CTBTO PREPARATORY COMMISSION | preparatory commission for the comprehensive nuclear-test-ban treaty organization

INVITATION TO BID

THIS IS NOT AN ORDER

To: ALL BIDDERS

CTBTO Ref. No.: **2024-0062/Thorvaldsdottir**
(PLEASE QUOTE ON ALL COMMUNICATIONS)

Tel. No.: +43 (1) 26030-6350
E-mail: procurement@ctbto.org

Attn.:
Phone:
Fax:
Email:

Date: 09 Apr 24

Title of Request: Provision of Air Transportation DBJ and Lower Deck Transport Containers

Deadline for Submission: 30 Apr 24 ***Vienna Local Time:*** 17:00

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the 'Commission') hereby invites you to bid the following items as per conditions listed below.

Item	***Description and Requirements***	***Quantity***	***U/M***
1	Provision of Air Transportation DBJ and Lower Deck Transport Containers In accordance with attached Technical Specifications	1	Lot

When preparing your bid, please follow the attached instructions. You are kindly requested to complete and return the acknowledgement form by e-mail as soon as possible. If you have any questions you should contact the e-mail address indicated above. We look forward to receiving your bid.

Yours sincerely,

Sally Alvarez de Schreiner
Chief, Procurement Services Section

CTBTO PREPARATORY COMMISSION | preparatory commission for the comprehensive nuclear-test-ban treaty organization

ACKNOWLEDGEMENT FORM

Solicitation No: 2024-0062	***Closing Date: 30*** Apr 24
Title: Production and Delivery of GEN II IMRDS Pods, and ALP Containers	***Vienna Local Time:*** 17:00

Procurement Staff: Thorvaldsdottir ***CTBTO Req. No.:*** 0010024042

Please complete 'A' or 'B' or 'C'
and Return

WITHIN FIVE (5) DAYS

THE PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (CTBTO)

by email to
procurement@ctbto.org

A: We shall submit our bid

Company Name: _____

By: _____ Contact Name: _____
(date)

Email/Tel: _____

B: We may submit and will advise

Company Name: _____

By: _____ Contact Name: _____
(date)

Email/Tel: _____

C: We will not submit a bid for the following reason(s)

___ our current workload does not permit us to take on additional work at this time;
___ we do not have the required expertise for this specific project;
___ insufficient time to prepare a proper submission;
___ other (please specify)_____

Company Name: _____

Contact Name: _____

Email/Tel: _____

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF BIDS

1. General

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the Commission) with its headquarters in Vienna is the International Organization mandated to establish the global verification system foreseen under the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which is the Treaty banning any nuclear weapon test explosion or any other nuclear explosions. The Treaty provides for a global verification regime, including a network of 321 stations worldwide, a communication system, an International Data Centre and on-site inspections to monitor compliance with the Treaty. More information can be found on the Commission's website: www.ctbto.org.

This Invitation to Bid (ITB) is for the provision of Air Transportation DBJ and Lower Deck Transport Containers (hereinafter referred to as the "Equipment" and/or the "Services") as described in the attached Technical Specifications.

The Bid shall meet all requirements stated in these Instructions and the Technical Specifications.

In case of an award, the following documents shall govern the Purchase Order and in case of discrepancies or inconsistencies, the documents to prevail shall be given precedence in the following order:

(a) The Commission's Purchase Order;
(b) The Commission's General Conditions of Contract (Annex A);
(c) Technical Specifications (Annex B), including Attachments 1-4 "Design Documents";
(d) The Bidder's Offer (Bid) (Annex C).

2. Documents included in this Invitation to Bid (ITB)

This ITB consists of the following documents:

(a) Letter of Invitation
(b) These Instructions for Preparation and Submission of Bids, including the Bidder's Statement and:
    Attachment 1: Technical Compliance Matrix
    Attachment 2: Procedures for Submission of Electronic Offers in 2 Sealed Files
(c) Vendor Profile Form
(d) Statement of Confirmation
(e) The Commission's General Conditions of Contract (Annex A)), incorporated herein by reference and available at this link: Microsoft Word - CTBTO General Conditions of Contract_08-10-2021_final clean.docx
(f) The Commission's Technical Specifications (Annex B)

NOTE: In the event of award, the Bid will be incorporated as Annex C to the Purchase Order.

3. Amendment of the ITB Documents

At any time prior to the closing date for submission of Bid, the Commission may, for any reason, modify the ITB documents by amendment. The Commission may consider extending the deadline in order to allow adequate time for considering the modifications in the preparation of the Bid.

4. Language of the Bid

The Bid and all correspondence and documents relating to it shall be in English.

5. Format and Submission of the Bid

The Bid shall be typed, dated and signed by an official legally authorized to enter into contracts on behalf of your organization. The Bid shall not contain any interlineation, erasures or overwriting except as necessary to correct errors, in which case such corrections shall be initialled by the authorized person(s) signing the Bid.

The Proposal shall be submitted electronically according to the attached "PROCEDURE FOR SUBMISSION OF ELECTRONIC OFFERS IN 2 SEALED FILES".

Proposals sent by regular e-mail, unless clearly submitted as electronically sealed bids as indicated above and following the instructions outlined in Attachment 2 will not be considered and lead to the rejection of the bidder from the procurement process.

The Bid shall be received not later than the closing date and time indicated in the Letter of Invitation.

6. Request for Clarifications and Contacting the Commission

The Commission will issue clarifications, if required. Bidders are requested to e-mail any questions pertaining to this ITB as soon as possible after receipt of the solicitation documents, but in any case no later than **7** business days prior to the Closing Date. No requests for clarifications will be entertained after this time. Questions will only be accepted via e-mail and should be sent to:

E-mail: procurement@ctbto.org
Subject: ITB No. 2024-0062/THORVALDSDOTTIR - Request for Clarifications

The Commission will make all reasonable efforts to issue the clarifications not later than 5 business days prior to the Closing Date.

Except in the case of responding to an ITB clarification, no bidder shall contact the Commission on any matter relating to the Bid after its submission and until the award of the Purchase Order. Any attempt to influence the Commission in its evaluation of the Bid or the award decision may result in rejection of the Bid.

7. Eligible Goods and Services

The goods and services to be rendered under the Purchase Order shall have their origin in the States Signatories of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) which is available in the CTBTO website at www.ctbto.org under Status of Signatures and Ratifications | CTBTO. For purposes of this paragraph, "the origin" means the place from where the materials, goods and/or from which the services are supplied.

8. Type of Contract and Payment

The Commission intends to conclude a firm fixed price Purchase Order based on the Commission's standard template. The terms and conditions of payment are as follows:

Within 30 days of receipt and acceptance of the Equipment and of the following documents:

(1) Invoice(s) showing the firm fixed price of the Purchase Order. The Supplier shall submit the invoice electronically, from the Supplier's official e-mail address in PDF format, duly signed and stamped by the Supplier and submitted to Payable_Invoices@ctbto.org. Each invoice shall contain the Purchase Order number (CTBTO and SAP numbers), detailed banking instructions, including the name and address of the Supplier's bank, account number, account holder's name and SWIFT, IBAN and/or ABA codes for payment by electronic transfer. and actual pre-paid transportation & insurance cost (as applicable);
(2) Delivery Note acknowledged by the designated receiving staff in Seibersdorf, showing all the items delivered;
(3) Certificate of Origin (original) or equivalent;
(4) Certificate of transportation insurance (copy);
(5) Acknowledgement Copy of the Purchase Order with the Supplier's signature;
(6) A copy of the documents reporting the result of Equipment Acceptance Testing, approved and counter-signed by the Commission and/or the end-user (if applicable);
(7) The Supplier's certificate, counter-signed by the Consignee/end-user, confirming the successful completion of the Services (as applicable); and
(8) Any other relevant documents.

Applicable Taxes payable by the Supplier and/or its subcontractor(s) shall be invoiced separately or be separately identified on the invoice. Actual payment of the Taxes must primarily be supported by original documentation such as invoices, bank account statements, transfer orders, or receipts issued by the local tax or customs authorities. If submission of such original documentation is not possible for justifiable reasons, their copies could be accepted by the Commission, provided that they are duly signed and certified by local tax or customs authorities. In case the currency in which the taxes are levied is not the currency of the Purchase Order, bank statements (or equivalent) showing the exchange rate used for the conversion shall be submitted to the Commission, in addition to any other supporting documentation.

"Taxes" means all direct and indirect taxes (including value added tax, general sales tax or goods and services tax), assessments, fees, customs duties, liens and charges in as much as they are levied in conclusion or implementation of the Purchase Order, including customs restrictions and charges of similar nature in respect of articles imported or exported for the Commission's official use.

9. Content of the Bid

The Bid shall contain, but not necessarily be limited to, the information described below.

The Bid shall be composed of the following separate parts:

I. **Technical Bid**; and

II. **Financial Bid**;

providing, but not limited to, the following information:

PART I: TECHNICAL BID

Please state the reference number and the date of this ITB in the Bid and any correspondence relating to it.

1. Personnel

The Bid shall state the contact details and address (name, telephone and fax numbers, and e-mail address) of the person/point of contact in your company dealing with this ITB.

Use of former Preparatory Commission for the CTBTO ("Commission") employees in the preparation of Quotations:

A Bidder must not, in the absence of prior written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Quotation or the procurement process if the person:

a. At any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
b. At any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.

2. Technical Compliance Matrix, Bidder's Statement, Statement of Confirmation and Vendor Profile Form

The attached Technical Compliance Matrix, Bidder's Statement, Statement of Confirmation and Vendor Profile Form shall be duly filled-in, signed and submitted together with the Bid

3. Specifications

The Bid shall include a detailed description of the items proposed by providing a section-by-section response to the Technical Specifications and include relevant technical literature.

The Bid shall also provide any other relevant issue which the bidder would like to bring to the attention of the Commission whether or not having cost implications. This shall include details of warranties/manufacturer's guaranties in respect to any Equipment item.

4. Manufacturer's Part Number

The Bid shall include the Manufacturer's Part Number for each good required by the Commission under this ITB.

5. Sub-Contractors

The Bid shall include names, legal status, address and qualifications of subcontractor(s), if any, involved in the Project and the scope of the subcontracted services. The bidder shall provide a statement that its organization shall be fully responsible for the performance of sub-contractors. All sub-contractors shall be legally established in one of the CTBT states signatories (the list is available on the CTBTO website at www.ctbto.org under Status of Signatures and Ratifications | CTBTO.)

6. Insurance

Insurance to be included in the Bid must be for All Risk, covering 110% of the cost of the equipment proposed, and from the date/place of the shipment to the date/place the delivery is completed. The insurance shall be in the name of the supplier and the Commission. You are requested to confirm that you will provide this insurance coverage.

7. Delivery Schedule

Delivery time shall be indicated in weeks after receipt of an order and shall be firm during the validity of the Bid.

8. Qualifications and References

1) Potential bidders shall include a minimum of 2 client references for similar projects with their Bid. If after reasonable efforts, the Commission is unable to contact the client references provided by the bidder, the Commission may take the decision not to further consider the offer provided by the bidder.
2) The Bid shall include documentary evidence demonstrating the qualification for the suppliers in compliance with the requirements of the Technical Specifications.

PART II: FINANCIAL BID

i. The Bid shall include the prices of the Equipment, including separately the costs for door-to-door DAP (Delivered At Place; Incoterms 2020) delivery to CTBTO's TeST Centre, 2444 Seibersdorf, Austria. The delivery terms shall be door-to-door CTBTO, Seibersdorf, Austria.

ii. The Bidder is required to prepare the Price Schedule using the Price Schedule Form attached to these Instructions for Preparation and Submission of Bids. In presenting the cost for each item, adequate justification and calculation must be included in the cost. All individual costs

shall be stated in EURO or US Dollars and be computed to constitute the total Purchase Order Price. Note that clear and detailed explanations would enable us to evaluate the Bid promptly and proceed with fewer requests for clarifications/justifications in a later stage. This is also a factor influencing the decision for Purchase Order award.

iii. In principle the Commission is exempt from taxes. Since the arrangement under which such exemption is respected varies from country-to-country, the selected bidder will be informed by the Commission whether tax exemption will occur at source or whether taxes paid by the selected bidder will be reimbursed by the Commission upon submission of the original supporting documentation.

(1) *For Austrian companies*

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Purchase Order in respect of the goods/services shall be quoted separately or be separately identified on the Bid together with information on the nature of the tax and its method of calculation.

(2) For European Union (EU) Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Purchase Order in respect of the goods/services shall be quoted separately or separately identified on the Bid together with information on the nature of the Tax and its method of calculation. Due to the VAT exemption applicable to the Commission, no VAT will be charged to the Commission by the EEC Suppliers under the Contract (Ref. EU VAT Council Directive 2006/112/EC, Article 151).

(3) *For Non-EU Companies*

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Purchase Order in respect of the goods/services shall be quoted separately or be separately identified on the Bid together with information on the nature of the tax and its method of calculation. For deliveries to Vienna, Austria, and due to the tax exemption at source, applicable to the Commission, no Taxes shall be charged to the Commission under the Contract.

9. Completeness and Correctness of the Bid

The Commission reserves the right to verify all information furnished in the Bid through a source of its choice. Any inaccurate information so given may lead to the rejection of the Bid.

10. Evaluation of the Bid

(a) The technical evaluation shall include the following evaluation criteria:
- (i) compliance with the technical specifications;
- (ii) supplier's qualifications;
- (iii) delivery schedule.

(b) The Financial Bid of bidders passing the technical evaluation shall be evaluated as follows:

(i) contractual compliance;
(ii) commercial acceptability.

(a) The Commission, based on the evaluation method given above, will determine the Bid which is the "***least costly technically acceptable Bid***". Bidders are expected to comply with all the provisions of the Commission's General Conditions for Contract. Any deviation to these provisions may be a factor in the Commission's award decision.

(b) To assist in the examination, evaluation and comparison of bids, the Commission may, at its discretion, request any Bidder to clarify its Bid. The Commission's request for clarification and the Bidder's response shall be in writing.

13. Correction of Errors

The Commission will check the Bid for any arithmetic errors. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

14. Validity of the Bid

The Bid shall be valid for 90 (ninety) days after the deadline for its submission to the Commission, unless an extension of validity has been requested by the Commission.

15. Negotiations of the Bid and Award

The Commission reserves the right to request clarifications on the Bid and to enter into negotiations regarding technical or commercial aspects of the Bid before awarding the Purchase Order under this ITB. If and when the Bid, including any amendment resulting from such negotiations, is fully agreed, the Commission will notify the bidder in writing.

16. Modification and Withdrawal of the Bid

Bidders may modify or withdraw their Bids after its submission, provided that written notice of the modification or withdrawal is received by the Commission by the closing date for the submission of the Bid. The Bid may not be modified subsequent to the closing date.

17. The Commission's Right to Reject the Bid

The Commission reserves the right to accept or reject the Bid or to annul this procurement process at any time prior to award without having to inform the affected party of the grounds therefore, without thereby incurring any liability to the affected party.

18. Costs of preparation and submission of the Bid

Bidders shall bear all the costs associated with the preparation and submission of Bid and the Commission will not be responsible or liable for those costs, regardless of the outcome of this ITB.

19. Proprietary Information

All documentation and information contained in this ITB are proprietary to the Commission and shall not be duplicated, used or disclosed –in whole or in part- for any purpose other than to evaluate them and respond to the Commission's ITB or otherwise without prior written agreement of the Commission.

BIDDER'S STATEMENT **PLEASE FILL THIS FORM & SUBMIT WITH THE BID**
Delivery Time:
Shipping weight (kg) and Volume (m^3) – if applicable:
List of recommended consumables and spares including prices and details on local availability, if applicable (please tick): ☐ For one year period ☐ For a period of …….
Warranty period applicable (it shall be for a **minimum of 60 months**, starting from the acceptance of the Equipment by the Commission) – please tick below: ☐ For a two year period ☐ For a period of …….
Availability of local service in Vienna, Austria (if any/if applicable):
State country of origin or assembly of all items quoted:
Quantity discount and early payment discount (if any):
Include documentary evidence of qualifications to perform the order, which shall establish to the Commission's satisfaction that the bidder has the financial, technical and production capability necessary to perform the order in its entirety and to provide spare parts and other necessary on-going services as required. Included in this Bid : **Yes** ☐ **No** ☐
Confirmation that the bidder has reviewed the Commission's General Conditions of Contract and agreed to all terms and conditions. Yes ☐ No ☐ Remarks:
With regards to the software provided with the equipment, state and confirm whether the software licenses are transferable to third parties, i.e. the Commission or the Commission's State Signatories (Member States). Yes ☐ No ☐ Not applicable ☐ Remarks:
Name: **Name & Title of Contact Person:** **Signature & date:**

Attachment No. 1
Price Schedule Form

Bidders are required to prepare the Price Schedule using the form below.

The Price Schedule must provide a detailed cost breakdown of all goods and related services to be provided, from unit price to total prices.

Cost Breakdown per Item:

Lot	Technical Specifications	Description	Quantity	Unit Price EUR/USD*	Total Price EUR/USD*
Lot 1	Para. 3.1	DBJ Containers	4		
Lot 2	Para. 3.2	Lower Deck Transport Containers	2		
Lot 3	Para. 5	5 years' Warranty	1		
		Delivery (DAP)	Lump sum fixed		
Total Price in EUR or USD (DAP, door-to-door, excluding taxes)**					

* Specify either EUR or USD
** Please see the Instructions for Preparation and Submission of Bids about any applicable taxes

ITB 2024-0062

Attachment No. 1

Technical Compliance Matrix

Provision of Air Transportation DBJ and Lower Deck Transport Containers

Criteria	Mandatory (Y/N)	Optional (Y/N)	Offered (Y/N)	Bidder's Notes/Cross reference to bid
Technical Specifications Para 3.1 DBJ Containers				
Bidder offers to produce 4 DBJ containers to full technical specifications from design documents.	Y			
Bidder can provide certification of air worthiness.	Y			
Technical Specifications Para 3.2 Lower Deck Containers				
Hardshell with solid doors opening on hinges out to at least 180 degrees to allow for loading.	Y			
Doors can open to 180 degrees at least to allow for loading full capacity of the container	Y			
Solid doors, able to be secured by padlock or seal	Y			
Full compatibility with air cargo handling systems in use worldwide.	Y			
Interoperability with most cargo aircrafts in use worldwide (Airbus A300, Airbus A310, Airbus A330, Airbus A340, Airbus A350, Airbus A380,Boeing 737C, Boeing 747, Boeing 767, Boeing 777, IL-86, DC-10, MD-11)	Y			
Certified and accepted by main cargo operators worldwide	Y			
Forkliftable floor design (forklift pockets)	Y			
Airworthiness certificate	Y			
Dimensions of 3,175mm long x 2,235mm wide x 1,615 mm tall	Y			
Dimensions of 3,175mm long x 1,534mm wide x 1,615mm tall.		Y		

Units are stackable		Y		
Weather protection	Y			
Lightweight design with high weight bearing capability	Y			
Shelf option		Y		
Bergo floor option		Y		
Technical Specifications Para 4 Supplier Requirements				
Minimum of 10 years' experience in global air transportation and material handling services,	Y			
Experience and certification required for air cargo operations	Y			
Specialized expertise on designing/evaluating and certifying Unit Load Devices (ULDs)	Y			
Minimum of 8 years' experience in the certified design and production of specialized /customized rapid deployment systems	Y			
Supplier has experience in transporting cargo by air cost effectively.	Y			
Supplier provides references of two similar projects	Y			
Technical Specifications Para 5				
Warranty of five years is provided in offer.	Y			

Attachment 2

"Procedure for Submission of Electronic Offers in 2 Sealed Files"

The Commission invites you to submit your sealed offer (Bid, or Proposal) in response to the solicitation forming part of this request.

Please be sure to follow the instructions below very carefully, so that the documents you submit are encrypted, and cannot be opened without an encryption key (password). If the documents are not encrypted, they will not be accepted as part of this tender process.

CRITICAL INFORMATION:

Create separate zip files for the technical offer and the financial offer (labelling them clearly in the title) with different encryption keys. Instructions for how to do this are provided below.

Step 1: You provide the encryption key (password) for the *Technical Offer only* (in accordance with the below instructions)!

Step 2: After the Commission has performed the evaluation of the Technical Offer, if your Technical Offer is considered to be acceptable, the Commission will request the encryption key (password) for the Financial Offer you have already submitted by the tender Deadline.

Should you have any questions, please send an email to procurement@ctbto.org.

We recommend that you leave yourself plenty of time to complete the below process (including getting any necessary assistance from the Commission), as late offer will not be accepted.

INSTRUCTIONS:

1. In a **WINDOWS** environment, one way of meeting the requirements is as follows.

   We recommend using the open-source, free software **7-zip**, but if you are comfortable with other tools, the result should be the same, as long as you can apply encryption to the archive. In the below, we'll use 7-zip as an example. (You can download the 7-zip code for Windows at: 7-zip.org)

2. In **LINUX** environment, you can use, for instance, "sha1sum" on the command line.

Creating the archives for submission

Regardless of whether the offer is a single file, or a collection of files, the files are easier to manage if delivered as a single, compressed file. Compressing the archive is a common way to meet size limitations in email systems.

As an example of how to submit your offer in the required format: assuming you are supplier "SOFTCOMP" and have the following files related to the offer for "RFP 2020-0010/EDWALD". *(You will need to replace these elements with the real information for your actual offer in line with the relevant Instructions for Preparation and Submission of Proposals/Bids.)* Assuming further that you have installed the 7-zip software on the Windows system you are using.

We will only go through the creation of the Technical Offer (Proposal/Bid) component; the Financial Offer (Proposal/Bid) component is similar.

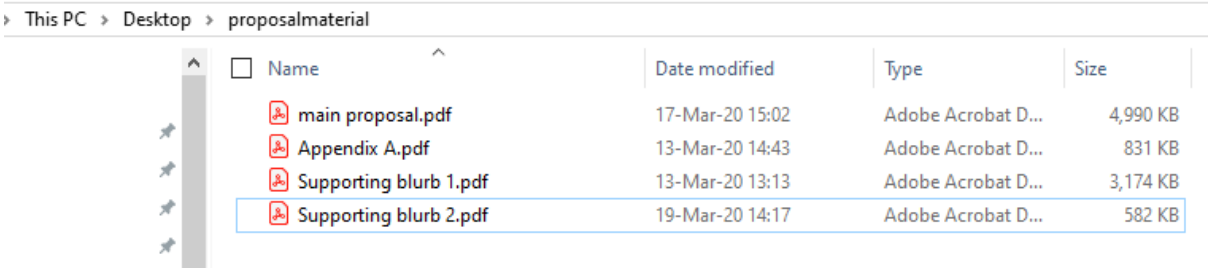


Figure 1 An example set of files to be submitted

Select the four files and right-click; a Dialog box pops up, with one of the options being "**7-ZIP >**". Hover your cursor over the " **>**" part and a few more options appear, select the "**Add to archive**" option.

Another dialog box pops up (see 'Figure 2, *Creating an Archive*', next page):

Using the standard Windows methods, select a suitable location for the archive (if you don't change it, the archive gets created right where the selected files are), and give it a name in the form of: "SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID", of course replacing all the elements with the true values for the offer in question: the actual company indicator, and the actual RFP/ITB identification string. Note that it is not possible to put a slash "/" in the file name, and therefore put a dash "-" instead. Leave the file extension ".zip' as is.

Leave all the other settings as is, except: **add a password to the encryption** (see figure 2 below). This is done by typing the same password (of your choosing) twice in the two text fields in the lower right hand corner.

Make a note of this password. You must choose different passwords for the two zip archives, that is, the Technical and the Financial Proposal/Bid.

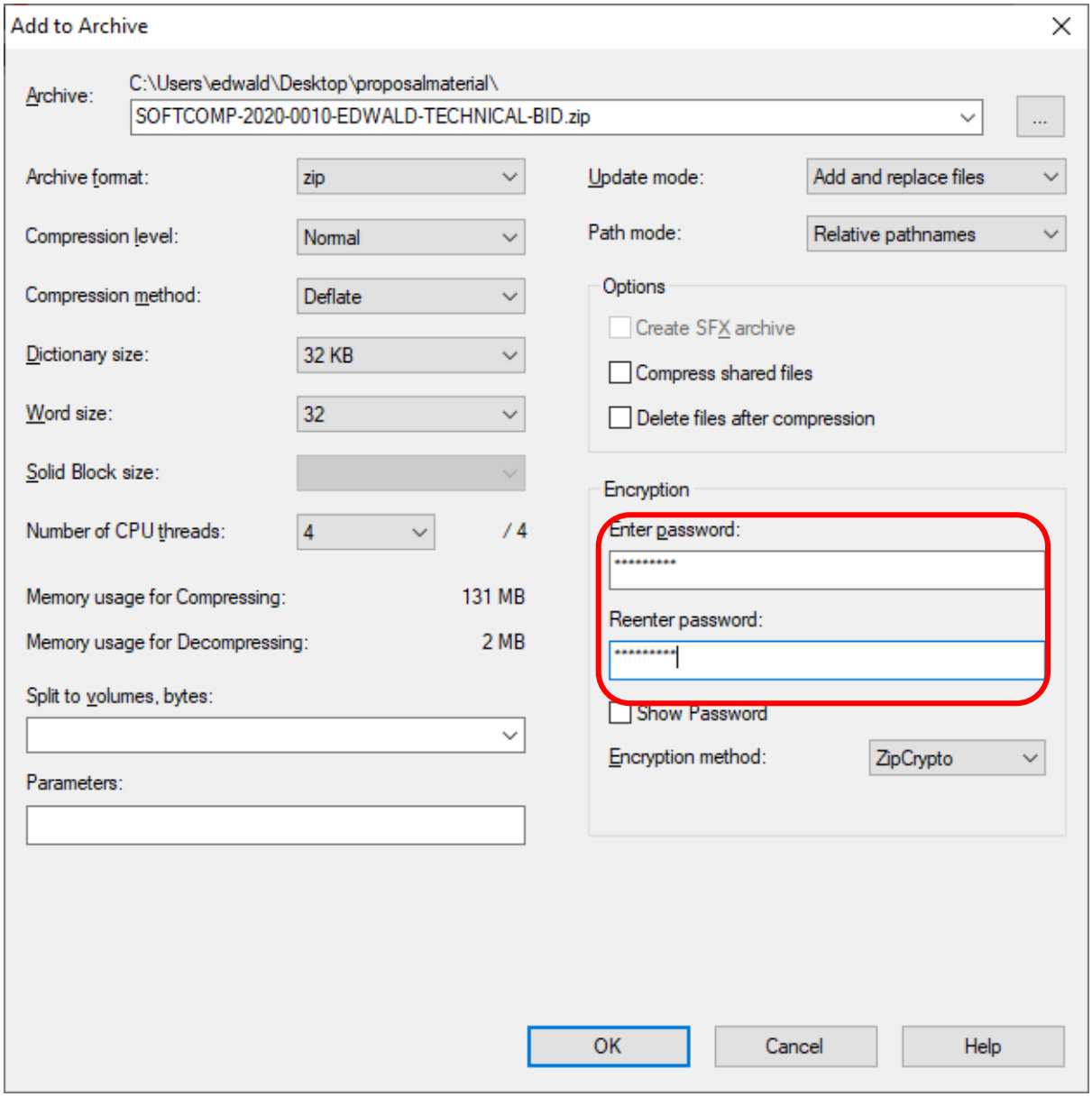


Figure 2 Creating an Archive

Now, we seek the "SHA1 Hash", and electronic fingerprint of the archive you have just created. The hash is a string calculated from your file(s) and can be used to guarantee that the file has not been modified since you created it. Any change to the file will result in a different hash value.

There are many ways of calculating this; two common options are decribed below.
If the appropriate functionality is available in your Windows environment: Select the compressed archive in the Windows file manager, (eg. SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip) and right click. One of the options to select is "**CRC SHA >**". Hovering over the " **>**" brings a few more options to light, select the **SHA-1** option. A smaller dialog pops up: (see Figure 3, *SHA1* below).

Clicking Ctrl-C grabs the contents of this box. You can close the box after copying the contents. (You can paste the contents into a mail message, for instance.)

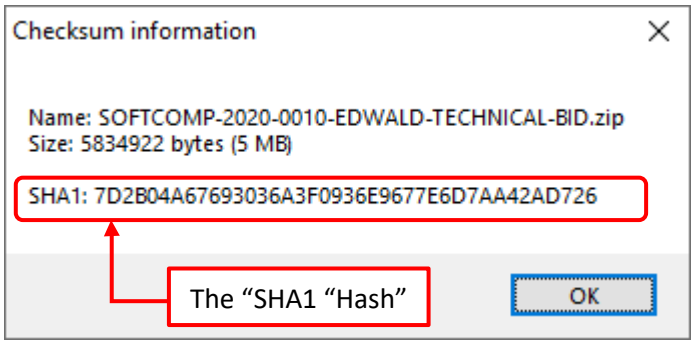


Figure 3 SHA1

If this CRC SHA function is not available by 'right-click' on your Windows version, you can also do this from 'the command line', a slightly more complicated way. Open a CMD window (see sidebar below), move to the folder where your archive is, and execute the command: "`certutil -hashfile` *`SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip`* `sha1`" where you obviously replace the name of the file with your real file name. The output of this command is the SHA1 "hash". You can copy-and-paste the string for use in the email (below).

Sidebar: How to open a CMD window in Windows:

The way to open a Command window (or 'terminal') depends on the version of Windows you have. The different methods are very clearly described in the following article, but a quick internet search will find multiple descriptions.

https://www.lifewire.com/how-to-open-command-prompt-2618089

Finally,

1. Create a new email, Subject: example- "SOFTCOMP-2020-0010-EDWALD". Add the two compressed archives, that is, the Technical Offer and the Financial Offer archives as attachments. The text of the email should contain the SHA1 information for both archives. **SEND THIS TO:** sealed_bids@ctbto.org (note that there is an underscore "_" between "sealed" and "bids"). (Should the email become larger than your mail system allows, you can try sending the two archives in separate emails. Take care to include the right SHA1 information with each file.)

2. Create a new email, Subject: example- "SOFTCOMP-2020-2010-EDWALD-Technical Offer" the contents of which must contain the Encryption Key for the Technical Offer (the password

you used when creating the Technical Offer). (Again, note the underscore between 'bid' and 'keys'.)
SEND THIS TO: bid_keys@ctbto.org

IMPORTANT NOTE: As stated above, only send the Encryption Key for the Technical Offer to the bid_keys@ctbto.org mailbox when sending your Technical and Financial Offer to the sealed_bids@ctbto.org mailbox. You shall only send the Encryption Key for the Financial Offer to the Commission if and when informed by the Commission that your Technical Offer had been evaluated as "technically acceptable".

The Financial Offer Encryption Key will need to be provided by you to the same e-mail (bid_keys@ctbto.org) within 48 hours of the Commission's request, clearly marked in Subject: Encryption Key for (example):"SOFTCOMP 2020-2010 EDWALD-Financial Offer". If your Offer is not considered "technically acceptable", the Commission will not request an Encryption Key for your Financial Offer, and it will remain unopened.

As mentioned above, should you have questions or difficulties, please send an e-mail to procurement@ctbto.org.

We recommend that you leave yourself plenty of time to complete the above process (including getting any necessary assistance from the Commission), as late offers will not be accepted.

ANNEX B

TECHNICAL SPECIFICATIONS

Provision of Air Transportation DBJ and Lower Deck Transport Containers

1. INTRODUCTION

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the "Commission") operates a global verification regime to monitor compliance with the Comprehensive Nuclear-Test-Ban Treaty (CTBT). It provides timely data, assessments and other products and services to Signatory States of the Treaty. More information can be found on the Commission's website: www.ctbto.org.

An On-Site Inspection (OSI) is the final verification measure to verify States' compliance with the CTBT. An OSI requires that equipment and Inspectors are transported to the location to be inspected, which could potentially be anywhere in the world.

The OSI Division of the Commission holds technical equipment and mobile laboratories in a 'ready state' to be deployed. To achieve the requirements of an OSI, for storage and equipment preparation, and to deploy the majority of technical equipment, customized Air Transportation DBJ containers are used.

2. SCOPE OF WORK

These Technical Specifications define the requirements for the construction and delivery of four (4) DBJ containers in accordance with the design provided by CTBTO, and the provision of two (2) lower deck air transportation containers.

3. SPECIFICATIONS

3.1 The Supplier shall supply four (4) DBJ containers with the following specifications:

- Produced according to the design documents provided by CTBTO to full technical specifications. **Design documents are included with these Technical Specifications as Attachment 1-4,.**
- Provide certification for the containers' airworthiness.

3.2 The Supplier shall supply two (2) lower deck transport containers with the following specifications:

- Hardshell containers with solid doors opening on hinges out to at least 180 degrees to allow for loading.
- Doors with the following specifications:
    - Open to at least 180 degrees to allow for loading full capacity of the container
    - Solid doors able to be secured (padlocked, or sealed)
- Full compatibility with certified air cargo handling systems in use worldwide.
- Interoperability with most common cargo aircrafts in use worldwide (Airbus A300, Airbus A310, Airbus A330, Airbus A340, Airbus A350, Airbus A380,Boeing 737C, Boeing 747, Boeing 767, Boeing 777, IL-86, DC-10, MD-11).
- Certified and accepted by main cargo operators worldwide.
- Forkliftable floor design (forklift pockets) to enable ground handling outside of airports.
- Airworthiness certificate.
- Dimensions of 3,175mm long x 2,235mm wide x 1,615 mm tall and optional dimension of 3,175mm long x 1,534mm wide x 1,615mm tall.
- Units are stackable to enable multi-modal transportation (optional)
- Weather protection to protect internal cargo during airport outdoor storage, and also for use in the field environment.
- Lightweight design with high weight bearing capability to allow for maximum use of aircraft weight and space capacity.
- Optional shelf.
- Optional bergo floor.

4. QUALITY OF DELIVERABLES AND REQUIREMENTS FOR THE SUPPLIER

The Supplier shall ensure that services are performed in a highly professional and safe manner **meeting with all the timelines and all requirements listed in these Technical Specifications.**

The Supplier must provide adequate assurance such as references, certifications etc. on its overall ability to meet all the requirements and that it is properly capable and certified to perform the required activities of this Technical Specifications.

The Supplier shall have:

- Minimum of 10 years' experience in global air transportation and material handling services, with emphasis on experience and certification required for air cargo operations and specialized expertise on designing/evaluating and certifying Unit Load Devices (ULDs).

- Minimum of 8 years' experience in the certified design and production of specialized /customized rapid deployment systems.

- Demonstrated satisfactory references of at least 2 similar projects (designing and delivering complex and customized rapid deployment solutions for international organizations and/or for military purposes).

5. WARRANTY

The Supplier shall provide warranty for a period of five (5) years. The warranty shall include complete replacement of any equipment and systems provided by the Supplier, which at any time during the warranty period, due to manufacturing faults or poor workmanship, does not meet at least one requirement of these Technical Specifications.

6. DELIVERABLES

The Supplier shall supply:

- Four (4) DBJ containers in accordance with the design provided by CTBTO.
- Two (2) Lower deck containers in accordance with the specifications at paragraph 3.2 of this Annex.

7. TIMEFRAME REQUIREMENTS

The Supplier shall deliver the equipment within twenty-four (24) weeks from the Commission's issuance of the Purchase Order.

8. ATTACHMENTS

ATTACHMENT 1: DESIGN DOCUMENT PART 1

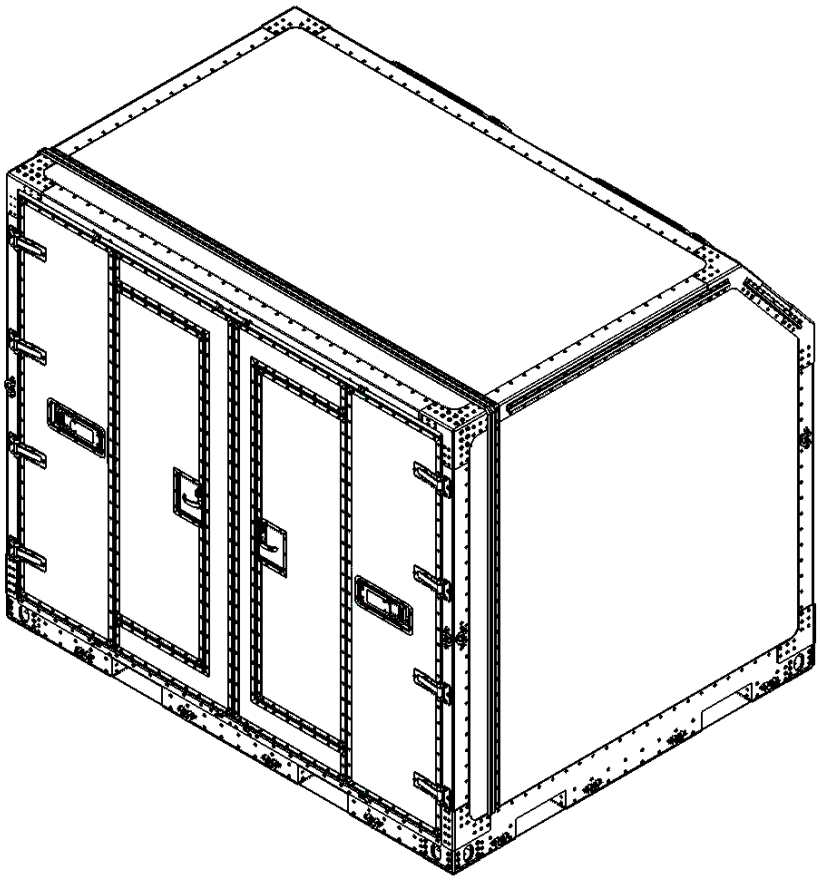
ATTACHMENT 2: DESIGN DOCUMENT PART 2

ATTACHMENT 3: DESIGN DOCUMENT PART 3

ATTACHMENT 4: DESIGN DOCUMENT PART 4

Operation Manual 25-56-28 / RRM 628-OM
DBJ Container
1283-40-0000 and 1283-40-0001

Issue 2
15-09-2023



VRR | Stolwijkstraat 57 | 3079 DN Rotterdam | The Netherlands | vrr.aero
T +31 10 479 81 00 | E info@vrr.aero

RECORD OF REVISION

Issue	Date of revision	Effect on pages	Reason Revision
1	24 April 2019	All pages	New issue
2	15 September 2023	001-004 201 - 235	Included improved design 1283-40-0001. Set-up of improved extendibility pack.

Responsible for	Signature	Date
Prepared: M.B.M. Heijmer		01 September 2023
Checked: B.J.D. Peters		01 September 2023
Approved: D. de Vreede		15 September 2023

LIST OF EFFECTIVE PAGES

TABLE OF CONTENTS

1. Introduction

1.1. General

This operation manual (OM), of which VRR is the owner and maintainer of the document, is created to inform users and handlers of the best practices when working with the DBJ container.

Please refer to the DBJ container manual with number RRM-628 for more information about damage limitations, maintenance and spare part list check.

1.2. Layout of manual

This manual contains a general operation description, a step-by-step guidance of different operation procedures and cleaning instruction for the DBJ container.

1.3. Revision service

Revision of the product will result in an update of the manual.

1.4. Safety precautions

When handling the container we strongly advice to use the following safety precautions:

- Always wear safety shoes while loading and unloading

2. Operation

2.1. General

The container shall be checked for damages prior to loading, as damaged containers may damage the aircraft loading and/or the restraint system invalidating the certified airworthiness. To ensure that a unit is in a serviceable condition, it must be inspected before each use.

Try to visualize the whole container load before commencing to pack, leave heavy and/or big items on the bottom. Spread load equally.

Cargo with density over 400 kg/m3 (25 lb/cu.ft) requires internal tie-down. This is not required in case of full load (min. 75%) with compressible material.

Before transporting the container on dollies, transporters or other vehicles, ensure that restraint stops, locks or other securing devices have been applied correctly.

⚠ **CAUTION**

- The doors must be properly closed when the container is moved.
- When the container is moved, the hose locks must be closed off by the gaskets, locked with the handles, and covered by zipping up the hose lock covers.

2.2. Transport

2.2.1. Transport by aircraft

The DBJ is a non-certified container without a pallet base. Therefore the DBJ must be placed on a certified aircraft pallet and fastened with a certified cargo net when transporting by air.

The DBJ will fit on a standard PMC pallet (civil, 3175 x 2438 mm / 125 x 96.0 inch) or a HCU/6E pallet (military).

When using a military HCU/6E pallet, chains can also be used to tie down the DBJ to the pallet.
Use the tie down points on the corners of the container.

When using chains to tie down the container to a pallet a certified cargo net is still needed.

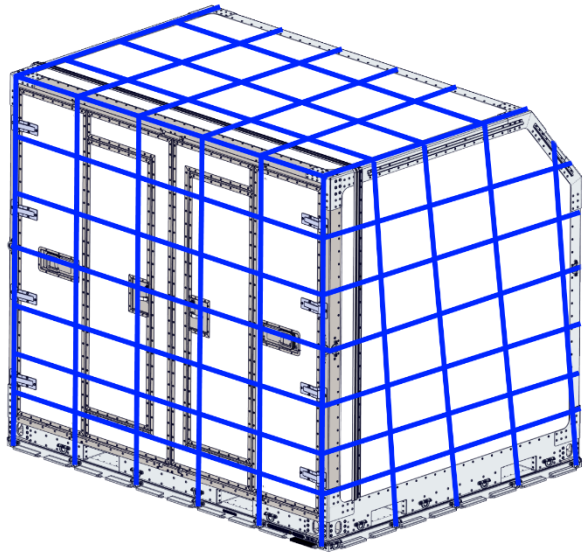


Figure 1: DBJ on an HCU/6E pallet with net

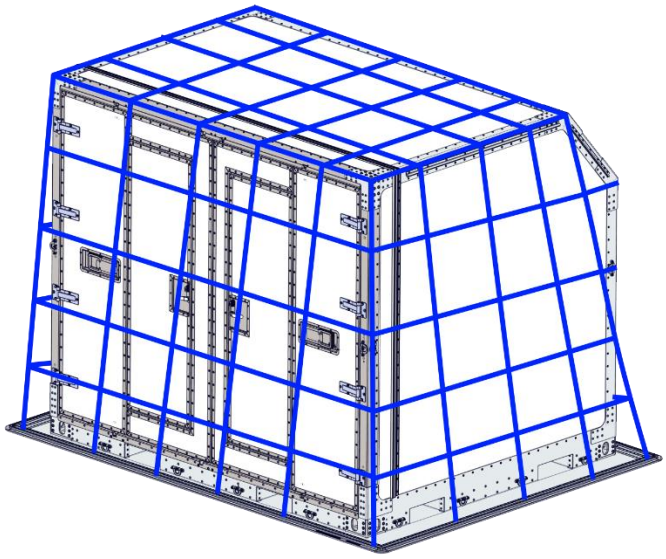


Figure 2: DBJ on a PMC pallet with net

2.2.2. Transport by truck

Use the tie-down points (Figure 3) on the base and corners of the container and/or the ISO corners, to tie down the container to a trailer.
Please note that the ISO corners positions do not match the ISO corner locks on a truck.

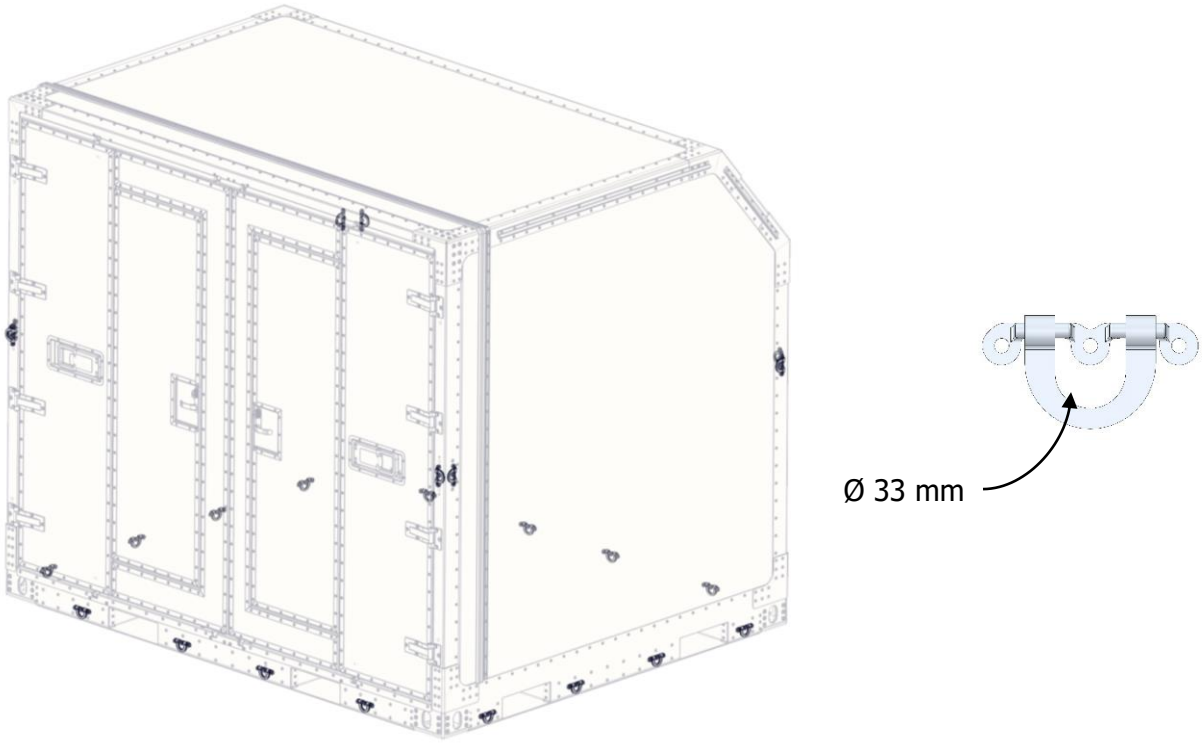


Figure 3: Tie-down rings

2.3. Hoisting

The DBJ can be hoisted by crane or as sling load by helicopter. Before hoisting, hooks should be attached to all four ISO-corners. A spreader must be used for stability and to prevent damages to the container. The chains must be connected to the tie-down rings as indicated in red in Figure 4 to prevent tipping over during hoisting.

⚠ **CAUTION**

» The force from the ISO corners must be transferred to the spreader in a straight line. I.e. the connections to the tie-down rings must **not** be tightened to the point at which the chains from the ISO corners to the spreader are not straight anymore.

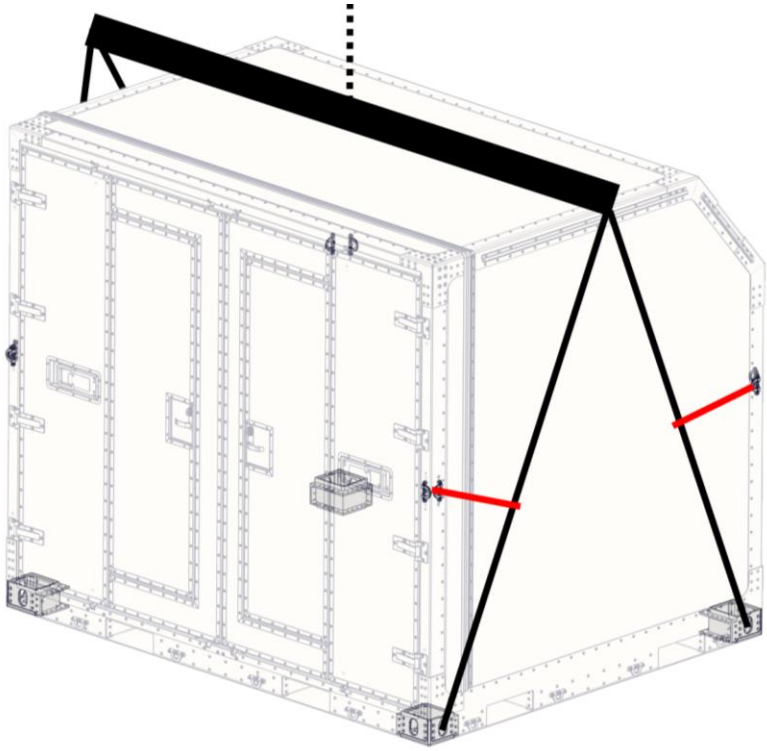


Figure 4: Hoisting (schematic)

2.4. Loading cargo

When loading the container with cargo, all of the following items need to be adhered to:

- The Maximum Operational Gross Weight (MOGW)
- The maximum loads on the floor of the container
- The maximum loads on the shelf
- The location of the Centre of Gravity (CoG)

These items are discussed in the following sections.

2.4.1. Maximum Operational Gross Weight

Theoretical Manufacturer's Empty Weight	827	kg	1823	lb
Maximum Operational Gross Weight	4536	kg	10000	lb
Maximum Net weight	3709	kg	8177	lb

2.4.2. Maximum allowable floor loads

The loads on the floor (base) of the container may not exceed any of the following values:

- 200 kg/cm^2
- 1000 kg/m^2
- 440 lb/inch^2
- 2200 lb/foot^2

2.4.3. Cargo on shelf

The maximum allowable load on the shelf is 1000 kg (2200 lb). The shelf must be supported by (at least) four panel brackets. The panel brackets all need to be at the same height. Place the panel brackets in the first and last seat track of both side walls of the ULD, see Figure 5 for a visualisation.

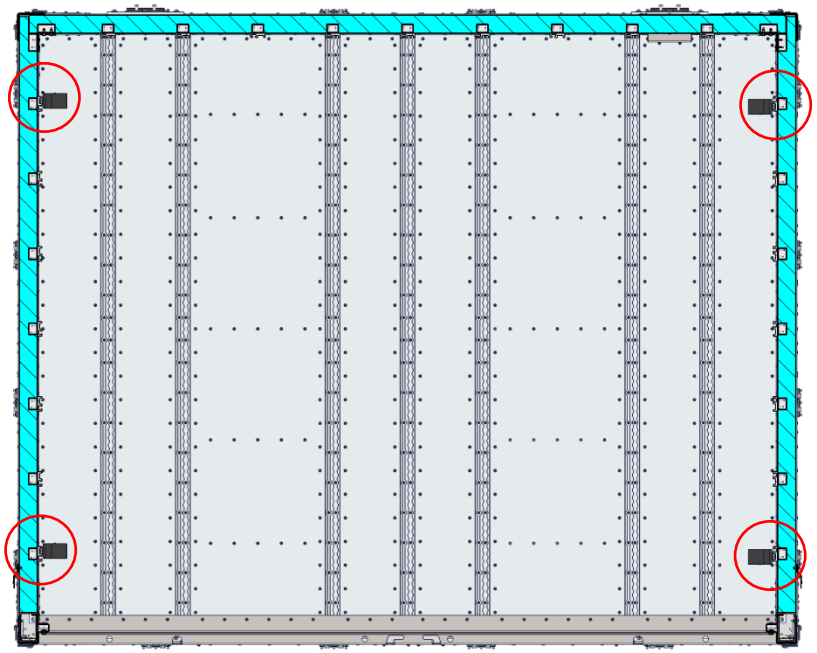


Figure 5: Locations panel brackets for shelf (cross section, top view)

Cargo on the shelf should be tied-down to the shelf's integrated Seat/T-track.

2.4.4. Centre of Gravity (CoG)

The Maximum Operational Gross Weight (MOGW) of the container is limited to 4536 kg (10000 lb).

When loaded to this MOGW, the Centre of Gravity (CoG) of the loaded container has to be within the following limits:

- Height of CoG, measured from the bottom, must be below 1219 mm (48 inch).
- In the X-direction (parallel to the long side), the CoG must be in the centre of the container base (1321 mm / 52 inch from the side edge) with a tolerance of ± 10% (264 mm / 10,4 in).
- In the Y direction (parallel to the short side), the CoG must be in the centre of the container base (1067 mm / 42 inch from the front edge) with a tolerance of ± 10% (213 mm / 8,4 in).

The above is visualised in Figure 6.

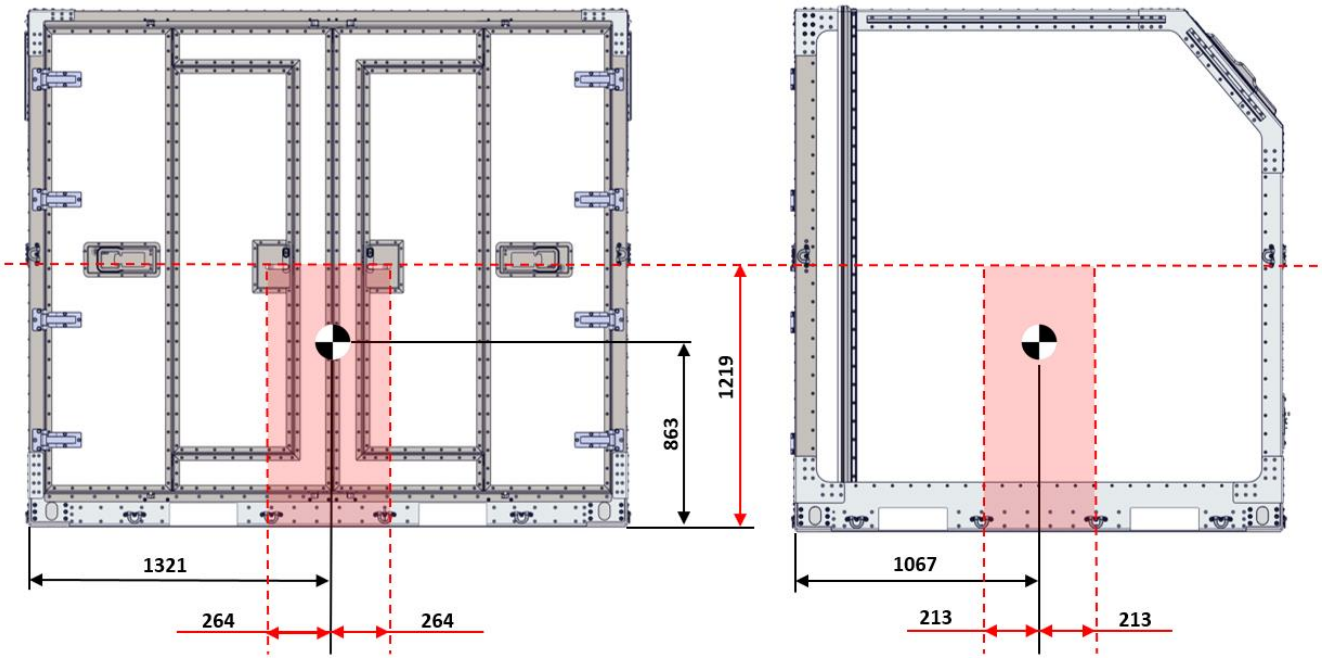


Figure 6: Allowed area for the CoG

Document "SAE AS36101 – Load distribution model" states that when the gross weight is lower than the MOGW, linear trade-off may be used for increased CoG eccentricity limits in proportion of the lower gross weight. See Figure 7 for this trade-off.

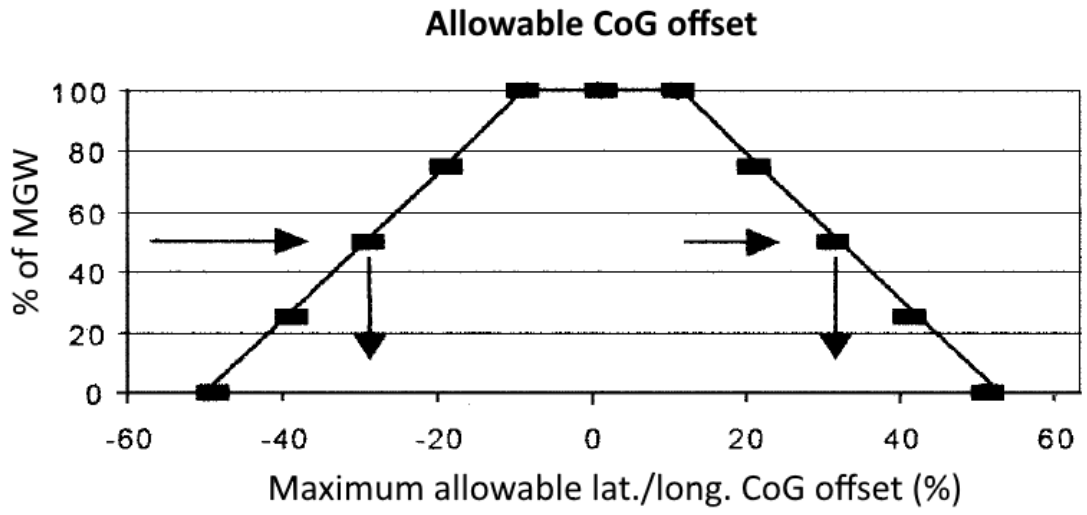


Figure 7: Allowable CoG offset

Figure 7 illustrates, as an example, that the ULD is loaded to only 50% of the MOGW, the lateral and longitudinal CoG offset can vary up to +/- 30% instead of +/- 10% at MOGW.

Whether at maximum gross weight or the lower gross weight trade-off limitation of Figure 7, the reference load distribution model shall not be used as a method for actually distributing cargo on a container base at ULD build-up. If a piece of cargo will occupy only part of the base surface, it shall be centred on the base and not in a corner. If only a partial load is planned, stacking shall start in the base centre area rather than at the edge.

During ULD build-up, all steps should be taken to provide a loaded ULD CoG location as closely as possible to its geometric centre. When the nature or shape of cargo makes this impossible in practice, the objective should be to limit CoG offset to one direction only, either longitudinal or lateral, not exceeding the maximum allowable offset in that direction. Only as a last resort should both longitudinal and lateral maximum CoG offset be simultaneously used.

2.4.4.1. Example calculation CoG

The file 'CoG_calculation_CTBTO.xlsx' can be used for calculating the centre of gravity.

The origin of this calculation is chosen at the left corner at the back of the container, positive x-direction is to the right, positive y-direction is to the front of the container, positive z-direction is upwards. See Figure 8 for the location of the origin.

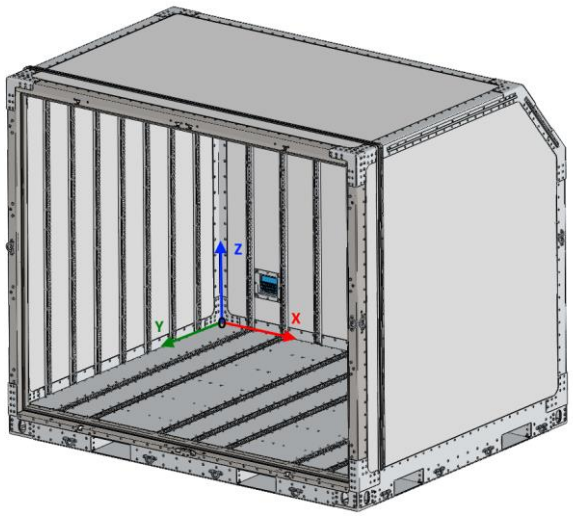


Figure 8: Location of origin for CoG calculation.

For this example the following loads were used:

M1 = weight of empty container = 827 [kg]
M2 = weight of shelf = 128 [kg]
M3 = bulk on shelf = 500 [kg]
M4 = bulk on base = 3000 [kg]

The example locations of the loads are shown in the table below and in Figure 9.

M	Mass [kg]	X [mm]	Y [mm]	Z [mm]
1	827	1250	1000	690
2	128	1250	1000	1440
3	500	2250	1300	1540
4	3000	650	1800	40

Total mass = 4455 [kg]
Total mass < MOGW*

*The total mass must be smaller than the MOGW of the container (= 4536 [kg])

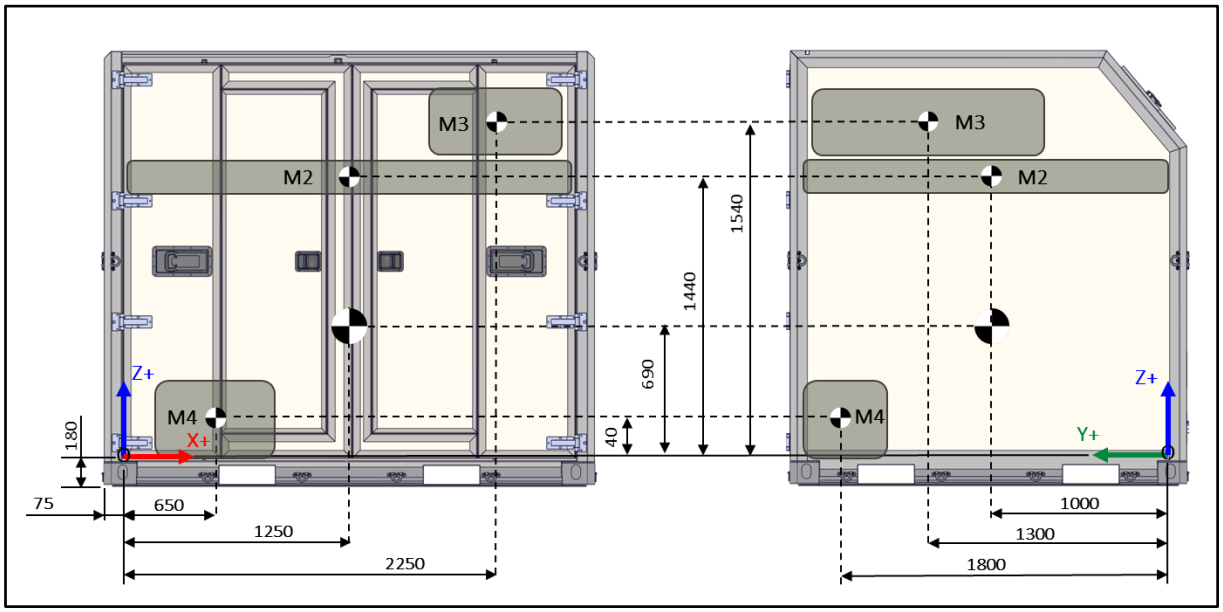


Figure 9: Loading example of container

With a moment calculation around the origin the location of the CoG can be obtained in x-, y- and z-direction.

	Mass * X	Mass * Y	Mass * Z
	1033750	827000	570630
	160000	128000	184320
	1125000	650000	770000
	1950000	5400000	120000
SUM	4268750	7005000	1644950

The CoG shift is obtained by dividing the sum of the moments by the total mass. See Figure 10 for allowed CoG limits.

	X_{shift}	Y_{shift}	Z_{shift}
CoG_{shift}	958	1572	369
Limits	986 - 1514	787 - 1213	0 - 1040

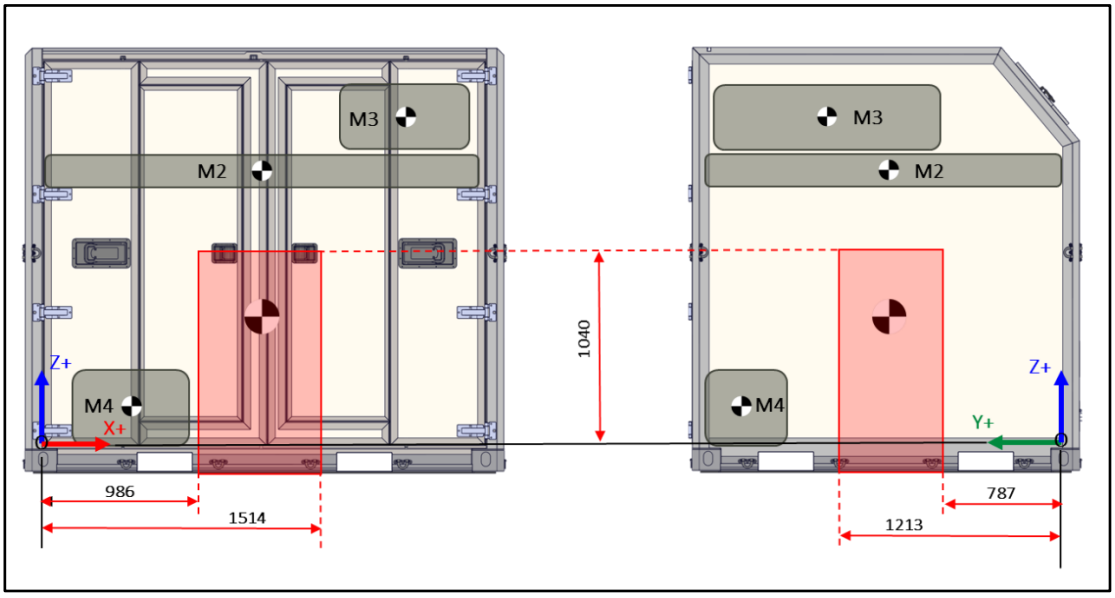


Figure 10: CoG limits (origin in left rear corner)

The way of loading the container in this example is insufficient. The CoG shift in x- and y- direction is outside the limits.

One solution is to shift the bulk on the base to a location where the container will be more in equilibrium.

Current location M4 [x; y] = [650; 1800].
New location M4 can be [850; 1200]

The CoG shift will now be within the limits, see table below.

	X_{shift}	Y_{shift}	Z_{shift}
CoG_{shift}	1093	1168	369
Limits	986 - 1514	787 - 1213	0 - 1040

A second solution is to lower the weight of the bulk. When minimizing the load, the limits of the CoG shifts are expanded according to Figure 7.

2.5. Seat/t-track load

The interior of the container is lined with Seat/T-track extrusions. The maximum force that may be applied on the Seat/T-track can be seen in below. These values for the maximum loads apply to any direction.

Location of Seat/T-track	Maximum load (N)	Maximum load (kg)	Minimum distance between loads (mm)*	Figure
Walls	2484	250	1000	Figure 11
Track bar	2484 (max. total load)	250 (max. total load)	Not applicable	-
Ceiling	1530	150	1000	Figure 12
Floor	3545	360	100	Figure 13

*As the load decreases, the required minimum distance between these loads decreases linearly.

When loading the container, spread the load evenly though the container. The CoG must stay within its described limits.

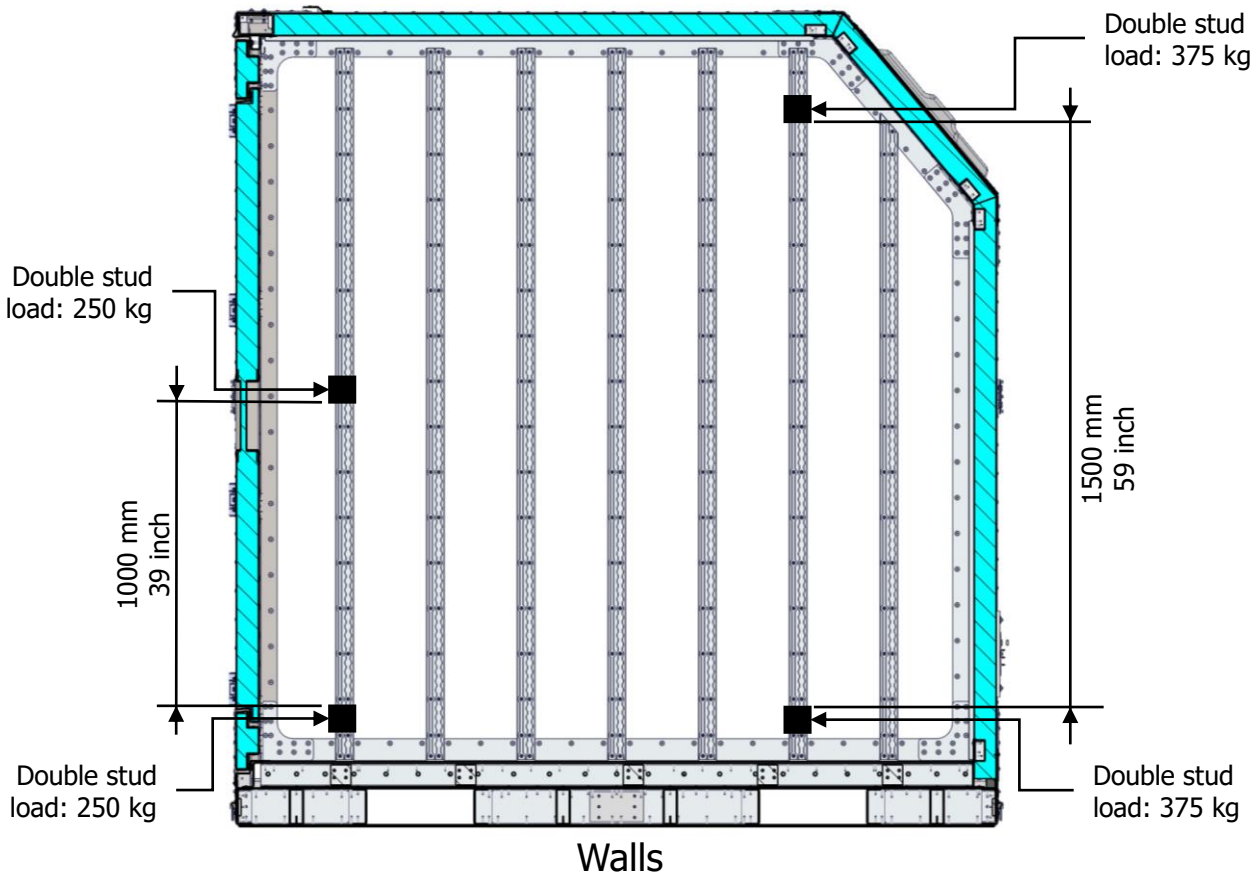


Figure 11: Walls

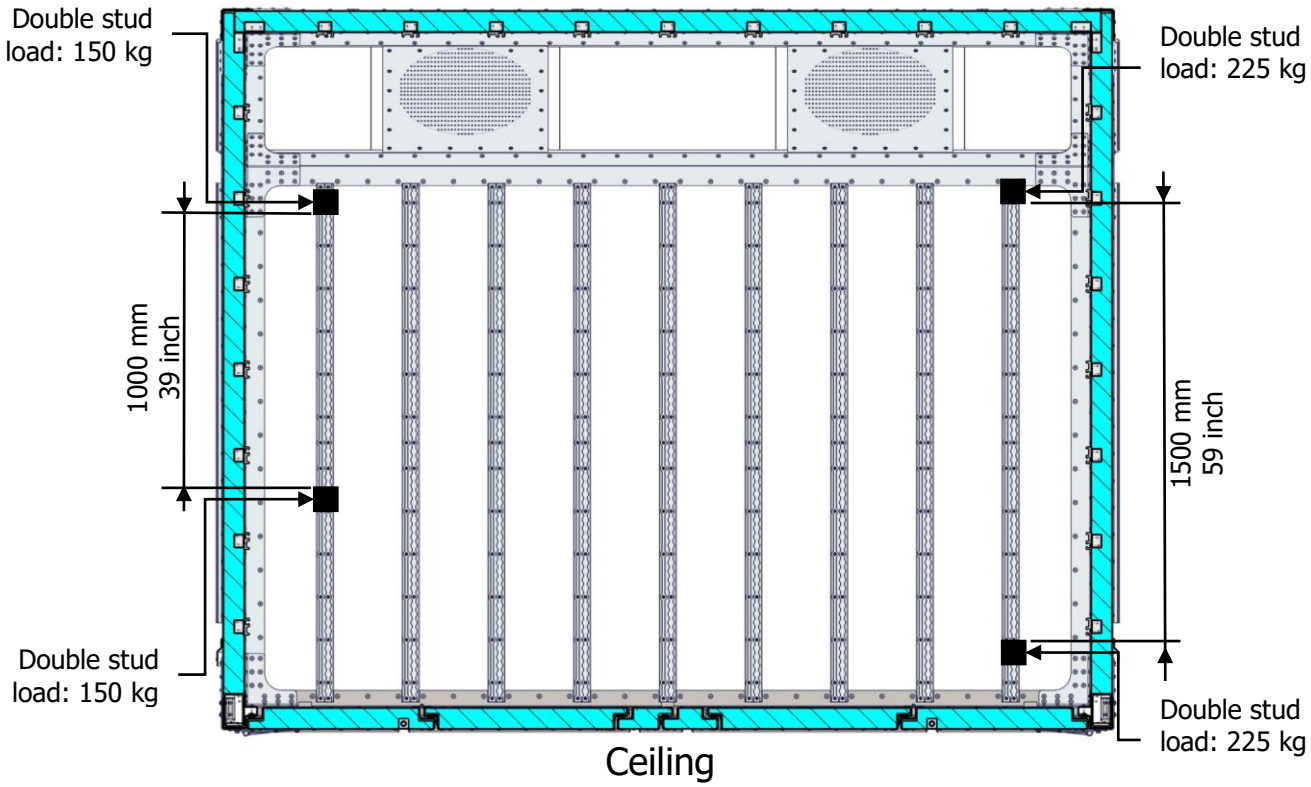


Figure 12:Ceiling

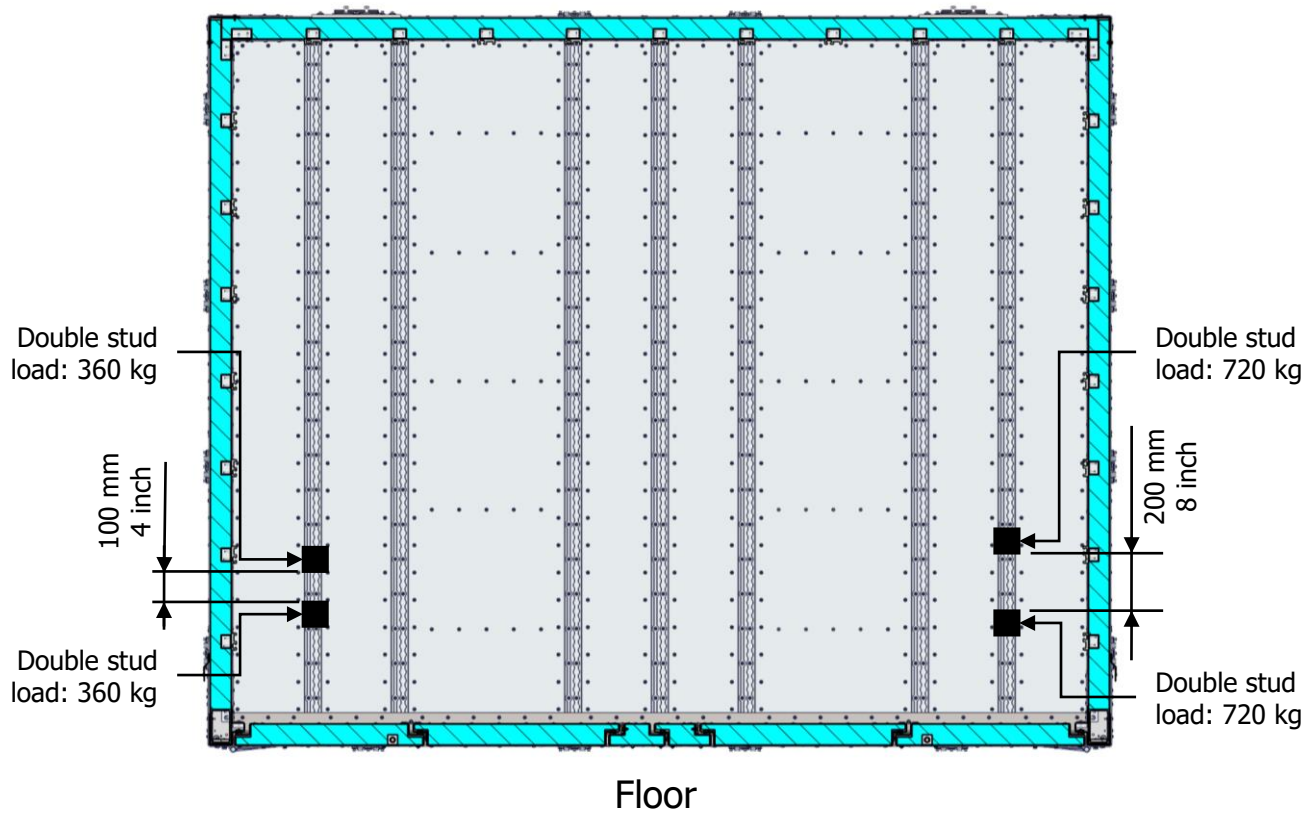


Figure 13: Floor

2.5.1. Track bar

Besides the integrated Seat/T-track, the container is equipped with two separate track bars, see Figure 14. These can be placed in various locations in the seat track on the walls of the container and provide a horizontal section of Seat/T-track. Two track bars fit next to each other on the side walls of the container.
A maximum total load of 2484 N (250 kg) is allowed on the track bar in any direction.

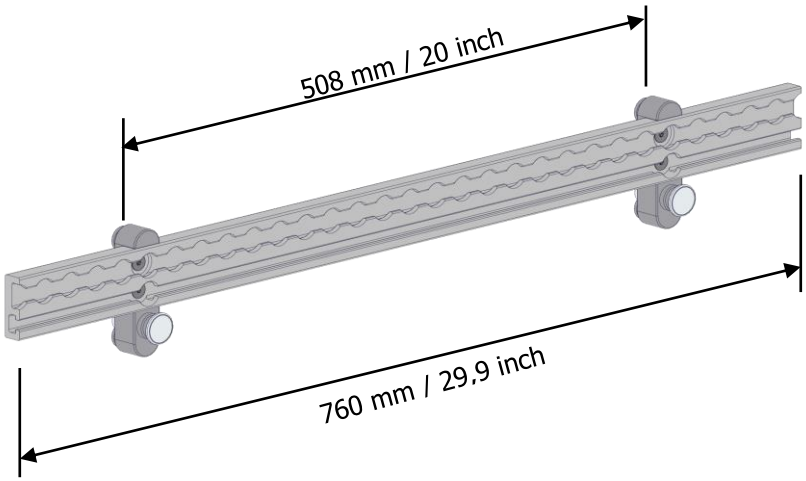
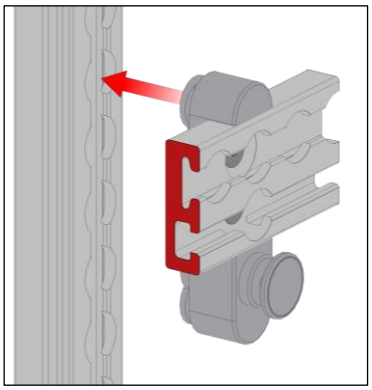
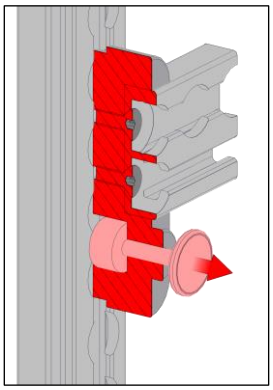


Figure 14: Track bar

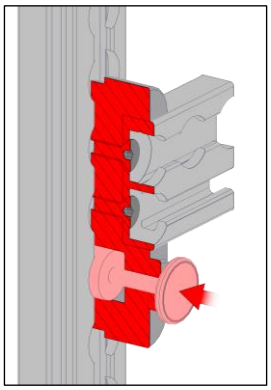
2.5.1.1. Placing the track bar



1. Align the studs of the track bar with the seat track on the wall.



2. Push the studs in the seat track which causes the pin on the track bar to be pushed outward.



3. Slide the track bar up or down causing the pin to snap into the seat track.

2.6. Stacking

The container may NOT be stacked on top of another container during transport or deployment. However, the containers could be stacked during storage:

- If the stack does not go beyond two containers in height;
- If wooden beams are placed in between the containers;
- If kept protected from any external influences e.g. forklift collision or weather circumstances such as wind;
- If the containers are not loaded with any equipment.
- If the wooden beams do not damage the zipper and/or roof of the bottom container.

CTBTO is fully responsible for stacking the container*s. VRR will not take any responsibility for failure or accidents related to stacking the* container*s.*

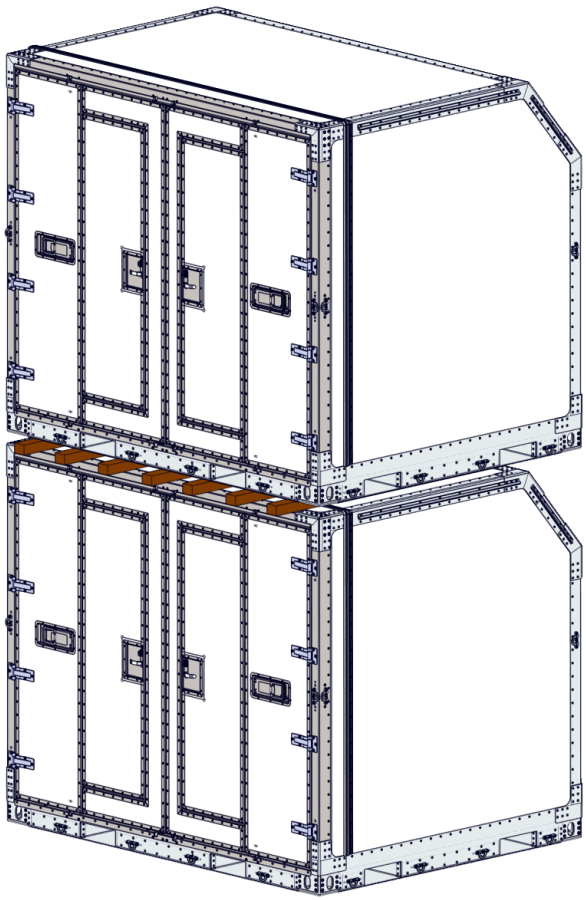
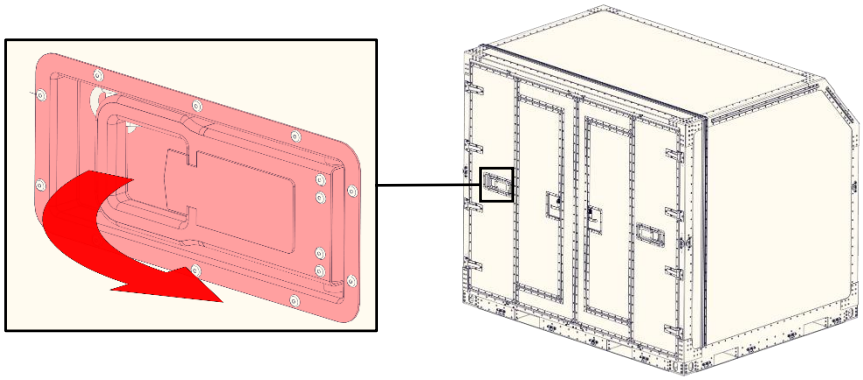


Figure 15: Stacked containers

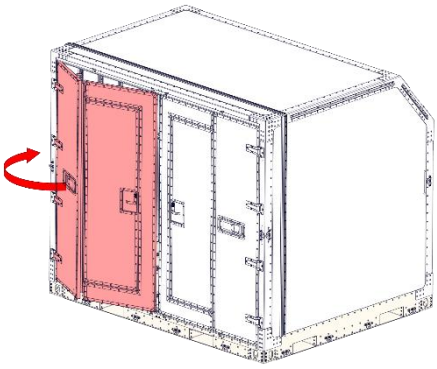
2.7. Opening/closing main doors

The main doors are located at the front of the container. Please find a short description on how to open and close the doors below:

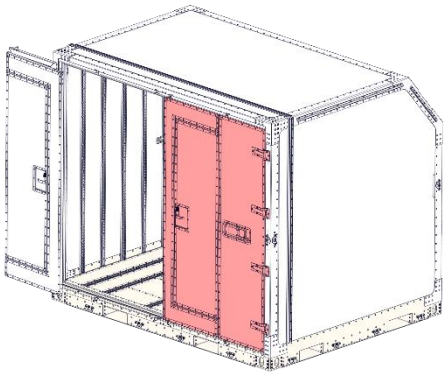
2.7.1. Opening the main doors



1. Open left door first by opening the lock of the left door

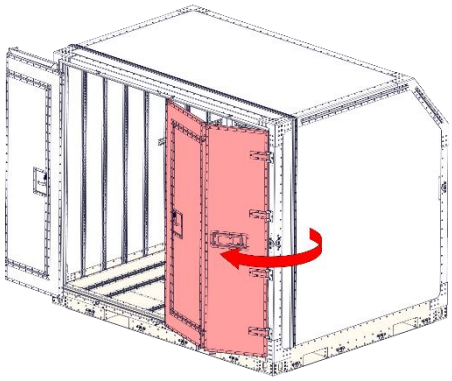


2. Pull at lock and pull door open

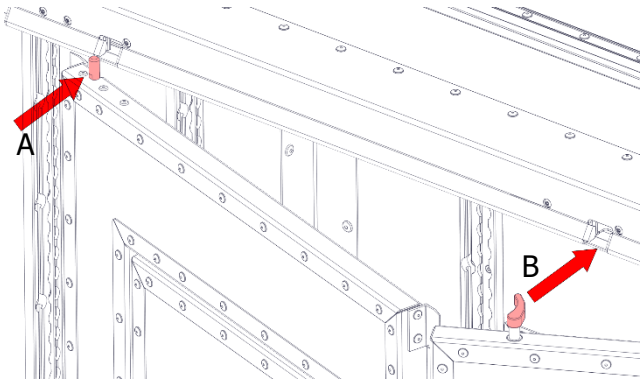


3. Open right door same way as left door

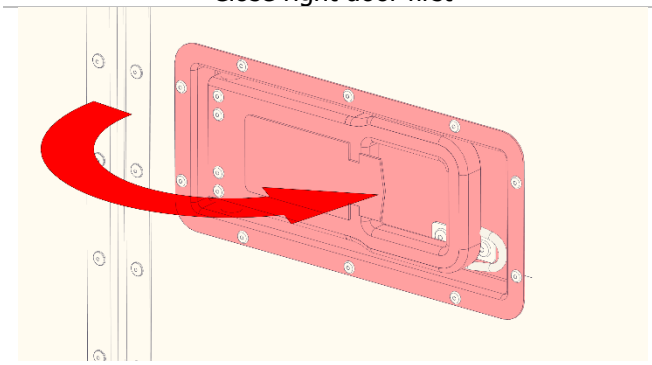
2.7.2. Closing the main doors



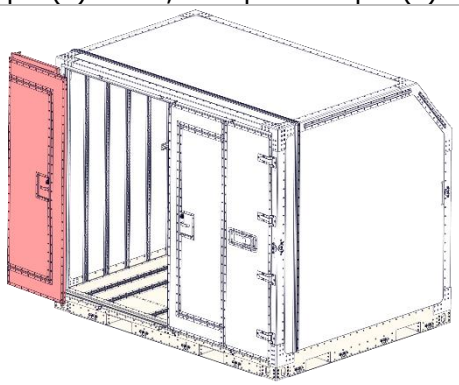
Close right door first



Place pin (A) in slot, then place keeper (B) in slot.



Close door handle and lock it



Close left door same way as right door

2.8. Extendibility pack of DBJ 1283-40-0000

Using the extendibility pack, a setup of two or four containers can be made to provide a workplace which can be cooled or heated using an air-conditioning unit. The expandability pack which need to be used for DBJ P/N 1283-40-0000 is P/N: 2000-05-0044.
The extendibility pack consists of the following items (Figure 16):

- 1x Shelf/pallet
- 4x Ramp
- 2x Modular roof
- 1x Cover

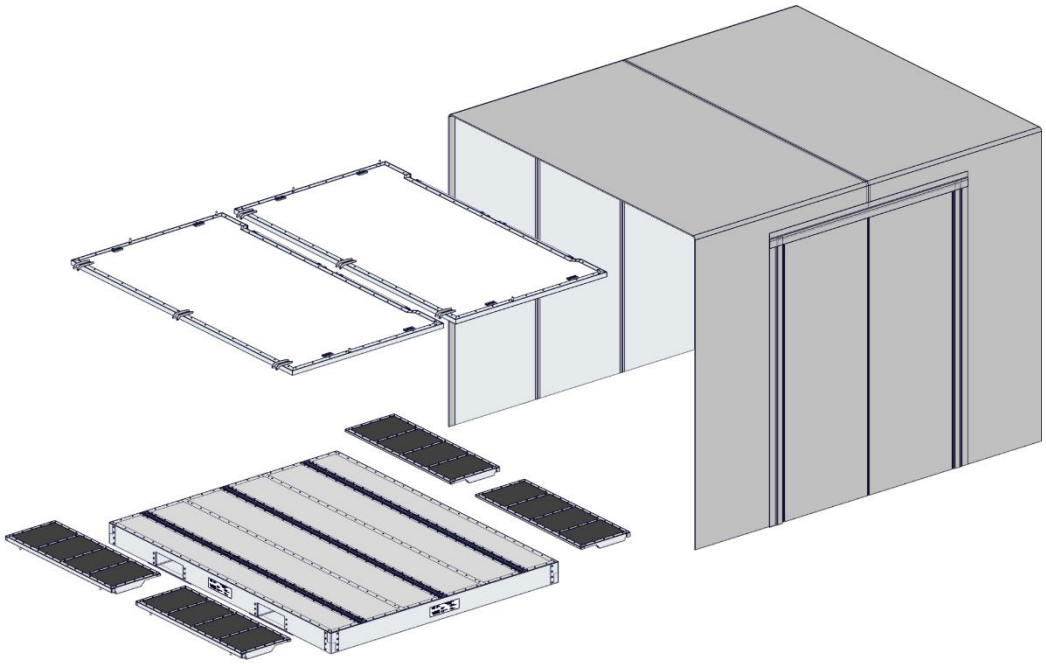


Figure 16: Extendibility pack components

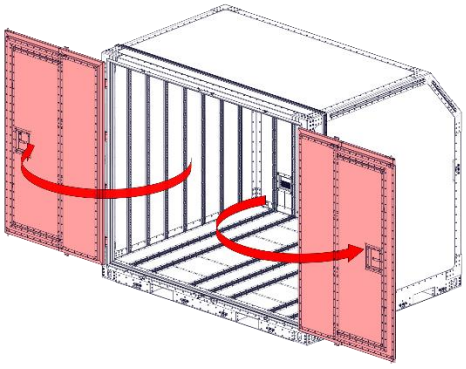
2.8.1. Stowing extendibility pack components

The modular roof and shelf can be stored in the container in a specific way.

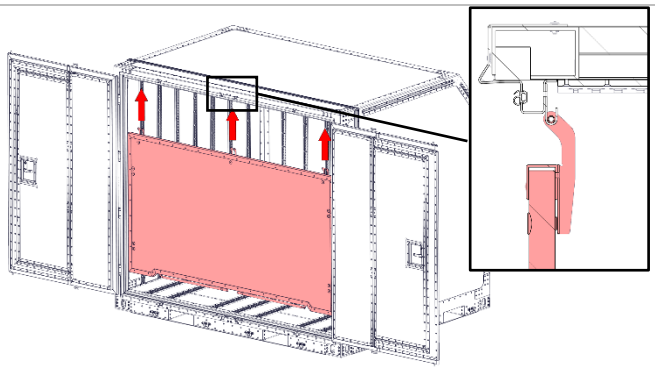
2.8.1.1. Stowing the modular roof

Please find below a short description on how to stow the modular roof in the container:

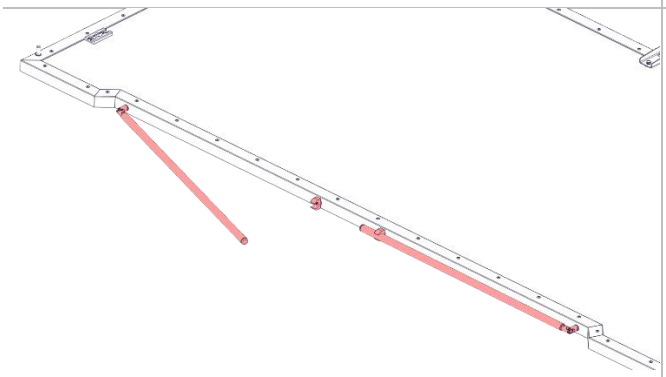
⚠ **CAUTION**
» Keep two panel brackets within reach.
» Stowing the modular roof is a two person job.



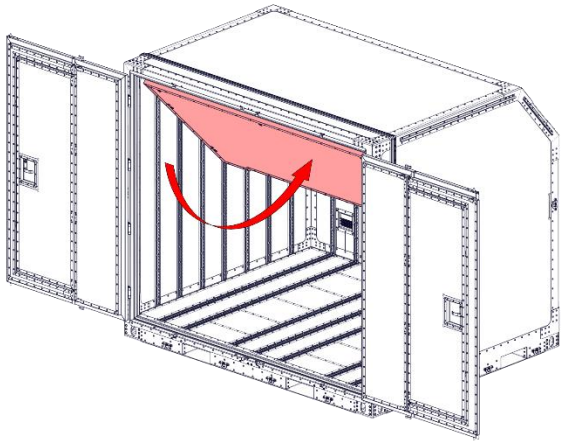
Open both main doors



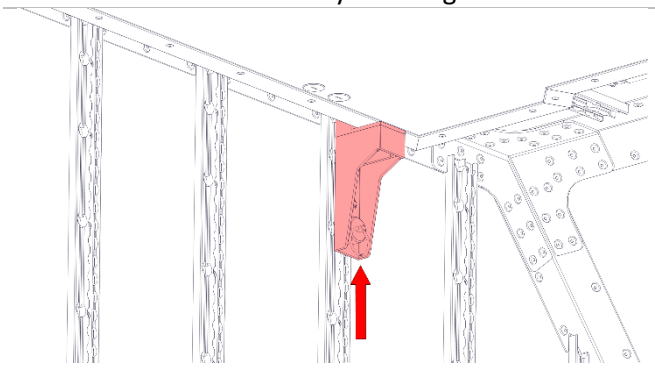
Hang the modular roof on the three hooks located in the roof



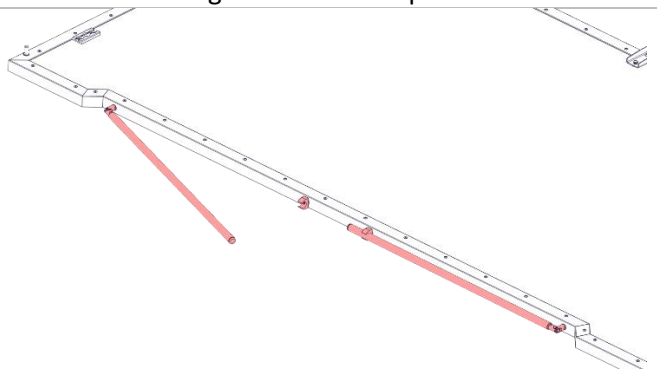
Use roof handles for easy handling modular roof



Swing modular roof upwards



Place a panel bracket to the side wall underneath the modular roof as high as possible

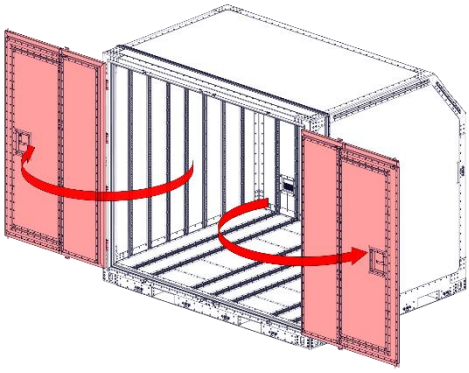


Put the roof handles back in the clamps

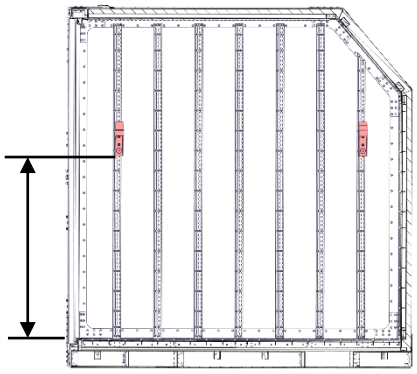
2.8.1.2. Stowing the shelf

Please find below a short description on how to stow the shelf in the container:

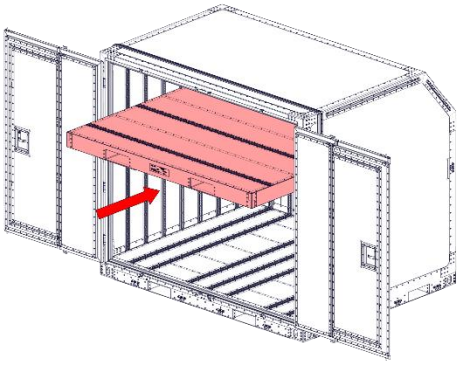
⚠ **CAUTION**
» The panel brackets must be placed on the first and last track of the side walls.
» A forklift truck is needed for this job.



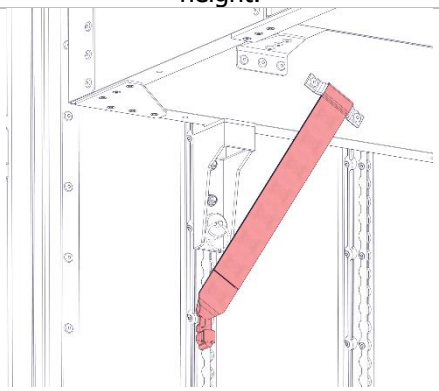
Open both main doors



Place the panel brackets on the first and last track of the side walls. Place all the brackets at the same height.



Using a forklift, carefully manoeuvre the shelf inside the container and set it down on the panel brackets.



Tie down the shelf by fastening all four straps to the seat track of the container.

The shelf can now be loaded, taking into account the maximum loading conditions in sections 2.4.3 and 2.4.4.

2.8.2. Two container configuration

Please find below a short description on how to setup the two-container configuration in Figure 17.

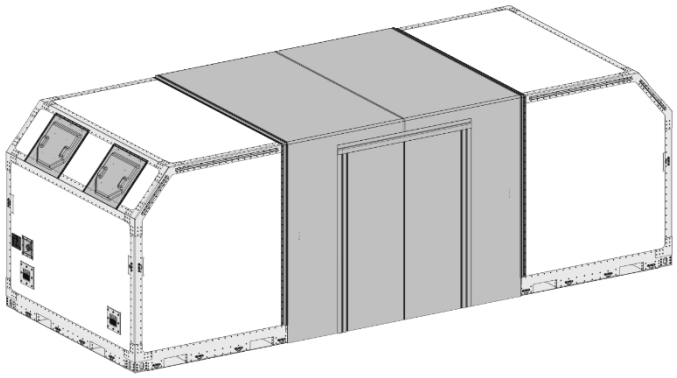
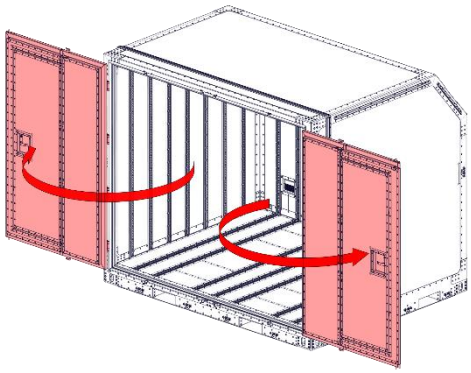


Figure 17: Two-container configuration

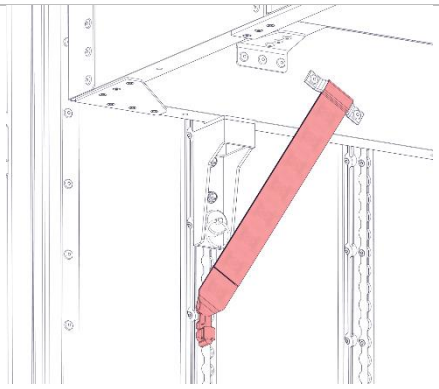
- Choose a flat surface of 8,5 x 3 m.
- Put the first container (containing the shelf) in place.

1



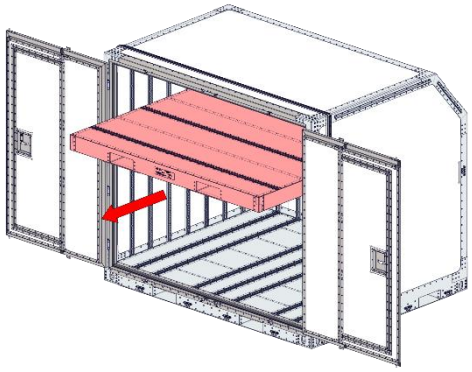
Open both main doors

2



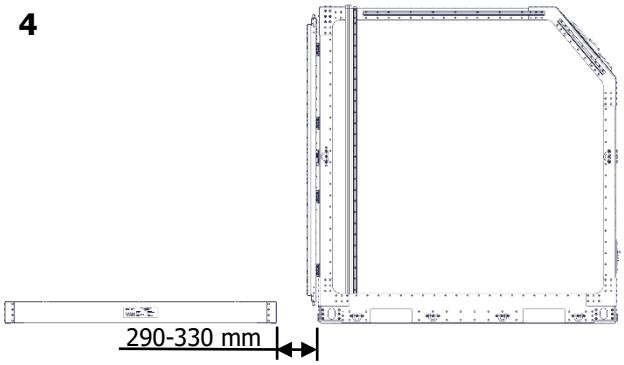
Loosen the straps of the shelf by taking the double studs out of the seat track.

3



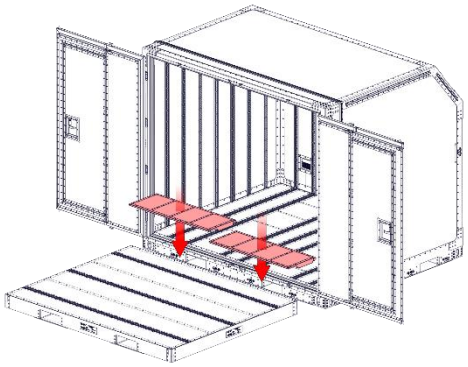
With a forklift carefully take the shelf outside the container and set it down on the ground.

4



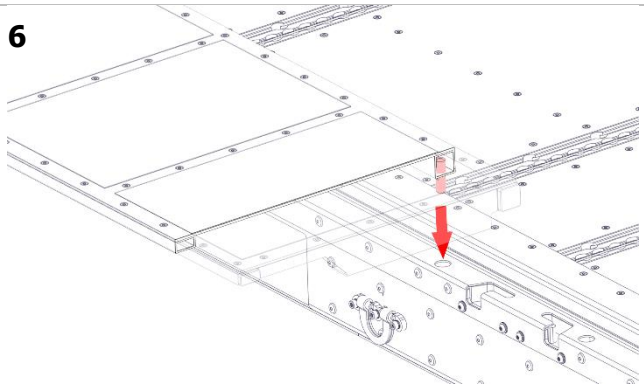
Leave 290 to 330 mm between the container and the shelf.

5



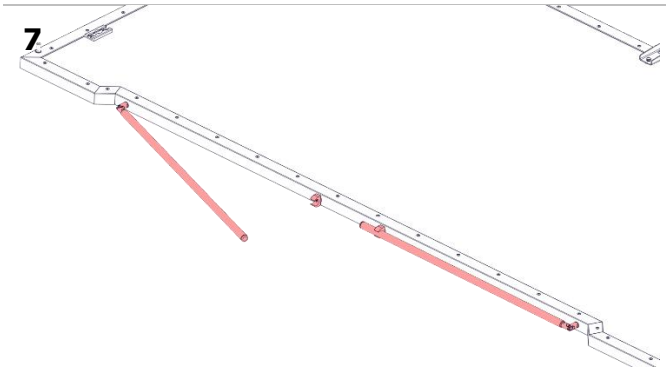
Place two ramps between container and shelf.

6



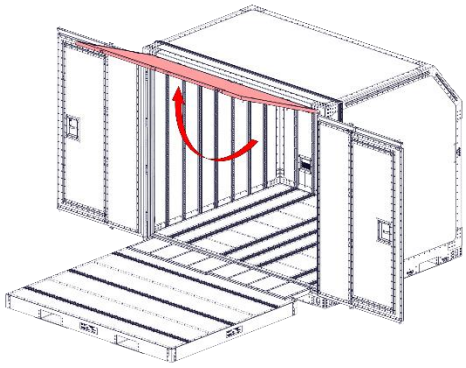
The pins will lock the ramp into the base of the container.

7



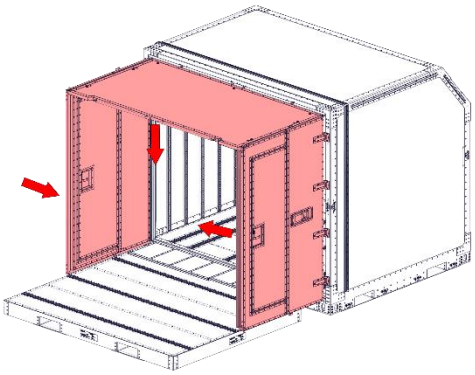
Take out the roof handles for easy handling.

8



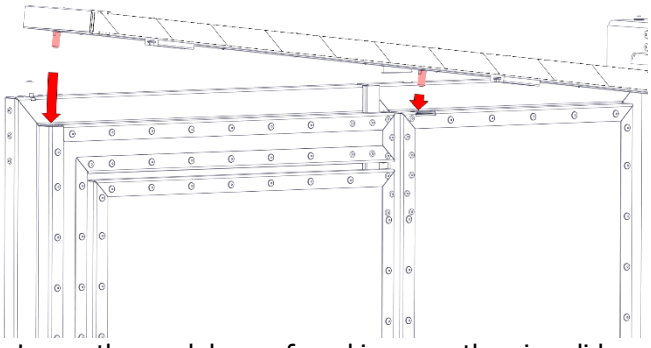
Remove all panel brackets and swing modular roof outside.

9



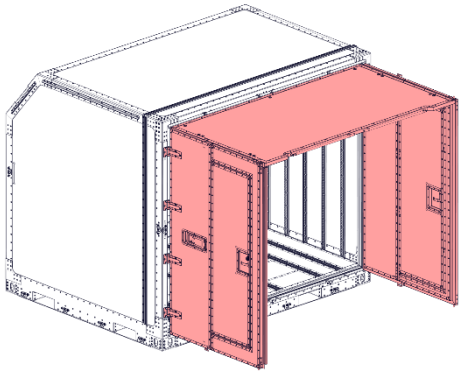
Position doors such that they are in line with the sides of the shelf and the container.

10



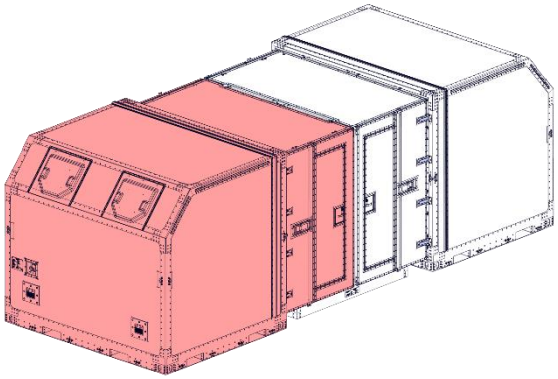
Lower the modular roof, making sure the pins slide into the tubes atop the doors.

11



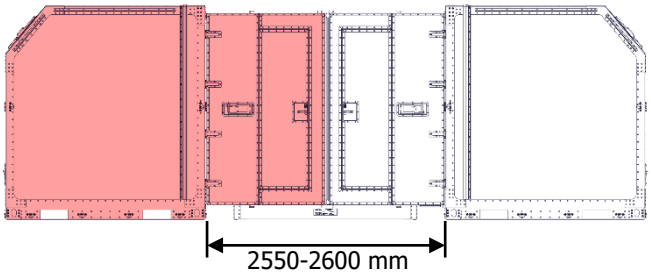
Repeat steps 1 and 7-10 for the second container.

12



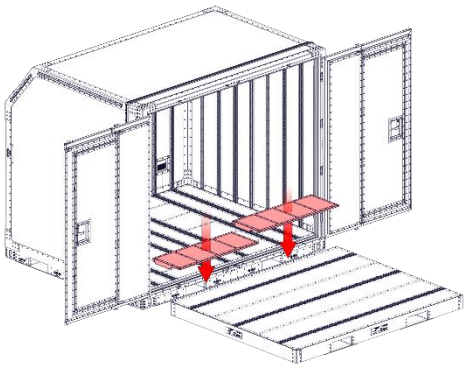
Align the second container with the first container.

13



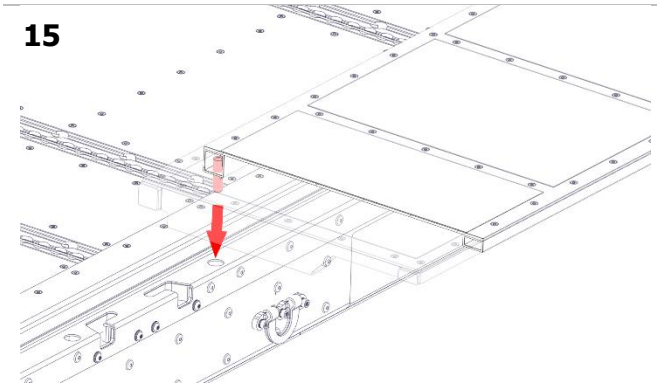
Place the containers 2550 to 2600 mm apart.

14



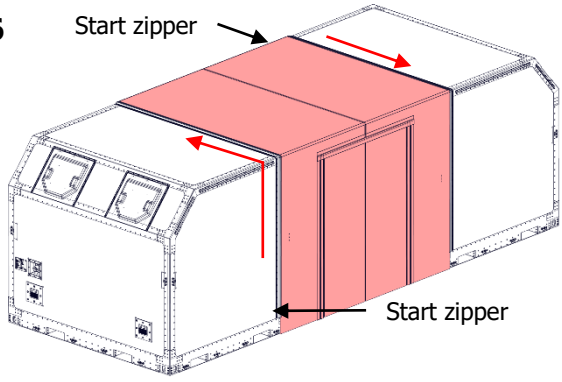
Place the last two ramps between the second container and shelf.

15



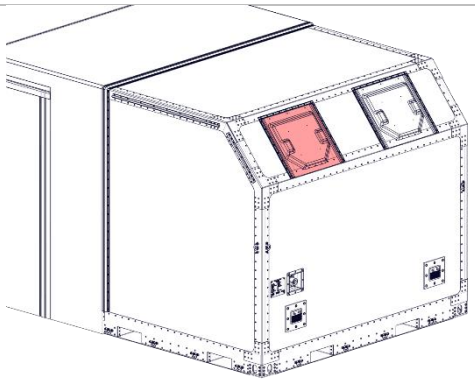
The pins will lock the ramp into the base of the container.

16



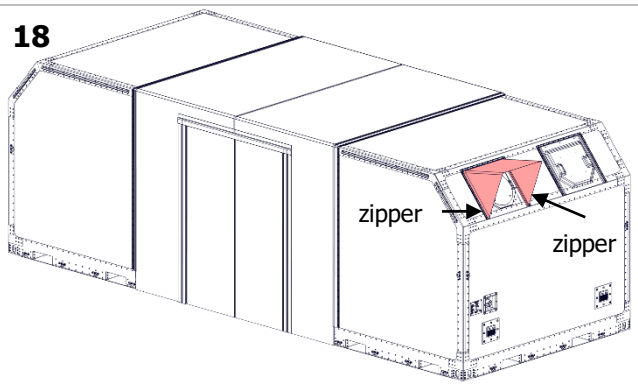
Place cover over container and zip the cover to the containers.

17



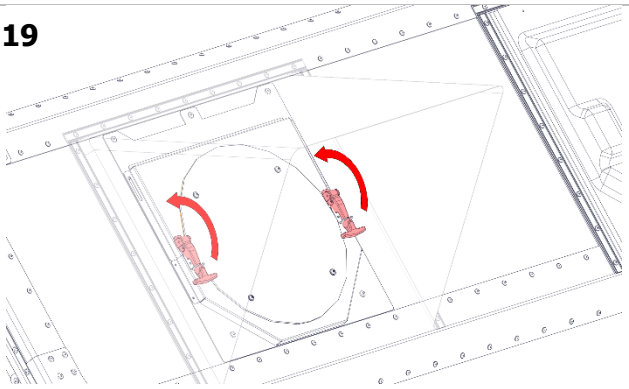
To install the HVAC system, open one of the hose lock covers on the slanted side of the container.

18



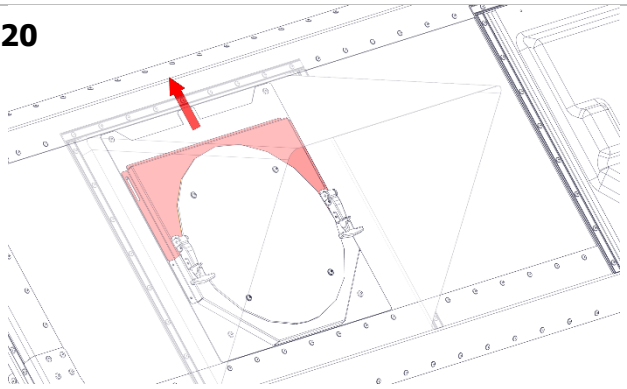
Open the cover with the two zippers on the side.

19



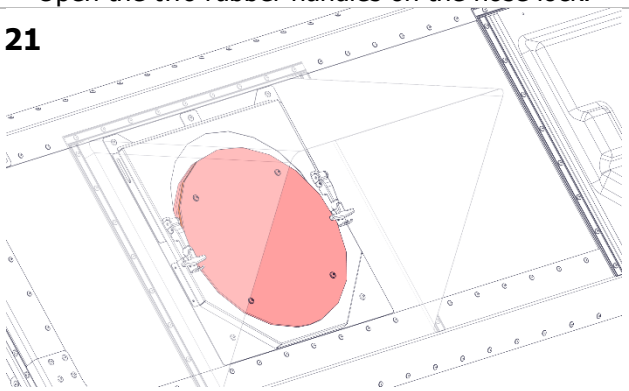
Open the two rubber handles on the hose lock.

20



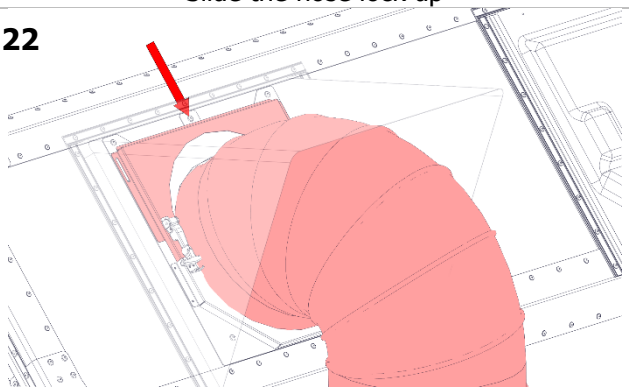
Slide the hose lock up

21



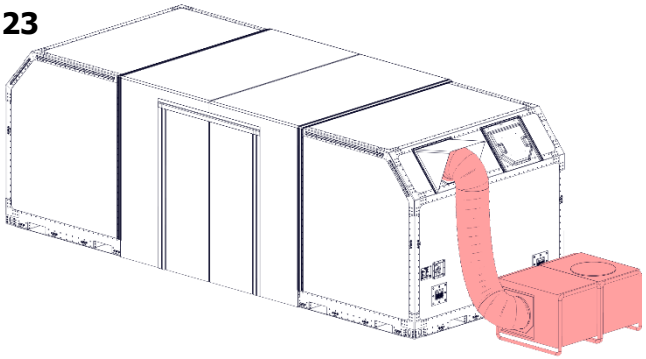
Remove the gasket.

22



Place the hose, close the hose lock and lock the rubber handles.

23



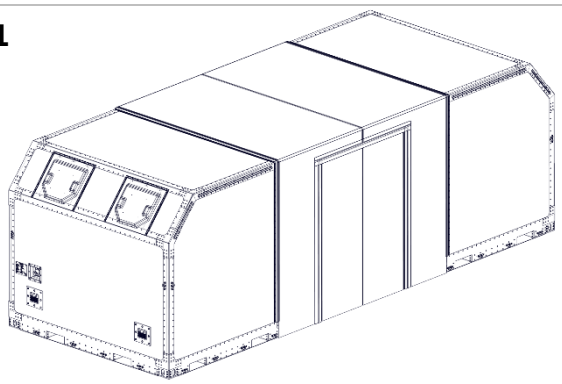
If not already, connect the hose the HVAC system. The containers are now ready for use.

2.8.3. Four container configuration

Please find below a short description on how to setup the four-container configuration.

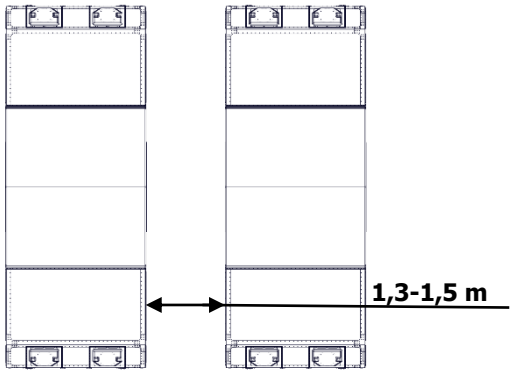
Choose a flat surface of 8,5 x 7 m

1



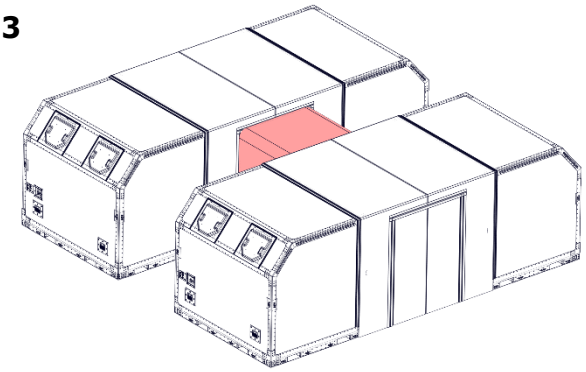
Perform steps 1-16 of section 2.8.2 twice.

2



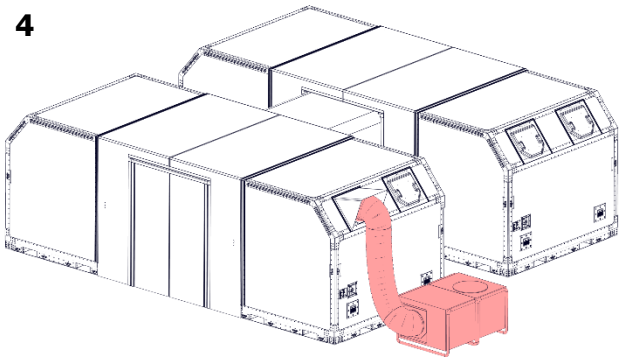
Place both pairs of containers 1,3 m to 1,5 apart.

3



Attach the tunnel to the cover using the zippers.

4



Perform steps 17-23 of section 2.8.2 to connect the HVAC unit to the containers.

2.9. Extendibility pack of DBJ 1283-40-0001

Using the extendibility pack, a setup of two or four containers can be made to provide a workplace which can be cooled or heated using an air-conditioning unit. The expandability pack which needs to be used for DBJ P/N 1283-40-0001 is P/N: 2000-07-2624.
The extendibility pack consists of the following items (Figure 16):

- 1x Shelf/pallet (balloon 3 in Figure 18)
- 4x Ramp (balloon 1 in Figure 18)
- 2x Sliding modular roof (balloon 2 in Figure 18)
- 1x Cover (balloon 4 in Figure 18)
- 1x Contour guidance pieces (balloon 5 in Figure 18). This is a "map on the floor" to indicate the container and shelf positions with respect to each other, thereby helping the forklift driver. Note that this is only an optional article that can be ordered separately. Since it is only optional, and since its usage speaks for itself, it has not been included in the rest of this operating manual.

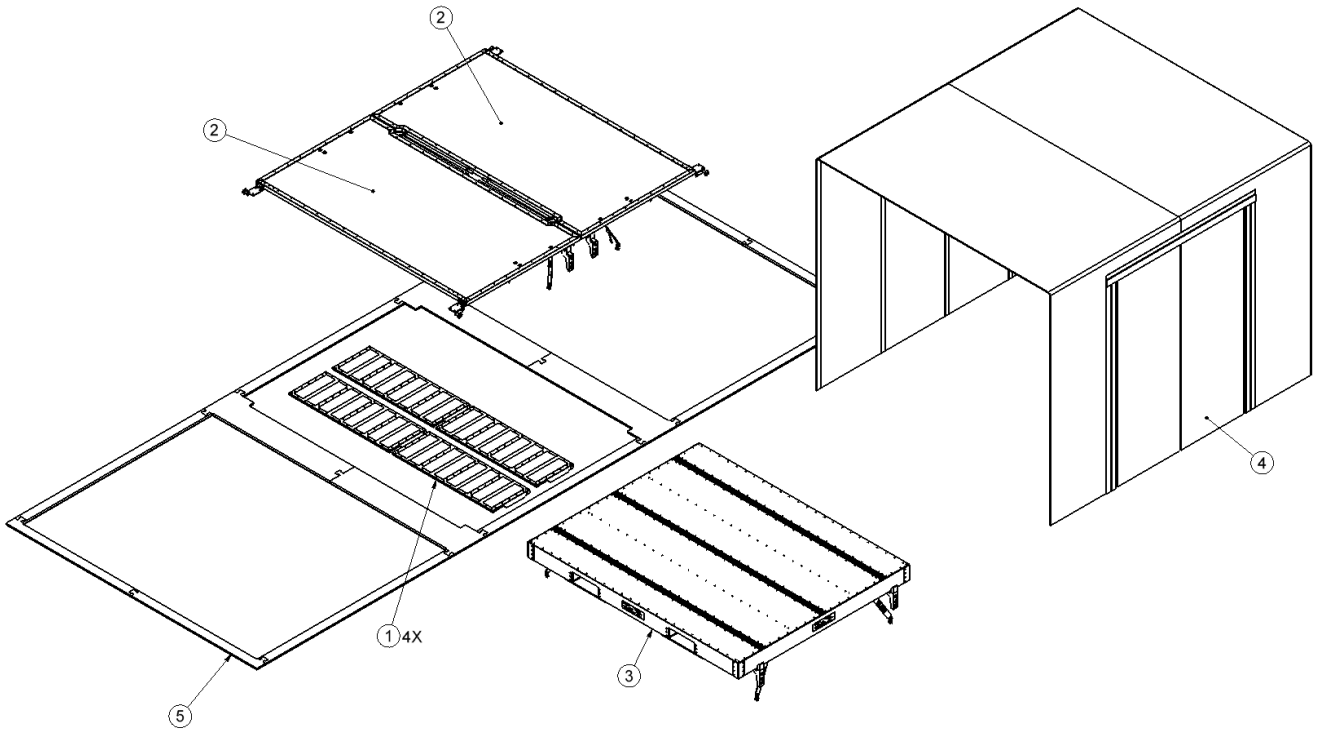


Figure 18: Extendibility pack components

2.9.1. Stowing extendibility pack components

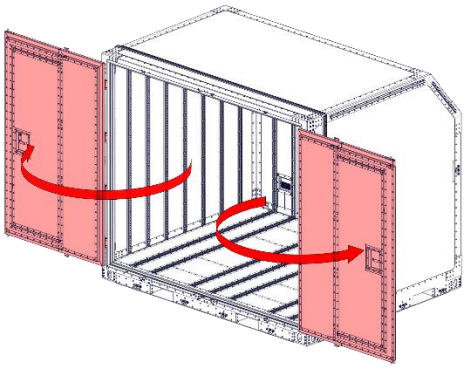
The modular roof and shelf can be stored in the container in a specific way.

The improved modular roof (2000-07-2626) is a sliding roof that is installed in the container once, as described in section 2.9.1.1. After that it can be deployed easily by sliding the roof out of the container, and stored easily by sliding it back into the container, as described in section 2.9.2.

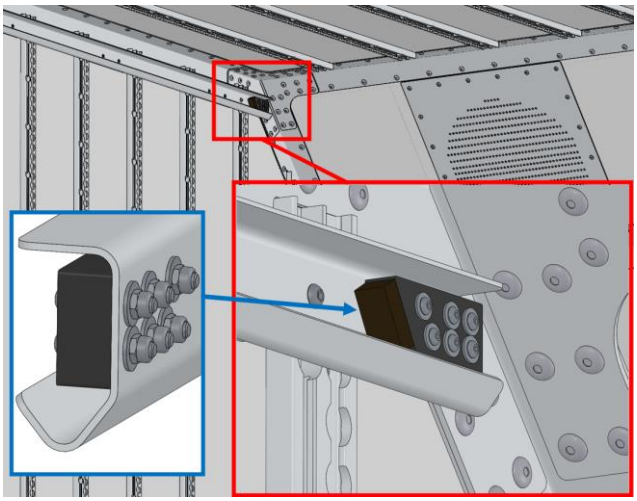
2.9.1.1. Installing the modular roof into the container

Please find below a description on how to install the modular roof in the container:

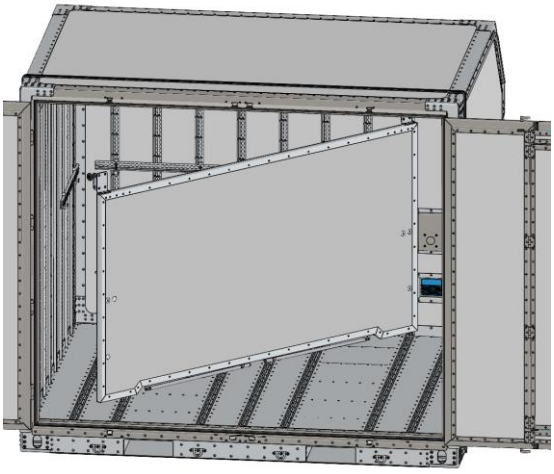
⚠ **CAUTION**
- Keep two panel brackets within reach.
- Installing the modular roof is a two person job.



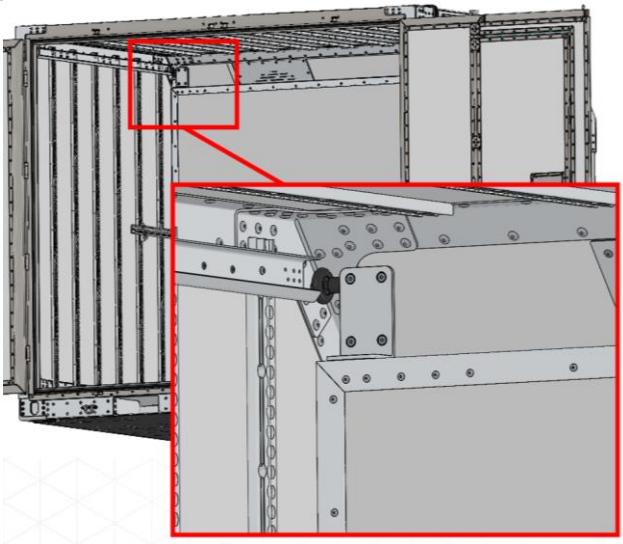
Step 1: Open both main doors



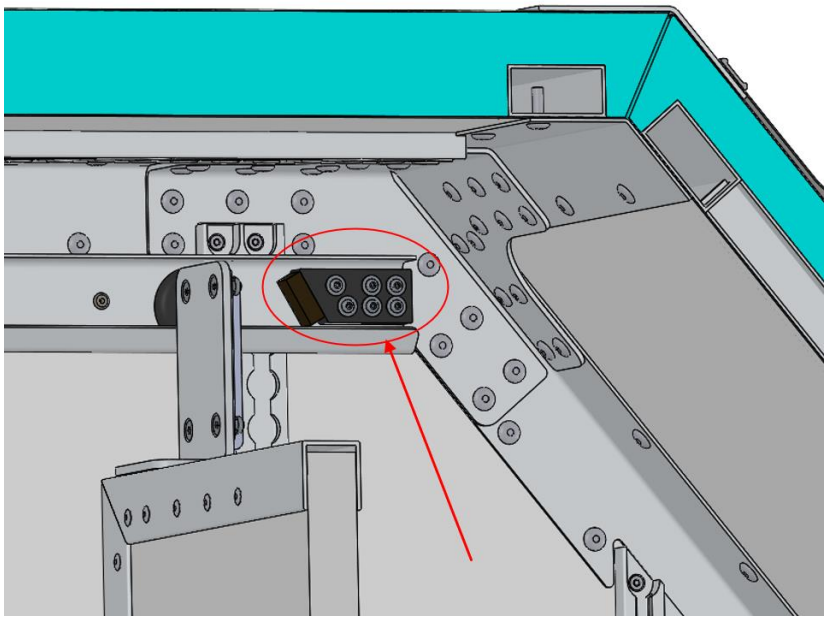
Step 2: Remove the end stop blocks from both roller tracks, by loosening the nuts on the back of the stop blocks (use a torx T9 bit and 7mm wrench).



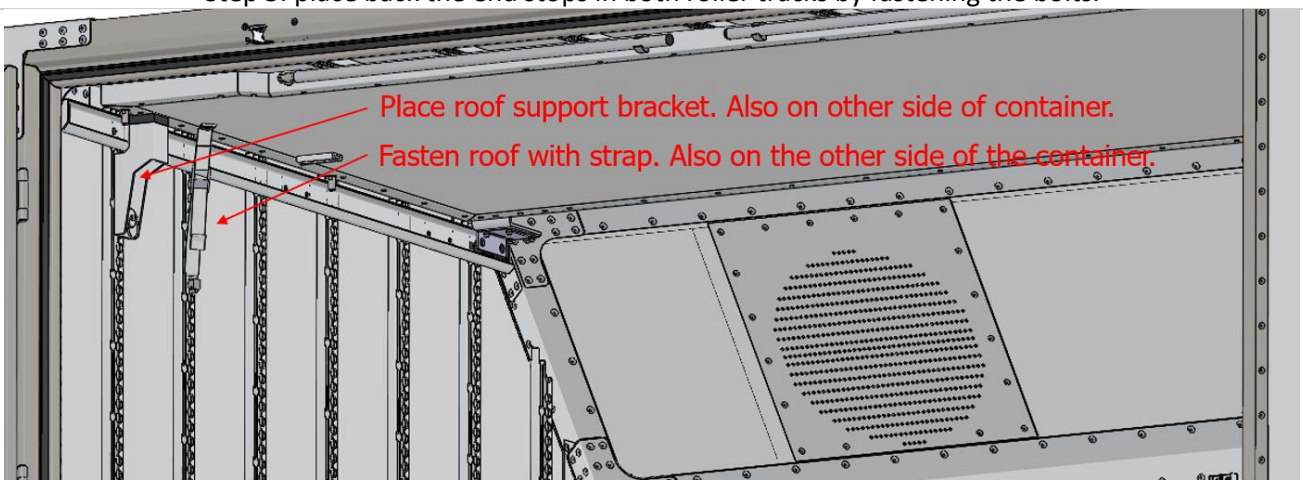
Step 3: Carry the roof into the container with two people.



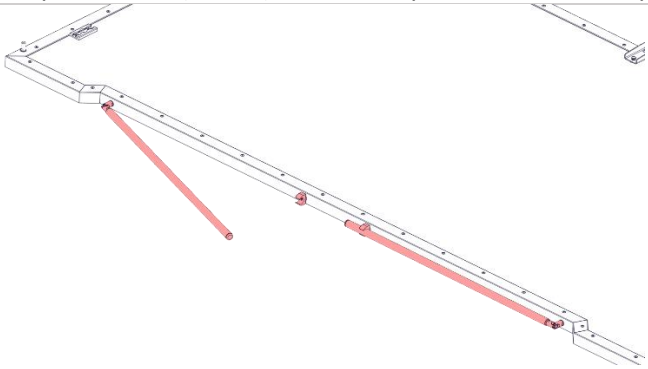
Step 4: Lift the modular roof with two people and Please use the orientation of the bracket shown in the image above, otherwise the roof will be installed upside down.



Step 5: place back the end stops in both roller tracks by fastening the bolts.



Step 6: one person tilts the roof horizontal and positions the wheels against the end stop. Another person then supports the roof with two roof support brackets (2000-07-2774), one per side of the container.
Step 7: Secure (fasten) the roof in place with two straps (2000-07-3403), one per side of the container.

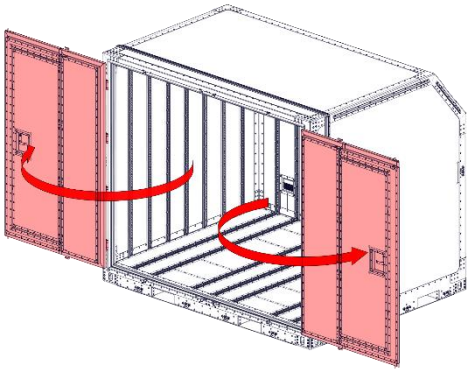


Step 8: put the roof handles back in the clamps.

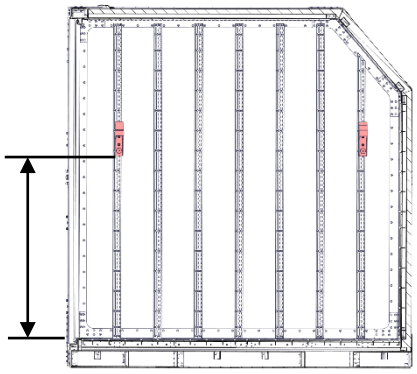
2.9.1.2. Stowing the shelf

Please find below a short description on how to stow the shelf in the container:

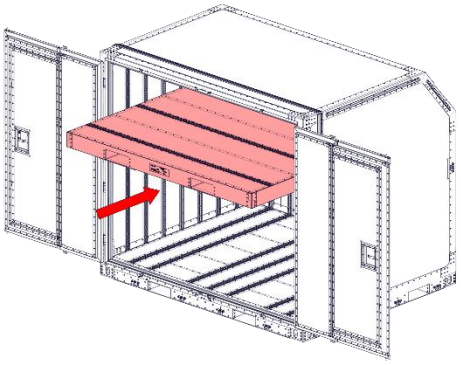
⚠ **CAUTION**
» The panel brackets must be placed on the first and last track of the side walls.
» A forklift truck is needed for this job.



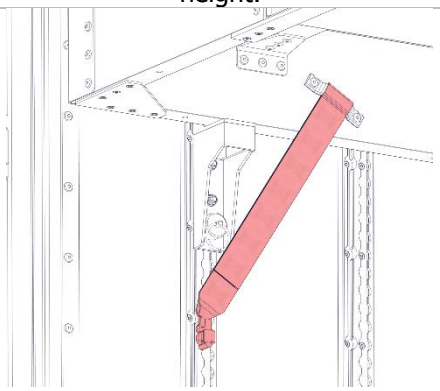
Open both main doors



Place the panel brackets on the first and last track of the side walls. Place all the brackets at the same height.



Using a forklift, carefully manoeuvre the shelf inside the container and set it down on the panel brackets.



Tie down the shelf by fastening all four straps to the seat track of the container.

The shelf can now be loaded, taking into account the maximum loading conditions in sections 2.4.3 and 2.4.4.

2.9.2. Two container configuration

Please find below a short description on how to setup the two-container configuration in Figure 17.

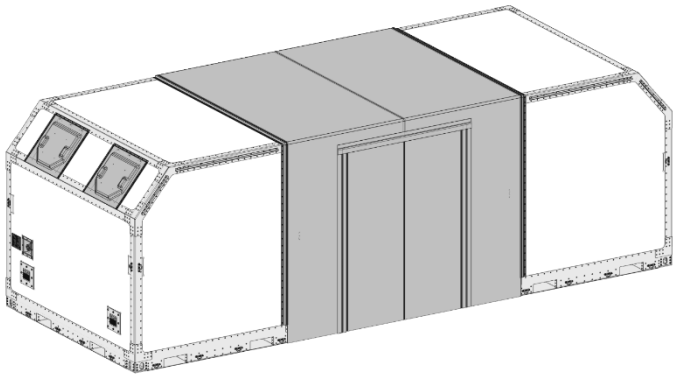
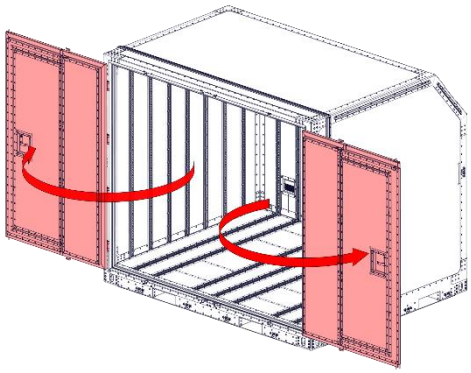


Figure 19: Two-container configuration

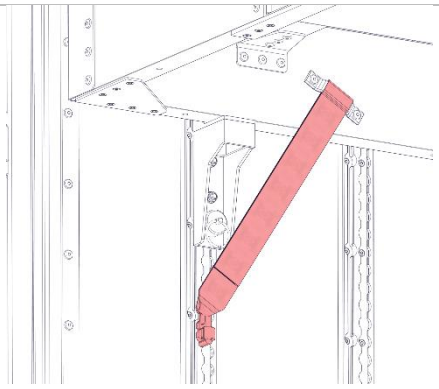
- Choose a flat surface of 8,5 x 3 m.
- Put the first container (containing the shelf) in place.

1



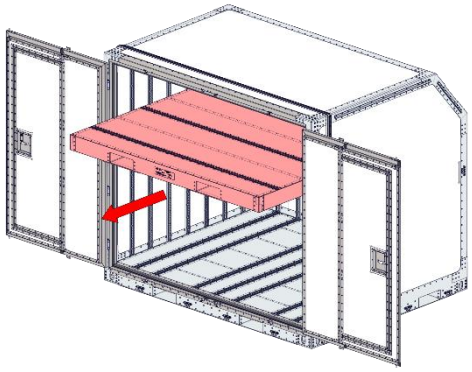
Open both main doors

2



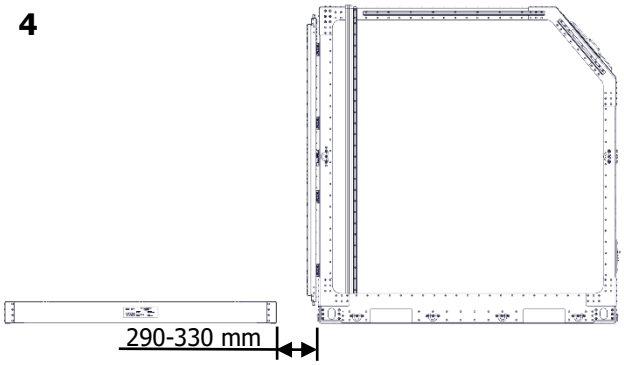
Loosen the straps of the shelf by taking the double studs out of the seat track.

3



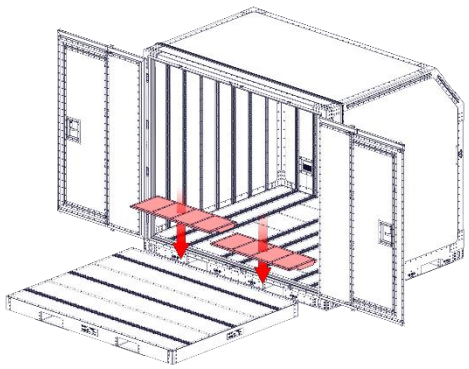
With a forklift carefully take the shelf outside the container and set it down on the ground.

4



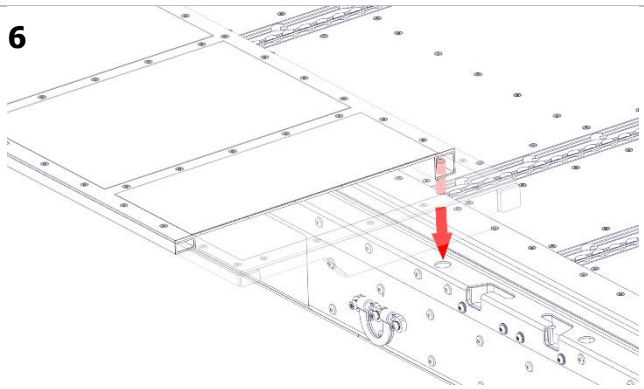
Leave 290 to 330 mm between the container and the shelf.

5



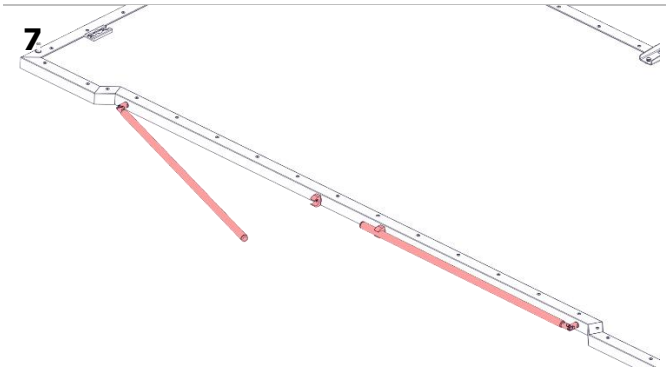
Place two ramps between container and shelf.

6



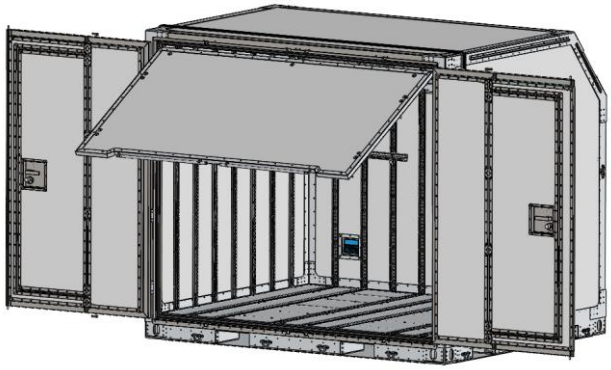
The pins will lock the ramp into the base of the container.

7



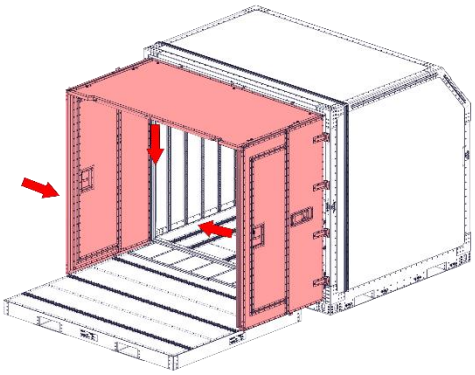
Take out the roof handles for easy handling.

8



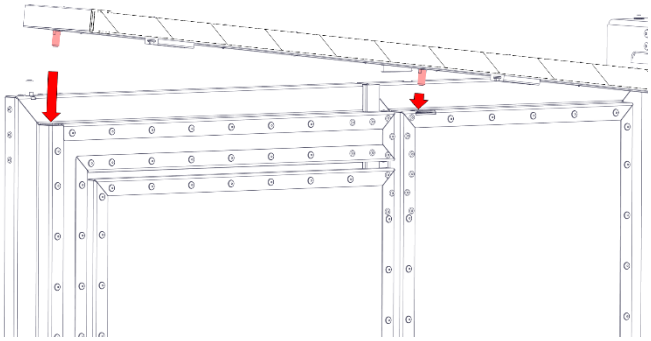
Loosen the straps and roof support brackets and slide the modular roof outside.

9



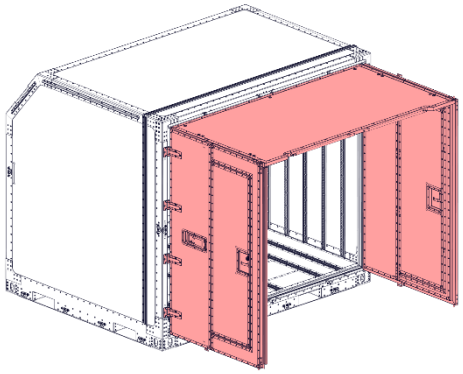
Position doors such that they are in line with the sides of the shelf and the container.

10



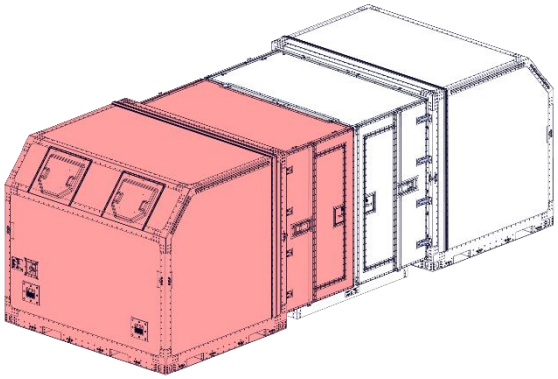
Lower the modular roof, making sure the pins slide into the tubes atop the doors.

11



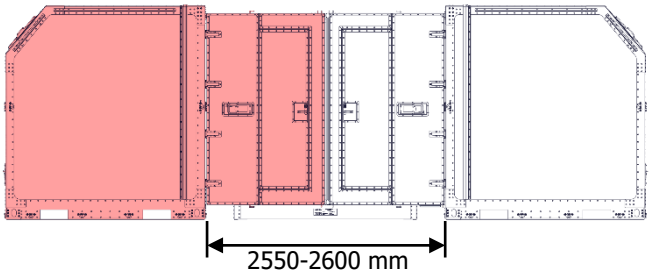
Repeat steps 1 and 7-10 for the second container.

12



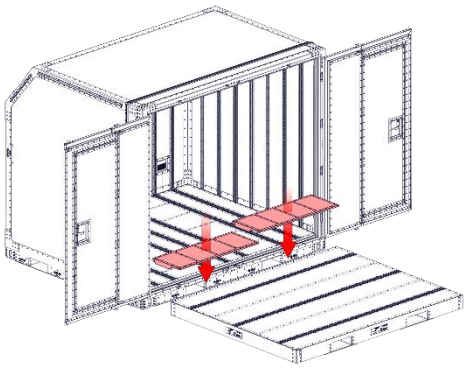
Align the second container with the first container.

13



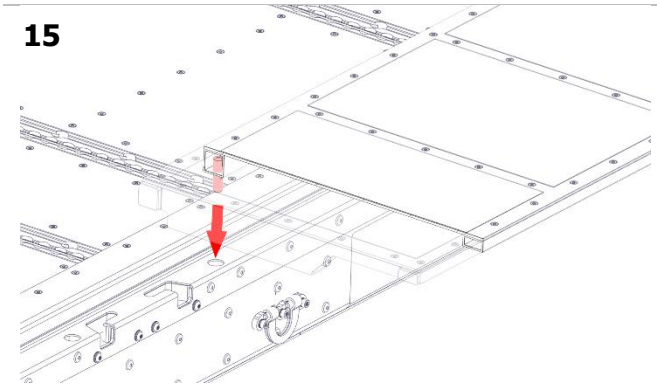
Place the containers 2550 to 2600 mm apart.

14



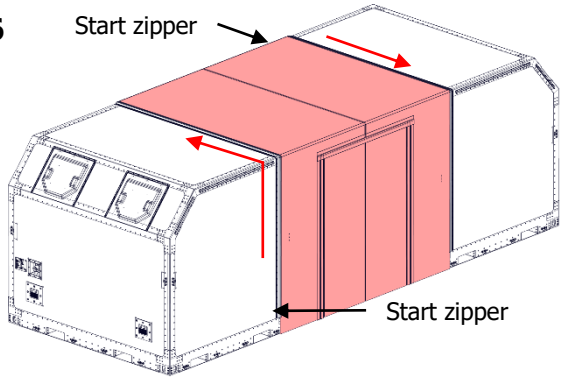
Place the last two ramps between the second container and shelf.

15



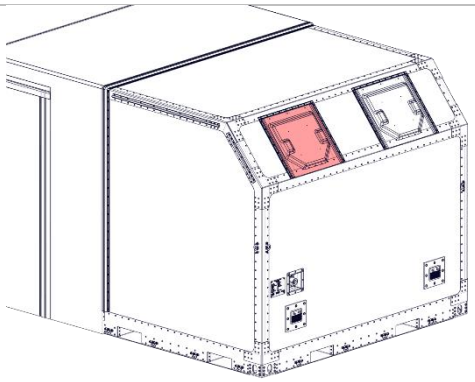
The pins will lock the ramp into the base of the container.

16



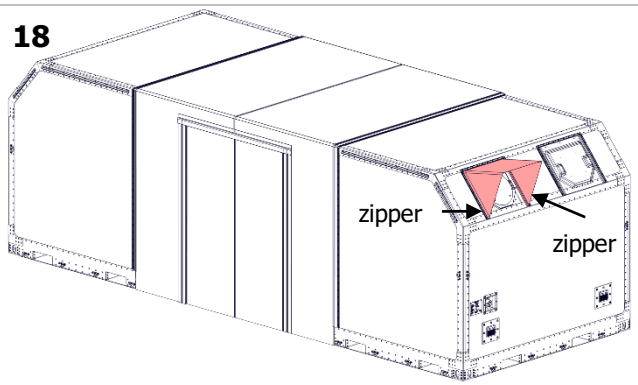
Place cover over container and zip the cover to the containers.

17



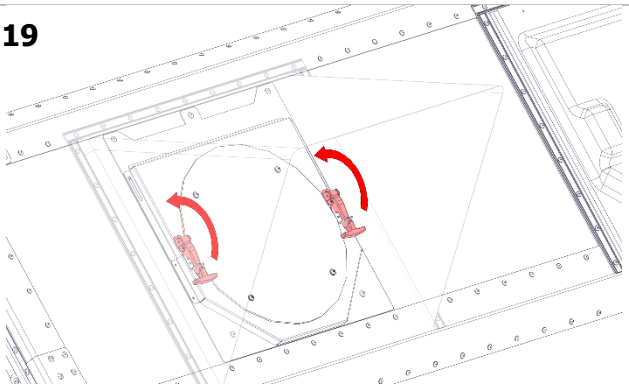
To install the HVAC system, open one of the hose lock covers on the slanted side of the container.

18



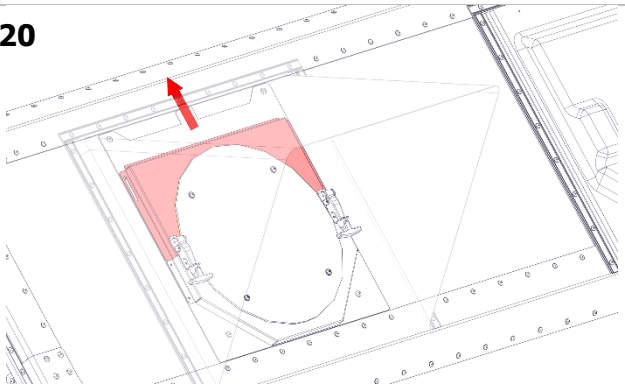
Open the cover with the two zippers on the side.

19



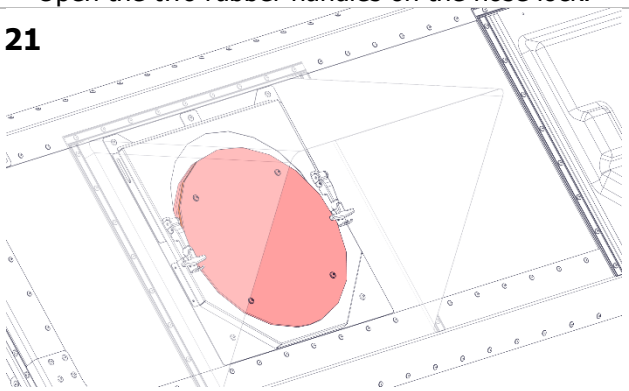
Open the two rubber handles on the hose lock.

20



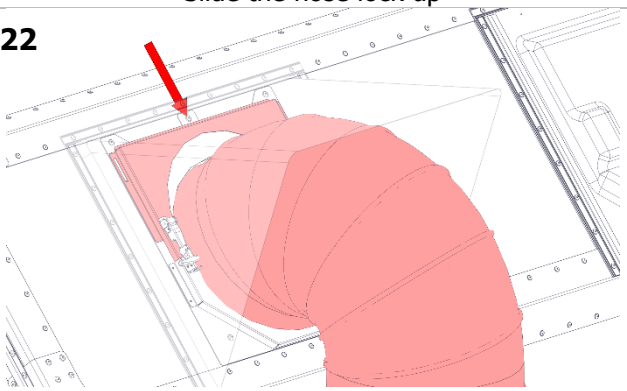
Slide the hose lock up

21



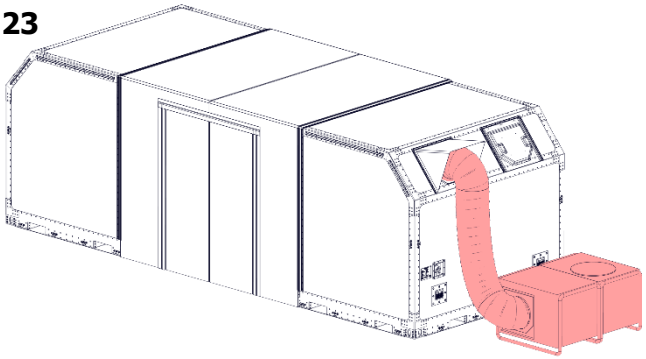
Remove the gasket.

22



Place the hose, close the hose lock and lock the rubber handles.

23



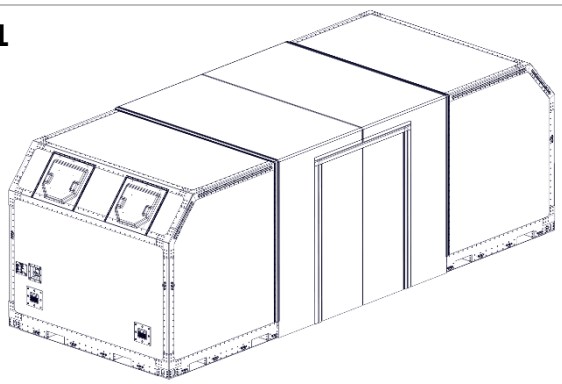
If not already, connect the hose the HVAC system. The containers are now ready for use.

2.9.3. Four container configuration

Please find below a short description on how to setup the four-container configuration.

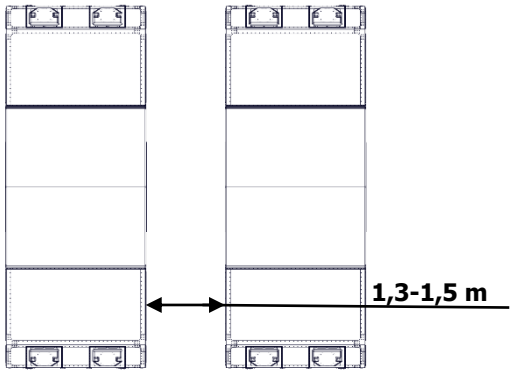
Choose a flat surface of 8,5 x 7 m

1



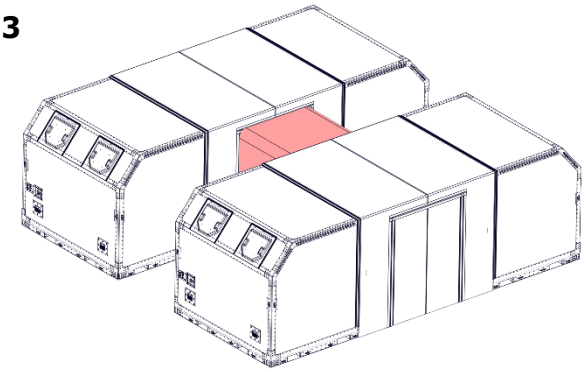
Perform steps 1-16 of section 2.8.2 twice.

2



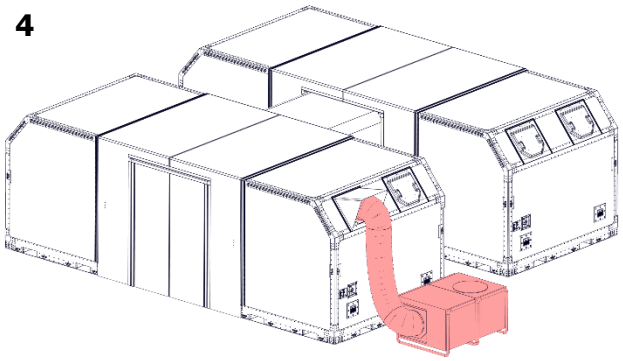
Place both pairs of containers 1,3 m to 1,5 apart.

3



Attach the tunnel to the cover using the zippers.

4



Perform steps 17-23 of section 2.8.2 to connect the HVAC unit to the containers.

2.10. Connections

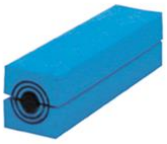
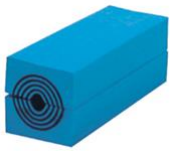
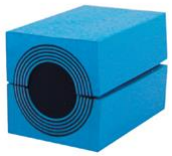
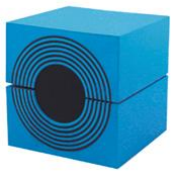
2.10.1. Roxtec

Two Roxtec Systems are installed in the rear panel of the container.

Two frames are installed in both bottom corners at the back of the container.
The two 120x60 mm frames accept different modules.
These modules can be mixed up as long the total height is no more than 60 mm and a row always has the same height.

In two 120x60 mm frames will fit the following number of modules:

- 64x RM 15; or
- 36x RM 20; or
- 6x RM 40 + 12x RM 20; or
- 4x RM 60

Image	Module	For cable diameter (mm)
	RM 15	3 - 11
	RM 20	4 - 14,5
	RM 40	21,5 - 34,5
	RM 60	24 - 54

2.10.2. HVAC

The container has two Dantherm duct connectors on the slanted side. The duct connectors are spaced 1,2 m apart and fit a hose with a diameter of Ø400 mm. Because the duct connector is not 100% watertight, the duct is covered with a cover. The cover has zippers on two sides for opening and closing. For insulation purposes a gasket is placed in the duct connector when not used.

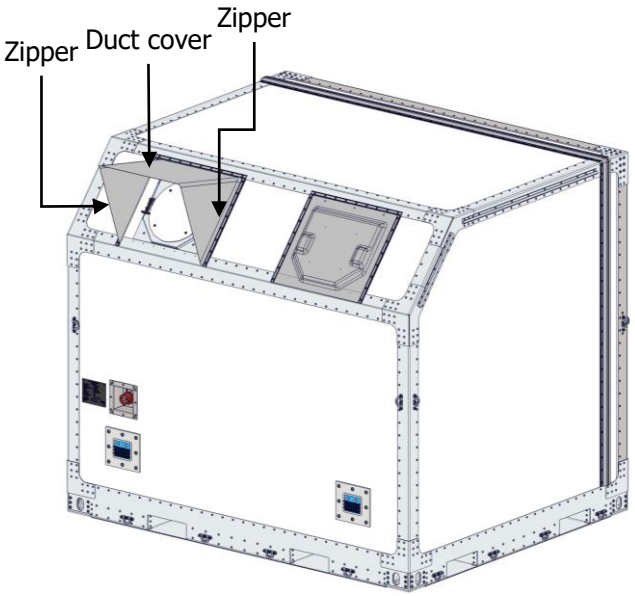


Figure 20: Duct cover

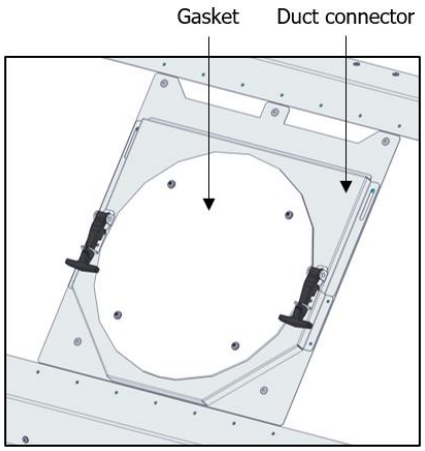


Figure 21: Detail – duct connector without cover

3. Cleaning

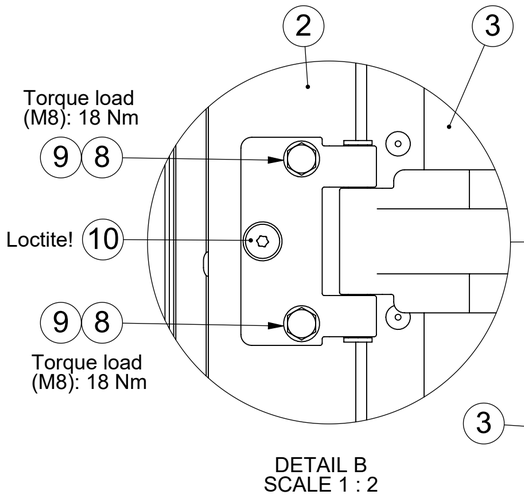
The interior and exterior faces of the container may be cleaned with any good grade industrial detergent, cleaner and/or water. The interior has to be wiped dry with a clean cloth.
There are no objections to blowing out the container with compressed air or using a vacuum cleaner.

In extremely contaminated condition, steam cleaning is permissible but only with a maximum temperature of 70 degrees Celsius.

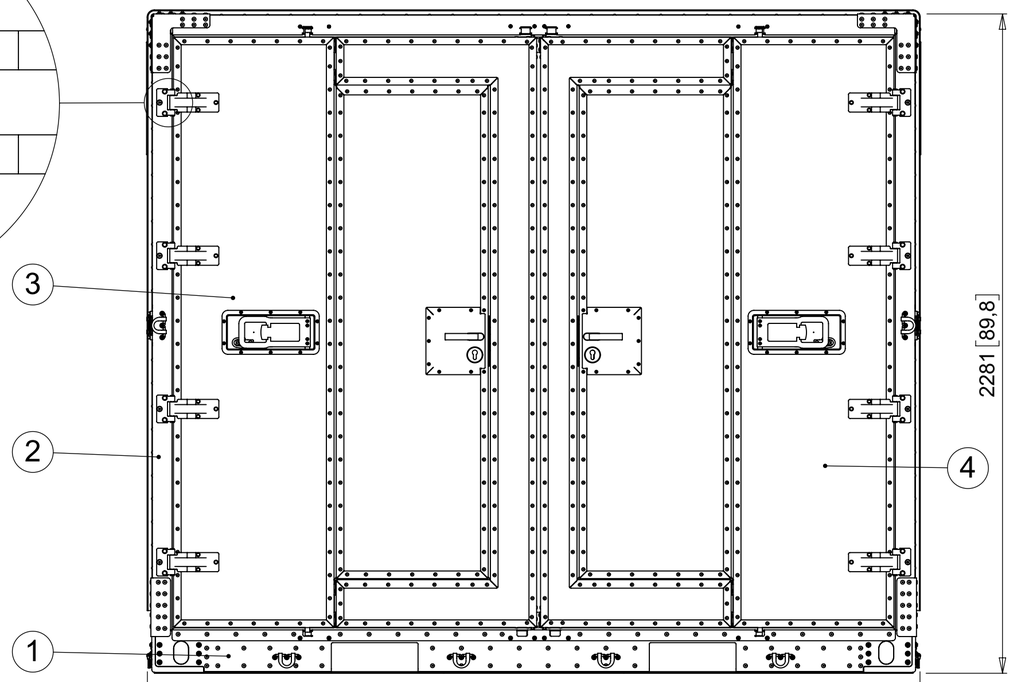
If sealing is damaged or missing it shall be restored immediately.

It's permitted to clean the interior and exterior of the container with high pressure cleaner but with a maximum pressure of 2,5 bar.

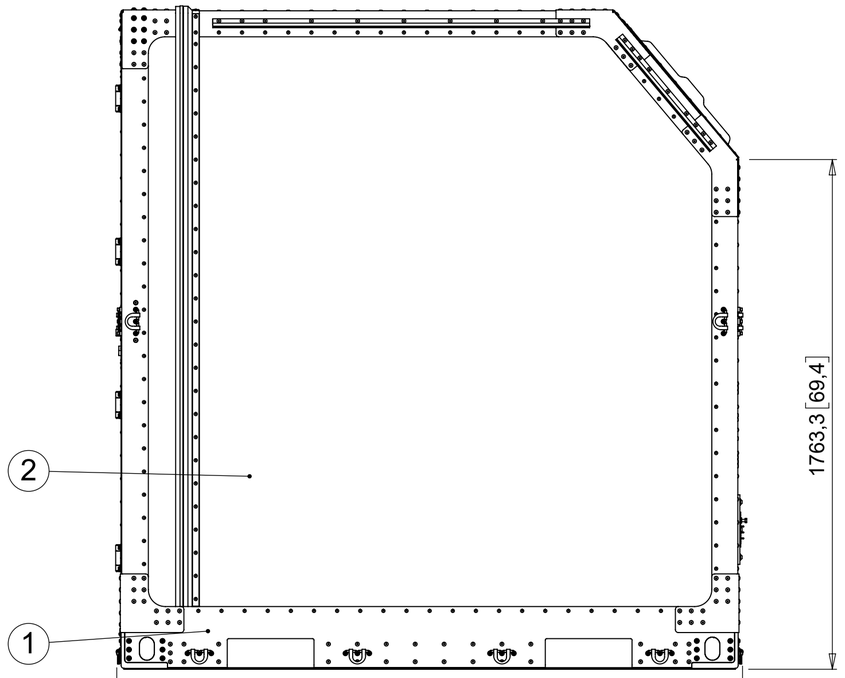
⚠ **CAUTION**
- Never use aggressive agents or chemicals;
- The use of household like chemicals is preferred



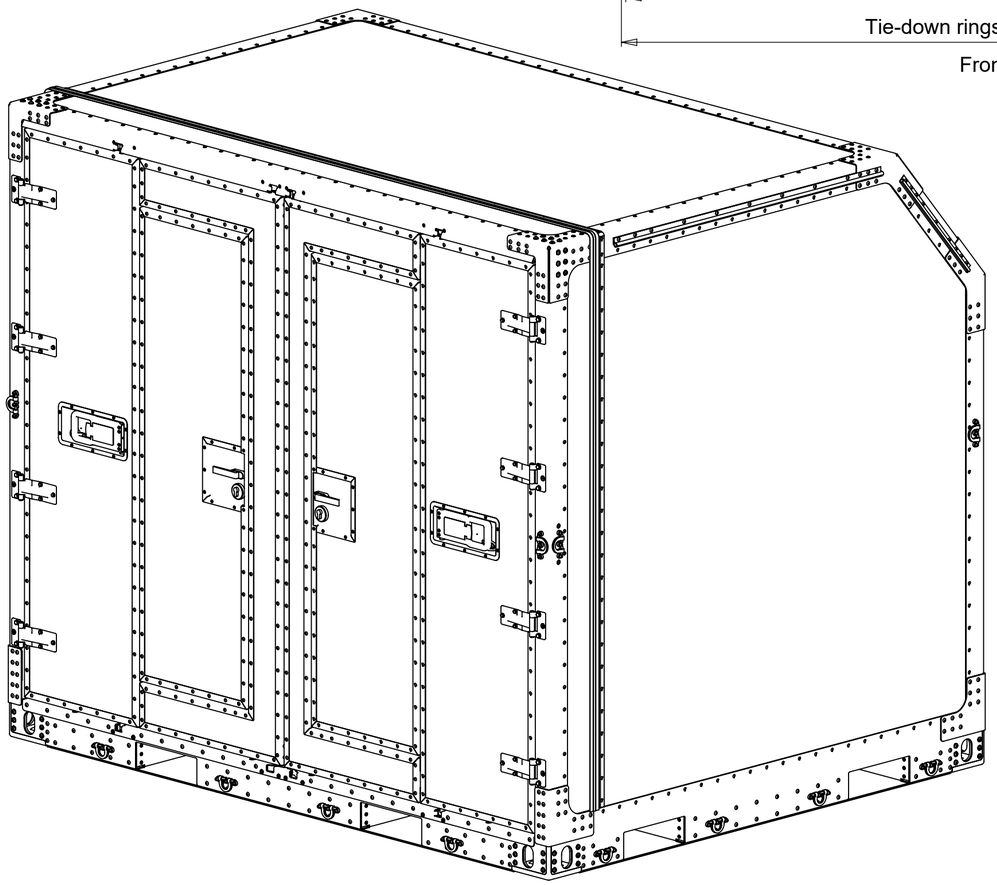
DETAIL B
SCALE 1 : 2



Front view



Right view



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
11	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
10	8	Torx Socket Csk. Screw	25	M8		BO-14581T-08025-A2	AISI 304	ISO 14581 torx
9	16	Hex. Head Screw	25	M8		BO-4017-08025-A2	AISI 304	ISO4017/DIN933
8	16	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
7	4	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
6	1	Manufacturer plate	180	150	2	2000-07-2969	Alu. 5754-H22	Blk.anod-Engrav.
5	2	Track bar				2000-07-3488	Assembly	
4	1	DBJ Door Right				2000-07-3476	Assembly	
3	1	DBJ Door Left				2000-07-3478	Assembly	
2	1	Hull DBJ				2000-07-2646	Assembly	
1	1	DBJ base level 1				2000-07-2725	Assembly	

Scale: 1:15	Date:	Drawing no. 1283-40-0001 Sheet : 1 of 4	Issue A
Drawn: MBMH	23-05-2023		
Checked: PvT	08-08-2023		
Approved: HS	08-08-2023		
Mass: 820.38 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

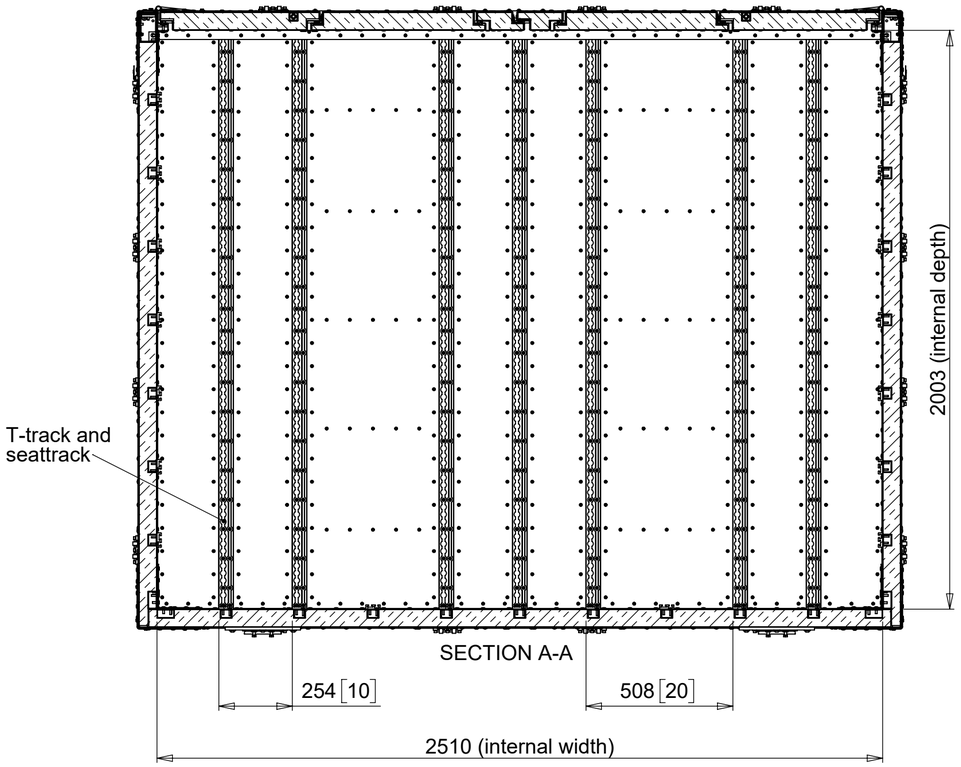
Title: DBJ container

Iss.	Changes	Date	Name

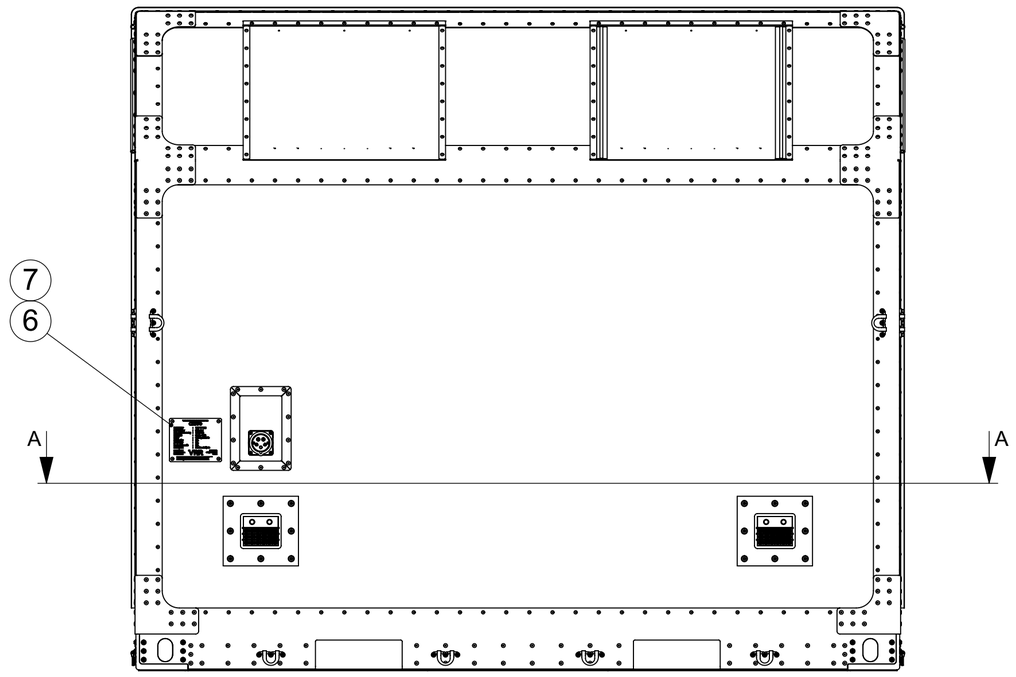
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



SECTION A-A



Rear view

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
11	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
10	8	Torx Socket Csk. Screw	25	M8		BO-14581T-08025-A2	AISI 304	ISO 14581 torx
9	16	Hex. Head Screw	25	M8		BO-4017-08025-A2	AISI 304	ISO4017/DIN933
8	16	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
7	4	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
6	1	Manufacturer plate	180	150	2	2000-07-2969	Alu. 5754-H22	Blk.anod-Engrav.
5	2	Track bar				2000-07-3488	Assembly	
4	1	DBJ Door Right				2000-07-3476	Assembly	
3	1	DBJ Door Left				2000-07-3478	Assembly	
2	1	Hull DBJ				2000-07-2646	Assembly	
1	1	DBJ base level 1				2000-07-2725	Assembly	

Scale: 1:15	Date:	Drawing no. 1283-40-0001 Sheet : 2 of 4	Issue A
Drawn: MBMH	23-05-2023		
Checked: PvT	08-08-2023		
Approved: HS	08-08-2023		
Mass: 820.38 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ container

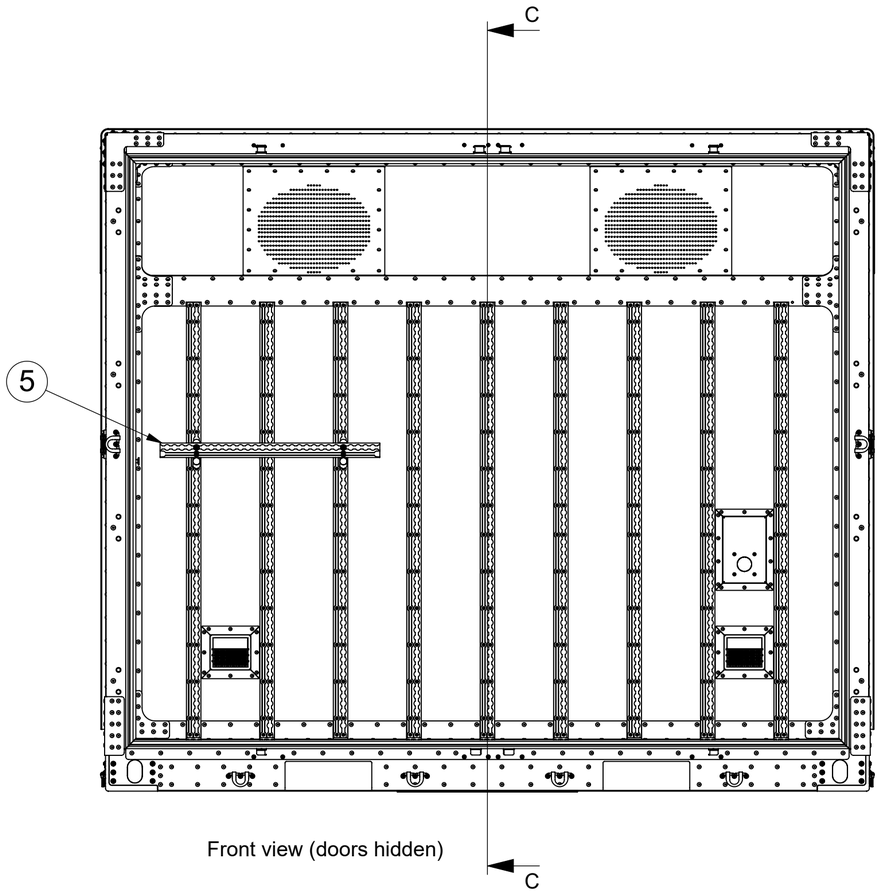
Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

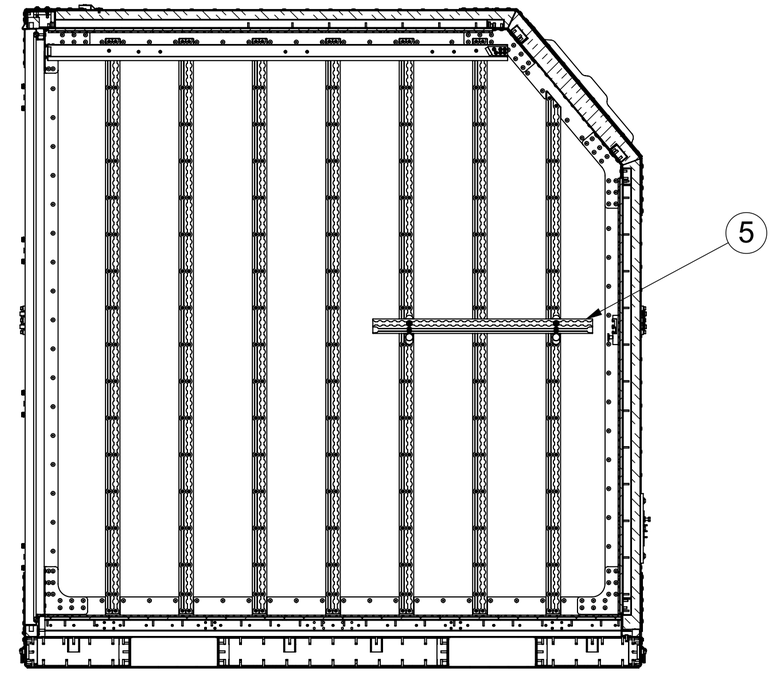
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Front view (doors hidden)



SECTION C-C

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
11	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
10	8	Torx Socket Csk. Screw	25	M8		BO-14581T-08025-A2	AISI 304	ISO 14581 torx
9	16	Hex. Head Screw	25	M8		BO-4017-08025-A2	AISI 304	ISO4017/DIN933
8	16	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
7	4	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
6	1	Manufacturer plate	180	150	2	2000-07-2969	Alu. 5754-H22	Blk.anod-Engrav.
5	2	Track bar				2000-07-3488	Assembly	
4	1	DBJ Door Right				2000-07-3476	Assembly	
3	1	DBJ Door Left				2000-07-3478	Assembly	
2	1	Hull DBJ				2000-07-2646	Assembly	
1	1	DBJ base level 1				2000-07-2725	Assembly	

Scale: 1:15	Date:	Drawing no. 1283-40-0001 Sheet : 3 of 4	Issue A
Drawn: MBMH	23-05-2023		
Checked: PvT	08-08-2023		
Approved: HS	08-08-2023		
Mass: 820.38 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ container

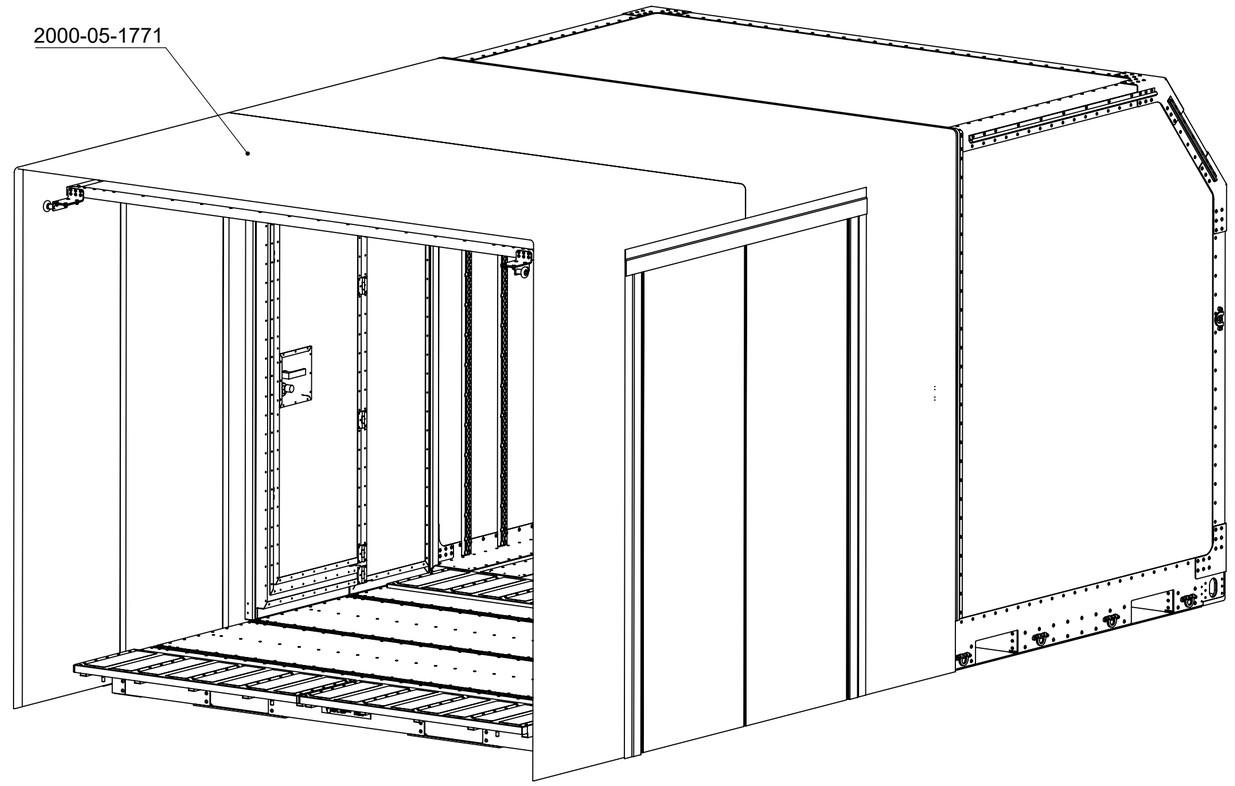
Rivets according to VRR-SP2201

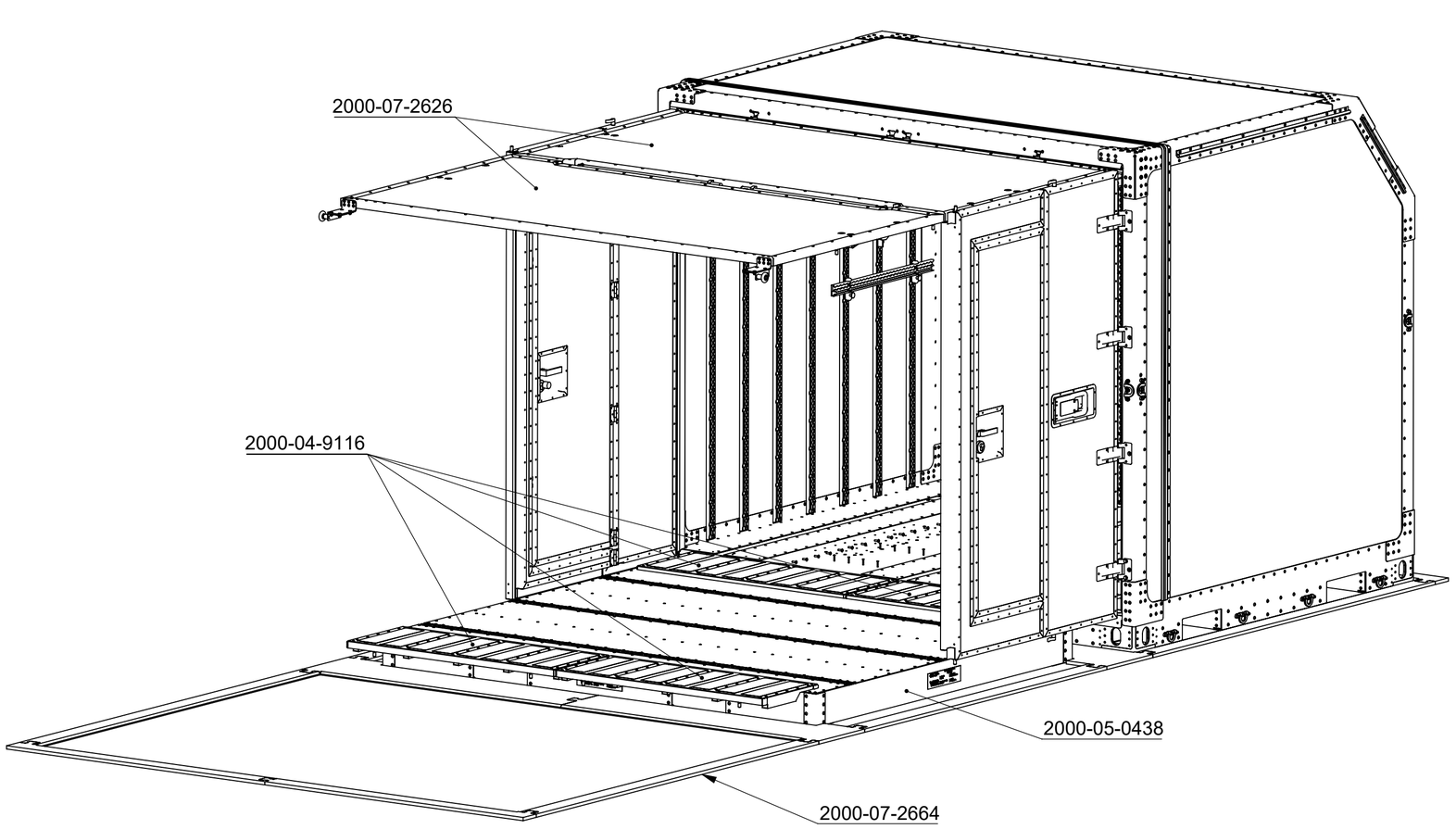
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Extendability pack (2000-07-2624) for DBJ containers

Contents:
1 x Cover (2000-05-1771)
1 x Shelf (2000-05-0438)
2 x Modular roof (2000-07-2626)
4 x Ramp (2000-04-9116)

Optionally:
1x contour guidance pieces (2000-07-2664)

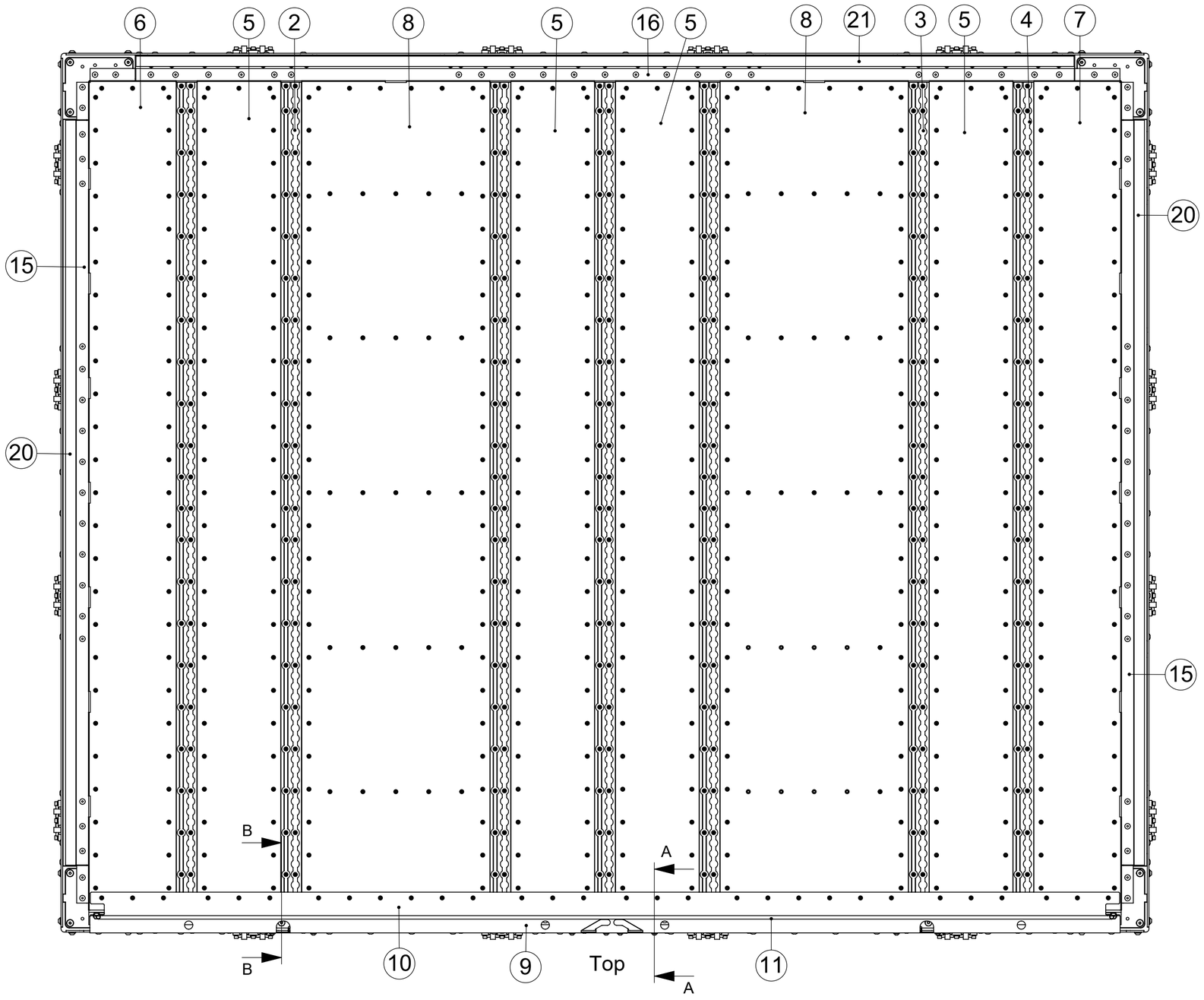
Scale: 1:18	Date:	Drawing no.		Issue	Tolerances (u.n.o.)
Drawn: MBMH	23-05-2023	1283-40-0001		A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ±2
Checked: PvT	08-08-2023		Sheet : 4 of 4		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: HS	08-08-2023				
Mass: 820.38 kg		Finish:			Dimensions in mm (u.n.o.)
Title: DBJ container					Rivets according to VRR-SP2201

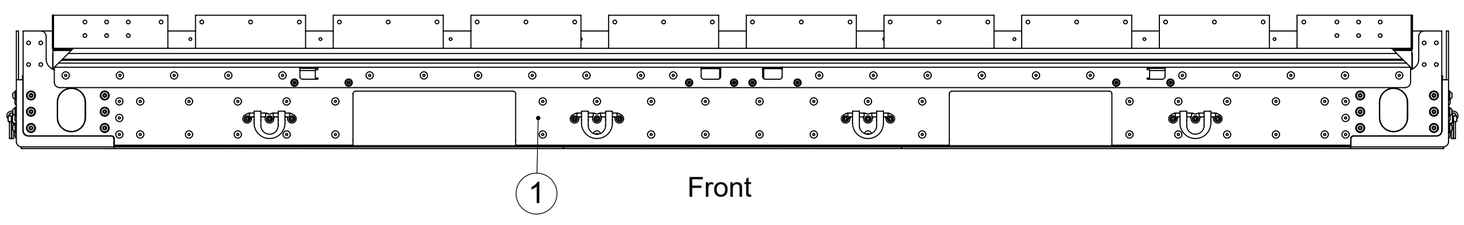
Iss.	Changes	Date	Name

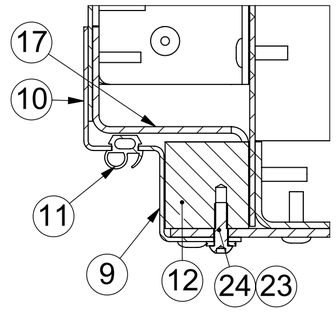
Projection

Size A2

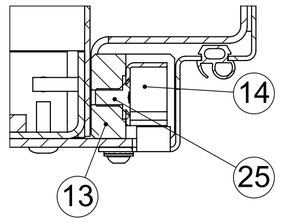
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION A-A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2725	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023	Sheet : 1 of 6	
Approved: HS	08-08-2023		
Mass: 322.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

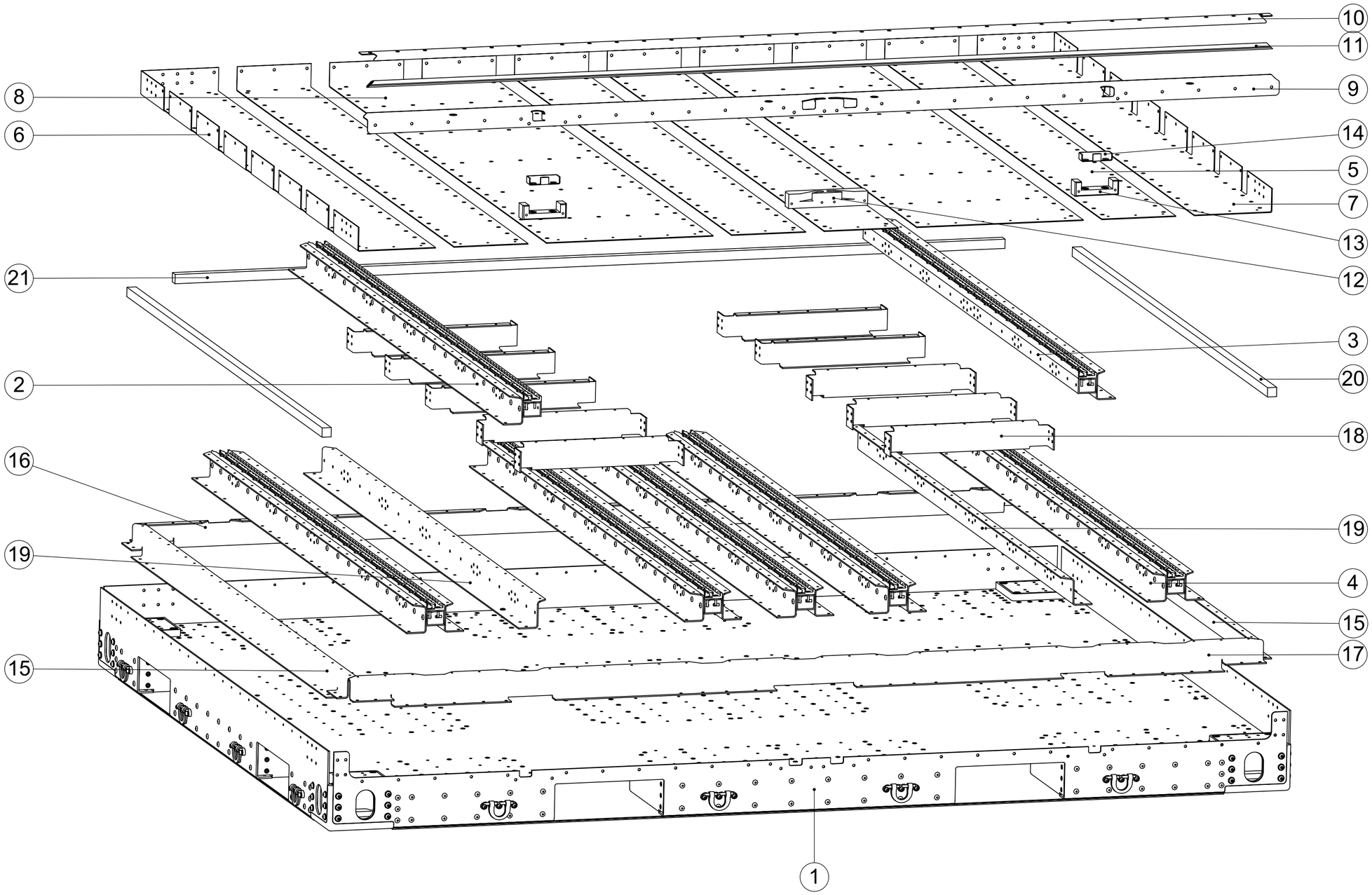
Title: DBJ base level 1

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2725	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 2 of 6	
Mass: 322.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ base level 1

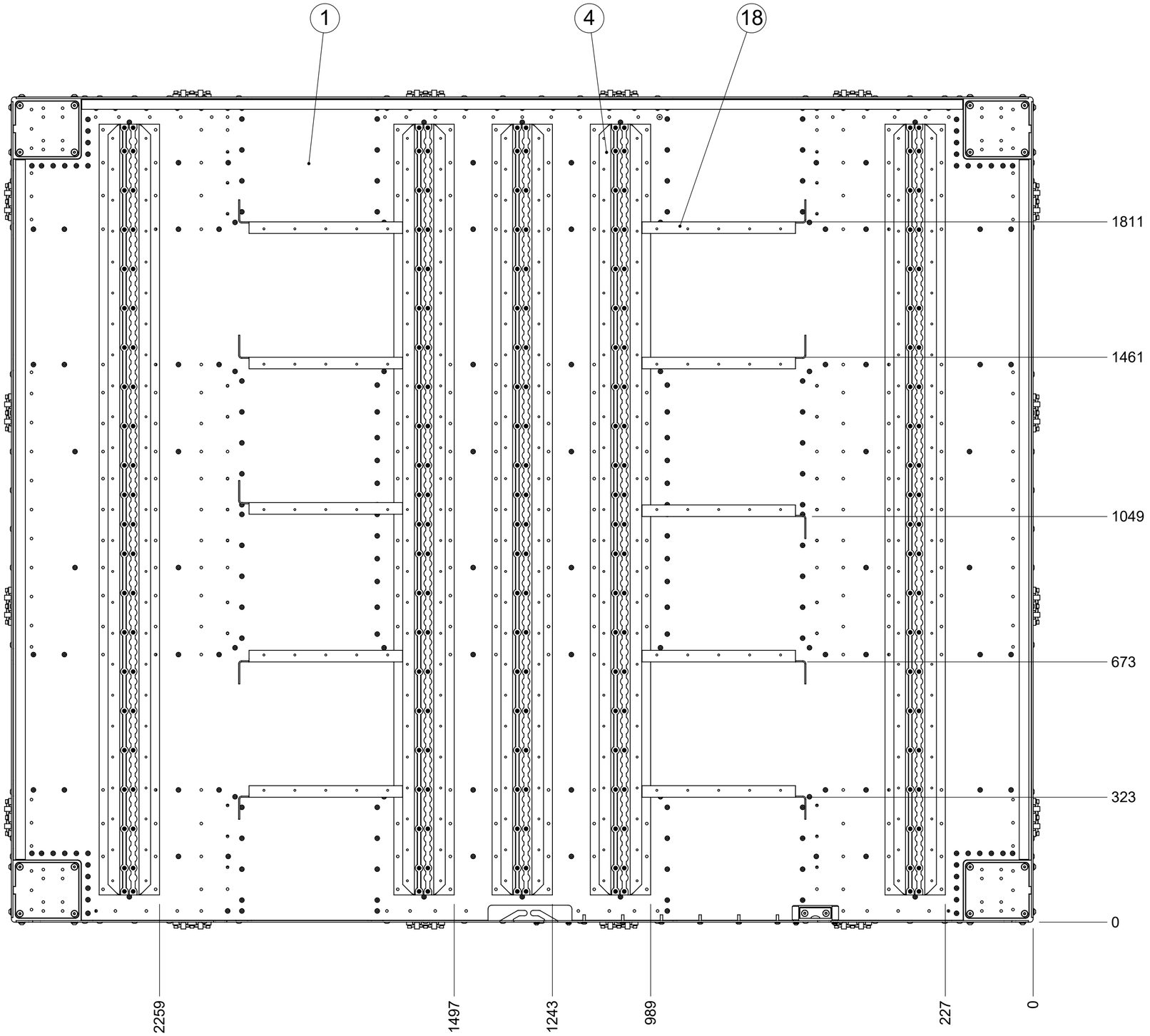
Iss.	Changes	Date	Name

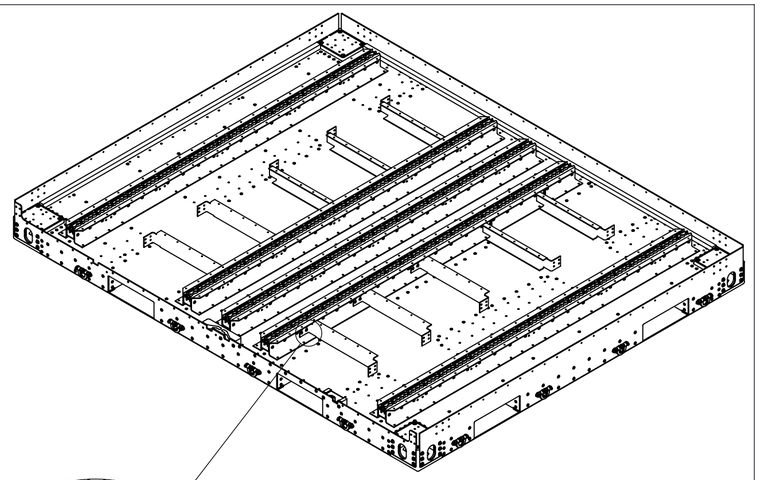
Projection

Size A2

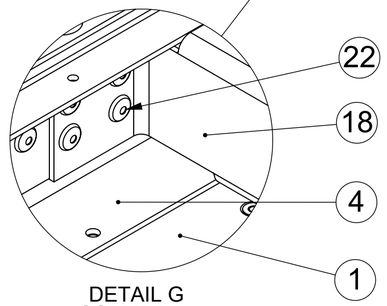
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 1





SCALE 1:20



DETAIL G
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2725	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 3 of 6	
Mass: 322.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ base level 1

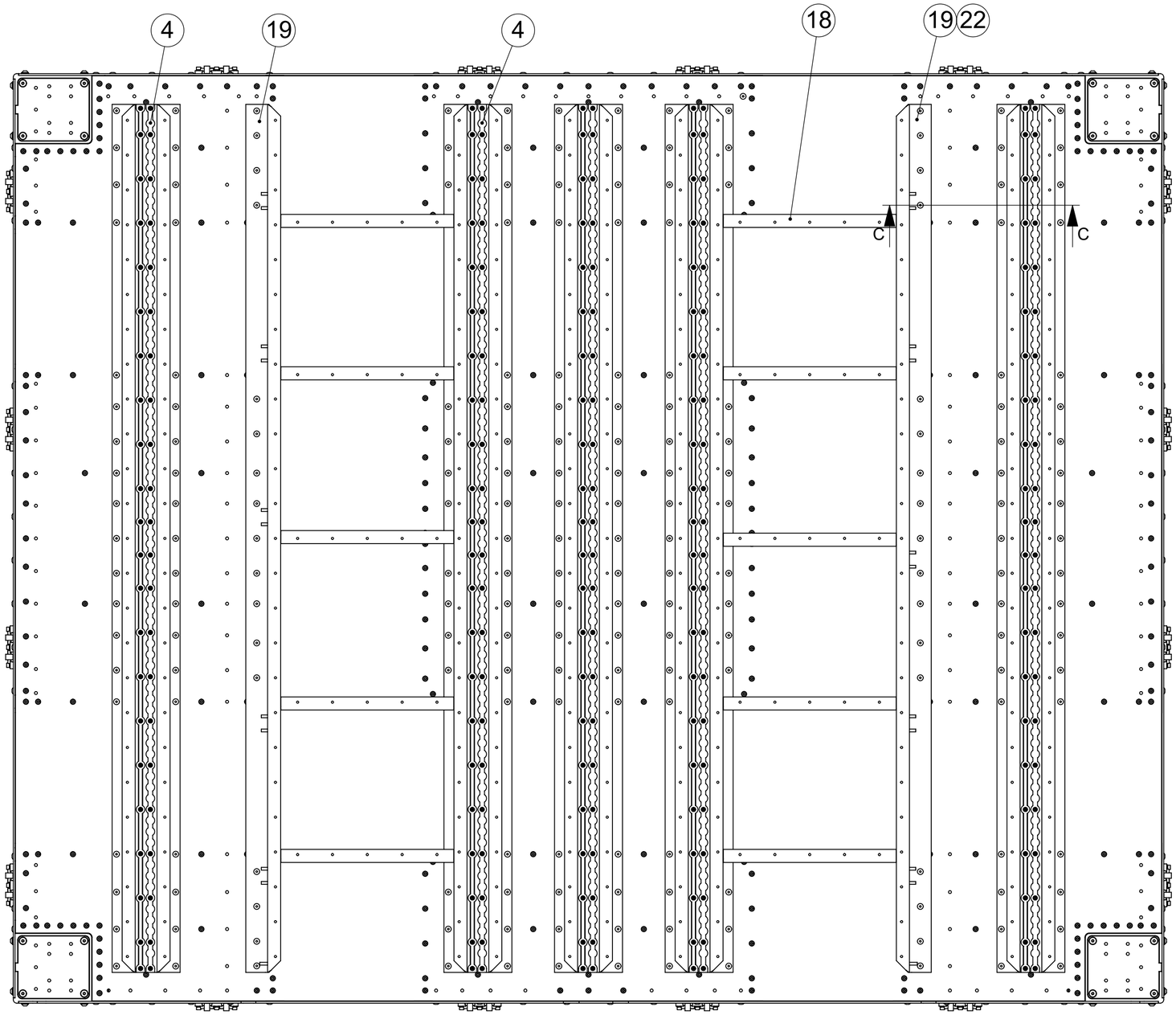
Iss.	Changes	Date	Name

Projection

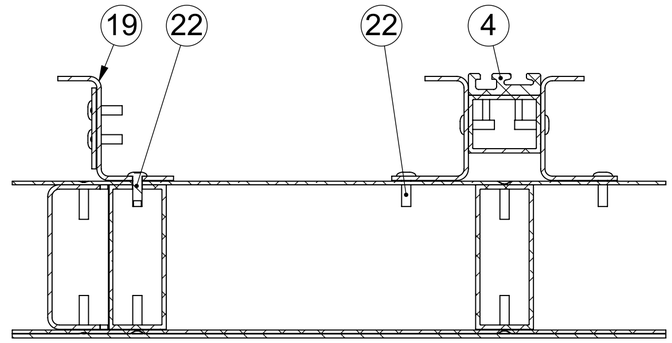
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 2



Top



SECTION C-C
SCALE 1 : 3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2725	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023	Sheet : 4 of 6	
Approved: HS	08-08-2023		
Mass: 322.35 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ base level 1

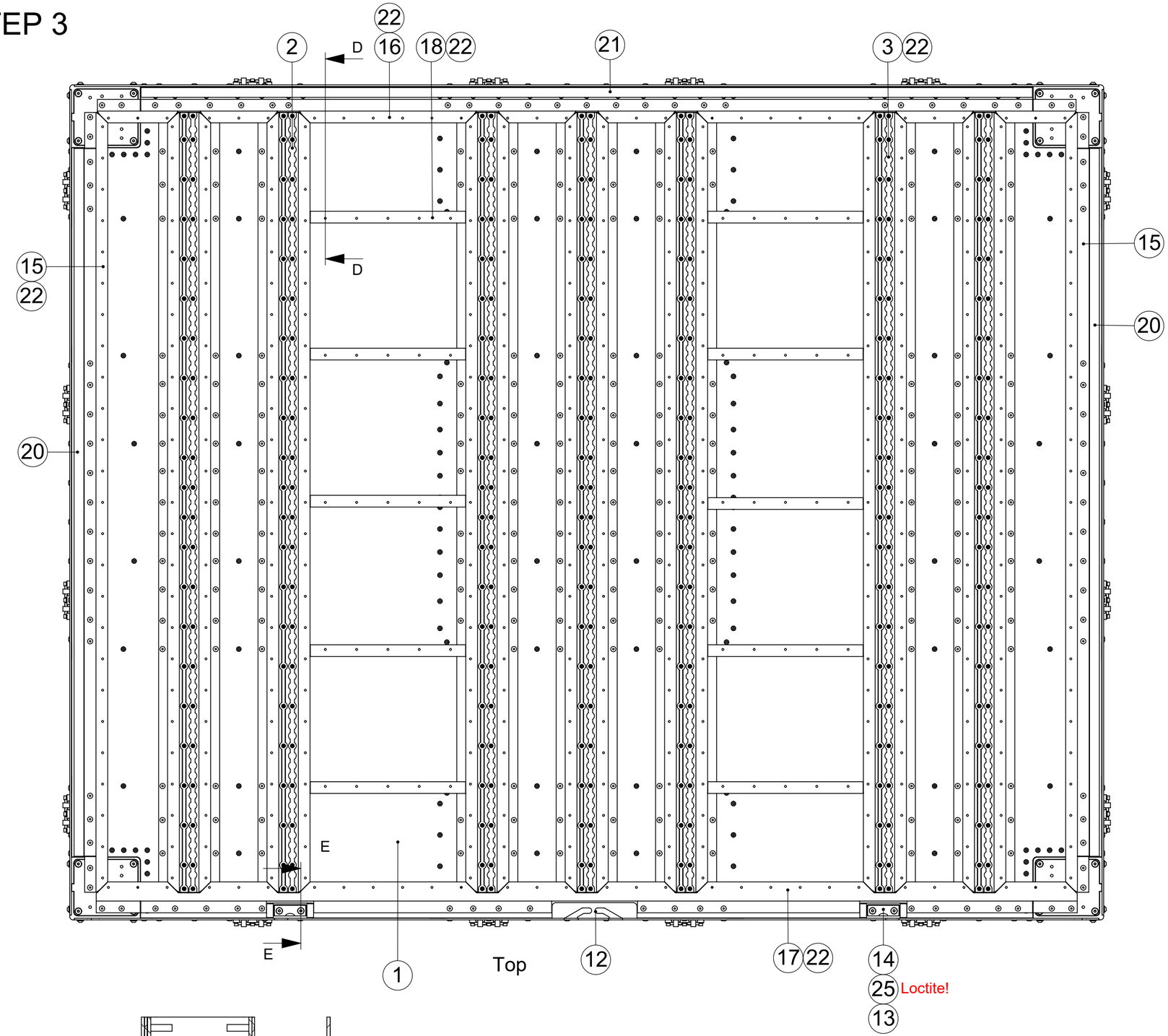
Iss.	Changes	Date	Name

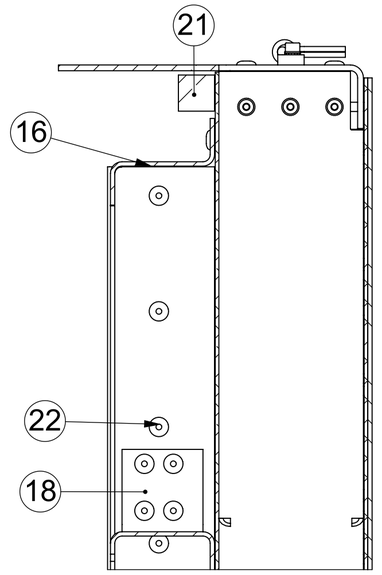
Projection

Size A2

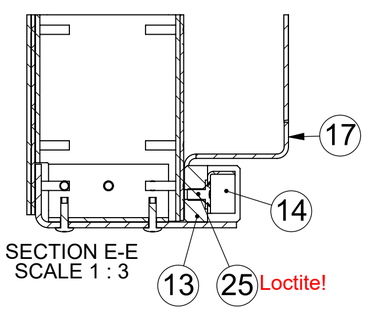
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 3





SECTION D-D
SCALE 1 : 3



SECTION E-E
SCALE 1 : 3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2725	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023	Sheet : 5 of 6	
Approved: HS	08-08-2023		
Mass: 322.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ base level 1

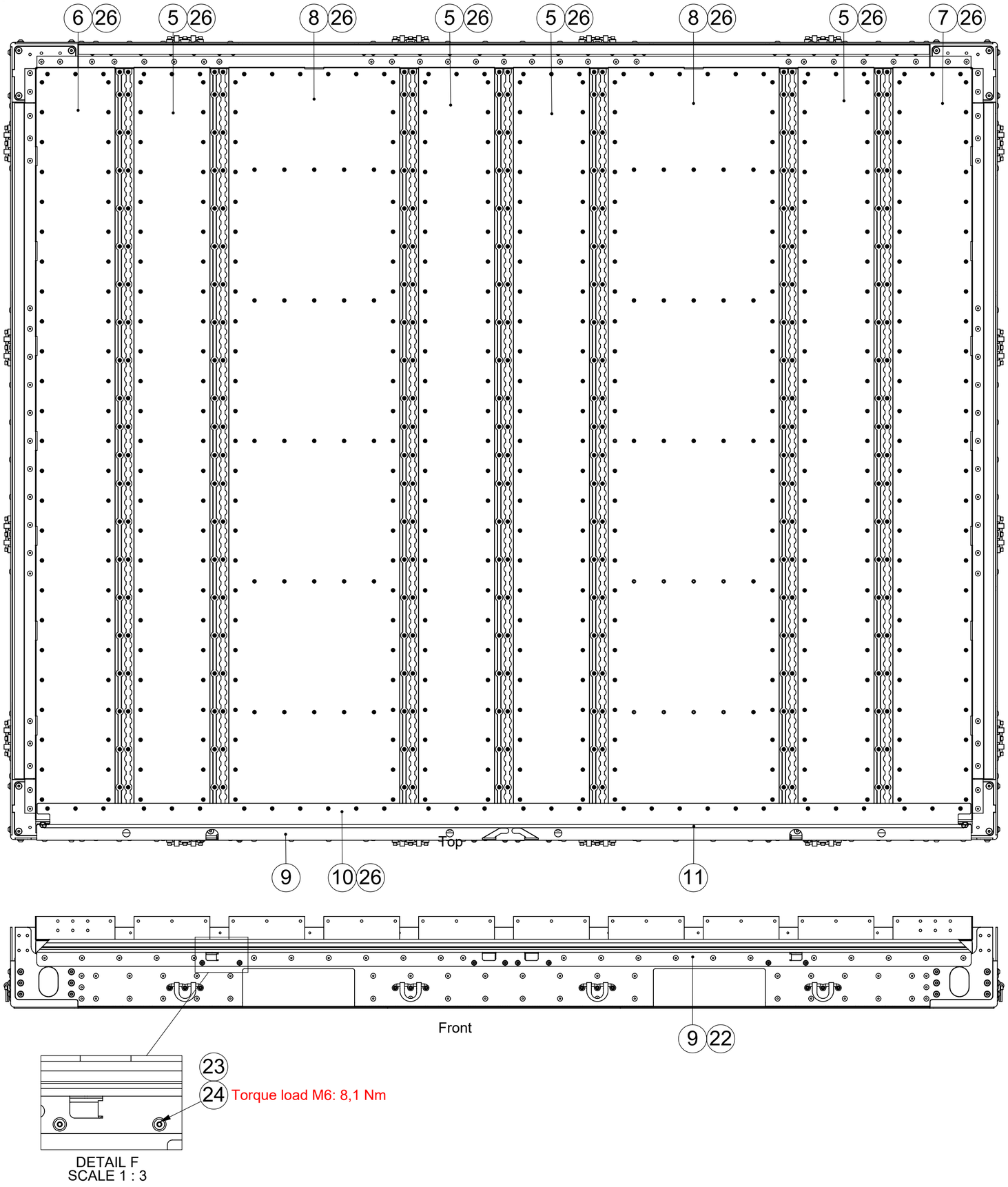
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 4



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	502	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
25	4	Hex. Socket Csk. Screw	16	M8		BO-10642-08016-A2	AISI 304	ISO10642/DIN7991
24	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
23	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
22	502	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	
20	2	Cel rubber	1809	25	25	2000-05-1625	EPDM	
19	2	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30
18	10	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30
17	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
16	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30
15	2	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
14	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
13	2	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	
12	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	
11	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
10	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16
9	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16
8	2	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16
7	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16
6	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16
5	4	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16
4	5	Seat/T-track beam				2000-05-1083	Assembly	
3	1	Seat/T-track beam				2000-05-1117	Assembly	
2	1	Seat/T-track beam				2000-05-1114	Assembly	
1	1	DBJ base Level 2				2000-07-2726	Assembly	

Scale:	1:8	Date:	
Drawn:	MBMH	08-06-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	322.35 kg		

Drawing no. 2000-07-2725

Sheet : 6 of 6

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: DBJ base level 1

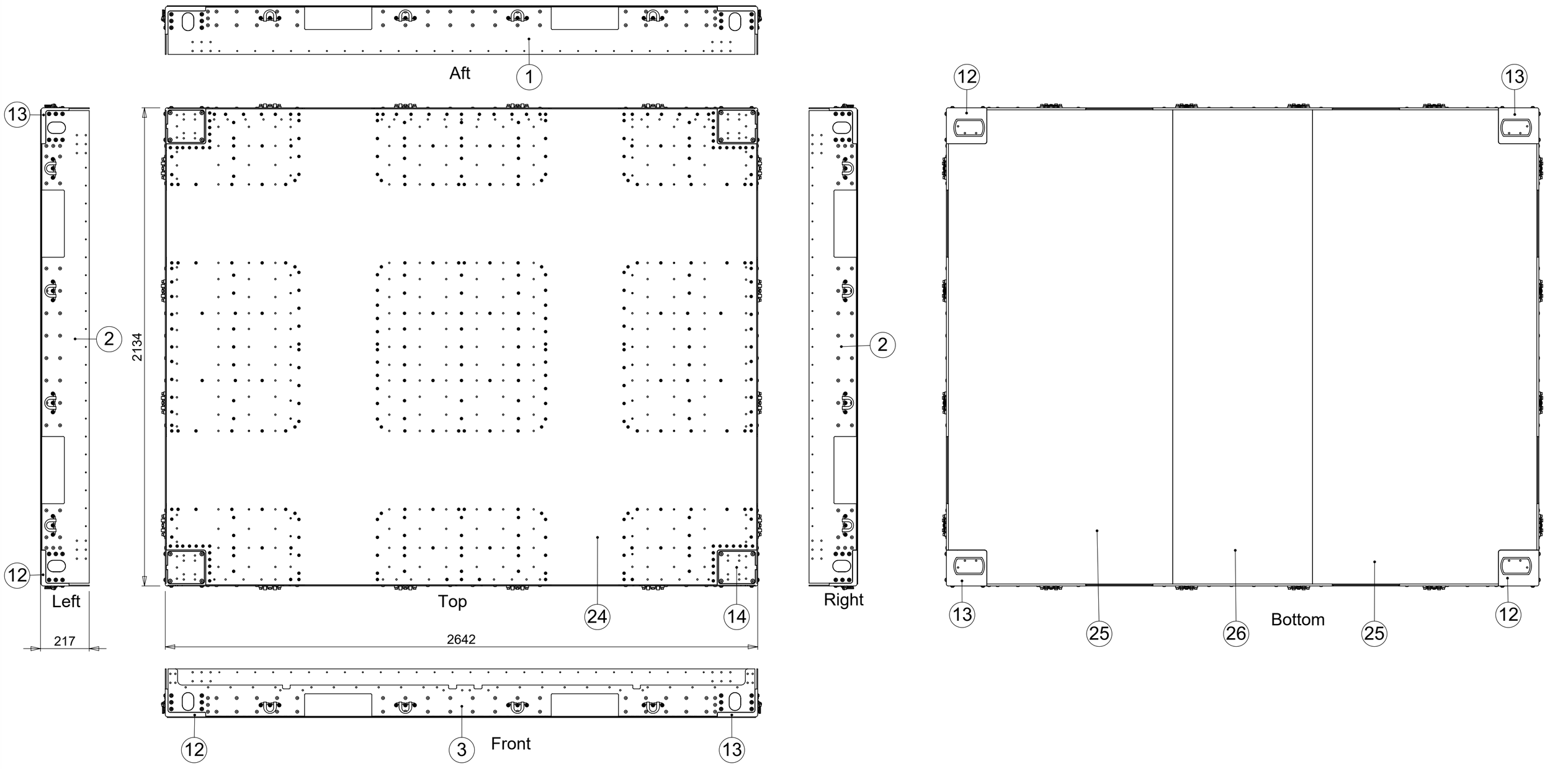
Iss.	Changes	Date	Name

Projection

Size A2

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
31	48	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
30	1015	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
29	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
28	16	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
27	48	Torx Socket Button Screw	20	M8		BO-7380T-08020-A2	AISI 304	ISO7380 torx
26	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003
25	2	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
24	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	
23	8	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
22	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	
21	2	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30
20	2	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
19	2	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30
18	4	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30
17	2	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
16	2	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
15	2	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30
14	4	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	
13	2	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
12	2	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part
11	2	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
10	2	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
9	2	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	
8	5	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	
7	4	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
6	10	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	
5	4	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	
4	4	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	
3	1	Base edge front				2000-07-2968	Assembly	
2	2	Base edge side				2000-07-2728	Assembly	
1	1	Base edge rear				2000-07-2727	Assembly	

Scale:	1:12	Date:	
Drawn:	MBMH	08-06-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	195.51 kg	Finish:	

Drawing no. 2000-07-2726 Sheet : 1 of 5

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

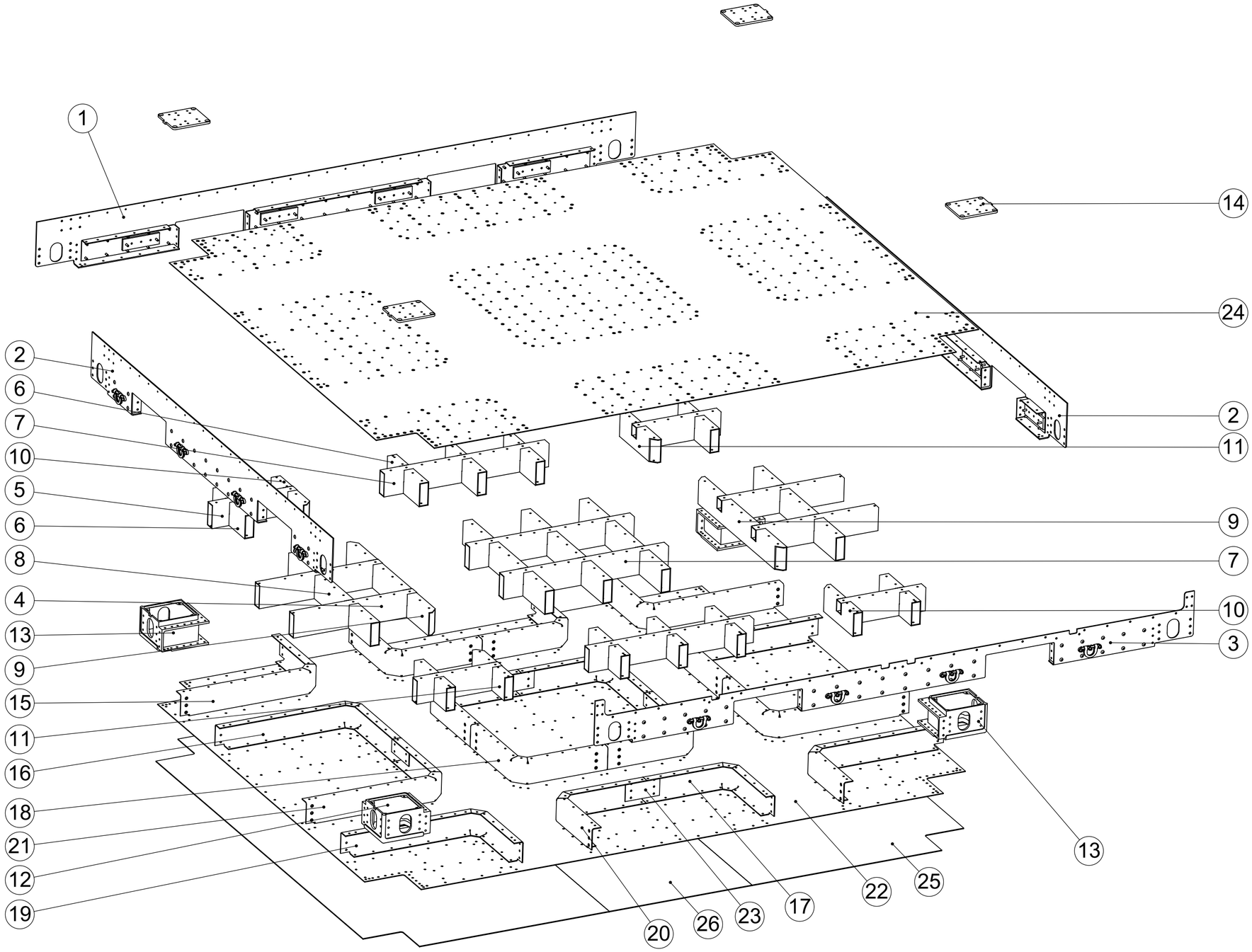
Title: DBJ base Level 2

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
31	48	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
30	1015	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
29	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
28	16	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
27	48	Torx Socket Button Screw	20	M8		BO-7380T-08020-A2	AISI 304	ISO7380 torx
26	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003
25	2	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
24	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	
23	8	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
22	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	
21	2	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30
20	2	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
19	2	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30
18	4	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30
17	2	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30
16	2	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
15	2	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30
14	4	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	
13	2	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
12	2	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part
11	2	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
10	2	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
9	2	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	
8	5	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	
7	4	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
6	10	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	
5	4	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	
4	4	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	
3	1	Base edge front				2000-07-2968	Assembly	
2	2	Base edge side				2000-07-2728	Assembly	
1	1	Base edge rear				2000-07-2727	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2726	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 2 of 5	
Mass: 195.51 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

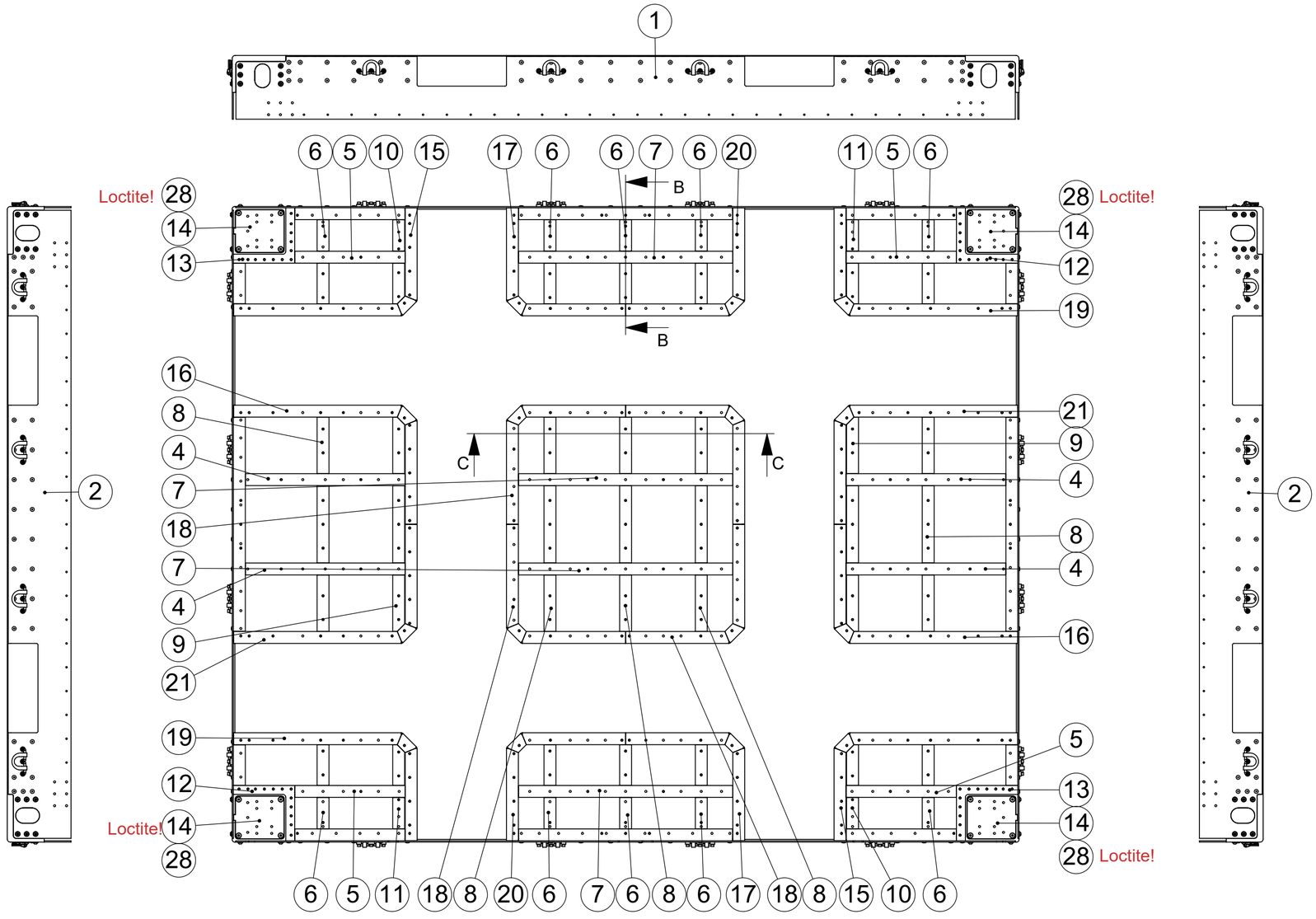
Title: DBJ base Level 2

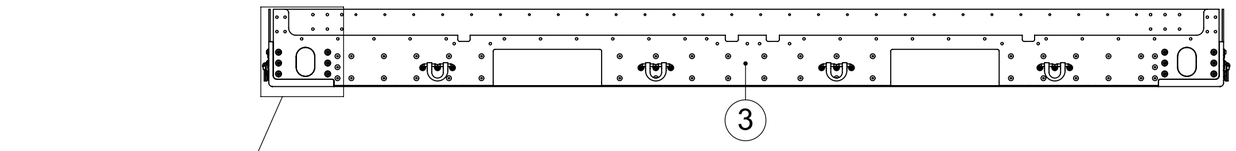
Iss.	Changes	Date	Name

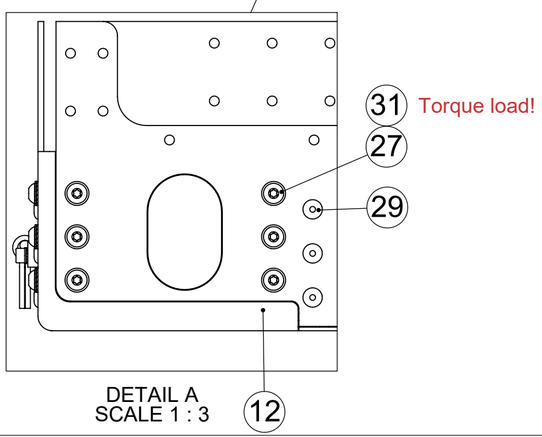
Projection

Size A2

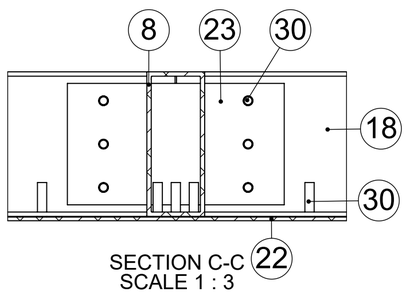
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



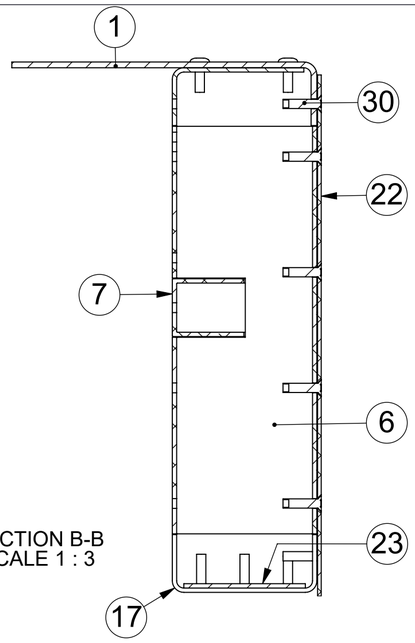




DETAIL A
SCALE 1 : 3



SECTION C-C
SCALE 1 : 3



SECTION B-B
SCALE 1 : 3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
31	48	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
30	1015	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
29	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
28	16	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
27	48	Torx Socket Button Screw	20	M8		BO-7380T-08020-A2	AISI 304	ISO7380 torx
26	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003
25	2	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
24	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	
23	8	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
22	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	
21	2	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30
20	2	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
19	2	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30
18	4	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30
17	2	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30
16	2	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
15	2	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30
14	4	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	
13	2	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
12	2	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part
11	2	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
10	2	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
9	2	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	
8	5	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	
7	4	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
6	10	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	
5	4	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	
4	4	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	
3	1	Base edge front				2000-07-2968	Assembly	
2	2	Base edge side				2000-07-2728	Assembly	
1	1	Base edge rear				2000-07-2727	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2726	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 3 of 5	
Mass: 195.51 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

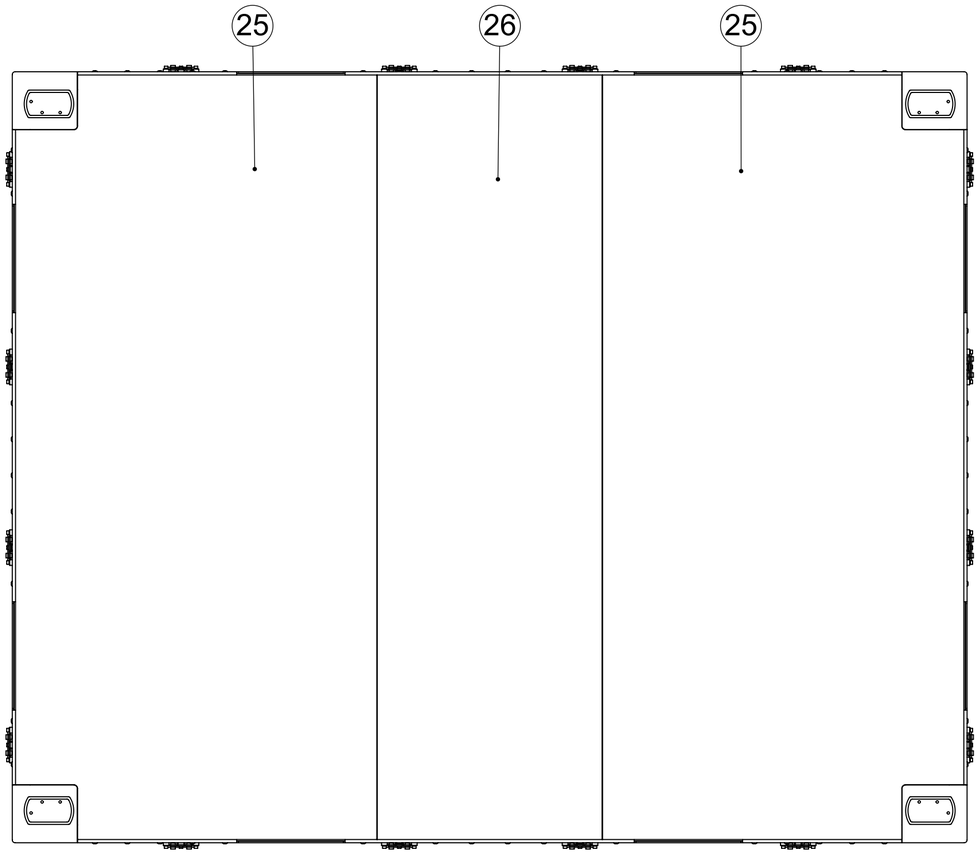
Title: DBJ base Level 2

Iss.	Changes	Date	Name

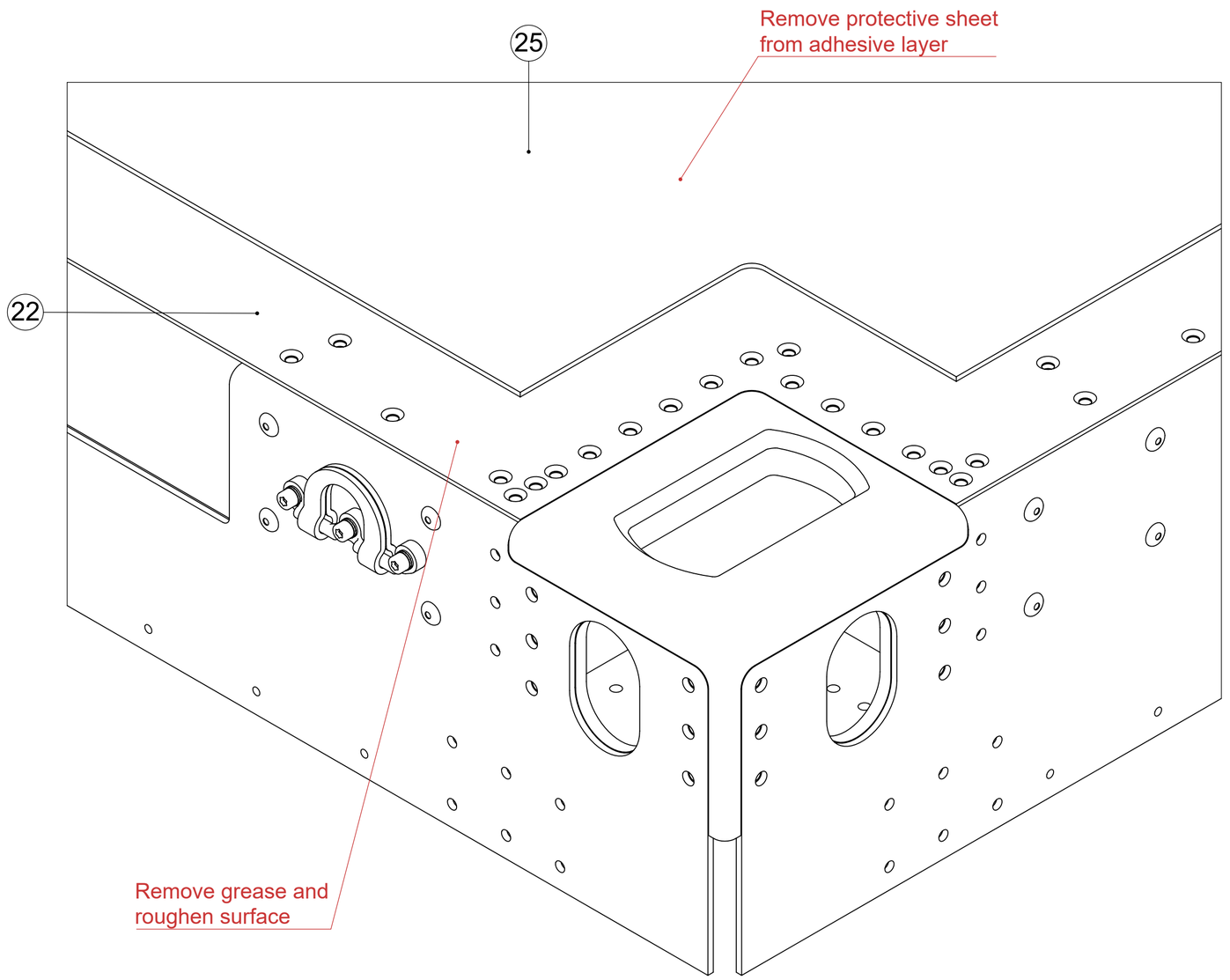
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Bottom



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
31	48	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
30	1015	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
29	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
28	16	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
27	48	Torx Socket Button Screw	20	M8		BO-7380T-08020-A2	AISI 304	ISO7380 torx
26	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003
25	2	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
24	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	
23	8	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
22	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	
21	2	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30
20	2	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
19	2	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30
18	4	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30
17	2	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30
16	2	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
15	2	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30
14	4	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	
13	2	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
12	2	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part
11	2	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
10	2	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
9	2	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	
8	5	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	
7	4	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
6	10	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	
5	4	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	
4	4	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	
3	1	Base edge front				2000-07-2968	Assembly	
2	2	Base edge side				2000-07-2728	Assembly	
1	1	Base edge rear				2000-07-2727	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2726 Sheet : 4 of 5	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 195.51 kg		Finish:	
Title: DBJ base Level 2			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

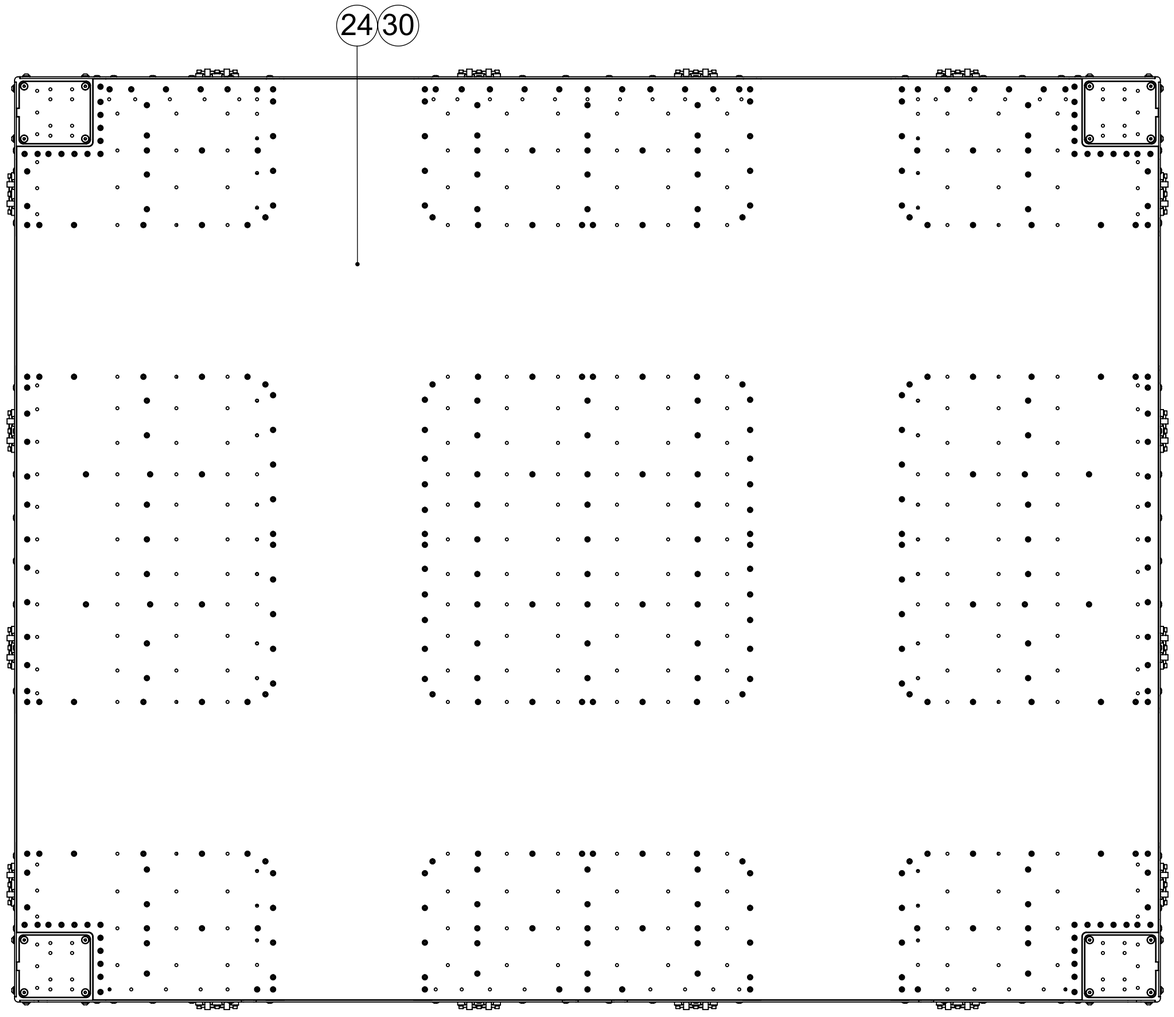
Dimensions in mm (u.n.o.)

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Top

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
31	48	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
30	1015	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
29	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
28	16	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
27	48	Torx Socket Button Screw	20	M8		BO-7380T-08020-A2	AISI 304	ISO7380 torx
26	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003
25	2	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
24	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	
23	8	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
22	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	
21	2	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30
20	2	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
19	2	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30
18	4	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30
17	2	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30
16	2	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
15	2	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30
14	4	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	
13	2	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
12	2	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part
11	2	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
10	2	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
9	2	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	
8	5	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	
7	4	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
6	10	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	
5	4	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	
4	4	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	
3	1	Base edge front				2000-07-2968	Assembly	
2	2	Base edge side				2000-07-2728	Assembly	
1	1	Base edge rear				2000-07-2727	Assembly	

Scale: 1:10	Date:	Drawing no.	Issue
Drawn: MBMH	08-06-2023	2000-07-2726	A
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 5 of 5	
Mass: 195.51 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

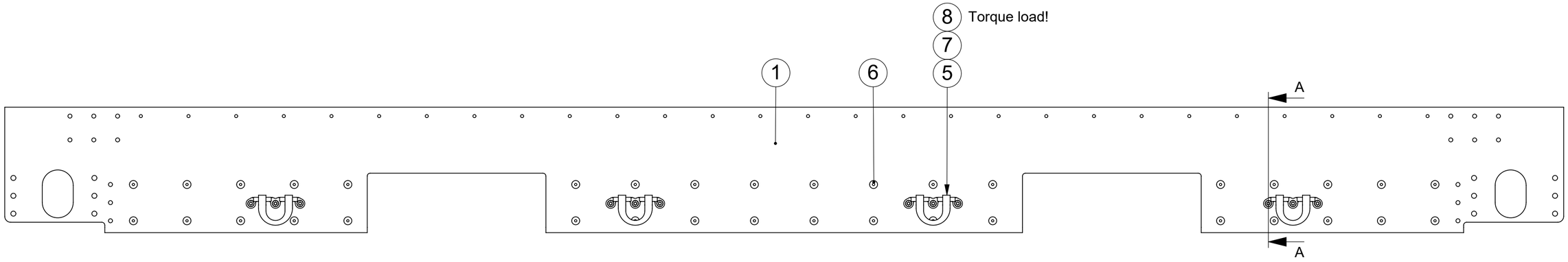
Title: DBJ base Level 2

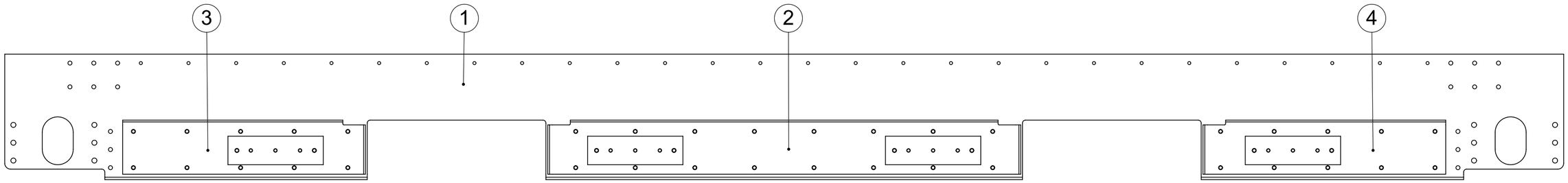
Iss.	Changes	Date	Name

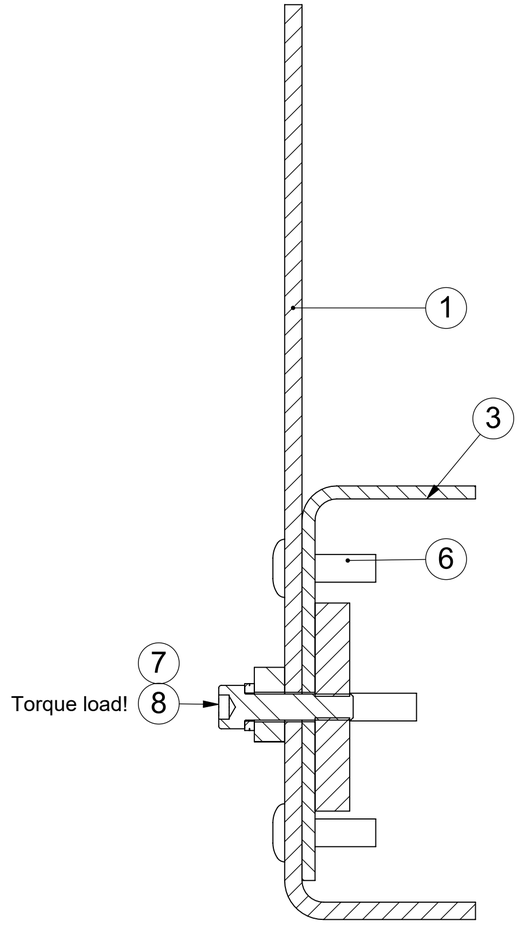
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION A-A
SCALE 1 : 1

Torque load M6: 6,3 Nm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
8	12	Torx Socket Cap Screw	25	M6		BO-14579T-06025-A2	AISI 304	ISO 14579 torx
7	12	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
6	36	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
5	4	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
4	1	Corner flange long				2000-05-0831	Assembly	
3	1	Corner flange long				2000-05-0832	Assembly	
2	1	Flange assy				2000-05-0828	Assembly	
1	1	Base edge sheet	2617	247,5	4	2000-05-0226	Alu. 5754-H22	Bend with V30

Scale: 1:5	Date:	Drawing no. 2000-07-2727 Sheet : 1 of 1	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 9.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Base edge rear

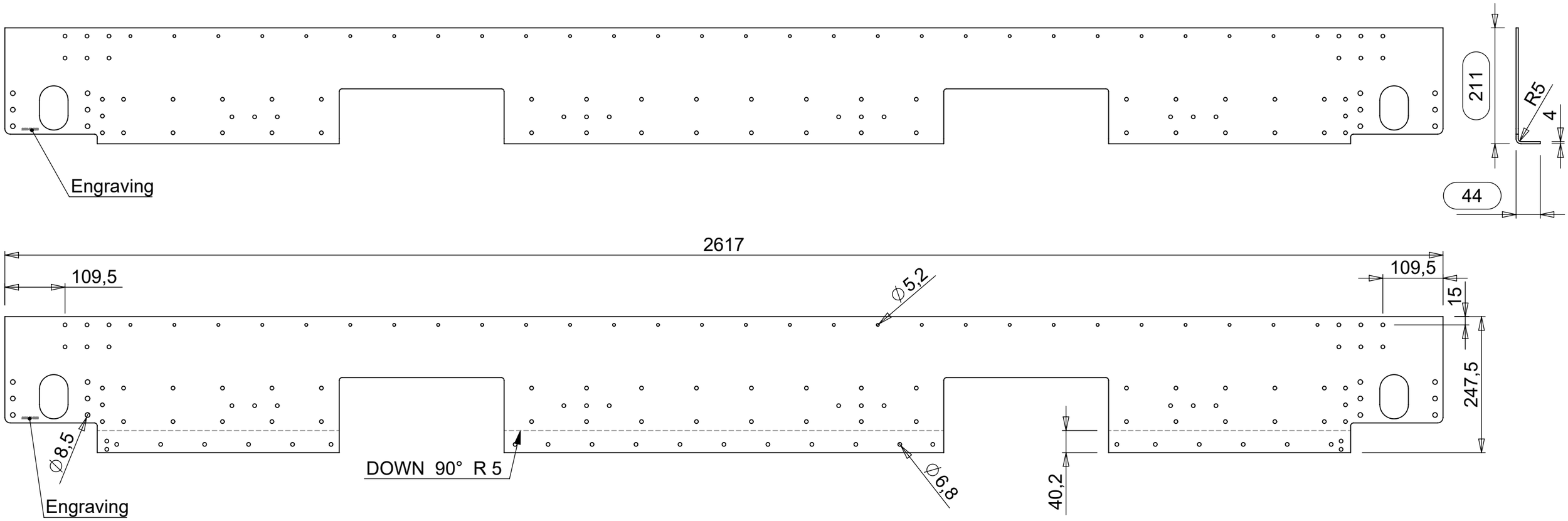
Rivets according to VRR-SP2201

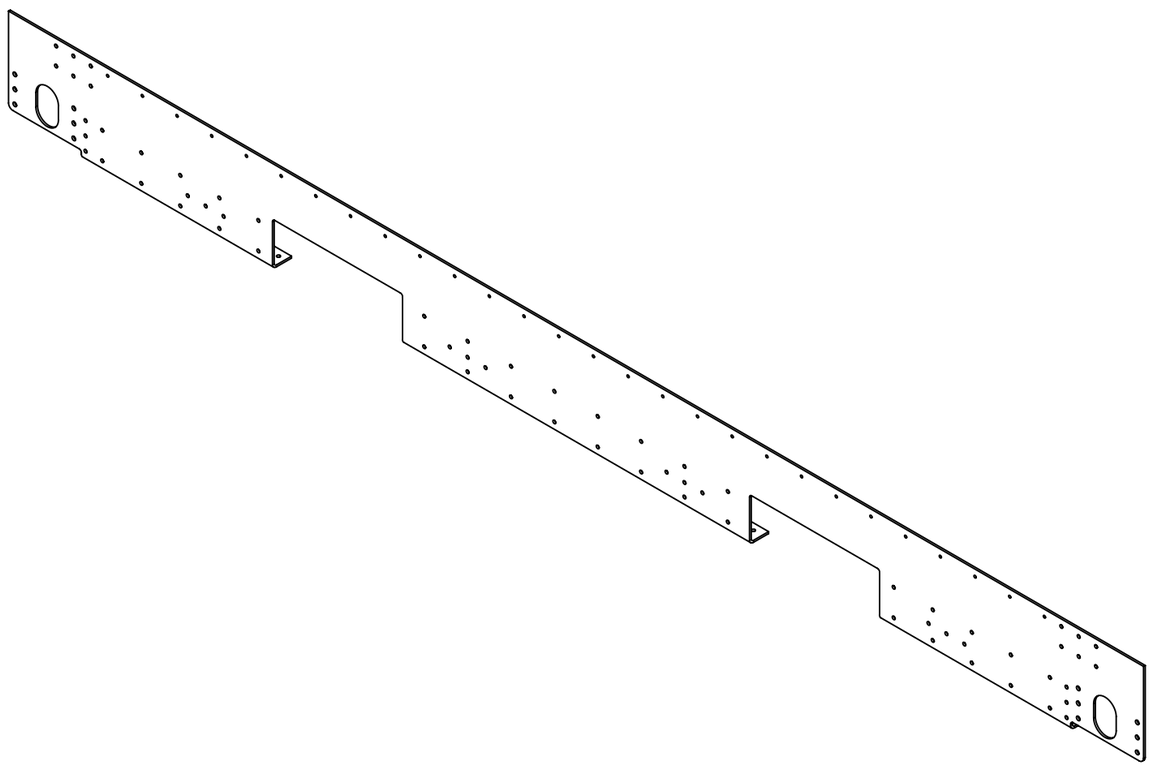
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge sheet	2617	247,5	4	2000-05-0226	Alu. 5754-H22	Bend with V30

Scale: 1:7	Date:	Drawing no.: 2000-05-0226	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 5.80 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

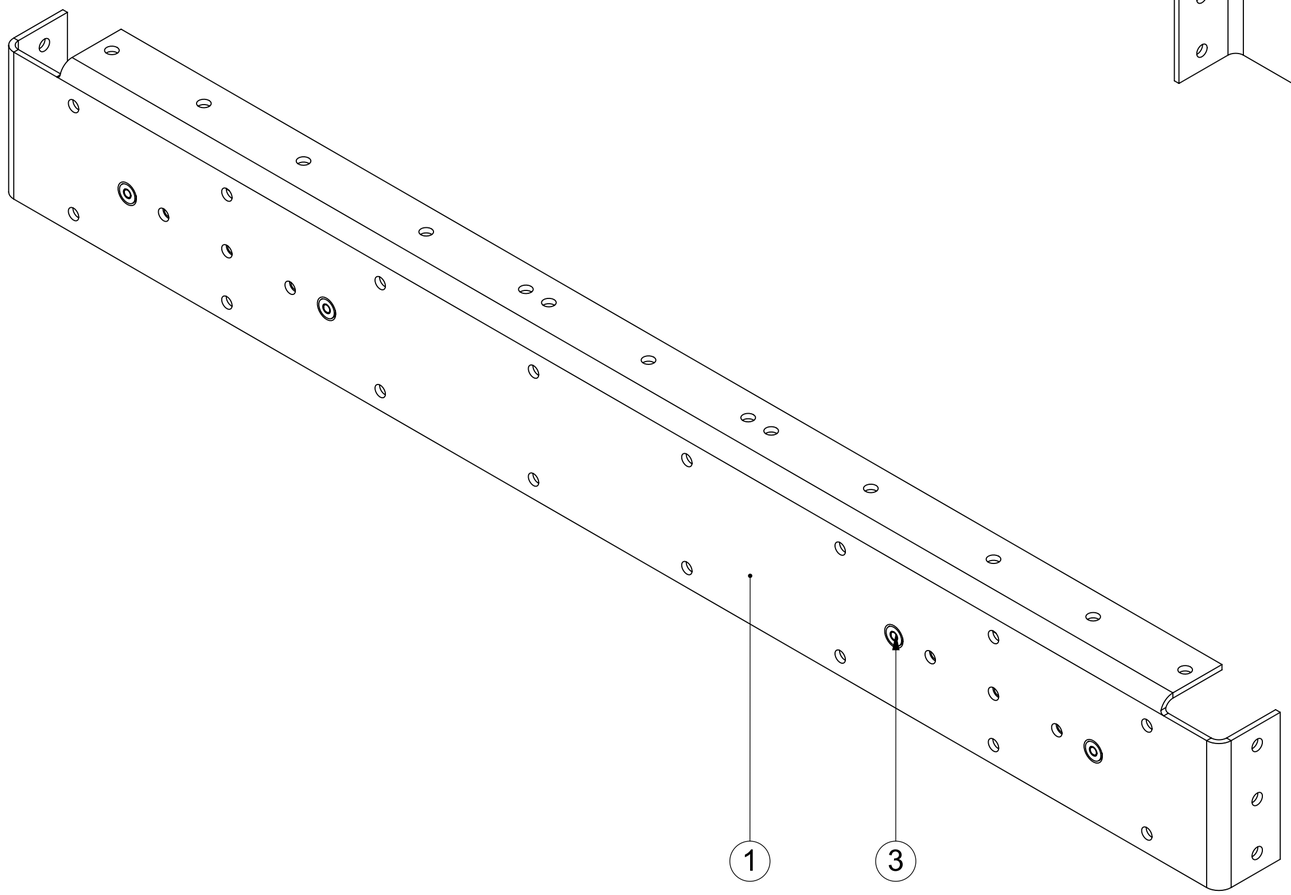
Title: **Base edge sheet**

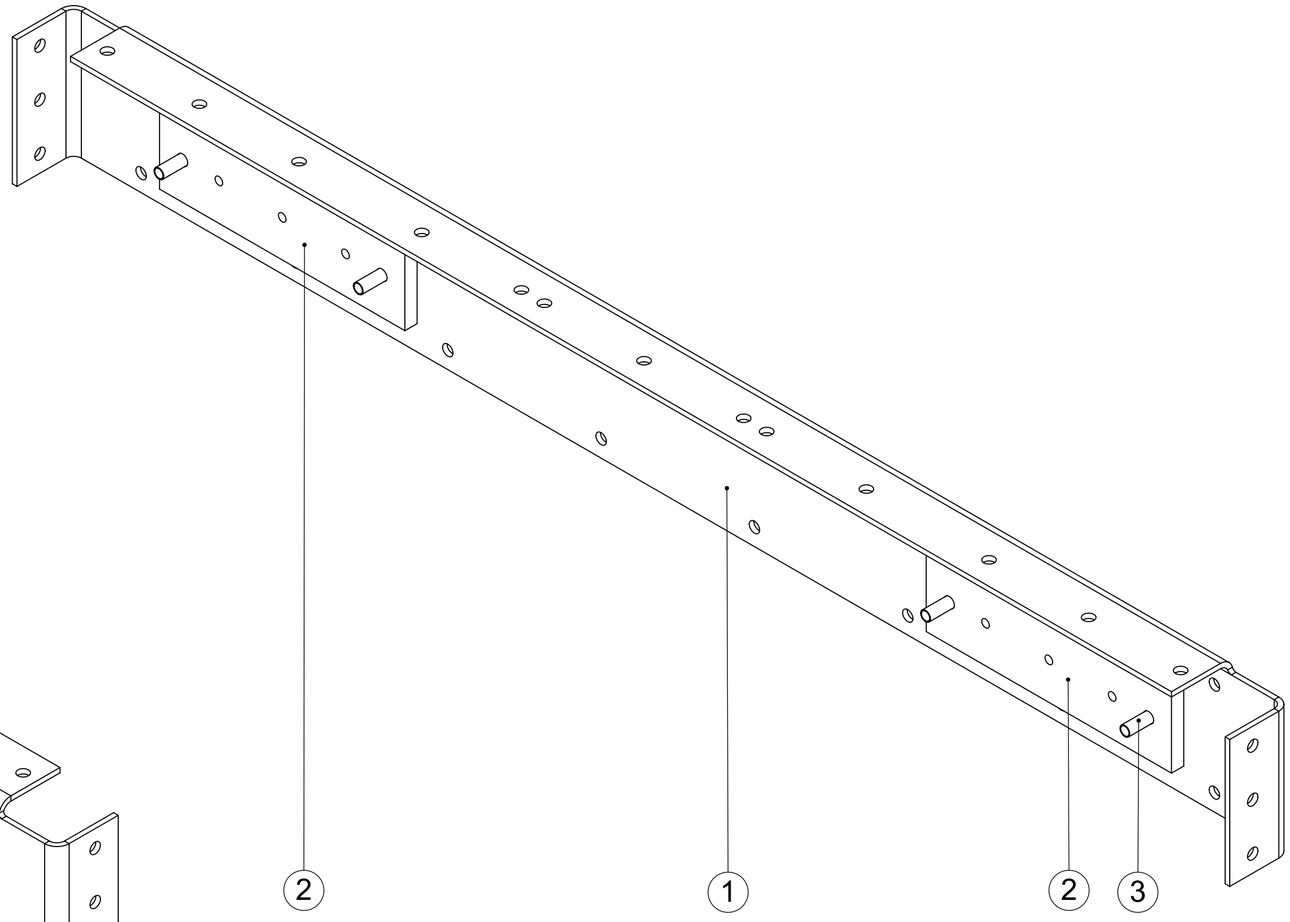
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	4	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
2	2	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
1	1	Base edge flange	861,7	124,8	3	2000-05-0241	Alu. 5754-H22	Bend with V30

Scale: 1:2	Date:	
Drawn: JWR	14-03-2019	
Checked: HS	12-04-2019	
Approved: JWR	09-05-2019	
Mass: 1.16 kg	Finish:	

Drawing no. **2000-05-0828** Sheet : 1 of 1

Issue **A**

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

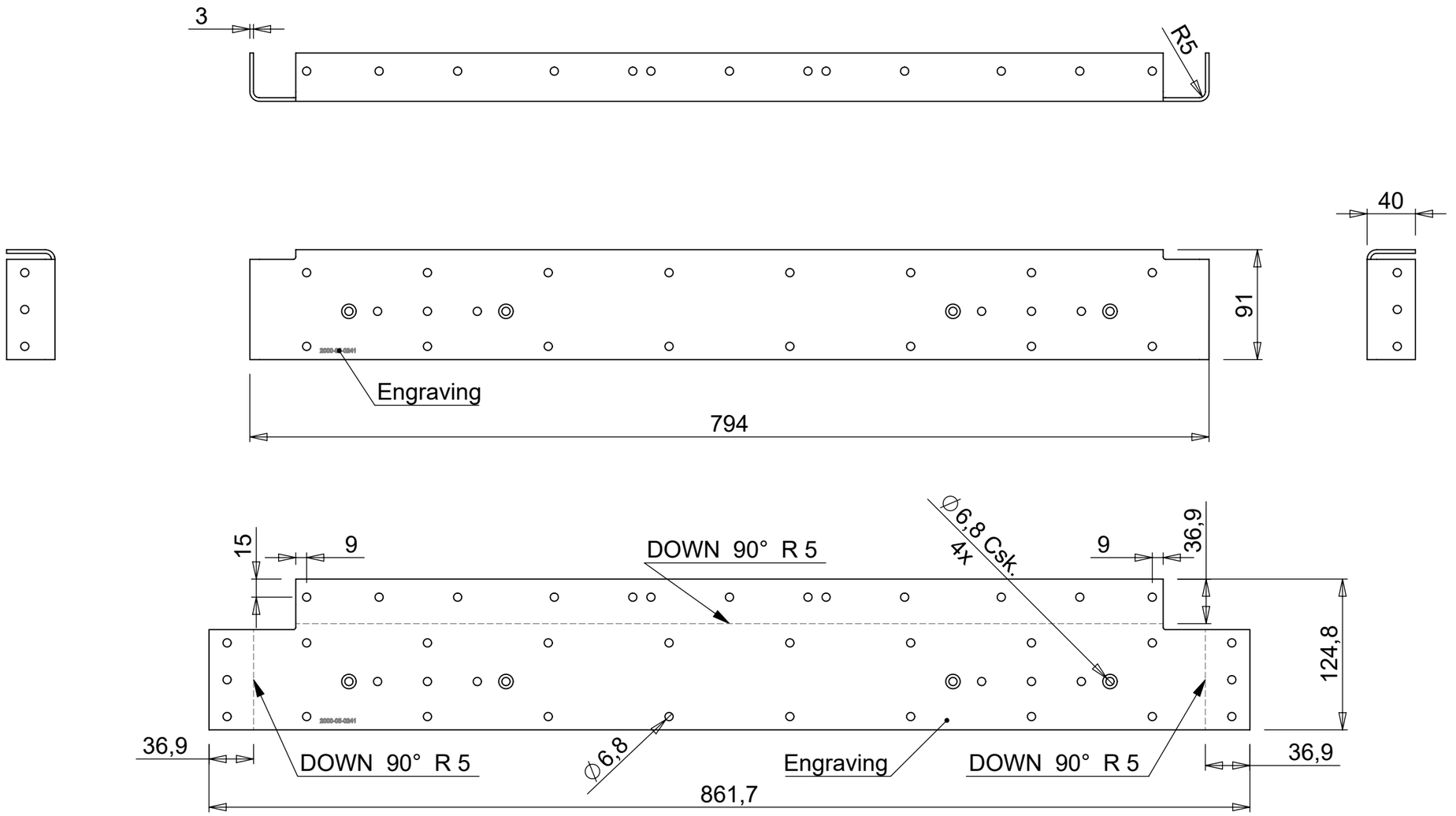
Title: **Flange assy**

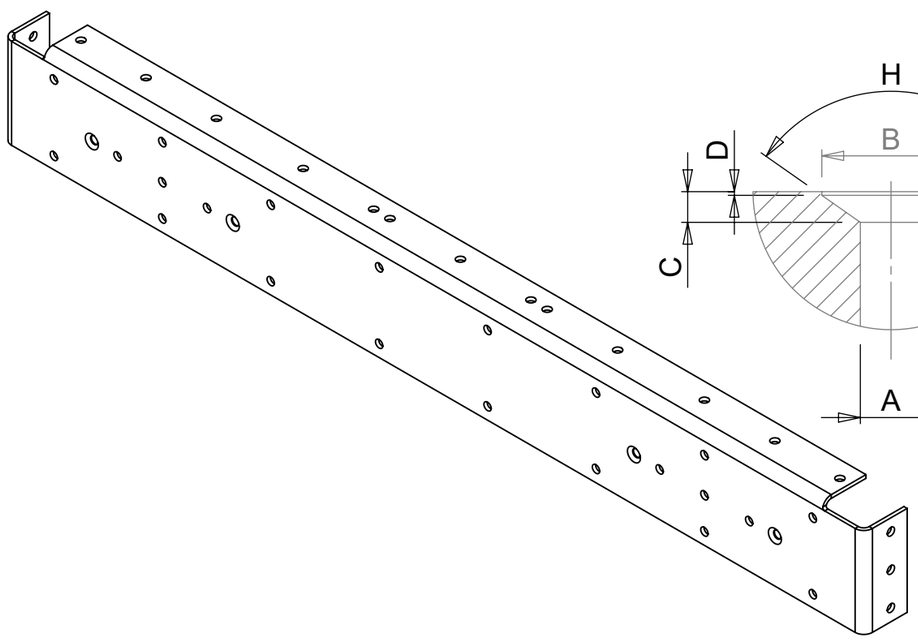
Iss.	Changes	Date	Name

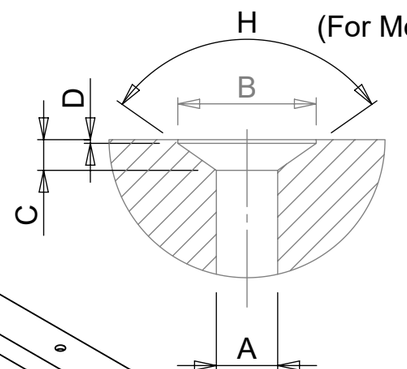
Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge flange	861,7	124,8	3	2000-05-0241	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0241	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.81 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

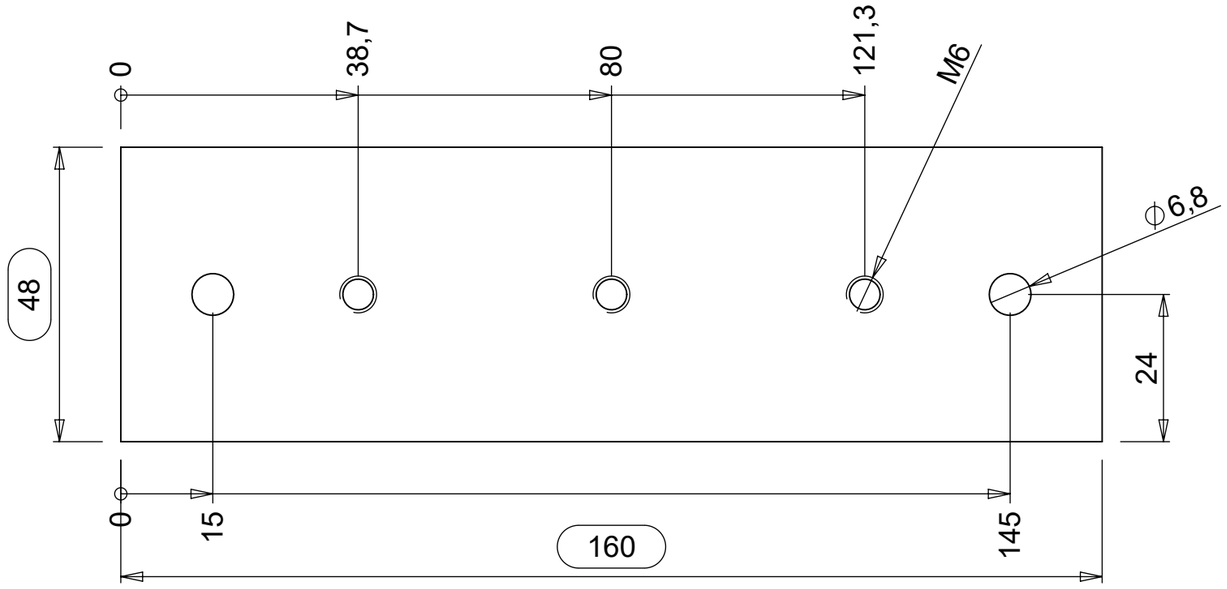
Title: **Base edge flange**

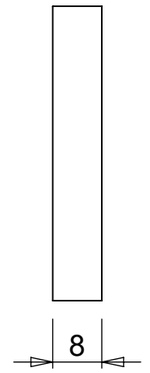
Iss.	Changes	Date	Name

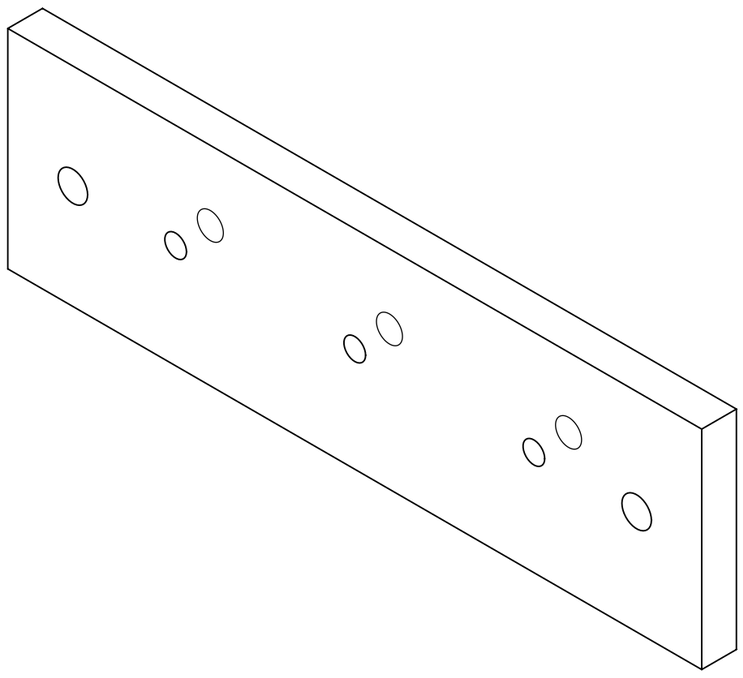
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-05-0259	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.16 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

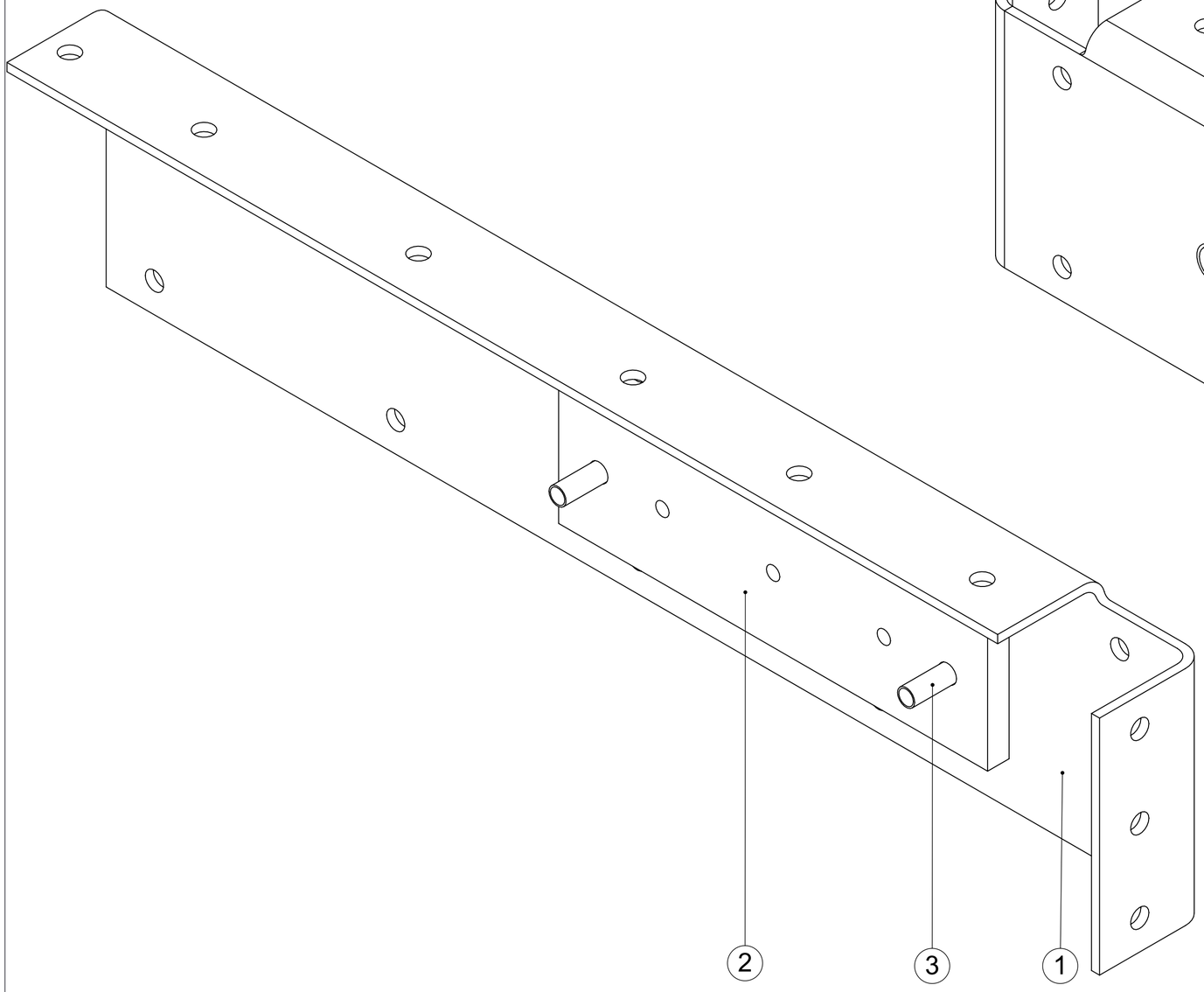
Title: # Thread block Tie-down points

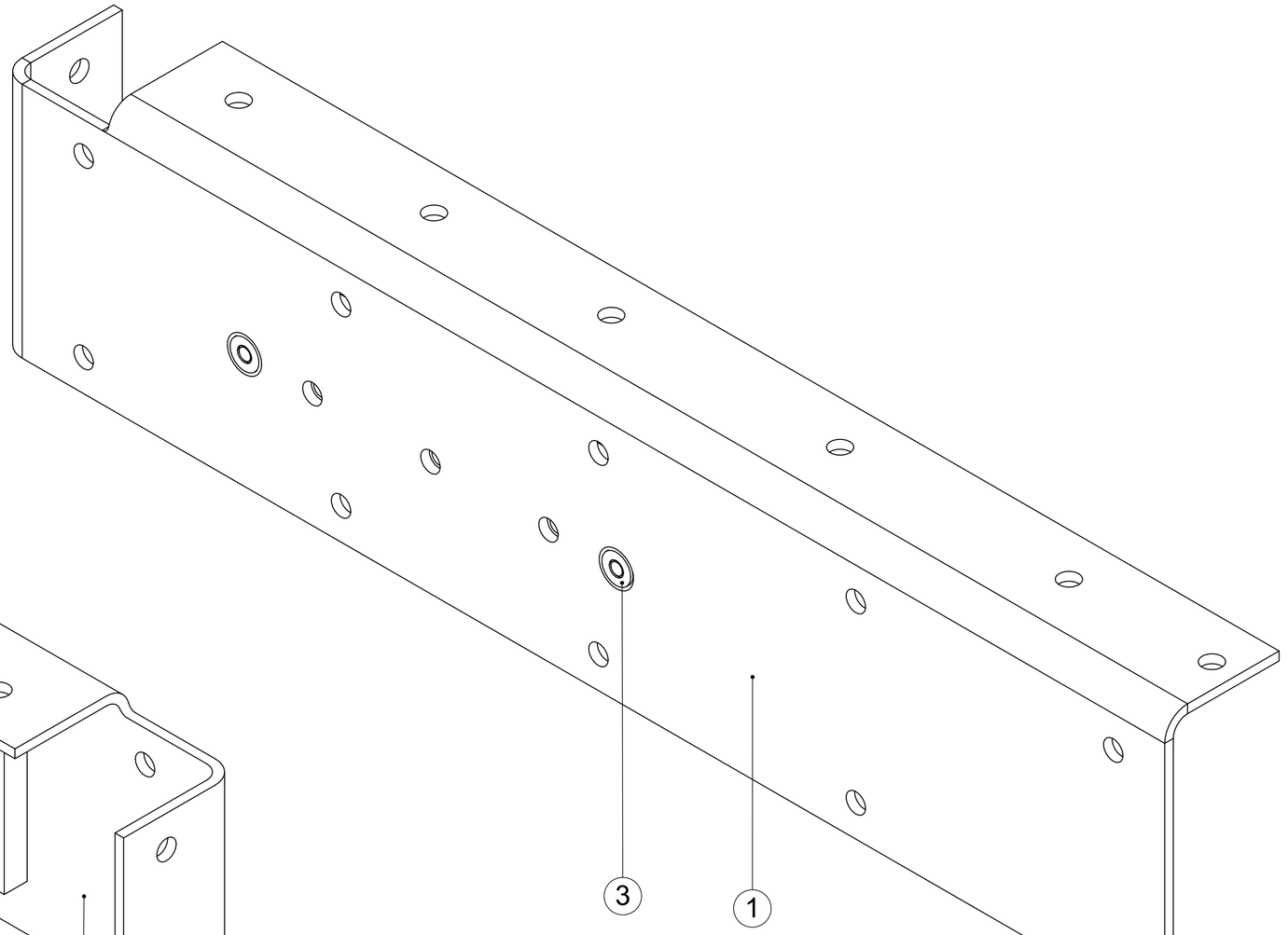
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	2	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
2	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
1	1	Base edge flange	441,3	124,8	3	2000-05-0248	Alu. 5754-H22	Bend with V30

Scale: 1:1	Date:	Drawing no. 2000-05-0832 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.59 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

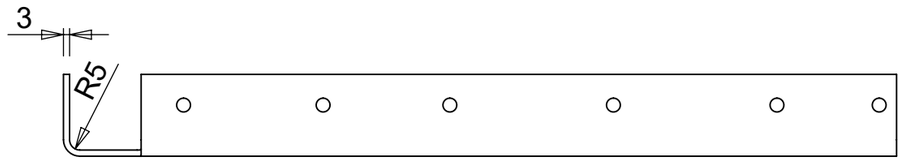
Title: # Corner flange long

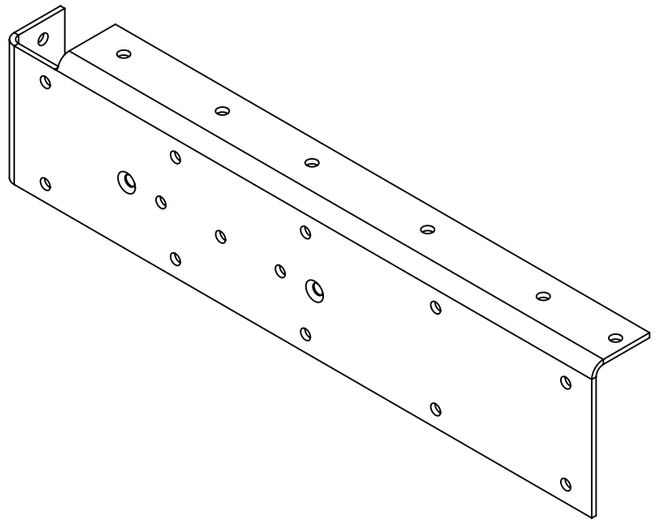
Iss.	Changes	Date	Name

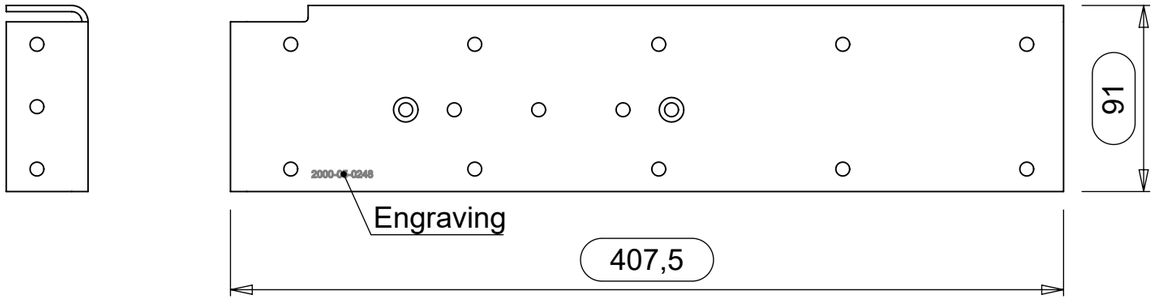
Projection

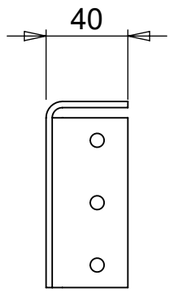
Size A2

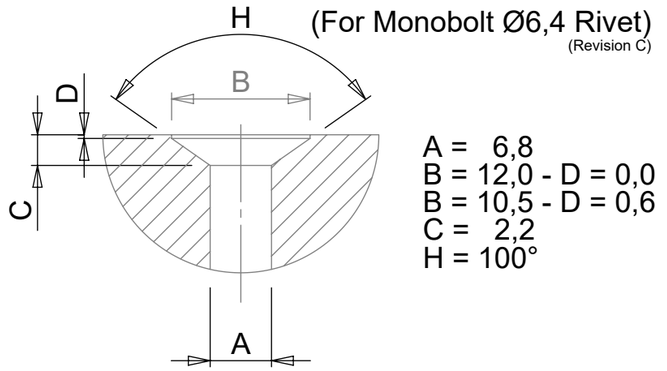
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

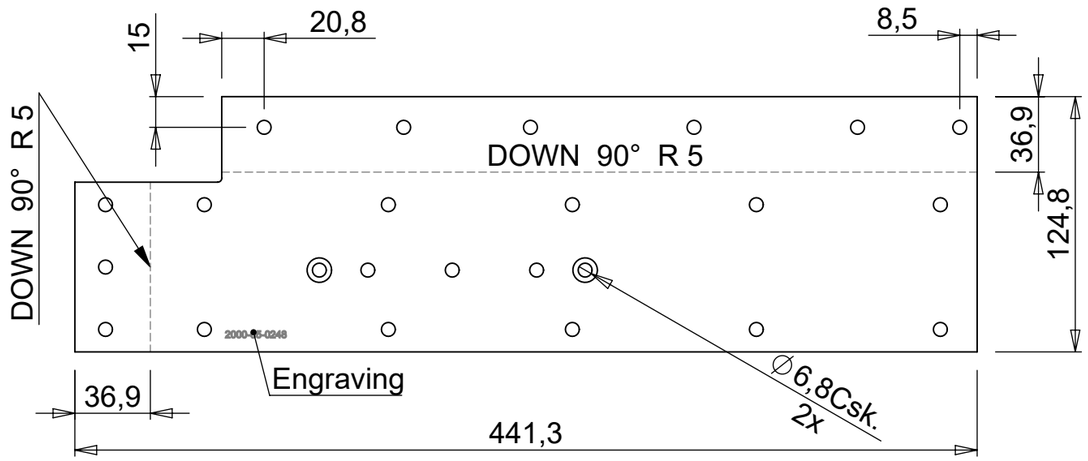












1	1	Base edge flange	441,3	124,8	3	2000-05-0248	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0248	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.42 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

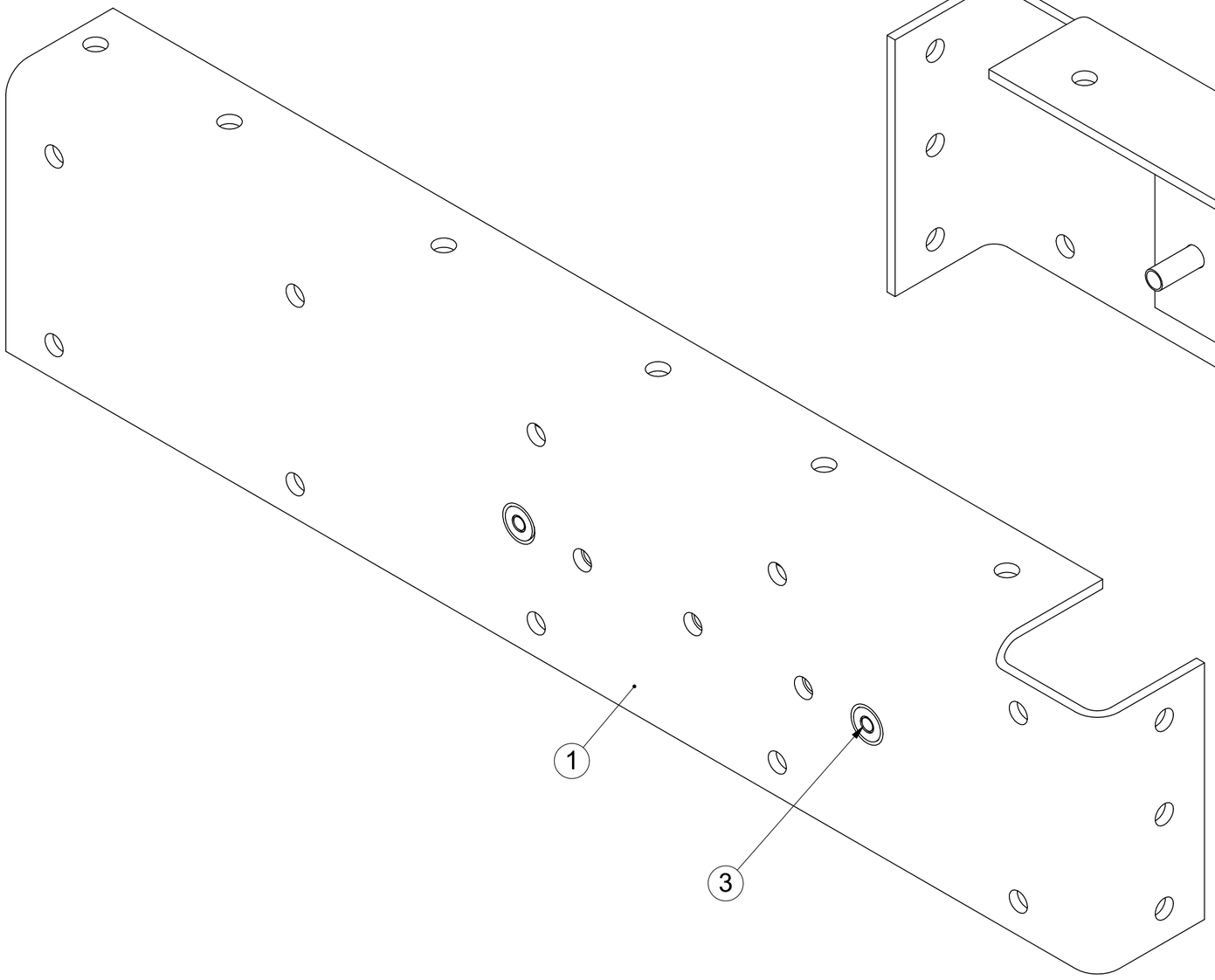
Title: **Base edge flange**

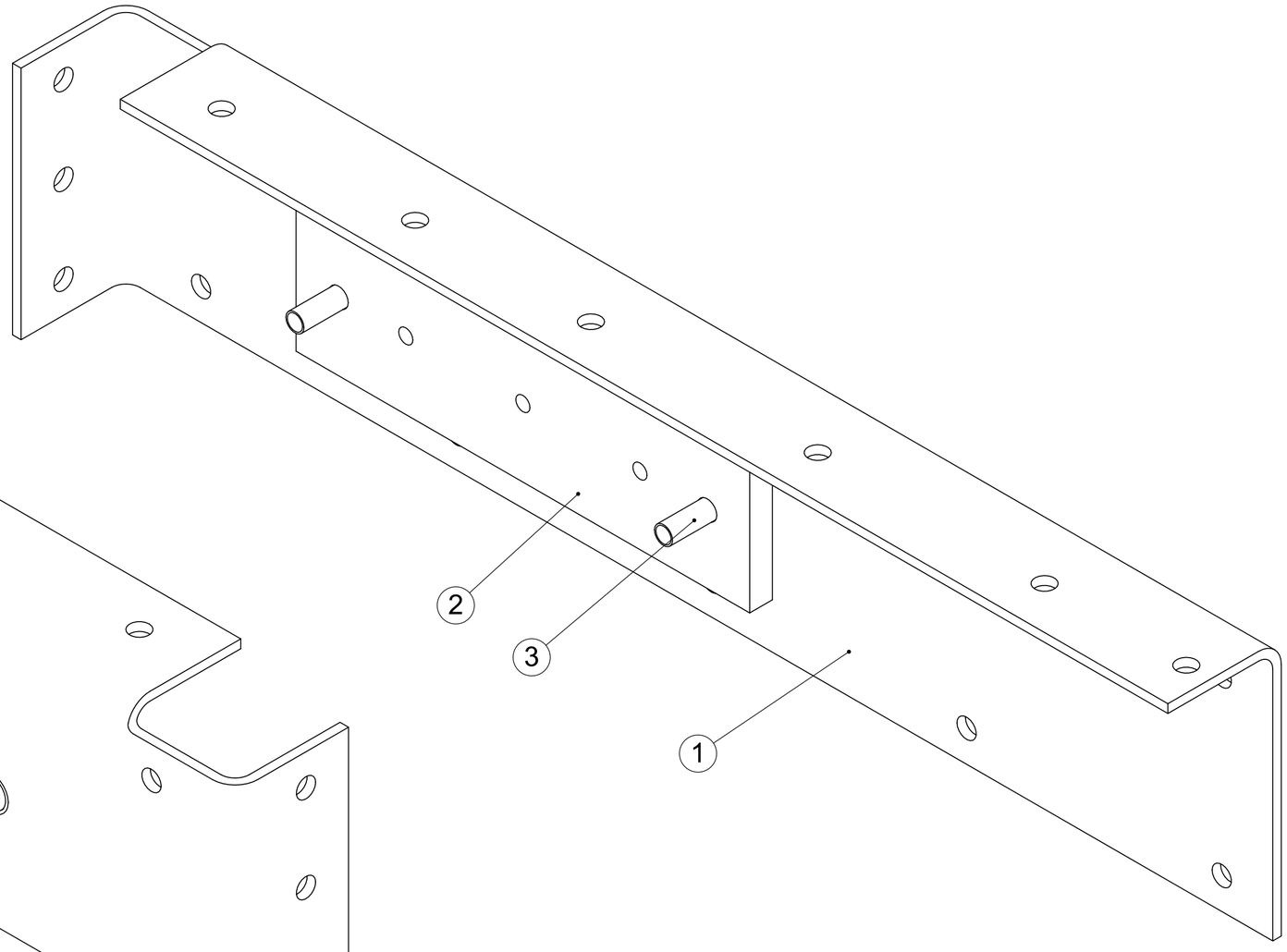
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	2	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
2	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
1	1	Base edge flange	441,3	124,8	3	2000-05-0252	Alu. 5754-H22	Bend with V30

Scale: 1:1	Date:	Drawing no. 2000-05-0831 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.59 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

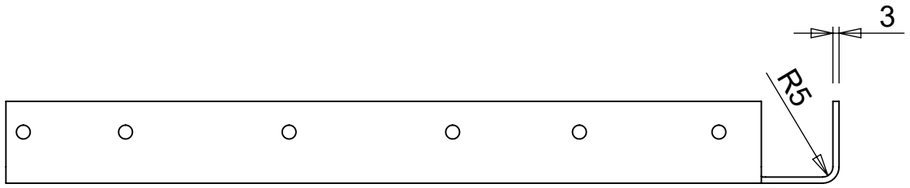
Title: Corner flange long

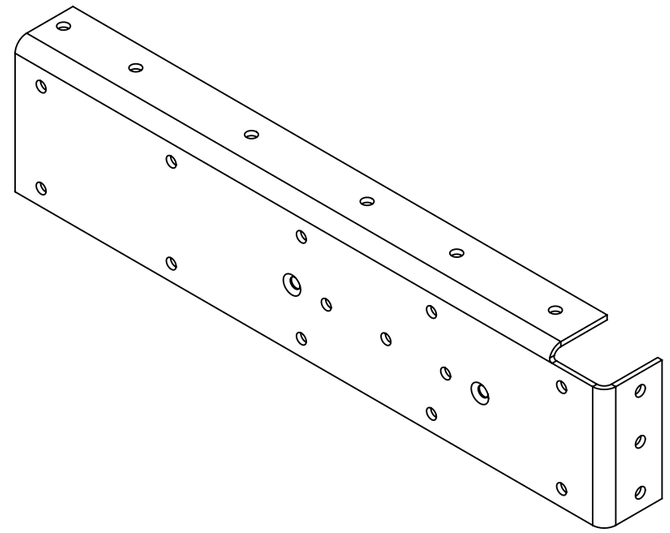
Iss.	Changes	Date	Name

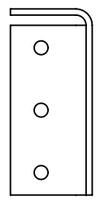
Projection

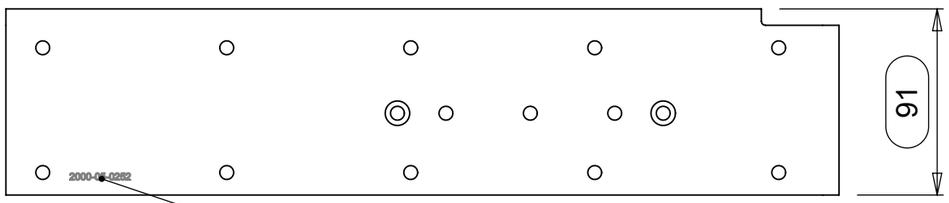
Size A2

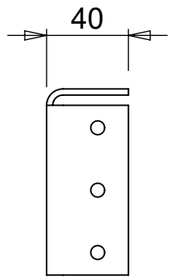
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

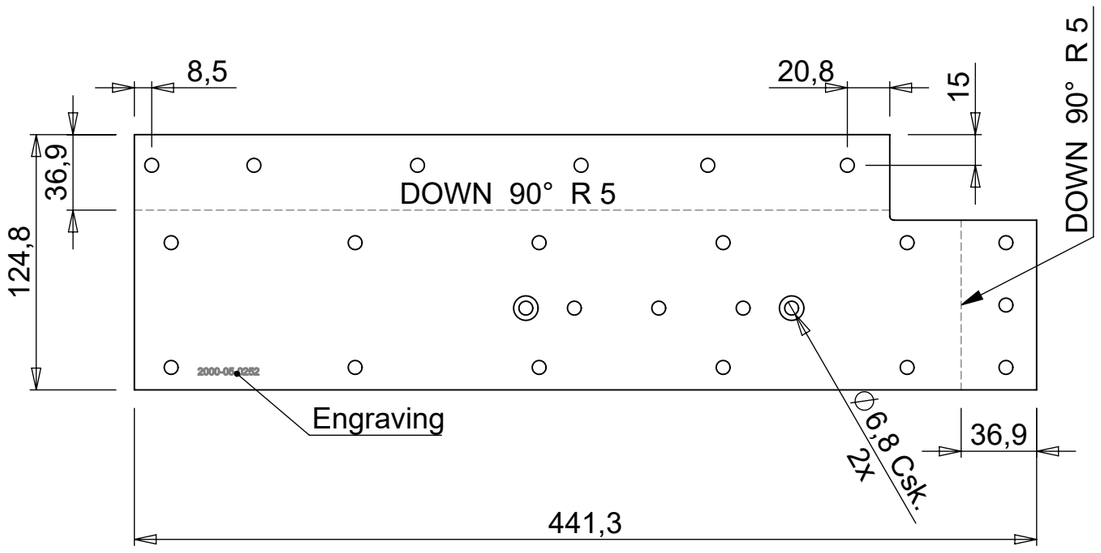


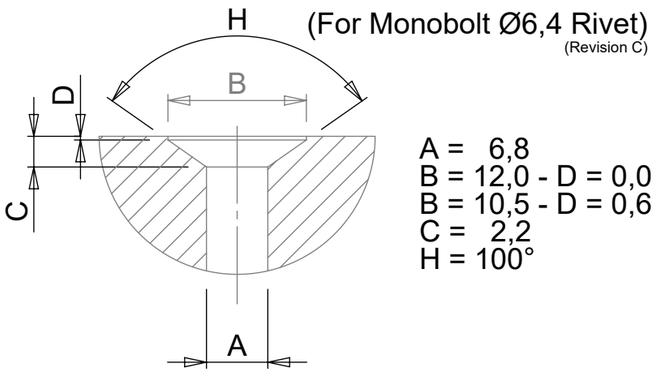












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge flange	441,3	124,8	3	2000-05-0252	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0252	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.42 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

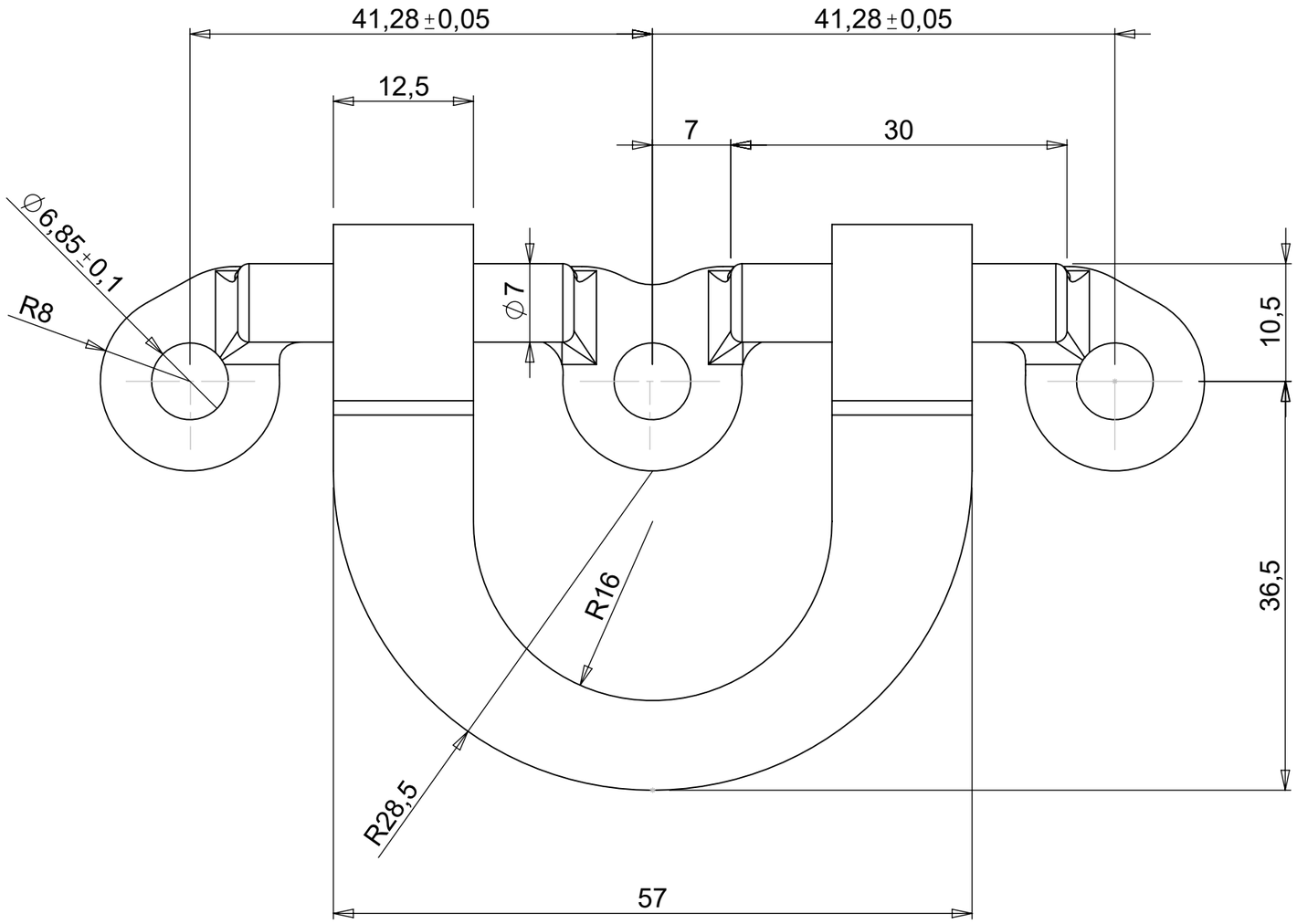
Title: **Base edge flange**

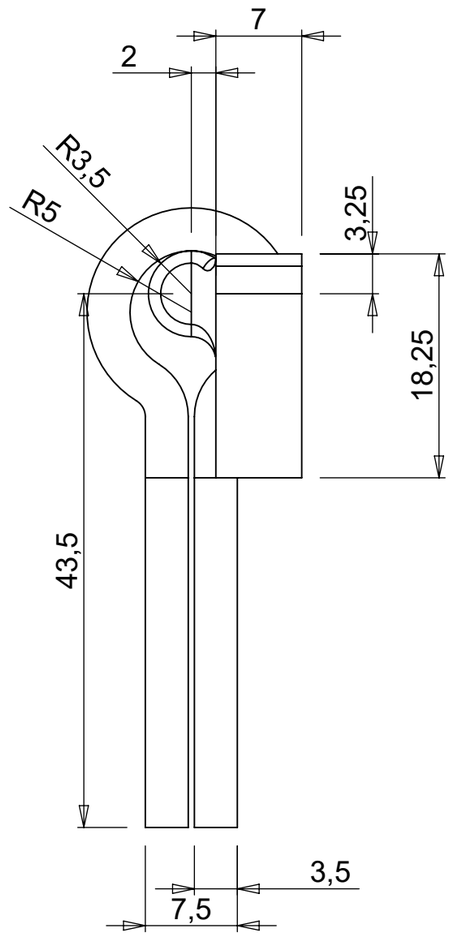
Iss.	Changes	Date	Name

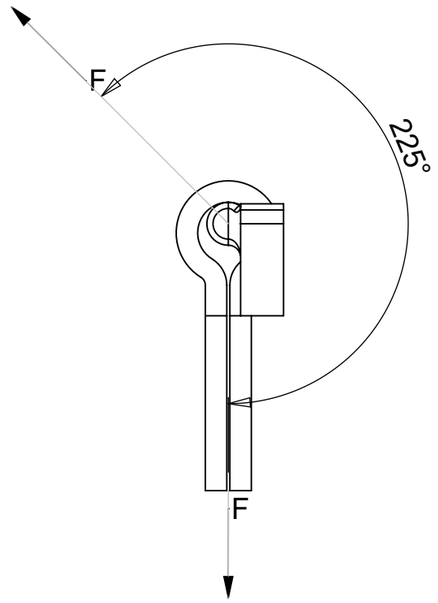
Projection

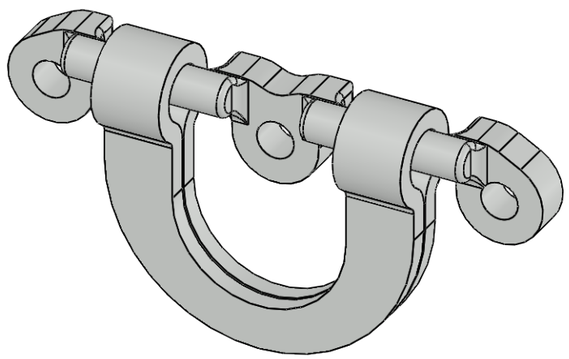
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Caution: the D-ring must be able to rotate freely without pinching

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated

Scale: 1:10	Date:	Drawing no.: ZN_VRR-DFSTN Sheet : 1 of 1	Issue: A
Drawn: HK	07-03-2022		
Checked: MVE	08-03-2022		
Approved: JWR	10-03-2022		
Mass: 0.13 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Tie-Down Ring

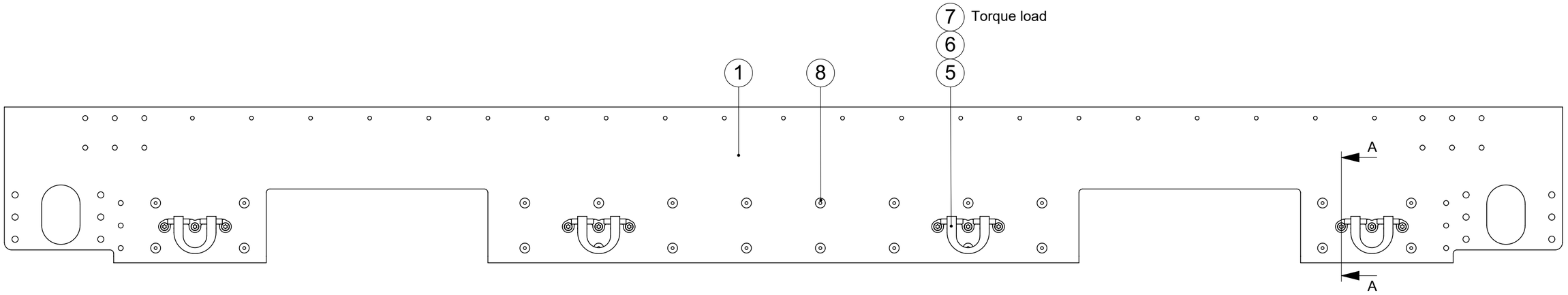
Iss.	Changes	Date	Name

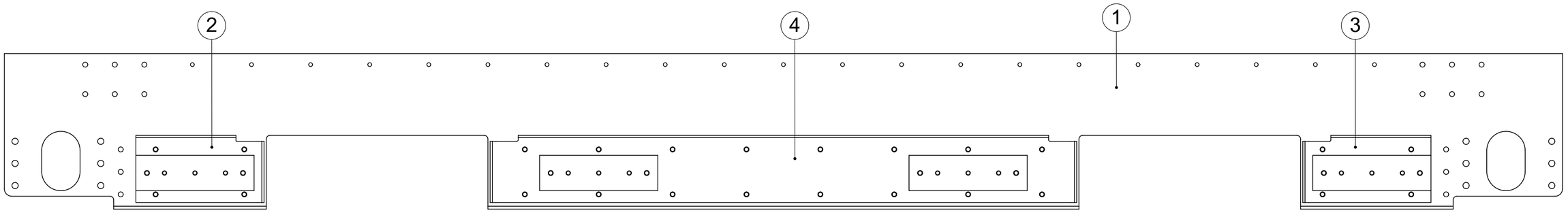
Projection

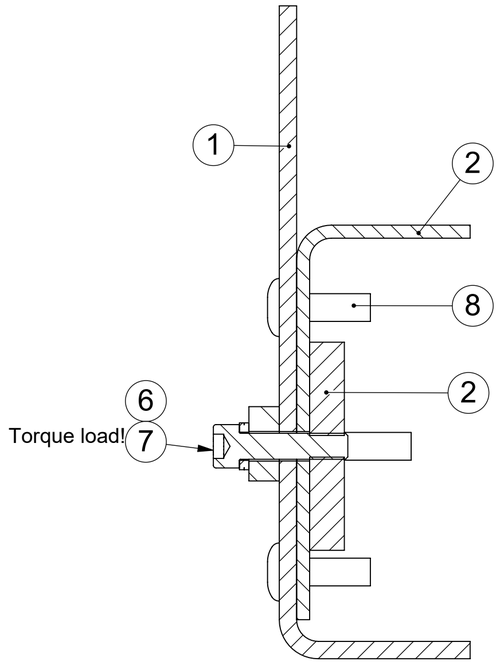
Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION A-A
SCALE 1 : 1

Torque load M6: 6,3 Nm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
8	24	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
7	12	Torx Socket Cap Screw	25	M6		BO-14579T-06025-A2	AISI 304	ISO 14579 torx
6	12	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
5	4	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
4	1	Flange assy				2000-05-0828	Assembly	
3	1	Corner flange short				2000-05-0829	Assembly	
2	1	Corner flange short				2000-05-0830	Assembly	
1	1	Base edge sheet	2109	247,5	4	2000-05-0223	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no. 2000-07-2728 Sheet : 1 of 1	Issue A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 7.13 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Base edge side

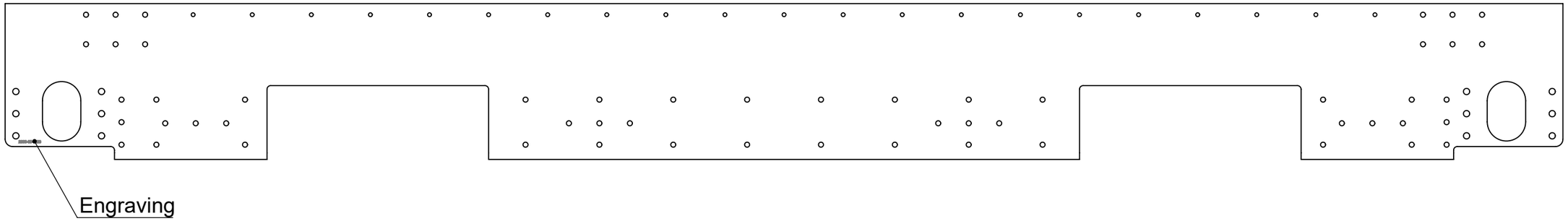
Rivets according to VRR-SP2201

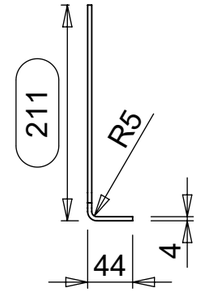
Iss.	Changes	Date	Name

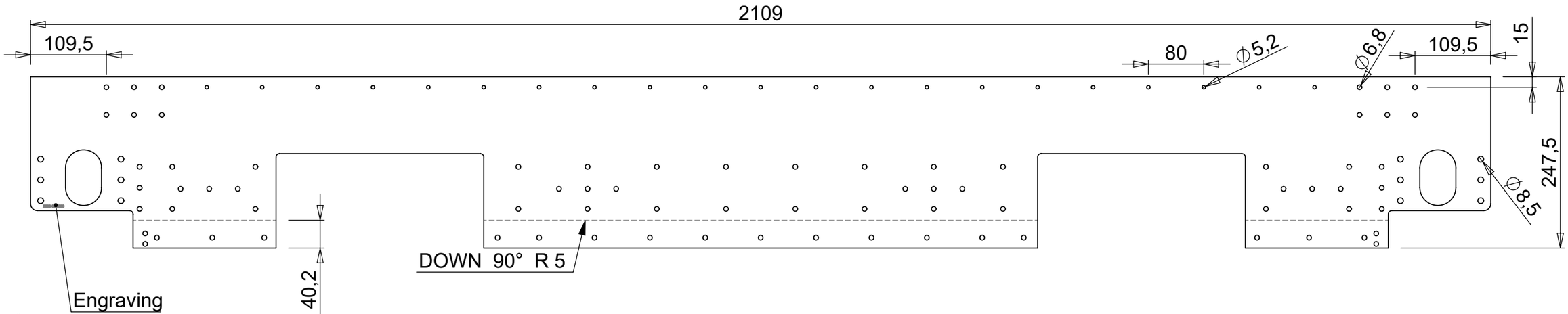
Projection

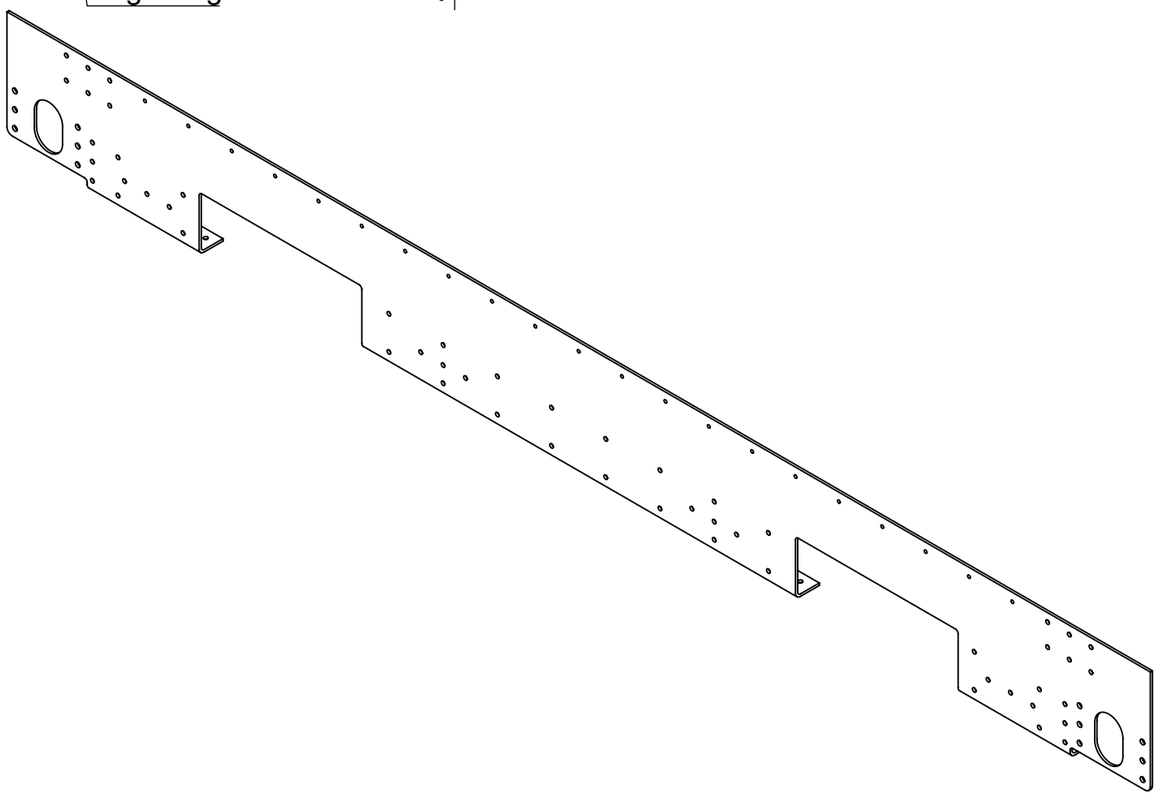
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Base edge sheet	2109	247,5	4	2000-05-0223	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0223	Issue A	Tolerances (u.n.o.)
Drawn: JWR	14-03-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: HS	12-04-2019			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	09-05-2019	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 4.47 kg		Finish:		Dimensions in mm (u.n.o.)

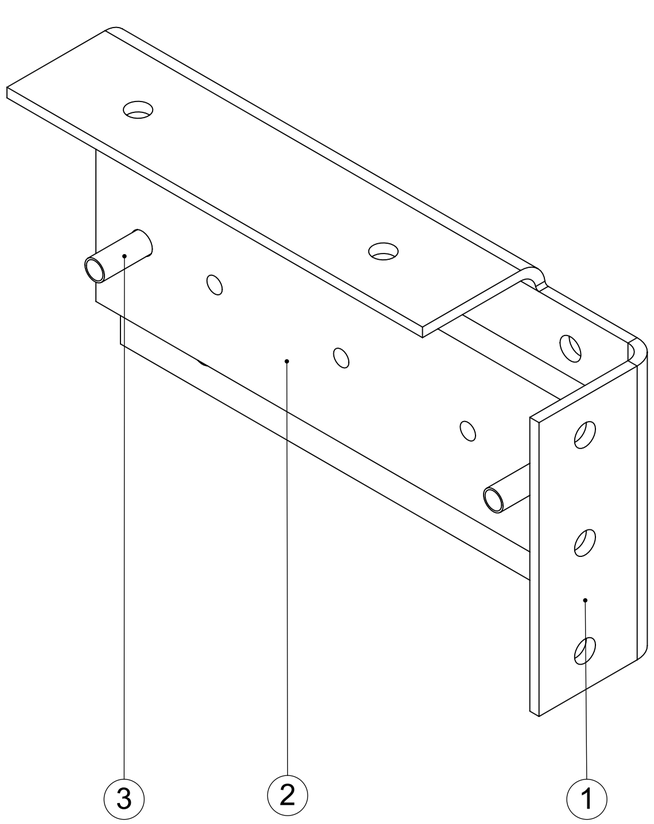
Title: **Base edge sheet**

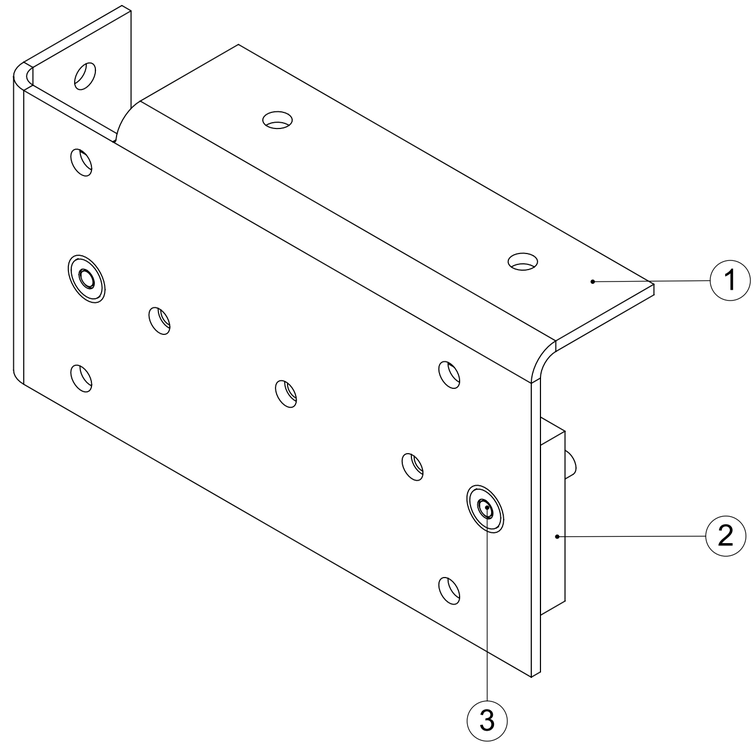
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	2	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
2	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
1	1	Base edge flange	207,3	124,8	3	2000-05-0253	Alu. 5754-H22	Bend with V30

Scale: 1:1	Date:	Drawing no. 2000-05-0830 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

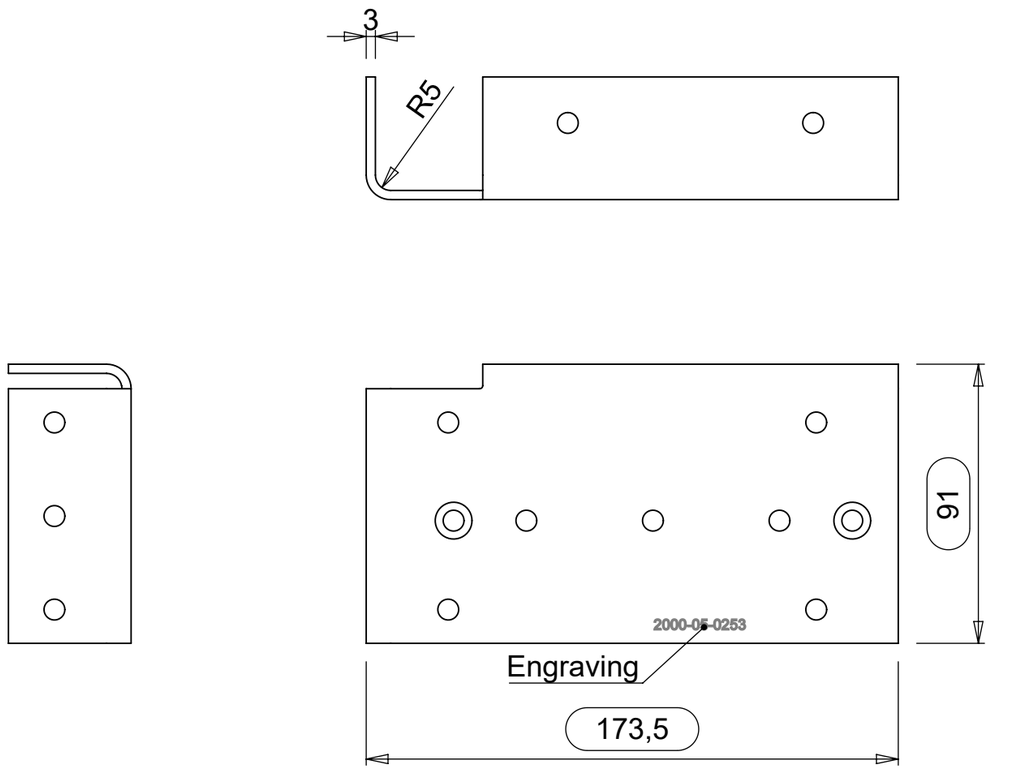
Title: # Corner flange short

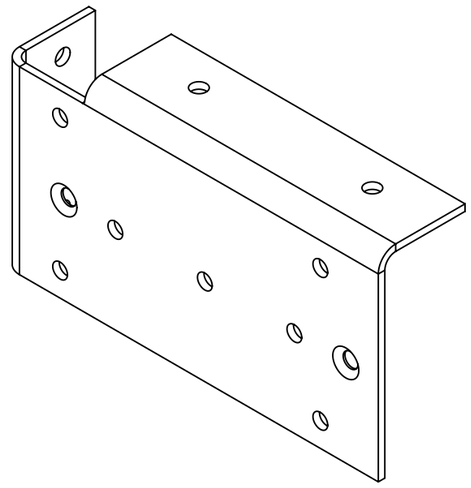
Iss.	Changes	Date	Name

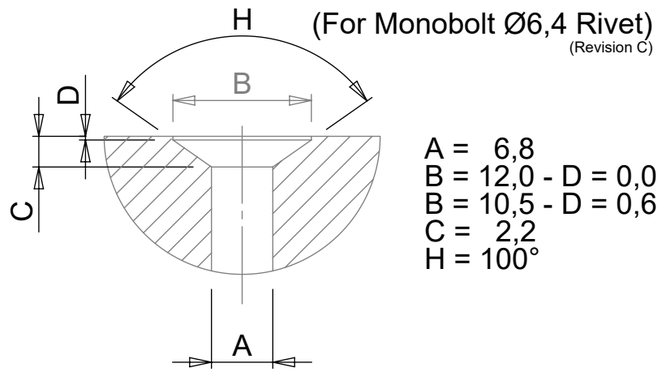
Projection

Size A2

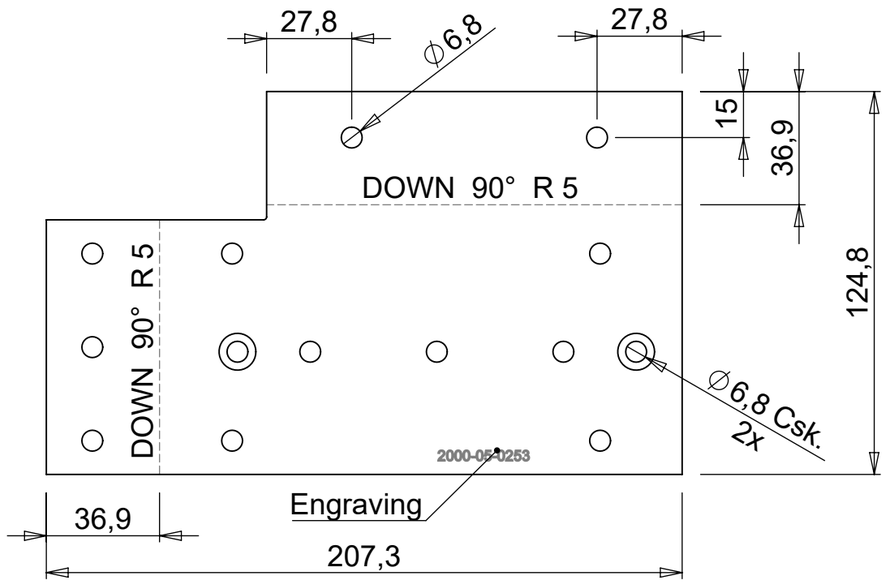
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge flange	207,3	124,8	3	2000-05-0253	Alu. 5754-H22	Bend with V30

Scale: 1:2	Date:	Drawing no.: 2000-05-0253	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.18 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

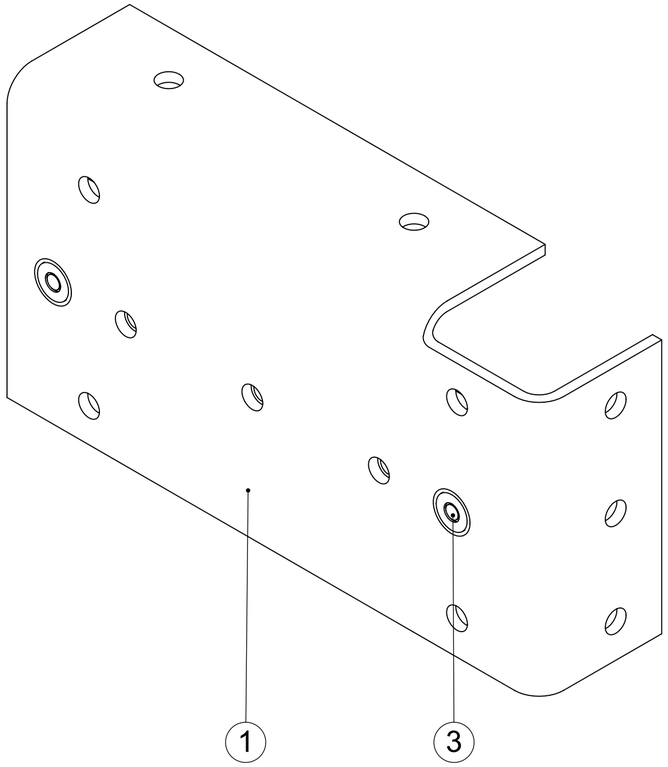
Title: **Base edge flange**

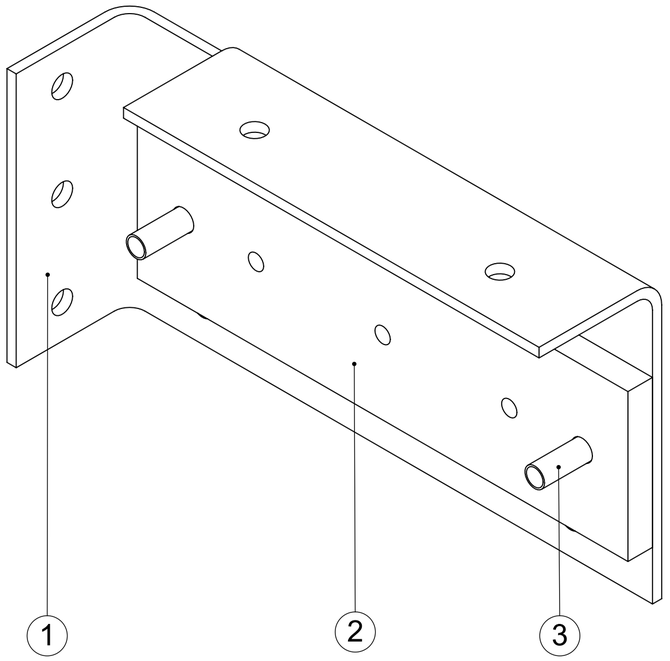
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	2	Csk.St. Monobolt 6,4	3,1-12,1	Ø6,4		BK-02761-00821	Steel	(MGL100-R8-8)
2	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
1	1	Base edge flange	207,3	124,8	3	2000-05-0250	Alu. 5754-H22	Bend with V30

Scale: 1:1	Date:	Drawing no. 2000-05-0829 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

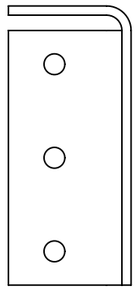
Title: Corner flange short

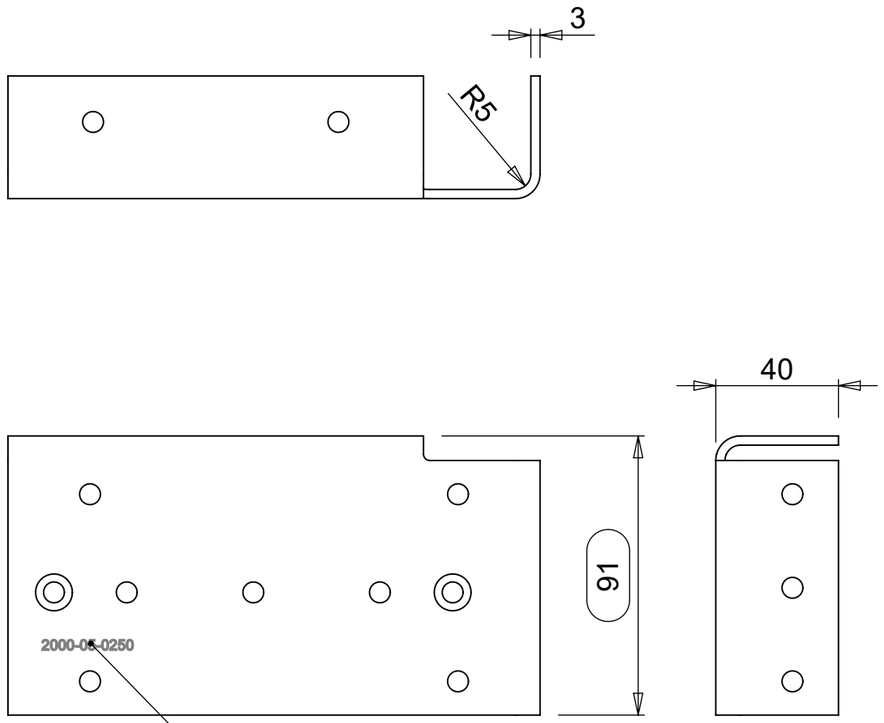
Iss.	Changes	Date	Name

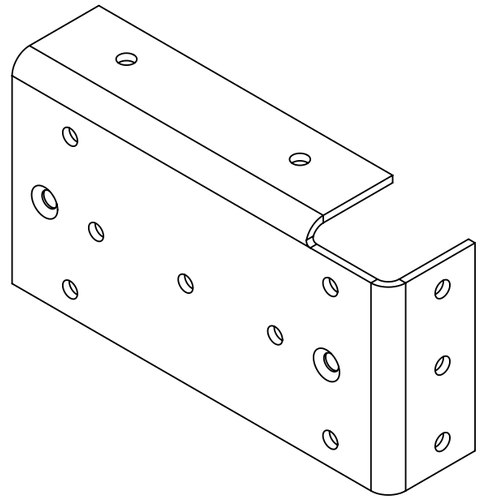
Projection

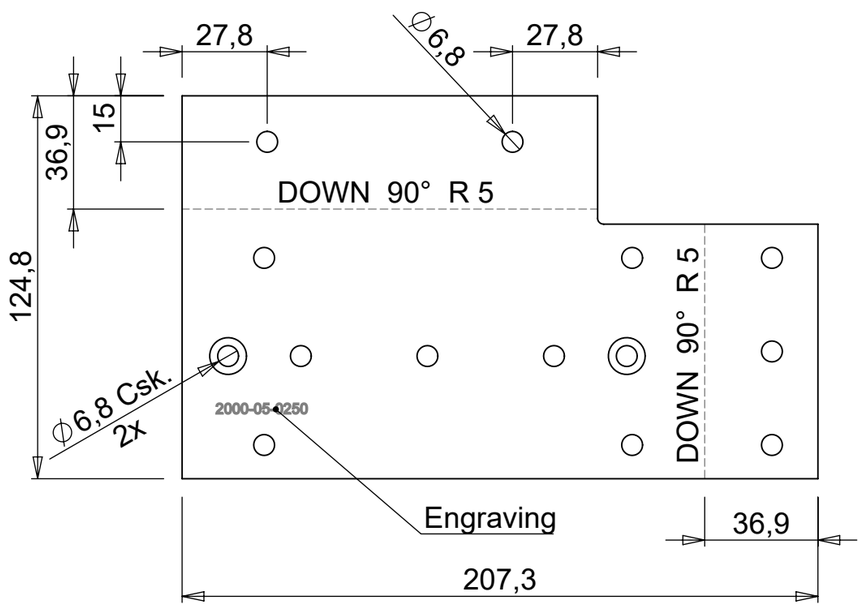
Size A2

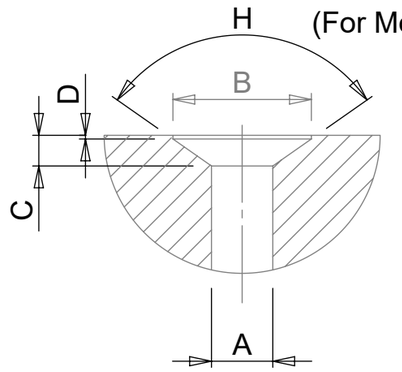
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge flange	207,3	124,8	3	2000-05-0250	Alu. 5754-H22	Bend with V30

Scale: 1:2	Date:	Drawing no.: 2000-05-0250	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.18 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

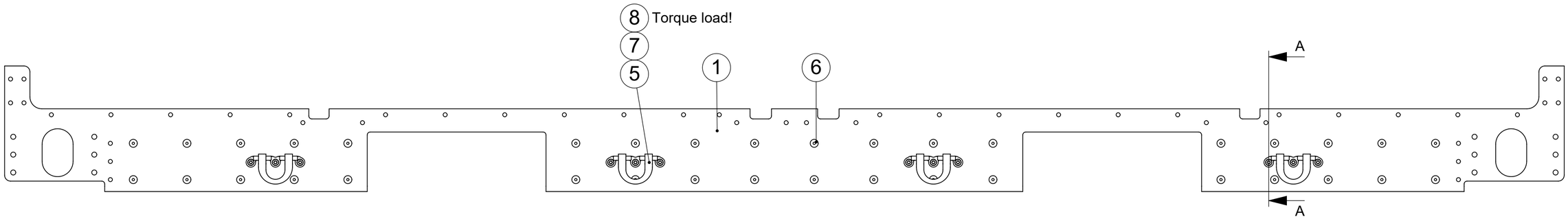
Title: **Base edge flange**

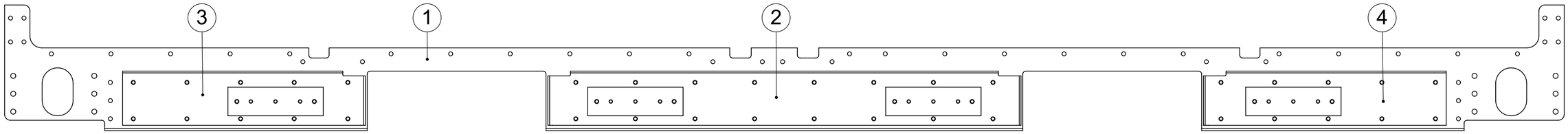
Iss.	Changes	Date	Name

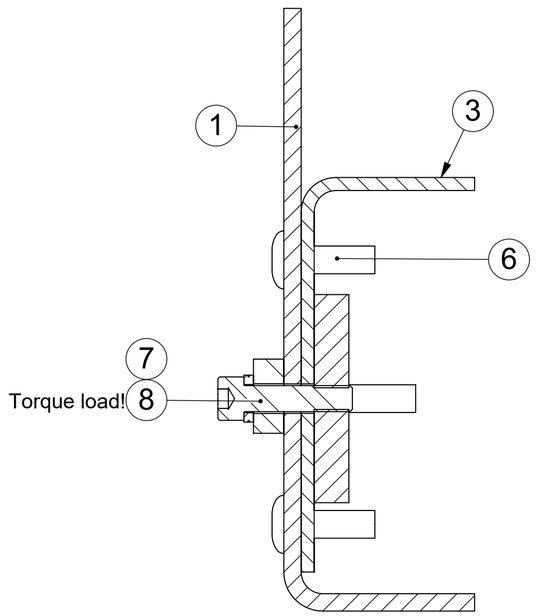
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







SECTION A-A
SCALE 1 : 1

Torque load M6: 6,3 Nm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
8	12	Torx Socket Cap Screw	25	M6		BO-14579T-06025-A2	AISI 304	ISO 14579 torx
7	12	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
6	36	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
5	4	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
4	1	Corner flange long				2000-05-0831	Assembly	
3	1	Corner flange long				2000-05-0832	Assembly	
2	1	Flange assy				2000-05-0828	Assembly	
1	1	Base edge sheet	2617	247,5	4	2000-05-0249	Alu. 5754-H22	Bend with V30

Scale: 1:5	Date:	Drawing no. 2000-07-2968 Sheet : 1 of 1	Issue A
Drawn: MBMH	16-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 7.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Base edge front

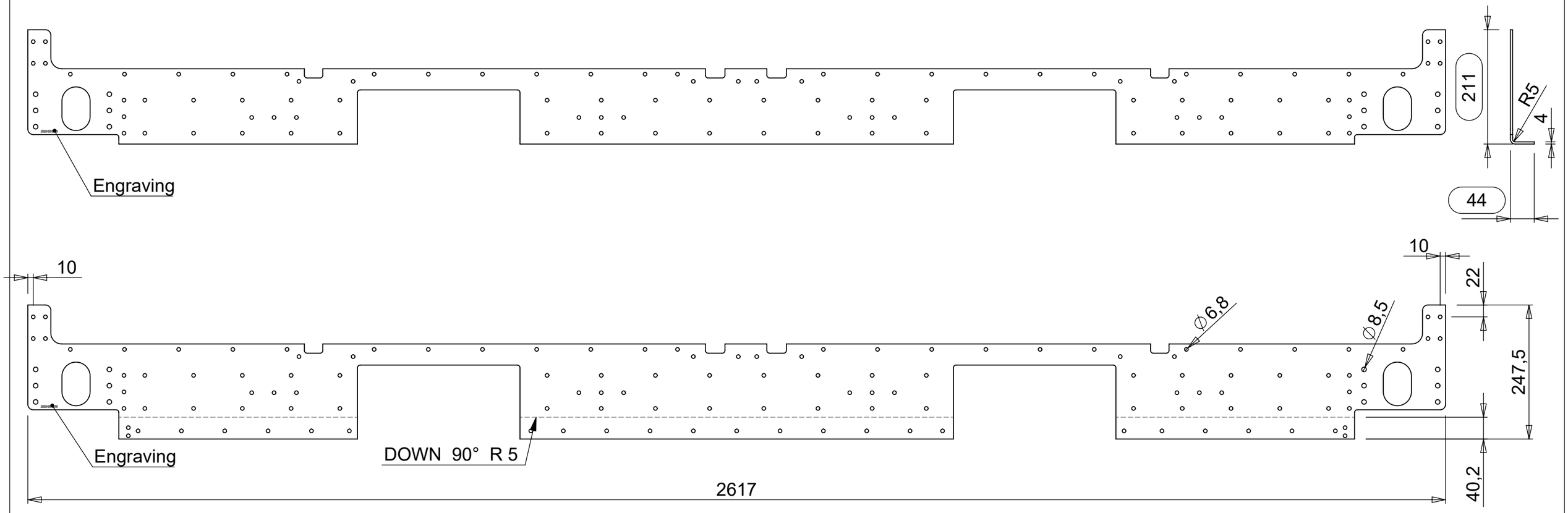
Rivets according to VRR-SP2201

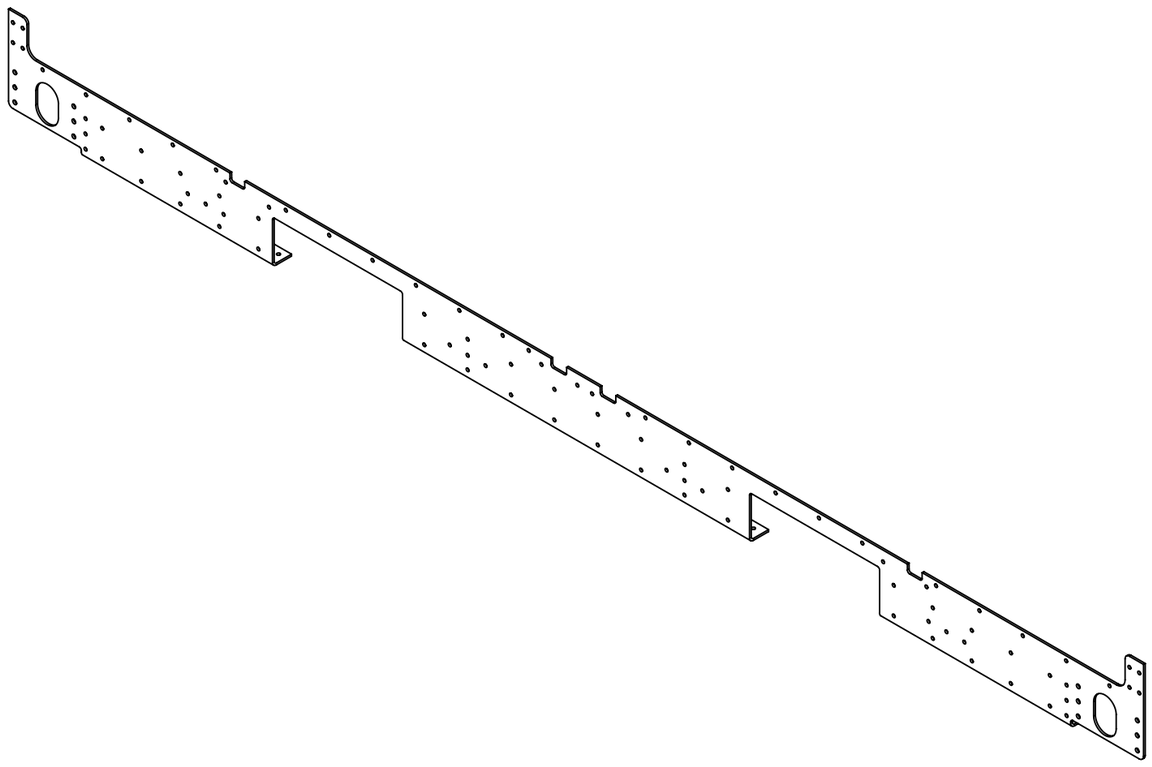
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Base edge sheet	2617	247,5	4	2000-05-0249	Alu. 5754-H22	Bend with V30

Scale: 1:7	Date:	Drawing no.: 2000-05-0249	Issue: A
Drawn: JWR	14-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 3.80 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

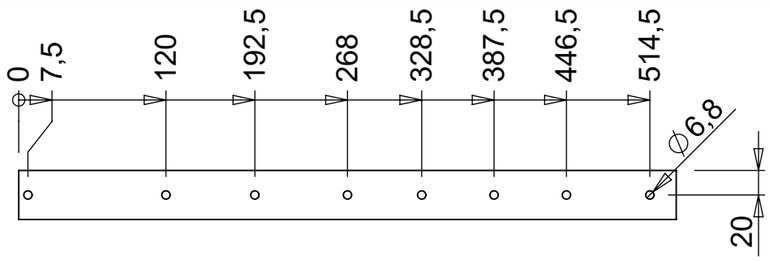
Title: **Base edge sheet**

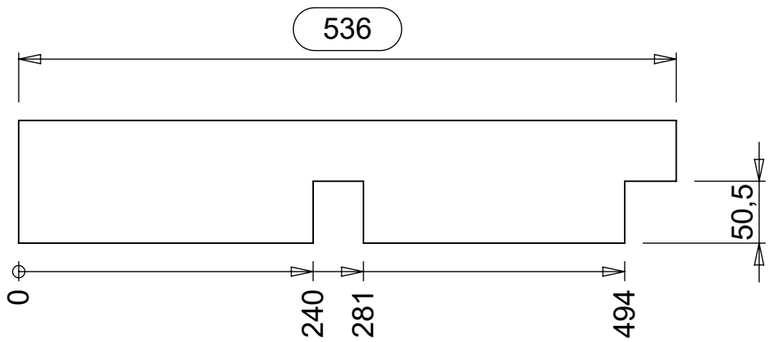
Iss.	Changes	Date	Name

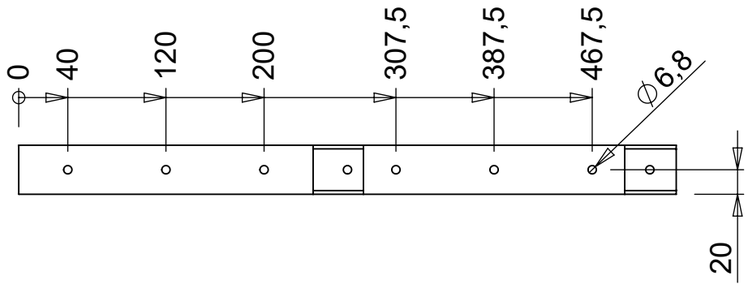
Projection

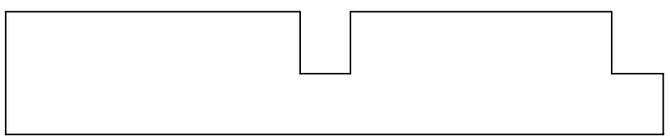
Size A3

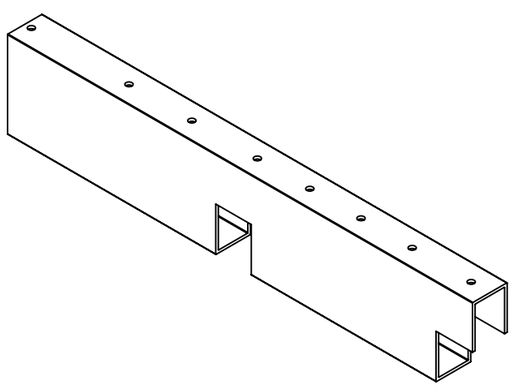
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

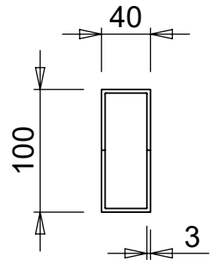


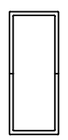












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x40x3	536	100/40	3	2000-05-0245	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0245 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.07 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

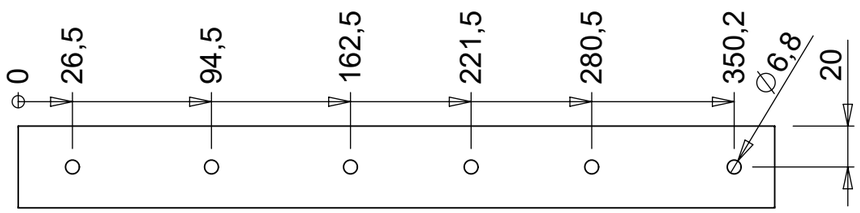
Title: Tube 100x40x3

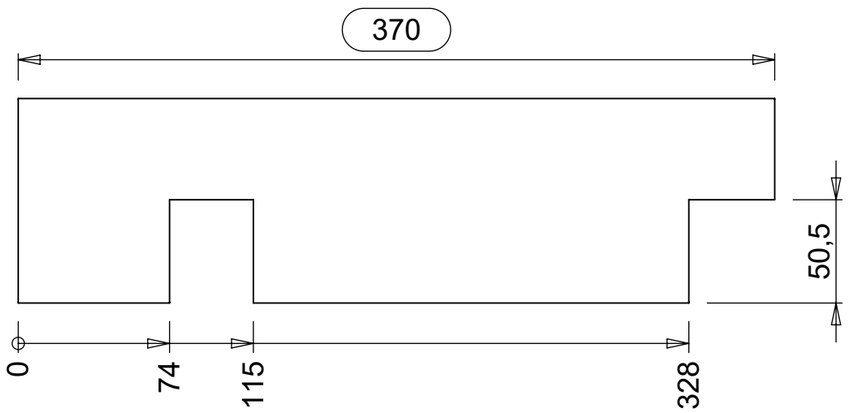
Iss.	Changes	Date	Name

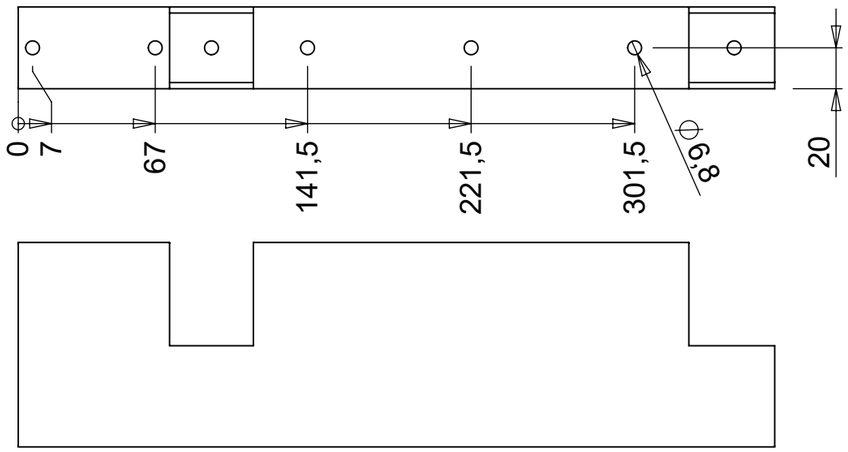
Projection

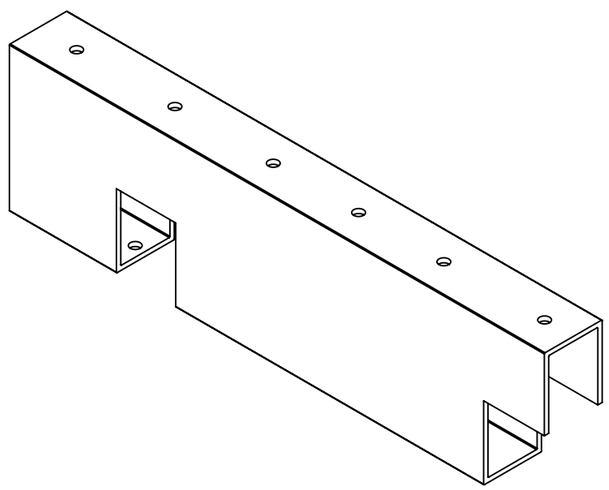
Size A3

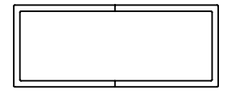
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

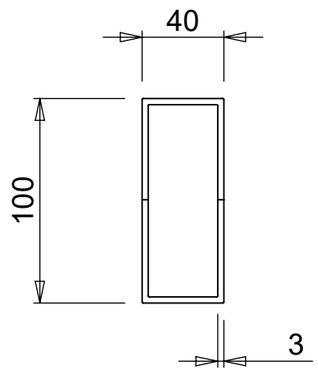


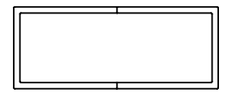


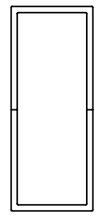












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x40x3	370	100/40	3	2000-05-0247	Alu. 6060-T66	

Scale: 1:3	Date:	Drawing no.: 2000-05-0247	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.71 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

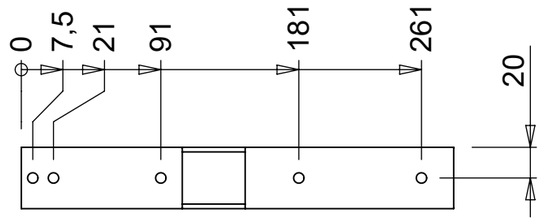
Title: Tube 100x40x3

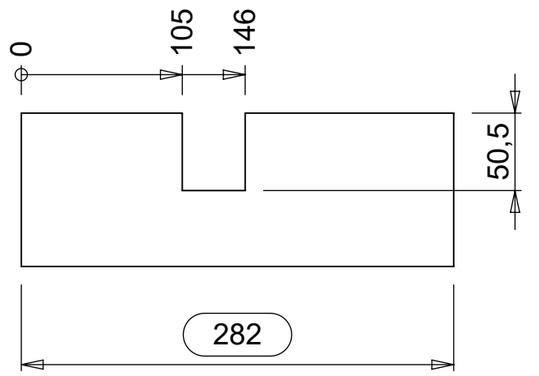
Iss.	Changes	Date	Name

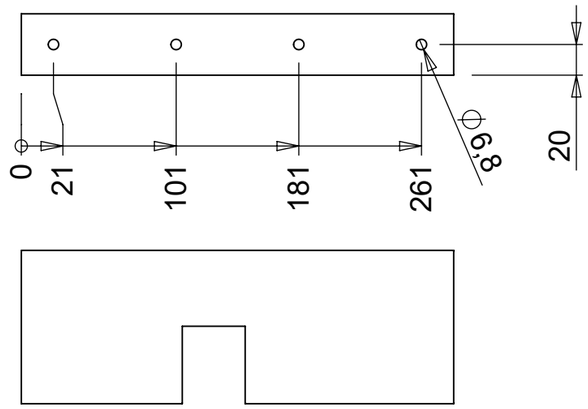
Projection

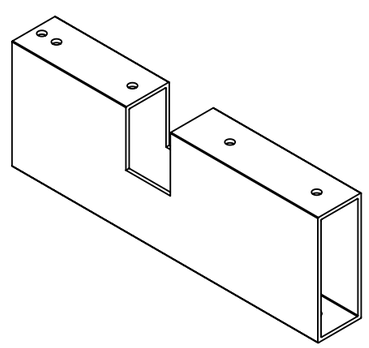
Size A3

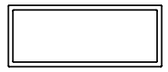
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

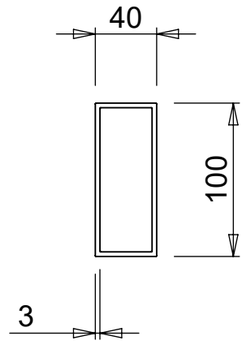


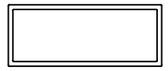


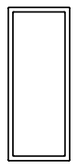












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x40x3	282	100/40	3	2000-05-0242	Alu. 6060-T66	

Scale: 1:4	Date:	Drawing no.: 2000-05-0242	Issue: A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.56 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

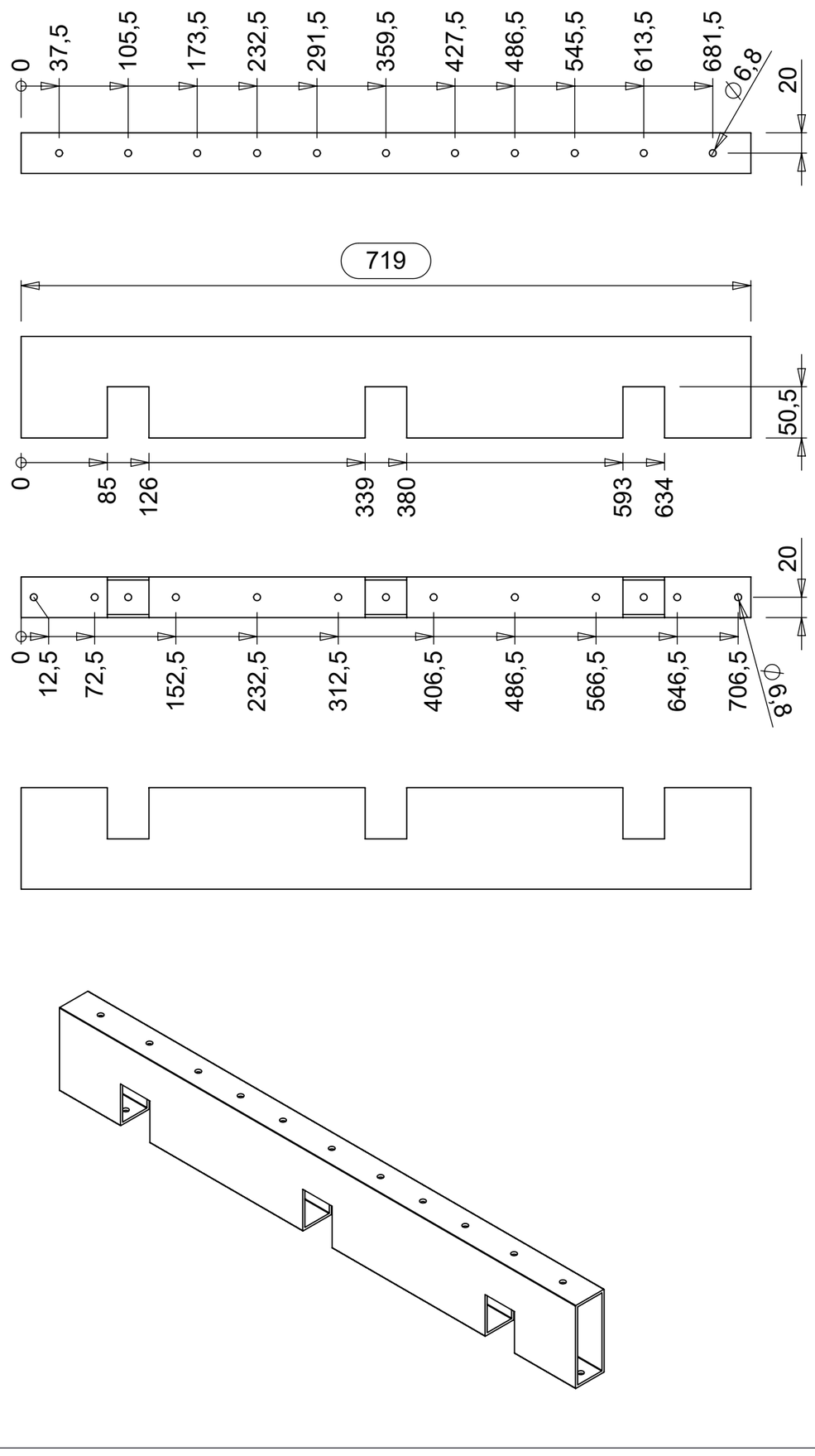
Title: Tube 100x40x3

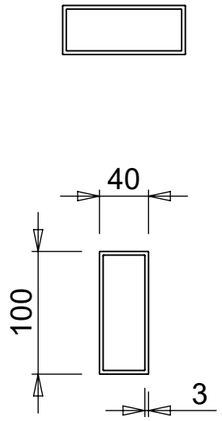
Iss.	Changes	Date	Name

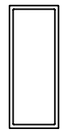
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Tube 100x40x3	719	100/40	3	2000-05-0618	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0618	Issue A
Drawn: JWR	14-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

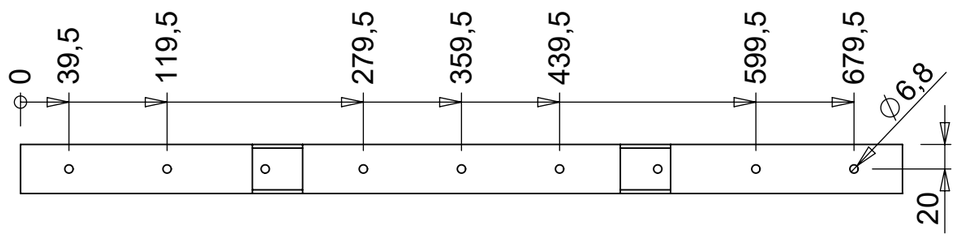
Title: **Tube 100x40x3**

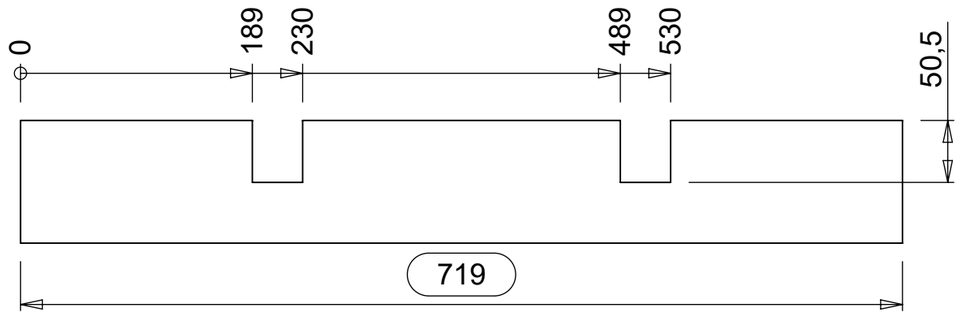
Iss.	Changes	Date	Name

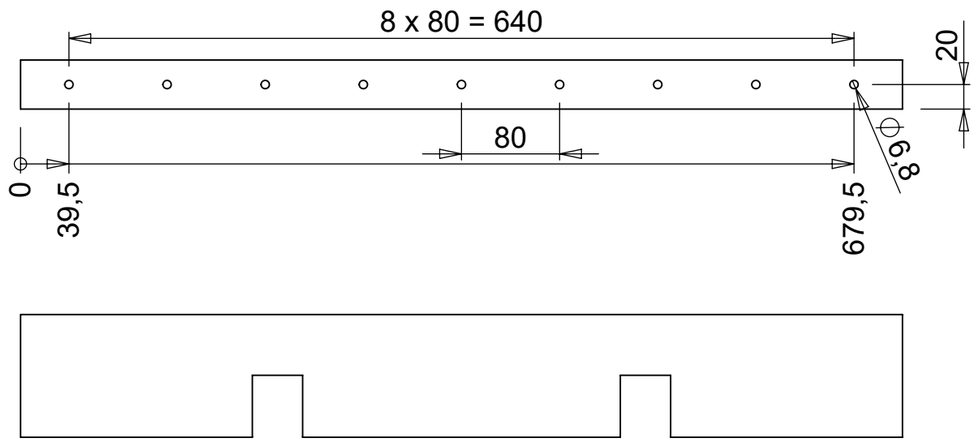
Projection

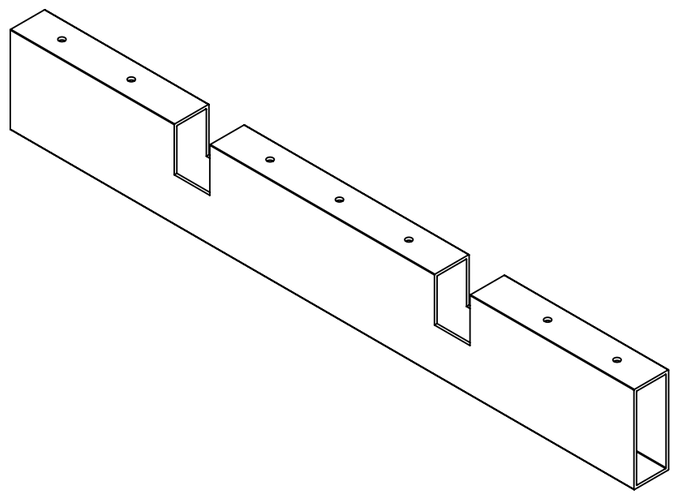
Size A3

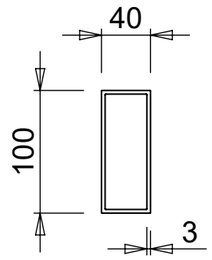
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

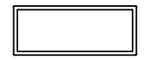


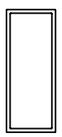












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x40x3	719	100/40	3	2000-05-0227	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0227 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.47 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

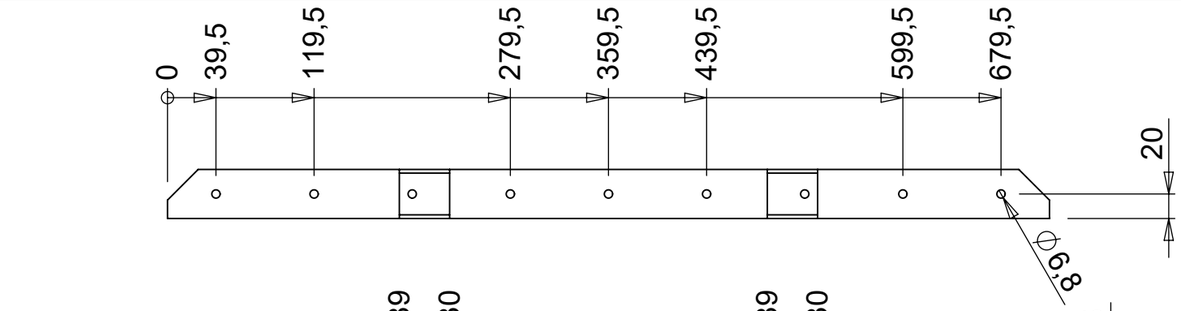
Title: **Tube 100x40x3**

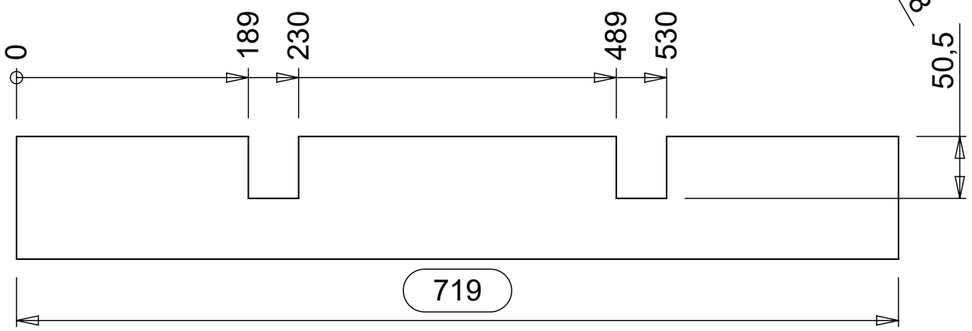
Iss.	Changes	Date	Name

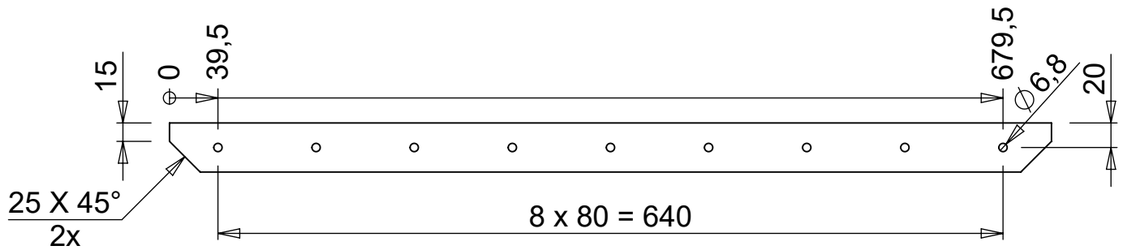
Projection

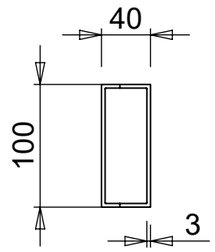
Size A3

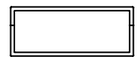
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

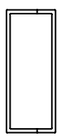


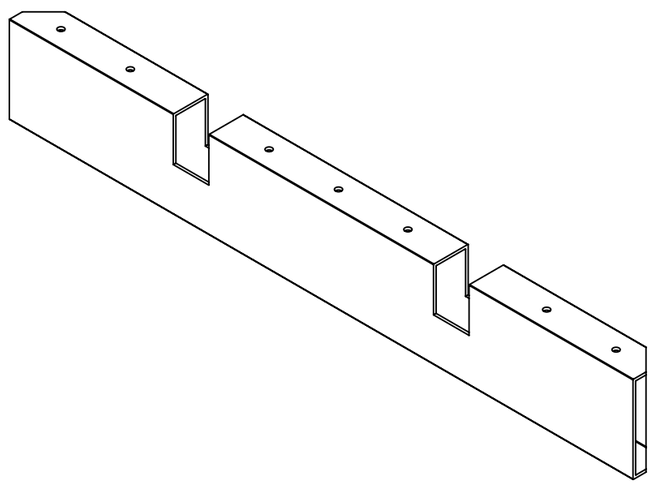












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x40x3	719	100/40	3	2000-05-0619	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0619 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

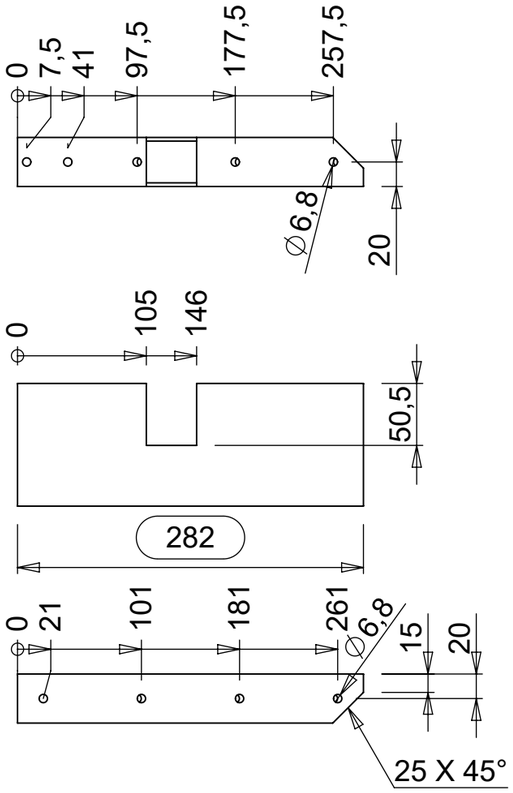
Title: Tube 100x40x3

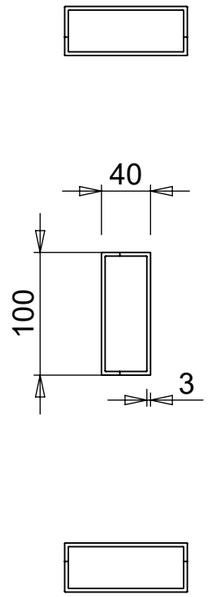
Iss.	Changes	Date	Name

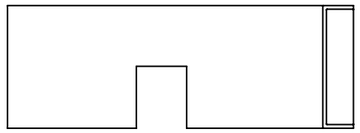
Projection

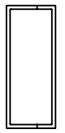
Size A3

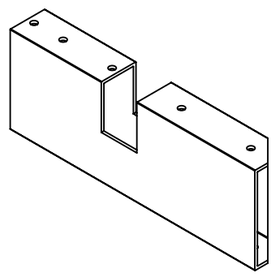
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Tube 100x40x3	282	100.40	3	2000-05-0622	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0622 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.54 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

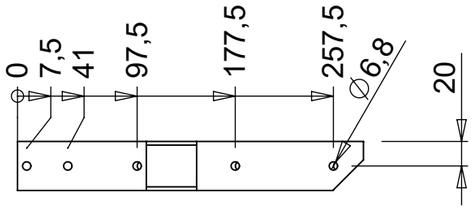
Title: **Tube 100x40x3**

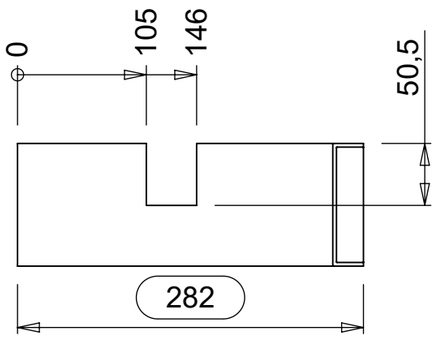
Iss.	Changes	Date	Name

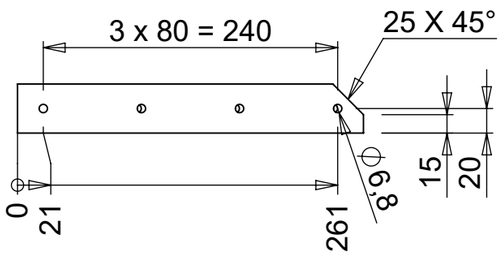
Projection

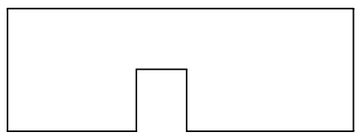
Size A3

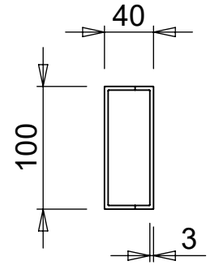
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

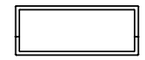


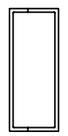


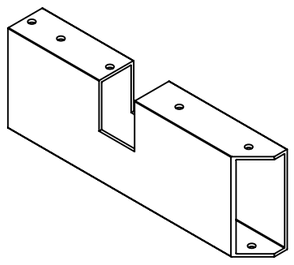












1	1	Tube 100x40x3	282	100/40	3	2000-05-0642	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0642 Sheet : 1 of 1	Issue A
Drawn: JWR	14-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.54 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

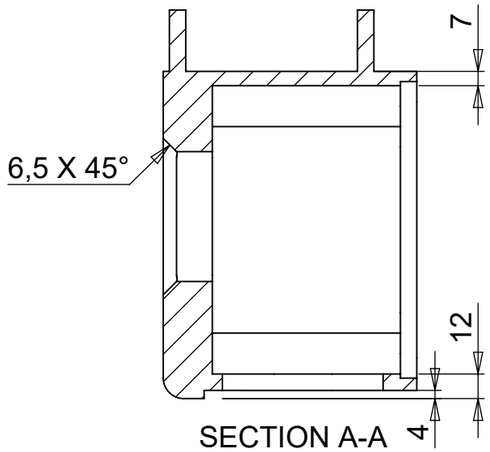
Title: Tube 100x40x3

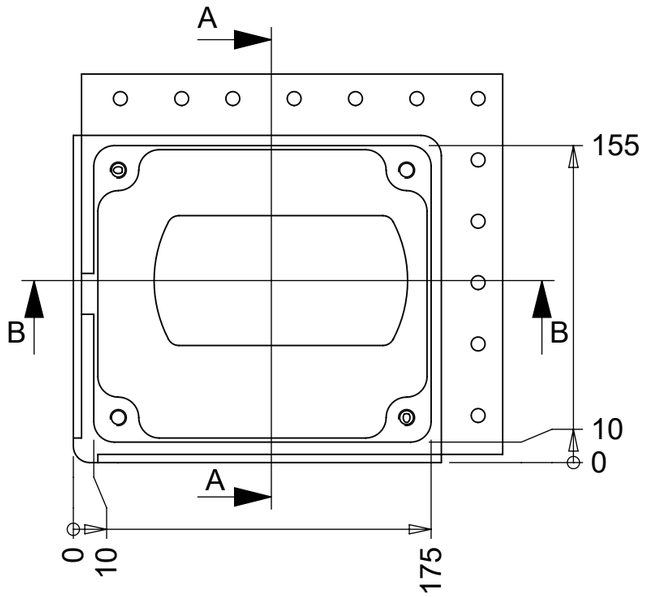
Iss.	Changes	Date	Name

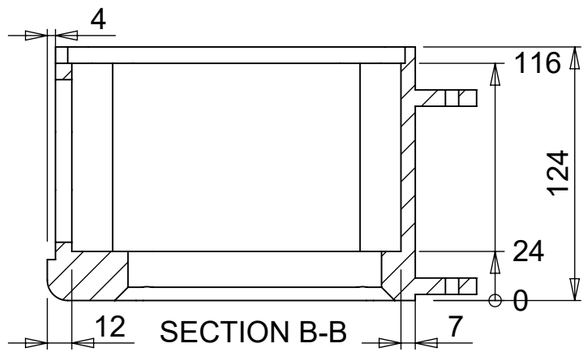
Projection

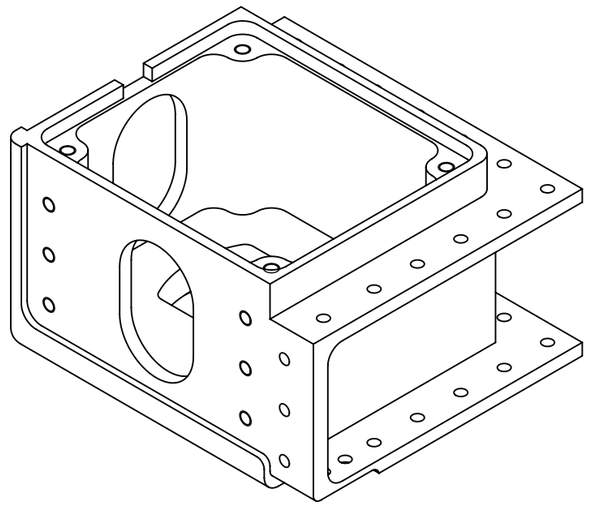
Size A3

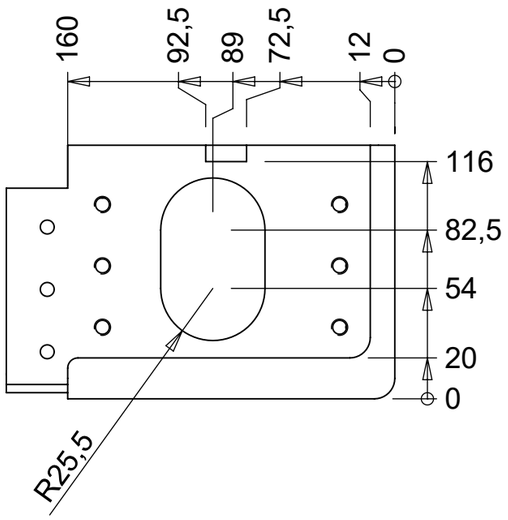
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

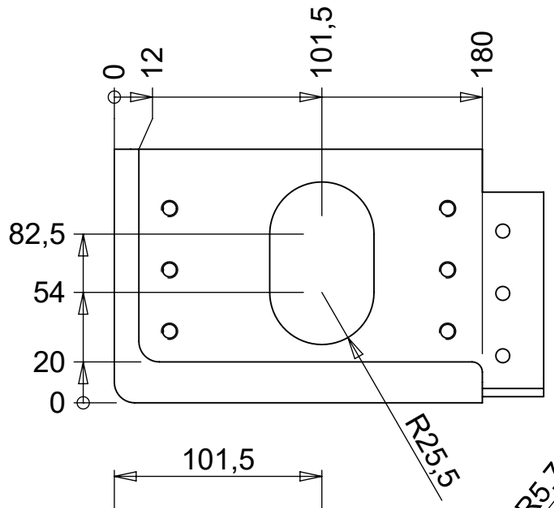


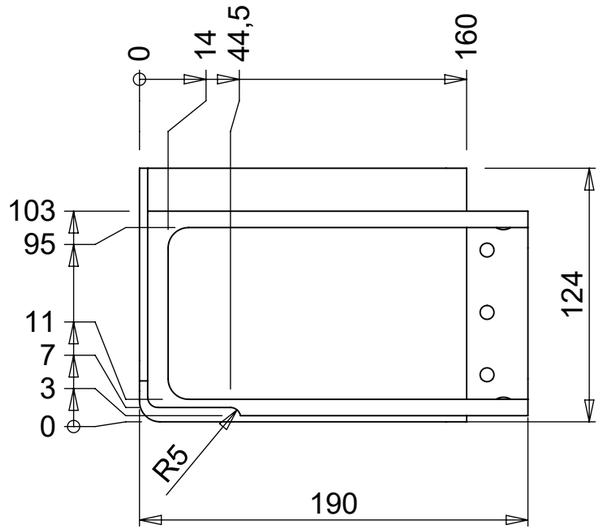


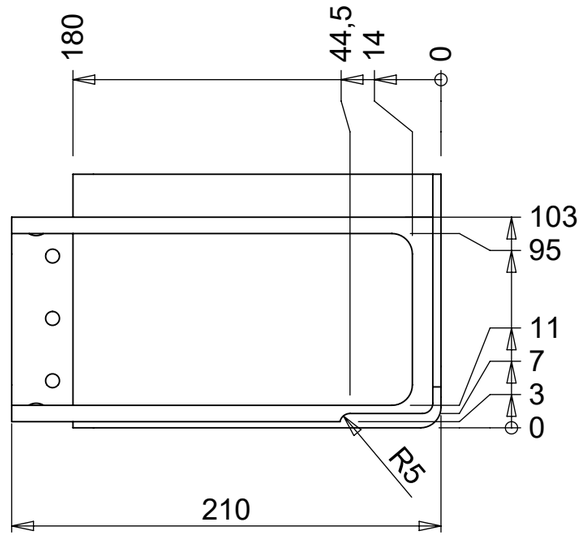


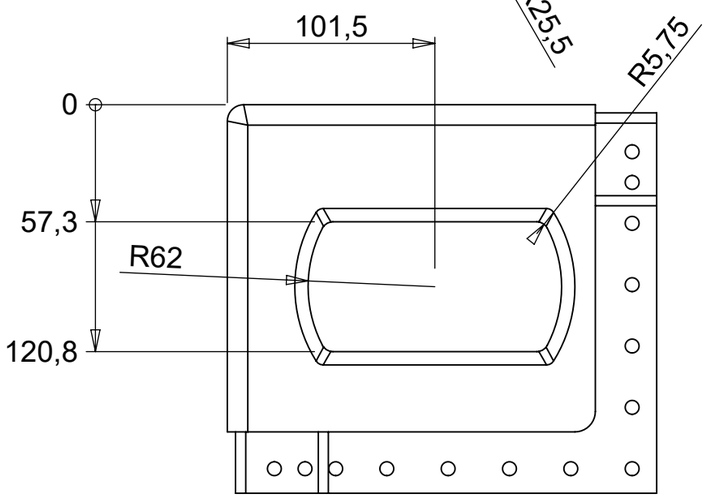












Scale: 1:3	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	14-03-2019	2000-04-8211	B	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: VvM	09-10-2019	Sheet : 1 of 2		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	10-10-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 3.39 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Corner Right**

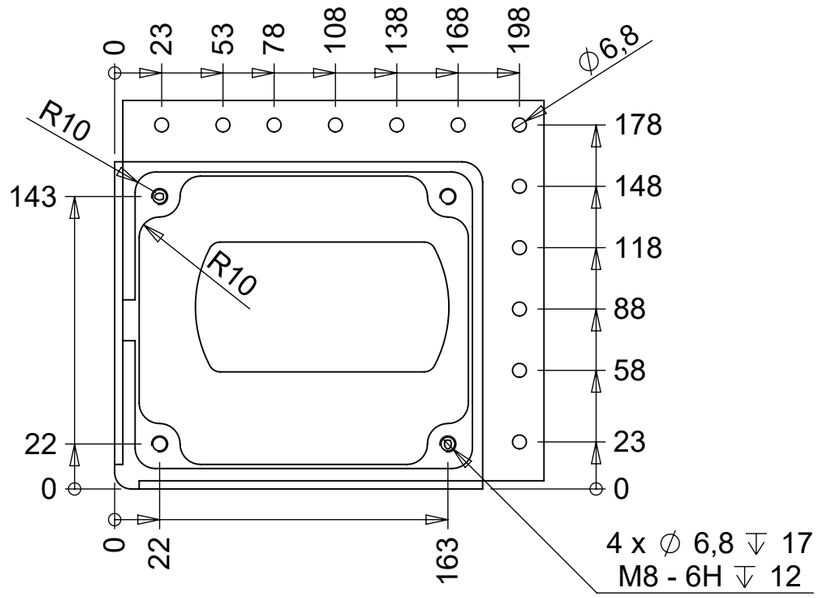
Iss.	Changes	Date	Name
B	+Fillets	10-10-2019	HS

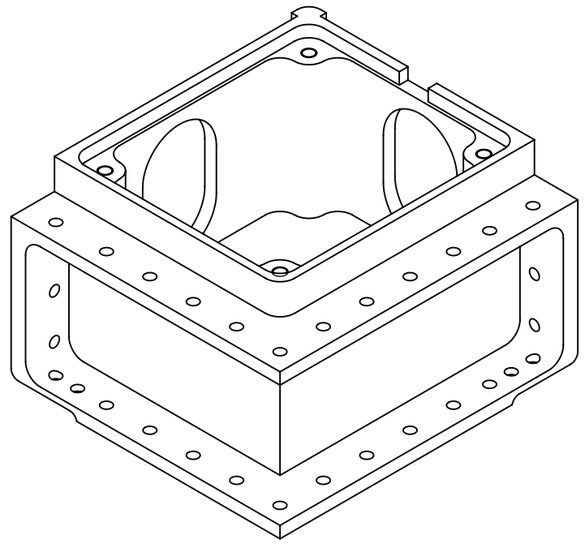
Projection

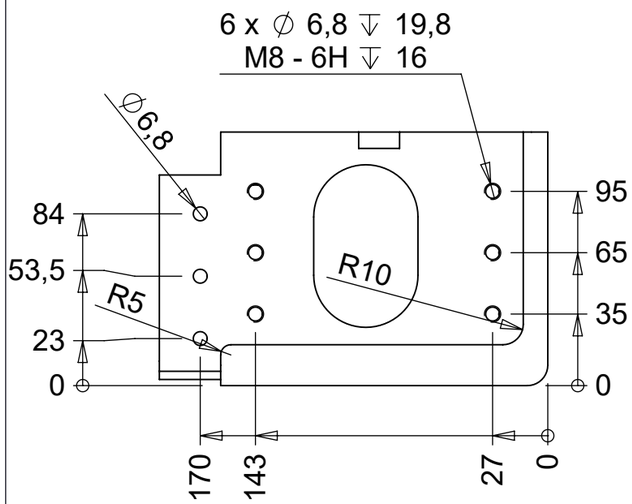
Size A3

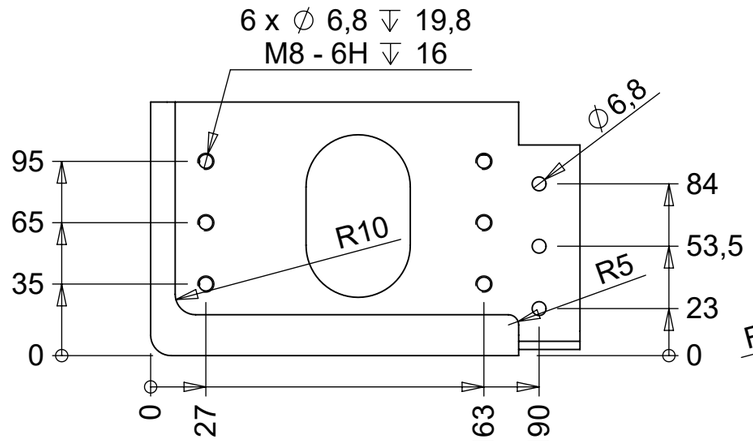
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

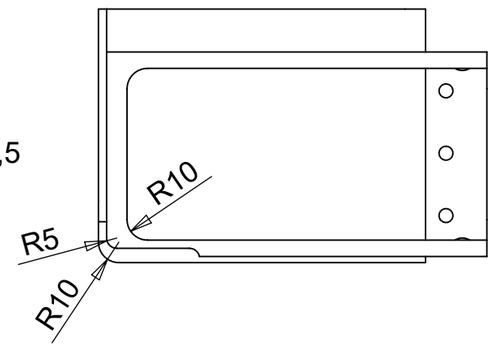
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part

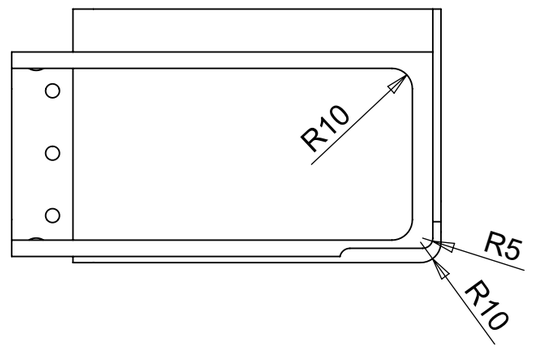


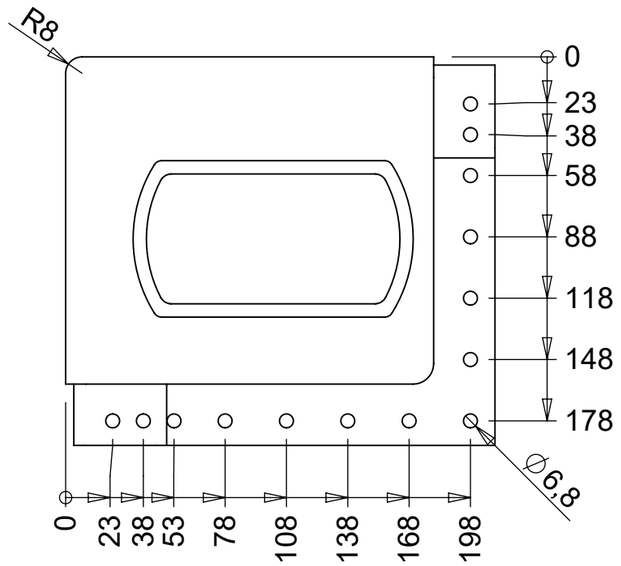












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Corner Right	210	190	124	2000-04-8211	Alu. 6082-T6	Milled Part

Scale: 1:3	Date:	Drawing no.: 2000-04-8211	Issue: B
Drawn: JWR	14-03-2019		
Checked: VvM	09-10-2019		
Approved: JWR	10-10-2019	Sheet : 2 of 2	
Mass: 3.39 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

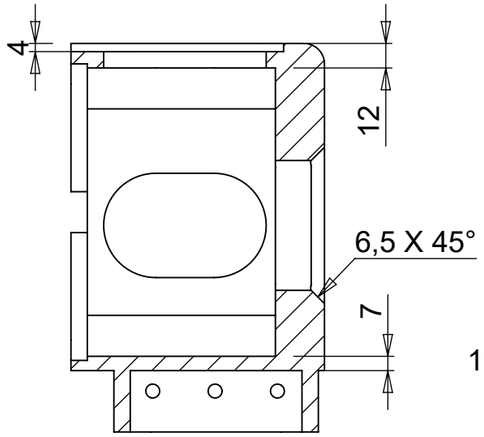
Title: **Corner Right**

Iss.	Changes	Date	Name
B	+Fillets	10-10-2019	HS

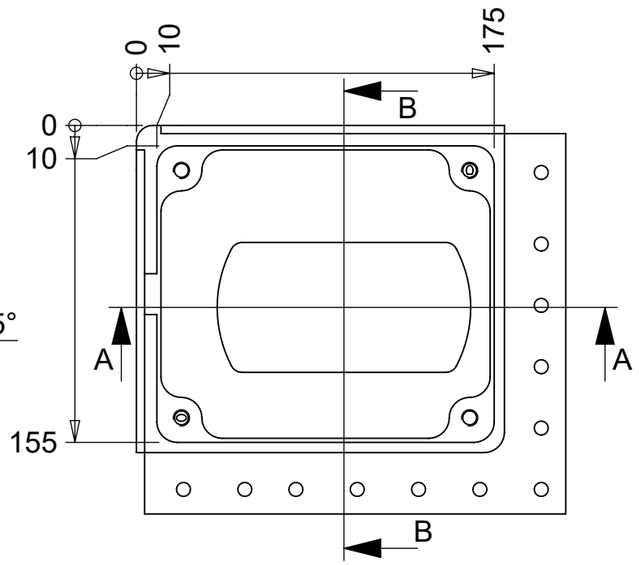
Projection

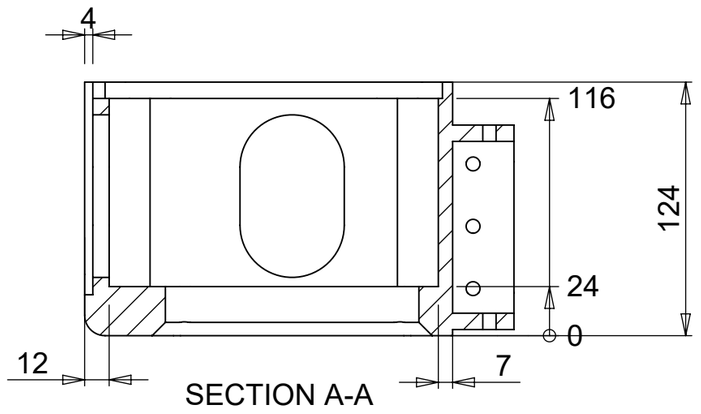
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

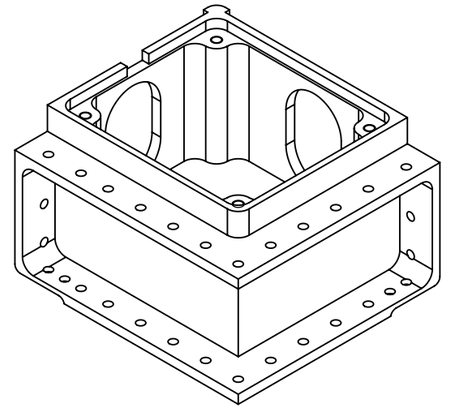


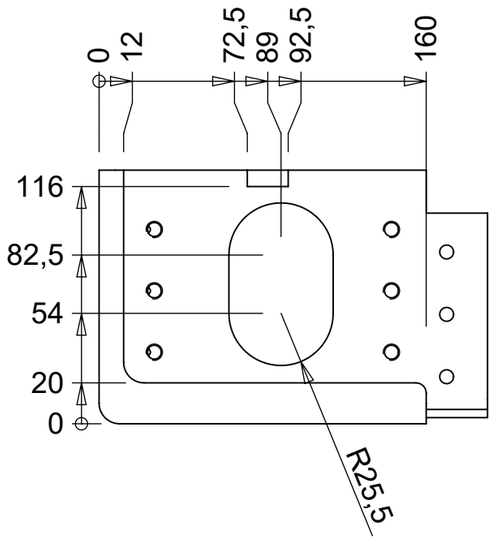
SECTION B-B

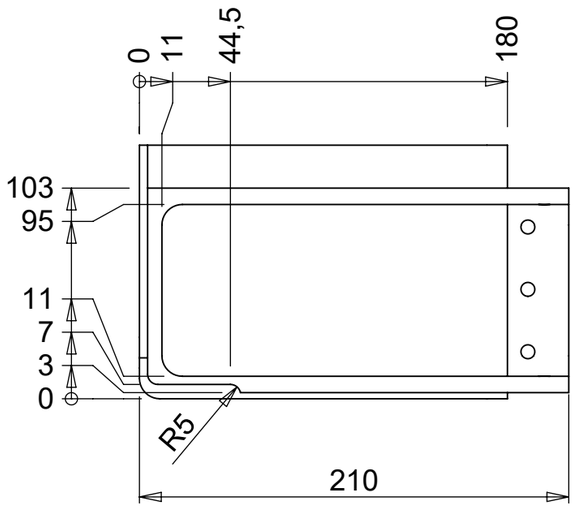


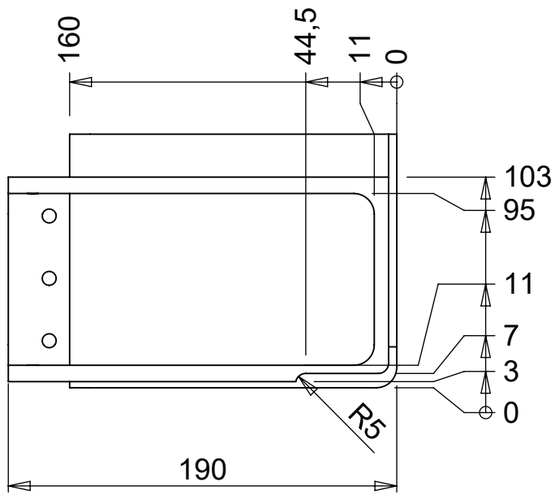


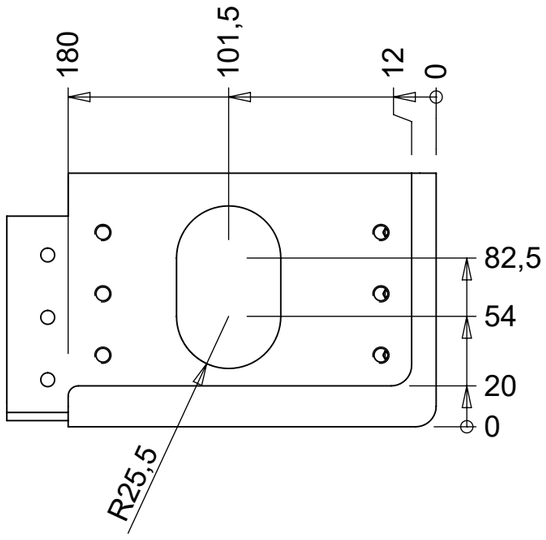
SECTION A-A

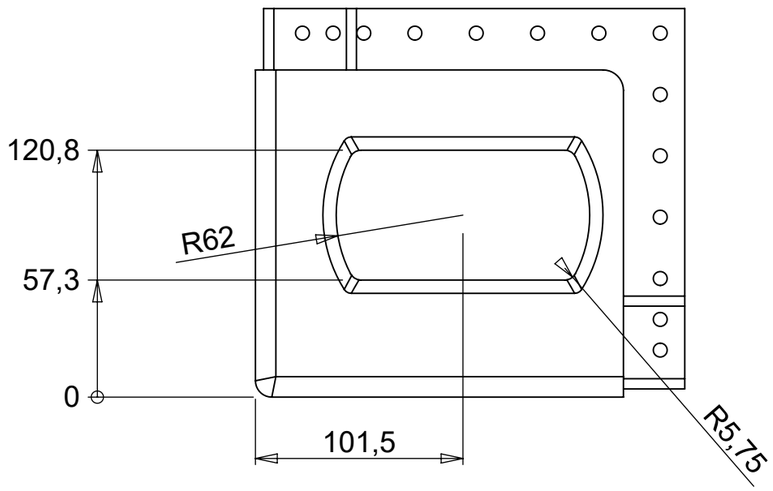












1	1	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0246 Sheet : 1 of 2	Issue B
Drawn: JWR	17-01-2019		
Checked: VvM	09-10-2019		
Approved: JWR	10-10-2019		
Mass: 3.35 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

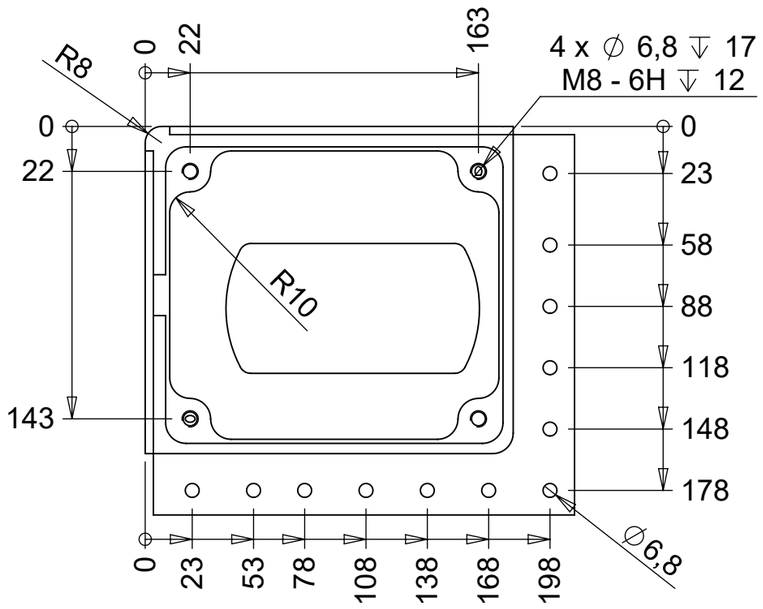
Title: **Corner Left**

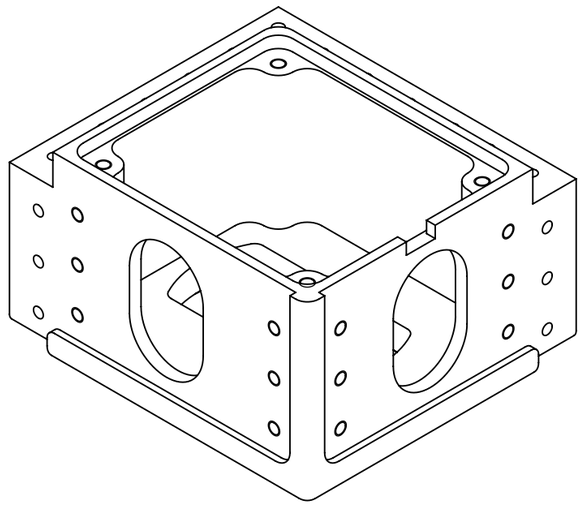
Iss.	Changes	Date	Name
B	+Fillets	10-10-2019	HS

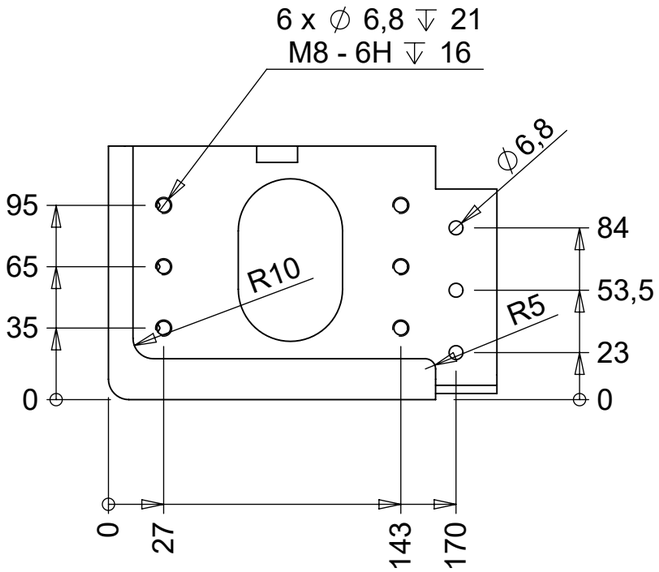
Projection

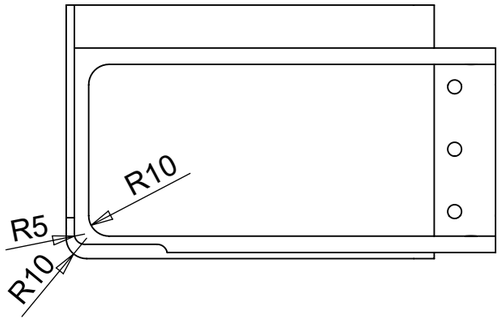
Size A3

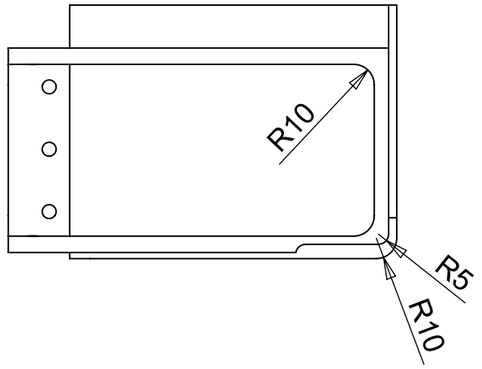
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

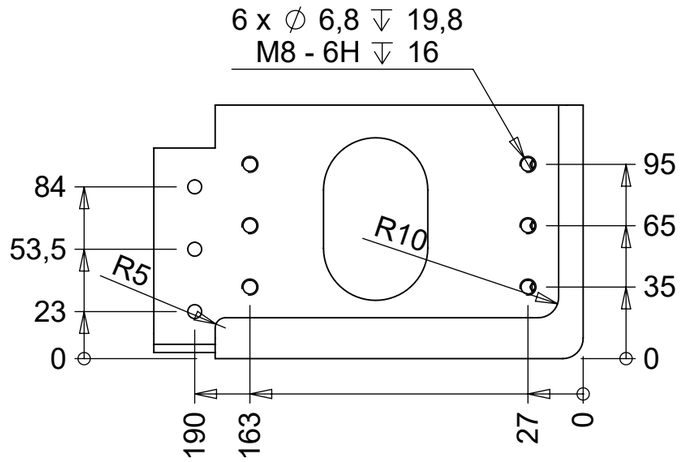


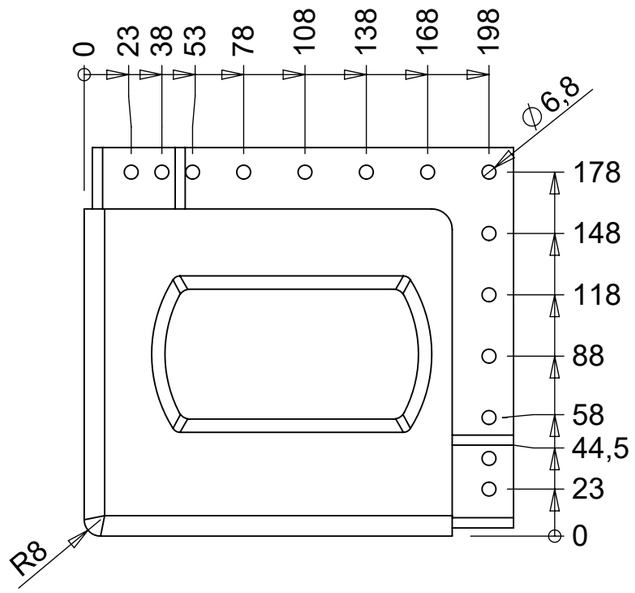












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Corner Left	210	190	124	2000-05-0246	Alu. 6082-T6	Milled Part

Scale: 1:3	Date:	Drawing no.: 2000-05-0246 Sheet : 2 of 2	Issue B
Drawn: JWR	17-01-2019		
Checked: VvM	09-10-2019		
Approved: JWR	10-10-2019		
Mass: 3.35 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

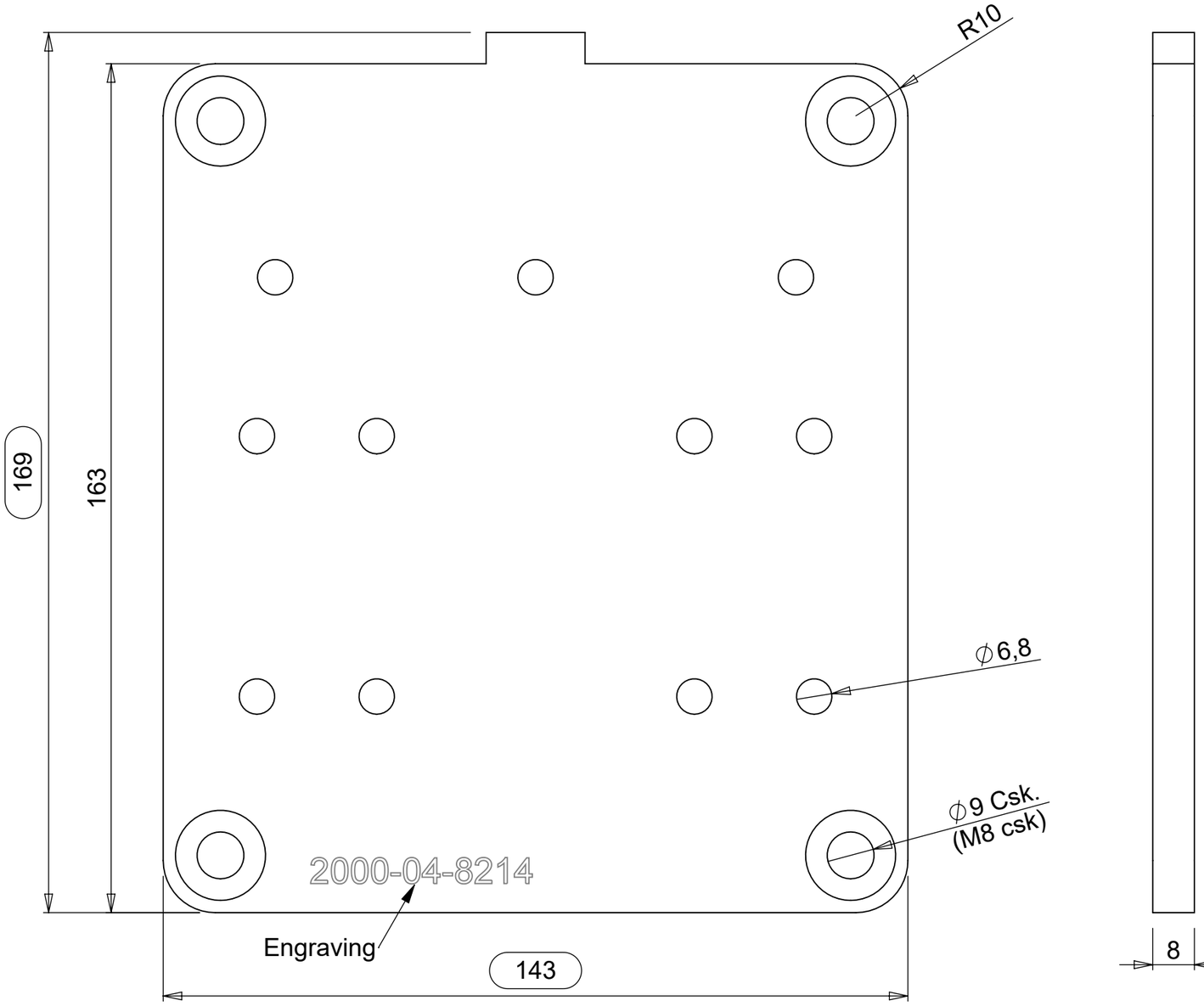
Title: **Corner Left**

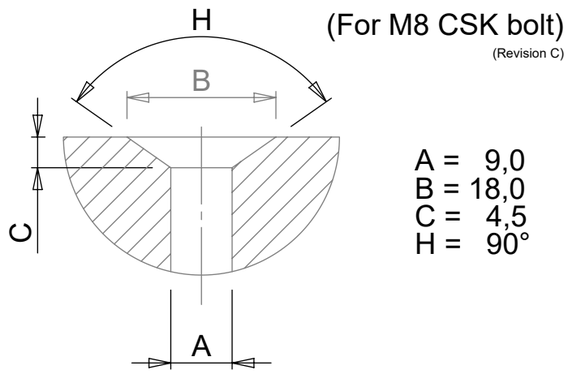
Iss.	Changes	Date	Name
B	+Fillets	10-10-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





(For M8 CSK bolt)
(Revision C)

A = 9,0
B = 18,0
C = 4,5
H = 90°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Isocorner top plate	169	143	8	2000-04-8214	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-04-8214	Issue: A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.49 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

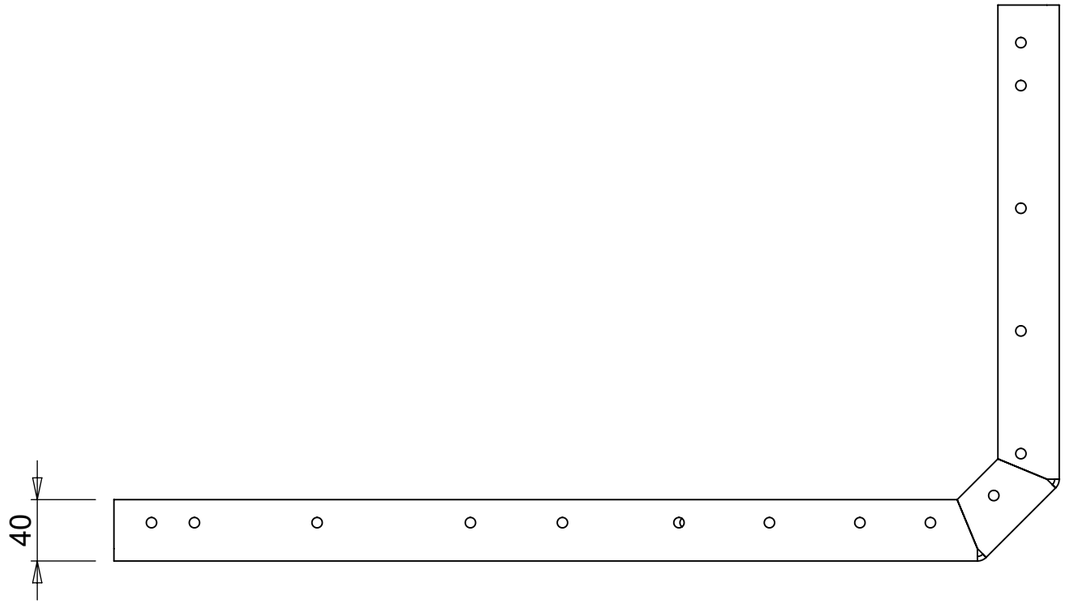
Title: **Isocorner top plate**

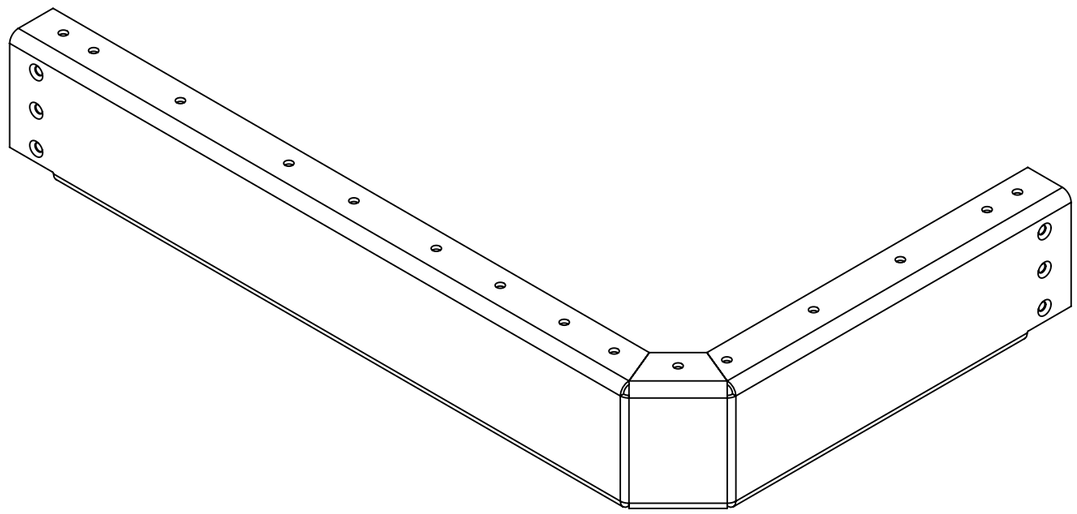
Iss.	Changes	Date	Name

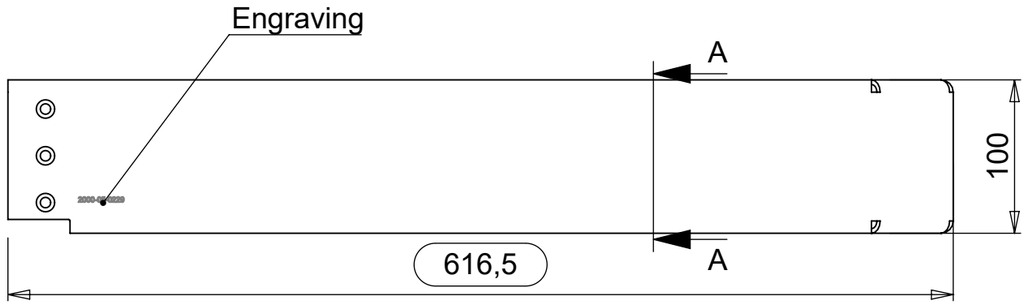
Projection

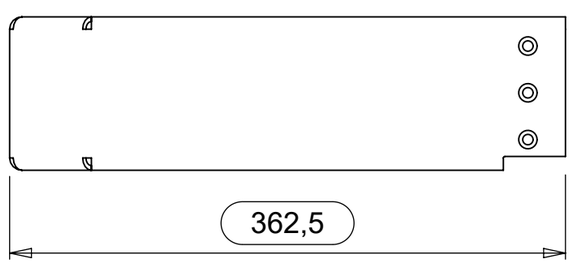
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

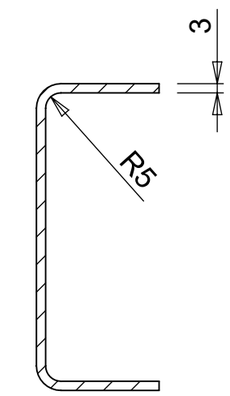




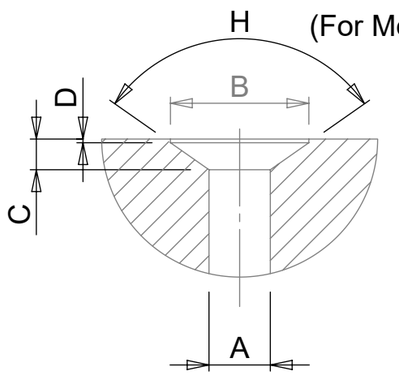




Flatpattern on sheet 2



SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0229 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.23 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

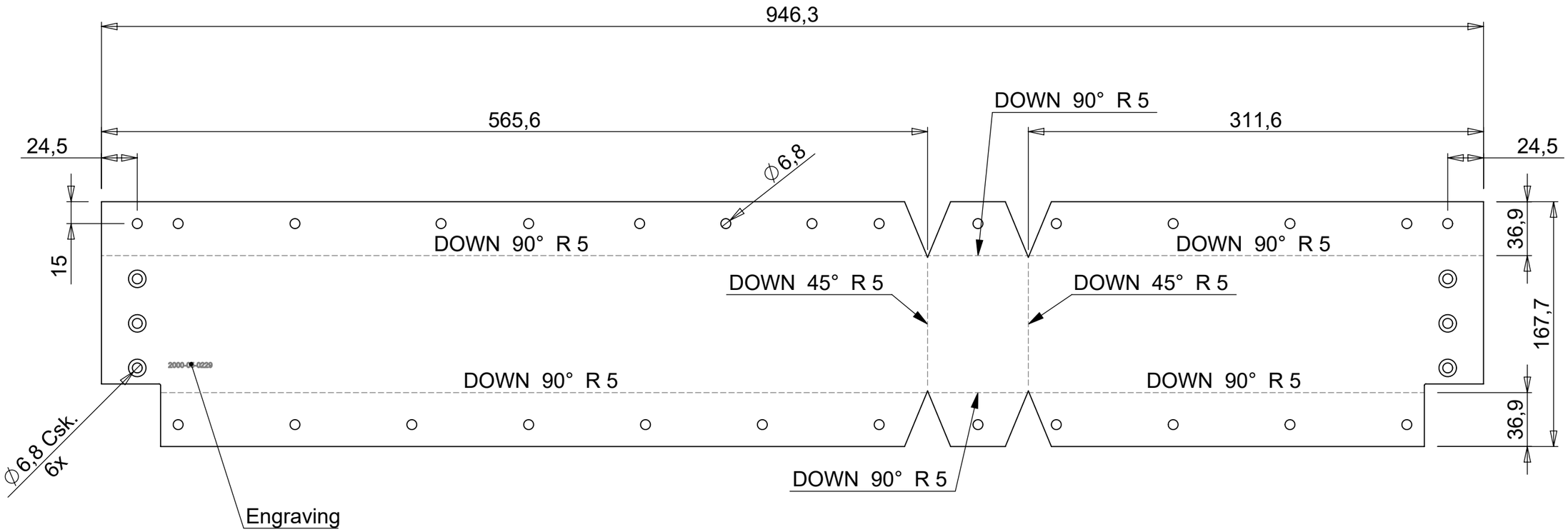
Title: Fork pocket sheet

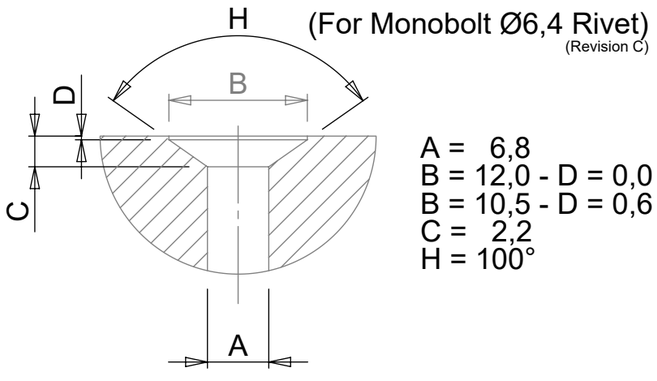
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	946,3	167,7	3	2000-05-0229	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0229	Issue: A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 1.23 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

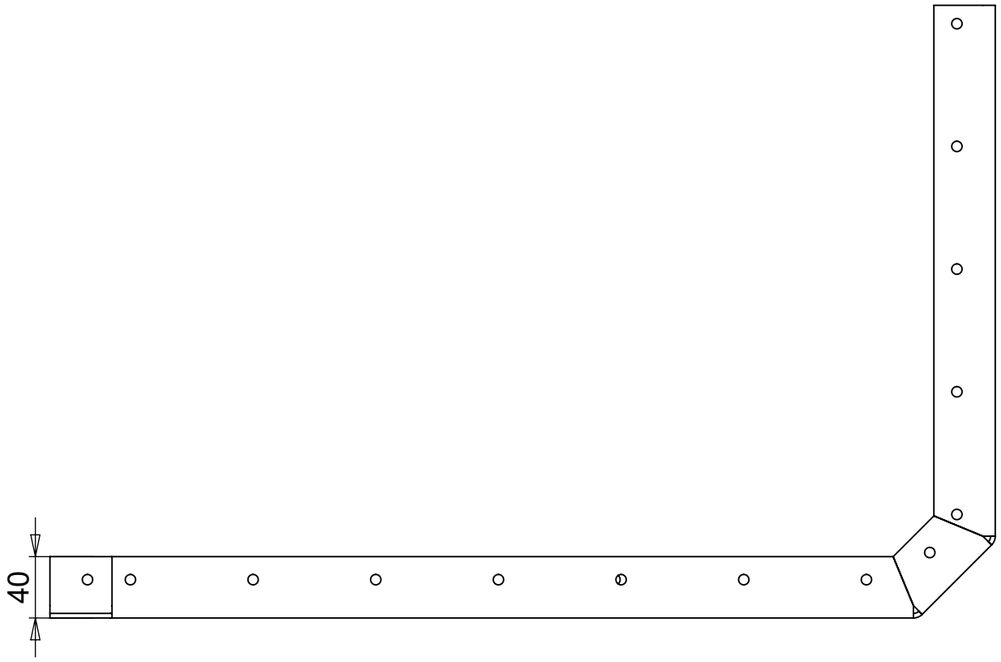
Title: **Fork pocket sheet**

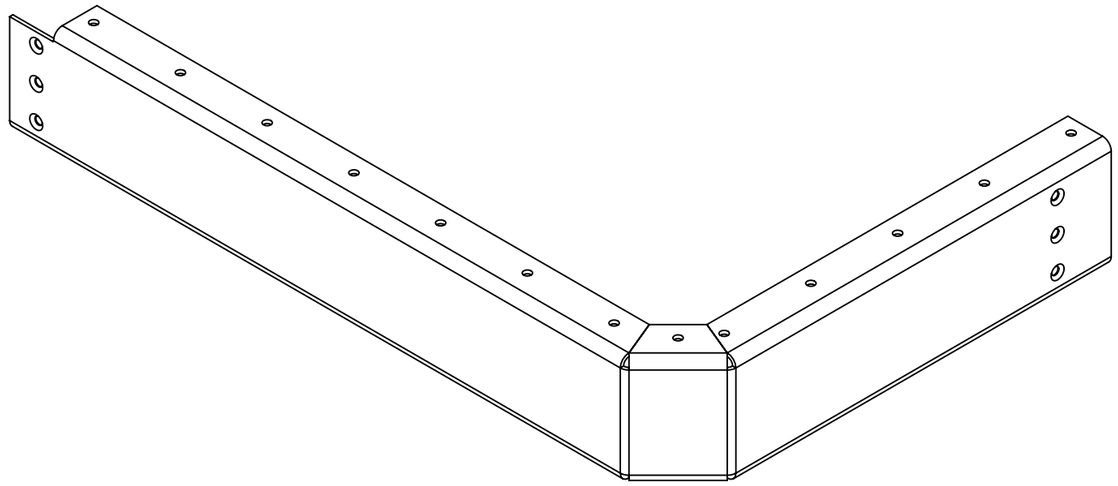
Iss.	Changes	Date	Name

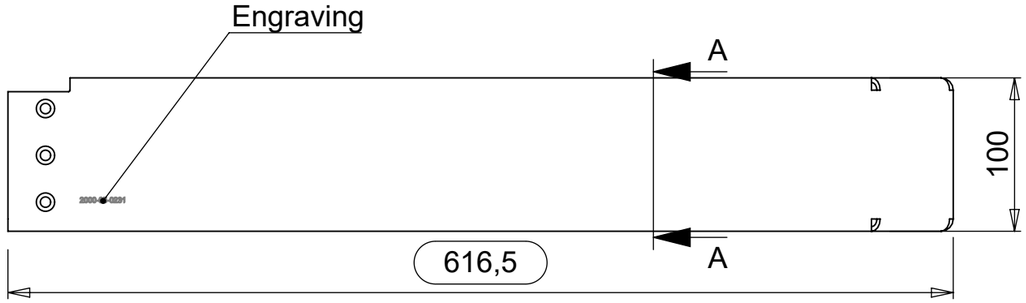
Projection

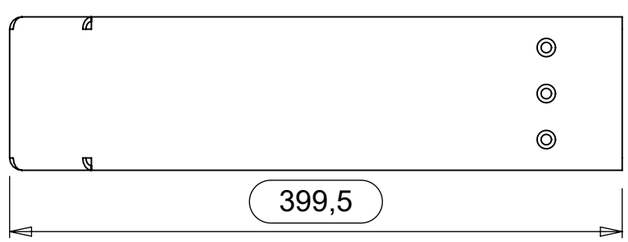
Size A3

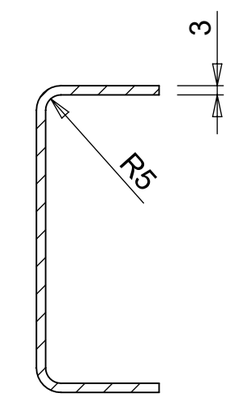
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



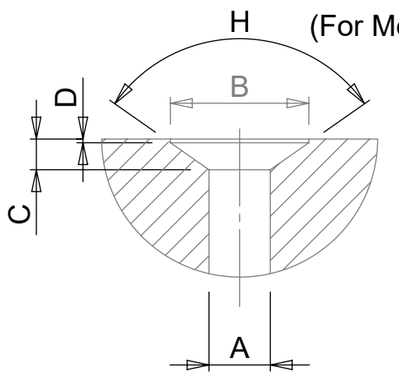








SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Flatpattern on sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0231 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.30 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

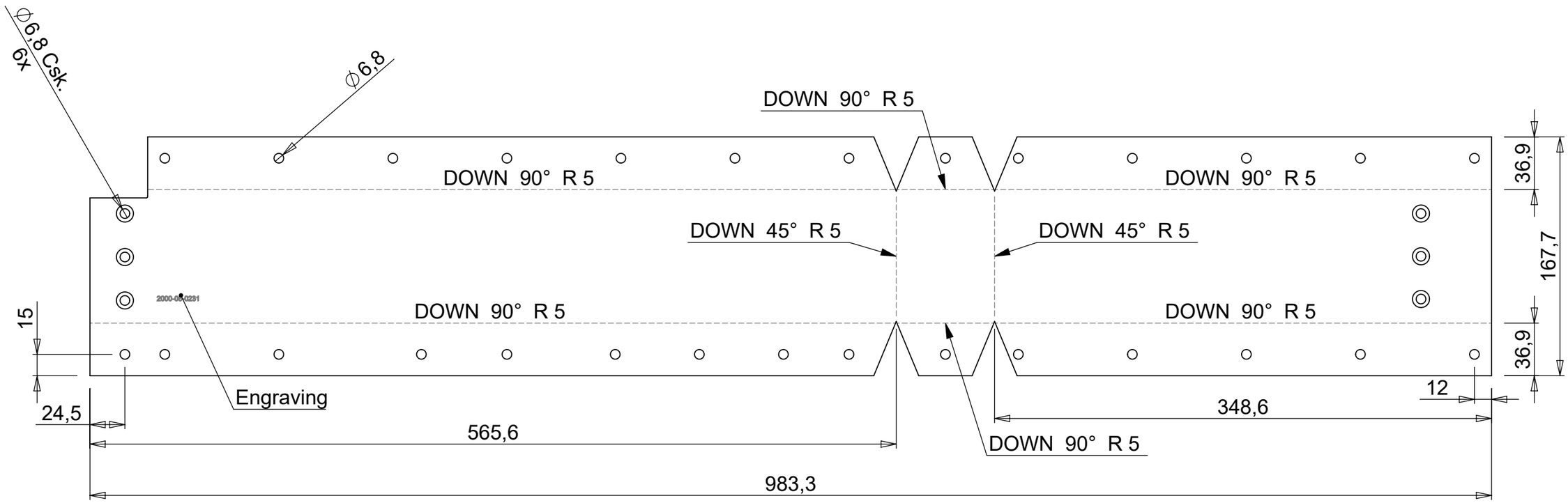
Title: Fork pocket sheet

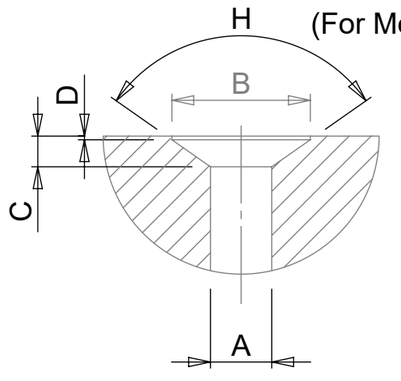
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

1	1	Fork pocket sheet	983,3	167,7	3	2000-05-0231	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0231	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 1.29 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

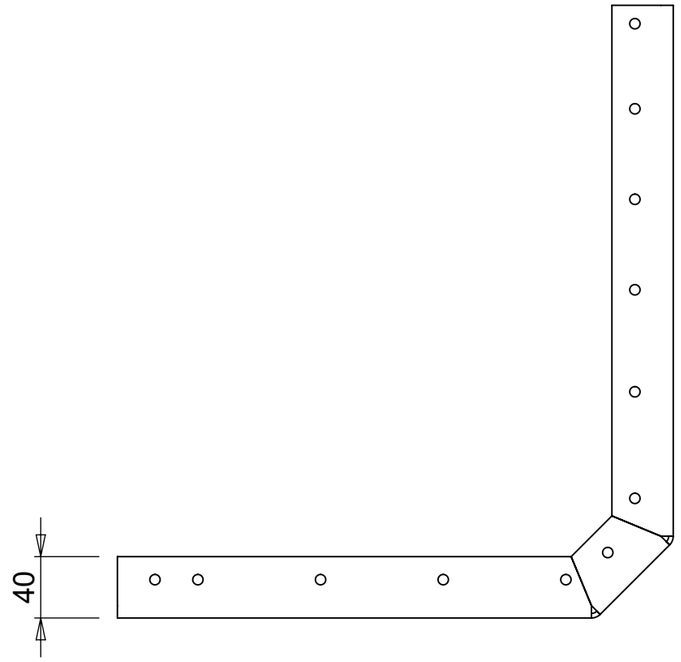
Title: **Fork pocket sheet**

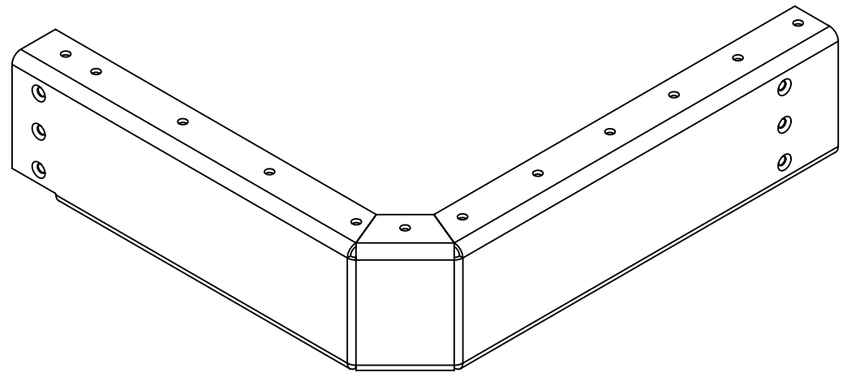
Iss.	Changes	Date	Name

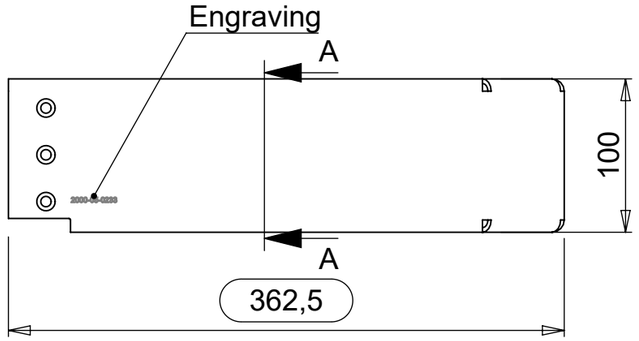
Projection

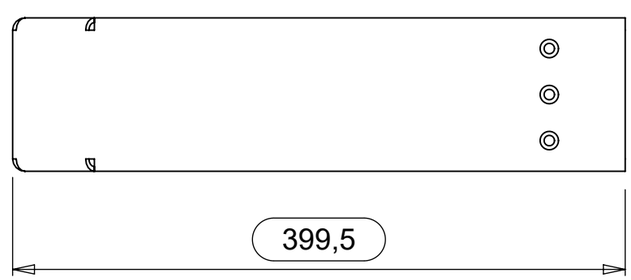
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

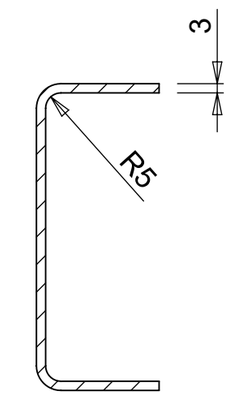




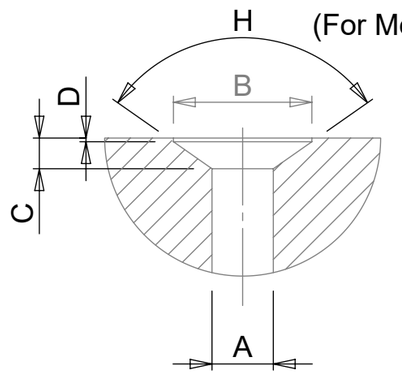




Flatpattern on sheet 2



SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0233 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.95 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

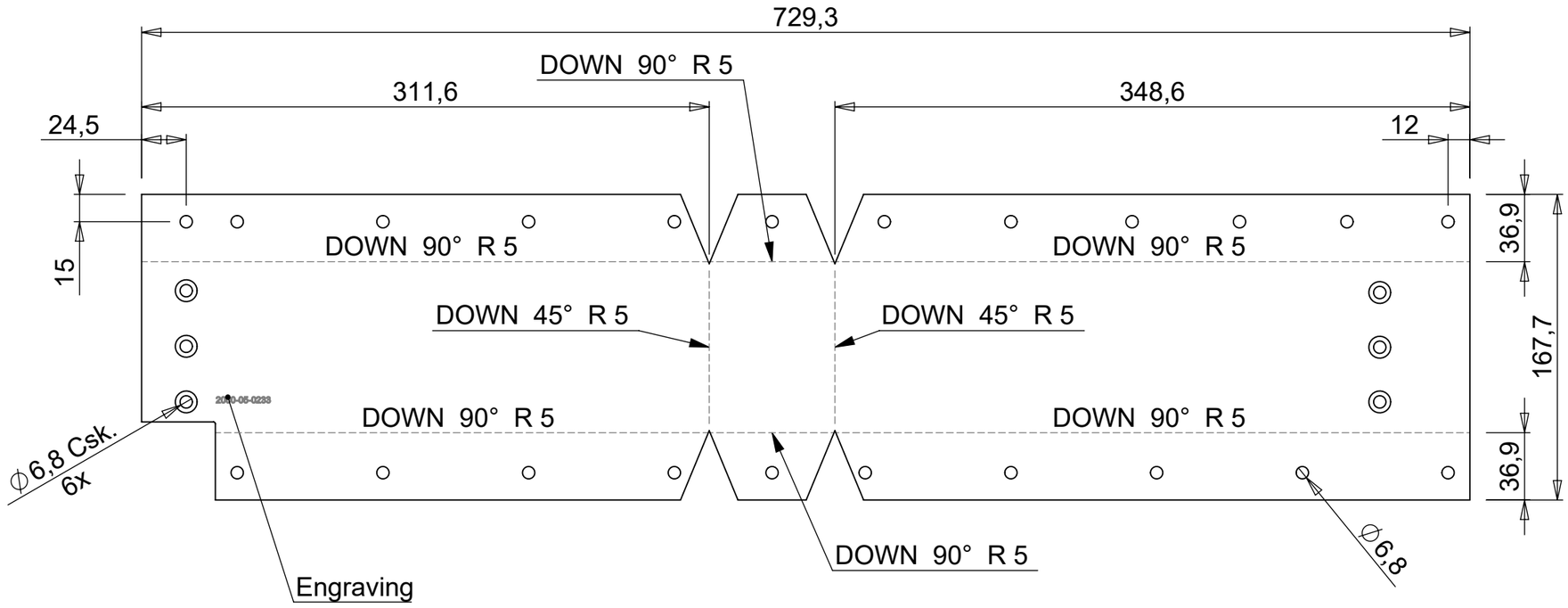
Title: Fork pocket sheet

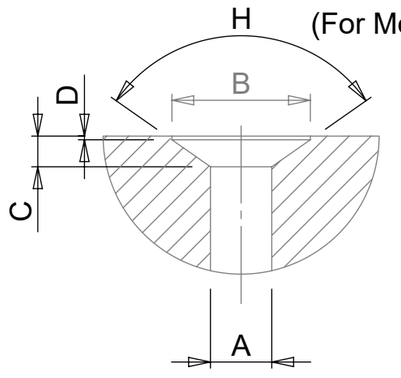
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	729,3	167,7	3	2000-05-0233	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0233	Issue: A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 0.95 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

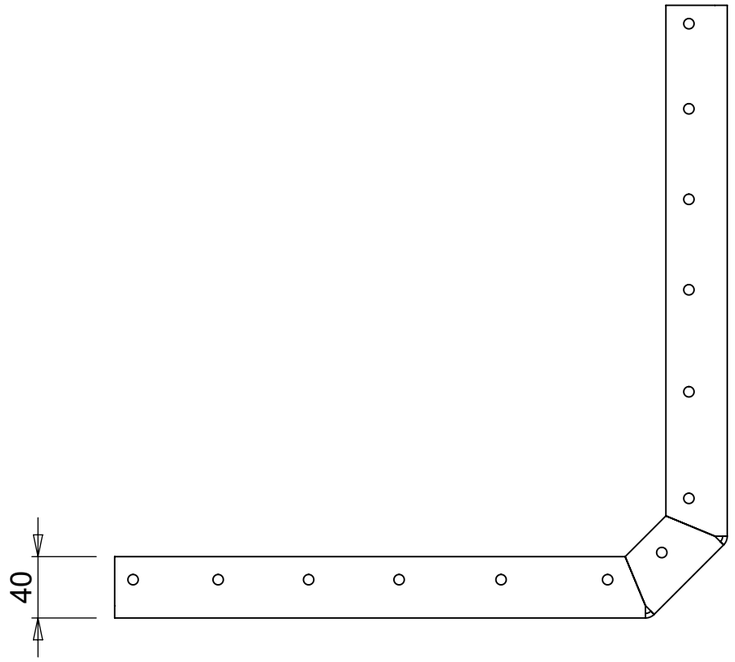
Title: **Fork pocket sheet**

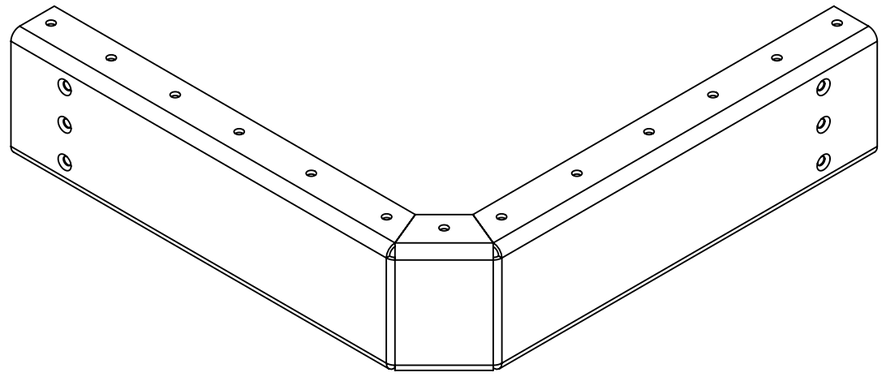
Iss.	Changes	Date	Name

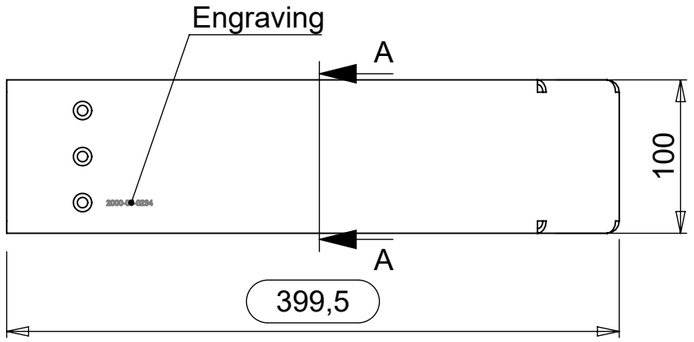
Projection

Size A3

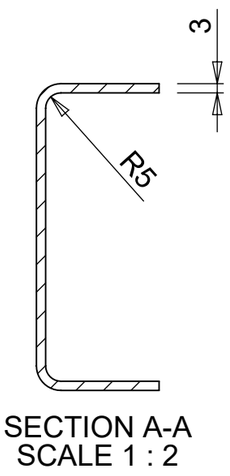
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



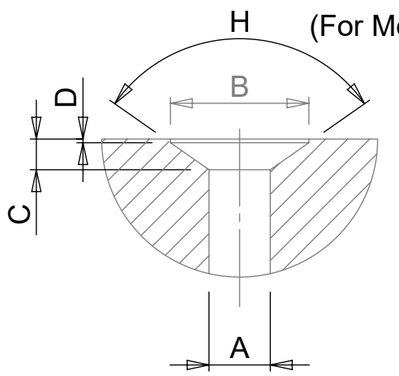




Flatpattern on sheet 2



SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0234 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.01 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

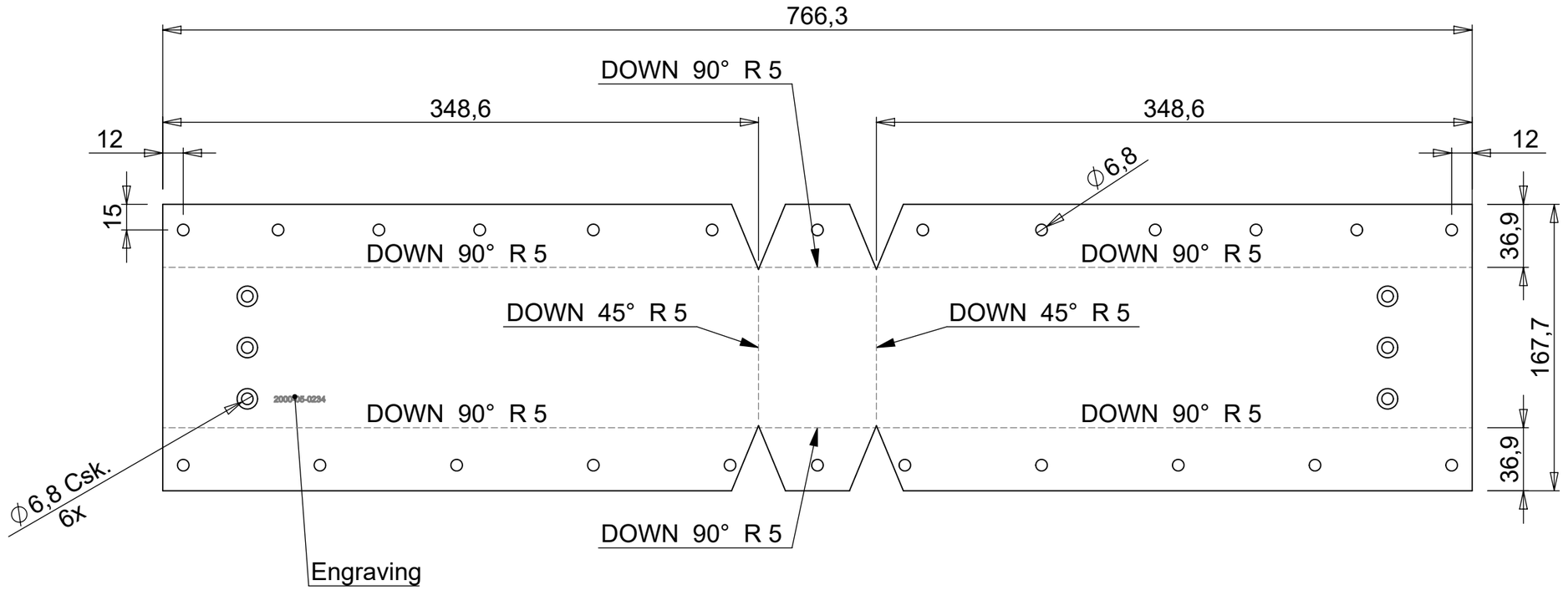
Title: **Fork pocket sheet**

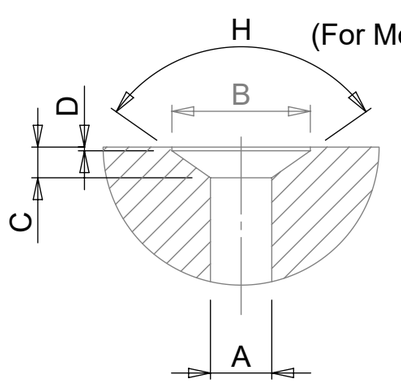
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	766,3	167,7	3	2000-05-0234	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0234	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 1.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

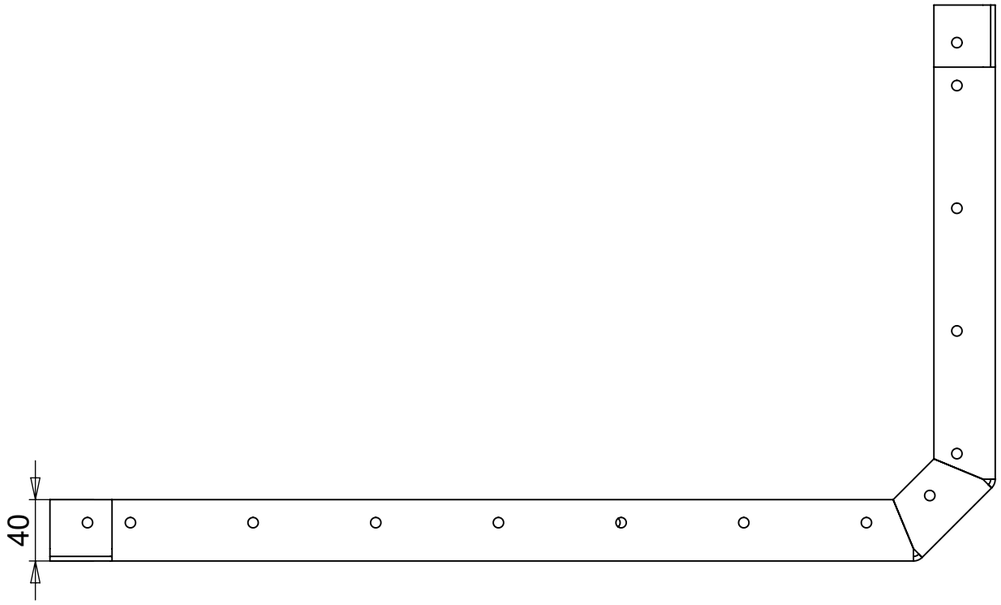
Title: **Fork pocket sheet**

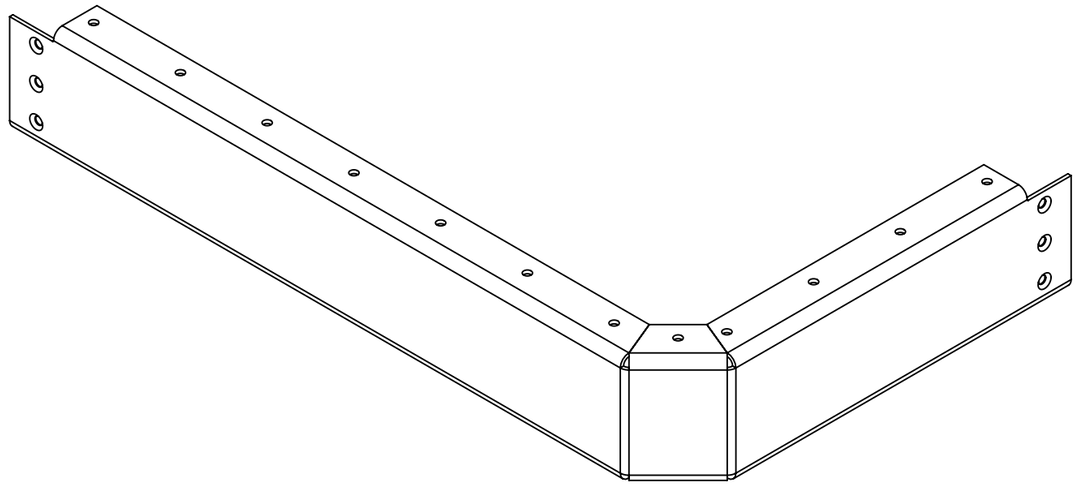
Iss.	Changes	Date	Name

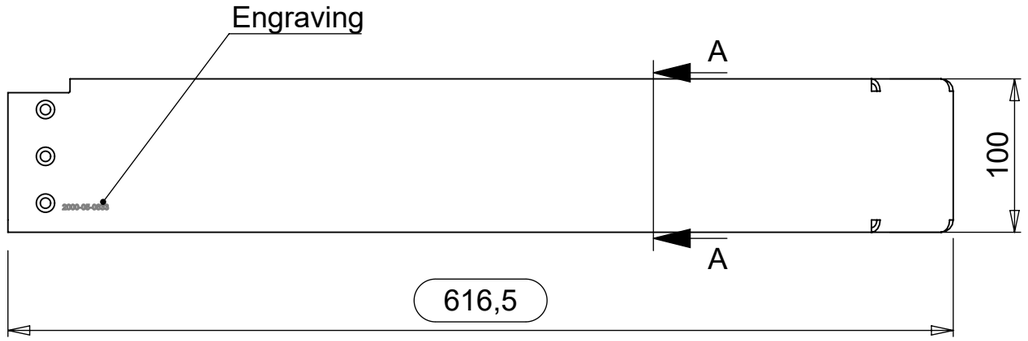
Projection

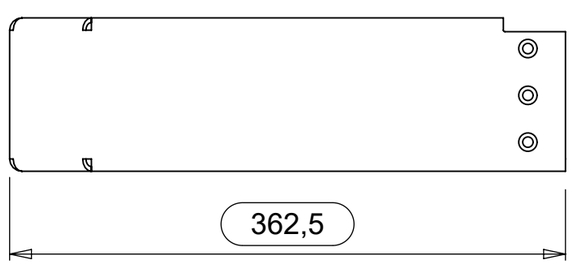
Size A3

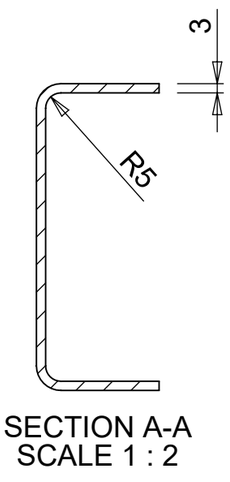
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



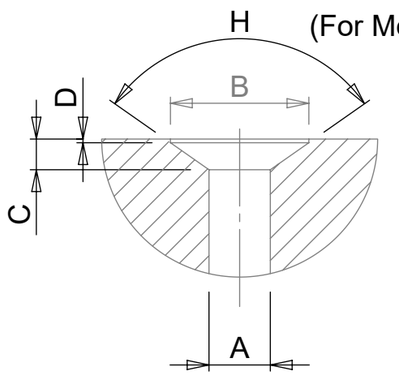








SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Flatpattern on sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0633 Sheet : 2 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.23 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

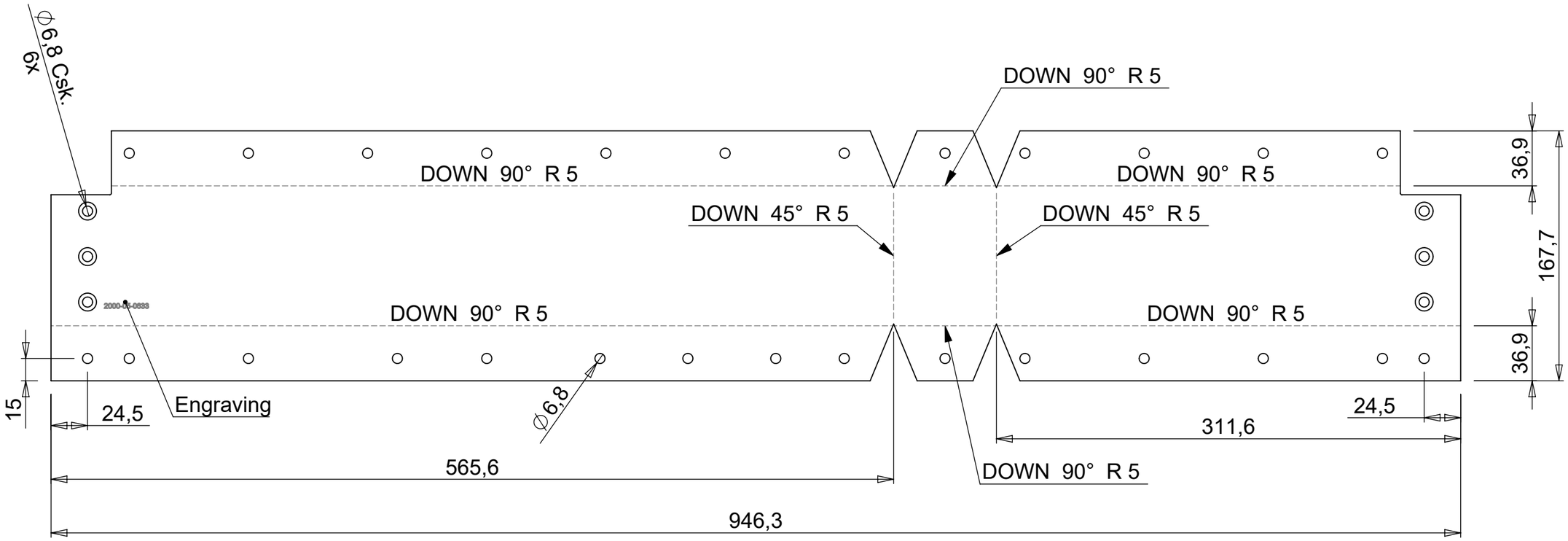
Title: Fork pocket sheet

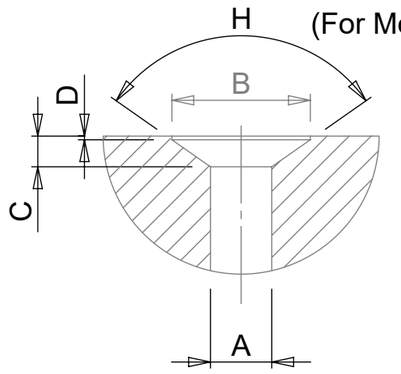
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	946,3	167,7	3	2000-05-0633	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0633	Issue: A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019	Sheet : 2 of 2	
Approved: JWR	09-05-2019		
Mass: 1.23 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

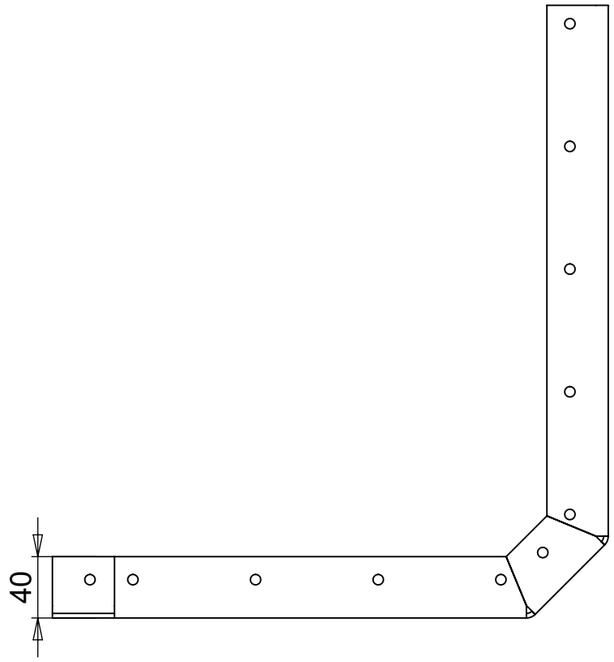
Title: **Fork pocket sheet**

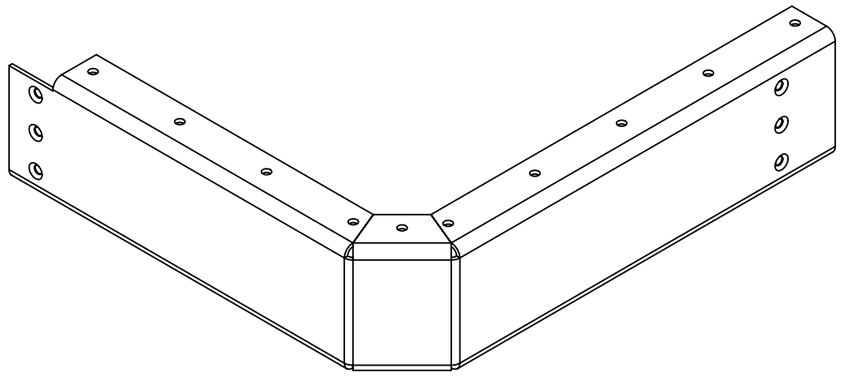
Iss.	Changes	Date	Name

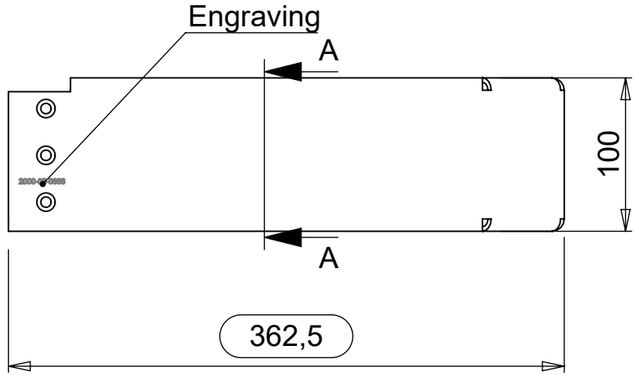
Projection

Size A3

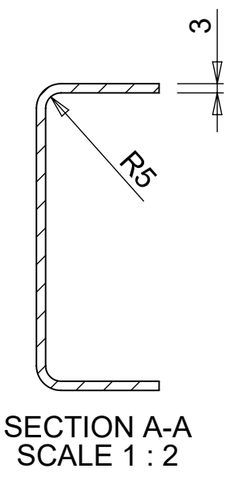
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



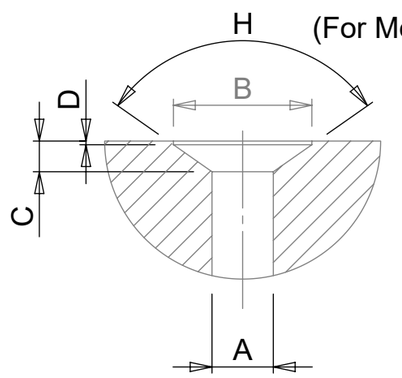




Flatpattern on sheet 2



SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0636 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.95 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

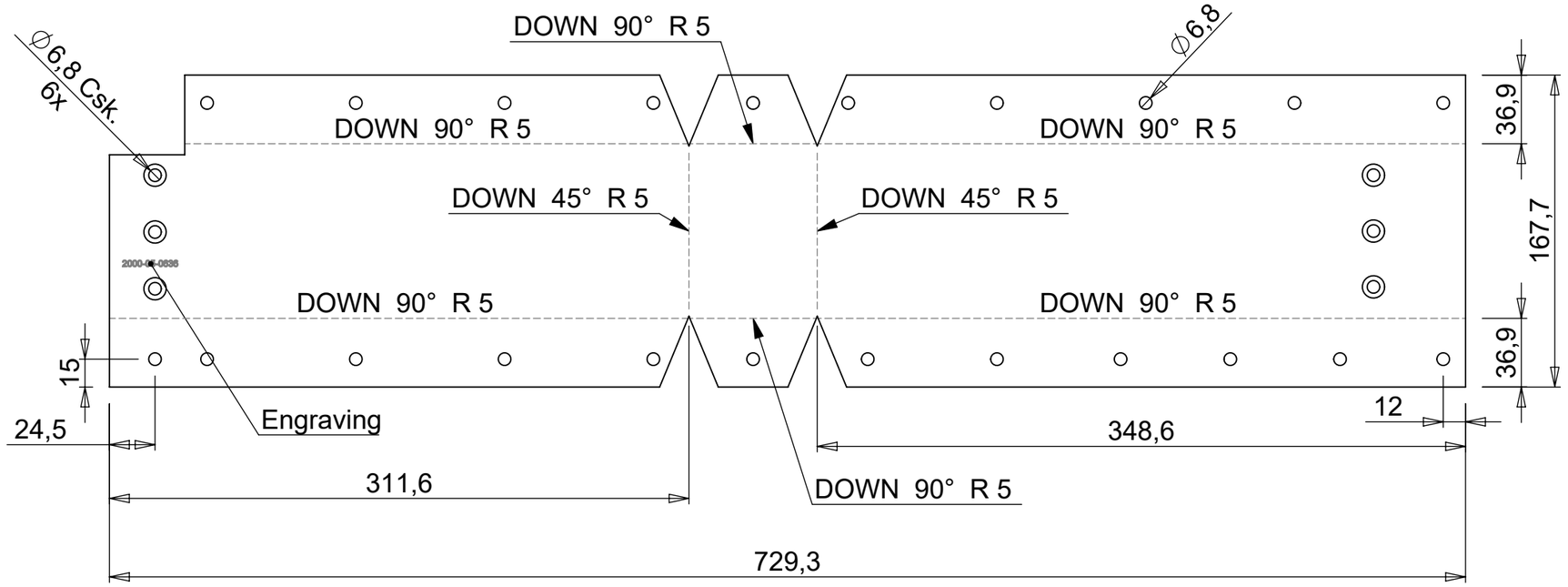
Title: Fork pocket sheet

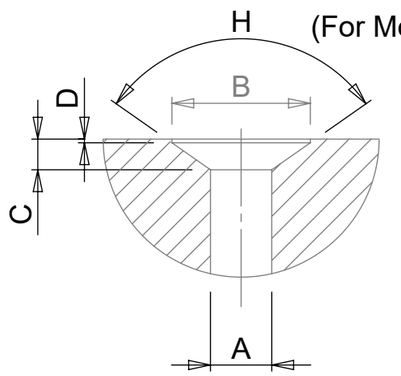
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Fork pocket sheet	729,3	167,7	3	2000-05-0636	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0636 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.95 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

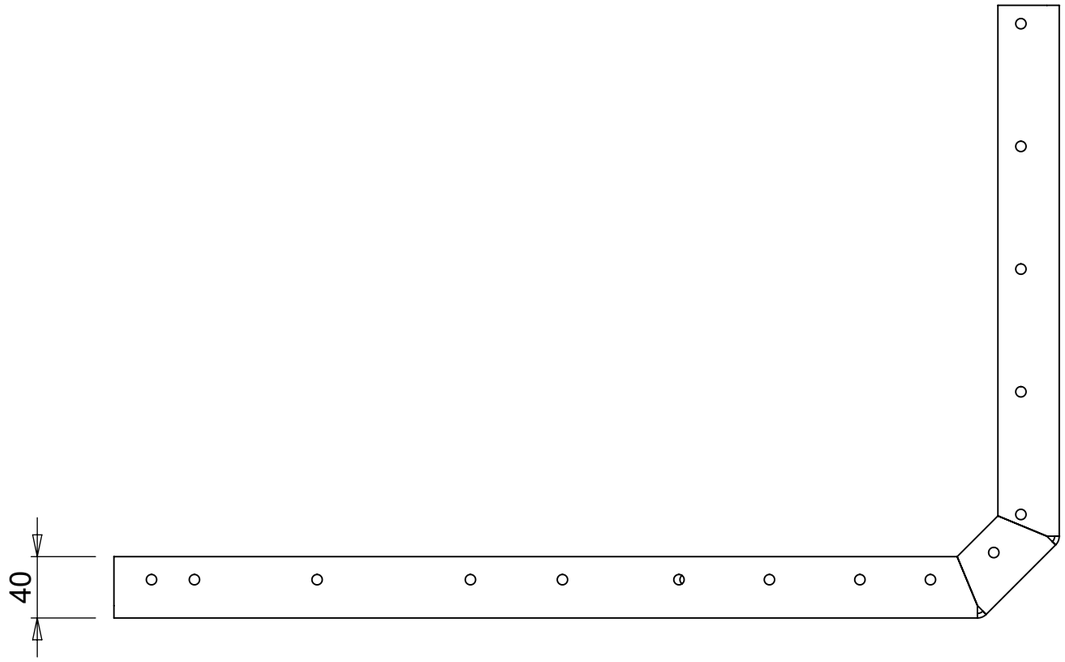
Title: **Fork pocket sheet**

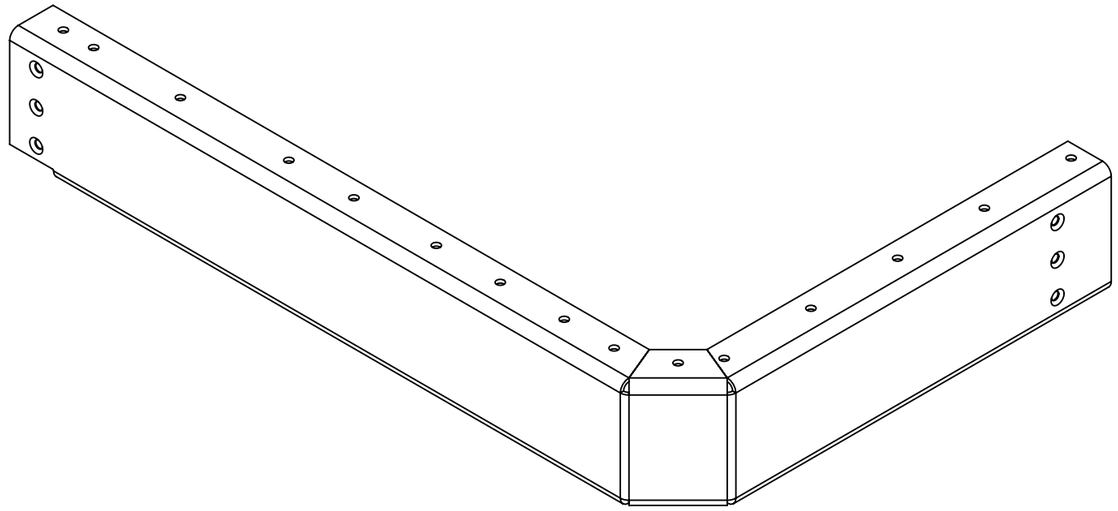
Iss.	Changes	Date	Name

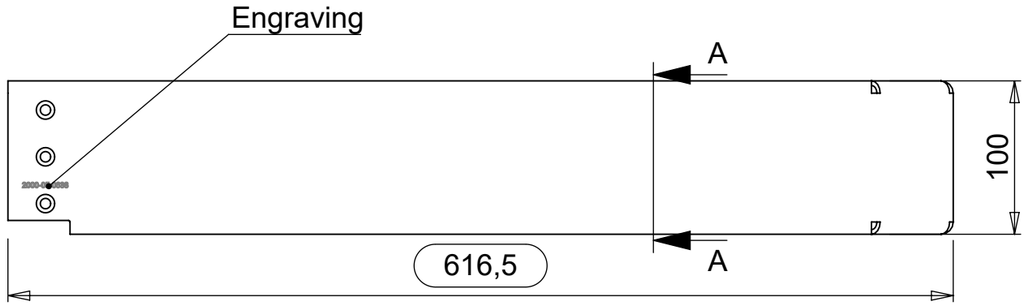
Projection

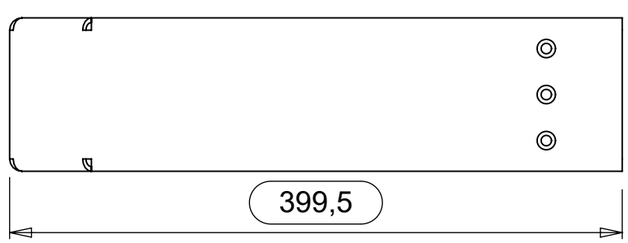
Size A3

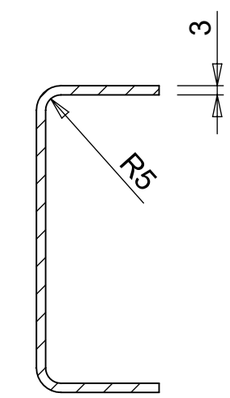
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



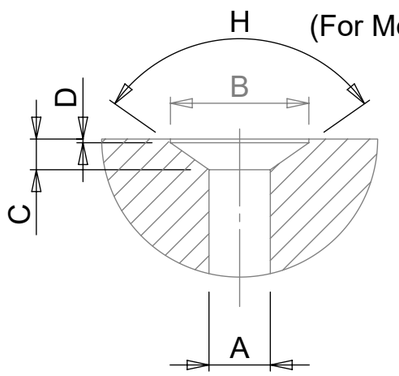








SECTION A-A
SCALE 1 : 2



(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Flatpattern on sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0638 Sheet : 1 of 2	Issue A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.30 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

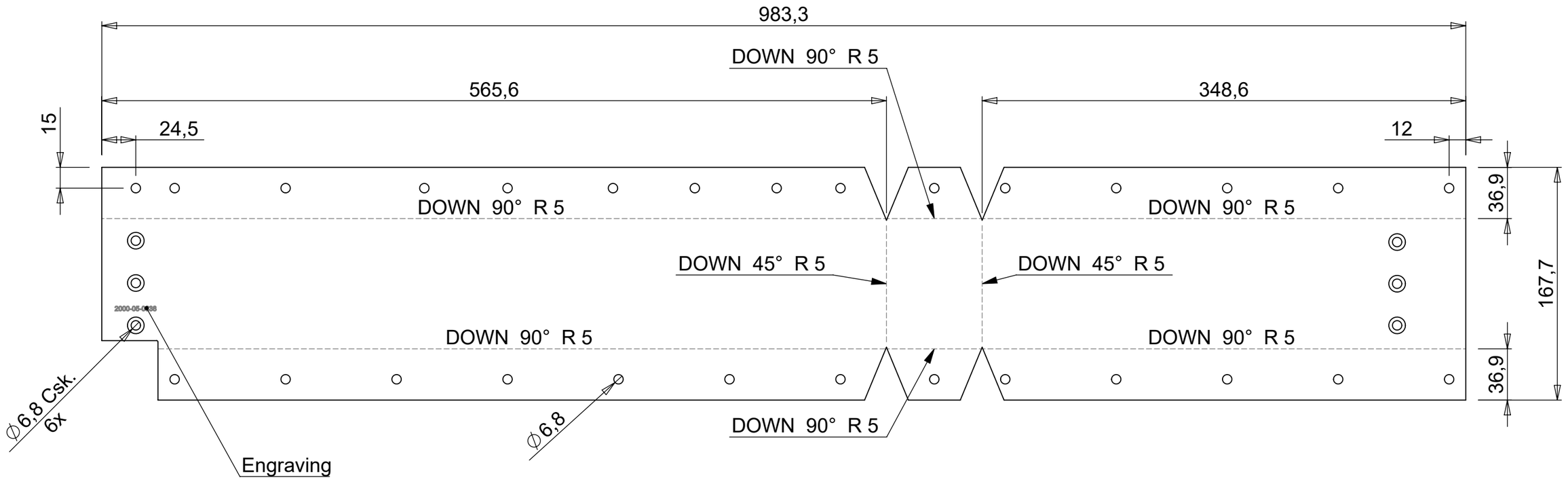
Title: Fork pocket sheet

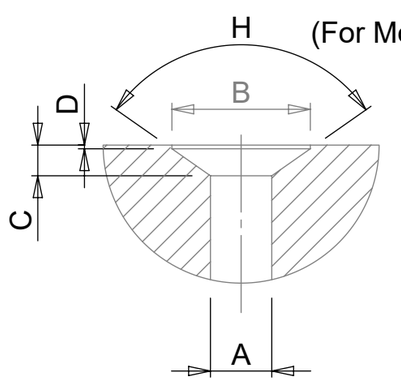
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fork pocket sheet	983,3	167,7	3	2000-05-0638	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0638	Issue: A
Drawn: JWR	15-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 1.29 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

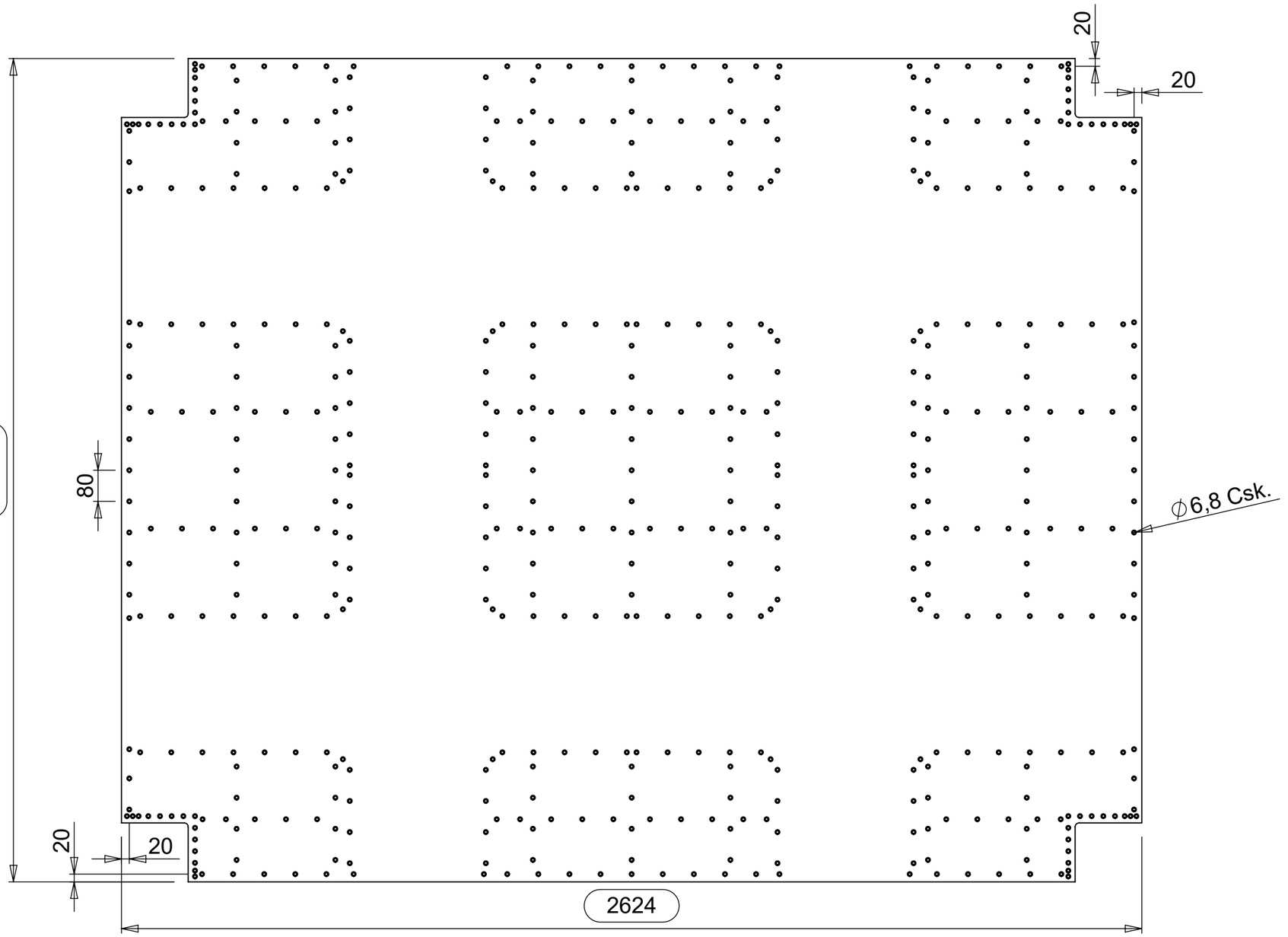
Title: **Fork pocket sheet**

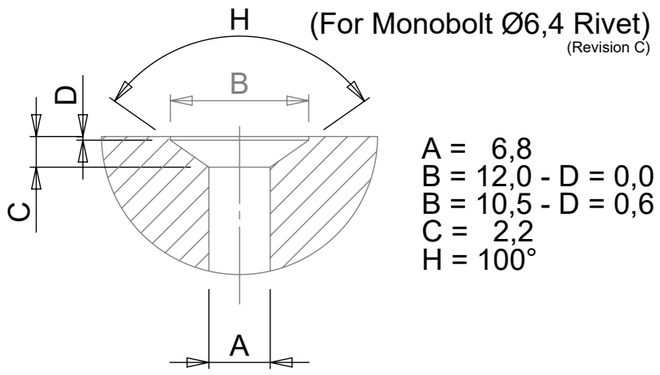
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Bottom sheet base	2624	2116	2,5	2000-04-8205	Alu. 7021-T6	

Iss.	Changes	Date	Name
B	~Thickness	10-09-2019	HS

Scale:	1:12	Date:	
Drawn:	JWR	15-03-2019	
Checked:	VvM	10-09-2019	
Approved:	JWR	10-09-2019	
Mass:	38.17 kg		

Drawing no.: 2000-04-8205
Sheet : 1 of 1

Issue: B

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

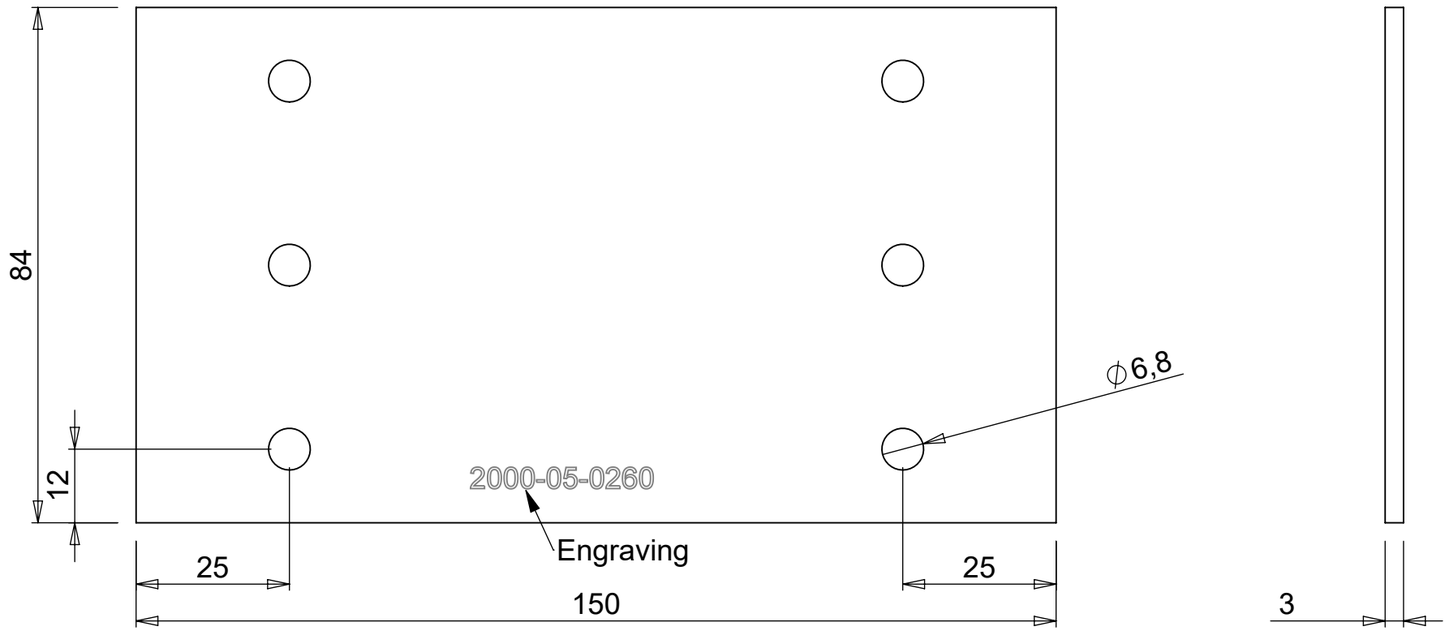
Dimensions in mm (u.n.o.)

Title: Bottom sheet base

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Connection plate	150	84	3	2000-05-0260	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:1	Date:	Drawing no.: 2000-05-0260	Issue A	Tolerances (u.n.o.)
Drawn: JWR	15-03-2019			< 7 30 120 400 1000 2000
Checked: HS	12-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.10 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

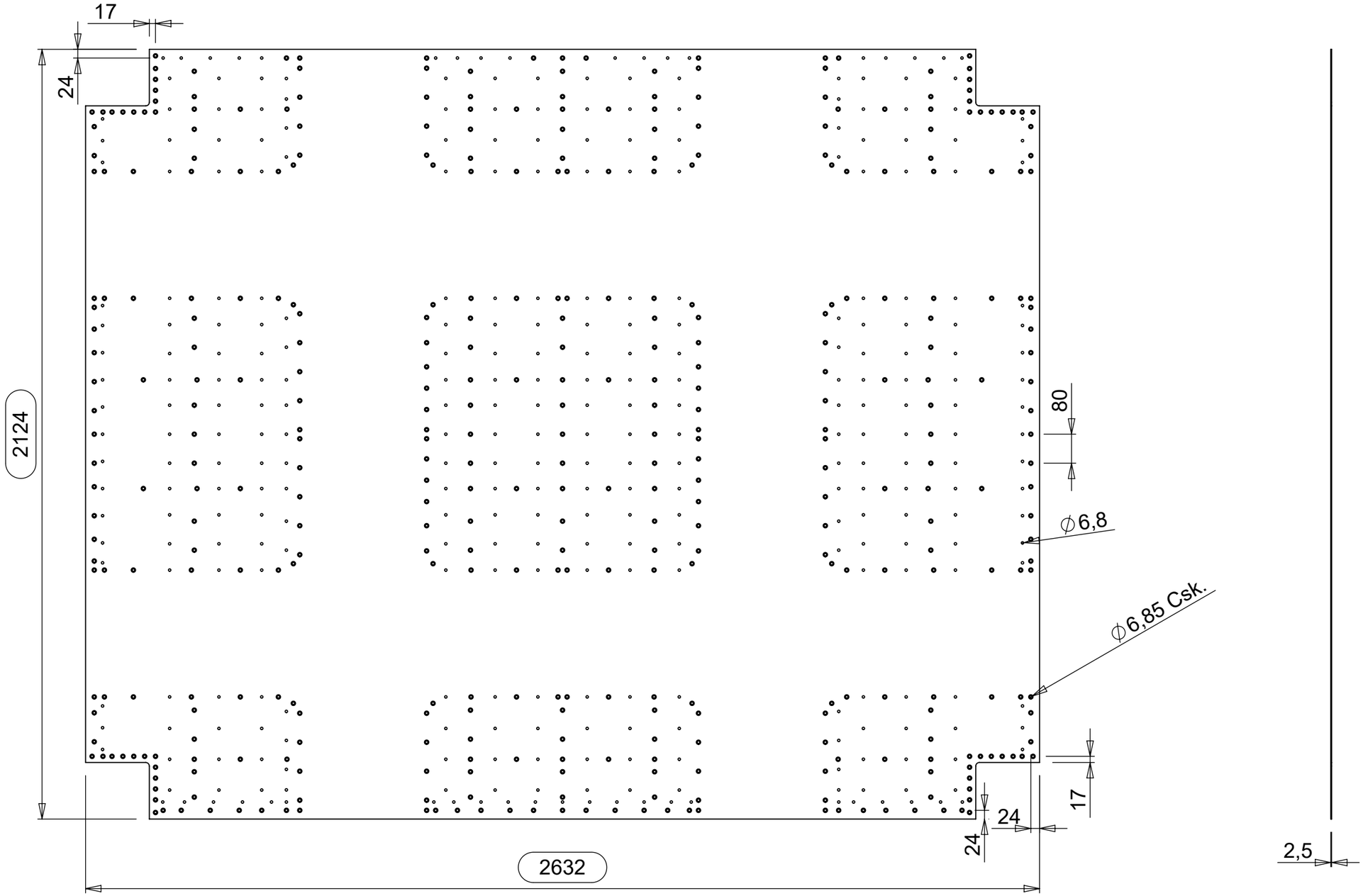
Title: **Connection plate**

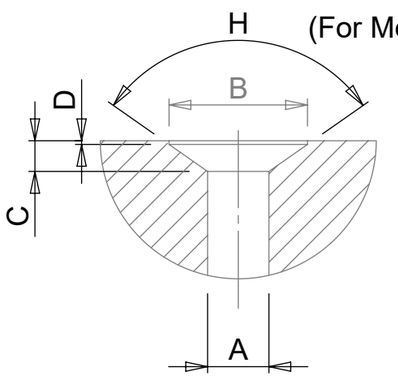
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø6,4 Rivet)
(Revision C)

A = 6,8
B = 12,0 - D = 0,0
B = 10,5 - D = 0,6
C = 2,2
H = 100°

Dia holes
Countersunk holes: Ø6,85
holes: Ø6,8

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Mid Sheet base	2632	2124	2,5	2000-05-1112	Alu. 7021-T6	

Scale: 1:12	Date:	Drawing no.: 2000-05-1112	Issue B
Drawn: JWR	15-03-2019	Sheet : 1 of 1	
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 38.37 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

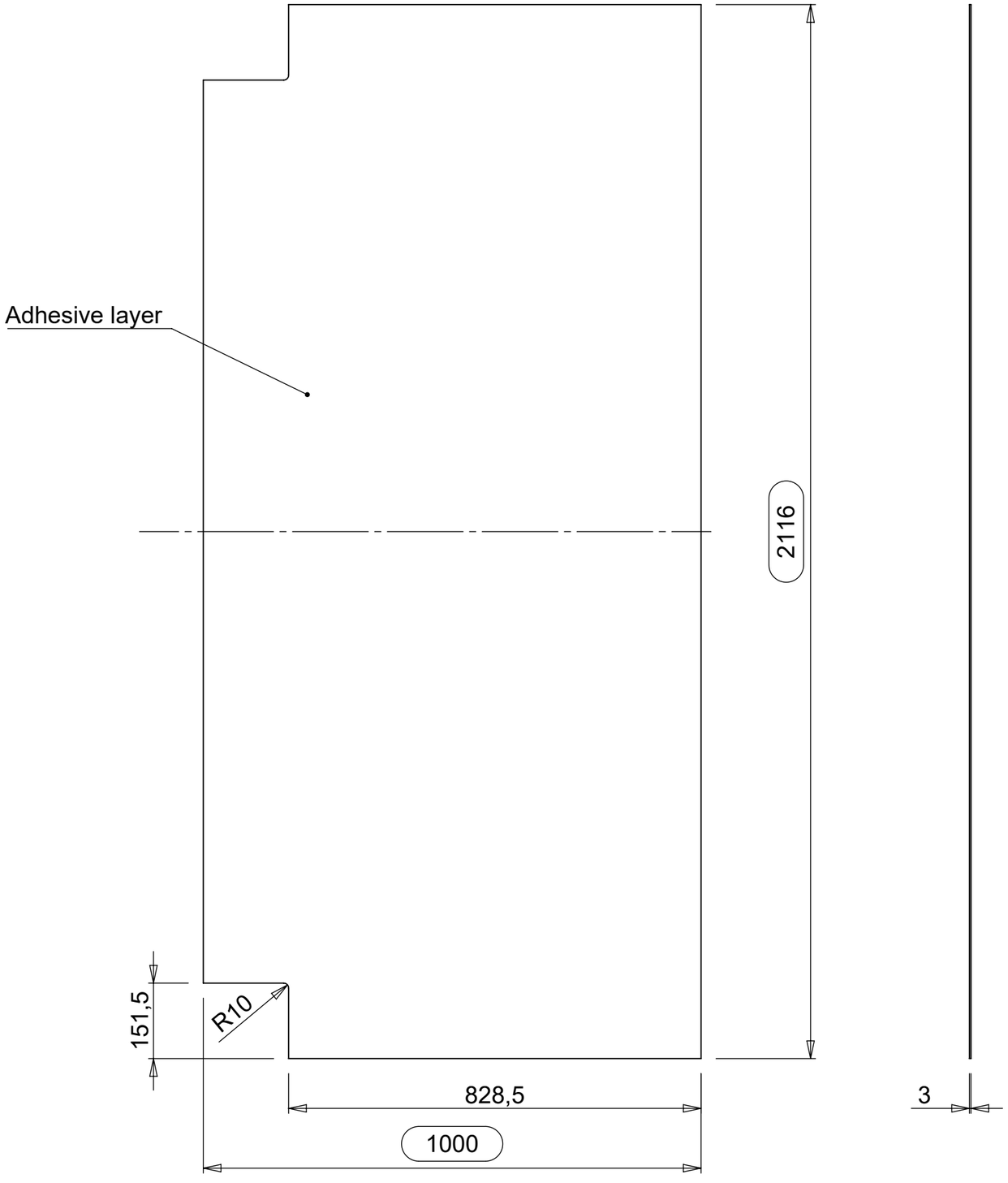
Title: Mid Sheet base

Iss.	Changes	Date	Name
B	~Thickness	10-09-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Pallet rubber	2116	1000	3	2000-05-0834	EPDM-Plaatrubber	art. nr. 422.000003
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-0834	Issue B	Tolerances (u.n.o.)
Drawn: JWR	18-03-2019			< 7 30 120 400 1000 2000
Checked: HS	13-02-2020			7 30 120 400 1000 2000 >
Approved: JWR	06-03-2020	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 6.19 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

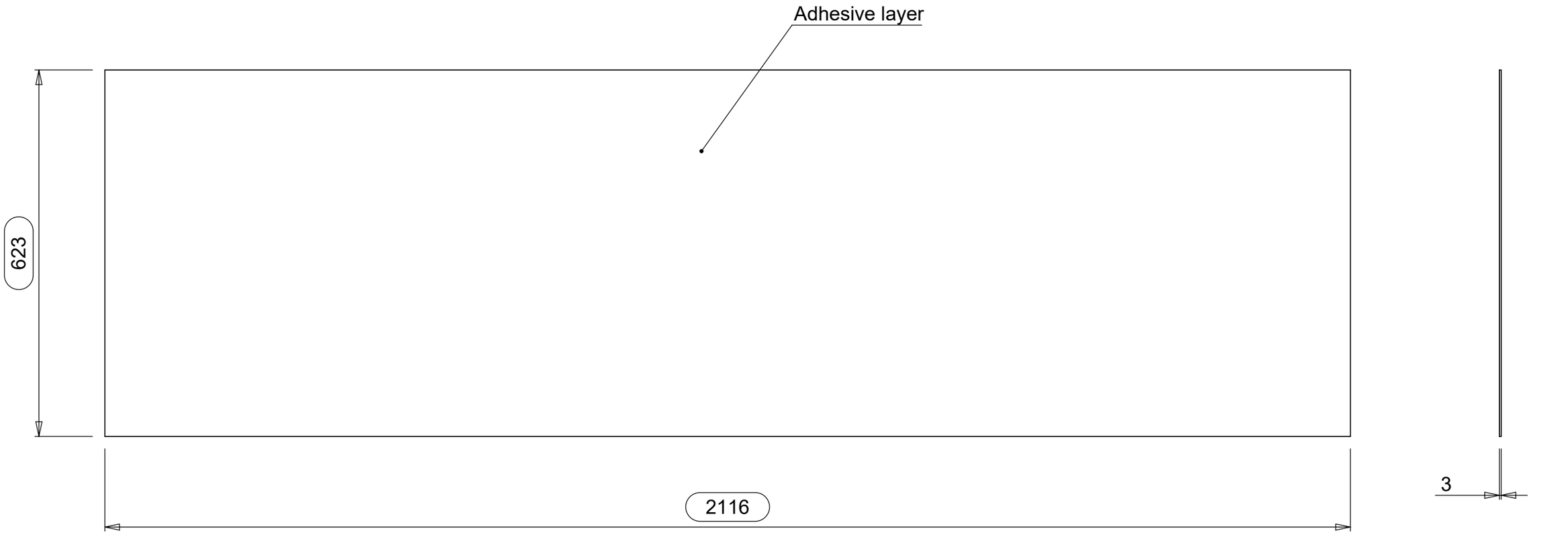
Title: **Pallet rubber**

Iss.	Changes	Date	Name
B	~material	06-03-2020	MVE

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Pallet rubber	2116	623	3	2000-05-1099	EPDM-Plaatrubber	art. nr. 422.000003

Scale: 1:7	Date:	Drawing no.: 2000-05-1099 Sheet : 1 of 1	Issue B
Drawn: JWR	18-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	06-03-2020		
Mass: 3.95 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

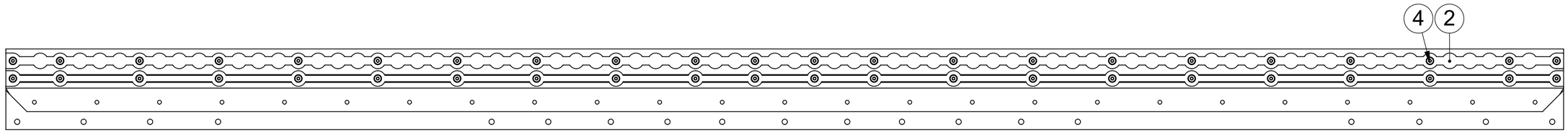
Title: **Pallet rubber**

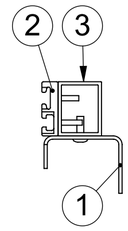
Iss.	Changes	Date	Name
B	~material	06-03-2020	MVE

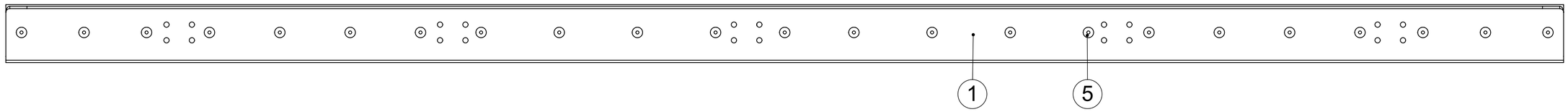
Projection

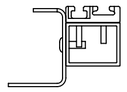
Size A3

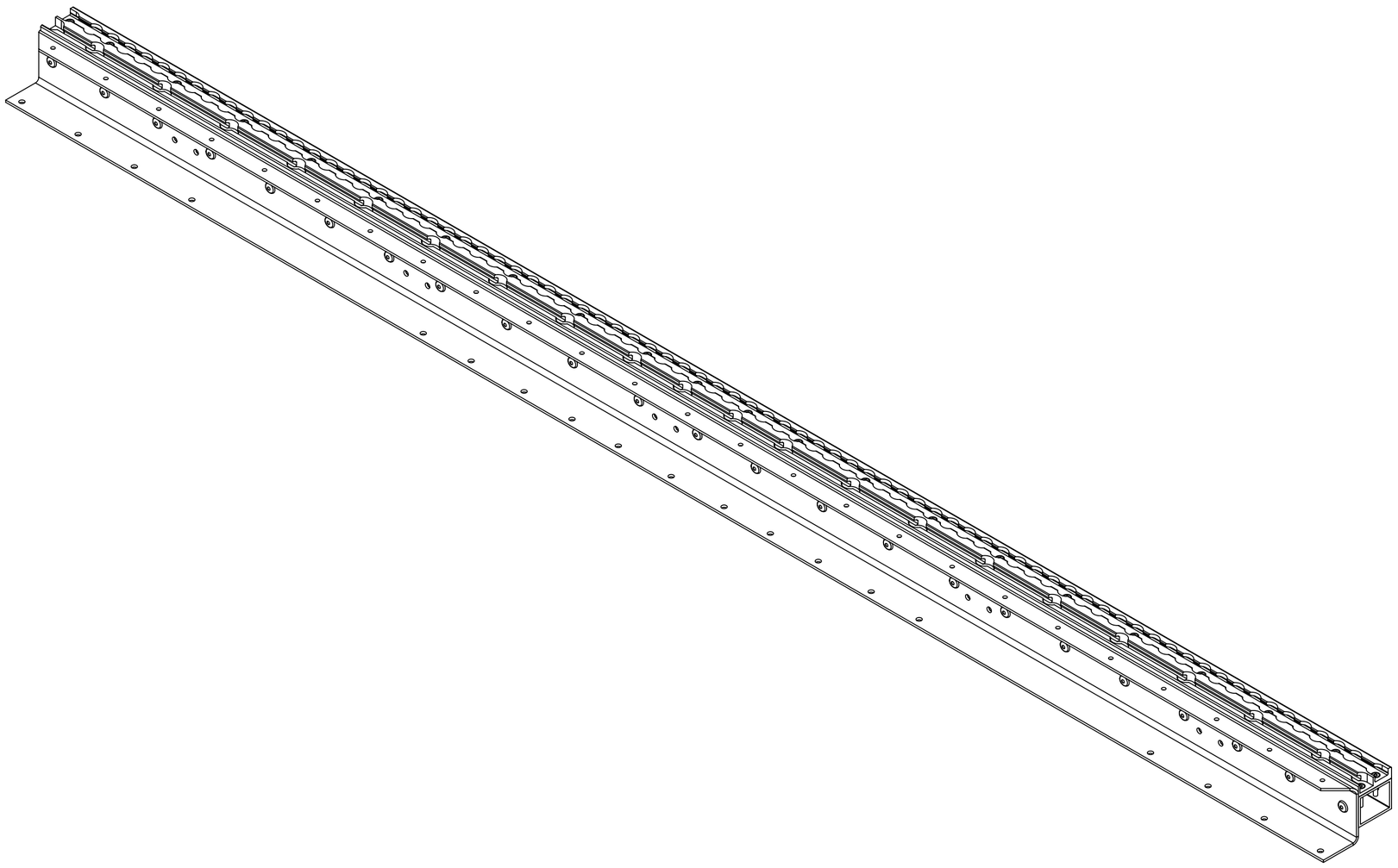
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	23	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
4	44	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
3	1	Tube 50x40x3	1993	50/40	3	2000-05-0261	Alu. 6060-T66	
2	1	Seat-T track profile	1993	50	15	2000-04-8266	Alu. 6061-T6	
1	1	Leg bracket	1993	142,7	3	2000-05-1081	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no. 2000-05-1114 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 7.79 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

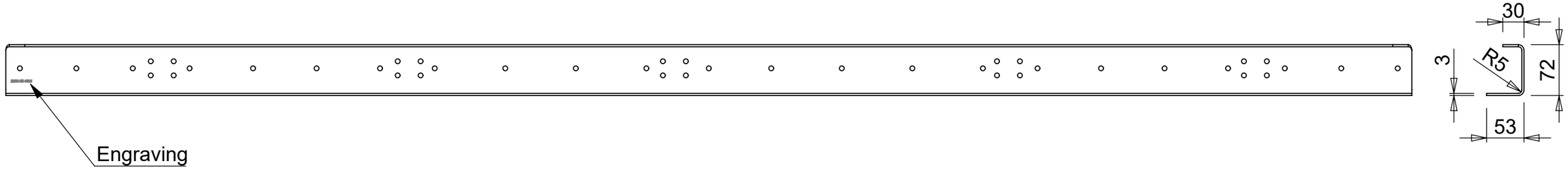
Title: # Seat/T-track beam

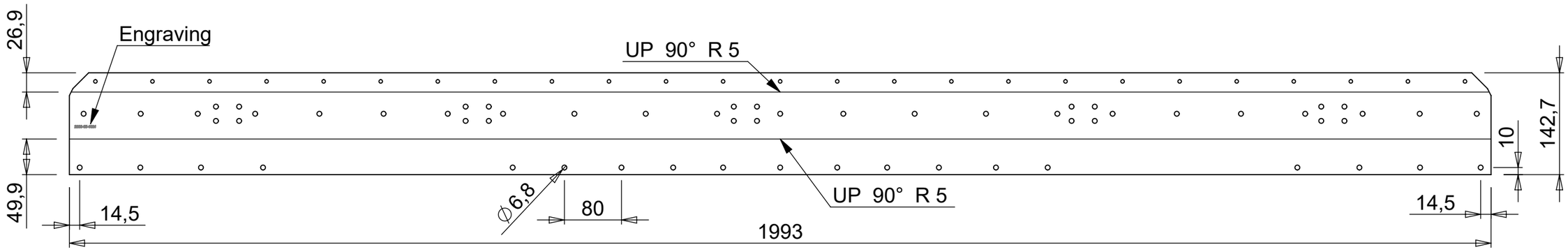
Iss.	Changes	Date	Name

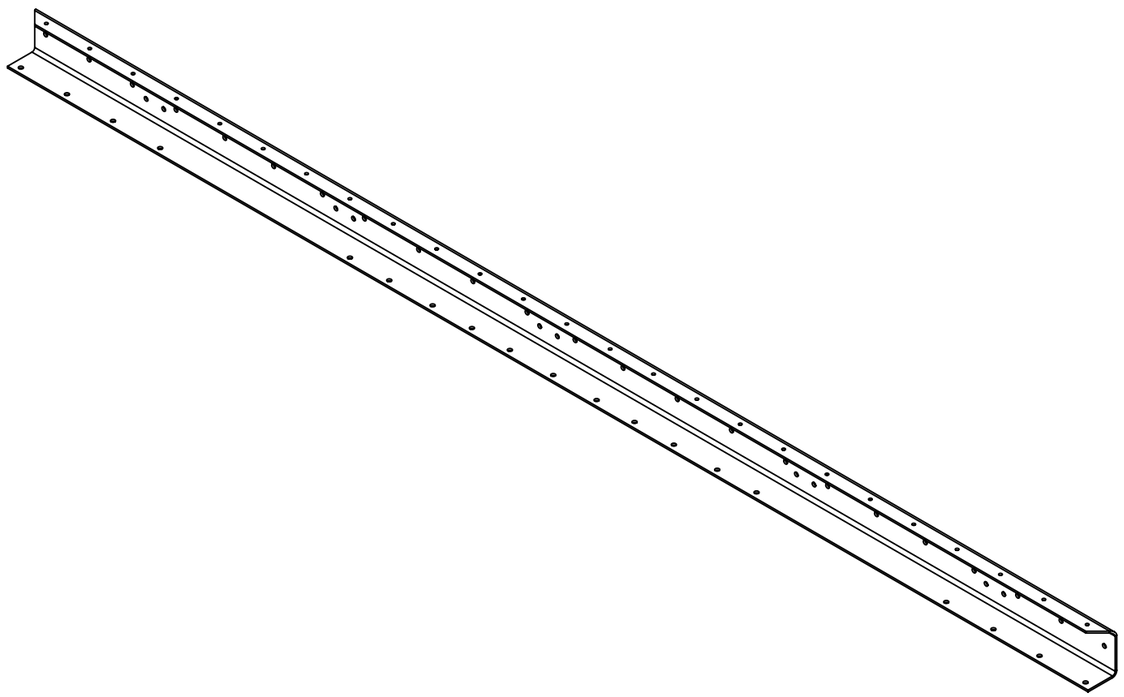
Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Leg bracket	1993	142,7	3	2000-05-1081	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-1081 Sheet : 1 of 1	Issue A
Drawn: JWR	19-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.29 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

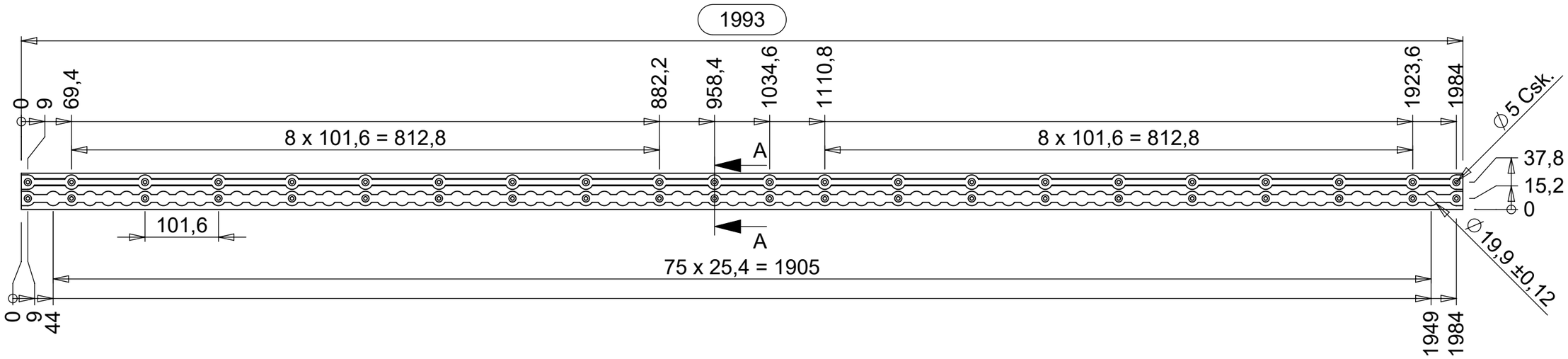
Title: **Leg bracket**

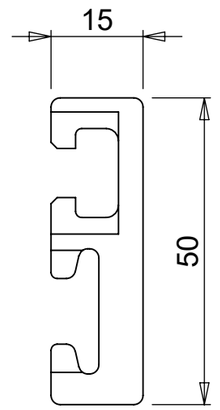
Iss.	Changes	Date	Name

Projection

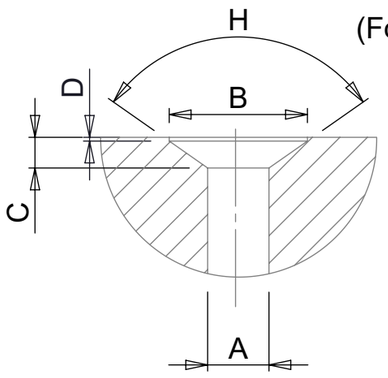
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



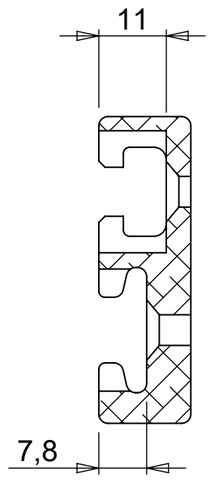


Scale 1:1



(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

1	1	Seat-T track profile	1993	50	15	2000-04-8266	Alu. 6061-T6	
4	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-04-8266 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.51 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

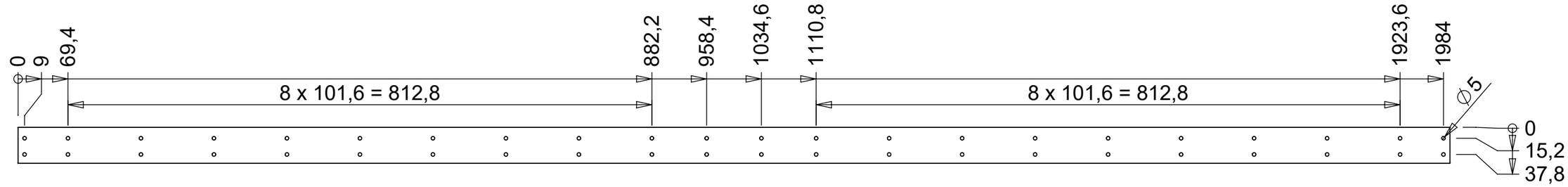
Title: **Seat-T track profile**

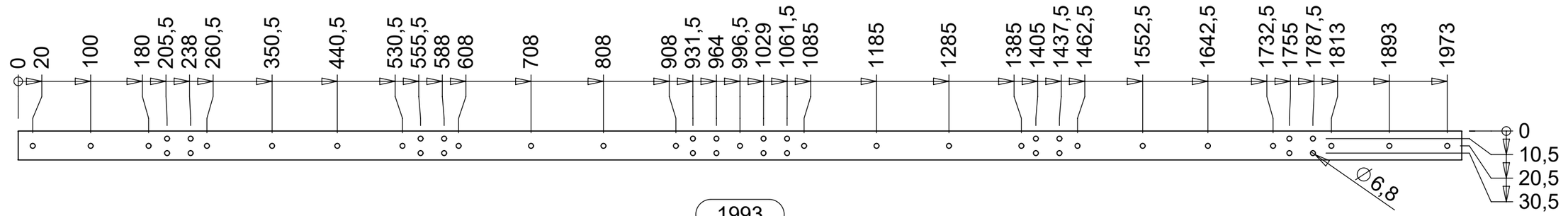
Iss.	Changes	Date	Name

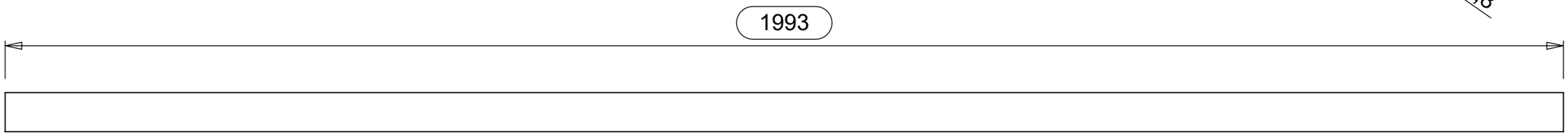
Projection

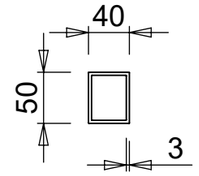
Size A3

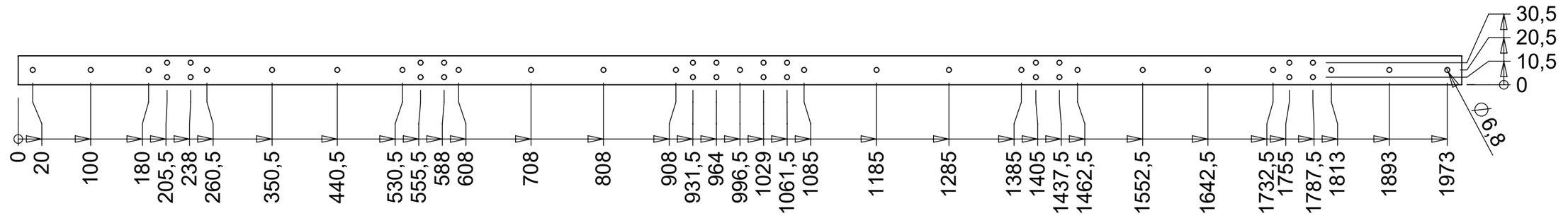
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

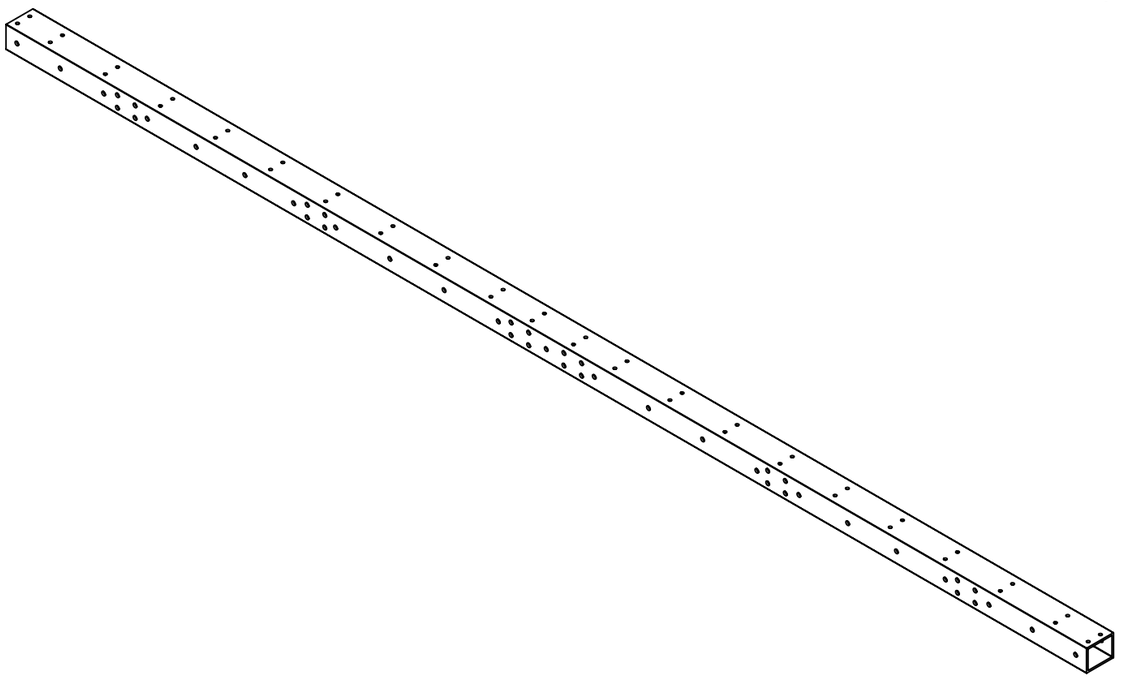












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 50x40x3	1993	50/40	3	2000-05-0261	Alu. 6060-T66	

Scale:	1:6	Date:	
Drawn:	JWR	21-03-2019	
Checked:	HS	12-04-2019	
Approved:	JWR	09-05-2019	
Mass:	2.68 kg		

Drawing no.: 2000-05-0261
Sheet : 1 of 1

Issue: A

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

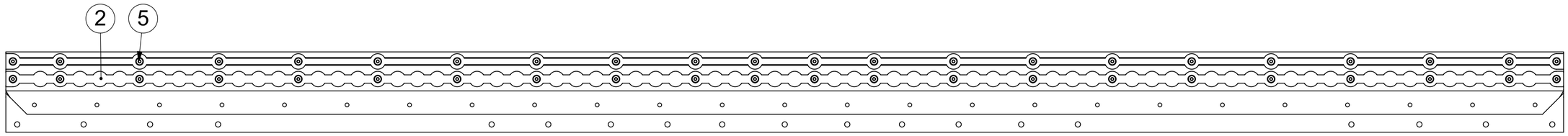
Title: Tube 50x40x3

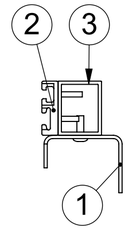
Iss.	Changes	Date	Name

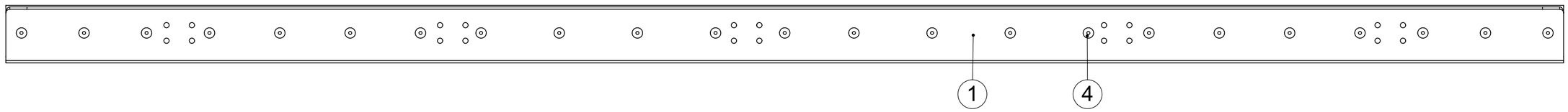
Projection

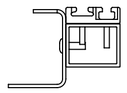
Size A3

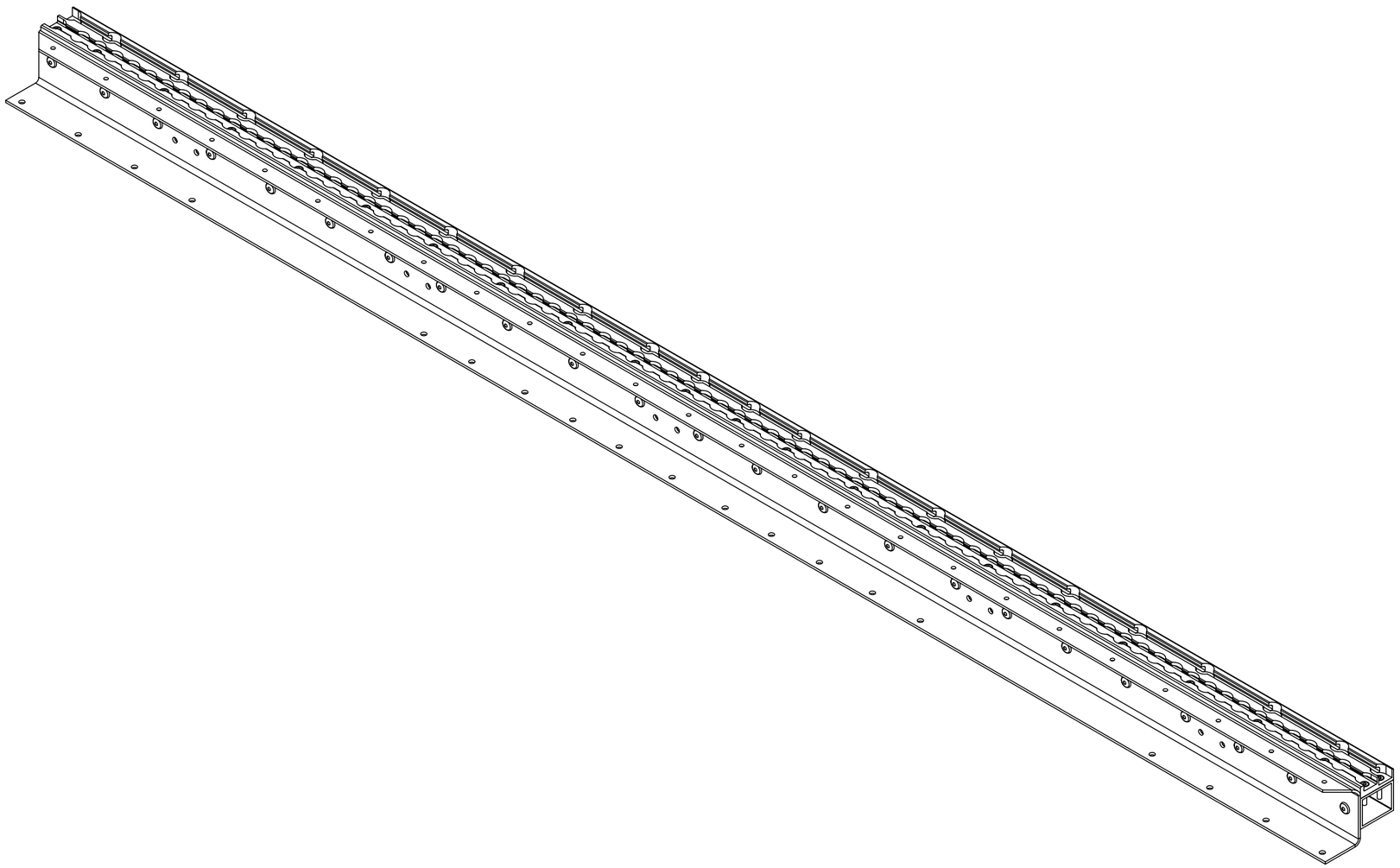
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	44	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
4	23	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
3	1	Tube 50x40x3	1993	50/40	3	2000-05-0261	Alu. 6060-T66	
2	1	Seat-T track profile	1993	50	15	2000-04-8266	Alu. 6061-T6	
1	1	Leg bracket	1993	142,7	3	2000-05-1081	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no. 2000-05-1117 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 7.79 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

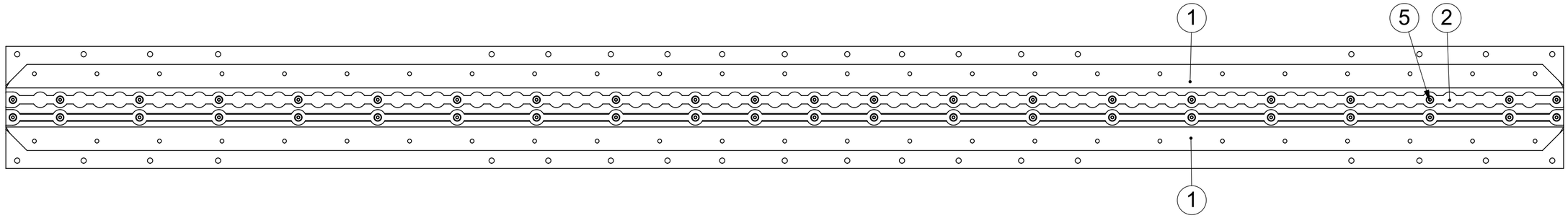
Title: Seat/T-track beam

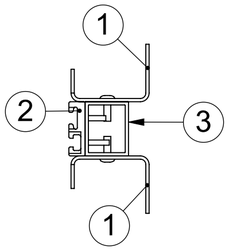
Iss.	Changes	Date	Name

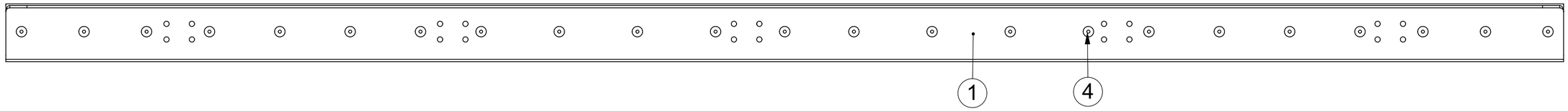
Projection

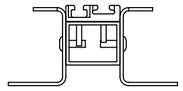
Size A2

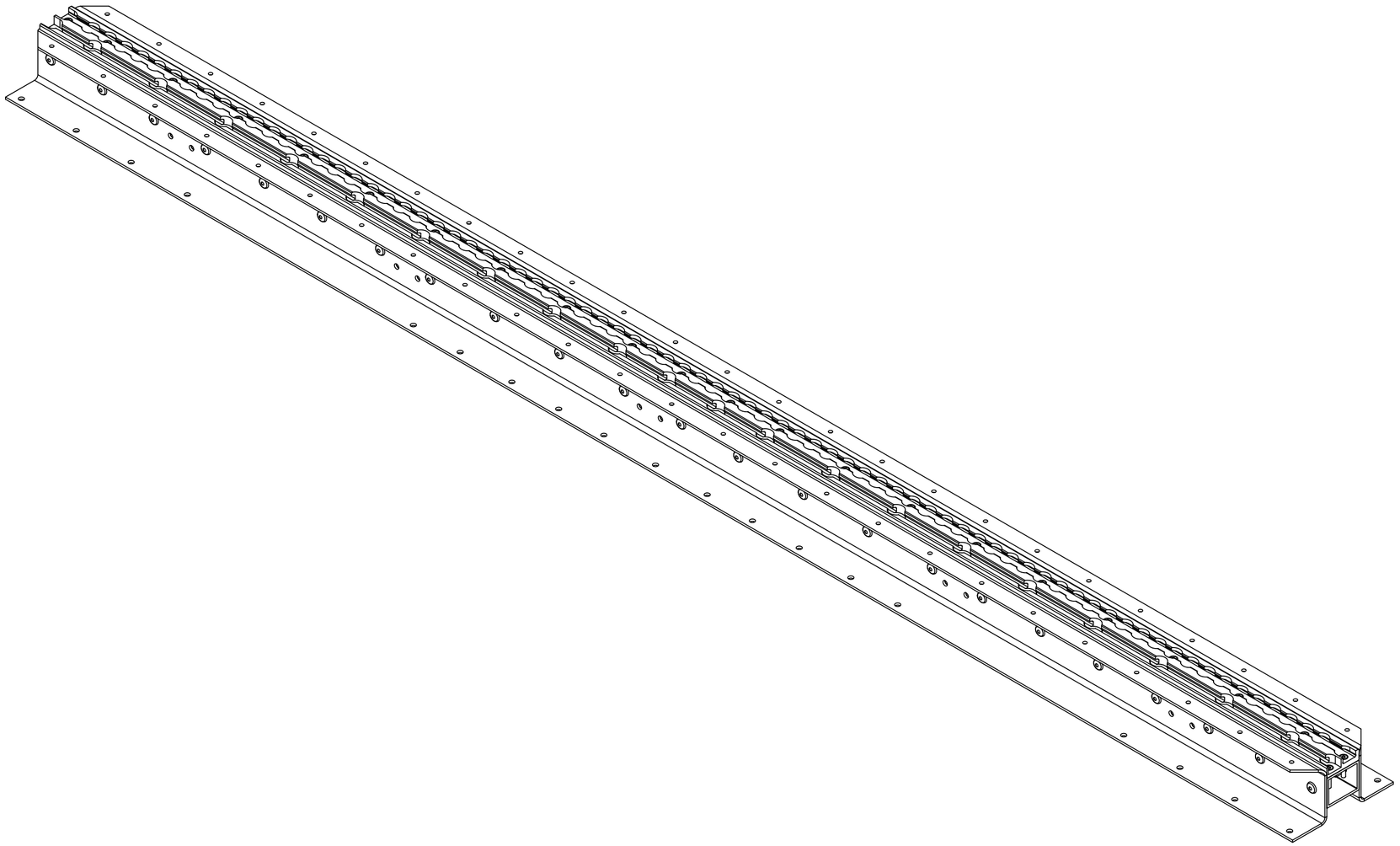
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	44	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
4	46	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
3	1	Tube 50x40x3	1993	50/40	3	2000-05-0261	Alu. 6060-T66	
2	1	Seat-T track profile	1993	50	15	2000-04-8266	Alu. 6061-T6	
1	2	Leg bracket	1993	142,7	3	2000-05-1081	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no. 2000-05-1083 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 10.24 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

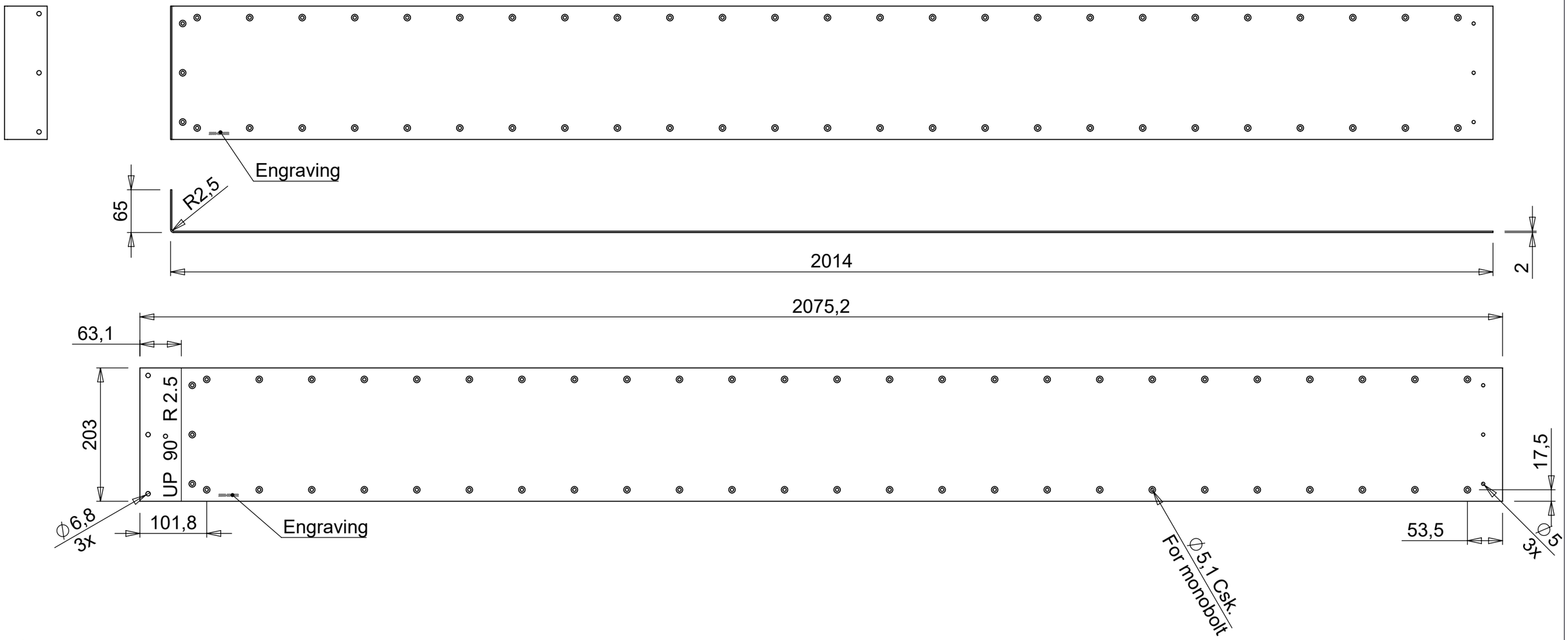
Title: Seat/T-track beam

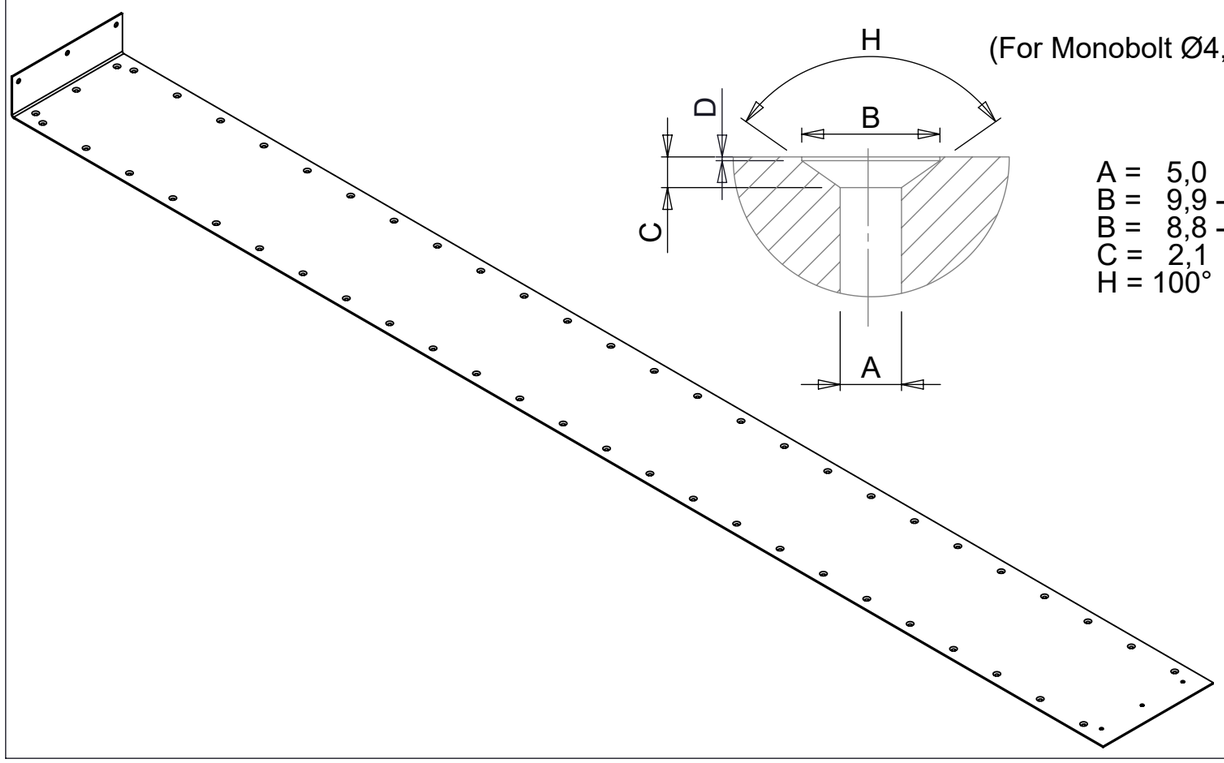
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	top base sheet	2075,2	203	2	2000-05-0272	Alu. 5754-H22	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-0272 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.26 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

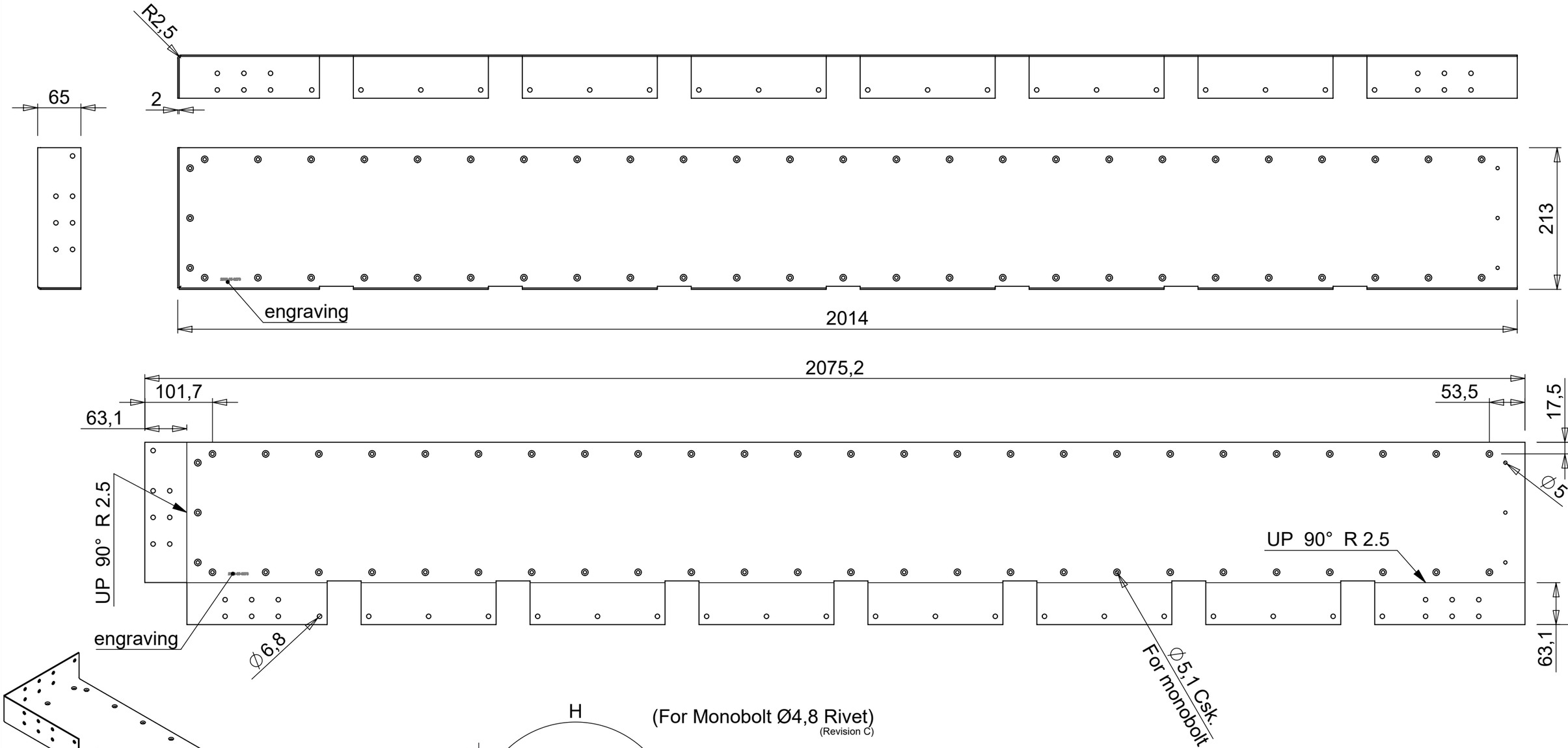
Title: top base sheet

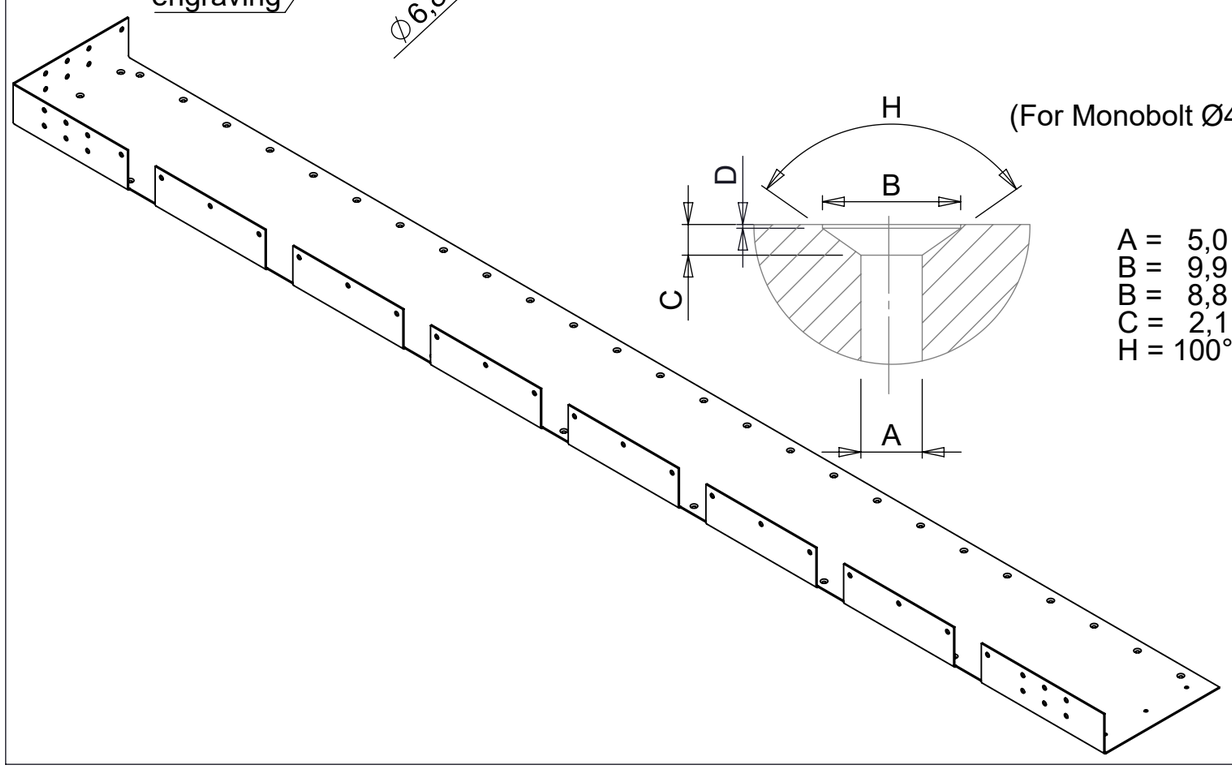
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	top base sheet	2075,2	274,2	2	2000-05-0273	Alu. 5754-H22	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-0273	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 2.91 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

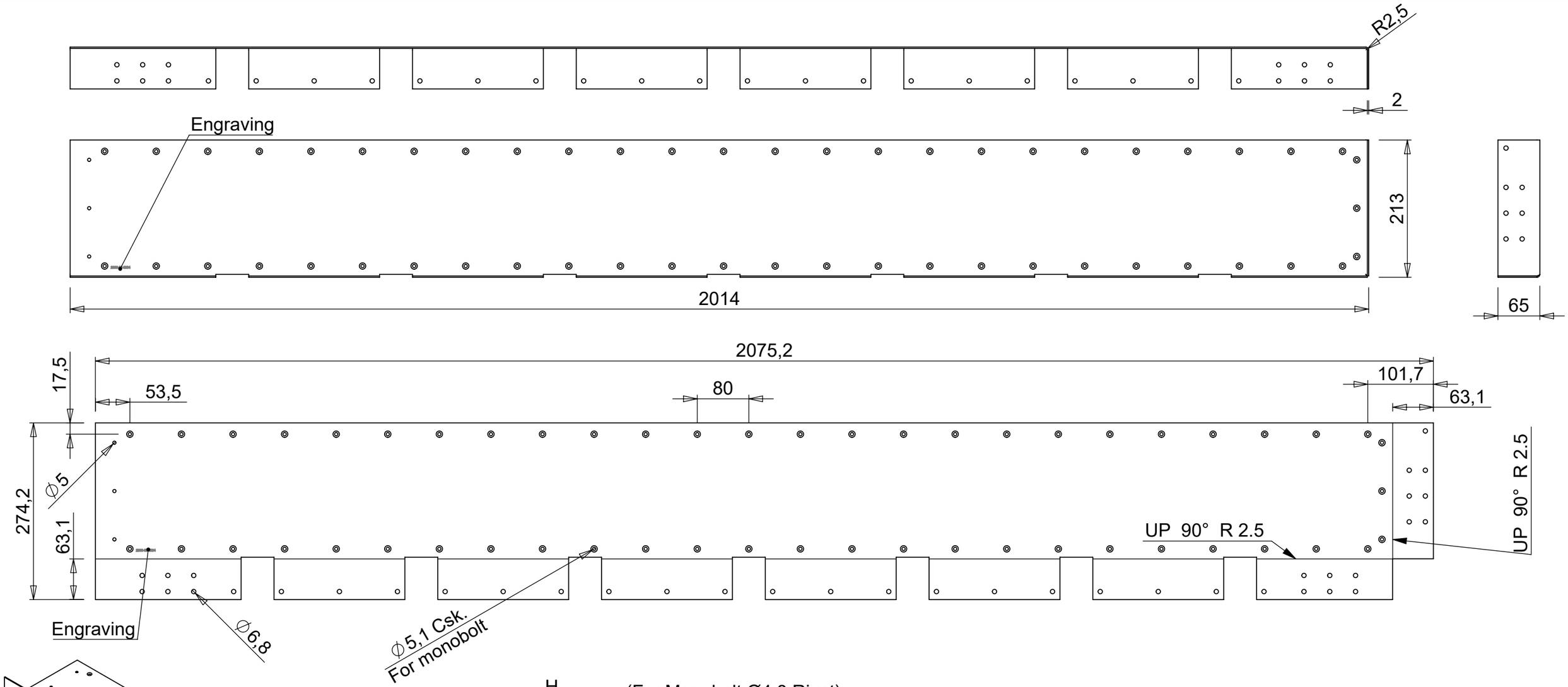
Title: **top base sheet**

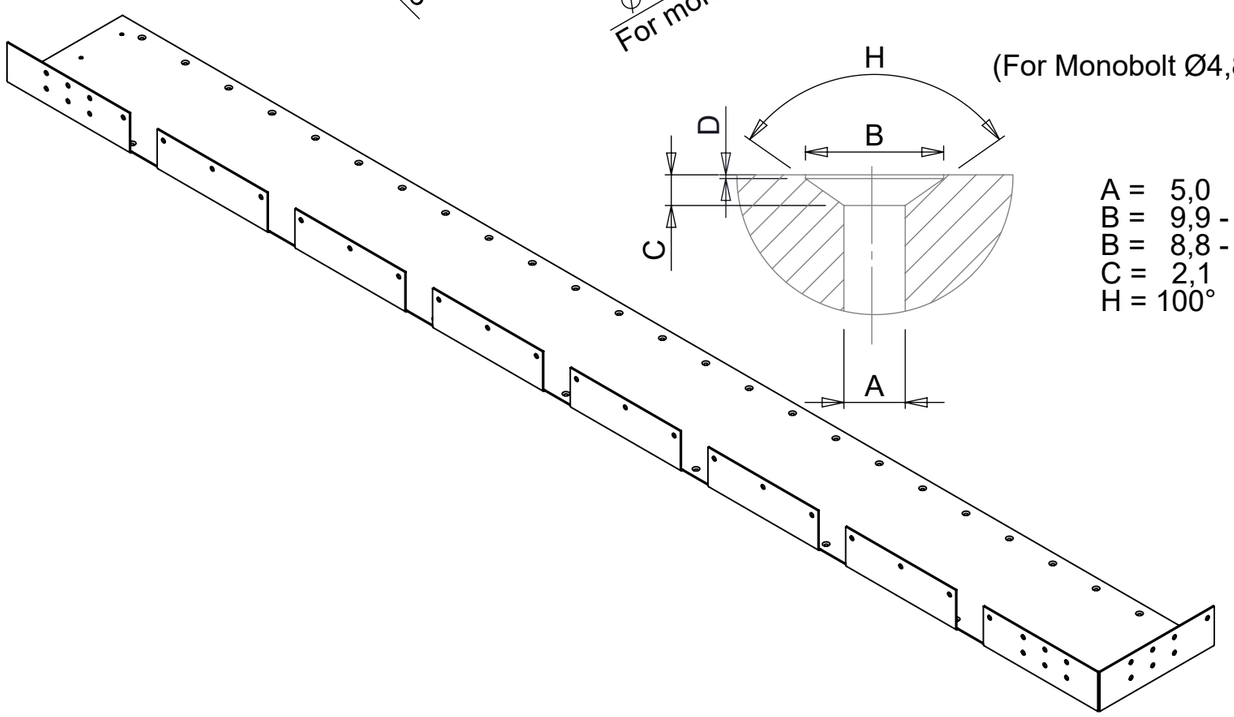
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	top base sheet	2075,2	274,2	2	2000-05-0394	Alu. 5754-H22	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-0394	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 2.91 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

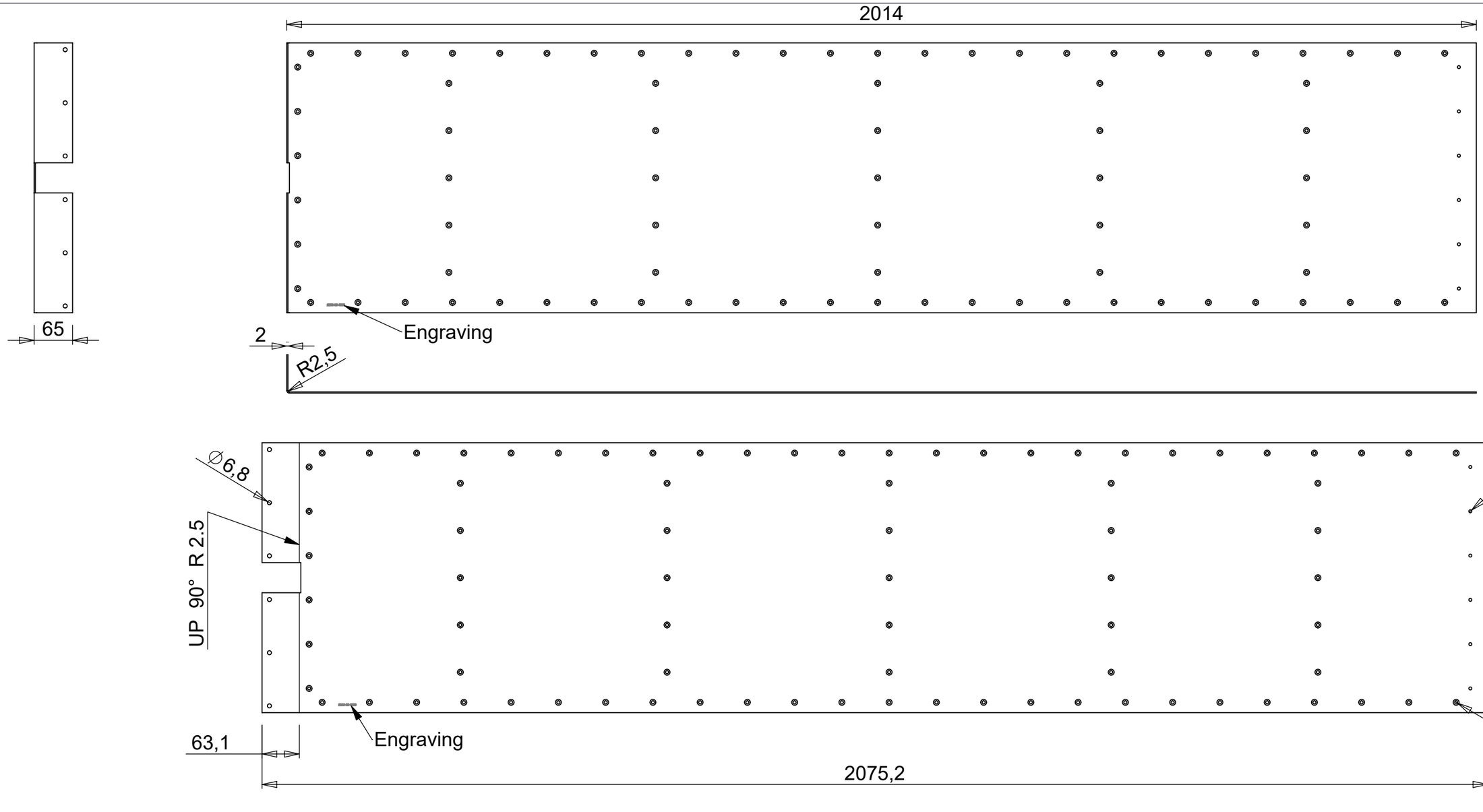
Title: top base sheet

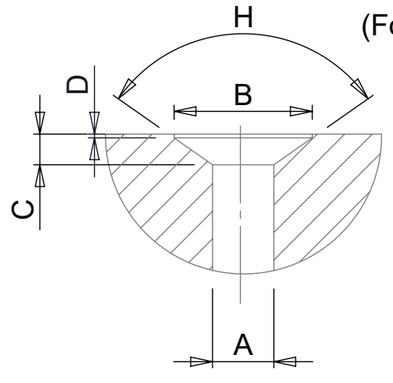
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	top base sheet	2075,2	457	2	2000-05-1098	Alu. 5754-H22	Bend with V16

Scale: 1:7	Date:	Drawing no.: 2000-05-1098	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 5.08 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

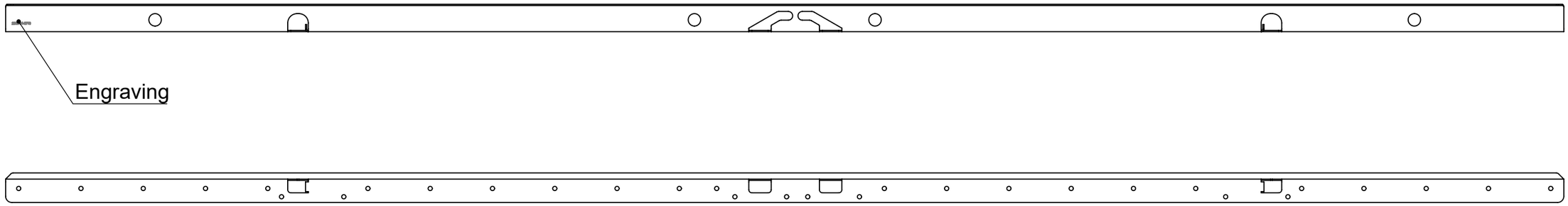
Title: **top base sheet**

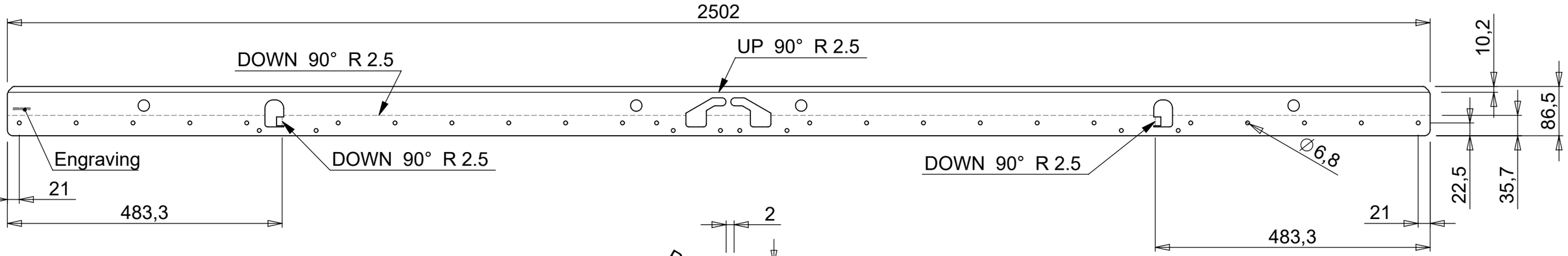
Iss.	Changes	Date	Name

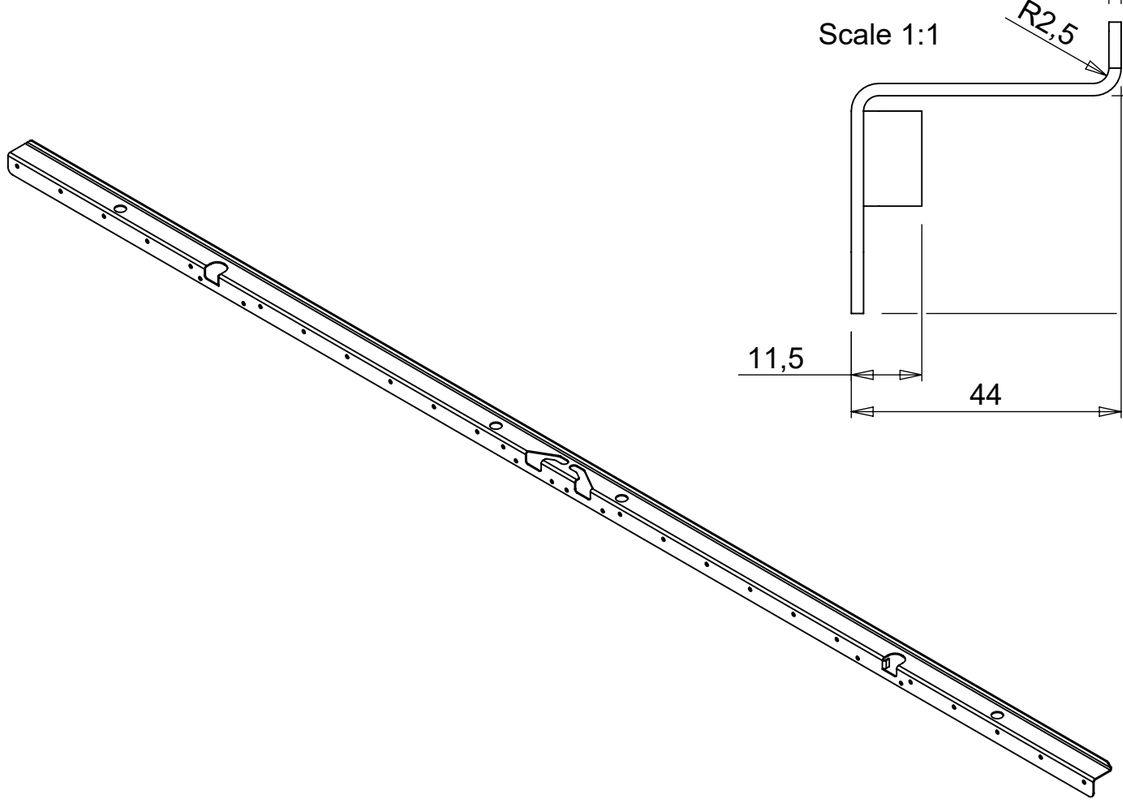
Projection

Size A3

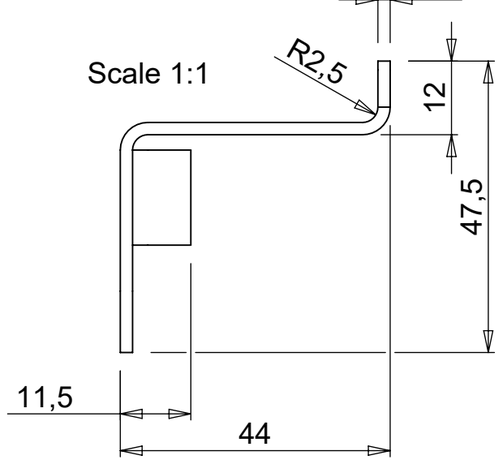
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Scale 1:1



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	outside doorpost	2502	86,5	2	2000-04-8710	AISI 304	Bend with V16

Scale: 1:7	Date:	Drawing no.: 2000-04-8710	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 3.33 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

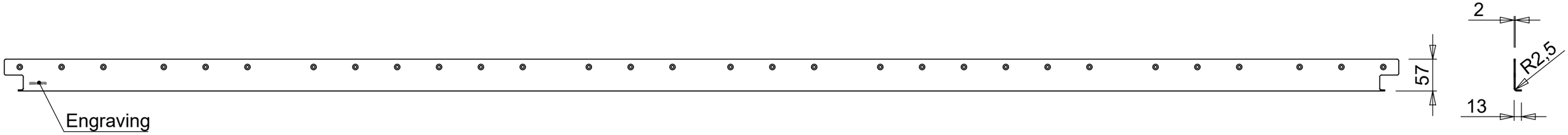
Title: outside doorpost

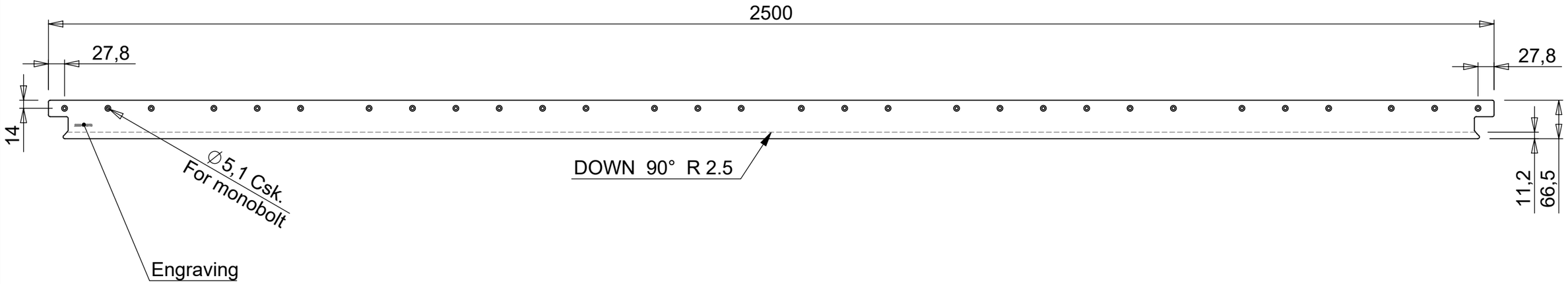
Iss.	Changes	Date	Name

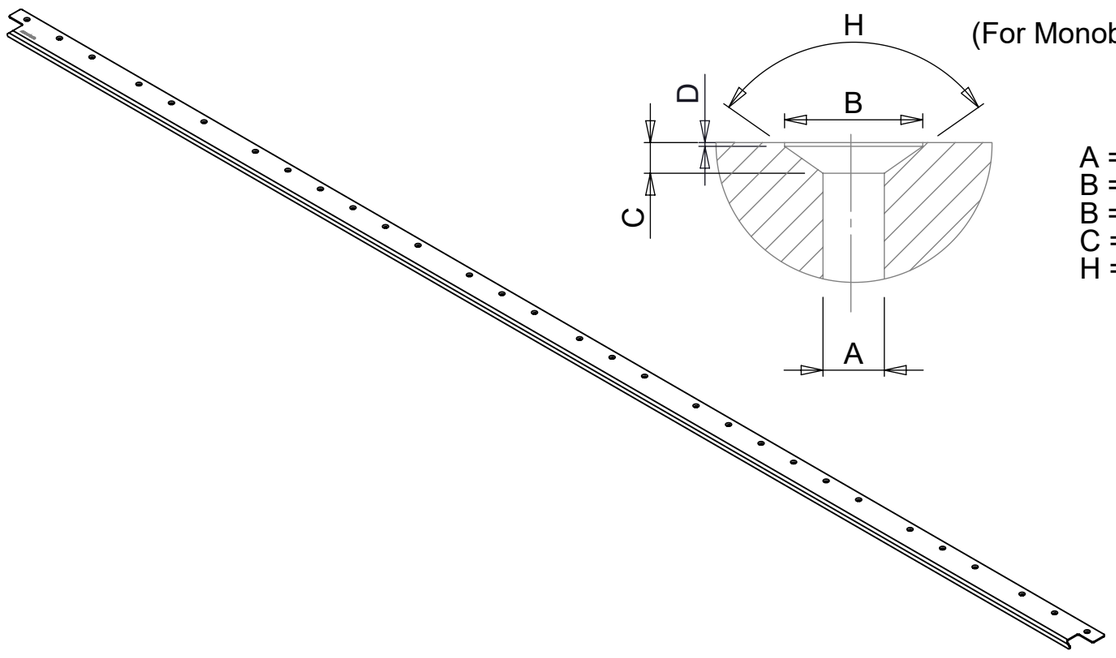
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inside doorstep	2500	66,5	2	2000-04-8713	AISI 304	Bend with V16

Scale: 1:7	Date:	Drawing no.: 2000-04-8713	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 2.60 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

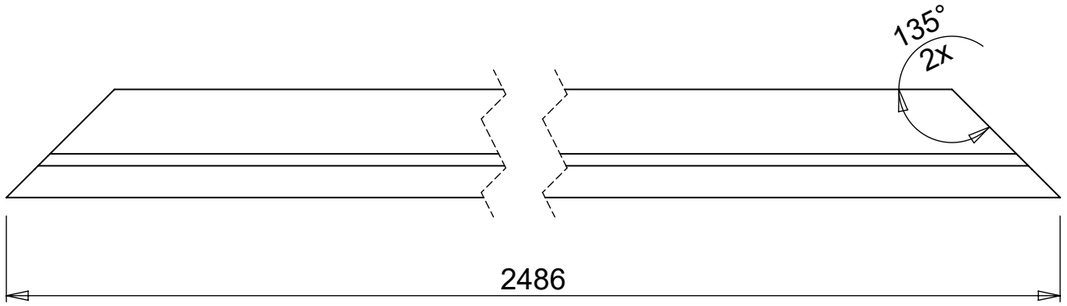
Title: Inside doorstep

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)

Scale: 1:1	Date:	Drawing no.: 2000-04-8336	Issue B	Tolerances (u.n.o.)
Drawn: JWR	21-03-2019	Sheet : 1 of 1		< 7 30 120 400 1000 2000
Checked: MH	11-09-2019			7 30 120 400 1000 2000 >
Approved: JWR	12-09-2019			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.25 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

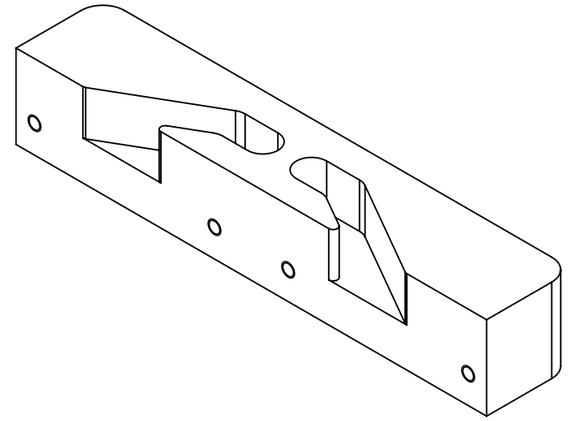
Title: **Door rubber Extrusion**

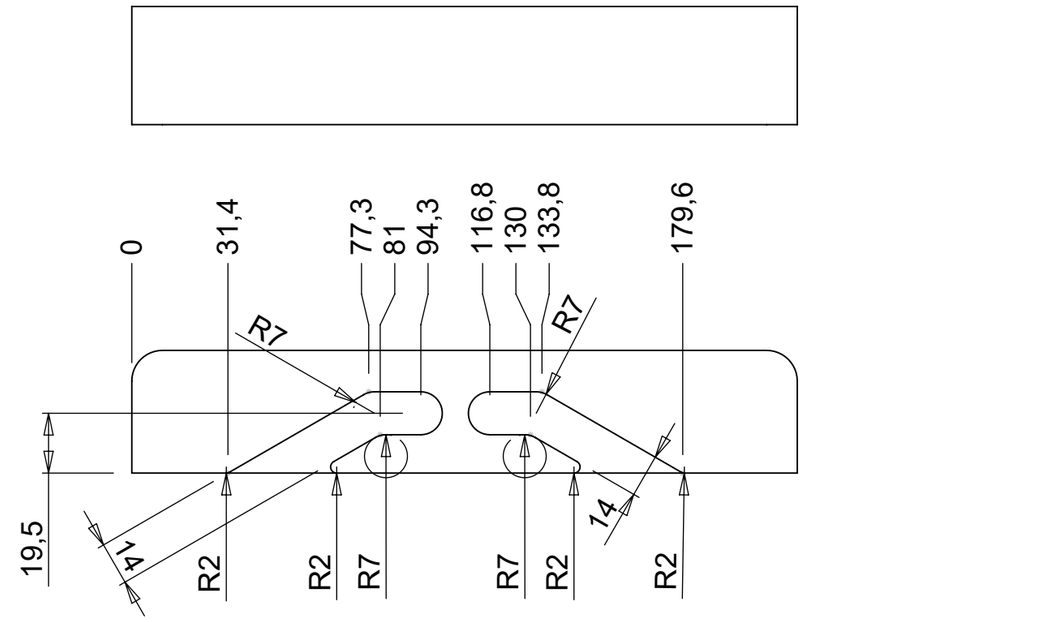
Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

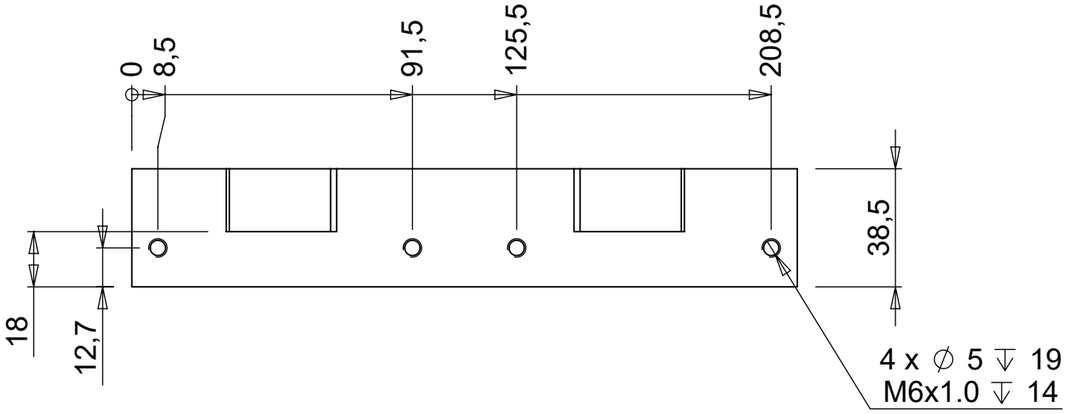
Projection

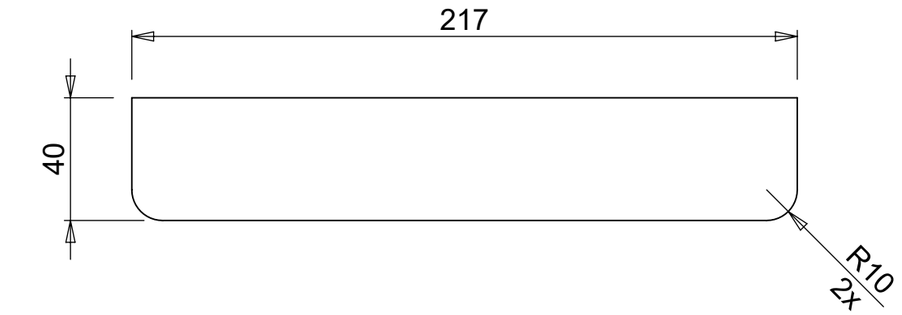
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Doorkeeper base	217	40	38,5	2000-05-1764	Alu. 6082-T6	

Scale: 1:2	Date:	Drawing no.: 2000-05-1764	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.80 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

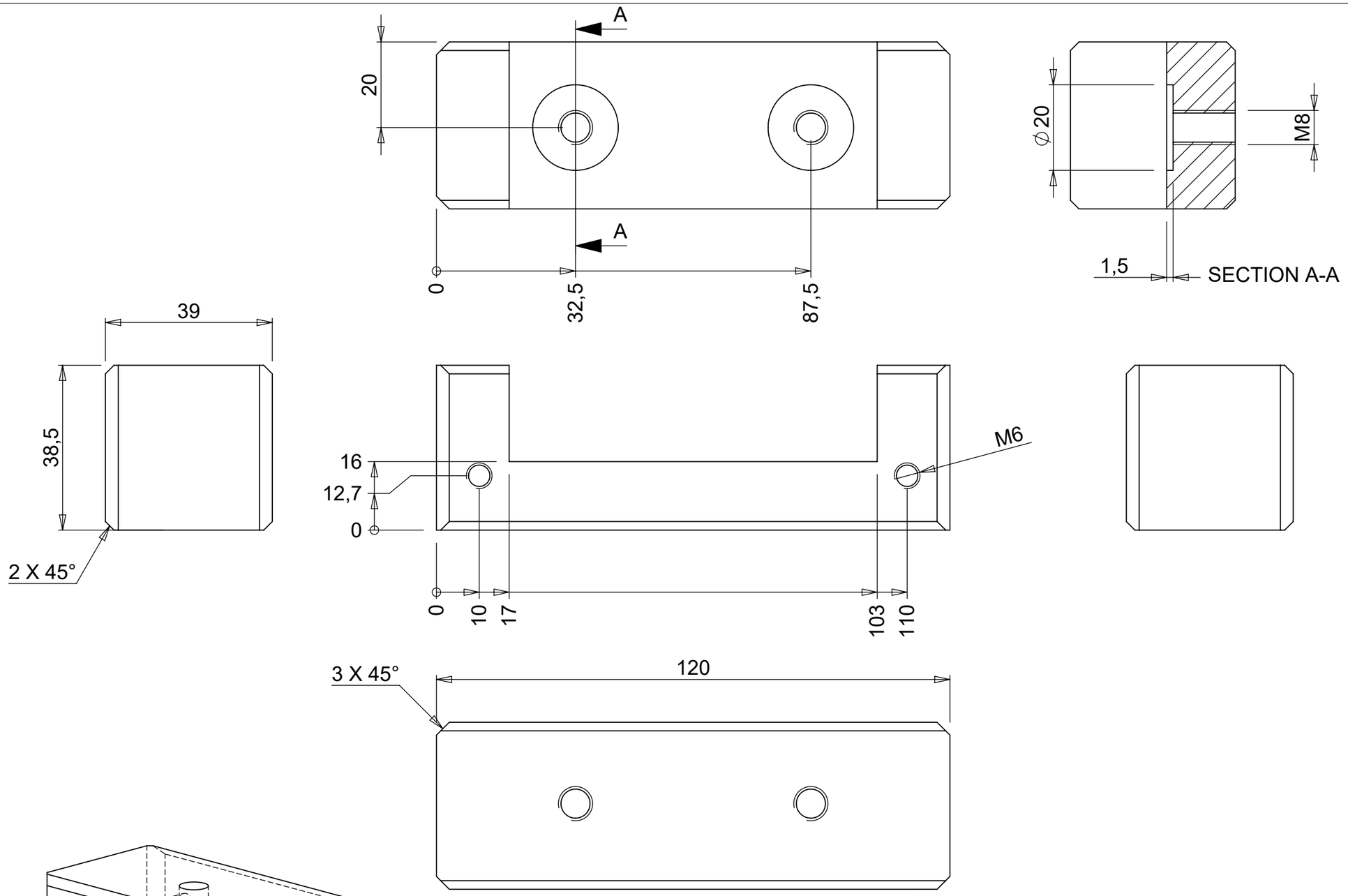
Title: **Doorkeeper base**

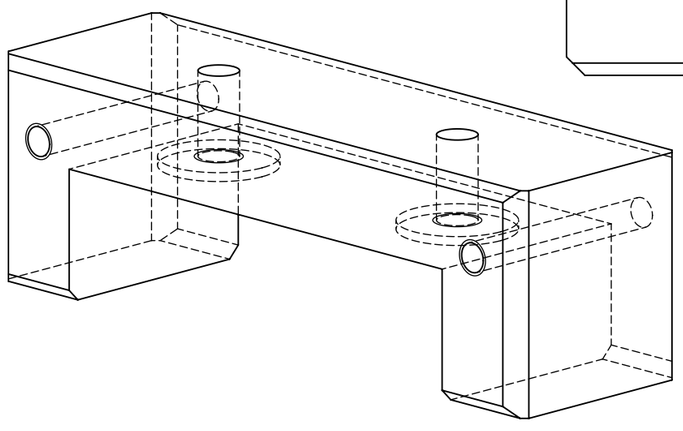
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



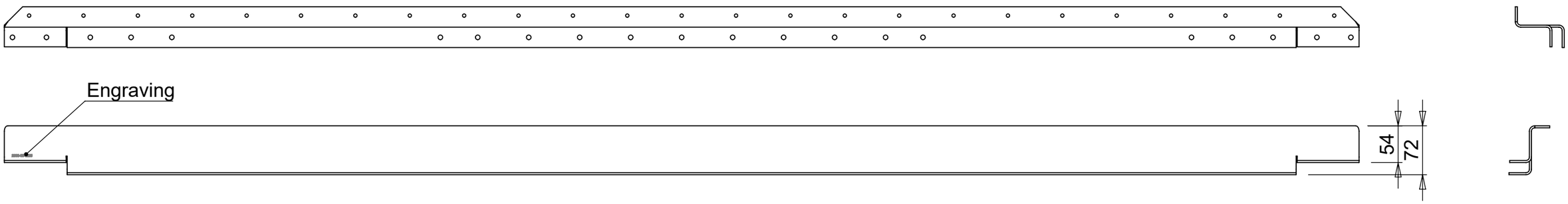


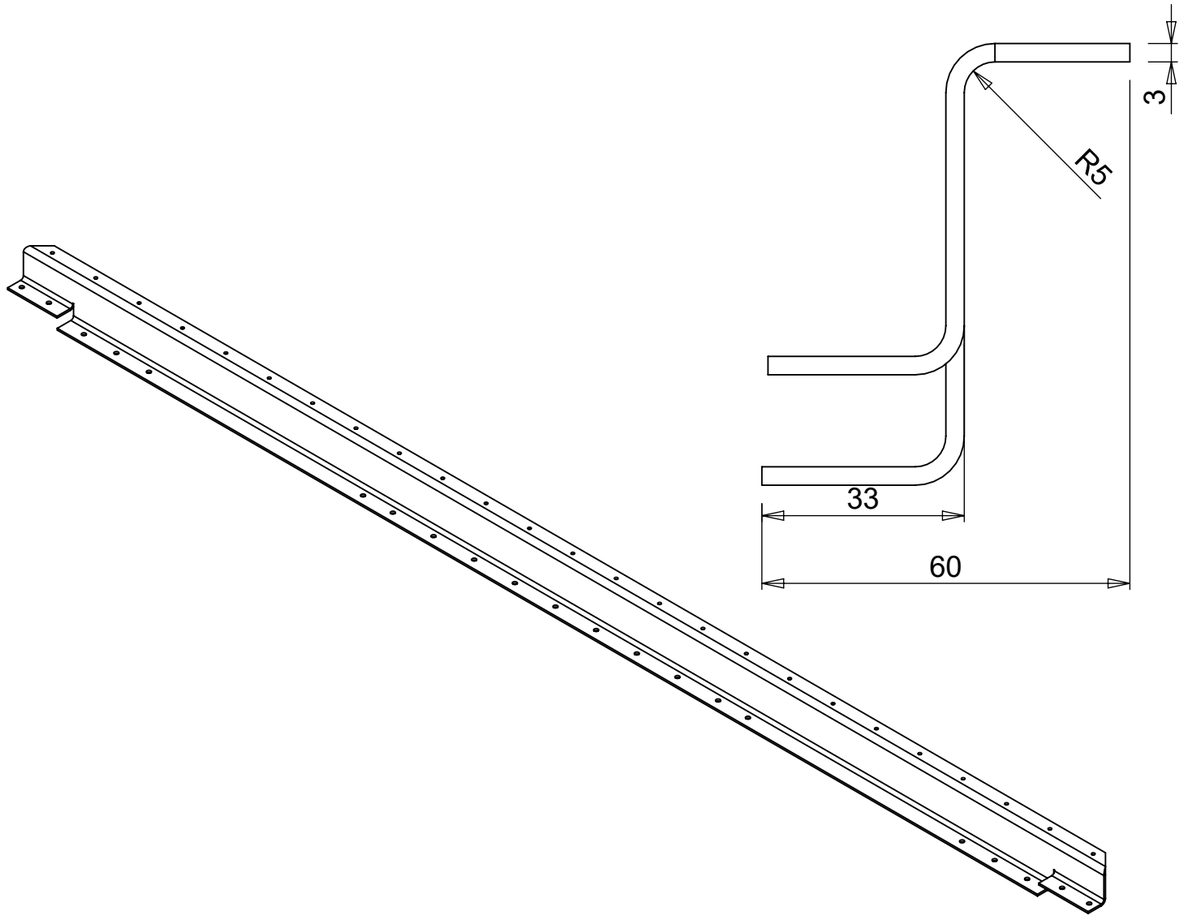
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Locking block	120	39	38,5	2000-05-1763	Alu. 6082-T6	

Iss.	Changes	Date	Name

Scale: 1:1	Date:	Drawing no.: 2000-05-1763	Issue	Tolerances (u.n.o.)
Drawn: JWR	19-03-2019		A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: HS	12-04-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	09-05-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.27 kg		Finish:		Dimensions in mm (u.n.o.)
Title: Locking block				
Projection	Size A3			

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	upper floor	1993	122,7	3	2000-05-0265	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0265 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.95 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

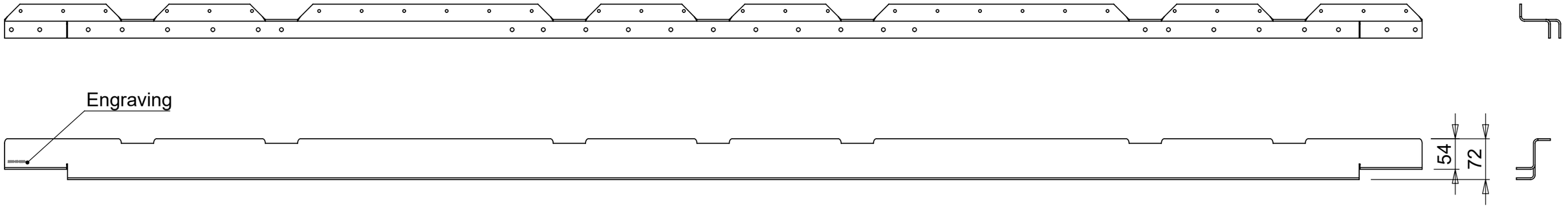
Title: upper floor

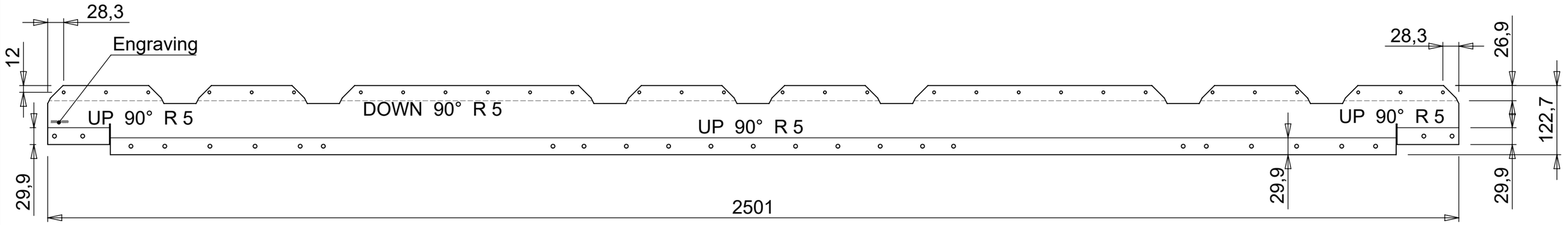
Iss.	Changes	Date	Name

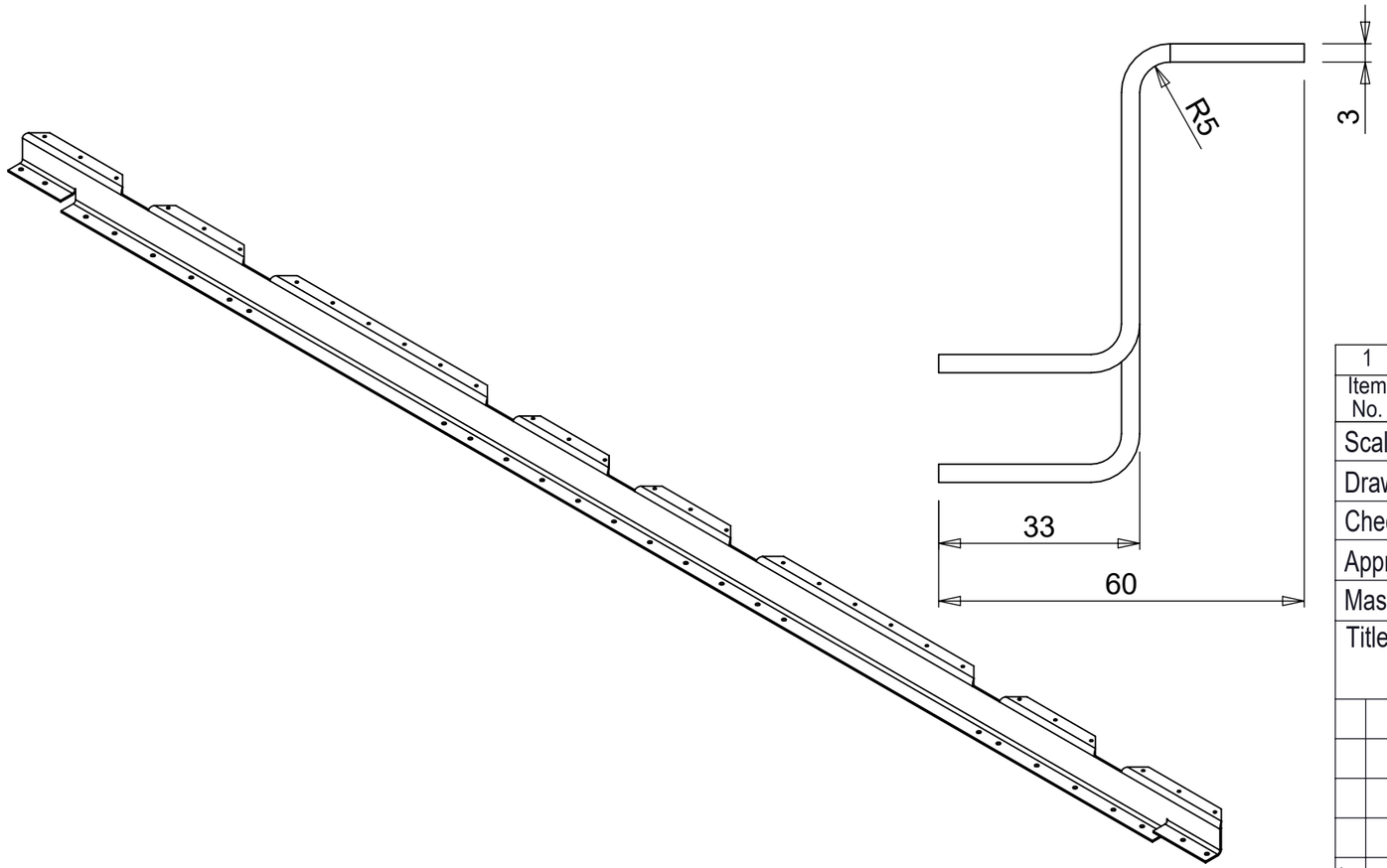
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Topfloor Aft Edge	2501	122,7	3	2000-05-0268	Alu. 5754-H22	Bend with V30

Scale: 1:7	Date:	Drawing no.: 2000-05-0268	Issue: A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 2.30 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

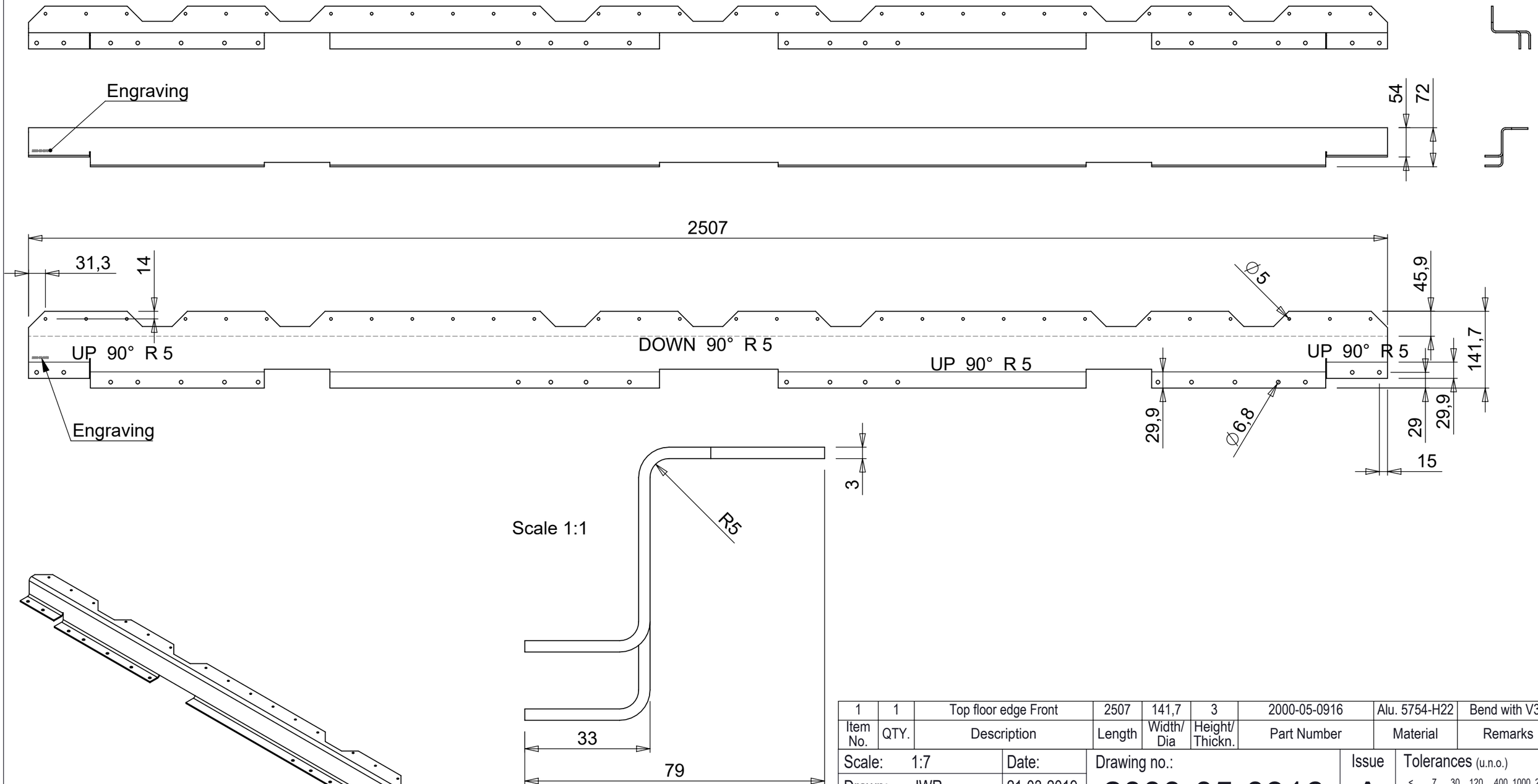
Title: **Topfloor Aft Edge**

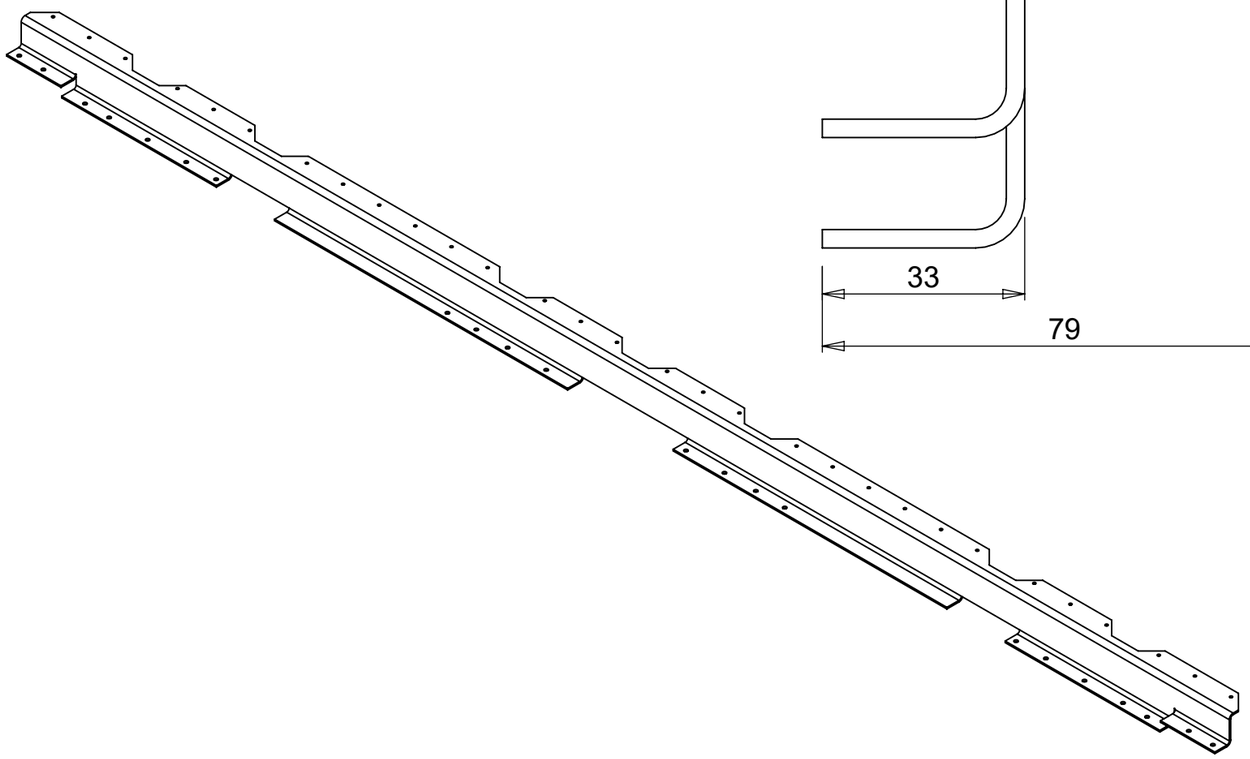
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Top floor edge Front	2507	141,7	3	2000-05-0916	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.: 2000-05-0916 Sheet : 1 of 1	Issue A
Drawn: JWR	21-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.58 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

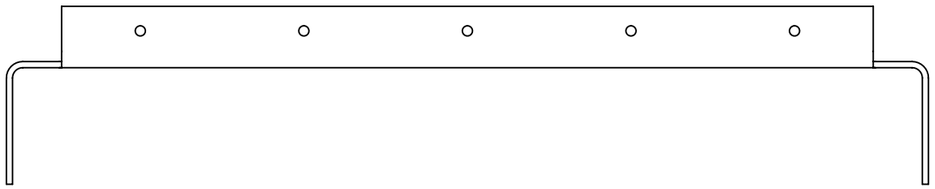
Title: **Top floor edge Front**

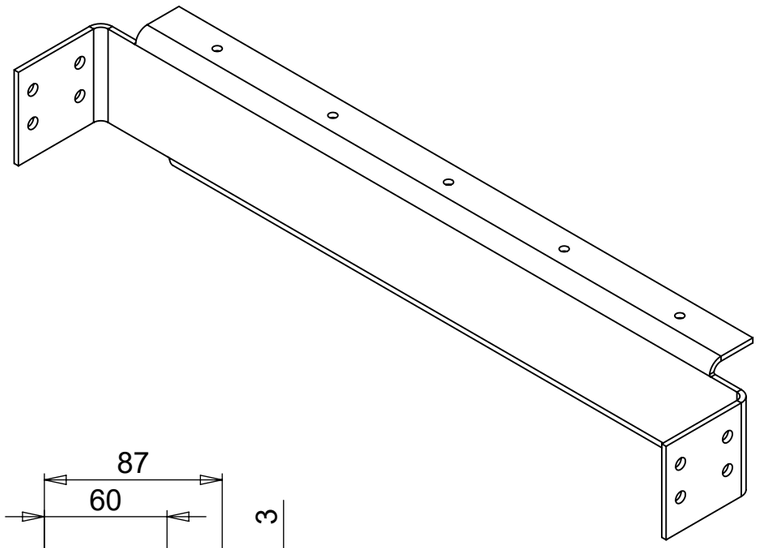
Iss.	Changes	Date	Name

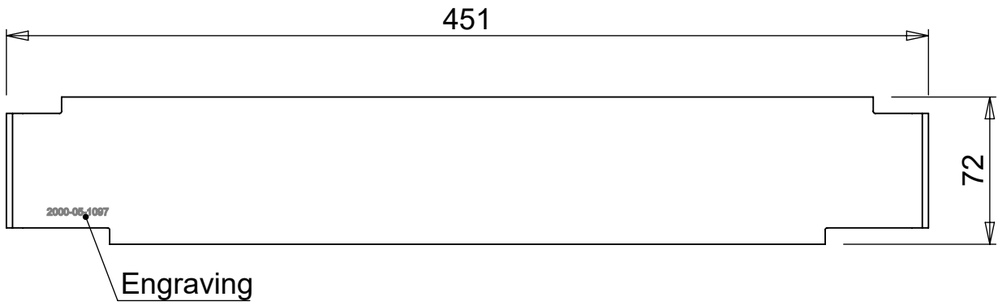
Projection

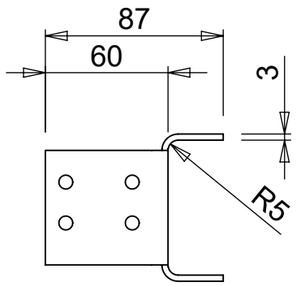
Size A3

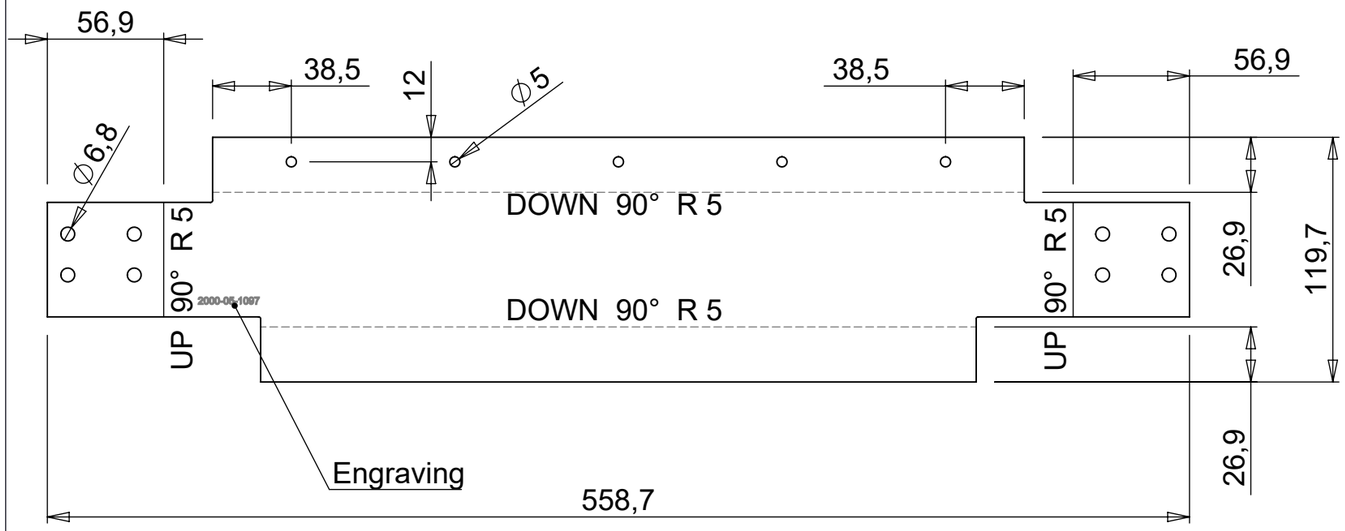
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Leg bracket	558,7	119,7	3	2000-05-1097	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-1097	Issue: A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.45 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

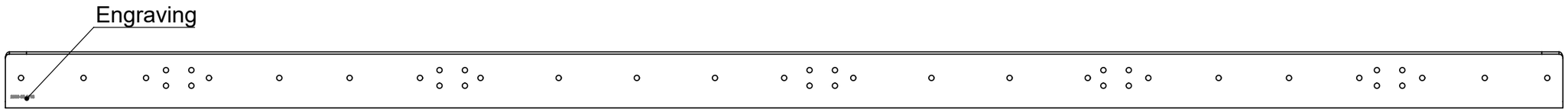
Title: **Leg bracket**

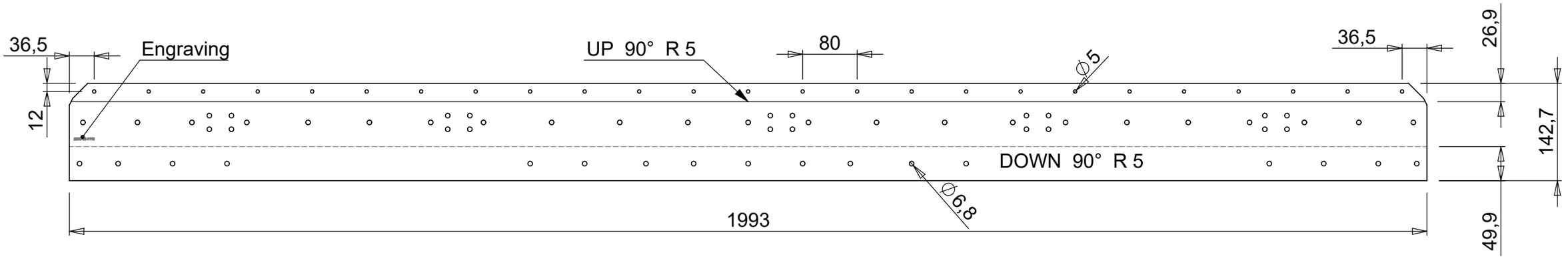
Iss.	Changes	Date	Name

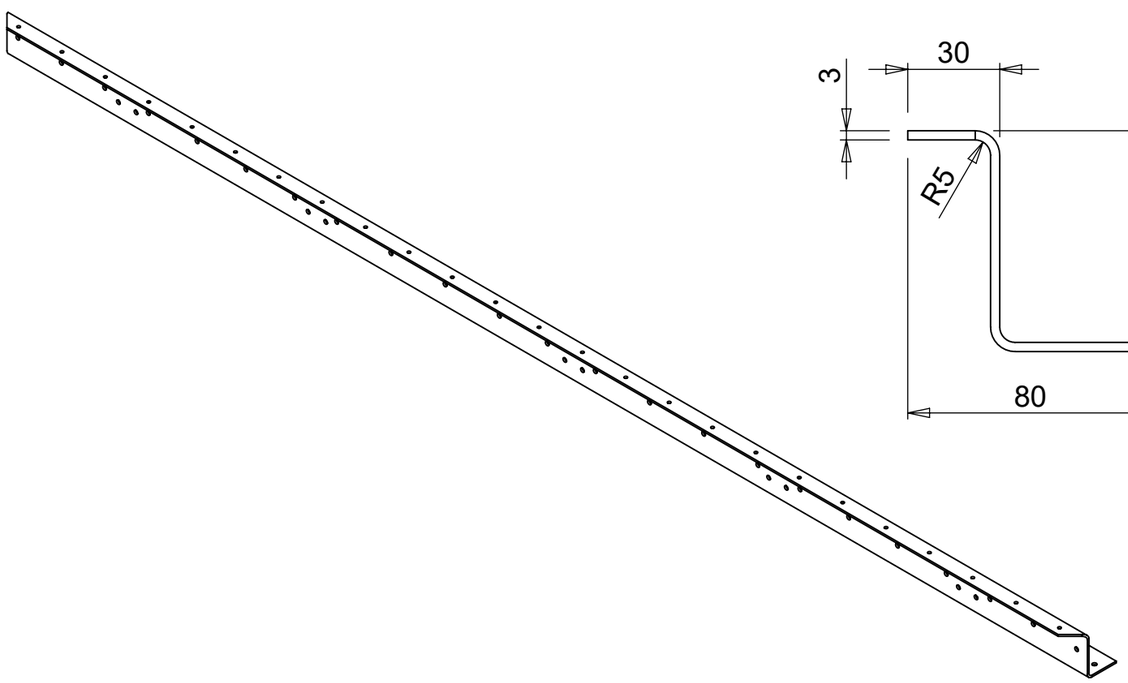
Projection

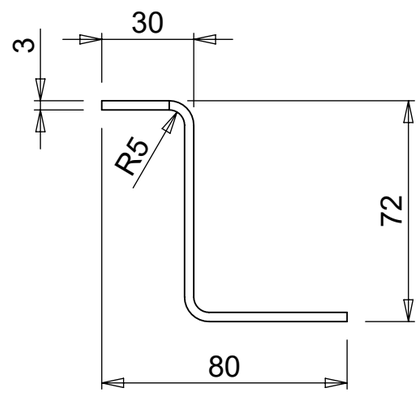
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Leg bracket	1993	142,7	3	2000-05-1116	Alu. 5754-H22	Bend with V30

Scale: 1:6	Date:	Drawing no.: 2000-05-1116	Issue: A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 2.29 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

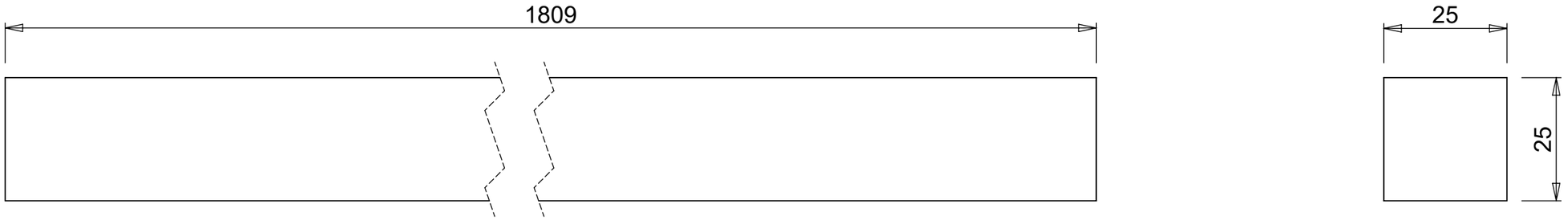
Title: **Leg bracket**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Cel rubber	1809	25	25	2000-05-1625	EPDM	

Scale: 1:1	Date:	Drawing no.: 2000-05-1625	Issue: A
Drawn: JWR	22-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.33 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

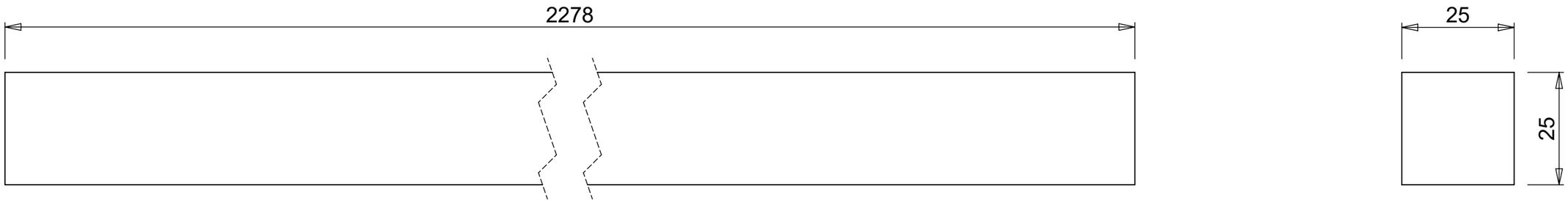
Title: Cel rubber

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Cel rubber	2278	25	25	2000-05-1626	EPDM	

Scale: 1:1	Date:	Drawing no.: 2000-05-1626	Issue: A
Drawn: JWR	22-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.68 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

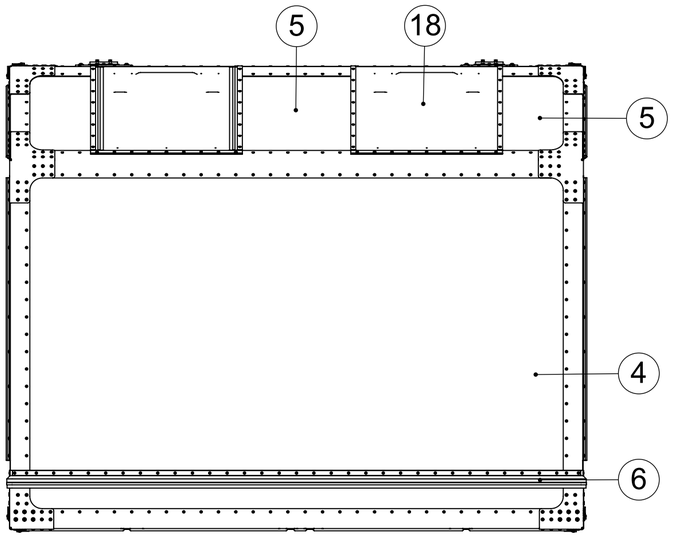
Title: Cel rubber

Iss.	Changes	Date	Name

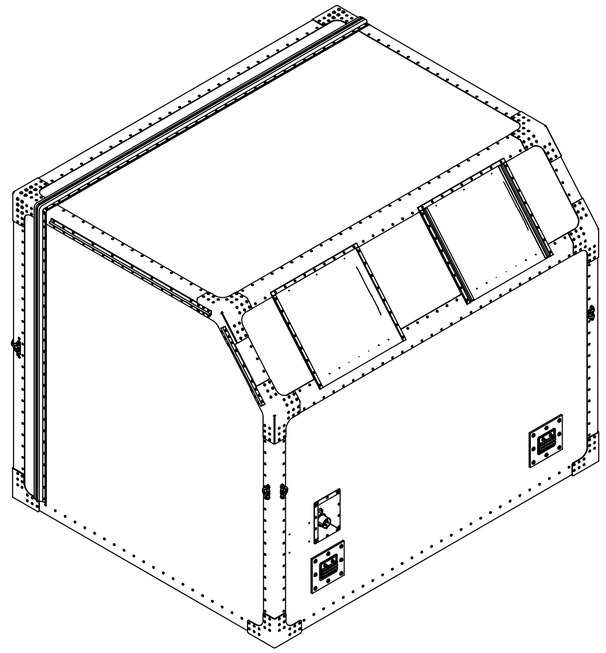
Projection

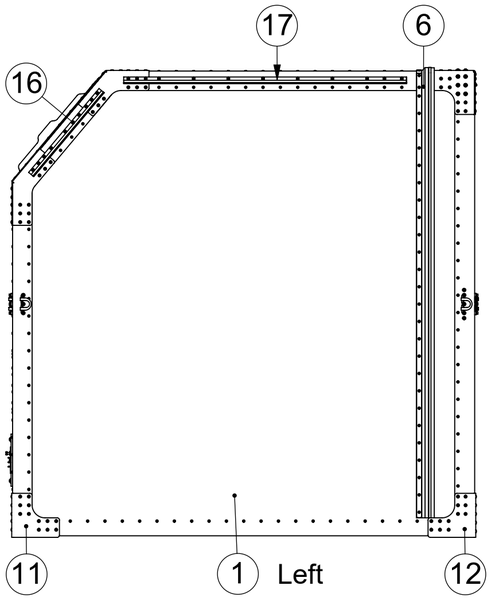
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

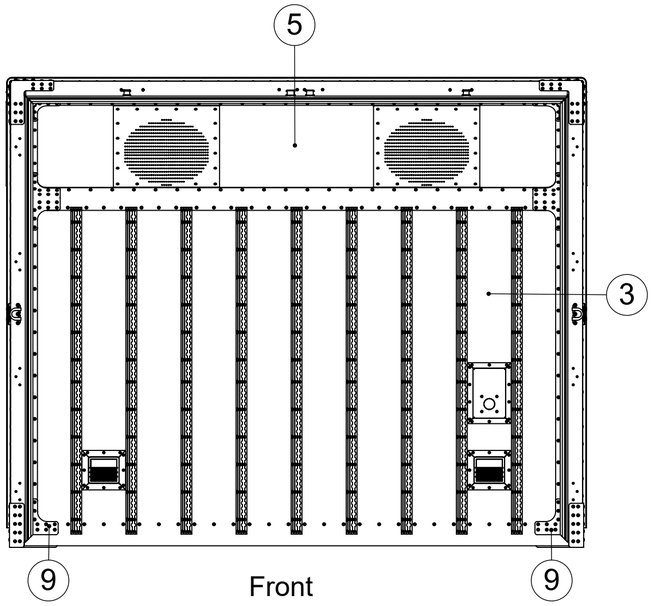


Top

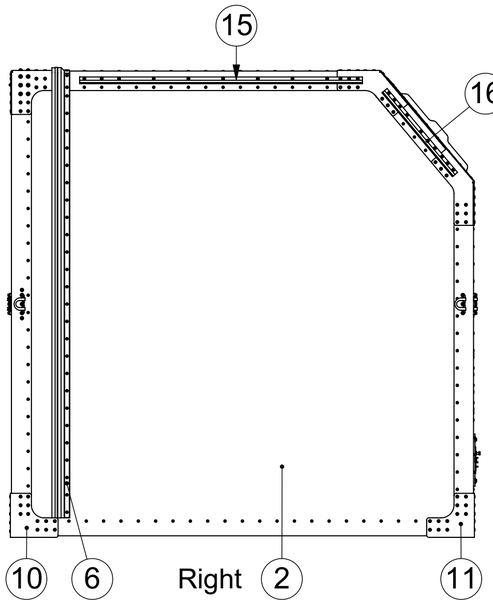




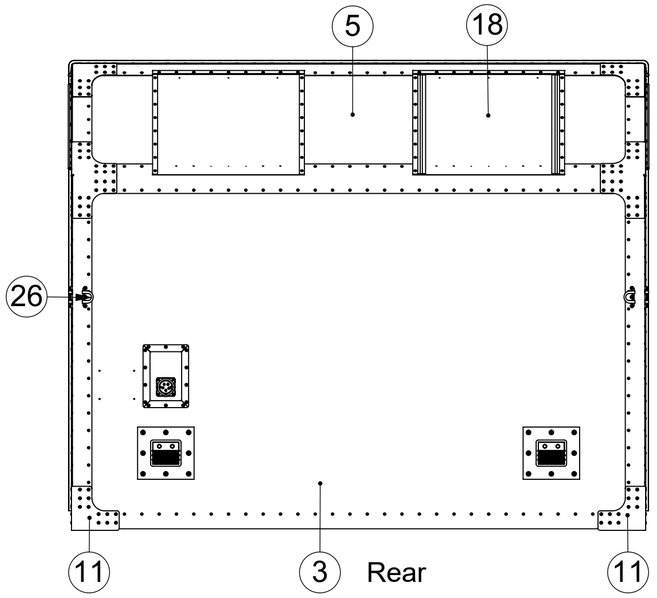
Left



Front



Right



Rear

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
35	4	T-nut	13	M6	10	DIN508-8-M6-NI	AISI 316Ti (1.4571)	Elesa+Ganter
34	12	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
33	24	Torx Socket Cap Screw	30	M6		BO-14579T-06030-A2	AISI 304	ISO 14579 torx
32	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
31	4	Torx Socket Button Screw	10	M6		BO-7380T-06010-A2	AISI 304	ISO7380 torx
30	24	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
29	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
26	8	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
25	2	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	
24	2	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	
23	1	Fill plate corner gusset	155,2	112	2	2000-05-1417	Alu. 5754-H22	Bend with V16
22	1	Fill plate corner gusset	155,2	112	2	2000-05-1416	Alu. 5754-H22	Bend with V16
21	2	Fill plate corner gusset	179,6	112	1	2000-05-1415	Alu. 5754-H22	Bend with V16
20	2	Plug				2000-05-1465	Assembly	
19	2	Hose lock system Color: FS 33446				WO-041636	Alu. 6060-T66	Dantherm: 041636

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
18	2	Hose lock cover				2000-05-1507	Assembly	
17	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
16	2	Rope profile	505			2000-05-1539	Alu. 6060-T66	
15	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
14	1	Gusset	178,8	165	3	2000-05-1279	Alu. 5754-H22	Bend with V30
13	1	Gusset	175,8	165	3	2000-05-1280	Alu. 5754-H22	Bend with V30
12	1	Front Corner gusset	281,8	203	3	2000-05-0496	Alu. 5754-H22	Bend with V30
11	2	Corner gusset	433,8	203	3	2000-05-0480	Alu. 5754-H22	Bend with V30
10	1	Corner gusset	281,8	203	3	2000-05-0491	Alu. 5754-H22	Bend with V30
9	2	Gusset	299,8	165	3	2000-05-0386	Alu. 5754-H22	Bend with V30
8	1	Roller track right assy				2000-07-2975	Assembly	
7	1	Roller track left assy				2000-07-2750	Assembly	
6	1	Cover connection assy				2000-05-2107	Assembly	
5	1	DBJ panel slanted				2000-05-0357	Assembly	
4	1	DBJ panel top				2000-07-3665	Assembly	
3	1	DBJ panel rear				2000-07-2685	Assembly	
2	1	DBJ panel right				2000-07-2972	Assembly	
1	1	DBJ panel left				2000-07-2647	Assembly	

Scale:	1:20	Date:	
Drawn:	MBMH	25-05-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	380.02 kg		

Drawing no. 2000-07-2646
Sheet : 1 of 15

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: Hull DBJ

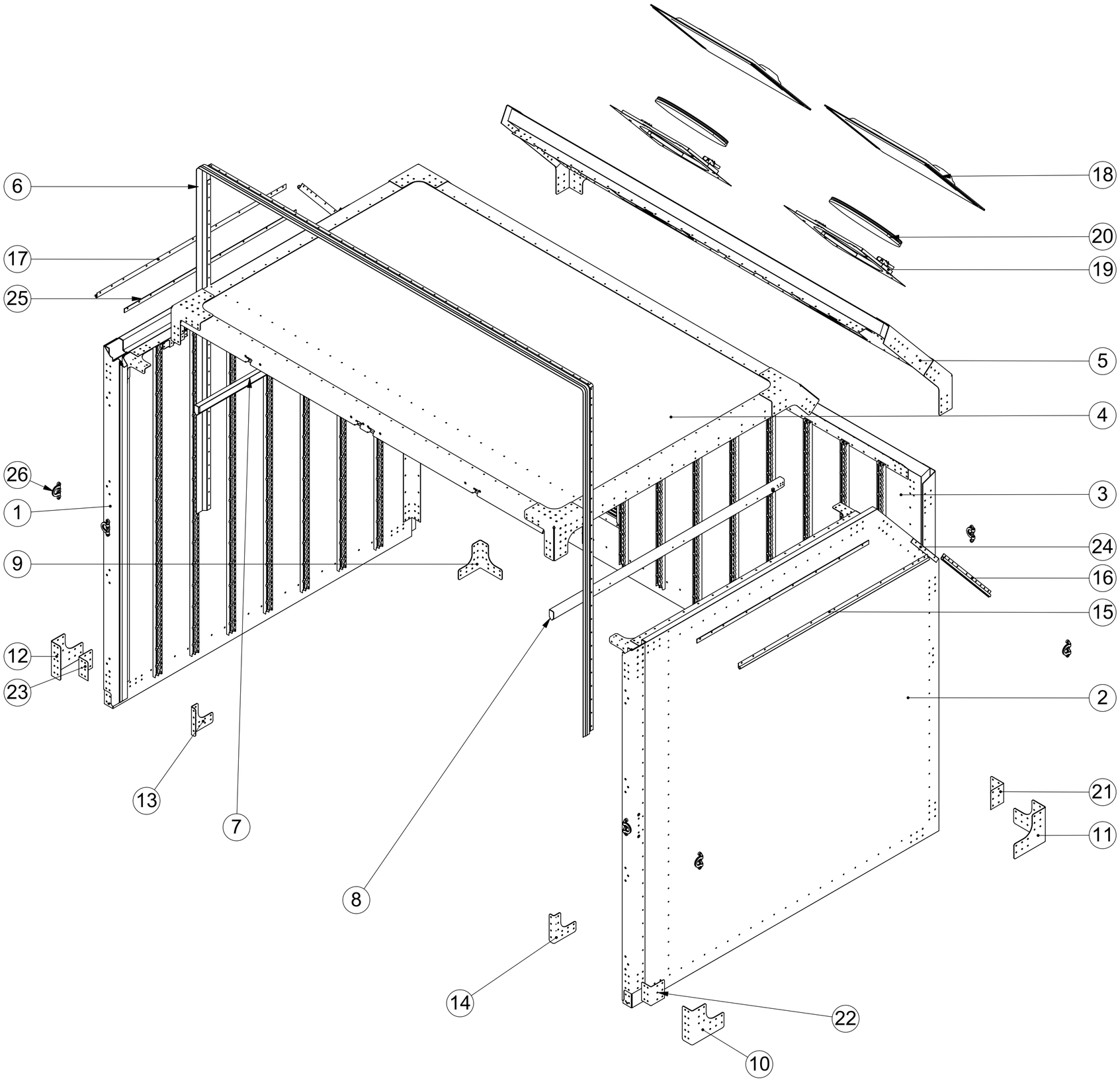
Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
35	4	T-nut	13	M6	10	DIN508-8-M6-NI	AISI 316Ti (1.4571)	Elesa+Ganter
34	12	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
33	24	Torx Socket Cap Screw	30	M6		BO-14579T-06030-A2	AISI 304	ISO 14579 torx
32	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
31	4	Torx Socket Button Screw	10	M6		BO-7380T-06010-A2	AISI 304	ISO7380 torx
30	24	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
29	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
26	8	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
25	2	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	
24	2	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	
23	1	Fill plate corner gusset	155,2	112	2	2000-05-1417	Alu. 5754-H22	Bend with V16
22	1	Fill plate corner gusset	155,2	112	2	2000-05-1416	Alu. 5754-H22	Bend with V16
21	2	Fill plate corner gusset	179,6	112	1	2000-05-1415	Alu. 5754-H22	Bend with V16
20	2	Plug				2000-05-1465	Assembly	
19	2	Hose lock system Color: FS 33446				WO-041636	Alu. 6060-T66	Dantherm: 041636
18	2	Hose lock cover				2000-05-1507	Assembly	
17	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
16	2	Rope profile	505			2000-05-1539	Alu. 6060-T66	
15	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
14	1	Gusset	178,8	165	3	2000-05-1279	Alu. 5754-H22	Bend with V30
13	1	Gusset	175,8	165	3	2000-05-1280	Alu. 5754-H22	Bend with V30
12	1	Front Corner gusset	281,8	203	3	2000-05-0496	Alu. 5754-H22	Bend with V30
11	2	Corner gusset	433,8	203	3	2000-05-0480	Alu. 5754-H22	Bend with V30
10	1	Corner gusset	281,8	203	3	2000-05-0491	Alu. 5754-H22	Bend with V30
9	2	Gusset	299,8	165	3	2000-05-0386	Alu. 5754-H22	Bend with V30
8	1	Roller track right assy				2000-07-2975	Assembly	
7	1	Roller track left assy				2000-07-2750	Assembly	
6	1	Cover connection assy				2000-05-2107	Assembly	
5	1	DBJ panel slanted				2000-05-0357	Assembly	
4	1	DBJ panel top				2000-07-3665	Assembly	
3	1	DBJ panel rear				2000-07-2685	Assembly	
2	1	DBJ panel right				2000-07-2972	Assembly	
1	1	DBJ panel left				2000-07-2647	Assembly	

Scale:	1:14	Date:	
Drawn:	MBMH	25-05-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	380.02 kg		

Drawing no. 2000-07-2646
Sheet : 2 of 15

Issue: A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: Hull DBJ

Rivets according to VRR-SP2201

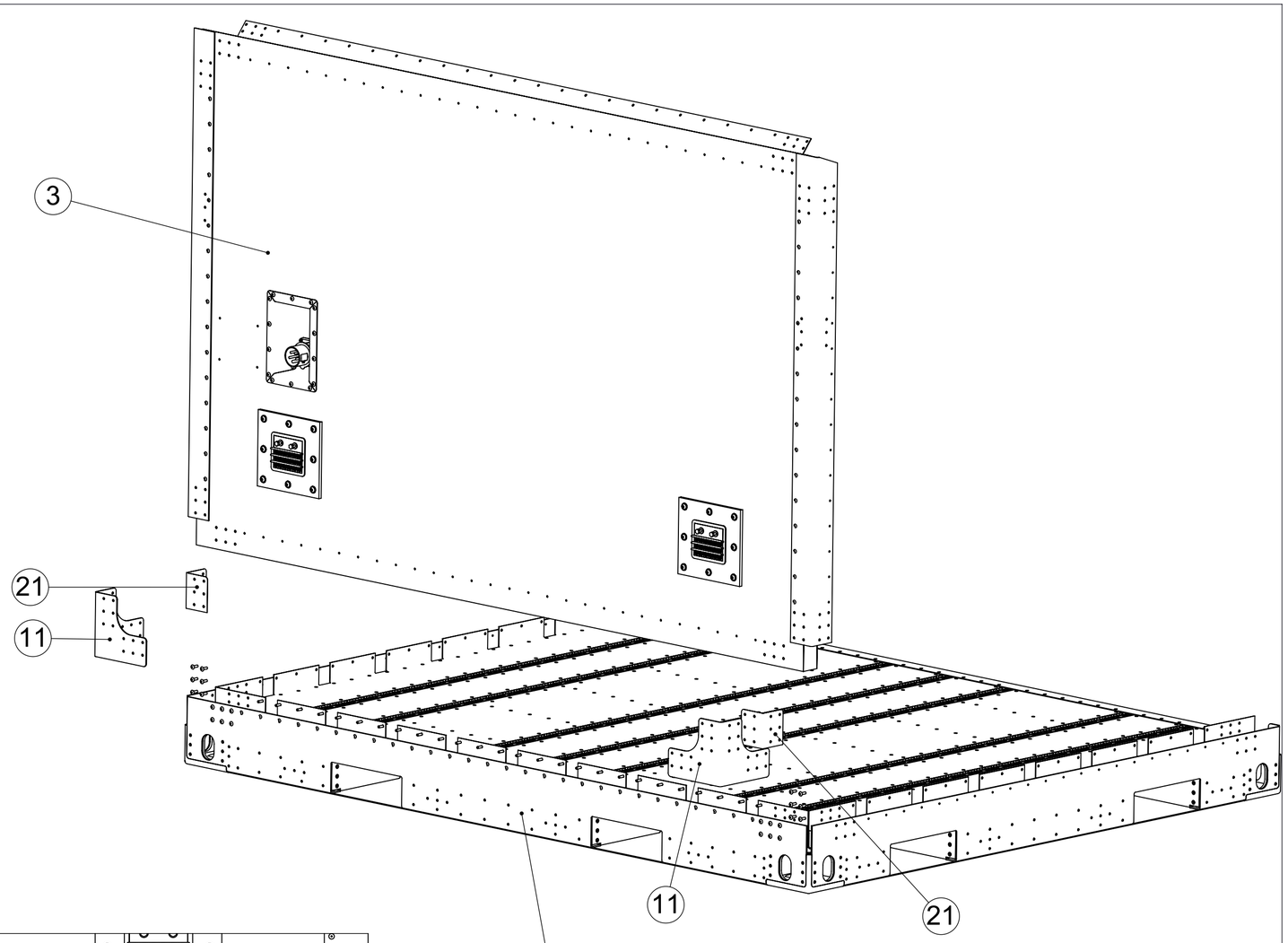
Iss.	Changes	Date	Name

Projection

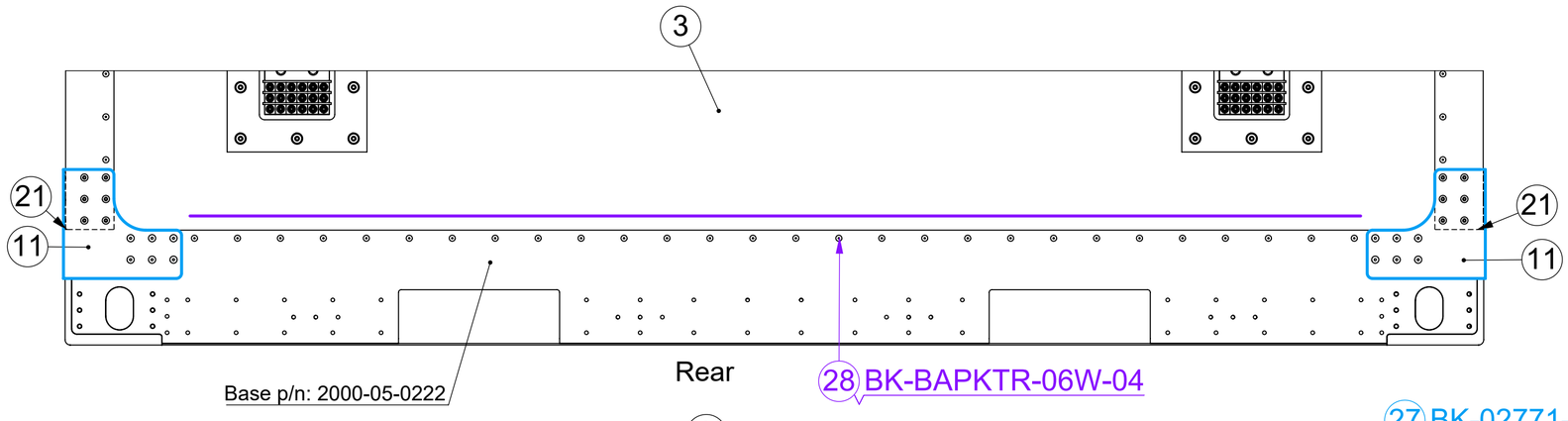
Size A2

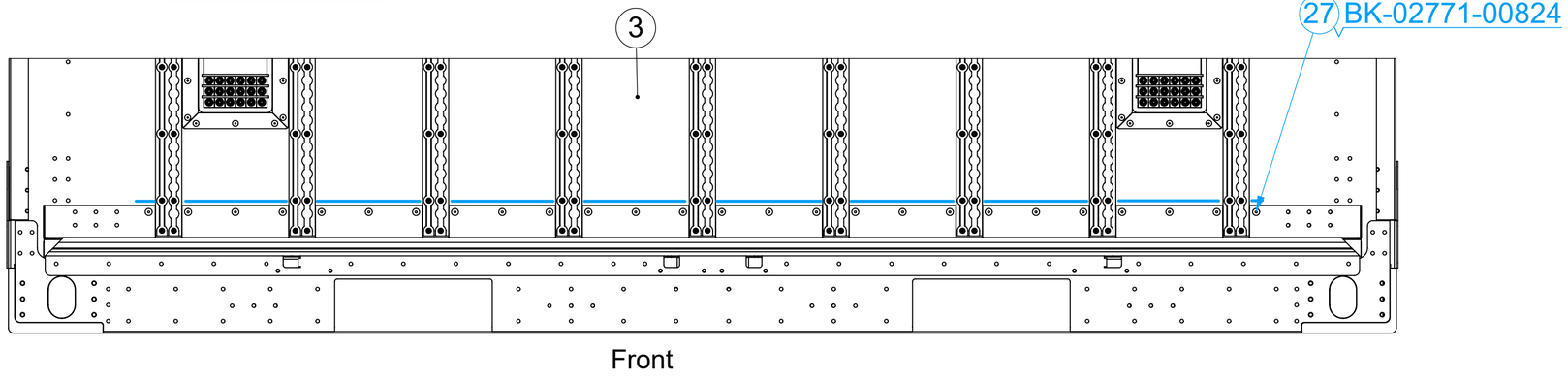
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 1



Place INNO SEAL between panels when assembling
Remove excess sealant
Note that the sealant has a dry time of 2 hours





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
21	2	Fill plate corner gusset	179,6	112	1	2000-05-1415	Alu. 5754-H22	Bend with V16
11	2	Corner gusset	433,8	203	3	2000-05-0480	Alu. 5754-H22	Bend with V30
3	1	DBJ panel rear				2000-07-2685	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023	Sheet : 3 of 15	
Approved: HS	08-08-2023		
Mass: 380.02 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

Title: Hull DBJ

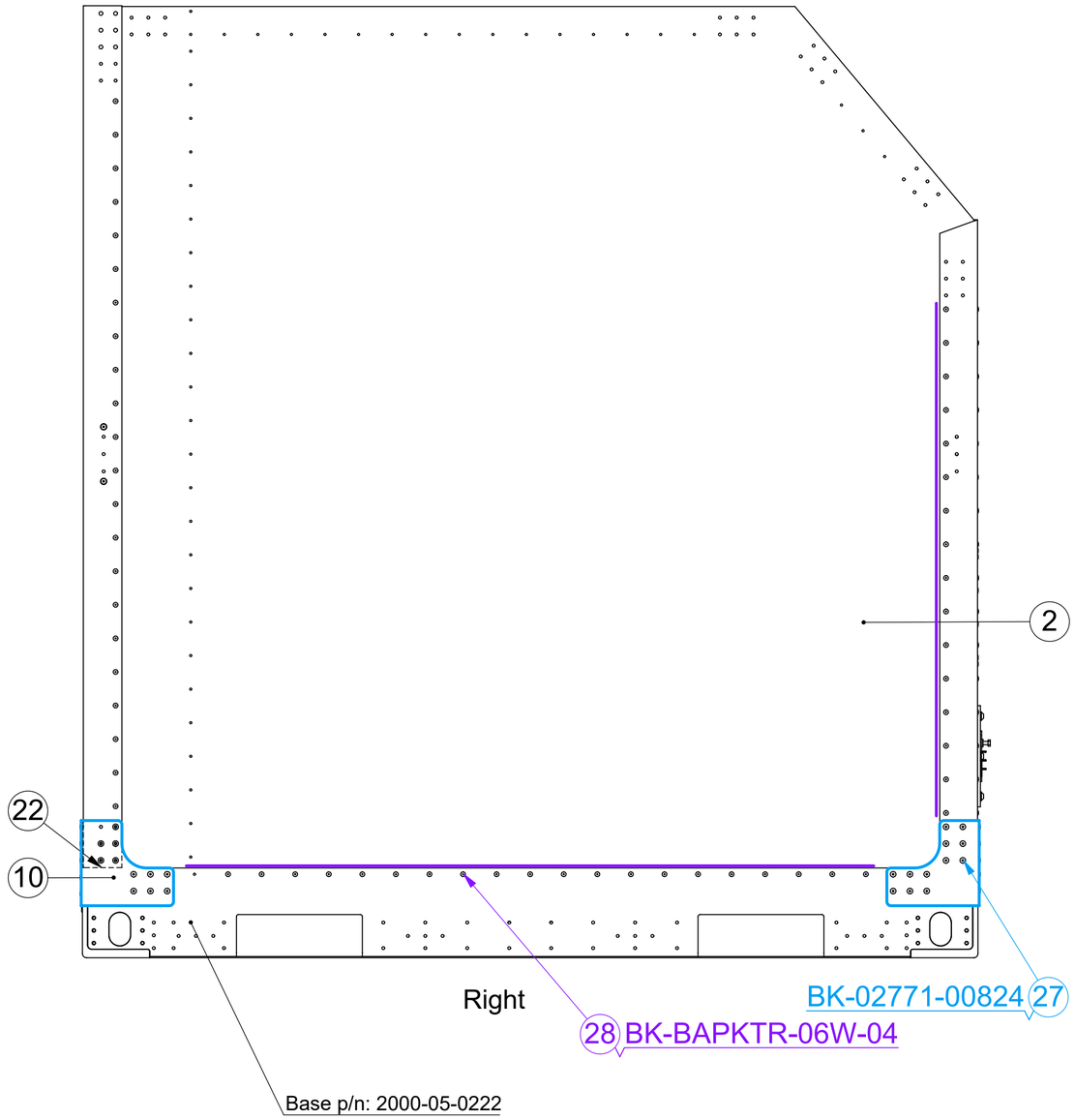
Iss.	Changes	Date	Name

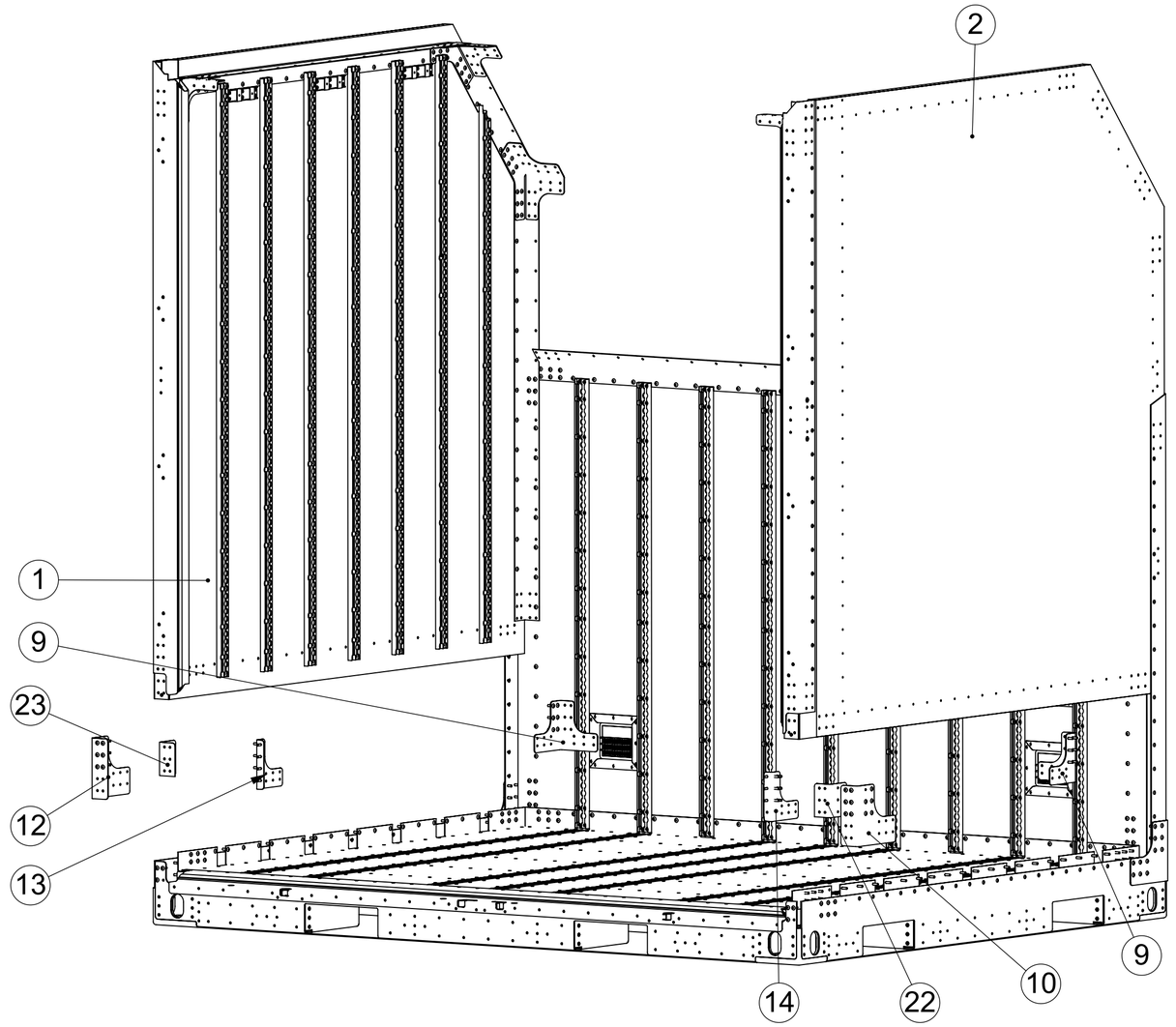
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 2





Place INNO SEAL between panels when assembling
Remove excess sealant
Note that the sealant has a dry time of 2 hours

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
23	1	Fill plate corner gusset	155,2	112	2	2000-05-1417	Alu. 5754-H22	Bend with V16
22	1	Fill plate corner gusset	155,2	112	2	2000-05-1416	Alu. 5754-H22	Bend with V16
14	1	Gusset	178,8	165	3	2000-05-1279	Alu. 5754-H22	Bend with V30
13	1	Gusset	175,8	165	3	2000-05-1280	Alu. 5754-H22	Bend with V30
12	1	Front Corner gusset	281,8	203	3	2000-05-0496	Alu. 5754-H22	Bend with V30
10	1	Corner gusset	281,8	203	3	2000-05-0491	Alu. 5754-H22	Bend with V30
9	2	Gusset	299,8	165	3	2000-05-0386	Alu. 5754-H22	Bend with V30
2	1	DBJ panel right				2000-07-2972	Assembly	
1	1	DBJ panel left				2000-07-2647	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 4 of 15	
Mass: 380.02 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Title: Hull DBJ

Rivets according to VRR-SP2201

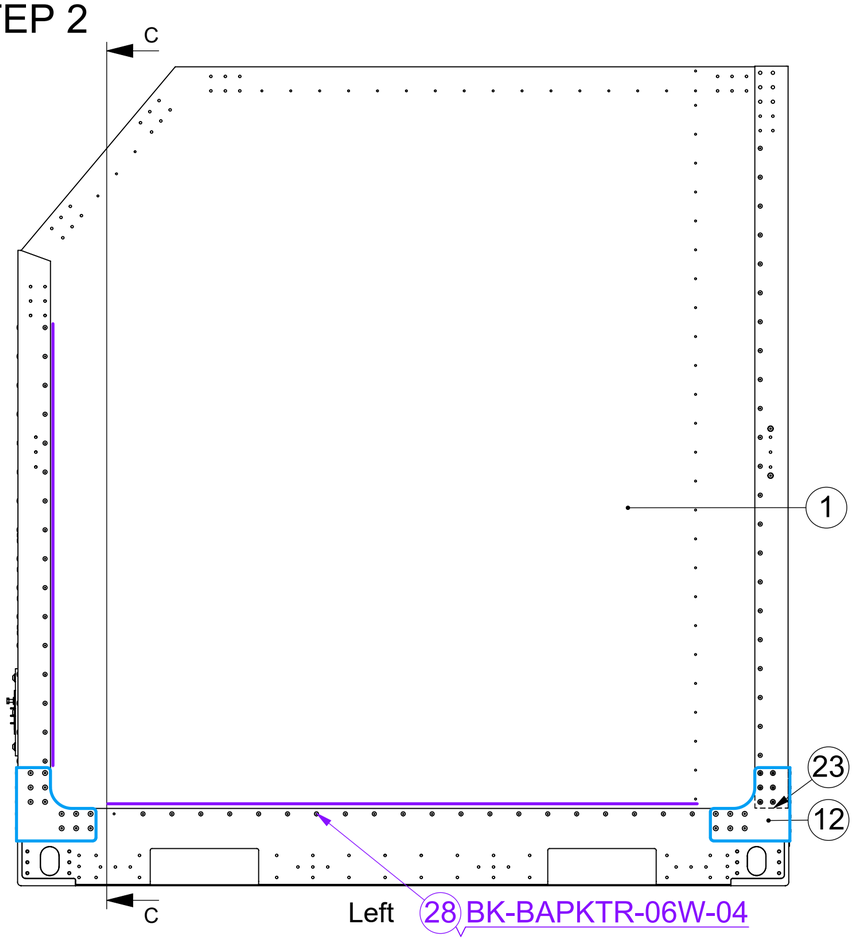
Iss.	Changes	Date	Name

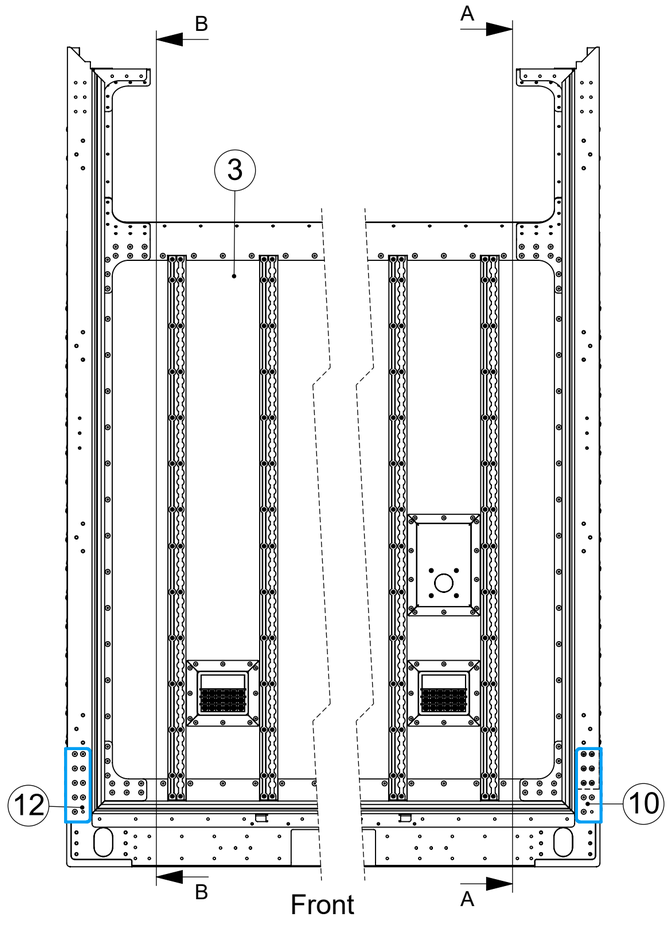
Projection

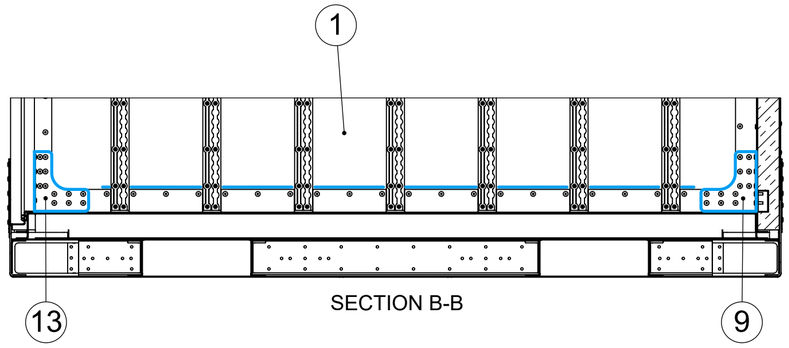
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

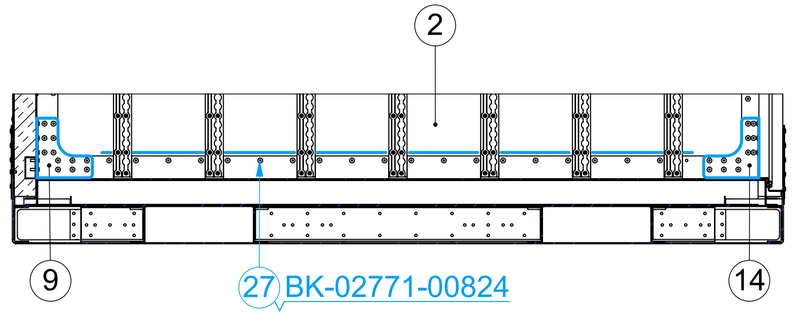
STEP 2



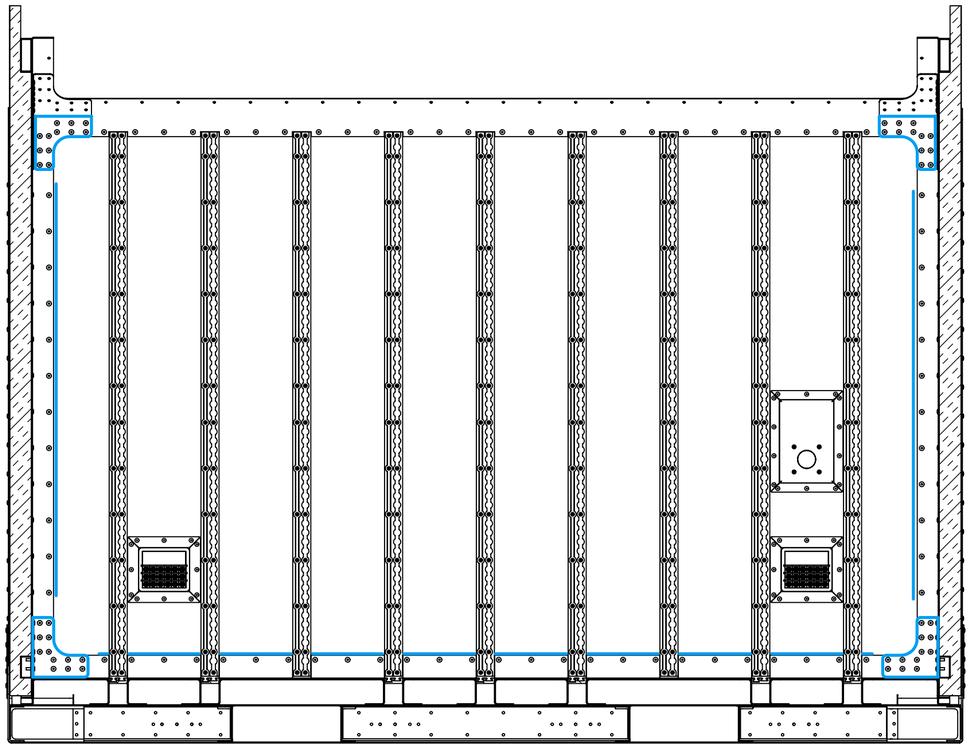




SECTION B-B



SECTION A-A



SECTION C-C

Place INNO SEAL between panels when assembling
Remove excess sealant
Note that the sealant has a dry time of 2 hours

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
14	1	Gusset	178,8	165	3	2000-05-1279	Alu. 5754-H22	Bend with V30
13	1	Gusset	175,8	165	3	2000-05-1280	Alu. 5754-H22	Bend with V30
12	1	Front Corner gusset	281,8	203	3	2000-05-0496	Alu. 5754-H22	Bend with V30
10	1	Corner gusset	281,8	203	3	2000-05-0491	Alu. 5754-H22	Bend with V30
9	2	Gusset	299,8	165	3	2000-05-0386	Alu. 5754-H22	Bend with V30
3	1	DBJ panel rear				2000-07-2685	Assembly	
1	1	DBJ panel left				2000-07-2647	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 5 of 15	
Mass: 380.02 kg		Finish:	
Title: Hull DBJ			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

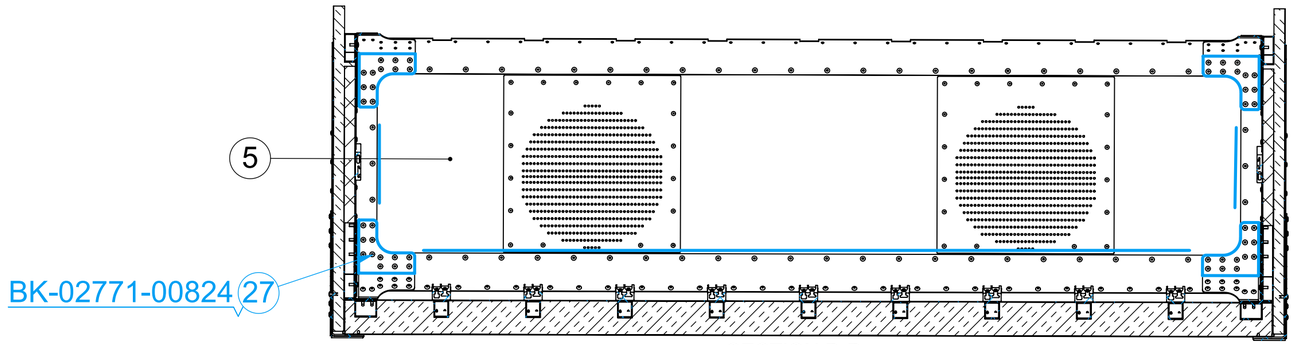
Iss.	Changes	Date	Name

Projection

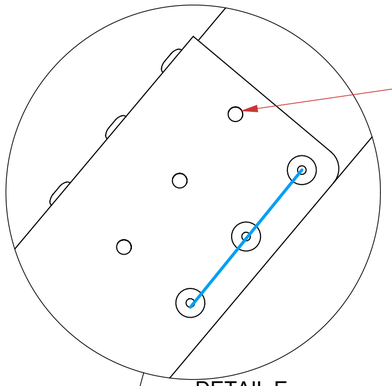
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

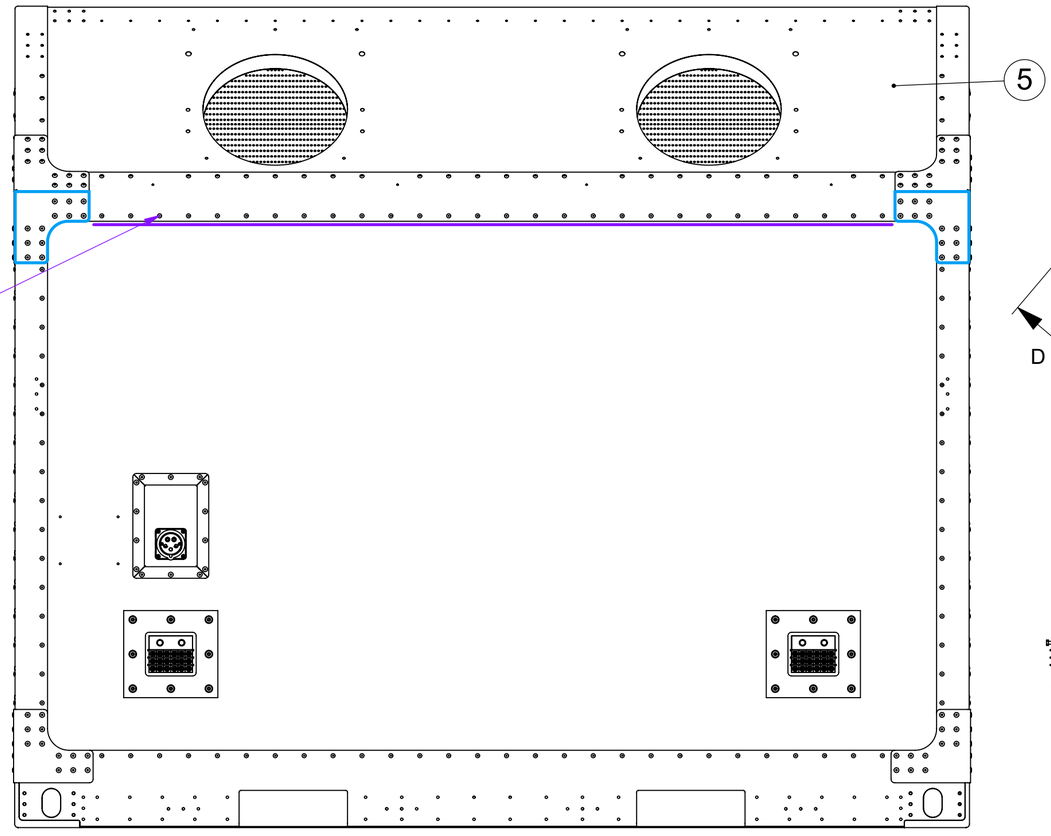
STEP 3



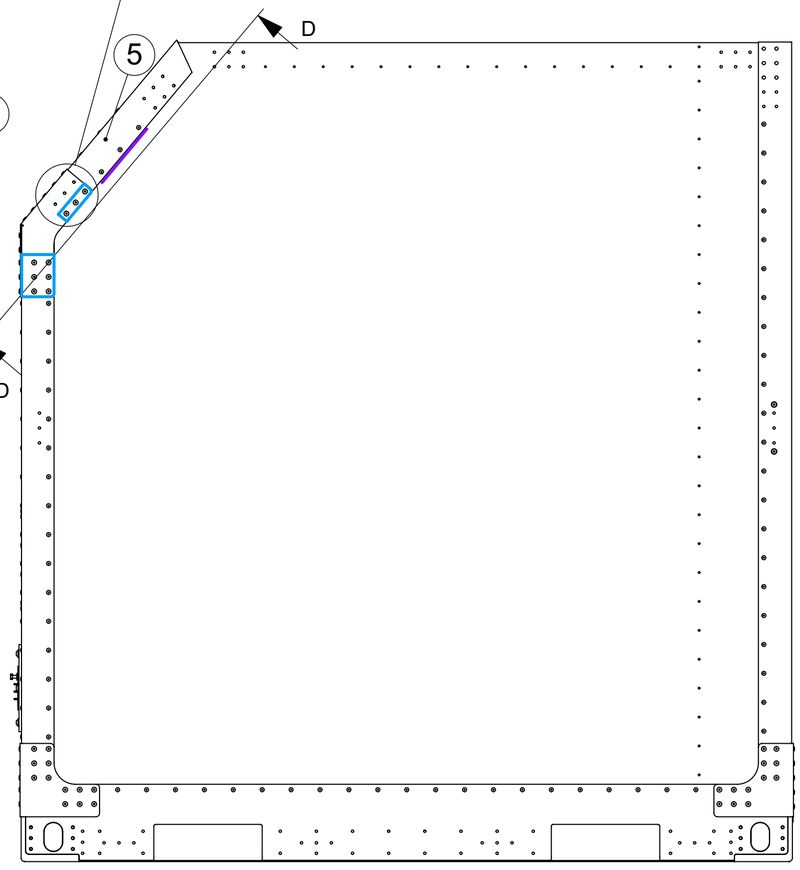
SECTION D-D



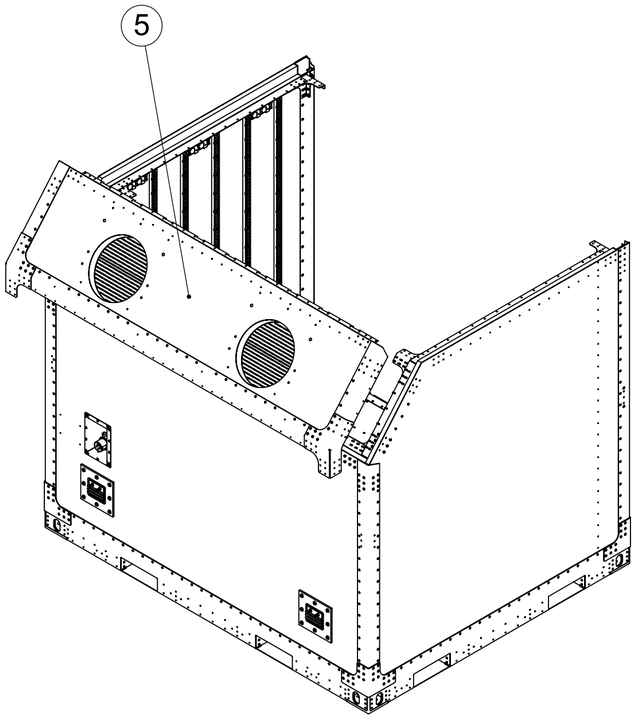
DETAIL E
SCALE 1 : 2



Rear



Left/Right



Place INNO SEAL between panels when assembling
Remove excess sealant
Note that the sealant has a dry time of 2 hours

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
5	1	DBJ panel slanted				2000-05-0357	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 6 of 15	
Mass: 380.02 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Hull DBJ

Rivets according to VRR-SP2201

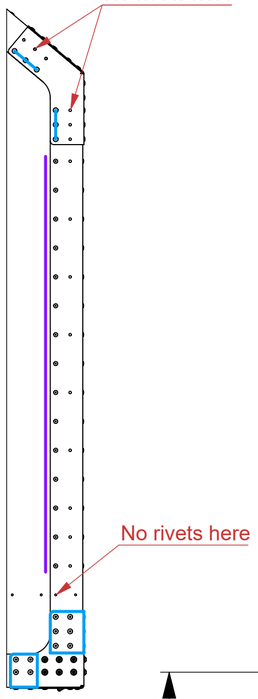
Iss.	Changes	Date	Name

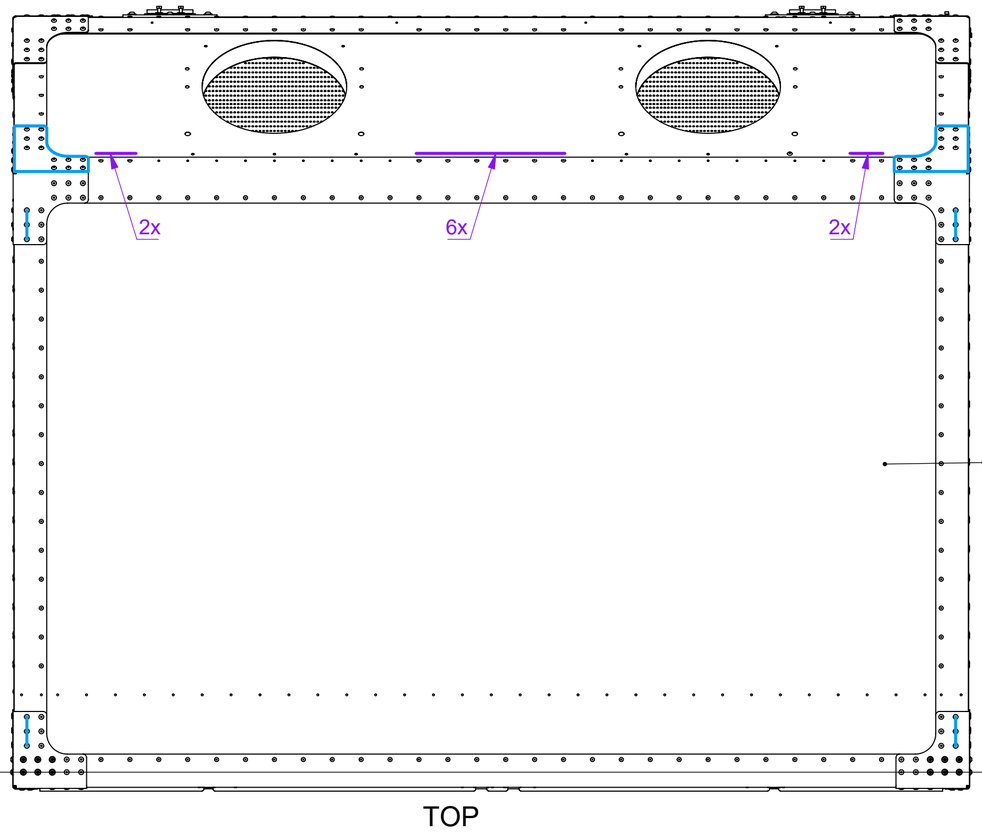
Projection

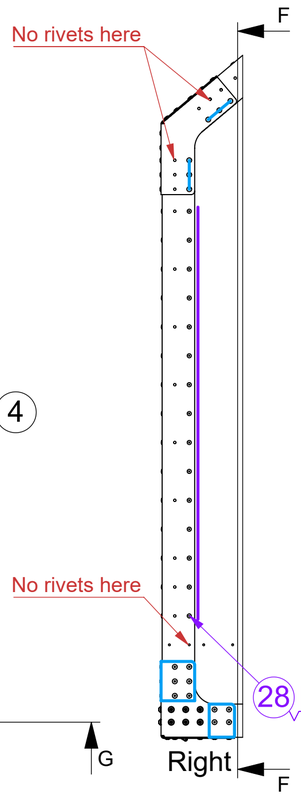
Size A2

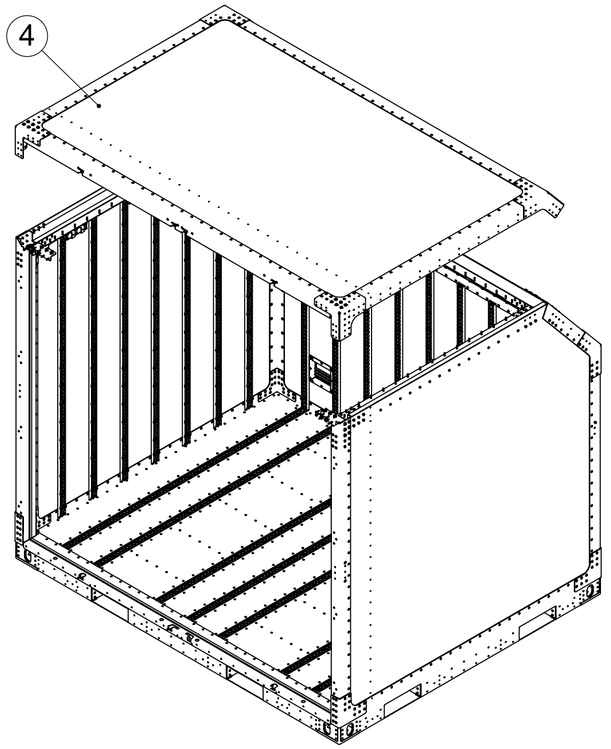
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

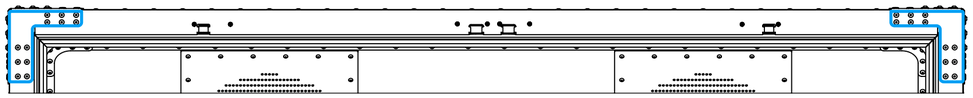
STEP 4



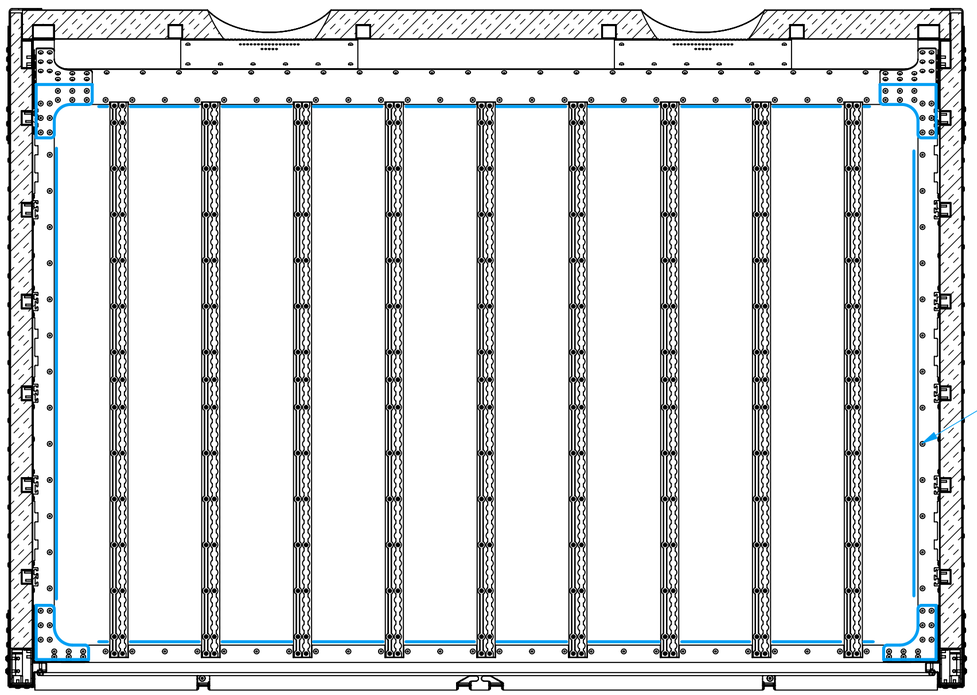




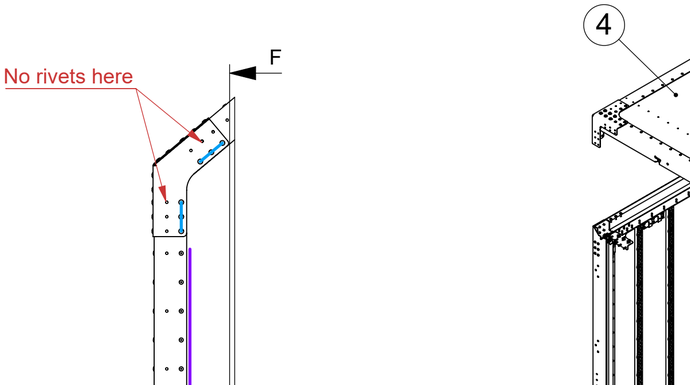




Front



SECTION F-F



SECTION G-G
SCALE 1 : 3

Place INNO SEAL between panels when assembling
Remove excess sealant
Note that the sealant has a dry time of 2 hours

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
32	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
29	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
4	1	DBJ panel top				2000-07-3665	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2646	Issue A	Tolerances (u.n.o.)	
Drawn: MBMH	25-05-2023			< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / > 2000	
Checked: PvT	31-07-2023			±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2	
Approved: HS	08-08-2023	Sheet : 7 of 15		Raw extrusion in accordance with OEM drawing and EN755-9	
Mass: 380.02 kg		Finish:		Dimensions in mm (u.n.o.)	
Title: Hull DBJ				Rivets according to VRR-SP2201	

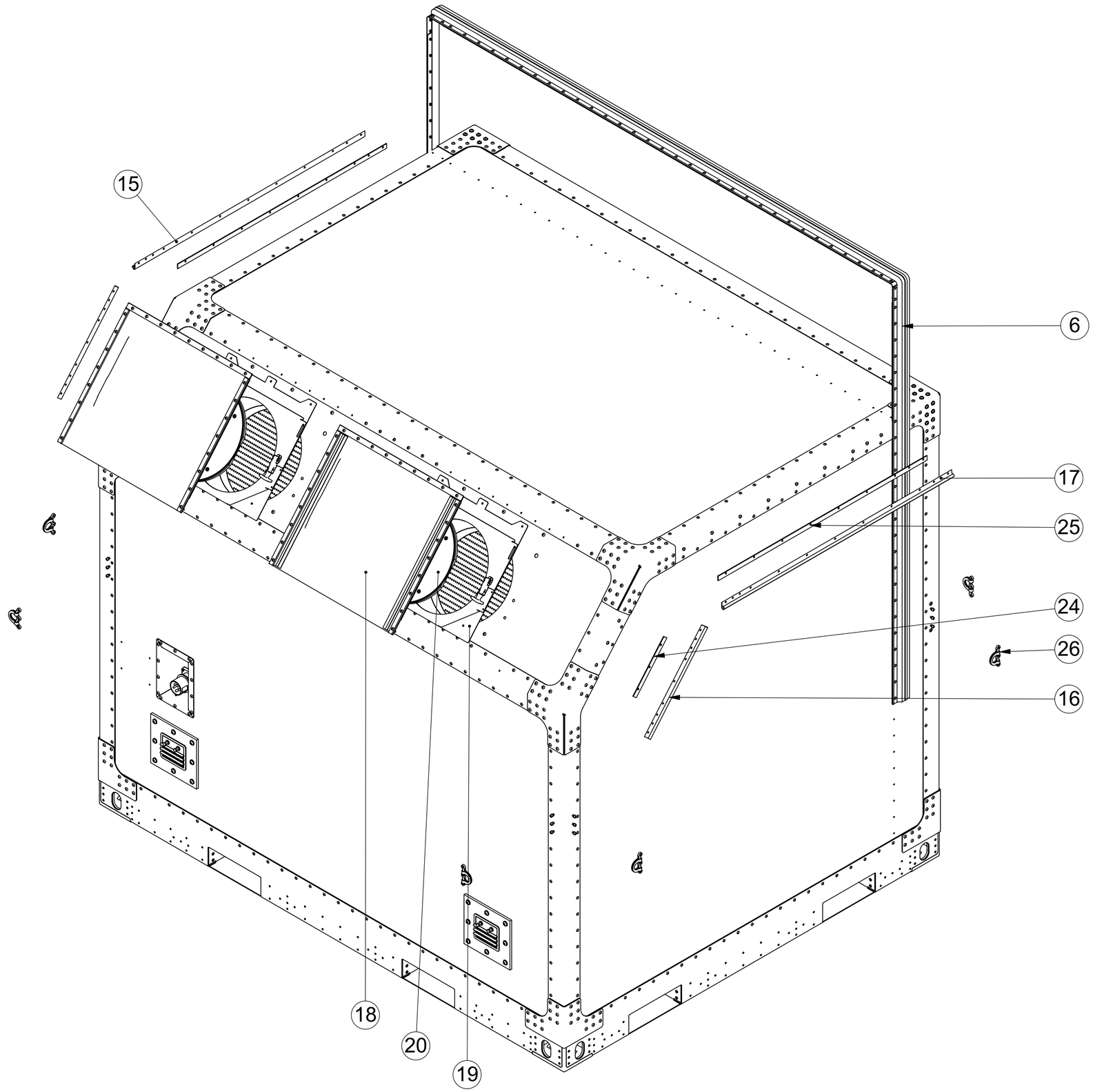
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 5



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
33	24	Torx Socket Cap Screw	30	M6		BO-14579T-06030-A2	AISI 304	ISO 14579 torx
32	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
30	24	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
29	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
26	8	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
25	2	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	
24	2	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	
20	2	Plug				2000-05-1465	Assembly	
19	2	Hose lock system Color: FS 33446				WO-041636	Alu. 6060-T66	Dantherm: 041636
18	2	Hose lock cover				2000-05-1507	Assembly	
17	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
16	2	Rope profile	505			2000-05-1539	Alu. 6060-T66	
15	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
6	1	Cover connection assy				2000-05-2107	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 8 of 15	
Mass: 380.02 kg		Finish:	
Title: Hull DBJ			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

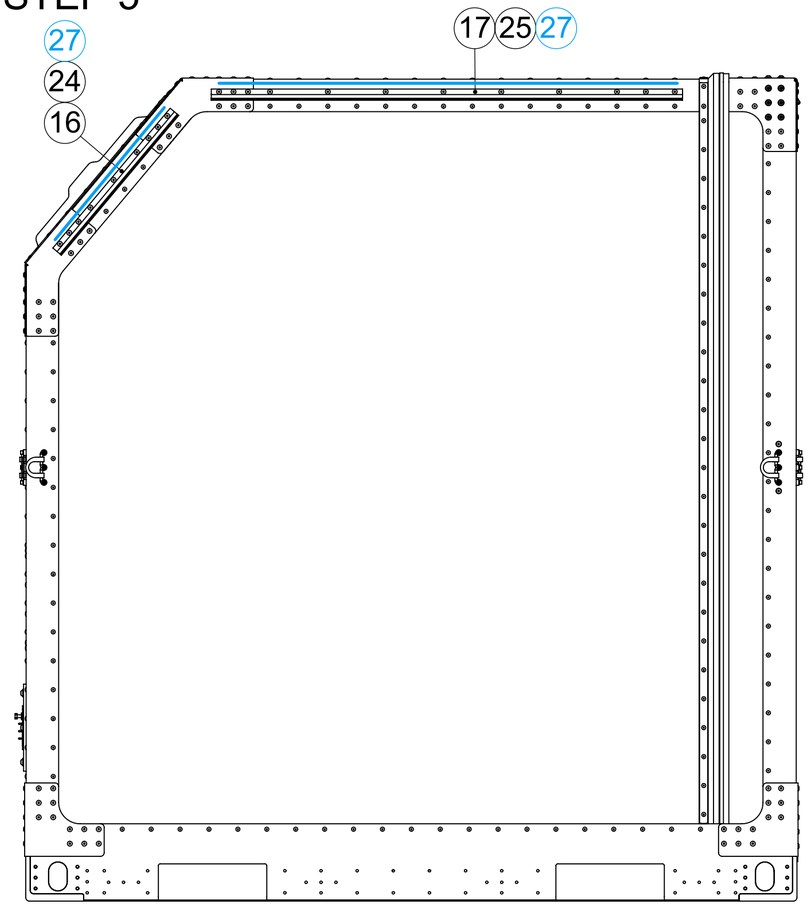
Iss.	Changes	Date	Name

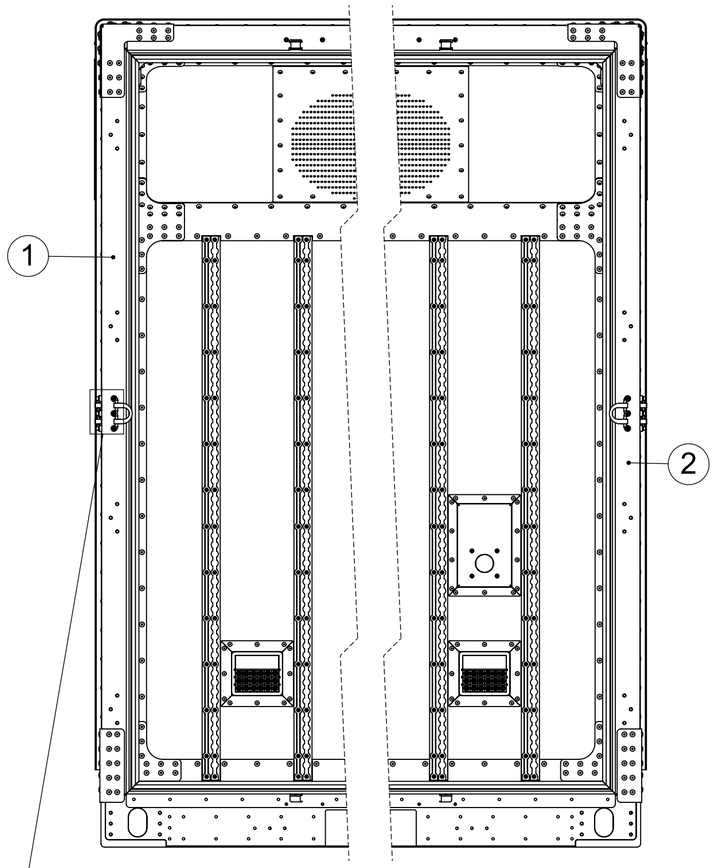
Projection

Size A2

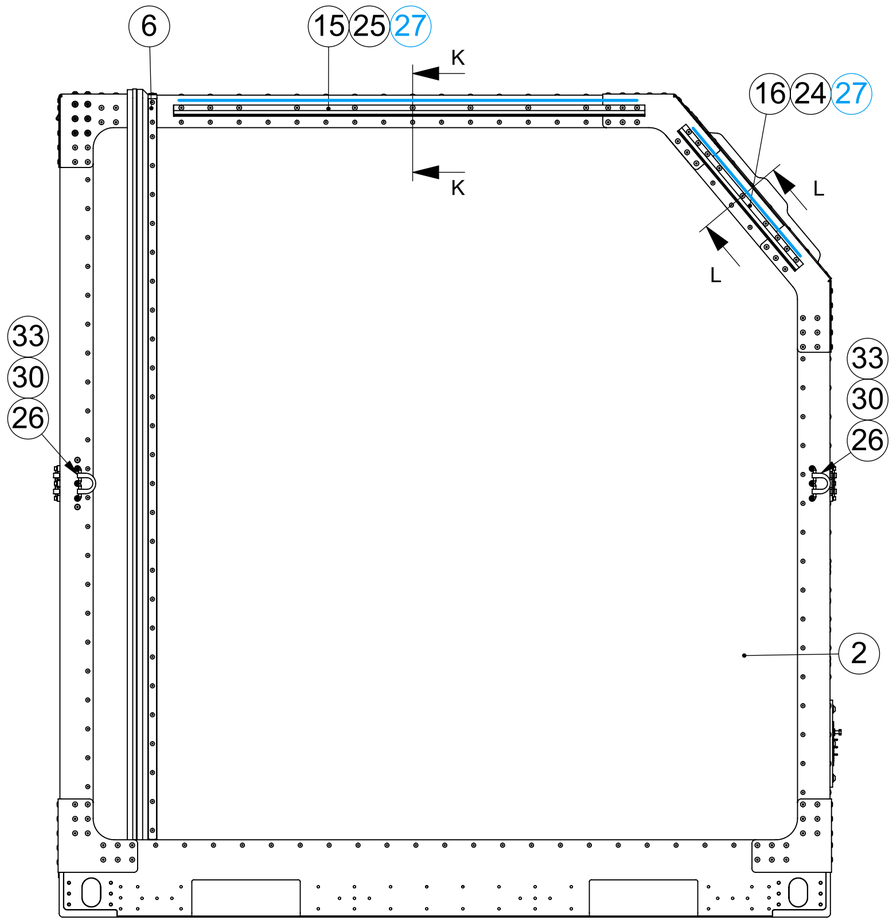
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 5

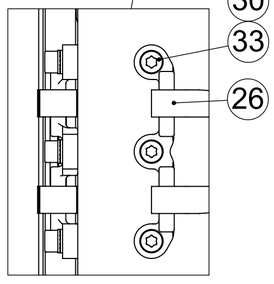




Front

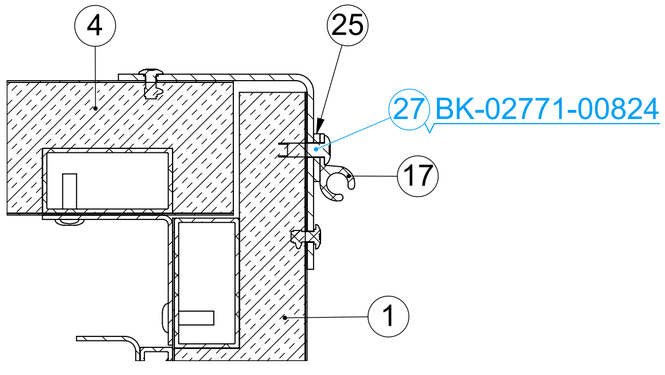


Right

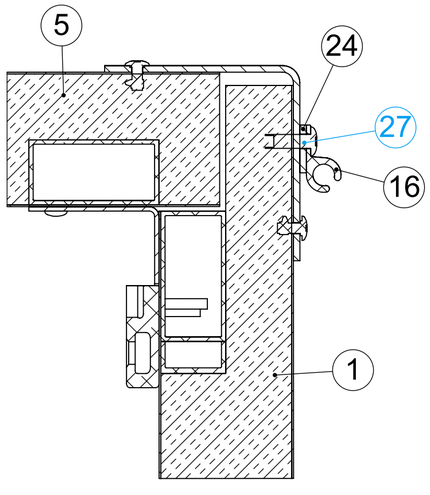


Torqueload M6: 8,1 Nm

DETAIL H
SCALE 1 : 2



SECTION K-K
SCALE 1 : 2



SECTION L-L
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
33	24	Torx Socket Cap Screw	30	M6		BO-14579T-06030-A2	AISI 304	ISO 14579 torx
32	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
30	24	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
29	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
28	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
26	8	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
25	2	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	
24	2	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	
20	2	Plug				2000-05-1465	Assembly	
19	2	Hose lock system Color: FS 33446				WO-041636	Alu. 6060-T66	Dantherm: 041636
18	2	Hose lock cover				2000-05-1507	Assembly	
17	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
16	2	Rope profile	505			2000-05-1539	Alu. 6060-T66	
15	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
6	1	Cover connection assy				2000-05-2107	Assembly	
4	1	DBJ panel top				2000-07-3665	Assembly	
2	1	DBJ panel right				2000-07-2972	Assembly	
1	1	DBJ panel left				2000-07-2647	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-2646	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023	Sheet : 9 of 15	
Approved: HS	08-08-2023		
Mass: 380.02 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Hull DBJ**

Rivets according to VRR-SP2201

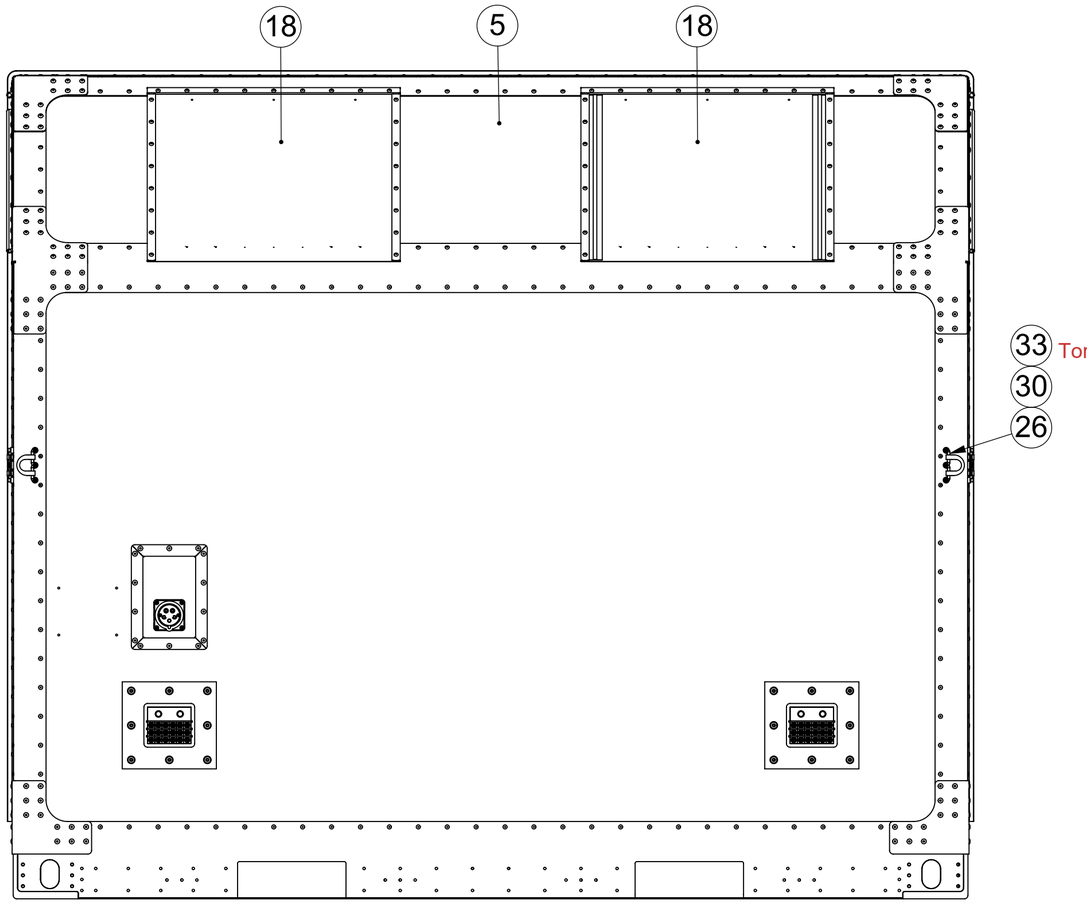
Iss.	Changes	Date	Name

Projection

Size A2

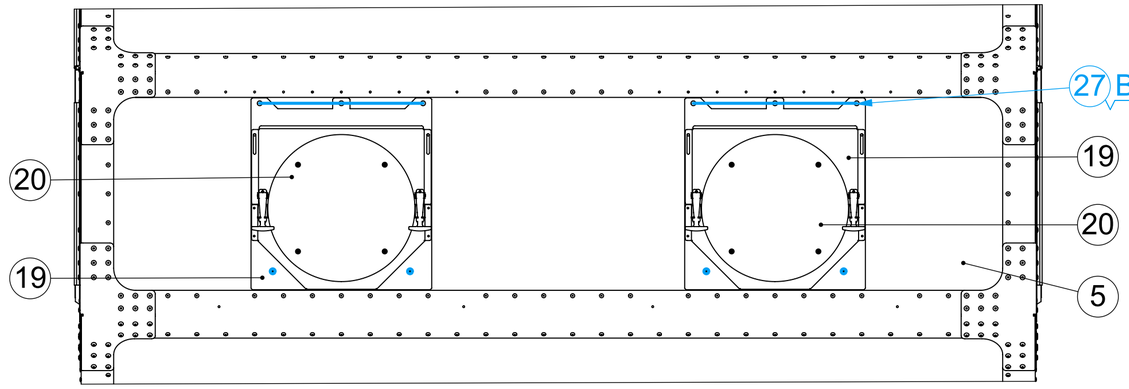
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 5

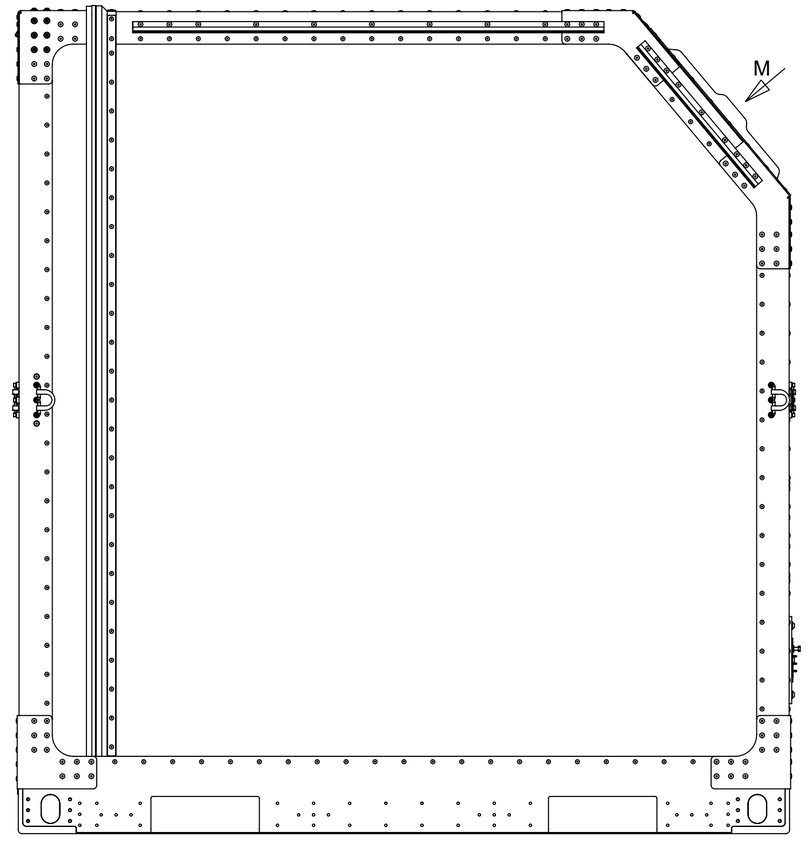


Rear

Torqueload M6: 8,1 Nm



VIEW M
40,0°
Hose lock cover (18) is hidden



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
33	24	Torx Socket Cap Screw	30	M6		BO-14579T-06030-A2	AISI 304	ISO 14579 torx
30	24	Nord-Lock Washer M6	ø10,8	M6	2,2	BO-NORDLCK-06-SMO	245 SMO	SMO
27	660	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
26	8	Tie-Down Ring				ZN_VRR-DFSTN	S355J2H	Zinc plated
25	2	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	
24	2	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	
20	2	Plug				2000-05-1465	Assembly	
19	2	Hose lock system Color: FS 33446				WO-041636	Alu. 6060-T66	Dantherm: 041636
18	2	Hose lock cover				2000-05-1507	Assembly	
17	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
16	2	Rope profile	505			2000-05-1539	Alu. 6060-T66	
15	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
6	1	Cover connection assy				2000-05-2107	Assembly	

Scale:	1:12	Date:	
Drawn:	MBMH	25-05-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	380.02 kg		

Drawing no. 2000-07-2646
Sheet : 10 of 15

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: Hull DBJ

Rivets according to VRR-SP2201

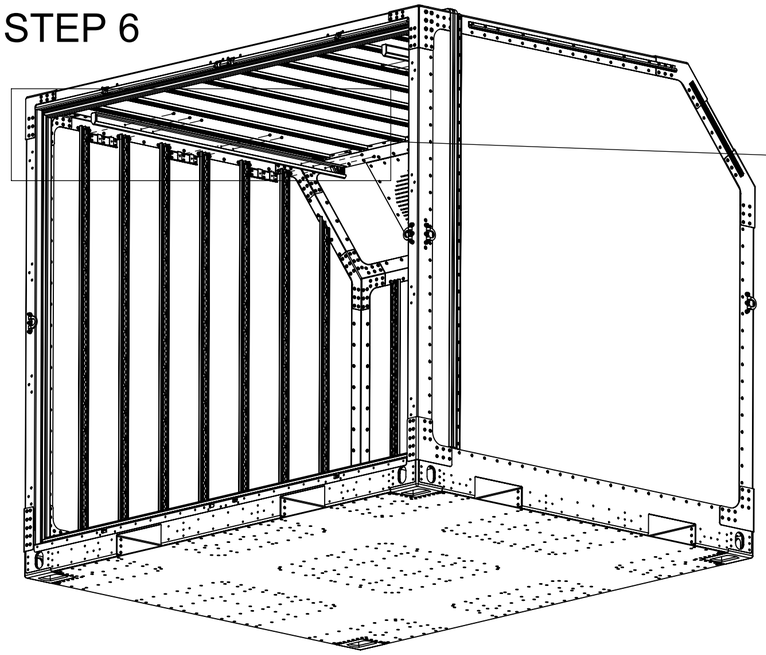
Iss.	Changes	Date	Name

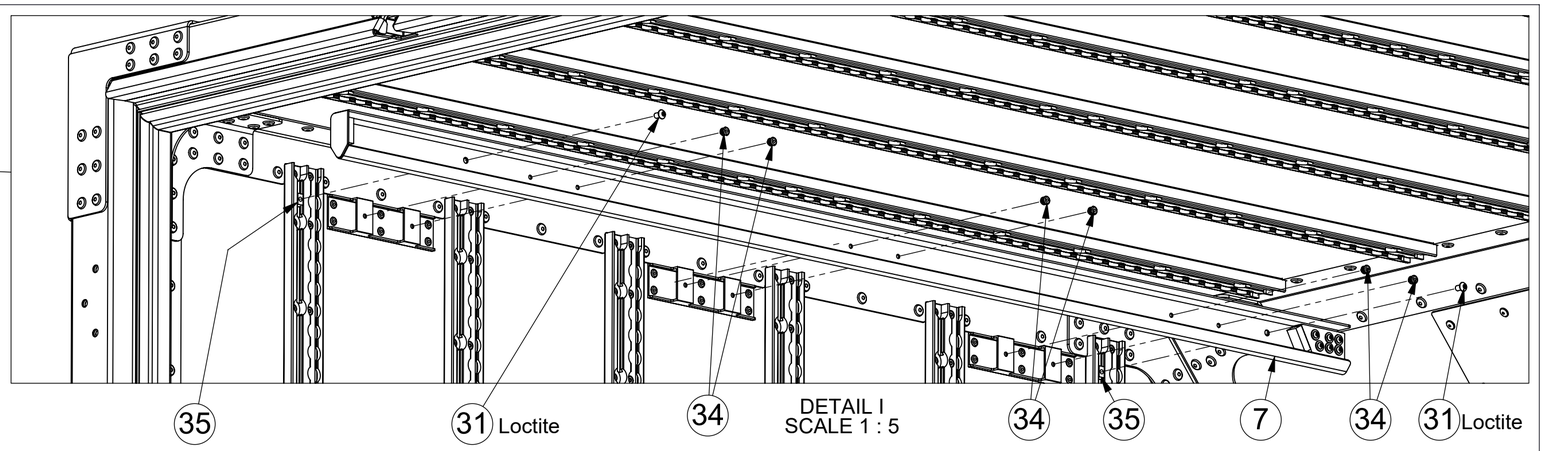
Projection

Size A2

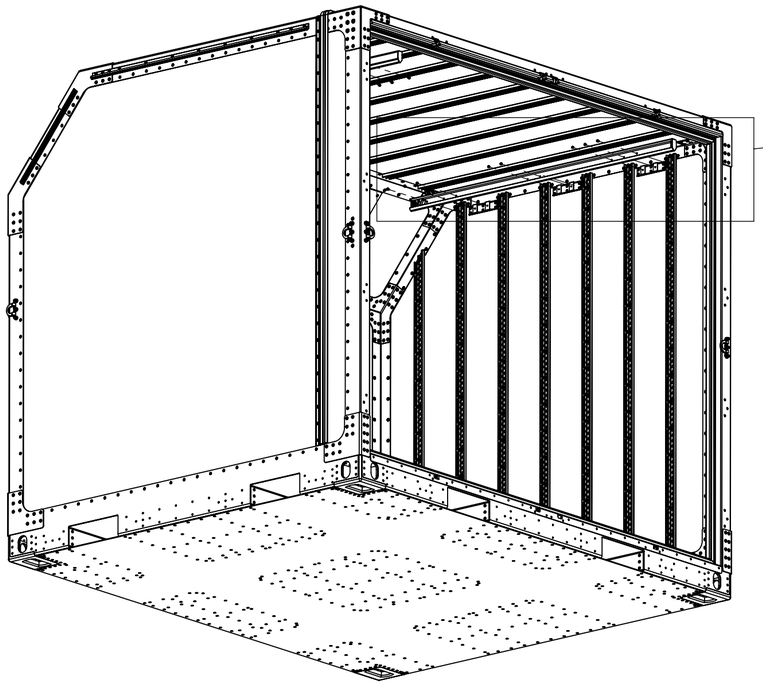
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

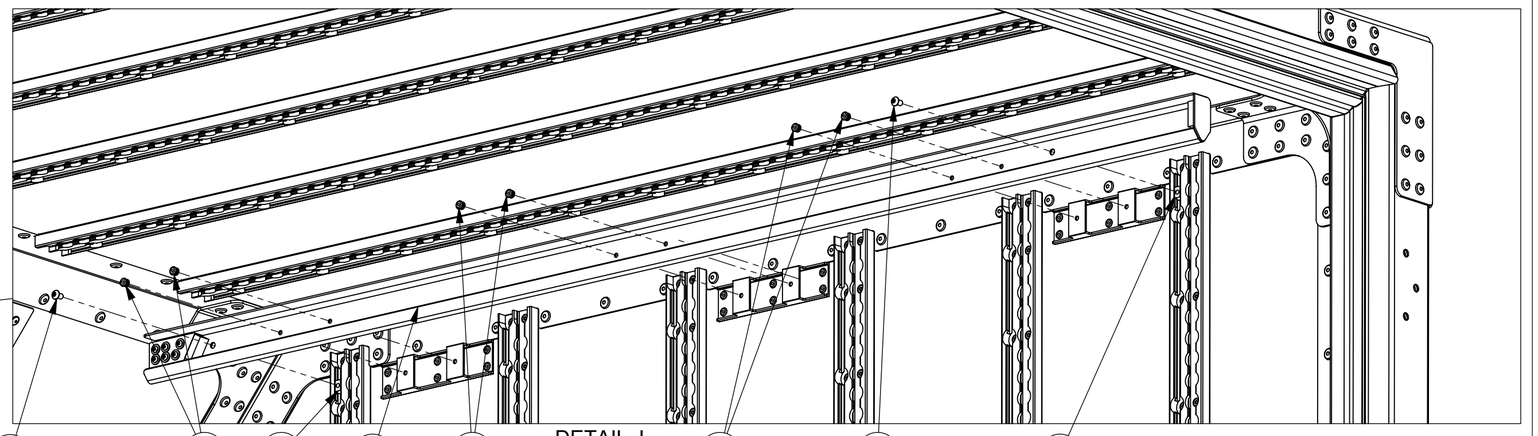
STEP 6





DETAIL I
SCALE 1 : 5





DETAIL J
SCALE 1 : 5

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
35	4	T-nut	13	M6	10	DIN508-8-M6-NI	AISI 316Ti (1.4571)	Elesa+Ganter
34	12	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
31	4	Torx Socket Button Screw	10	M6		BO-7380T-06010-A2	AISI 304	ISO7380 torx
8	1	Roller track right assy				2000-07-2975	Assembly	
7	1	Roller track left assy				2000-07-2750	Assembly	

Scale: 1:20	Date:	Drawing no.	Issue	Tolerances (u.n.o.)	
Drawn: MBMH	25-05-2023	2000-07-2646	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2	
Checked: PvT	31-07-2023			Raw extrusion in accordance with OEM drawing and EN755-9	
Approved: HS	08-08-2023	Sheet : 11 of 15			
Mass: 380.02 kg		Finish:		Dimensions in mm (u.n.o.)	

Title: **Hull DBJ**

Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

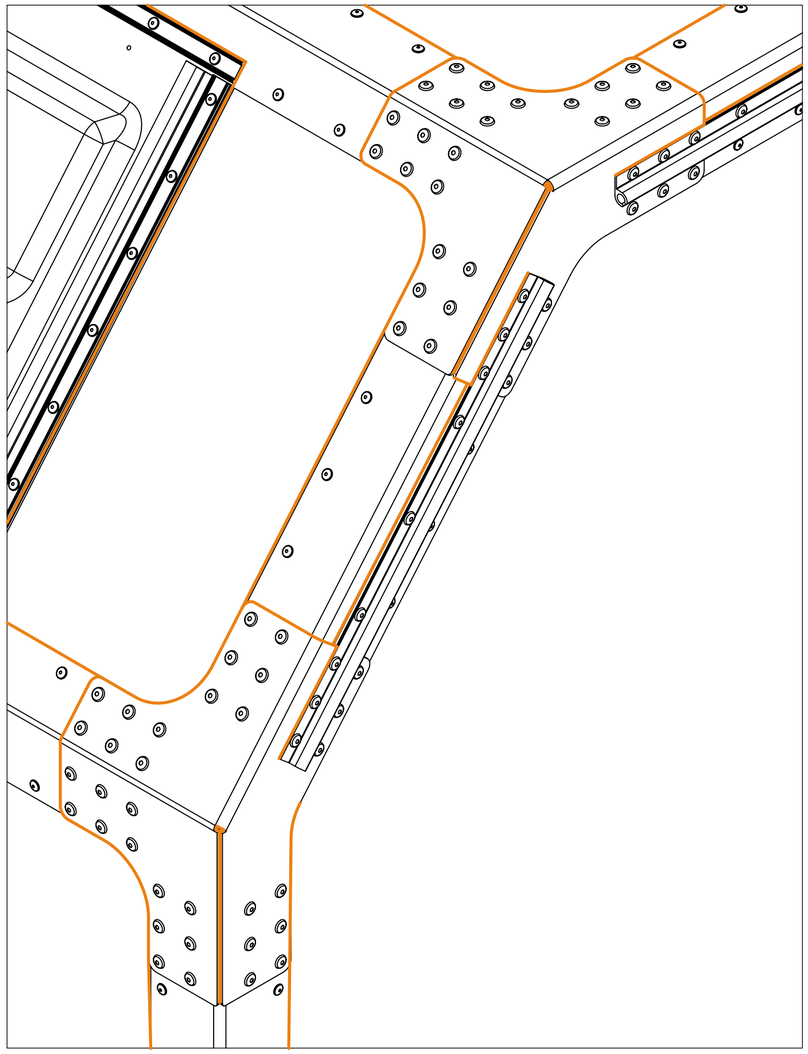
Projection

Size A2

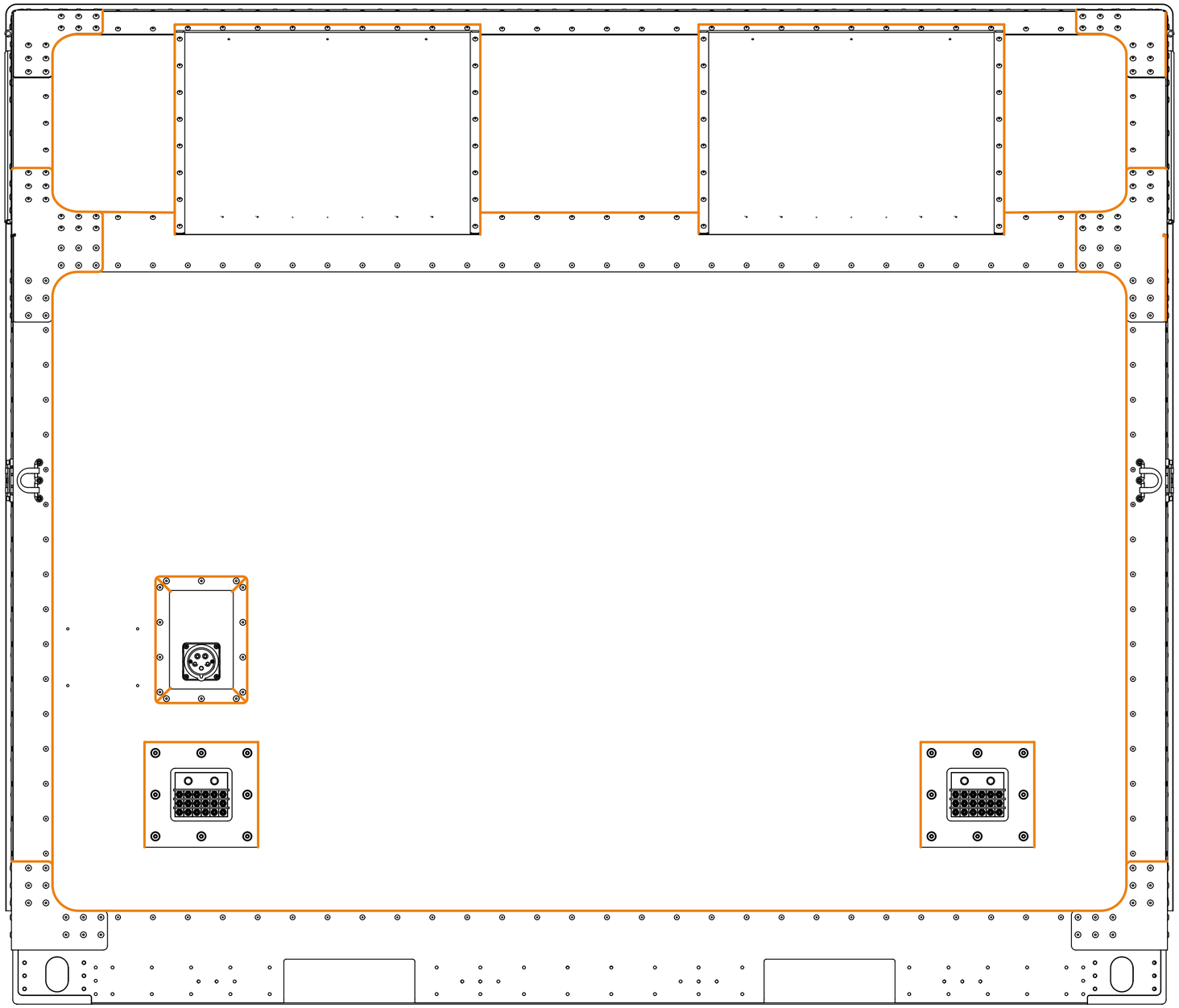
VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Kit instructions



Corner detail
rear side



Rear side

Scale: 1:8	Date:	Drawing no.	Issue
Drawn: MBMH	25-05-2023	2000-07-2646	A
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 12 of 15	
Mass: 380.02 kg		Finish:	
Title: Hull DBJ			

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

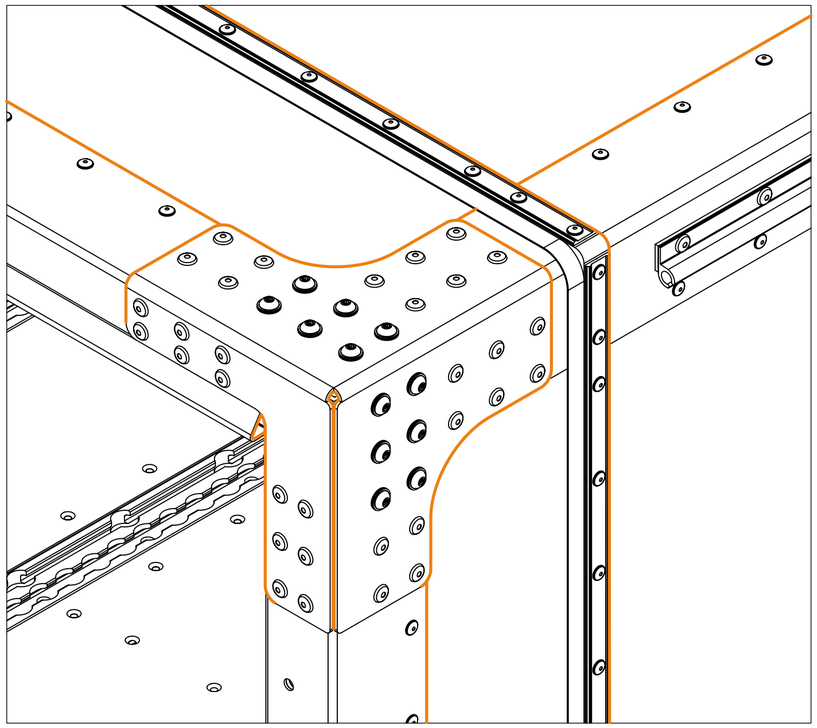
Iss.	Changes	Date	Name

Projection

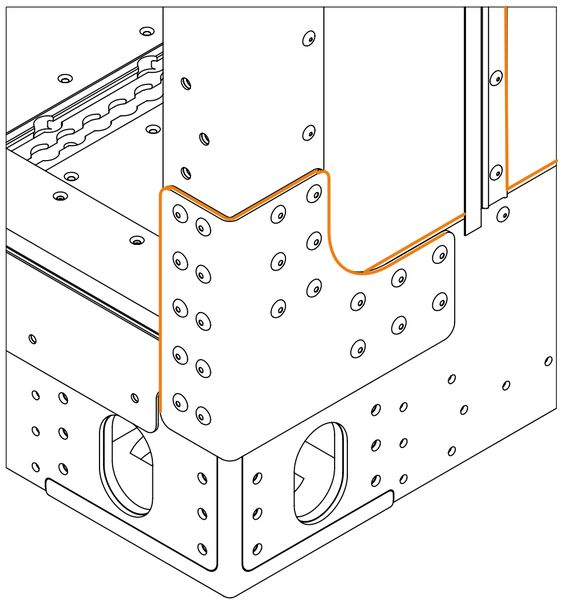
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

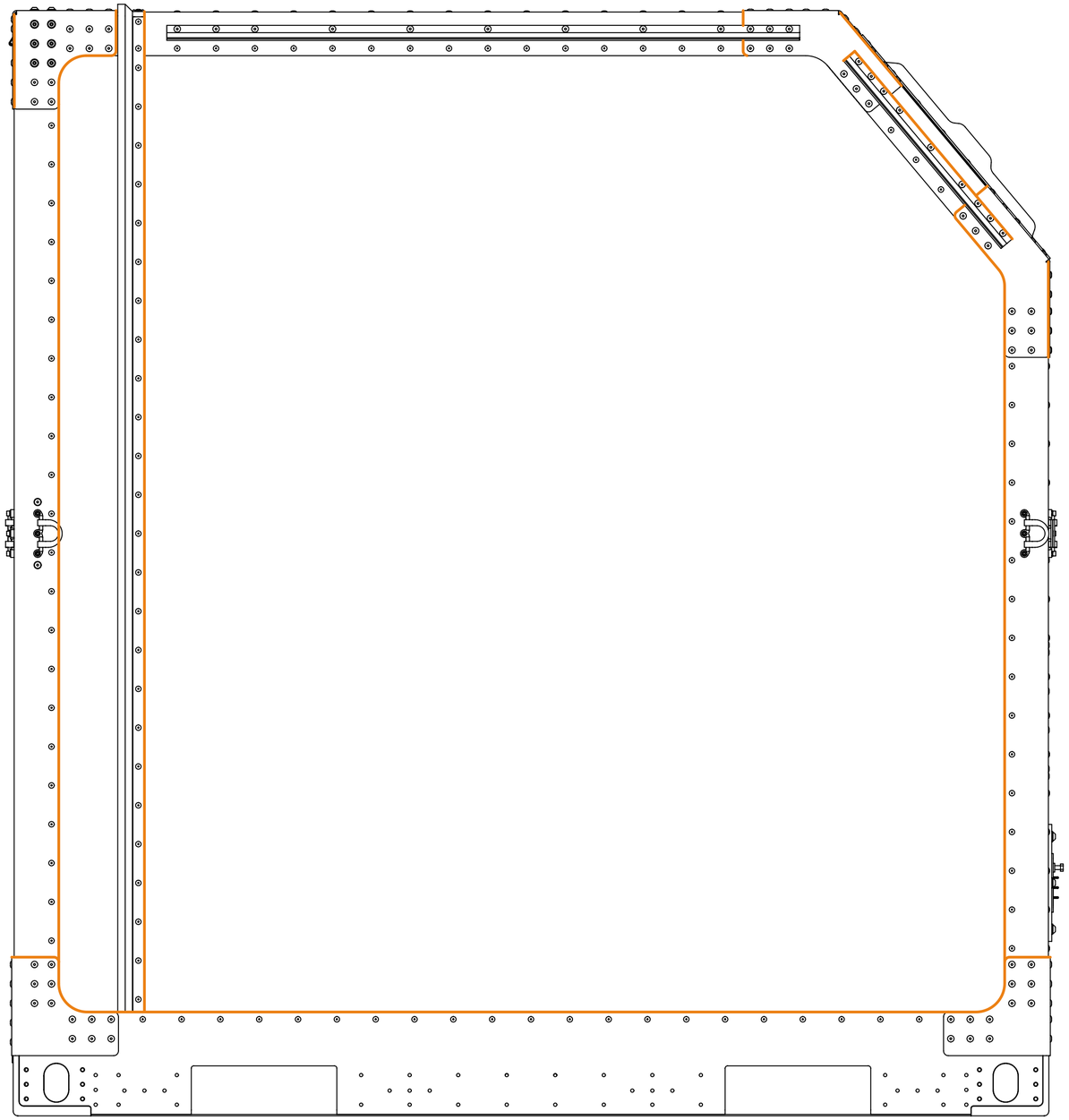
Kit instructions



Corner detail
Front top



Corner detail
Front bottom



Side

Scale: 1:8	Date:	Drawing no.		Issue	Tolerances (u.n.o.)	
Drawn: MBMH	25-05-2023	2000-07-2646		A	< 7 30 120 400 1000 2000	
Checked: PvT	31-07-2023				7 30 120 400 1000 2000 >	
Approved: HS	08-08-2023	Sheet : 13 of 15			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2	
Mass: 380.02 kg		Finish:			Raw extrusion in accordance with OEM drawing and EN755-9	
Title: Hull DBJ					Dimensions in mm (u.n.o.)	
					Rivets according to VRR-SP2201	

Iss.	Changes	Date	Name

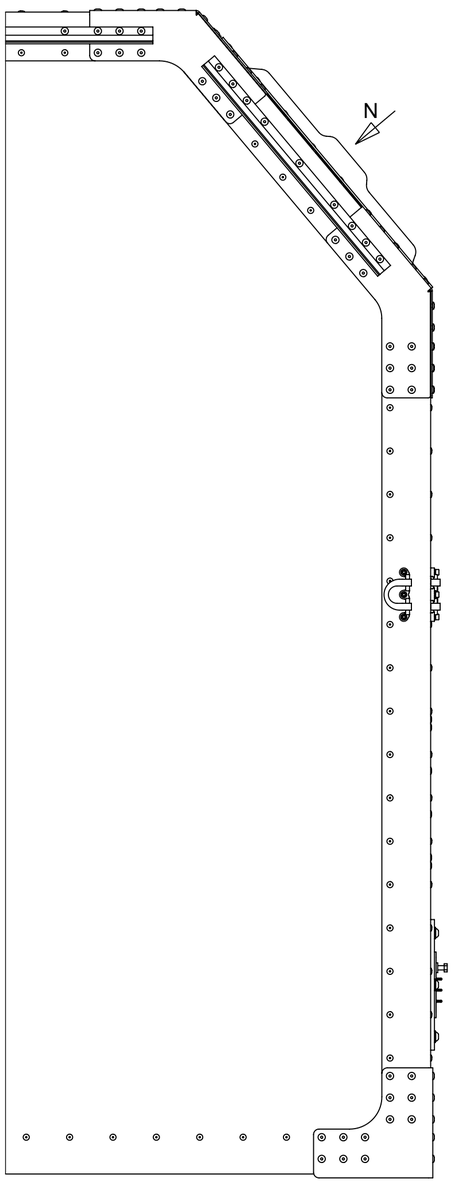
Projection

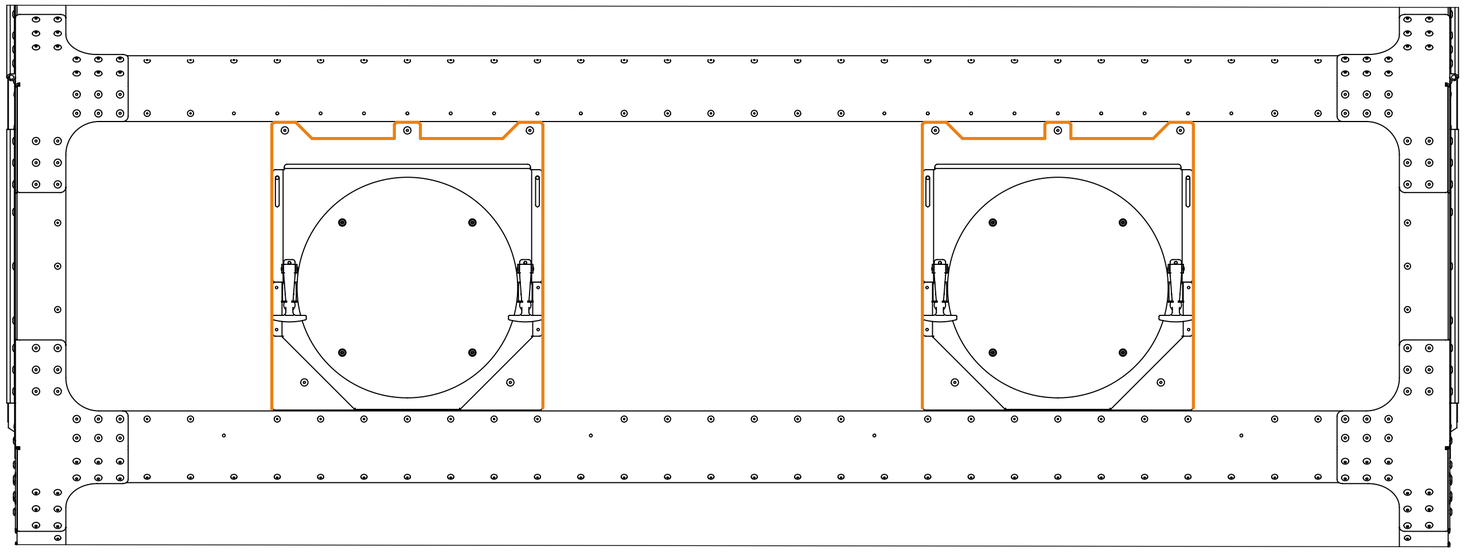
Size A2

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Kit instructions





VIEW N
◠ 40,0°
Hoselock cover is hidden

Scale: 1:8	Date:	Drawing no.		Issue	Tolerances (u.n.o.)
Drawn: MBMH	25-05-2023	2000-07-2646		A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: PvT	31-07-2023				Raw extrusion in accordance with OEM drawing and EN755-9
Approved: HS	08-08-2023	Sheet : 14 of 15			
Mass: 380.02 kg		Finish:			Dimensions in mm (u.n.o.)
Title: Hull DBJ					

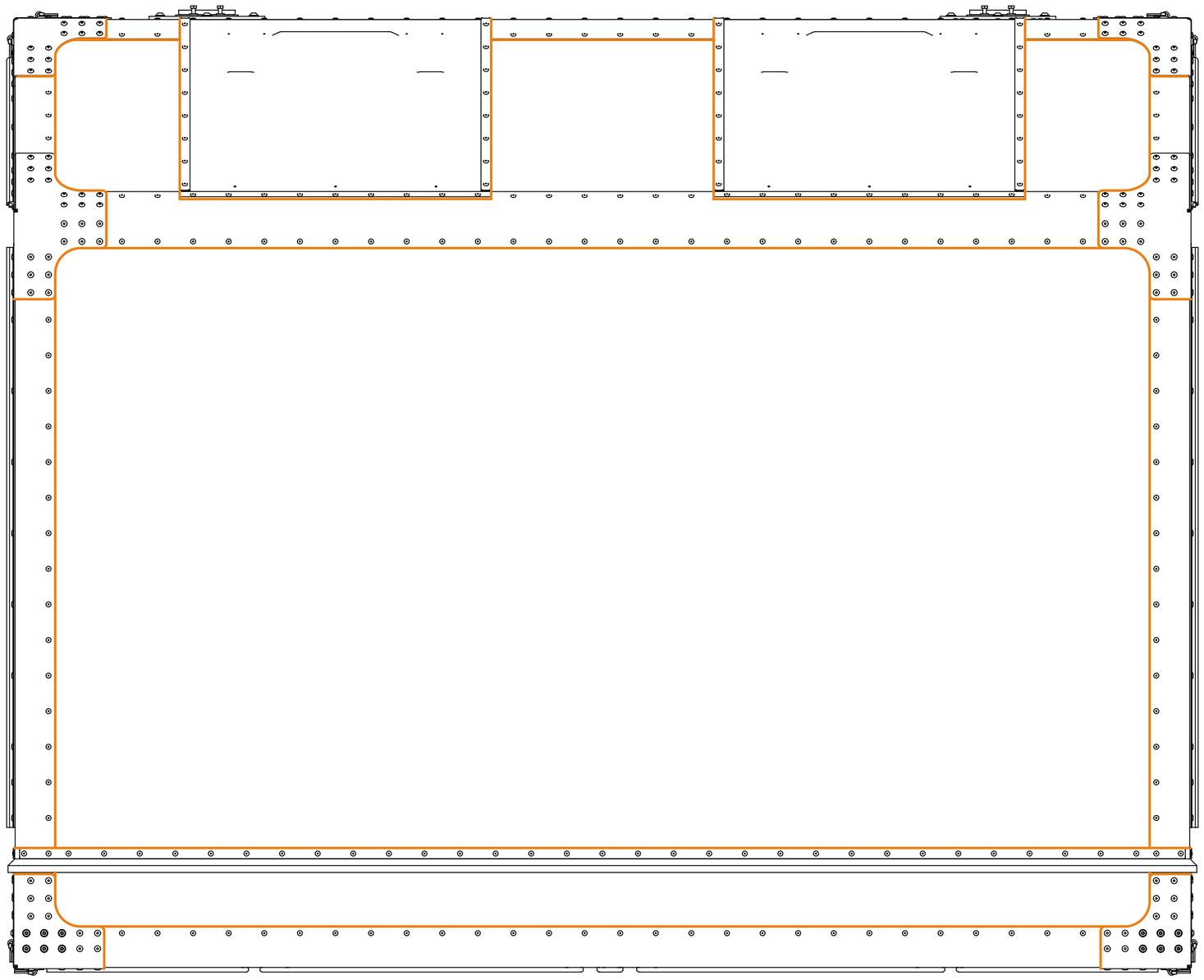
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

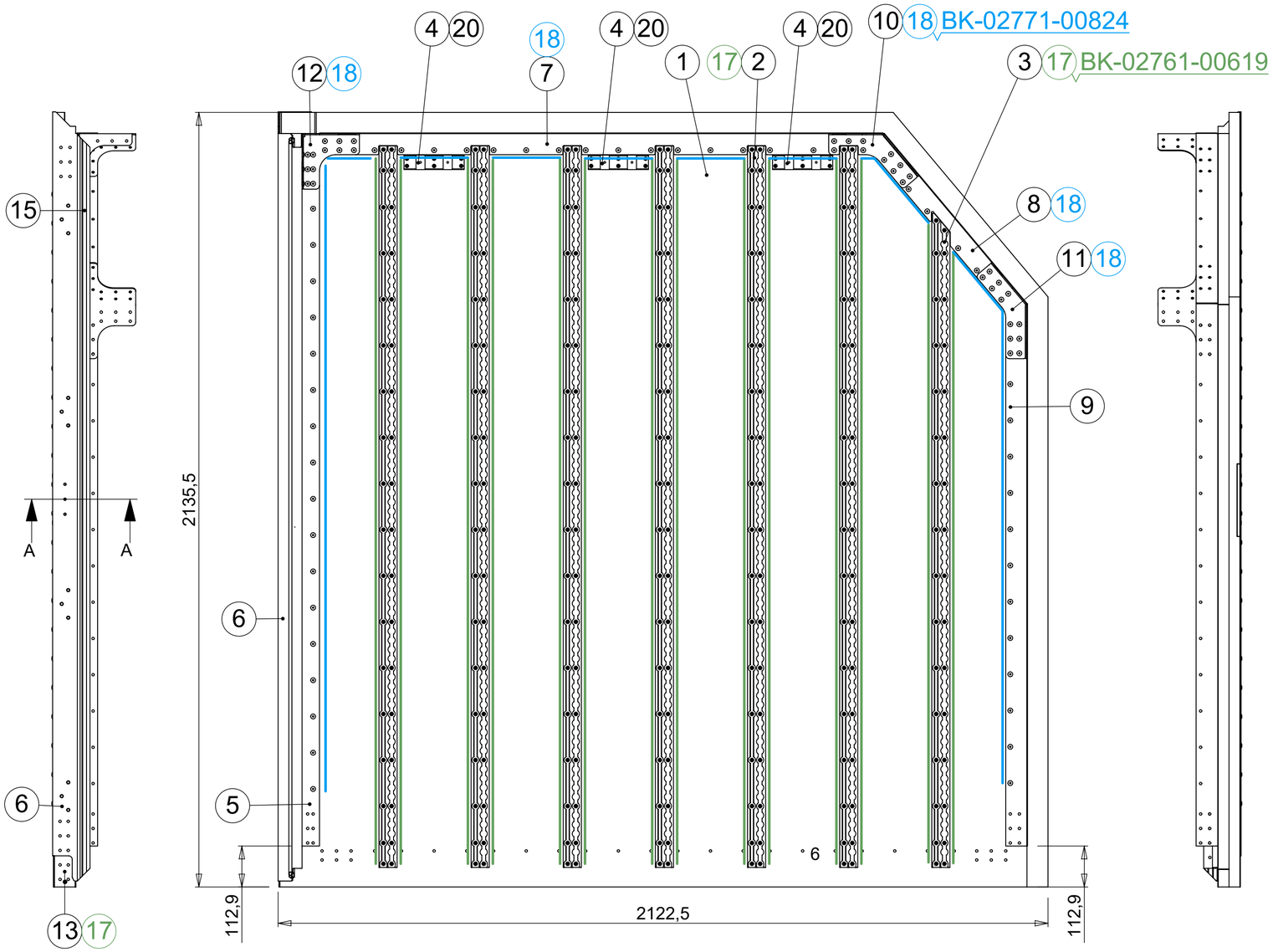
Kit instructions



Top side

Scale: 1:8		Date:	Drawing no.		Issue	Tolerances (u.n.o.)
Drawn: MBMH		25-05-2023	2000-07-2646		A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ±2
Checked: PvT		31-07-2023				Raw extrusion in accordance with OEM drawing and EN755-9
Approved: HS		08-08-2023	Sheet : 15 of 15			
Mass: 380.02 kg			Finish:			Dimensions in mm (u.n.o.)
Title: Hull DBJ						Rivets according to VRR-SP2201
Iss.	Changes	Date	Name	Projection		
				Size A2		

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

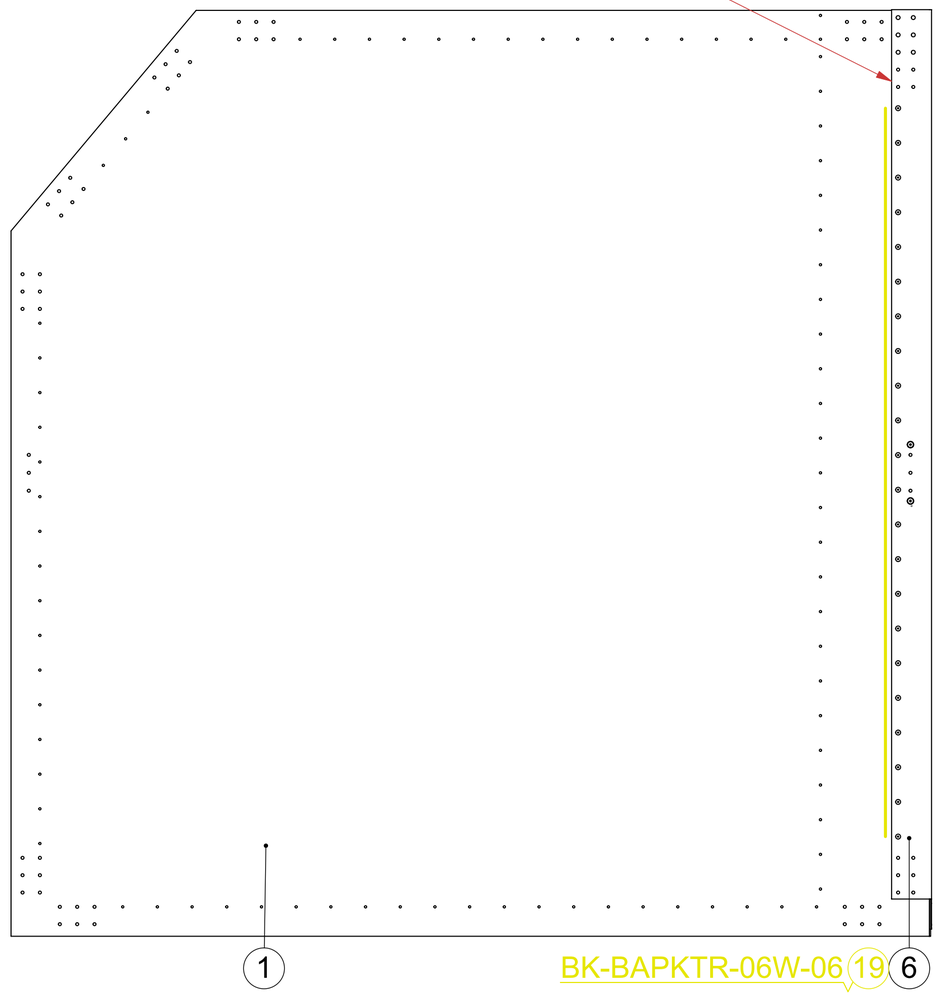


Inside

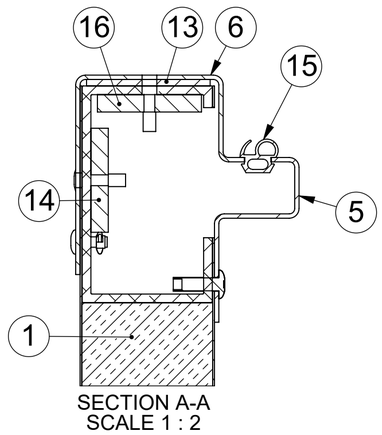
Place INNO SEAL on (5)/(6) before placing on

Remove excess sealant

Not that the sealant has a dry time of 2 hours.



Outside



SECTION A-A
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
21	1	Malplate DBJ side panel LEFT inside	1712,8	148,5	3	2000-05-4188	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
16	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
15	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1747	Alu. 5754-H22	
12	1	Left inner corner gusset	266,9	248,6	3	2000-05-1459	Alu. 5754-H22	Bend with V30
11	1	Left slanted corner gusset	294,3	267,3	3	2000-05-0508	Alu. 5754-H22	Bend with V30
10	1	Left slanted corner gusset	289,7	258,6	3	2000-05-0507	Alu. 5754-H22	Bend with V30
9	1	Internal frame sheet	1495,3	116,2	2	2000-05-0368	Alu. 5754-H22	Bend with V16
8	1	Internal frame sheet	610,3	116,2	2	2000-05-0369	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0373	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0493	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0492	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1803,5	50	15	2000-05-1457	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel left				2000-07-2751	Assembly	

Note:
See sheet 2 for details.
Use malplates to drill missing holes in panel, see sheet 3.

Scale: 1:10	Date:	Drawing no. 2000-07-2647	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 1 of 4	
Mass: 78.85 kg		Finish:	Dimensions in mm (u.n.o.)
Title: DBJ panel left			Rivets according to VRR-SP2201

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

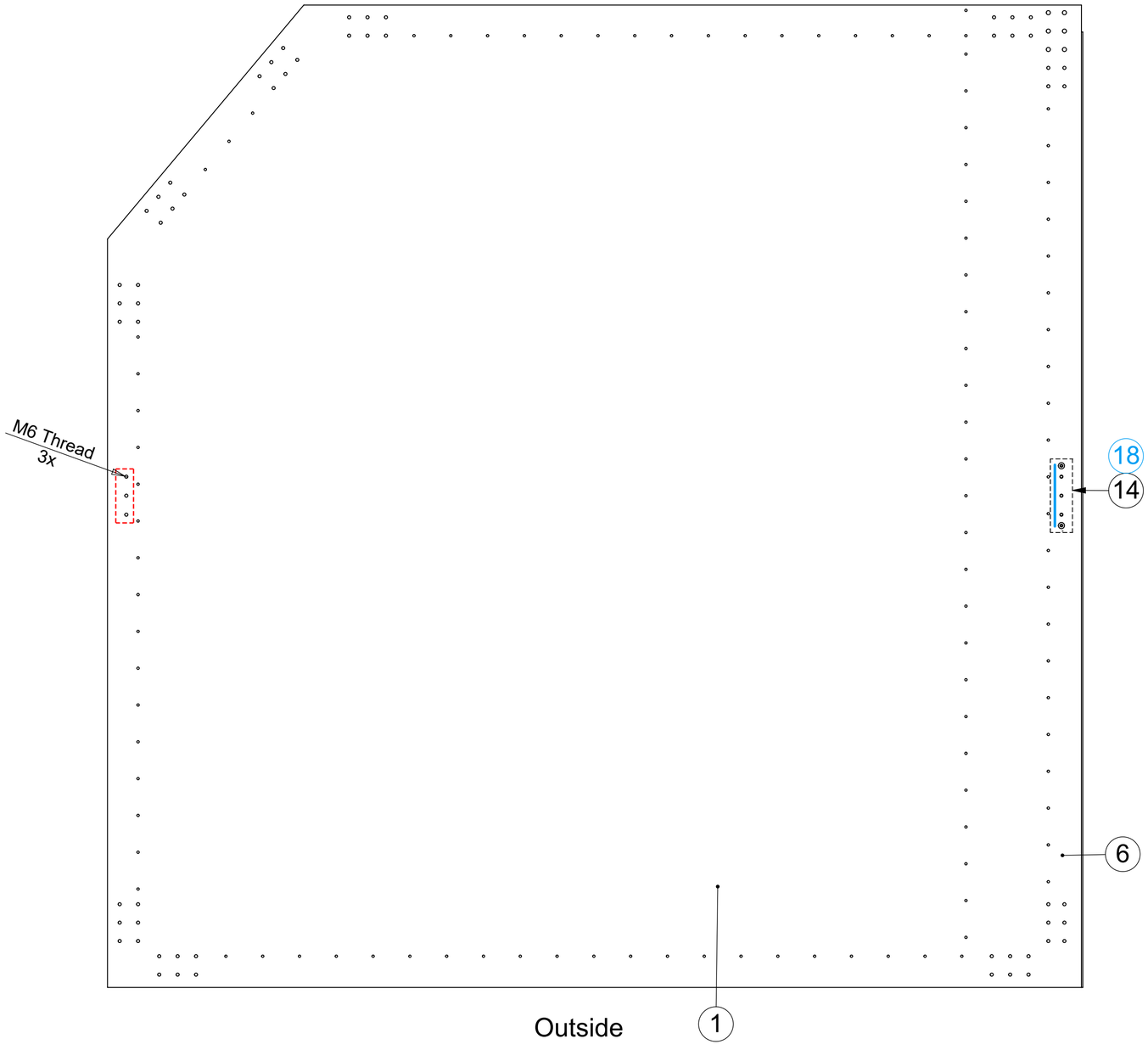
Raw extrusion in accordance with OEM drawing and EN755-9

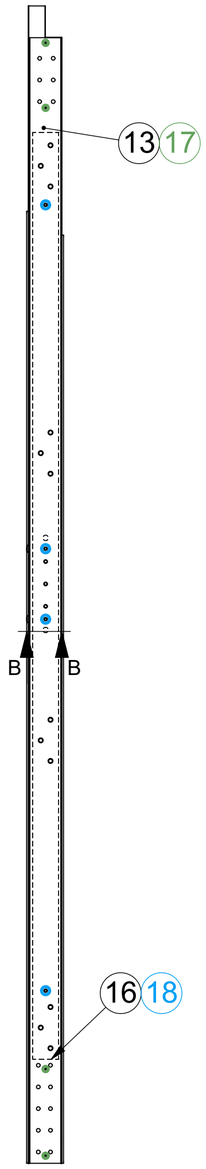
Iss.	Changes	Date	Name

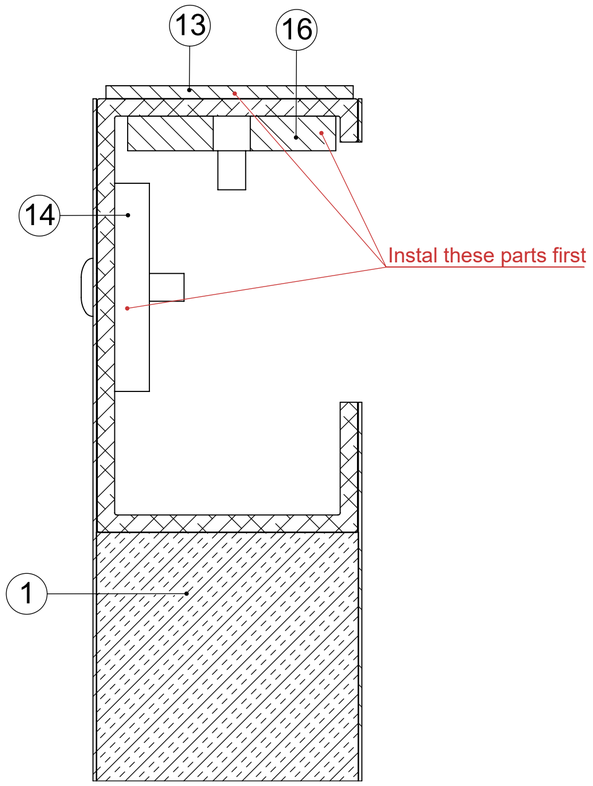
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION B-B
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
21	1	Malplate DBJ side panel LEFT inside	1712,8	148,5	3	2000-05-4188	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
16	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
15	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1747	Alu. 5754-H22	
12	1	Left inner corner gusset	266,9	248,6	3	2000-05-1459	Alu. 5754-H22	Bend with V30
11	1	Left slanted corner gusset	294,3	267,3	3	2000-05-0508	Alu. 5754-H22	Bend with V30
10	1	Left slanted corner gusset	289,7	258,6	3	2000-05-0507	Alu. 5754-H22	Bend with V30
9	1	Internal frame sheet	1495,3	116,2	2	2000-05-0368	Alu. 5754-H22	Bend with V16
8	1	Internal frame sheet	610,3	116,2	2	2000-05-0369	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0373	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0493	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0492	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1803,5	50	15	2000-05-1457	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel left				2000-07-2751	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2647 Sheet : 2 of 4	Issue A
Drawn: MBMH	25-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 78.85 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ panel left

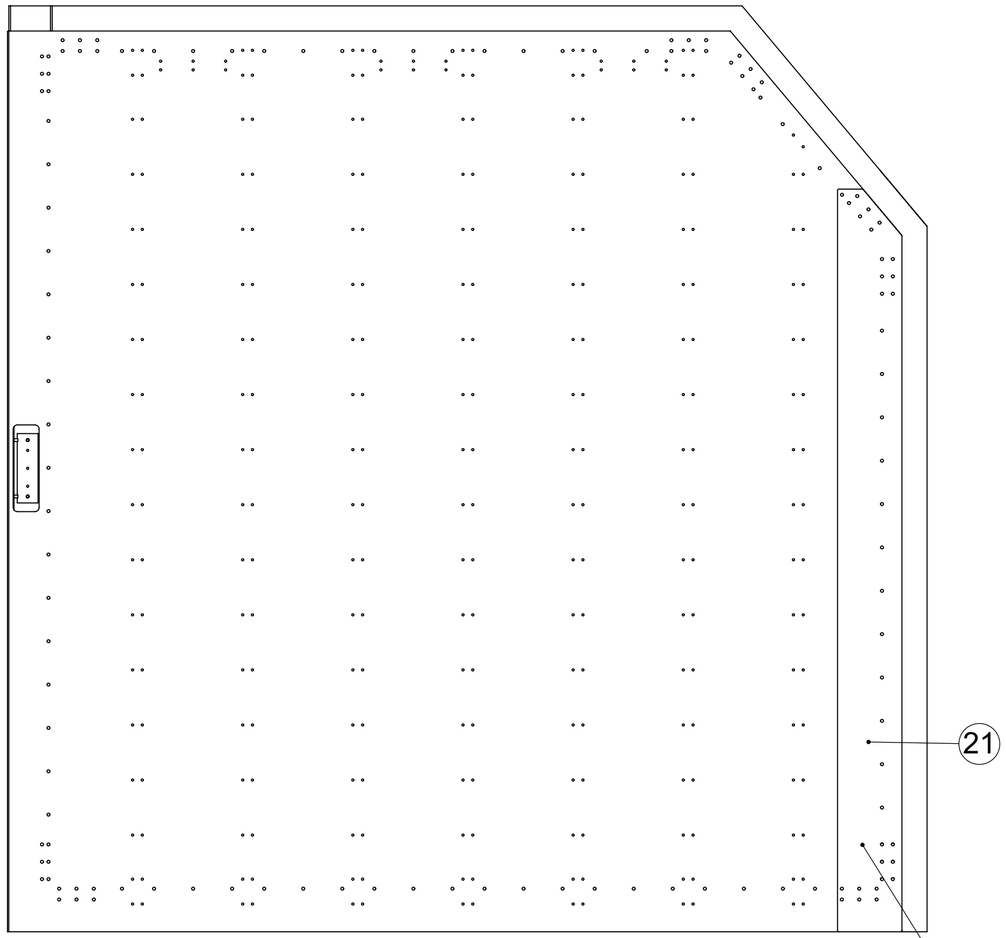
Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

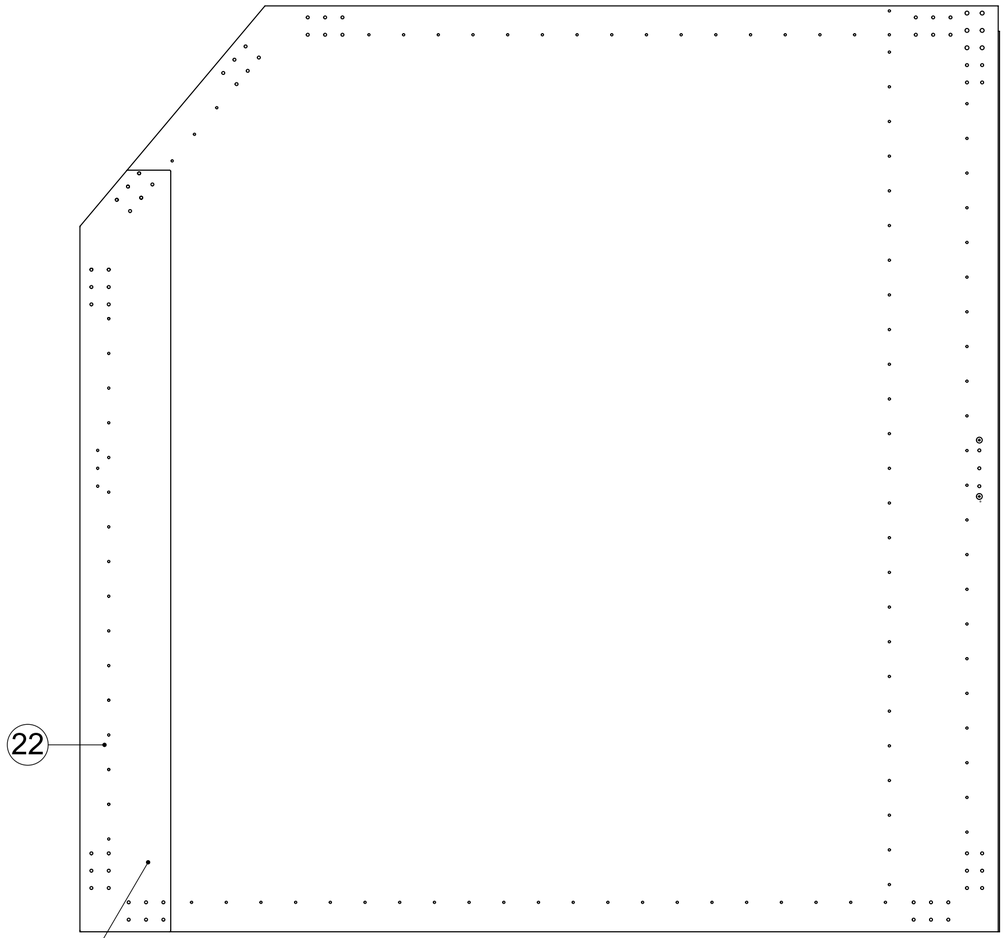
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Inside



Outside

Use malplates (21) + (22) to drill missing holes

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
21	1	Malplate DBJ side panel LEFT inside	1712,8	148,5	3	2000-05-4188	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
16	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
15	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1747	Alu. 5754-H22	
12	1	Left inner corner gusset	266,9	248,6	3	2000-05-1459	Alu. 5754-H22	Bend with V30
11	1	Left slanted corner gusset	294,3	267,3	3	2000-05-0508	Alu. 5754-H22	Bend with V30
10	1	Left slanted corner gusset	289,7	258,6	3	2000-05-0507	Alu. 5754-H22	Bend with V30
9	1	Internal frame sheet	1495,3	116,2	2	2000-05-0368	Alu. 5754-H22	Bend with V16
8	1	Internal frame sheet	610,3	116,2	2	2000-05-0369	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0373	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0493	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0492	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1803,5	50	15	2000-05-1457	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel left				2000-07-2751	Assembly	

Iss.	Changes	Date	Name

Scale: 1:10 | Date:
Drawn: MBMH | 25-05-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023
Mass: 78.85 kg | Finish:

Drawing no. 2000-07-2647 Sheet : 3 of 4

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

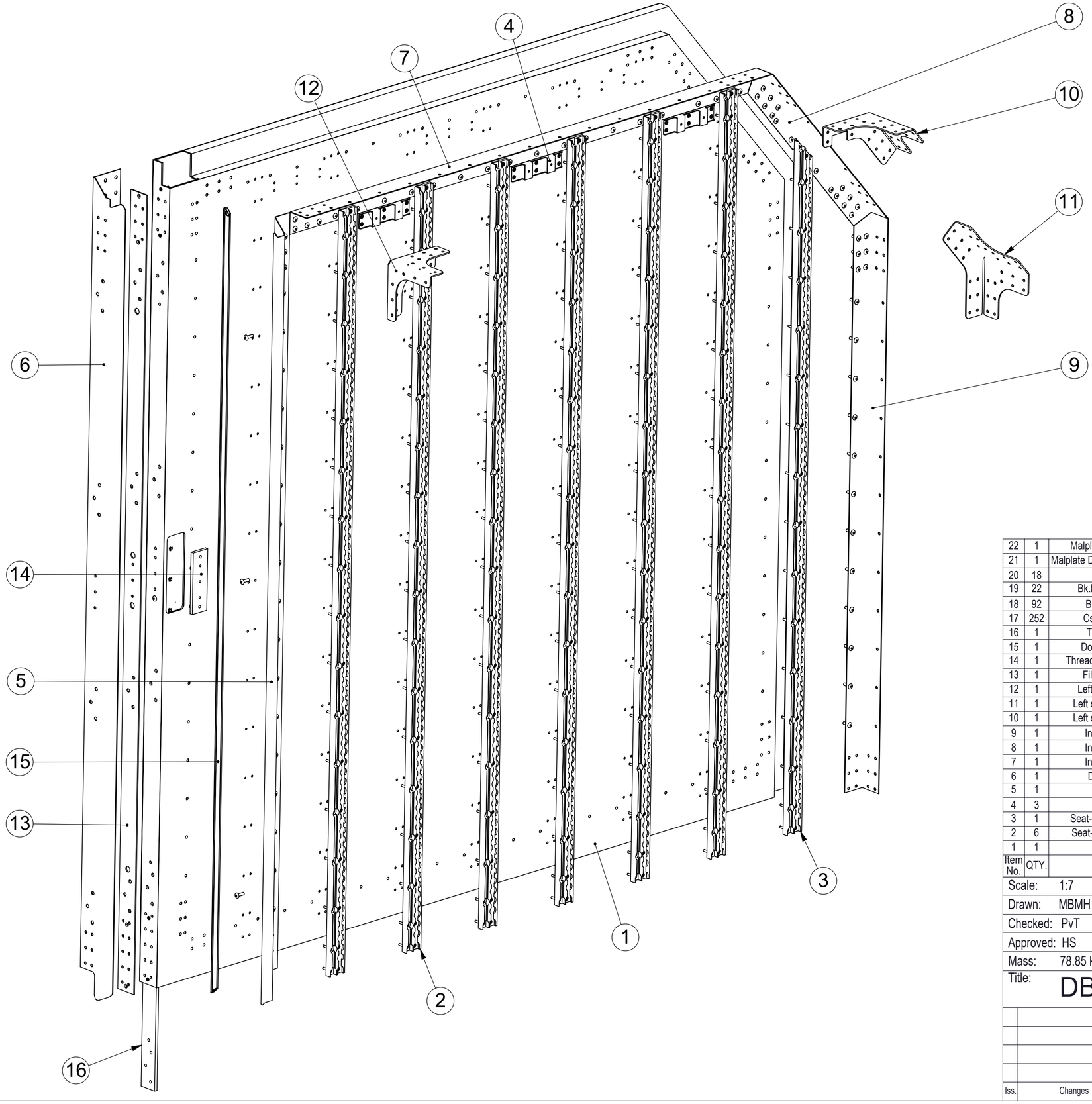
Title: DBJ panel left

Rivets according to VRR-SP2201

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
21	1	Malplate DBJ side panel LEFT inside	1712,8	148,5	3	2000-05-4188	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
16	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
15	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1747	Alu. 5754-H22	
12	1	Left inner corner gusset	266,9	248,6	3	2000-05-1459	Alu. 5754-H22	Bend with V30
11	1	Left slanted corner gusset	294,3	267,3	3	2000-05-0508	Alu. 5754-H22	Bend with V30
10	1	Left slanted corner gusset	289,7	258,6	3	2000-05-0507	Alu. 5754-H22	Bend with V30
9	1	Internal frame sheet	1495,3	116,2	2	2000-05-0368	Alu. 5754-H22	Bend with V16
8	1	Internal frame sheet	610,3	116,2	2	2000-05-0369	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0373	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0493	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0492	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1803,5	50	15	2000-05-1457	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel left				2000-07-2751	Assembly	

Scale: 1:7 | Date:
Drawn: MBMH | 25-05-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023

Drawing no. 2000-07-2647 Sheet : 4 of 4

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Mass: 78.85 kg

Finish:

Dimensions in mm (u.n.o.)

Title: DBJ panel left

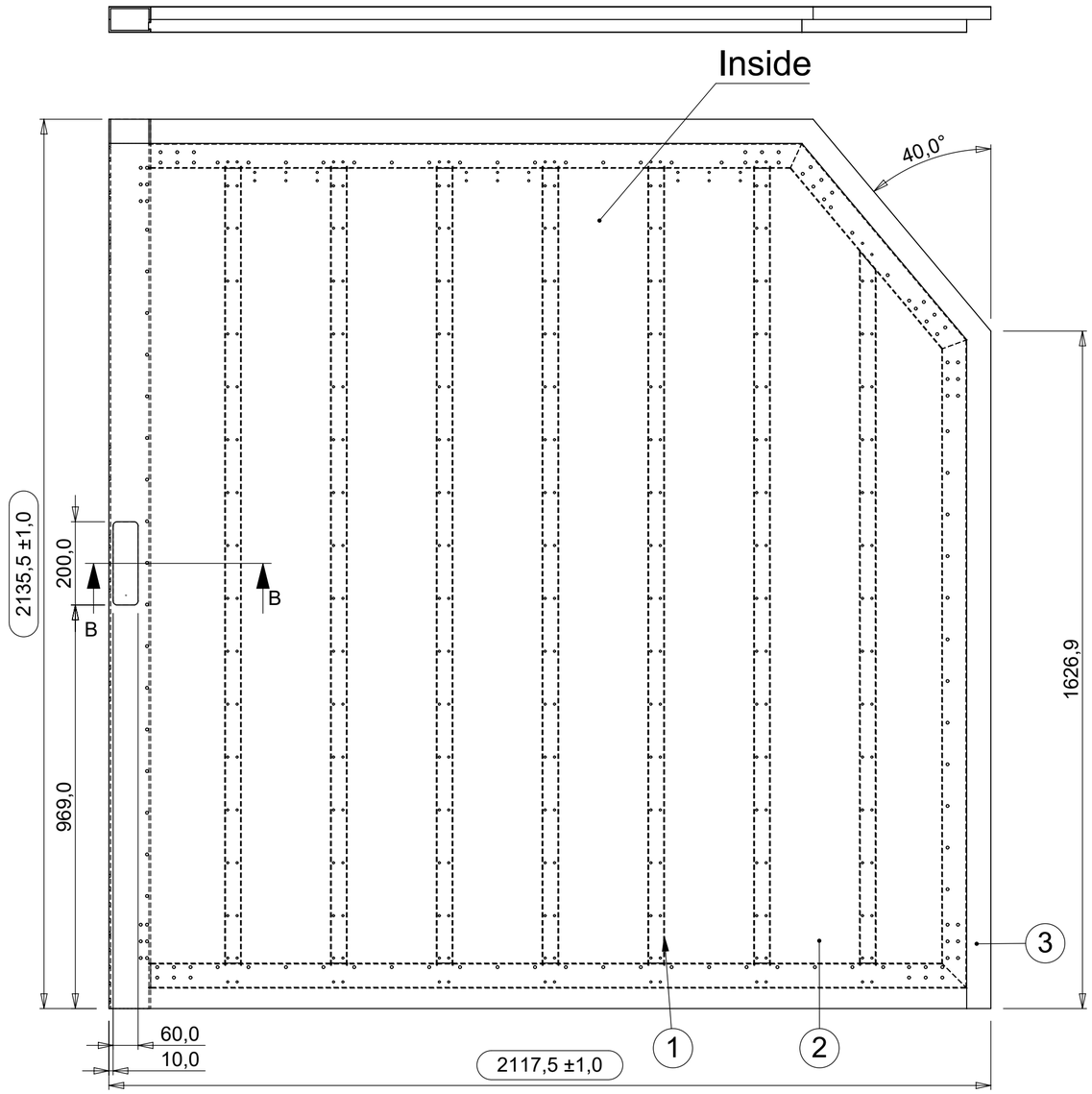
Rivets according to VRR-SP2201

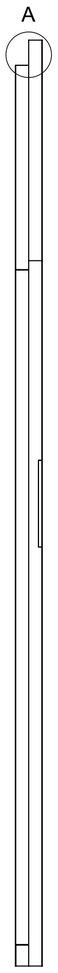
Iss.	Changes	Date	Name

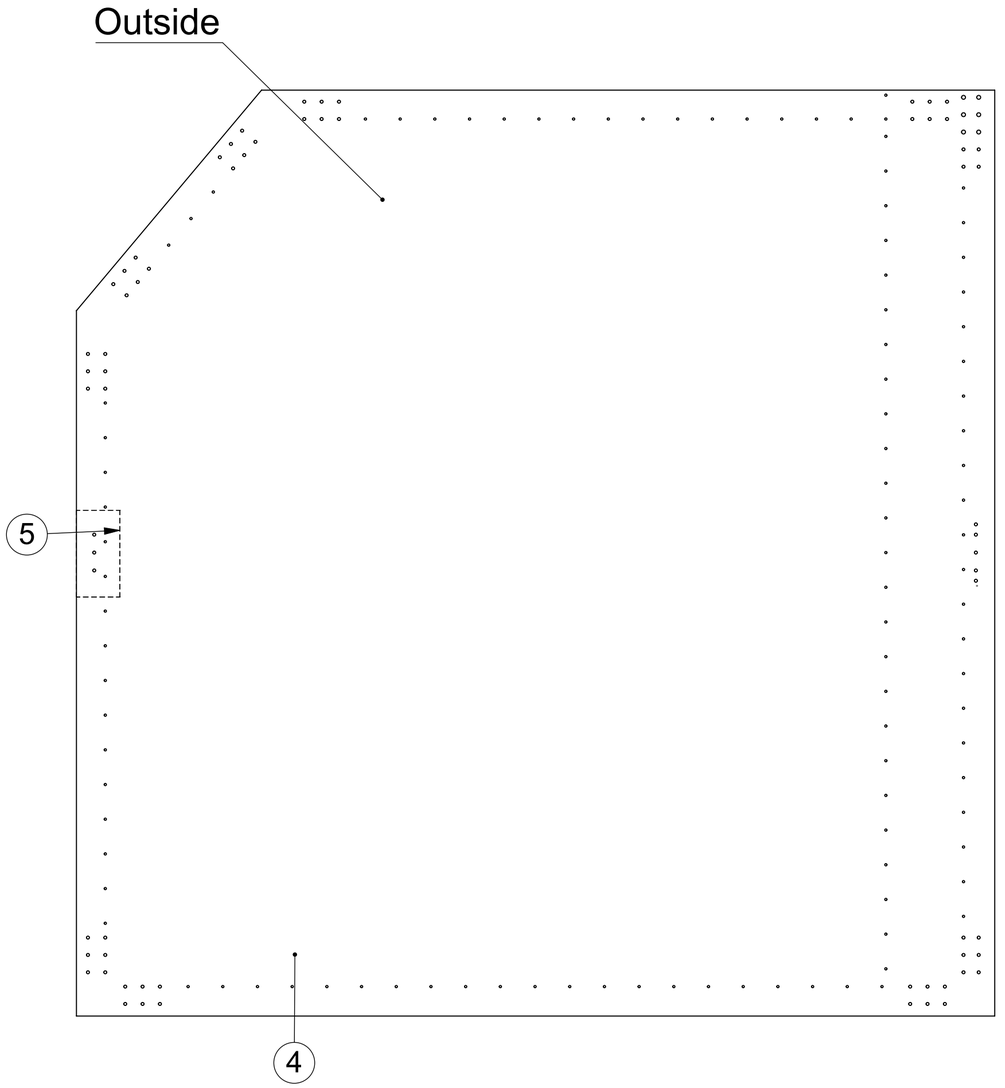
Projection

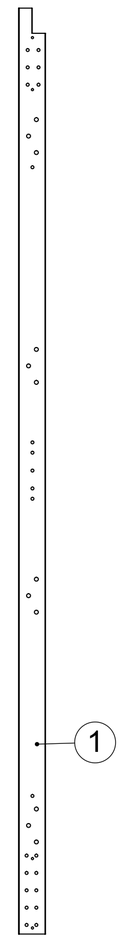
Size A2

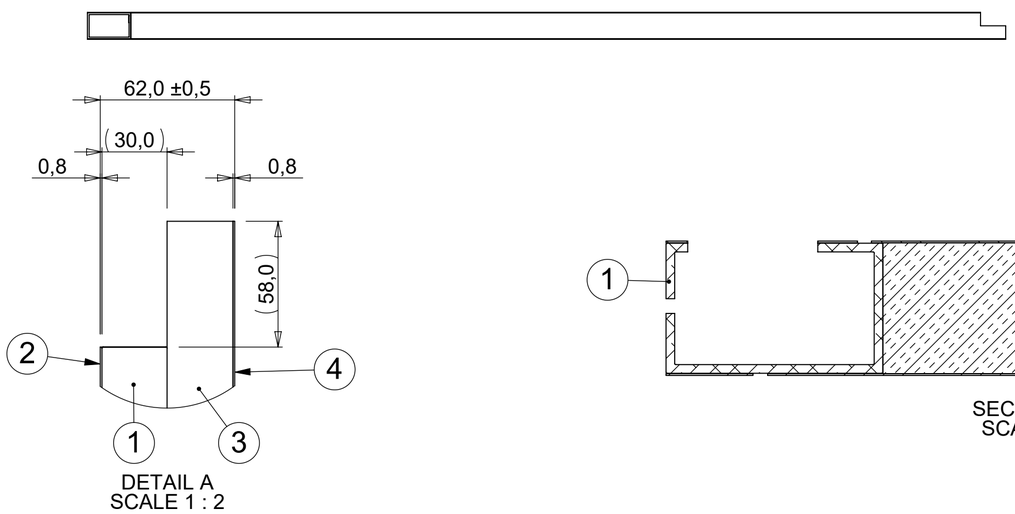
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



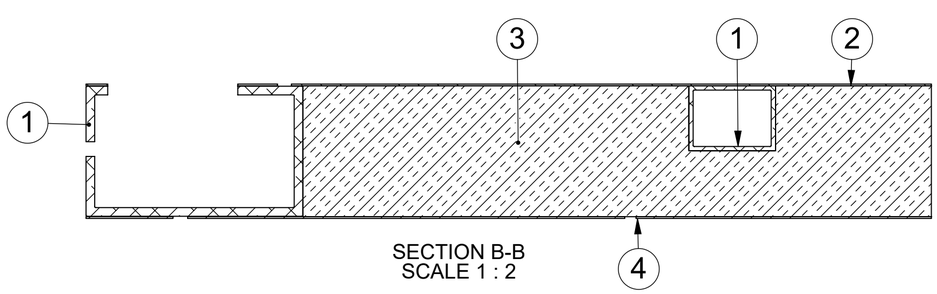








DETAIL A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0329	PE-GEGW 0,8 NF	
3	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0328	RTM-Plus	
2	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2749	PE-GEGW 0,8 NF	
1	1	Internal panel frame				2000-05-1830	Assembly	

Scale: 1:10 | Date:
Drawn: MBMH | 13-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023

Drawing no. 2000-07-2751 Sheet : 1 of 2

Issue A

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Mass: 43.13 kg

Typ. tolerances for insulation/sandwich panels

Dimensions in mm (u.n.o.)

Title: # DBJ panel left

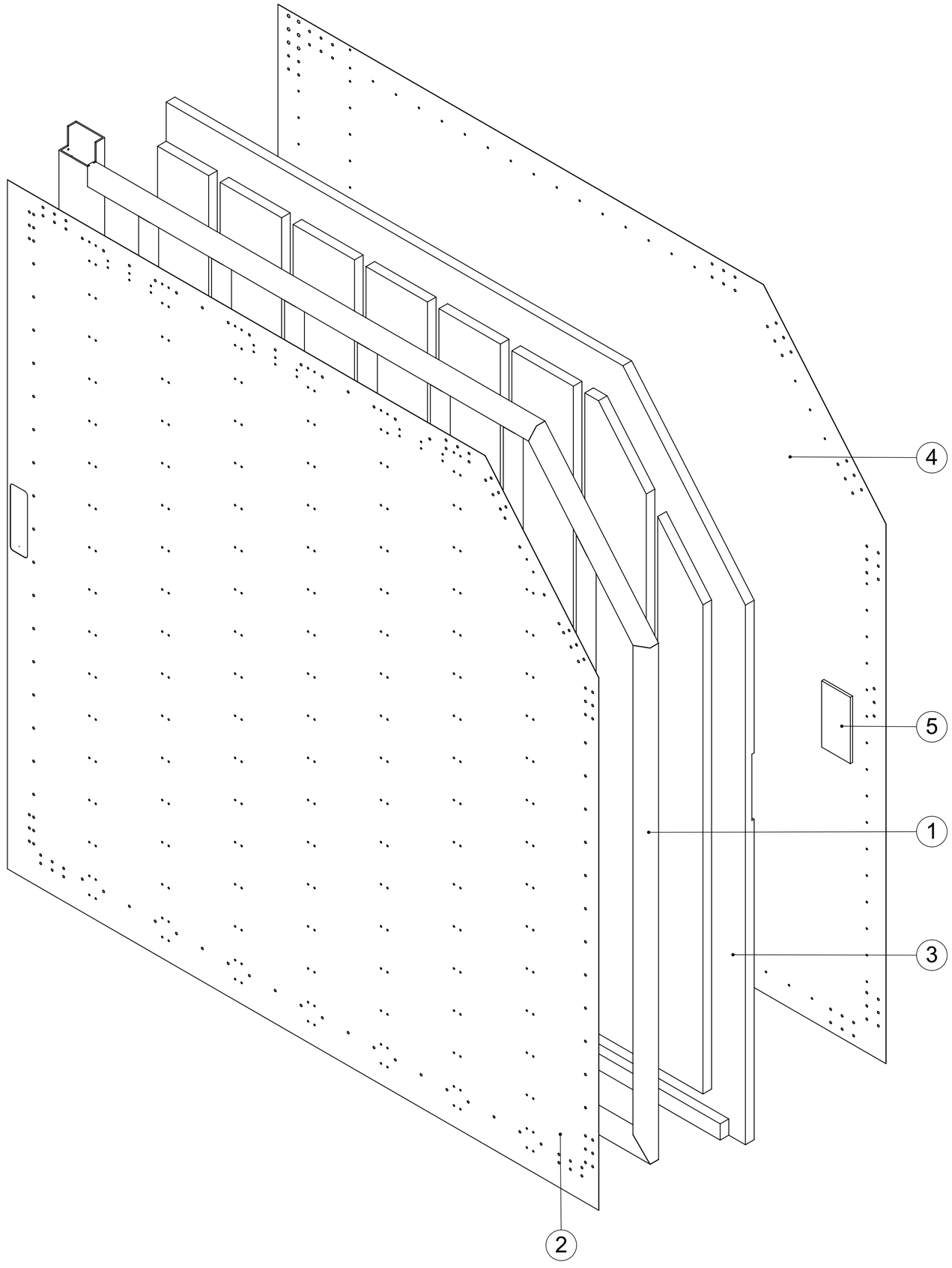
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0329	PE-GEGW 0,8 NF	
3	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0328	RTM-Plus	
2	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2749	PE-GEGW 0,8 NF	
1	1	Internal panel frame				2000-05-1830	Assembly	

Scale: 1:8 | Date:
Drawn: MBMH | 13-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023

Drawing no. 2000-07-2751 Sheet : 2 of 2

Issue A

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Mass: 43.13 kg

Typ. tolerances for insulation/sandwich panels

Dimensions in mm (u.n.o.)

Title: DBJ panel left

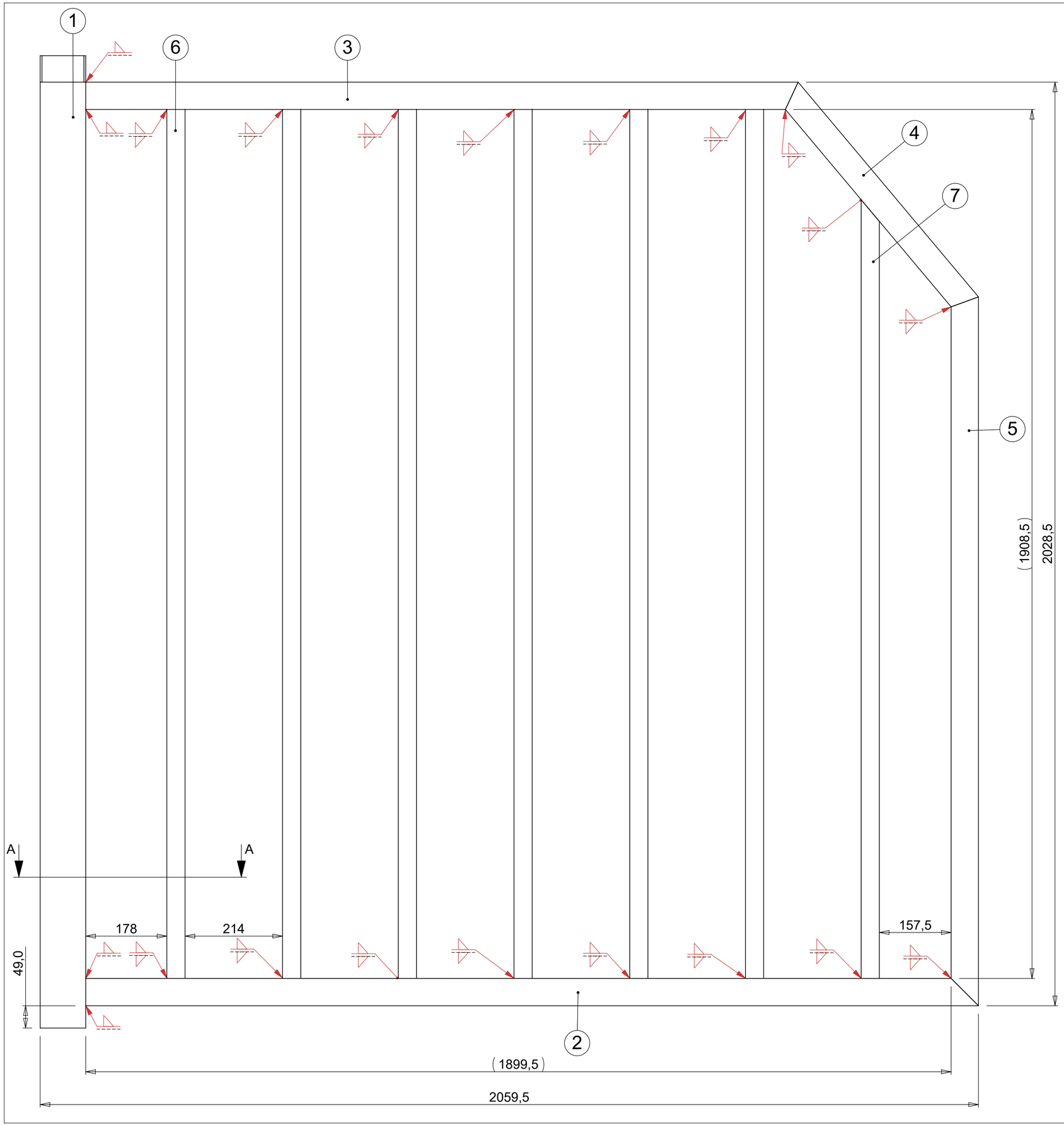
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

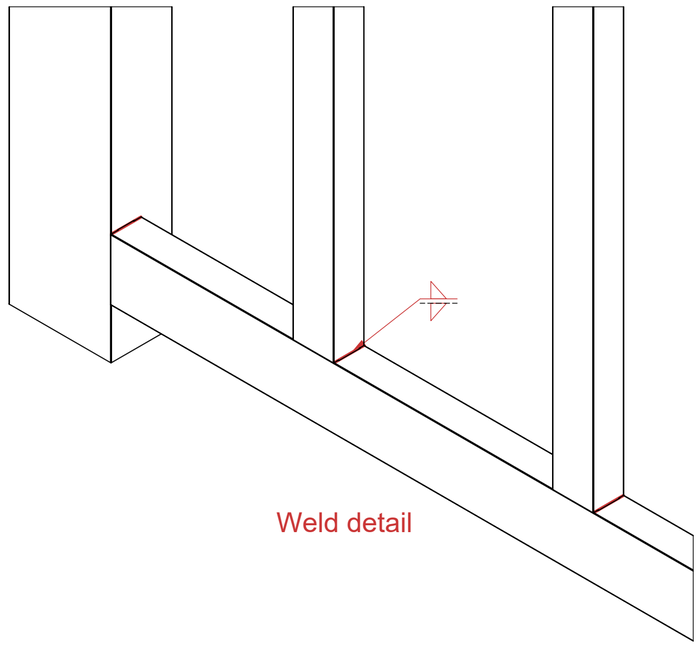
Iss.	Changes	Date	Name

Projection

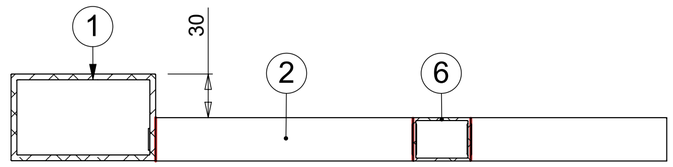
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Weld detail



SECTION A-A
SCALE 1 : 3

Welding according to procedure VRR-W3-090
except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
7	1	Tube 40x30x2	1715,3	40/30	2	2000-05-0297	Alu. 6060-T66	
6	6	Tube 40x30x2	1918,5	40/30	2	2000-05-0296	Alu. 6060-T66	
5	1	Tube 60x30x2	1556,8	60/30	2	2000-05-0292	Alu. 6060-T66	
4	1	Tube 60x30x2	615,8	60/30	2	2000-05-0295	Alu. 6060-T66	
3	1	Tube 60x30x2	1563,7	60/30	2	2000-05-0294	Alu. 6060-T66	
2	1	Tube 60x30x2	1959,5	60/30	2	2000-05-0293	Alu. 6060-T66	
1	1	Tube 100x60x4	2135,5	100/60	4	2000-05-1473	Alu. 6060-T66	

Scale:	1:6	Date:	Drawing no.	Issue	Tolerances (u.n.o.)
Drawn:	JWR	22-03-2019	2000-05-1830	A	< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / 2000 >
Checked:	HS	12-04-2019	Sheet : 1 of 1		±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2
Approved:	JWR	09-05-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass:	21.45 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Internal panel frame**

Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x60x4	2135,5	100/60	4	2000-05-1473	Alu. 6060-T66	

Scale: 1:7	Date:	Drawing no.: 2000-05-1473	Issue B	Tolerances (u.n.o.)
Drawn: JWR	22-03-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: HS	13-02-2020	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	10-03-2020			
Mass: 6.77 kg		Finish:		Dimensions in mm (u.n.o.)

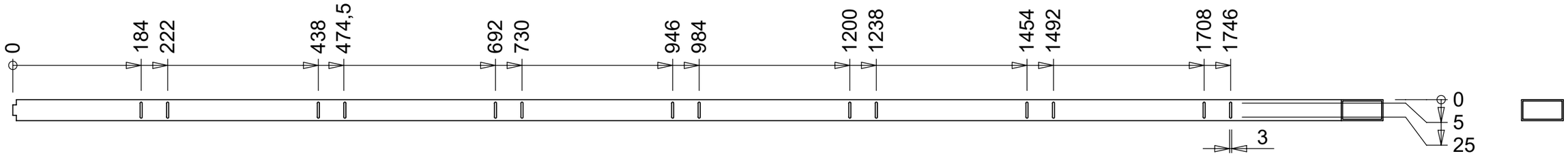
Title: **Tube 100x60x4**

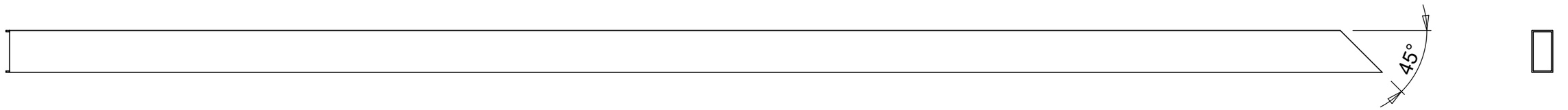
Iss.	Changes	Date	Name
B	+Cut-out	10-03-2020	MVE

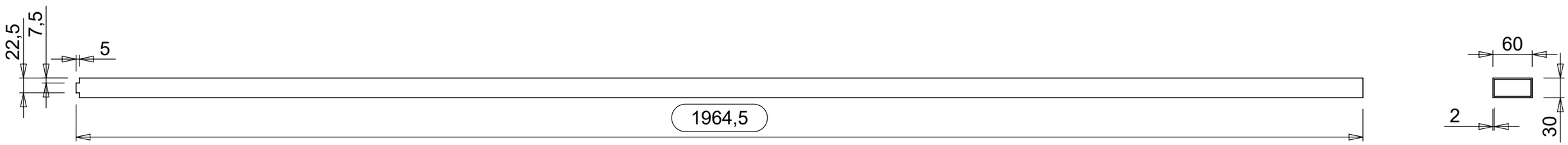
Projection

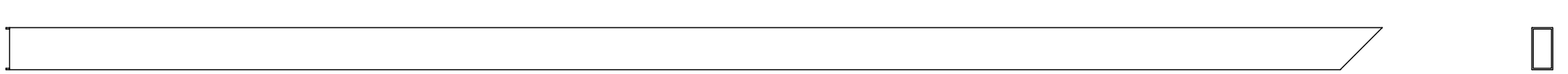
Size A3

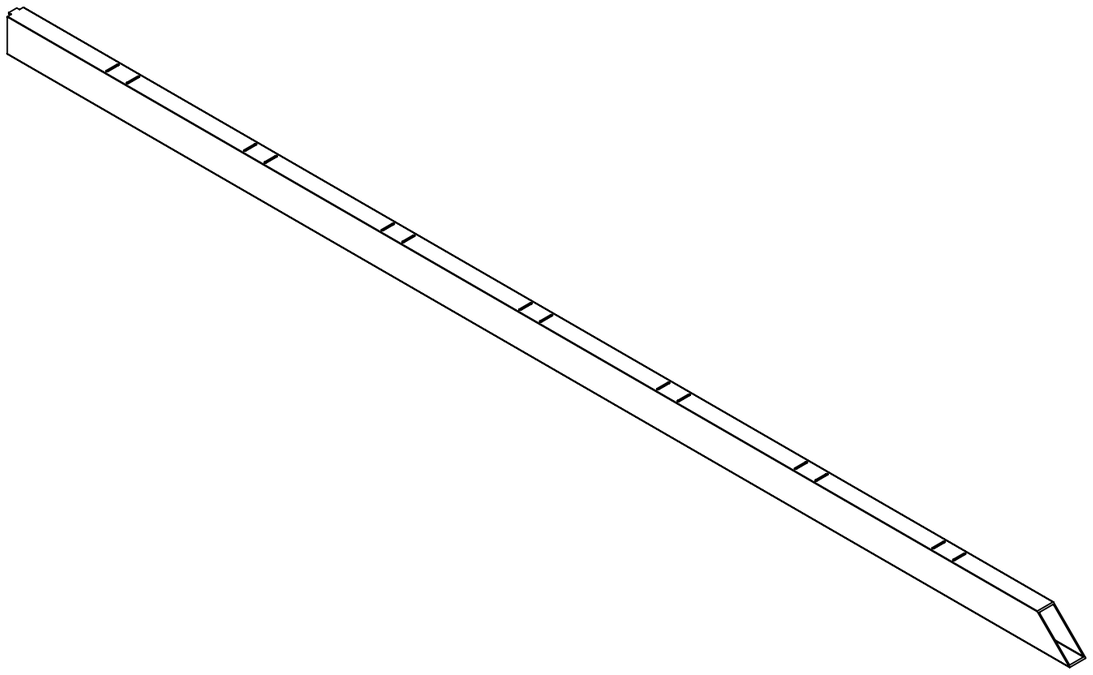
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











1	1	Tube 60x30x2	1959,5	60/30	2	2000-05-0293	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0293	Issue: A
Drawn: JWR	22-03-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: HS	12-04-2019		< 7 / 7 ±0.2; 7 30 / 30 ±0.3; 30 120 / 120 ±0.5; 120 400 / 400 ±0.8; 400 1000 / 1000 ±1.0; 1000 2000 / 2000 ±1.4; > 2 ± 2
Approved: JWR	09-05-2019		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 1.79 kg		Finish:	Dimensions in mm (u.n.o.)

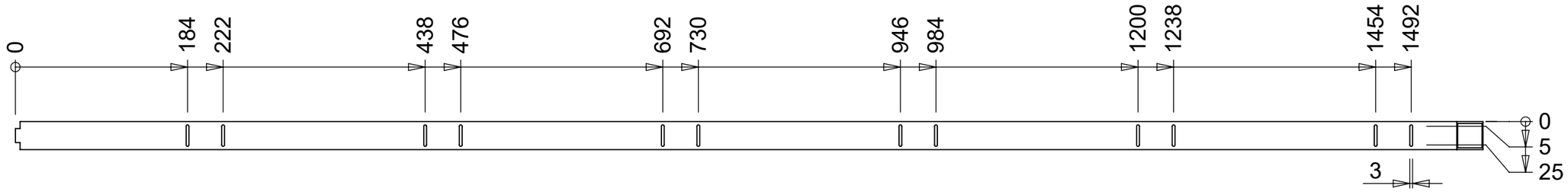
Title: **Tube 60x30x2**

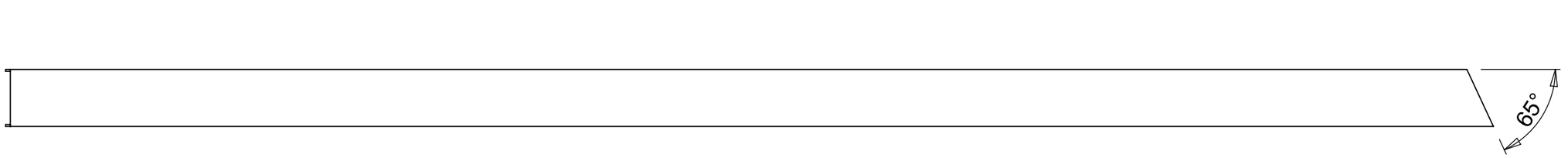
Iss.	Changes	Date	Name

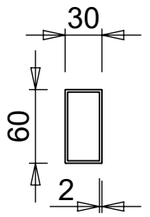
Projection

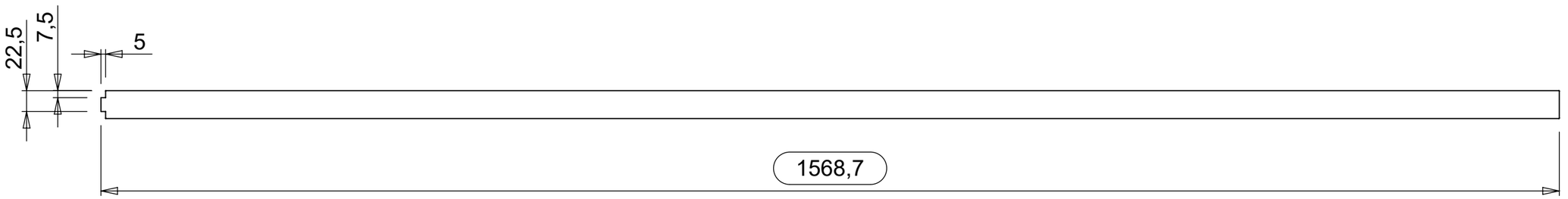
Size A3

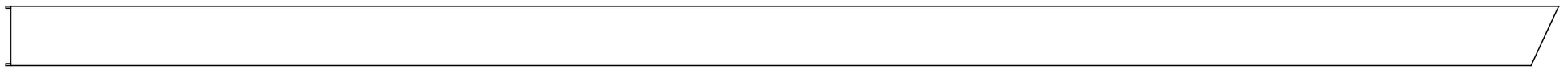
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

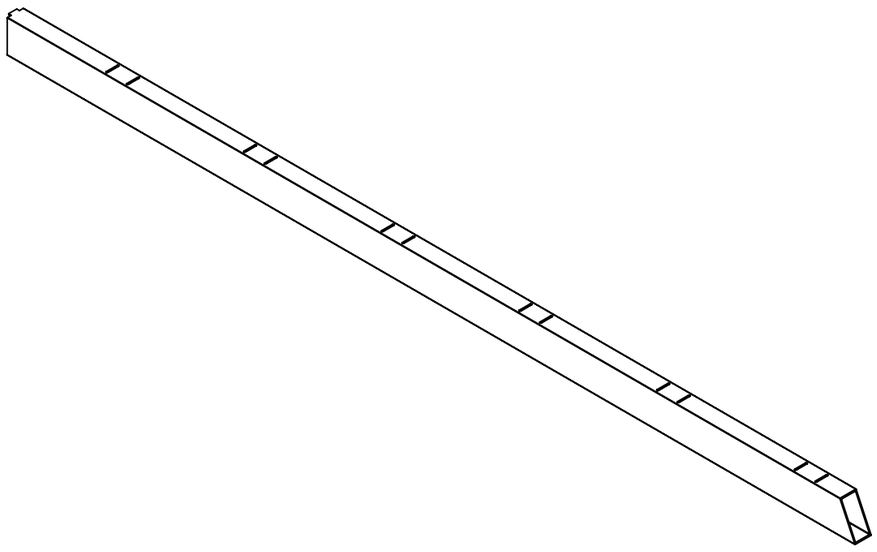












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 60x30x2	1563,7	60/30	2	2000-05-0294	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0294	Issue: A
Drawn: JWR	22-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.44 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

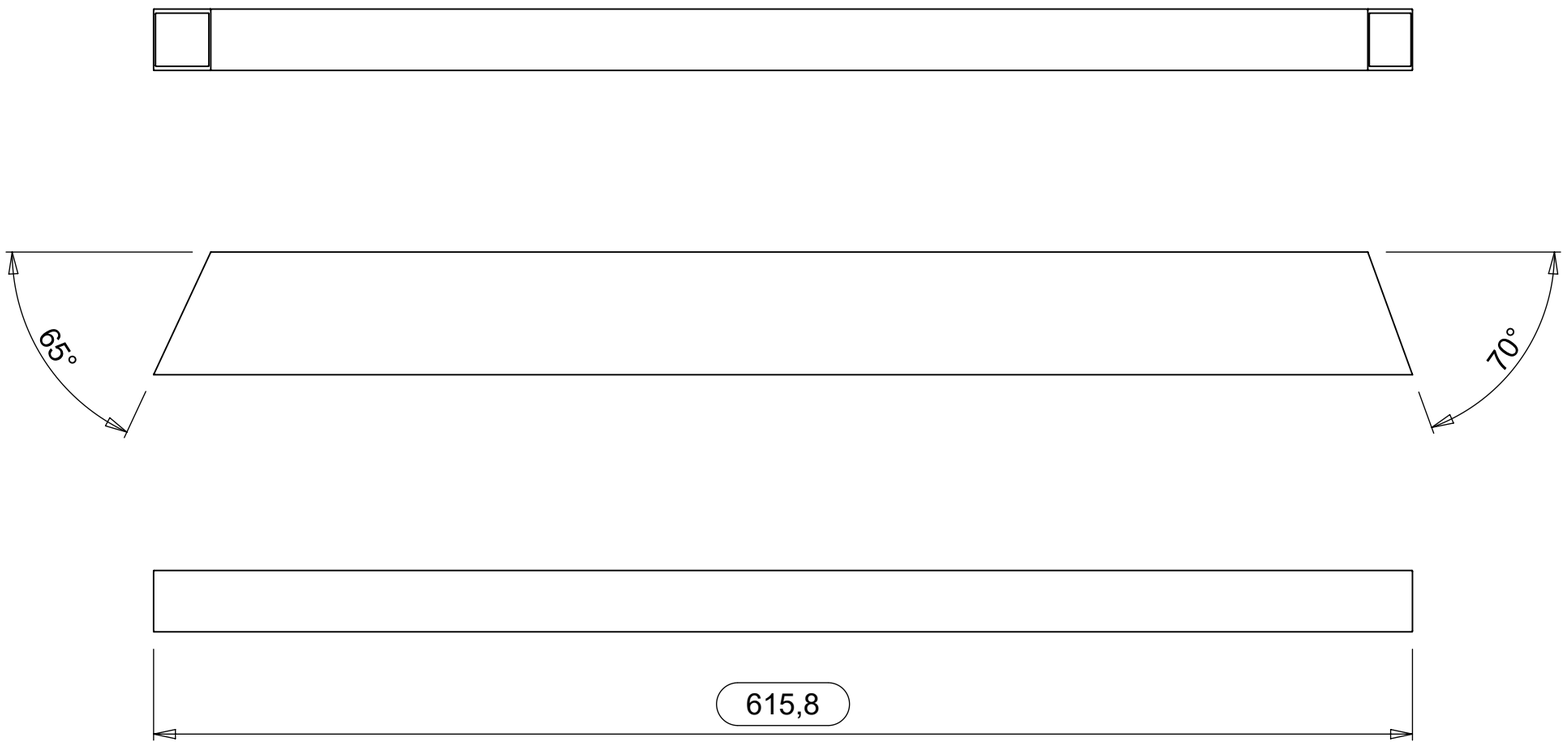
Title: Tube 60x30x2

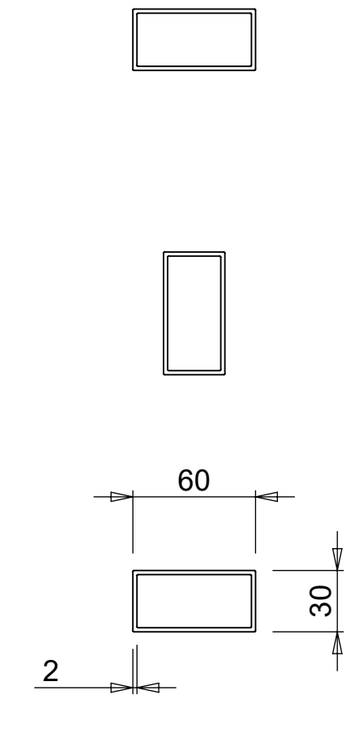
Iss.	Changes	Date	Name

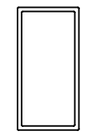
Projection

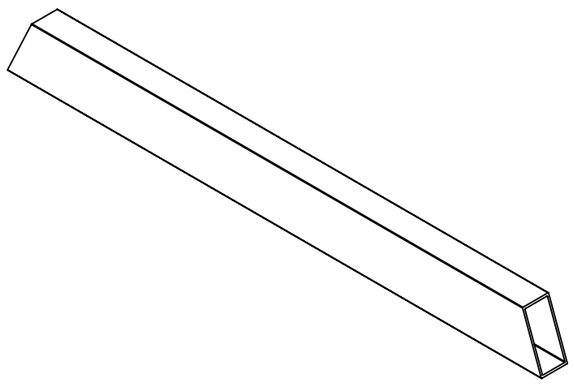
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Tube 60x30x2	615,8	60/30	2	2000-05-0295	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0295 Sheet : 1 of 1	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.55 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

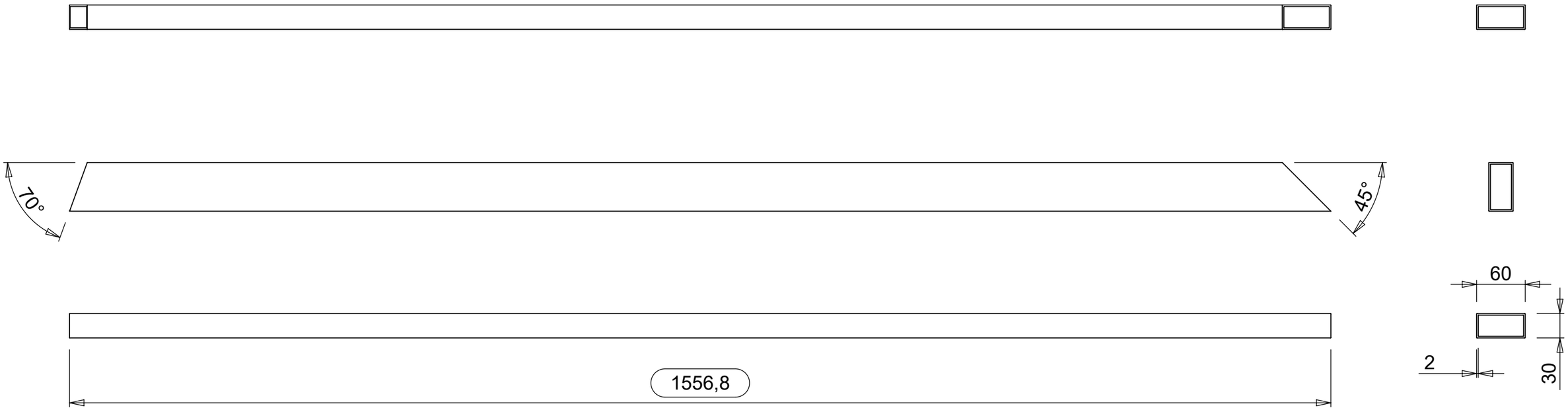
Title: Tube 60x30x2

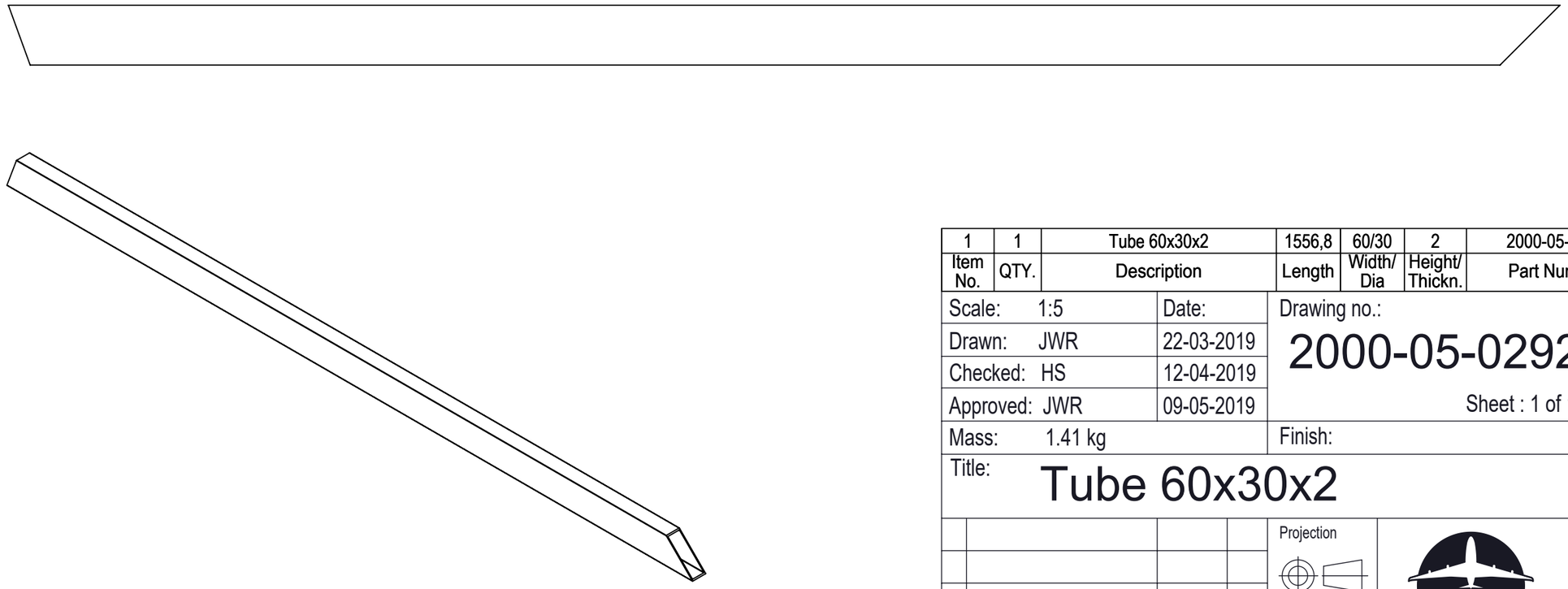
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 60x30x2	1556,8	60/30	2	2000-05-0292	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0292 Sheet : 1 of 1	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.41 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

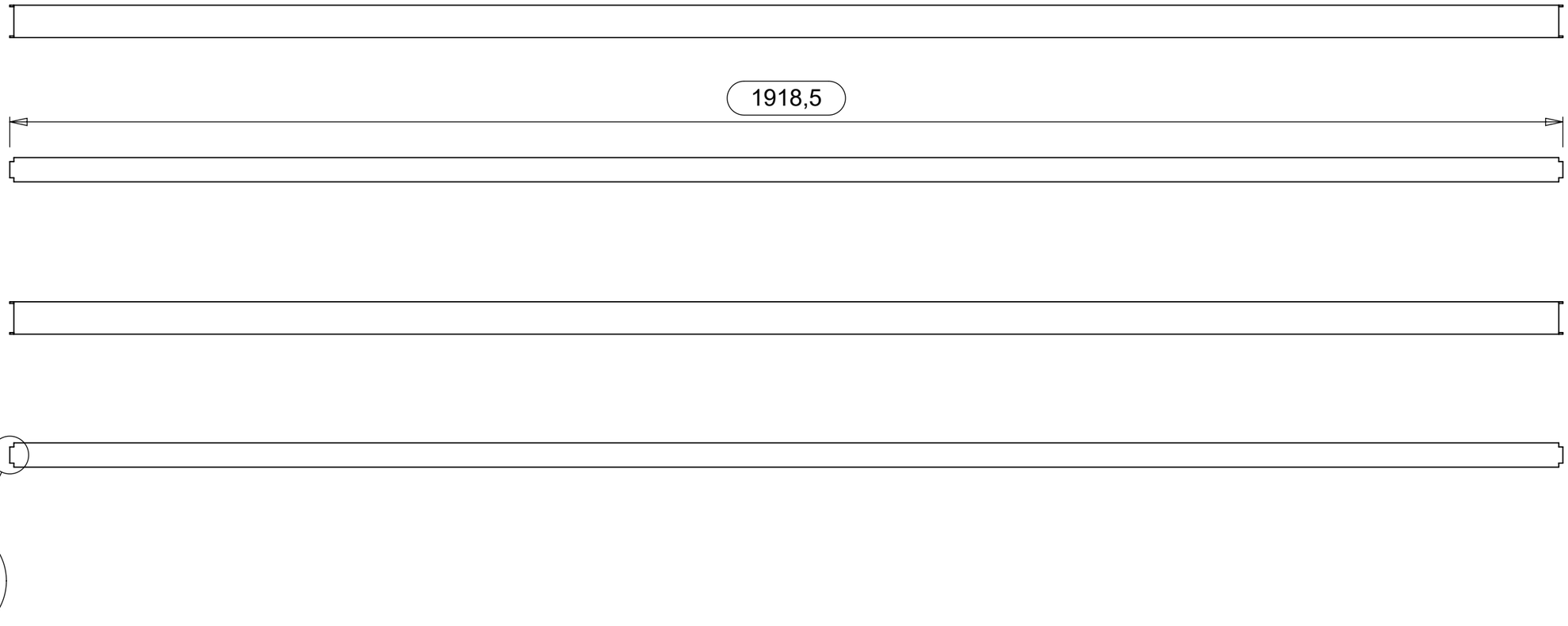
Title: Tube 60x30x2

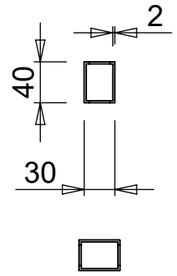
Iss.	Changes	Date	Name

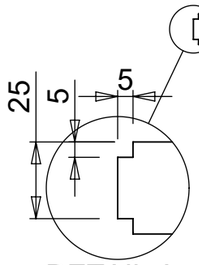
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

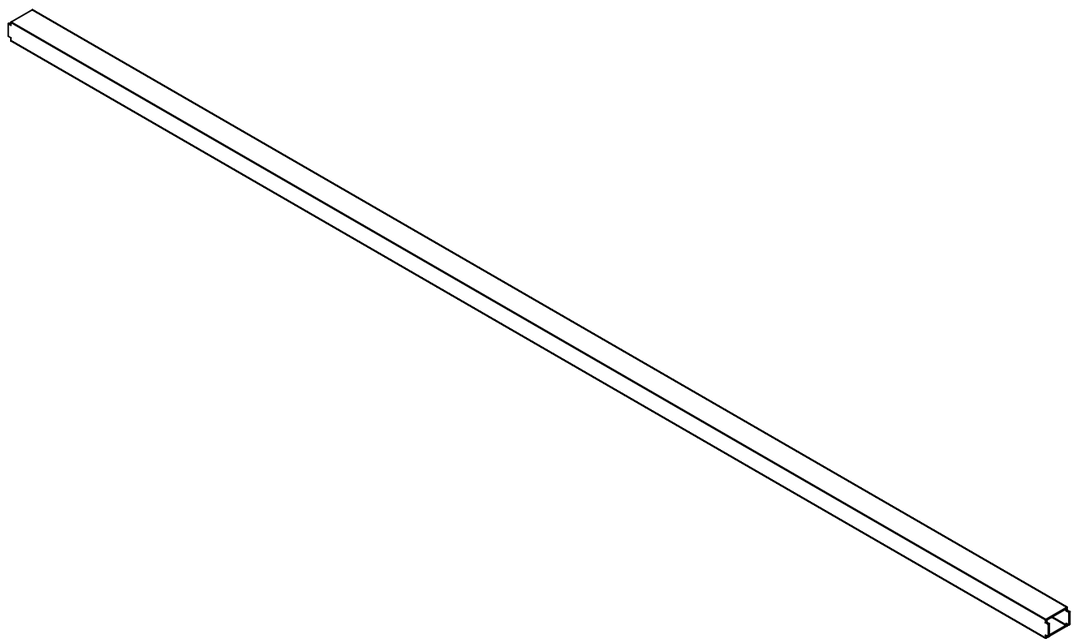






DETAIL A
SCALE 1 : 2

applies on both sides



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 40x30x2	1918,5	40/30	2	2000-05-0296	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no.: 2000-05-0296 Sheet : 1 of 1	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

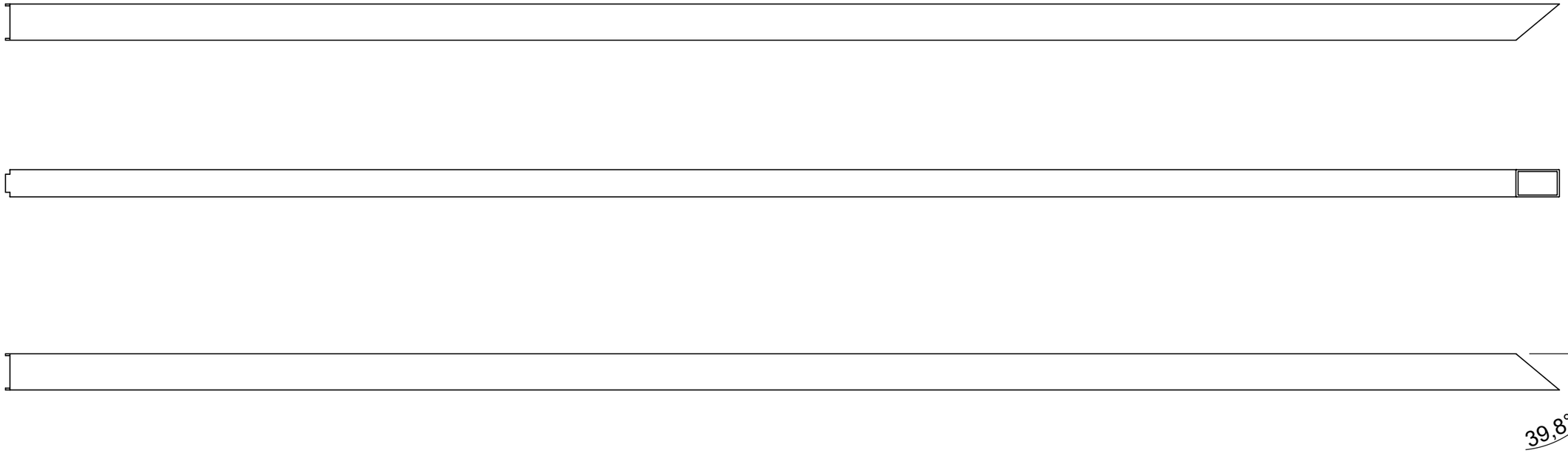
Title: Tube 40x30x2

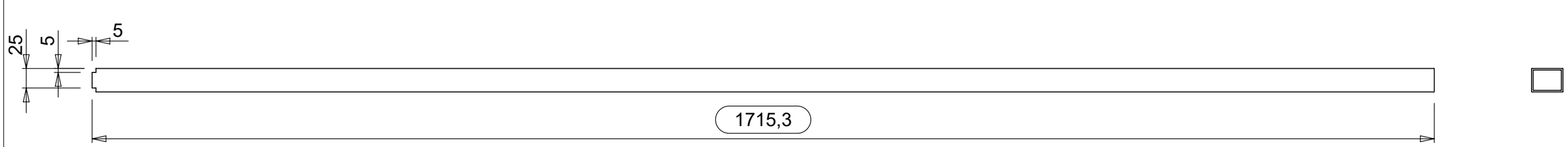
Iss.	Changes	Date	Name

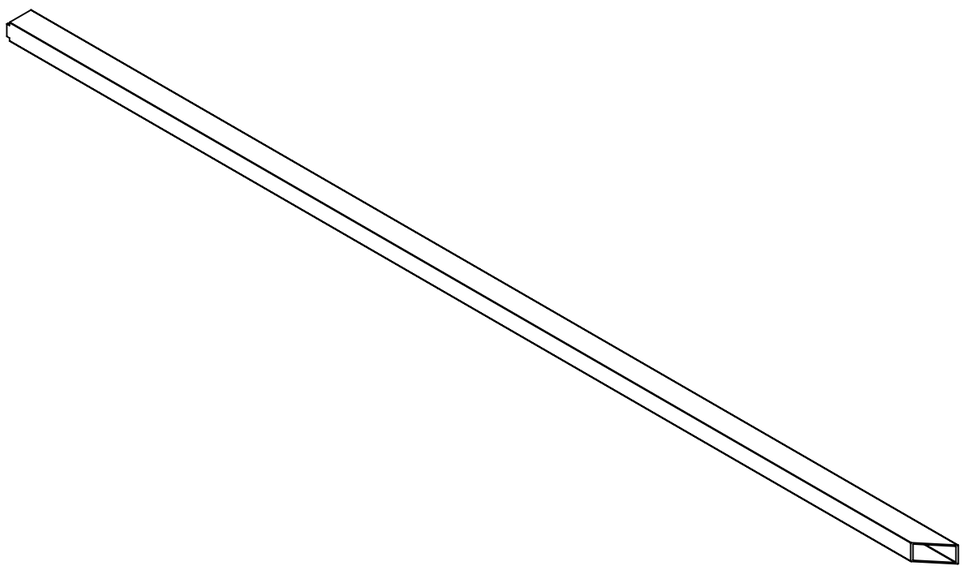
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Tube 40x30x2	1715,3	40/30	2	2000-05-0297	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0297 Sheet : 1 of 1	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.20 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

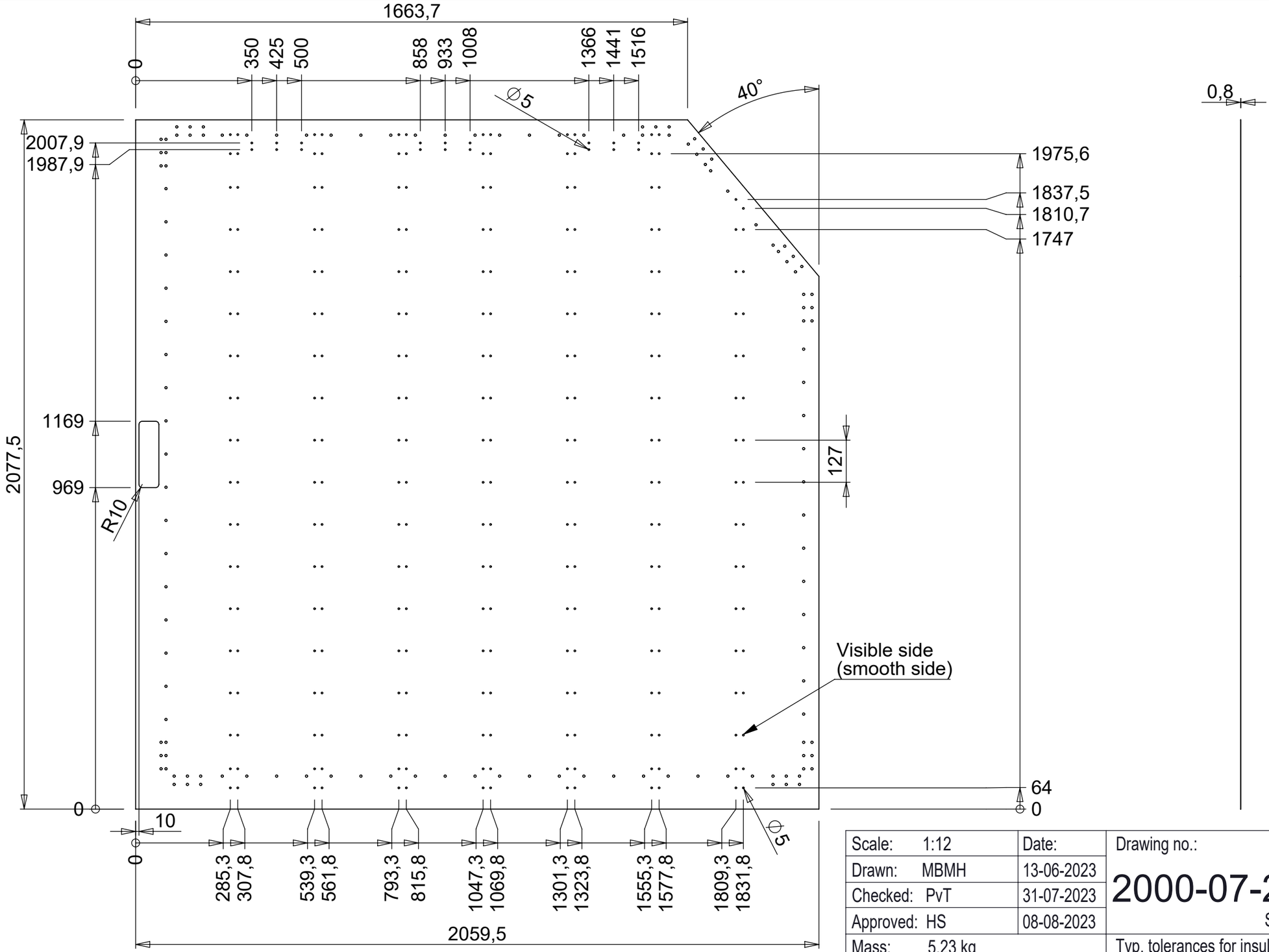
Title: **Tube 40x30x2**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Ø5 holes

See also sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2749	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Scale: 1:12	Date:	Drawing no.: 2000-07-2749 Sheet : 1 of 2	Issue A
Drawn: MBMH	13-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.23 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Title: **Inner sheet**

Tolerances (u.n.o.)

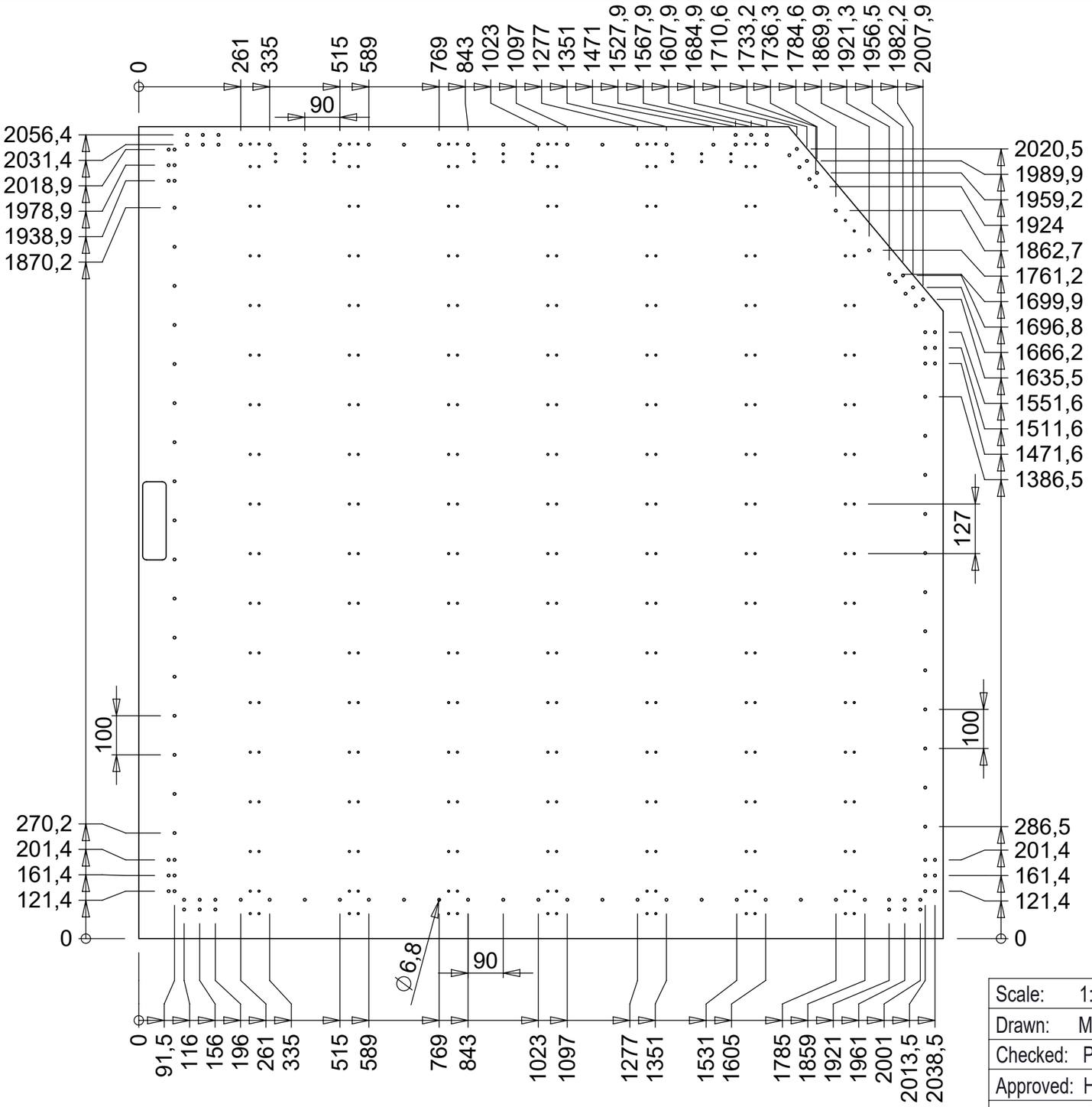
Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

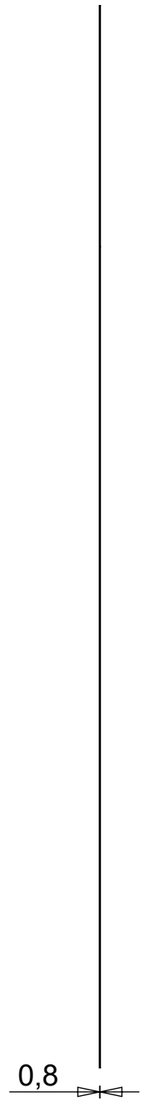
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Ø6,8 holes

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2749	PE-GEGW 0,8 NF	

Scale: 1:12	Date:	Drawing no.: 2000-07-2749 Sheet : 2 of 2	Issue A
Drawn: MBMH	13-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.23 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

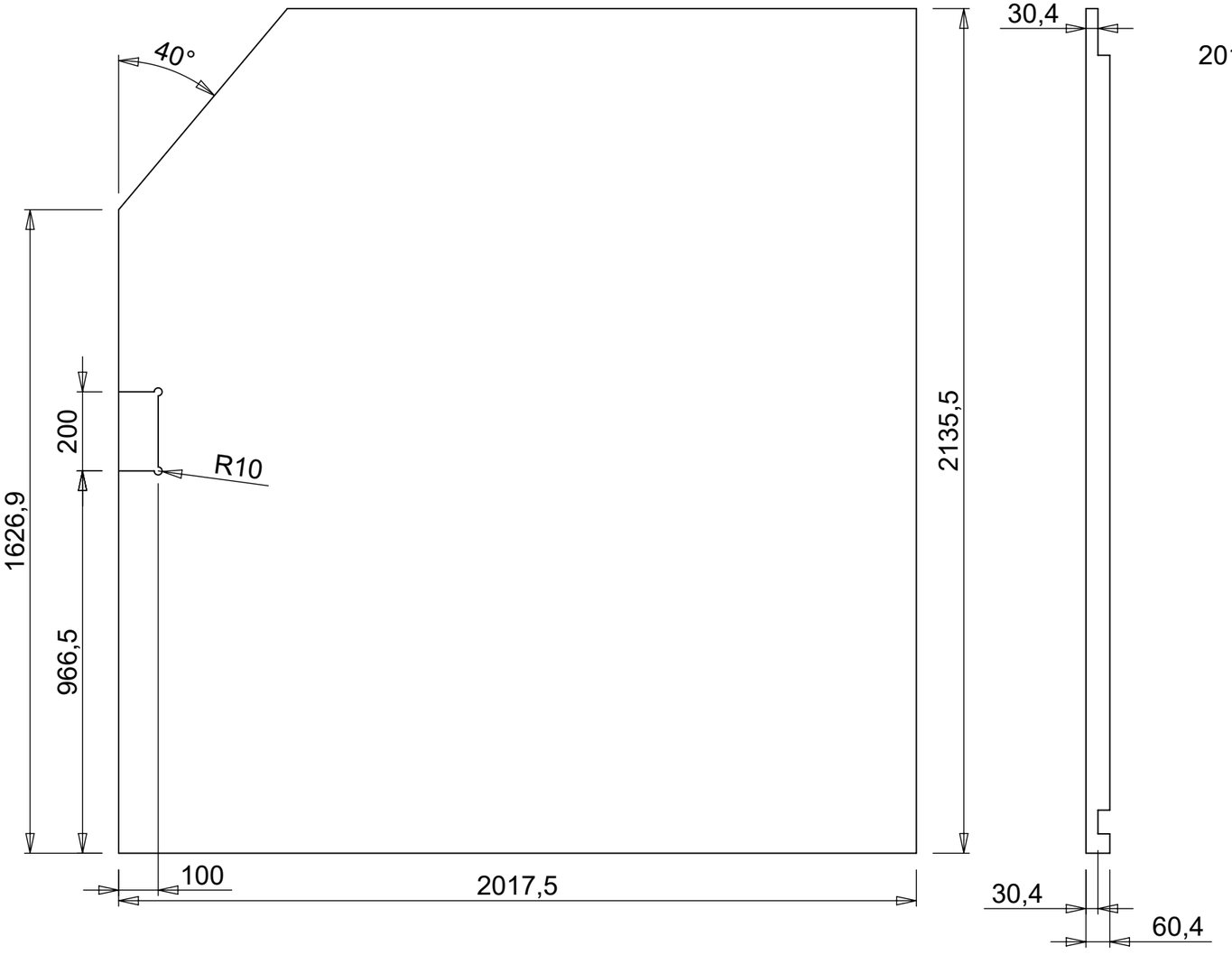
Title: # Inner sheet

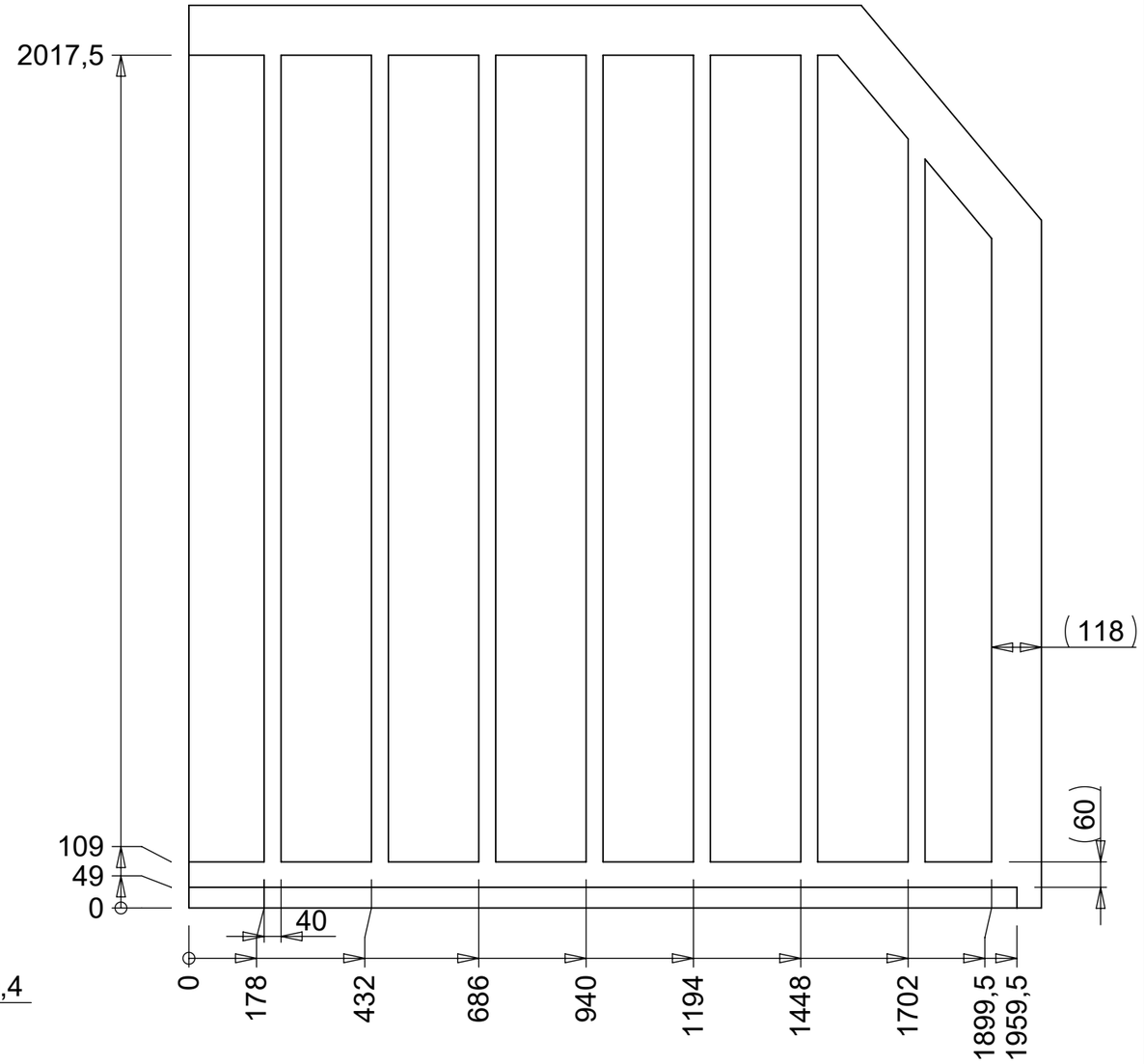
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





1	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0328	RTM-Plus	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:14	Date:	Drawing no.: 2000-05-0328	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 10.61 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

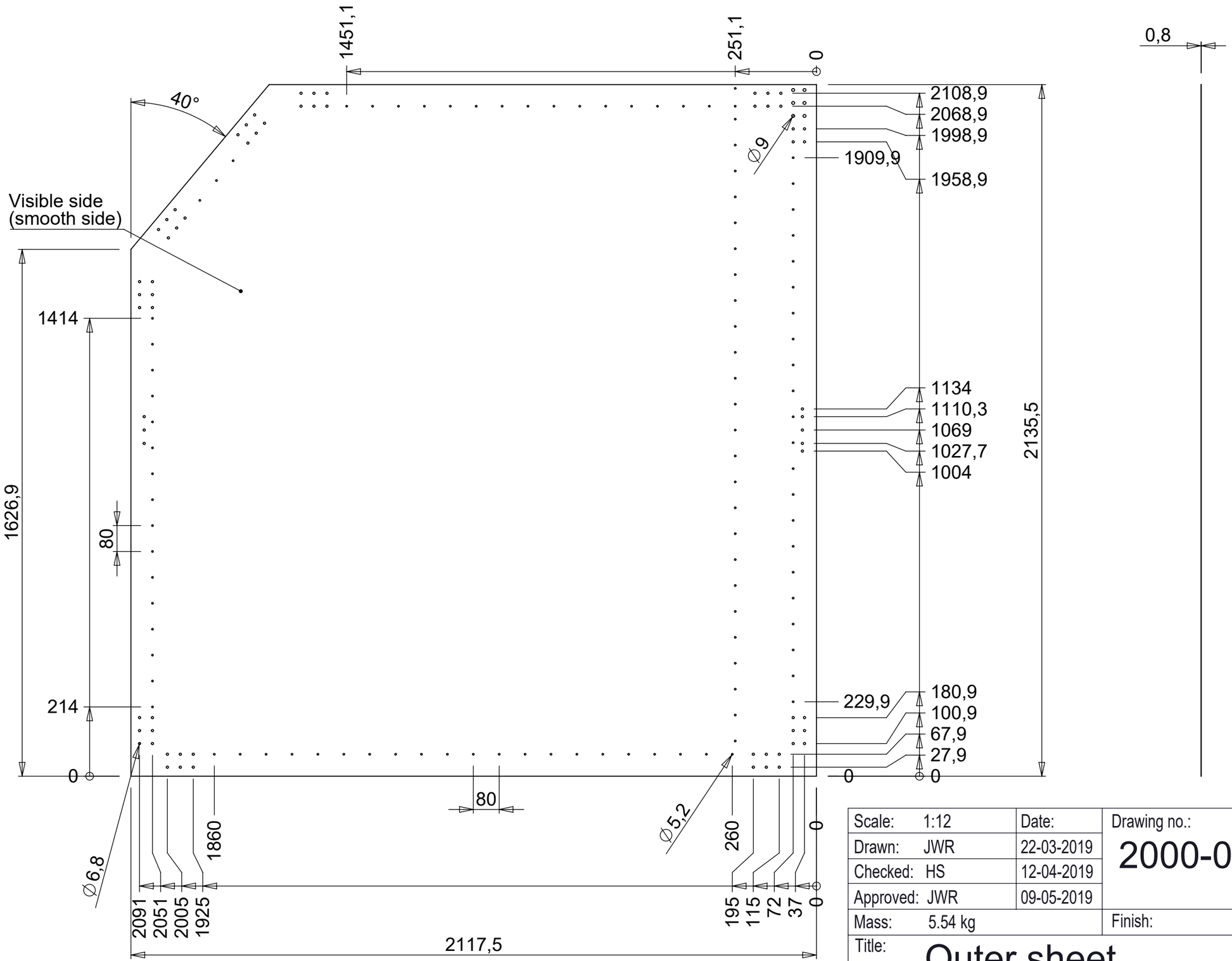
Title: # Insulation panel

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Scale: 1:12	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	22-03-2019	2000-05-0329	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >< br>±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: HS	12-04-2019	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-05-2019			
Mass: 5.54 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Outer sheet**

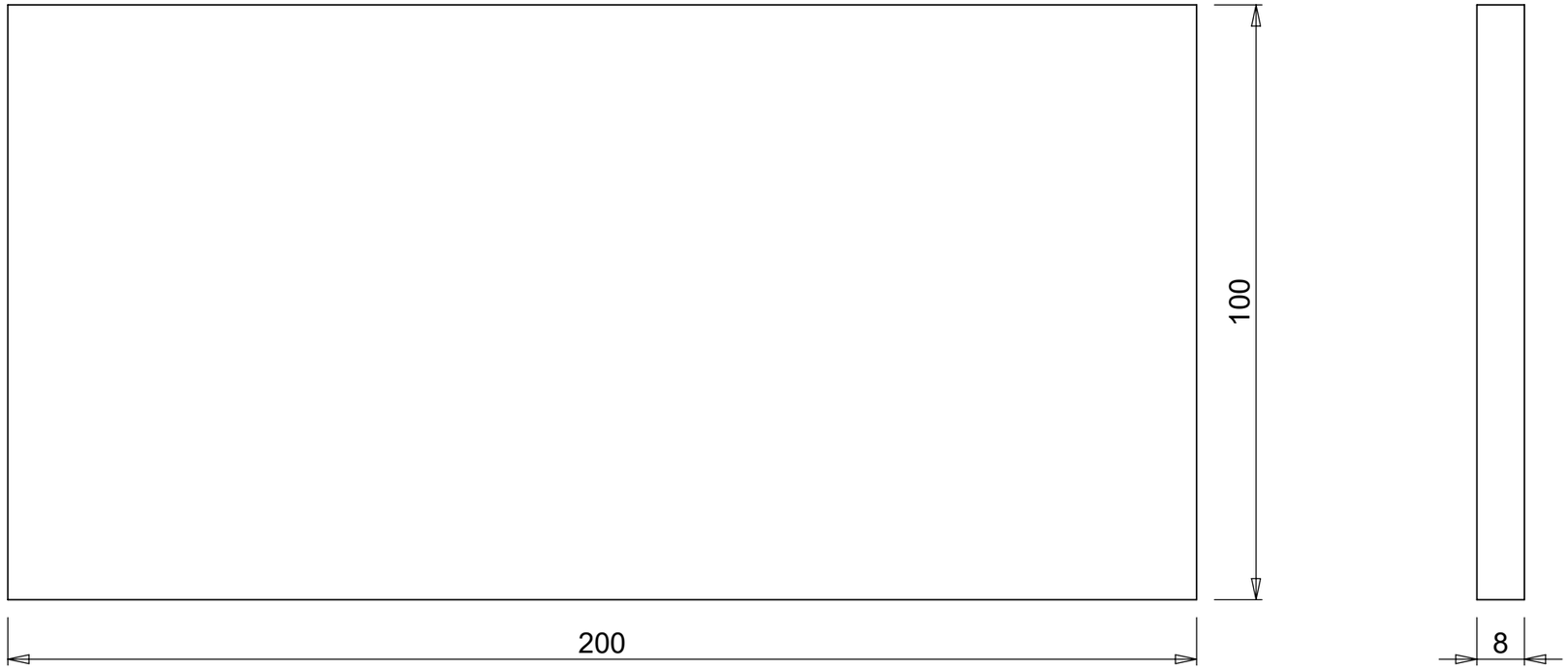
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0329	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:1	Date:	Drawing no.: 2000-05-1202 Sheet : 1 of 1	Issue A
Drawn: JWR	22-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.43 kg		Finish:	
Title: Insert			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

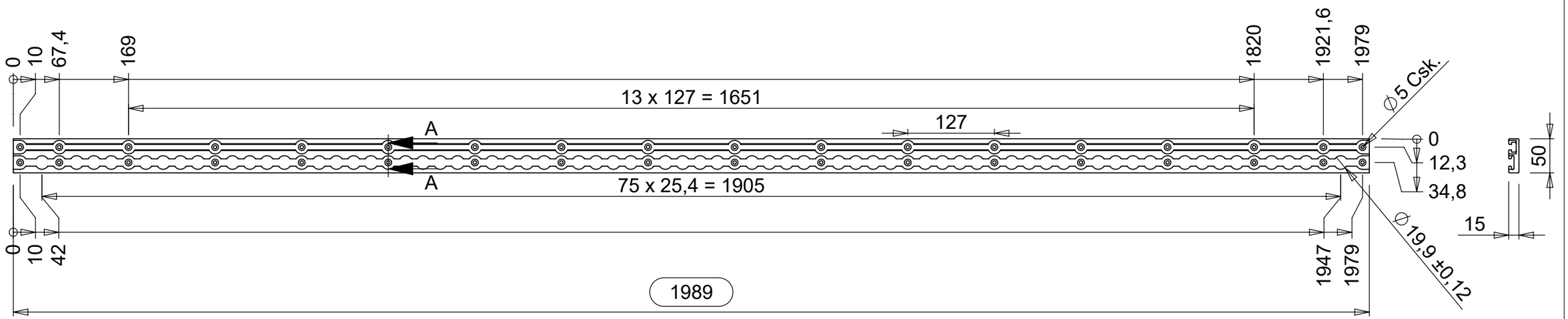
Dimensions in mm (u.n.o.)

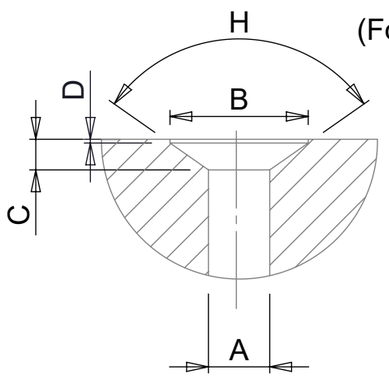
Iss.	Changes	Date	Name

Projection

Size A3

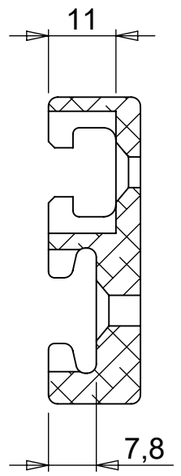
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	

Scale: 1:6	Date:	Drawing no.: 2000-04-8198	Issue: A
Drawn: JWR	12-02-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.52 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

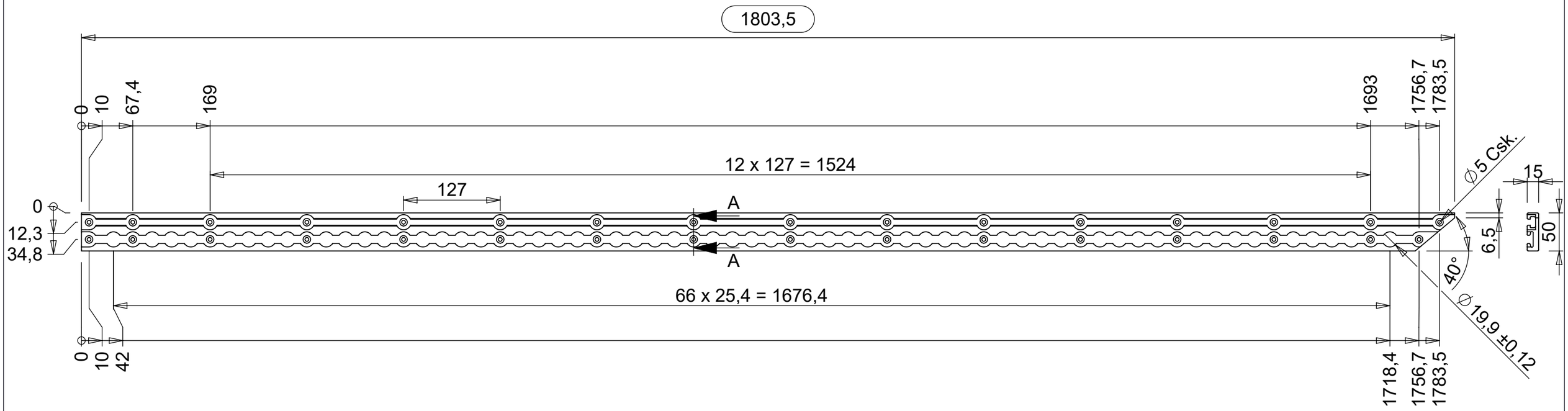
Title: Seat-T track profile RR 205

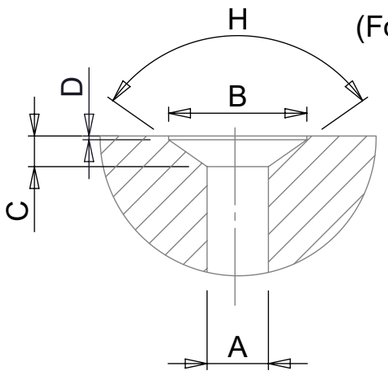
Iss.	Changes	Date	Name

Projection

Size A3

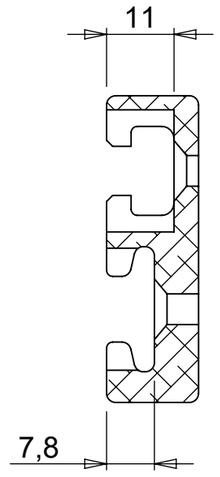
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Seat-T track profile RR 205	1803,5	50	15	2000-05-1457	Alu. 6061-T6	

Scale: 1:5	Date:	Drawing no.: 2000-05-1457	Issue: A
Drawn: JWR	25-03-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: HS	12-04-2019		< 7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019		7 30 120 400 1000 2000 >
Mass: 2.25 kg		Finish: U001 - Aludon	±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
			Raw extrusion in accordance with OEM drawing and EN755-9
			Dimensions in mm (u.n.o.)

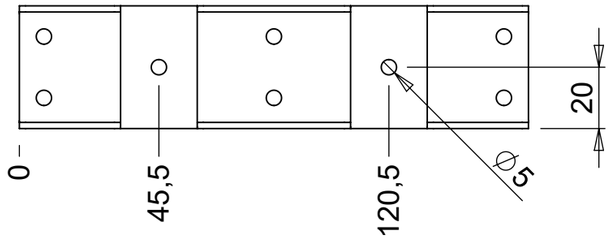
Title: **Seat-T track profile RR 205**

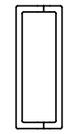
Iss.	Changes	Date	Name

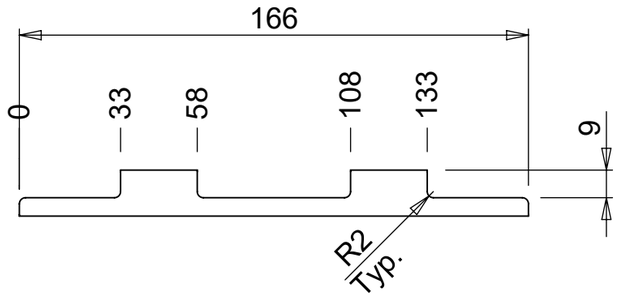
Projection

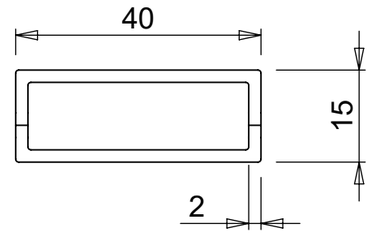
Size A3

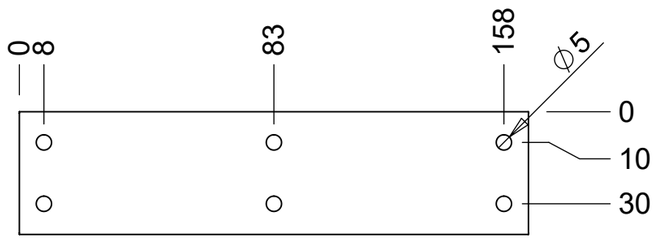
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

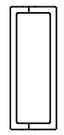


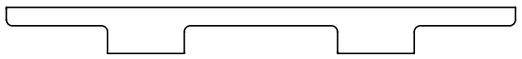


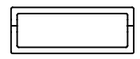


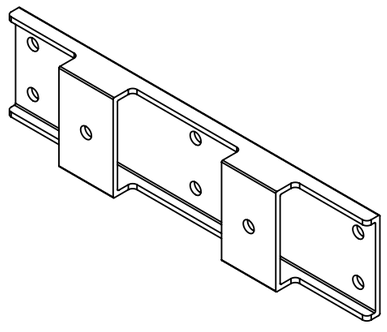












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	

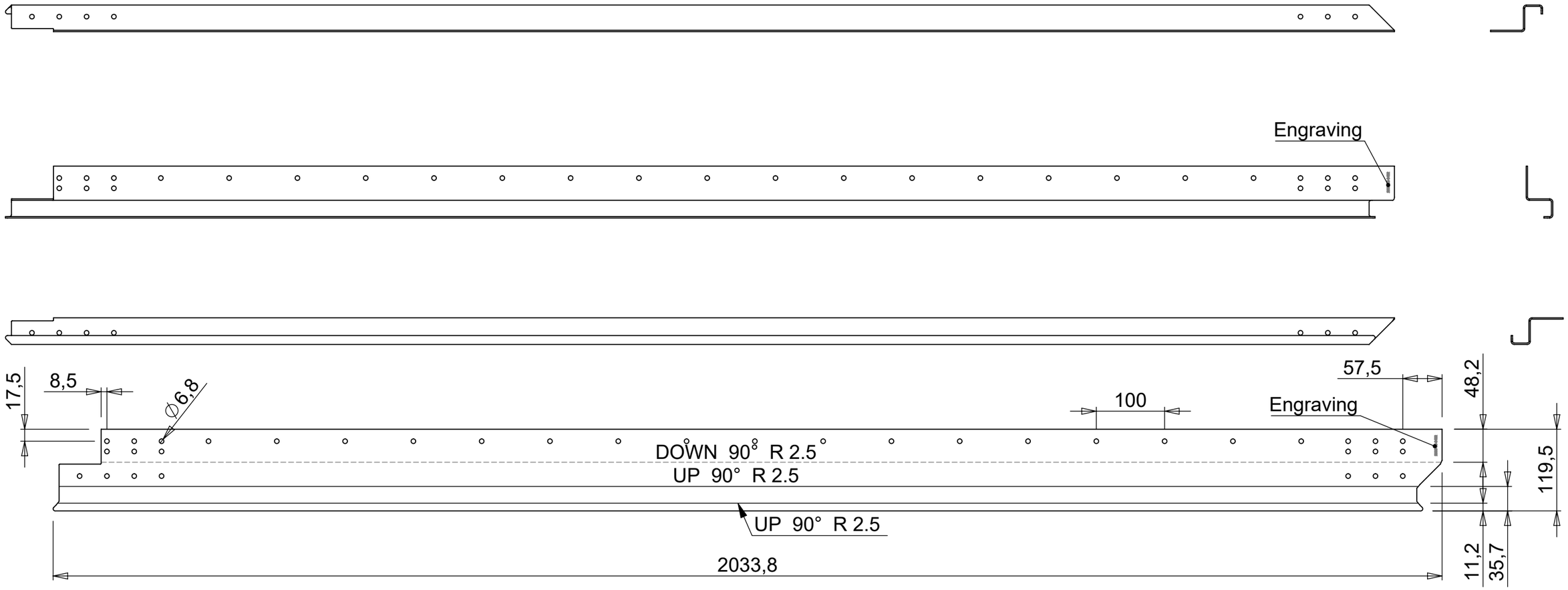
Scale: 1:2	Date:	Drawing no.: 2000-07-2645	Issue: A
Drawn: MBMH	25-05-2023	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: PvT	31-07-2023		< 7 / 7 30 / ±0.2 ±0.3
Approved: HS	08-08-2023		30 120 400 1000 2000 > / ±0.5 ±0.8 ±1.0 ±1.4 ±2
Mass: 0.06 kg		Finish:	Raw extrusion in accordance with OEM drawing and EN755-9
Title: Tube 40x15x2			Dimensions in mm (u.n.o.)

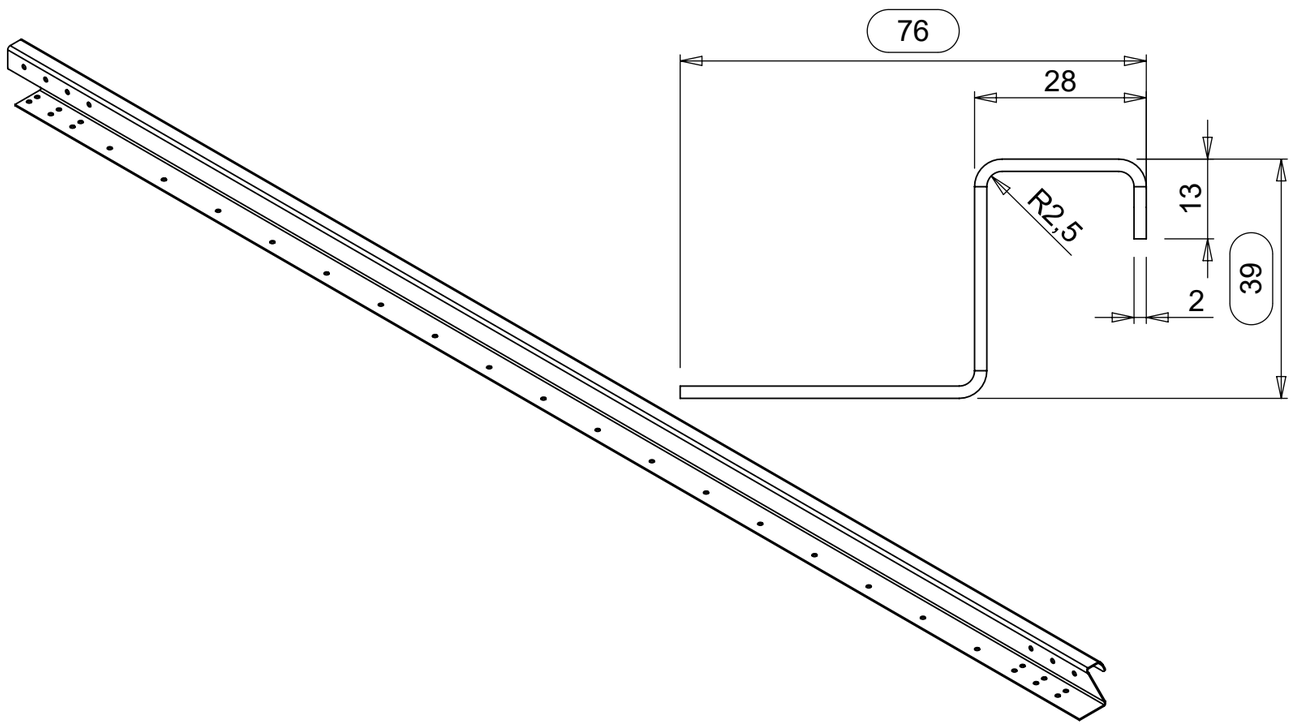
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





1	1	Door post	2033,8	119,5	2	2000-05-0492	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0492	Issue A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 3.77 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

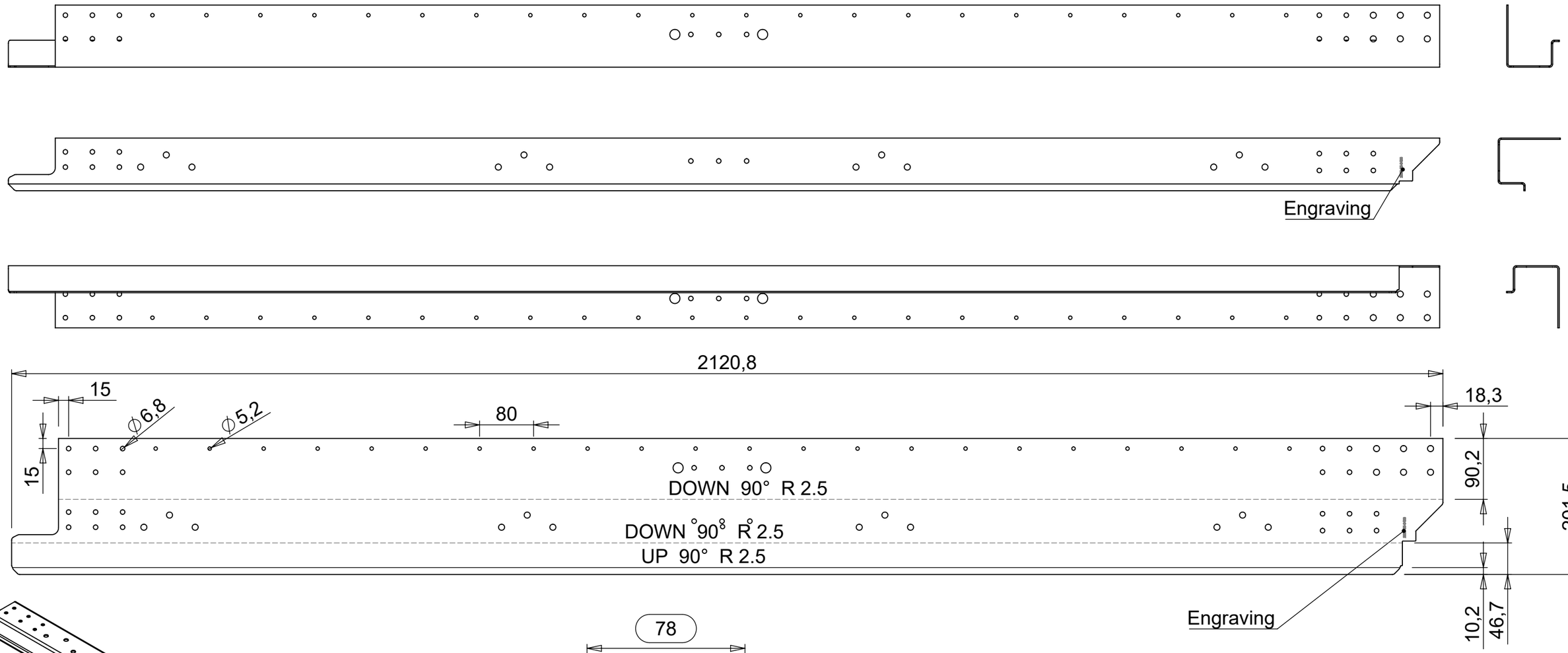
Title: **Door post**

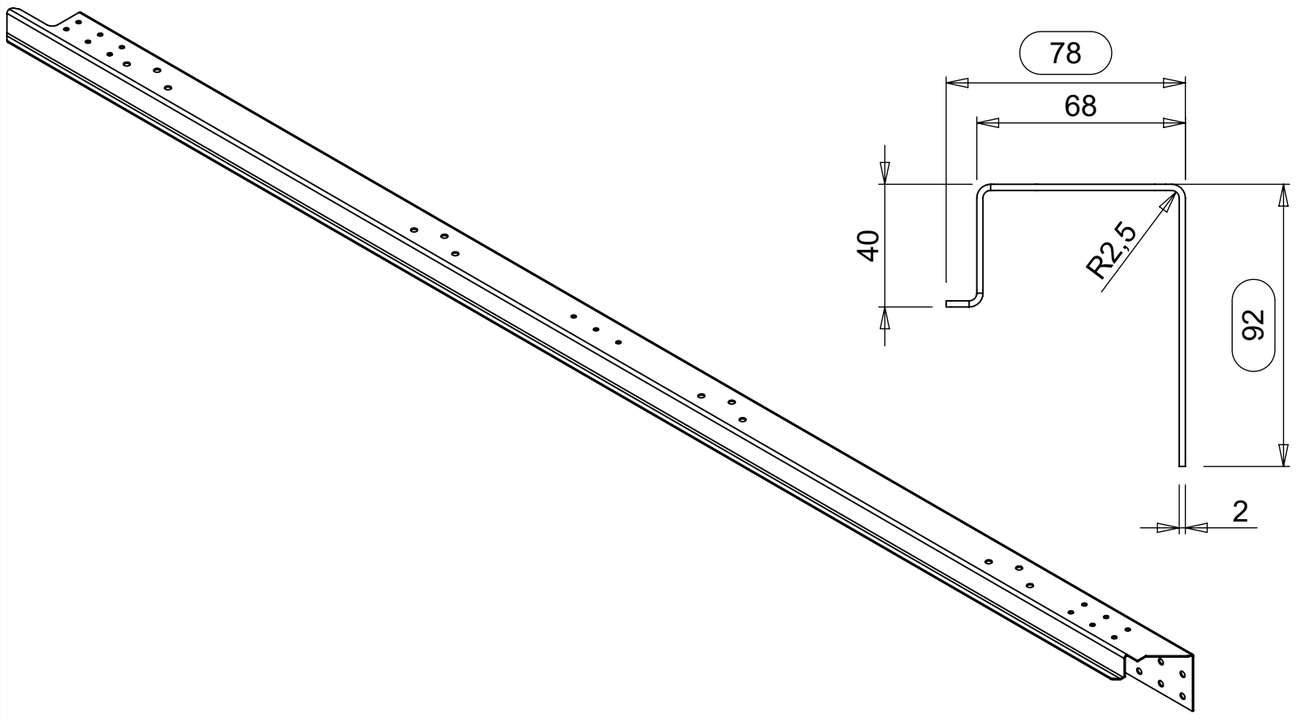
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0493	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0493 Sheet : 1 of 1	Issue B
Drawn: JWR	25-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 6.56 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

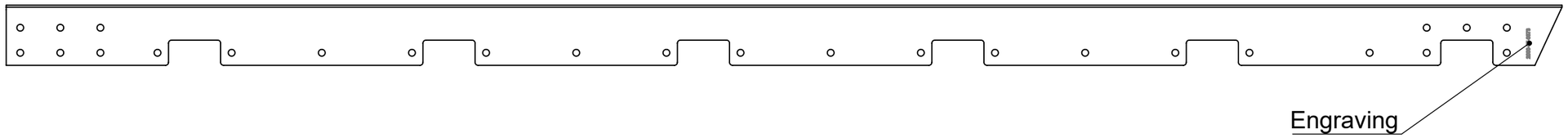
Title: # DBJ corner sheets

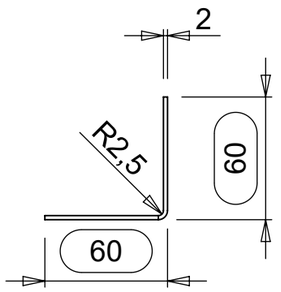
Iss.	Changes	Date	Name
B	~cut-out	10-03-2020	MVE

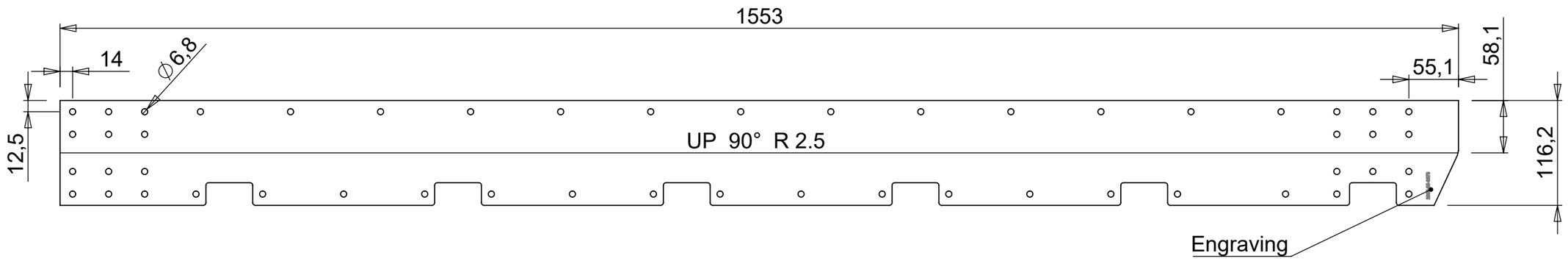
Projection

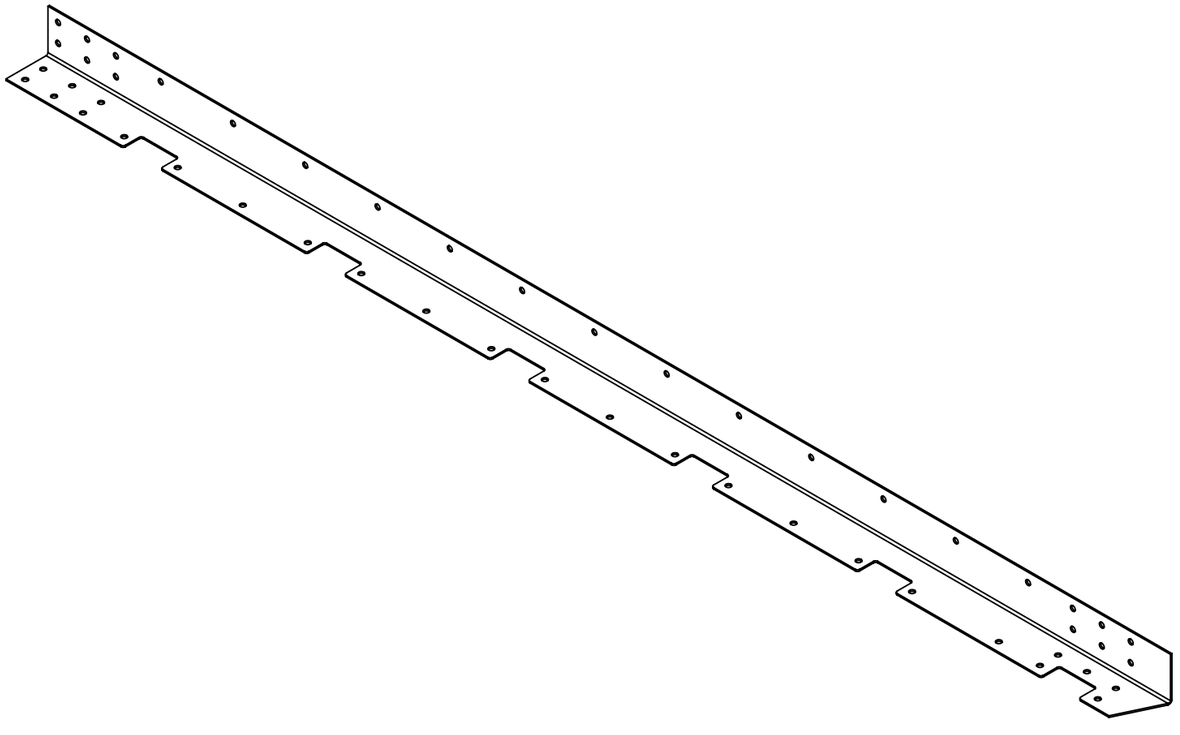
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Internal frame sheet	1553	116,2	2	2000-05-0373	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0373	Issue A	Tolerances (u.n.o.)
Drawn: JWR	25-03-2019			< 7 30 120 400 1000 2000
Checked: HS	12-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.92 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

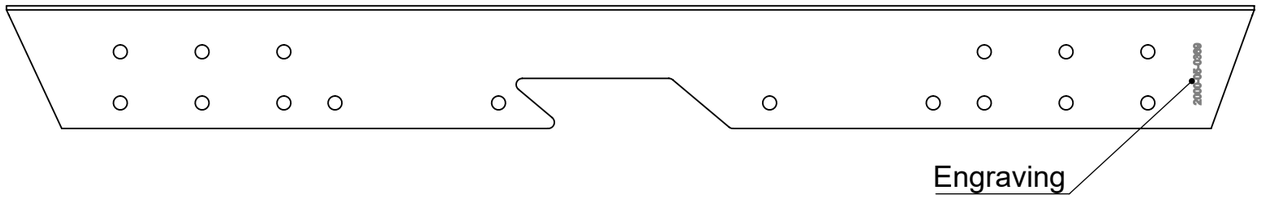
Title: **Internal frame sheet**

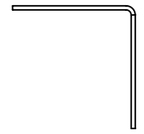
Iss.	Changes	Date	Name

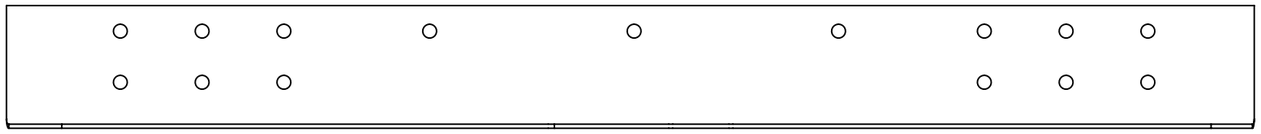
Projection

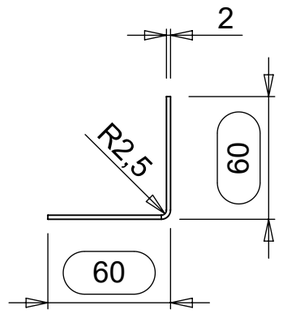
Size A3

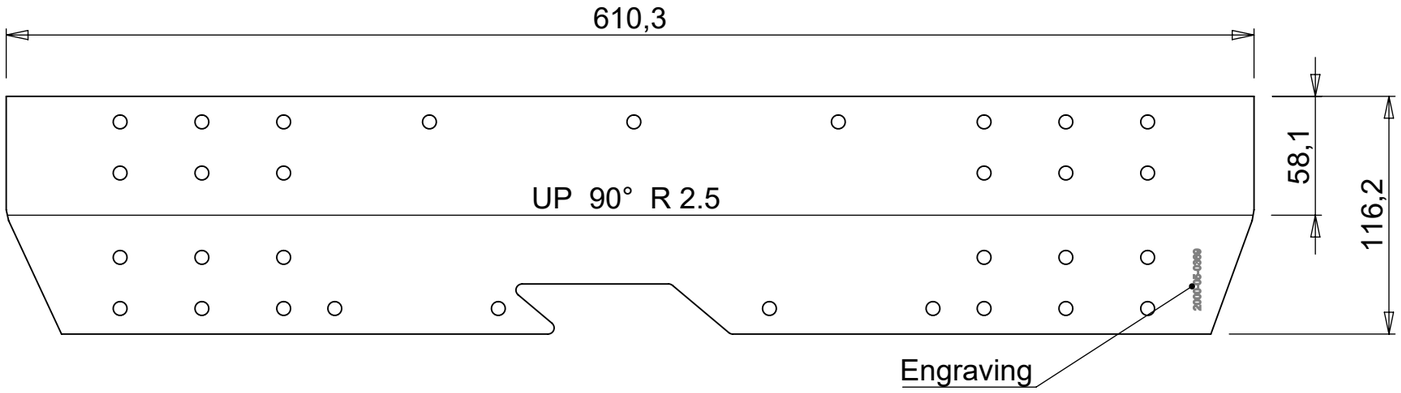
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

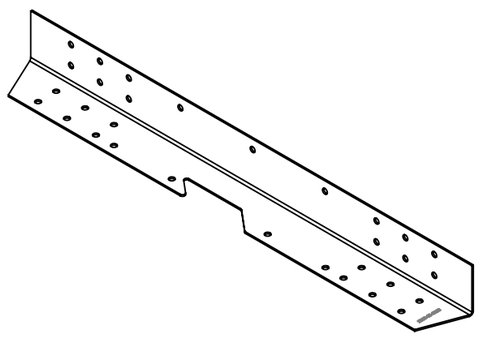












1	1	Internal frame sheet	610,3	116,2	2	2000-05-0369	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0369	Issue: A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.36 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

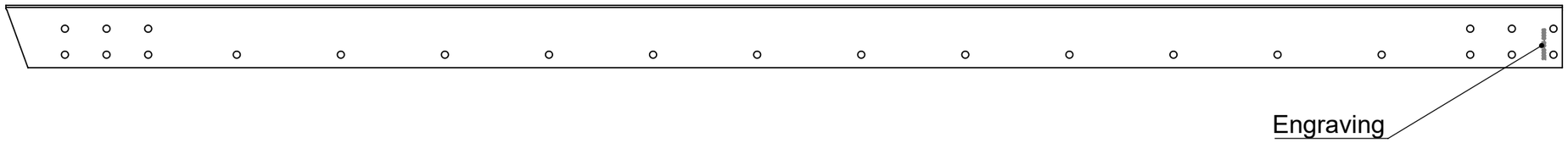
Title: **Internal frame sheet**

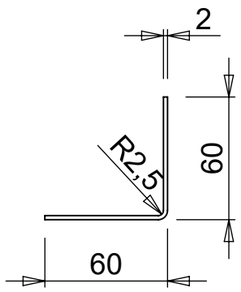
Iss.	Changes	Date	Name

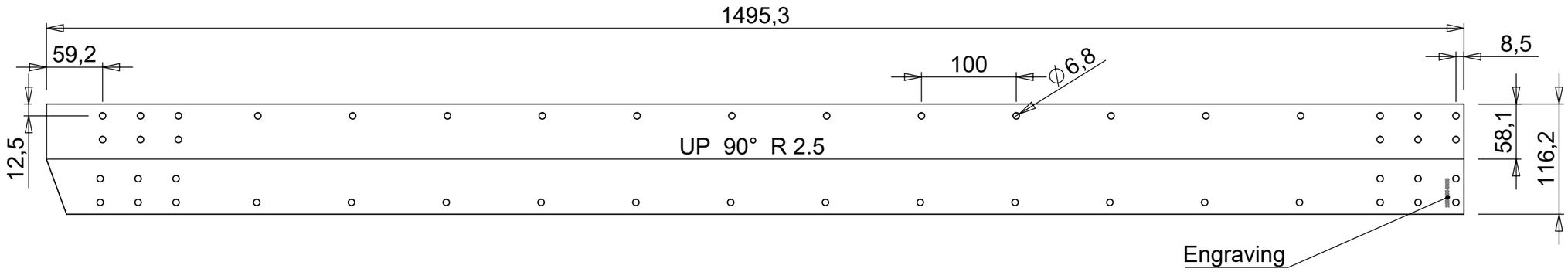
Projection

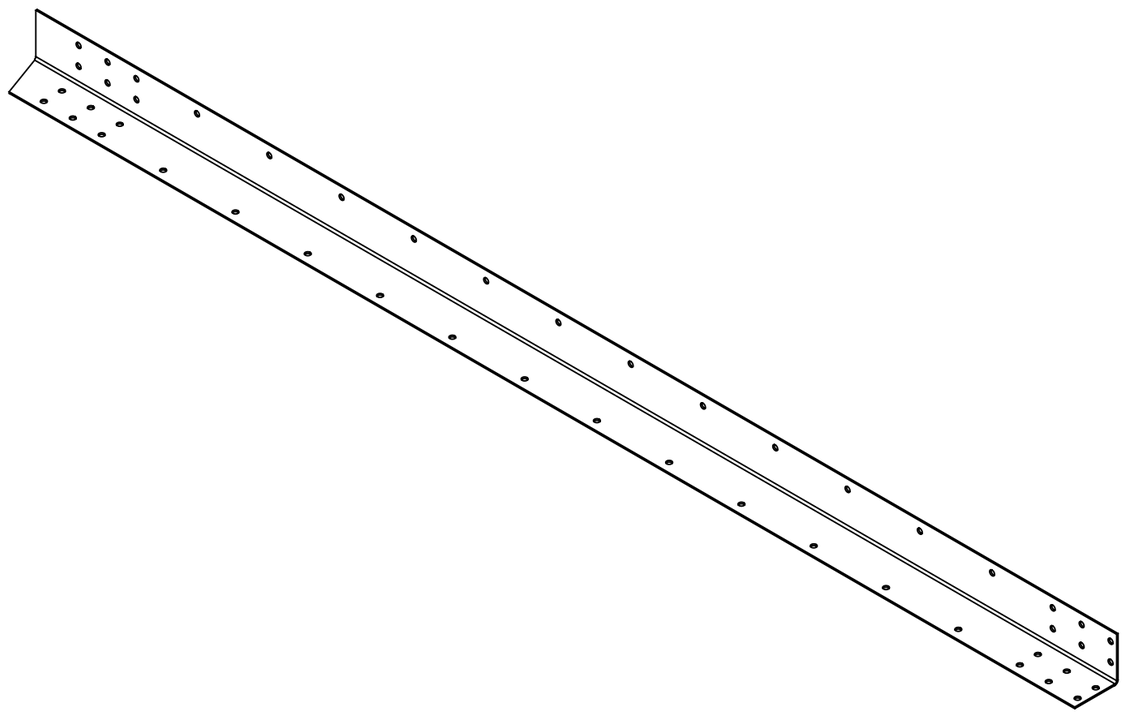
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Internal frame sheet	1495,3	116,2	2	2000-05-0368	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0368 Sheet : 1 of 1	Issue A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.93 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

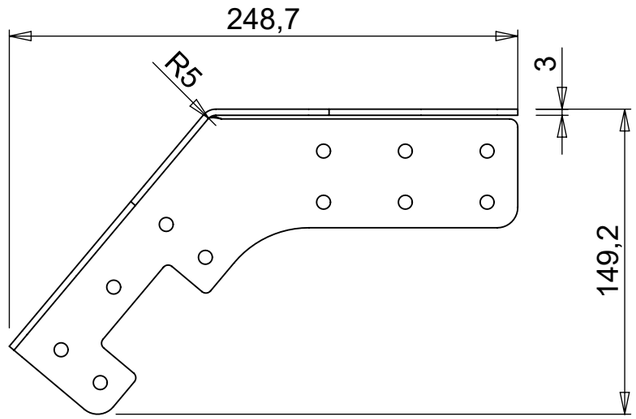
Title: **Internal frame sheet**

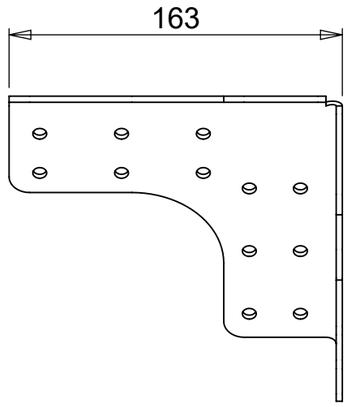
Iss.	Changes	Date	Name

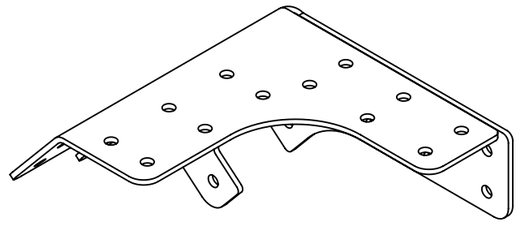
Projection

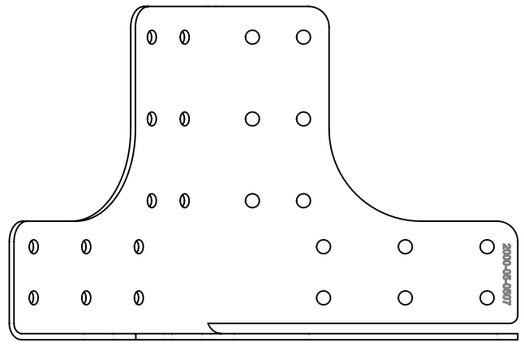
Size A3

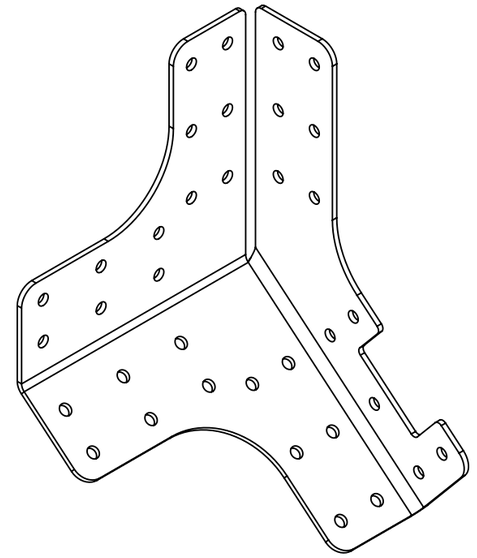
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

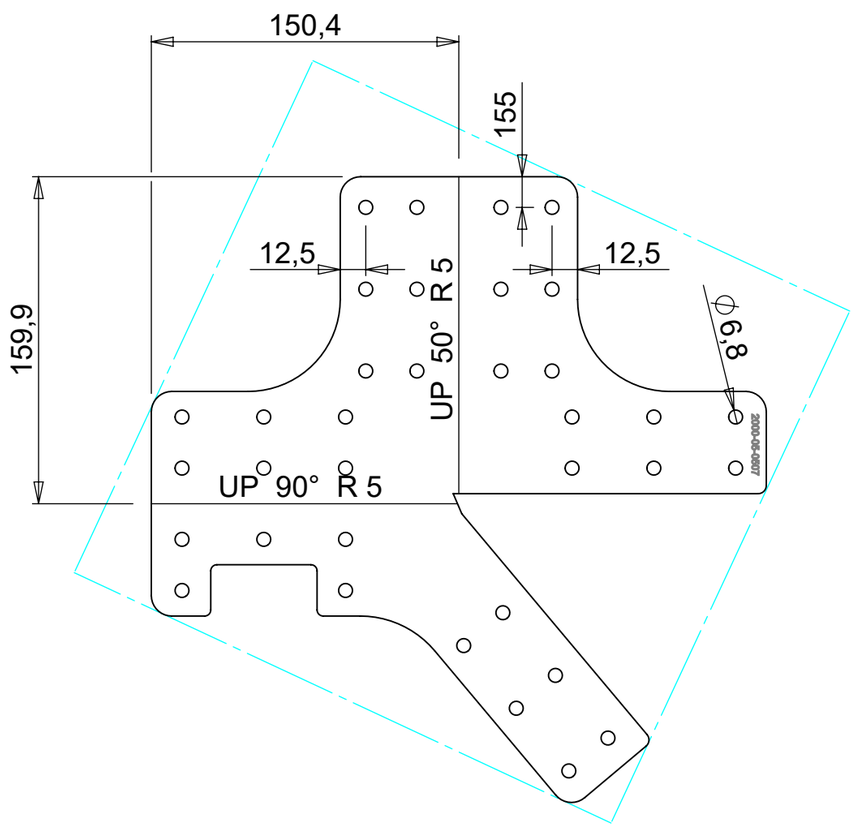












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Left slanted corner gusset	289,7	258,6	3	2000-05-0507	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0507	Issue: A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.33 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

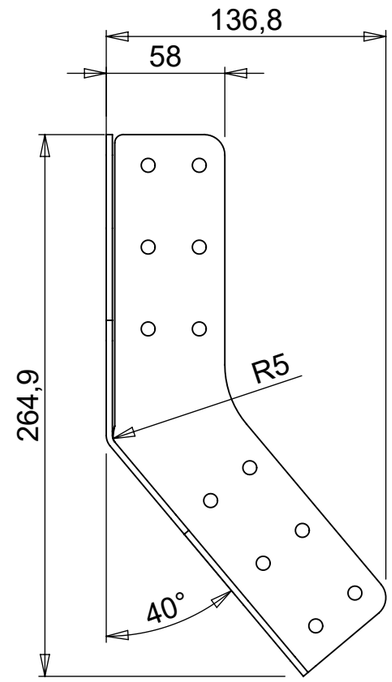
Title: **Left slanted corner gusset**

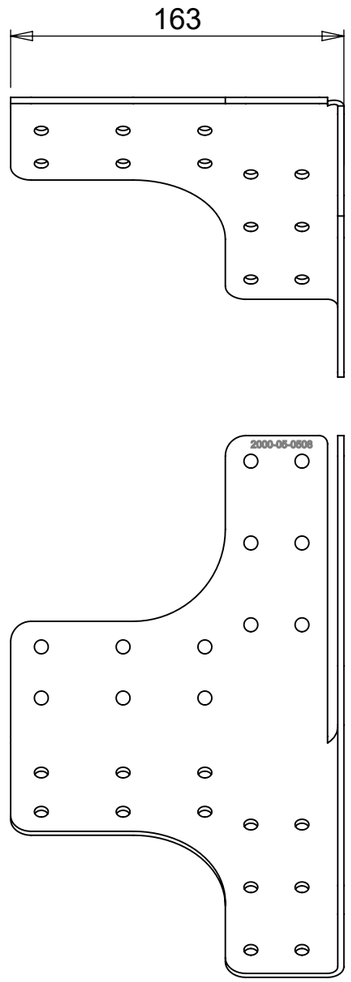
Iss.	Changes	Date	Name

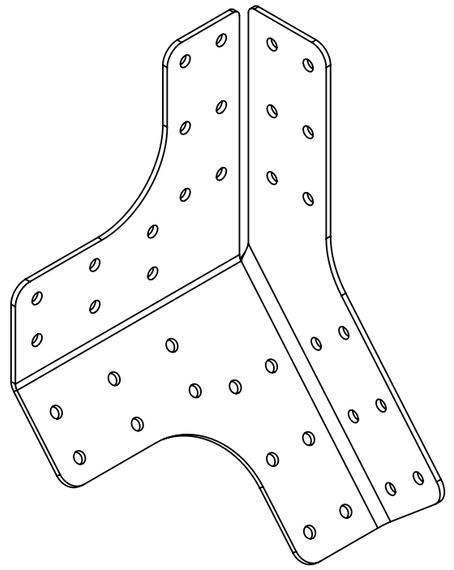
Projection

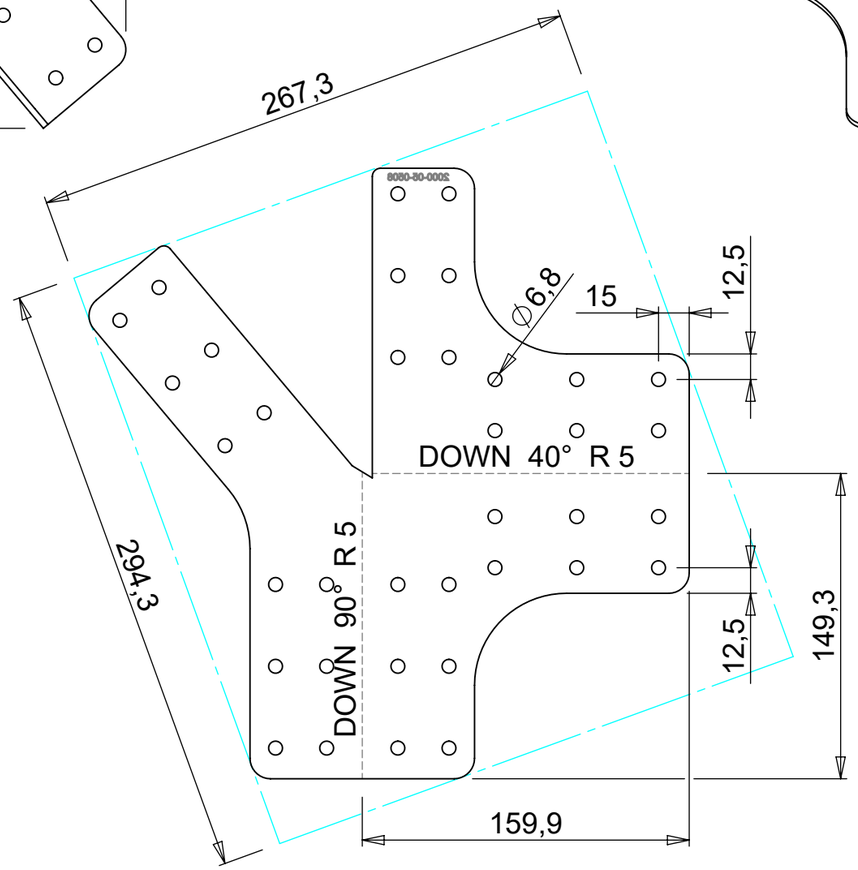
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Left slanted corner gusset	294,3	267,3	3	2000-05-0508	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0508	Issue A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.34 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

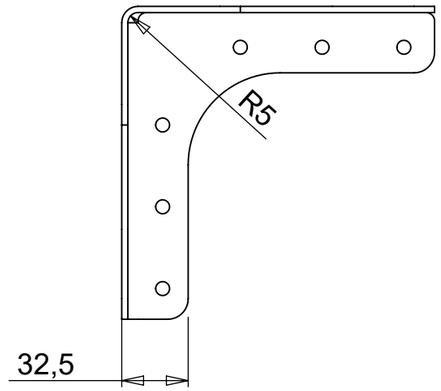
Title: **Left slanted corner gusset**

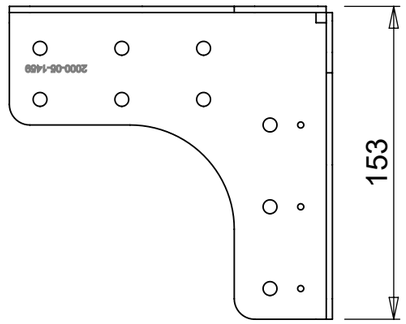
Iss.	Changes	Date	Name

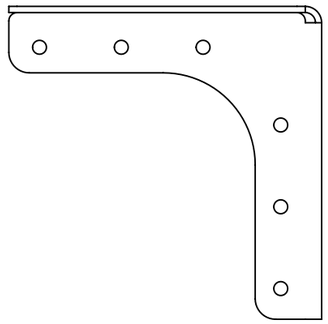
Projection

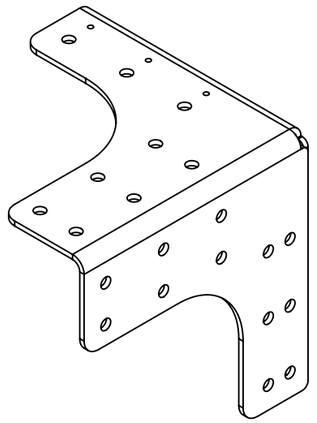
Size A3

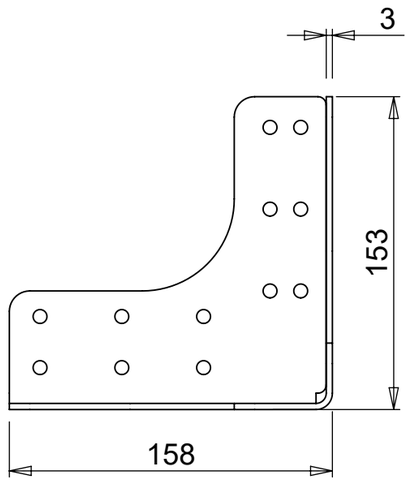
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

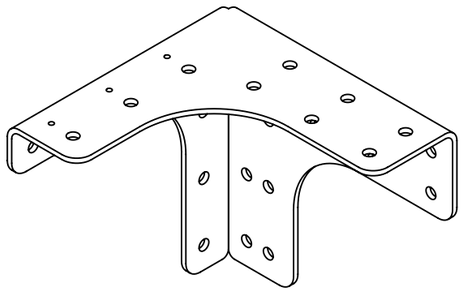


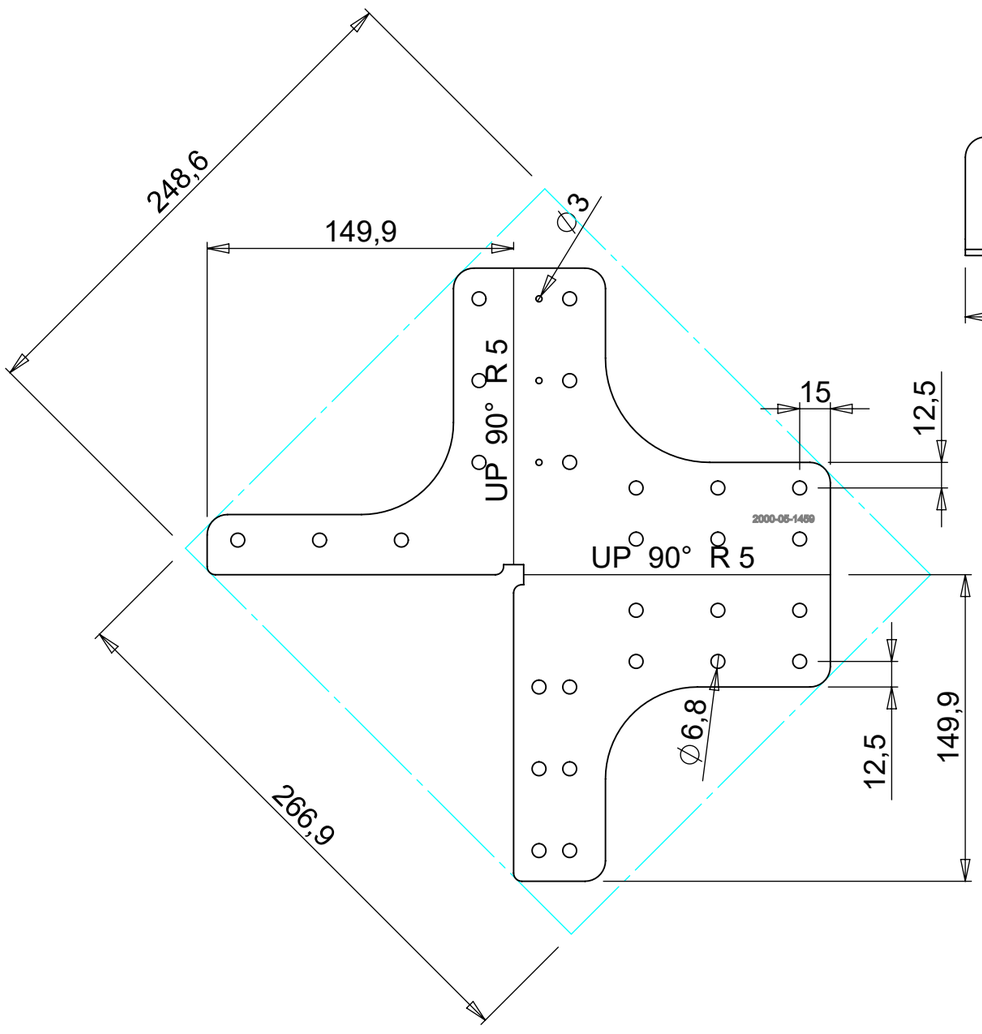












1	1	Left inner corner gusset	266,9	248,6	3	2000-05-1459	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1459 Sheet : 1 of 1	Issue A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.27 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

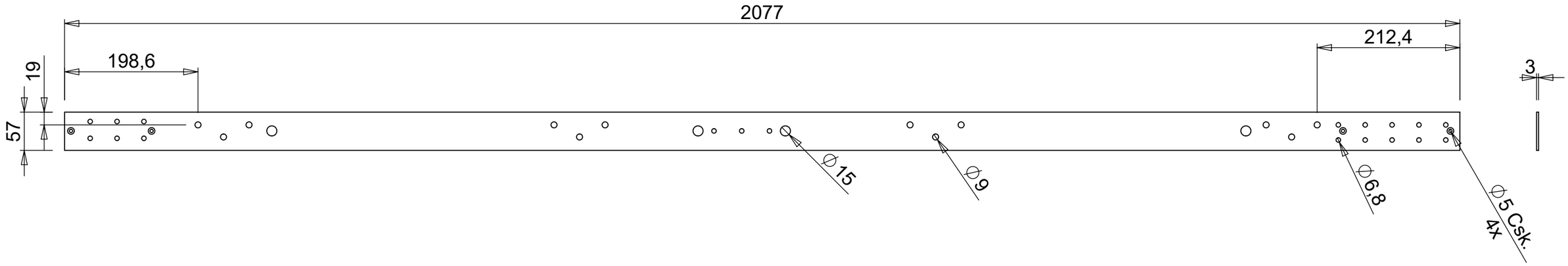
Title: **Left inner corner gusset**

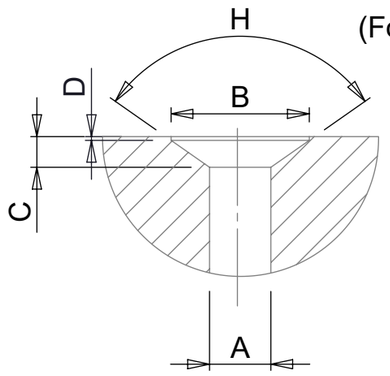
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°

1	1	Fill plate base gusset	2077	57	3	2000-05-1747	Alu. 5754-H22	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-1747 Sheet : 1 of 1	Issue A
Drawn: JWR	25-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.94 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

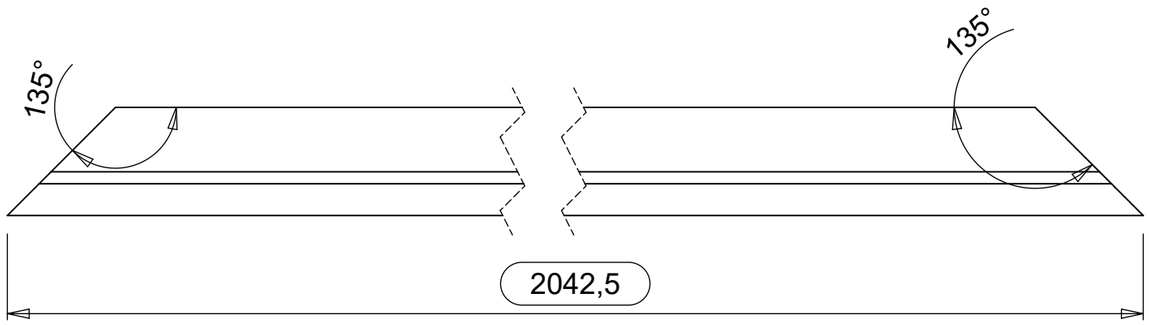
Title: Fill plate base gusset

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)

Scale: 1:1	Date:	Drawing no.: 2000-05-1537 Sheet : 1 of 1	Issue B
Drawn: JWR	25-03-2019		
Checked: MH	11-09-2019		
Approved: JWR	12-09-2019		
Mass: 0.21 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

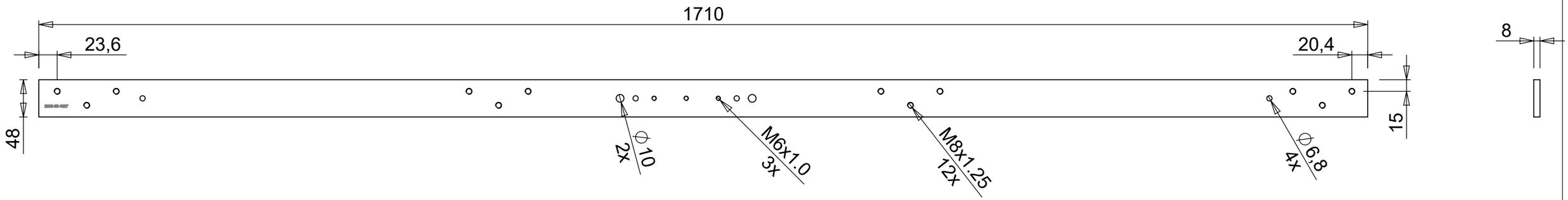
Title: **Door rubber Extrusion**

Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-1627	Issue A	Tolerances (u.n.o.)
Drawn: JWR	25-03-2019			< 7 30 120 400 1000 2000
Checked: HS	12-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 1.76 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

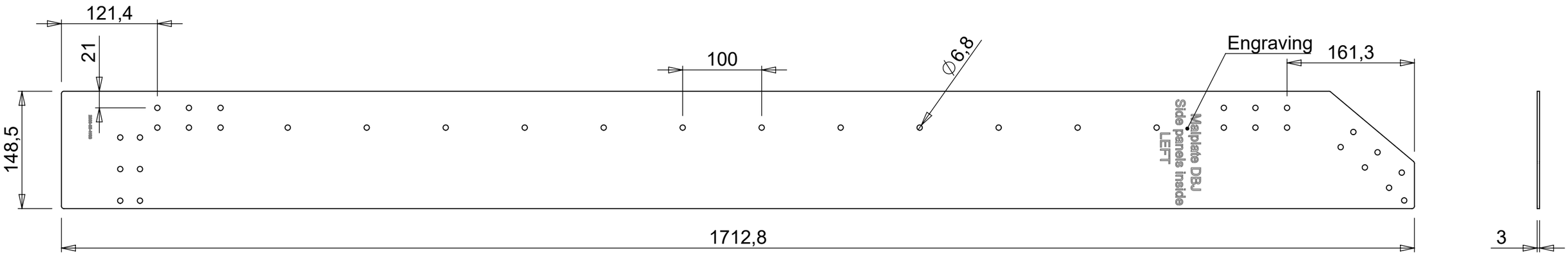
Title: **Thread block doors**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Malplate DBJ side panel LEFT inside	1712,8	148,5	3	2000-05-4188	Alu. 5754-H22	One per order

Scale: 1:5	Date:	Drawing no.: 2000-05-4188 Sheet : 1 of 1	Issue: A
Drawn: JWR	08-10-2019		
Checked: HS	08-10-2019		
Approved: JWR	08-10-2019		
Mass: 2.01 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

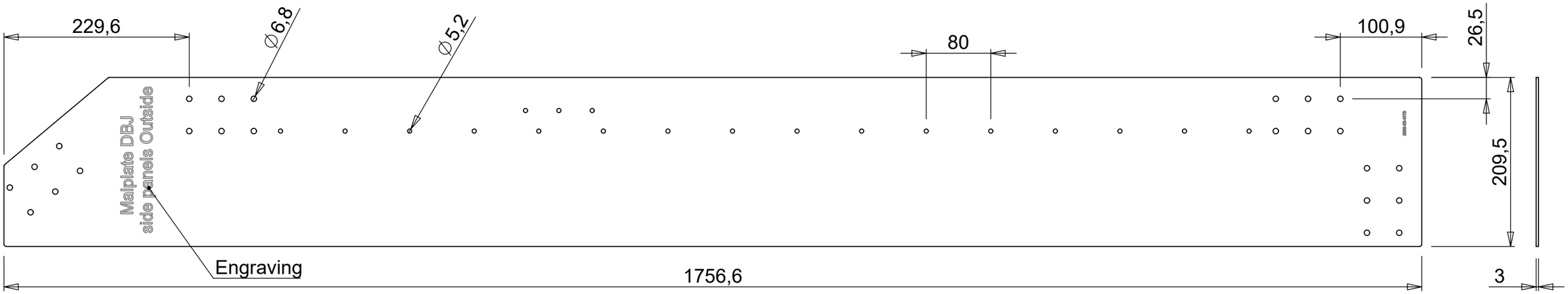
Title: **Malplate DBJ side panel LEFT inside**

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-4178 Sheet : 1 of 1	Issue A	Tolerances (u.n.o.)
Drawn: JWR	07-10-2019			
Checked: HS	07-10-2019			
Approved: JWR	08-10-2019			
Mass: 2.91 kg		Finish:		Dimensions in mm (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

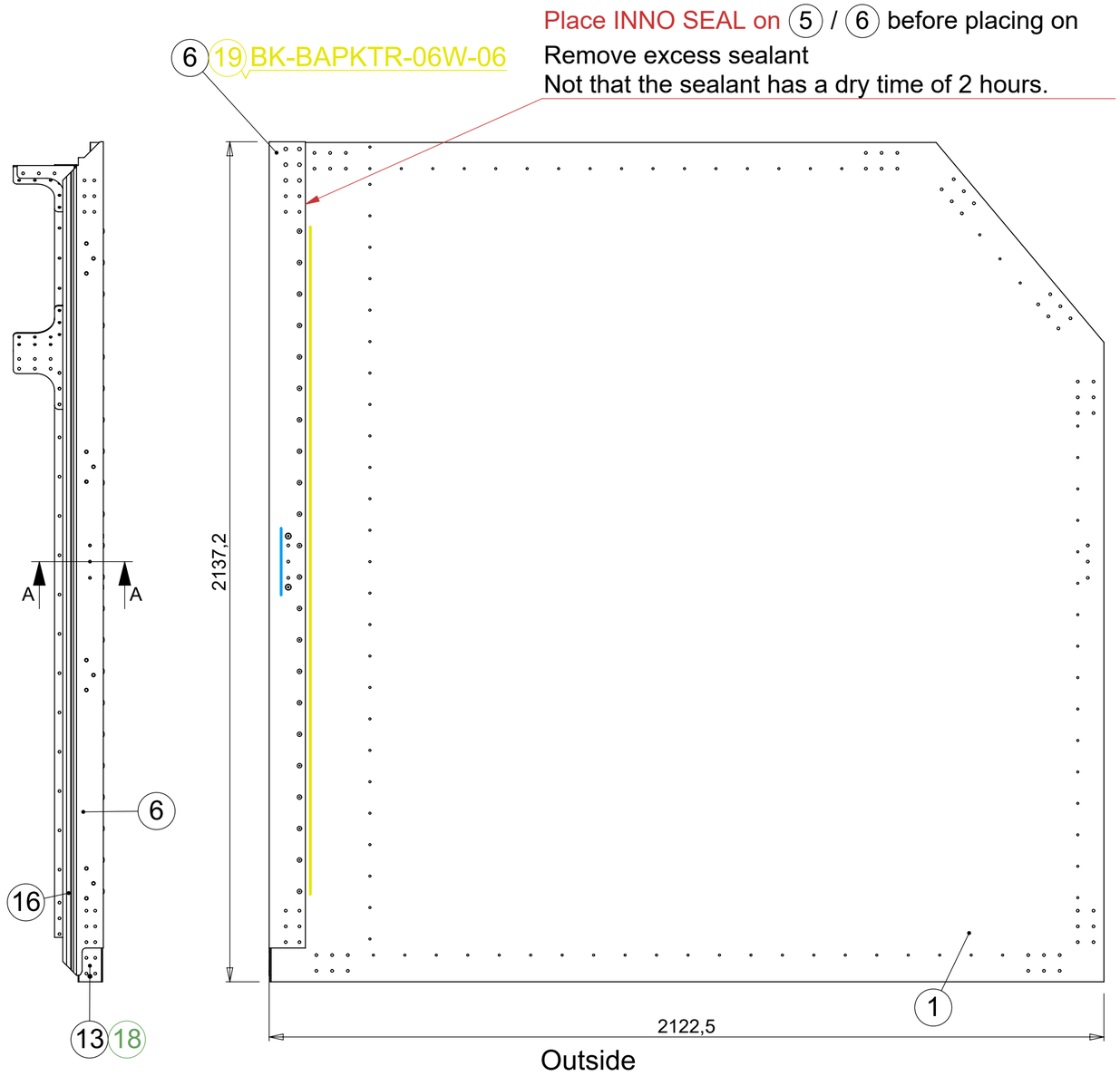
Title: **Malplate side panel outside**

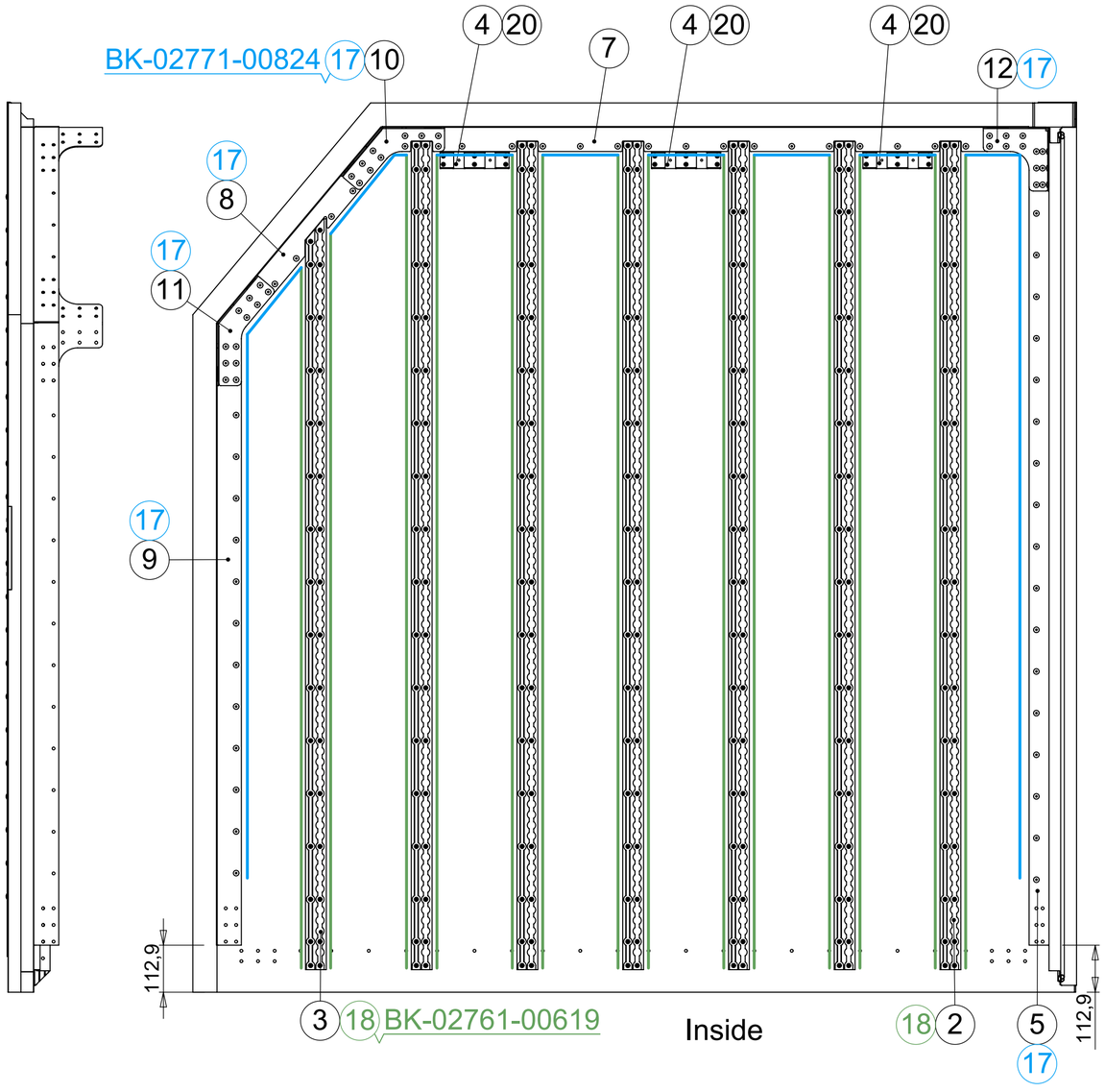
Iss.	Changes	Date	Name

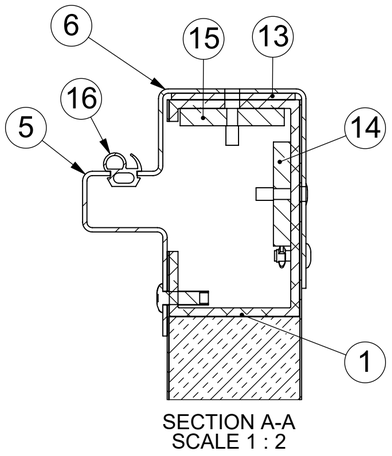
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION A-A
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate DBJ side panel Right inside	1712,8	148,5	3	2000-05-4182	Alu. 5754-H22	One per order
21	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
17	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
16	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
15	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1282	Alu. 5754-H22	
12	1	Right inner corner gusset	266,9	248,6	3	2000-05-1256	Alu. 5754-H22	Bend with V30
11	1	Right Slanted corner gusset	294,3	267,3	3	2000-05-1255	Alu. 5754-H22	Bend with V30
10	1	Right Slanted corner gusset	289,7	276,2	3	2000-05-1254	Alu. 5754-H22	Bend with V30
9	1	Internal Frame Sheet	1494,6	116,2	2	2000-05-0374	Alu. 5754-H22	Bend with V16
8	1	Internal Frame Sheet	610,3	116,2	2	2000-05-0380	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0381	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0434	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0435	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1811,2	50	15	2000-04-8265	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel right				2000-07-2973	Assembly	

Note:
See sheet 2 for details.
Use Malplates to drill missing holes in panel, see sheet 3.

Scale: 1:10	Date:	Drawing no. 2000-07-2972	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023	Sheet : 1 of 4	
Approved: HS	08-08-2023		
Mass: 78.85 kg		Finish:	
Title: DBJ panel right			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

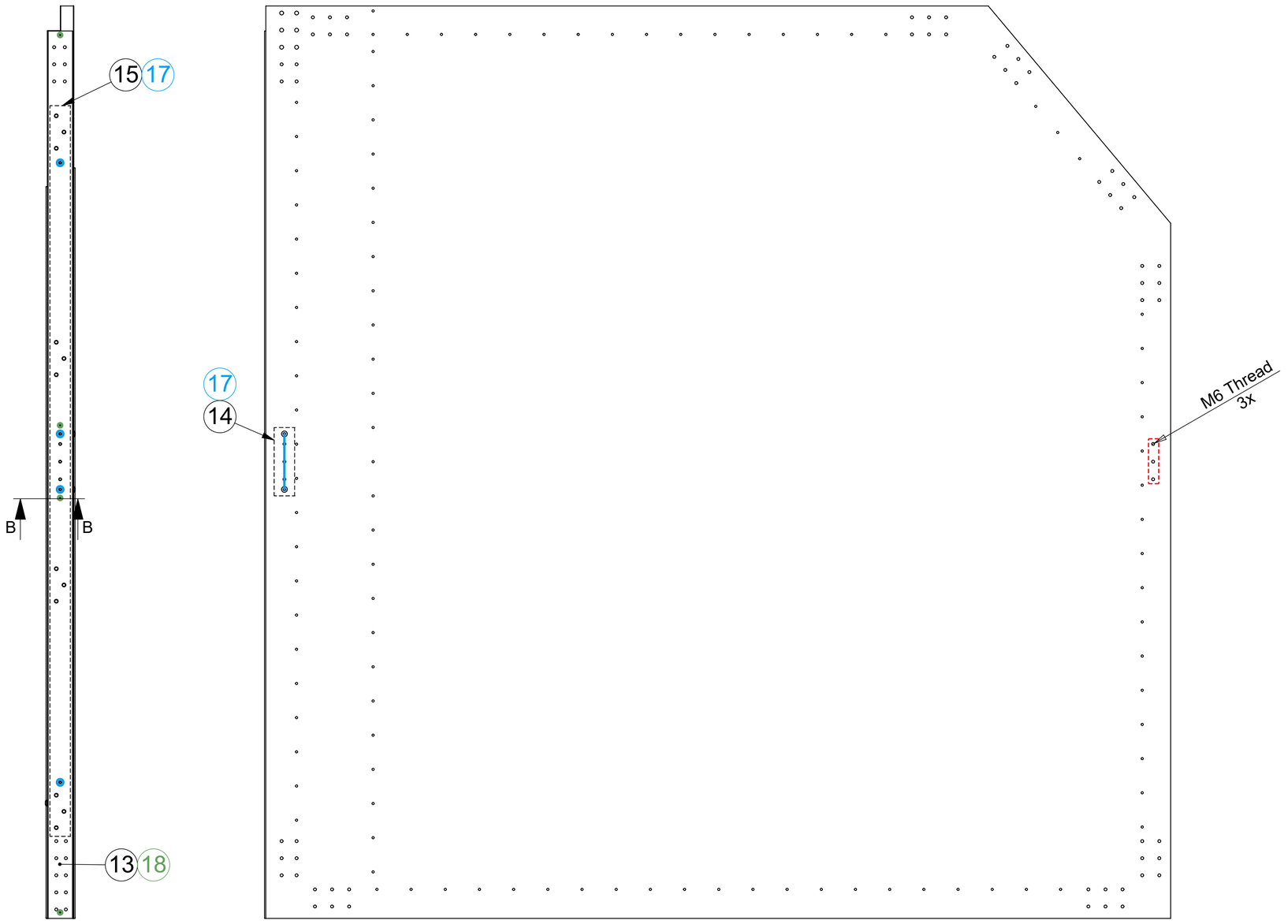
Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

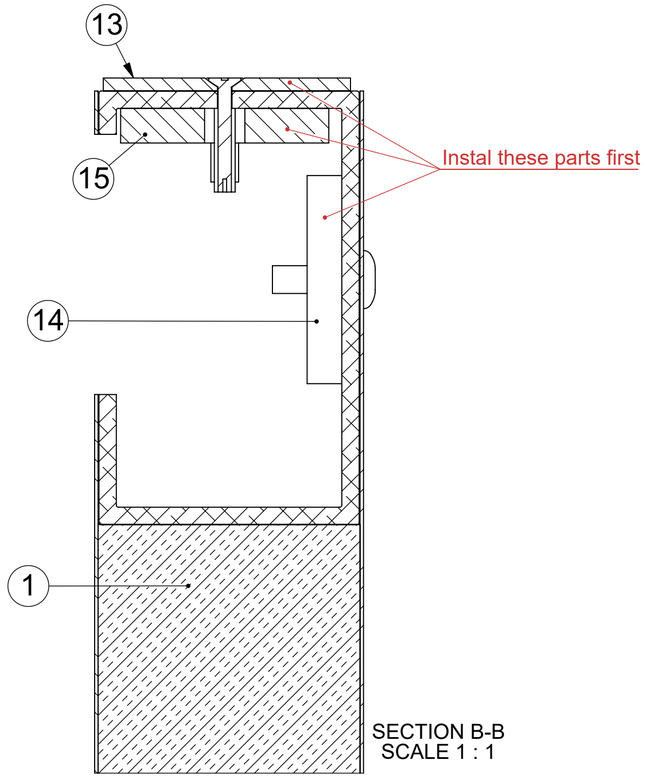
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Outside



SECTION B-B
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate DBJ side panel Right inside	1712,8	148,5	3	2000-05-4182	Alu. 5754-H22	One per order
21	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
17	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
16	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
15	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1282	Alu. 5754-H22	
12	1	Right inner corner gusset	266,9	248,6	3	2000-05-1256	Alu. 5754-H22	Bend with V30
11	1	Right Slanted corner gusset	294,3	267,3	3	2000-05-1255	Alu. 5754-H22	Bend with V30
10	1	Right Slanted corner gusset	289,7	276,2	3	2000-05-1254	Alu. 5754-H22	Bend with V30
9	1	Internal Frame Sheet	1494,6	116,2	2	2000-05-0374	Alu. 5754-H22	Bend with V16
8	1	Internal Frame Sheet	610,3	116,2	2	2000-05-0380	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0381	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0434	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0435	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1811,2	50	15	2000-04-8265	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel right				2000-07-2973	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2972 Sheet : 2 of 4	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 78.85 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ panel right

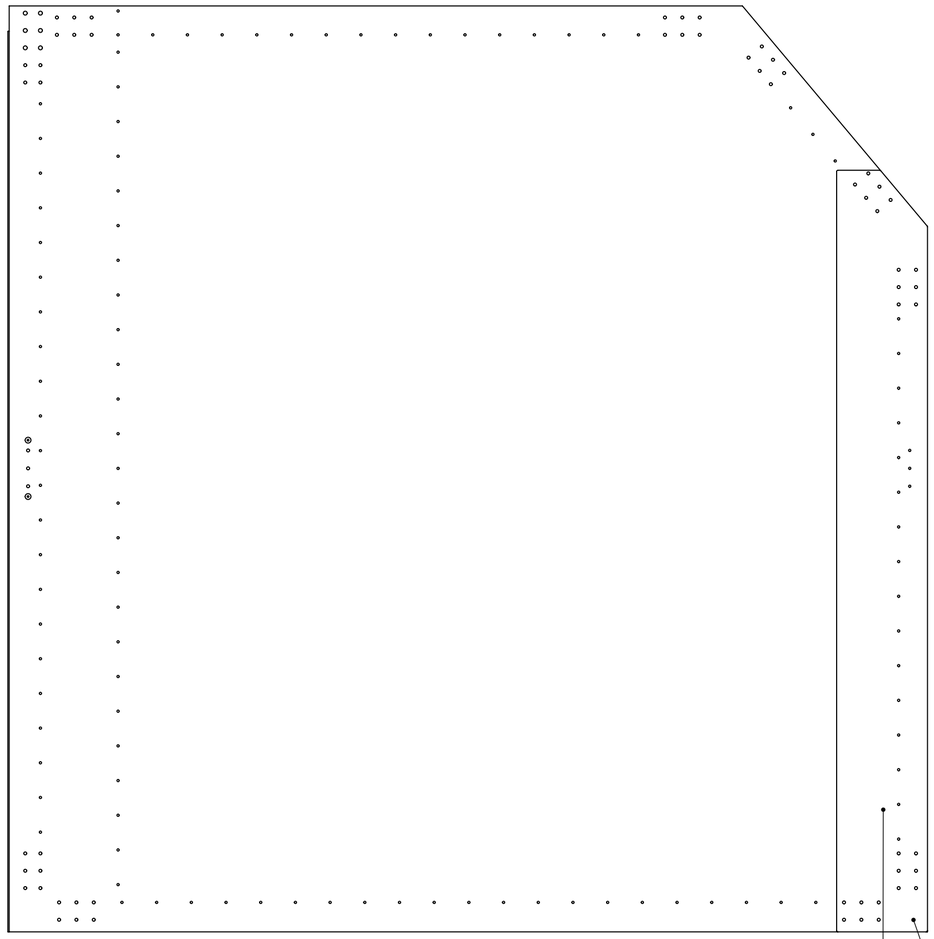
Rivets according to VRR-SP2201

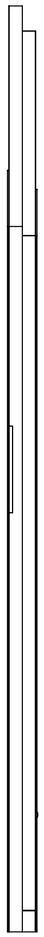
Iss.	Changes	Date	Name

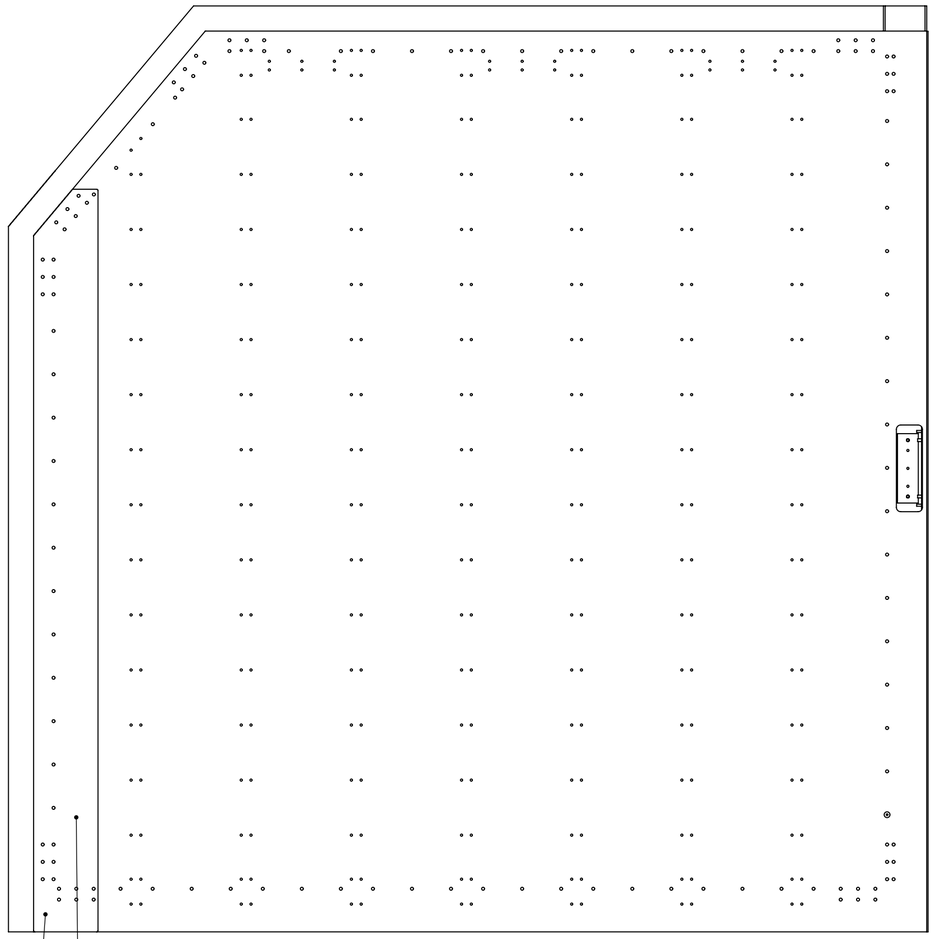
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







Inside

21

Use Malplates (21) and (22) to drill missing holes

22

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate DBJ side panel Right inside	1712,8	148,5	3	2000-05-4182	Alu. 5754-H22	One per order
21	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
17	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
16	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
15	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1282	Alu. 5754-H22	
12	1	Right inner corner gusset	266,9	248,6	3	2000-05-1256	Alu. 5754-H22	Bend with V30

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
11	1	Right Slanted corner gusset	294,3	267,3	3	2000-05-1255	Alu. 5754-H22	Bend with V30
10	1	Right Slanted corner gusset	289,7	276,2	3	2000-05-1254	Alu. 5754-H22	Bend with V30
9	1	Internal Frame Sheet	1494,6	116,2	2	2000-05-0374	Alu. 5754-H22	Bend with V16
8	1	Internal Frame Sheet	610,3	116,2	2	2000-05-0380	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0381	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0434	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0435	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1811,2	50	15	2000-04-8265	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel right				2000-07-2973	Assembly	

Scale:	1:10	Date:	
Drawn:	MBMH	19-06-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	78.85 kg		

Drawing no. 2000-07-2972 Sheet : 3 of 4

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: DBJ panel right

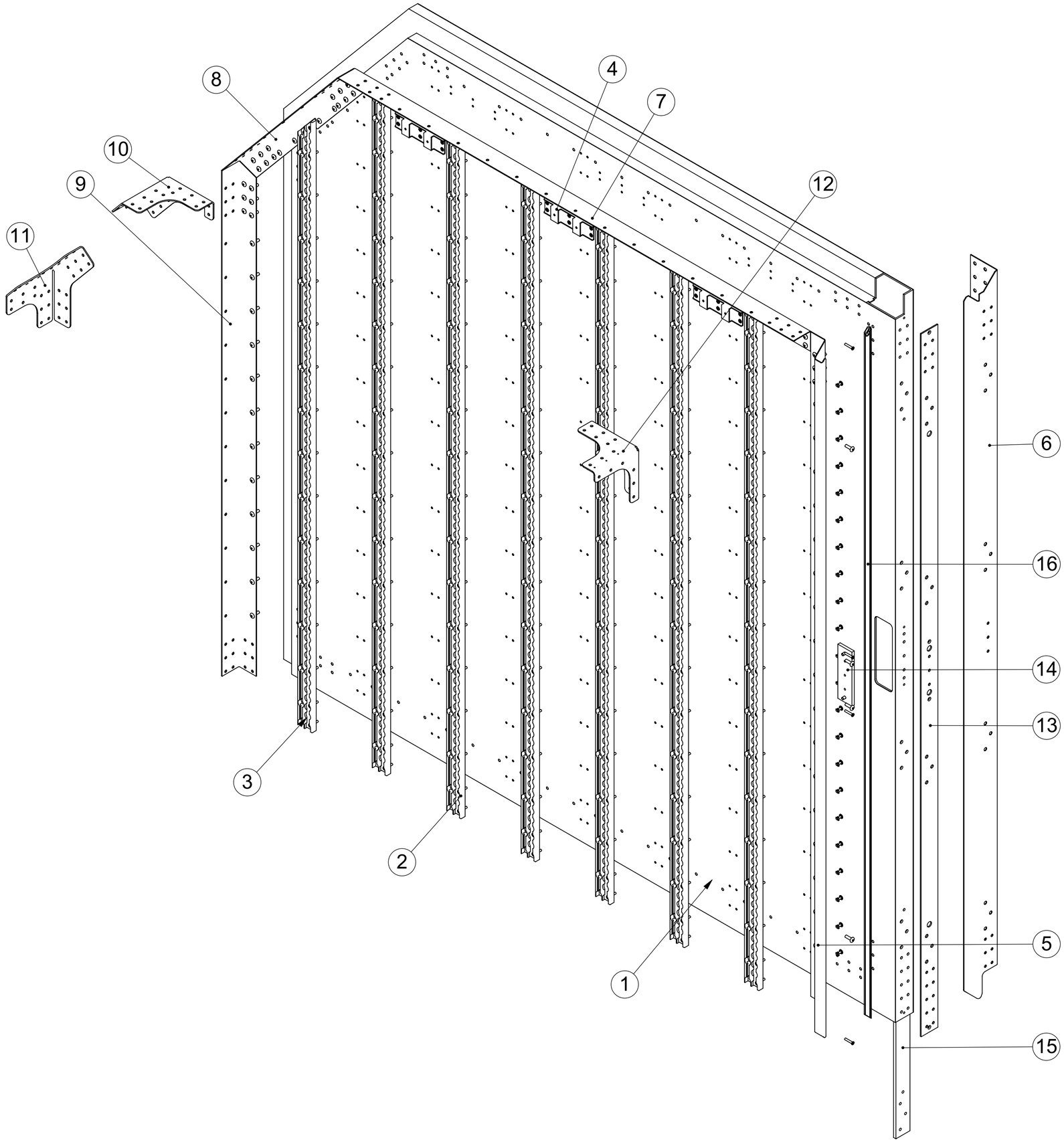
Rivets according to VRR-SP2201

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
22	1	Malplate DBJ side panel Right inside	1712,8	148,5	3	2000-05-4182	Alu. 5754-H22	One per order
21	1	Malplate side panel outside	1756,6	209,5	3	2000-05-4178	Alu. 5754-H22	One per order
20	18	TVD Rivet	2,0-4,5	ø4,8	12,3	BK-TVD603GT	AISI 304	
19	22	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
18	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
17	92	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
16	1	Door rubber Extrusion	2042,5			2000-05-1537	Rubber	Almet (AN625)
15	1	Thread block doors	1710	48	8	2000-05-1627	Alu. 6082-T6	
14	1	Thread block Tie-down points	160	48	8	2000-05-0259	Alu. 6082-T6	
13	1	Fill plate base gusset	2077	57	3	2000-05-1282	Alu. 5754-H22	
12	1	Right inner corner gusset	266,9	248,6	3	2000-05-1256	Alu. 5754-H22	Bend with V30
11	1	Right Slanted corner gusset	294,3	267,3	3	2000-05-1255	Alu. 5754-H22	Bend with V30
10	1	Right Slanted corner gusset	289,7	276,2	3	2000-05-1254	Alu. 5754-H22	Bend with V30
9	1	Internal Frame Sheet	1494,6	116,2	2	2000-05-0374	Alu. 5754-H22	Bend with V16
8	1	Internal Frame Sheet	610,3	116,2	2	2000-05-0380	Alu. 5754-H22	Bend with V16
7	1	Internal frame sheet	1553	116,2	2	2000-05-0381	Alu. 5754-H22	Bend with V16
6	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0434	AISI 304	Bend with V16
5	1	Door post	2033,8	119,5	2	2000-05-0435	AISI 304	Bend with V16
4	3	Tube 40x15x2	166	15/40	2	2000-07-2645	Alu. 6060-T66	
3	1	Seat-T track profile RR 205	1811,2	50	15	2000-04-8265	Alu. 6061-T6	
2	6	Seat-T track profile RR 205	1989	50	15	2000-04-8198	Alu. 6061-T6	
1	1	DBJ panel right				2000-07-2973	Assembly	

Scale: 1:7	Date:	Drawing no. 2000-07-2972	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023	Sheet : 4 of 4	
Approved: HS	08-08-2023		
Mass: 78.85 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ panel right

Rivets according to VRR-SP2201

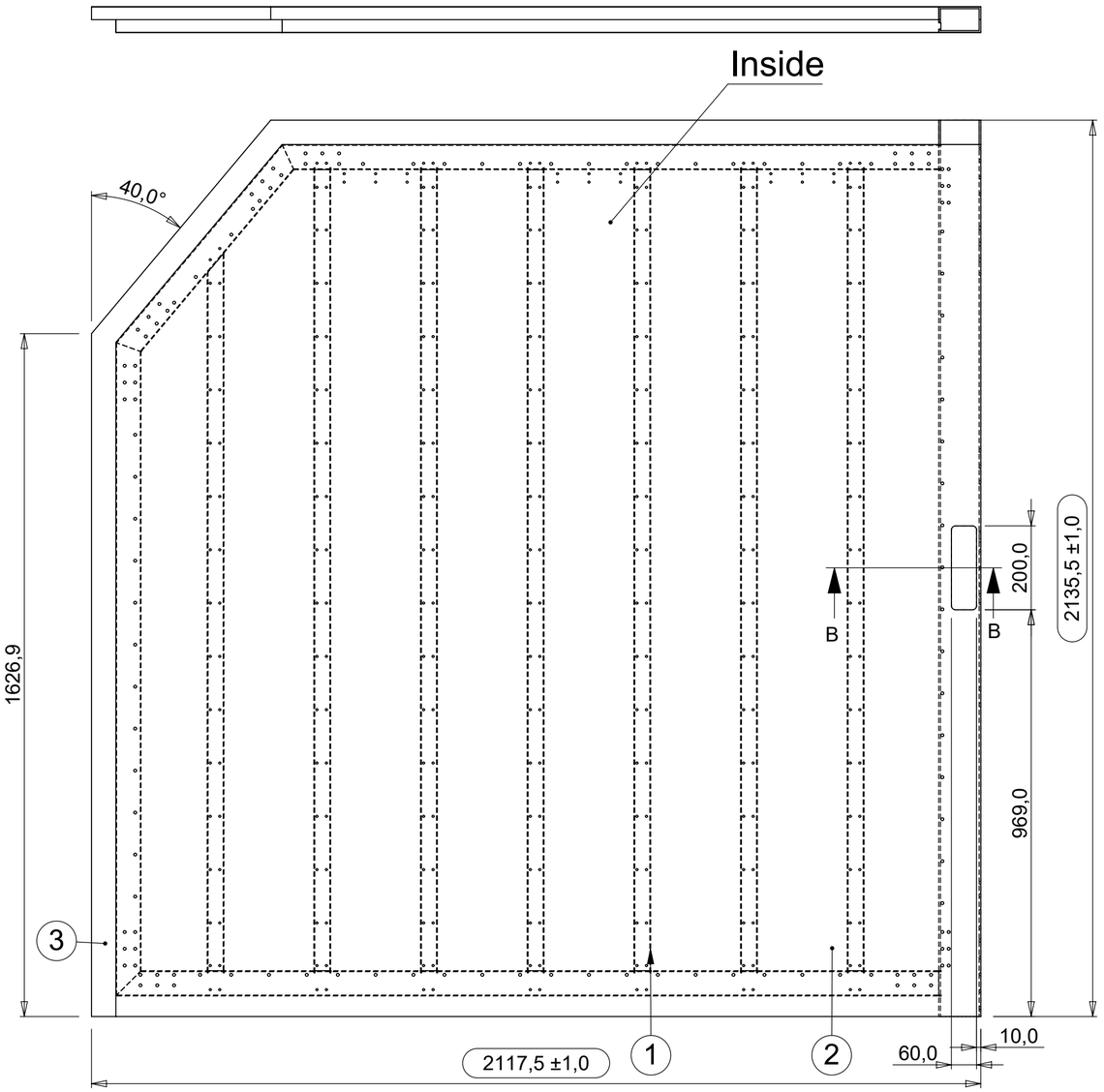
Iss.	Changes	Date	Name

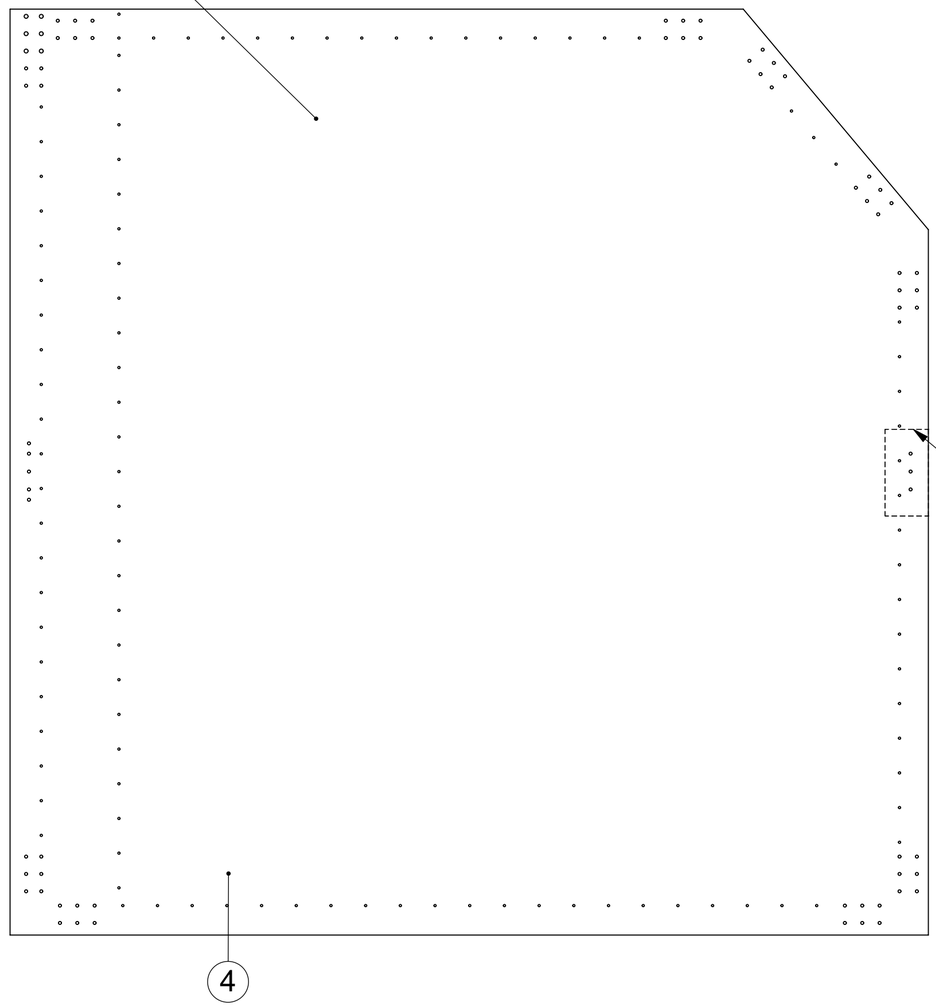
Projection

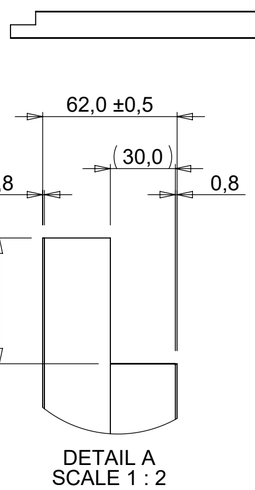
Size A2

VRR

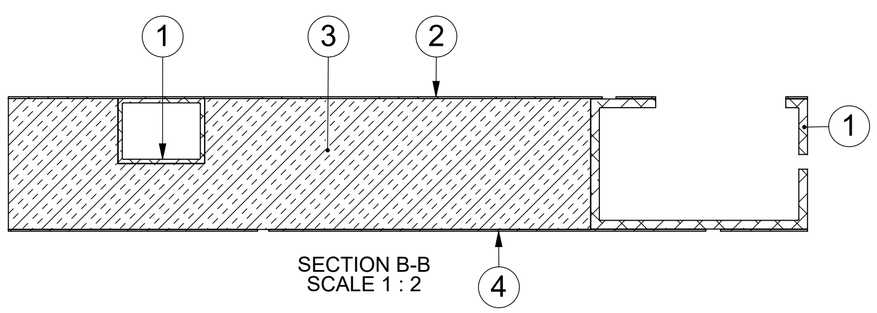
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







DETAIL A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0298	PE-GEGW 0,8 NF	
3	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0299	RTM-Plus	
2	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2974	PE-GEGW 0,8 NF	
1	1	Internal panel frame				2000-05-1865	Assembly	

Scale: 1:10 | Date:
Drawn: MBMH | 19-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023
Mass: 43.13 kg

Drawing no. 2000-07-2973
Sheet : 1 of 2

Issue A

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Typ. tolerances for insulation/sandwich panels

Dimensions in mm (u.n.o.)

Title: DBJ panel right

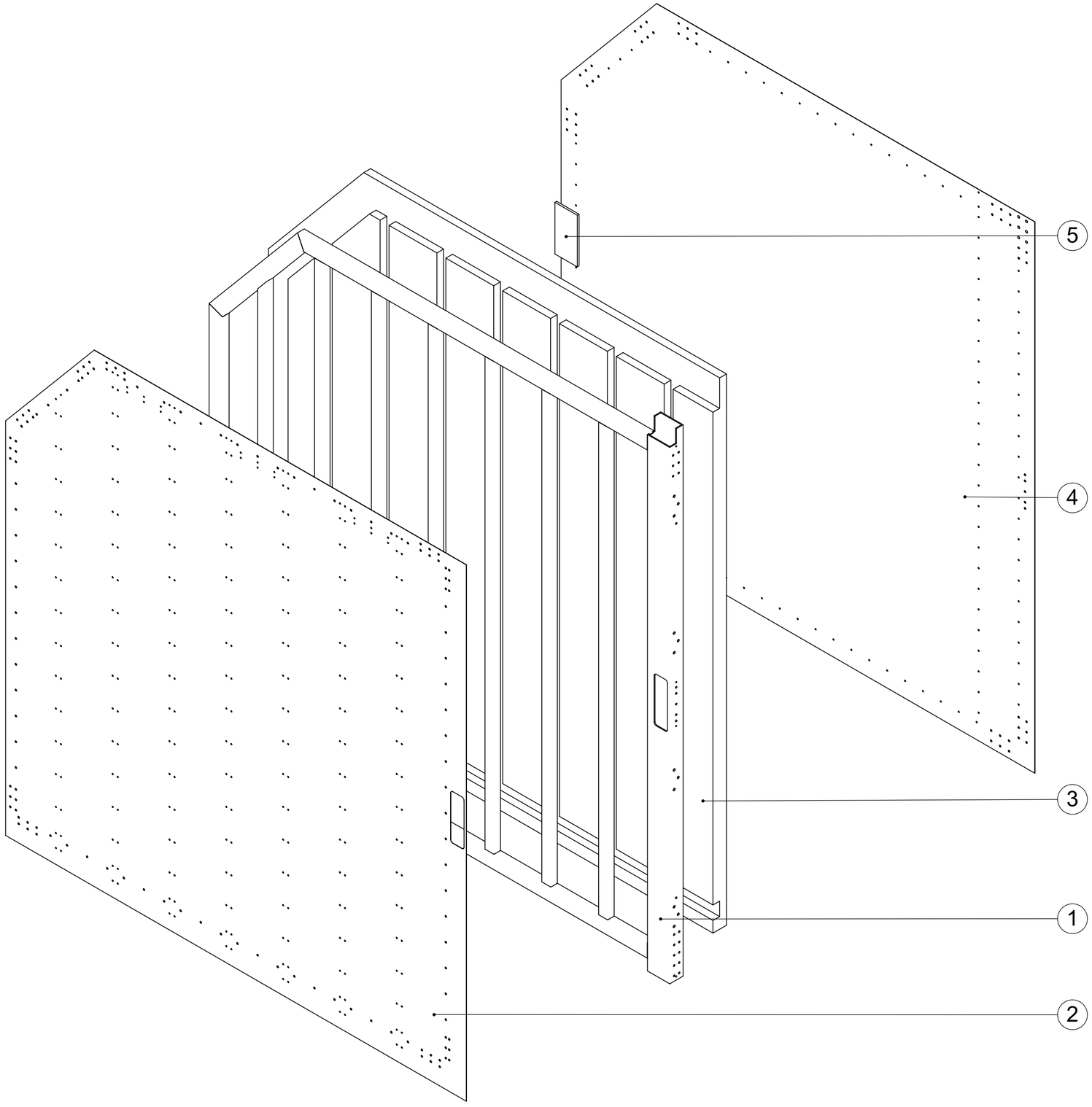
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0298	PE-GEGW 0,8 NF	
3	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0299	RTM-Plus	
2	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2974	PE-GEGW 0,8 NF	
1	1	Internal panel frame				2000-05-1865	Assembly	

Scale: 1:10 | Date:
Drawn: MBMH | 19-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023

Drawing no. 2000-07-2973 Sheet : 2 of 2

Issue A

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Mass: 43.13 kg

Typ. tolerances for insulation/sandwich panels

Dimensions in mm (u.n.o.)

Title: DBJ panel right

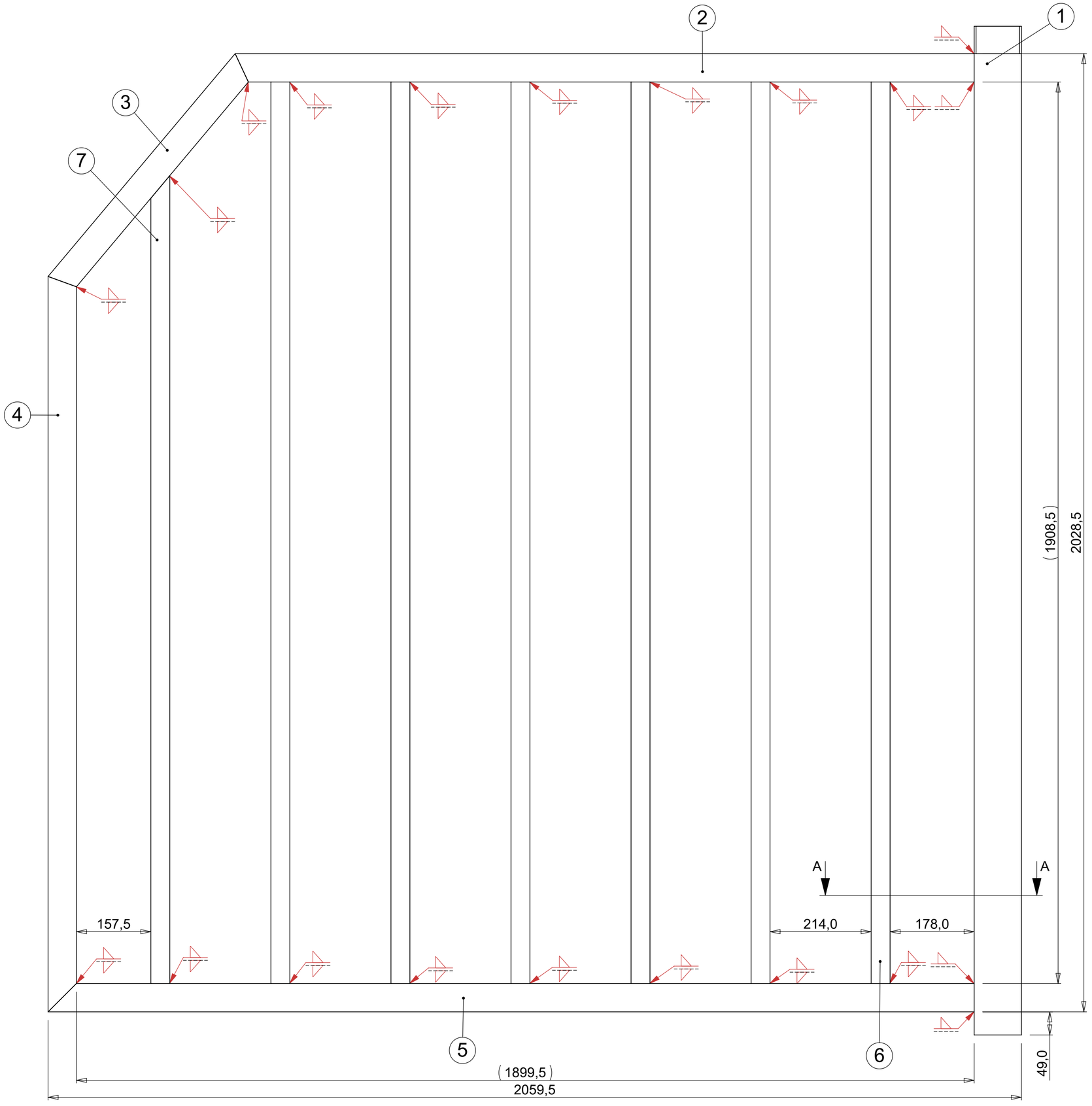
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

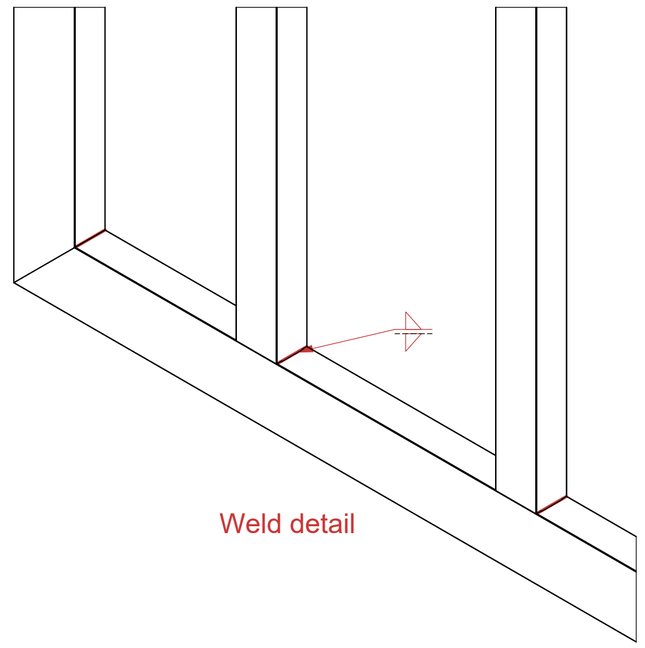
Iss.	Changes	Date	Name

Projection

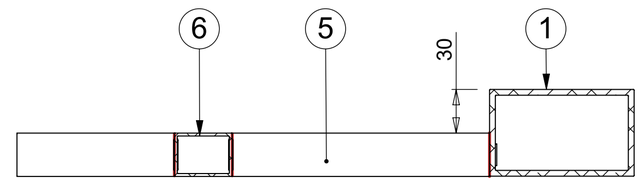
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Weld detail



SECTION A-A
SCALE 1 : 3

Welding according to procedure VRR-W3-090 except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
7	1	Tube 40x30x2	1715,3	40/30	2	2000-05-0297	Alu. 6060-T66	
6	6	Tube 40x30x2	1918,5	40/30	2	2000-05-0296	Alu. 6060-T66	
5	1	Tube 60x30x2	1959,5	60/30	2	2000-05-0293	Alu. 6060-T66	
4	1	Tube 60x30x2	1556,8	60/30	2	2000-05-0292	Alu. 6060-T66	
3	1	Tube 60x30x2	615,8	60/30	2	2000-05-0295	Alu. 6060-T66	
2	1	Tube 60x30x2	1563,7	60/30	2	2000-05-0294	Alu. 6060-T66	
1	1	Tube 100x60x4	2135,5	100/60	4	2000-05-0311	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no. 2000-05-1865 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 19.80 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

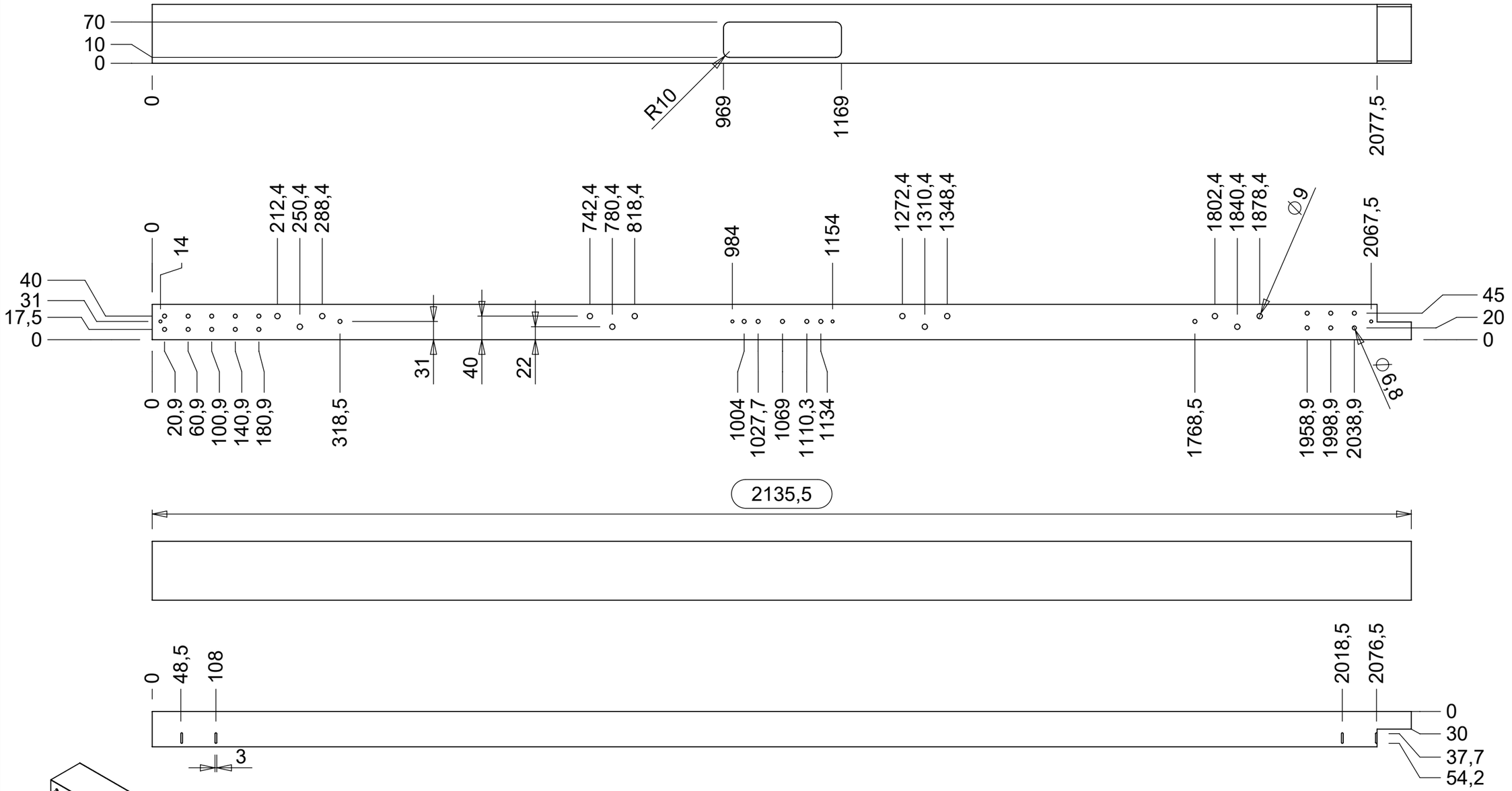
Title: **Internal panel frame**

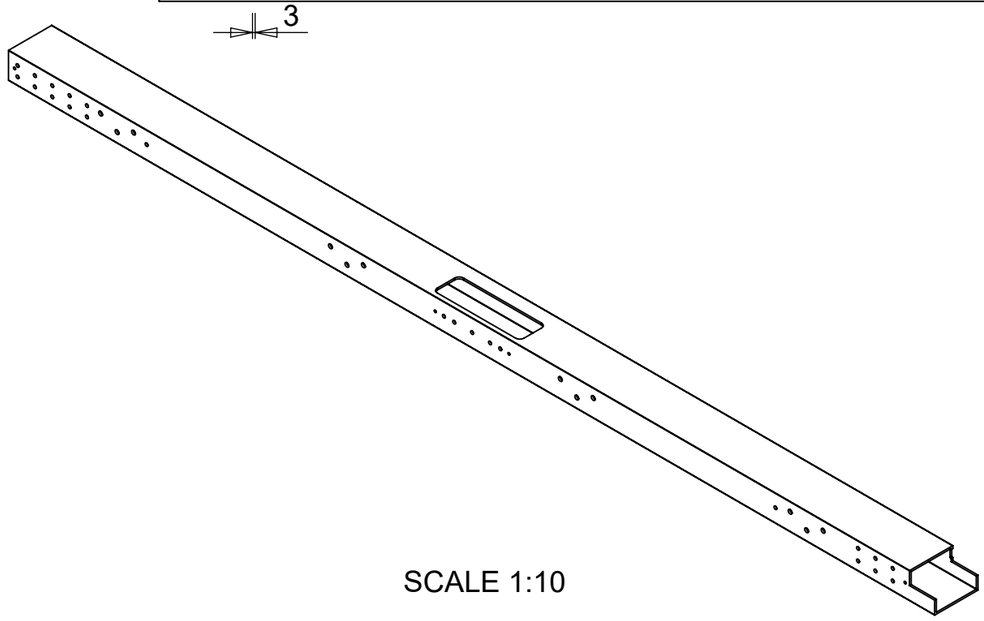
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





SCALE 1:10

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x60x4	2135,5	100/60	4	2000-05-0311	Alu. 6060-T66	

Scale: 1:7	Date:	Drawing no.: 2000-05-0311	Issue: B
Drawn: JWR	25-03-2019		
Checked: HS	13-02-2020	Sheet : 1 of 1	
Approved: JWR	10-03-2020		
Mass: 6.77 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

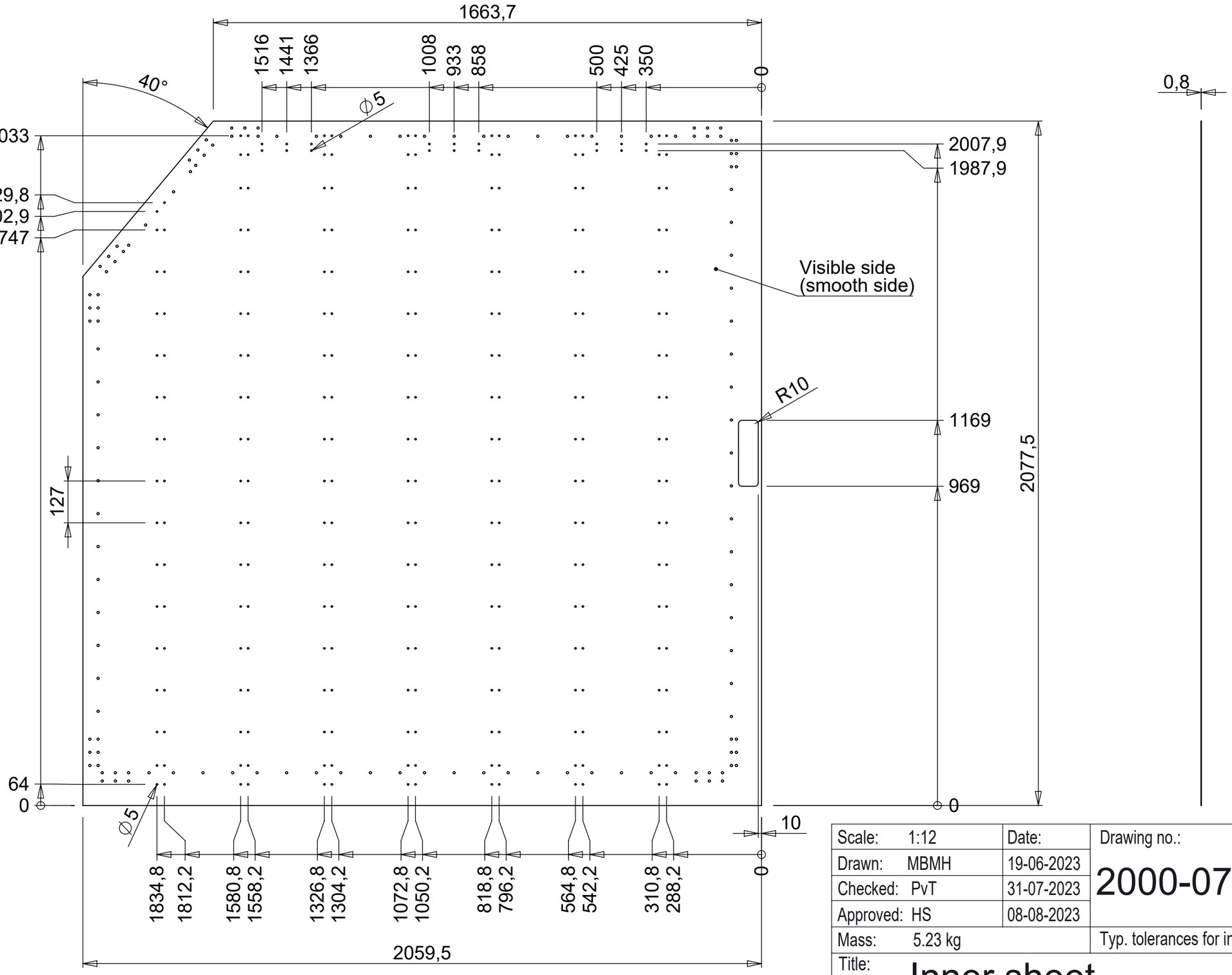
Title: Tube 100x60x4

Iss.	Changes	Date	Name
B	+Cut-out	10-03-2020	MVE

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Ø5 holes

See also sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2974	PE-GEGW 0,8 NF	

Scale: 1:12	Date:	Drawing no.: 2000-07-2974 Sheet : 1 of 2	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.23 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

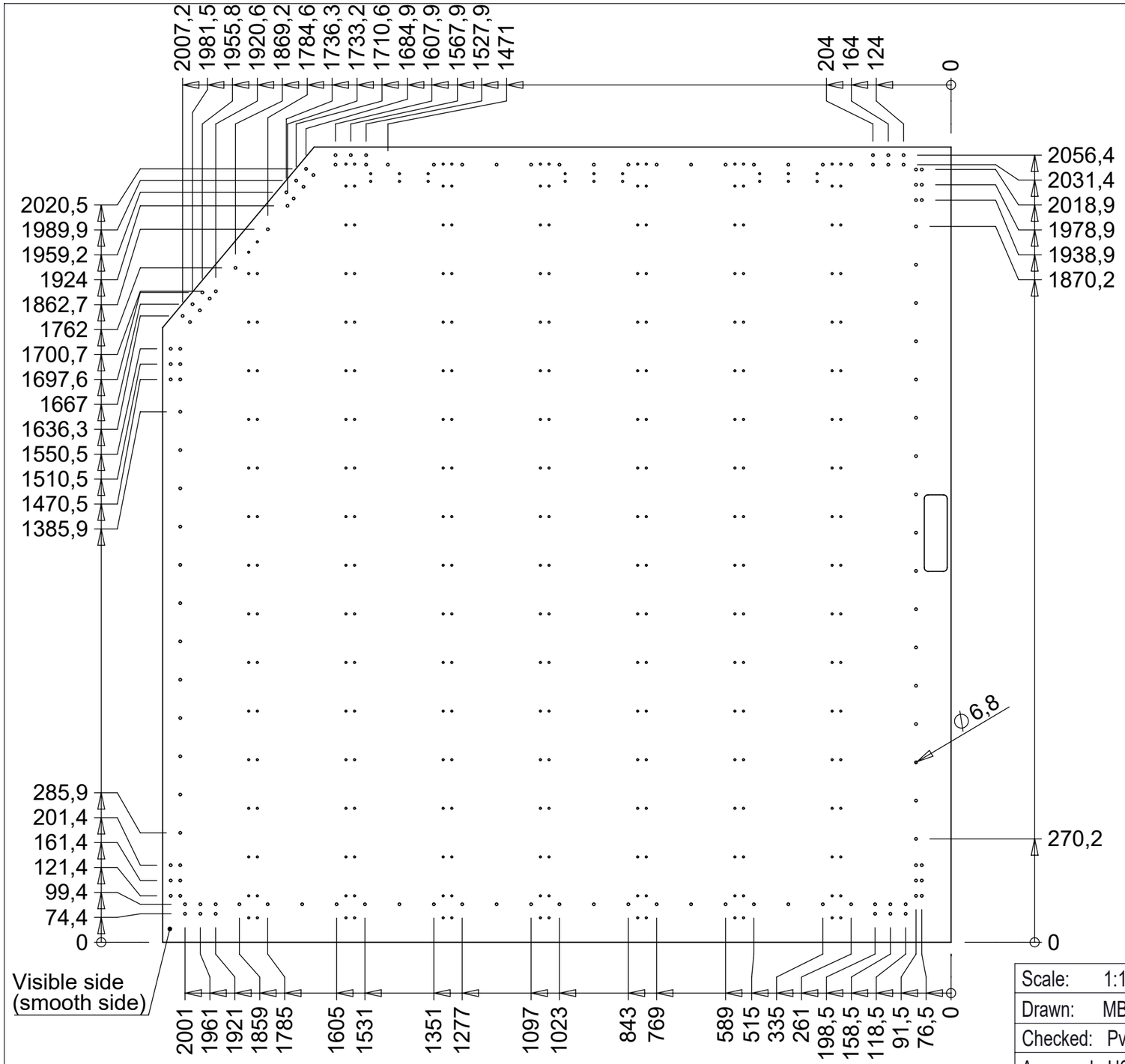
Title: Inner sheet

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Ø6,8 holes

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2077,5	2059,5	0,8	2000-07-2974	PE-GEGW 0,8 NF	

Scale: 1:12	Date:	Drawing no.: 2000-07-2974 Sheet : 2 of 2	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.23 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

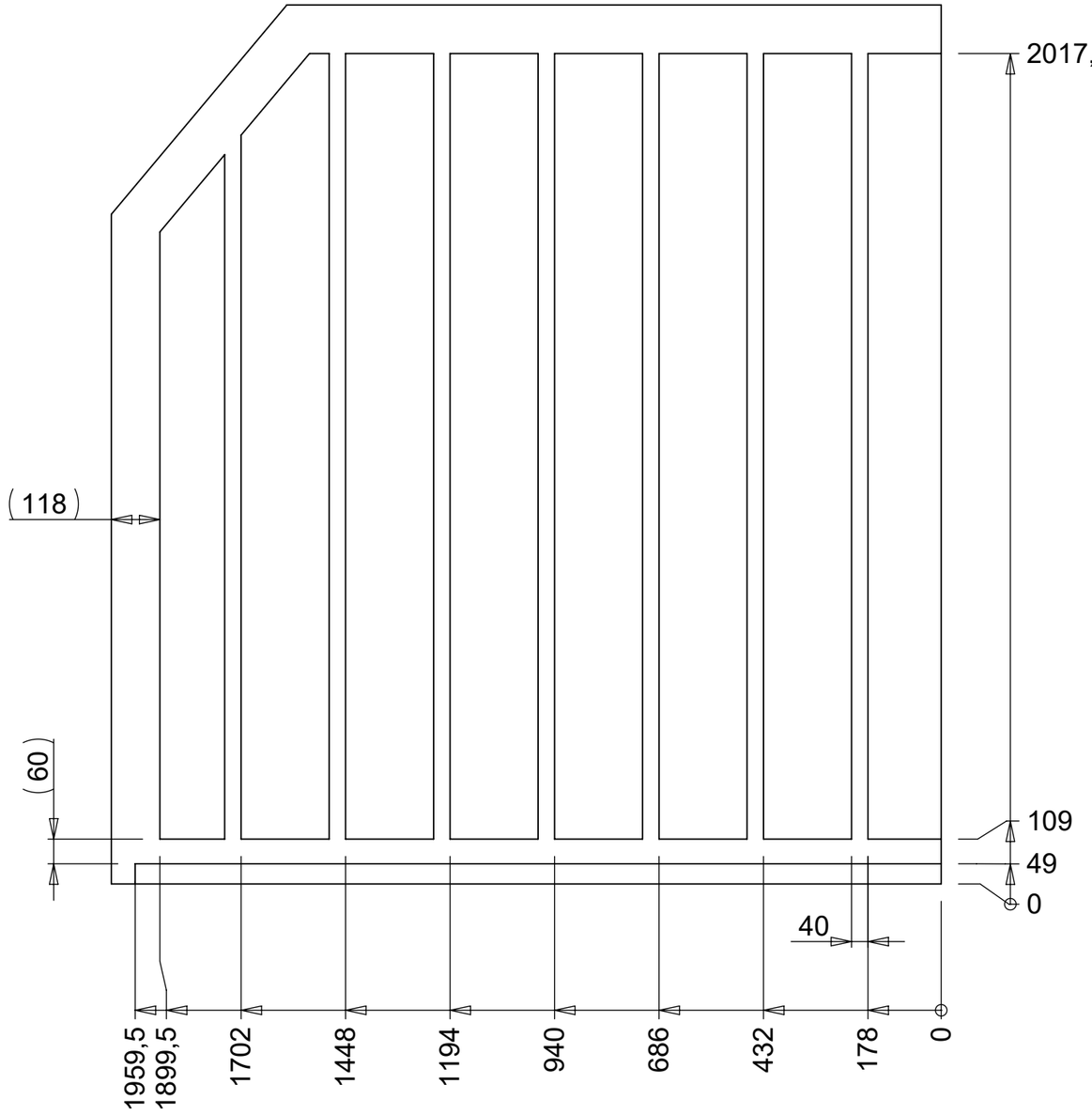
Title: # Inner sheet

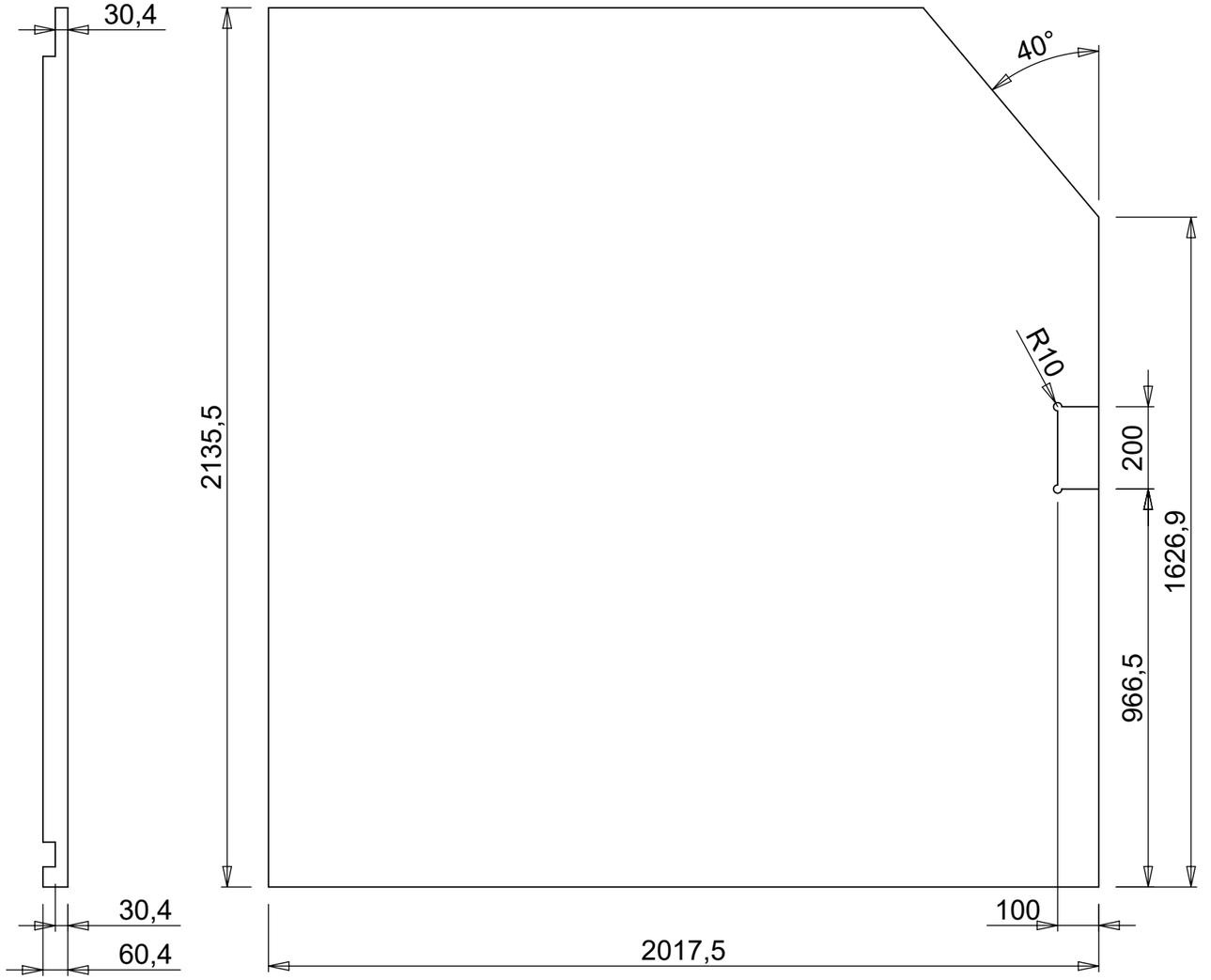
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





1	1	Insulation panel	2135,5	2017,5	60,4	2000-05-0299	RTM-Plus	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:14	Date:	Drawing no.: 2000-05-0299	Issue A
Drawn: JWR	26-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 10.61 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

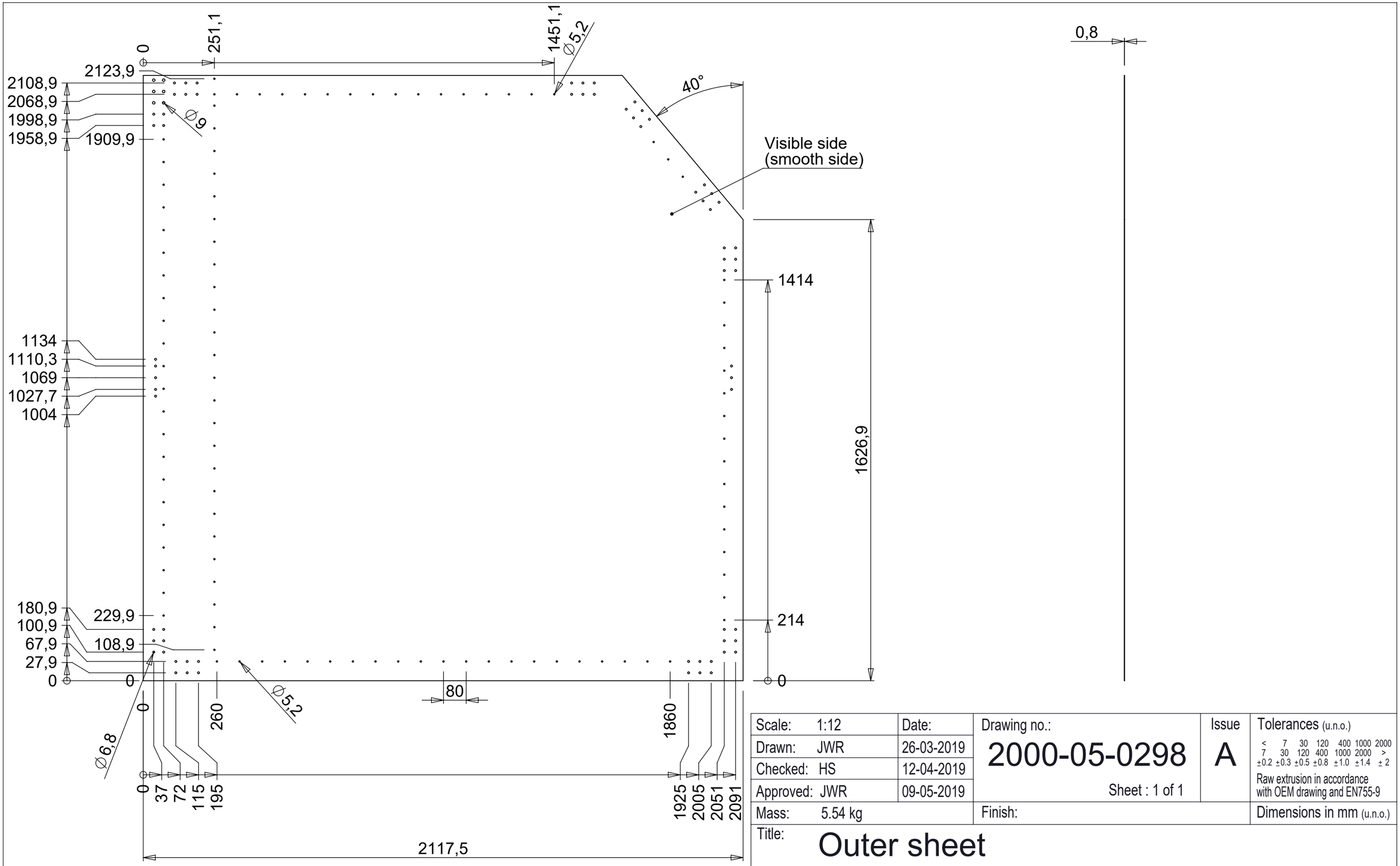
Title: # Insulation panel

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2135,5	2117,5	0,8	2000-05-0298	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Scale: 1:12	Date:	Drawing no.: 2000-05-0298	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 5.54 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

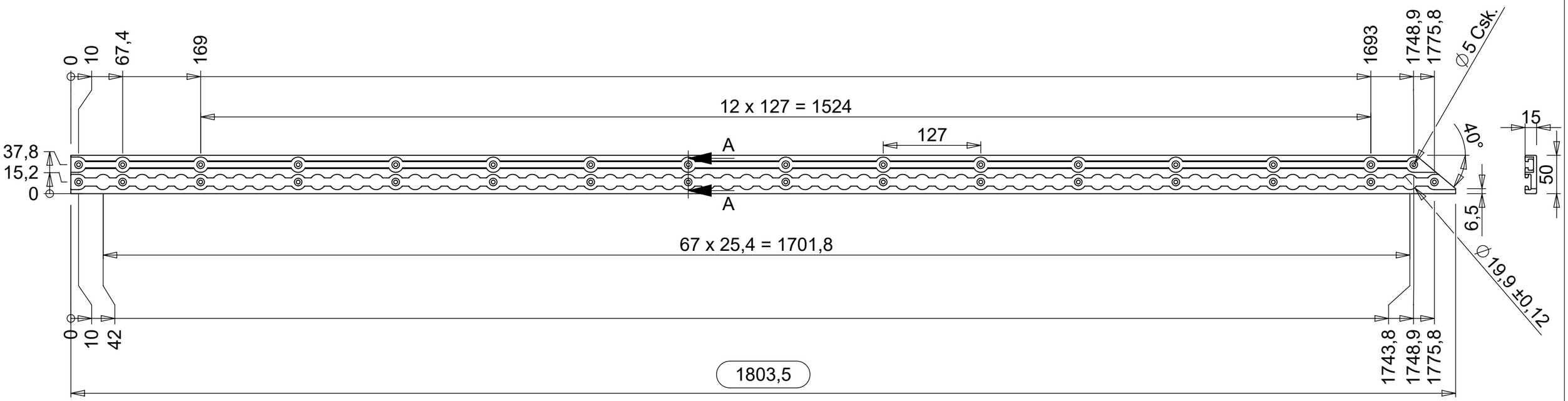
Dimensions in mm (u.n.o.)

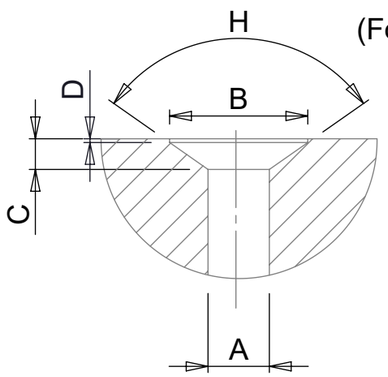
Title: **Outer sheet**

Projection

Size A3

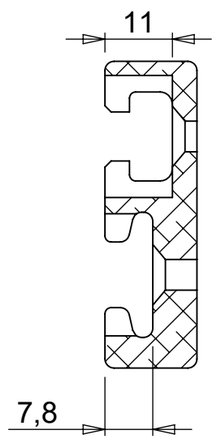
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Seat-T track profile RR 205	1811,2	50	15	2000-04-8265	Alu. 6061-T6	

Scale: 1:5	Date:	Drawing no.: 2000-04-8265	Issue: A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 2.25 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

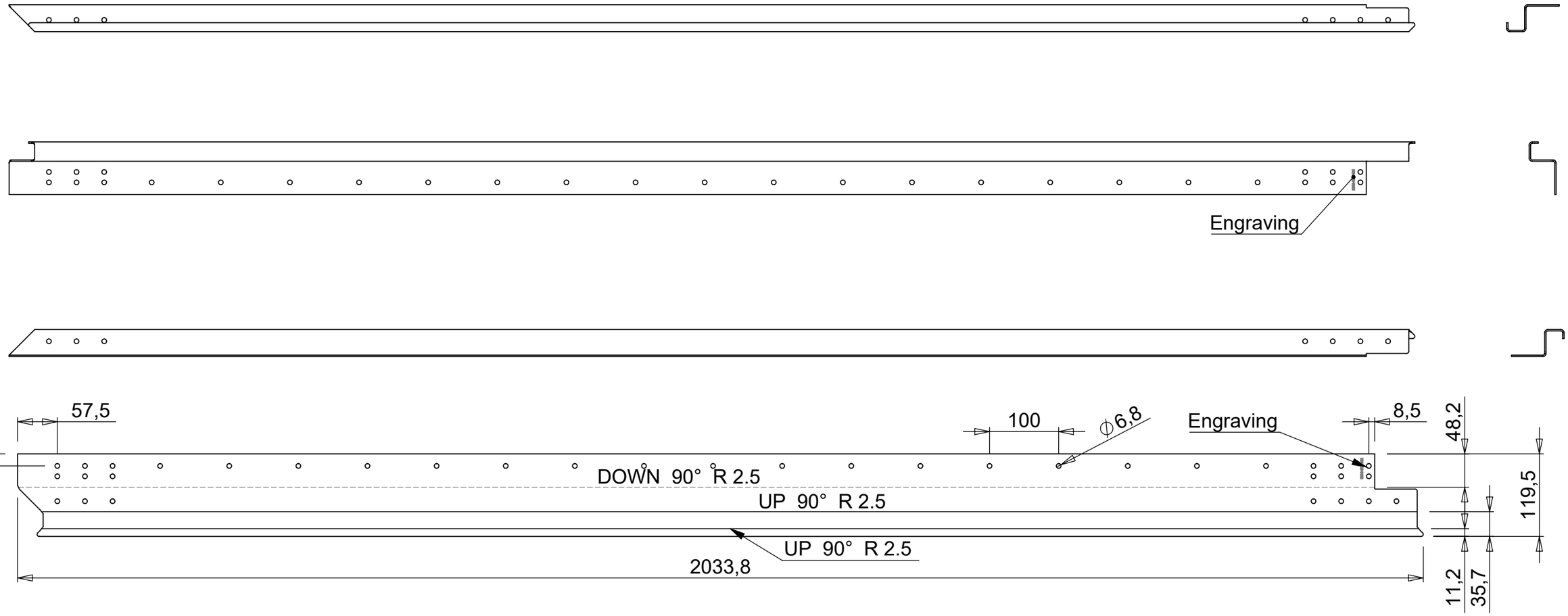
Title: **Seat-T track profile RR 205**

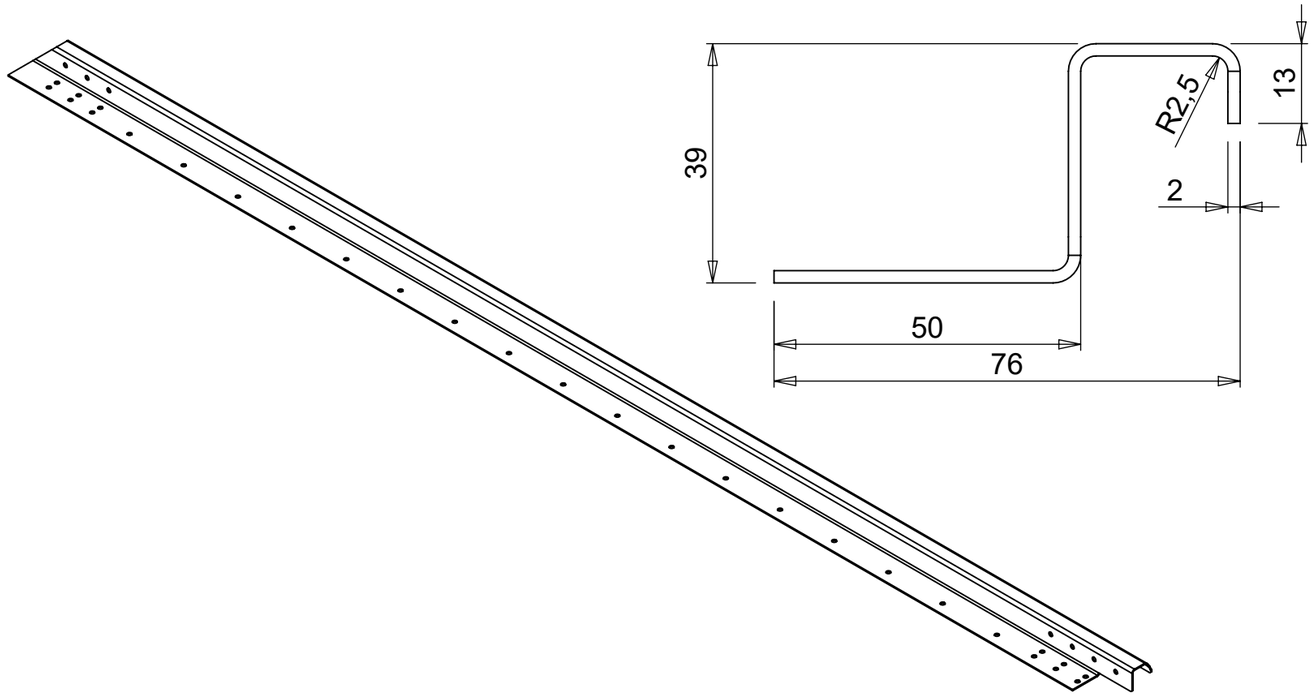
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Door post	2033,8	119,5	2	2000-05-0435	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0435	Issue: A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 3.77 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

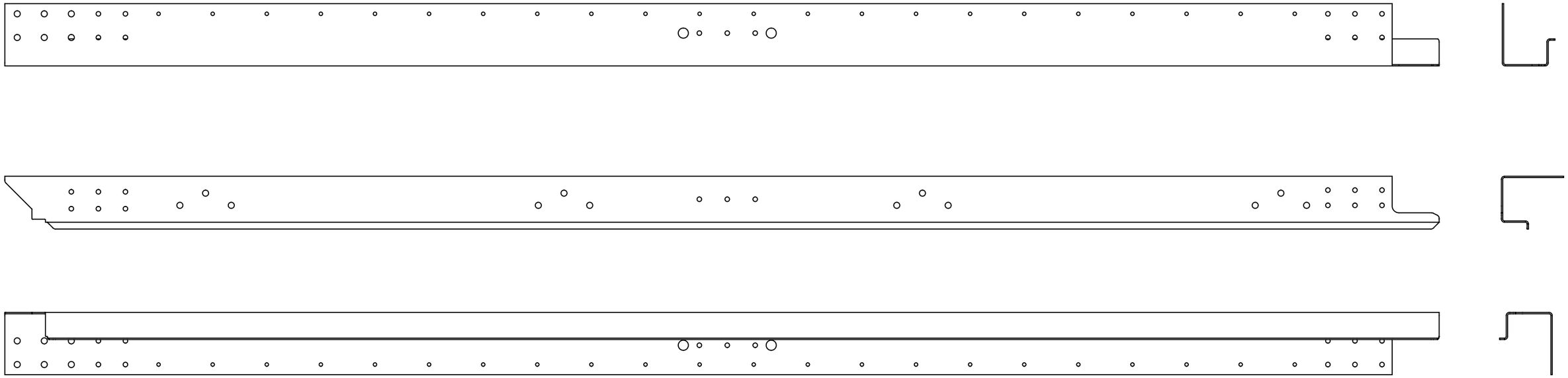
Title: **Door post**

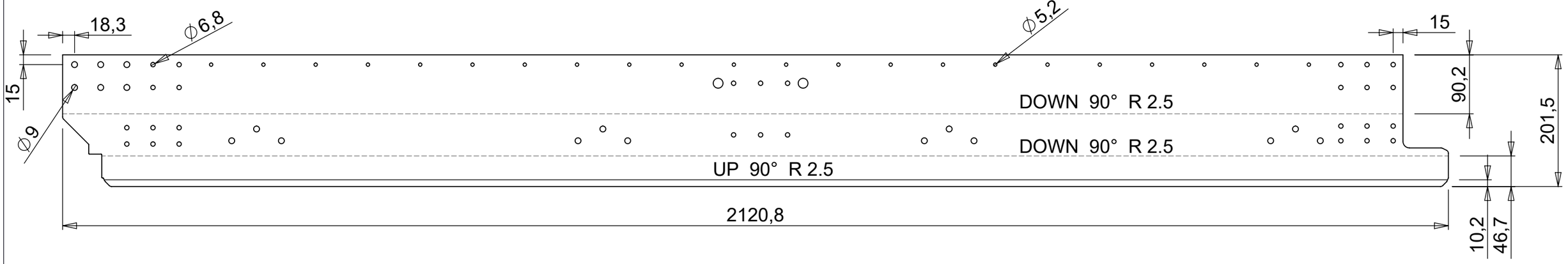
Iss.	Changes	Date	Name

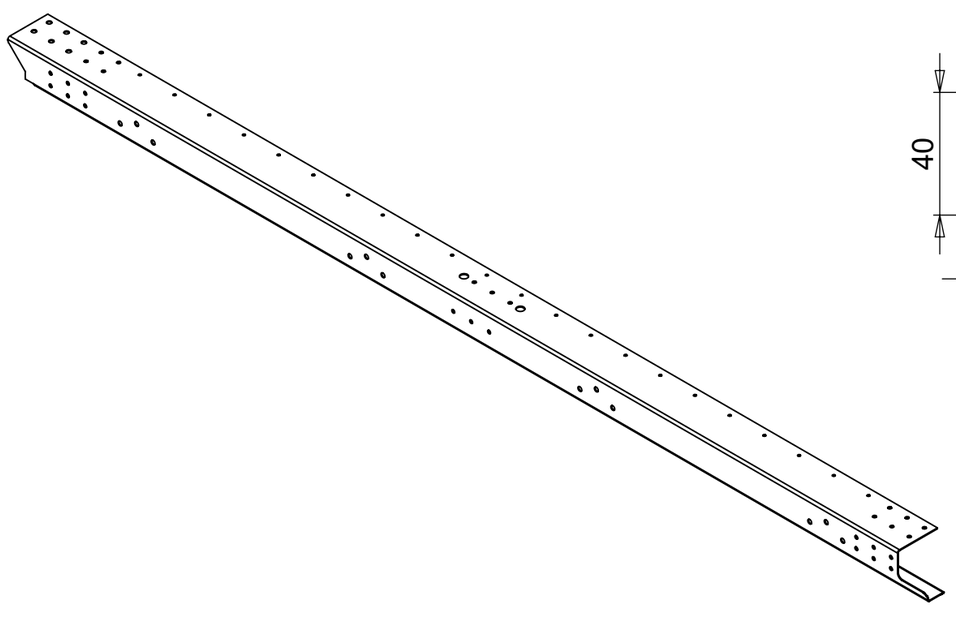
Projection

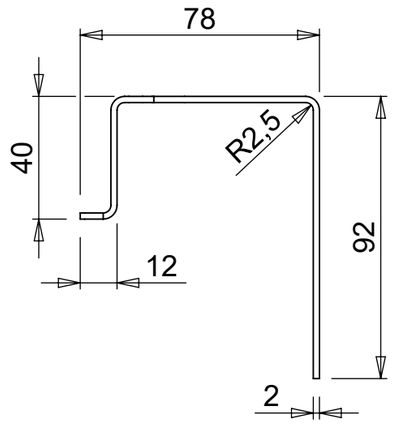
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	DBJ corner sheets	2120,8	201,5	2	2000-05-0434	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0434	Issue B
Drawn: JWR	26-03-2019		
Checked: HS	13-02-2020	Sheet : 1 of 1	
Approved: JWR	10-03-2020		
Mass: 6.56 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: # DBJ corner sheets

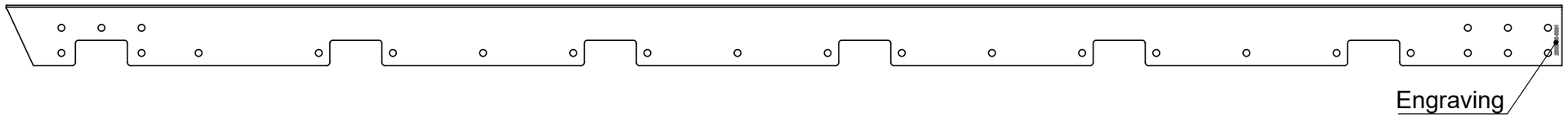
Iss.	Changes	Date	Name
B	~cut-out	10-03-2020	MVE

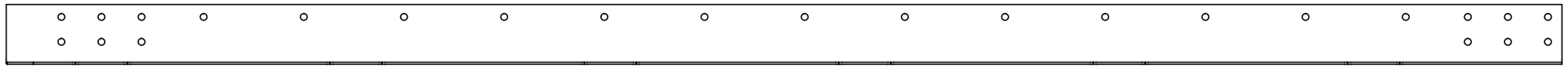
Projection

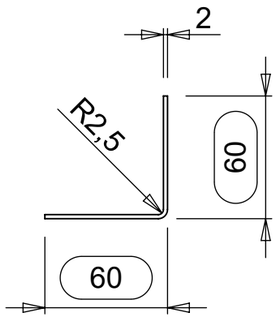
Size A3

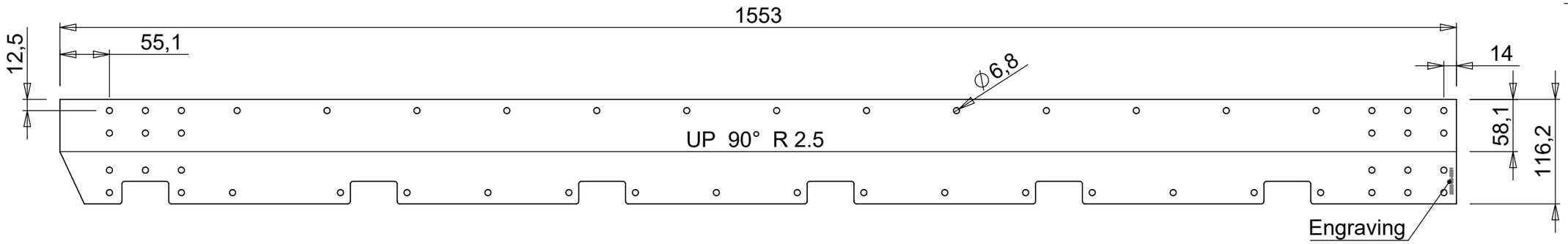
VRR

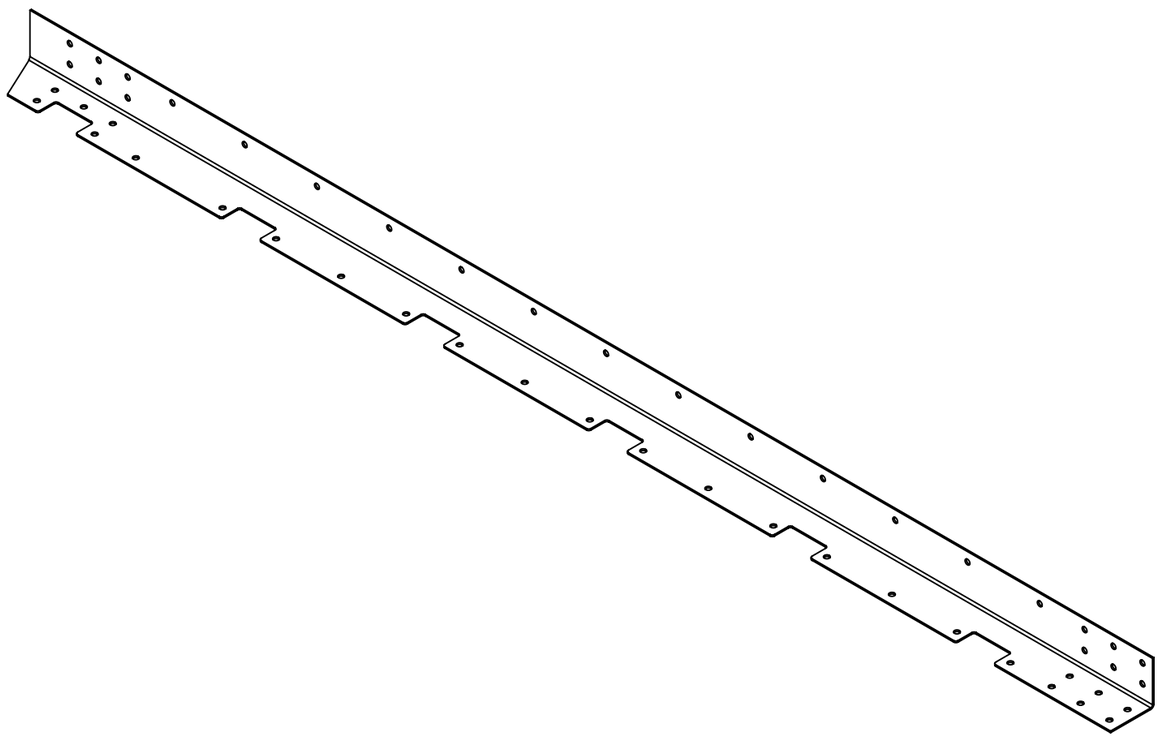
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











1	1	Internal frame sheet	1553	116,2	2	2000-05-0381	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0381 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.92 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

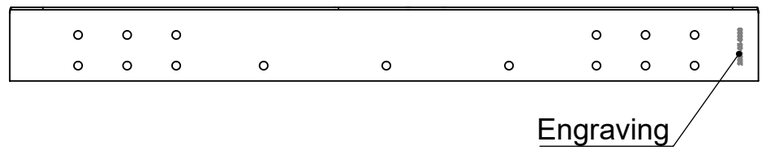
Title: **Internal frame sheet**

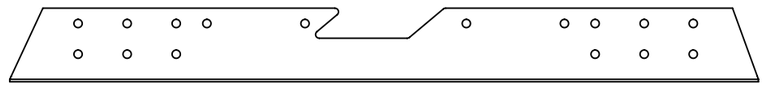
Iss.	Changes	Date	Name

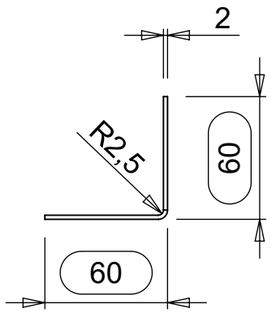
Projection

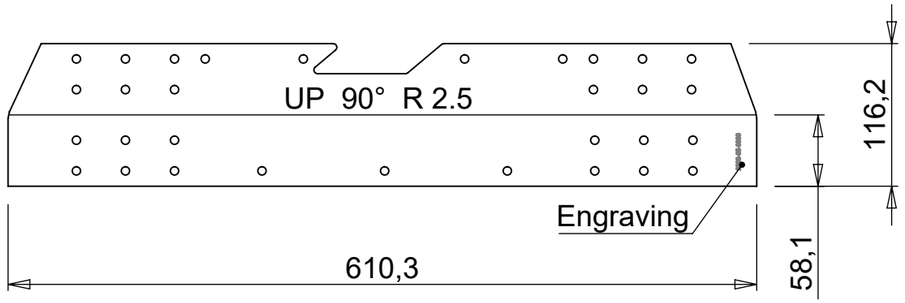
Size A3

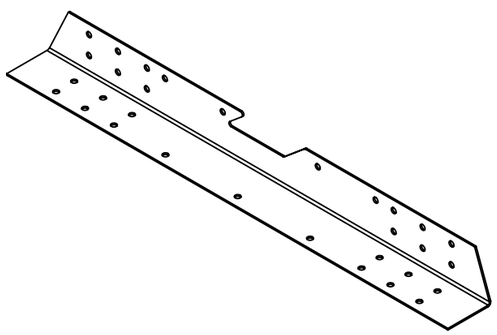
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Internal Frame Sheet	610,3	116,2	2	2000-05-0380	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0380 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

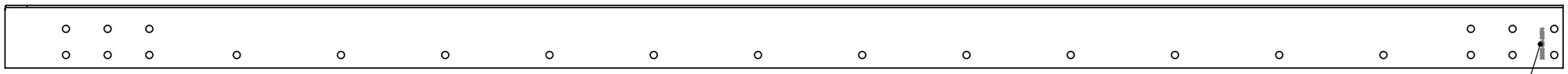
Title: **Internal Frame Sheet**

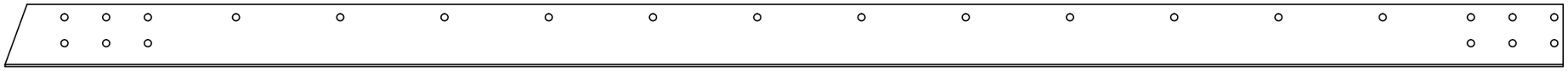
Iss.	Changes	Date	Name

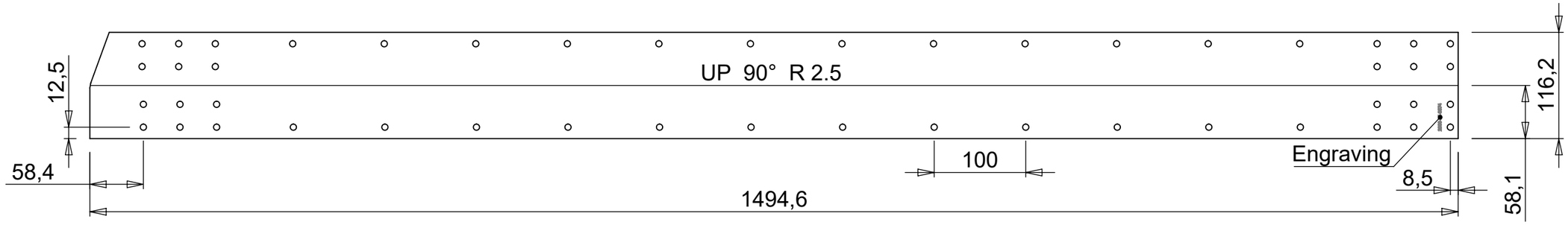
Projection

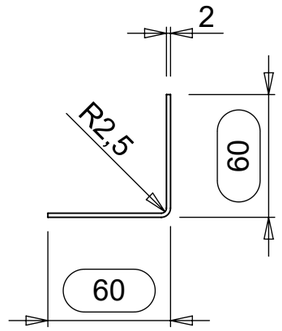
Size A3

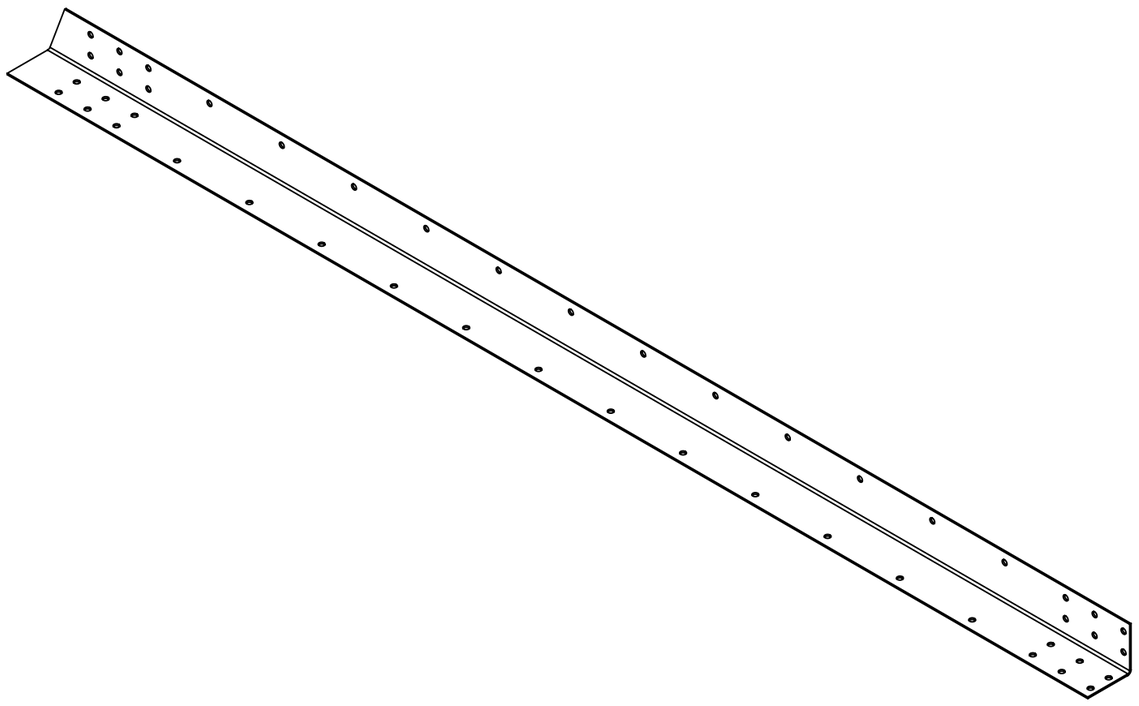
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Internal Frame Sheet	1494,6	116,2	2	2000-05-0374	Alu. 5754-H22	Bend with V16

Scale: 1:5	Date:	Drawing no.: 2000-05-0374 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.93 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

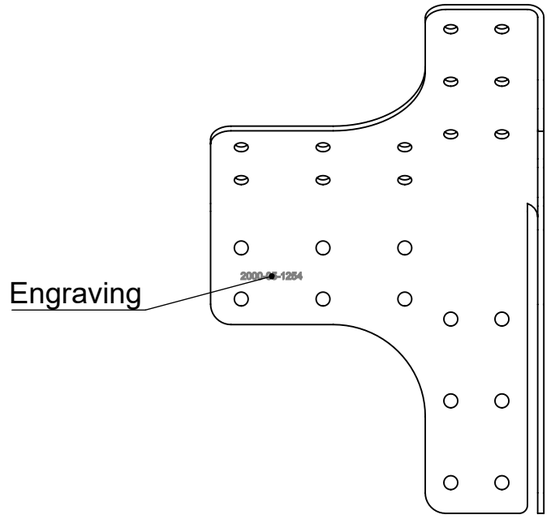
Title: **Internal Frame Sheet**

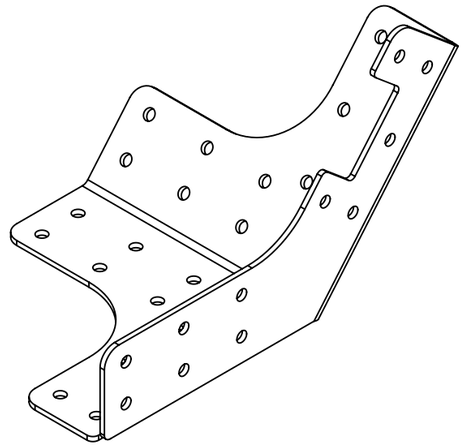
Iss.	Changes	Date	Name

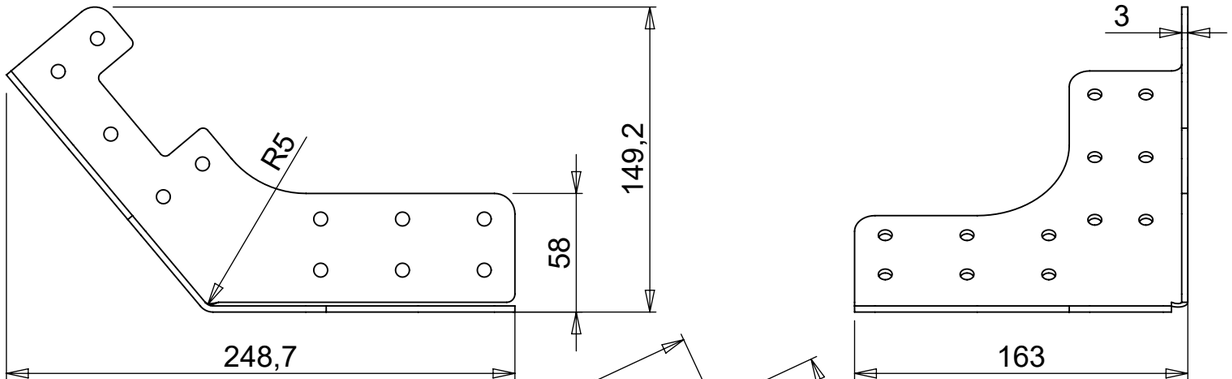
Projection

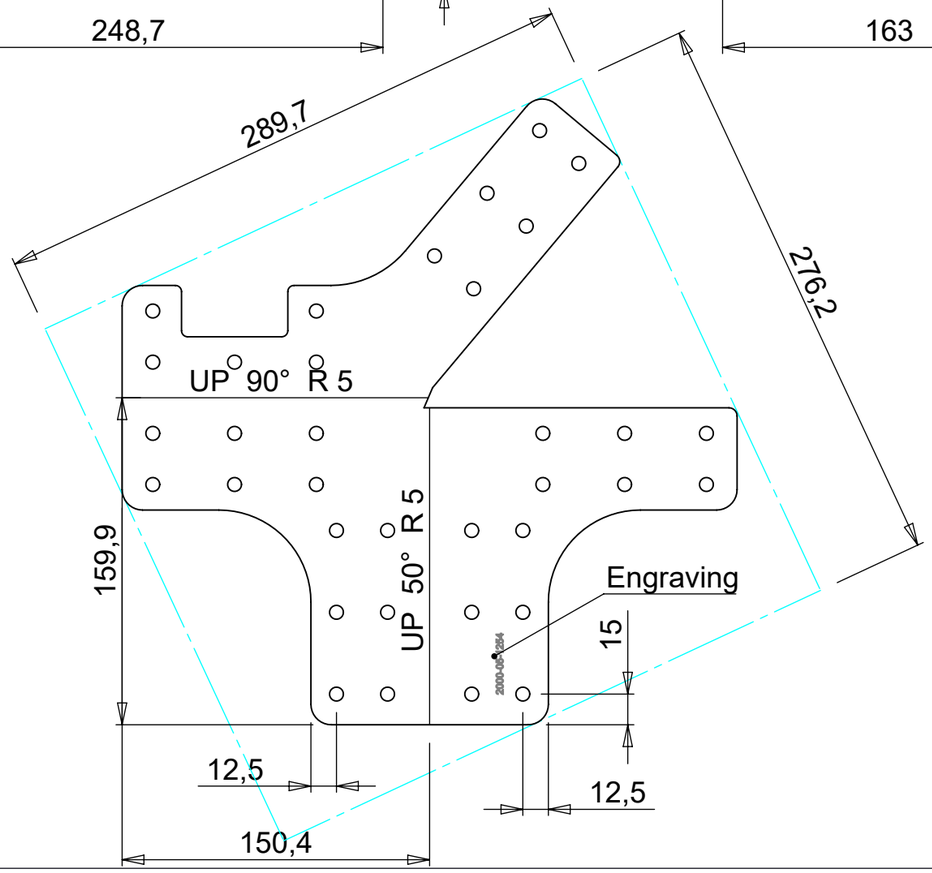
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Right Slanted corner gusset	289,7	276,2	3	2000-05-1254	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1254 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.33 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

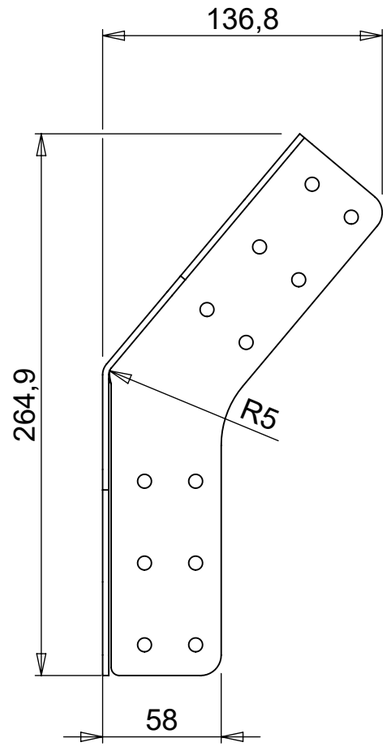
Title: **Right Slanted corner gusset**

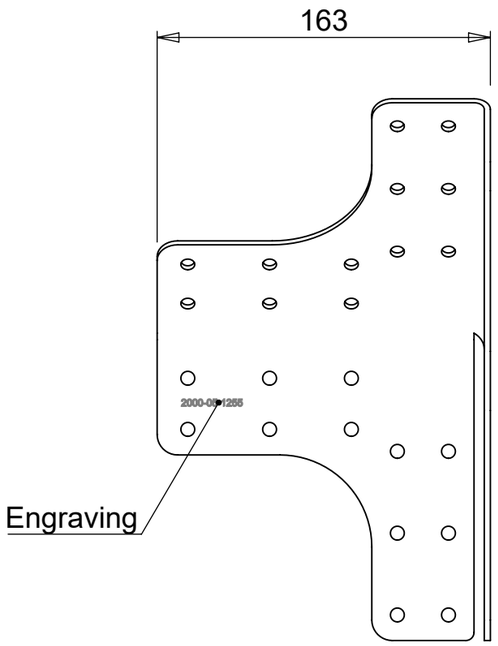
Iss.	Changes	Date	Name

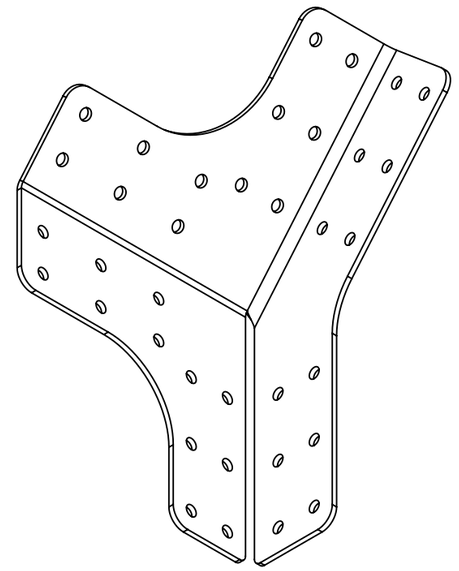
Projection

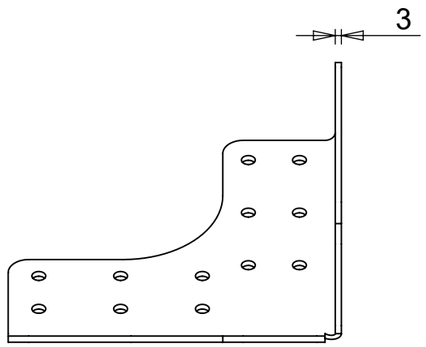
Size A3

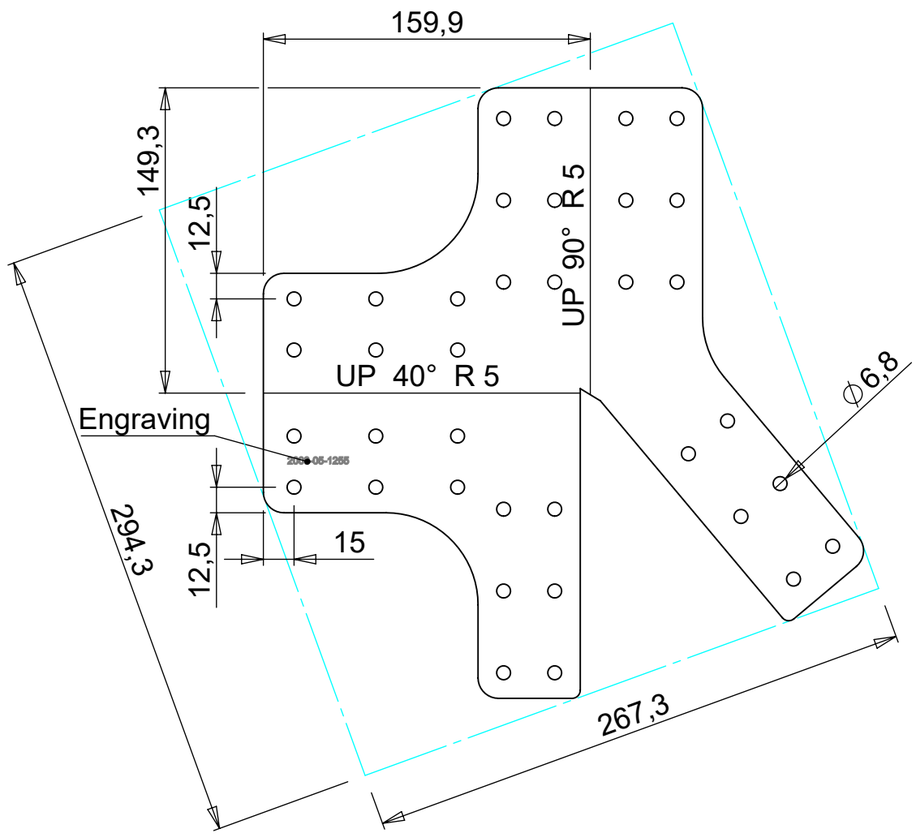
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Right Slanted corner gusset	294,3	267,3	3	2000-05-1255	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1255 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

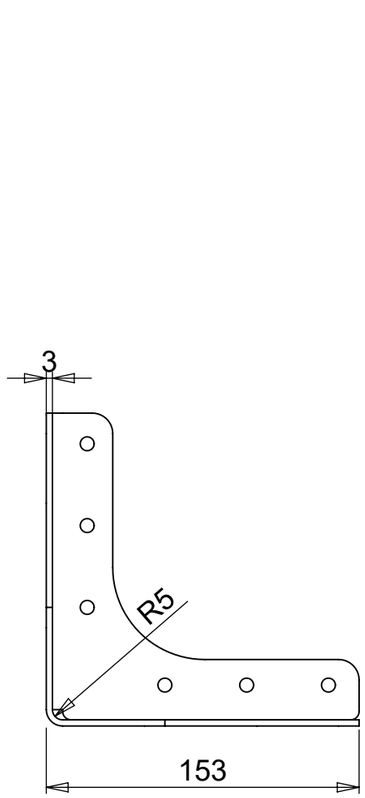
Title: **Right Slanted corner gusset**

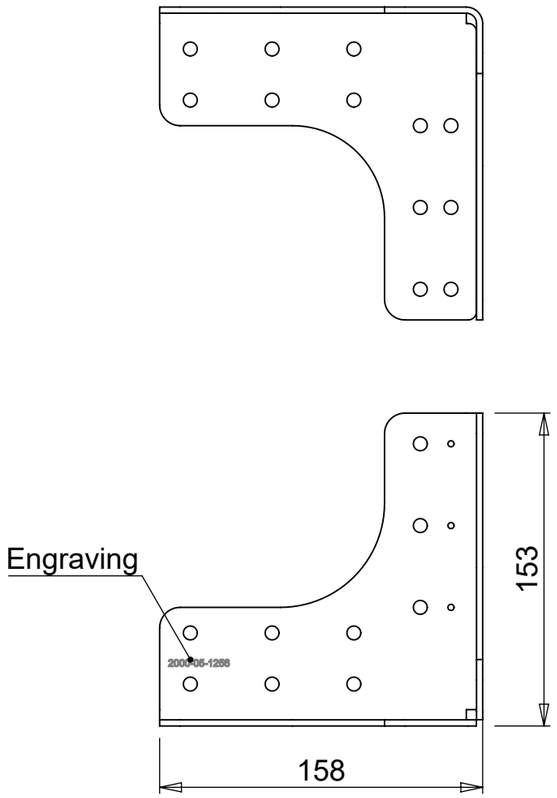
Iss.	Changes	Date	Name

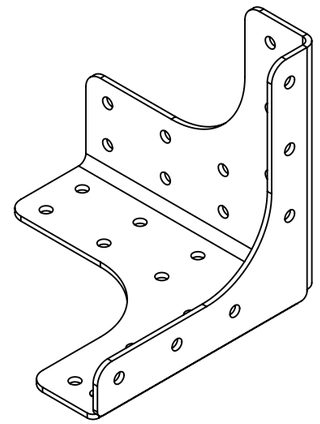
Projection

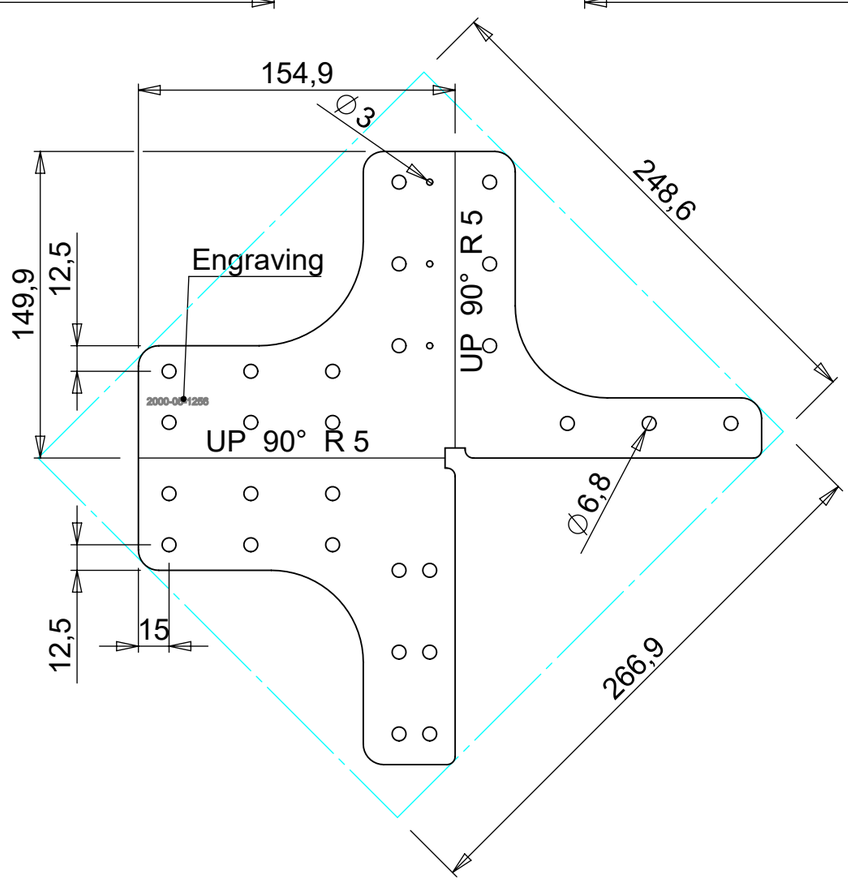
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Right inner corner gusset	266,9	248,6	3	2000-05-1256	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1256 Sheet : 1 of 1	Issue A
Drawn: JWR	26-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.27 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

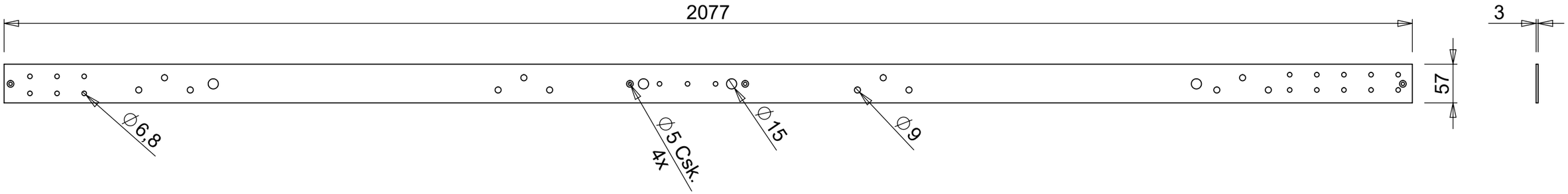
Title: **Right inner corner gusset**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill plate base gusset	2077	57	3	2000-05-1282	Alu. 5754-H22	

Scale: 1:6	Date:	Drawing no.: 2000-05-1282	Issue: A
Drawn: JWR	26-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.94 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

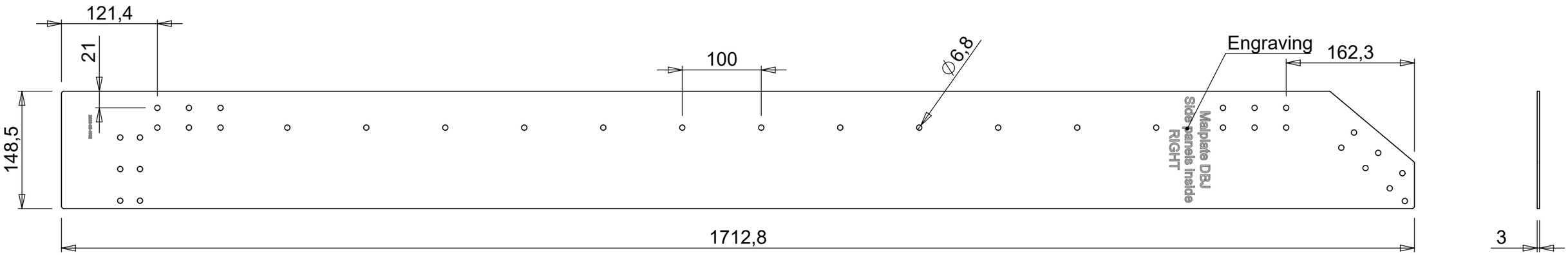
Title: **Fill plate base gusset**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Malplate DBJ side panel Right inside	1712,8	148,5	3	2000-05-4182	Alu. 5754-H22	One per order
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-4182 Sheet : 1 of 1	Issue A
Drawn: JWR	07-10-2019		
Checked: HS	07-10-2019		
Approved: JWR	08-10-2019		
Mass: 2.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

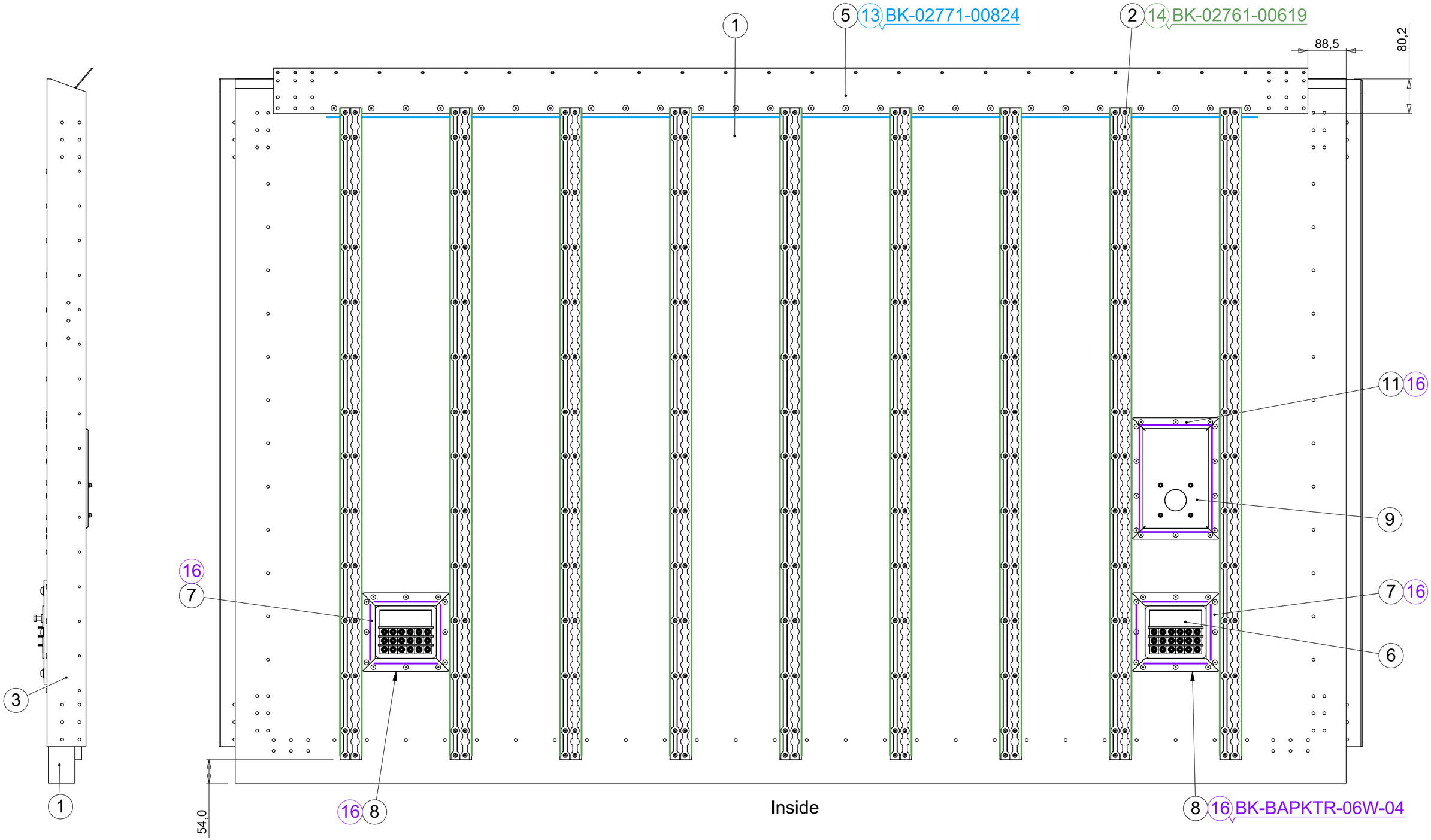
Title: **Malplate DBJ side panel Right inside**

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
21	4	Nyloc Hex Nut	10	M5		BO-10511-05-A2	AISI 304	ISO10511/DIN985
20	4	Torx Socket Button Screw	25	M5		BO-7380T-05025-A2	AISI 304	ISO7380 torx
19	16	Torx Socket Button Screw	25	M10		BO-7380T-10025-A2	AISI 304	ISO7380 torx
18	8	Nord-Lock Large Washer M5	ø10.8	M5	2,2	BO-NORDLCK-05SP-SMO	245 SMO	SMO
17	16	Nord-Lock Large Washer M10	ø21,0	M10	2	BO-NORDLCK-10SP-SMO	245 SMO	SMO
16	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
15	4	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
14	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
13	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	Panel mounted inlet 32A 5p				WO-821		Mennekes art. no. 821
11	2	Flange connector	197,8	46,2	2	2000-05-1343	Alu. 5754-H22	Bend with V16
10	2	Flange connector	277,8	46,2	2	2000-07-2720	Alu. 5754-H22	Bend with V16
9	1	Connector plate	468	388	2	2000-07-2684	AISI 304	Bend with V16
8	4	Flange roxtec	198,3	51,2	2	2000-05-1218	Alu. 5754-H22	Bend with V16
7	4	Flange roxtec	178,8	51,2	2	2000-05-1217	Alu. 5754-H22	Bend with V16
6	2	Roxtec cable seal				2000-05-1205	Assembly	
5	1	Internal Frame Sheet	2389	119,1	2	2000-05-0384	Alu. 5754-H22	Bend with V16
4	1	Outer frame sheet	1541,9	173,8	3	2000-05-0395	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1543	173,8	3	2000-05-0389	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1506	50	15	2000-05-0354	Alu. 6061-T6	
1	1	DBJ panel rear				2000-07-2705	Assembly	

Iss.	Changes	Date	Name

Scale: 1:6 | Date:
Drawn: MBMH | 06-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023
Mass: 78.33 kg | Finish:

Drawing no. 2000-07-2685 Sheet : 1 of 3

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

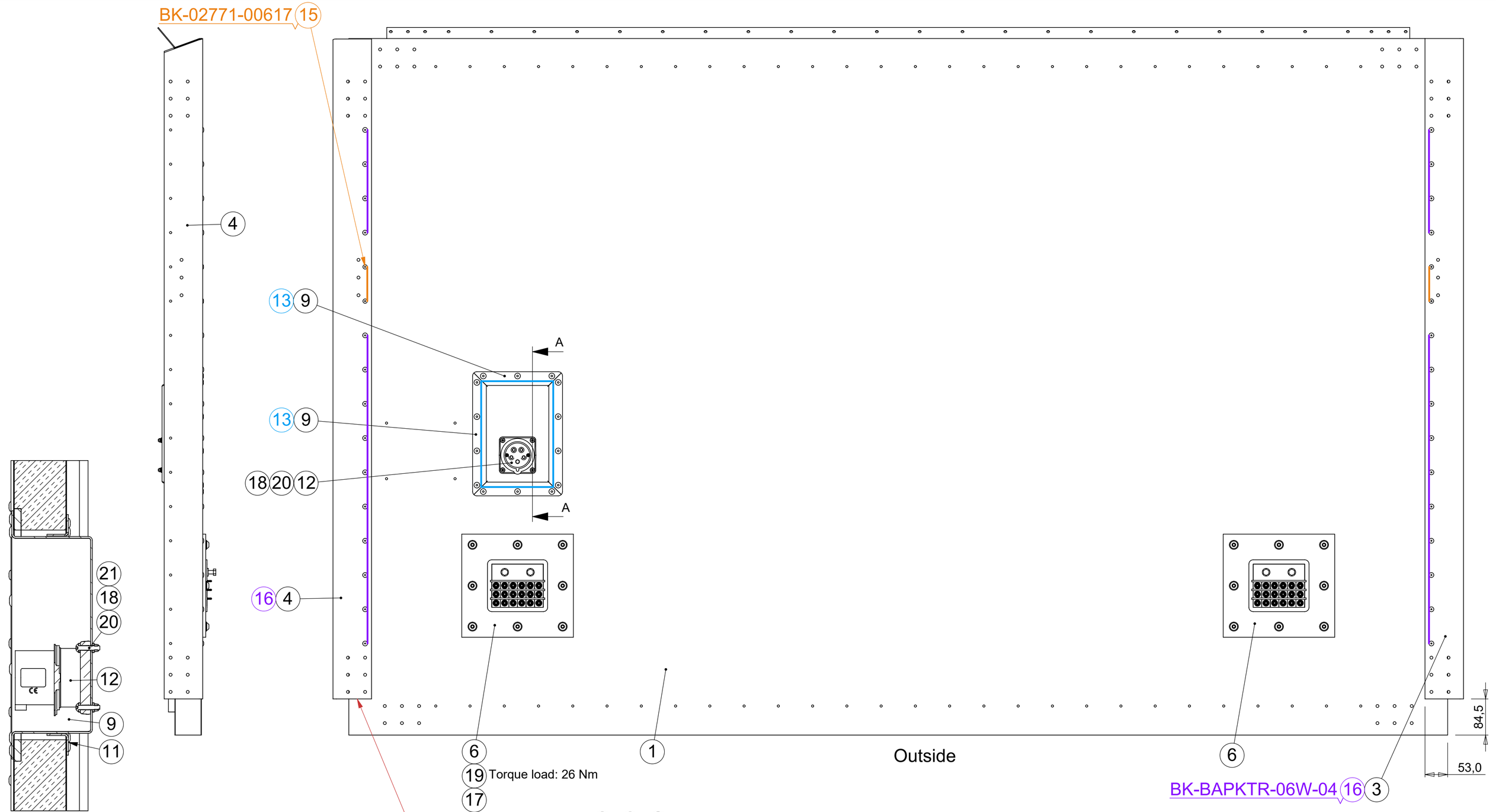
Dimensions in mm (u.n.o.)

Title: DBJ panel rear

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
21	4	Nyloc Hex Nut	10	M5		BO-10511-05-A2	AISI 304	ISO10511/DIN985
20	4	Torx Socket Button Screw	25	M5		BO-7380T-05025-A2	AISI 304	ISO7380 torx
19	16	Torx Socket Button Screw	25	M10		BO-7380T-10025-A2	AISI 304	ISO7380 torx
18	8	Nord-Lock Large Washer M5	ø10.8	M5	2,2	BO-NORDLCK-05SP-SMO	245 SMO	SMO
17	16	Nord-Lock Large Washer M10	ø21,0	M10	2	BO-NORDLCK-10SP-SMO	245 SMO	SMO
16	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
15	4	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
14	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
13	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
12	1	Panel mounted inlet 32A 5p				WO-821		Mennekes art. no. 821

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
11	2	Flange connector	197,8	46,2	2	2000-05-1343	Alu. 5754-H22	Bend with V16
10	2	Flange connector	277,8	46,2	2	2000-07-2720	Alu. 5754-H22	Bend with V16
9	1	Connector plate	468	388	2	2000-07-2684	AISI 304	Bend with V16
8	4	Flange roxtec	198,3	51,2	2	2000-05-1218	Alu. 5754-H22	Bend with V16
7	4	Flange roxtec	178,8	51,2	2	2000-05-1217	Alu. 5754-H22	Bend with V16
6	2	Roxtec cable seal				2000-05-1205	Assembly	
5	1	Internal Frame Sheet	2389	119,1	2	2000-05-0384	Alu. 5754-H22	Bend with V16
4	1	Outer frame sheet	1541,9	173,8	3	2000-05-0395	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1543	173,8	3	2000-05-0389	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1506	50	15	2000-05-0354	Alu. 6061-T6	
1	1	DBJ panel rear				2000-07-2705	Assembly	

Scale: 1:6	Date:	Drawing no. 2000-07-2685	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023	Sheet : 2 of 3	
Approved: HS	08-08-2023		
Mass: 78.33 kg		Finish:	
Title: DBJ panel rear			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

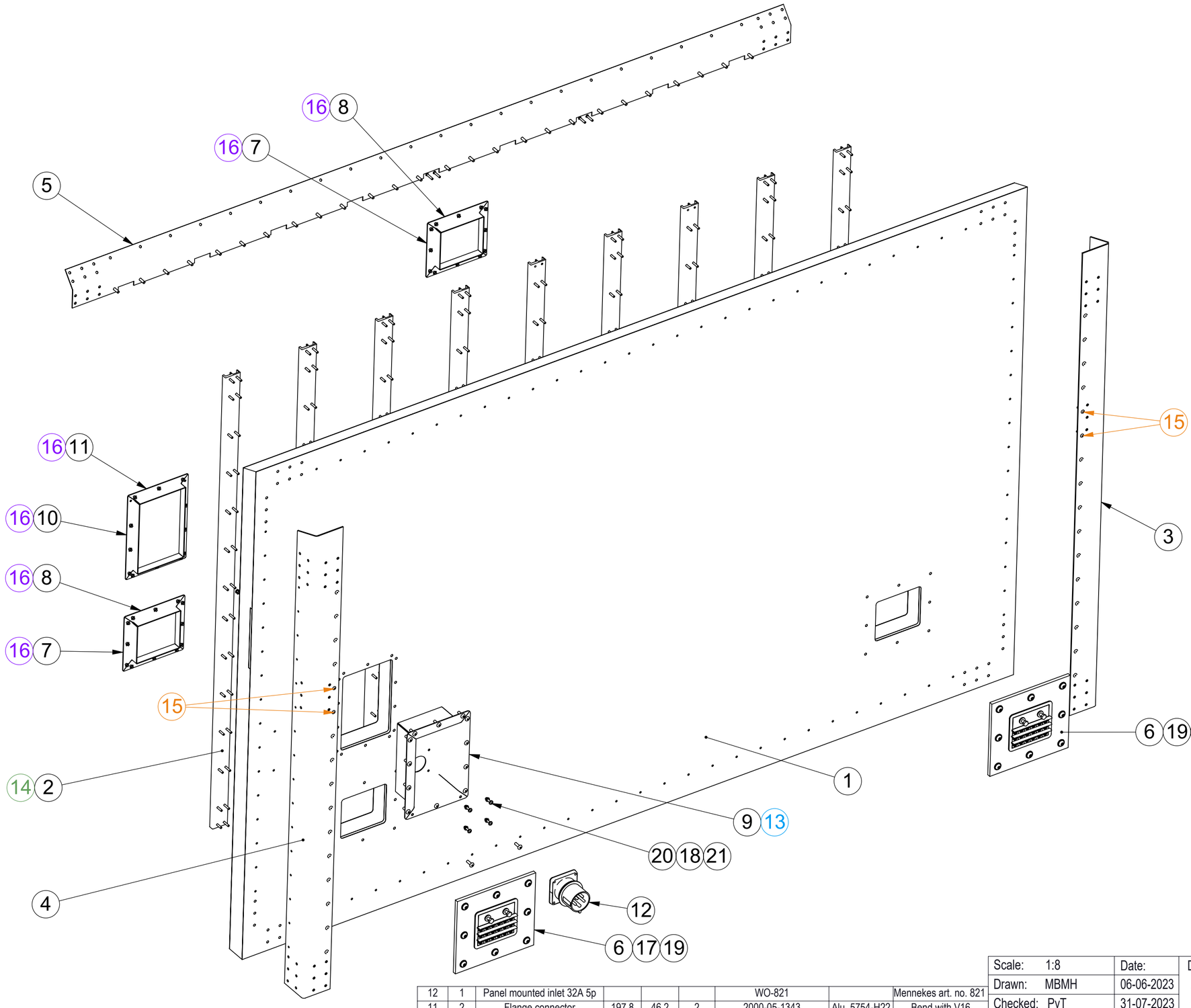
Dimensions in mm (u.n.o.)

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
21	4	Nyloc Hex Nut	10	M5		BO-10511-05-A2	AISI 304	ISO10511/DIN985
20	4	Torx Socket Button Screw	25	M5		BO-7380T-05025-A2	AISI 304	ISO7380 torx
19	16	Torx Socket Button Screw	25	M10		BO-7380T-10025-A2	AISI 304	ISO7380 torx
18	8	Nord-Lock Large Washer M5	ø10.8	M5	2,2	BO-NORDLCK-05SP-SMO	245 SMO	SMO
17	16	Nord-Lock Large Washer M10	ø21,0	M10	2	BO-NORDLCK-10SP-SMO	245 SMO	SMO
16	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
15	4	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
14	252	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
13	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	Panel mounted inlet 32A 5p				WO-821		Mennekes art. no. 821
11	2	Flange connector	197,8	46,2	2	2000-05-1343	Alu. 5754-H22	Bend with V16
10	2	Flange connector	277,8	46,2	2	2000-07-2720	Alu. 5754-H22	Bend with V16
9	1	Connector plate	468	388	2	2000-07-2684	AISI 304	Bend with V16
8	4	Flange roxtec	198,3	51,2	2	2000-05-1218	Alu. 5754-H22	Bend with V16
7	4	Flange roxtec	178,8	51,2	2	2000-05-1217	Alu. 5754-H22	Bend with V16
6	2	Roxtec cable seal				2000-05-1205	Assembly	
5	1	Internal Frame Sheet	2389	119,1	2	2000-05-0384	Alu. 5754-H22	Bend with V16
4	1	Outer frame sheet	1541,9	173,8	3	2000-05-0395	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1543	173,8	3	2000-05-0389	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1506	50	15	2000-05-0354	Alu. 6061-T6	
1	1	DBJ panel rear				2000-07-2705	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-07-2685 Sheet : 3 of 3	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 78.33 kg		Finish:	
Title: DBJ panel rear			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

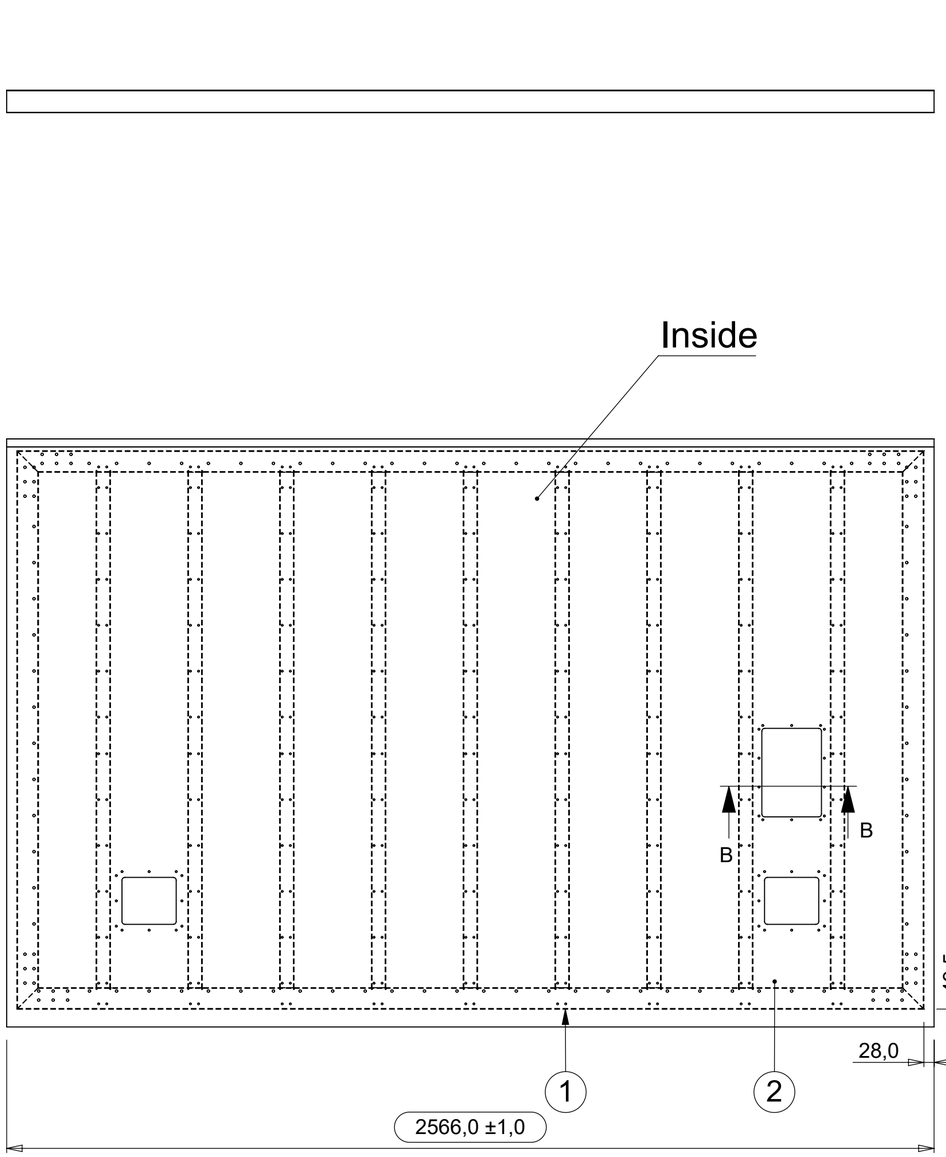
Dimensions in mm (u.n.o.)

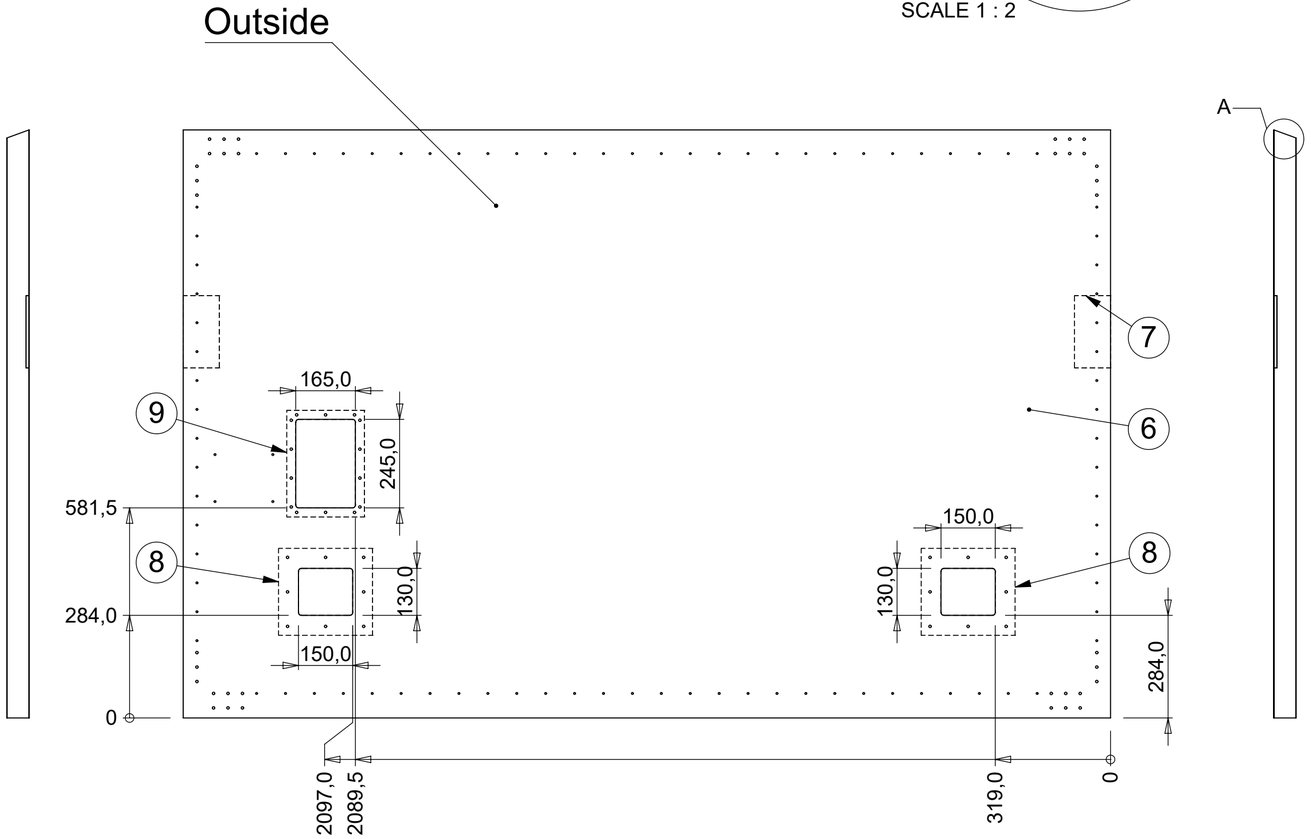
Iss.	Changes	Date	Name

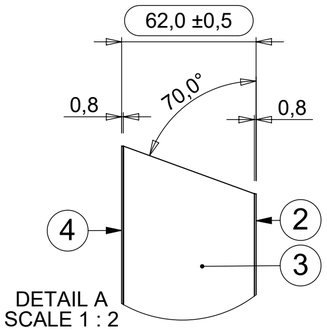
Projection

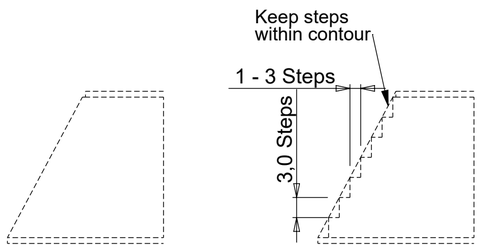
Size A2

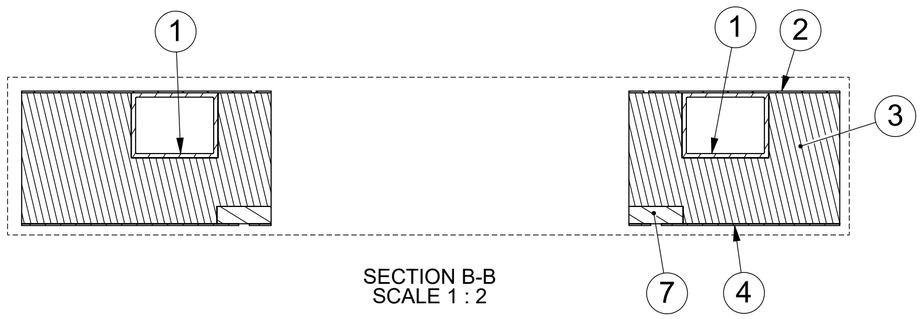
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
7	1	Insert	295	215	8	2000-07-2714	Alu. 6082-T6	
6	2	Insert	260	241	8	2000-05-1350	Alu. 6082-T6	
5	2	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2566	1627,5	0,8	2000-07-2708	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	1627,5	60,4	2000-07-2713	RTM-Plus	
2	1	Inner sheet	2566	1605,5	0,8	2000-07-2715	PE-GEGW 0,8 NF	
1	1	Internal panel frame rear				2000-05-1890	Assembly	

Scale: 1:12	Date:	Drawing no.	Issue
Drawn: MBMH	06-06-2023	2000-07-2705	A
Checked: PvT	31-07-2023	Sheet : 1 of 2	
Approved: HS	08-08-2023		
Mass: 40.21 kg		Typ. tolerances for insulation/sandwich panels	

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ± 0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Dimensions in mm (u.n.o.)

Title: DBJ panel rear

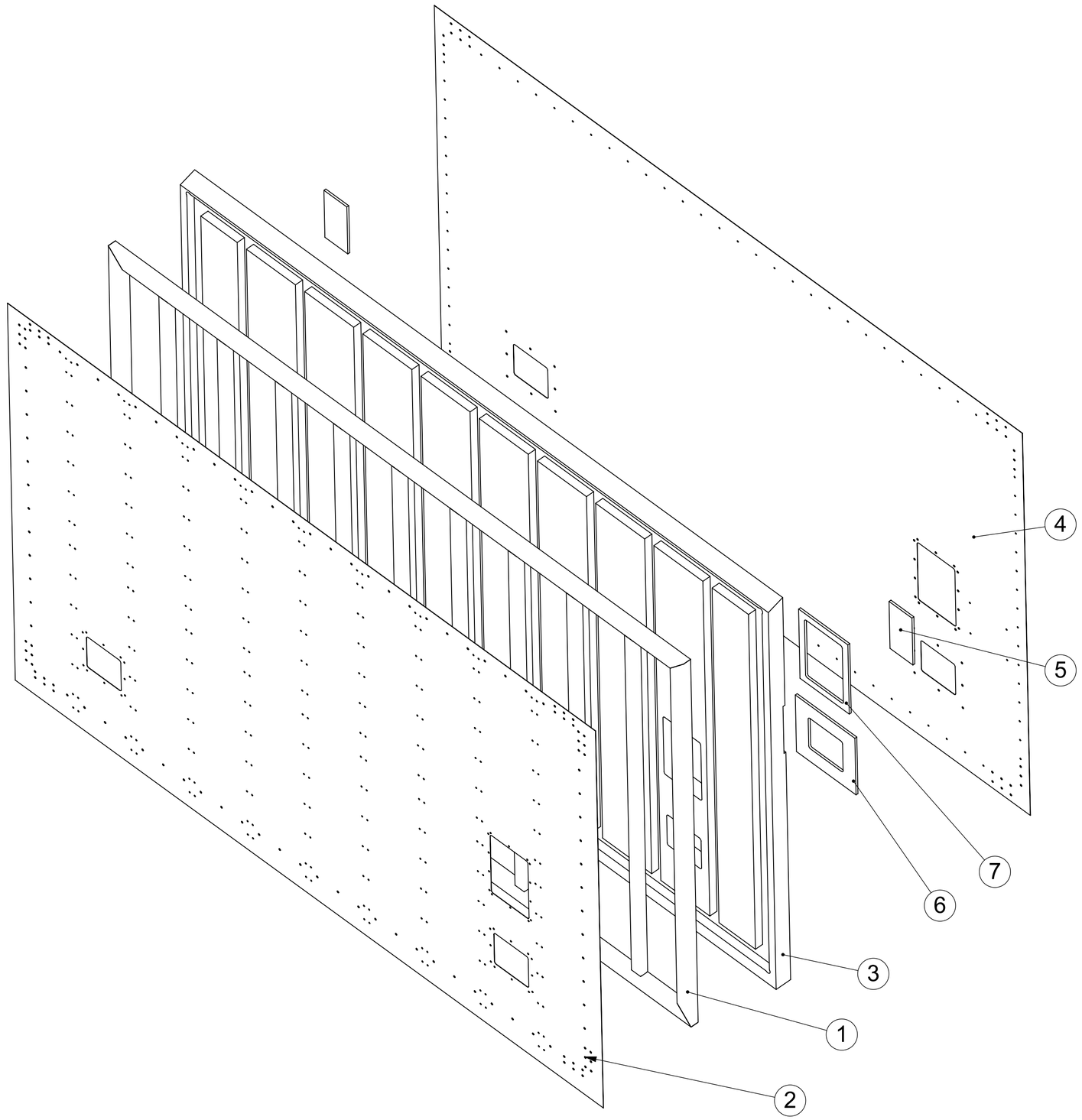
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
7	1	Insert	295	215	8	2000-07-2714	Alu. 6082-T6	
6	2	Insert	260	241	8	2000-05-1350	Alu. 6082-T6	
5	2	Insert	200	100	8	2000-05-1202	Alu. 6082-T6	
4	1	Outer sheet	2566	1627,5	0,8	2000-07-2708	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	1627,5	60,4	2000-07-2713	RTM-Plus	
2	1	Inner sheet	2566	1605,5	0,8	2000-07-2715	PE-GEGW 0,8 NF	
1	1	Internal panel frame rear				2000-05-1890	Assembly	

Scale: 1:10 | Date:
Drawn: MBMH | 06-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023

Drawing no. 2000-07-2705 Sheet : 2 of 2

Issue A

Tolerances (u.n.o.)
Outside dimensions of panel: ±1
Thickness of panel: -0/+1
Position of cutouts / inserts: ±1
Dimensions of cutouts: ±1
Tolerance on CNC features: ±0.5
No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Mass: 40.21 kg

Typ. tolerances for insulation/sandwich panels

Dimensions in mm (u.n.o.)

Title: # DBJ panel rear

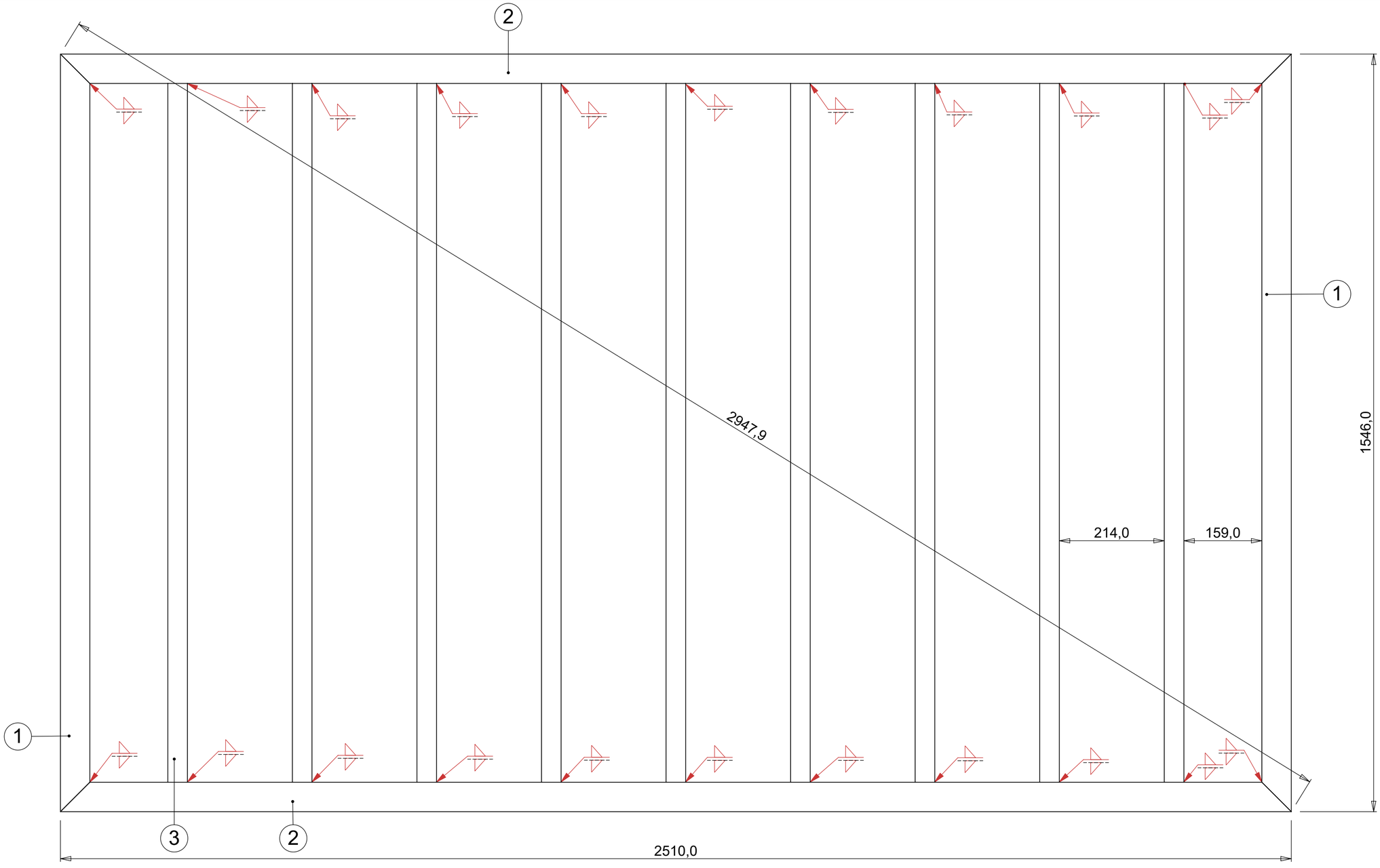
Glue foam and inserts using Adekit A 290 / H 6290 POLYOL / H6280 ISOCYANATE
Glue face sheets to foam using SikaForce-712 L80 Part A and SikaForce-7010 Part B

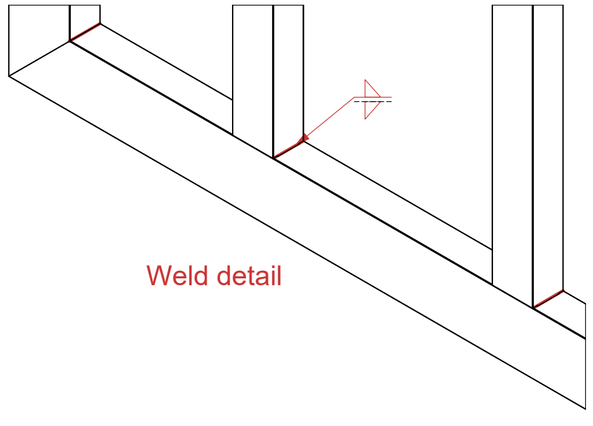
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Weld detail

Welding according to procedure VRR-W3-090 except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	9	Tube 40x30x2	1436	40/30	2	2000-05-0350	Alu. 6060-T66	
2	2	Tube 30x60x2	2510	30/60	2	2000-05-0349	Alu. 6060-T66	
1	2	Tube 60x30x2	1546	60/30	2	2000-05-0348	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no. 2000-05-1890 Sheet : 1 of 1	Issue A
Drawn: JWR	27-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 16.47 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

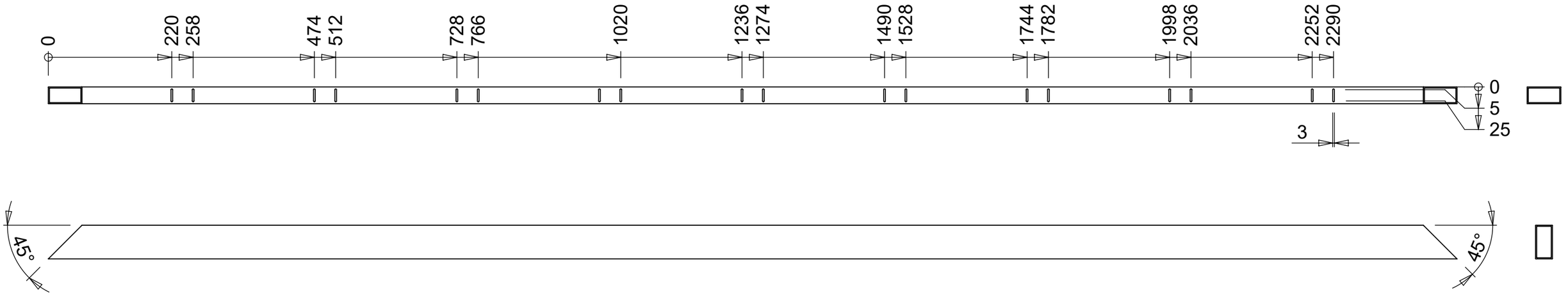
Title: **Internal panel frame rear**

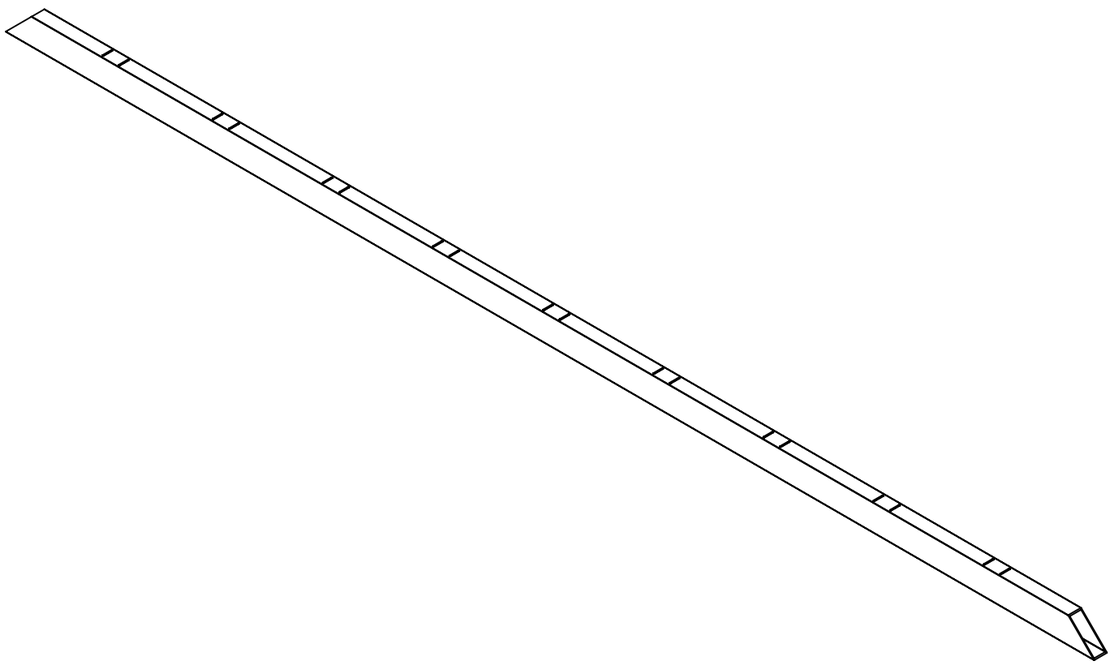
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 30x60x2	2510	30/60	2	2000-05-0349	Alu. 6060-T66	

Scale: 1:7	Date:	Drawing no.: 2000-05-0349	Issue: A
Drawn: JWR	27-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 2.27 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

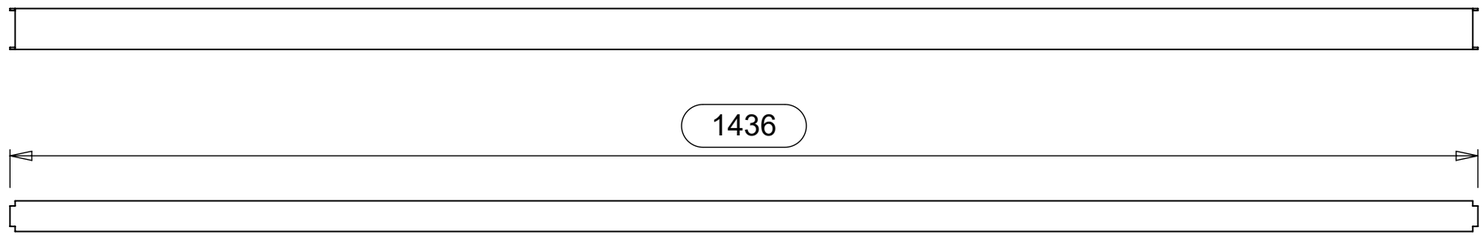
Title: Tube 30x60x2

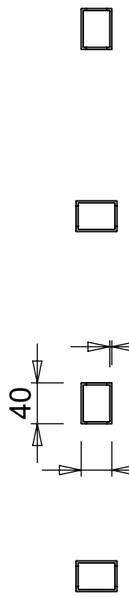
Iss.	Changes	Date	Name

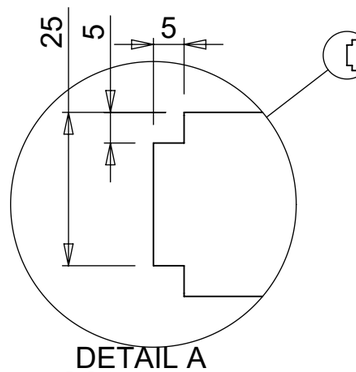
Projection

Size A3

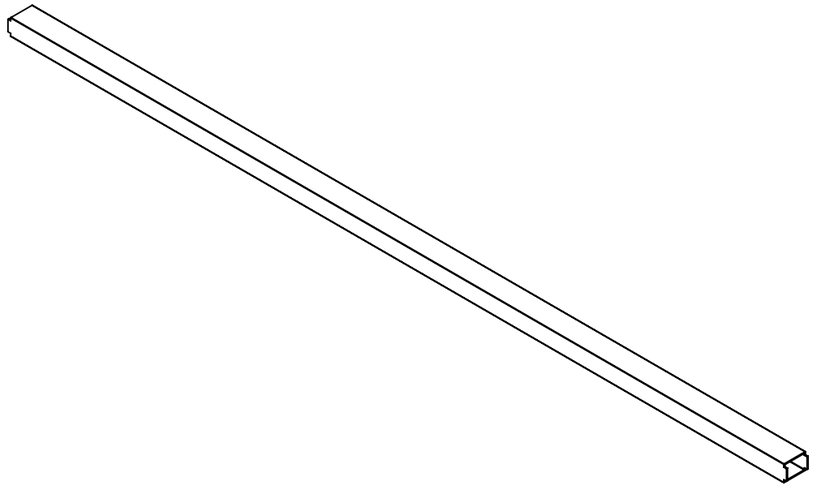
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







DETAIL A
SCALE 1 : 1
applies on both sides



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 40x30x2	1436	40/30	2	2000-05-0350	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no.: 2000-05-0350	Issue: A
Drawn: JWR	27-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.02 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

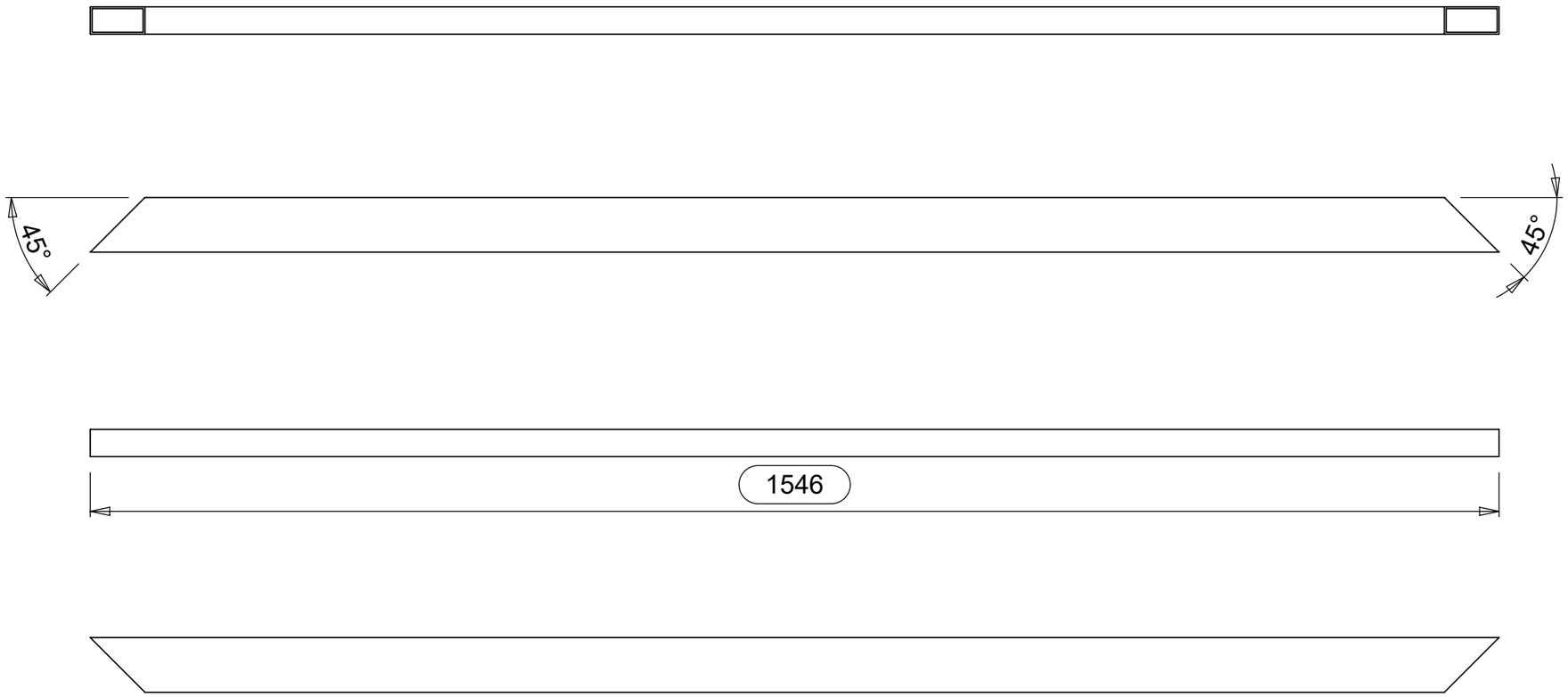
Title: Tube 40x30x2

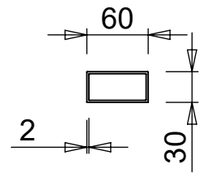
Iss.	Changes	Date	Name

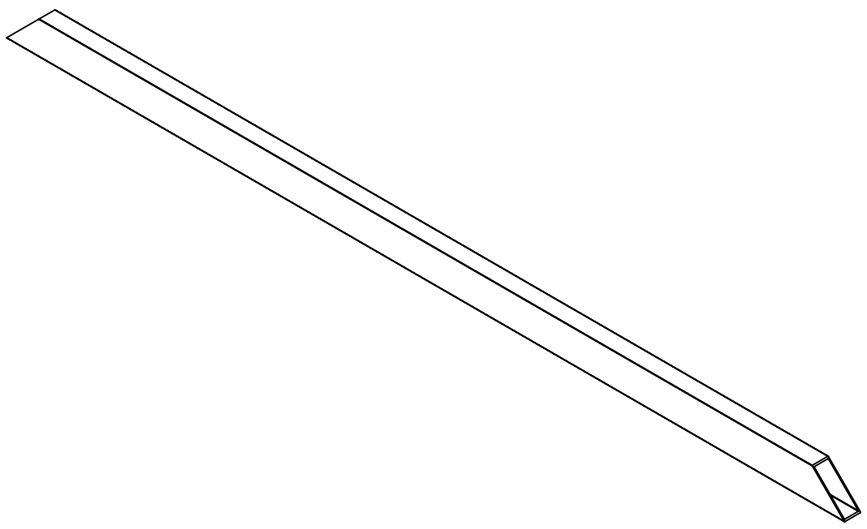
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Tube 60x30x2	1546	60/30	2	2000-05-0348	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0348 Sheet : 1 of 1	Issue A
Drawn: JWR	27-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.38 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

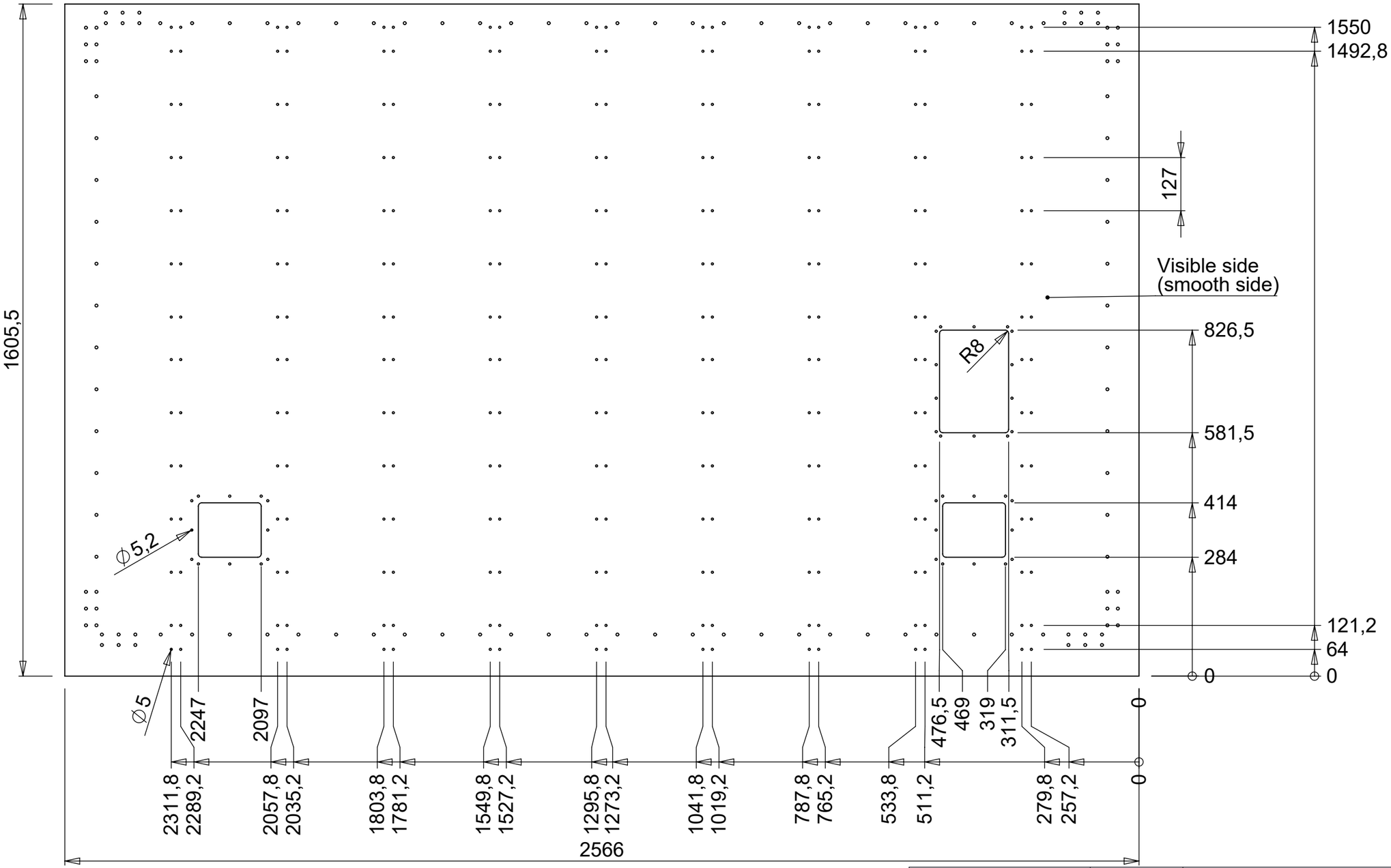
Title: Tube 60x30x2

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Holes Ø5 mm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2566	1605,5	0,8	2000-07-2715	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Scale: 1:10	Date:	Drawing no.: 2000-07-2715 Sheet : 1 of 2	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.06 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Title: **Inner sheet**

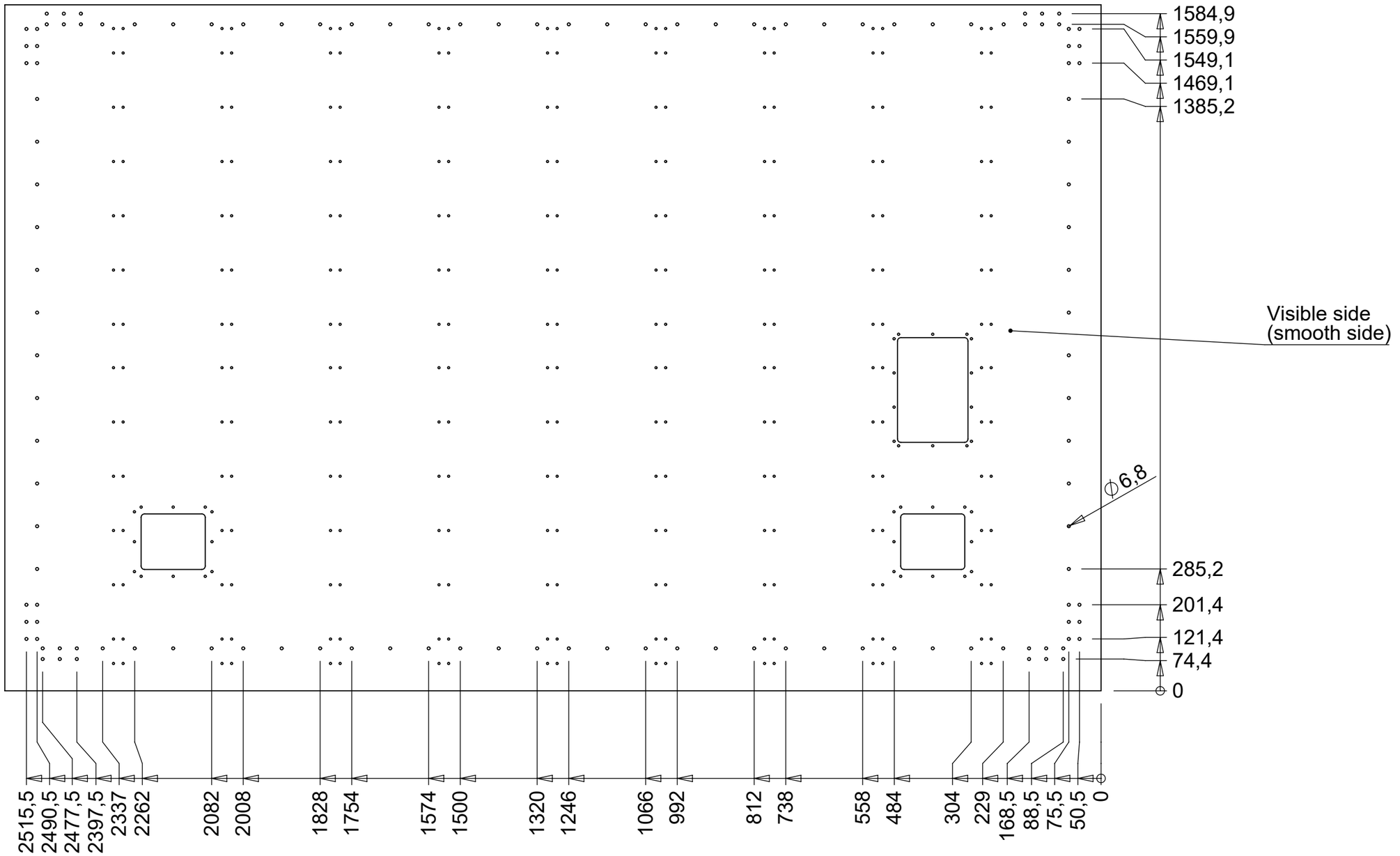
Tolerances (u.n.o.)
- Outside dimensions of panel: ±1
- Thickness of panel: -0/+1
- Position of cutouts / inserts: ±1
- Dimensions of cutouts: ±1
- Tolerance on CNC features: ±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Holes Ø6,8 mm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2566	1605,5	0,8	2000-07-2715	PE-GEGW 0,8 NF	

Scale: 1:10	Date:	Drawing no.: 2000-07-2715 Sheet : 2 of 2	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.06 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

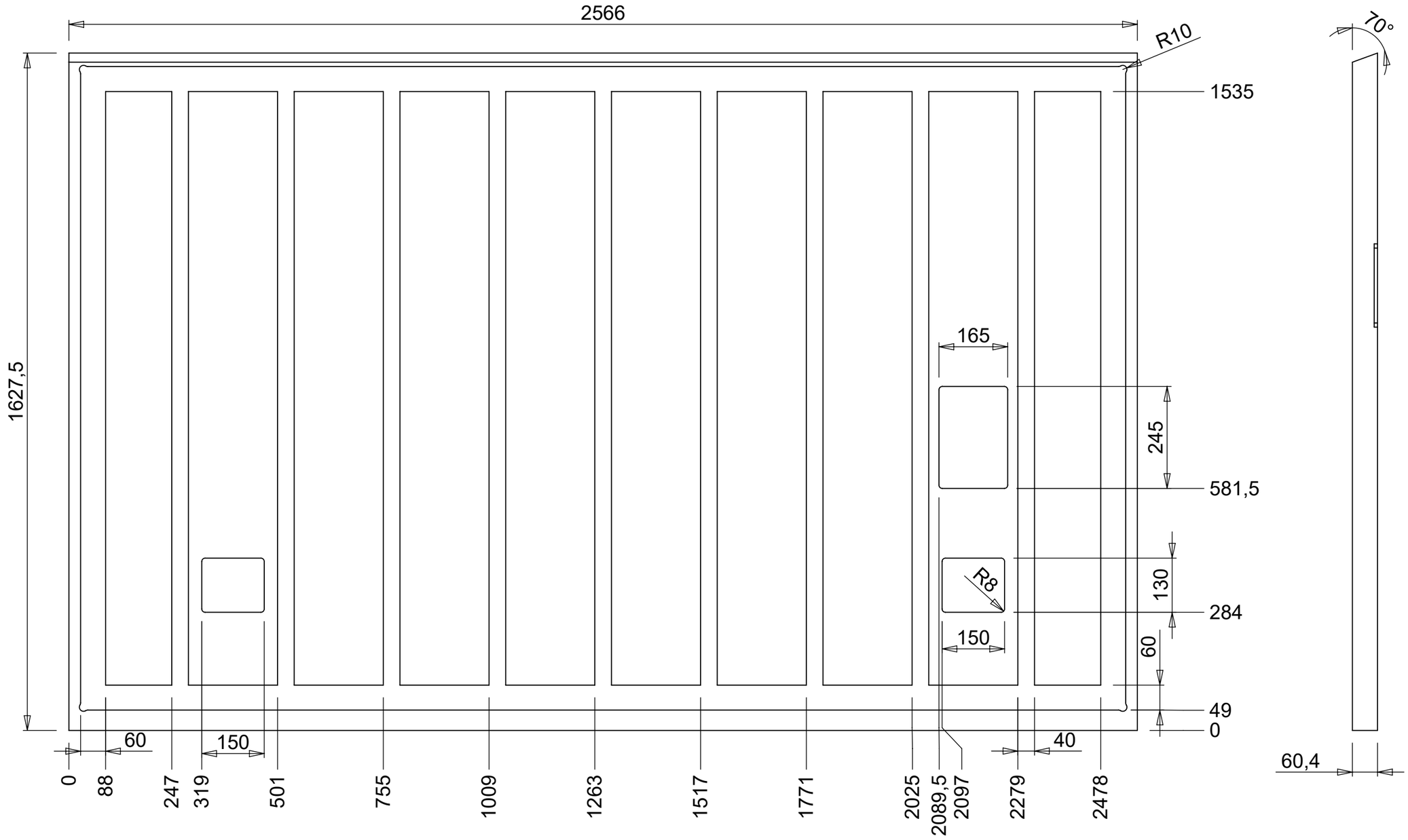
Title: **Inner sheet**

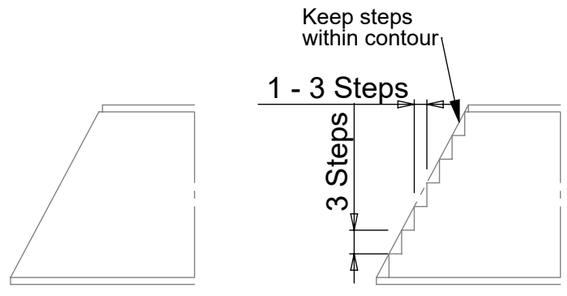
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Slanted side sawn

Slanted side milled

Acceptable finish of slanted sides insulation panels

Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: MBMH	06-06-2023	2000-07-2713	A	Outside dimensions of panel: ±1 Thickness of panel: -0/+1 Position of cutouts / inserts: ±1 Dimensions of cutouts: ±1 Tolerance on CNC features: ±0.5 **No gaps in core allowed -> Fill with glue** **All core parts MUST be glued together**
Checked: PvT	31-07-2023	Sheet : 1 of 2		
Approved: HS	08-08-2023			
Mass: 10.32 kg		Typ. tolerances for insulation/sandwich panels		Dimensions in mm (u.n.o.)

Title: **Insulation panel**

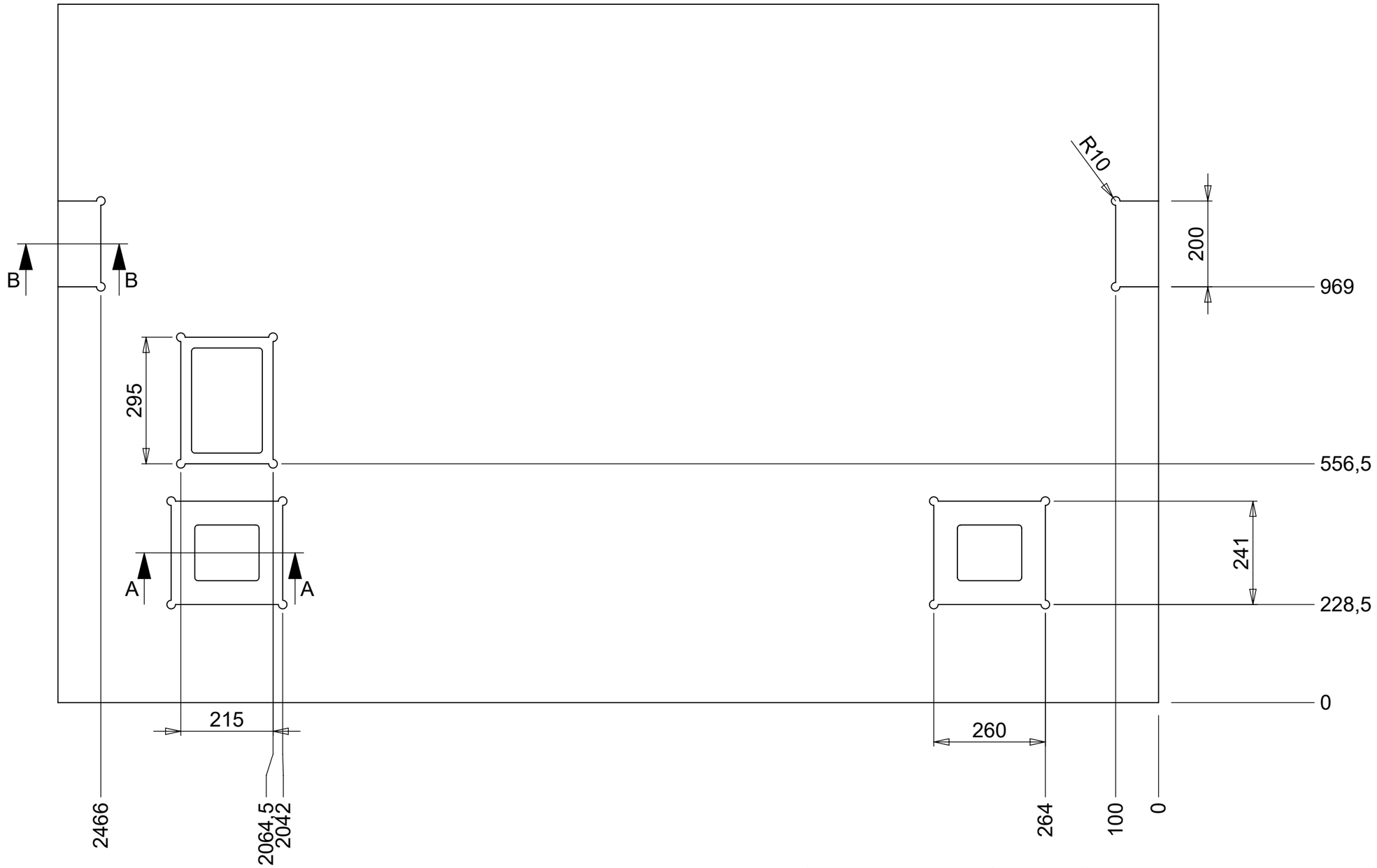
Iss.	Changes	Date	Name

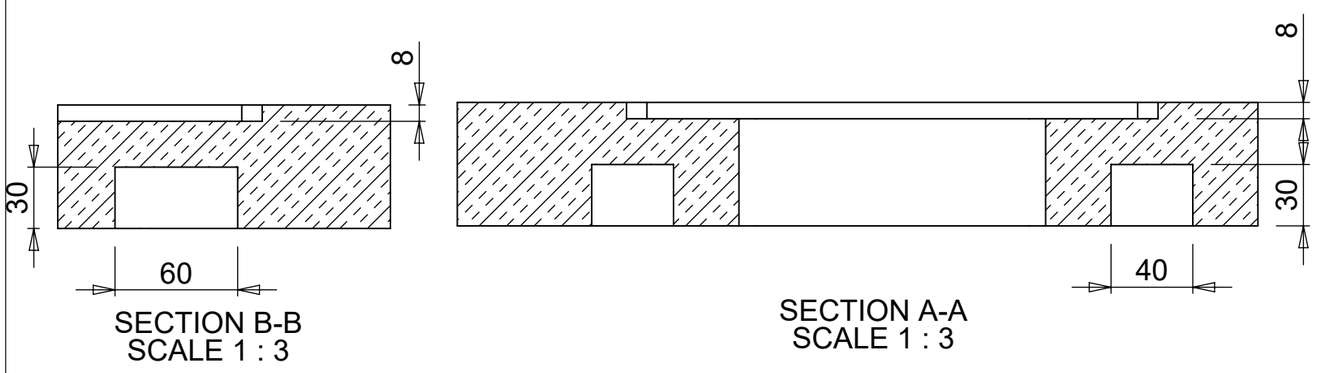
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation panel	2566	1627,5	60,4	2000-07-2713	RTM-Plus	





SECTION B-B
SCALE 1 : 3

SECTION A-A
SCALE 1 : 3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation panel	2566	1627,5	60,4	2000-07-2713	RTM-Plus	

Scale: 1:10	Date:	Drawing no.: 2000-07-2713 Sheet : 2 of 2	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 10.32 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

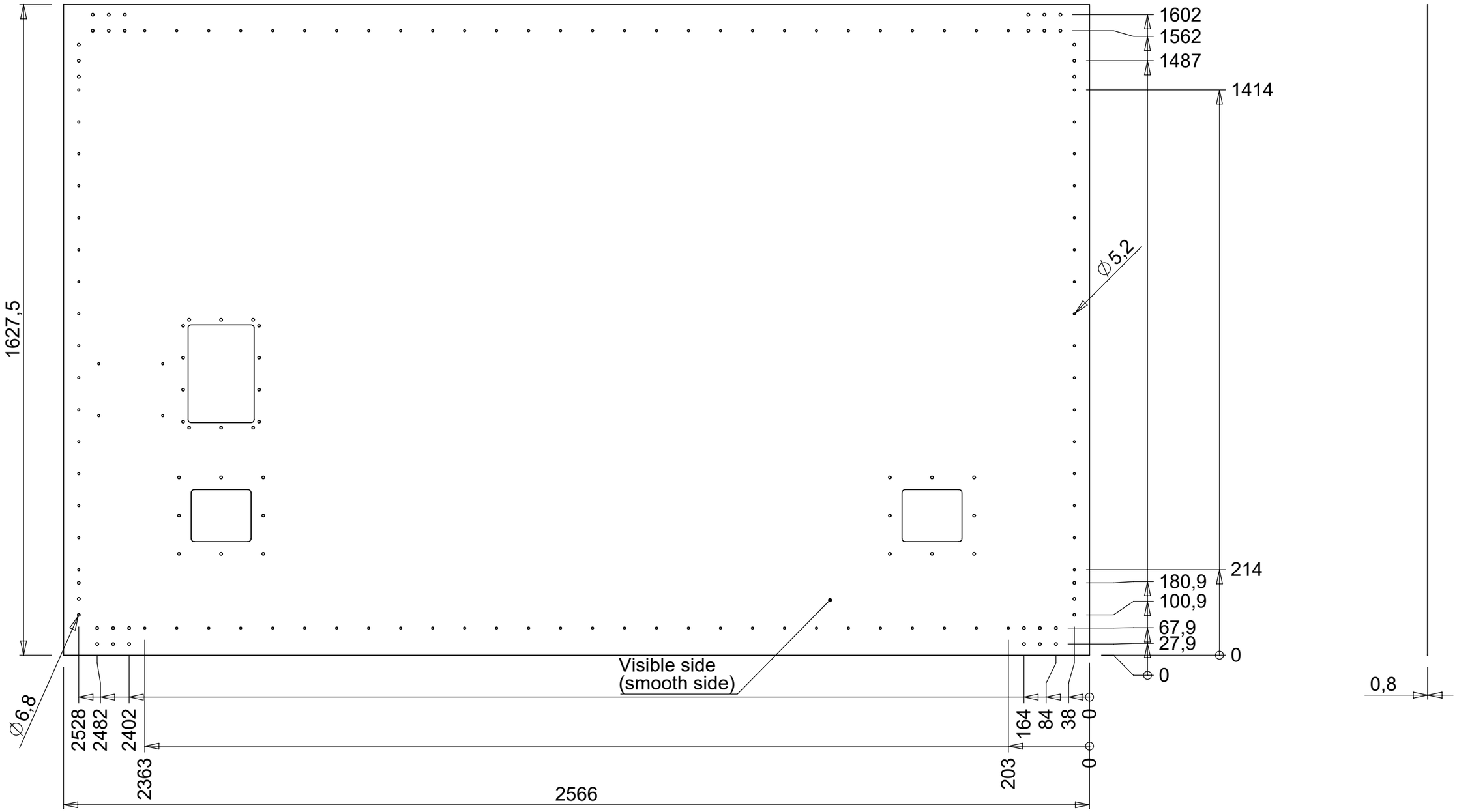
Title: Insulation panel

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: MBMH	06-06-2023	2000-07-2708	A	Outside dimensions of panel: ±1 Thickness of panel: -0/+1 Position of cutouts / inserts: ±1 Dimensions of cutouts: ±1 Tolerance on CNC features: ±0.5 **No gaps in core allowed -> Fill with glue** **All core parts MUST be glued together**
Checked: PvT	31-07-2023			
Approved: HS	08-08-2023	Sheet : 1 of 2		
Mass: 5.14 kg		Typ. tolerances for insulation/sandwich panels		Dimensions in mm (u.n.o.)

Title: **Outer sheet**

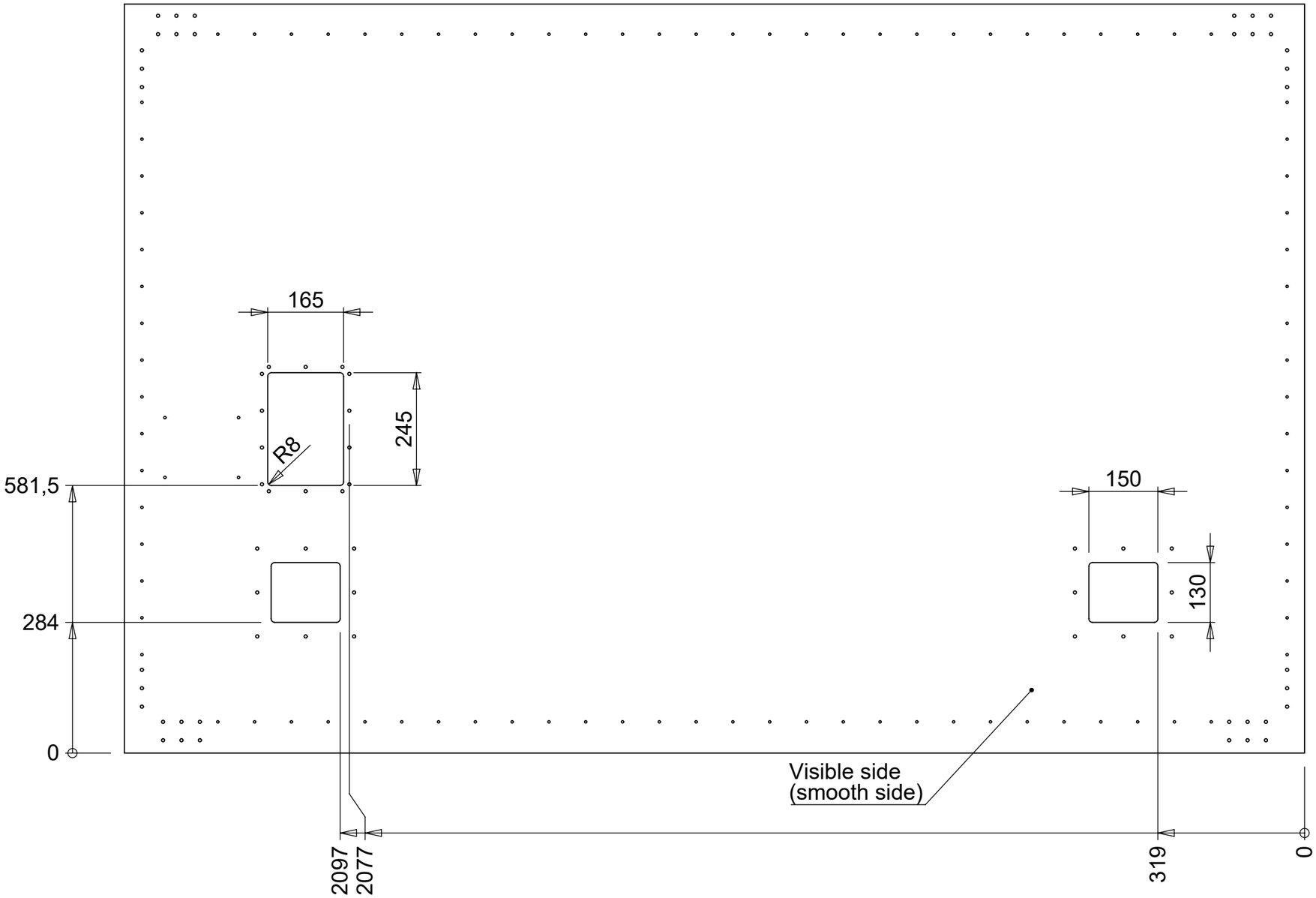
Iss.	Changes	Date	Name

Projection

Size A3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2566	1627,5	0,8	2000-07-2708	PE-GEGW 0,8 NF	

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Outer sheet	2566	1627,5	0,8	2000-07-2708	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-07-2708 Sheet : 2 of 2	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 5.14 kg		Typ. tolerances for insulation/sandwich panels	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

Outside dimensions of panel:	±1
Thickness of panel:	-0/+1
Position of cutouts / inserts:	±1
Dimensions of cutouts:	±1
Tolerance on CNC features:	±0.5

No gaps in core allowed -> Fill with glue
All core parts MUST be glued together

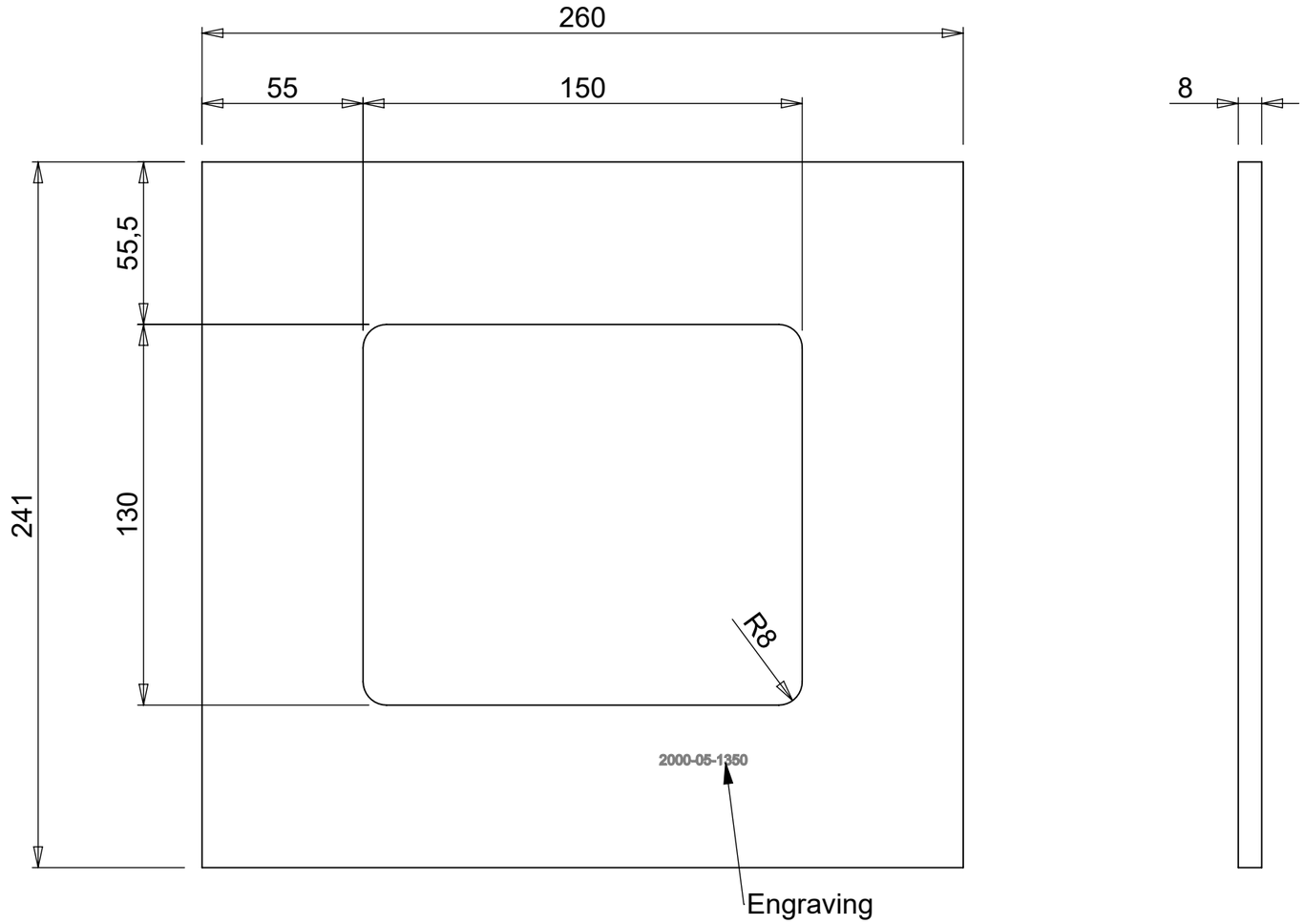
Title: # Outer sheet

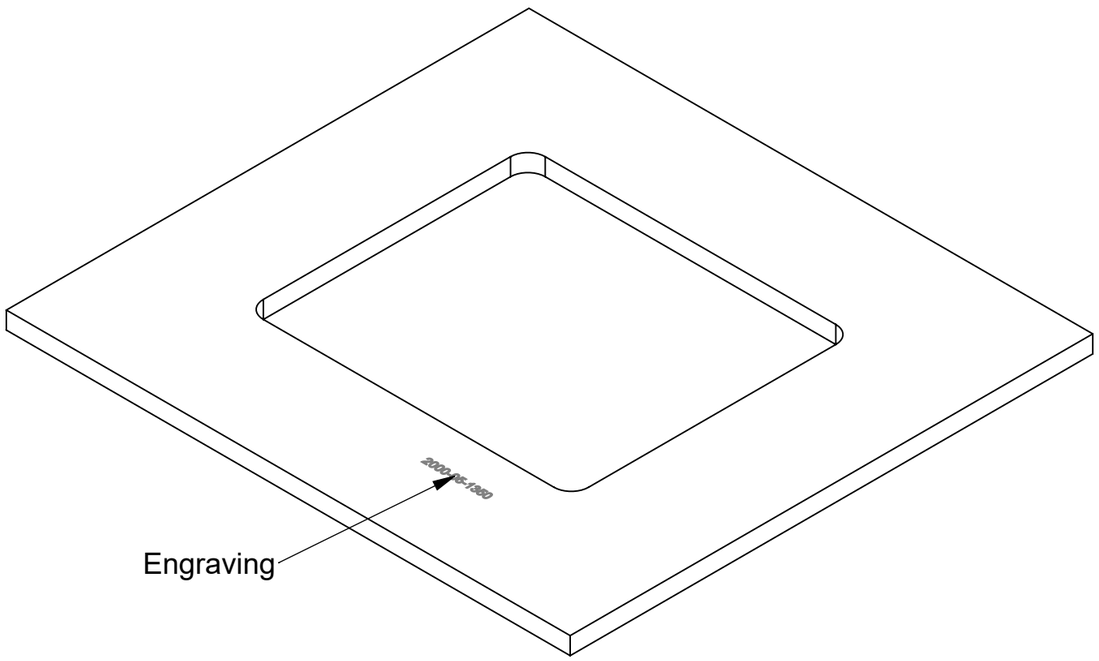
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insert	260	241	8	2000-05-1350	Alu. 6082-T6	

Scale: 1:2	Date:	Drawing no.: 2000-05-1350	Issue: A
Drawn: JWR	27-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.93 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

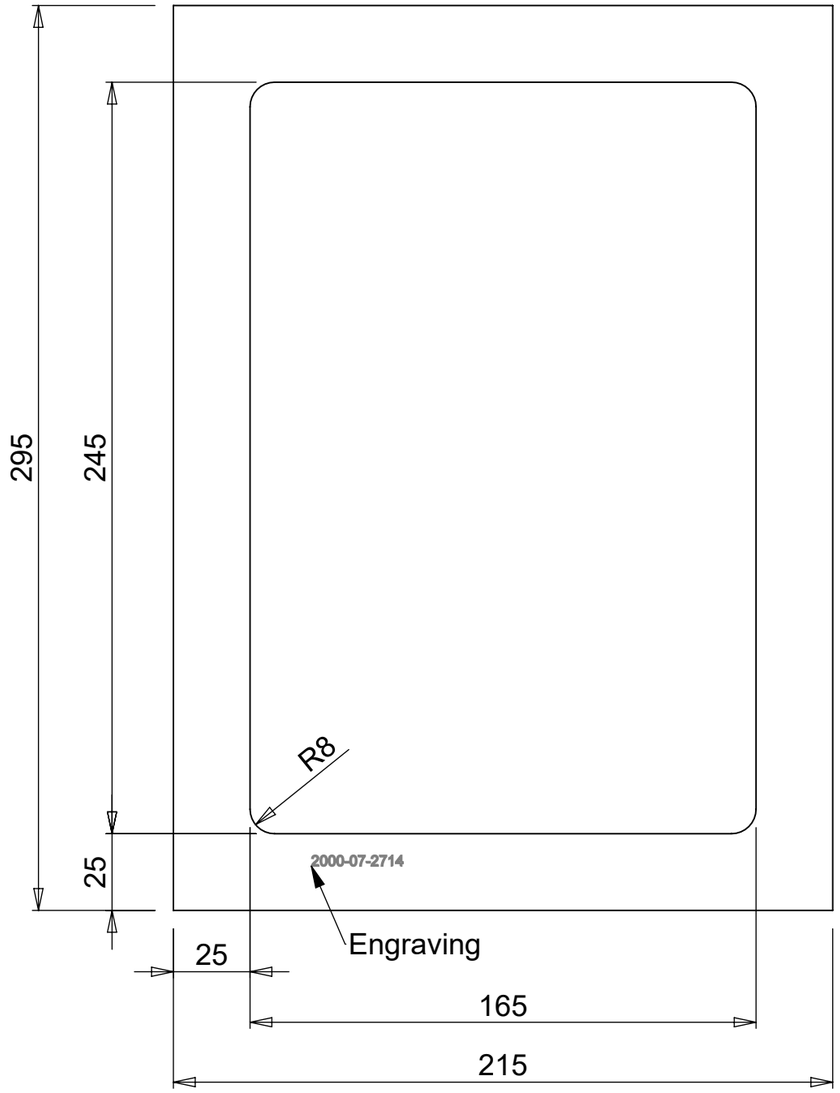
Title: **Insert**

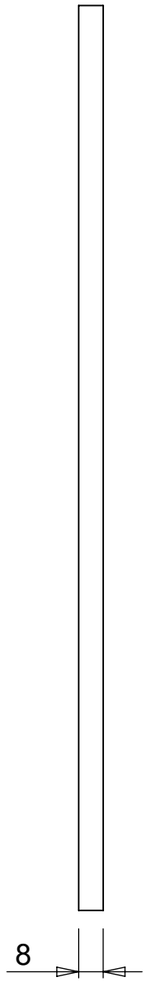
Iss.	Changes	Date	Name

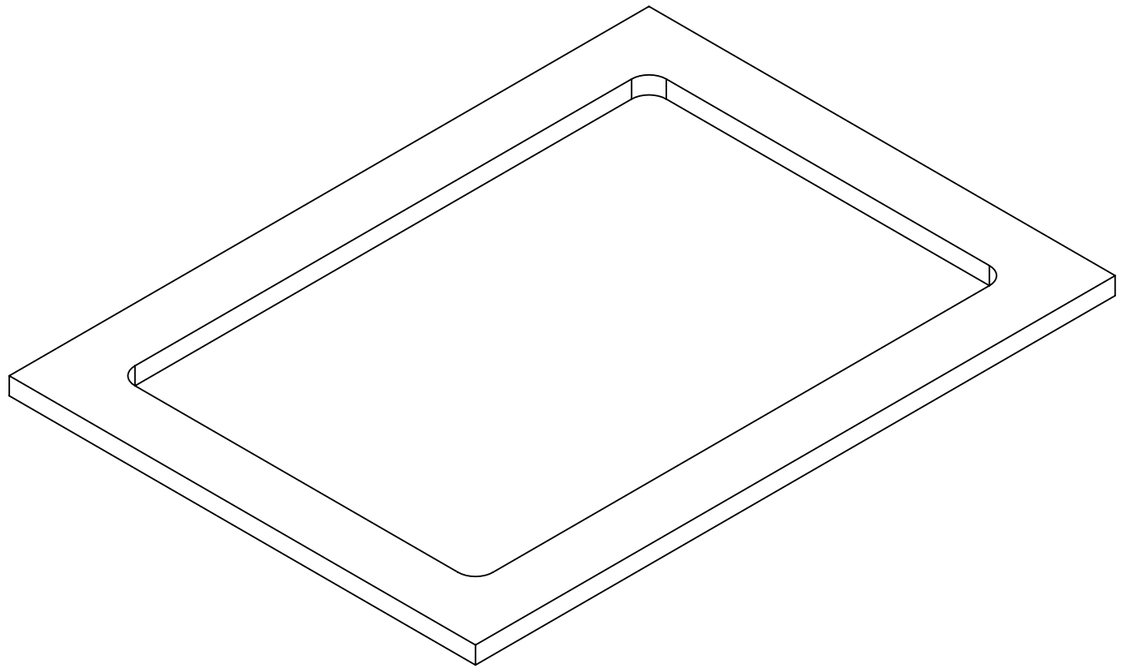
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insert	295	215	8	2000-07-2714	Alu. 6082-T6	

Scale: 1:2	Date:	Drawing no.: 2000-07-2714 Sheet : 1 of 1	Issue: A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

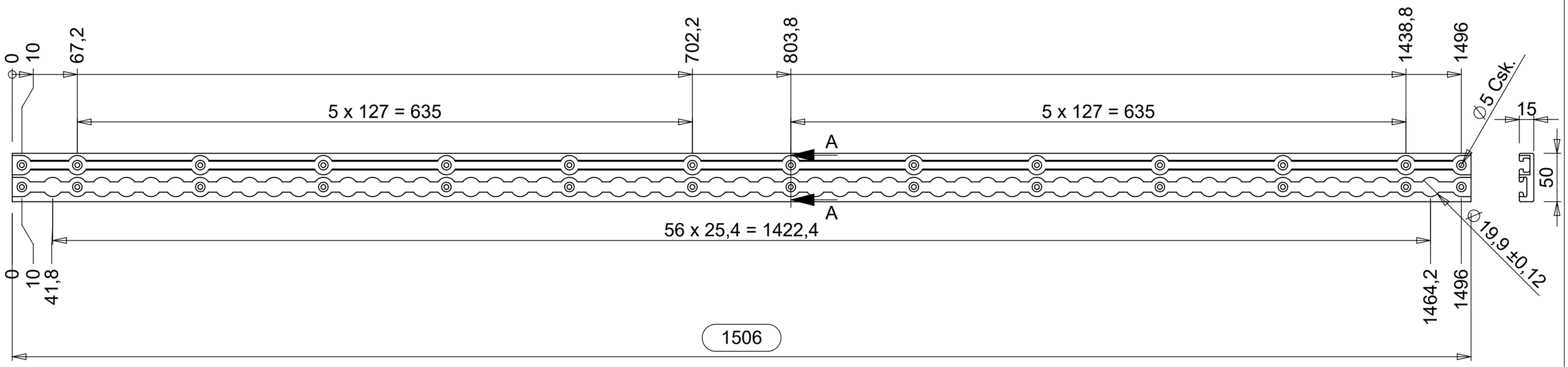
Title: **Insert**

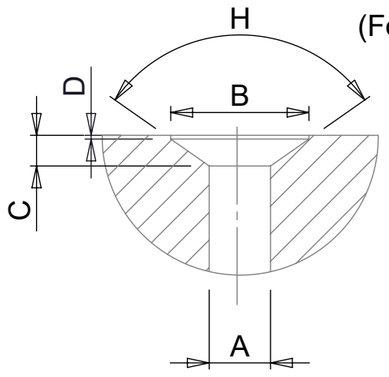
Iss.	Changes	Date	Name

Projection

Size A3

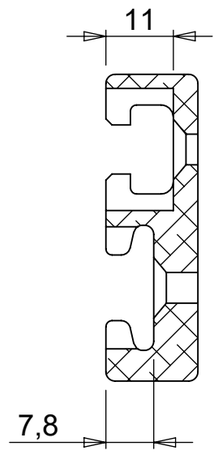
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Seat-T track profile RR 205	1506	50	15	2000-05-0354	Alu. 6061-T6	

Scale: 1:4	Date:	Drawing no.: 2000-05-0354 Sheet : 1 of 1	Issue A
Drawn: JWR	27-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.91 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

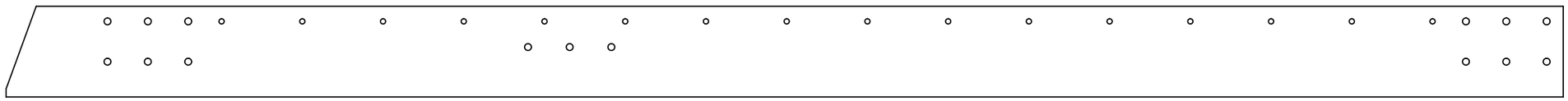
Title: Seat-T track profile RR 205

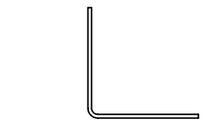
Iss.	Changes	Date	Name

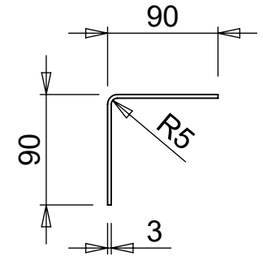
Projection

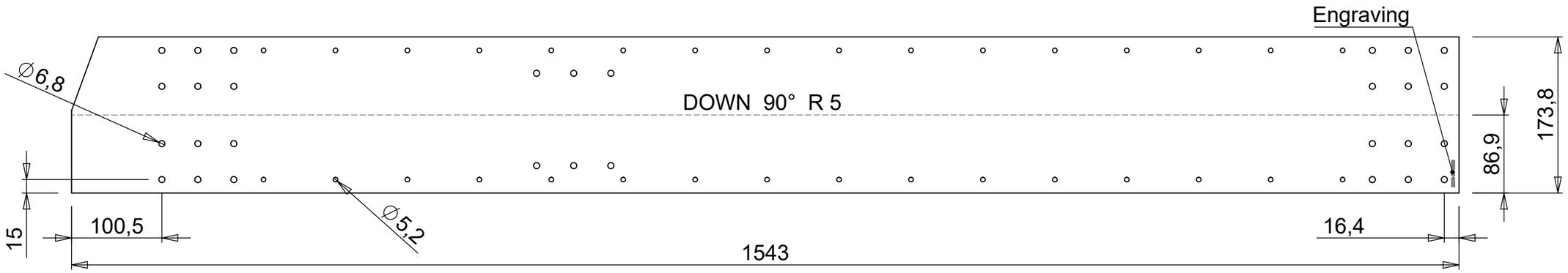
Size A3

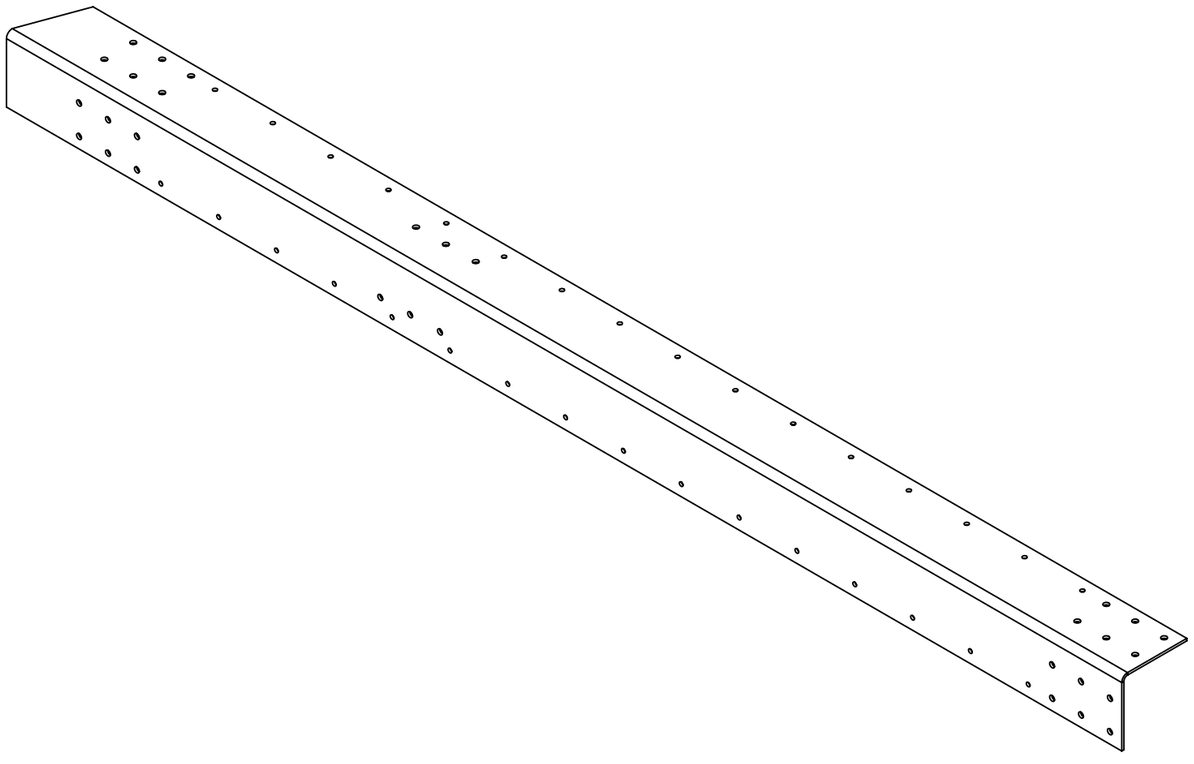
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Outer frame sheet	1543	173,8	3	2000-05-0389	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0389	Issue: A
Drawn: JWR	28-03-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: HS	12-04-2019		< 7 / 7 ±0.2; 7 30 / ±0.3; 30 120 / ±0.5; 120 400 / ±0.8; 400 1000 / ±1.0; 1000 2000 / ±1.4; 2000 > / ± 2
Approved: JWR	09-05-2019		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 2.15 kg		Finish:	Dimensions in mm (u.n.o.)

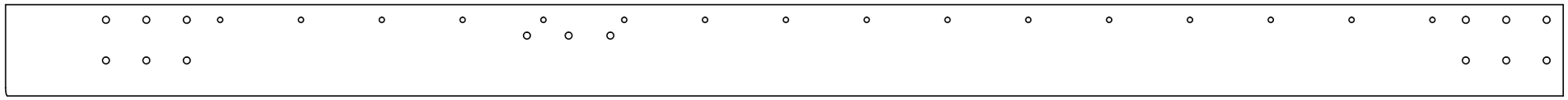
Title: **Outer frame sheet**

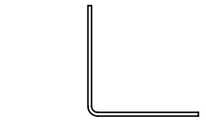
Iss.	Changes	Date	Name

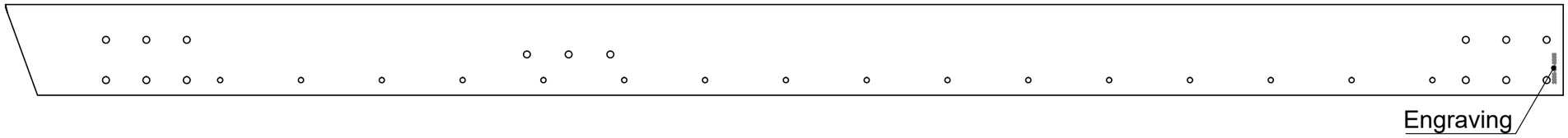
Projection

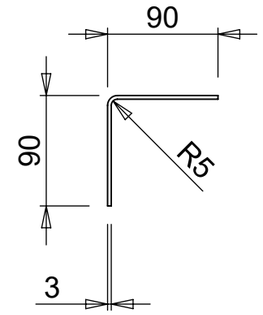
Size A3

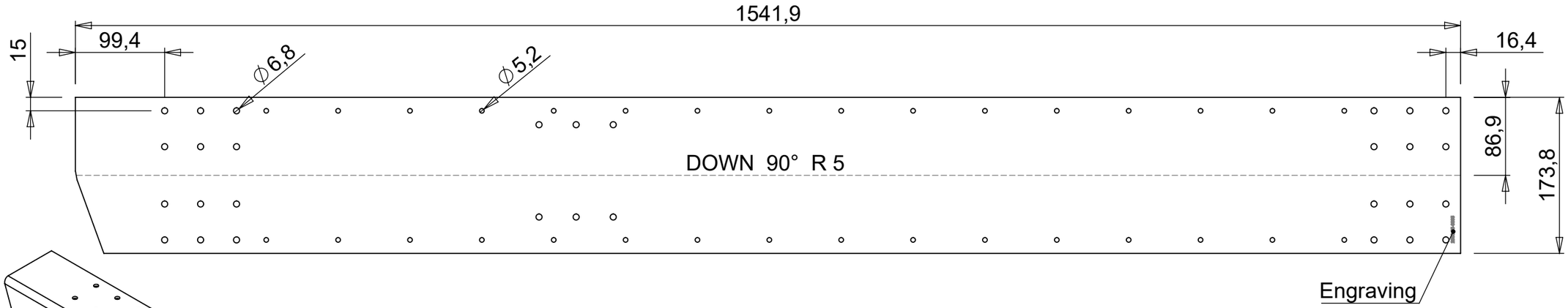
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

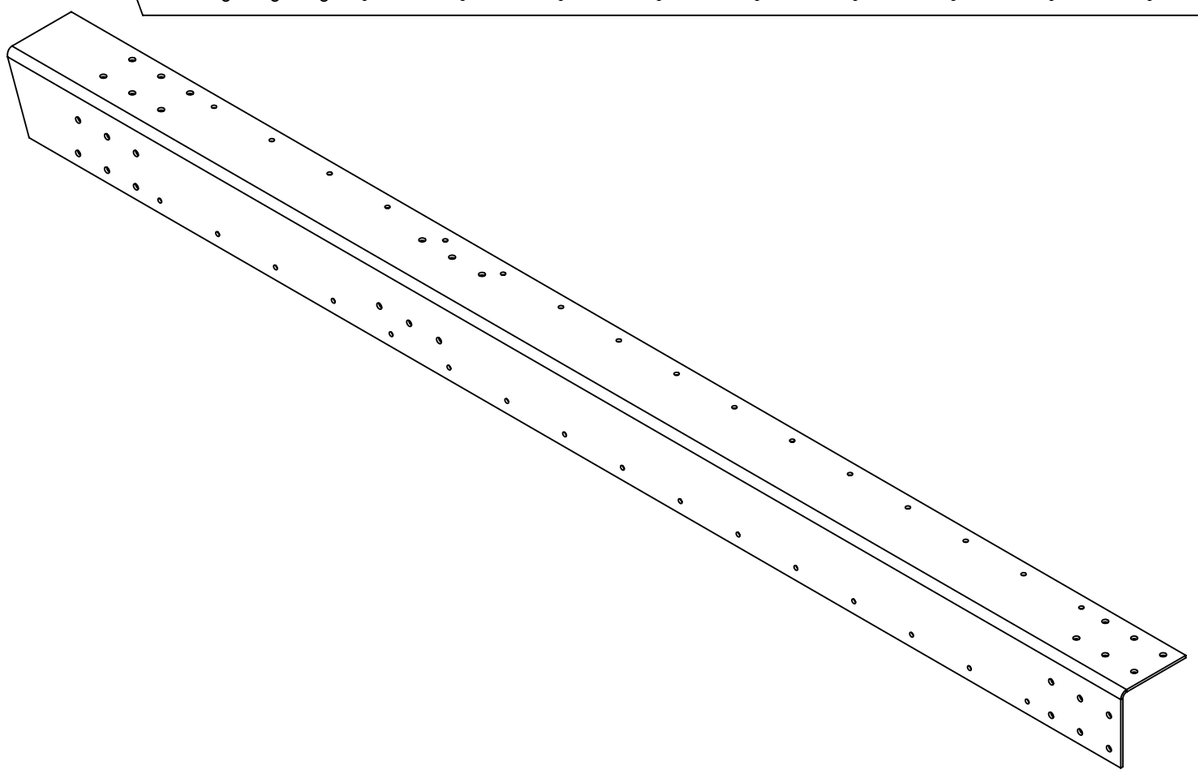












1	1	Outer frame sheet	1541,9	173,8	3	2000-05-0395	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0395 Sheet : 1 of 1	Issue A
Drawn: JWR	28-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.15 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

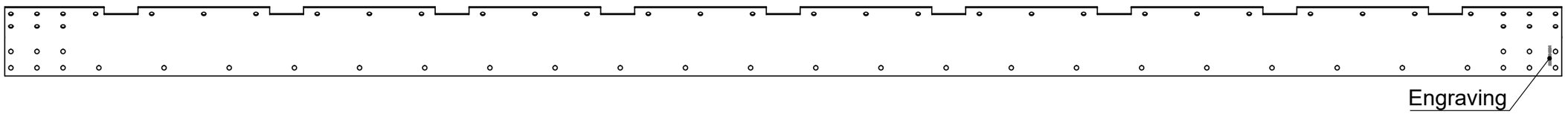
Title: **Outer frame sheet**

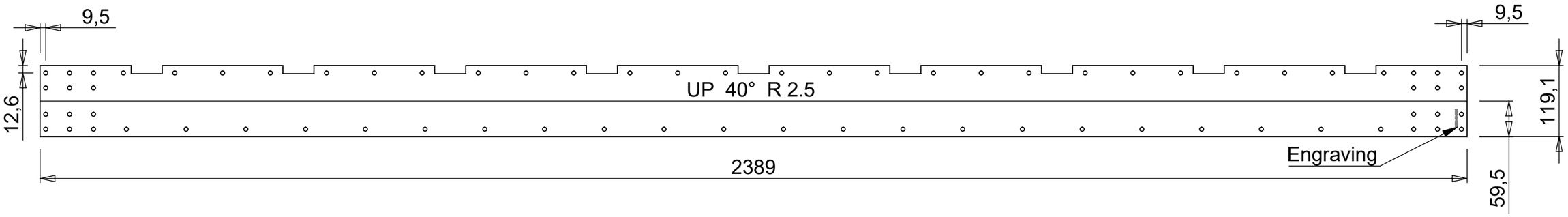
Iss.	Changes	Date	Name

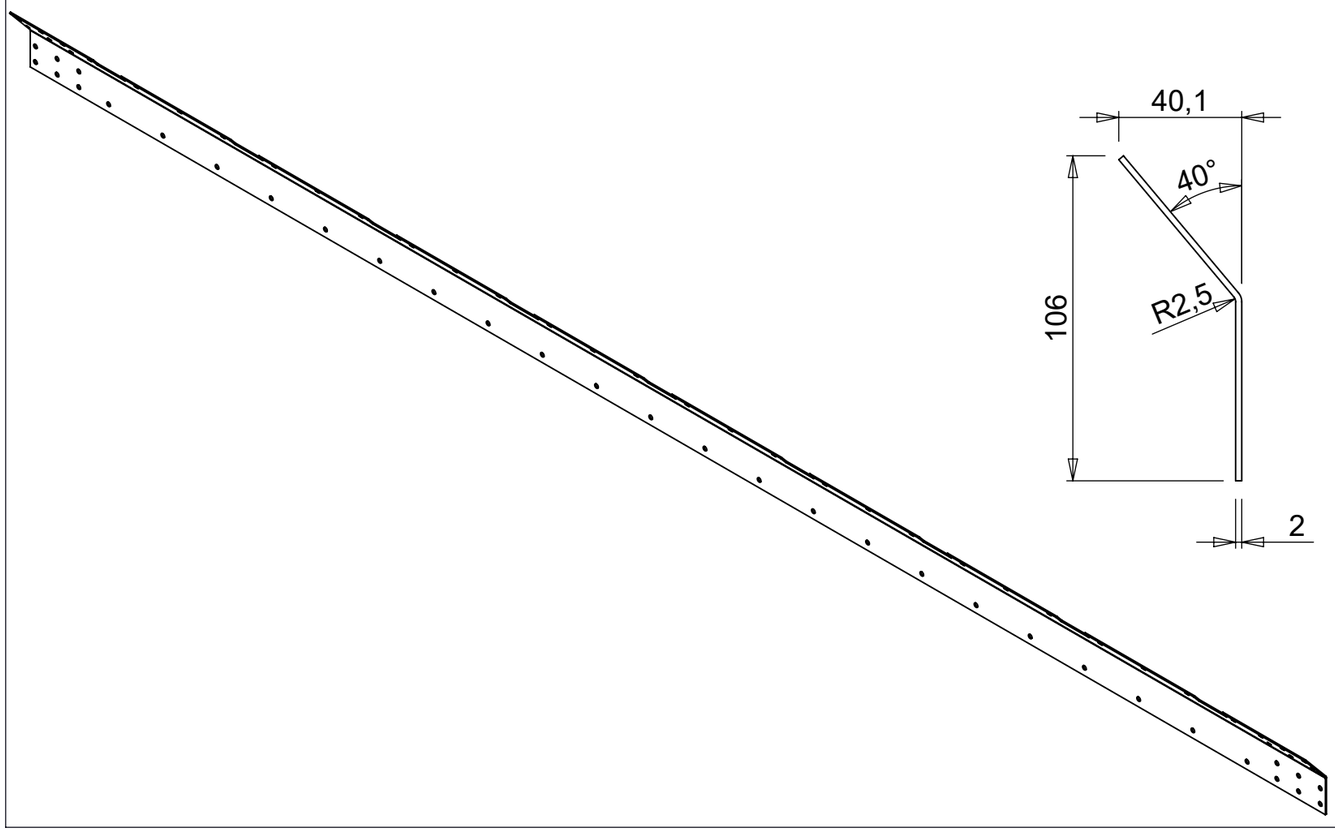
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Internal Frame Sheet	2389	119,1	2	2000-05-0384	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.: 2000-05-0384 Sheet : 1 of 1	Issue A
Drawn: JWR	28-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.49 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

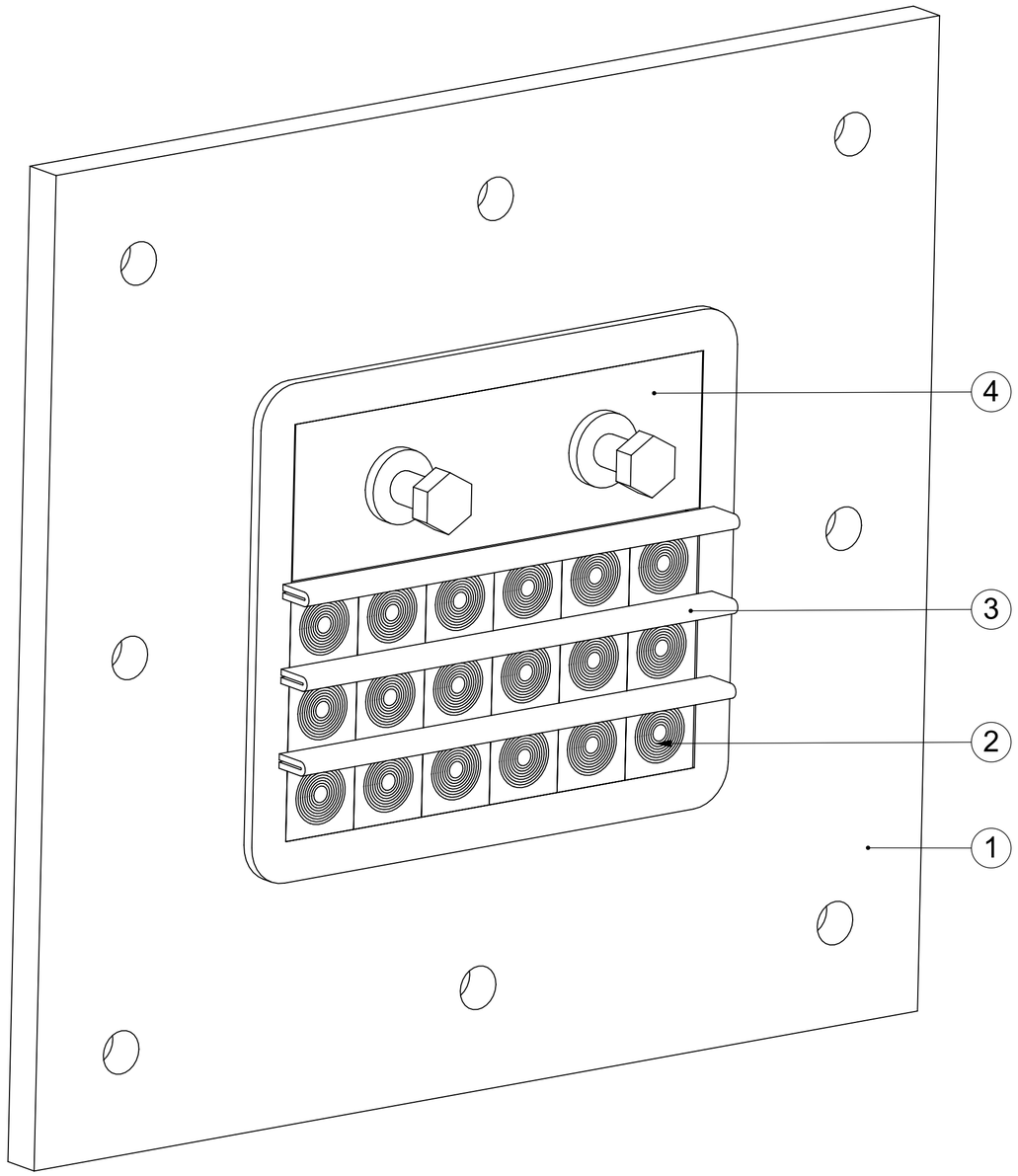
Title: **Internal Frame Sheet**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



See sheet 2 for installation instructions

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
4	1	Wedge 120 AISI316	120	60	29/48	5ARW000001851	AISI 316	Roxtec art. no ARW0001201021
3	3	Stayplate 120 AISI316				ASP0001200018	AISI316	ROXTEC ASP0001200021
2	18	RM 20	60	20	20	RUB-RM00100201000	Rubber	Roxtec RM00100201000
1	1	SFHM 2x1 Alu.				RUB-5SFHM00012248	Alu. 6060-T66	Roxtec 5SFHM00012248

Scale: 1:1	Date:	Drawing no. 2000-05-1205	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019	Sheet : 2 of 2	
Approved: JWR	09-05-2019		
Mass: 3.90 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Title: Roxtec cable seal

Iss.	Changes	Date	Name

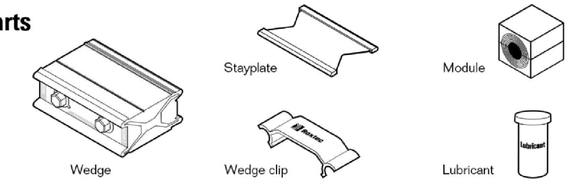
Projection

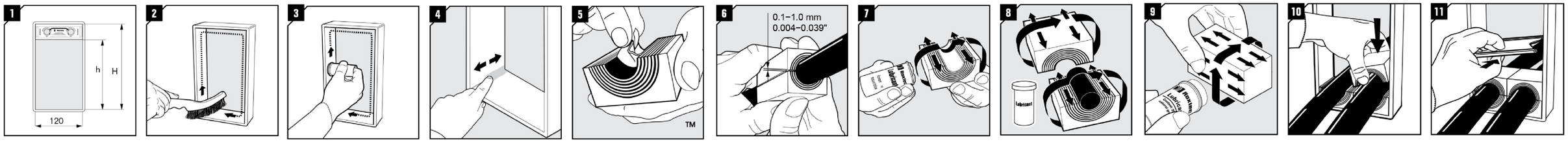
Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

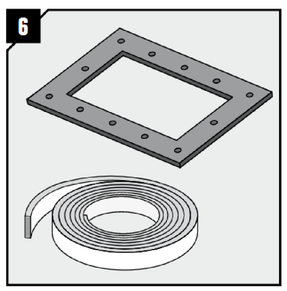
Roxtec installation instructions
Modules

Parts

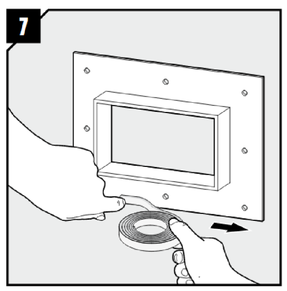




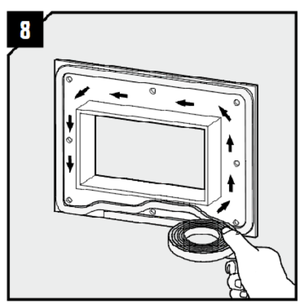
Roxtec installation instructions
Frame



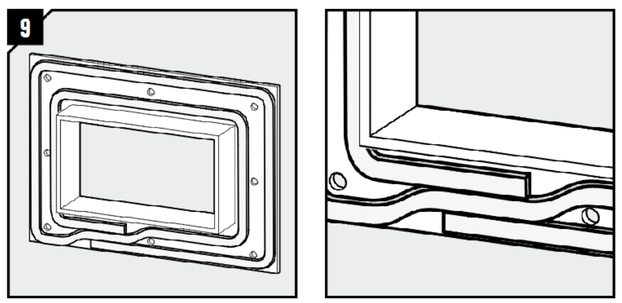
To seal the frame against the structure, apply TSL 15x6 sealing strip or a pre-punched gasket.



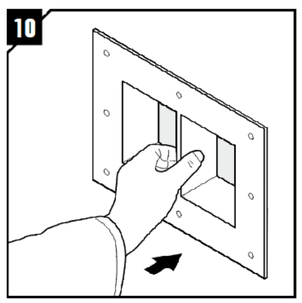
When using TSL 15x6, attach the end of the sealing strip to the frame.



Apply two rounds of sealing strip.



Cut the sealing strip so that it overlaps as shown in the picture. Make sure that the sealing strip parts are mounted tightly against each other in the overlap section.



Attach the frame to the structure.

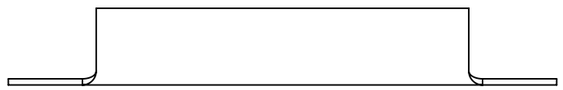
Scale: 1:1	Date:	Drawing no.		Issue	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019	2000-05-1205		A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: HS	12-04-2019		Sheet : 2 of 2		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-05-2019				
Mass: kg		Finish:			Dimensions in mm (u.n.o.)
Title:					

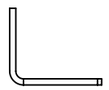
Iss.	Changes	Date	Name

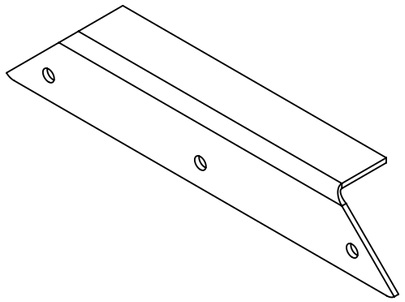
Projection

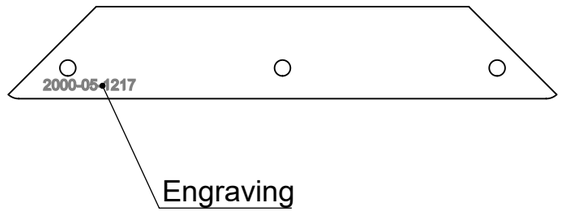
Size A2

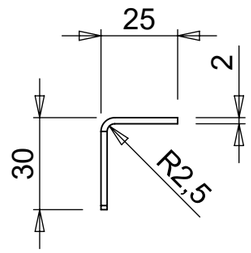
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

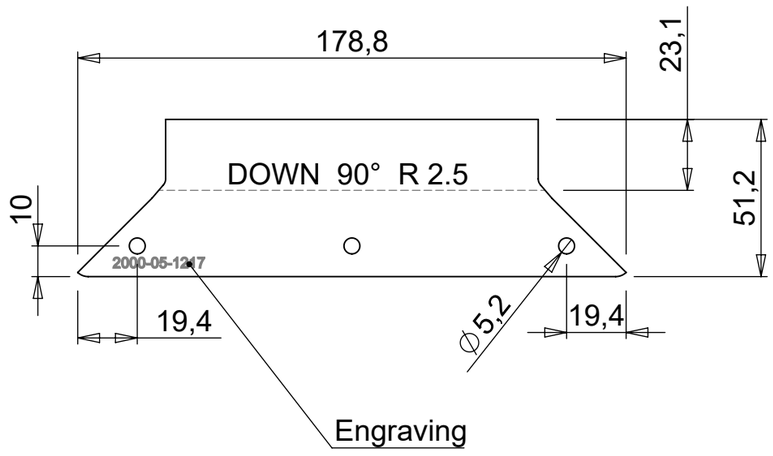












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Flange roxtec	178,8	51,2	2	2000-05-1217	Alu. 5754-H22	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-1217	Issue: A
Drawn: JWR	29-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.04 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

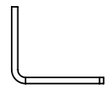
Title: **Flange roxtec**

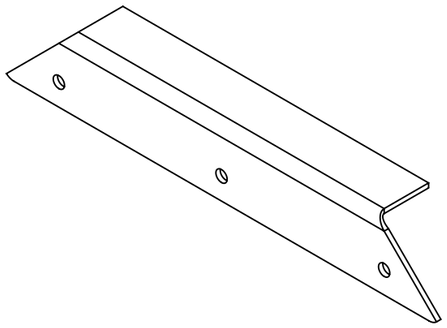
Iss.	Changes	Date	Name

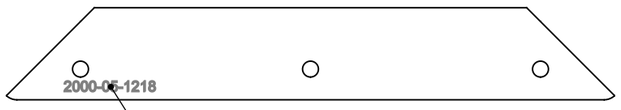
Projection

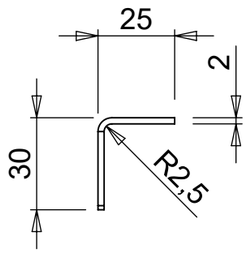
Size A3

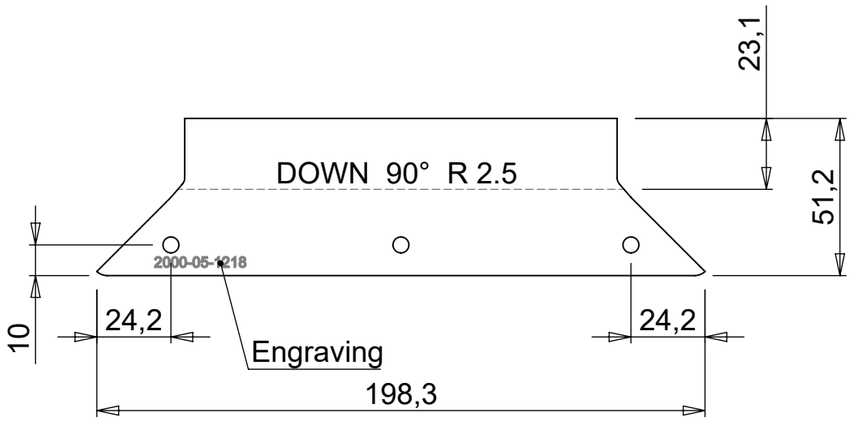
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Flange roxtec	198,3	51,2	2	2000-05-1218	Alu. 5754-H22	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-1218	Issue: A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.04 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

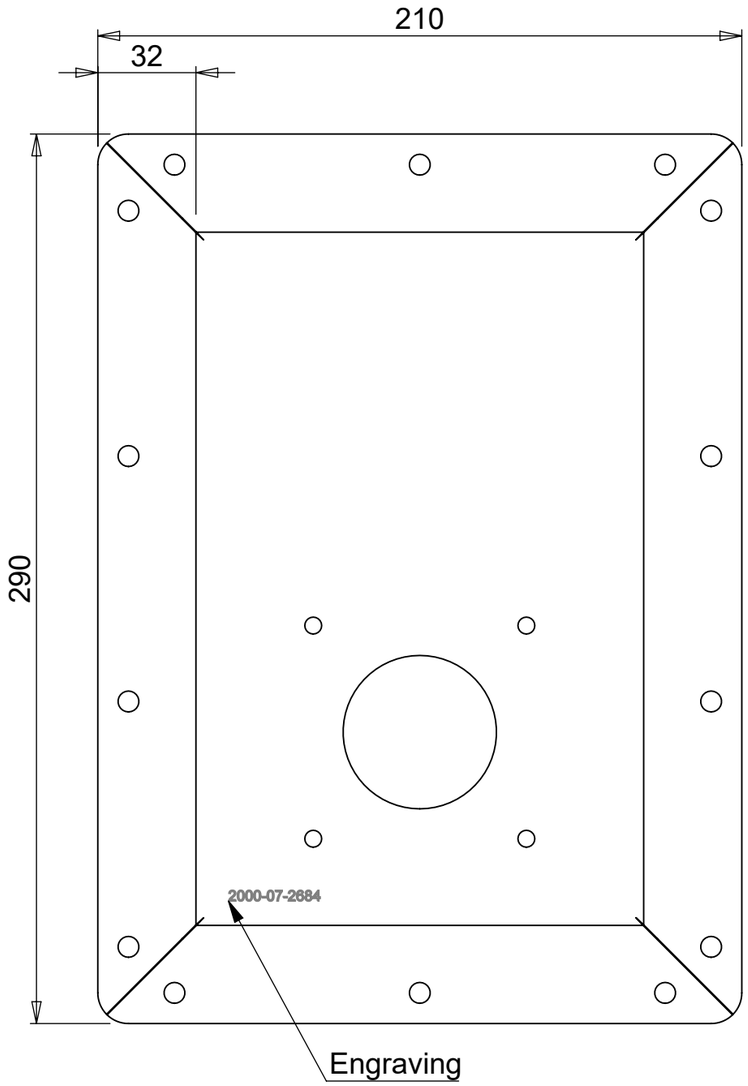
Title: **Flange roxtec**

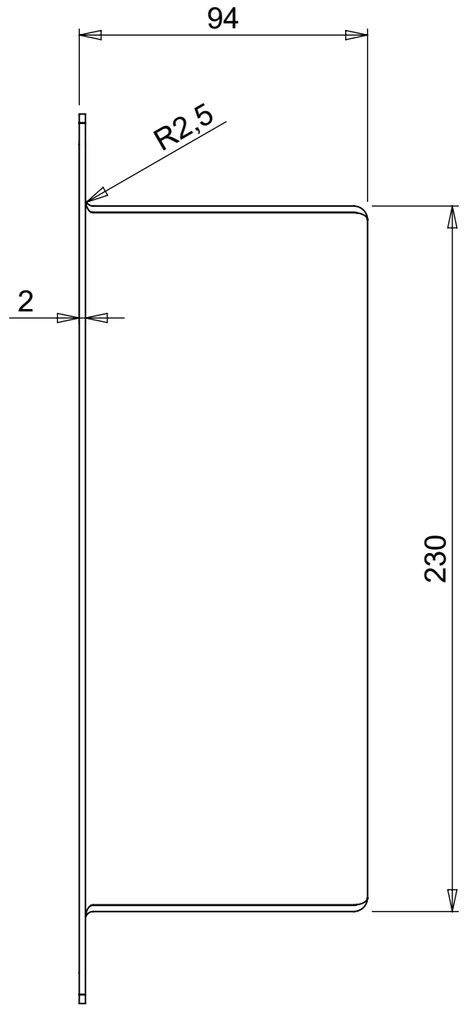
Iss.	Changes	Date	Name

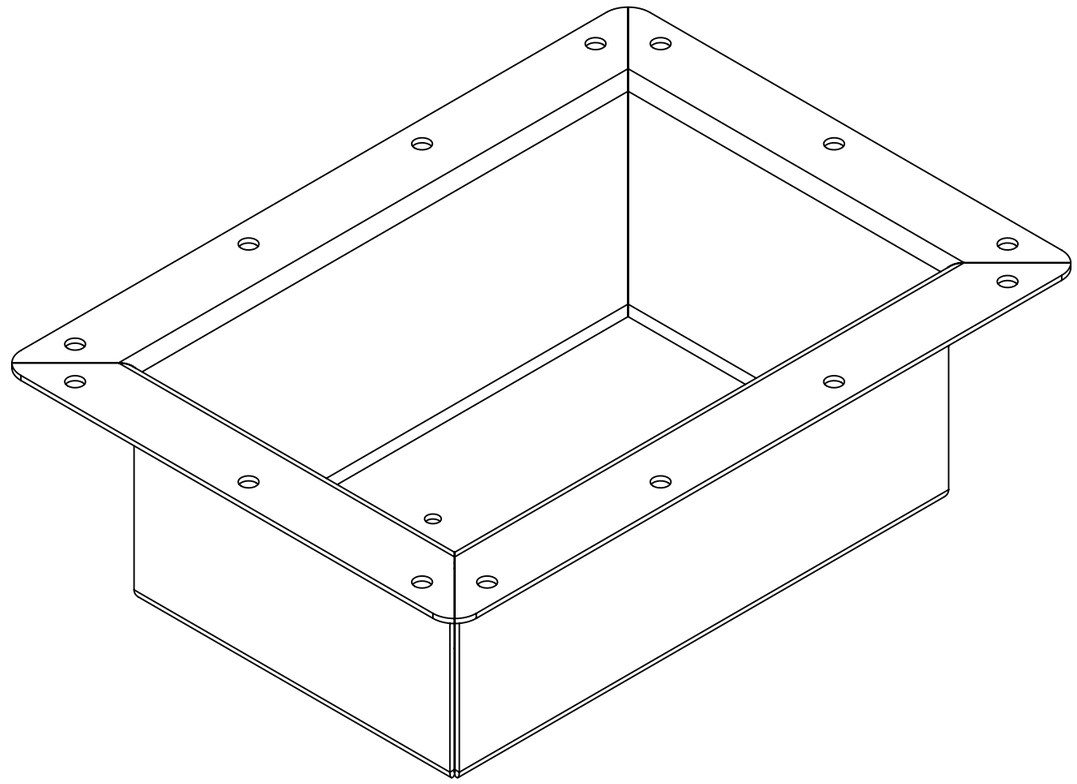
Projection

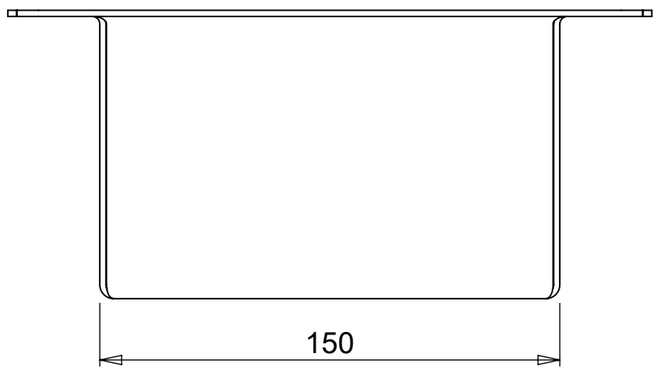
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Connector plate	468	388	2	2000-07-2684	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-07-2684 Sheet : 1 of 2	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 1.99 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

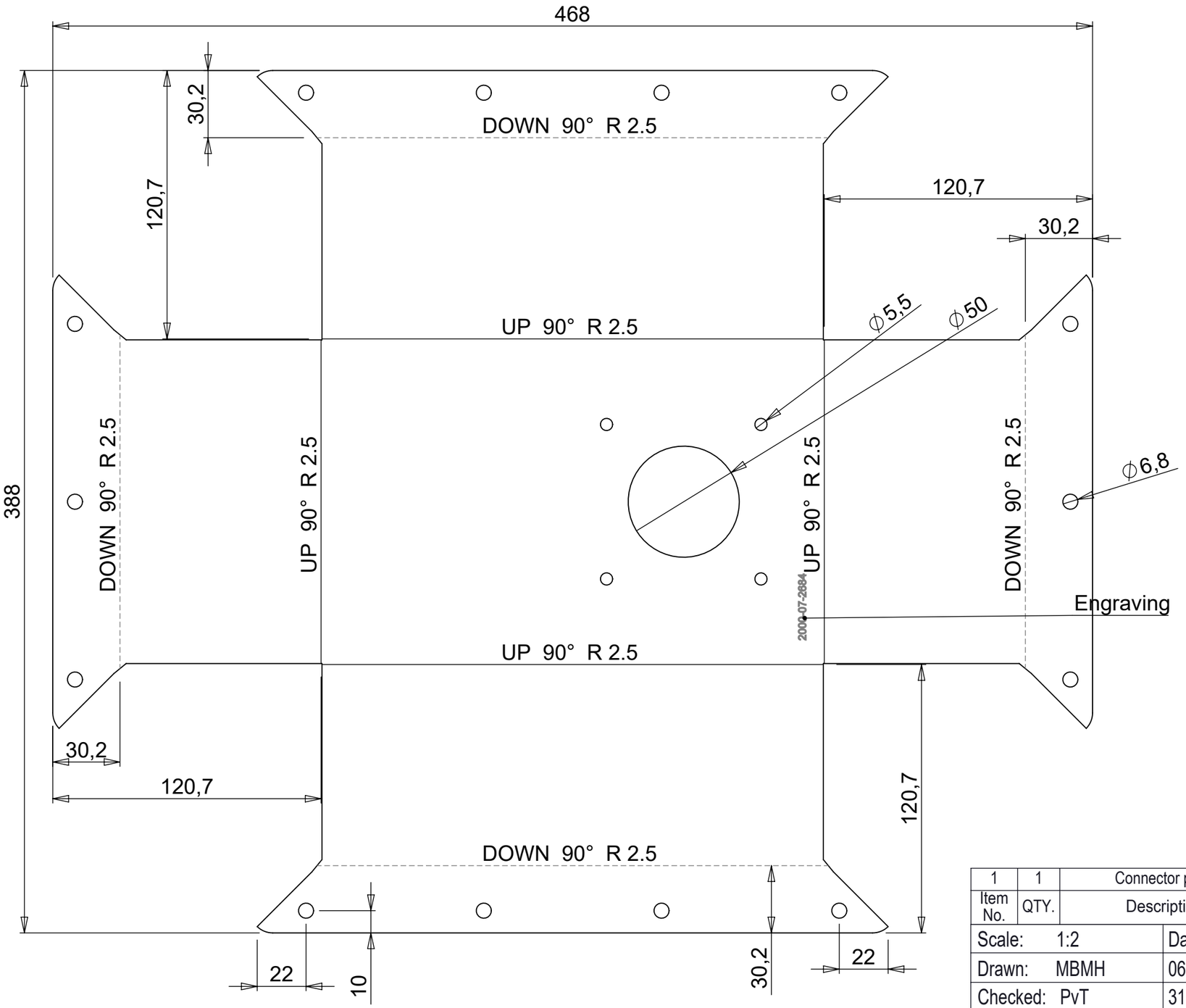
Title: **Connector plate**

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Connector plate	468	388	2	2000-07-2684	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-07-2684	Issue A
Drawn: MBMH	06-06-2023		
Checked: PvT	31-07-2023	Sheet : 2 of 2	
Approved: HS	08-08-2023		
Mass: 1.99 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

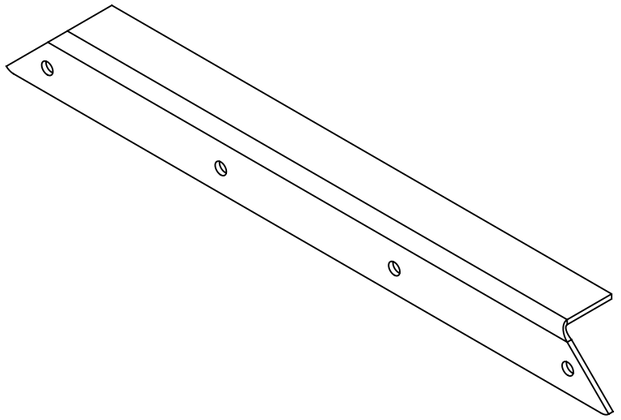
Title: **Connector plate**

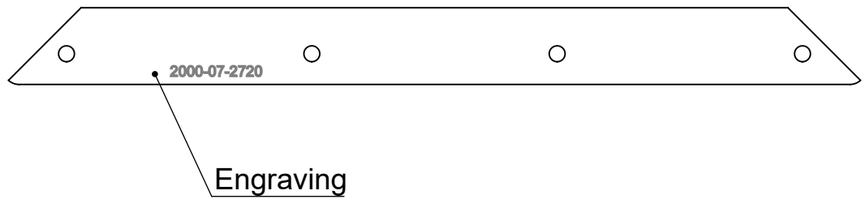
Iss.	Changes	Date	Name

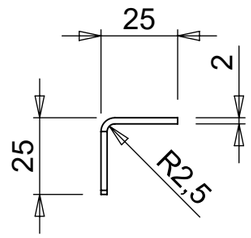
Projection

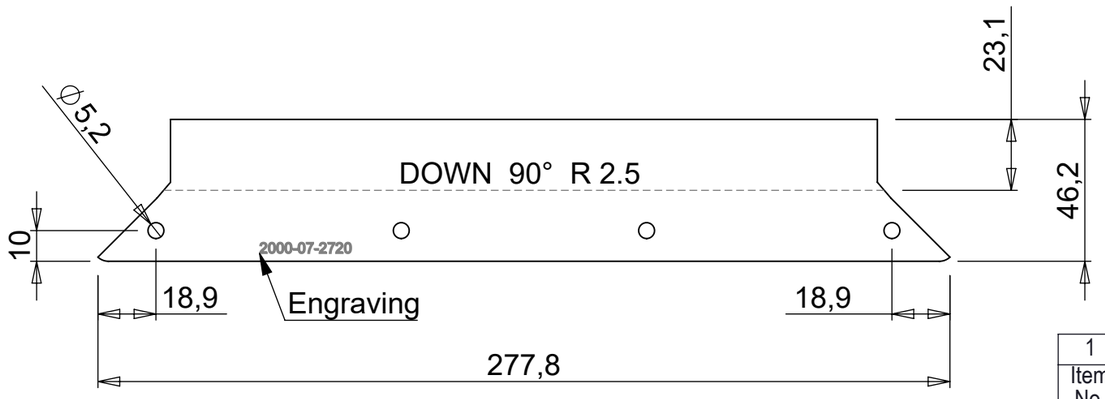
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Flange connector	277,8	46,2	2	2000-07-2720	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-07-2720	Issue: A
Drawn: MBMH	08-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 1 of 1	
Mass: 0.06 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

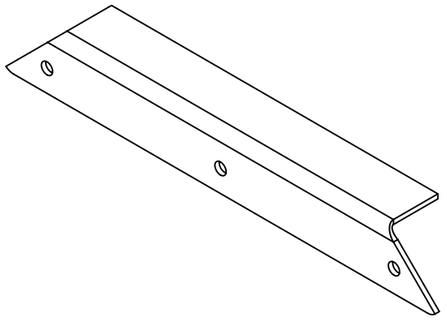
Title: **Flange connector**

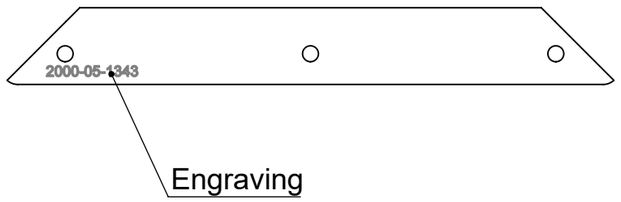
Iss.	Changes	Date	Name

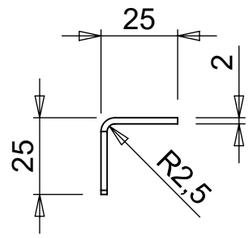
Projection

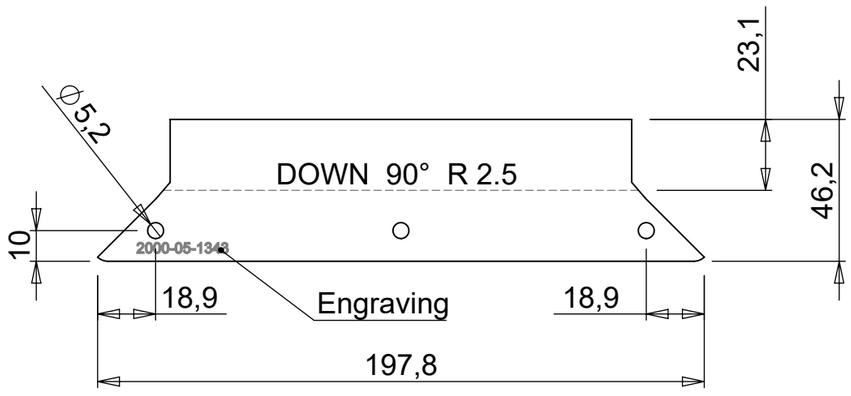
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Flange connector	197,8	46,2	2	2000-05-1343	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1343 Sheet : 1 of 1	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.04 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

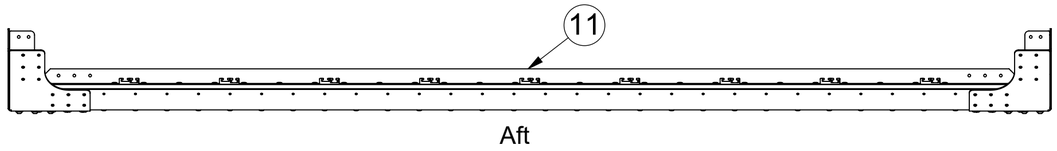
Title: **Flange connector**

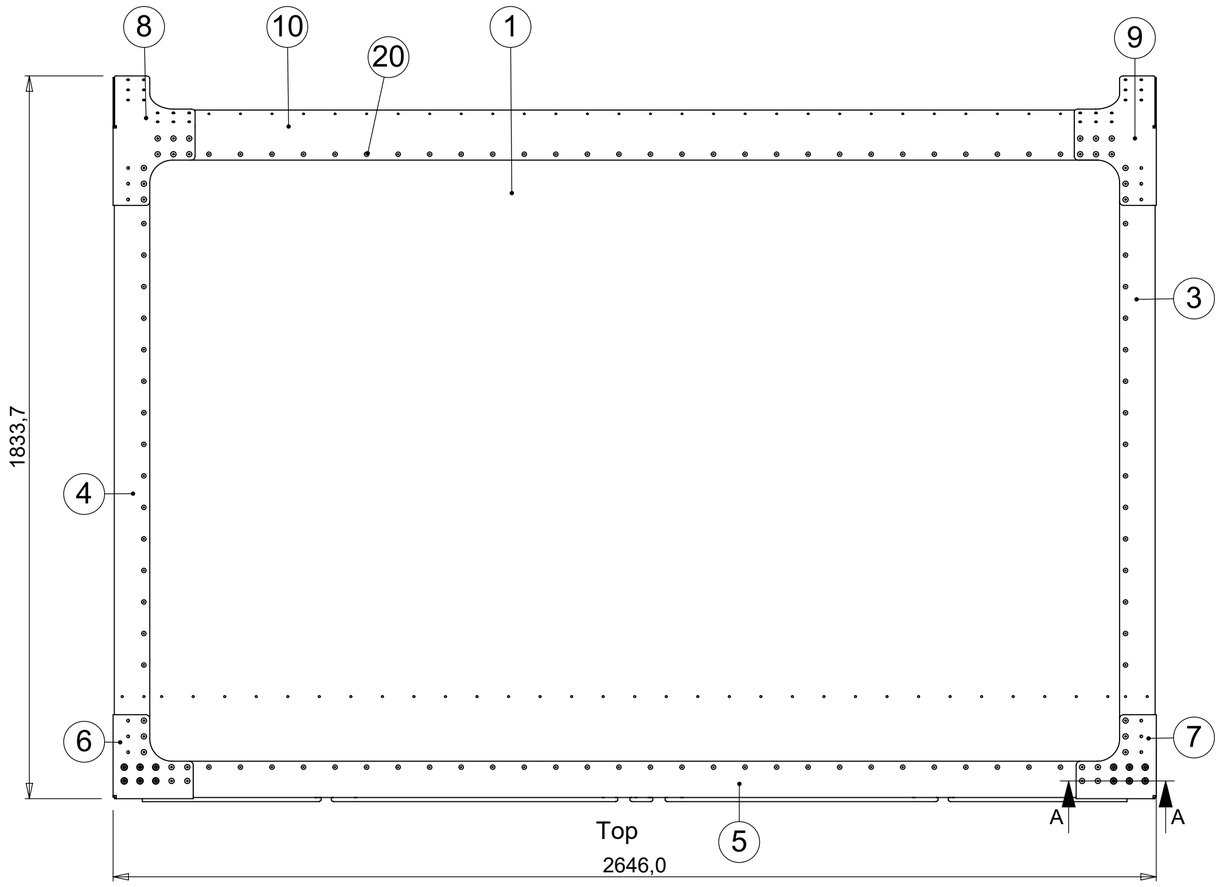
Iss.	Changes	Date	Name

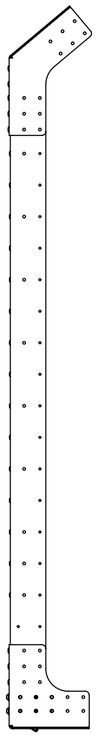
Projection

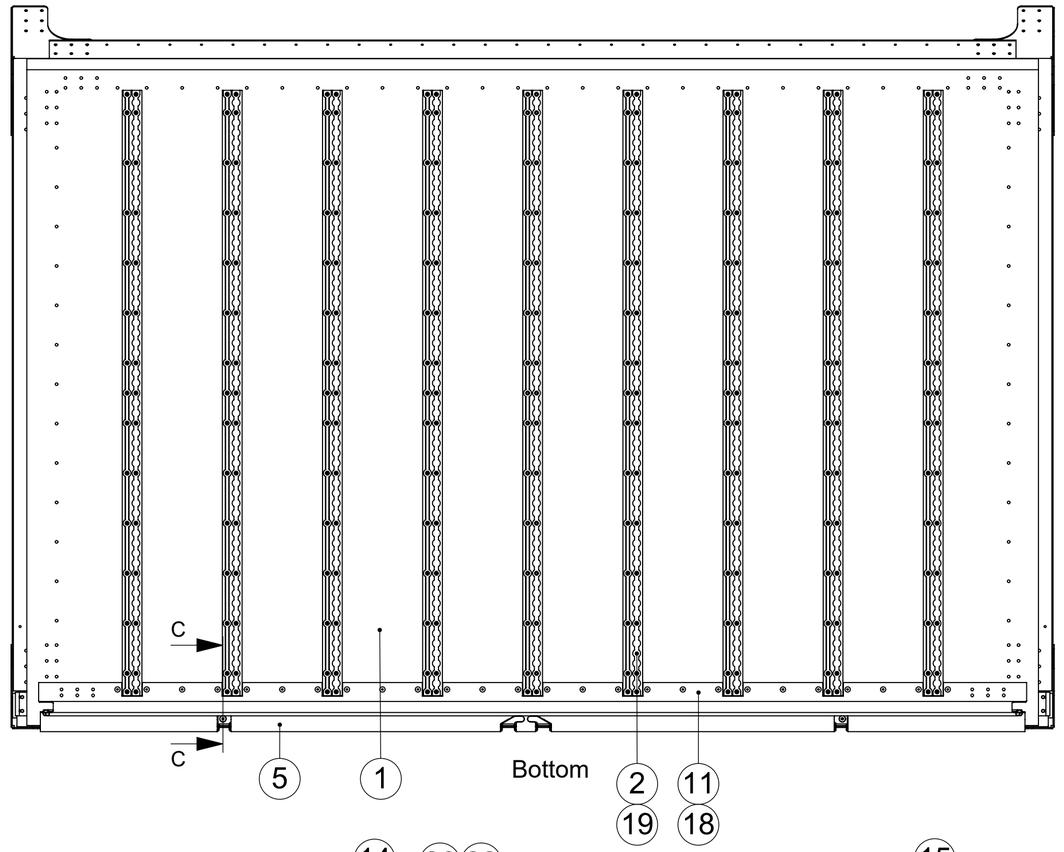
Size A3

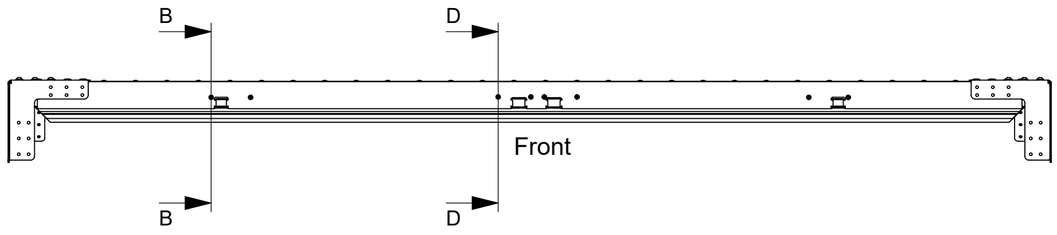
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

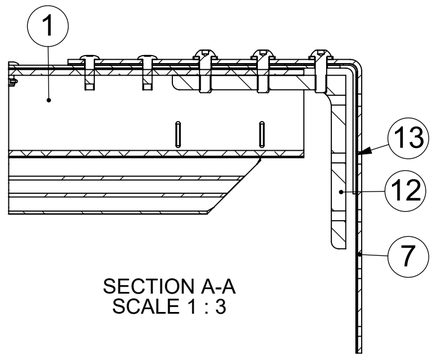


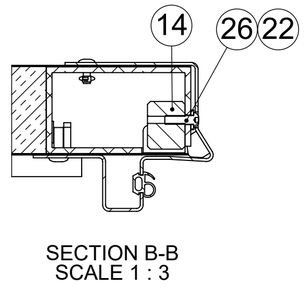


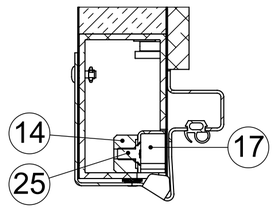


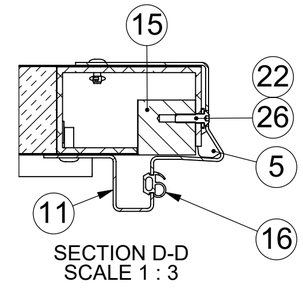












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
25	4	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
24	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
23	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
22	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
21	28	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
20	58	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
19	270	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
18	58	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
16	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
15	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	
14	2	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
13	2	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16
12	2	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	
11	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16
10	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30
9	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
8	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30
7	1	Gusset	390,2	347,4	3	2000-05-0479	Alu. 5754-H22	Bend with V30
6	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
5	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
4	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	
1	1	DBJ panel top				2000-05-0336	Assembly	

Scale:	1:11	Date:	
Drawn:	MBMH		21-07-2023
Checked:	PvT		31-07-2023
Approved:	HS		08-08-2023
Mass:	90.22 kg		

Drawing no. 2000-07-3665 Sheet : 1 of 5

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Finish:

Title: DBJ panel top

Rivets according to VRR-SP2201

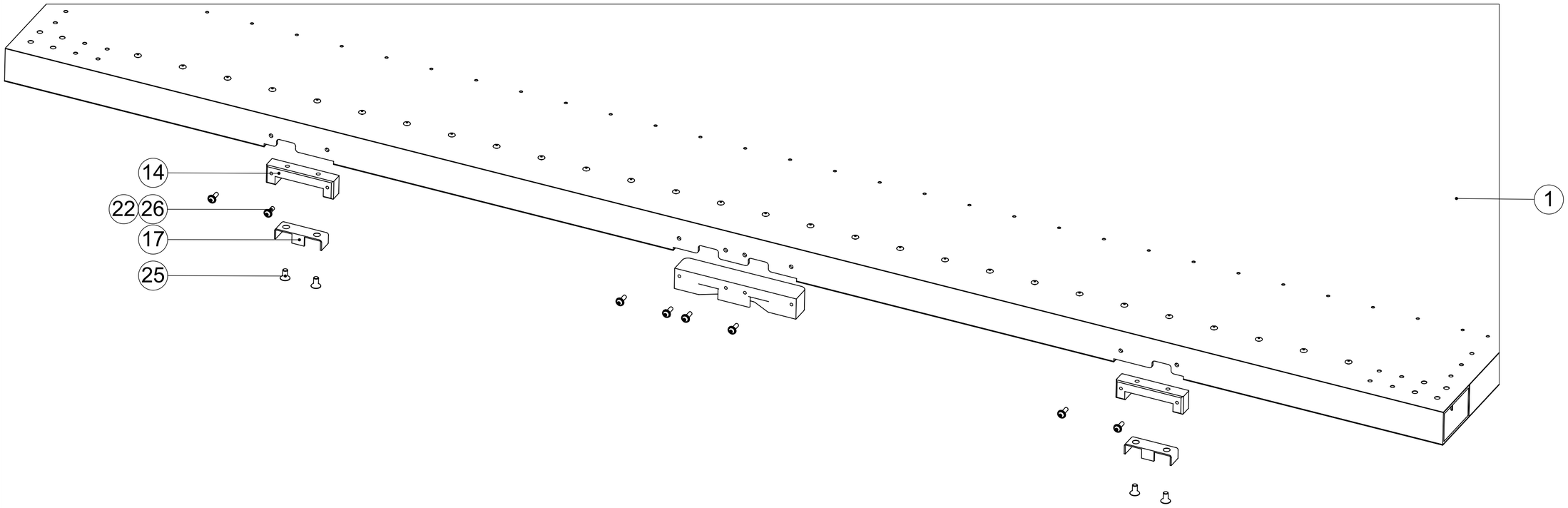
Iss.	Changes	Date	Name

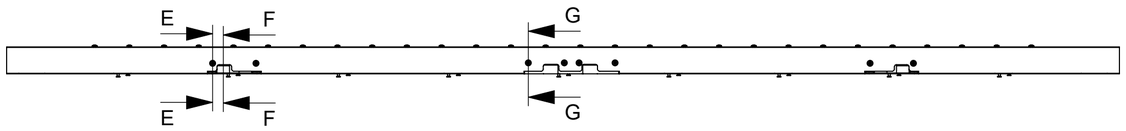
Projection

Size A2

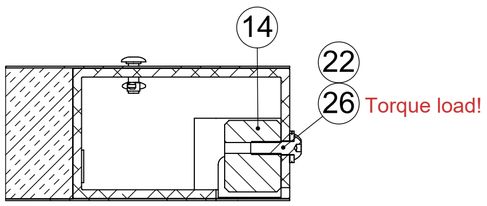
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

STEP 1

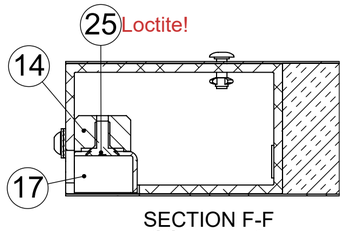




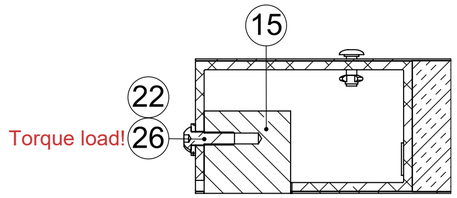
Front



SECTION E-E
SCALE 1 : 2



SECTION F-F
SCALE 1 : 2



SECTION G-G
SCALE 1 : 2

Torque load M6: 8,1 Nm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
25	4	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
24	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
23	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
22	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
21	28	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
20	58	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
19	270	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
18	58	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
16	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
15	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	
14	2	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
13	2	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16
12	2	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	
11	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16
10	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30
9	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
8	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30
7	1	Gusset	390,2	347,4	3	2000-05-0479	Alu. 5754-H22	Bend with V30
6	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
5	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
4	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	
1	1	DBJ panel top				2000-05-0336	Assembly	

Scale:	1:10	Date:	Drawing no.	Issue	Tolerances (u.n.o.)
Drawn:	MBMH	21-07-2023	2000-07-3665	A	< 7 ±0.2; 7 30 ±0.3; 30 120 ±0.5; 120 400 ±0.8; 400 1000 ±1.0; 1000 2000 ±1.4; 2000 > ±2
Checked:	PvT	31-07-2023	Sheet : 2 of 5		Raw extrusion in accordance with OEM drawing and EN755-9
Approved:	HS	08-08-2023			
Mass:	90.22 kg		Finish:		Dimensions in mm (u.n.o.)
Title:	DBJ panel top				Rivets according to VRR-SP2201

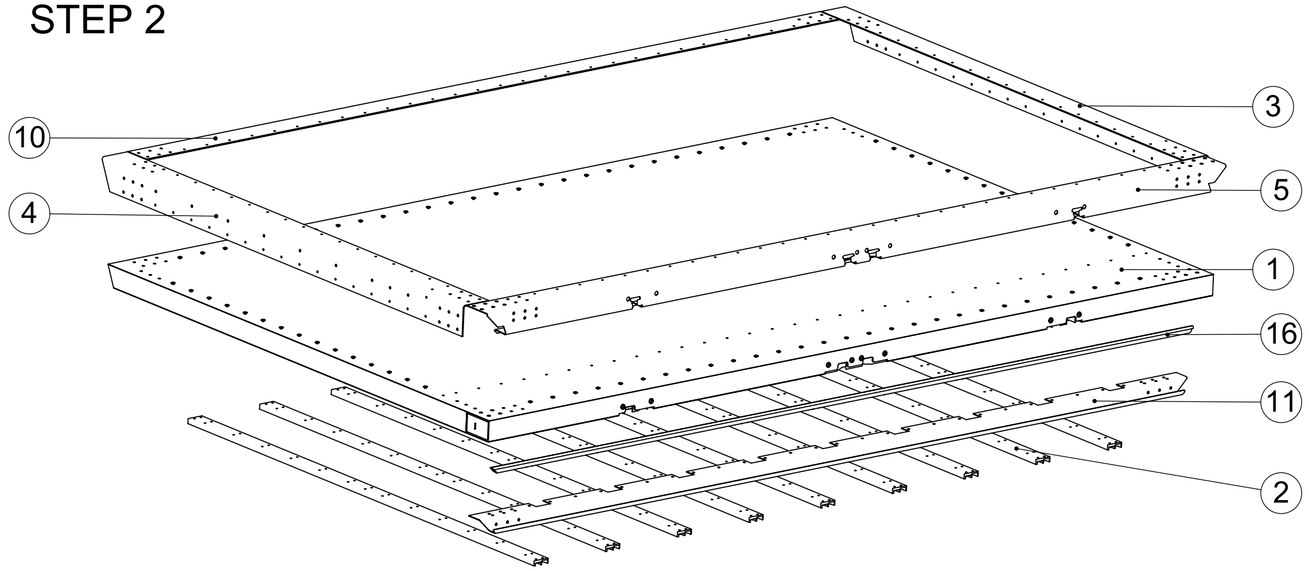
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

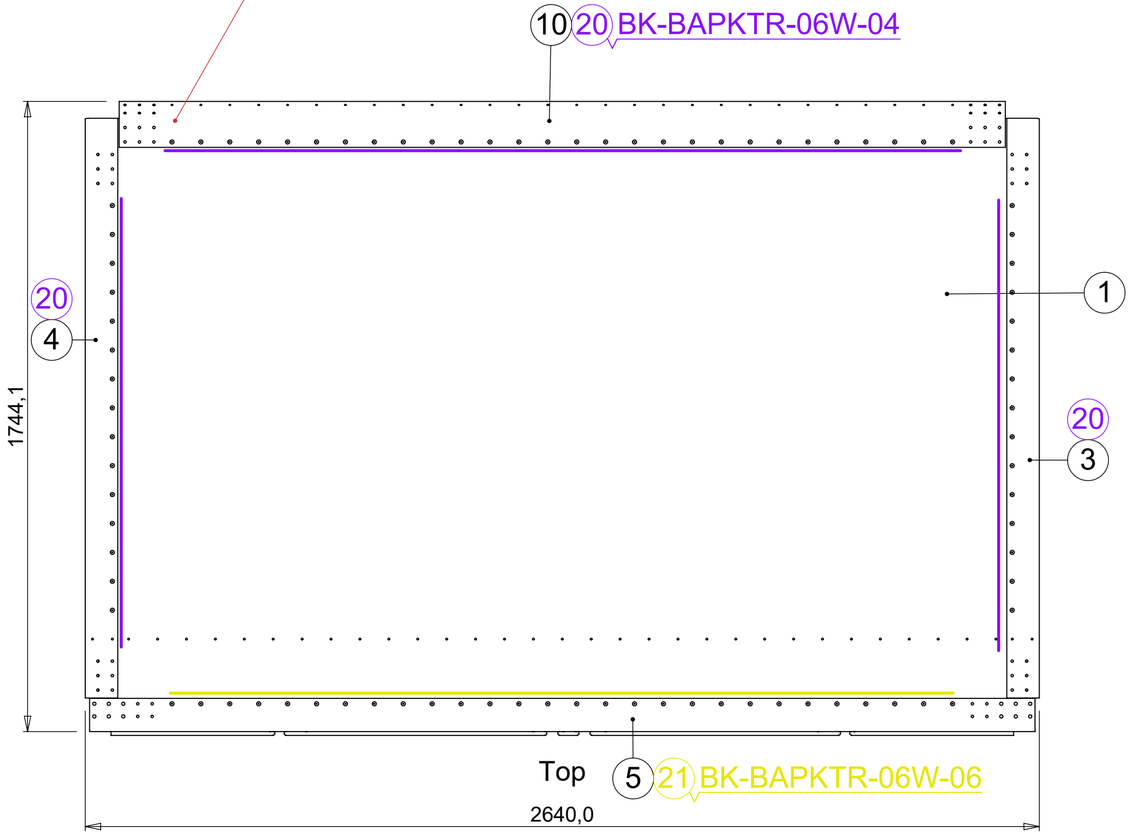
STEP 2

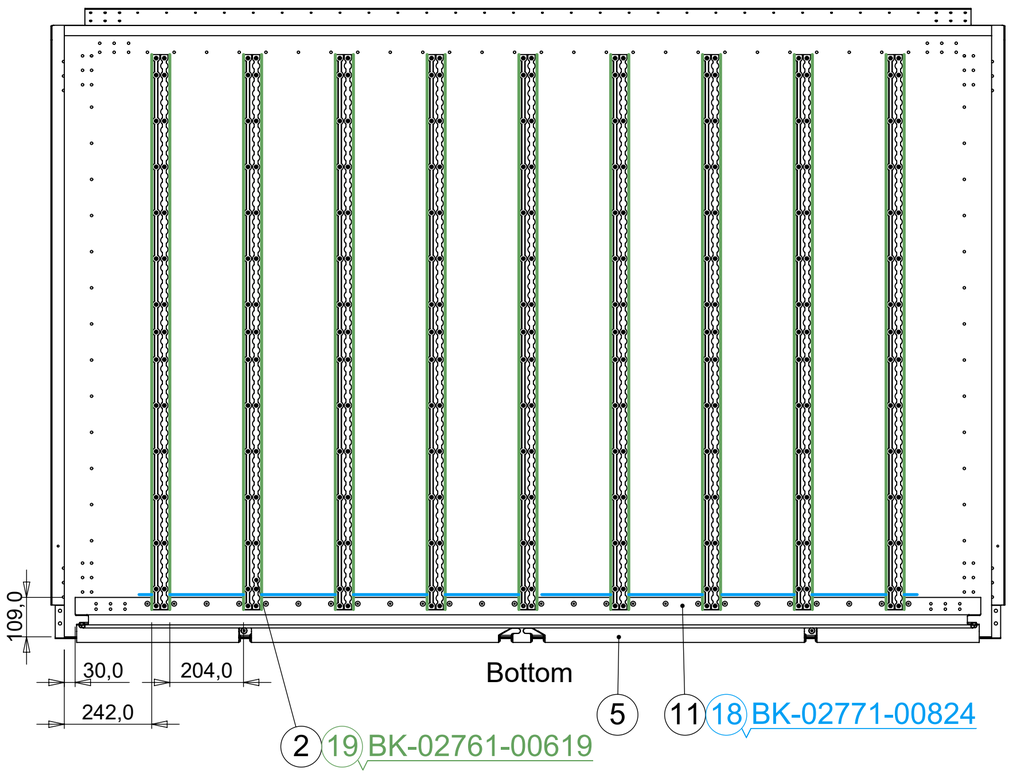


Place INNO SEAL on (3)/(5)/(4)/(10)/(11) before placing on (1)

Remove excess sealant

Not that the sealant has a dry time of 2 hours.





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
25	4	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
24	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
23	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
22	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
21	28	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
20	58	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
19	270	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
18	58	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
16	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
15	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	
14	2	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
13	2	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16
12	2	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	
11	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16
10	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30
9	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
8	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30
7	1	Gusset	390,2	347,4	3	2000-05-0479	Alu. 5754-H22	Bend with V30
6	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
5	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
4	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	
1	1	DBJ panel top				2000-05-0336	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-07-3665	Issue A
Drawn: MBMH	21-07-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 3 of 5	
Mass: 90.22 kg		Finish:	
Title: DBJ panel top			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

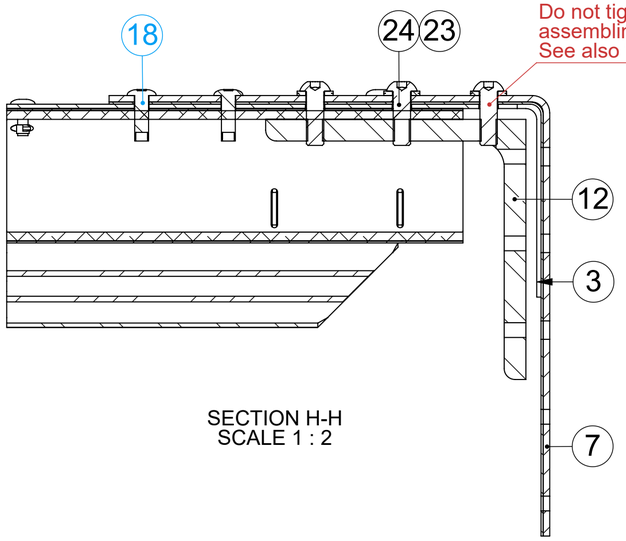
Iss.	Changes	Date	Name

Projection

Size A2

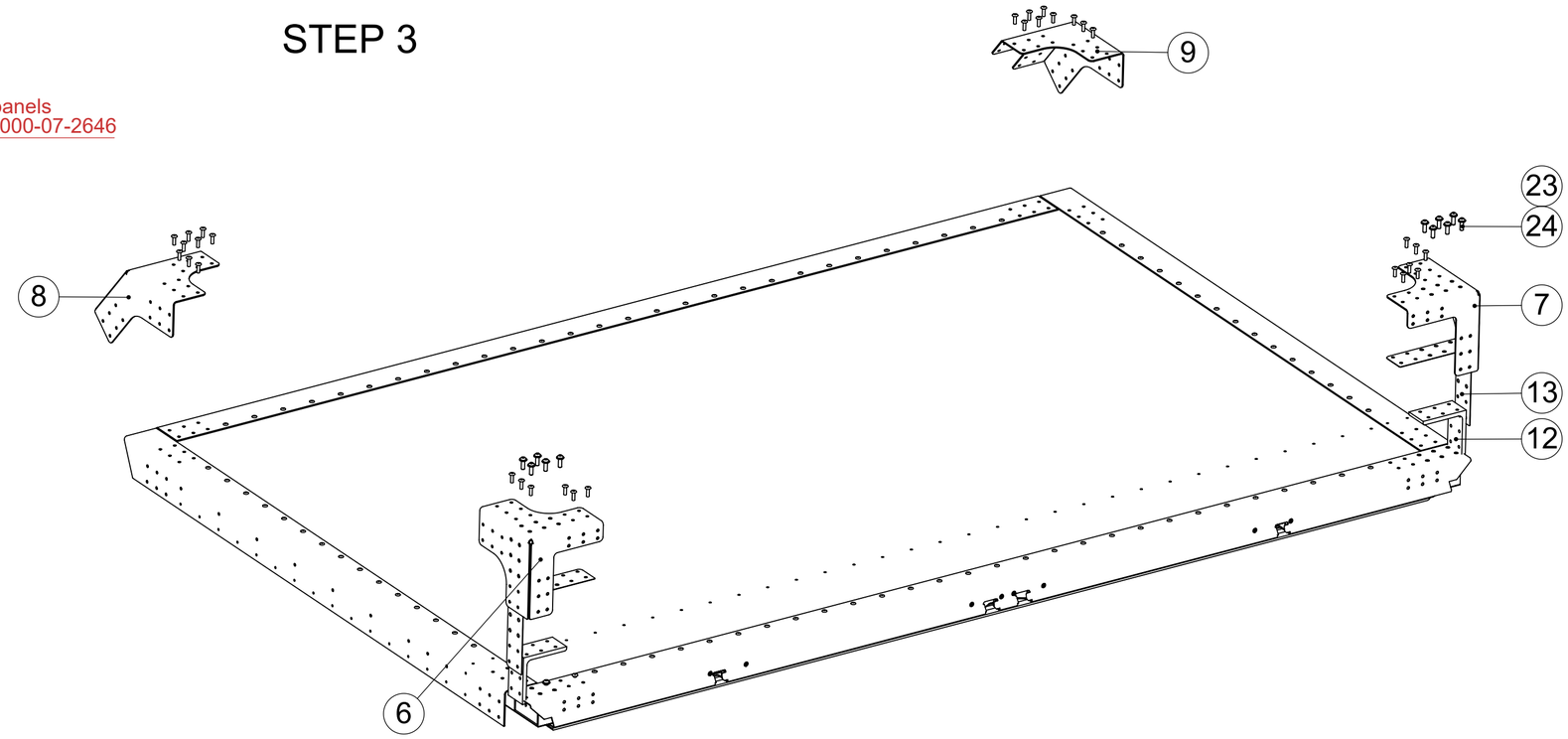
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

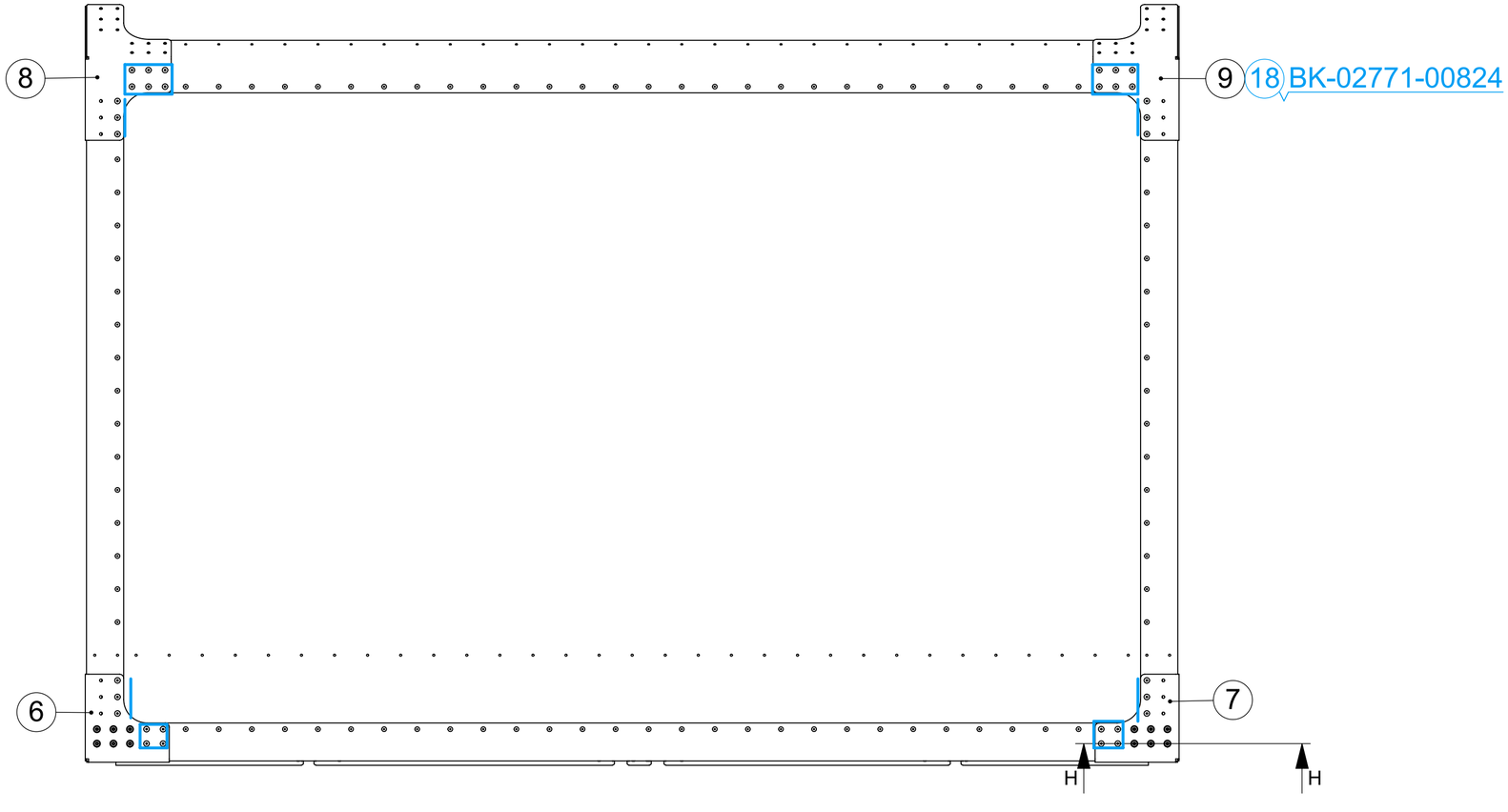
STEP 3



SECTION H-H
SCALE 1 : 2

Do not tighten bolts before
assembling top panel on side panels
See also "Hull DBJ" drawing: 2000-07-2646





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
25	4	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
24	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
23	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
22	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
21	28	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
20	58	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
19	270	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
18	58	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
16	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
15	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	
14	2	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	
13	2	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16
12	2	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	
11	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16
10	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30
9	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
8	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30
7	1	Gusset	390,2	347,4	3	2000-05-0479	Alu. 5754-H22	Bend with V30
6	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
5	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
4	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	
1	1	DBJ panel top				2000-05-0336	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3665	Issue A
Drawn: MBMH	21-07-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 4 of 5	
Mass: 90.22 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Rivets according to VRR-SP2201

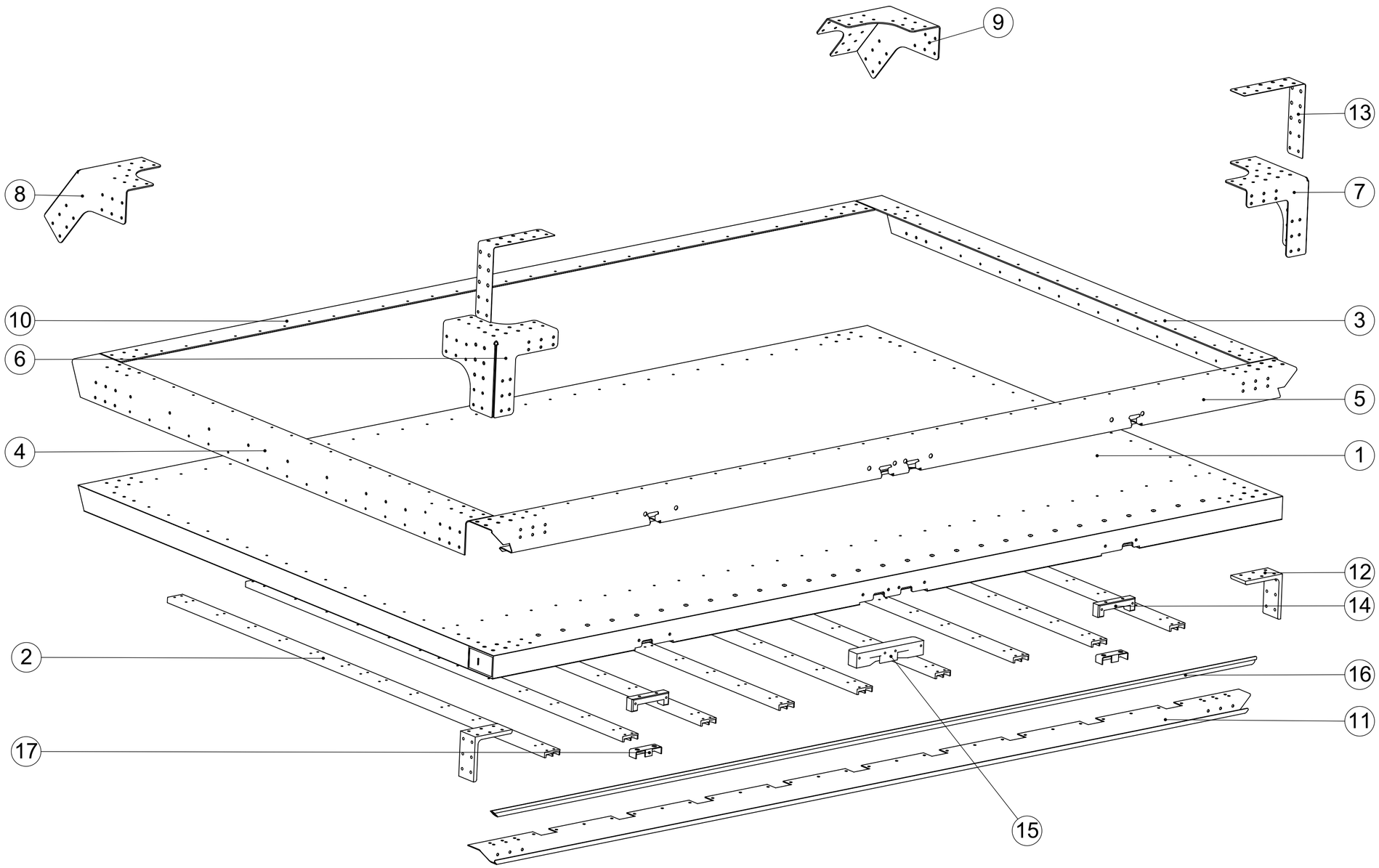
Title: DBJ panel top

Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
26	8	Torx Socket Button Screw	20	M6		BO-7380T-06020-A2	AISI 304	ISO7380 torx
25	4	Torx Socket Csk. Screw	16	M8		BO-14581T-08016-A2	AISI 304	ISO 14581 torx
24	12	Torx Socket Button Screw	25	M8		BO-7380T-08025-A2	AISI 304	ISO7380 torx
23	12	Nord-Lock Large Washer M8	ø16,6	M8	2,0	BO-NORDLCK-08SP-SMO	245 SMO	SMO
22	8	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
21	28	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
20	58	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
19	270	Csk.St. Monobolt 4,8	3,2-12,2	Ø4,8		BK-02761-00619	Steel	(MGL100-R6-9)
18	58	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
17	2	Keeper	84	19	29	SL-1201436		Rhiwa 1201436
16	1	Door rubber Extrusion	2486			2000-04-8336	Rubber	Almet (AN625)
15	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	
14	2	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	
13	2	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16
12	2	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	
11	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16
10	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30
9	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
8	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30
7	1	Gusset	390,2	347,4	3	2000-05-0479	Alu. 5754-H22	Bend with V30
6	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
5	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
4	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
3	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
2	9	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	
1	1	DBJ panel top				2000-05-0336	Assembly	

Scale: 1:8 | Date:
Drawn: MBMH | 21-07-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023
Mass: 90.22 kg
Finish:

Drawing no. 2000-07-3665
Sheet : 5 of 5

Issue A

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ panel top

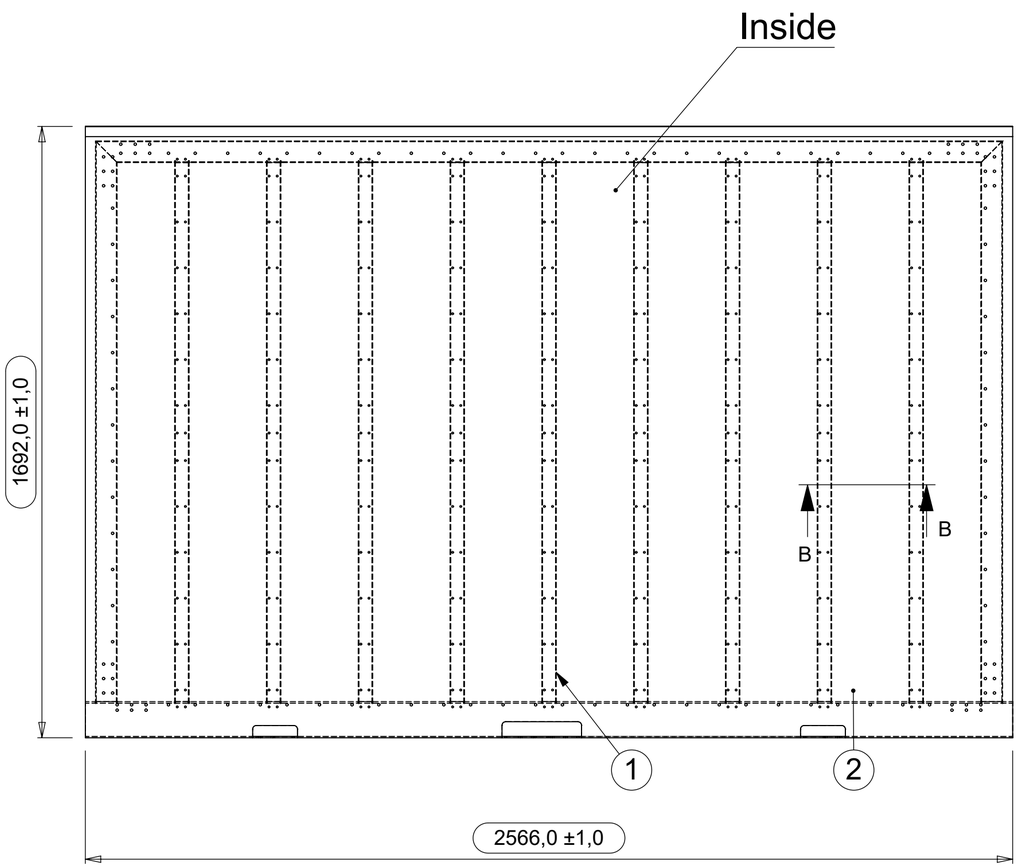
Rivets according to VRR-SP2201

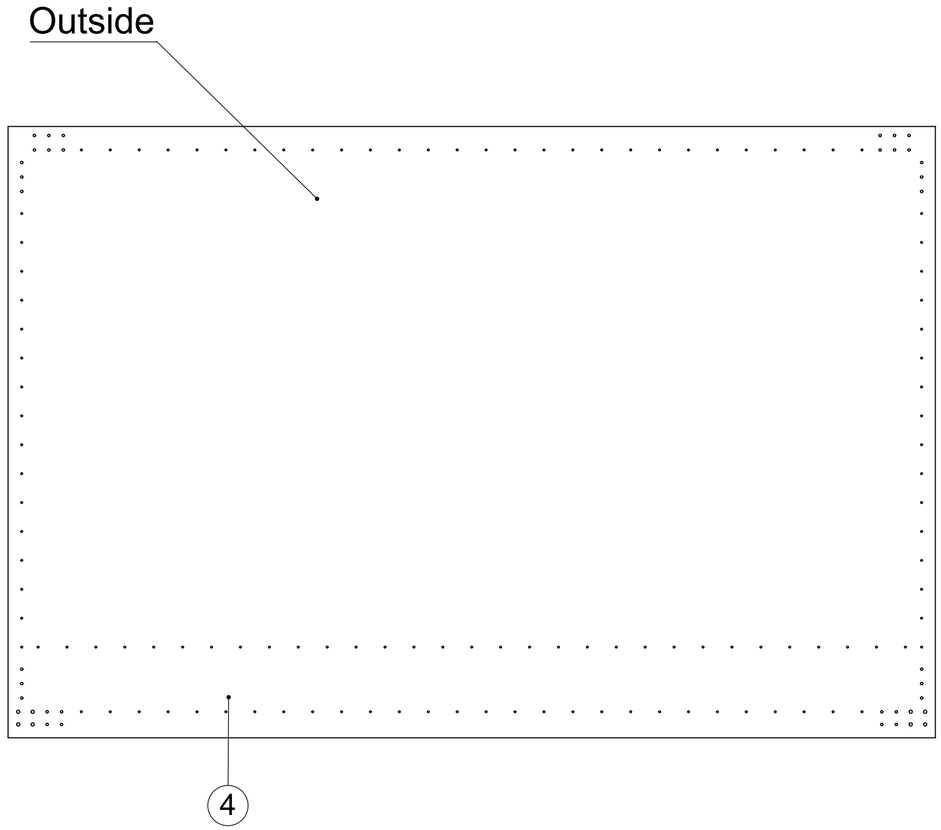
Iss.	Changes	Date	Name

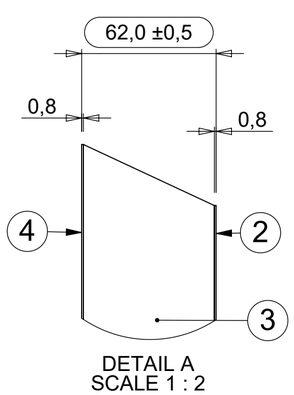
Projection

Size A2

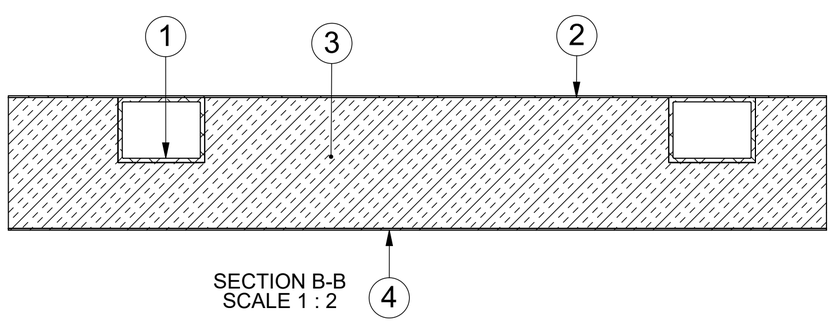
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







DETAIL A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
4	1	Outer sheet	2566	1692	0,8	2000-05-0339	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	1592	60,4	2000-05-0340	RTM-Plus	
2	1	Inner sheet	2566	1663,9	0,8	2000-05-0341	PE-GEGW 0,8 NF	
1	1	Internal panel frame Top				2000-05-1982	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-05-0336 Sheet : 1 of 2	Issue B
Drawn: JWR	29-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 44.13 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

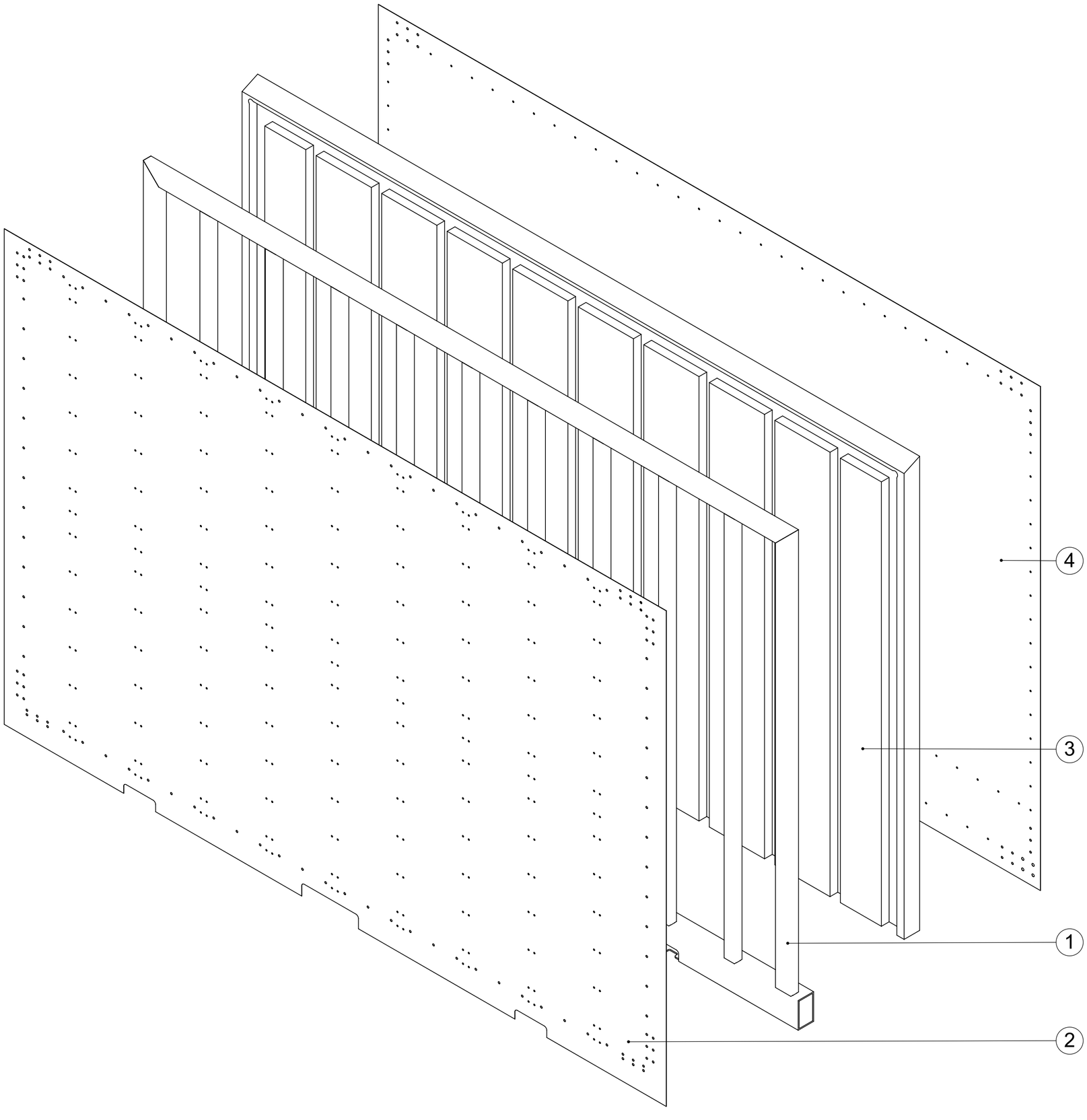
Title: DBJ panel top

Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
4	1	Outer sheet	2566	1692	0,8	2000-05-0339	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	1592	60,4	2000-05-0340	RTM-Plus	
2	1	Inner sheet	2566	1663,9	0,8	2000-05-0341	PE-GEGW 0,8 NF	
1	1	Internal panel frame Top				2000-05-1982	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-0336 Sheet : 2 of 2	Issue B
Drawn: JWR	29-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 44.13 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

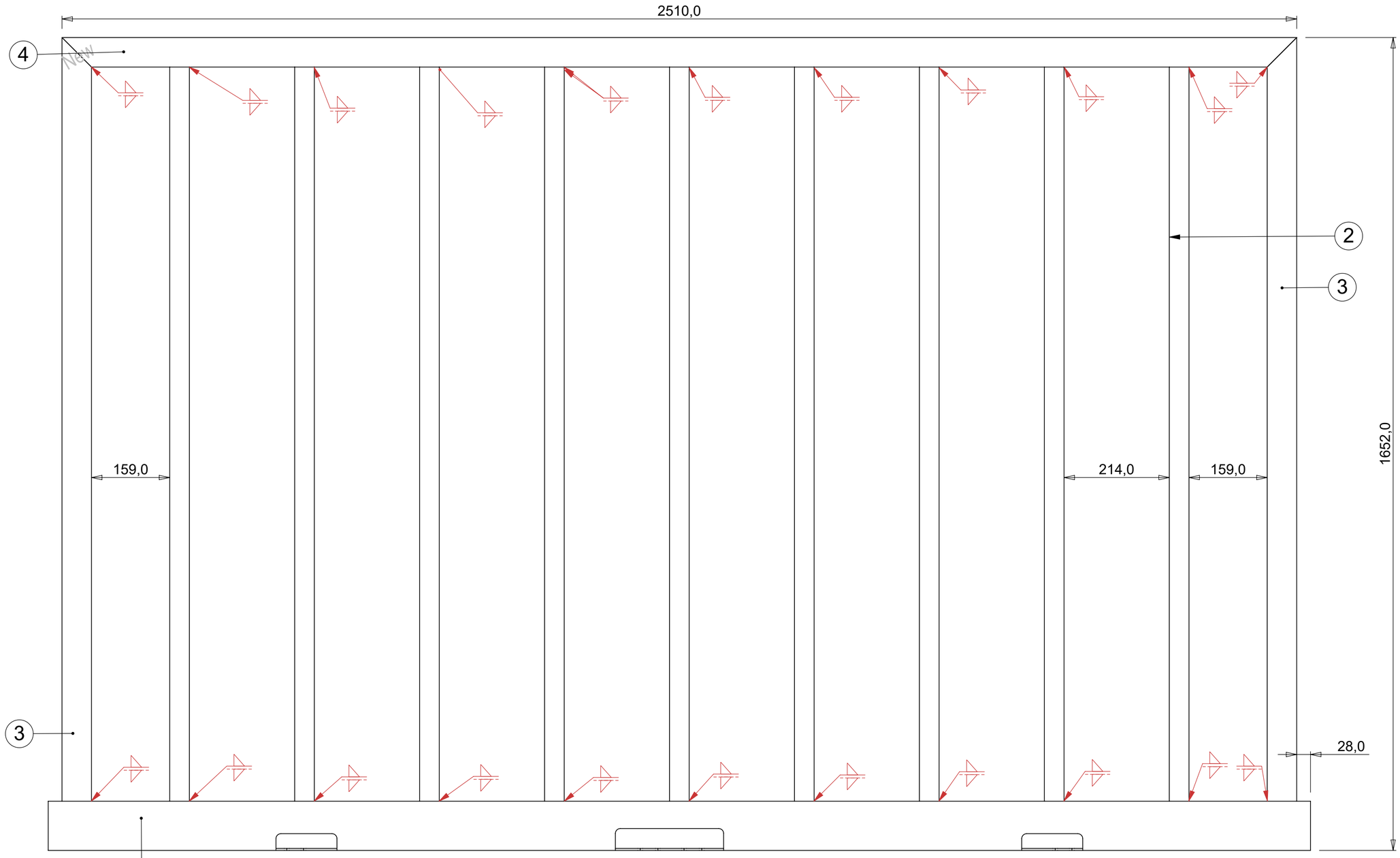
Title: DBJ panel top

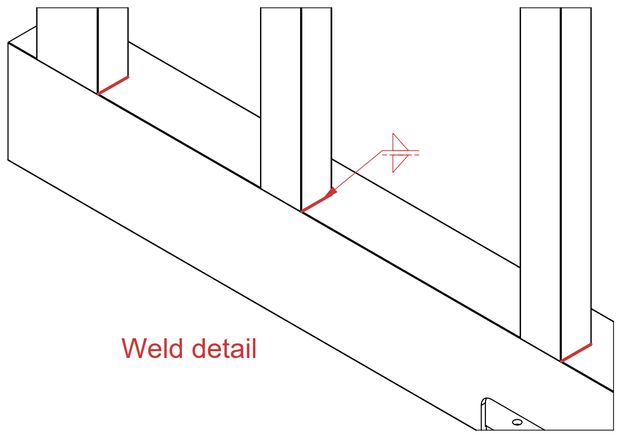
Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Weld detail

Welding according to procedure VRR-W3-090 except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
4	1	Tube 30x60x2	2510	30/60	2	2000-05-0349	Alu. 6060-T66	
3	2	Tube 60x30x2	1552	60/30	2	2000-05-0338	Alu. 6060-T66	
2	9	Tube 40x30x2	1502	40/30	2	2000-05-0342	Alu. 6060-T66	
1	1	Tube 100x60x4	2566	100/60	4	2000-05-0345	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no. 2000-05-1982	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 22.87 kg		Finish: New	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Internal panel frame Top**

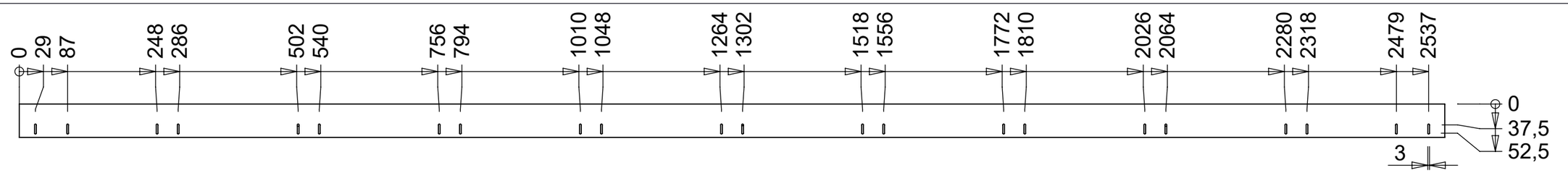
Rivets according to VRR-SP2201

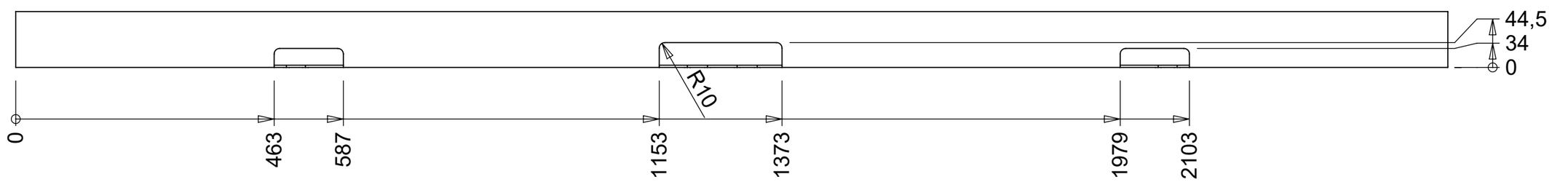
Iss.	Changes	Date	Name

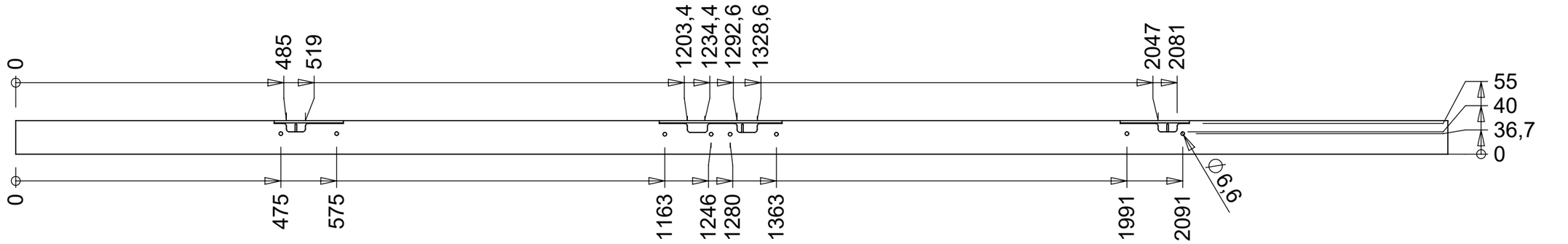
Projection

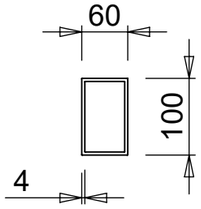
Size A2

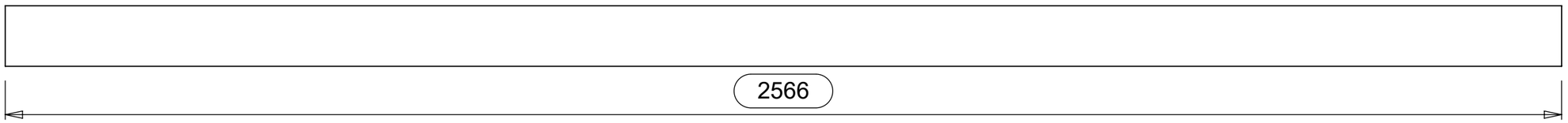
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

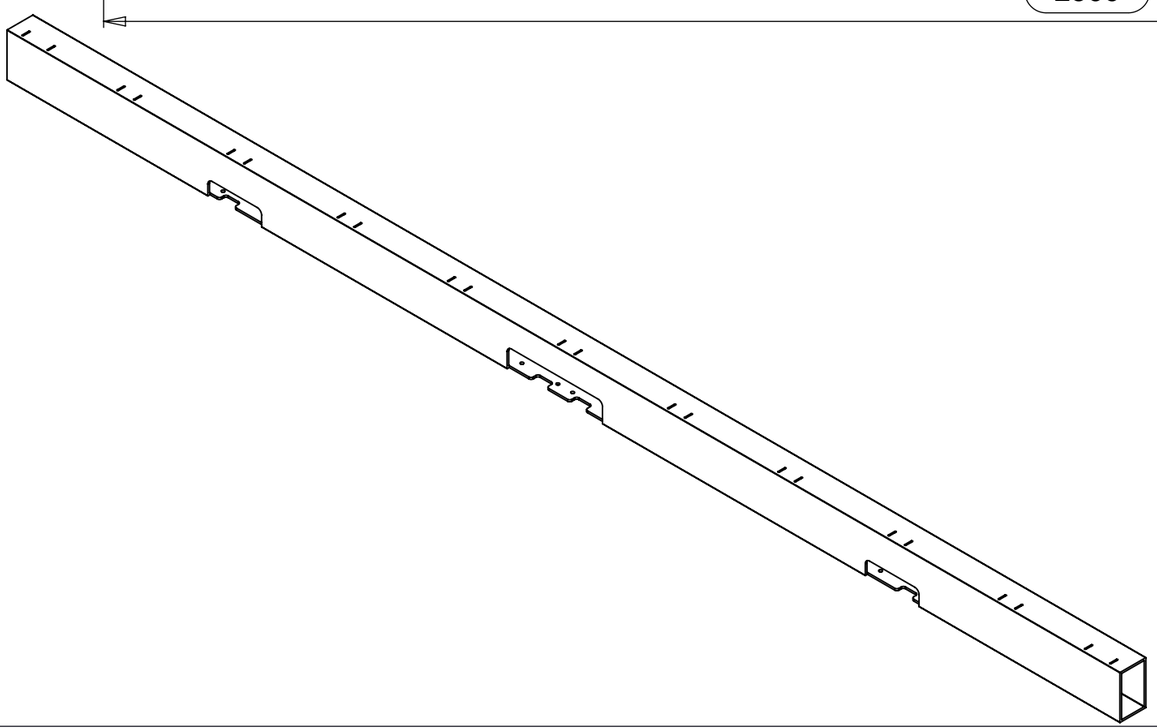












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 100x60x4	2566	100/60	4	2000-05-0345	Alu. 6060-T66	

Scale: 1:8	Date:	Drawing no.: 2000-05-0345	Issue B	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: MVE	11-08-2023			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: HS	11-08-2023	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 8.19 kg		Finish:		Dimensions in mm (u.n.o.)

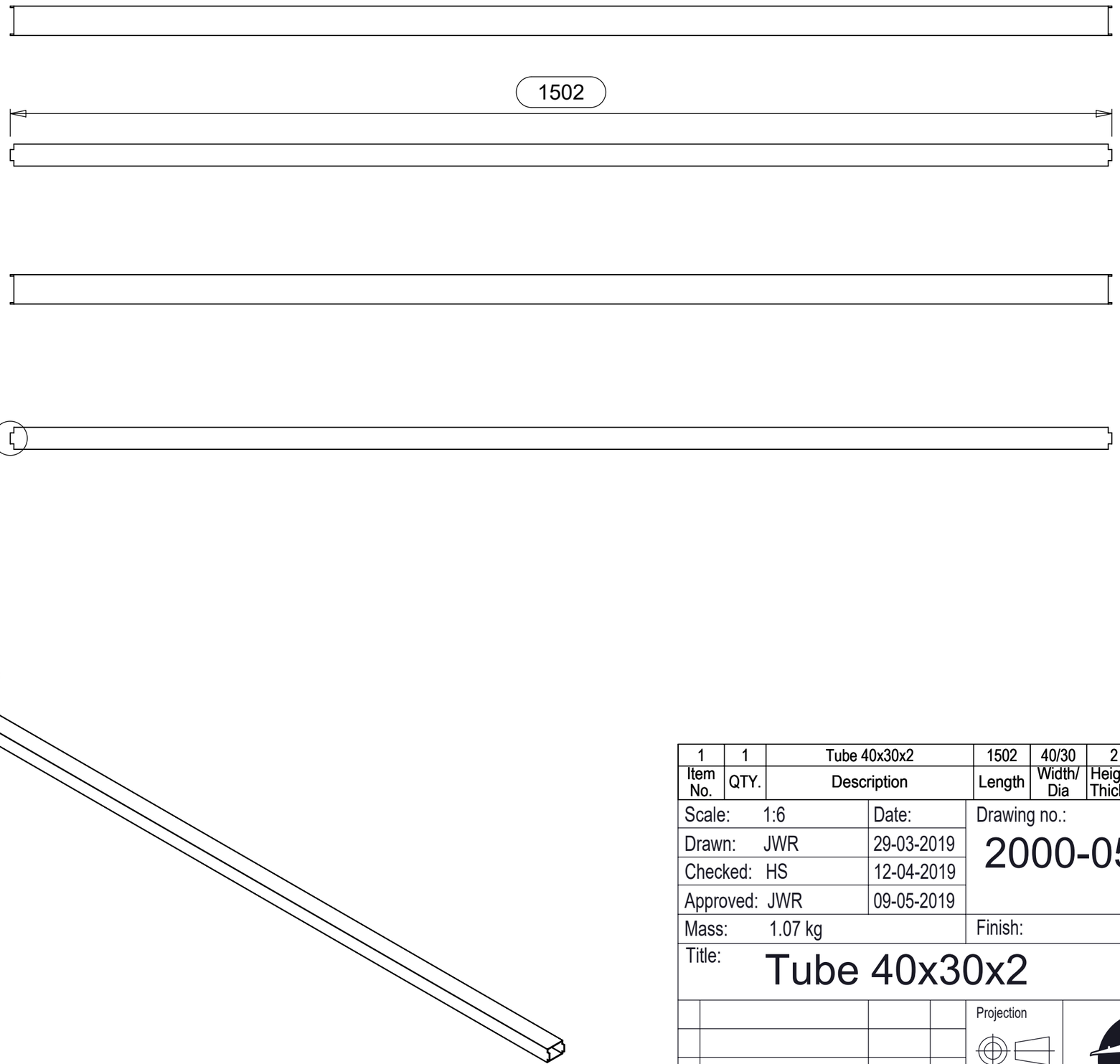
Title: **Tube 100x60x4**

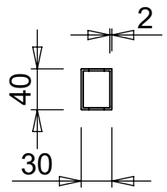
Iss.	Changes	Date	Name
B	Corrected description thickness	11-08-2023	MBMH

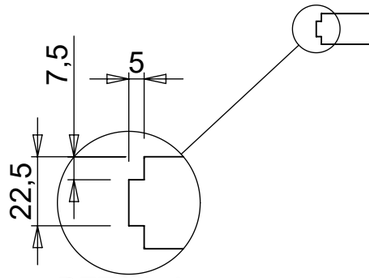
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







DETAIL A
SCALE 1 : 2
applies on both sides

1	1	Tube 40x30x2	1502	40/30	2	2000-05-0342	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0342	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 1.07 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

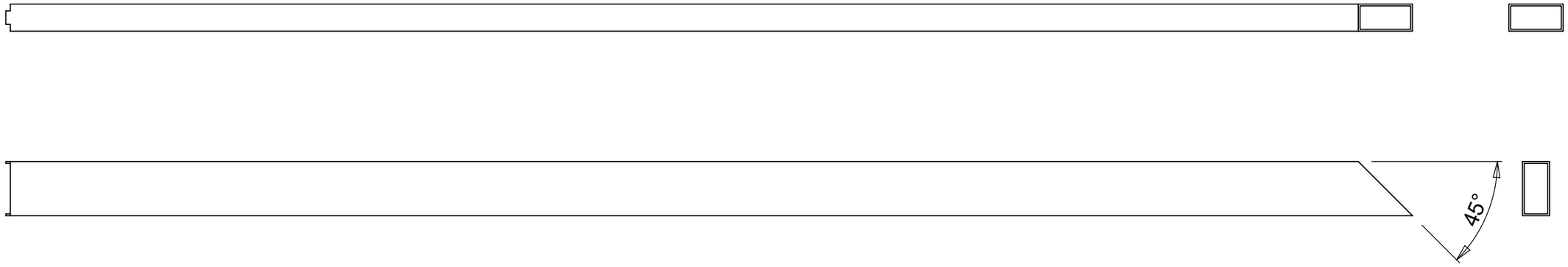
Title: Tube 40x30x2

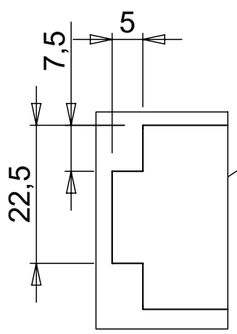
Iss.	Changes	Date	Name

Projection

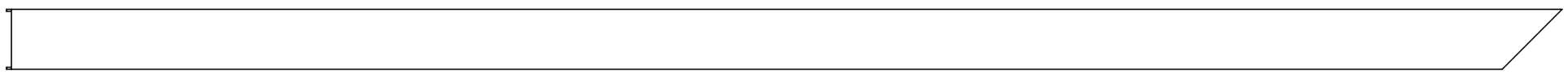
Size A3

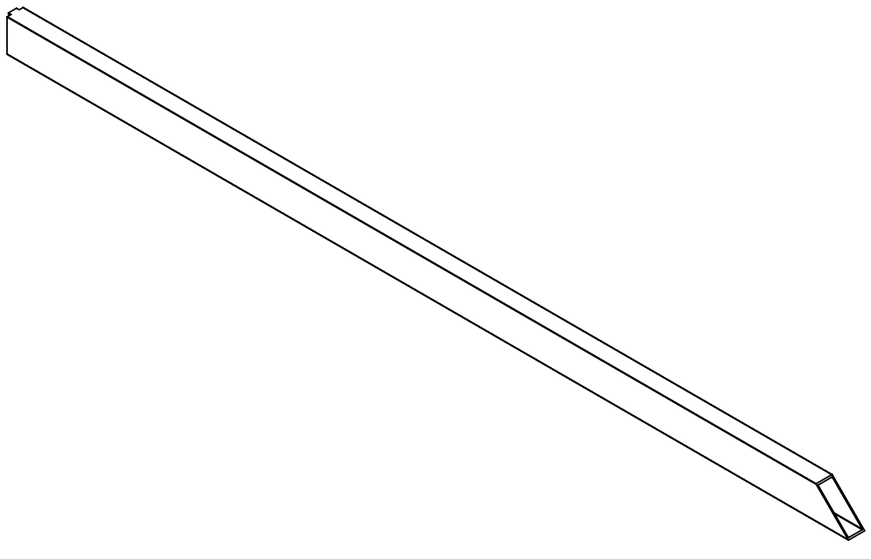
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





DETAIL A
SCALE 1 : 1





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 60x30x2	1552	60/30	2	2000-05-0338	Alu. 6060-T66	

Scale: 1:5	Date:	Drawing no.: 2000-05-0338	Issue: A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 1.41 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

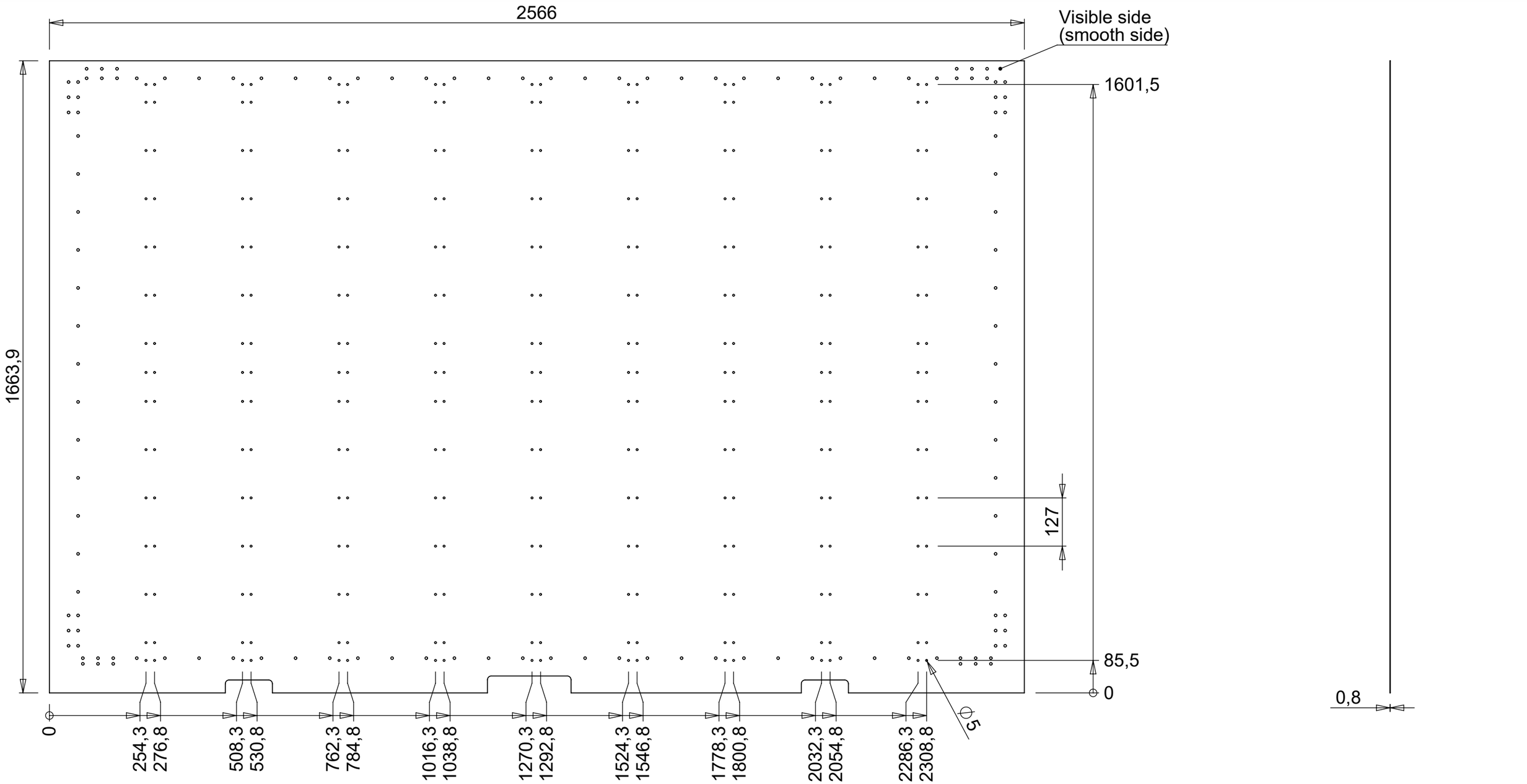
Title: Tube 60x30x2

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Holes : Ø5

See also sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2566	1663,9	0,8	2000-05-0341	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Scale: 1:10	Date:	Drawing no.: 2000-05-0341 Sheet : 1 of 2	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 5.33 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

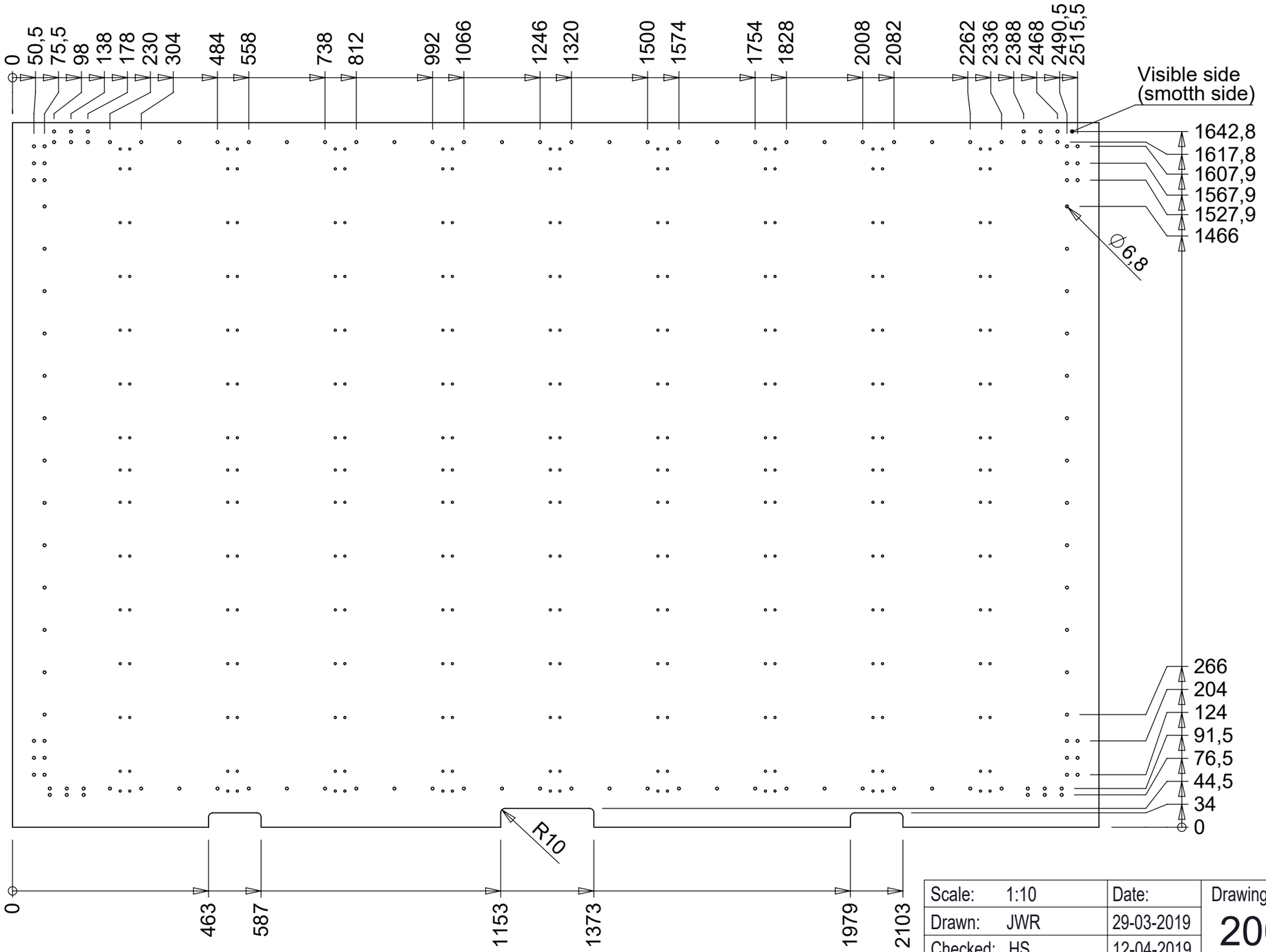
Dimensions in mm (u.n.o.)

Title: **Inner sheet**

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Holes : Ø6,8

Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019	2000-05-0341	A	< 7 30 120 400 1000 2000 >
Checked: HS	12-04-2019	Sheet : 1 of 2		7 30 120 400 1000 2000 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	09-05-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 5.33 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Inner sheet**

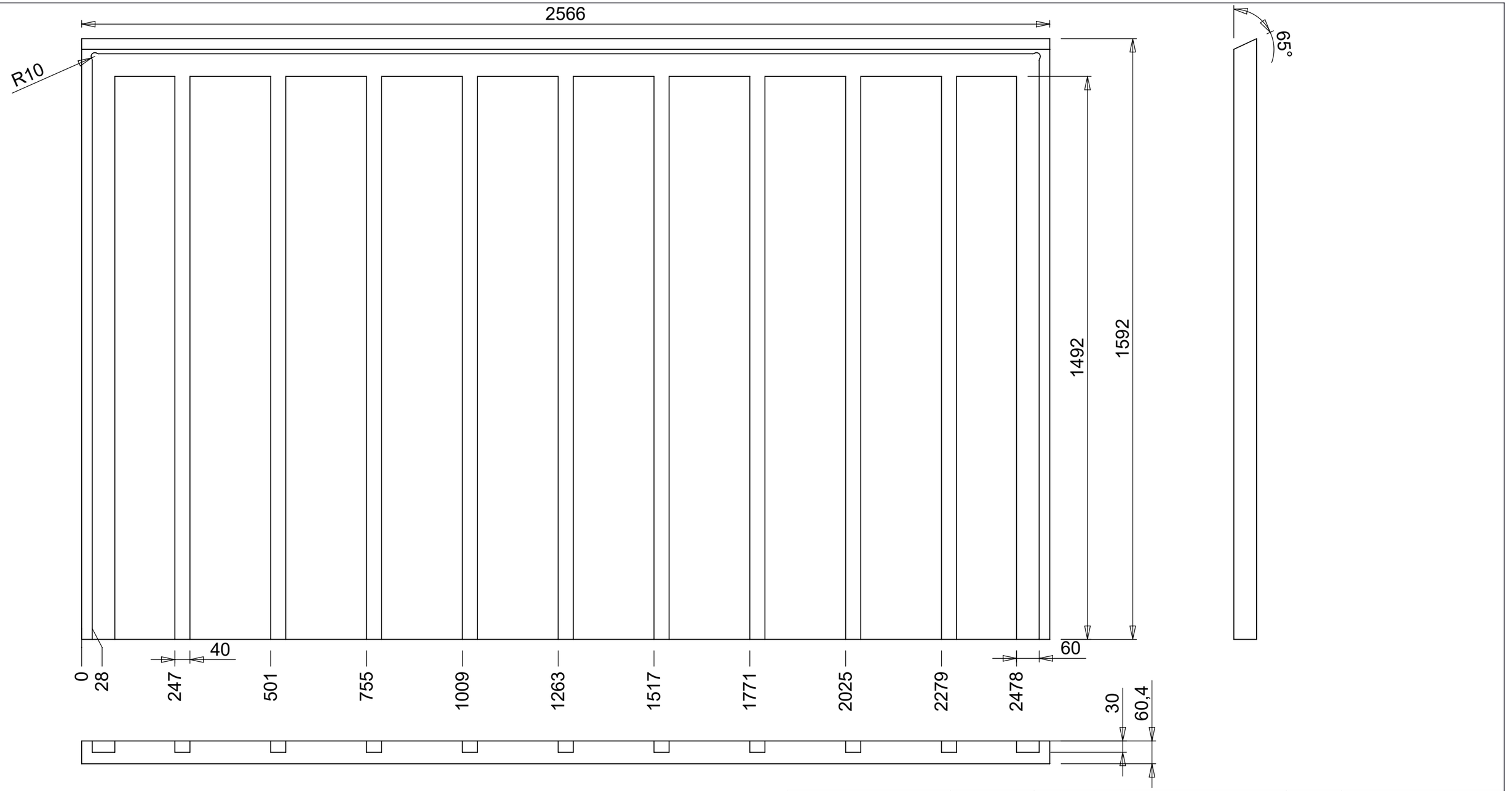
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	2566	1663,9	0,8	2000-05-0341	PE-GEGW 0,8 NF	

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019	2000-05-0340	B	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ±2
Checked: HS	13-02-2020	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-03-2020			
Mass: 10.49 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Insulation panel**

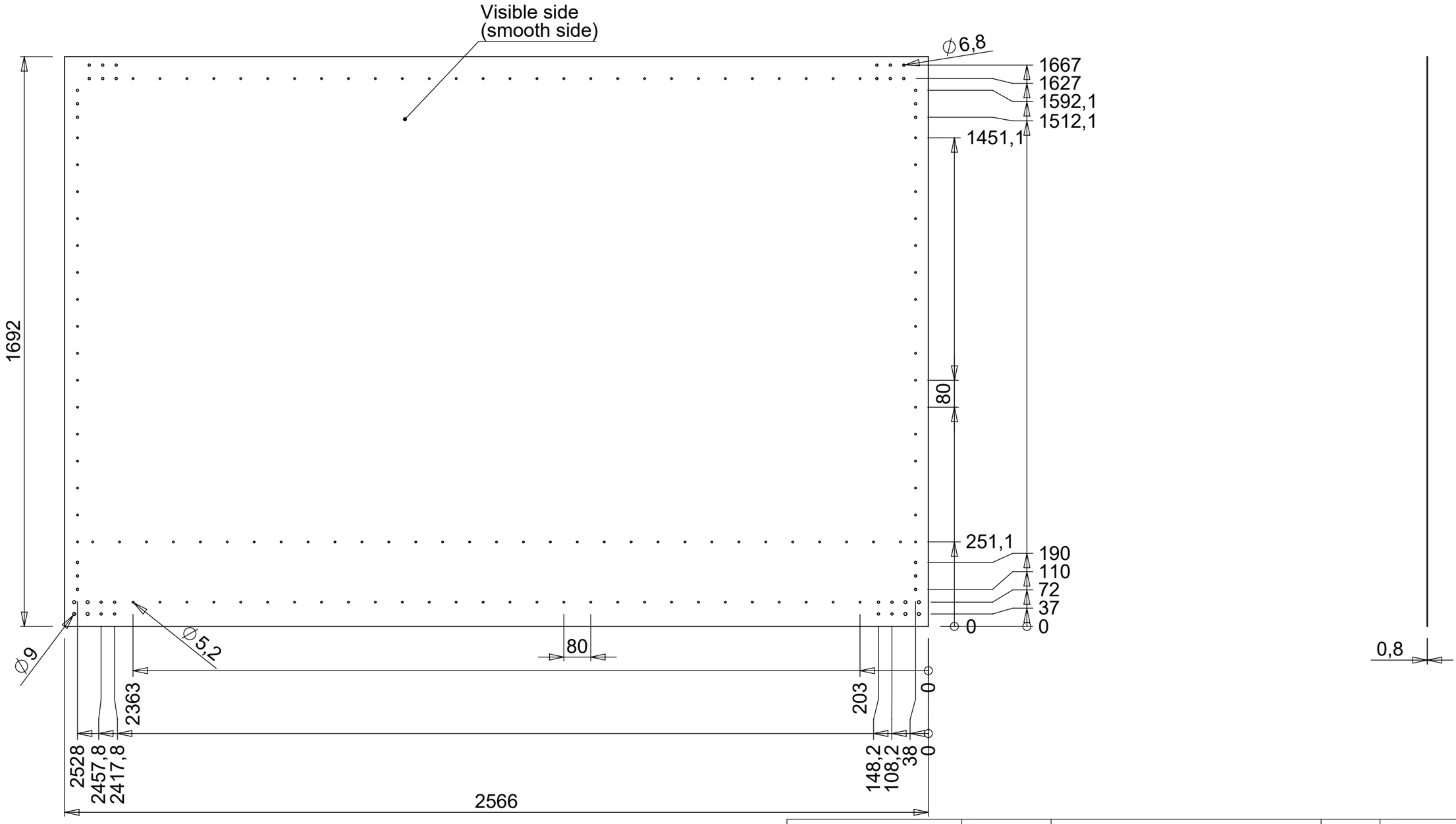
Iss.	Changes	Date	Name
B	~cut-out	09-03-2020	MVE

Projection

Size A3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation panel	2566	1592	60,4	2000-05-0340	RTM-Plus	

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Scale: 1:12	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019	2000-05-0339	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >** ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2 Raw extrusion in accordance with OEM drawing and EN755-9
Checked: HS	12-04-2019			
Approved: JWR	09-05-2019	Sheet : 1 of 1		
Mass: 5.45 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Outer sheet**

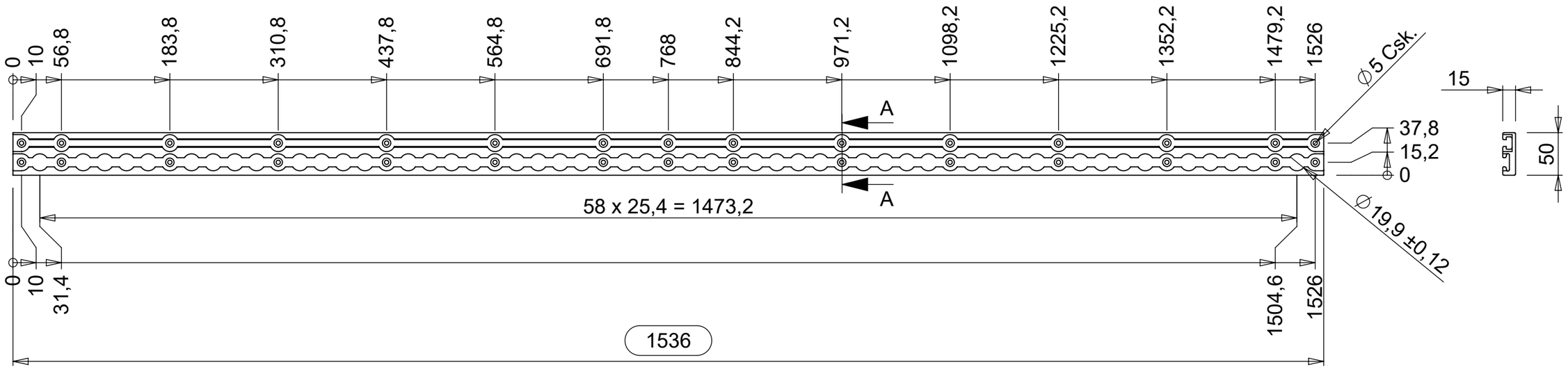
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2566	1692	0,8	2000-05-0339	PE-GEGW 0,8 NF	

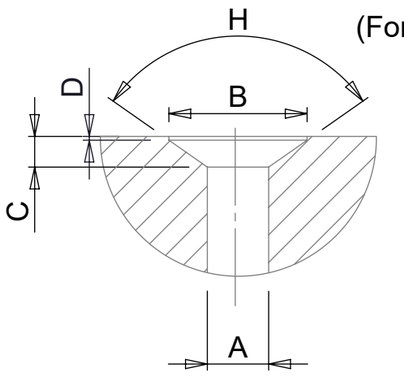
Iss.	Changes	Date	Name

Projection

Size A3

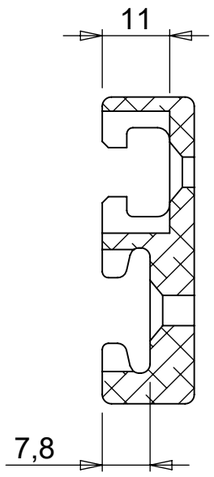
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





(For Monobolt Ø4,8 Rivet)
(Revision C)

A = 5,0
B = 9,9 - D = 0,0
B = 8,8 - D = 0,5
C = 2,1
H = 100°



SECTION A-A
SCALE 1 : 1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Seat-T track profile RR 205	1536	50	15	2000-05-0343	Alu. 6061-T6	

Scale: 1:5	Date:	Drawing no.: 2000-05-0343	Issue: A
Drawn: JWR	29-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.94 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

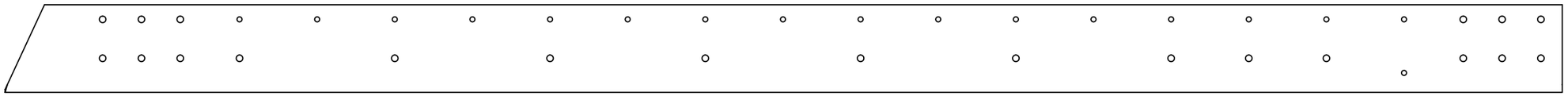
Title: **Seat-T track profile RR 205**

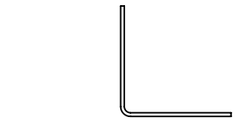
Iss.	Changes	Date	Name

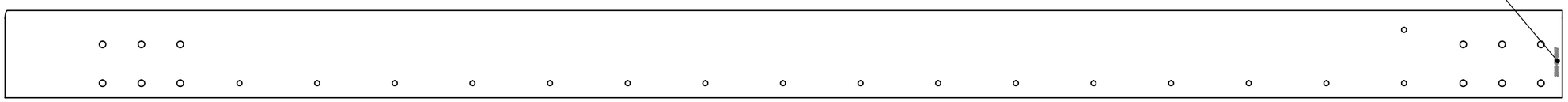
Projection

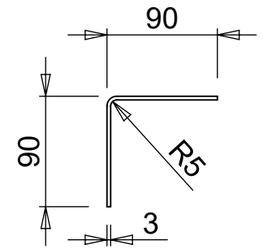
Size A3

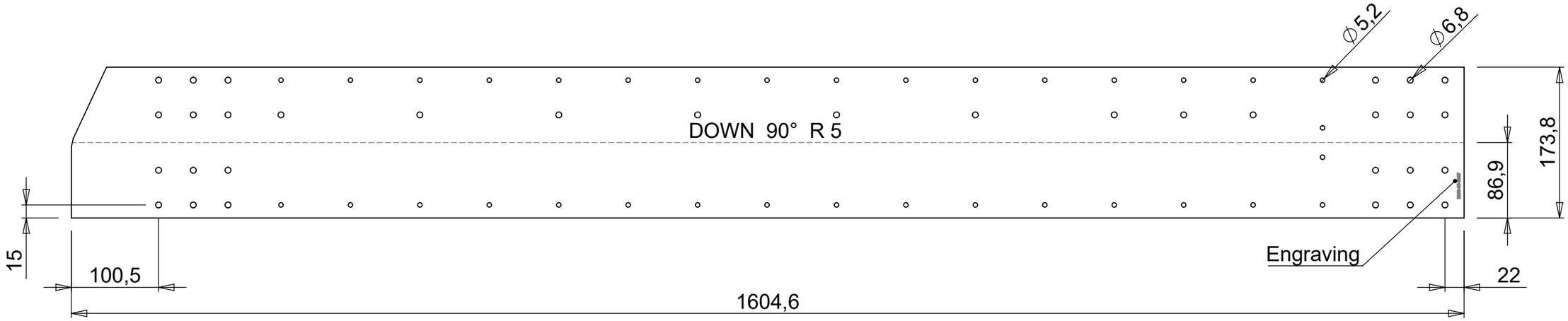
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Outer frame sheet	1604,6	173,8	3	2000-05-0397	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0397 Sheet : 1 of 1	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.23 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

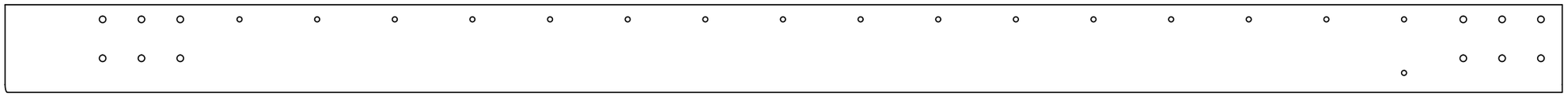
Title: **Outer frame sheet**

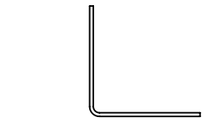
Iss.	Changes	Date	Name

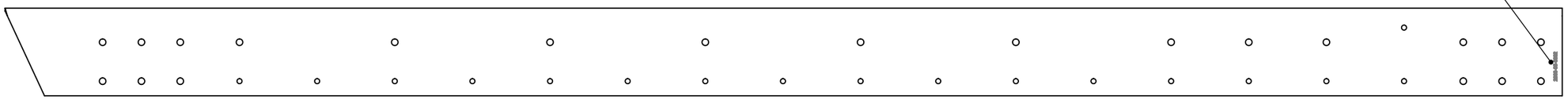
Projection

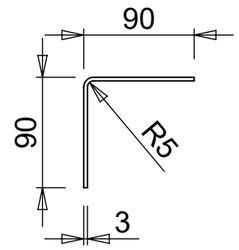
Size A3

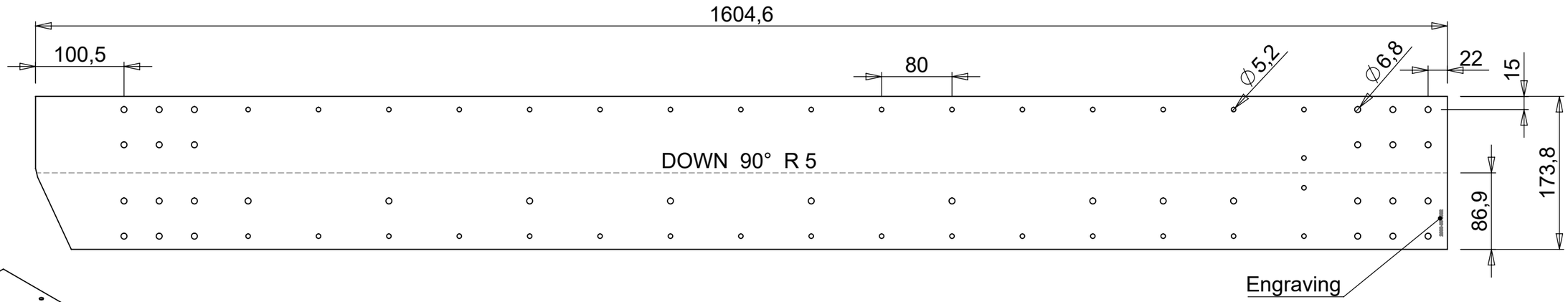
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

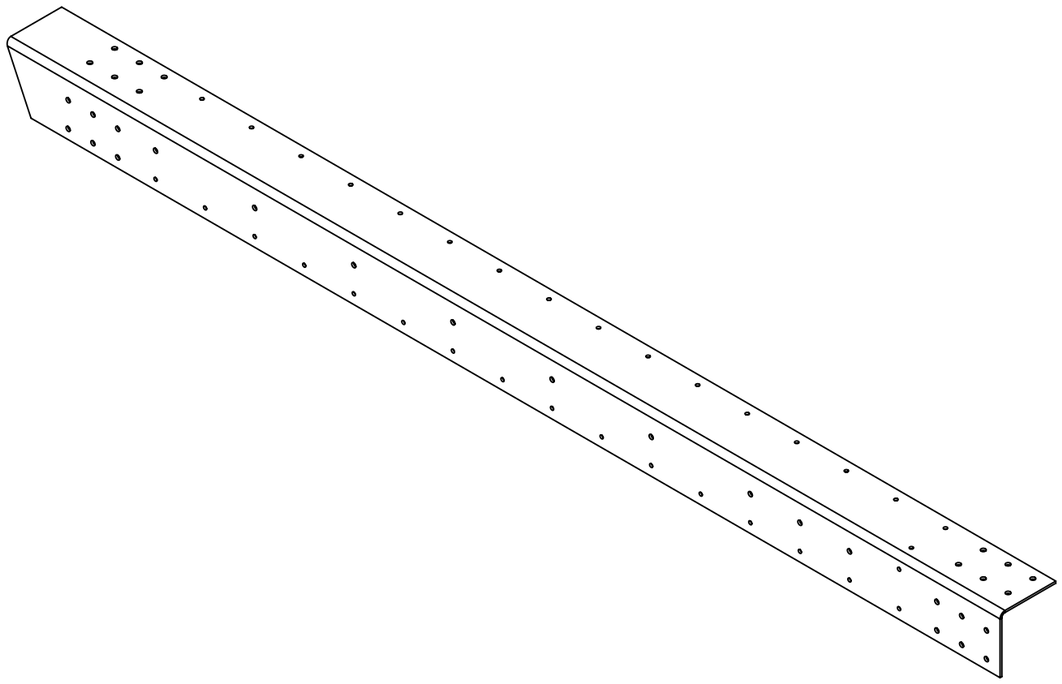












1	1	Outer frame sheet	1604,6	173,8	3	2000-05-0392	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-0392 Sheet : 1 of 1	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.23 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

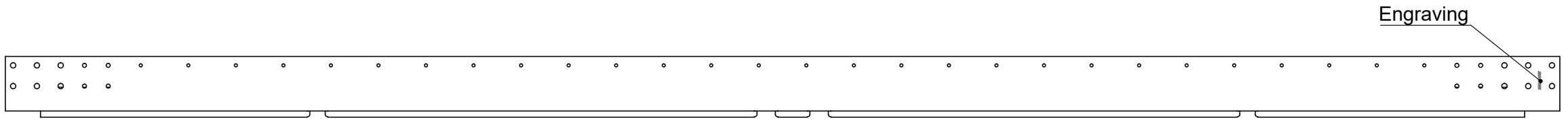
Title: **Outer frame sheet**

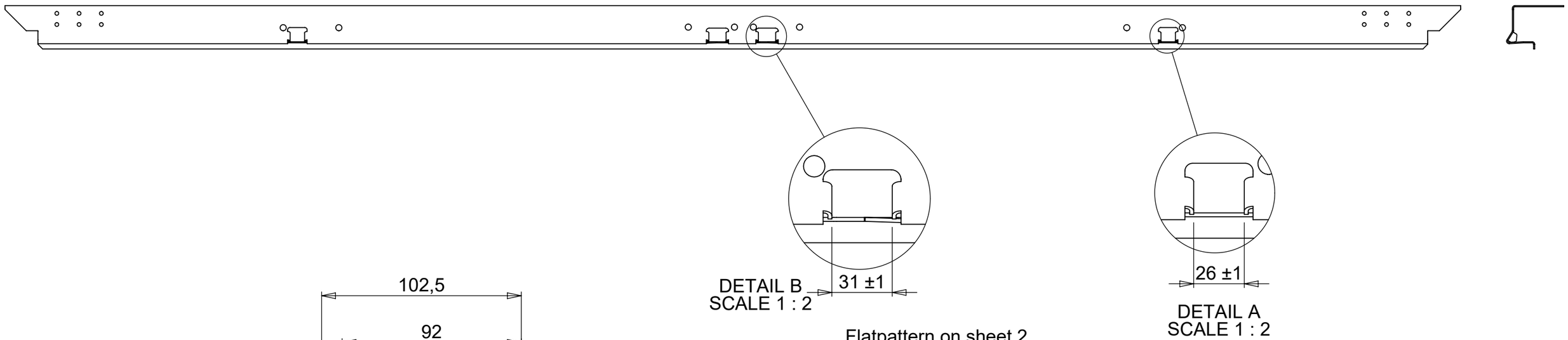
Iss.	Changes	Date	Name

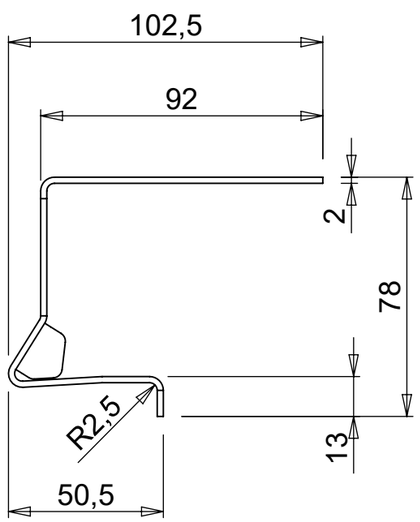
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Flatpattern on sheet 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16

Scale: 1:7	Date:	Drawing no.: 2000-05-0437	Issue: A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 2	
Mass: 8.70 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

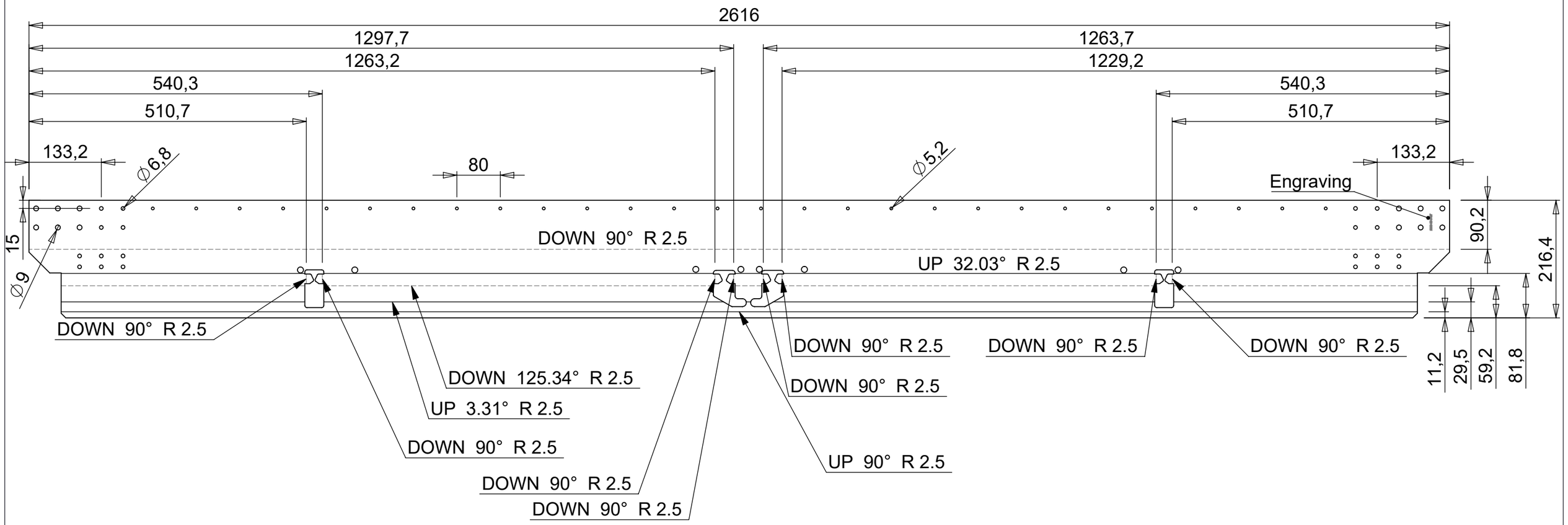
Title: **Frame sheet door**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Frame sheet door	2616	216,4	2	2000-05-0437	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.: 2000-05-0437 Sheet : 1 of 2	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 8.70 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

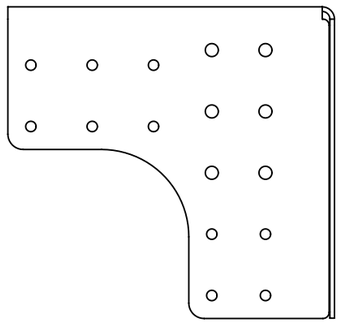
Title: **Frame sheet door**

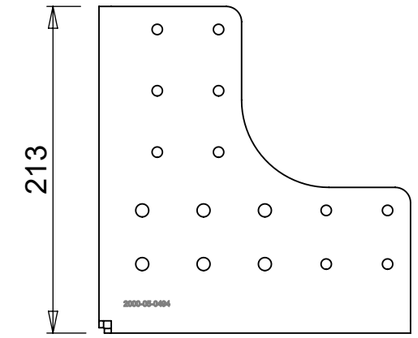
Iss.	Changes	Date	Name

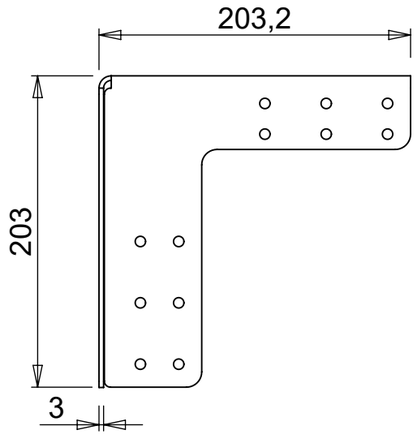
Projection

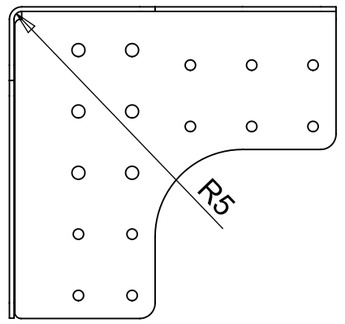
Size A3

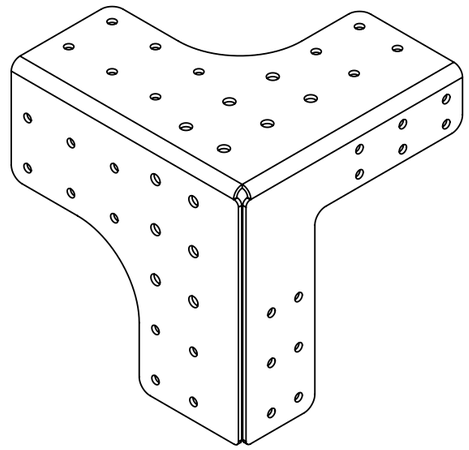
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

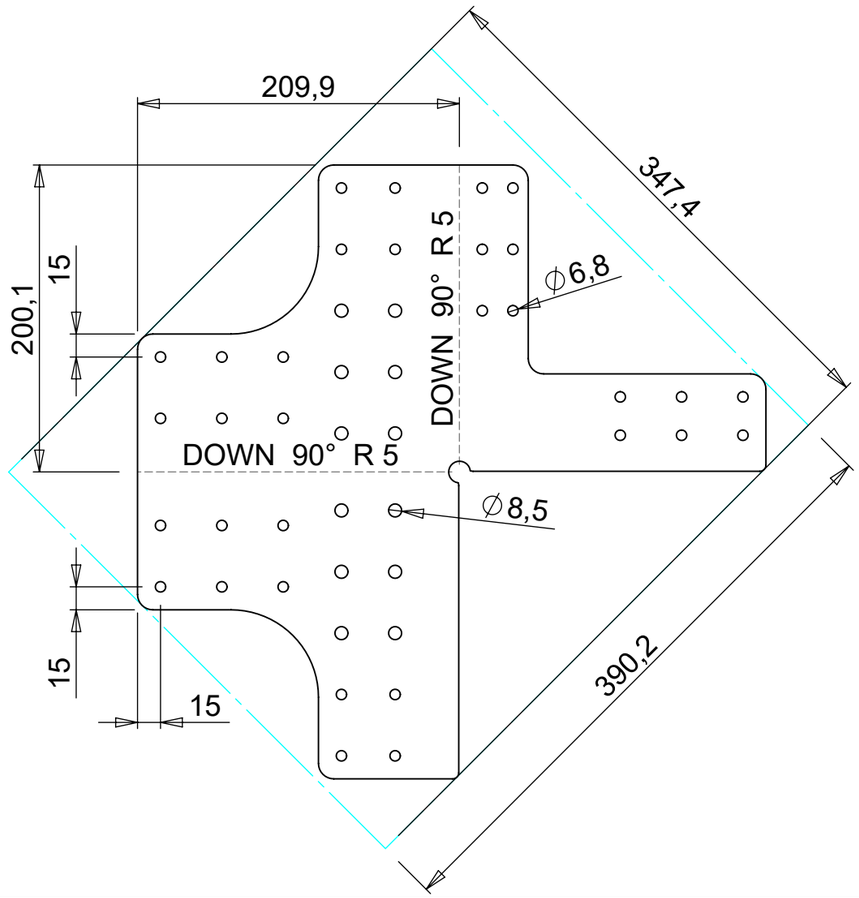












1	1	Gusset	390,2	347,4	3	2000-05-0494	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-0494 Sheet : 1 of 1	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.62 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

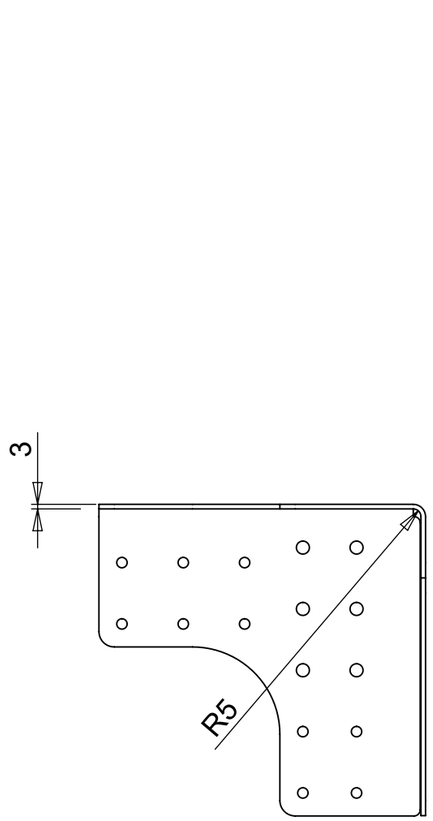
Title: **Gusset**

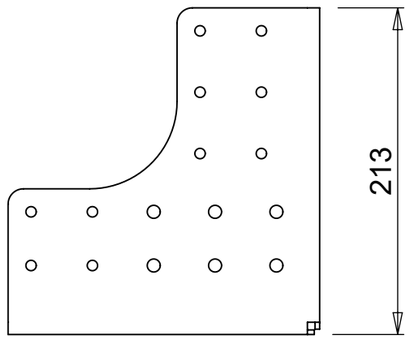
Iss.	Changes	Date	Name

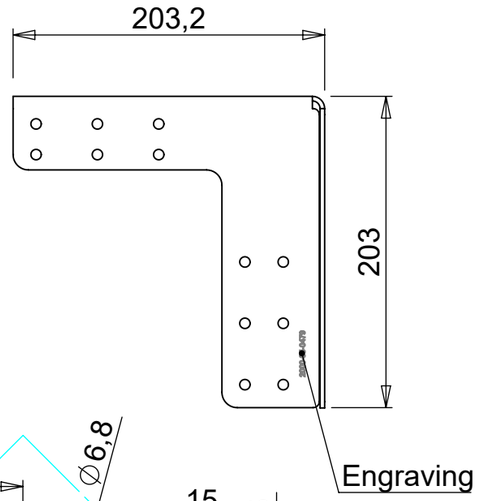
Projection

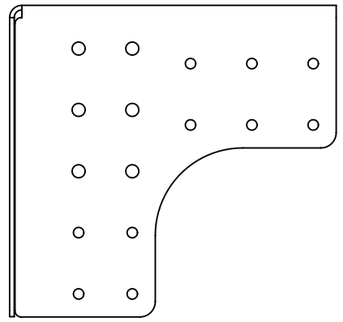
Size A3

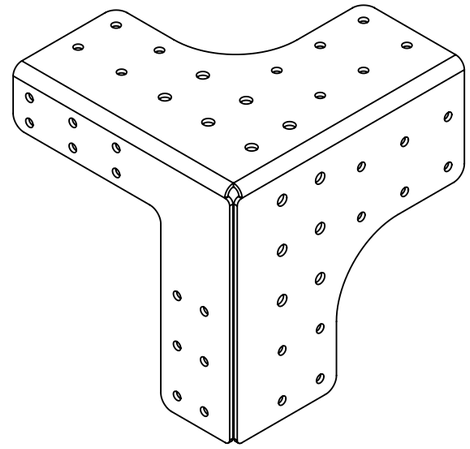
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

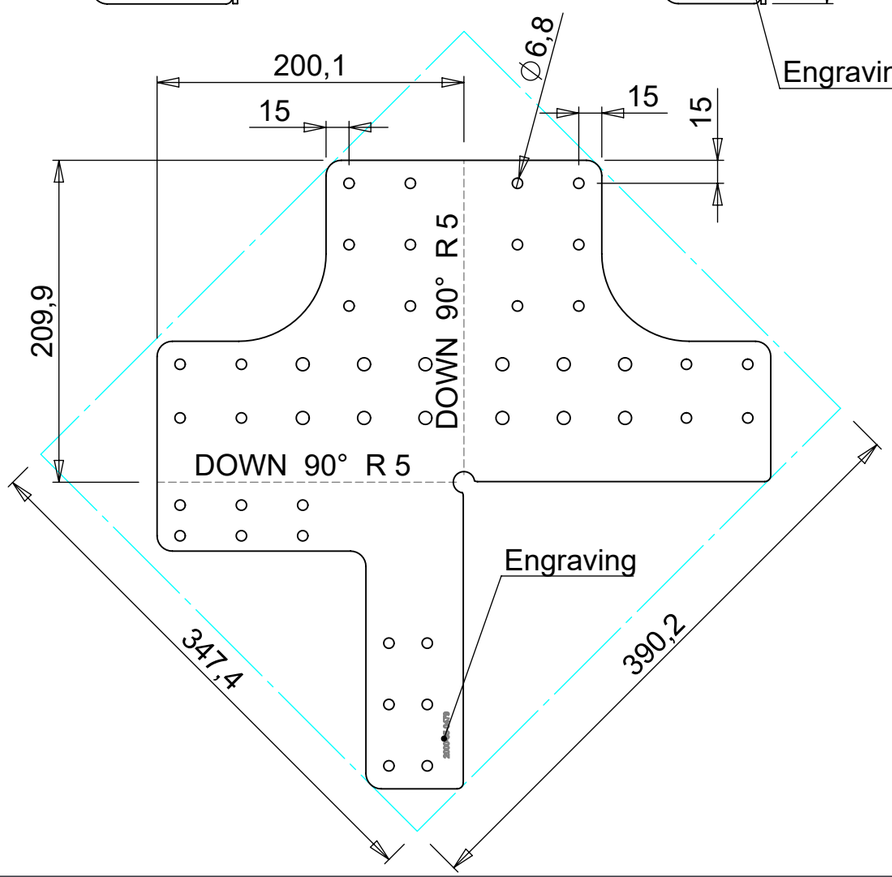












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Gusset	390,3	347,3	3	2000-05-0479	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0479	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.62 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

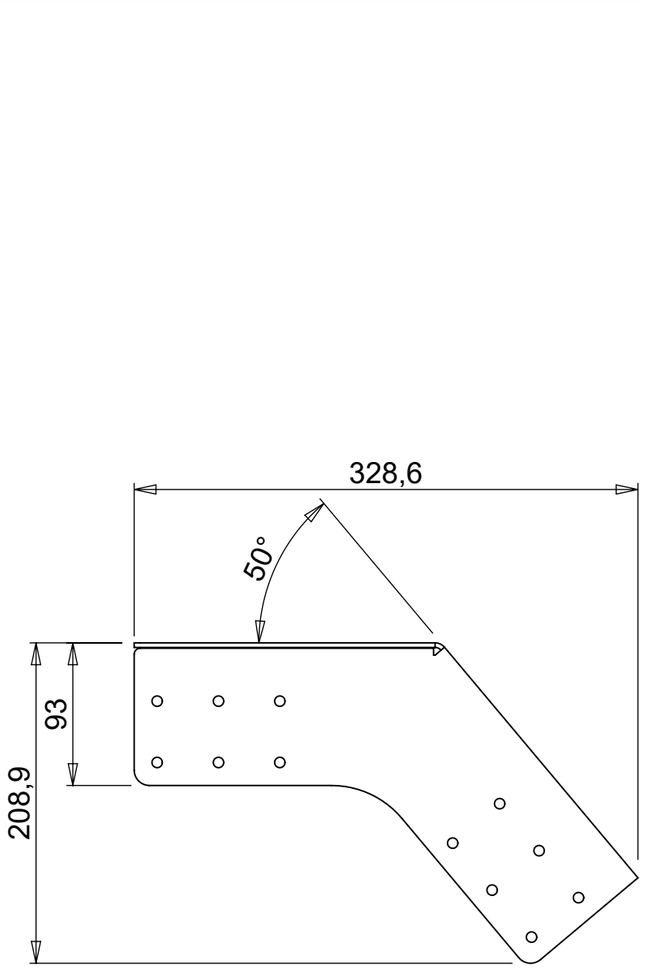
Title: **Gusset**

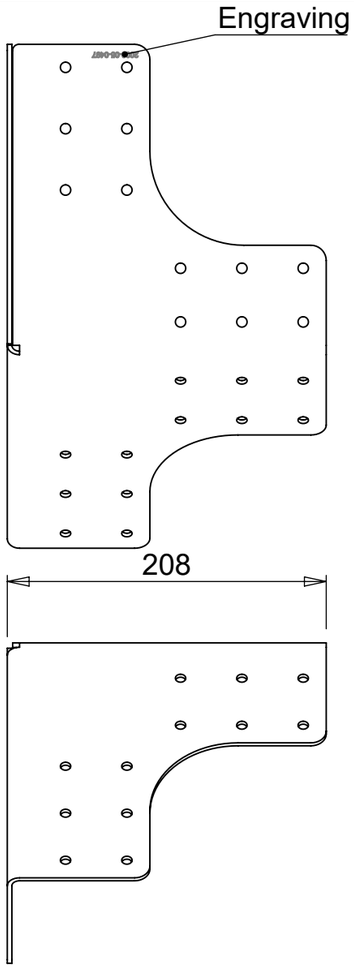
Iss.	Changes	Date	Name

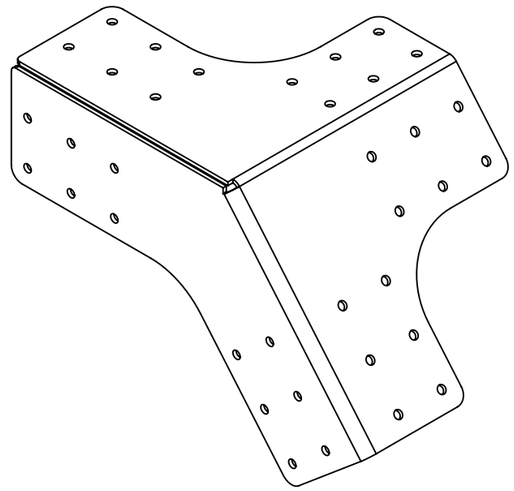
Projection

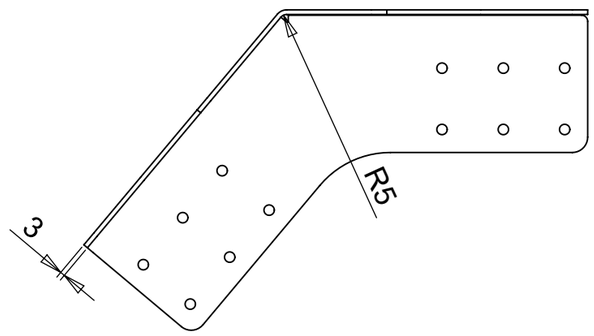
Size A3

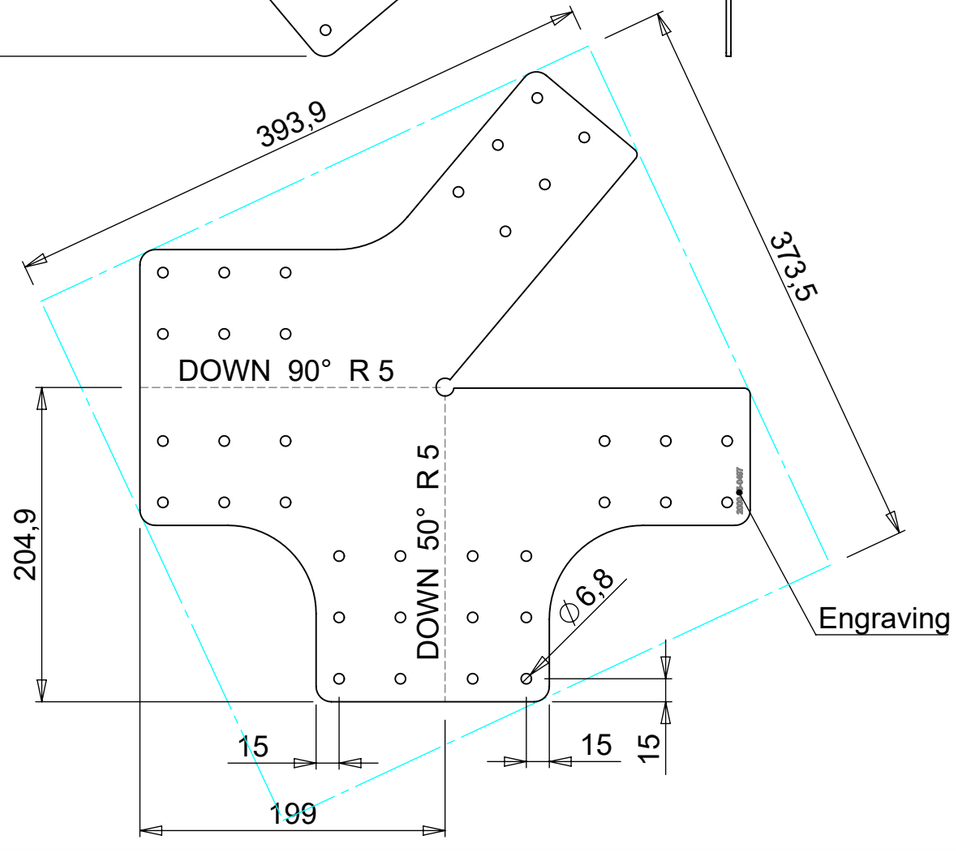
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Slanted corner gusset	393,9	373,5	3	2000-05-0497	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0497	Issue A	Tolerances (u.n.o.)
Drawn: JWR	29-03-2019			< 7 30 120 400 1000 2000
Checked: HS	12-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.69 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

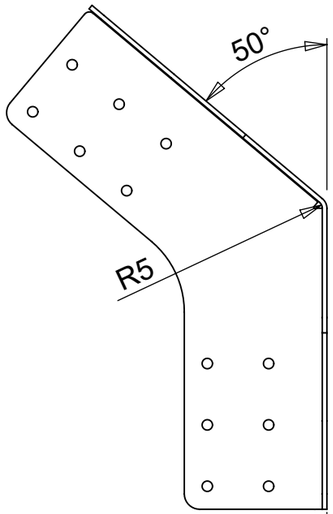
Title: **Slanted corner gusset**

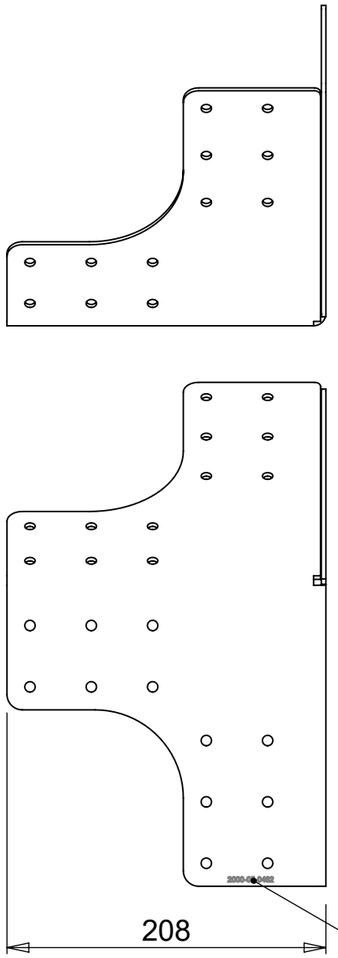
Iss.	Changes	Date	Name

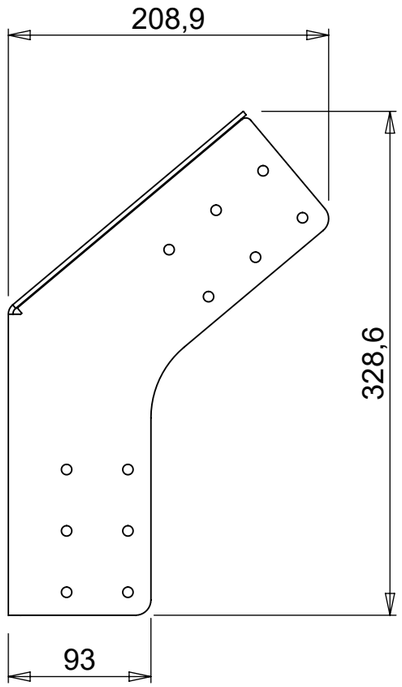
Projection

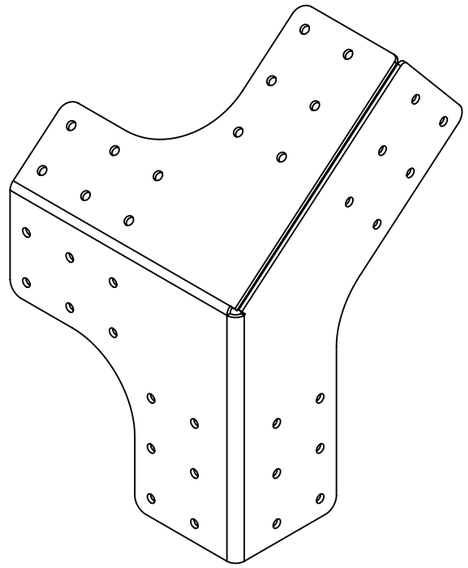
Size A3

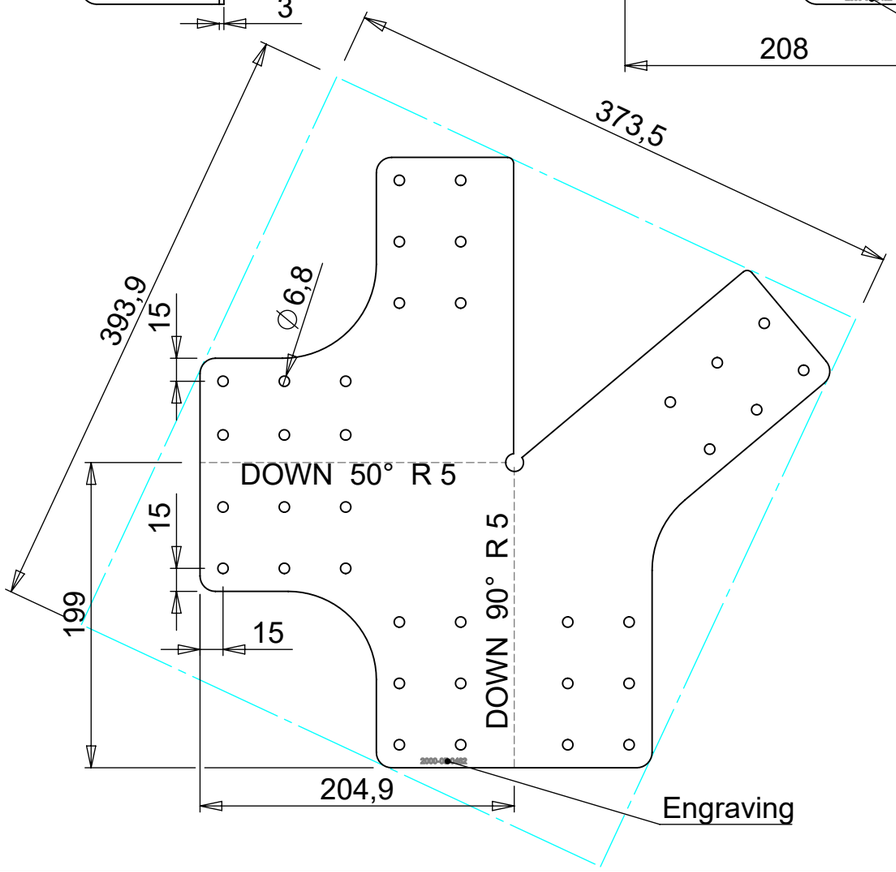
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Slanted corner gusset	393,9	373,5	3	2000-05-0482	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-0482 Sheet : 1 of 1	Issue A
Drawn: JWR	29-03-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.69 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

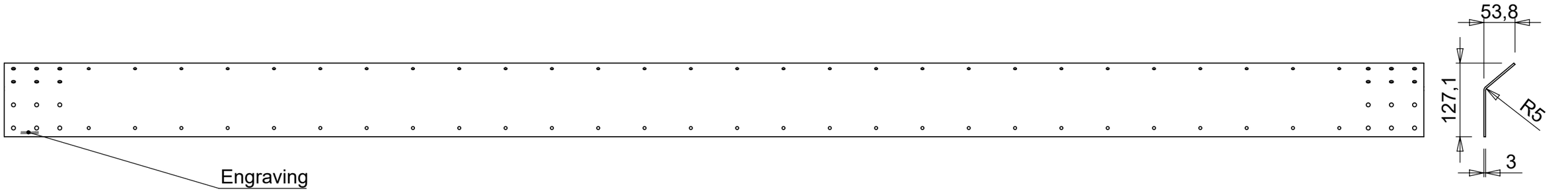
Title: **Slanted corner gusset**

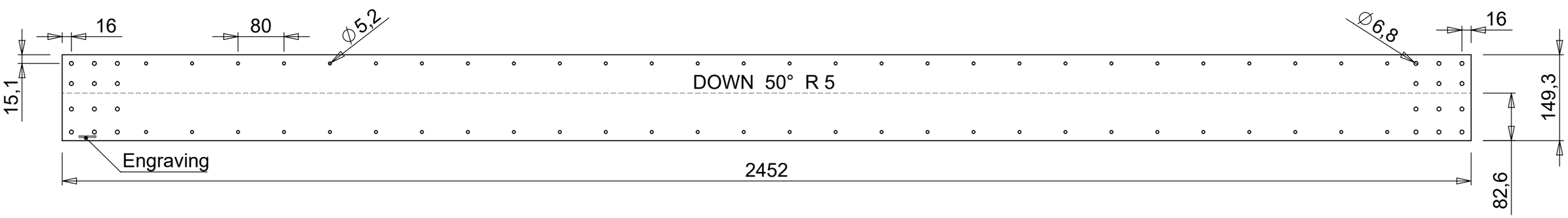
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Frame sheet slanted	2452	149,3	3	2000-05-0495	Alu. 5754-H22	Bend with V30

Scale: 1:7	Date:	Drawing no.: 2000-05-0495	Issue: A
Drawn: JWR	29-03-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.95 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

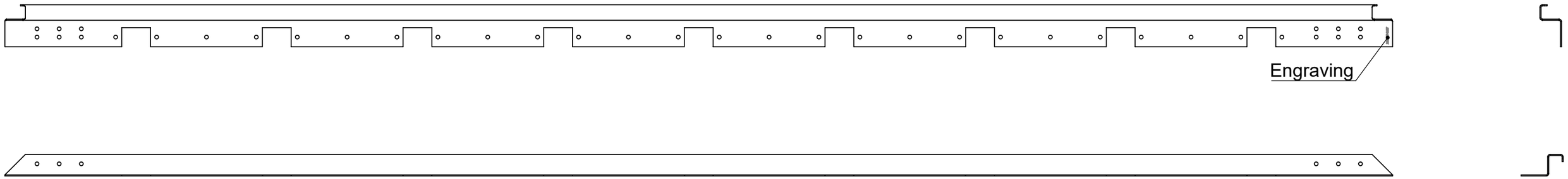
Title: **Frame sheet slanted**

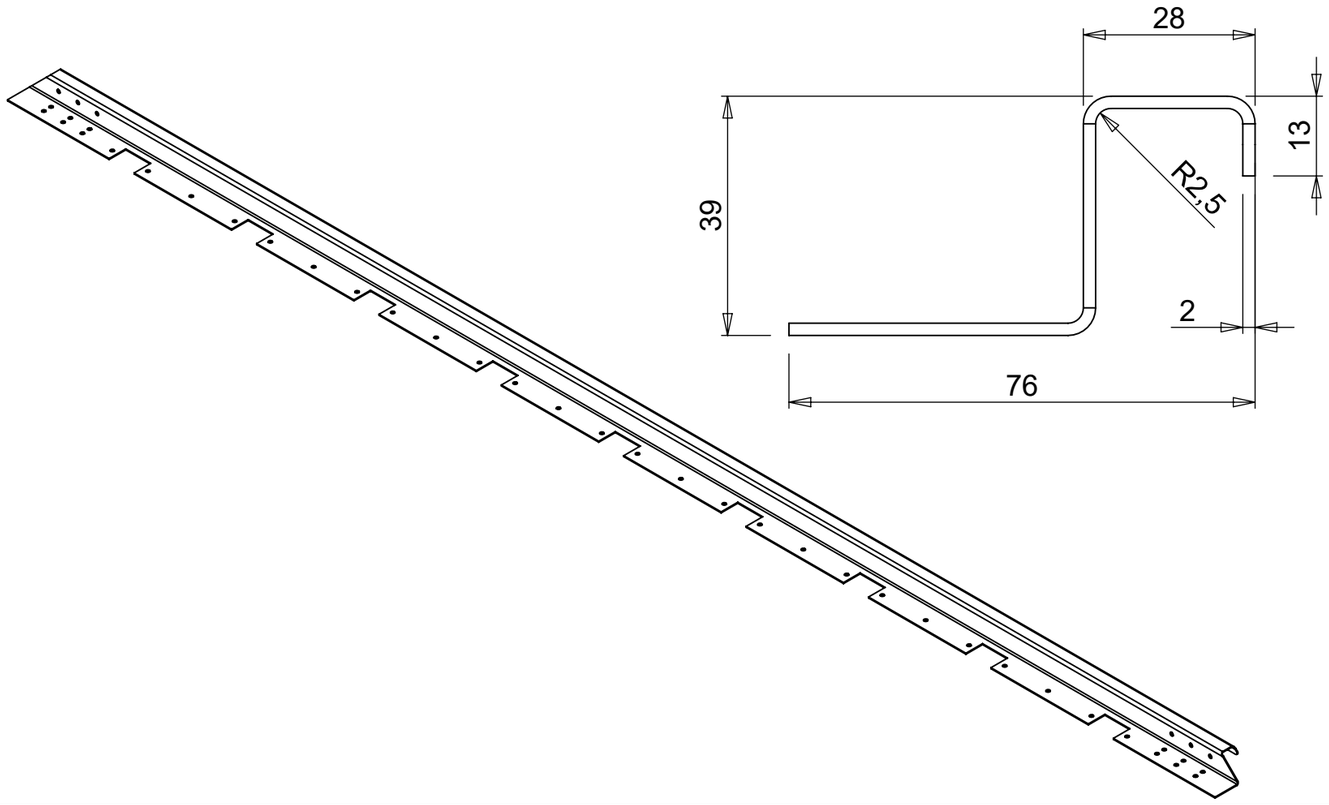
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Door post	2506	119,5	2	2000-07-3667	AISI 304	Bend with V16

Scale: 1:7	Date:	Drawing no.: 2000-07-3667	Issue: A
Drawn: MBMH	21-07-2023	Sheet : 1 of 1	
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 4.45 kg		Finish:	
Title: Door post			

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

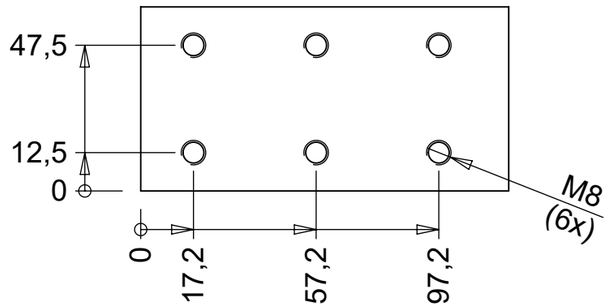
Dimensions in mm (u.n.o.)

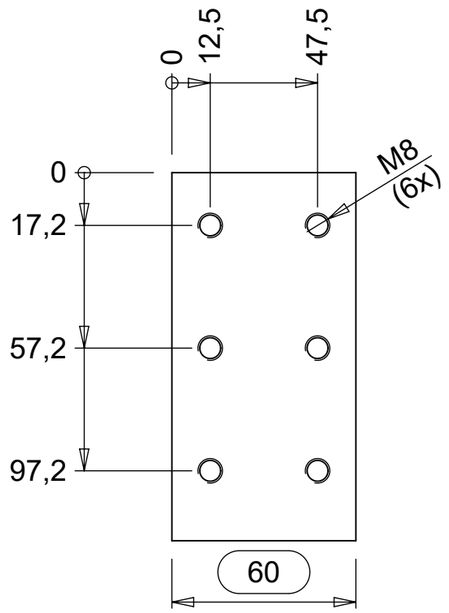
Iss.	Changes	Date	Name

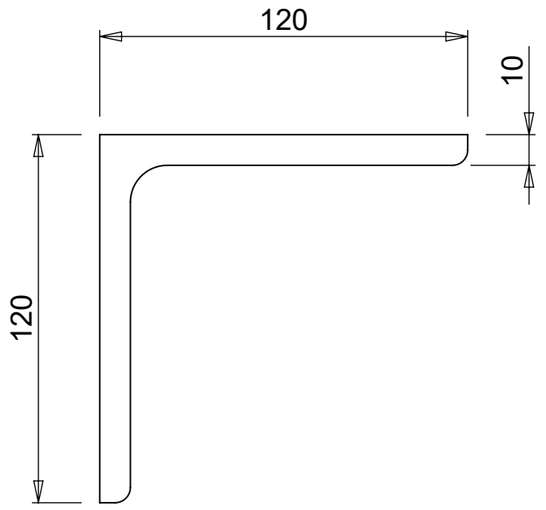
Projection

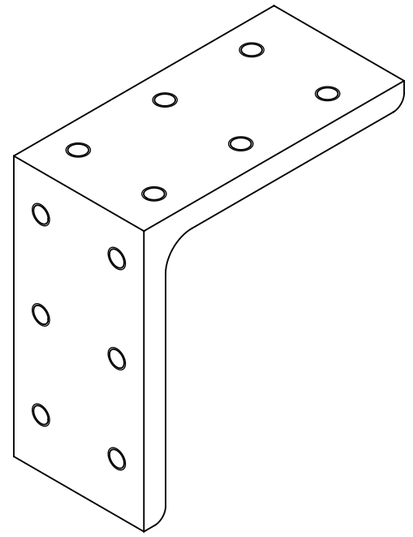
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	L-extrusion	60	120/120	10	2000-04-6140	AISI 304	

Scale: 1:2	Date:	Drawing no.: 2000-04-6140 Sheet : 1 of 1	Issue: B
Drawn: JWR	24-04-2018		
Checked: MH	09-11-2018		
Approved: PvT	09-11-2018		
Mass: 1.08 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

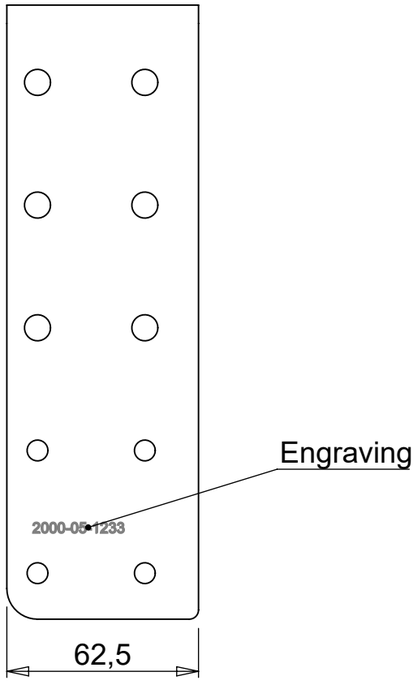
Title: L-extrusion

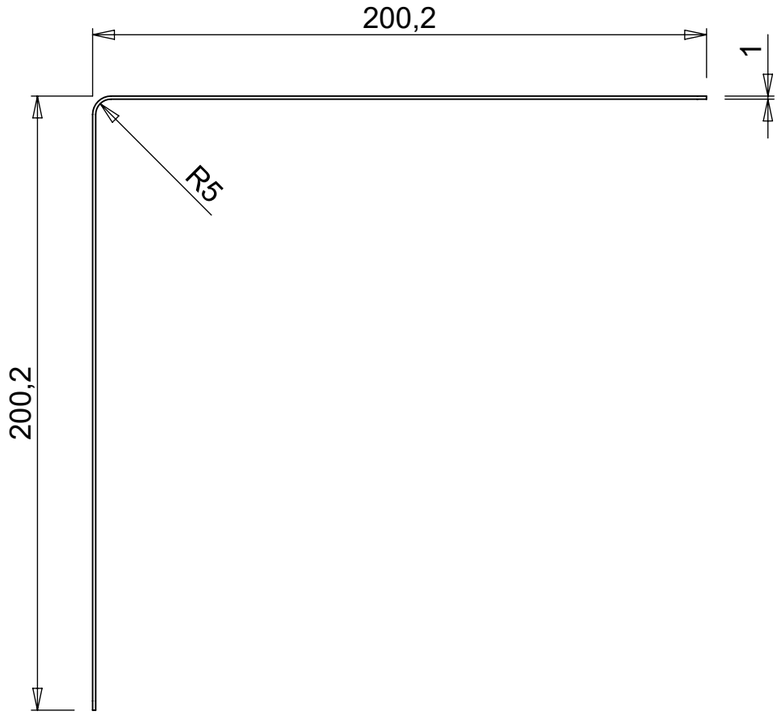
Iss.	Changes	Date	Name
B	~ thread size	09-11-2018	PvT

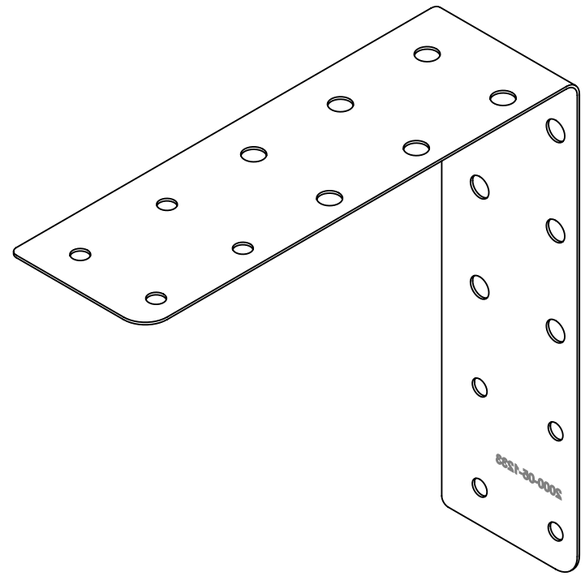
Projection

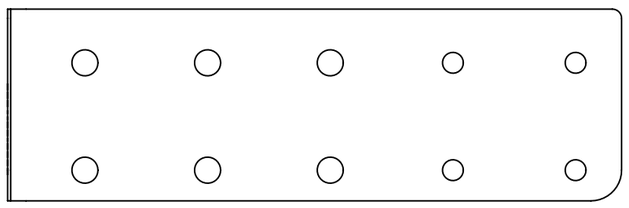
Size A3

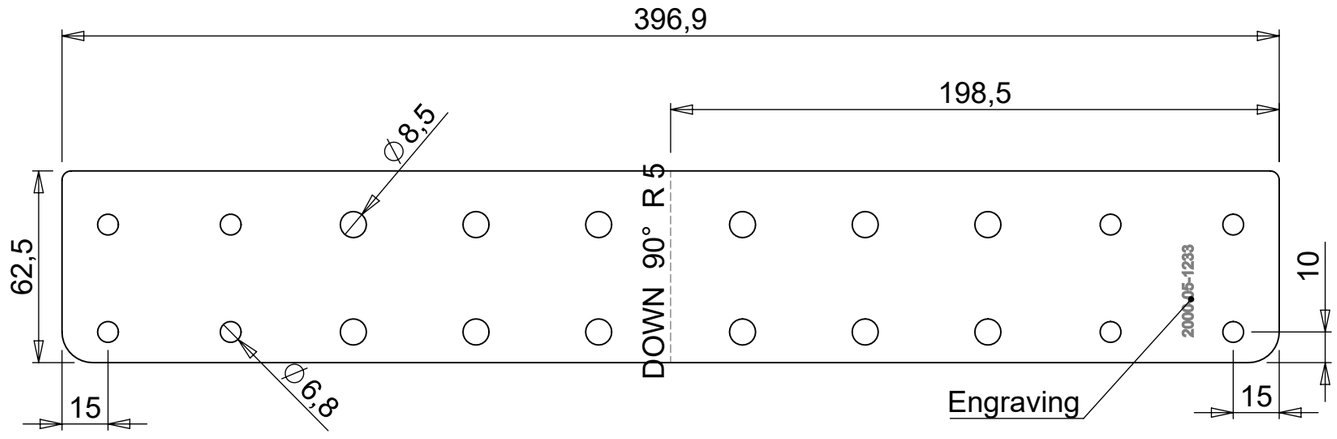
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill strip front gusset	396,9	62,5	1	2000-05-1233	Alu. 5754-H22	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-1233	Issue: A
Drawn: JWR	14-02-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.06 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

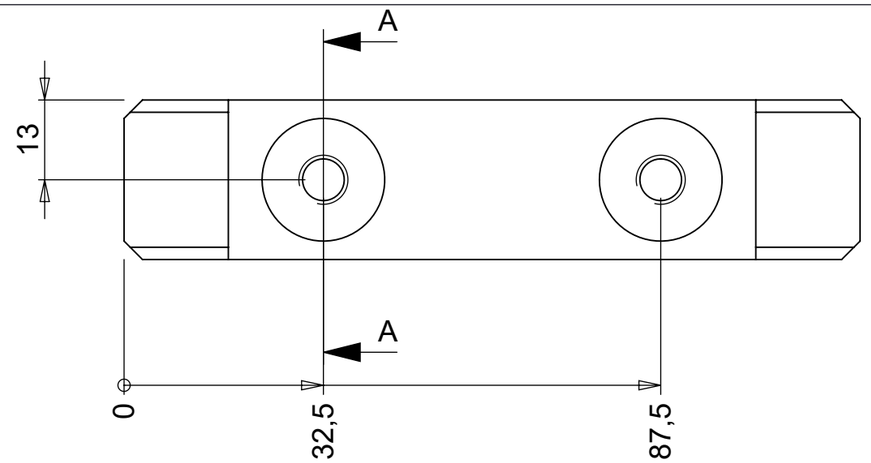
Title: # Fill strip front gusset

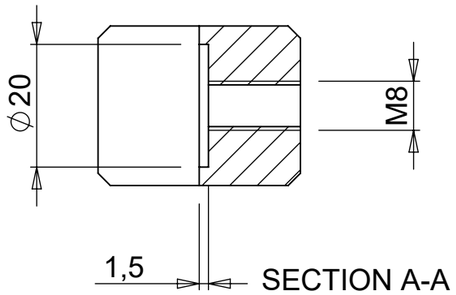
Iss.	Changes	Date	Name

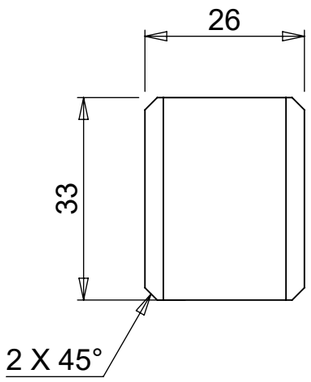
Projection

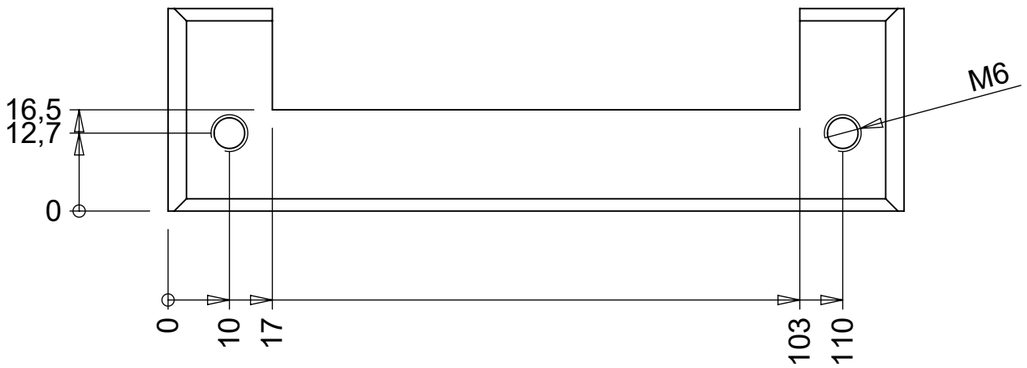
Size A3

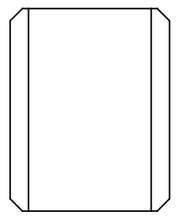
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

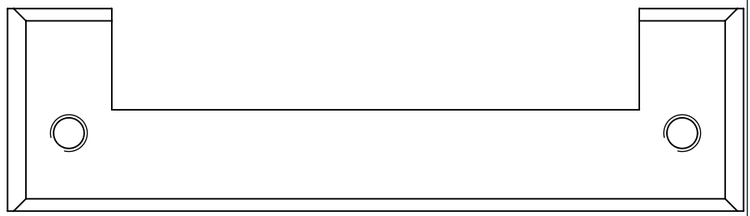


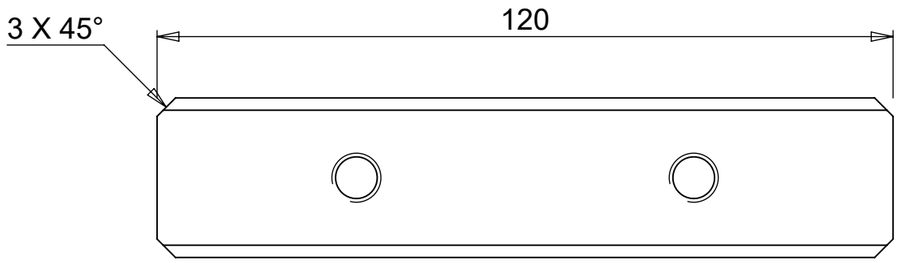


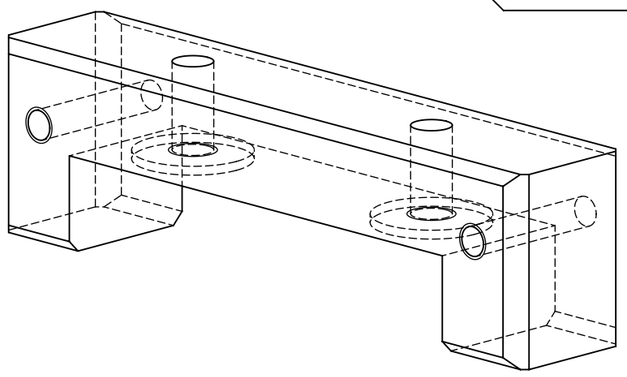












Scale: 1:1	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	01-03-2019	2000-05-1527	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ±2
Checked: HS	12-04-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-05-2019	Sheet : 1 of 1		
Mass: 0.17 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Locking block**

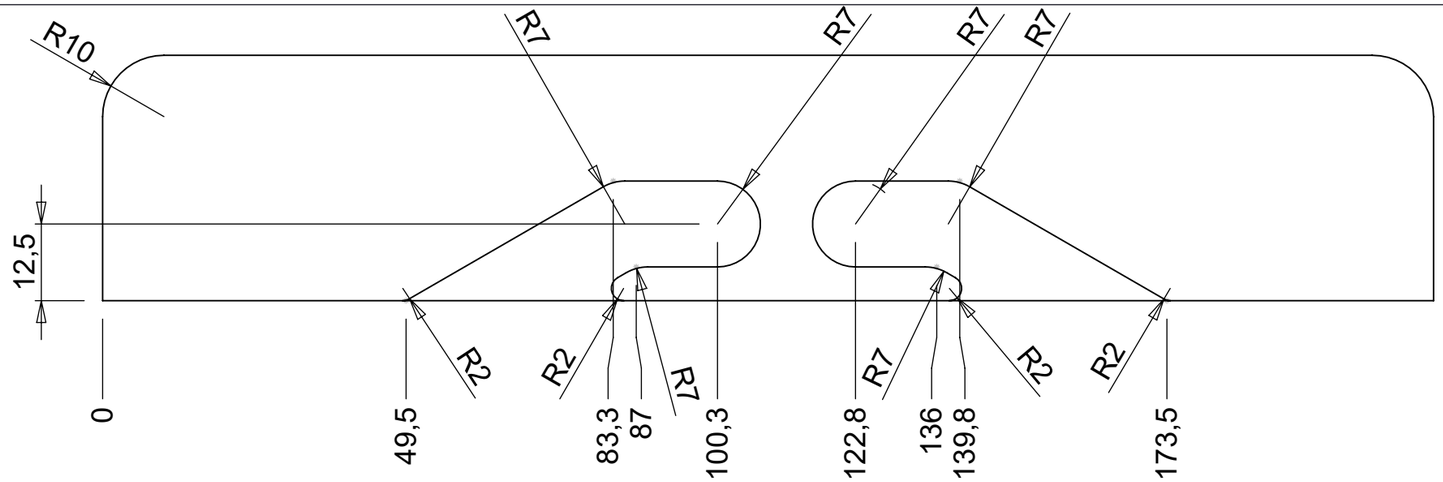
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Locking block	120	33	26	2000-05-1527	Alu. 6082-T6	

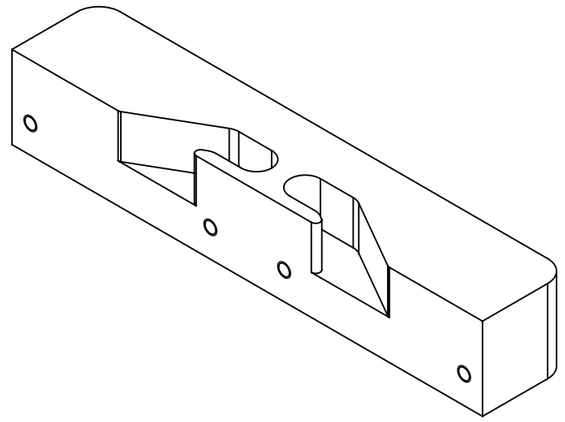
Iss.	Changes	Date	Name

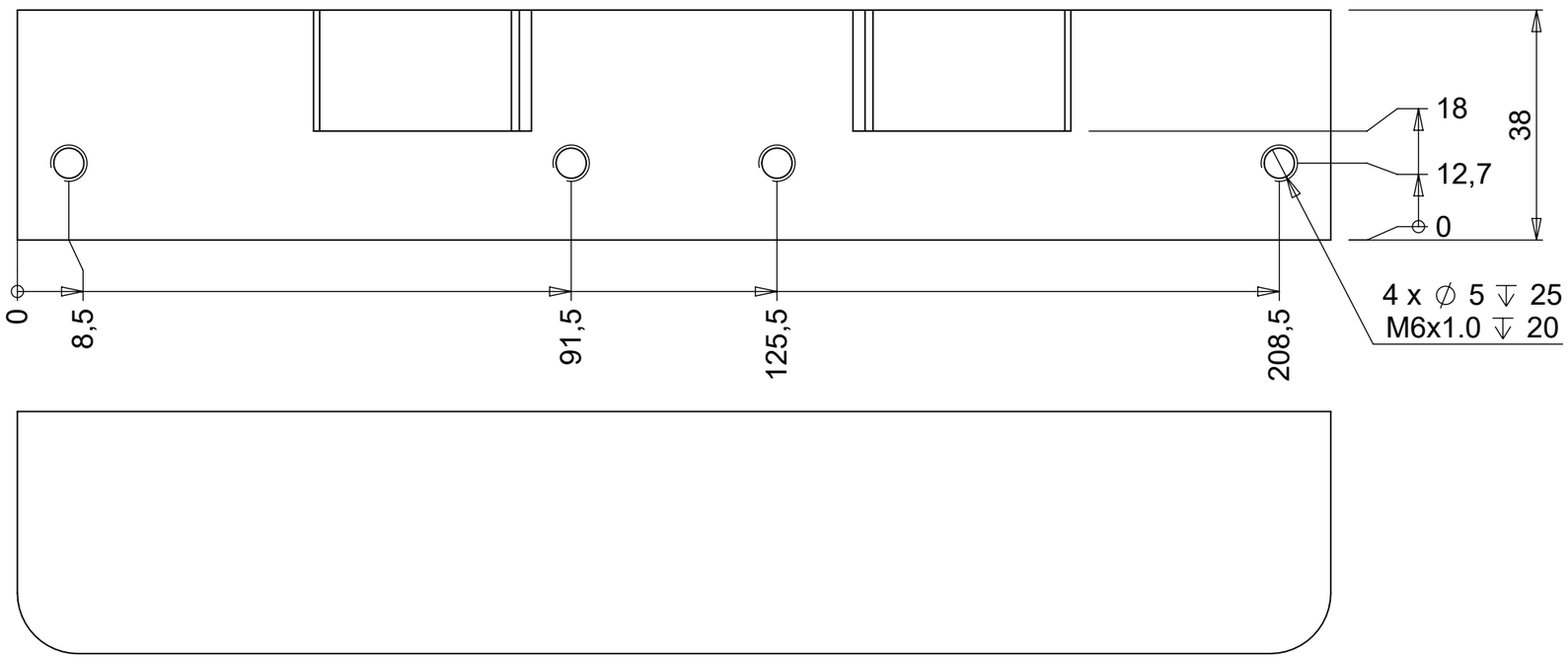
Projection

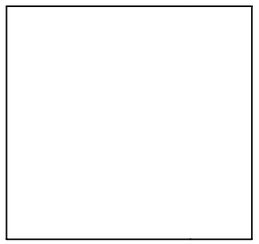
Size A3

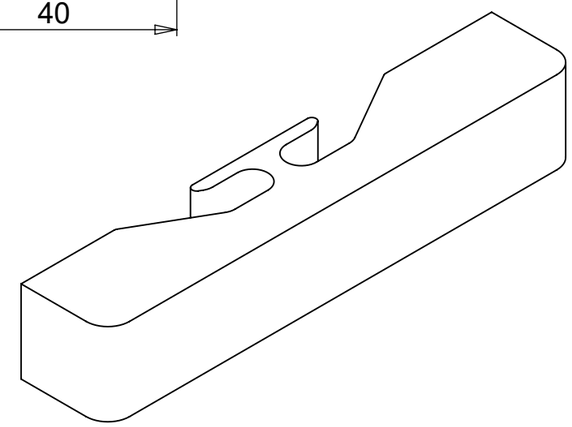
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Scale: 1:1	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	01-04-2019	2000-05-1528	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ±2
Checked: HS	12-04-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-05-2019	Sheet : 1 of 1		
Mass: 0.81 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Doorkeeper**

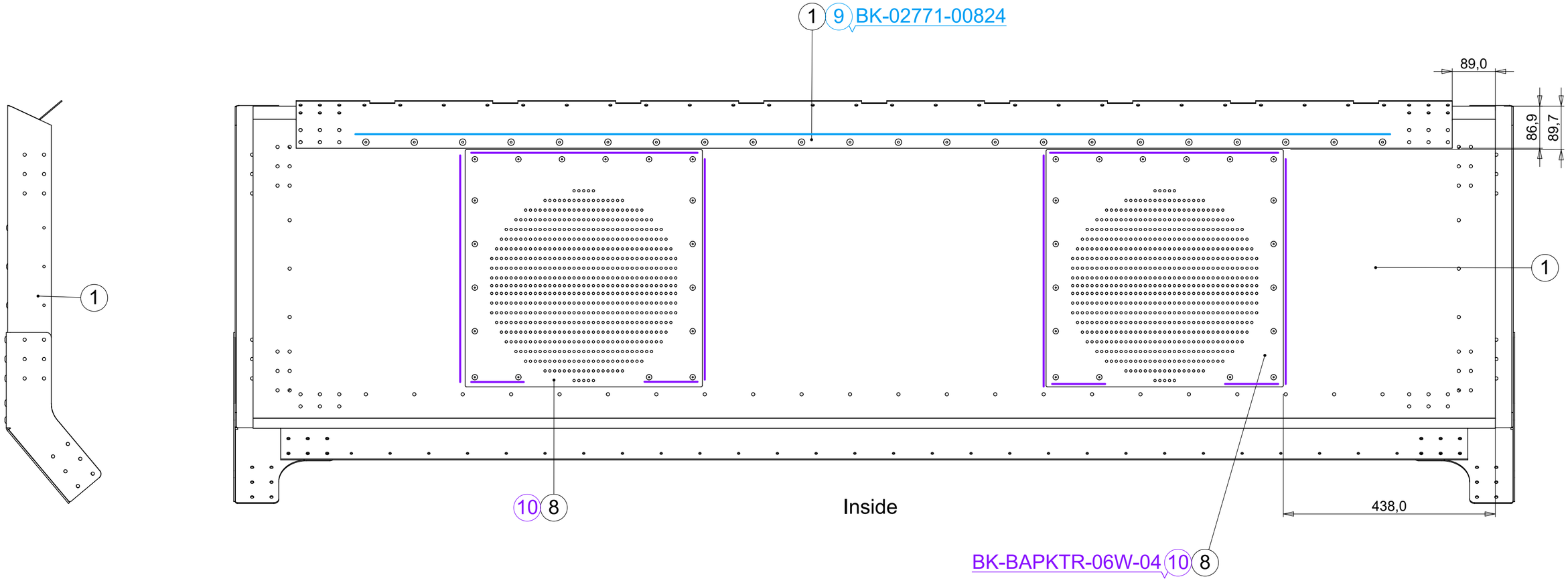
Iss.	Changes	Date	Name

Projection

Size A3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Doorkeeper	217	40	38	2000-05-1528	Alu. 6082-T6	

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
10	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
9	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
8	2	Grill	490	490	2	2000-05-1525	Alu. 5754-H22	
7	1	Slanted corner gusset	401,2	368,4	3	2000-05-0506	Alu. 5754-H22	Bend with V30
6	1	Outer frame sheet	665,5	173,8	3	2000-05-0390	Alu. 5754-H22	Bend with V30
5	1	Outer Frame sheet	665,5	173,8	3	2000-05-0398	Alu. 5754-H22	Bend with V30
4	1	Slanted corner gusset	401,1	368,5	3	2000-05-0490	Alu. 5754-H22	Bend with V30
3	1	Frame sheet	2452	150,5	3	2000-05-0481	Alu. 5754-H22	Bend with V30
2	1	Internal gusset	2388	118,7	2	2000-05-0382	Alu. 5754-H22	Bend with V16
1	1	DBJ panel slanted				2000-05-0358	Assembly	

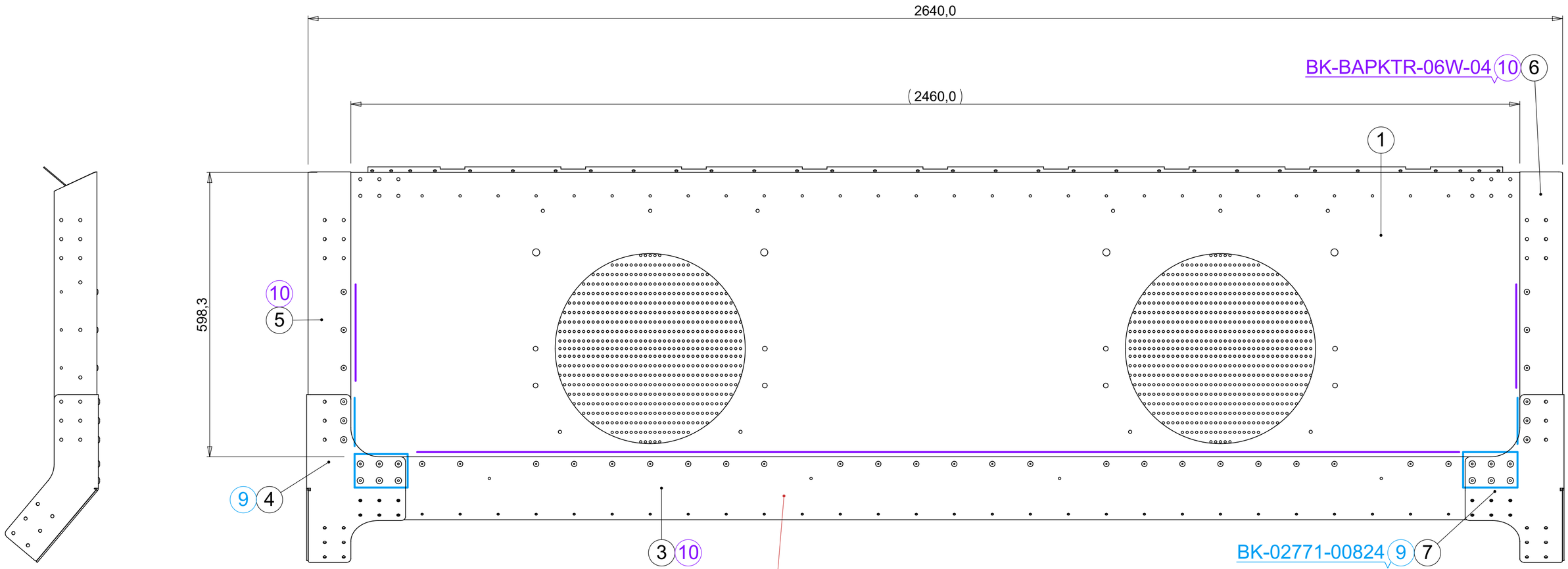
Iss.	Changes	Date	Name

Scale: 1:6 | Date:
Drawn: JWR | 02-04-2019
Checked: VvM | 17-04-2019
Approved: JWR | 09-05-2019
Drawing no. 2000-05-0357 Sheet : 1 of 3
Issue A
Mass: 25.91 kg
Finish:
Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9
Dimensions in mm (u.n.o.)
Title: DBJ panel slanted
Projection
Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Place INNO SEAL on (3)/ (5)/ (6) before placing on panel (1)

Remove excess sealant

Not that the sealant has a dry time of 2 hours.

Outside

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
10	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
9	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
8	2	Grill	490	490	2	2000-05-1525	Alu. 5754-H22	
7	1	Slanted corner gusset	401,2	368,4	3	2000-05-0506	Alu. 5754-H22	Bend with V30
6	1	Outer frame sheet	665,5	173,8	3	2000-05-0390	Alu. 5754-H22	Bend with V30
5	1	Outer Frame sheet	665,5	173,8	3	2000-05-0398	Alu. 5754-H22	Bend with V30
4	1	Slanted corner gusset	401,1	368,5	3	2000-05-0490	Alu. 5754-H22	Bend with V30
3	1	Frame sheet	2452	150,5	3	2000-05-0481	Alu. 5754-H22	Bend with V30
2	1	Internal gusset	2388	118,7	2	2000-05-0382	Alu. 5754-H22	Bend with V16
1	1	DBJ panel slanted				2000-05-0358	Assembly	

Iss.	Changes	Date	Name

Scale: 1:6 | Date:
Drawn: JWR | 02-04-2019
Checked: VvM | 17-04-2019
Approved: JWR | 09-05-2019
Mass: 25.91 kg
Drawing no. 2000-05-0357
Sheet : 1 of 3
Issue A
Finish:
Title: DBJ panel slanted
Projection
Size A2

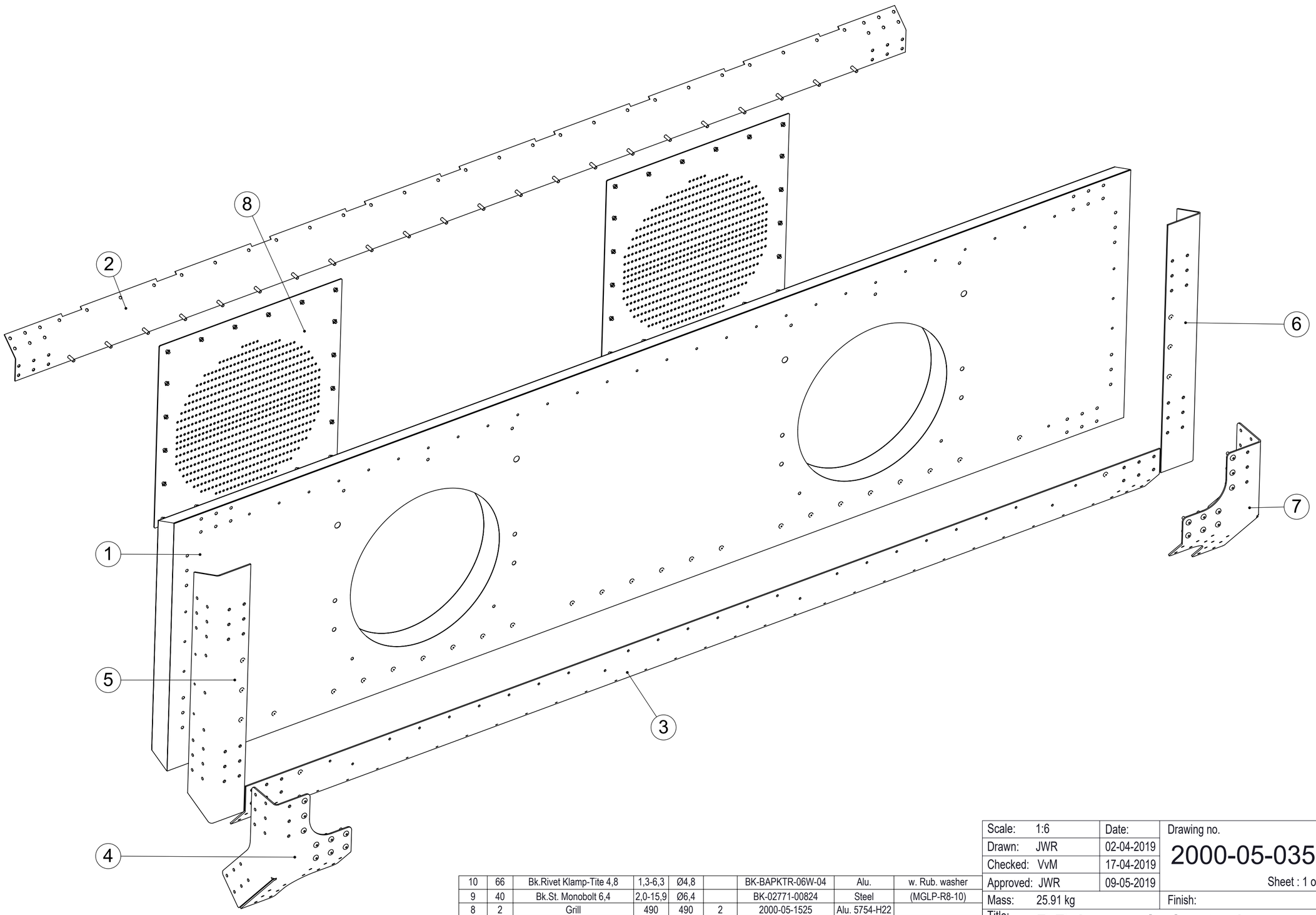
Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
10	66	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
9	40	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
8	2	Grill	490	490	2	2000-05-1525	Alu. 5754-H22	
7	1	Slanted corner gusset	401,2	368,4	3	2000-05-0506	Alu. 5754-H22	Bend with V30
6	1	Outer frame sheet	665,5	173,8	3	2000-05-0390	Alu. 5754-H22	Bend with V30
5	1	Outer Frame sheet	665,5	173,8	3	2000-05-0398	Alu. 5754-H22	Bend with V30
4	1	Slanted corner gusset	401,1	368,5	3	2000-05-0490	Alu. 5754-H22	Bend with V30
3	1	Frame sheet	2452	150,5	3	2000-05-0481	Alu. 5754-H22	Bend with V30
2	1	Internal gusset	2388	118,7	2	2000-05-0382	Alu. 5754-H22	Bend with V16
1	1	DBJ panel slanted				2000-05-0358	Assembly	

Scale:	1:6	Date:	
Drawn:	JWR	02-04-2019	
Checked:	VvM	17-04-2019	
Approved:	JWR	09-05-2019	
Mass:	25.91 kg		

Drawing no. 2000-05-0357 Sheet : 1 of 3

Issue A

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

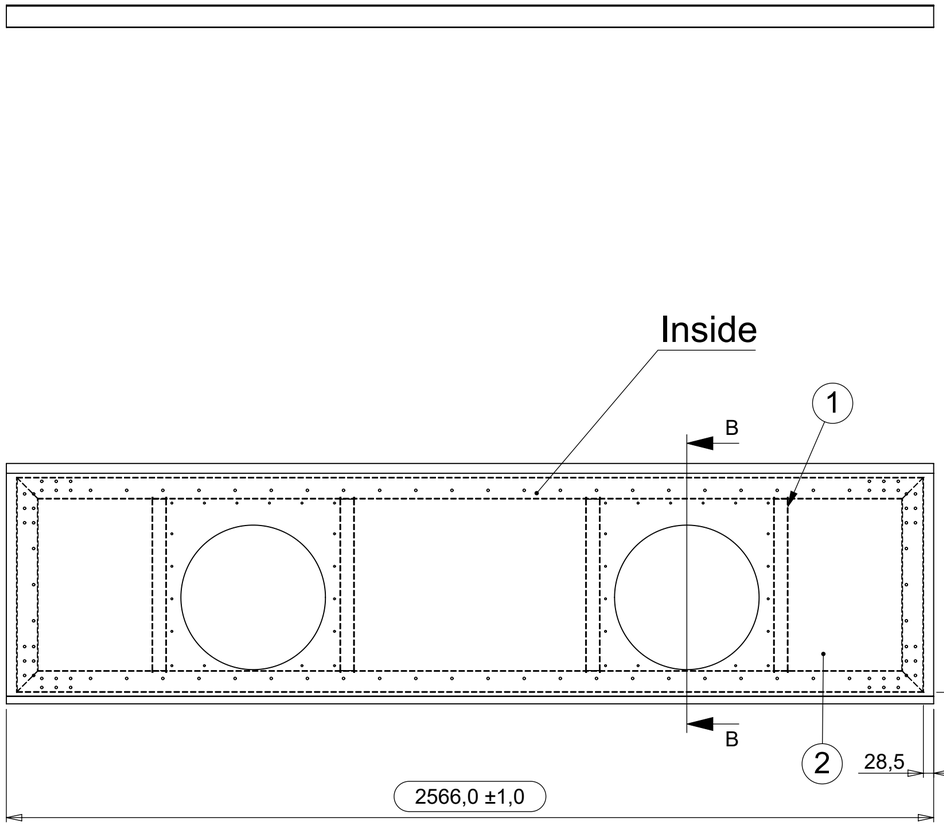
Title: DBJ panel slanted

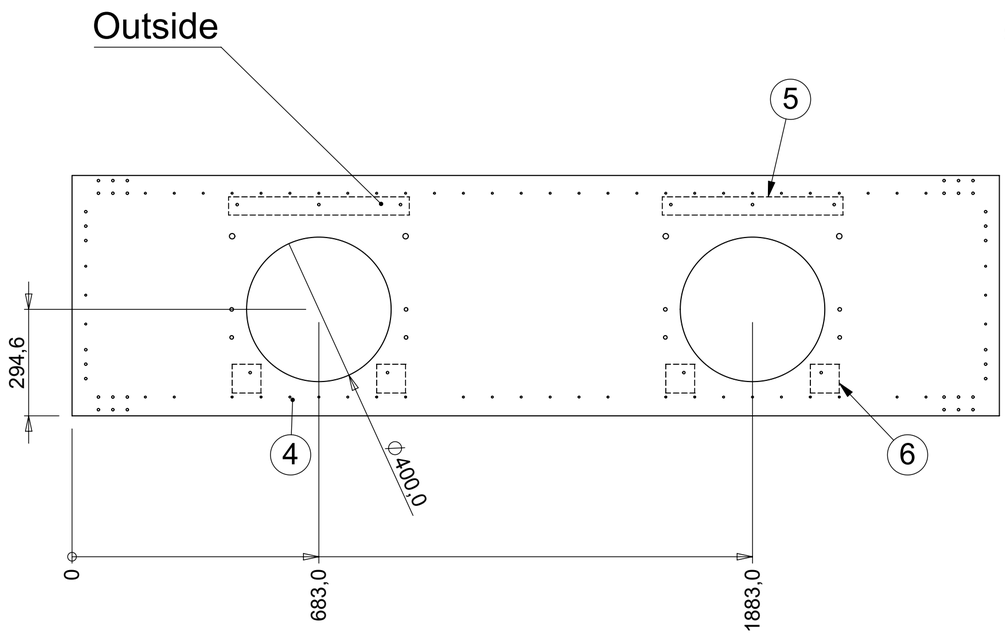
Iss.	Changes	Date	Name

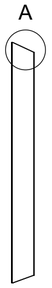
Projection

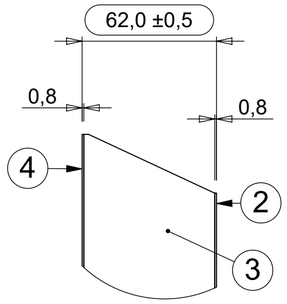
Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

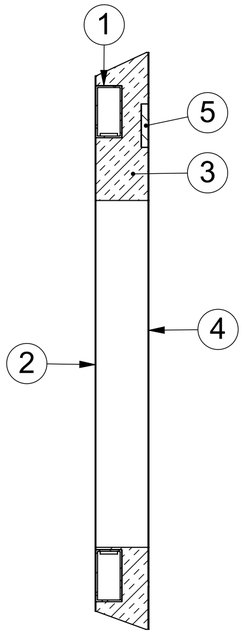








DETAIL A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 5

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	4	Insert	80	80	8	2000-05-1514	Alu. 6082-T6	
5	2	Insert	500	50	8	2000-05-1513	Alu. 6082-T6	
4	1	Outer sheet	2566	665,3	0,8	2000-05-0362	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	665,3	60,4	2000-05-0363	RTM-Plus	
2	1	Inner sheet	2566	617,2	0,8	2000-05-0364	PE-GEGW 0,8 NF	
1	1	Internal panel frame slanted				2000-05-2012	Assembly	

Scale: 1:12	Date:	Drawing no. 2000-05-0358 Sheet : 1 of 2	Issue B
Drawn: JWR	02-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 15.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

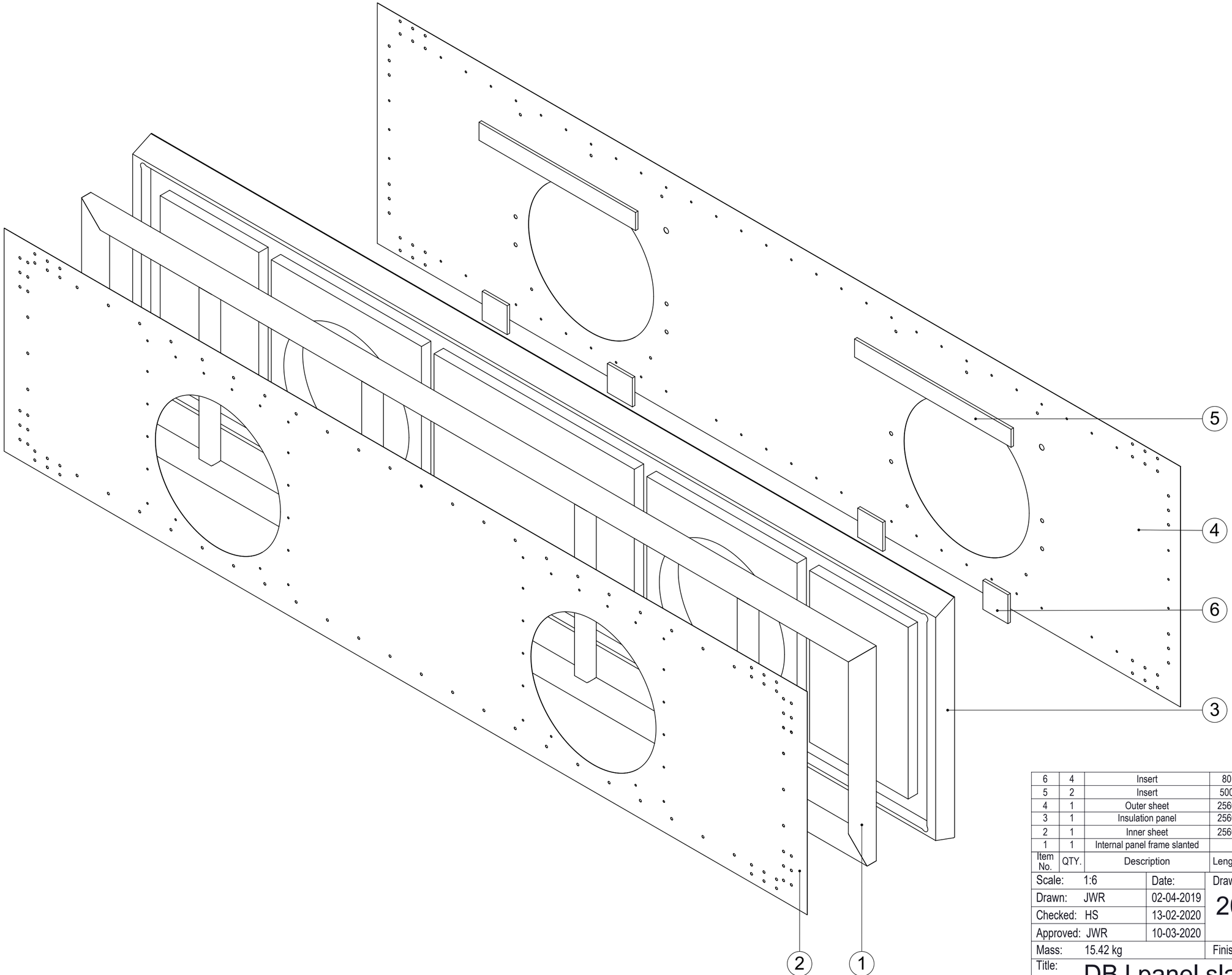
Title: DBJ panel slanted

Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	4	Insert	80	80	8	2000-05-1514	Alu. 6082-T6	
5	2	Insert	500	50	8	2000-05-1513	Alu. 6082-T6	
4	1	Outer sheet	2566	665,3	0,8	2000-05-0362	PE-GEGW 0,8 NF	
3	1	Insulation panel	2566	665,3	60,4	2000-05-0363	RTM-Plus	
2	1	Inner sheet	2566	617,2	0,8	2000-05-0364	PE-GEGW 0,8 NF	
1	1	Internal panel frame slanted				2000-05-2012	Assembly	

Scale: 1:6	Date:	Drawing no. 2000-05-0358 Sheet : 2 of 2	Issue B
Drawn: JWR	02-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 15.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

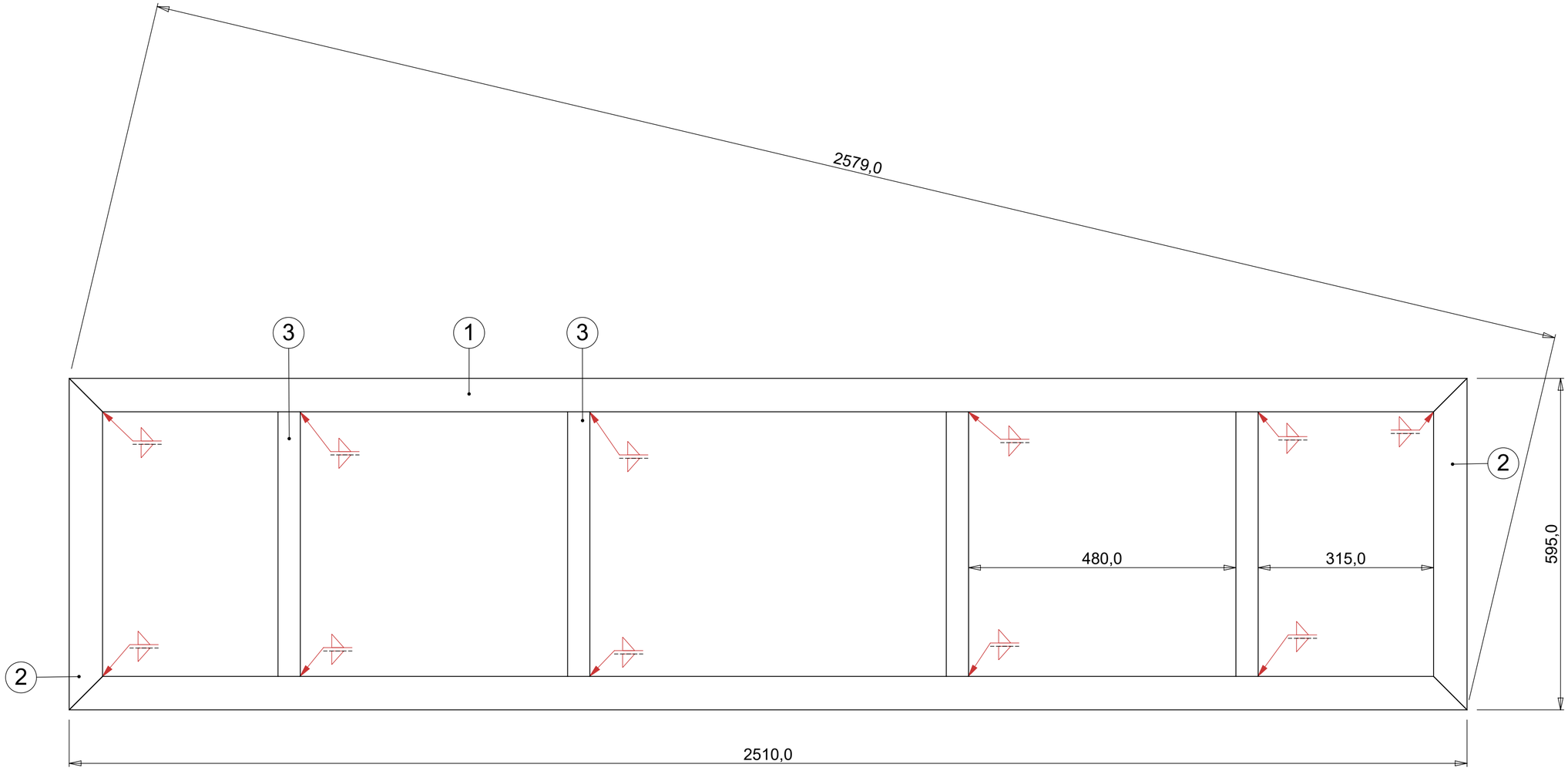
Title: DBJ panel slanted

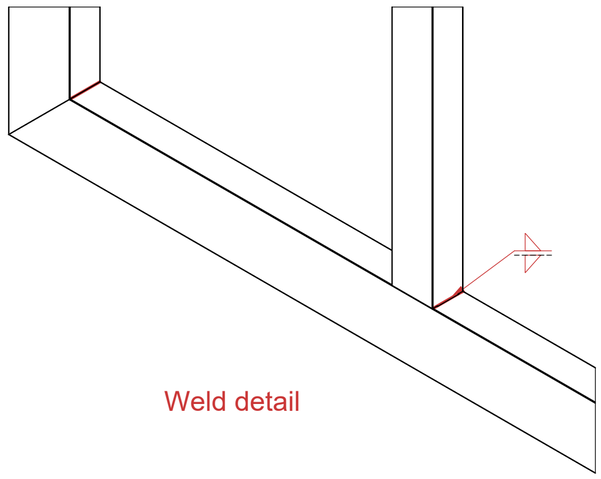
Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Weld detail

Welding according to procedure VRR-W3-090
except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	4	Tube 40x30x2	485	40/30	2	2000-05-0361	Alu. 6060-T66	
2	2	Tube 30x60x2	595	30/60	2	2000-05-0360	Alu. 6060-T66	
1	2	Tube 60x30x2	2510	60/30	2	2000-05-0359	Alu. 6060-T66	

Scale: 1:6	Date:	Drawing no. 2000-05-2012 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 6.90 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

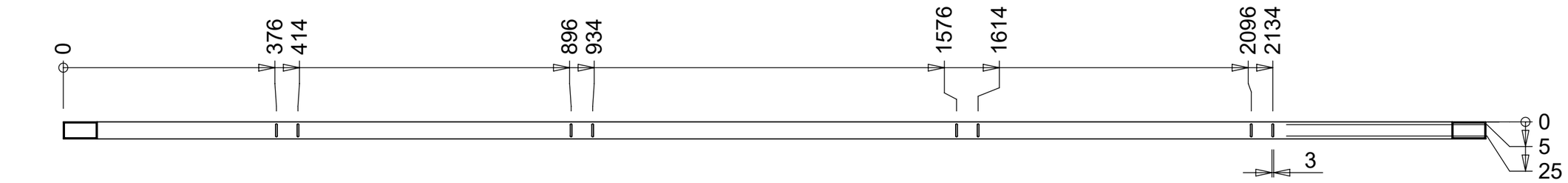
Title: **Internal panel frame slanted**

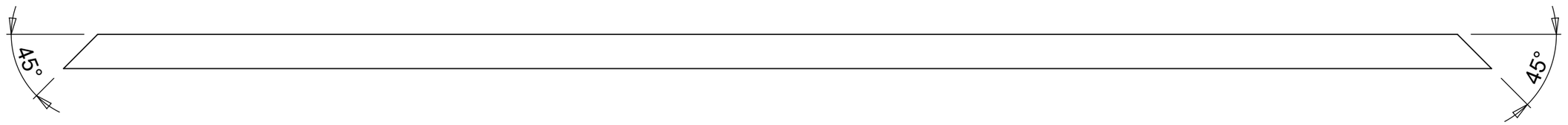
Iss.	Changes	Date	Name

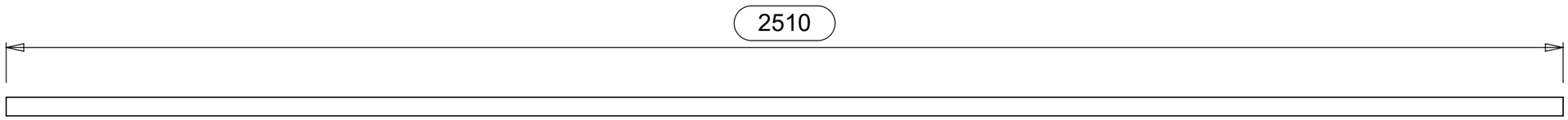
Projection

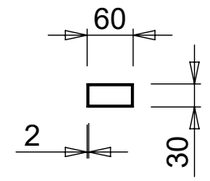
Size A2

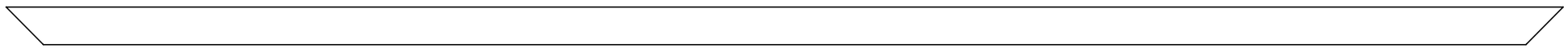
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

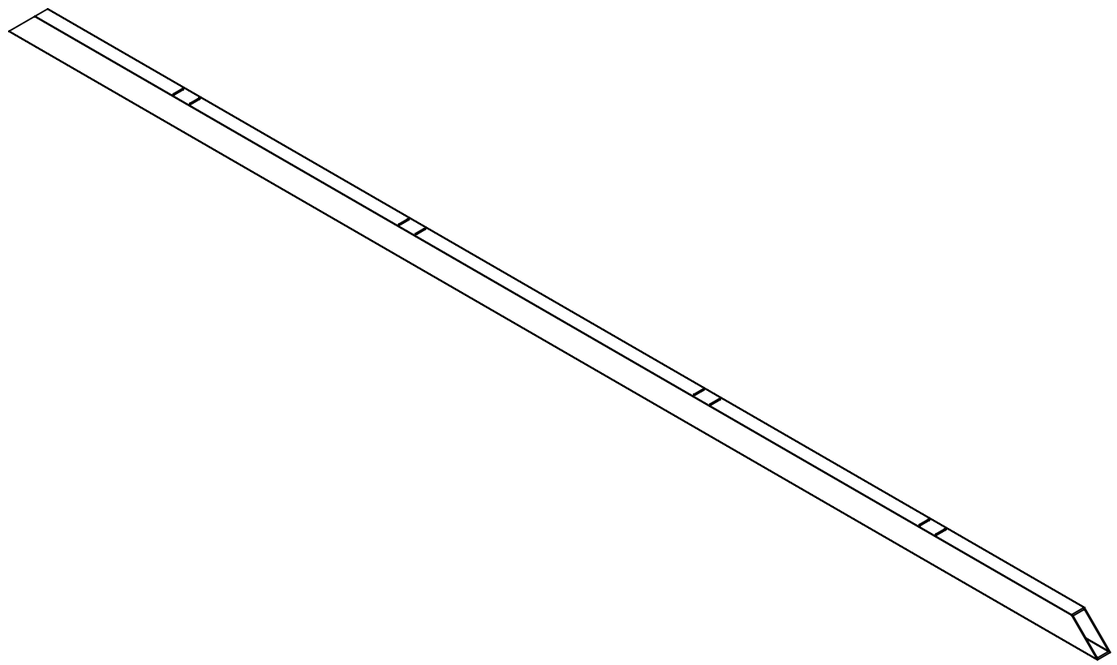












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 60x30x2	2510	60/30	2	2000-05-0359	Alu. 6060-T66	

Scale: 1:8	Date:	Drawing no.: 2000-05-0359 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 2.27 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

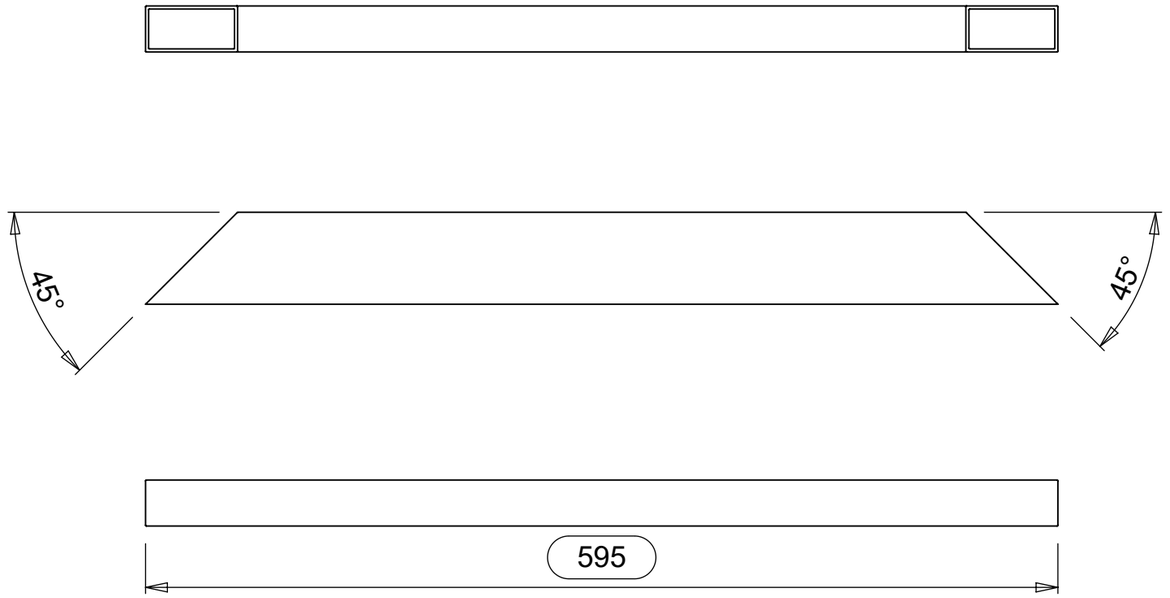
Title: **Tube 60x30x2**

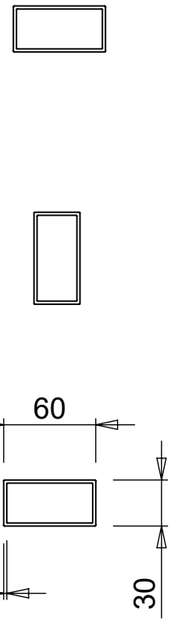
Iss.	Changes	Date	Name

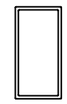
Projection

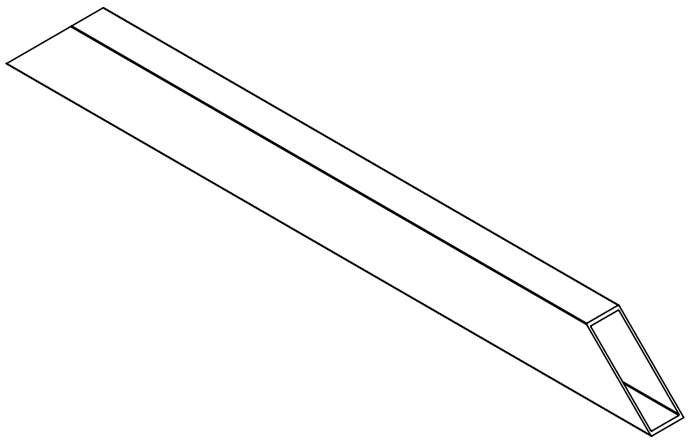
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 30x60x2	595	30/60	2	2000-05-0360	Alu. 6060-T66	

Scale:	1:4	Date:	
Drawn:	JWR	02-04-2019	
Checked:	HS	12-04-2019	
Approved:	JWR	09-05-2019	
Mass:	0.50 kg		

Drawing no.: 2000-05-0360

Sheet : 1 of 1

Issue: A

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

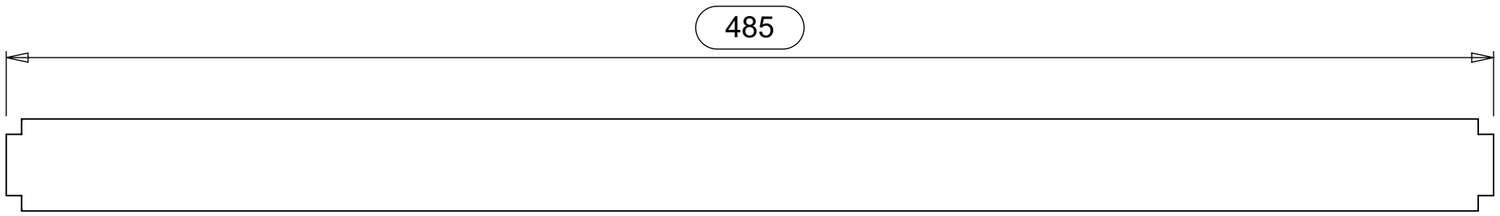
Title: Tube 30x60x2

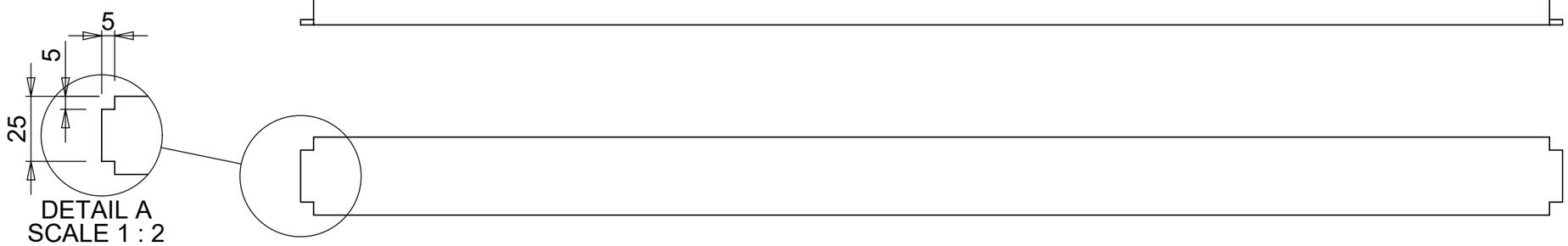
Iss.	Changes	Date	Name

Projection

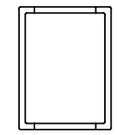
Size A3

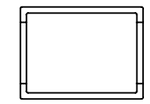
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

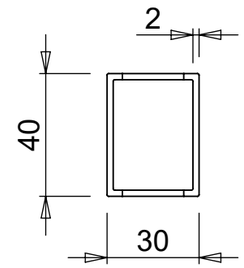


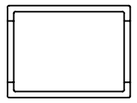


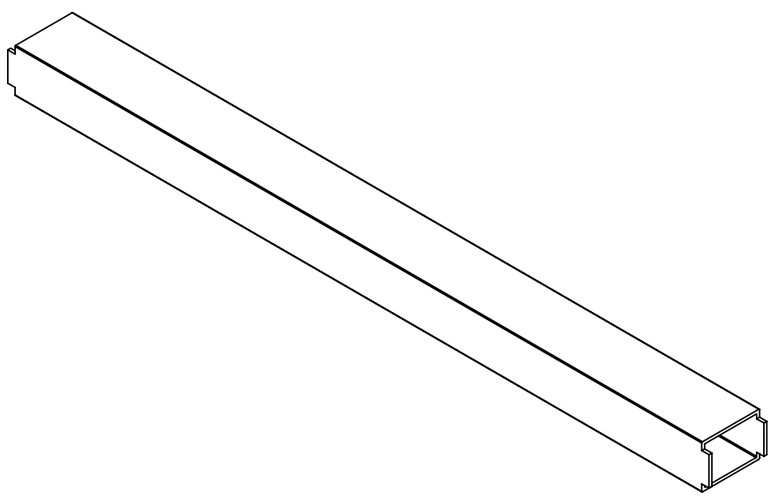
DETAIL A
SCALE 1 : 2
applies on both sides











1	1	Tube 40x30x2	485	40/30	2	2000-05-0361	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-0361 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.34 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

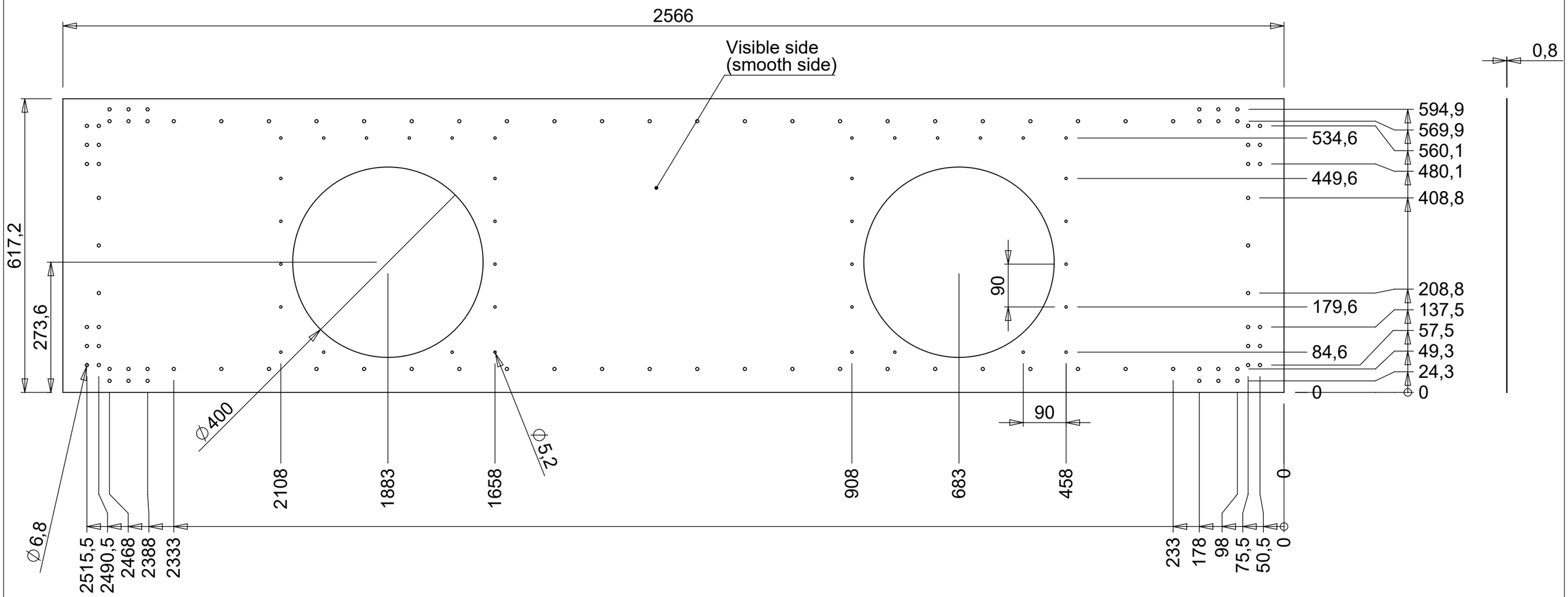
Title: Tube 40x30x2

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Inner sheet	2566	617,2	0,8	2000-05-0364	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:8	Date:	Drawing no.: 2000-05-0364	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 1.67 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

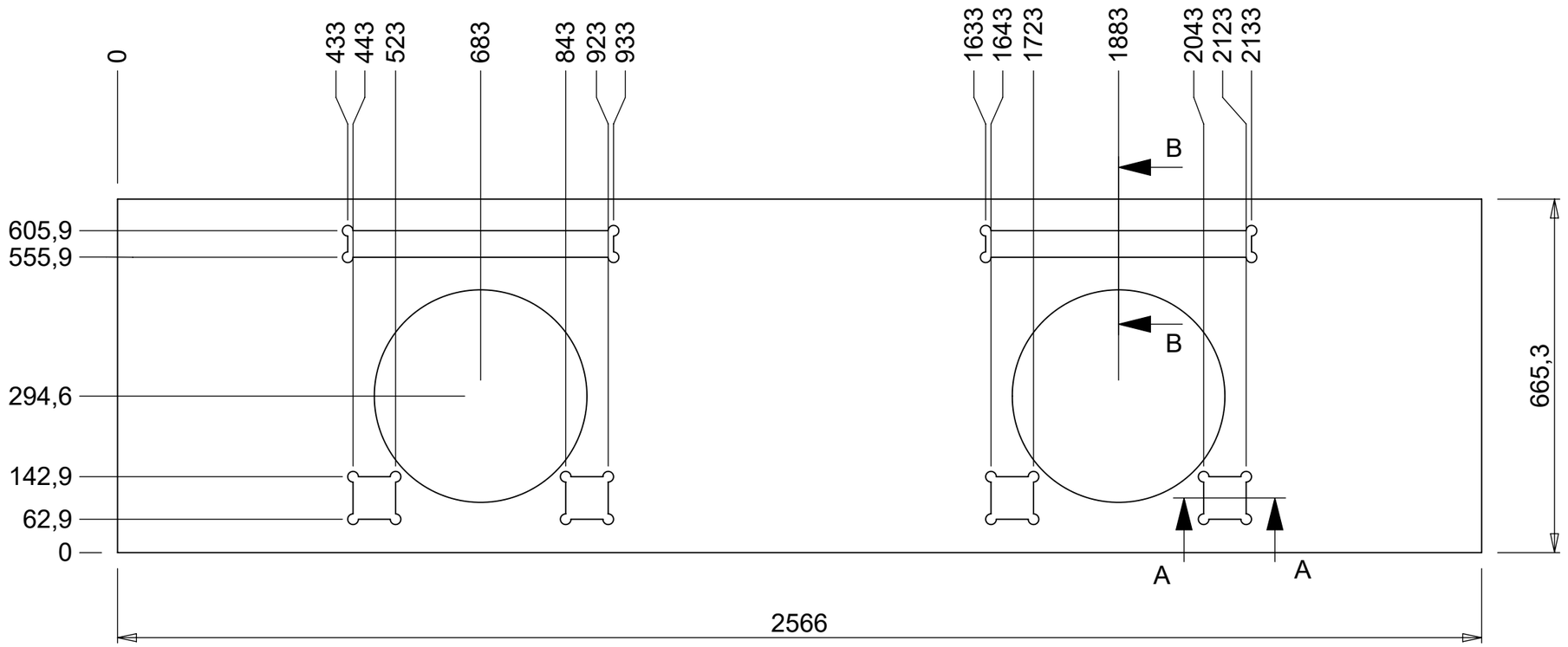
Title: **Inner sheet**

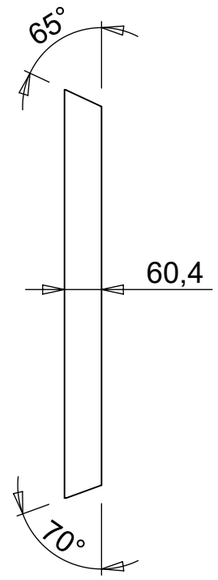
Iss.	Changes	Date	Name

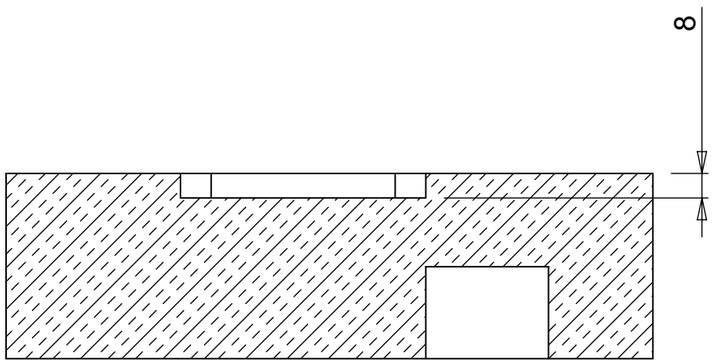
Projection

Size A3

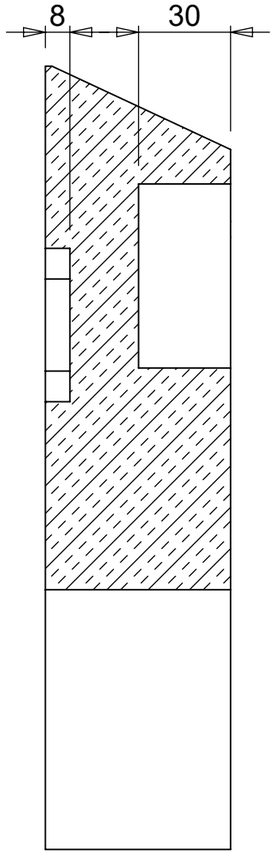
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







SECTION A-A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation panel	2566	665,3	60,4	2000-05-0363	RTM-Plus	

Scale: 1:10	Date:	Drawing no.: 2000-05-0363	Issue B
Drawn: JWR	02-04-2019	Sheet : 1 of 2	
Checked: HS	13-02-2020		
Approved: JWR	09-03-2020		
Mass: 3.39 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

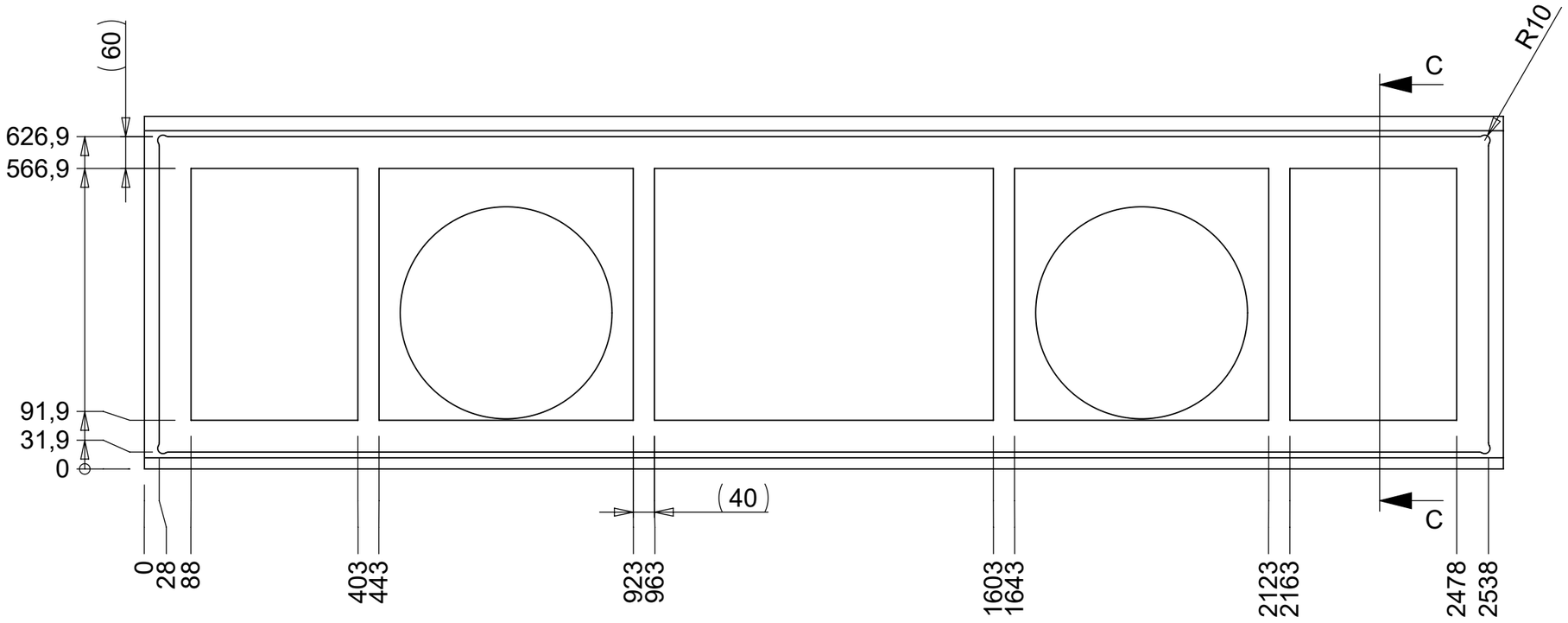
Title: **Insulation panel**

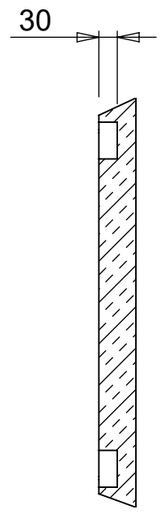
Iss.	Changes	Date	Name
B	~cut-out	09-03-2020	MVE

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





SECTION C-C

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation panel	2566	665,3	60,4	2000-05-0363	RTM-Plus	

Scale: 1:10	Date:	Drawing no.: 2000-05-0363	Issue: B
Drawn: JWR	02-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	09-03-2020	Sheet : 2 of 2	
Mass: 3.39 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Insulation panel**

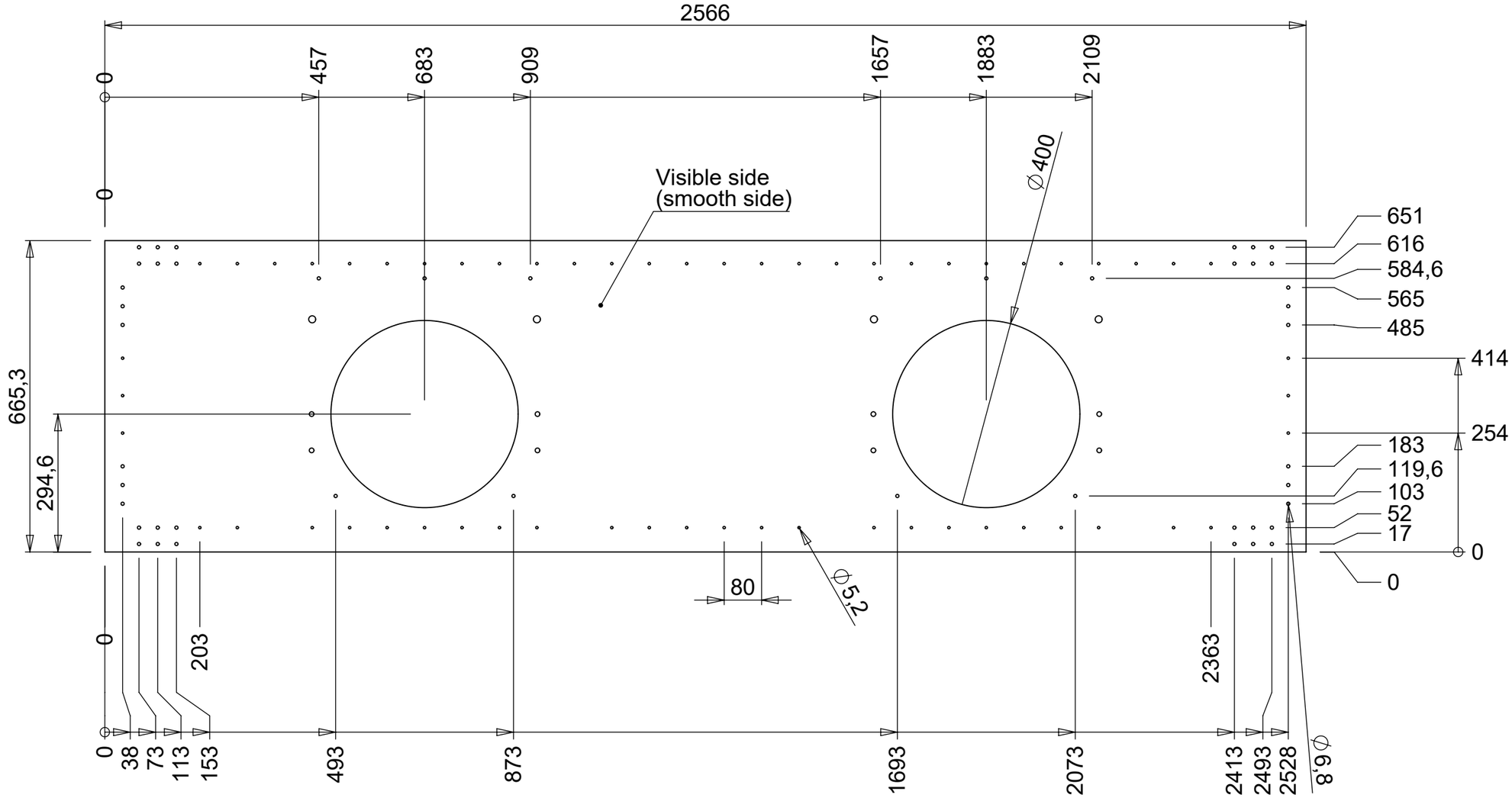
Iss.	Changes	Date	Name
B	~cut-out	09-03-2020	MVE

Projection

Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Outer sheet	2566	665,3	0,8	2000-05-0362	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-0362 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.82 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

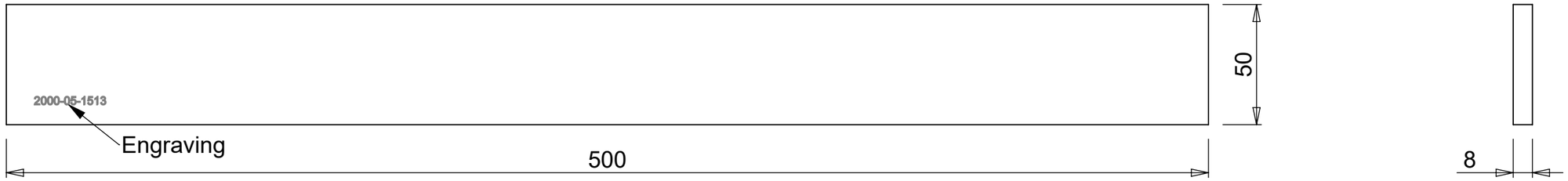
Title: **Outer sheet**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Insert	500	50	8	2000-05-1513	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1513	Issue: A
Drawn: JWR	02-04-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: HS	12-04-2019		< 7 / ±0.2; 7 30 / ±0.3; 30 120 / ±0.5; 120 400 / ±0.8; 400 1000 / ±1.0; 1000 2000 / ±1.4; 2000 > / ± 2
Approved: JWR	09-05-2019		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.54 kg		Finish:	Dimensions in mm (u.n.o.)

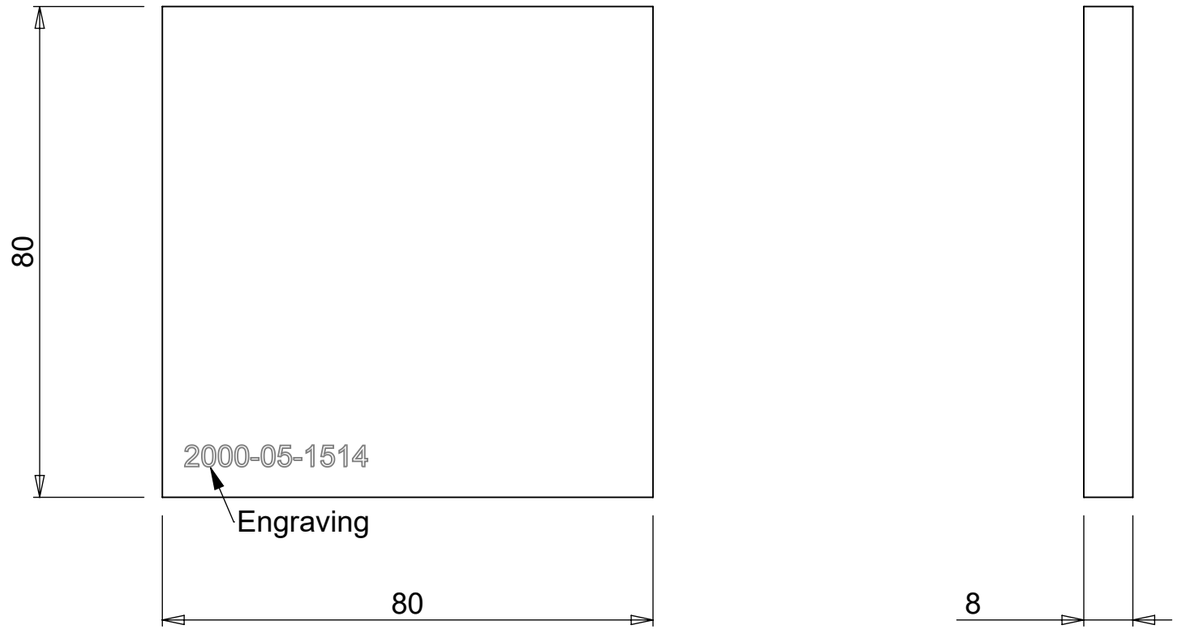
Title: **Insert**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insert	80	80	8	2000-05-1514	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-05-1514 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.14 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

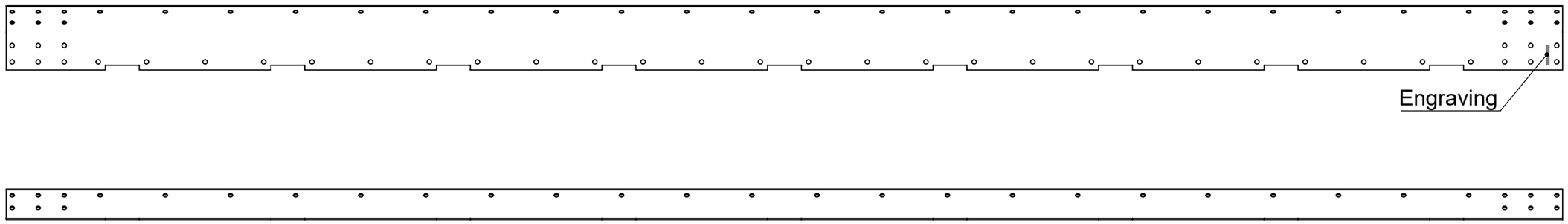
Title: **Insert**

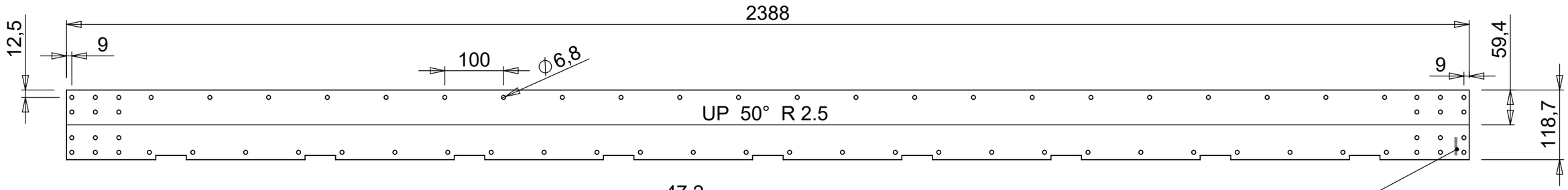
Iss.	Changes	Date	Name

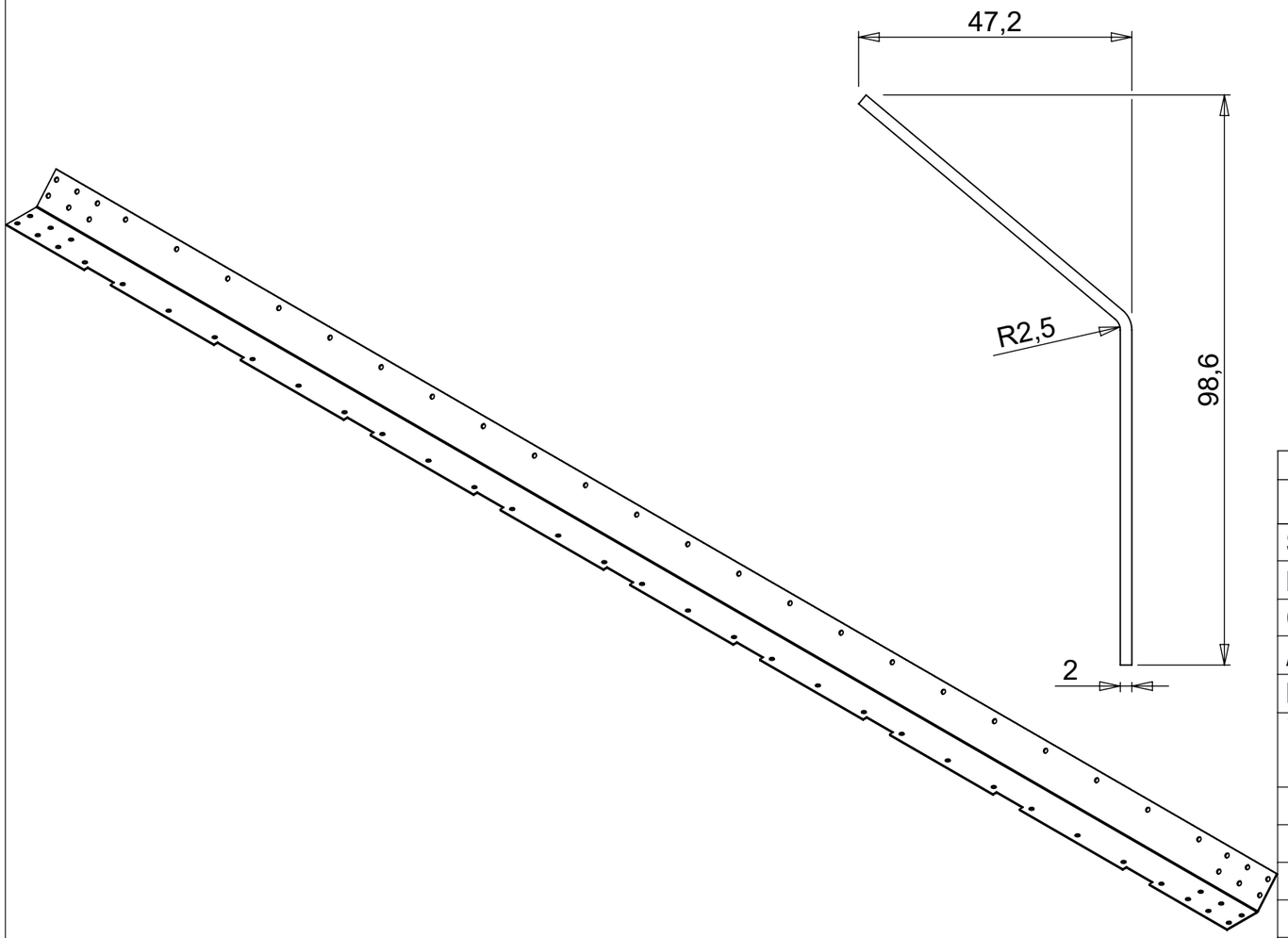
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Internal gusset	2388	118,7	2	2000-05-0382	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.: 2000-05-0382 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

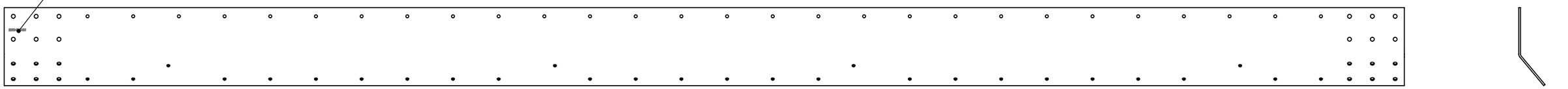
Title: **Internal gusset**

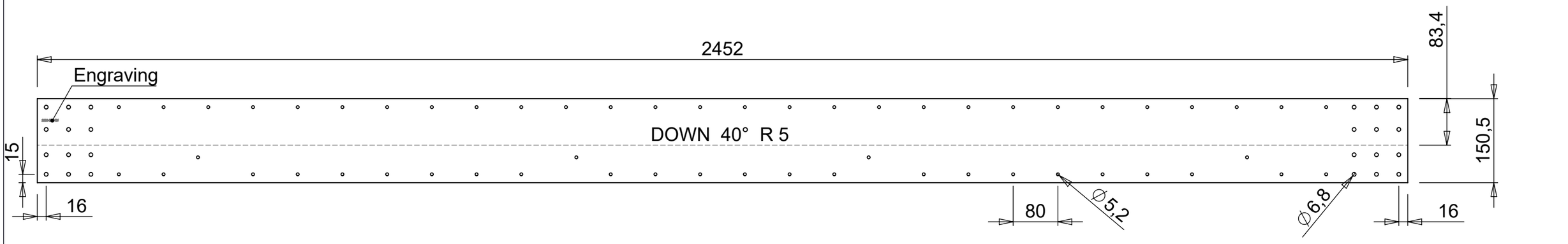
Iss.	Changes	Date	Name

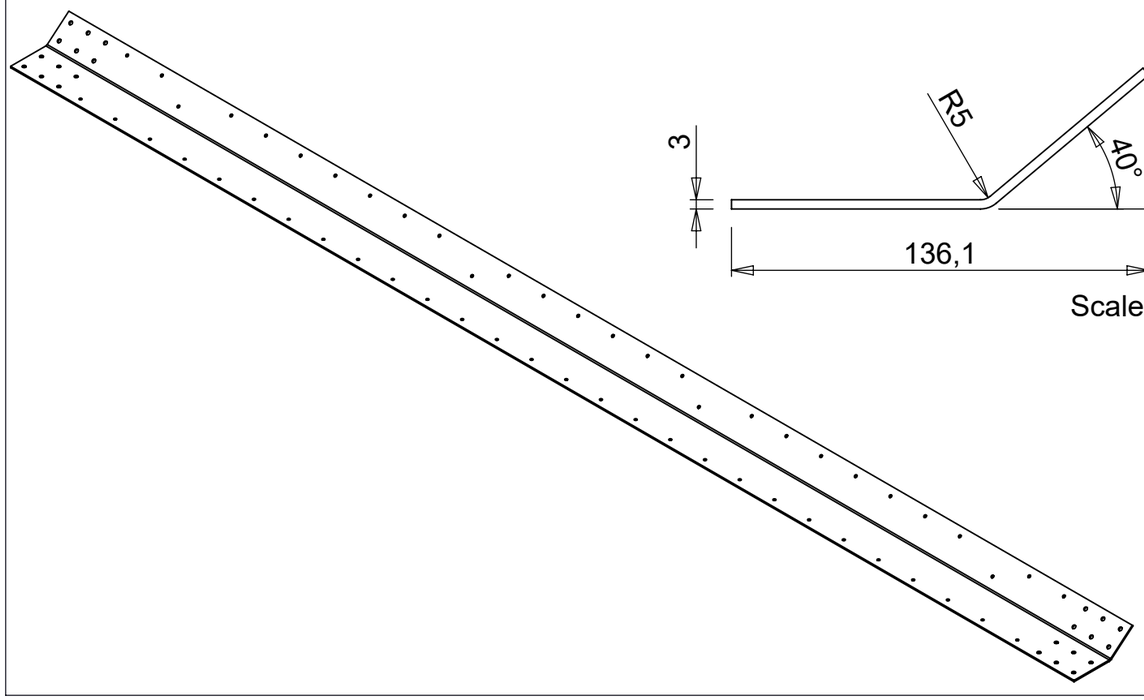
Projection

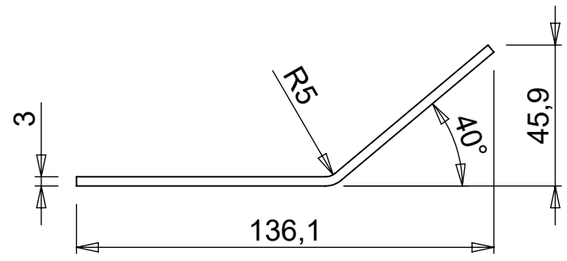
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Scale 1:2

1	1	Frame sheet	2452	150,5	3	2000-05-0481	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: JWR	02-04-2019	2000-05-0481	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: HS	12-04-2019	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	09-05-2019			
Mass: 2.98 kg		Finish:		Dimensions in mm (u.n.o.)

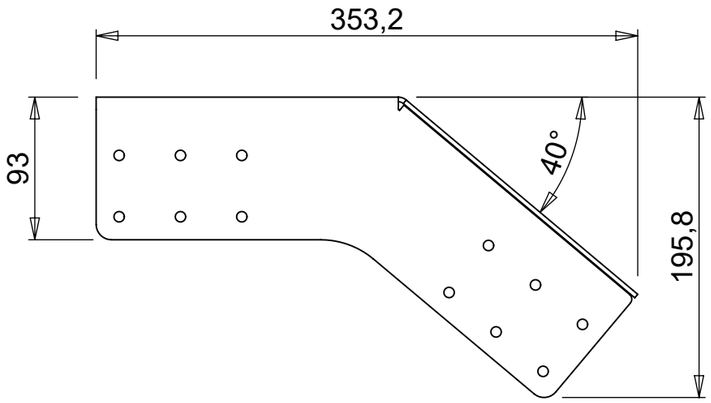
Title: **Frame sheet**

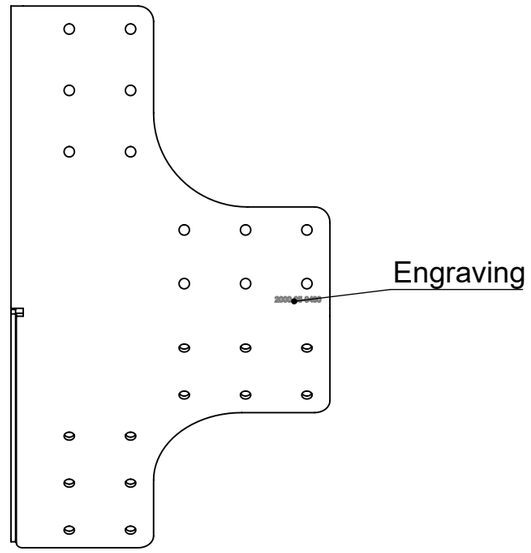
Iss.	Changes	Date	Name

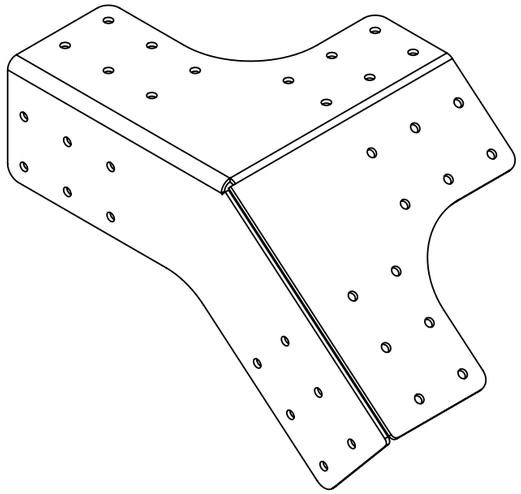
Projection

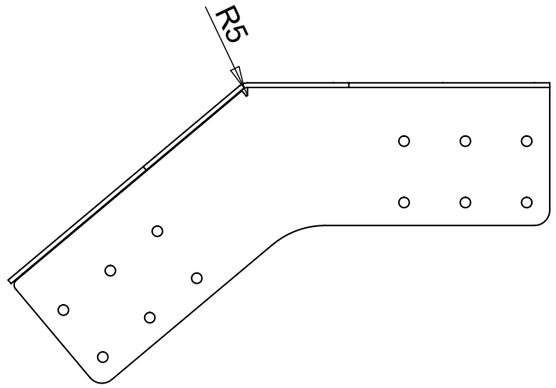
Size A3

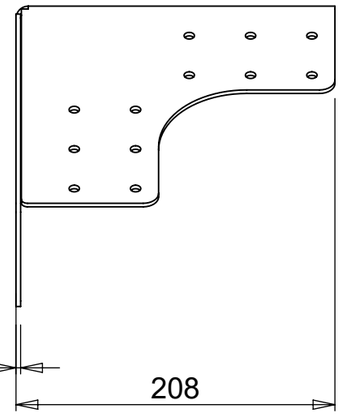
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

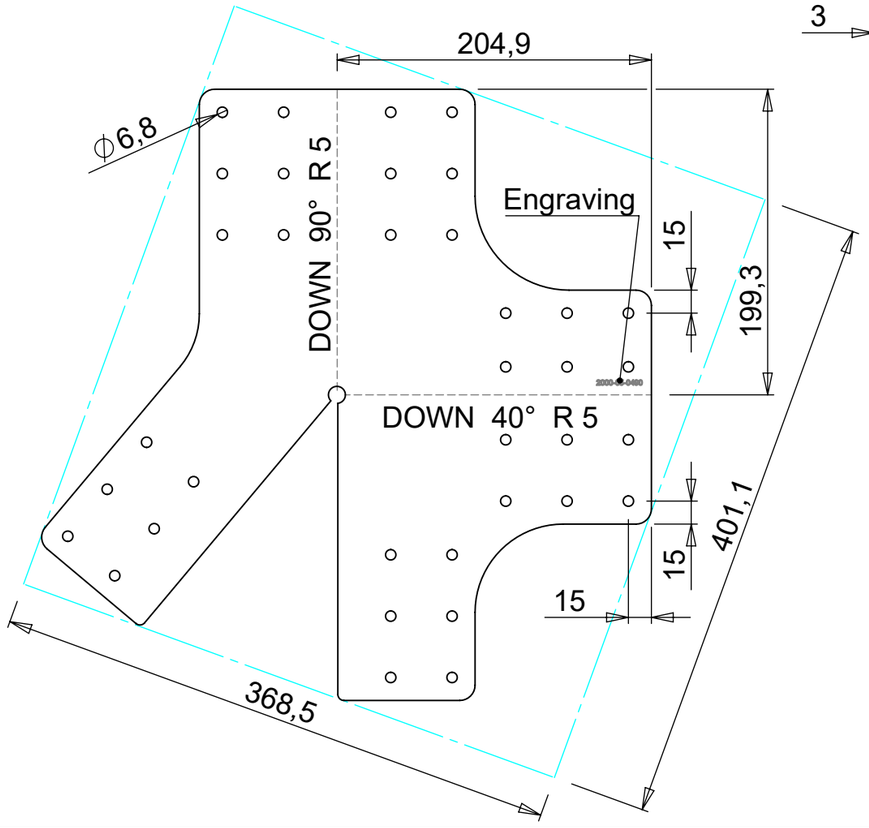












1	1	Slanted corner gusset	401,1	368,5	3	2000-05-0490	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-0490	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.70 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

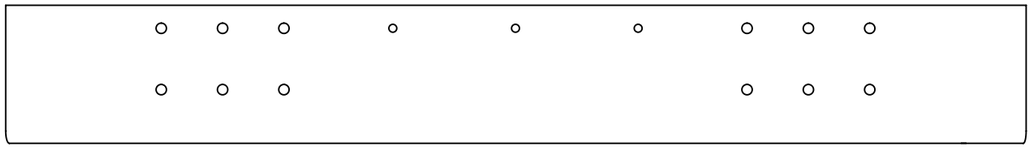
Title: **Slanted corner gusset**

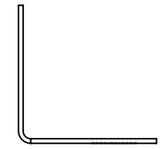
Iss.	Changes	Date	Name

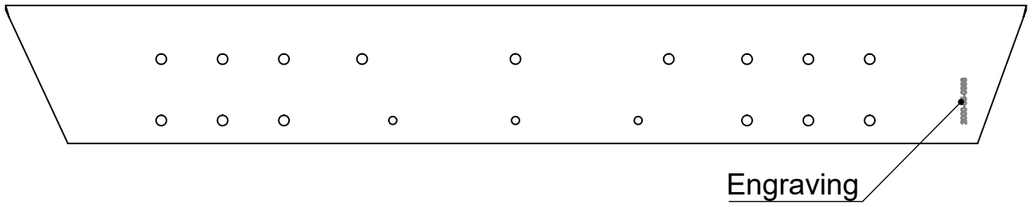
Projection

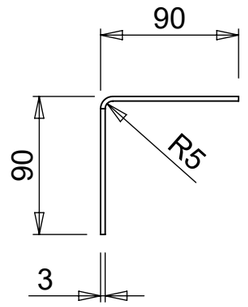
Size A3

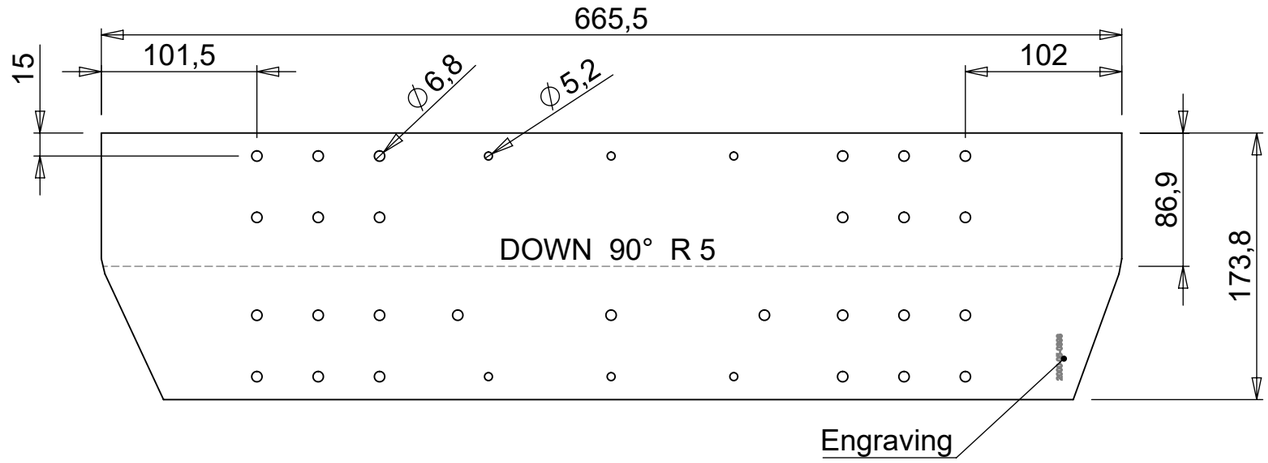
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

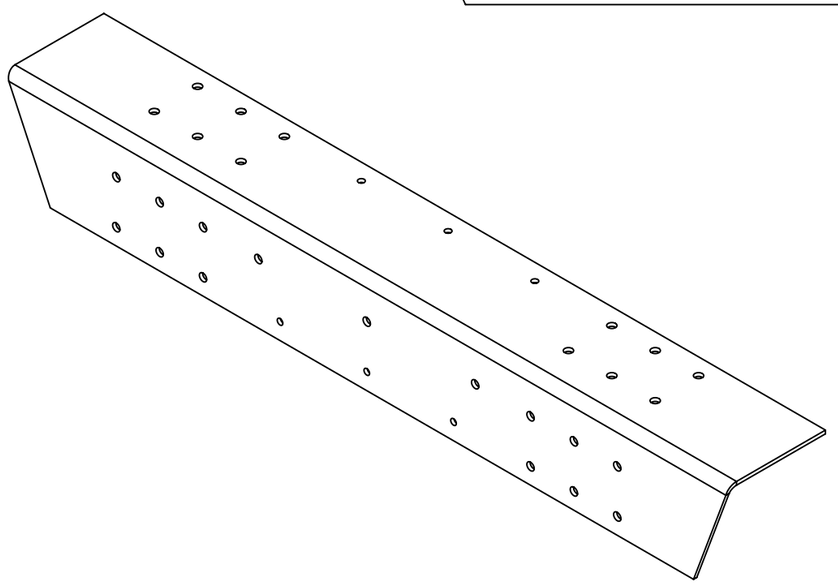












1	1	Outer Frame sheet	665,5	173,8	3	2000-05-0398	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-0398 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.90 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

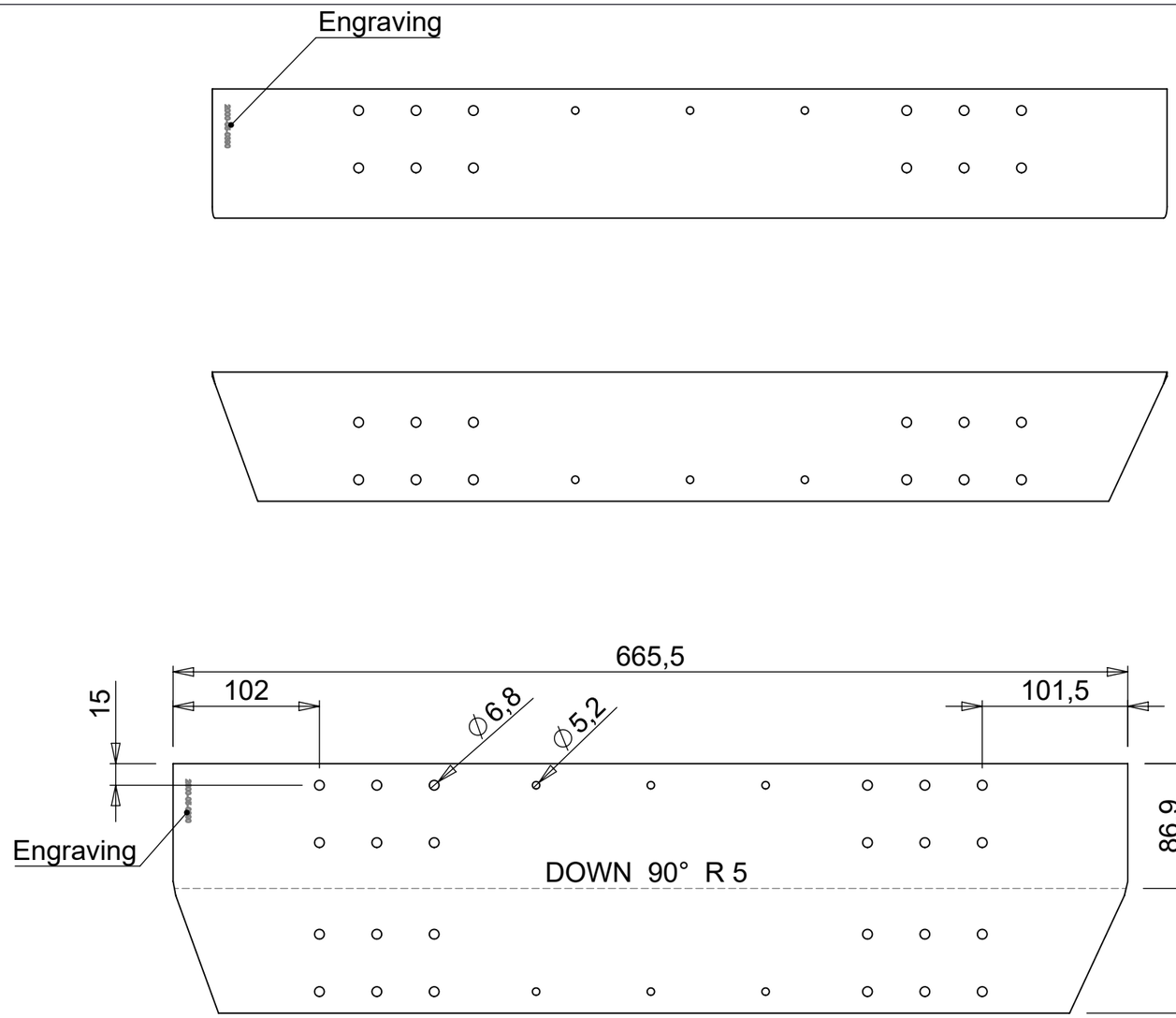
Title: Outer Frame sheet

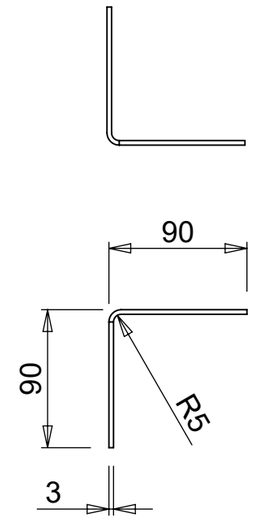
Iss.	Changes	Date	Name

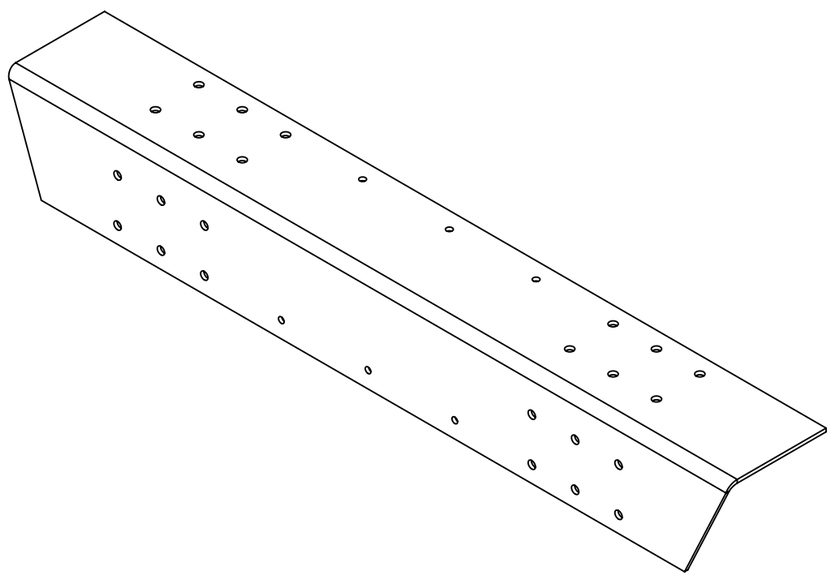
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Outer frame sheet	665,5	173,8	3	2000-05-0390	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-0390 Sheet : 1 of 1	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.91 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

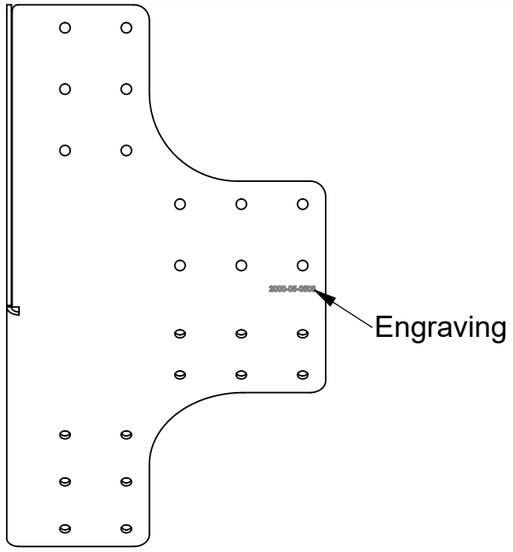
Title: **Outer frame sheet**

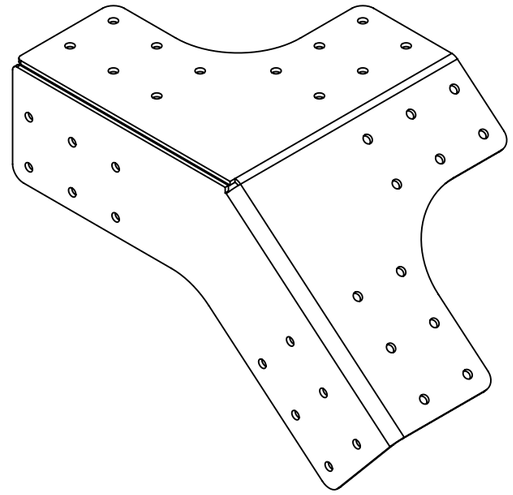
Iss.	Changes	Date	Name

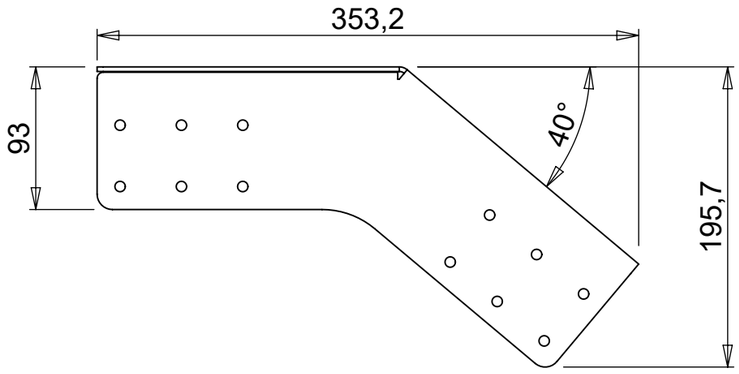
Projection

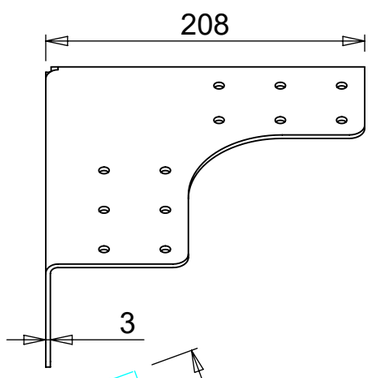
Size A3

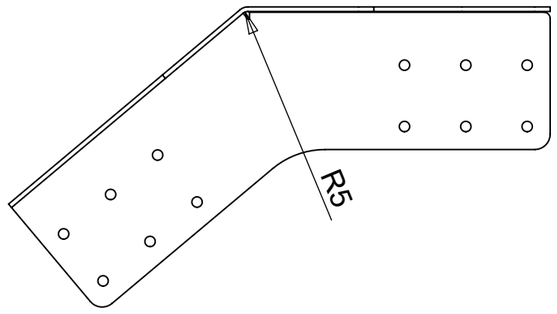
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

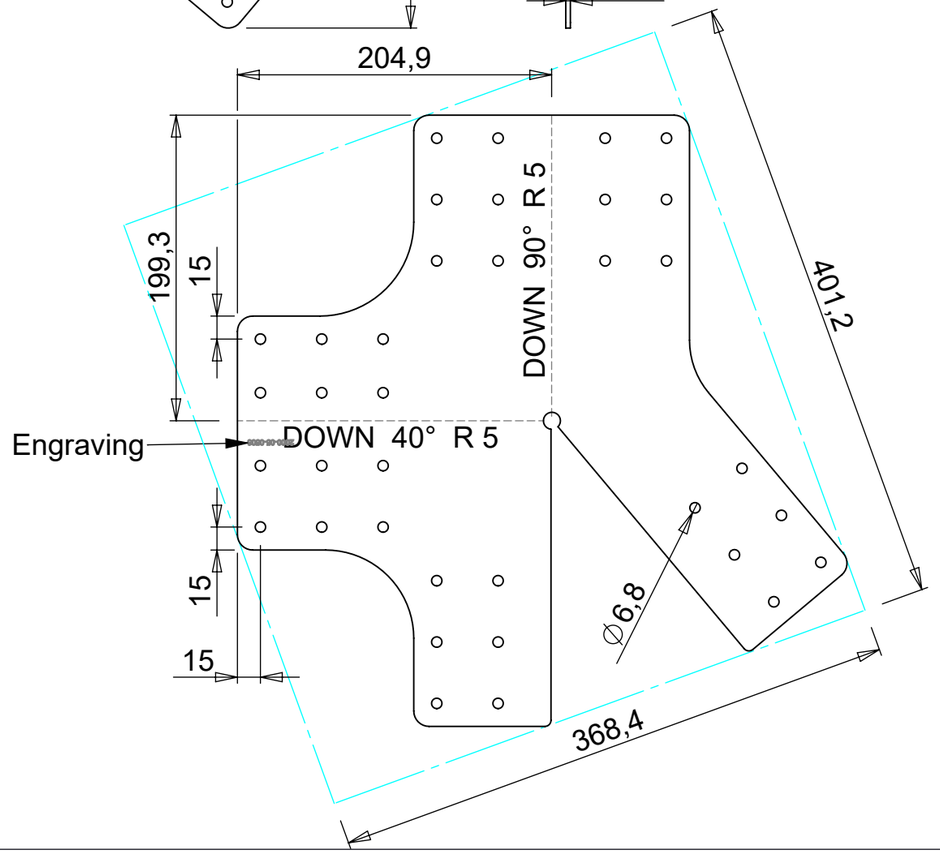












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Slanted corner gusset	401,2	368,4	3	2000-05-0506	Alu. 5754-H22	Bend with V30

Scale: 1:4	Date:	Drawing no.: 2000-05-0506	Issue A
Drawn: JWR	02-04-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.70 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

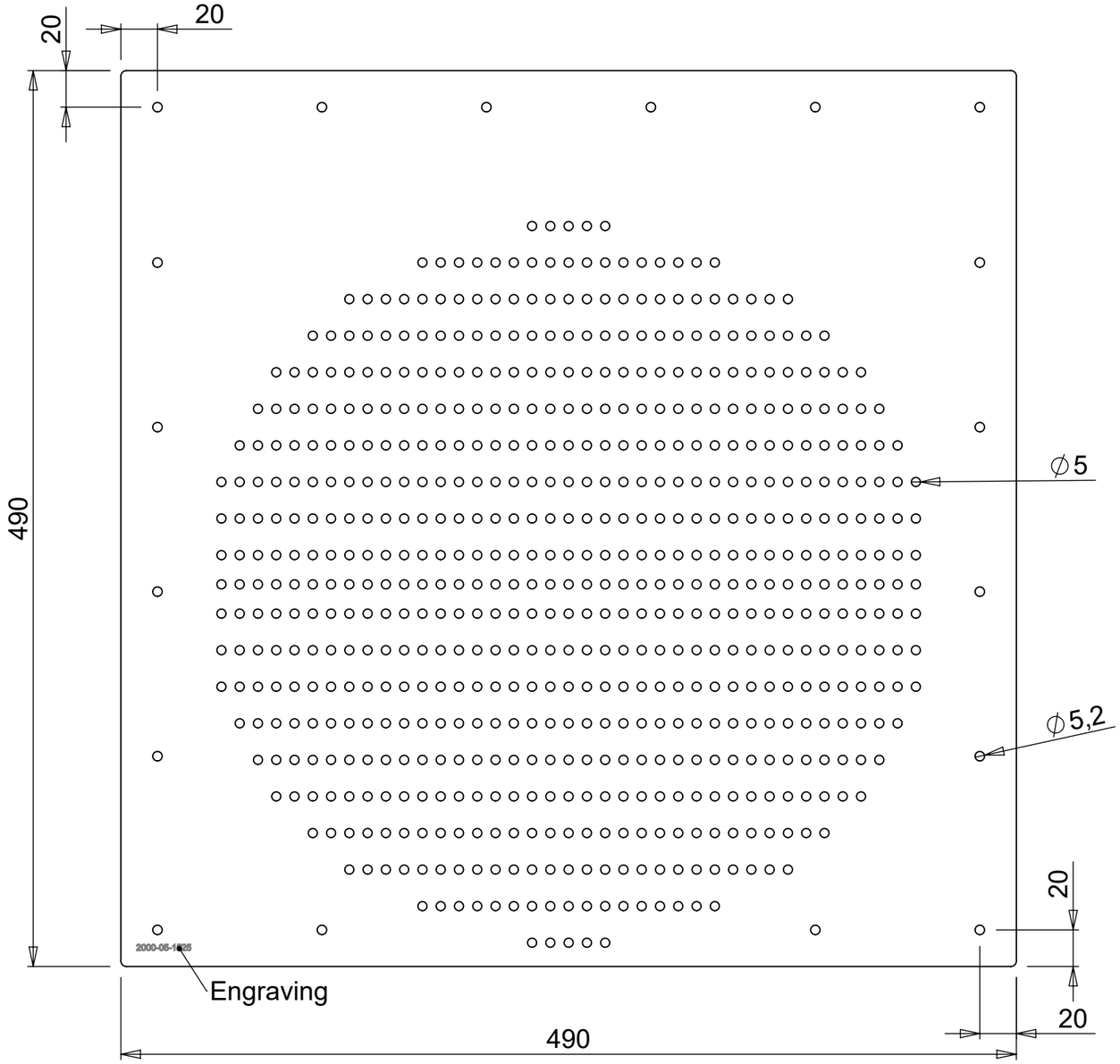
Title: **Slanted corner gusset**

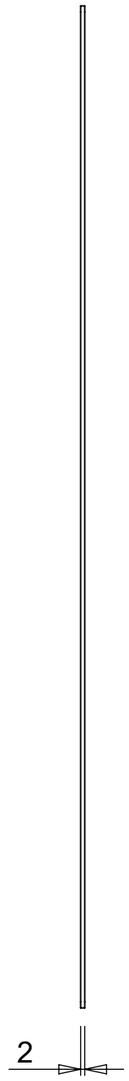
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Grill	490	490	2	2000-05-1525	Alu. 5754-H22	

Scale: 1:3	Date:	Drawing no.: 2000-05-1525	Issue: A
Drawn: JWR	02-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 1.23 kg		Finish:	
Title: Grill			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

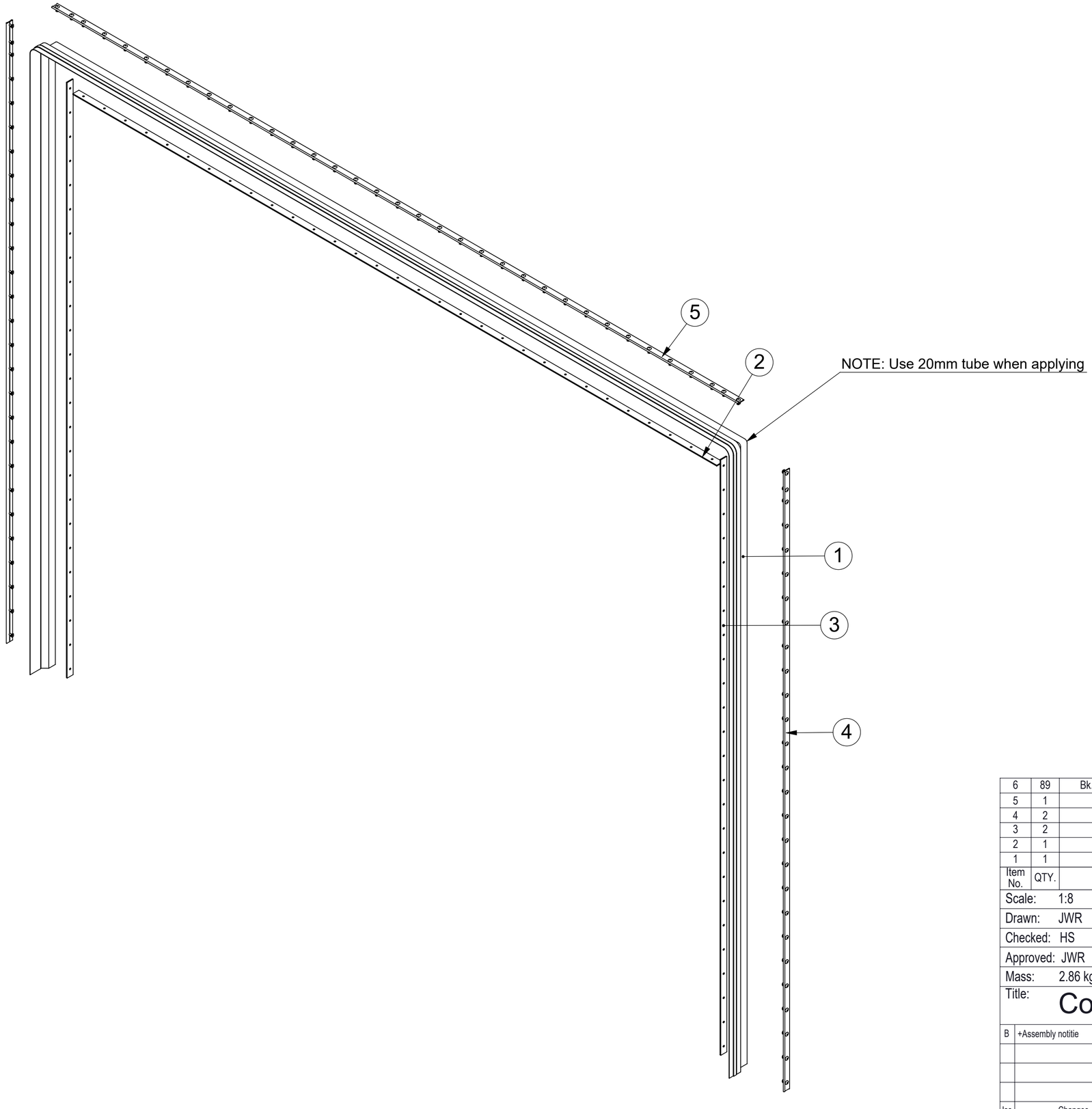
Dimensions in mm (u.n.o.)

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	89	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
5	1	Extrusion RR148	2620	23/3,5	2,2	2000-05-1687	Alu. 6063-T66	
4	2	Extrusion RR148	2050	23/3,5	2,2	2000-05-1690	Alu. 6063-T66	
3	2	Fill strip cover	1969	23	3	2000-05-1689	Alu. 5754-H22	
2	1	Fill strip cover	2458	23	3	2000-05-1688	Alu. 5754-H22	
1	1	Cover connection				2000-05-1641	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-2107 Sheet : 1 of 2	Issue B
Drawn: JWR	08-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 2.86 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

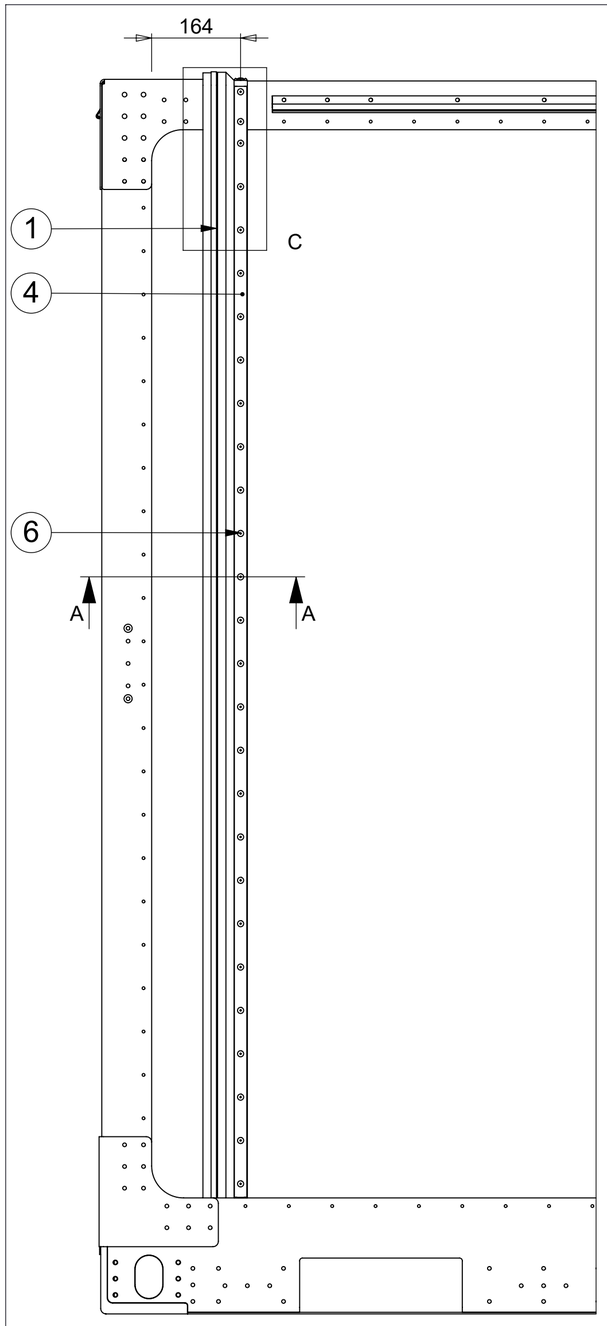
Title: # Cover connection assy

Iss.	Changes	Date	Name
B	+Assembly notitie	10-03-2020	MVE

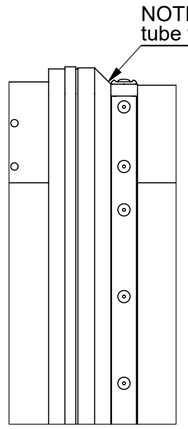
Projection

Size A2

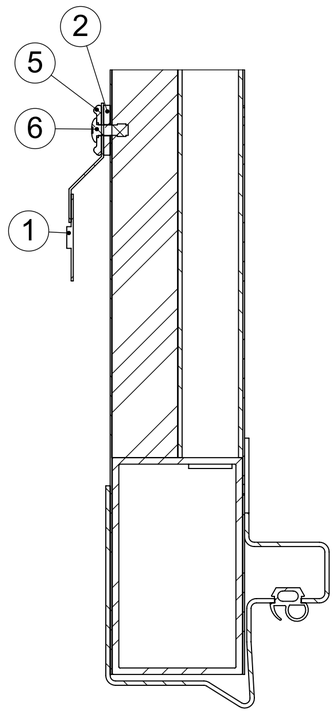
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



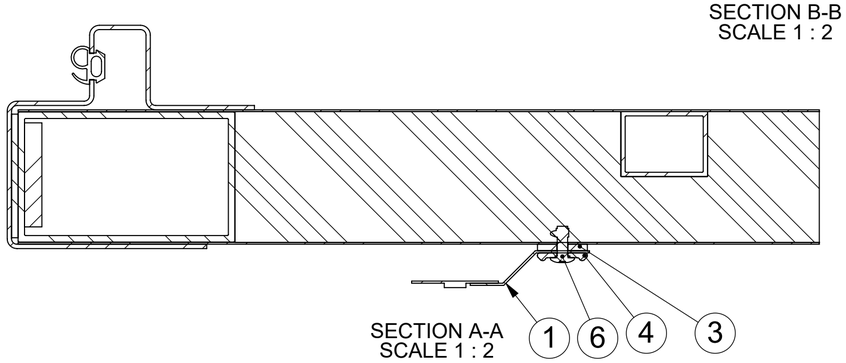
Right



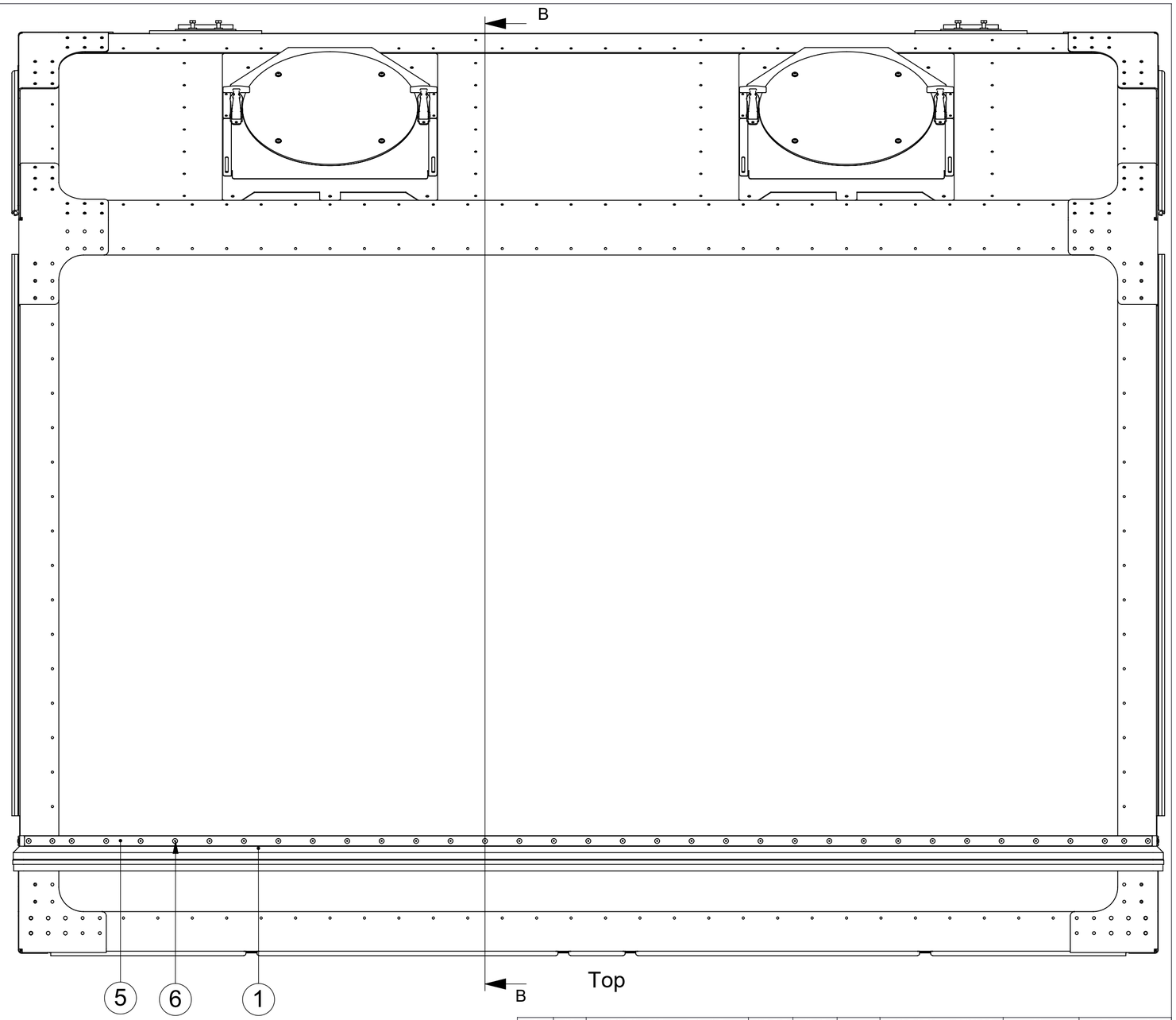
DETAIL C
SCALE 1 : 4



SECTION B-B
SCALE 1 : 2



SECTION A-A
SCALE 1 : 2



Top

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	89	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
5	1	Extrusion RR148	2620	23/3,5	2,2	2000-05-1687	Alu. 6063-T66	
4	2	Extrusion RR148	2050	23/3,5	2,2	2000-05-1690	Alu. 6063-T66	
3	2	Fill strip cover	1969	23	3	2000-05-1689	Alu. 5754-H22	
2	1	Fill strip cover	2458	23	3	2000-05-1688	Alu. 5754-H22	
1	1	Cover connection				2000-05-1641	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-2107 Sheet : 2 of 2	Issue B
Drawn: JWR	08-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 2.86 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

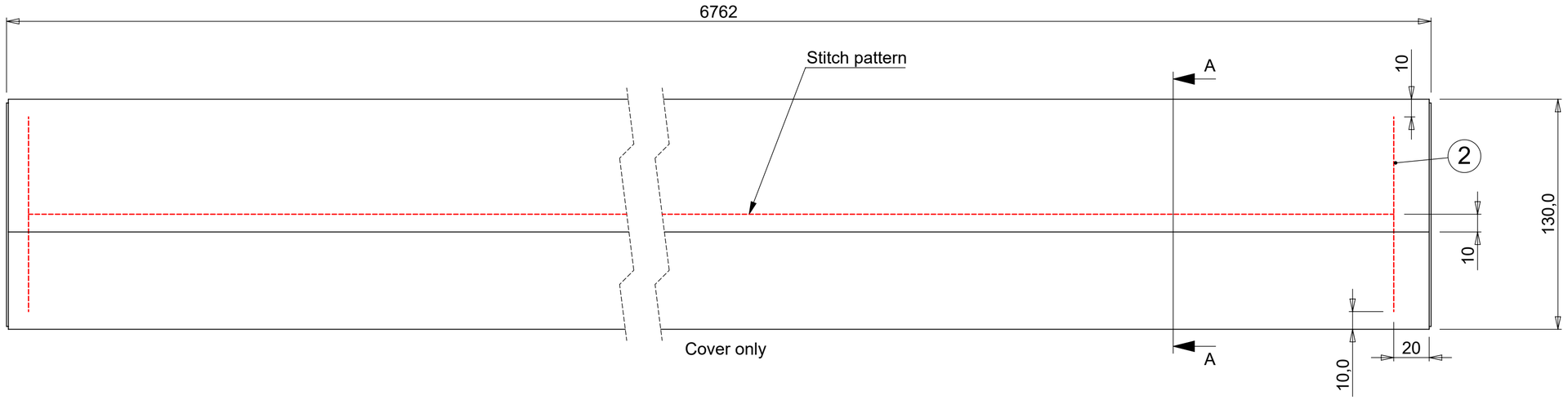
Title: Cover connection assy

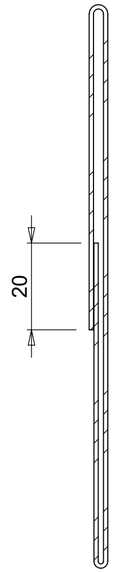
Iss.	Changes	Date	Name
B	+Assembly notitie	10-03-2020	MVE

Projection

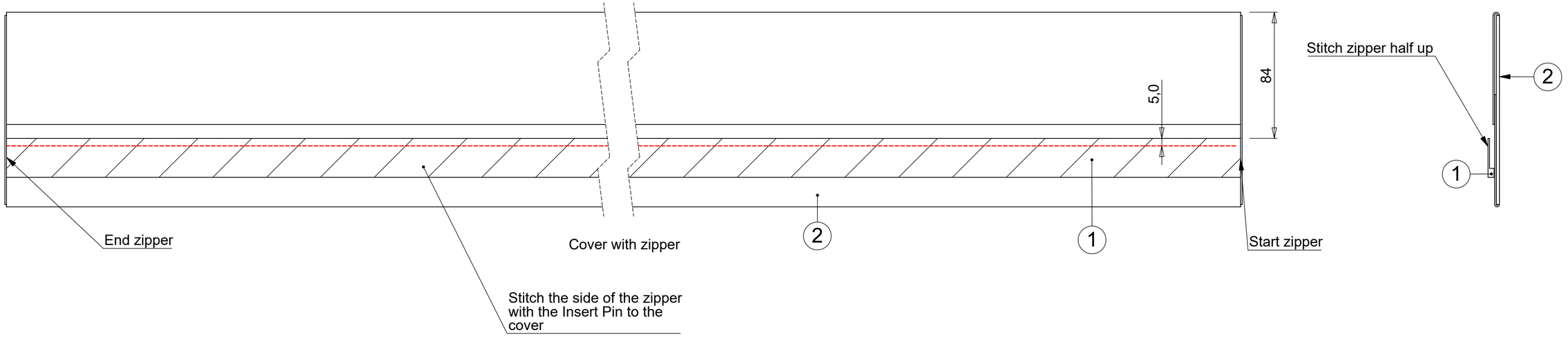
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





SECTION A-A
SCALE 1 : 1



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
2	1	Container connection	6861,4	281,1		2000-05-1638	PVC Cover	Color: Grey
1	1	Zipper 10 mm (White)	6760	53		2000-05-1640	Zipper	Trisco: Y10MM700

Scale: 1:2	Date:	Drawing no. 2000-05-1641 Sheet : 1 of 1	Issue A
Drawn: JWR	08-04-2019		
Checked: HS	12-04-2019		
Approved: JWR (JWR)	24-05-2019		
Mass: 1.44 kg		Finish:	

Tolerances (u.n.o.)

< 100	100 500	500 2500	2500 >
±1	±2	±4	±6

Dimensions in mm (u.n.o.)

Title: Cover connection

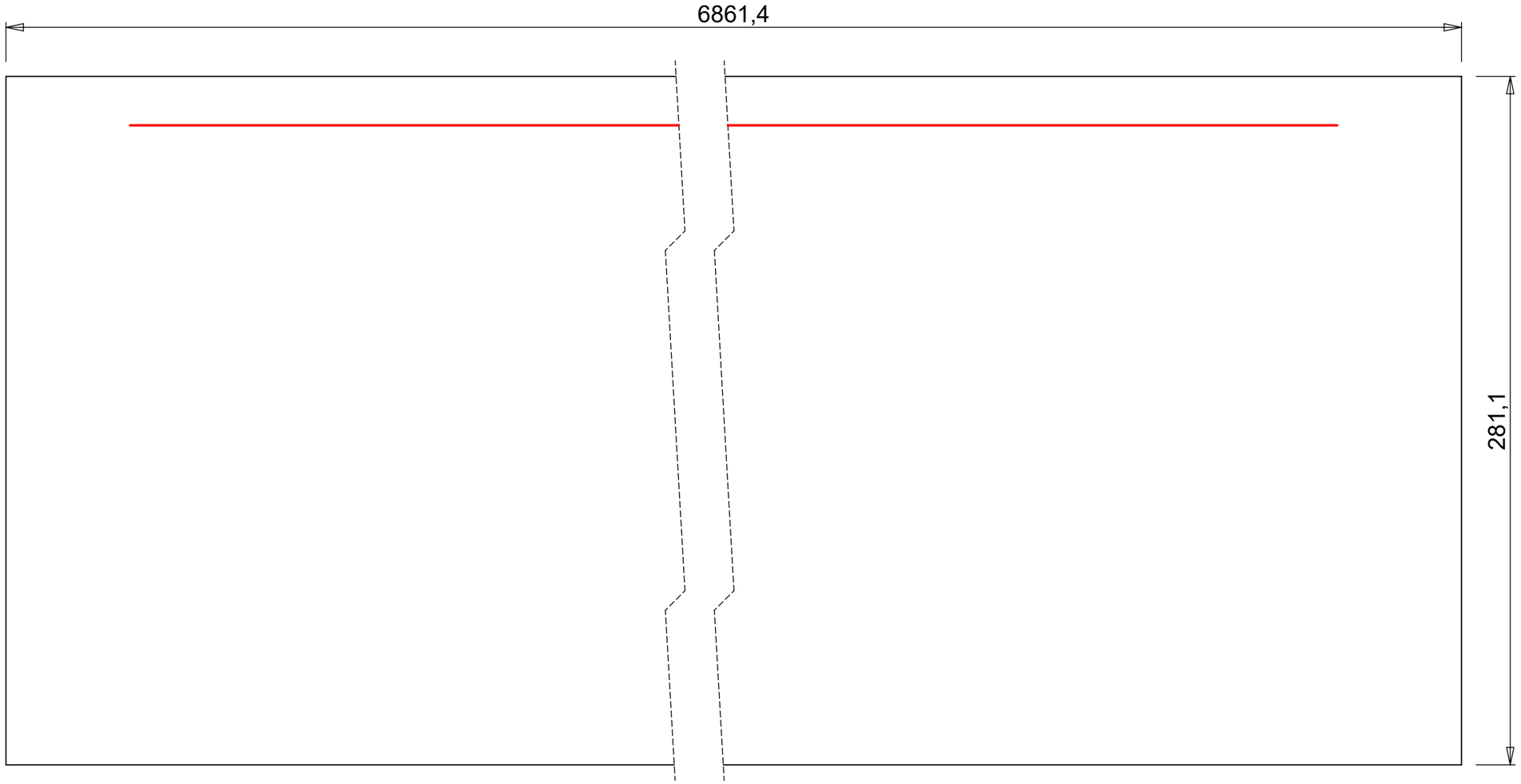
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Flat pattern
Fine side



1	1	Container connection	6861,4	281,1		2000-05-1638	PVC Cover	Color: Grey
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1638 Sheet : 1 of 1	Issue A
Drawn: JWR	08-04-2019		
Checked: HS	12-04-2019		
Approved: JWR (JWR)	24-05-2019		
Mass: 1.25 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 100	100 500	500 2500	2500 >
±1	±2	±4	±6

Title: **Container connection**

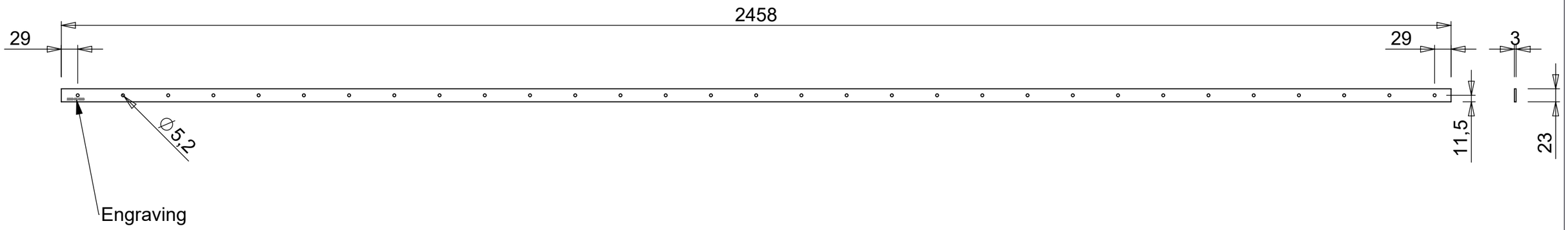
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Cover material according to specification VRR-SP1605



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill strip cover	2458	23	3	2000-05-1688	Alu. 5754-H22	

Scale: 1:7	Date:	Drawing no.: 2000-05-1688 Sheet : 1 of 1	Issue A
Drawn: JWR	08-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.45 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

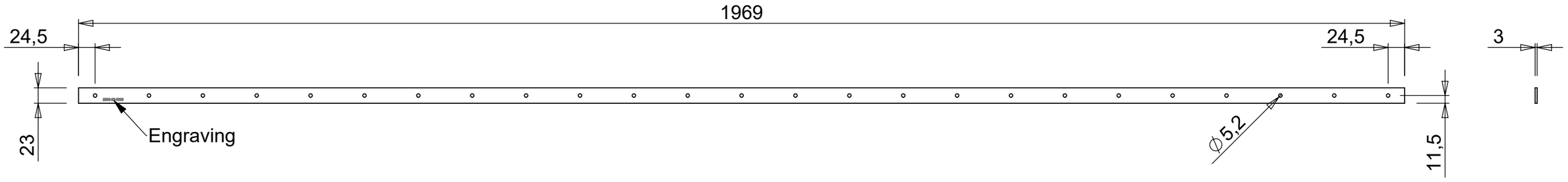
Title: **Fill strip cover**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill strip cover	1969	23	3	2000-05-1689	Alu. 5754-H22	

Scale: 1:6	Date:	Drawing no.: 2000-05-1689	Issue: A
Drawn: JWR	08-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

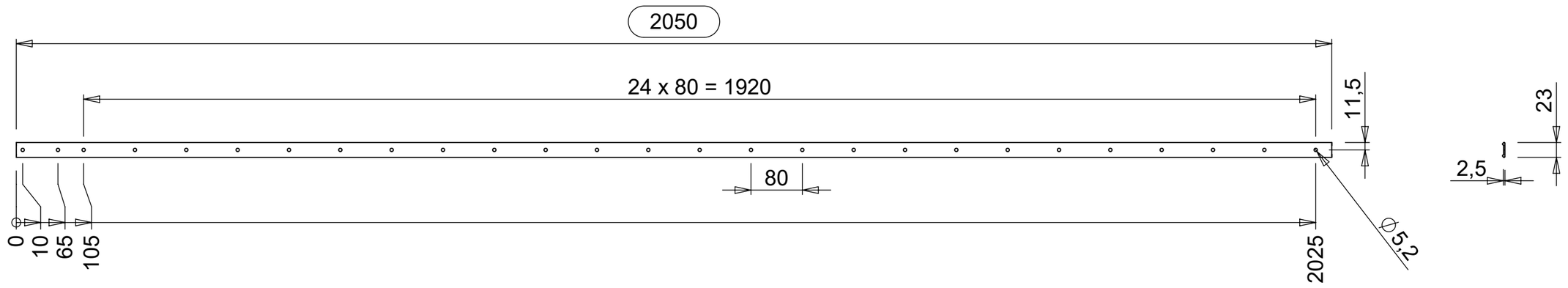
Title: **Fill strip cover**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Extrusion RR148	2050	23/3,5	2,2	2000-05-1690	Alu. 6063-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:7	Date:	Drawing no.: 2000-05-1690	Issue A	Tolerances (u.n.o.)
Drawn: JWR	08-04-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: HS	12-04-2019			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	09-05-2019	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: kg		Finish: U001 - Aludon		Dimensions in mm (u.n.o.)

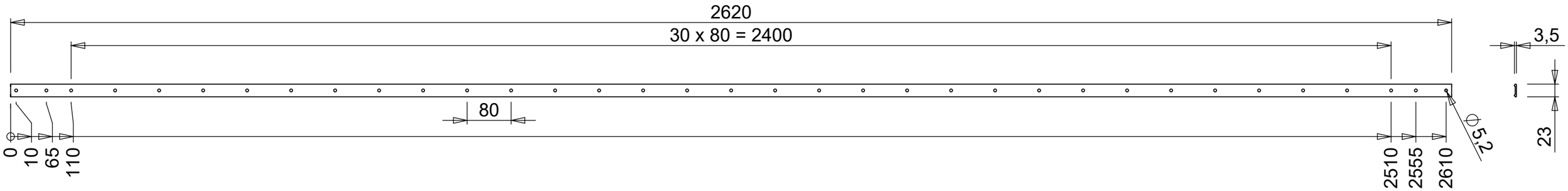
Title: **Extrusion RR148**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion RR148	2620	23/3,5	2,2	2000-05-1687	Alu. 6063-T66	

Scale: 1:7	Date:	Drawing no.: 2000-05-1687	Issue: A
Drawn: JWR	08-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

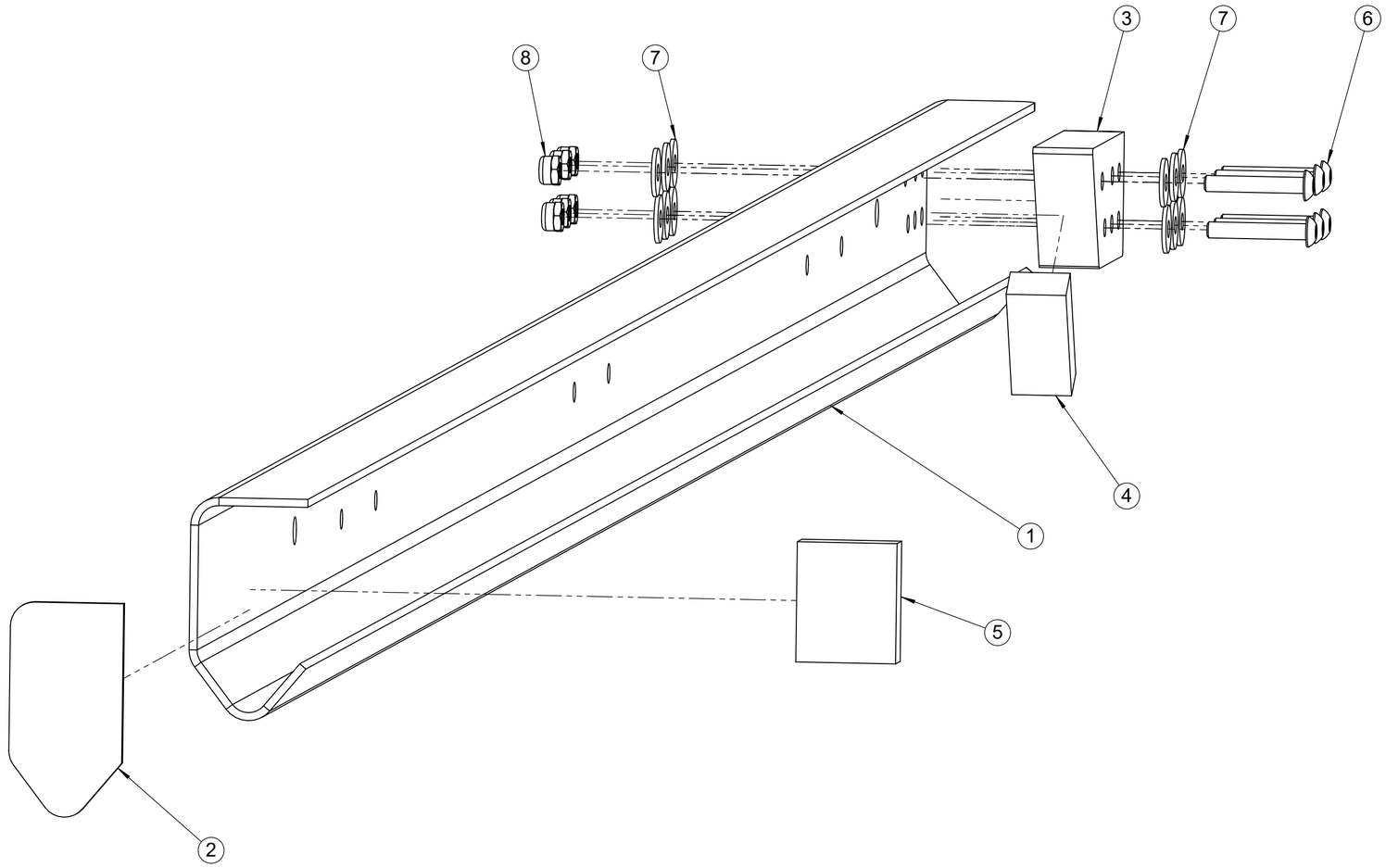
Title: **Extrusion RR148**

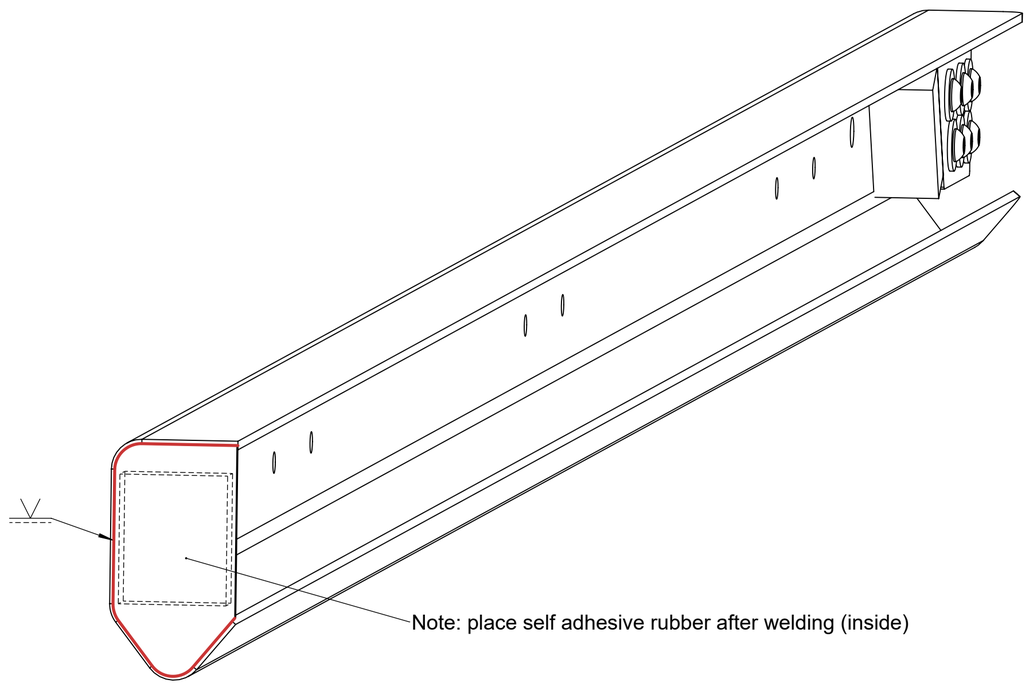
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Welding according to procedure VRR-W3-090
except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
8	6	Nyloc Hex Nut	10	M4		BO-10511-04-A2	AISI 304	ISO10511/DIN985
7	12	Plain Washer Large	12	M4	1,0	BO-7093-04-A2	AISI 304	ISO7093/DIN9021
6	6	Torx Socket Button Screw	25	M4		BO-7380T-04025-A2	AISI 304	ISO7380 torx
5	1	EPDM Foam Rubber	25	30	10	2000-07-3408	Celrub.(EPDM)	(Self Adhesive)
4	1	EPDM Foam Rubber	15	30	10	2000-07-3409	Celrub.(EPDM)	(Self Adhesive)
3	1	End stop block	68,77	31	15	2000-07-2648	HDPE (PE-HD)	Colour: black
2	1	Roller track end plate	53,5	28,3	2	2000-07-3475	Alu. 5754-H22	
1	1	Roller track left	1590	107,27	2	2000-07-2730	Alu. 5754-H22	Special bend radius

Scale: 1:3	Date:	Drawing no. 2000-07-2750	Issue A
Drawn: MBMH	13-06-2023		
Checked: PvT	08-08-2023		
Approved: HS	08-08-2023	Sheet : 1 of 1	
Mass: 0.96 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Title: **Roller track left assy**

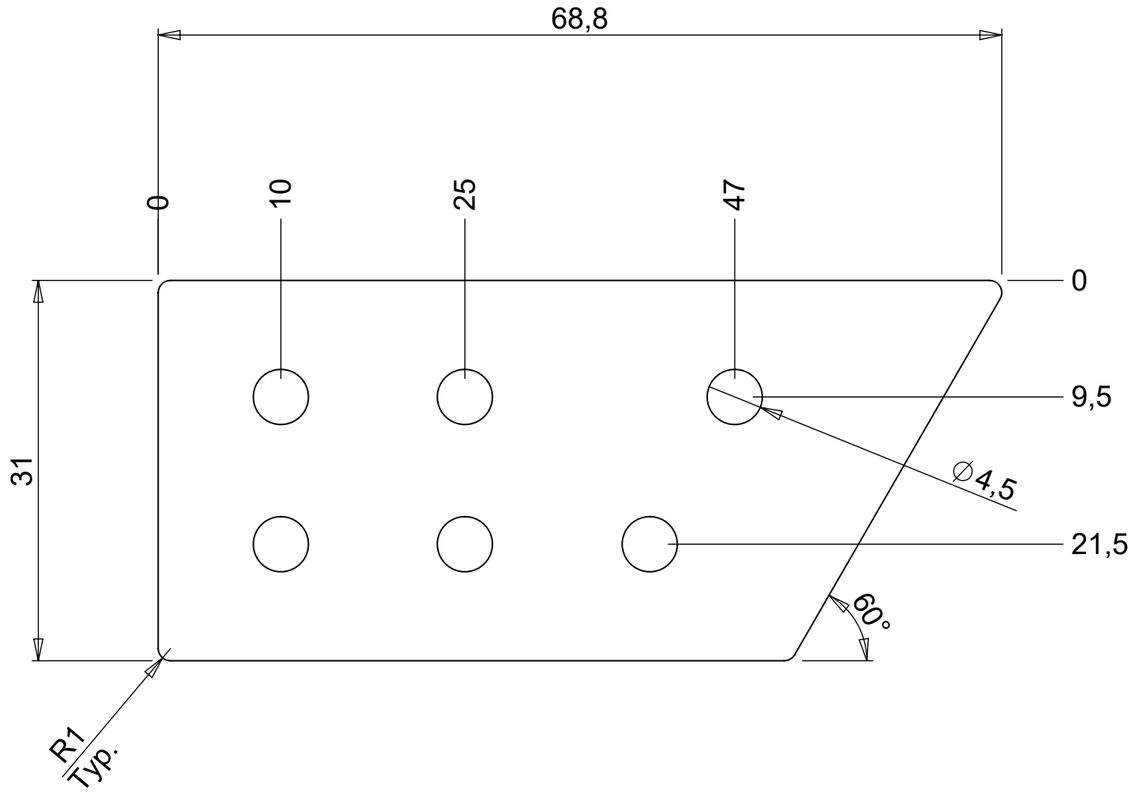
Rivets according to VRR-SP2201

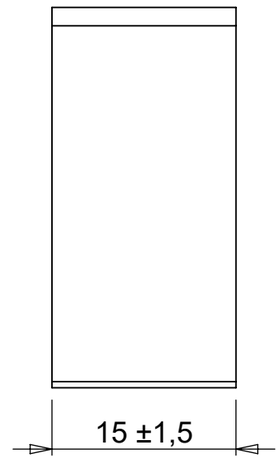
Iss.	Changes	Date	Name

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	End stop block	68,8	31	15	2000-07-2648	HDPE (PE-HD)	Colour: black

Scale: 2:1	Date:	Drawing no.: 2000-07-2648 Sheet : 1 of 1	Issue: A
Drawn: MBMH	26-05-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.03 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

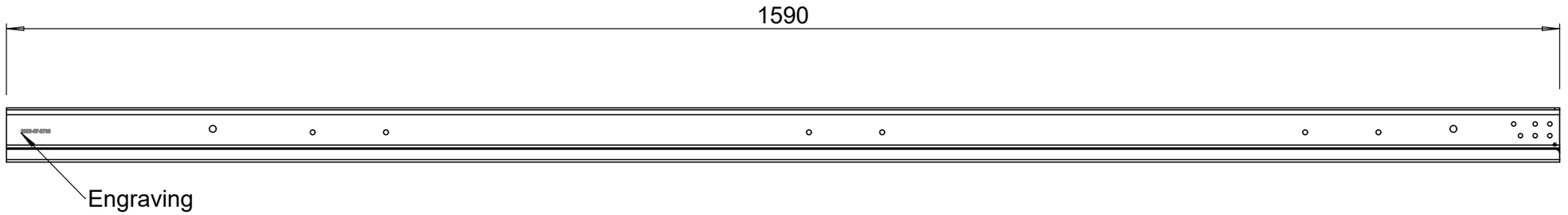
Title: **End stop block**

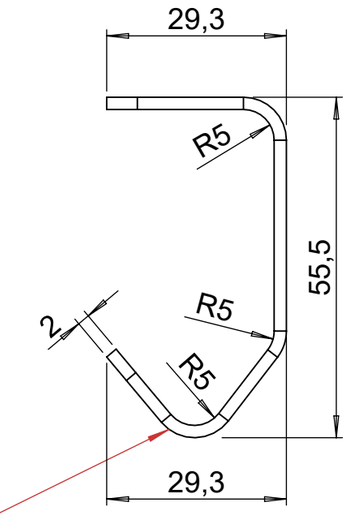
Iss.	Changes	Date	Name

Projection

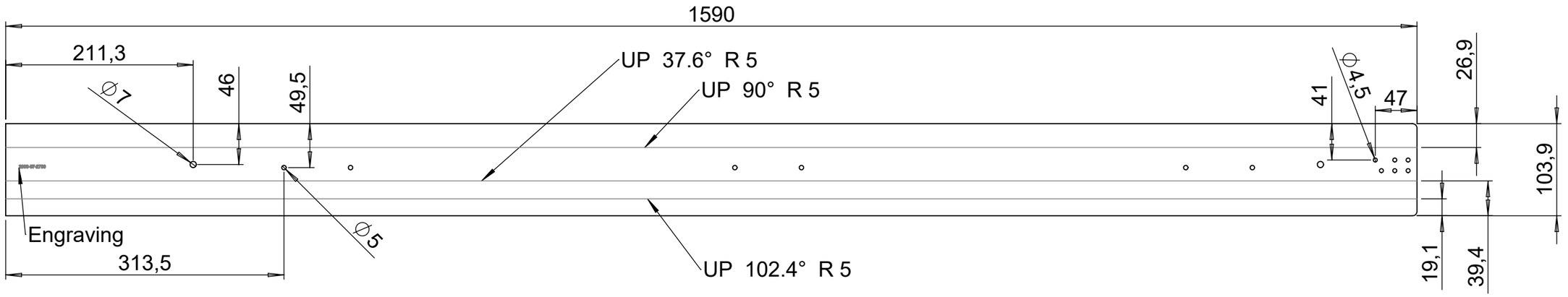
Size A3

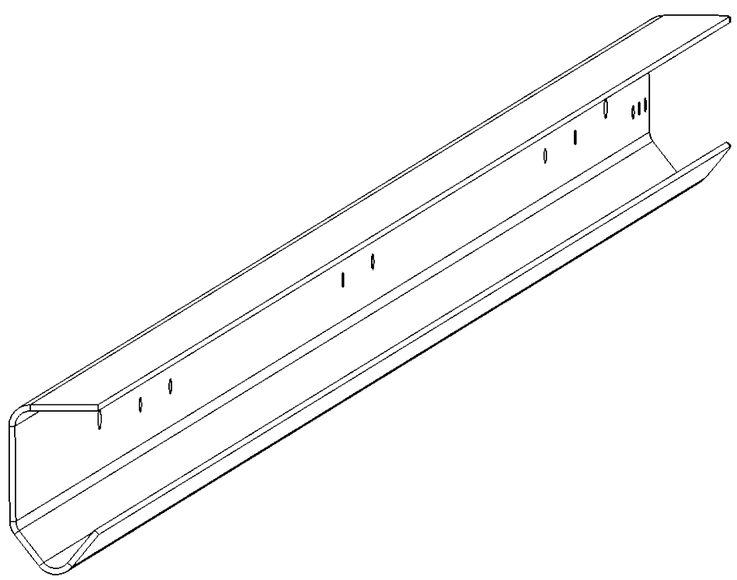
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Note: make all three bends with a R5 punch and a V24 V-die.





1	1	Roller track left	1590	103,9	2	2000-07-2730	Alu. 5754-H22	Special bend radius
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-07-2730	Issue A
Drawn: MBMH	09-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 1 of 1	
Mass: 0.90 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Roller track left**

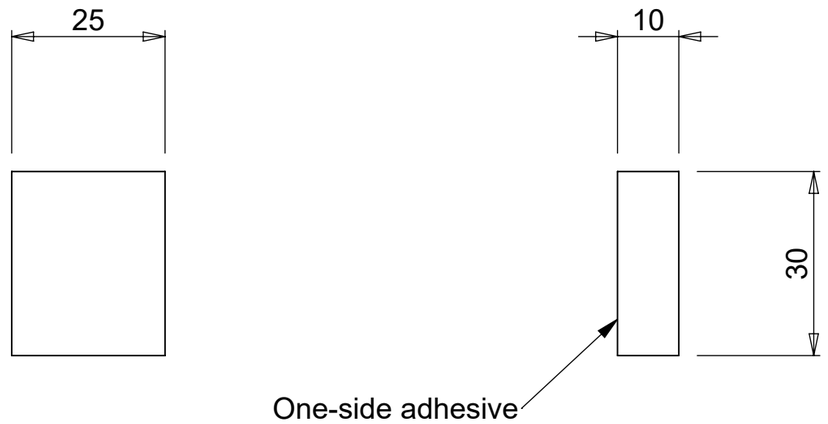
Special bend radius

Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	EPDM Foam Rubber	25	30	10	2000-07-3408	Celrub.(EPDM)	(Self Adhesive)

Scale: 1:1	Date:	Drawing no.: 2000-07-3408 Sheet : 1 of 1	Issue A
Drawn: MBMH	21-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.00 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: EPDM Foam Rubber

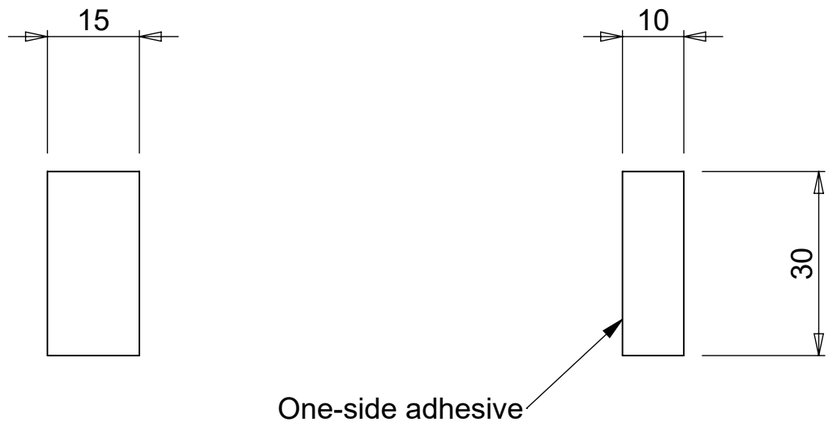
Iss.	Changes	Date	Name

Projection

Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	EPDM Foam Rubber	15	30	10	2000-07-3409	Celrub.(EPDM)	(Self Adhesive)

Scale: 1:1	Date:	Drawing no.: 2000-07-3409 Sheet : 1 of 1	Issue A
Drawn: MBMH	21-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.00 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: EPDM Foam Rubber

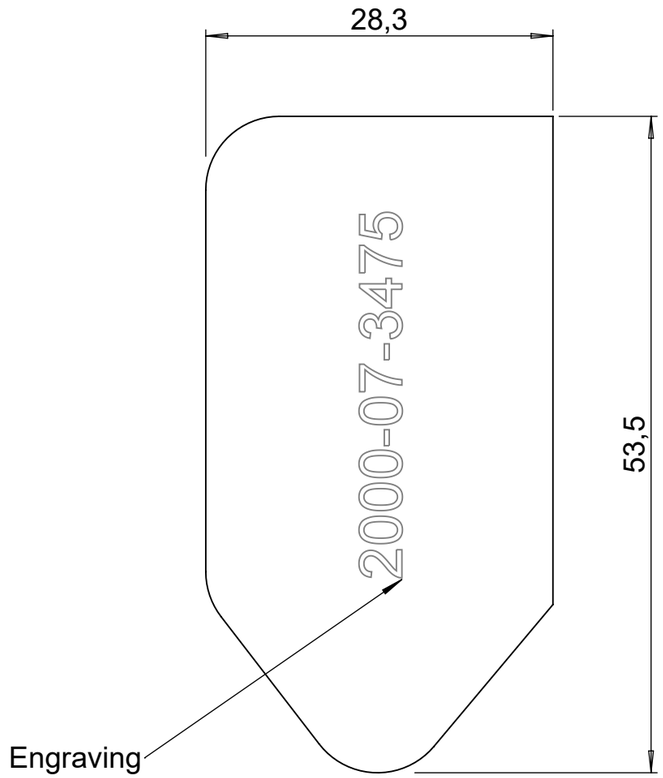
Iss.	Changes	Date	Name

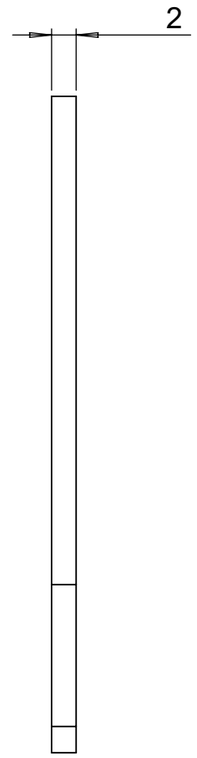
Projection

Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Roller track end plate	53,5	28,3	2	2000-07-3475	Alu. 5754-H22	

Scale: 2:1	Date:	Drawing no.: 2000-07-3475 Sheet : 1 of 1	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

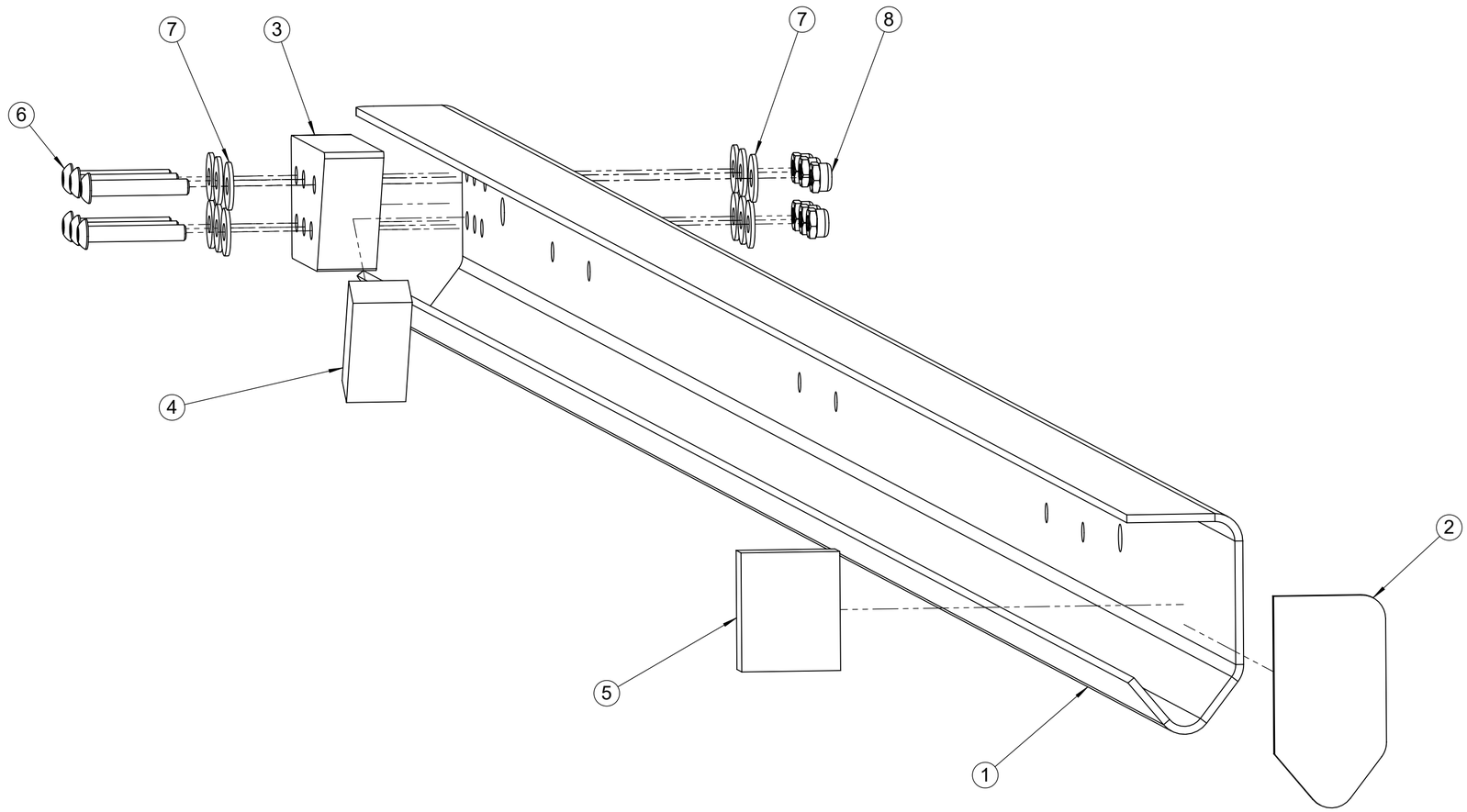
Title: **Roller track end plate**

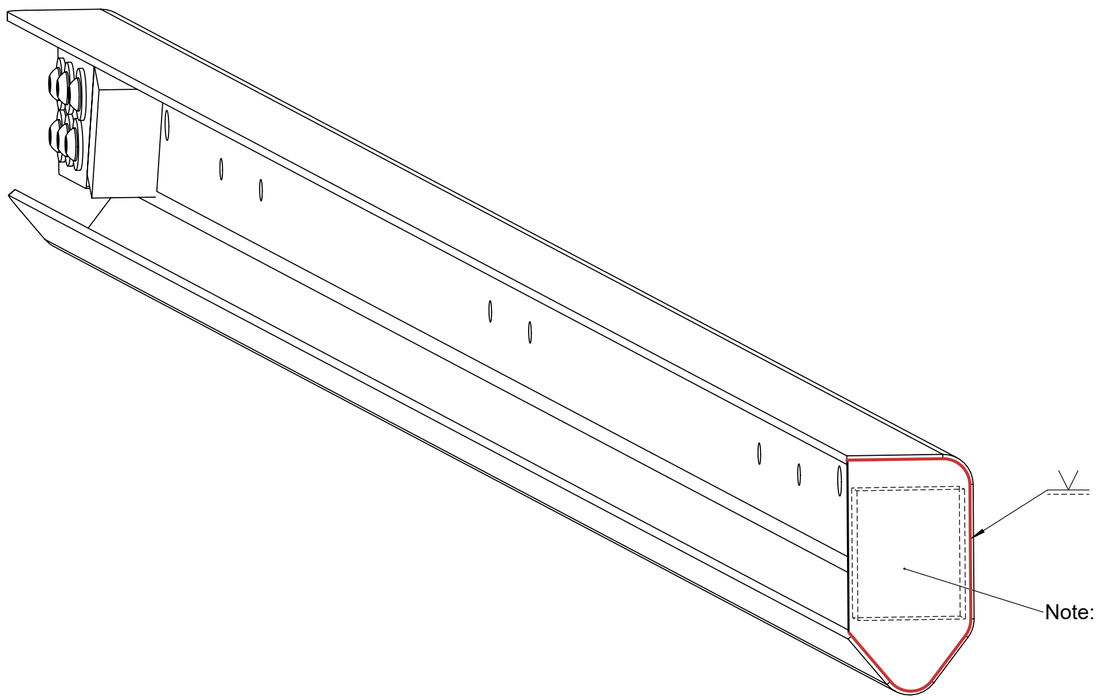
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Welding according to procedure VRR-W3-090 except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
8	6	Nyloc Hex Nut	10	M4		BO-10511-04-A2	AISI 304	ISO10511/DIN985
7	12	Plain Washer Large	12	M4	1,0	BO-7093-04-A2	AISI 304	ISO7093/DIN9021
6	6	Torx Socket Button Screw	25	M4		BO-7380T-04025-A2	AISI 304	ISO7380 torx
5	1	EPDM Foam Rubber	25	30	10	2000-07-3408	Celrub.(EPDM)	(Self Adhesive)
4	1	EPDM Foam Rubber	15	30	10	2000-07-3409	Celrub.(EPDM)	(Self Adhesive)
3	1	End stop block	68,77	31	15	2000-07-2648	HDPE (PE-HD)	Colour: black
2	1	Roller track end plate	53,5	28,3	2	2000-07-3475	Alu. 5754-H22	
1	1	Roller track right	1590	103,87	2	2000-07-2976	Alu. 5754-H22	Special bend radius

Scale: 1:3	Date:	Drawing no. 2000-07-2975	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	08-08-2023		
Approved: HS	08-08-2023	Sheet : 1 of 1	
Mass: 0.96 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Roller track right assy**

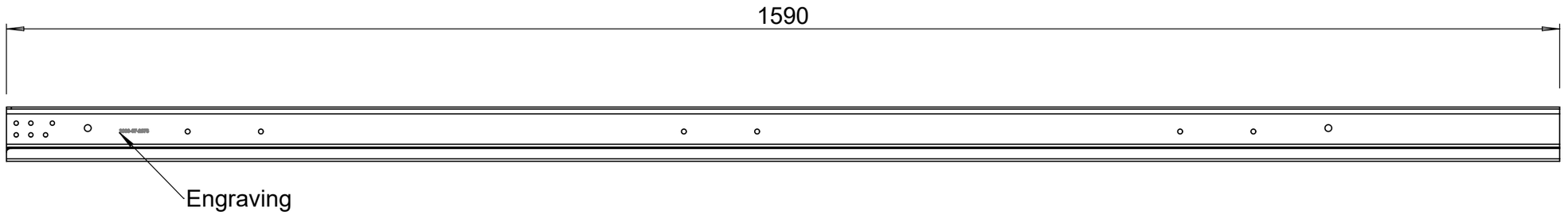
Rivets according to VRR-SP2201

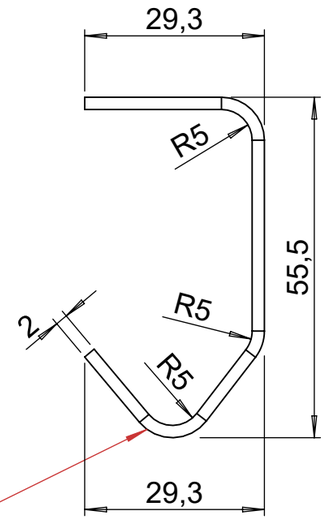
Iss.	Changes	Date	Name

Projection

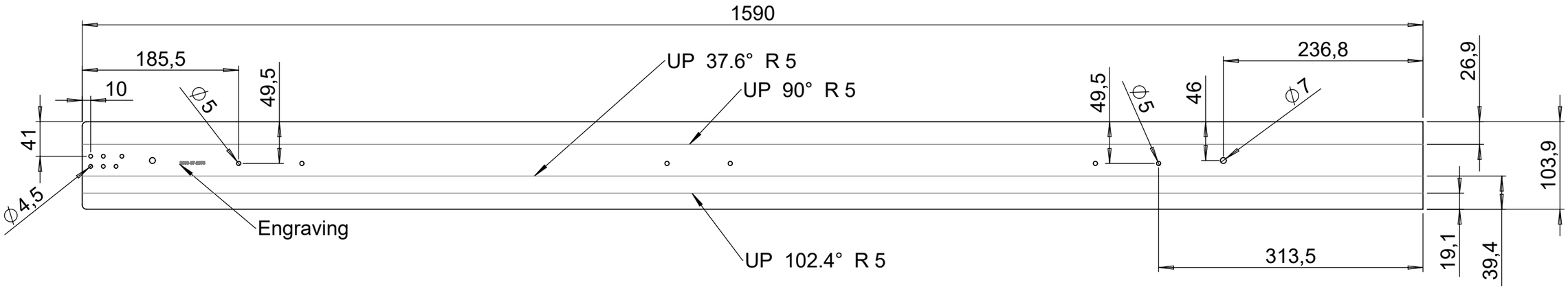
Size A2

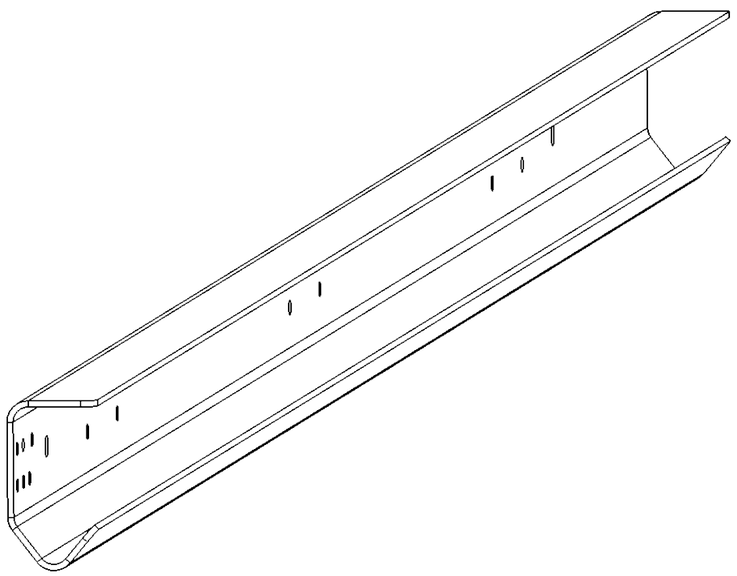
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Note: make all three bends with a R5 punch and a V24 V-die.





1	1	Roller track right	1590	103,9	2	2000-07-2976	Alu. 5754-H22	Special bend radius
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-07-2976 Sheet : 1 of 1	Issue A
Drawn: MBMH	19-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.90 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Roller track right

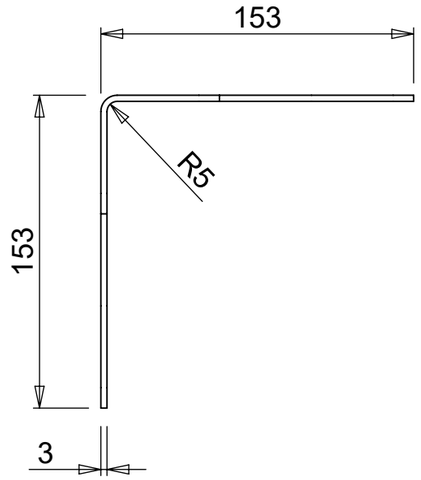
Special bend radius

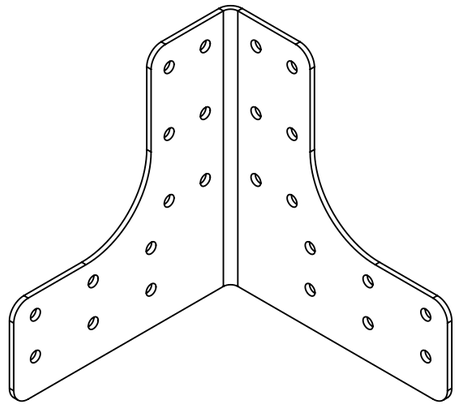
Iss.	Changes	Date	Name

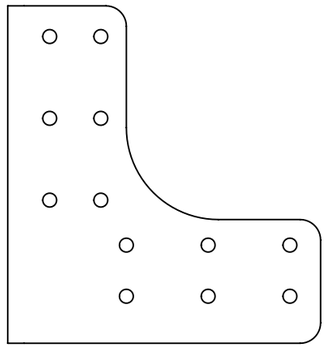
Projection

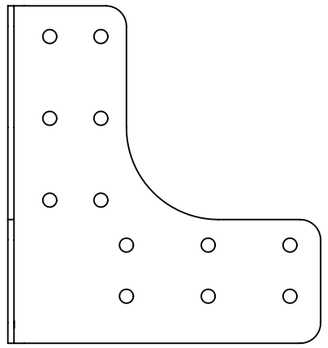
Size A3

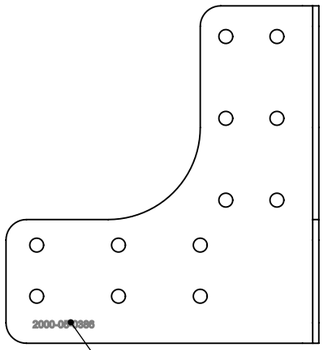
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

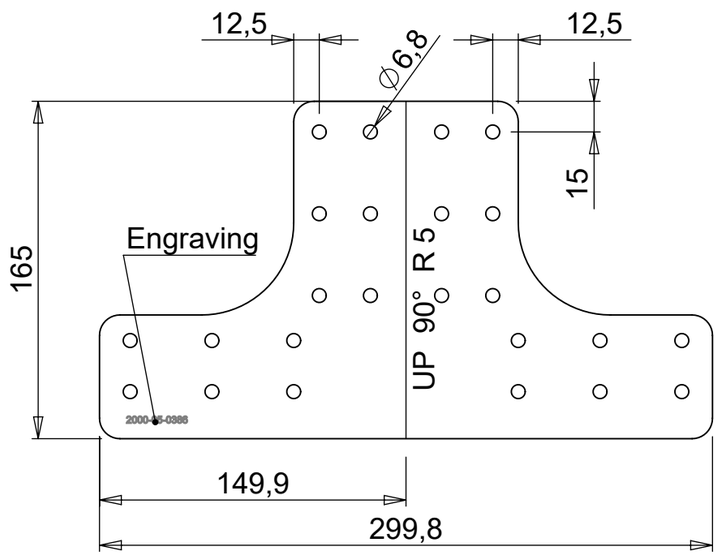












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Gusset	299,8	165	3	2000-05-0386	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0386	Issue: A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.24 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

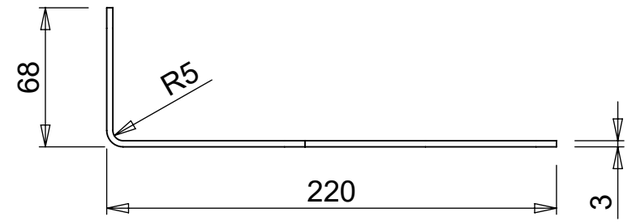
Title: **Gusset**

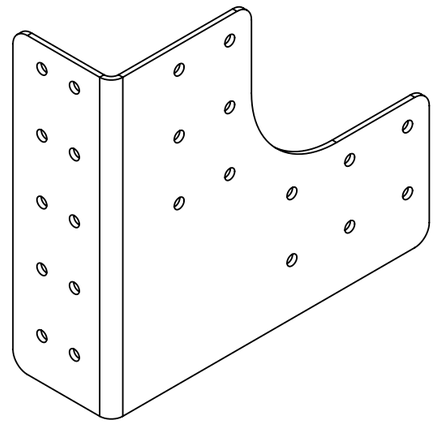
Iss.	Changes	Date	Name

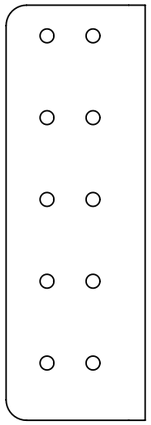
Projection

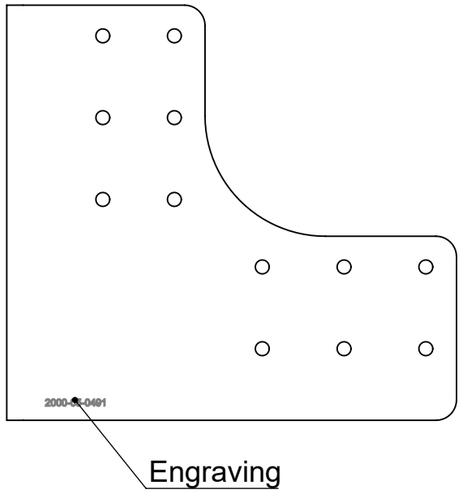
Size A3

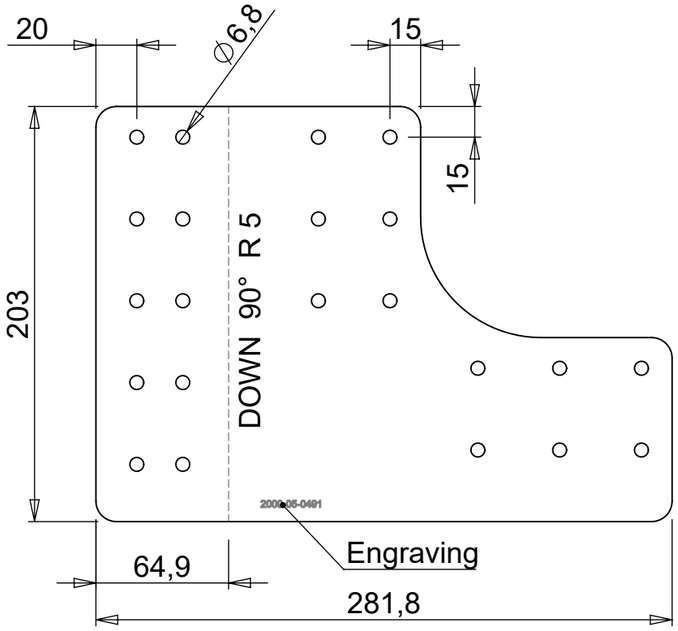
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Corner gusset	281,8	203	3	2000-05-0491	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0491	Issue A	Tolerances (u.n.o.)
Drawn: JWR	04-04-2019			< 7 30 120 400 1000 2000
Checked: HS	12-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
				Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.35 kg		Finish:		Dimensions in mm (u.n.o.)

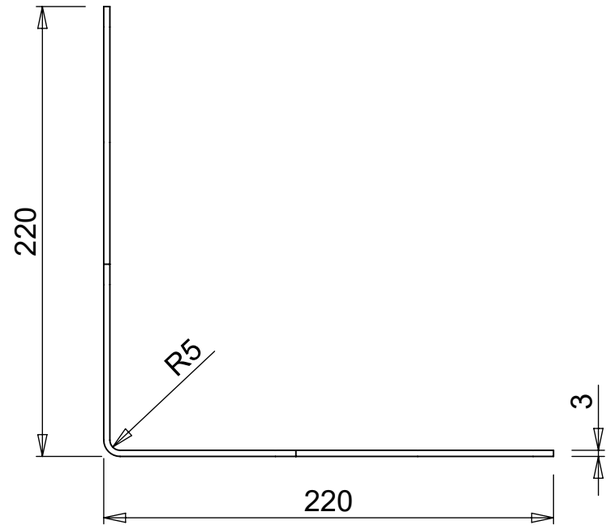
Title: **Corner gusset**

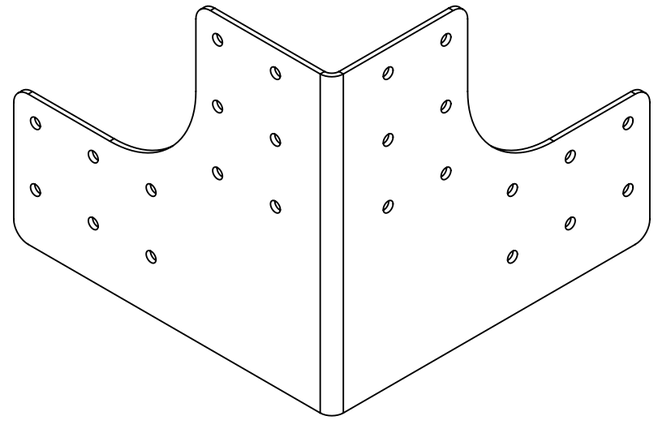
Iss.	Changes	Date	Name

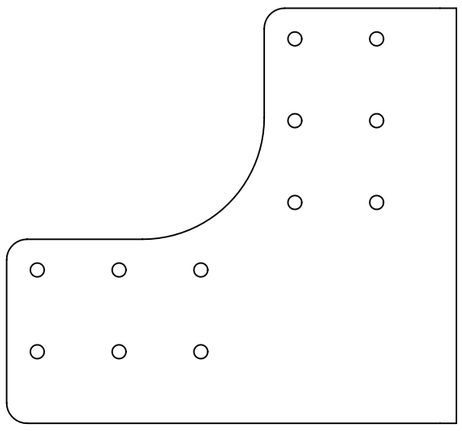
Projection

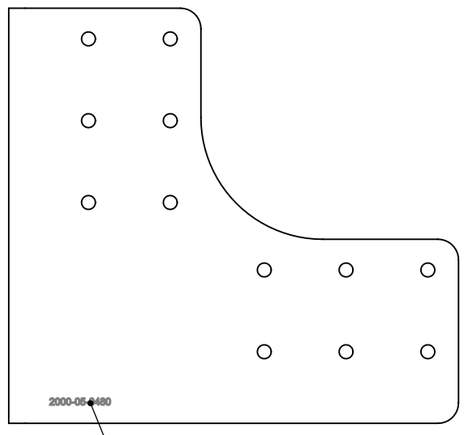
Size A3

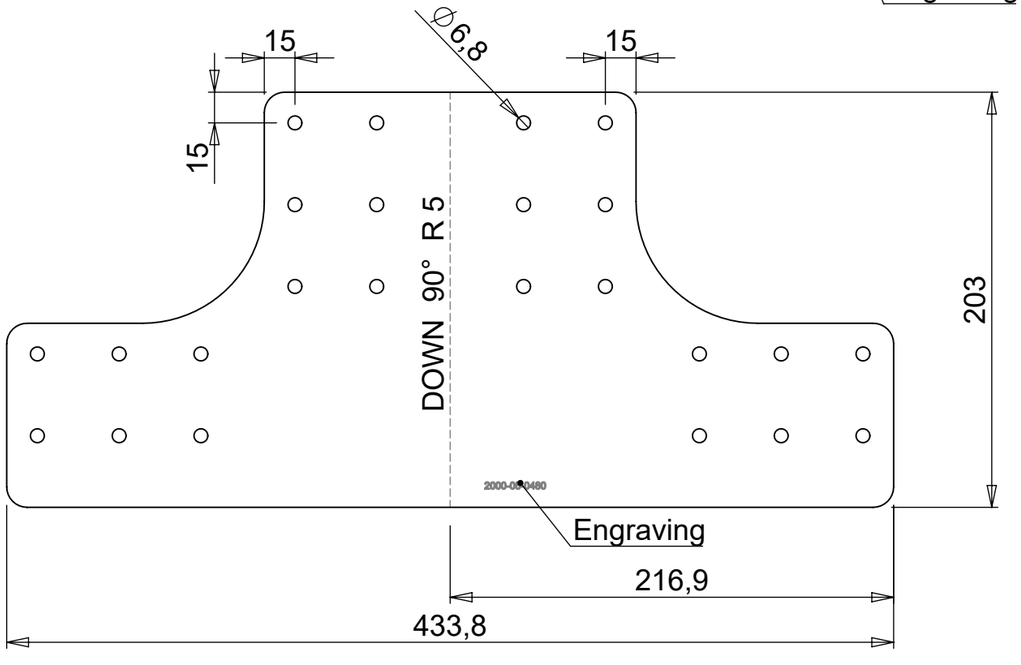
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Corner gusset	433,8	203	3	2000-05-0480	Alu. 5754-H22	Bend with V30
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0480 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.49 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

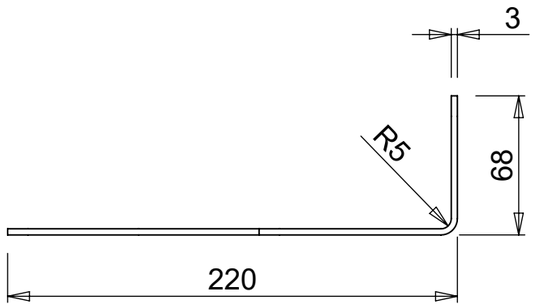
Title: **Corner gusset**

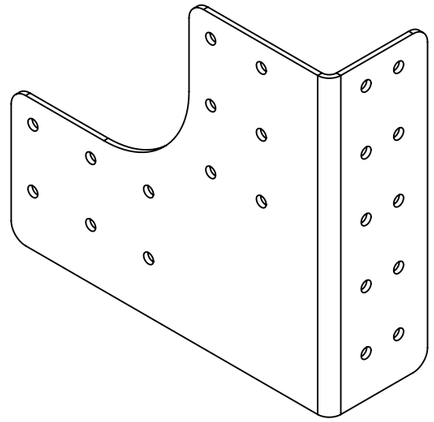
Iss.	Changes	Date	Name

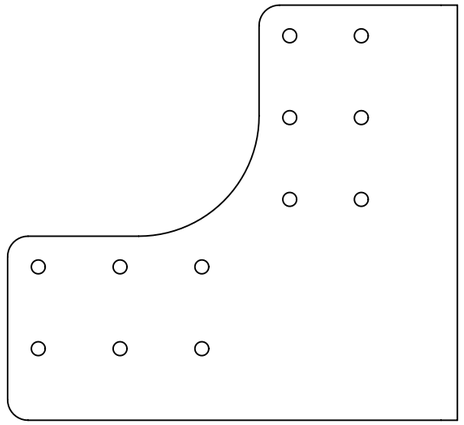
Projection

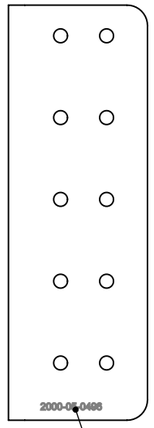
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

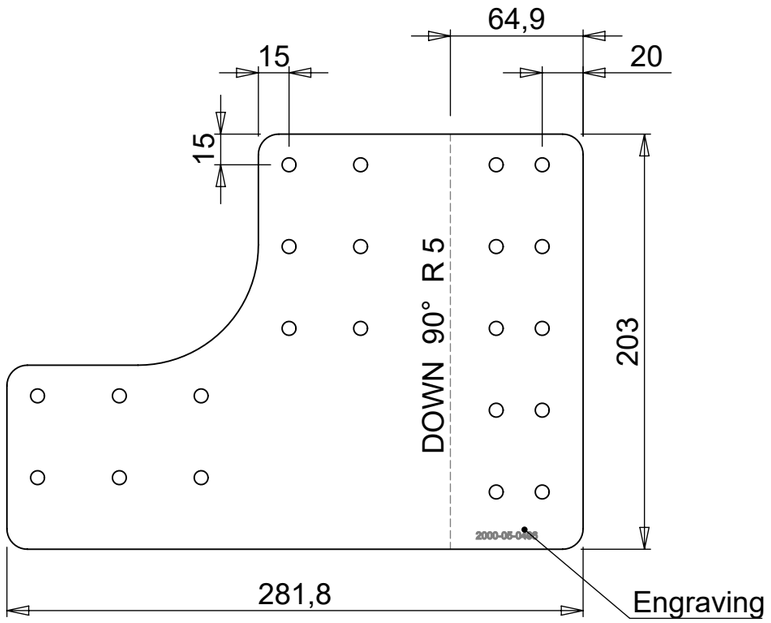








Engraving



Engraving

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Front Corner gusset	281,8	203	3	2000-05-0496	Alu. 5754-H22	Bend with V30

Scale: 1:3	Date:	Drawing no.: 2000-05-0496	Issue: A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.35 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

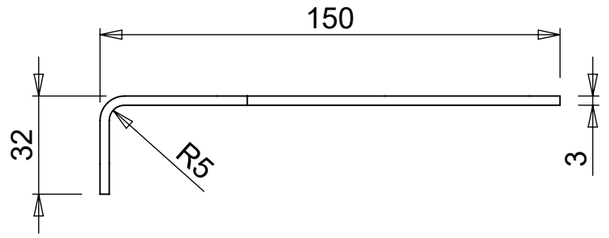
Title: **Front Corner gusset**

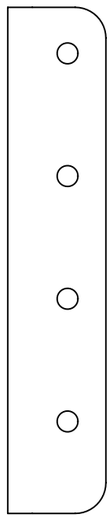
Iss.	Changes	Date	Name

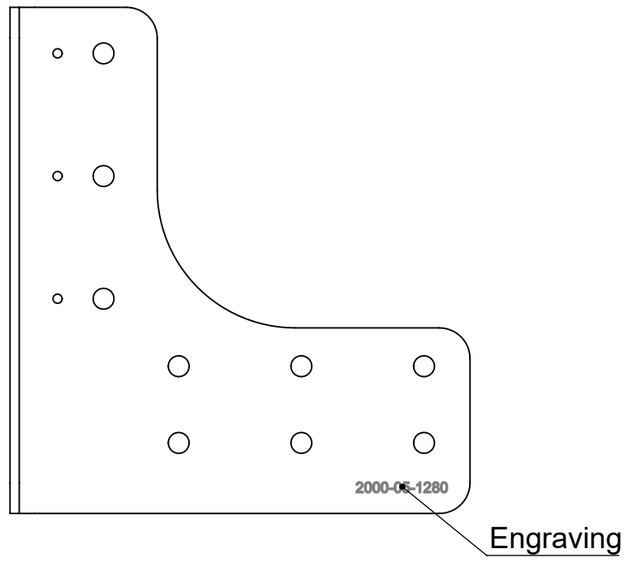
Projection

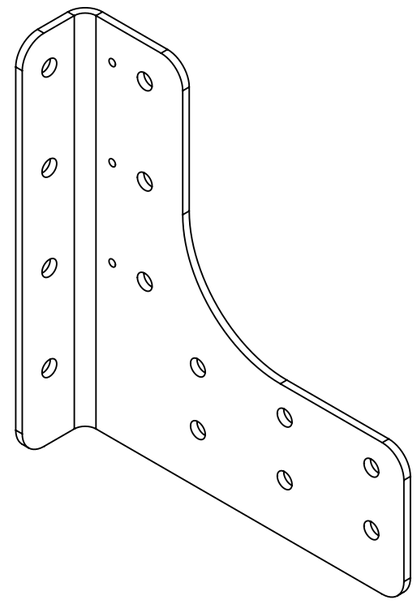
Size A3

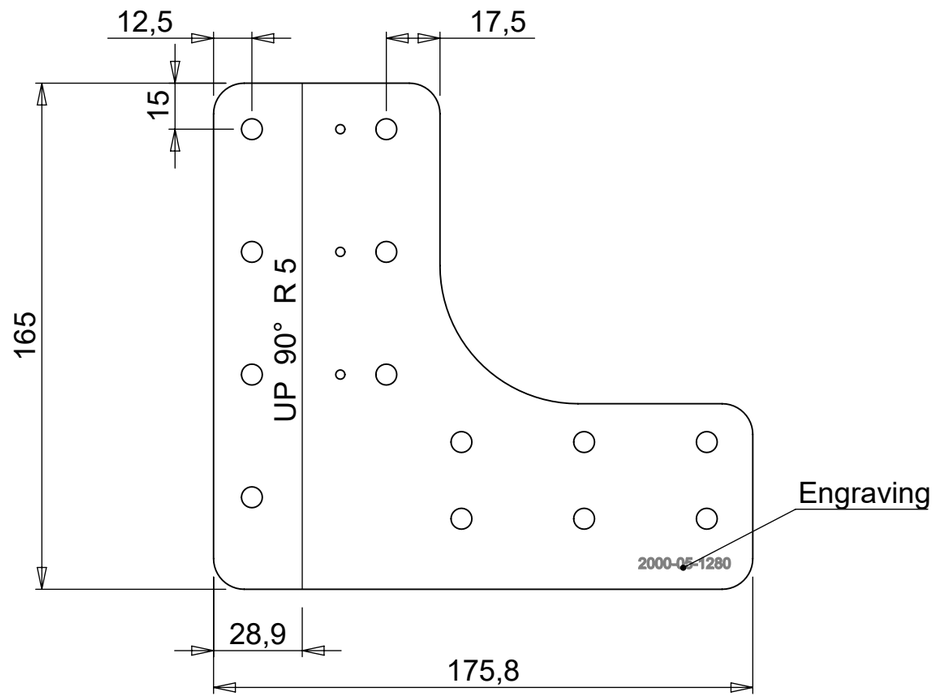
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Gusset	175,8	165	3	2000-05-1280	Alu. 5754-H22	Bend with V30

Scale: 1:2	Date:	Drawing no.: 2000-05-1280	Issue: A
Drawn: JWR	04-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.15 kg		Finish:	
Title: Gusset			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

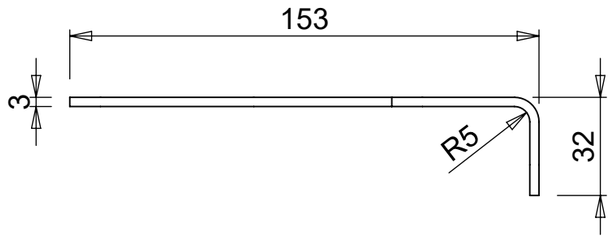
Dimensions in mm (u.n.o.)

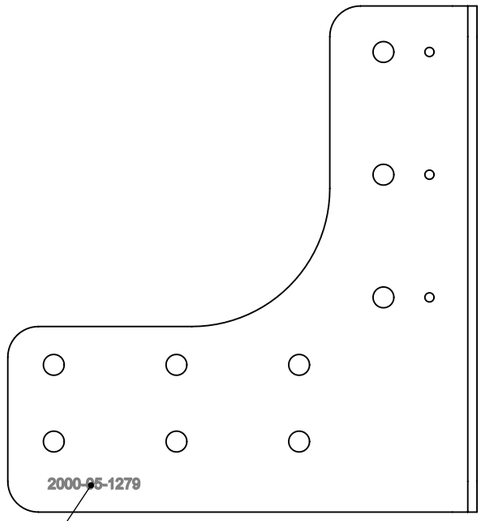
Iss.	Changes	Date	Name

Projection

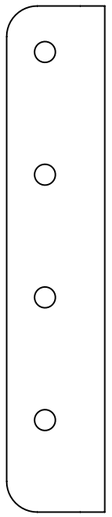
Size A3

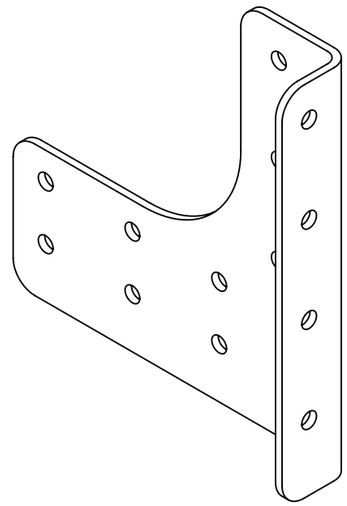
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

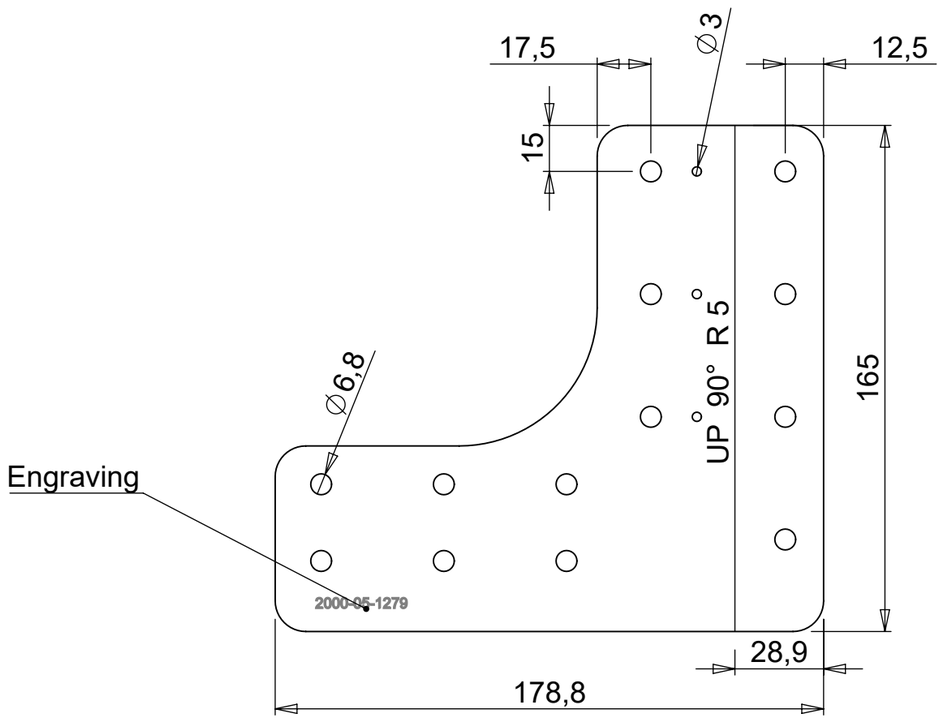




Engraving







Engraving

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Gusset	178,8	165	3	2000-05-1279	Alu. 5754-H22	Bend with V30

Scale: 1:2	Date:	Drawing no.: 2000-05-1279	Issue: A
Drawn: JWR	04-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.15 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

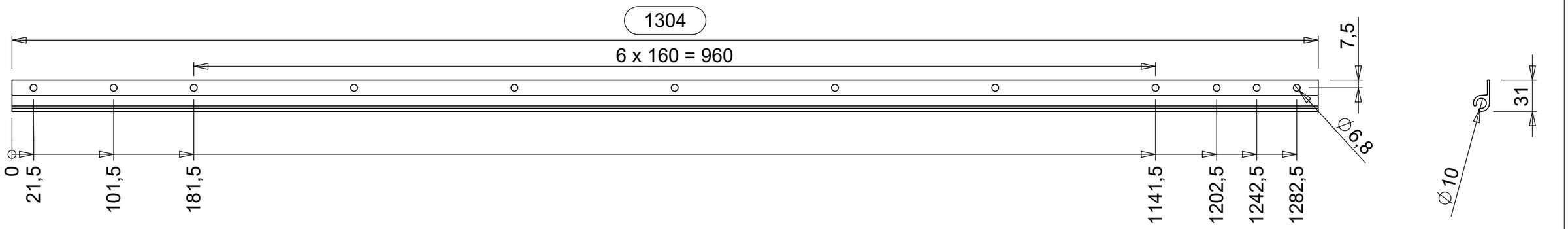
Title: Gusset

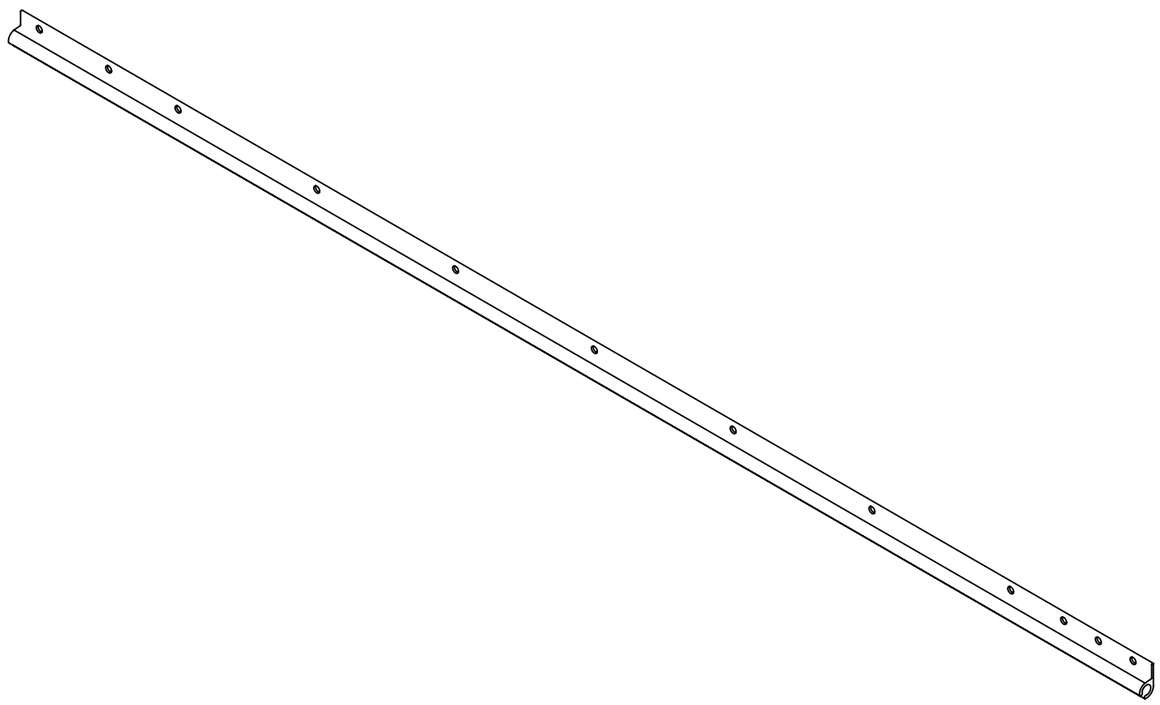
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Rope profile	1304			2000-05-1536	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-1536	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019	Sheet : 1 of 1	
Approved: JWR	09-05-2019		
Mass: 0.53 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

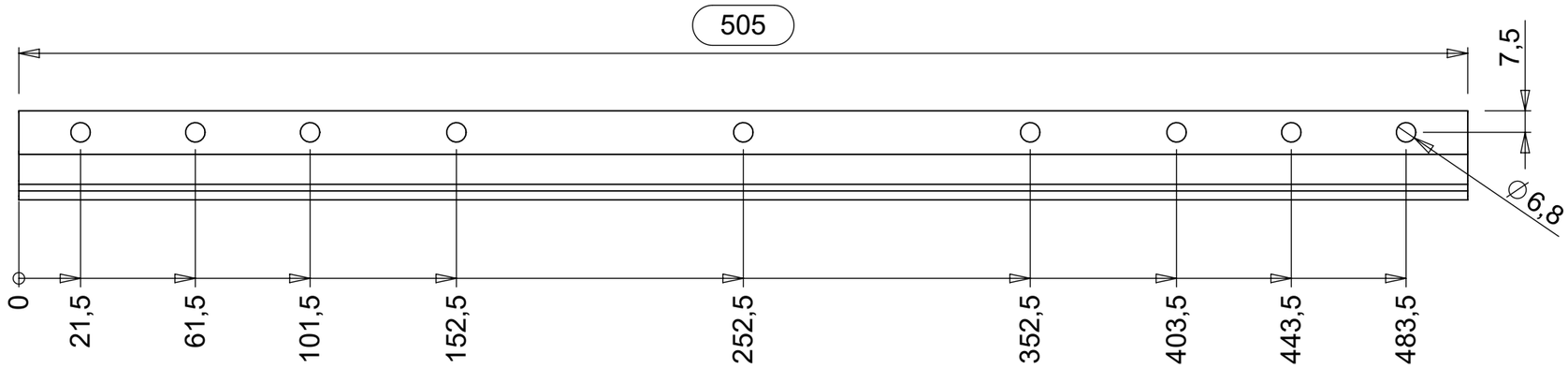
Title: # Rope profile

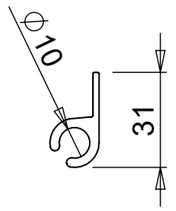
Iss.	Changes	Date	Name

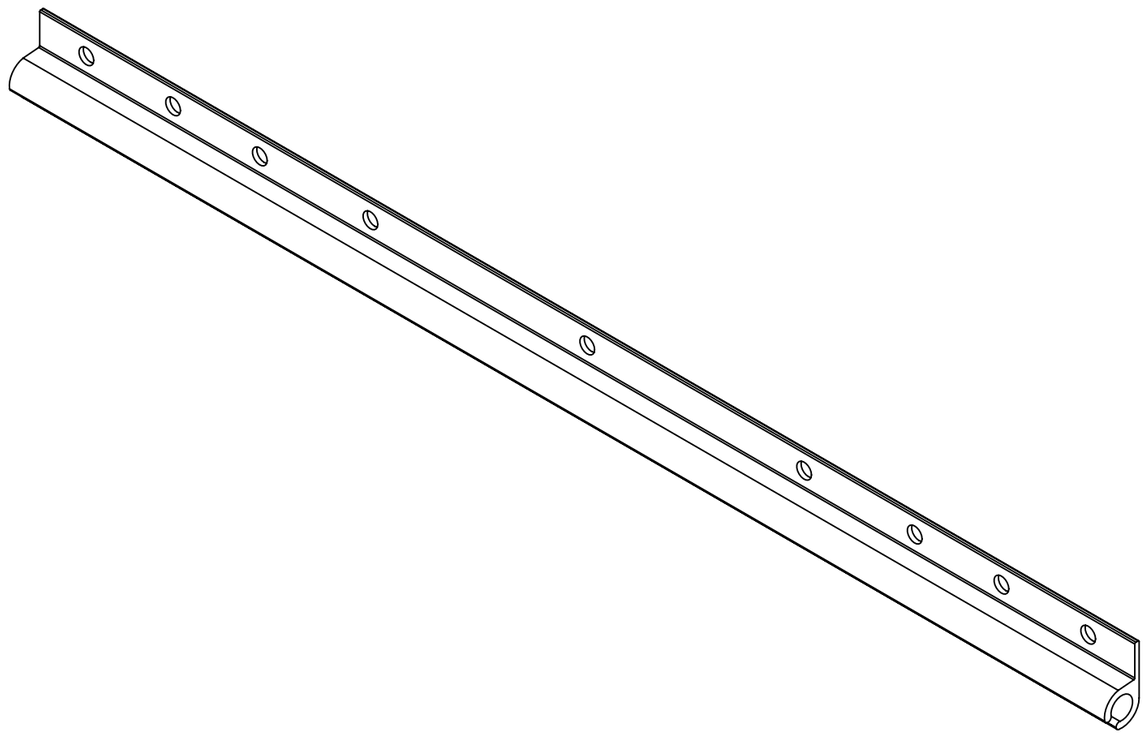
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Rope profile	505			2000-05-1539	Alu. 6060-T66	

Scale: 1:2	Date:	Drawing no.: 2000-05-1539	Issue: A
Drawn: JWR	04-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.20 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

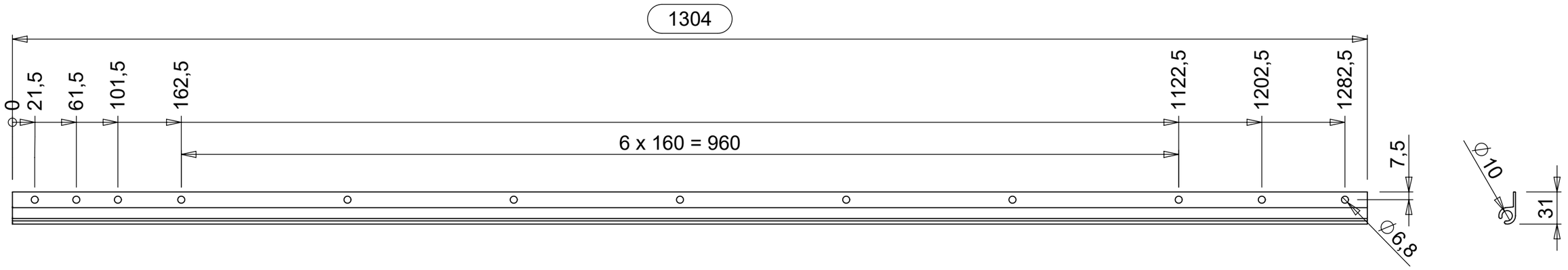
Title: **Rope profile**

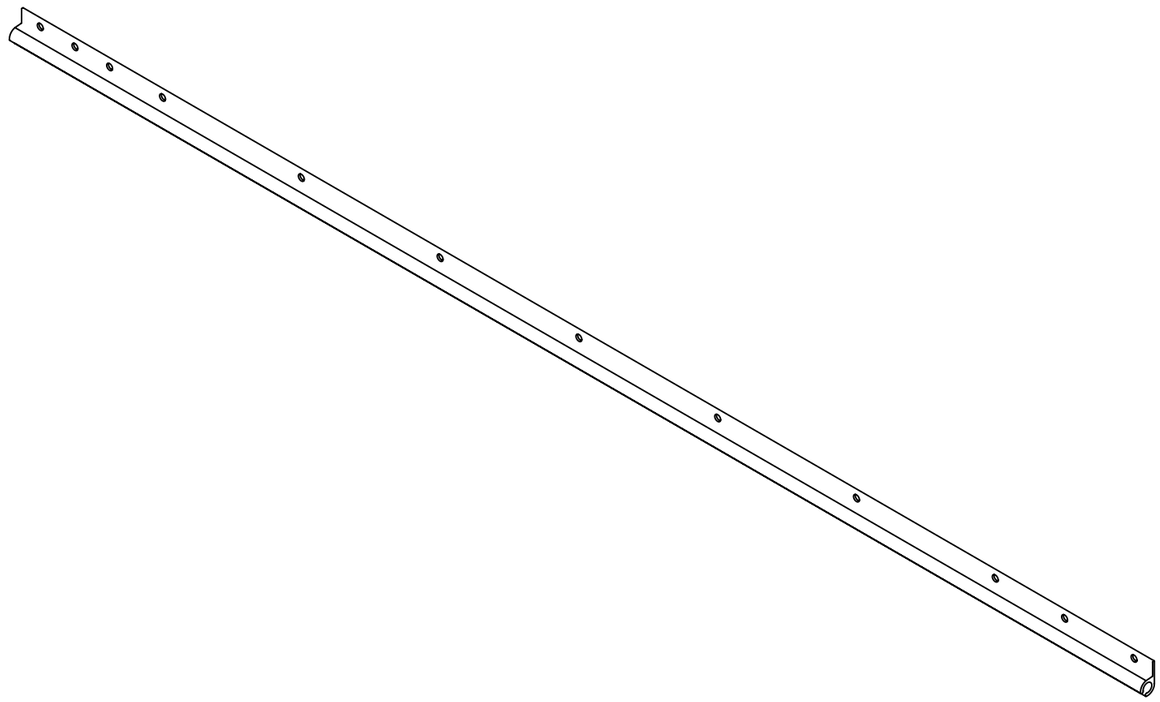
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Rope profile	1304			2000-05-1686	Alu. 6060-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-1686	Issue: A
Drawn: JWR	04-04-2019	Sheet : 1 of 1	
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.53 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

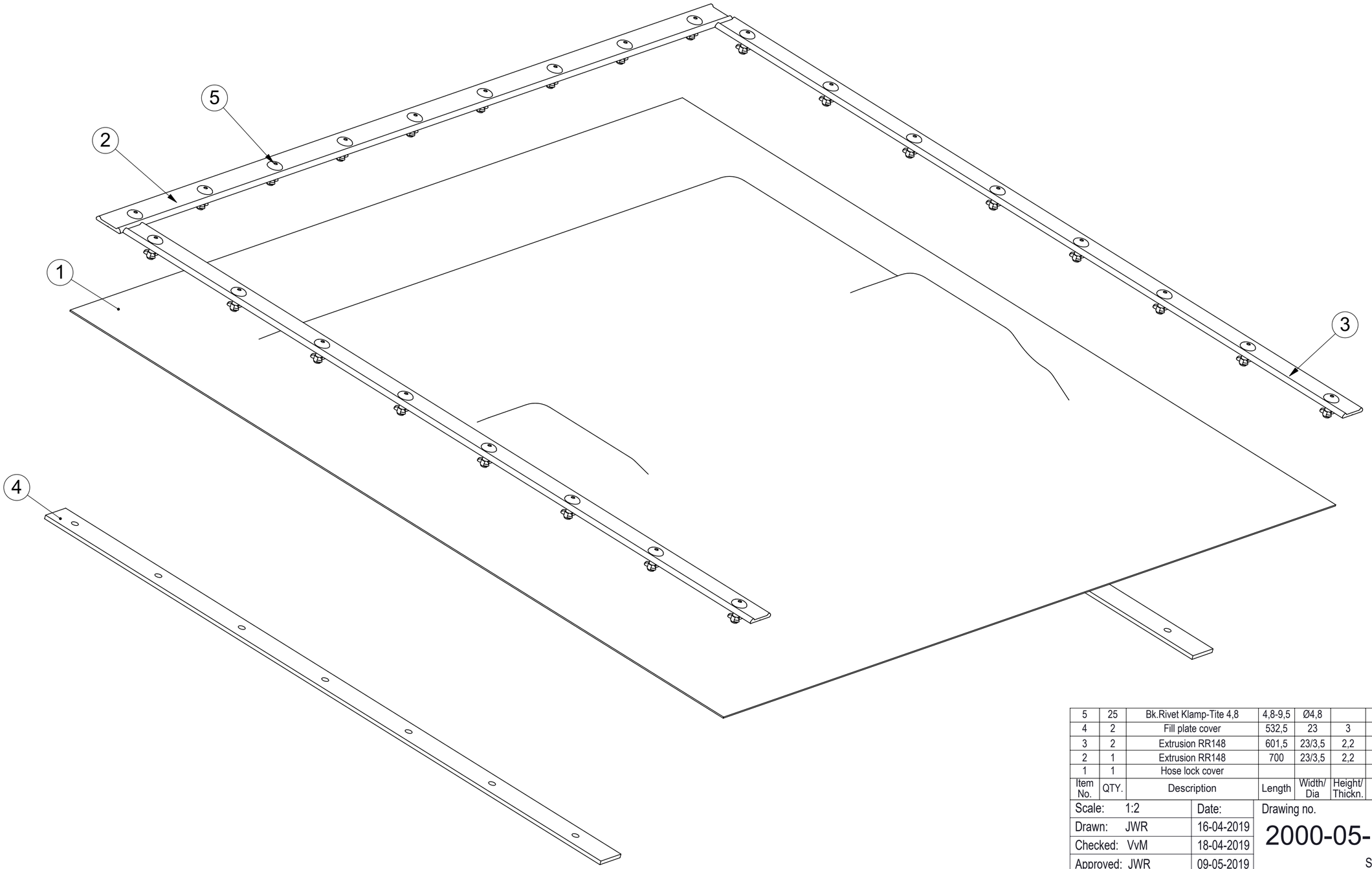
Title: **Rope profile**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	25	Bk.Rivet Klamp-Tite 4,8	4,8-9,5	Ø4,8		BK-BAPKTR-06W-06	Alu.	w. Rub. washer
4	2	Fill plate cover	532,5	23	3	2000-05-2104	Alu. 5754-H22	
3	2	Extrusion RR148	601,5	23/3,5	2,2	2000-05-1510	Alu. 6063-T66	
2	1	Extrusion RR148	700	23/3,5	2,2	2000-05-1505	Alu. 6063-T66	
1	1	Hose lock cover				2000-05-2059	Assembly	

Scale: 1:2 | Date:
Drawn: JWR | 16-04-2019
Checked: VvM | 18-04-2019
Approved: JWR | 09-05-2019

Drawing no. 2000-05-1507 Sheet : 1 of 1

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Mass: 0.82 kg

Finish:

Dimensions in mm (u.n.o.)

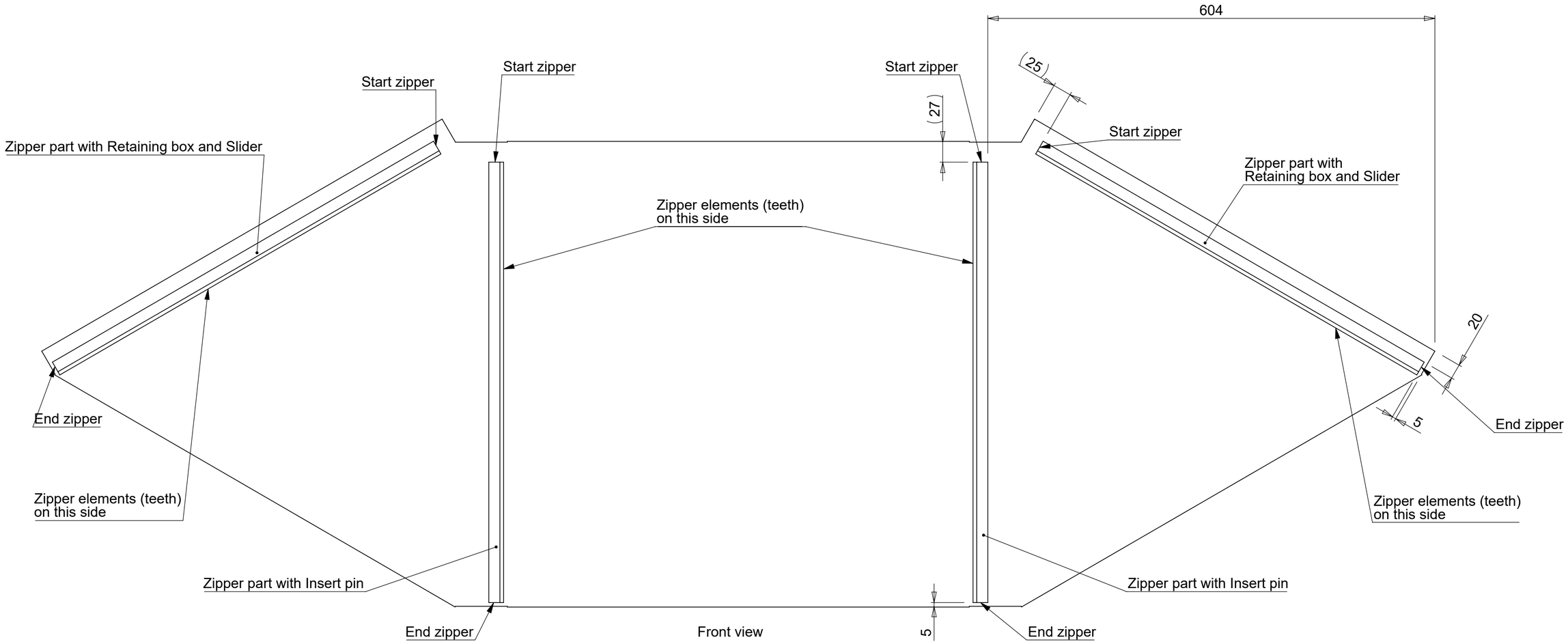
Title: Hose lock cover

Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Cover material according to specification VRR-SP1605
Sewing thread according to specification VRR-SP1607

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
2	2	Zipper 10mm (White)	595			2000-05-1508	Zipper	Trisco: Y10MM100
1	1	Stitched Cover Hose				2000-05-2225	Assembly	

Scale: 1:4	Date:	Drawing no. 2000-05-2059 Sheet : 1 of 2	Issue A
Drawn: JWR	16-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.75 kg		Finish:	

Tolerances (u.n.o.)

< 100	100 500	500 2500	2500 >
±1	±2	±4	±6

Dimensions in mm (u.n.o.)

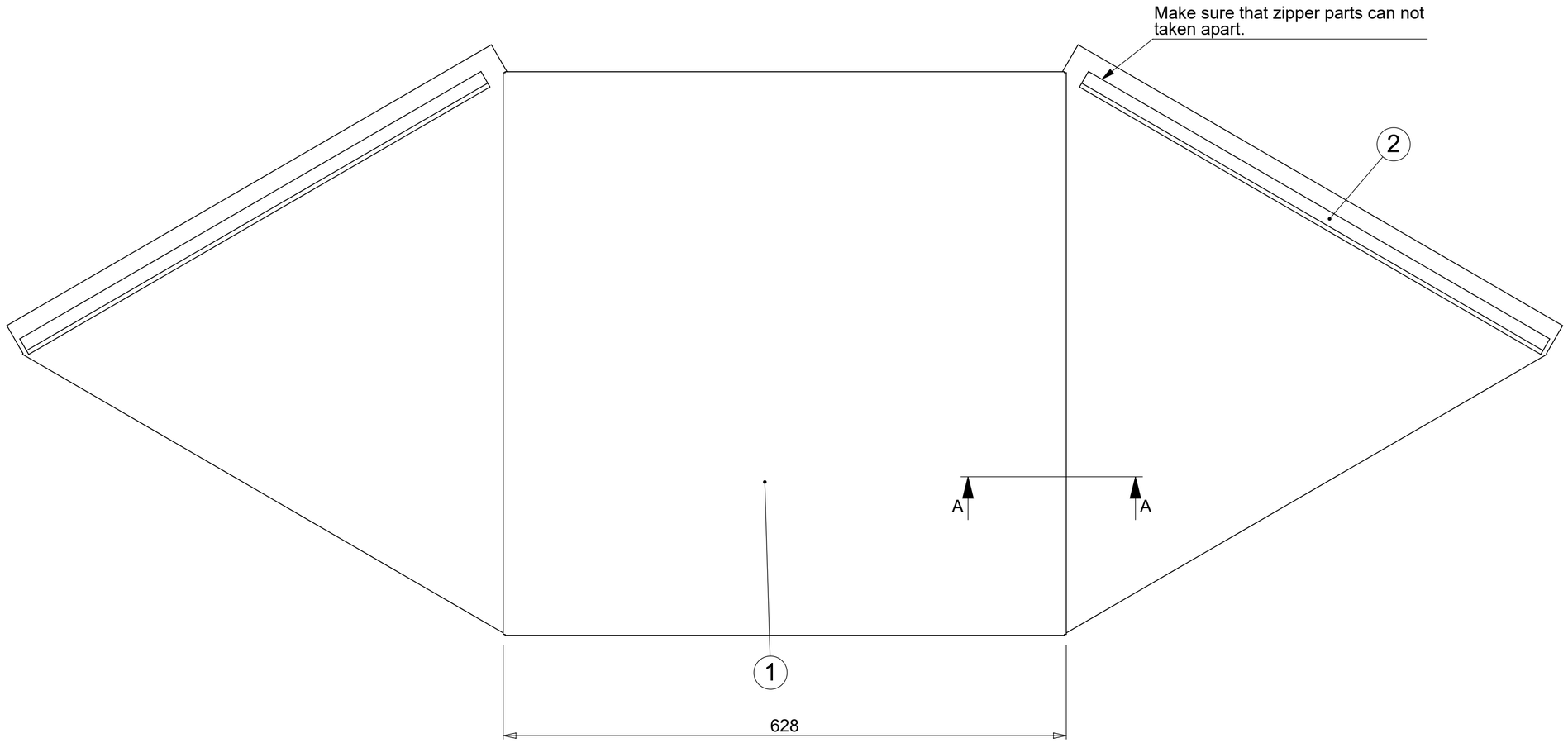
Title: Hose lock cover

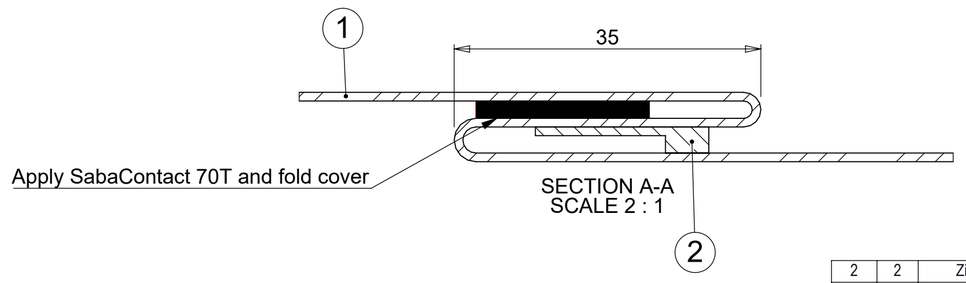
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
2	2	Zipper 10mm (White)	595			2000-05-1508	Zipper	Trisco: Y10MM100
1	1	Stitched Cover Hose				2000-05-2225	Assembly	

Scale: 1:4	Date:	Drawing no. 2000-05-2059 Sheet : 2 of 2	Issue A
Drawn: JWR	16-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.75 kg		Finish:	

Tolerances (u.n.o.)

< 100	100 500	500 2500	2500 >
±1	±2	±4	±6

Dimensions in mm (u.n.o.)

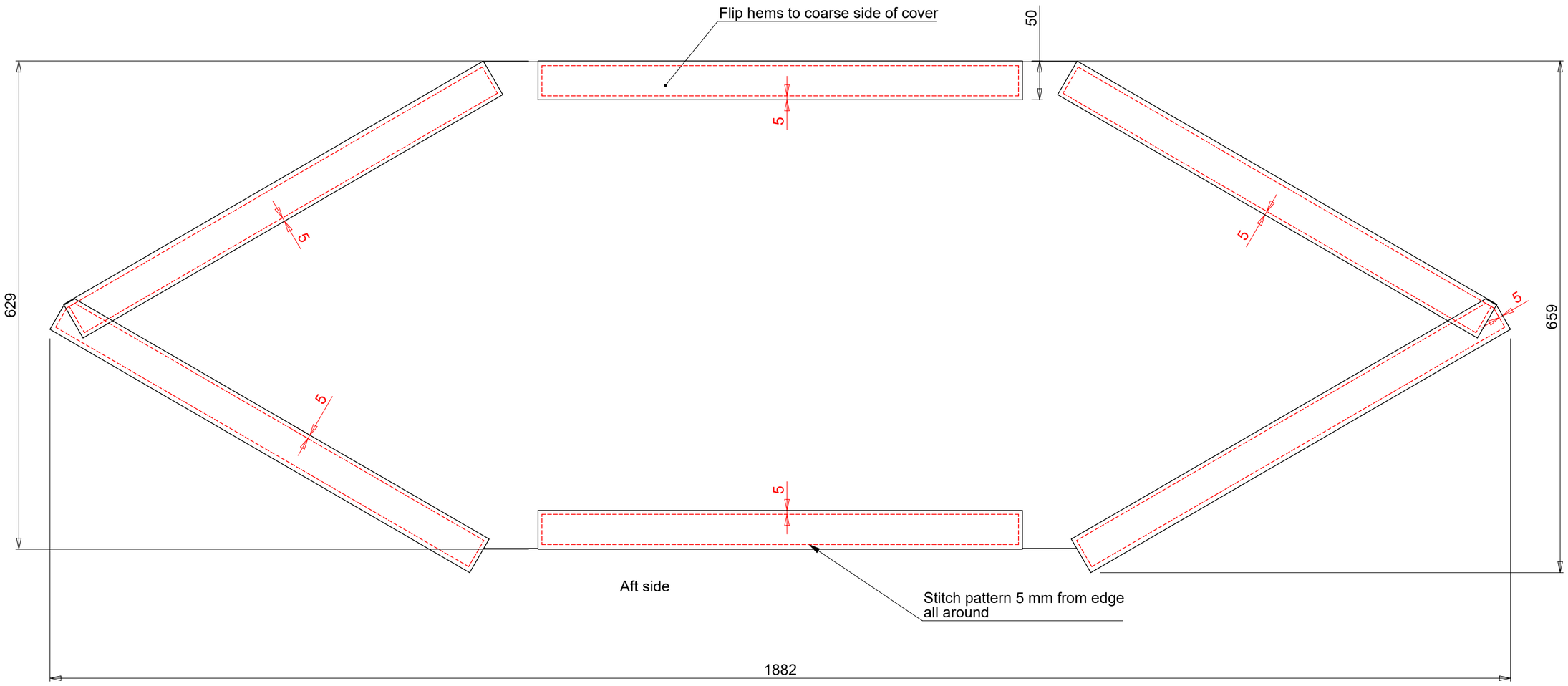
Title: **Hose lock cover**

Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



1	1	Cover Hose lock	1917,5	751,8		2000-05-1500	PVC Cover	Color: Grey
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.	Issue	Tolerances (u.n.o.)
Drawn: JWR	16-04-2019	2000-05-2225	A	< 100 500 2500 100 500 2500 > ±1 ±2 ±4 ±6
Checked: VvM	18-04-2019	Sheet : 1 of 1		
Approved: JWR	09-05-2019			
Mass: 0.68 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Stitched Cover Hose**

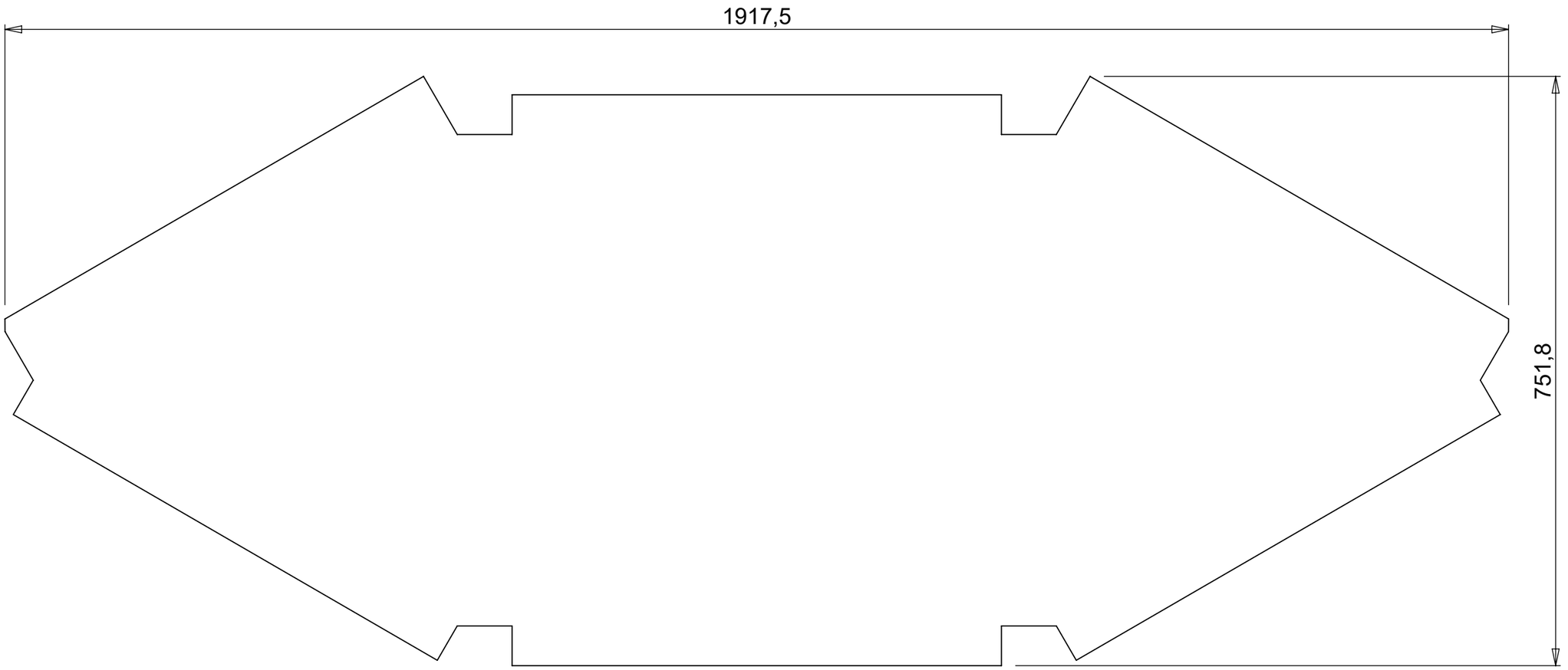
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Flat pattern



Cover material according to specification VRR-SP1605

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Cover Hose lock	1917,5	751,8		2000-05-1500	PVC Cover	Color: Grey

Scale: 1:6	Date:	Drawing no.: 2000-05-1500	Issue: A
Drawn: JWR	04-04-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.68 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

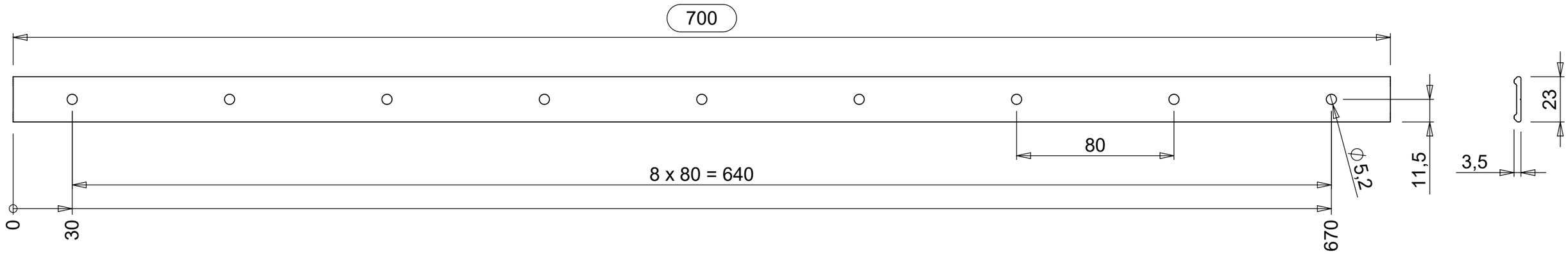
Title: **Cover Hose lock**

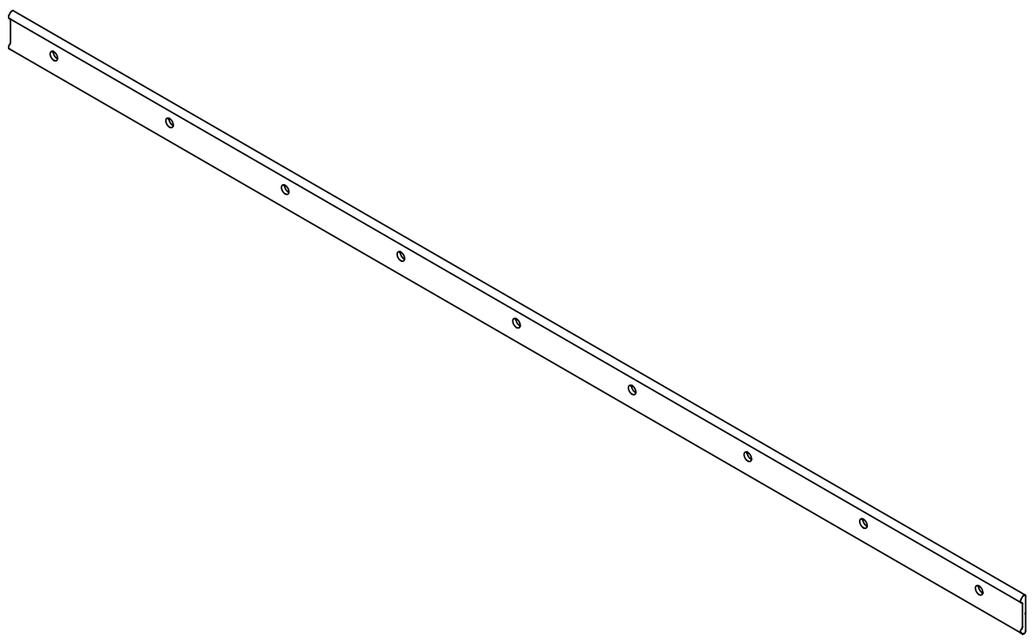
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion RR148	700	23/3,5	2,2	2000-05-1505	Alu. 6063-T66	

Scale: 1:2	Date:	Drawing no.: 2000-05-1505 Sheet : 1 of 1	Issue A
Drawn: JWR	16-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.11 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

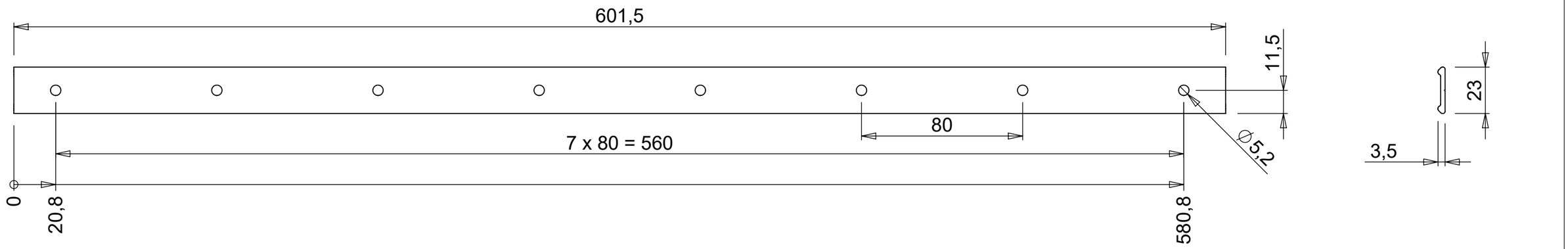
Title: **Extrusion RR148**

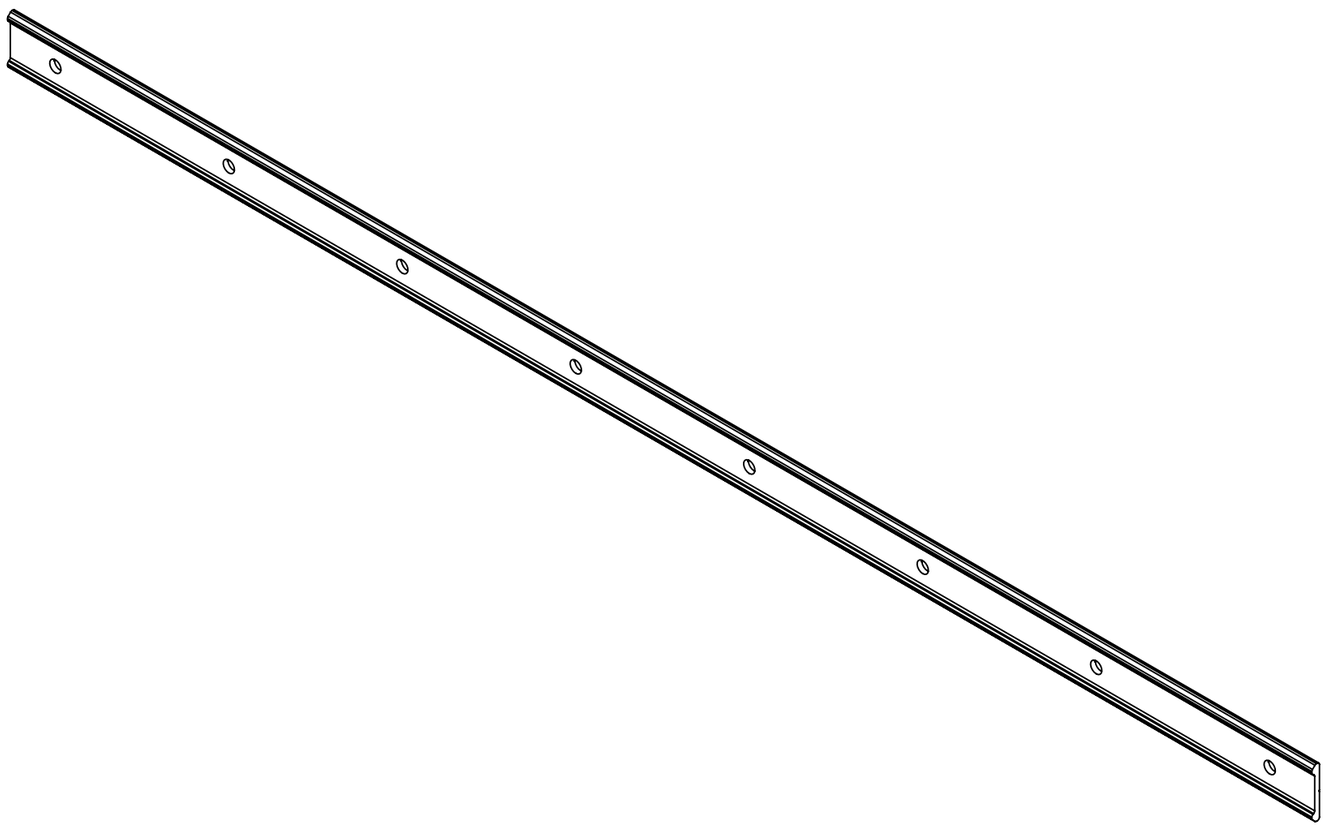
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Extrusion RR148	601,5	23/3,5	2,2	2000-05-1510	Alu. 6063-T66	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1510	Issue A	Tolerances (u.n.o.)
Drawn: JWR	16-04-2019			< 7 30 120 400 1000 2000
Checked: VvM	18-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
				Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.09 kg		Finish: U001 - Aludon		Dimensions in mm (u.n.o.)

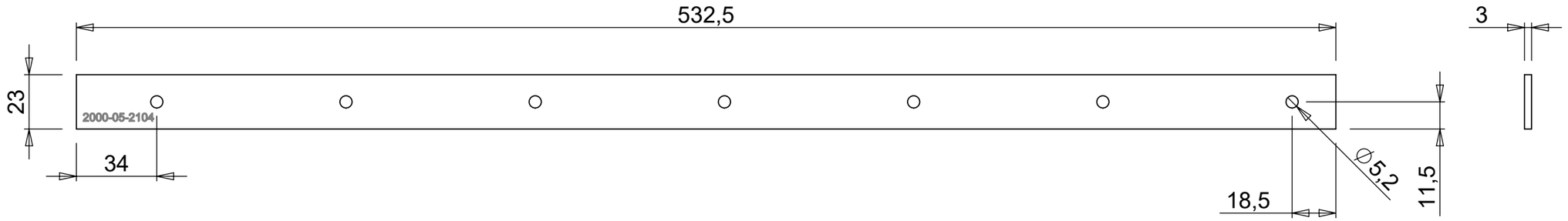
Title: **Extrusion RR148**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill plate cover	532,5	23	3	2000-05-2104	Alu. 5754-H22	

Scale: 1:2	Date:	Drawing no.: 2000-05-2104	Issue: A
Drawn: JWR	16-04-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.10 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Fill plate cover**

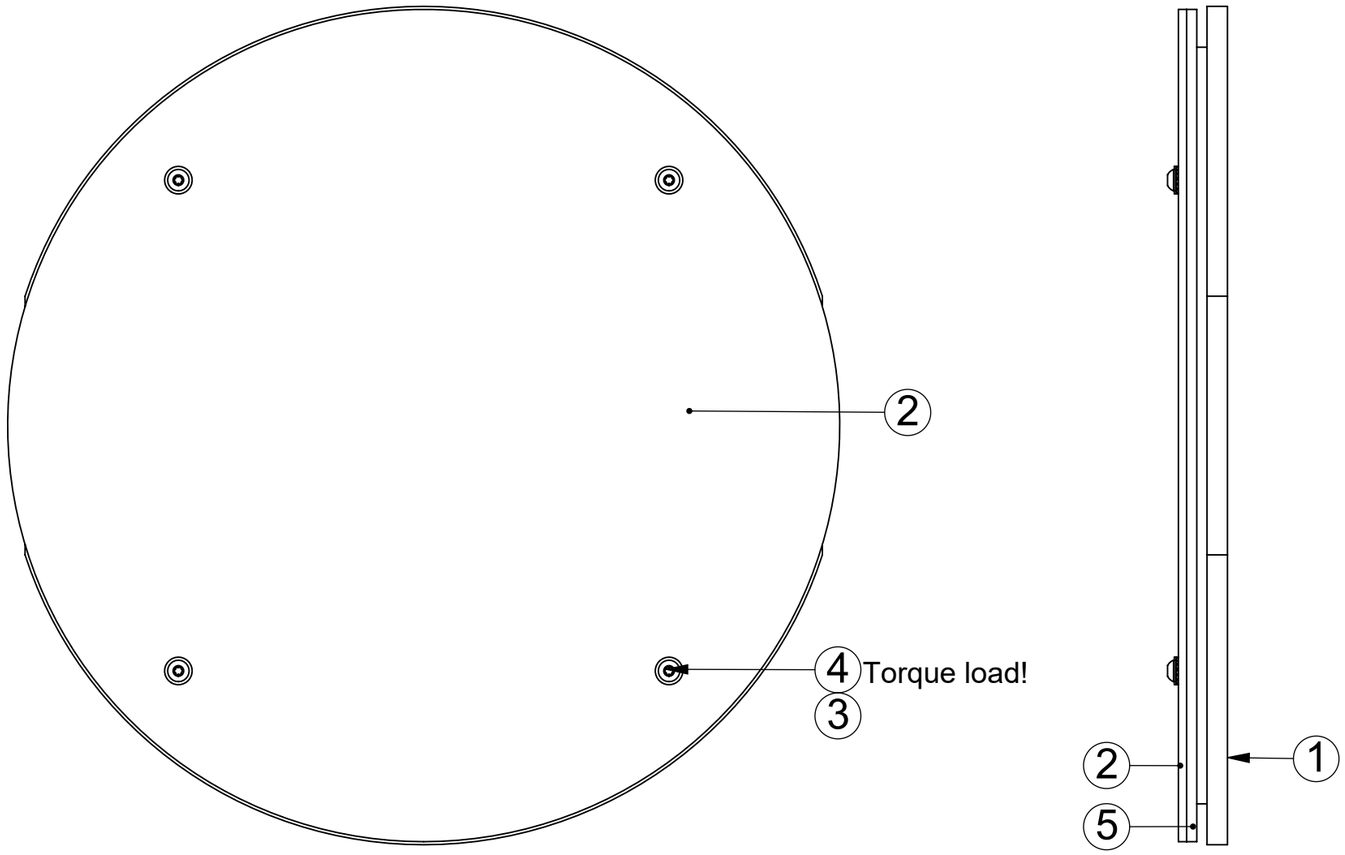
Iss.	Changes	Date	Name

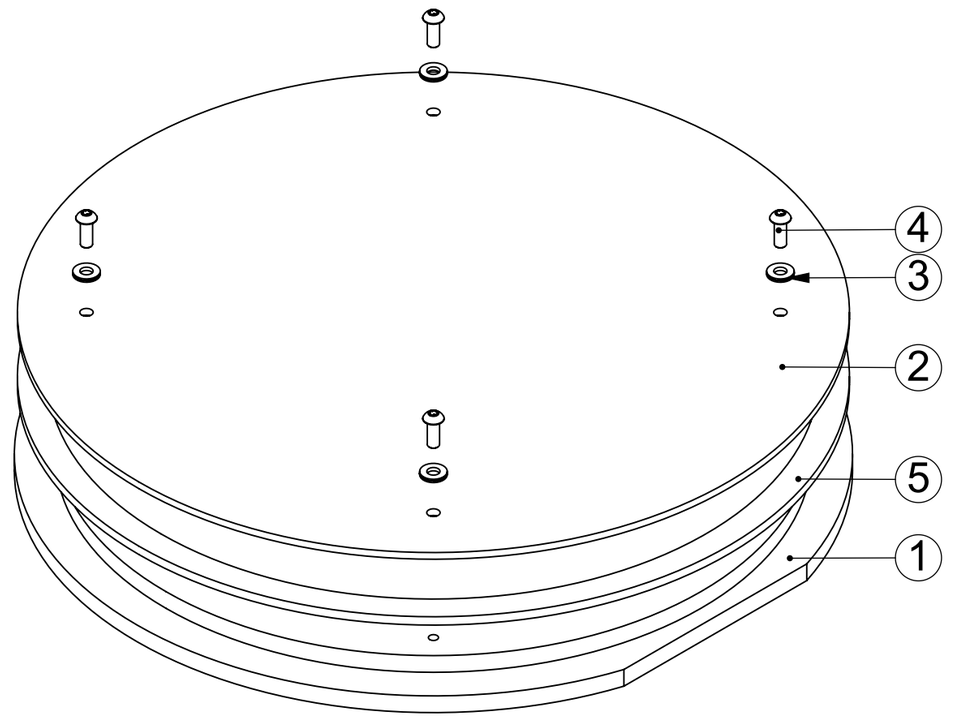
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Stick Rubber ⑤ to Plug top ② before fastening to Plug bottom ①





Torque load M6: 8,1 Nm

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Celrubber 15x5	1231,5	15	5	2000-05-1467	Celrub.(EPDM)	
4	4	Torx Socket Button Screw	16	M6		BO-7380T-06016-A2	AISI 304	ISO7380 torx
3	4	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-A4	AISI 316L	Stainless steel
2	1	Plug top		407	4	2000-05-1464	POM-C	Color: White
1	1	Plug bottom		Ø410	20	2000-05-1463	POM-C	Color: white

Iss.	Changes	Date	Name

Scale: 1:3	Date:	Drawing no.: 2000-05-1465 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 4.07 kg		Finish:	
Title: Plug			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

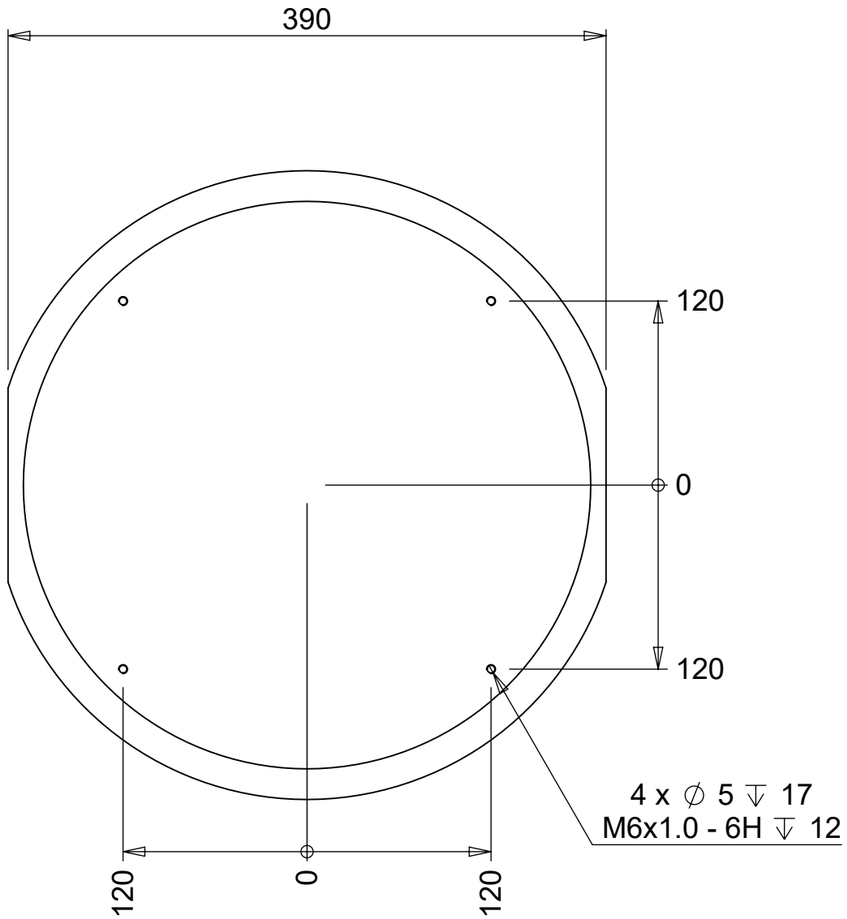
Raw extrusion in accordance with OEM drawing and EN755-9

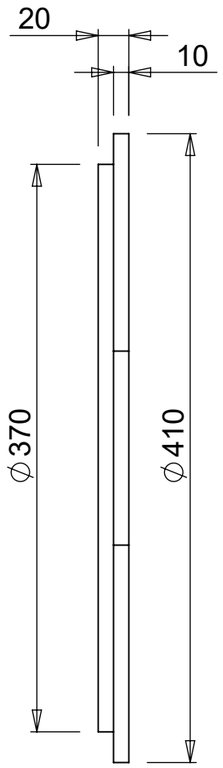
Dimensions in mm (u.n.o.)

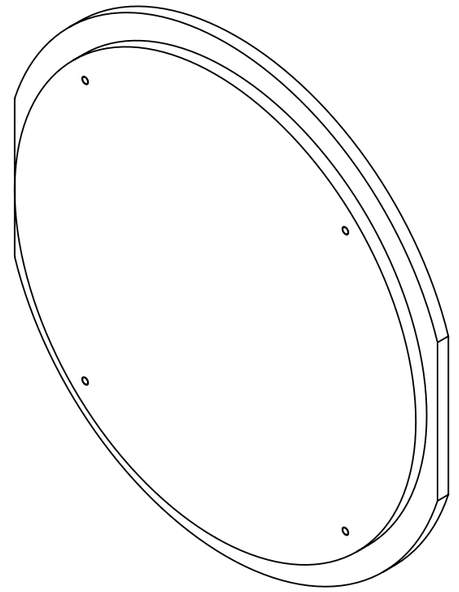
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Plug bottom		Ø410	20	2000-05-1463	POM-C	Color: white
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:4	Date:	Drawing no.: 2000-05-1463 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 3.30 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

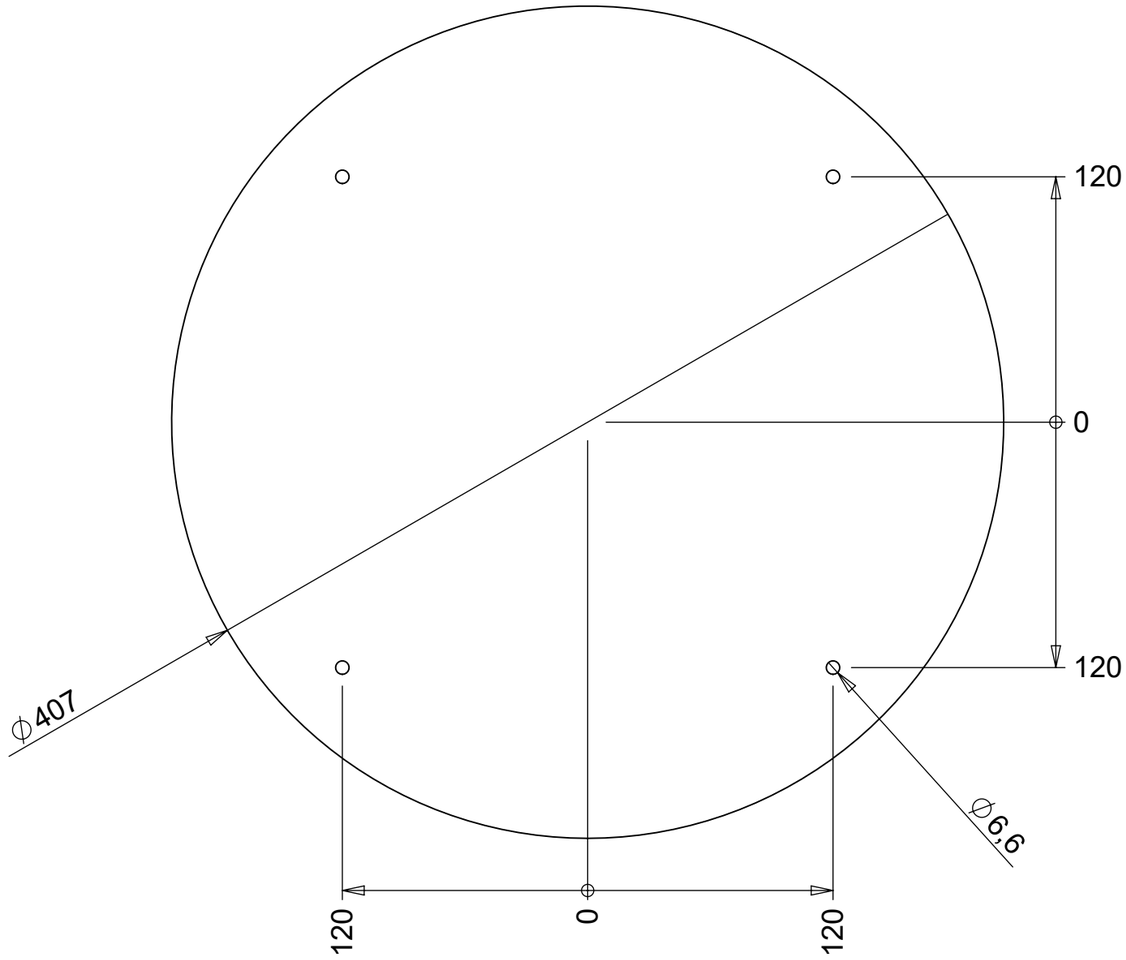
Title: **Plug bottom**

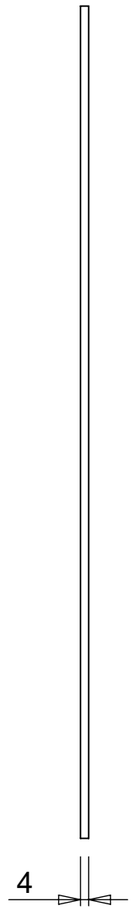
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Plug top		407	4	2000-05-1464	POM-C	Color: White

Scale: 1:3	Date:	Drawing no.: 2000-05-1464 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.72 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

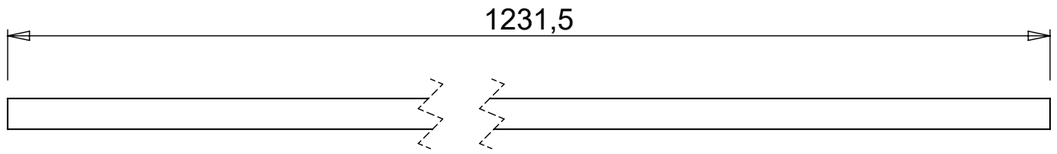
Title: **Plug top**

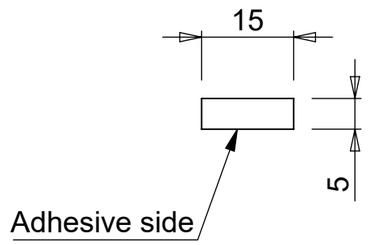
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Celrubber 15x5	1231,5	15	5	2000-05-1467	Celrub.(EPDM)	

Scale: 1:1	Date:	Drawing no.: 2000-05-1467 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

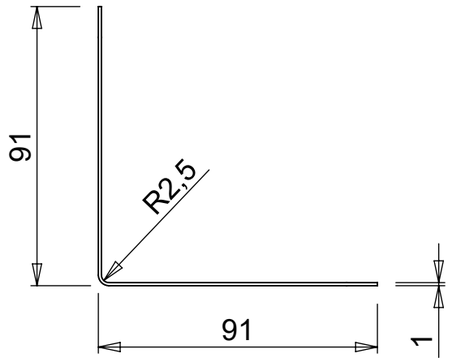
Title: Celrubber 15x5

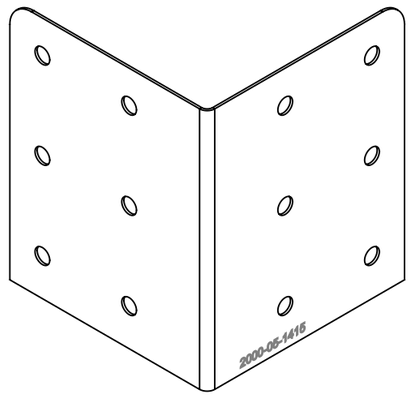
Iss.	Changes	Date	Name

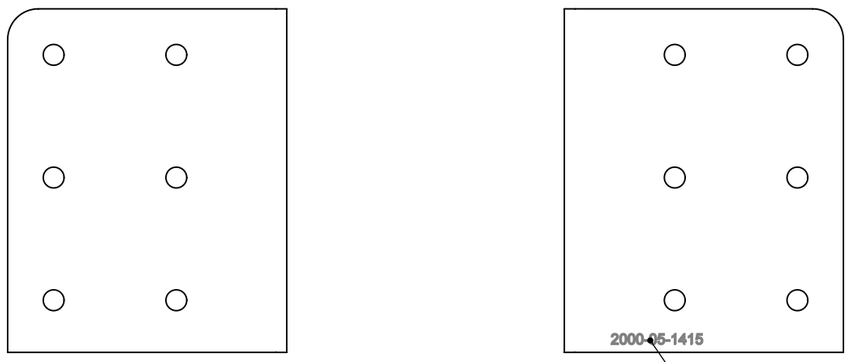
Projection

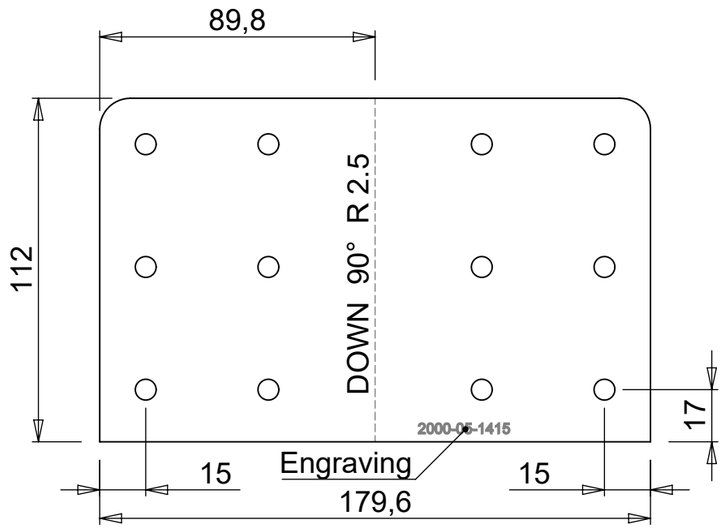
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Fill plate corner gusset	179,6	112	1	2000-05-1415	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1415 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.05 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

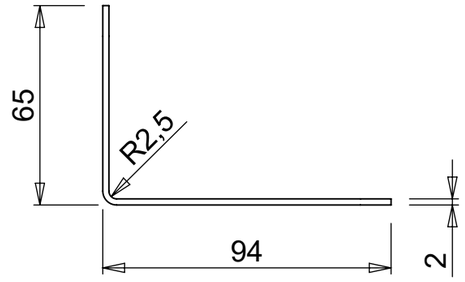
Title: **Fill plate corner gusset**

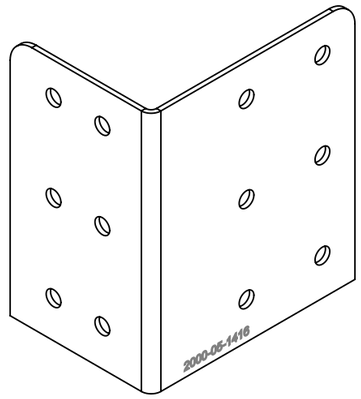
Iss.	Changes	Date	Name

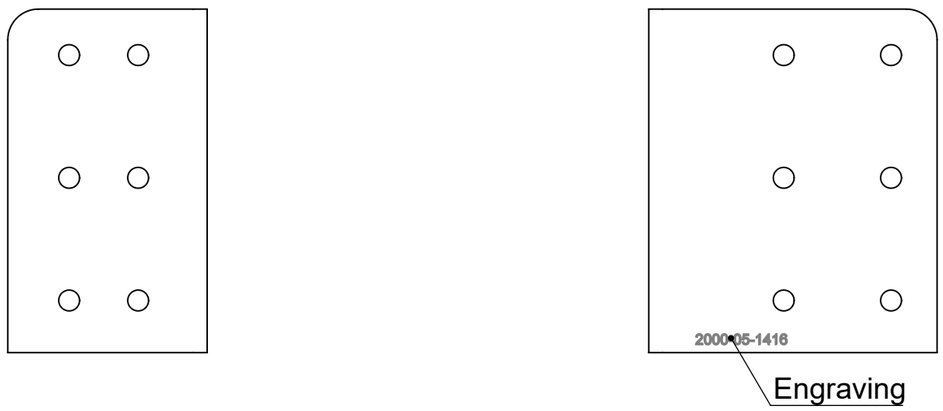
Projection

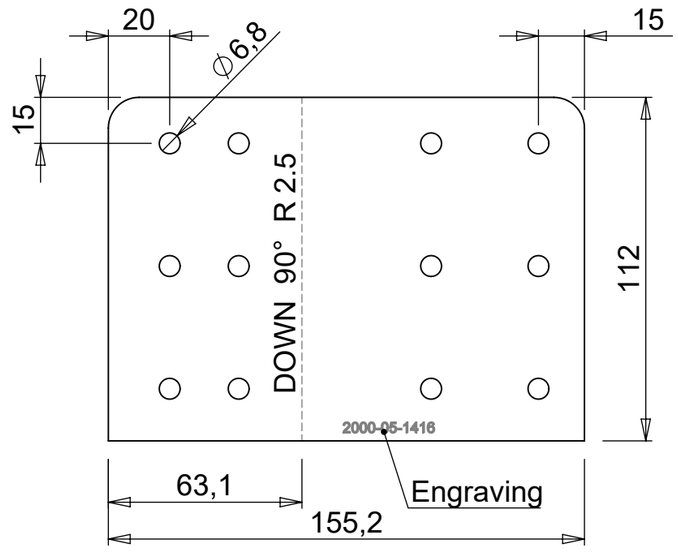
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Fill plate corner gusset	155,2	112	2	2000-05-1416	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1416 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.09 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

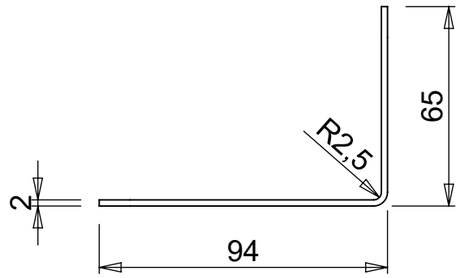
Title: **Fill plate corner gusset**

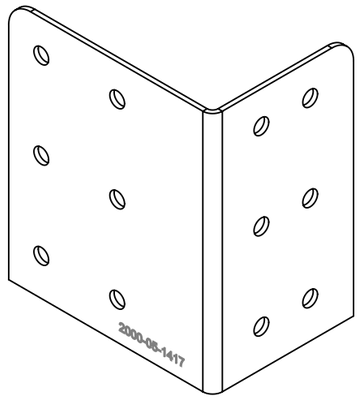
Iss.	Changes	Date	Name

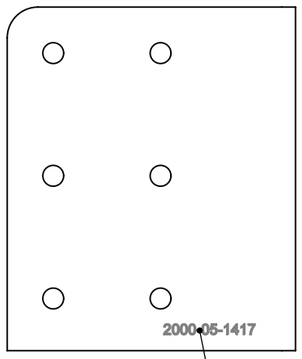
Projection

Size A3

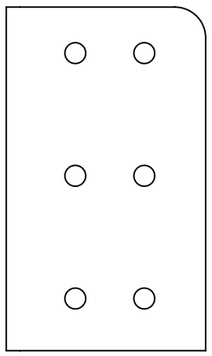
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

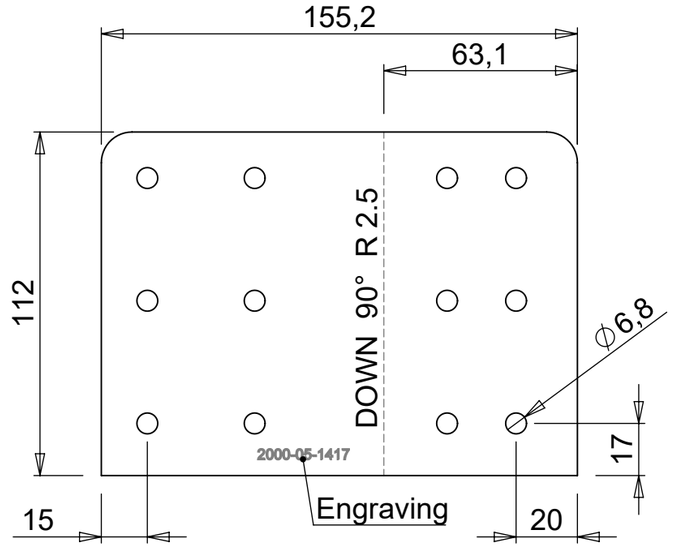






Engraving





1	1	Fill plate corner gusset	155,2	112	2	2000-05-1417	Alu. 5754-H22	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1417 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.09 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

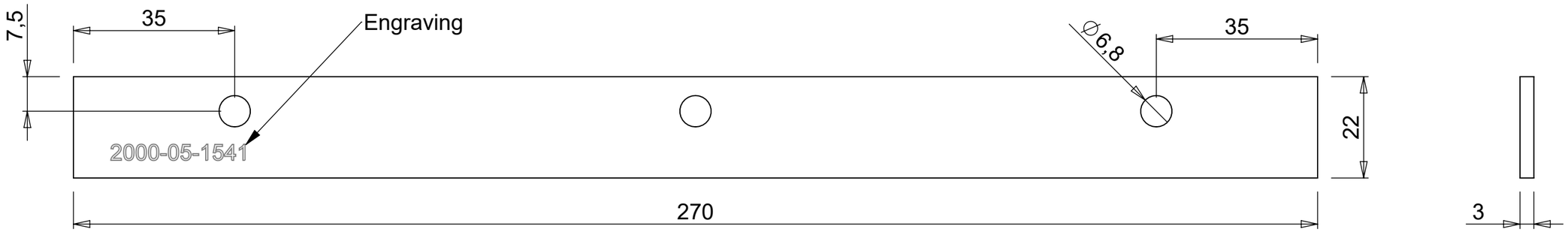
Title: **Fill plate corner gusset**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill strip	270	22	3	2000-05-1541	Alu. 5754-H22	

Scale: 1:1	Date:	Drawing no.: 2000-05-1541 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.05 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

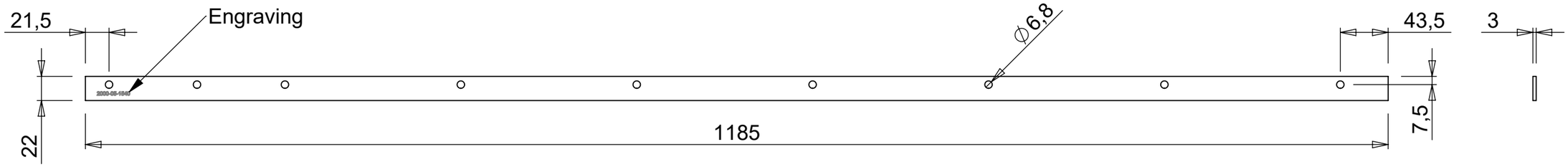
Title: **Fill strip**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Fill strip	1185	22	3	2000-05-1540	Alu. 5754-H22	

Scale: 1:4	Date:	Drawing no.: 2000-05-1540 Sheet : 1 of 1	Issue A
Drawn: JWR	04-04-2019		
Checked: HS	12-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.21 kg		Finish:	
Title: Fill strip			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

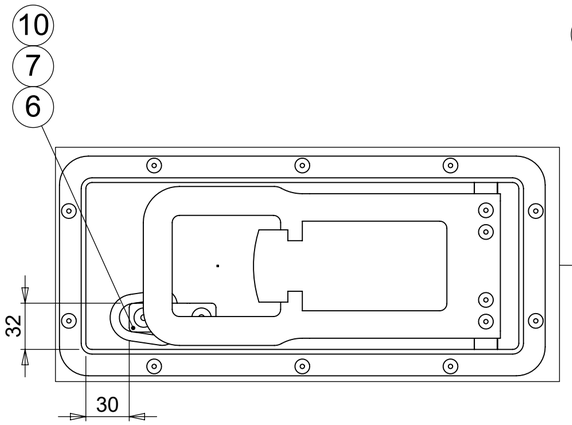
Dimensions in mm (u.n.o.)

Iss.	Changes	Date	Name

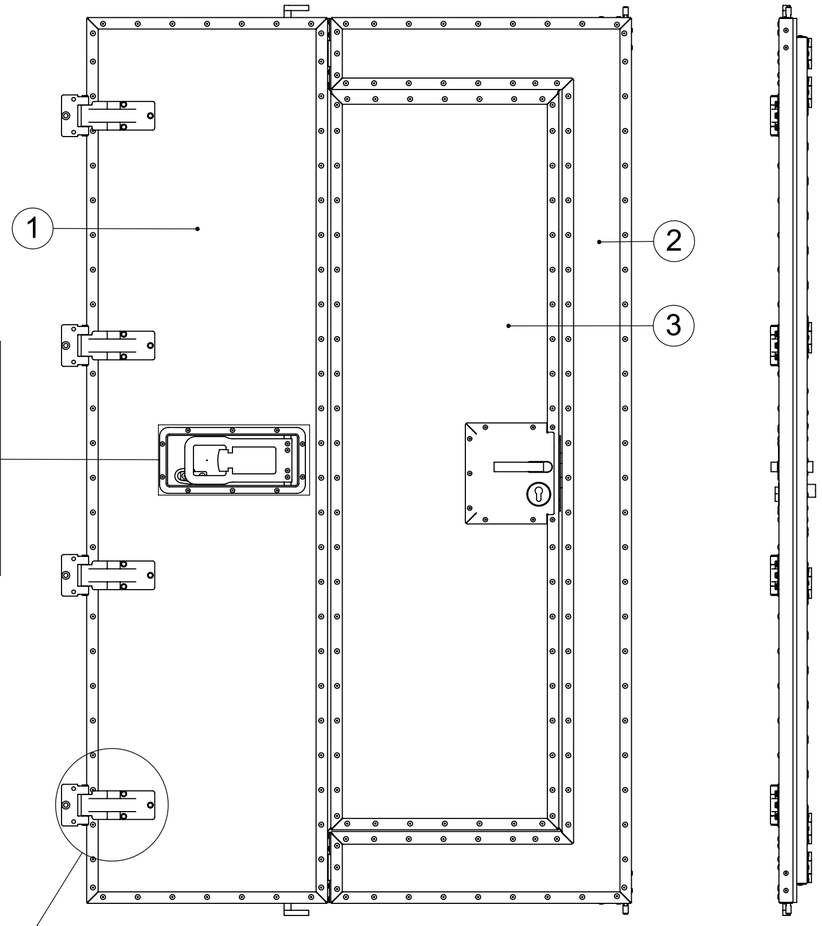
Projection

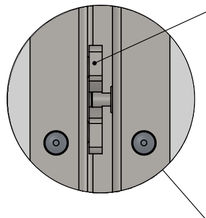
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



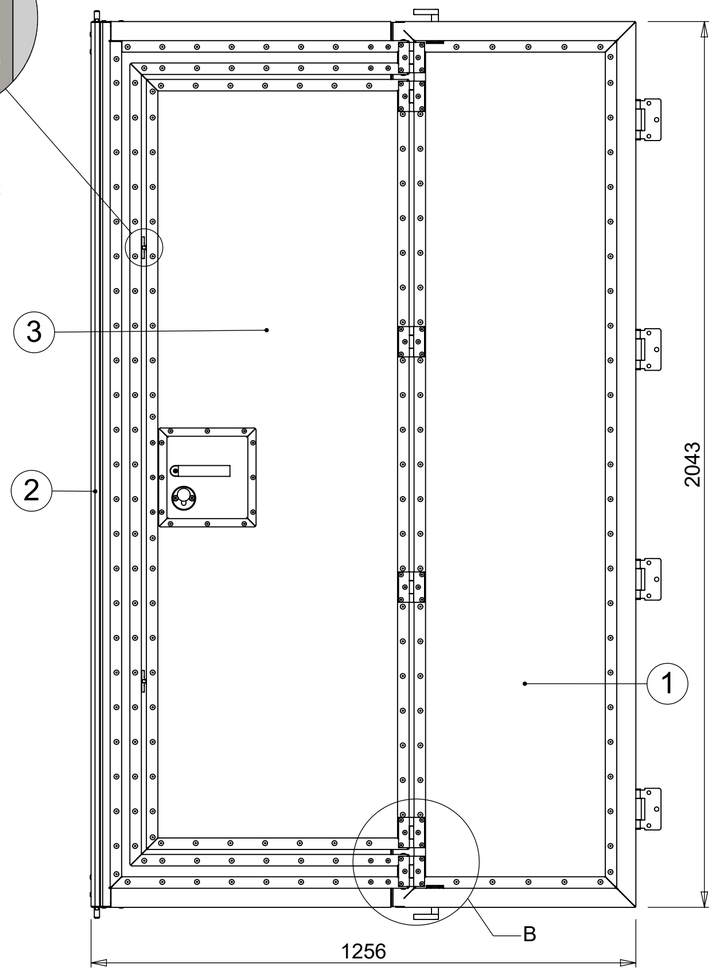
DETAIL D
SCALE 1 : 3

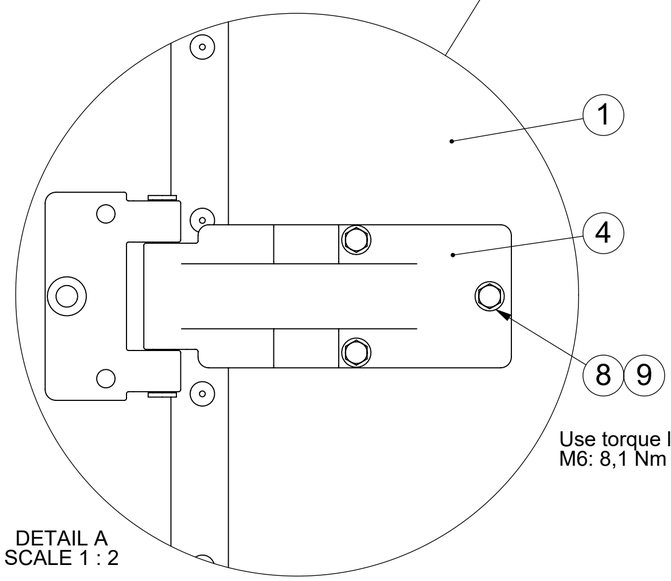




Adjust guiding block on door (2) such that door (3) locks vertically, then tighten the bolts of guiding block

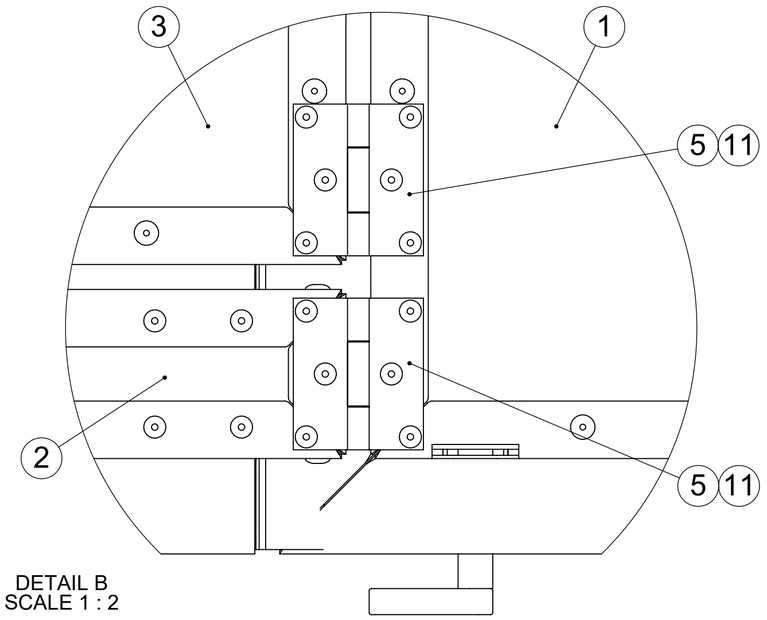
DETAIL C
SCALE 1 : 2





Use torque load
M6: 8,1 Nm

DETAIL A
SCALE 1 : 2



DETAIL B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
11	36	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
10	2	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
9	12	Hex. Head Screw	25	M6		BO-4017-06025-A2	AISI 304	ISO4017/DIN933
8	12	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
7	1	D-Ring 25mm	44	37		ZN-VRR-DRNG2	St52	min.2250daN
6	1	Net Bracket (SS)	60	67.3	20	RR7.720.085	AISI 304	
5	6	Hinge				2000-05-2212	Assembly	
4	4	Door hinge 214S				SL-NJ214S	Assembly	
3	1	DBJ door left 3				2000-07-3479	Assembly	
2	1	DBJ door left2				2000-05-0520	Assembly	
1	1	DBJ door 1				2000-05-0511	Assembly	

Scale:	1:10	Date:	
Drawn:	MBMH	28-06-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	

Drawing no. 2000-07-3478
Sheet : 1 of 2

Issue: A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Mass: 57.12 kg

Finish:

Dimensions in mm (u.n.o.)

Title: DBJ Door Left

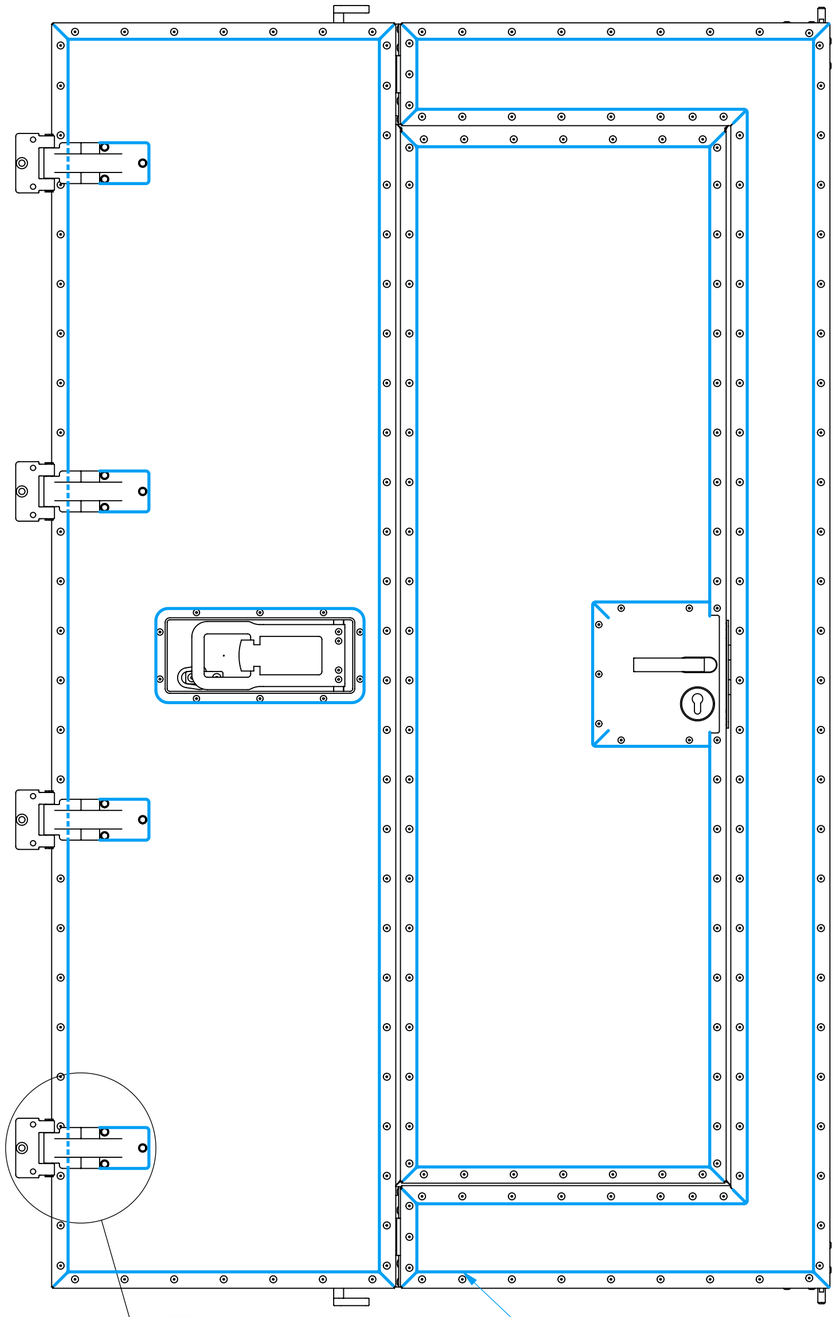
Iss.	Changes	Date	Name

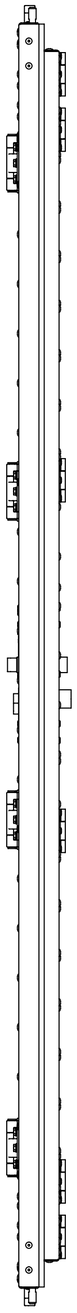
Projection

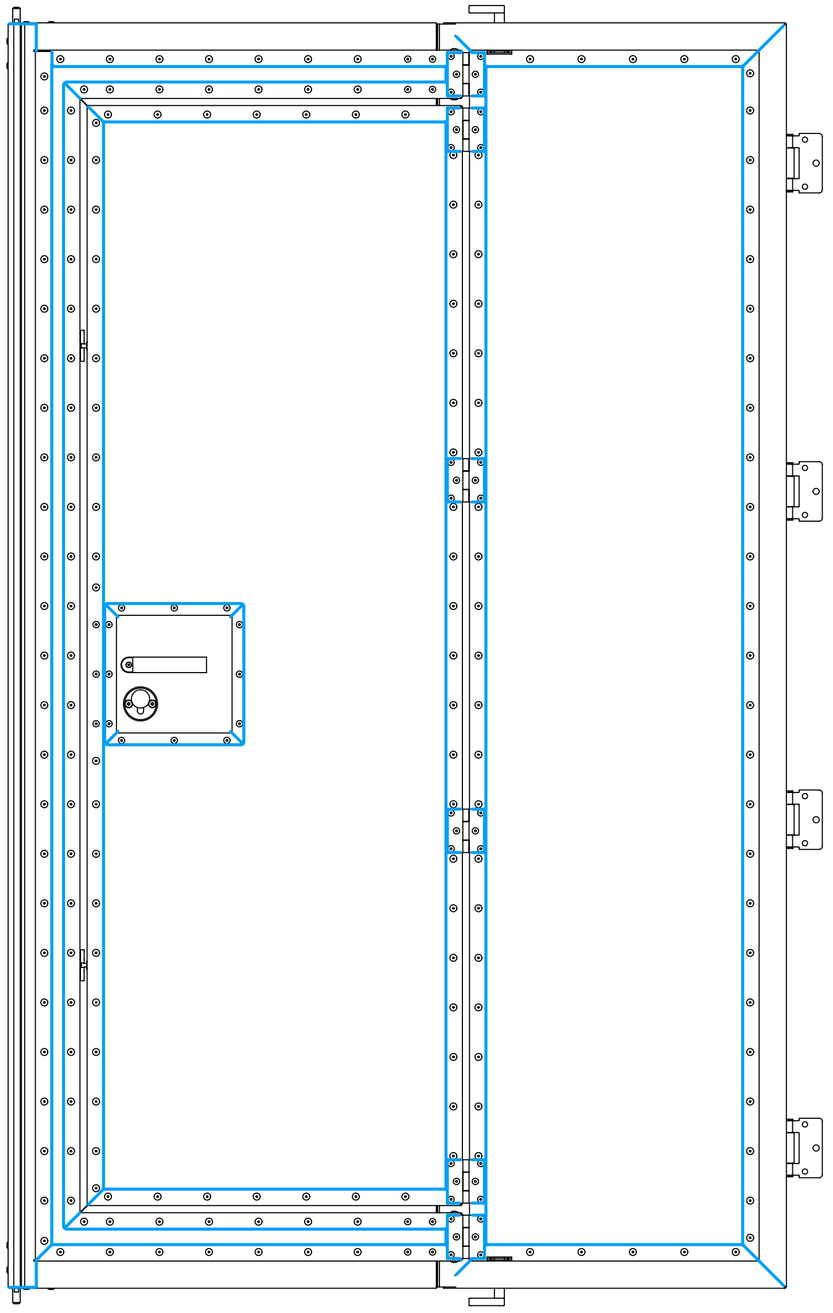
Size: A2

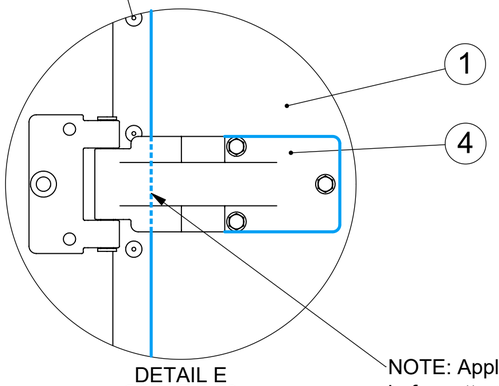
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Sealant Instructions









DETAIL E
SCALE 1 : 3

NOTE: Apply sealant (dashed line) before attaching (4) to (1)

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
11	36	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
10	2	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
9	12	Hex. Head Screw	25	M6		BO-4017-06025-A2	AISI 304	ISO4017/DIN933
8	12	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
7	1	D-Ring 25mm	44	37		ZN-VRR-DRNG2	St52	min.2250daN
6	1	Net Bracket (SS)	60	67.3	20	RR7.720.085	AISI 304	
5	6	Hinge				2000-05-2212	Assembly	
4	4	Door hinge 214S				SL-NJ214S	Assembly	
3	1	DBJ door left 3				2000-07-3479	Assembly	
2	1	DBJ door left2				2000-05-0520	Assembly	
1	1	DBJ door 1				2000-05-0511	Assembly	

Scale: 1:7	Date:	Drawing no. 2000-07-3478 Sheet : 2 of 2	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 57.12 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

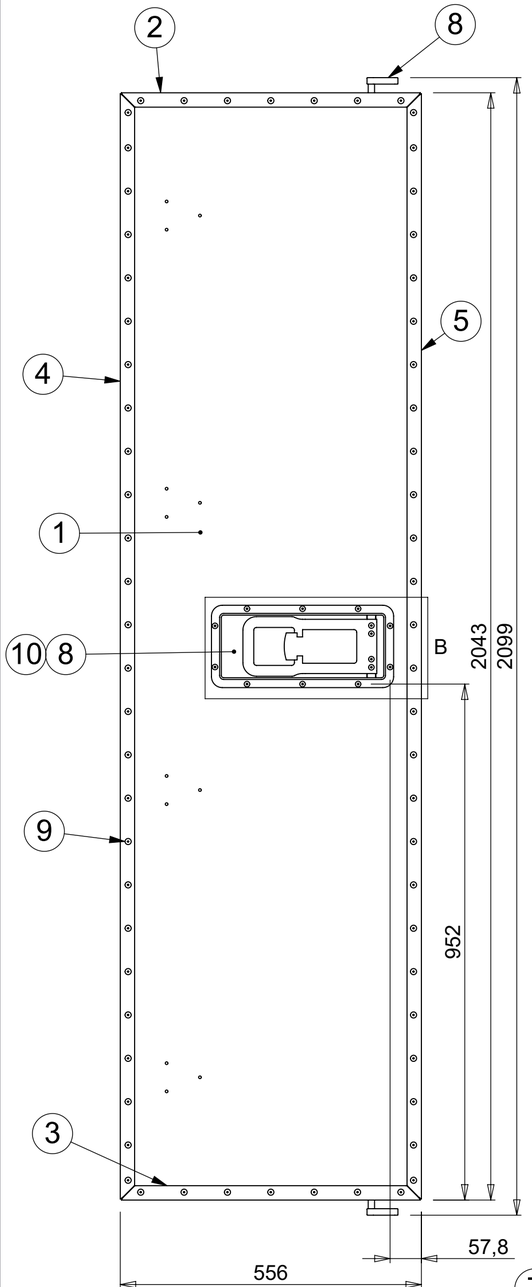
Title: DBJ Door Left

Iss.	Changes	Date	Name

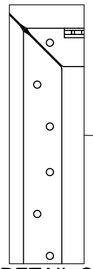
Projection

Size A2

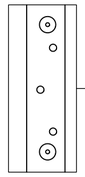
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



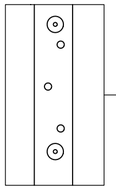
Leave holes open
shown in details C - F



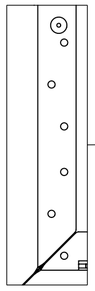
DETAIL C
SCALE 1 : 3



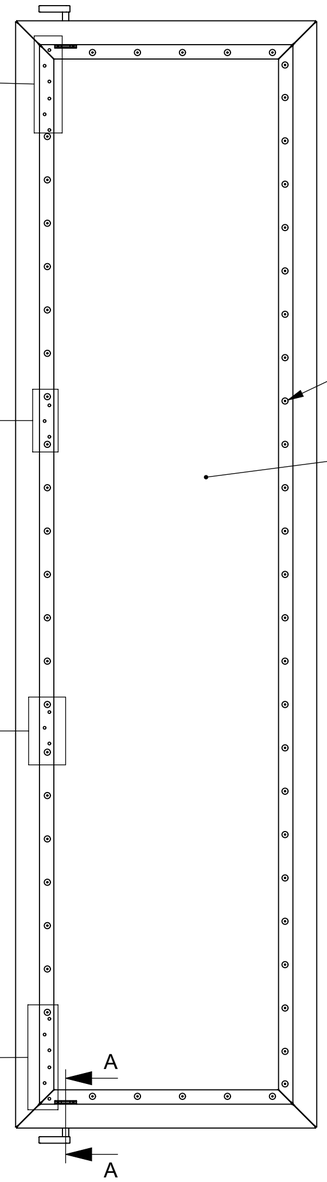
DETAIL D
SCALE 1 : 3

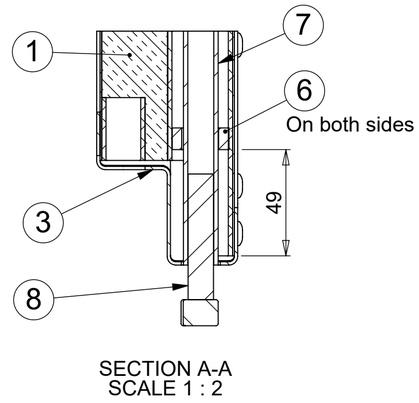


DETAIL E
SCALE 1 : 3

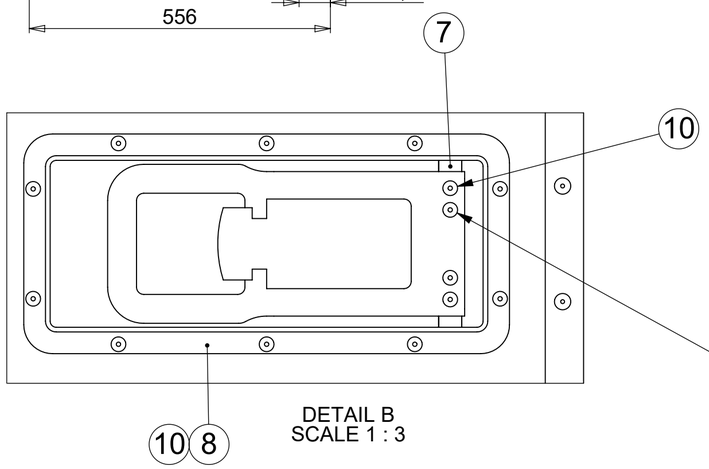


DETAIL F
SCALE 1 : 3





SECTION A-A
SCALE 1 : 2



DETAIL B
SCALE 1 : 3

Placement door lock
- Fasten tubes (7) with monobolt (10)
- Check if door lock functions correctly in container
- If door lock works correctly, weld tubes (7) to door handle (8) on inside

Place WHITE INNO SEAL on (2), (3), (4) and (5) before placing on (1)
Remove excess sealant

Note that the sealant has a dry time of 2 hours.

Welding according to procedure VRR-W3-090 except when indicated otherwise

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
10	14	Bk.St. Monobolt 4,8	1,6-6,9	Ø4,8		BK-02771-00613	Steel	(MGLP-R6-4)
9	122	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
8	1	Internal Door Lock	335	152	29	SL-1202530	AISI 1020	RHIWA-1202530
7	2	Tube 16x2	1019,5	16	2	2000-05-1421	AISI 304	
6	2	Center block	26,2	26,2	10	2000-00-5783	Alu. 6082-T6	
5	1	Sheet; door frame	2039	153,4	1,5	2000-05-1257	AISI 304	Bend with V16
4	1	Sheet; door frame	2039	153,4	1,5	2000-05-0514	AISI 304	Bend with V16
3	1	Sheet; door frame	551,5	153,4	1,5	2000-05-1367	AISI 304	Bend with V16
2	1	Sheet; door frame	551,5	153,4	1,5	2000-05-0446	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0512	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-0511 Sheet : 1 of 1	Issue A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 20.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

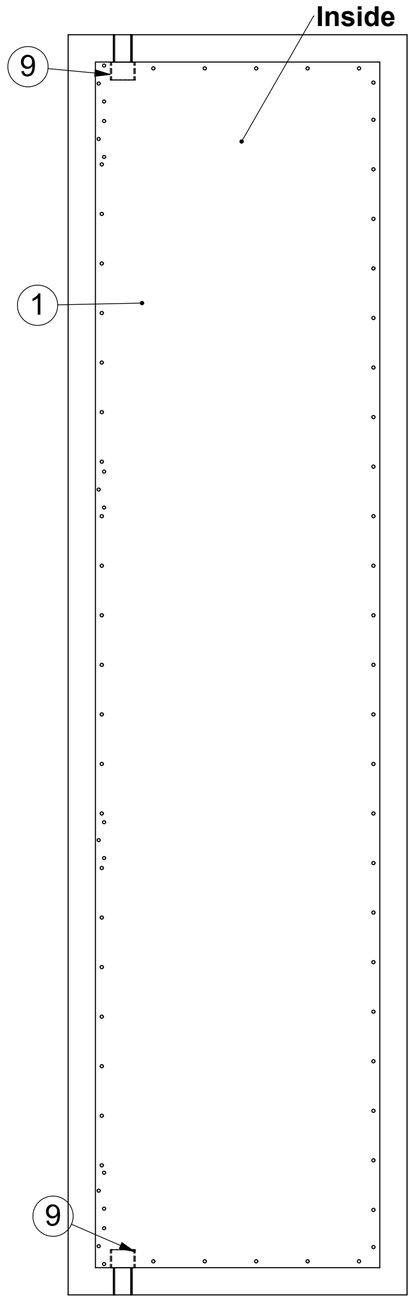
Title: DBJ door 1

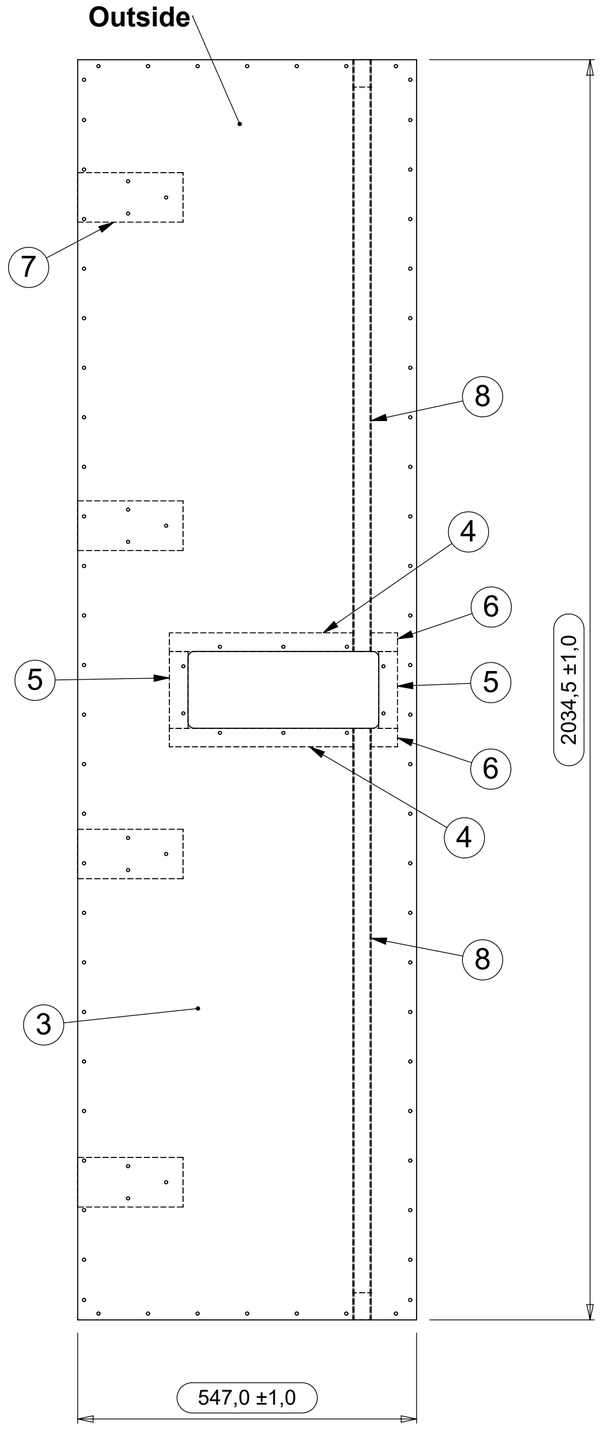
Iss.	Changes	Date	Name

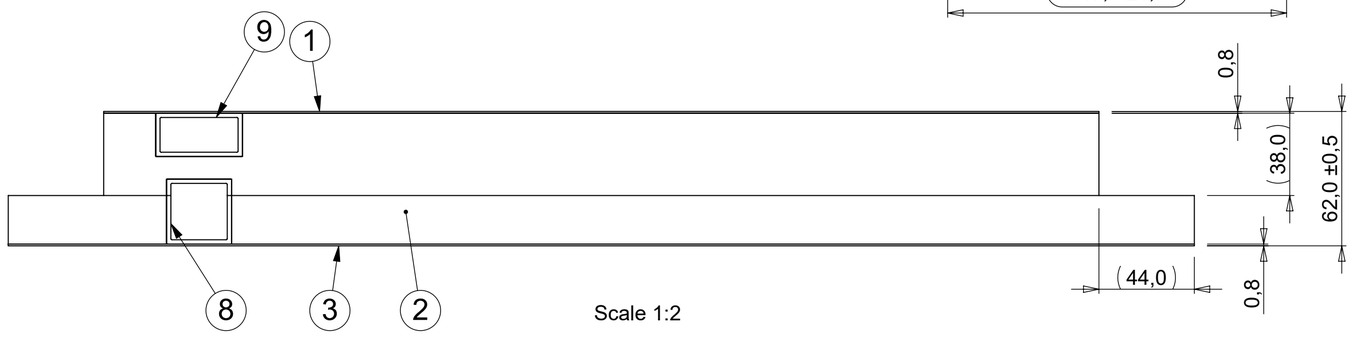
Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Scale 1:2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
9	2	Tube 40x20x2	29	40/20	2	2000-05-2106	Alu. 6060-T66	
8	2	Tube (30x30x2)	955,3	30/30	2	2000-05-0929	Alu. 6060-T66	
7	4	Reinforcement sheet	170	80	8	2000-05-1344	Alu. 6082-T6	
6	2	Lock insert	42	30	4	2000-04-1389	Alu. 6060-T66	
5	2	Lock insert	124	30	4	2000-04-1388	Alu. 6060-T66	
4	2	Lock insert	296	30	4	2000-04-1387	Alu. 6060-T66	
3	1	Outer sheet	2034,5	547	0,8	2000-05-0875	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	547	60,4	2000-05-0874	RTM-Plus	
1	1	Inner panel	1946,5	459	0,8	2000-05-0873	PE-GEGW 0,8 NF	

Scale: 1:7	Date:	Drawing no. 2000-05-0512 Sheet : 1 of 2	Issue B
Drawn: HS	27-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 7.77 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

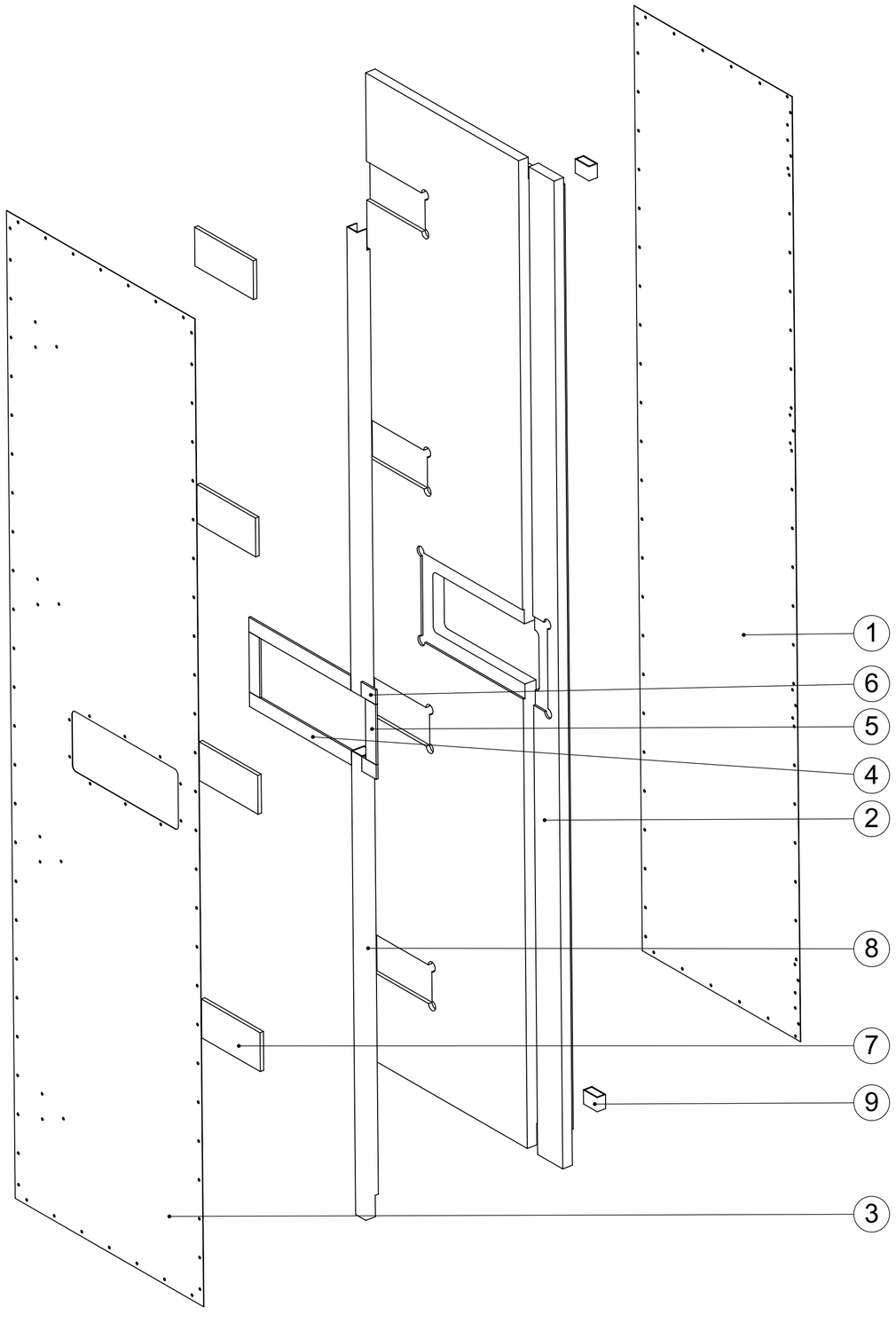
Title: DBJ panel door

Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
9	2	Tube 40x20x2	29	40/20	2	2000-05-2106	Alu. 6060-T66	
8	2	Tube (30x30x2)	955,3	30/30	2	2000-05-0929	Alu. 6060-T66	
7	4	Reinforcement sheet	170	80	8	2000-05-1344	Alu. 6082-T6	
6	2	Lock insert	42	30	4	2000-04-1389	Alu. 6060-T66	
5	2	Lock insert	124	30	4	2000-04-1388	Alu. 6060-T66	
4	2	Lock insert	296	30	4	2000-04-1387	Alu. 6060-T66	
3	1	Outer sheet	2034,5	547	0,8	2000-05-0875	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	547	60,4	2000-05-0874	RTM-Plus	
1	1	Inner panel	1946,5	459	0,8	2000-05-0873	PE-GEGW 0,8 NF	

Scale: 1:7	Date:	Drawing no.	Issue	Tolerances (u.n.o.)	
Drawn: HS	27-03-2019	2000-05-0512	B	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2	
Checked: HS	13-02-2020	Sheet : 2 of 2		Raw extrusion in accordance with OEM drawing and EN755-9	
Approved: JWR	10-03-2020				
Mass: 7.77 kg		Finish:		Dimensions in mm (u.n.o.)	

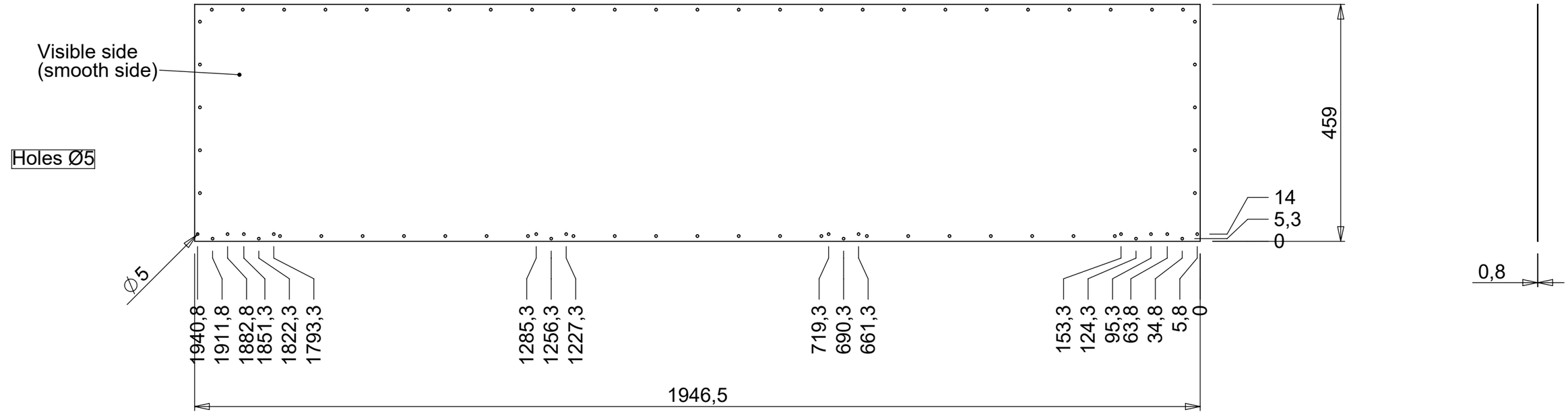
Title: **DBJ panel door**

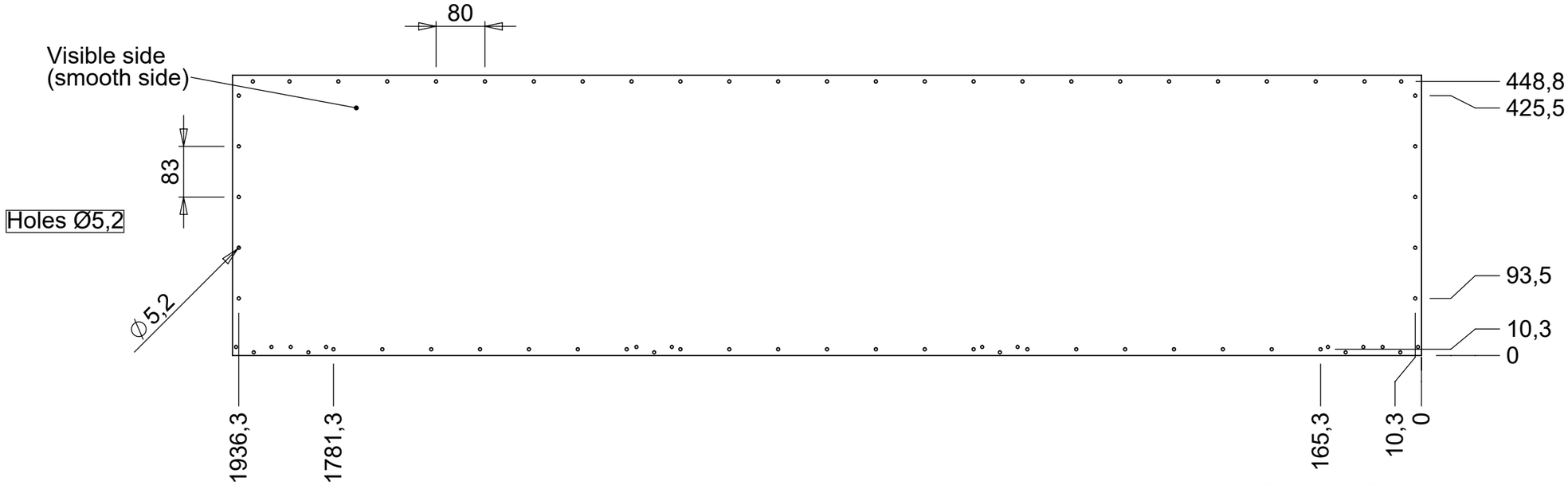
Iss.	Changes	Date	Name
B	~Parts	10-03-2020	MVE

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Scale: 1:8	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: HS	27-03-2019	2000-05-0873	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: VvM	18-04-2019	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	10-05-2019			
Mass: 1.12 kg		Finish:		Dimensions in mm (u.n.o.)
Title: Inner panel				

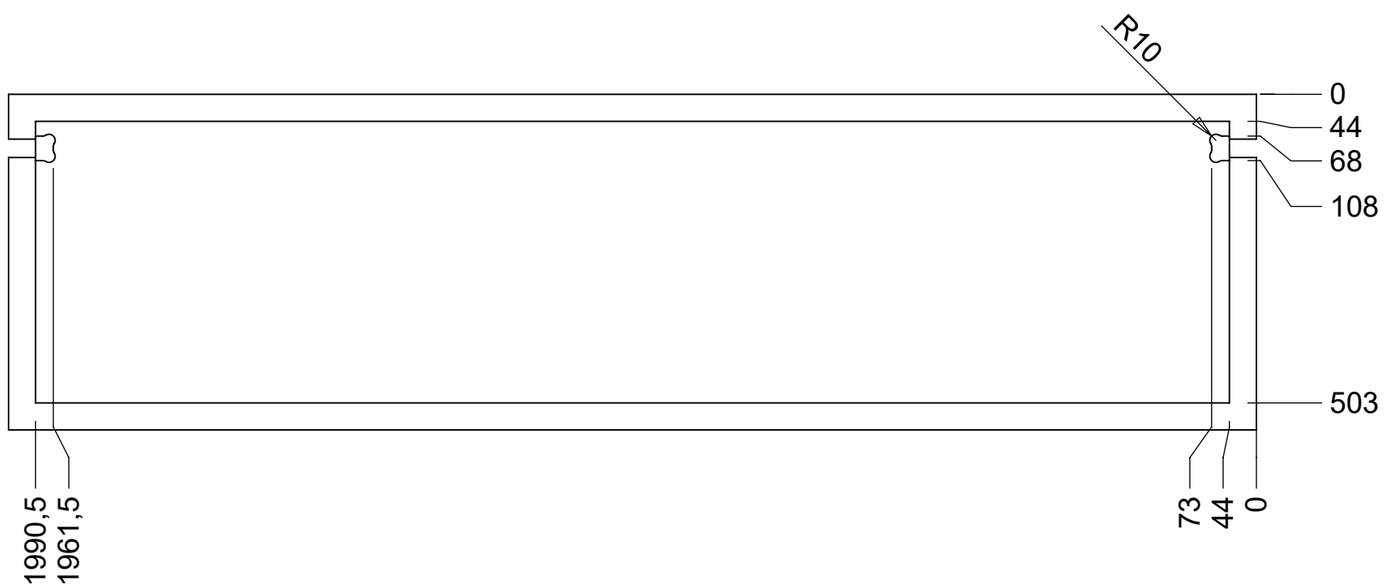
Iss.	Changes	Date	Name

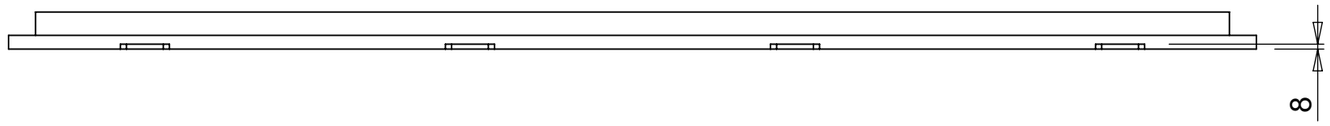
Projection

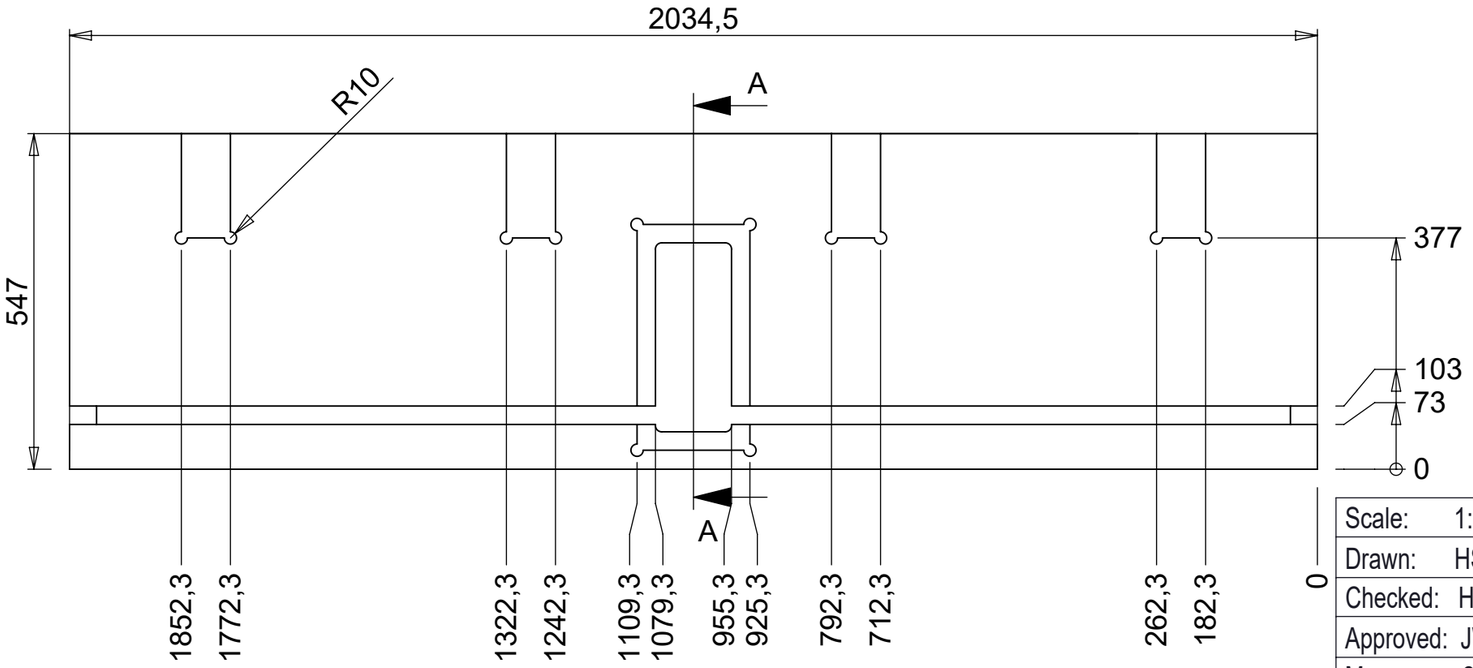
Size A3

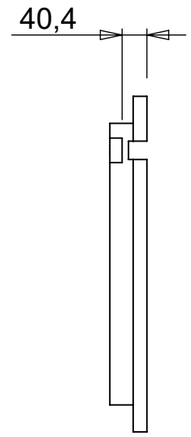
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner panel	1946,5	459	0,8	2000-05-0873	PE-GEGW 0,8 NF	

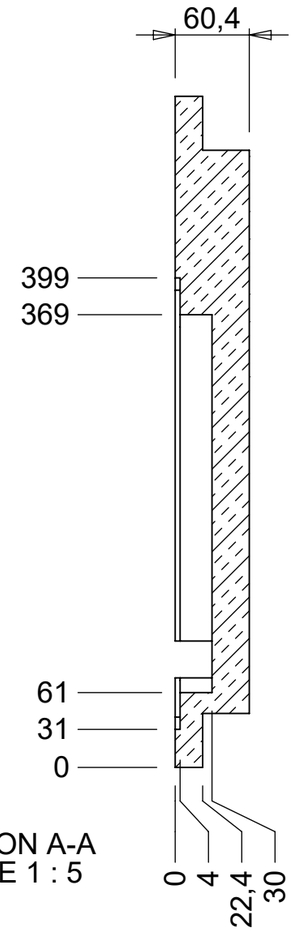
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Insulation	2034,5	547	60,4	2000-05-0874	RTM-Plus	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-0874 Sheet : 1 of 1	Issue B
Drawn: HS	27-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	09-03-2020		
Mass: 2.66 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Insulation**

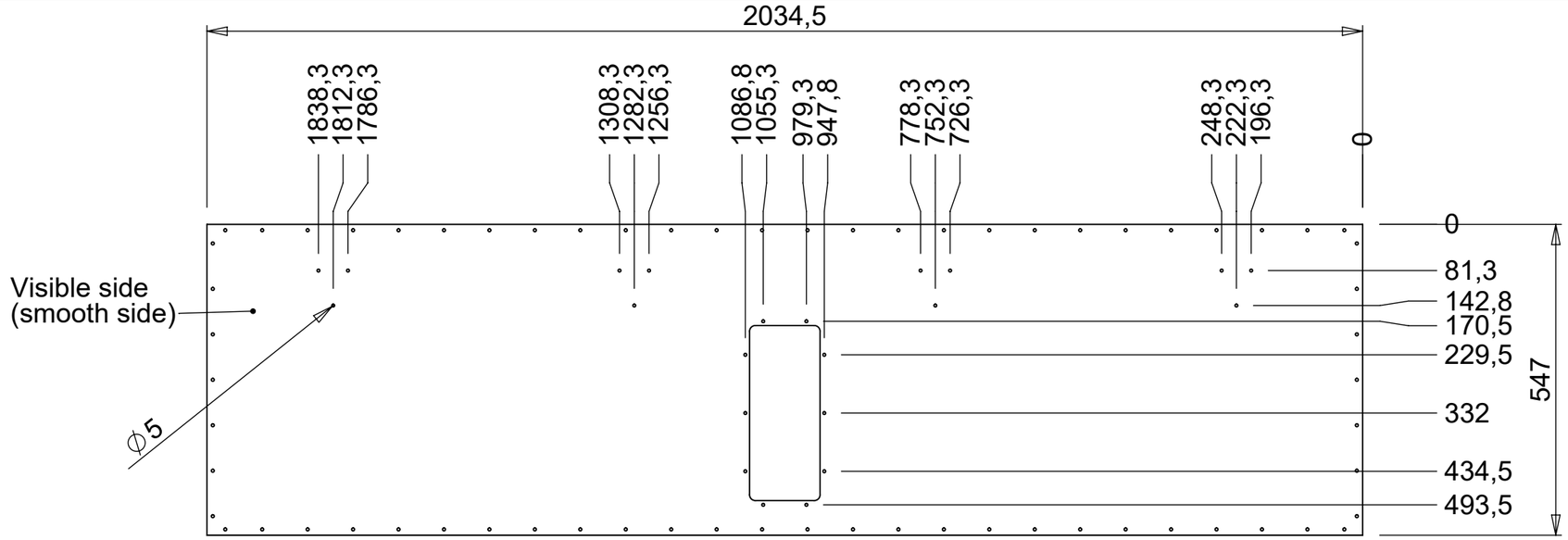
Iss.	Changes	Date	Name
B	~cut-out	09-03-2020	MVE

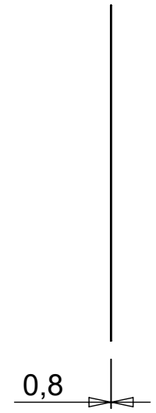
Projection

Size A3

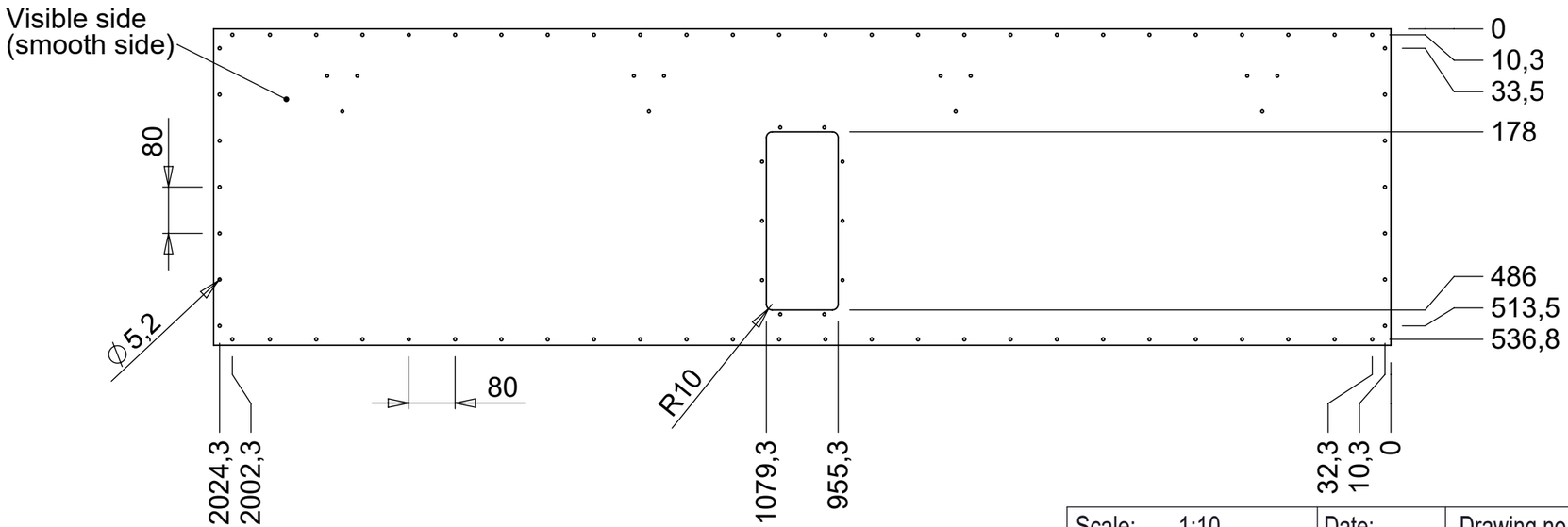
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Holes Ø5





Holes Ø5,2



Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: HS	27-03-2019	2000-05-0875	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >< br>±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: VvM	18-04-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	10-05-2019	Sheet : 1 of 1		
Mass: 1.35 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Outer sheet**

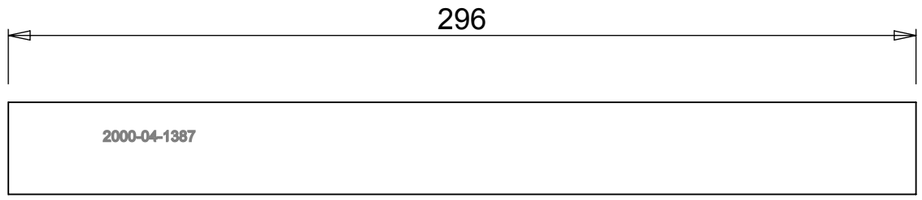
Iss.	Changes	Date	Name

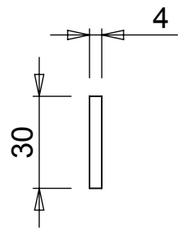
Projection

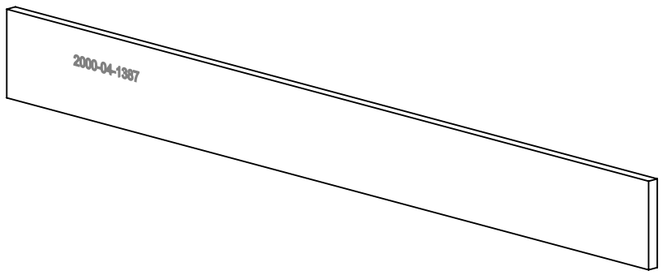
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2034,5	547	0,8	2000-05-0875	PE-GEGW 0,8 NF	







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	296	30	4	2000-04-1387	Alu. 6060-T66	

Scale: 1:2	Date:	Drawing no.: 2000-04-1387	Issue: B
Drawn: PvT	21-07-2017	Sheet : 1 of 1	
Checked: JWR	21-09-2017		
Approved: WvdV	21-09-2017		
Mass: 0.10 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

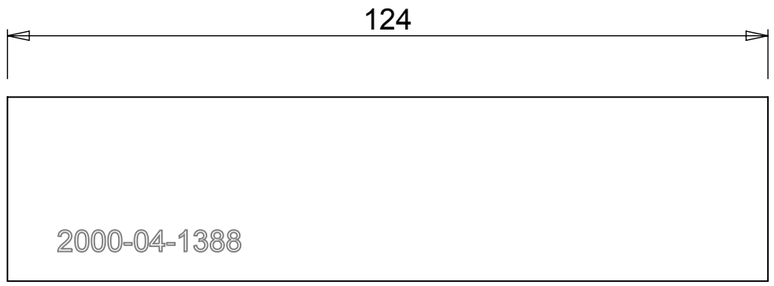
Title: **Lock insert**

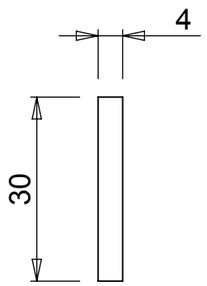
Iss.	Changes	Date	Name
B	length changed	21-09-2017	PvT

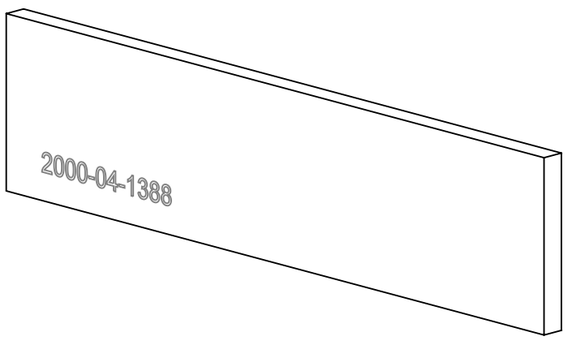
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	124	30	4	2000-04-1388	Alu. 6060-T66	

Scale: 1:1	Date:	Drawing no.: 2000-04-1388 Sheet : 1 of 1	Issue B
Drawn: PvT	21-07-2017		
Checked: JWR	21-09-2017		
Approved: WvdV	21-09-2017		
Mass: 0.04 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

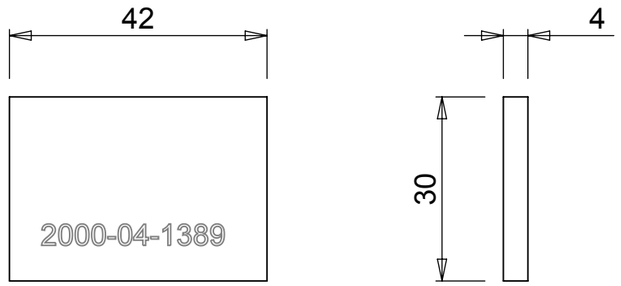
Title: **Lock insert**

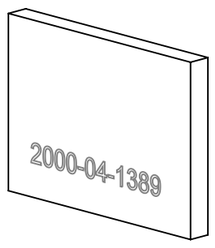
Iss.	Changes	Date	Name
B	length changed	21-09-2017	PvT

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	42	30	4	2000-04-1389	Alu. 6060-T66	

Scale: 1:1	Date:	Drawing no.: 2000-04-1389 Sheet : 1 of 1	Issue B
Drawn: PvT	21-07-2017		
Checked: JWR	21-09-2017		
Approved: WvdV	21-09-2017		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

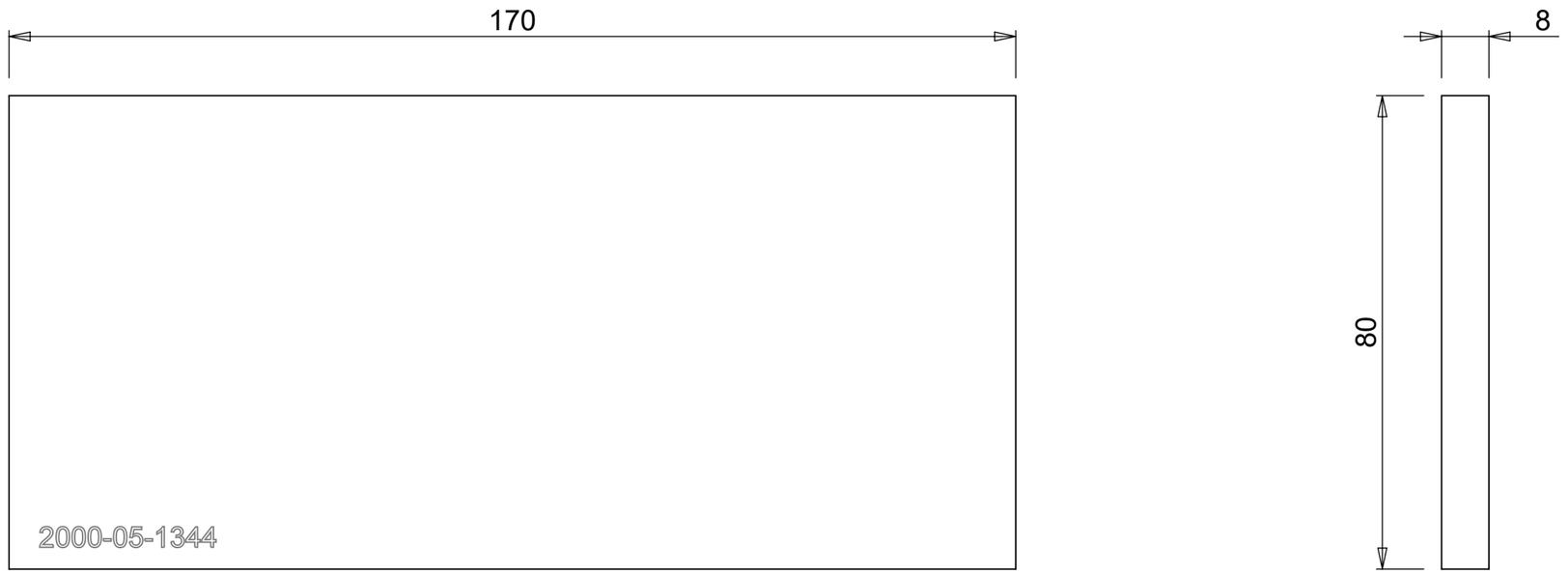
Title: **Lock insert**

Iss.	Changes	Date	Name
B	length changed	21-09-2017	PvT

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Reinforcement sheet	170	80	8	2000-05-1344	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-05-1344 Sheet : 1 of 1	Issue A
Drawn: HS	21-02-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.29 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

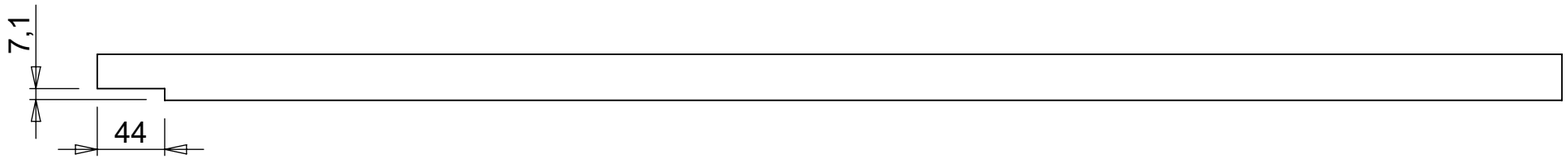
Title: **Reinforcement sheet**

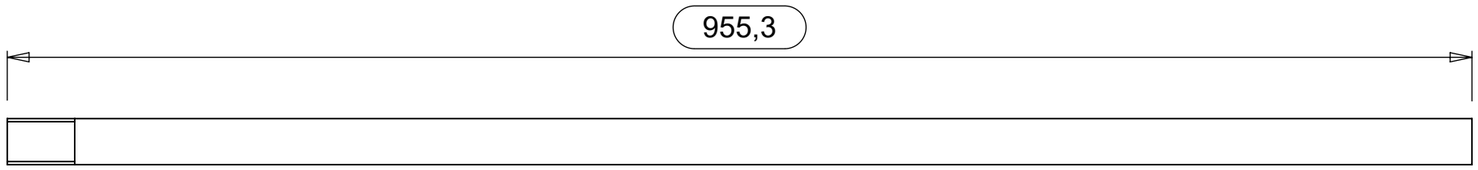
Iss.	Changes	Date	Name

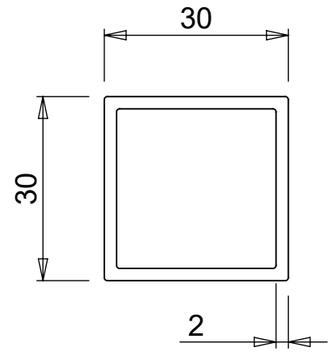
Projection

Size A3

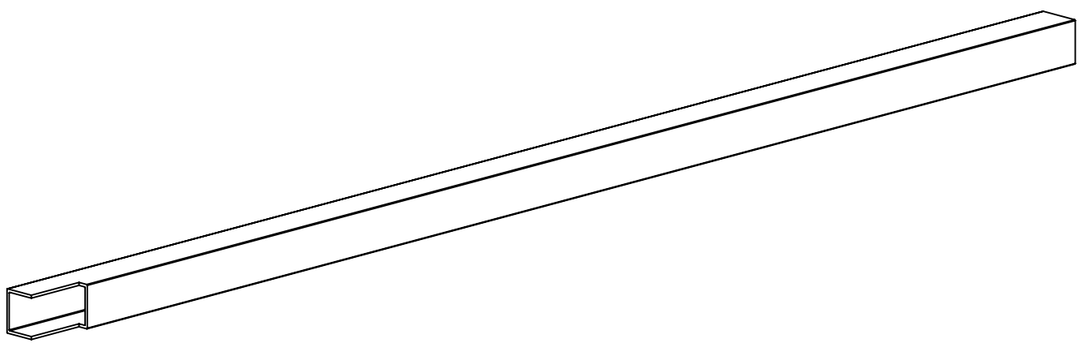
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Scale 1:1



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube (30x30x2)	955,3	30/30	2	2000-05-0929	Alu. 6060-T66	

Scale: 1:4	Date:	Drawing no.: 2000-05-0929	Issue: A
Drawn: HS	29-01-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.57 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

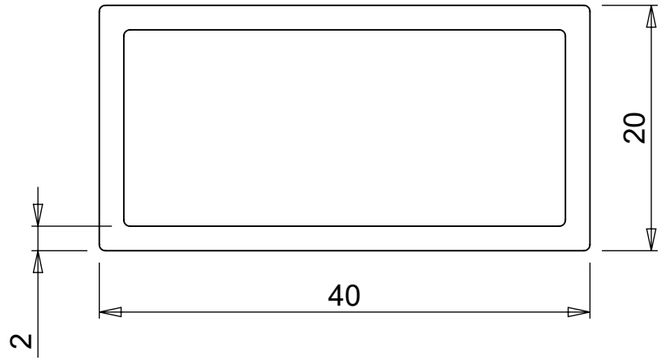
Title: Tube (30x30x2)

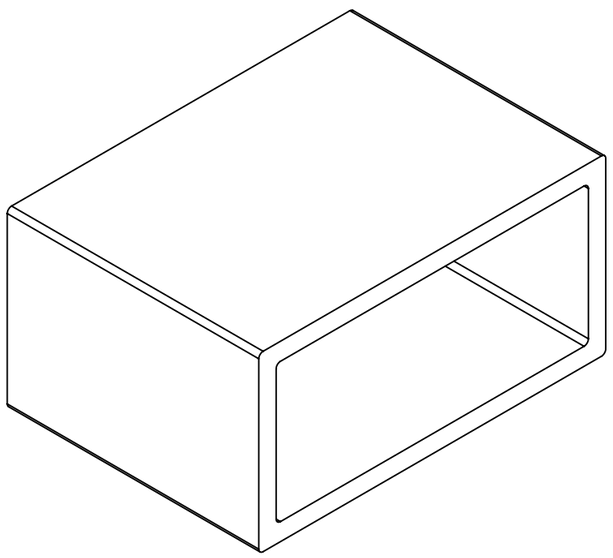
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 40x20x2	29	40/20	2	2000-05-2106	Alu. 6060-T66	

Scale: 2:1	Date:	Drawing no.: 2000-05-2106	Issue: A
Drawn: HS	04-04-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.02 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

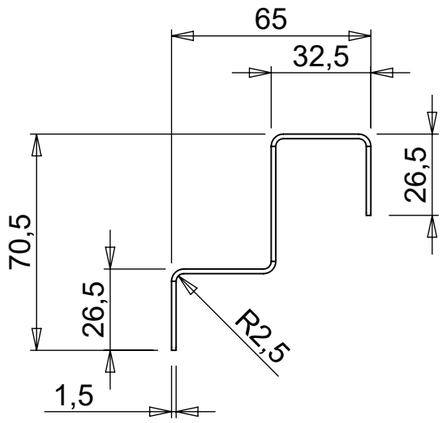
Title: **Tube 40x20x2**

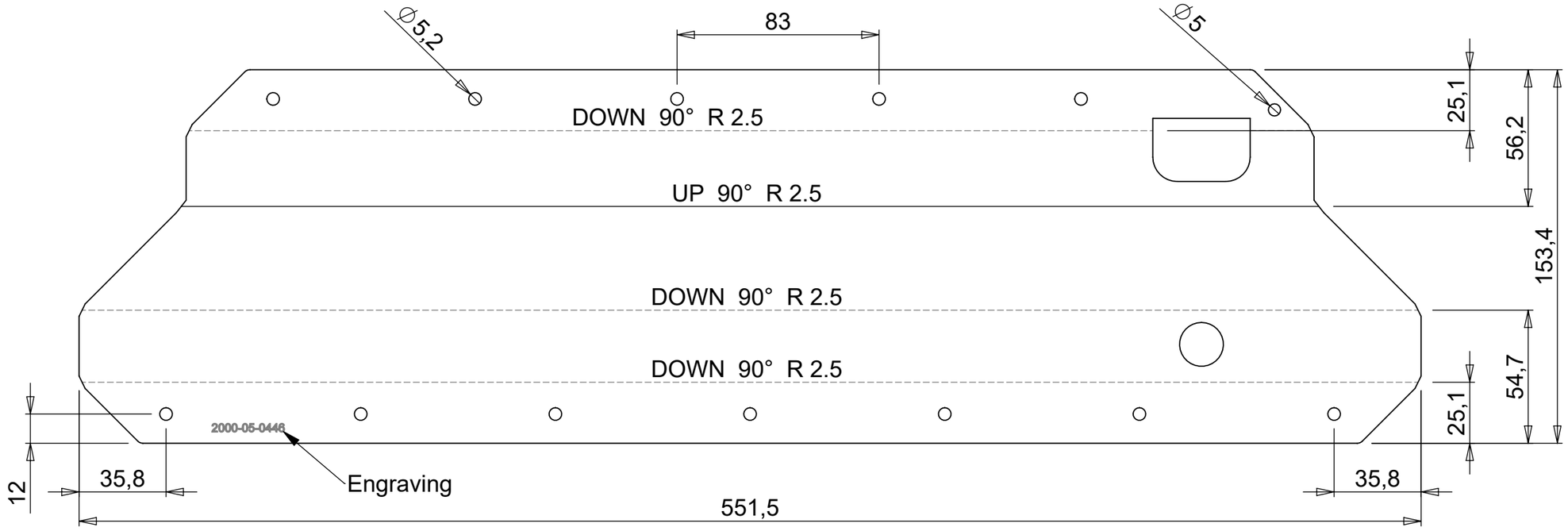
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





1	1	Sheet; door frame	551,5	153,4	1,5	2000-05-0446	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-0446	Issue: B
Drawn: HS	25-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 0.90 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

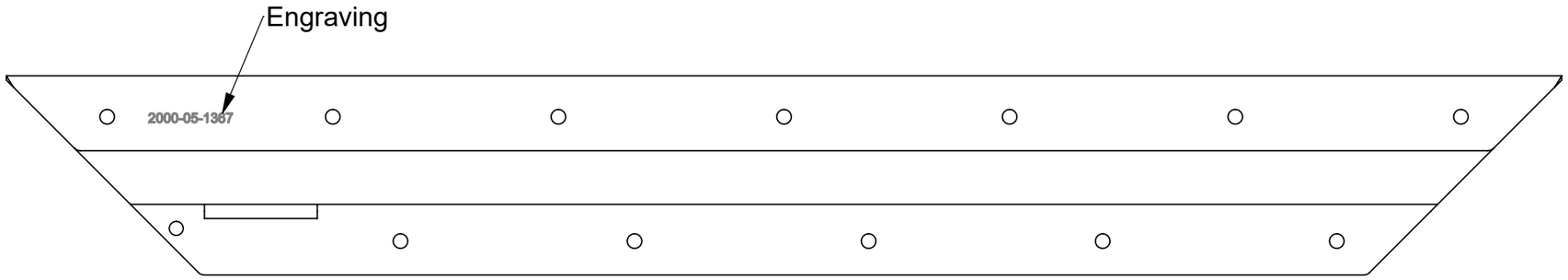
Title: **Sheet; door frame**

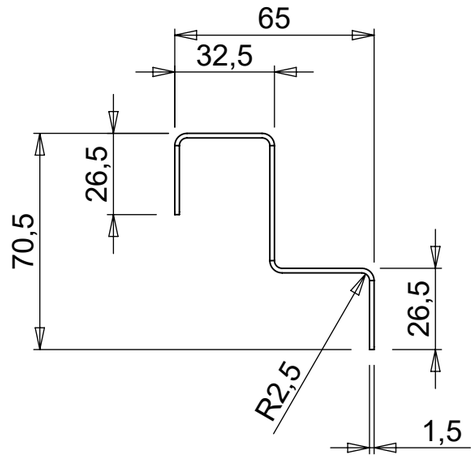
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

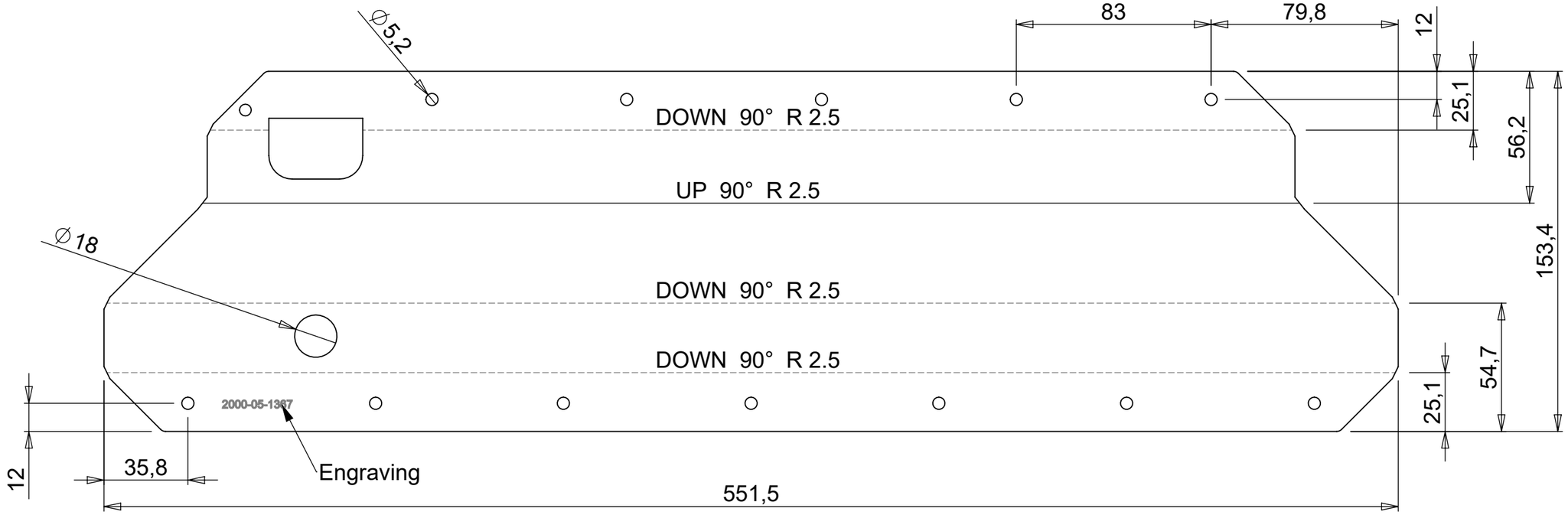
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







1	1	Sheet; door frame	551,5	153,4	1,5	2000-05-1367	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1367	Issue: B
Drawn: HS	25-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 0.90 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

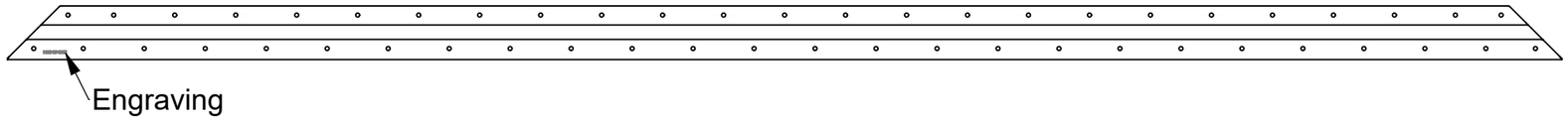
Title: **Sheet; door frame**

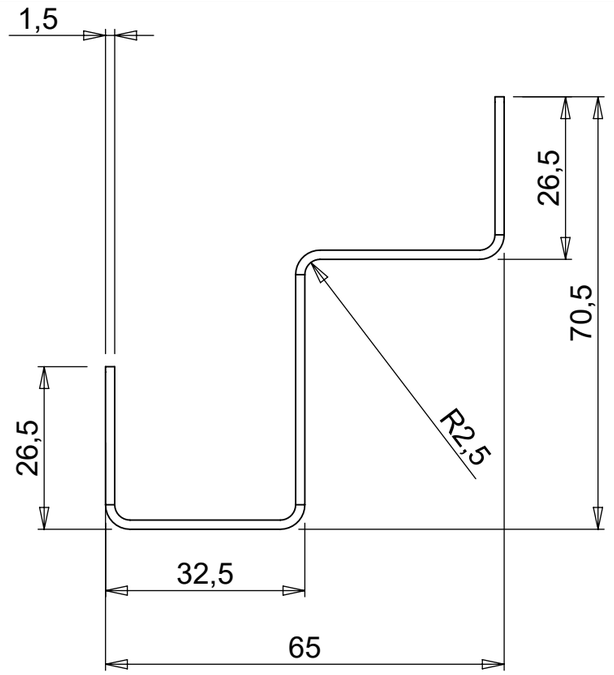
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

Projection

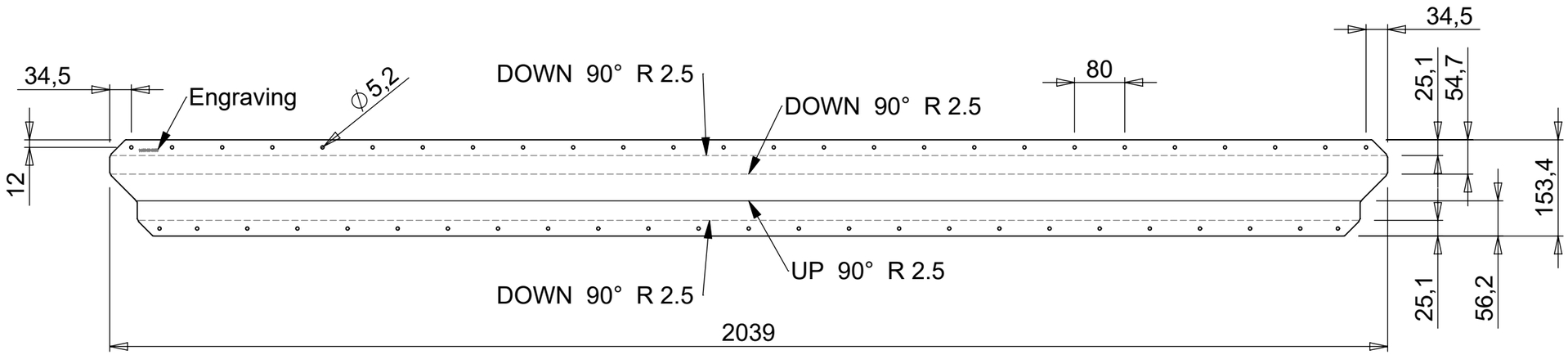
Size A3

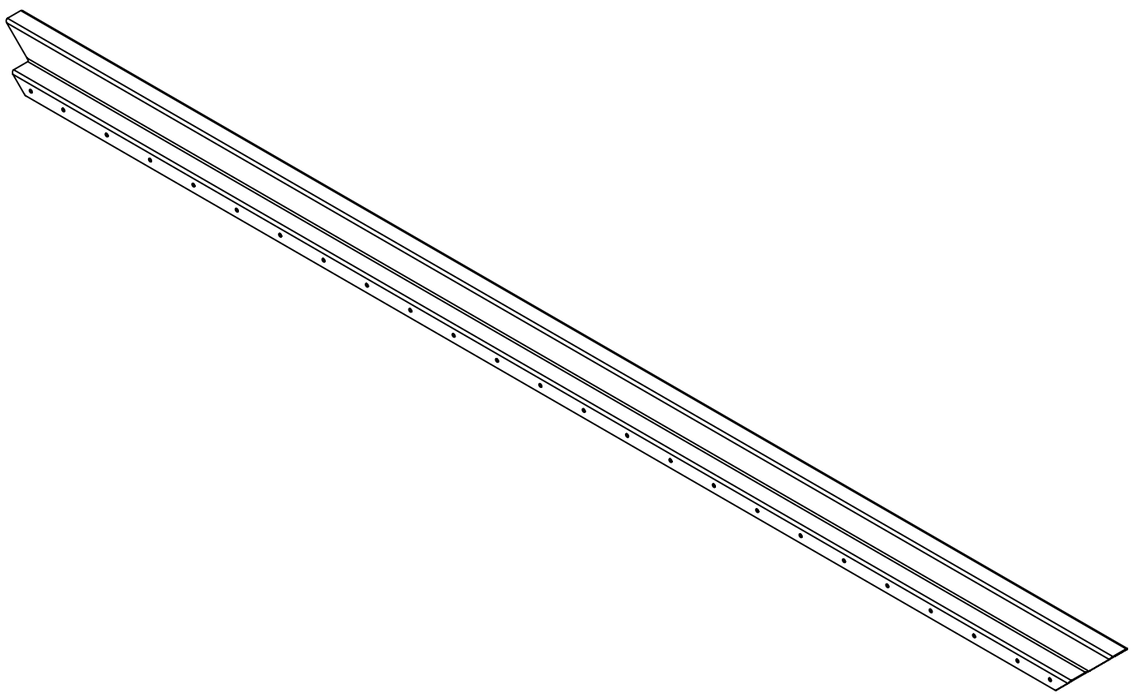
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Scale 1:1





1	1	Sheet; door frame	2039	153,4	1,5	2000-05-0514	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:8	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: HS	27-03-2019	2000-05-0514	B	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: VvM	06-11-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	26-11-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 3.64 kg		Finish:		Dimensions in mm (u.n.o.)

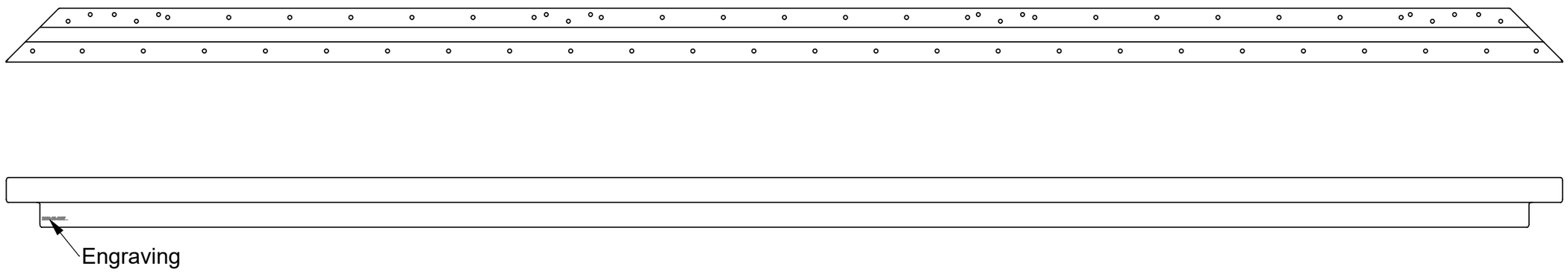
Title: **Sheet; door frame**

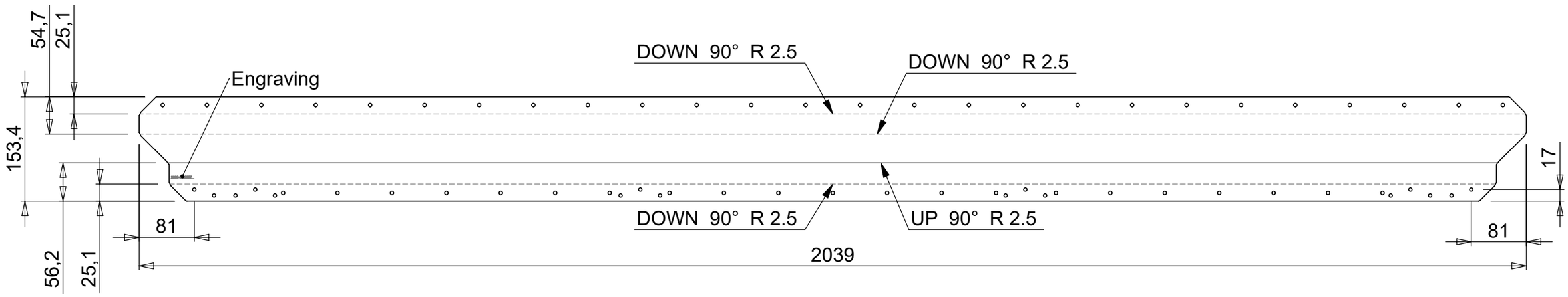
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

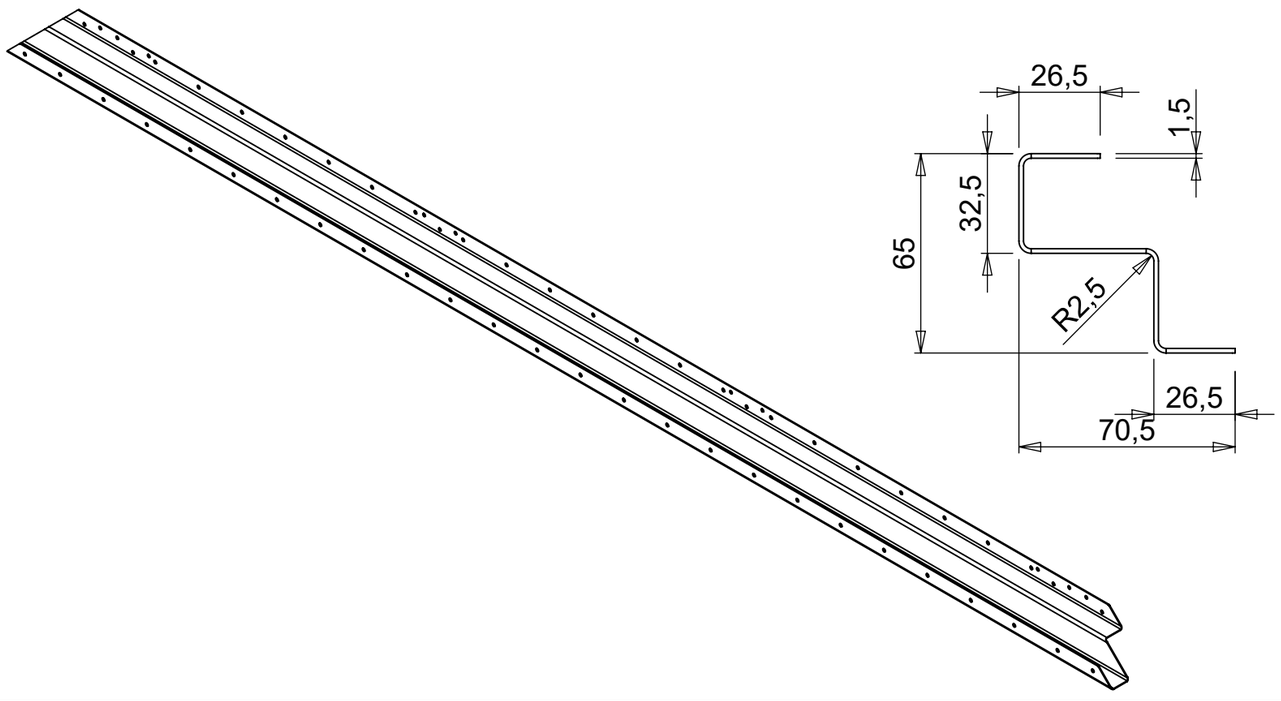
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	2039	153,4	1,5	2000-05-1257	AISI 304	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-1257	Issue: A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019	Sheet : 1 of 1	
Approved: JWR	10-05-2019		
Mass: 3.64 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

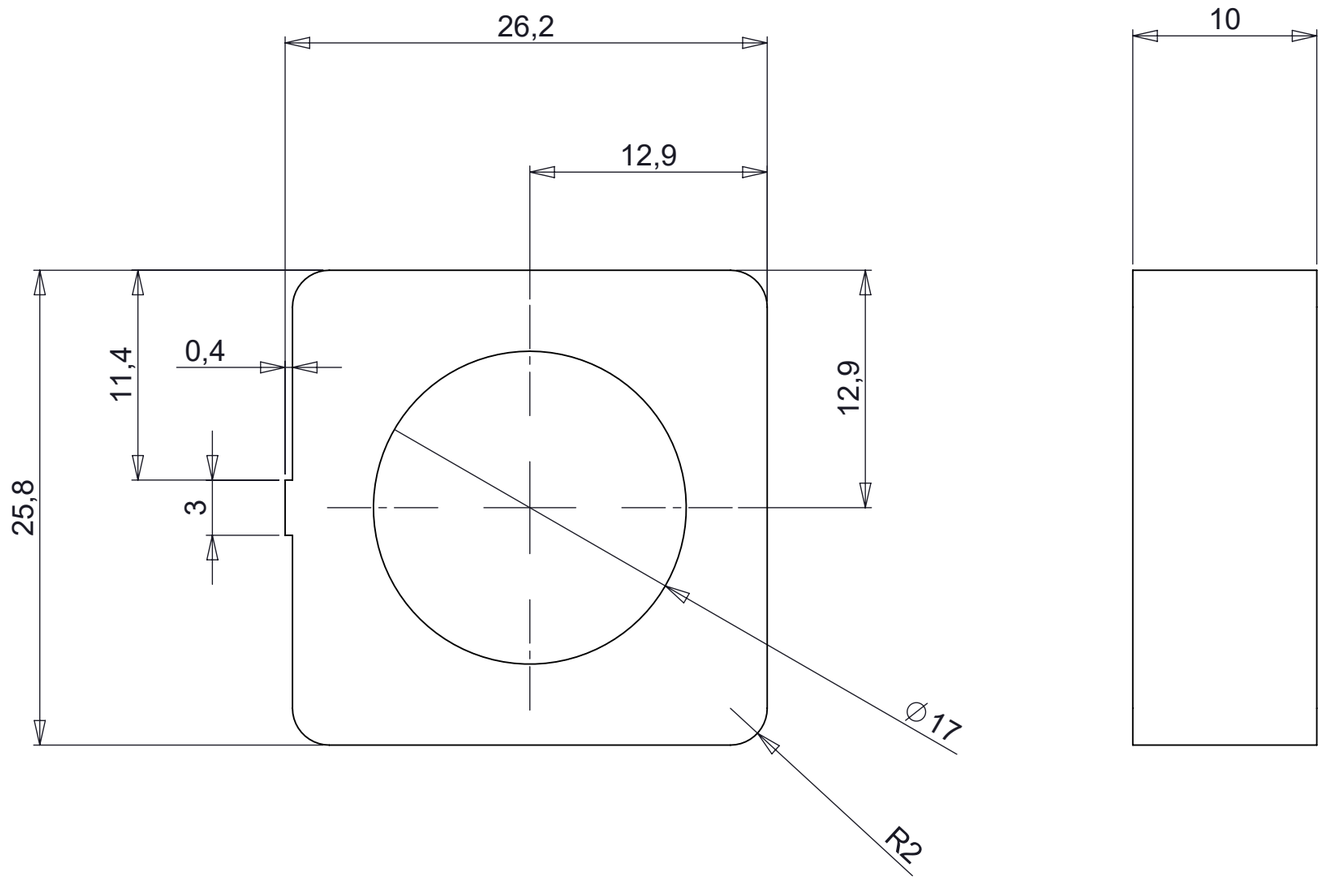
Title: **Sheet; door frame**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



BREAK SHARP EDGES

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Center block	25,8	26,2	10	2000-00-5783	Alu. 6082-T6	

Scale: 3:1	Date:	Drawing no.: 2000-00-5783	Issue B	Tolerances (u.n.o.)
Drawn: PvT	27-9-2012			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >7 ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: TGW	15-04-2022			Raw extrusion in accordance with OEM drawing and EN755-9
Approved: HS	19-04-2022	Sheet : 1 of 1		
Mass: 0.01 kg		Finish:		Dimensions in mm (u.n.o.)

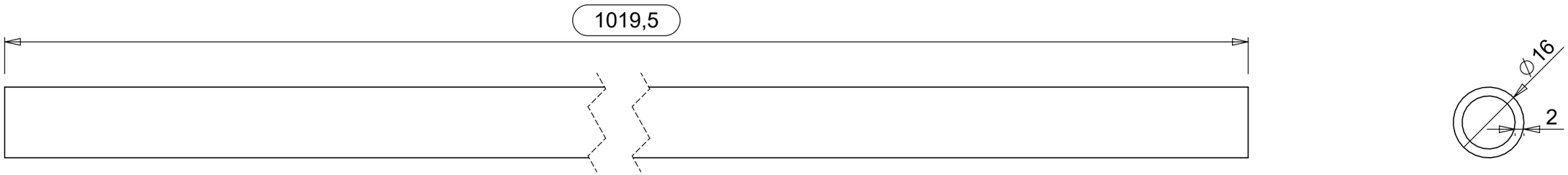
Title: **Center block**

Iss.	Changes	Date	Name
B	- Tab, + Radius	19-04-2022	BW

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 16x2	1019,5	16	2	2000-05-1421	AISI 304	

Scale: 1:1	Date:	Drawing no.: 2000-05-1421 Sheet : 1 of 1	Issue A
Drawn: HS	22-02-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.72 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

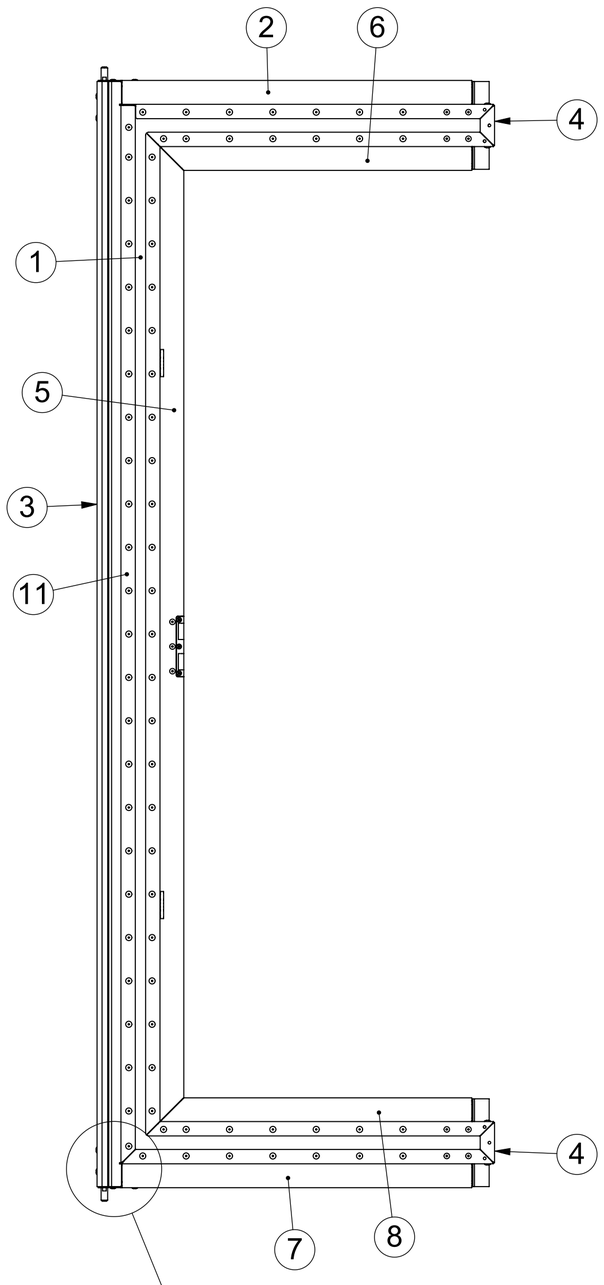
Title: **Tube 16x2**

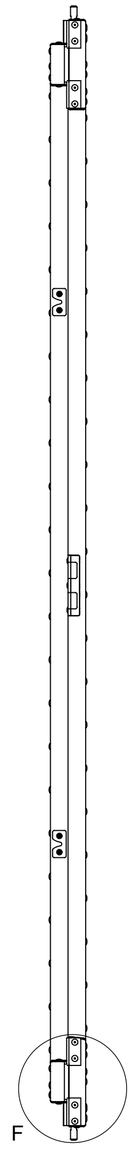
Iss.	Changes	Date	Name

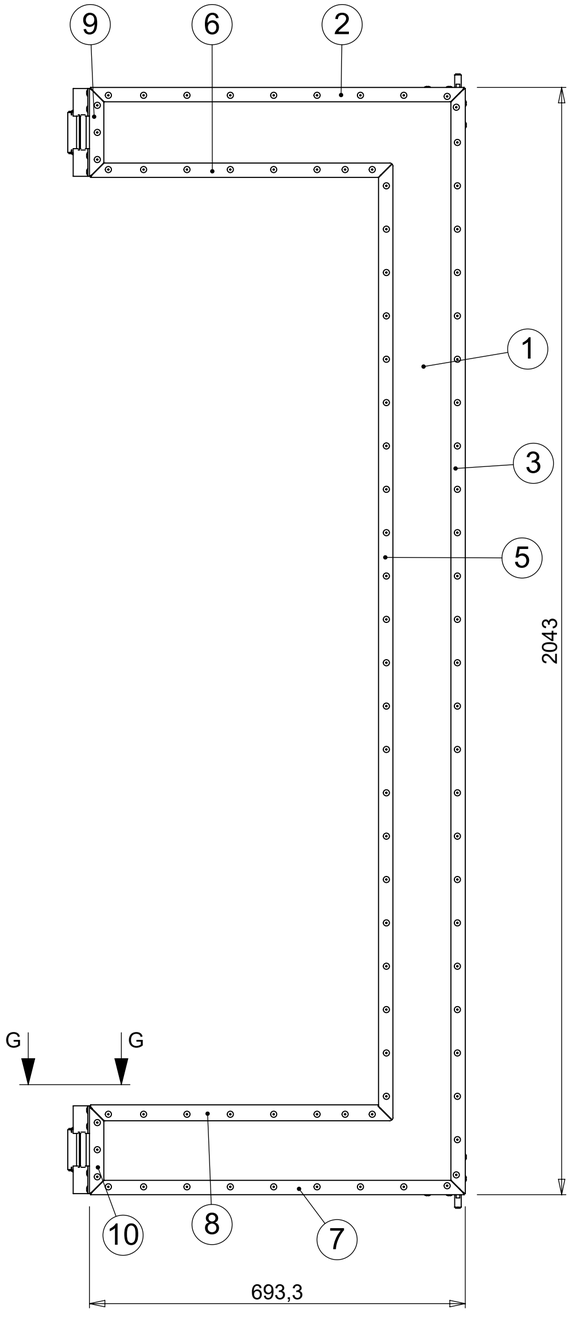
Projection

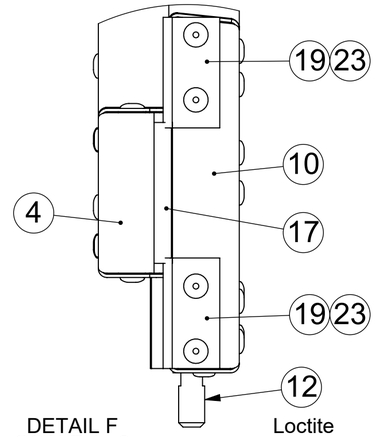
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

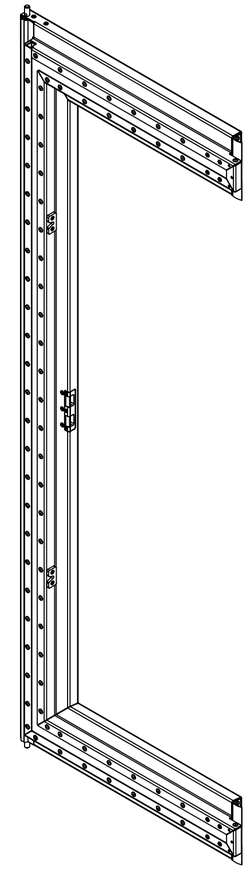


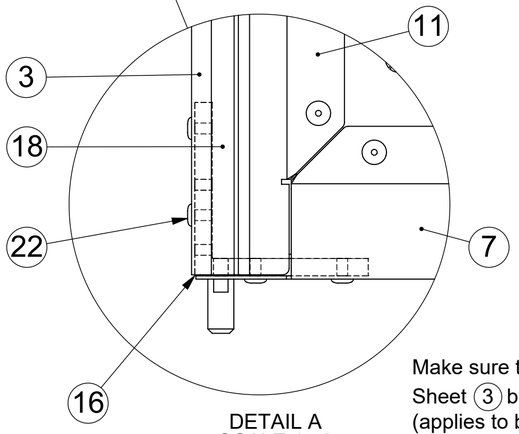






DETAIL F
SCALE 1 : 2



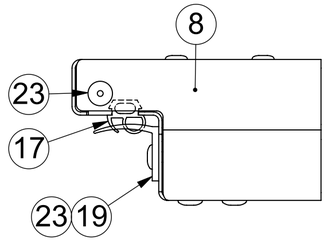


DETAIL A
SCALE 1 : 2

Make sure to rivet L-Extrusion (16) to
Sheet (3) before putting it on the insulation panel
(applies to both top and bottom corner)

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.



SECTION G-G
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
24	3	Hex. Socket Csk. Screw	20	M4		BO-10642-04020-A2	AISI 304	ISO10642/DIN7991
23	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
22	19	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
21	4	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
20	4	Hex. Socket Cap Screw	16	M4		BO-4762-04016-A2	AISI 304	ISO4762/DIN912
19	4	Rubber L-extrusion	51	30/25	3	2000-04-1446	SEBS70	Technirub VRR001r
18	1	Extrusion Door (Rubber)	2039			2000-05-1242	suraSil FR60	
17	2	Extrusion Door (Rubber)	65			2000-05-0528	suraSil FR60	
16	2	L-Extrusion 80x80x8	24	80/80	8	2000-05-2448	Alu. 6060-T66	
15	1	Detent; back	111	16	15	2000-05-3880	AISI 304	
14	1	Detent	111	28	5	2000-05-3877	AISI 304	
13	2	Guide	50	25	6	2000-05-1321	AISI 304	
12	2	Pin	42,5	12		2000-05-0530	AISI 304	
11	1	Sheet; door frame	2039	75,7	1,5	2000-05-2458	AISI 304	Bend with V16
10	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1285	AISI 304	Bend with V16
9	1	Sheet; door frame	162	72,5	1,5	2000-05-1073	AISI 304	Bend with V16
8	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1071	AISI 304	Bend with V16
7	1	Sheet; door frame	698	65,3	1,5	2000-05-1069	AISI 304	Bend with V16
6	1	Sheet; door frame	639,8	153,4	1,5	2000-05-1068	AISI 304	Bend with V16
5	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-0525	AISI 304	Bend with V16
4	2	Sheet; door frame	102,2	64,9	1,5	2000-05-0523	AISI 304	Bend with V16
3	1	Sheet; door frame	2039	65,7	1,5	2000-05-1433	AISI 304	Bend with V16
2	1	Sheet; door frame	729,3	153,4	1,5	2000-05-0522	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0521	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-0520 Sheet : 1 of 2	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 14.44 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

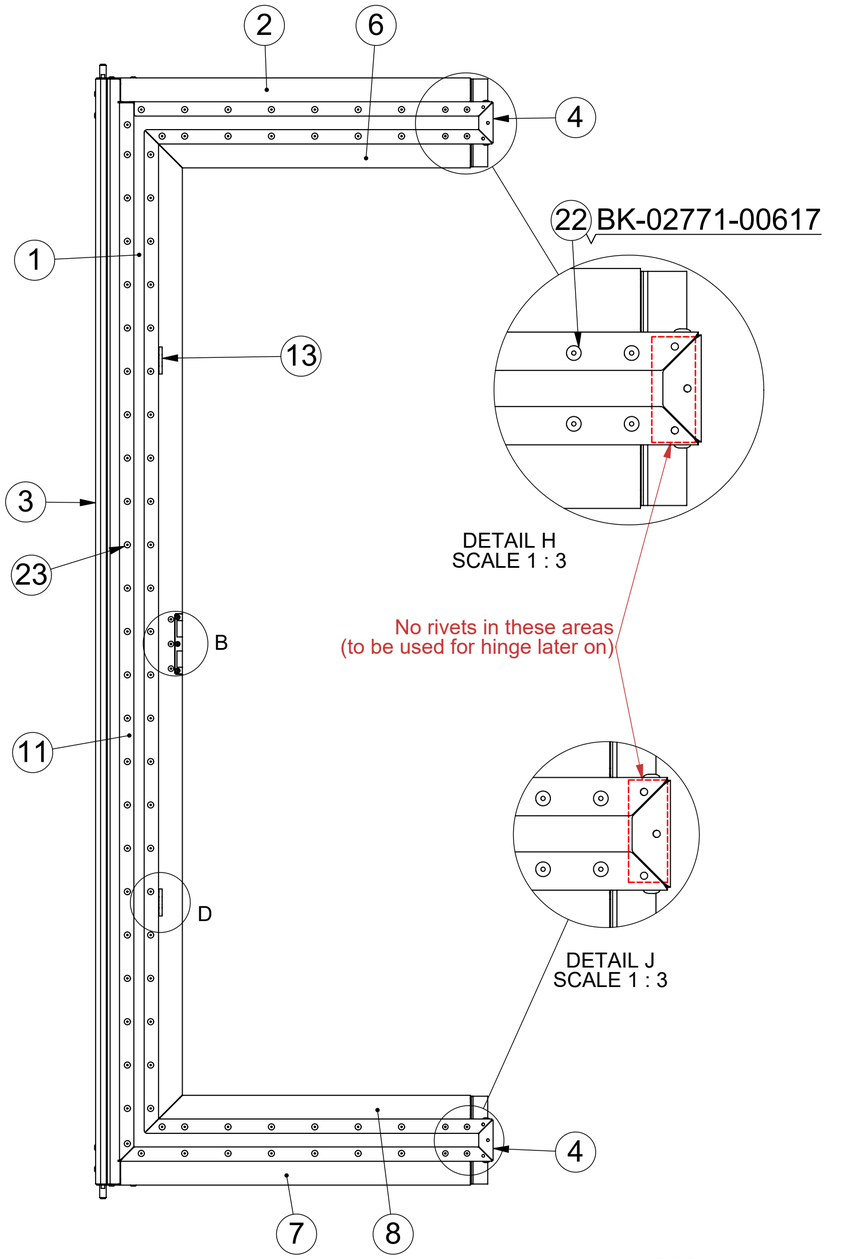
Title: DBJ door left2

Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

Projection

Size A2

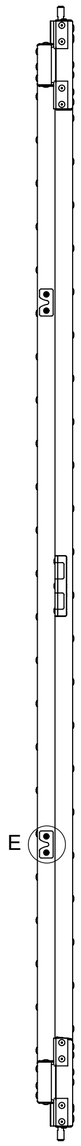
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

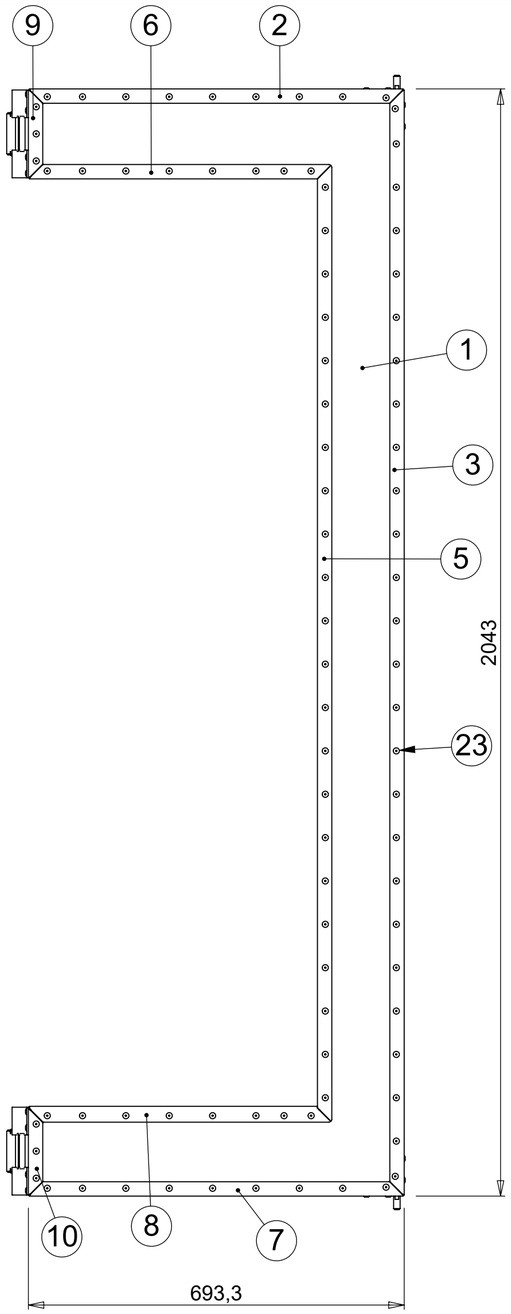


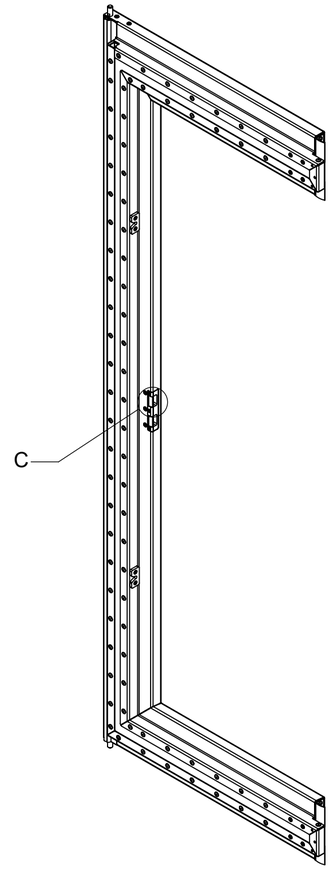
DETAIL H
SCALE 1 : 3

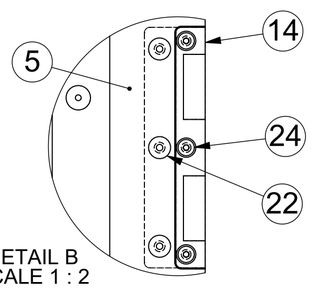
No rivets in these areas
(to be used for hinge later on)

DETAIL J
SCALE 1 : 3



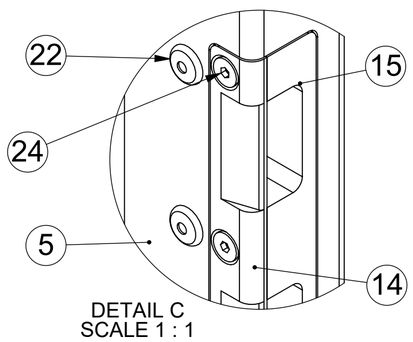






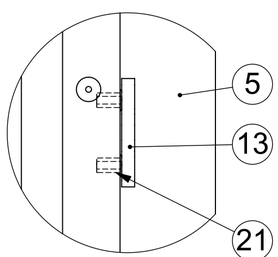
DETAIL B
SCALE 1 : 2

Loctite

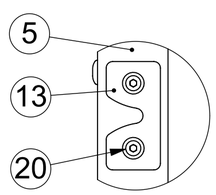


DETAIL C
SCALE 1 : 1

Tighten Screw (20) after assembling total door and adjusting the position of Guide (13)



DETAIL D
SCALE 1 : 2



DETAIL E
SCALE 1 : 2

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
24	3	Hex. Socket Csk. Screw	20	M4		BO-10642-04020-A2	AISI 304	ISO10642/DIN7991
23	176	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
22	19	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
21	4	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
20	4	Hex. Socket Cap Screw	16	M4		BO-4762-04016-A2	AISI 304	ISO4762/DIN912
19	4	Rubber L-extrusion	51	30/25	3	2000-04-1446	SEBS70	Technirub VRR001r
18	1	Extrusion Door (Rubber)	2039			2000-05-1242	suraSil FR60	
17	2	Extrusion Door (Rubber)	65			2000-05-0528	suraSil FR60	
16	2	L-Extrusion 80x80x8	24	80/80	8	2000-05-2448	Alu. 6060-T66	
15	1	Detent; back	111	16	15	2000-05-3880	AISI 304	
14	1	Detent	111	28	5	2000-05-3877	AISI 304	
13	2	Guide	50	25	6	2000-05-1321	AISI 304	
12	2	Pin	42,5	12		2000-05-0530	AISI 304	
11	1	Sheet; door frame	2039	75,7	1,5	2000-05-2458	AISI 304	Bend with V16
10	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1285	AISI 304	Bend with V16
9	1	Sheet; door frame	162	72,5	1,5	2000-05-1073	AISI 304	Bend with V16
8	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1071	AISI 304	Bend with V16
7	1	Sheet; door frame	698	65,3	1,5	2000-05-1069	AISI 304	Bend with V16
6	1	Sheet; door frame	639,8	153,4	1,5	2000-05-1068	AISI 304	Bend with V16
5	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-0525	AISI 304	Bend with V16
4	2	Sheet; door frame	102,2	64,9	1,5	2000-05-0523	AISI 304	Bend with V16
3	1	Sheet; door frame	2039	65,7	1,5	2000-05-1433	AISI 304	Bend with V16
2	1	Sheet; door frame	729,3	153,4	1,5	2000-05-0522	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0521	Assembly	

Scale:	1:8	Date:	
Drawn:	HS	29-03-2019	
Checked:	VvM	10-09-2019	
Approved:	JWR	10-09-2019	
Mass:	14.44 kg		

Drawing no. 2000-05-0520
Sheet : 1 of 2

Issue B

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

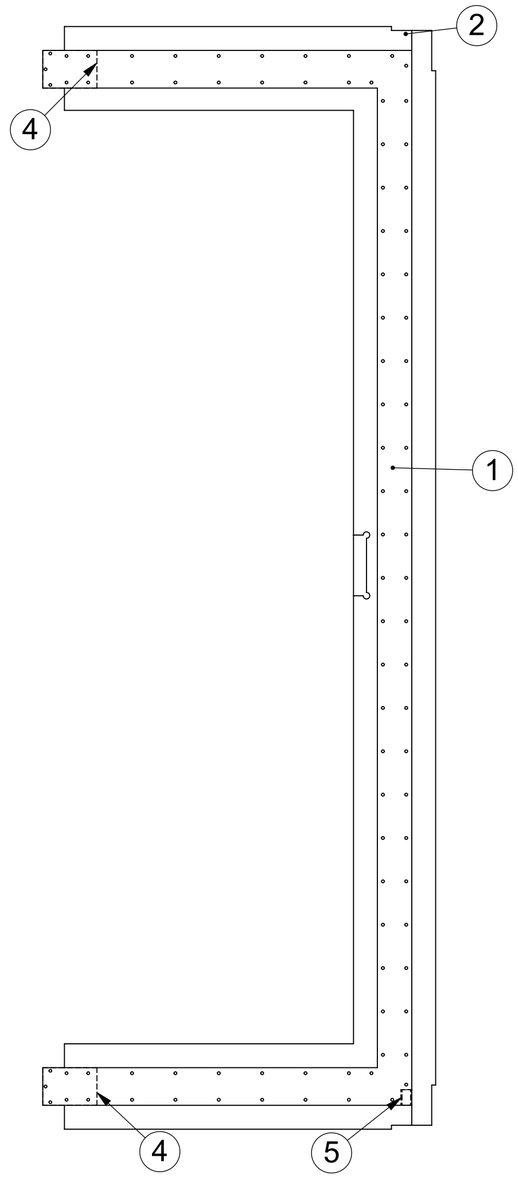
Title: DBJ door left2

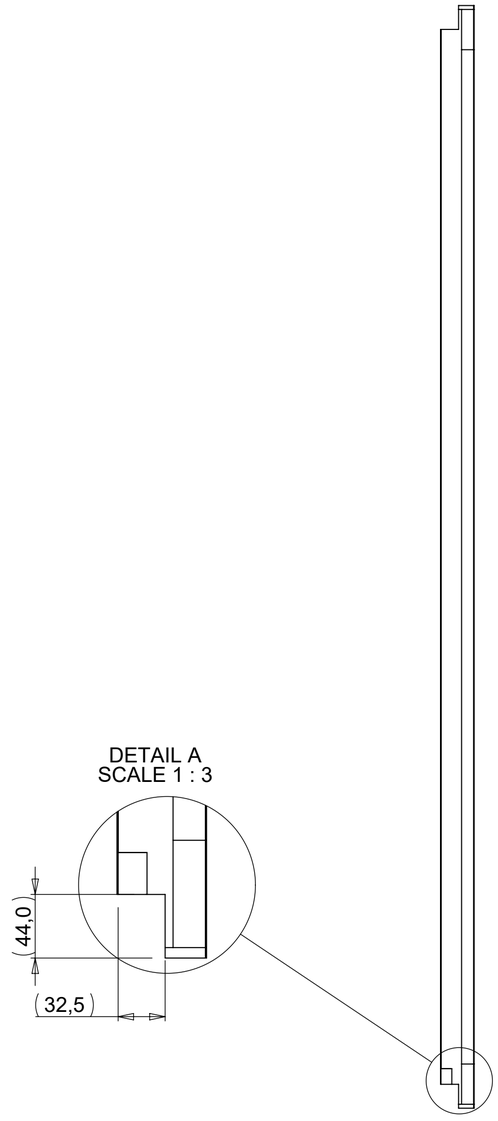
Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

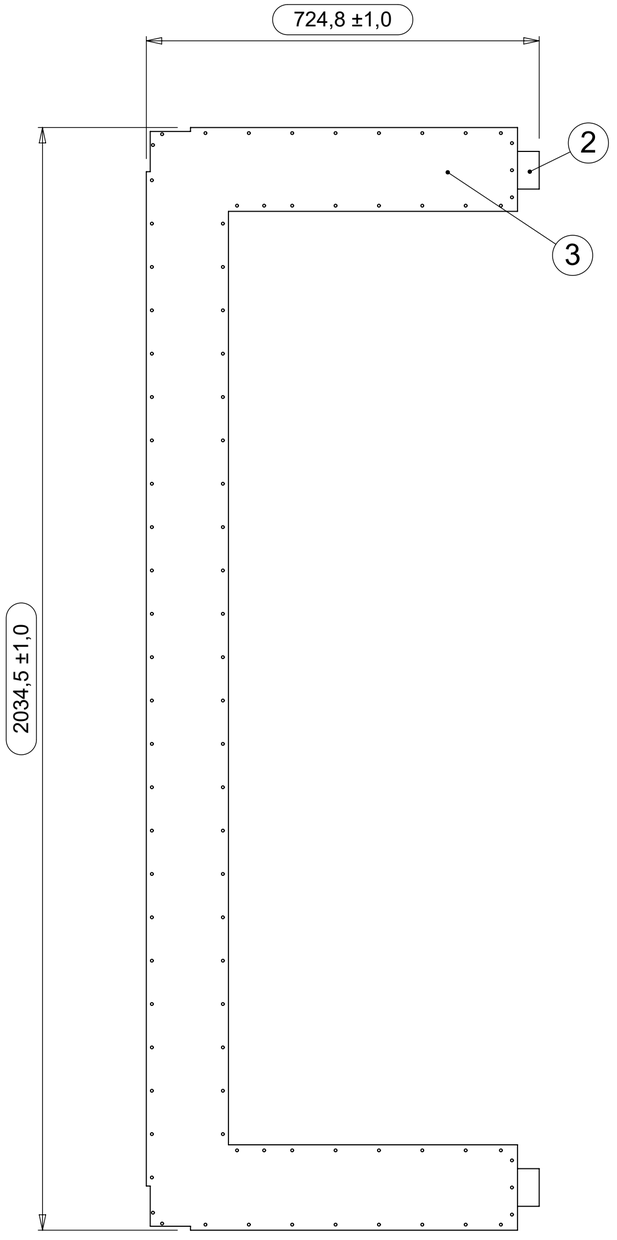
Projection

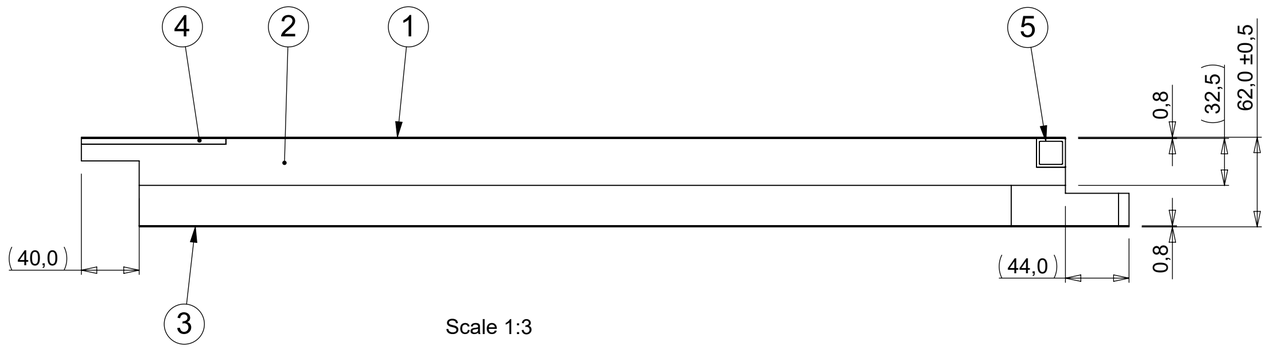
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Scale 1:3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Tube 20x20x2	29	20/20	2	2000-04-8840	Alu. 6060-T66	
4	2	Reinforcement sheet	100	69,5	4	2000-05-1206	Alu. 6082-T6	
3	1	Outer sheet	2034,5	684,8	0,8	2000-05-1208	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	724,8	60,4	2000-05-1209	RTM-X	
1	1	Inner Sheet	1946,5	680,8	0,8	2000-05-1207	PE-GEGW 0,8 NF	

Scale: 1:8	Date:	Drawing no. 2000-05-0521 Sheet : 1 of 2	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 1.94 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

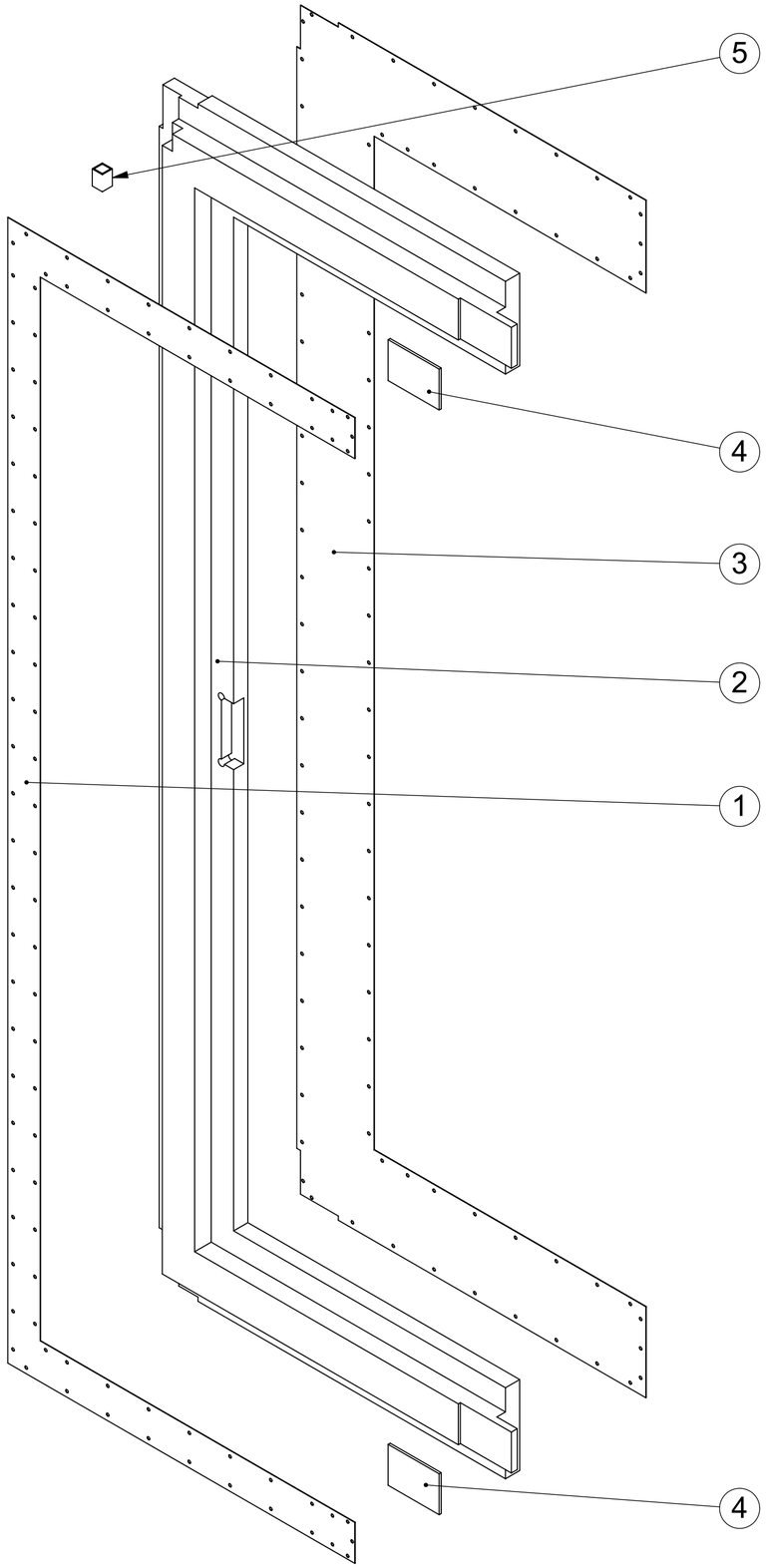
Title: DBJ panel door

Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Tube 20x20x2	29	20/20	2	2000-04-8840	Alu. 6060-T66	
4	2	Reinforcement sheet	100	69,5	4	2000-05-1206	Alu. 6082-T6	
3	1	Outer sheet	2034,5	684,8	0,8	2000-05-1208	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	724,8	60,4	2000-05-1209	RTM-X	
1	1	Inner Sheet	1946,5	680,8	0,8	2000-05-1207	PE-GEGW 0,8 NF	

Scale: 1:6	Date:	Drawing no. 2000-05-0521 Sheet : 1 of 2	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 1.94 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

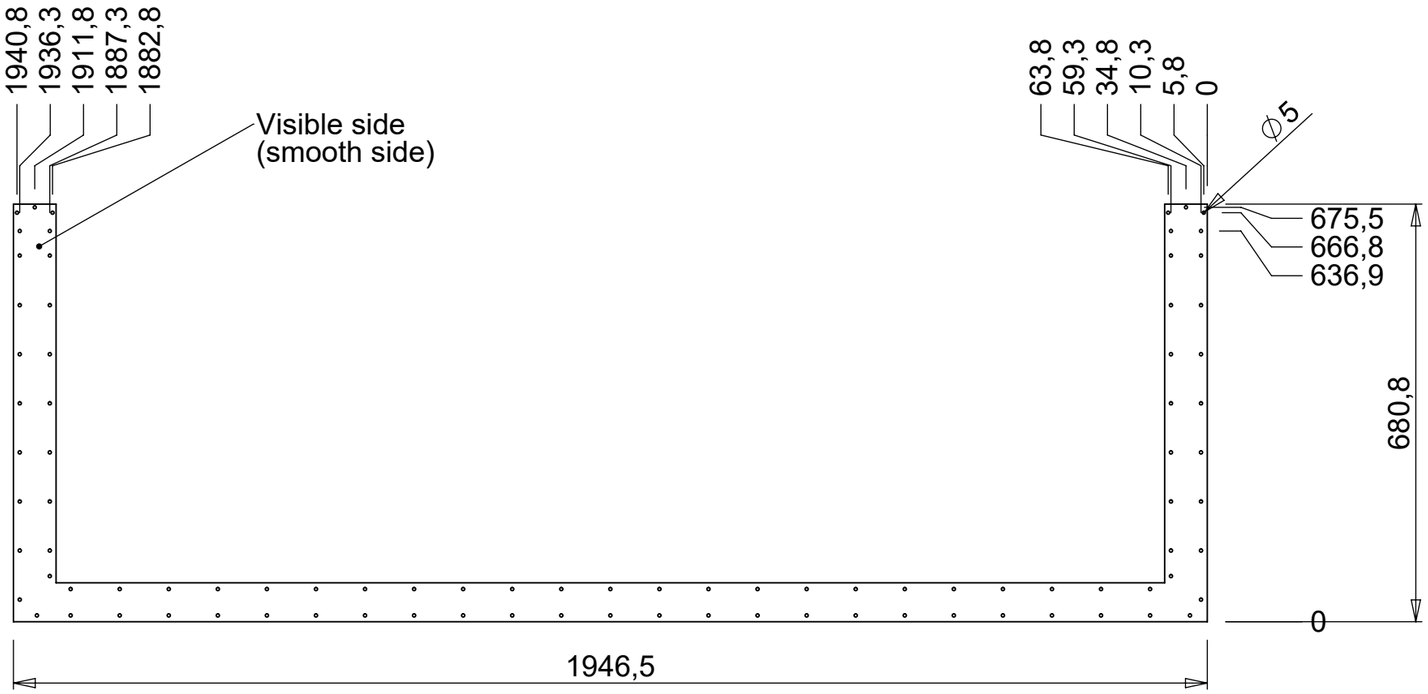
Title: DBJ panel door

Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

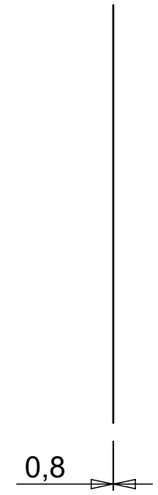
Projection

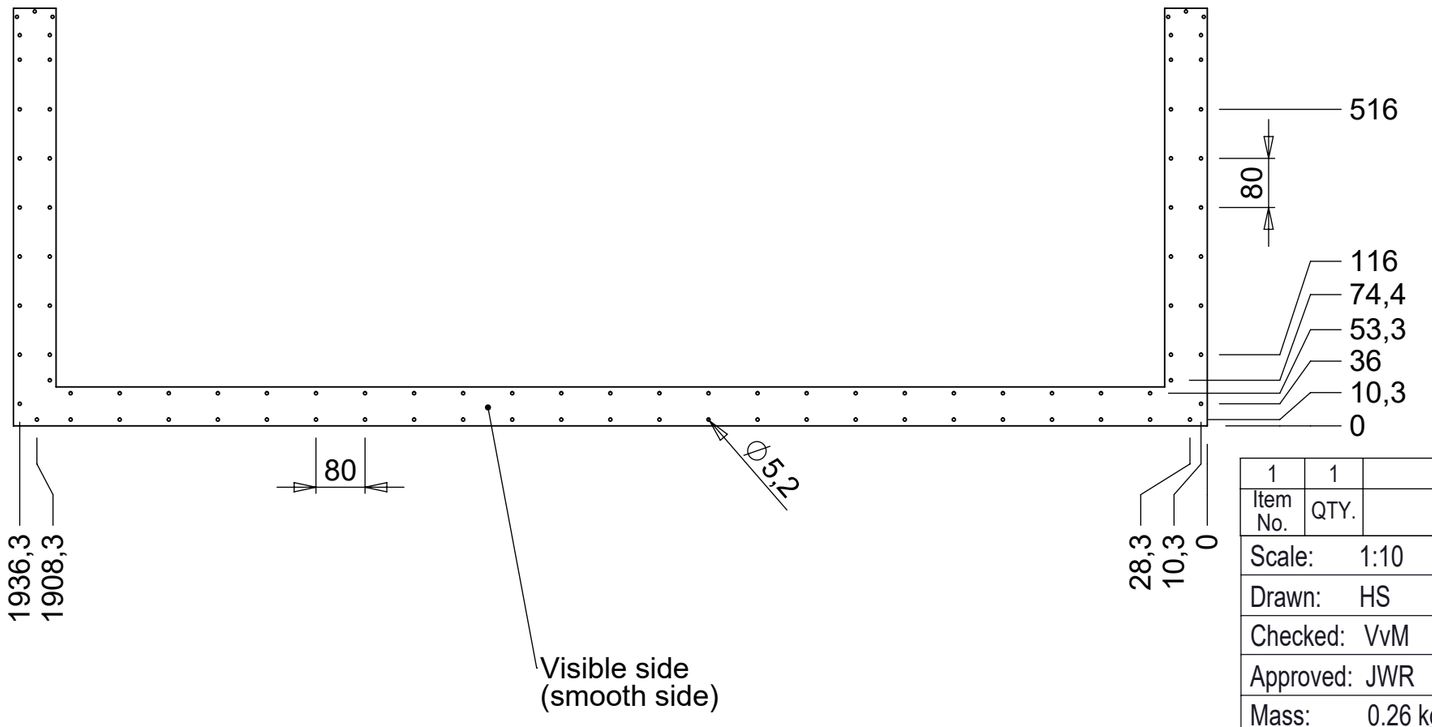
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Holes Ø5





Holes Ø5,2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner Sheet	1946,5	680,8	0,8	2000-05-1207	PE-GEGW 0,8 NF	

Scale: 1:10	Date:	Drawing no.: 2000-05-1207 Sheet : 1 of 1	Issue A
Drawn: HS	28-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.26 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

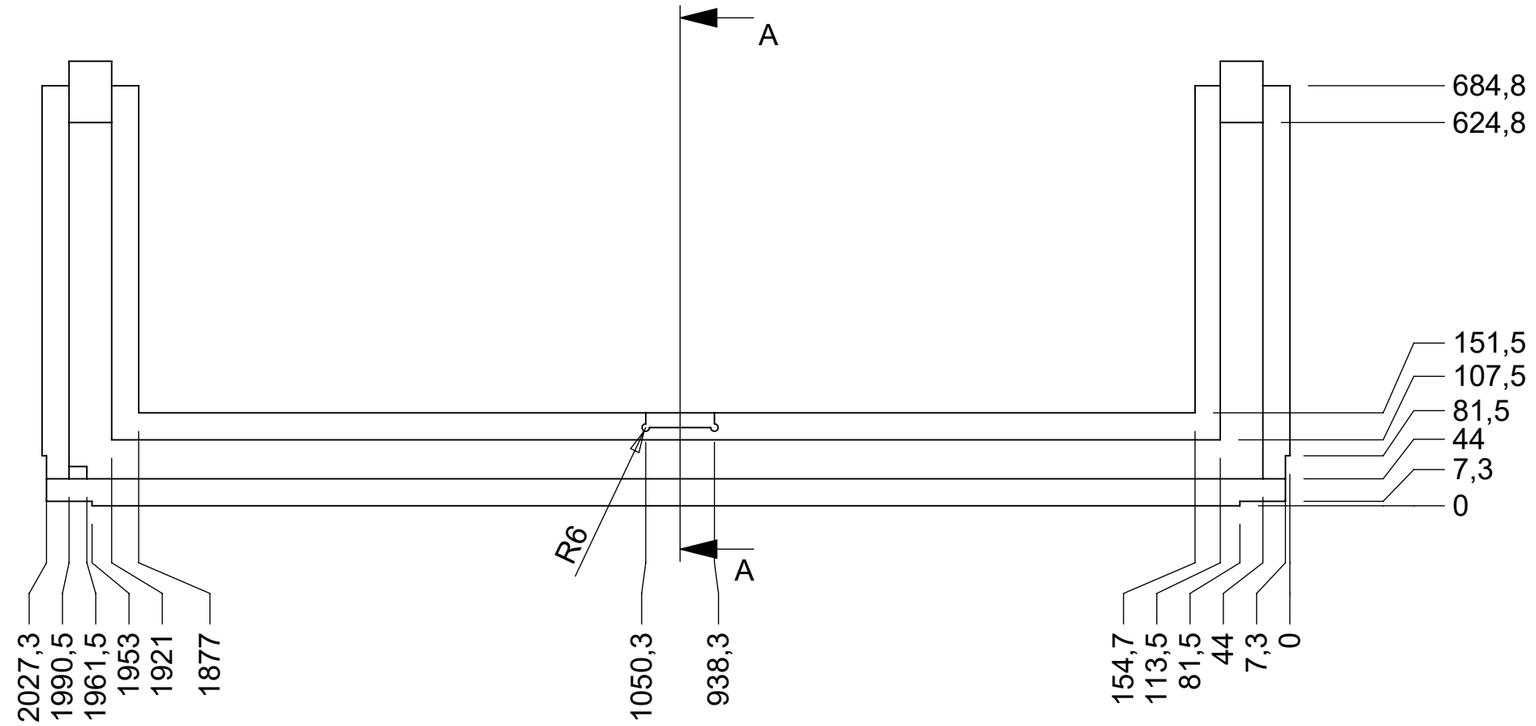
Title: **Inner Sheet**

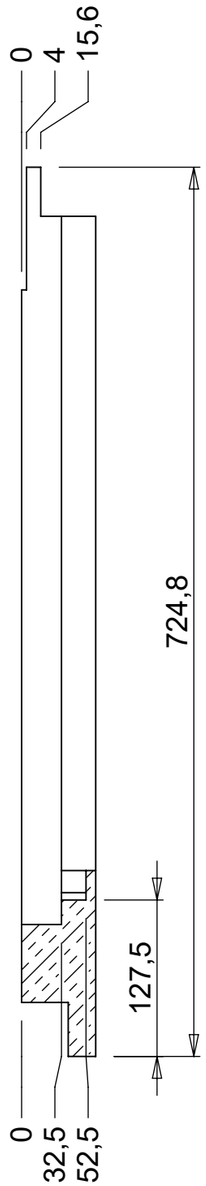
Iss.	Changes	Date	Name

Projection

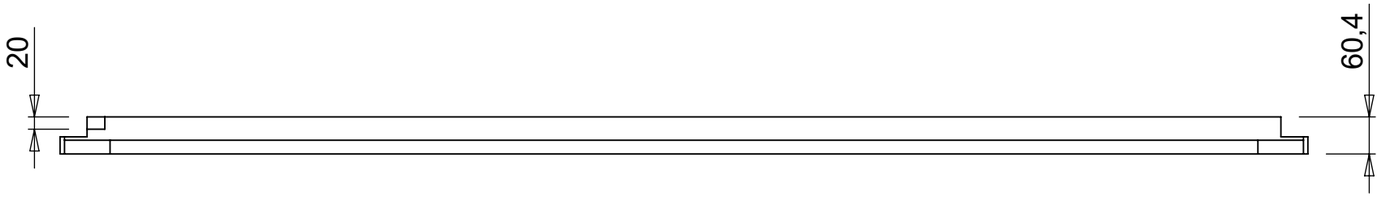
Size A3

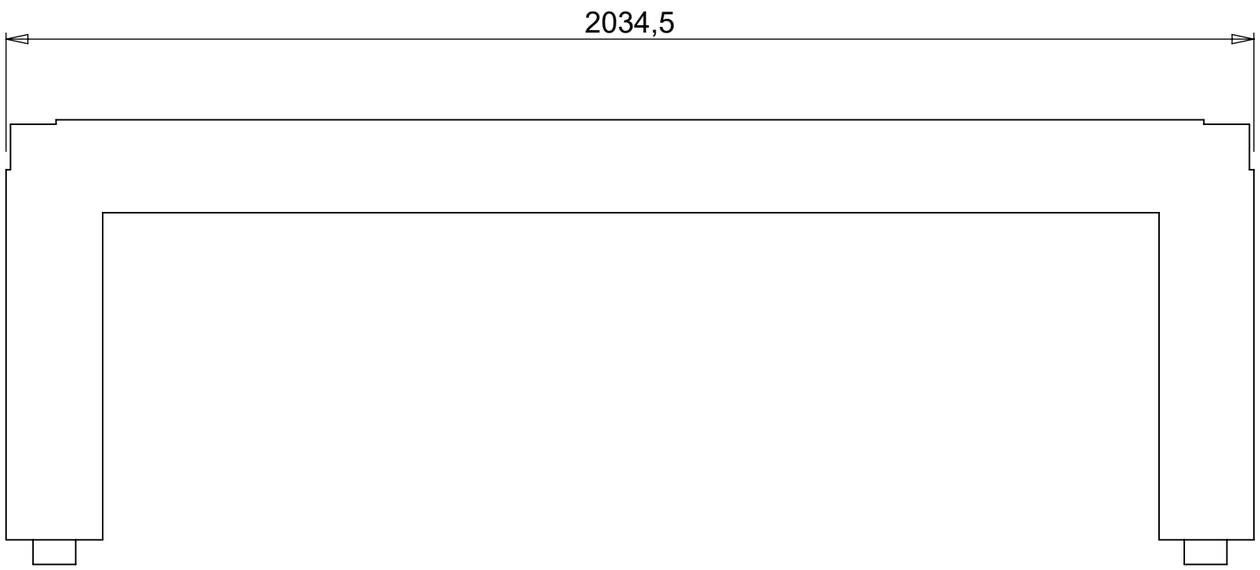
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





SECTION A-A
SCALE 1 : 5





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation	2034,5	724,8	60,4	2000-05-1209	RTM-X	

Scale: 1:10	Date:	Drawing no.: 2000-05-1209 Sheet : 1 of 1	Issue: B
Drawn: HS	28-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 0.93 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

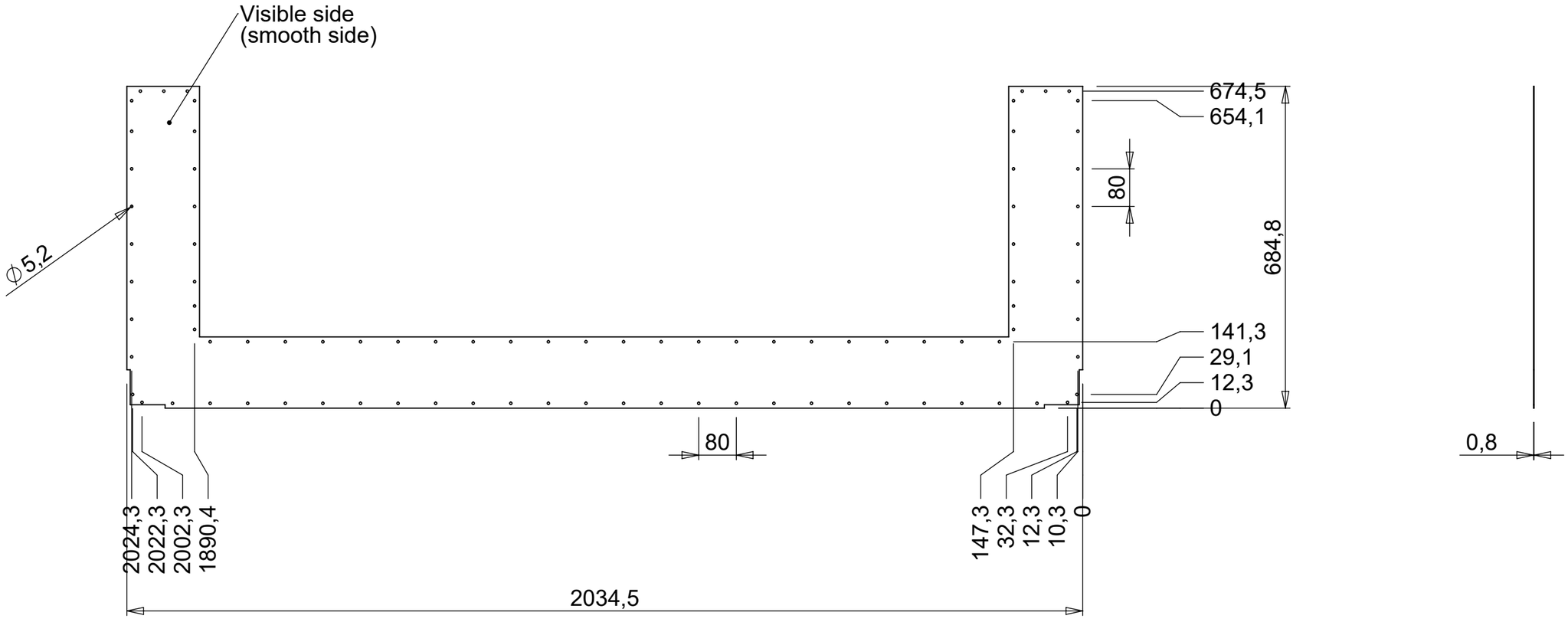
Title: **Insulation**

Iss.	Changes	Date	Name
B	~Cut out	10-09-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



1	1	Outer sheet	2034,5	684,8	0,8	2000-05-1208	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-1208 Sheet : 1 of 1	Issue A
Drawn: HS	28-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.59 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

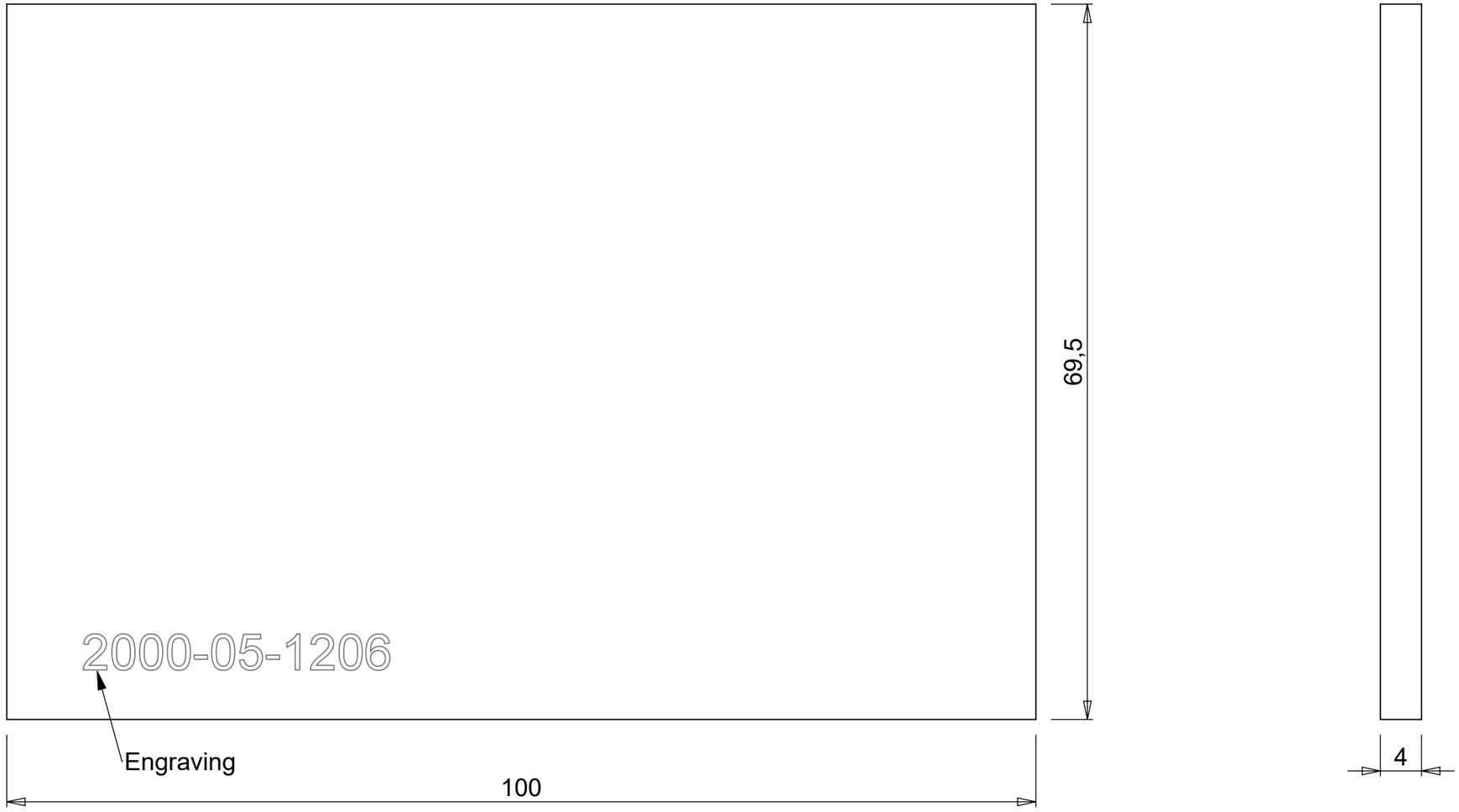
Title: **Outer sheet**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Reinforcement sheet	100	69,5	4	2000-05-1206	Alu. 6082-T6	

Scale: 2:1	Date:	Drawing no.: 2000-05-1206	Issue: A
Drawn: HS	28-03-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.08 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

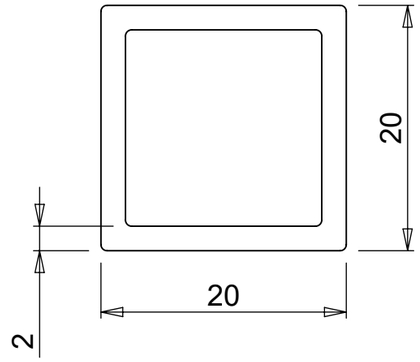
Title: **Reinforcement sheet**

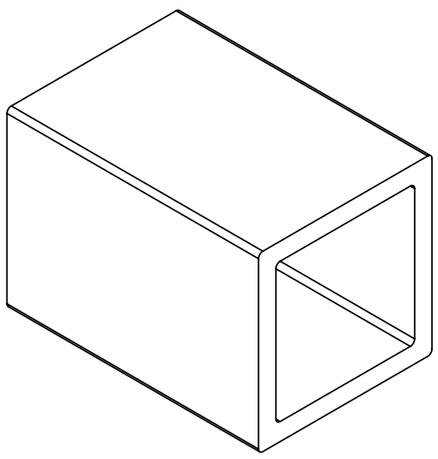
Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Tube 20x20x2	29	20/20	2	2000-04-8840	Alu. 6060-T66	

Scale: 2:1	Date:	Drawing no.: 2000-04-8840 Sheet : 1 of 1	Issue A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

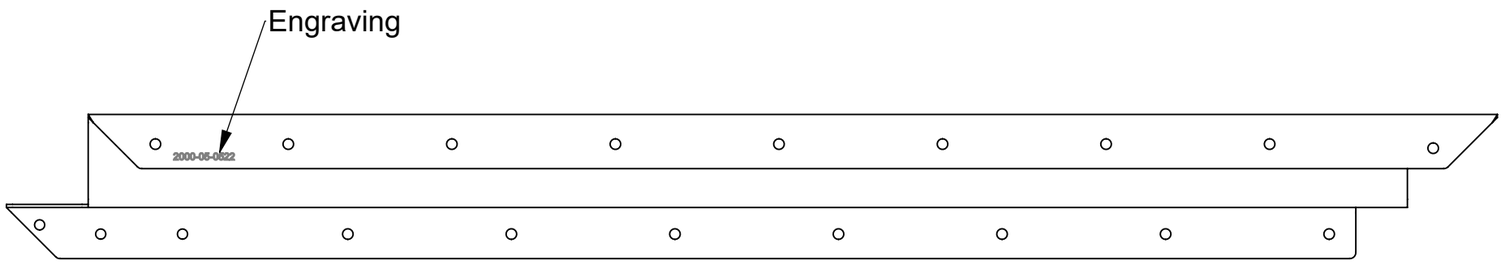
Title: Tube 20x20x2

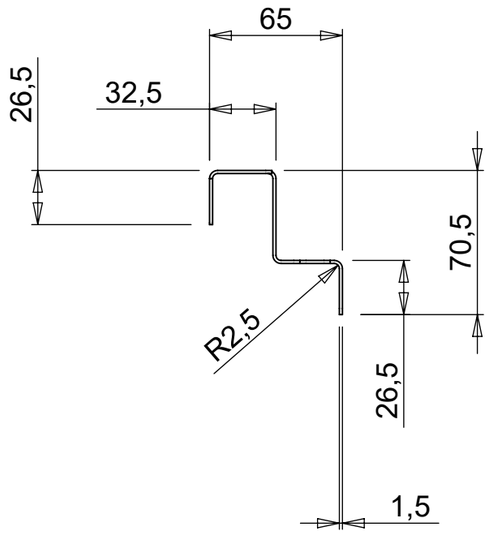
Iss.	Changes	Date	Name

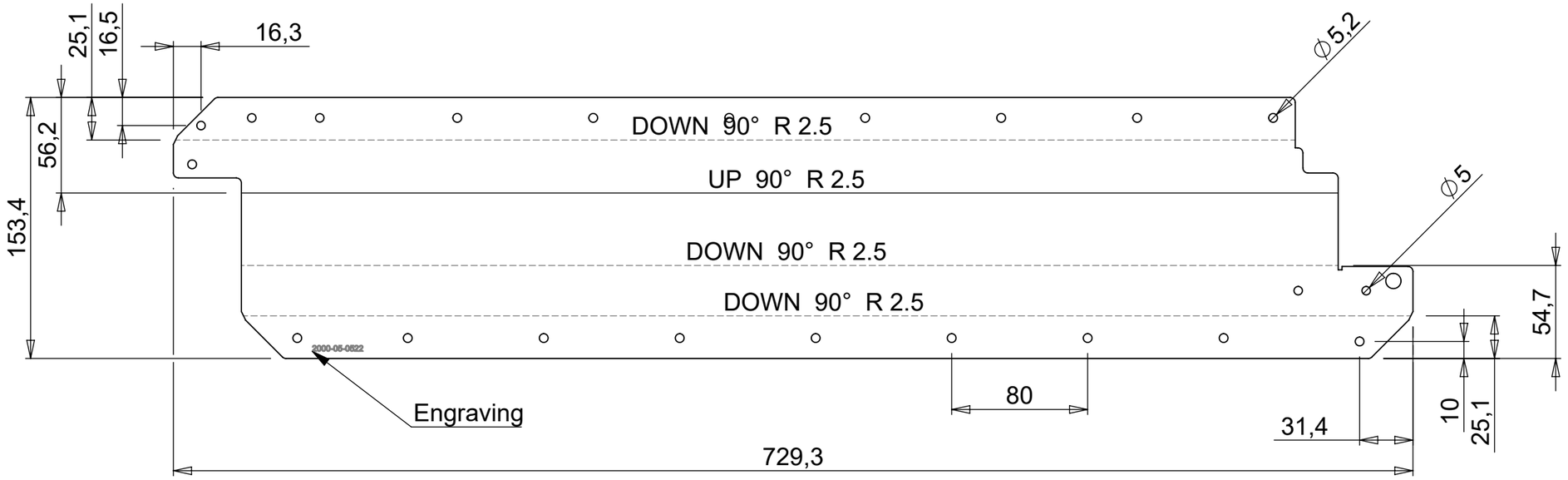
Projection

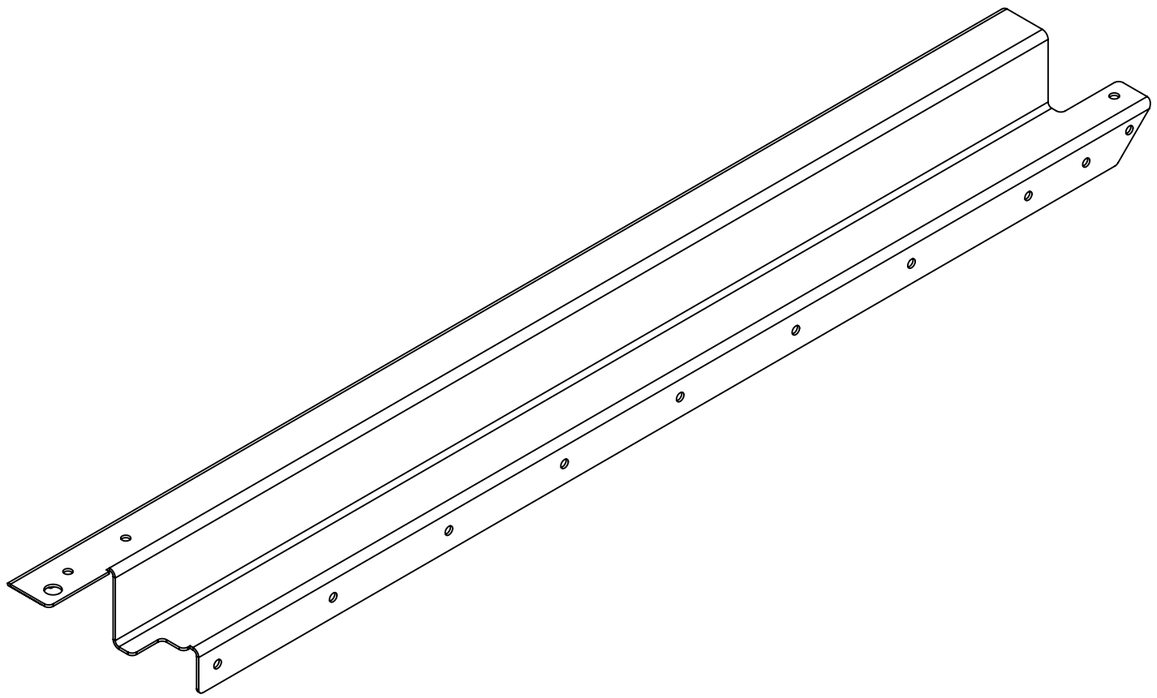
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









1	1	Sheet; door frame	729,3	153,4	1,5	2000-05-0522	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-0522	Issue: A
Drawn: HS	27-03-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR (VvM)	10-10-2019		
Mass: 1.21 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

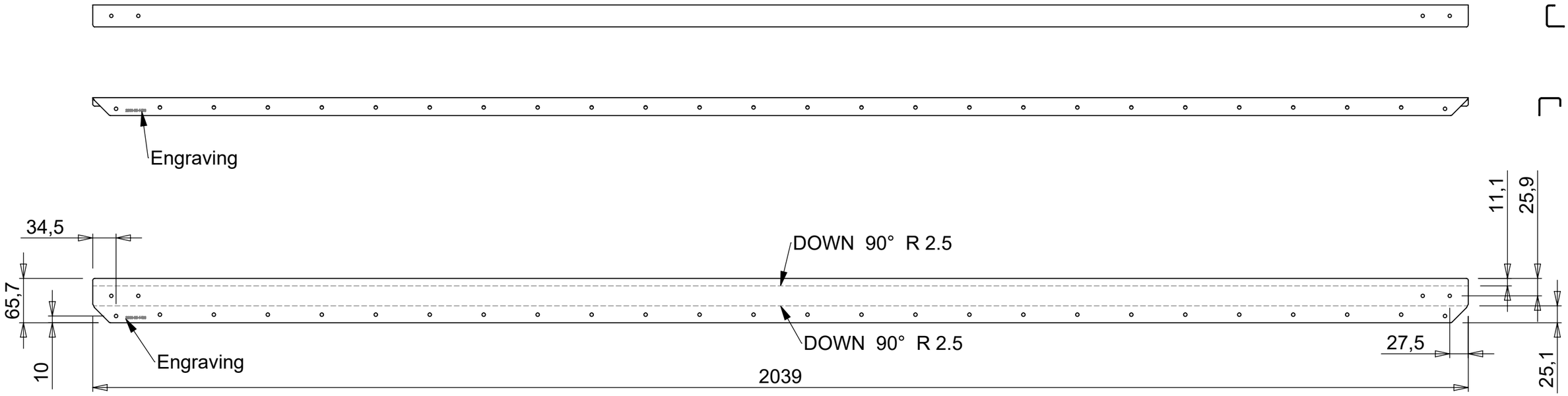
Title: **Sheet; door frame**

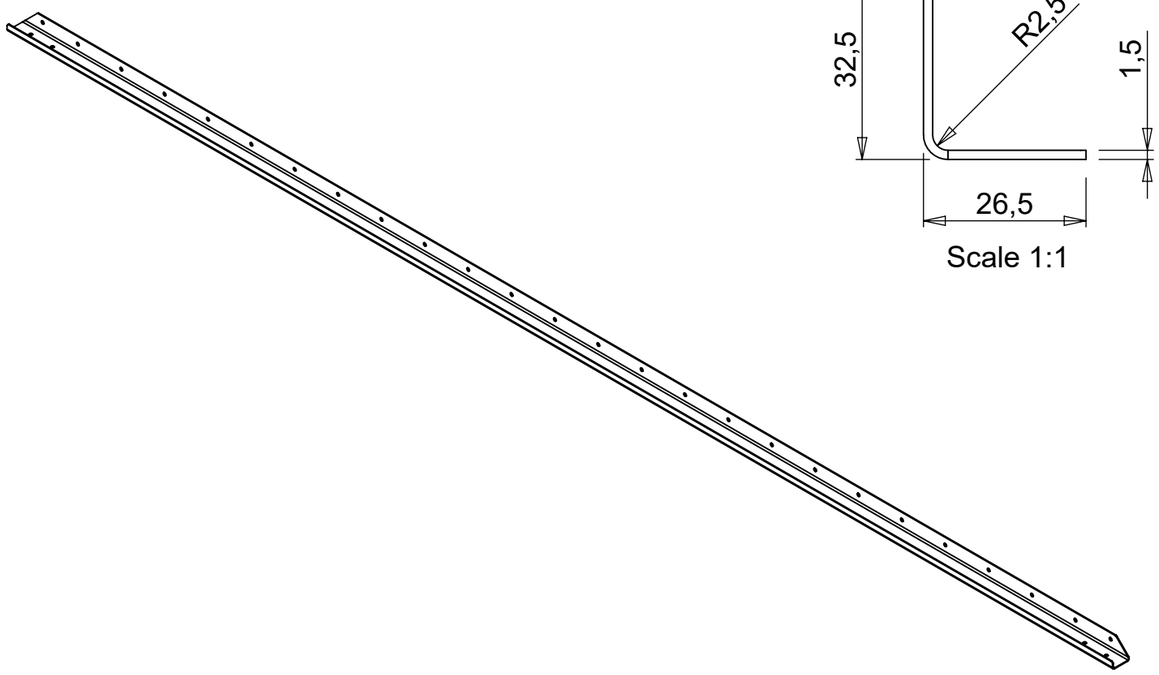
Iss.	Changes	Date	Name

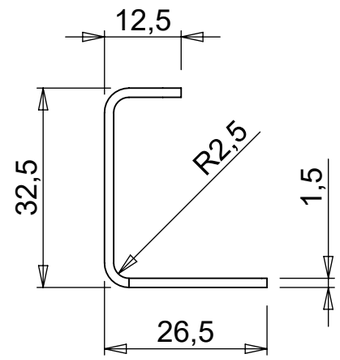
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Scale 1:1

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	2039	65,7	1,5	2000-05-1433	AISI 304	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-1433 Sheet : 1 of 1	Issue: B
Drawn: HS	27-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019		
Mass: 1.59 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

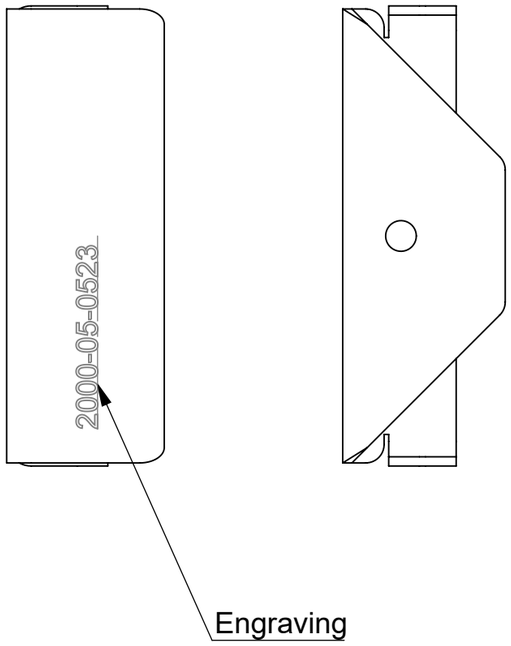
Title: **Sheet; door frame**

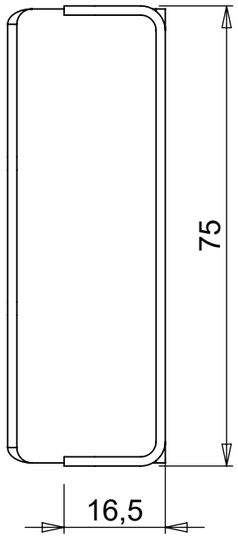
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

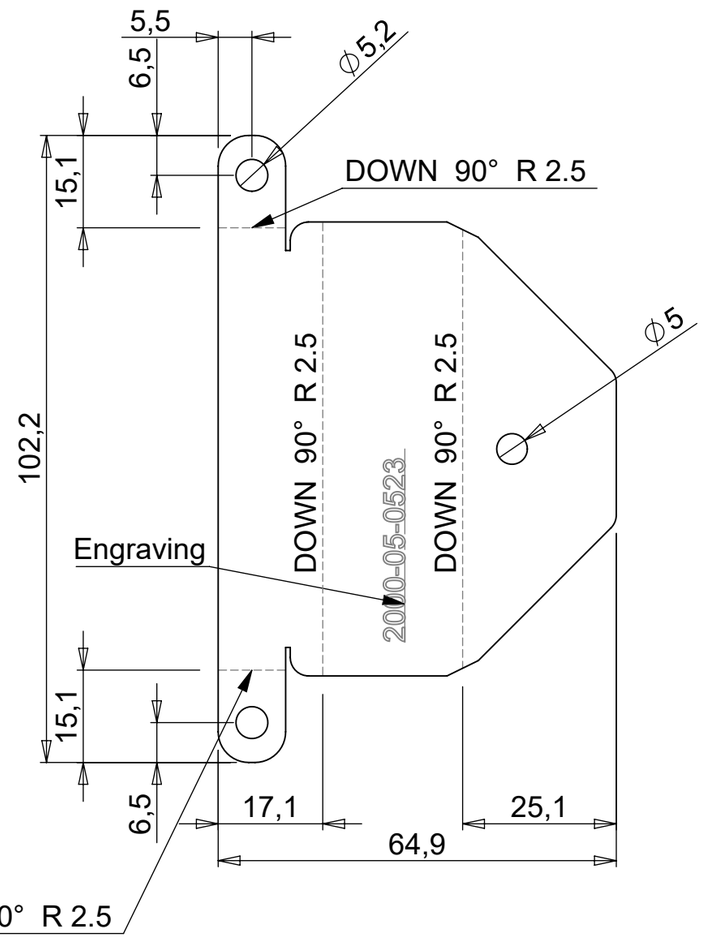
Projection

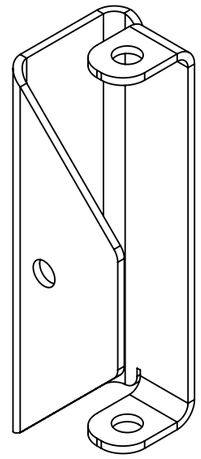
Size A3

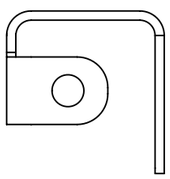
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

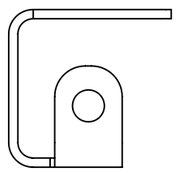


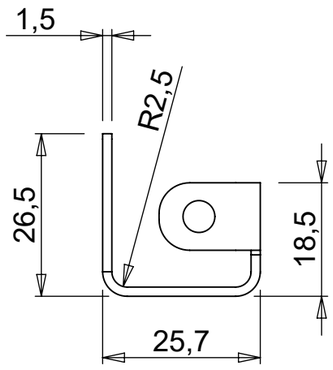












1	1	Sheet; door frame	102,2	64,9	1,5	2000-05-0523	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:1	Date:	Drawing no.: 2000-05-0523	Issue: A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019	Sheet : 1 of 1	
Mass: 0.05 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

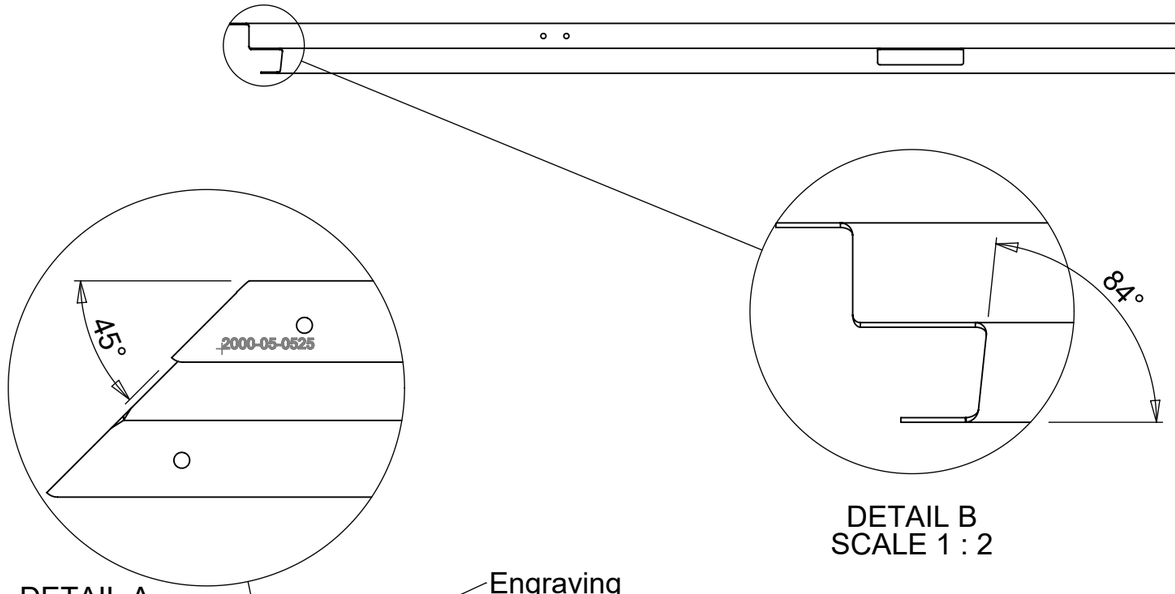
Title: **Sheet; door frame**

Iss.	Changes	Date	Name

Projection

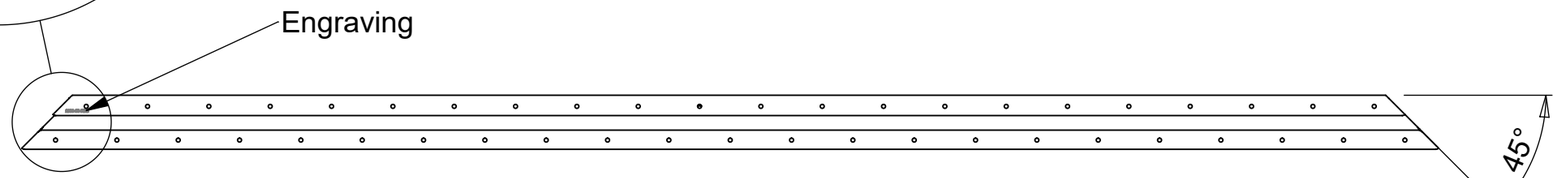
Size A3

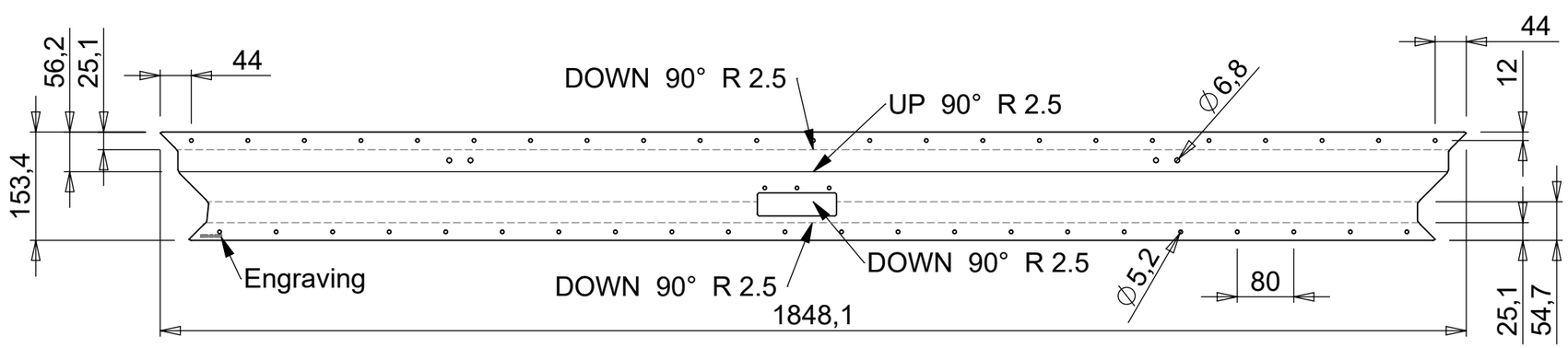
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



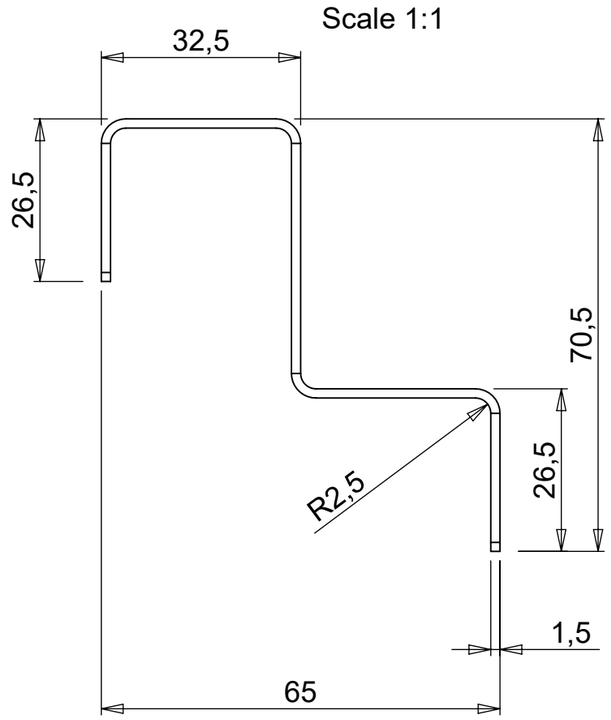
DETAIL A
SCALE 1 : 2

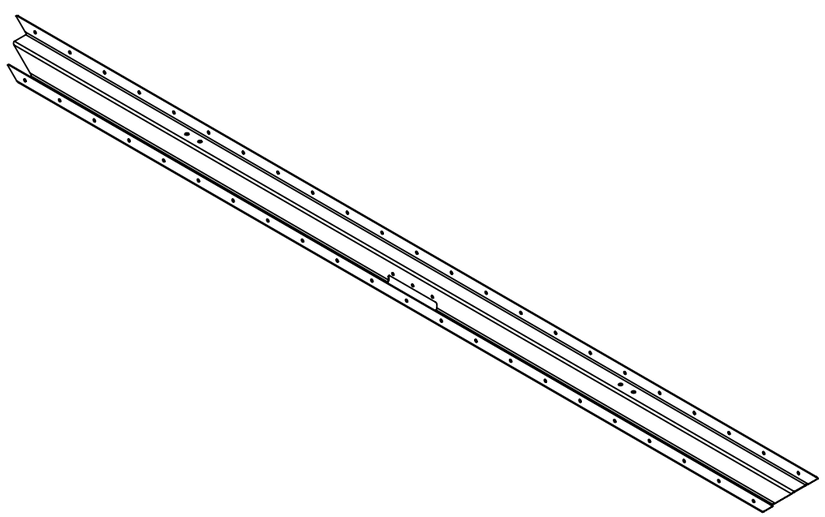
DETAIL B
SCALE 1 : 2





Scale 1:1





1	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-0525	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:8	Date:	Drawing no.: 2000-05-0525	Issue C
Drawn: HS	27-03-2019		
Checked: VvM	04-11-2019		
Approved: JWR	04-11-2019	Sheet : 1 of 1	
Mass: 3.19 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

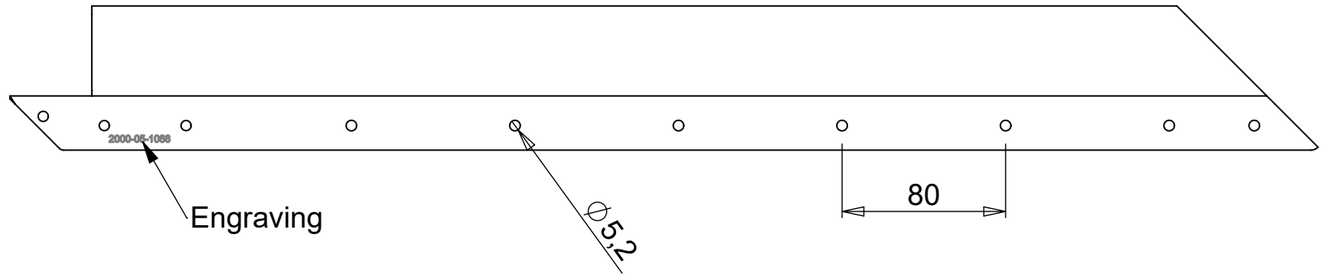
Title: **Sheet; door frame**

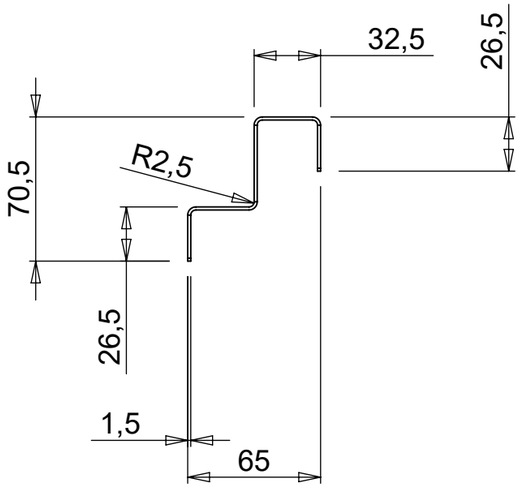
Iss.	Changes	Date	Name
C	Flat pattern corrected	04-11-2019	HS
B	~Cut out	10-09-2019	HS

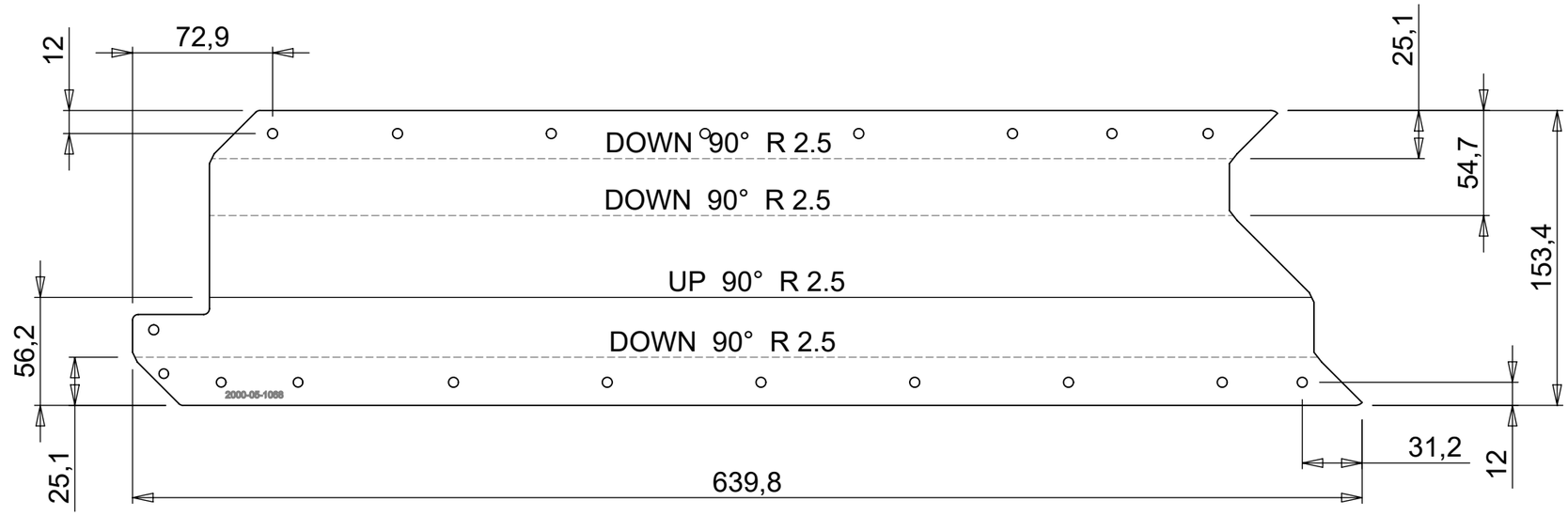
Projection

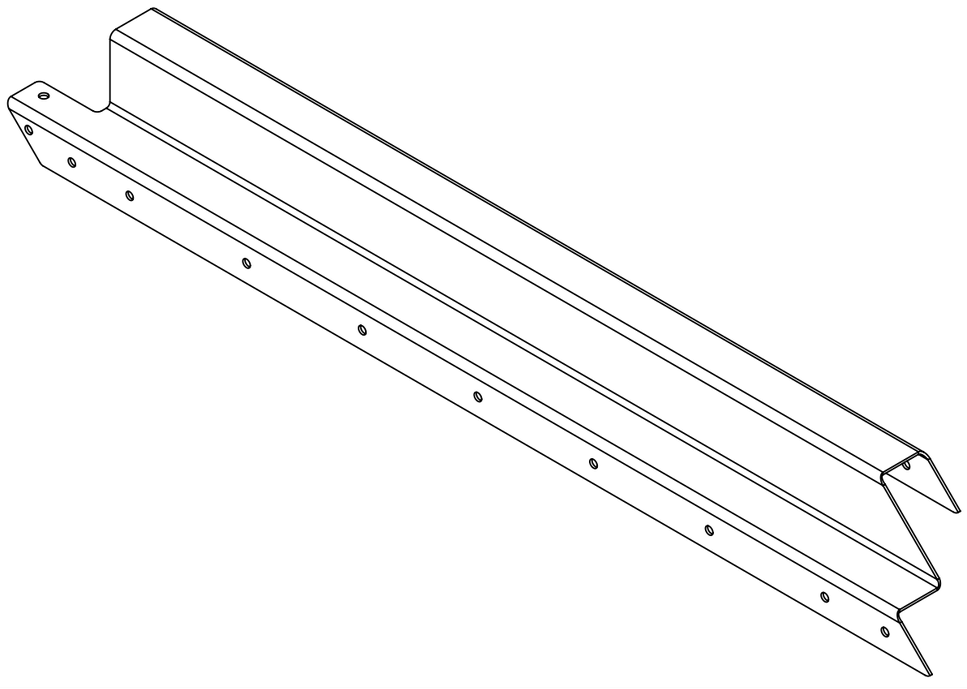
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Sheet; door frame	639,8	153,4	1,5	2000-05-1068	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1068 Sheet : 1 of 1	Issue A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 1.04 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

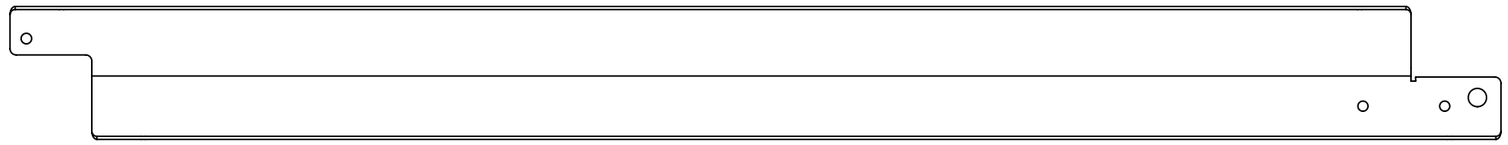
Title: **Sheet; door frame**

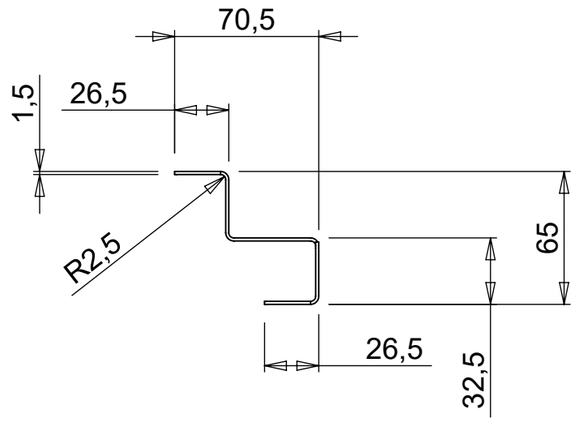
Iss.	Changes	Date	Name

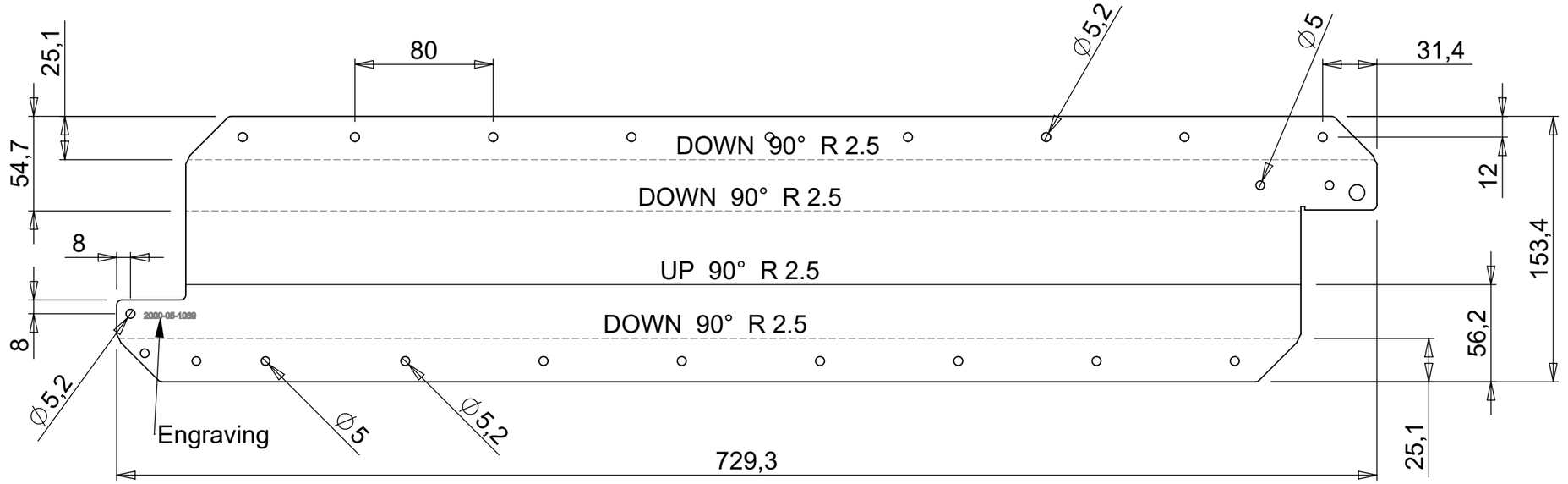
Projection

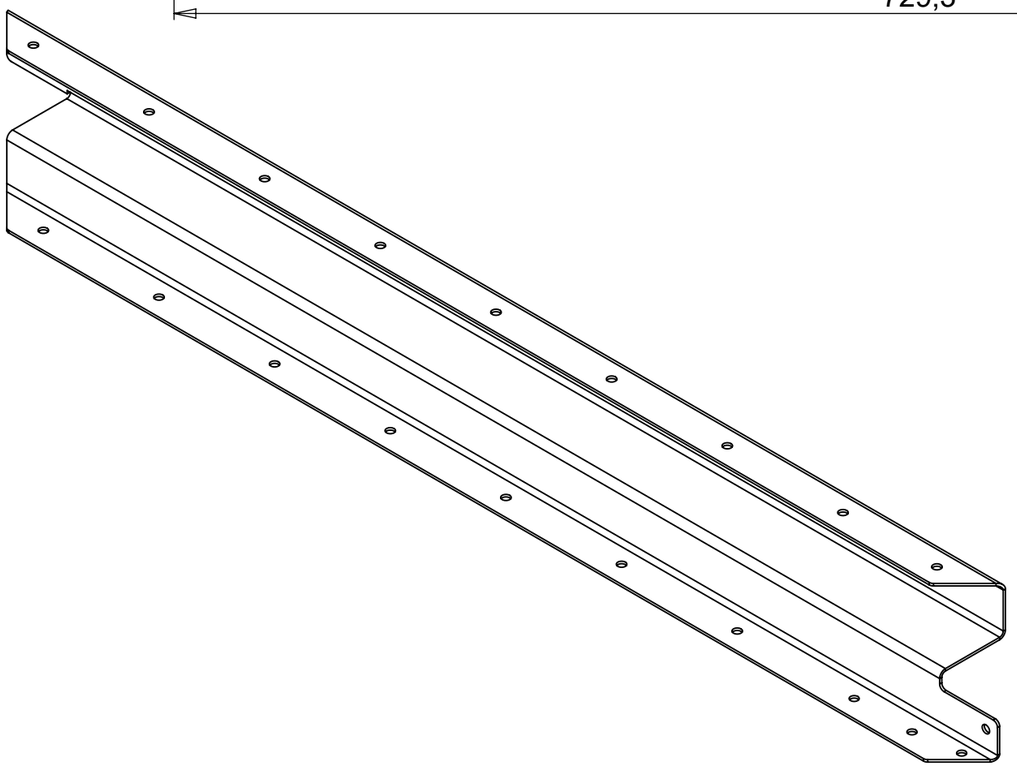
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	698	65,3	1,5	2000-05-1069	AISI 304	Bend with V16

Scale: 1:3	Date:	Drawing no.: 2000-05-1069	Issue: A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019	Sheet : 1 of 1	
Mass: 1.22 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

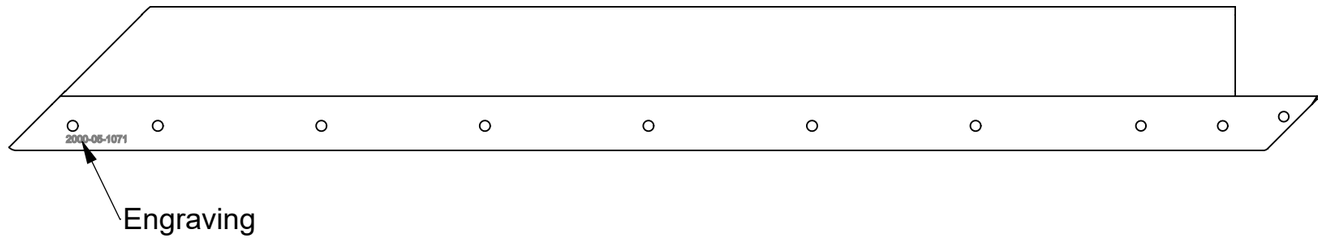
Title: **Sheet; door frame**

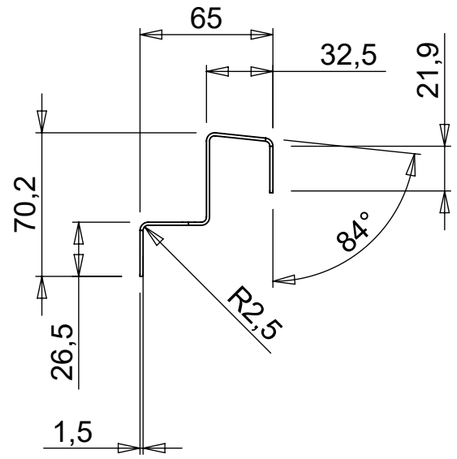
Iss.	Changes	Date	Name

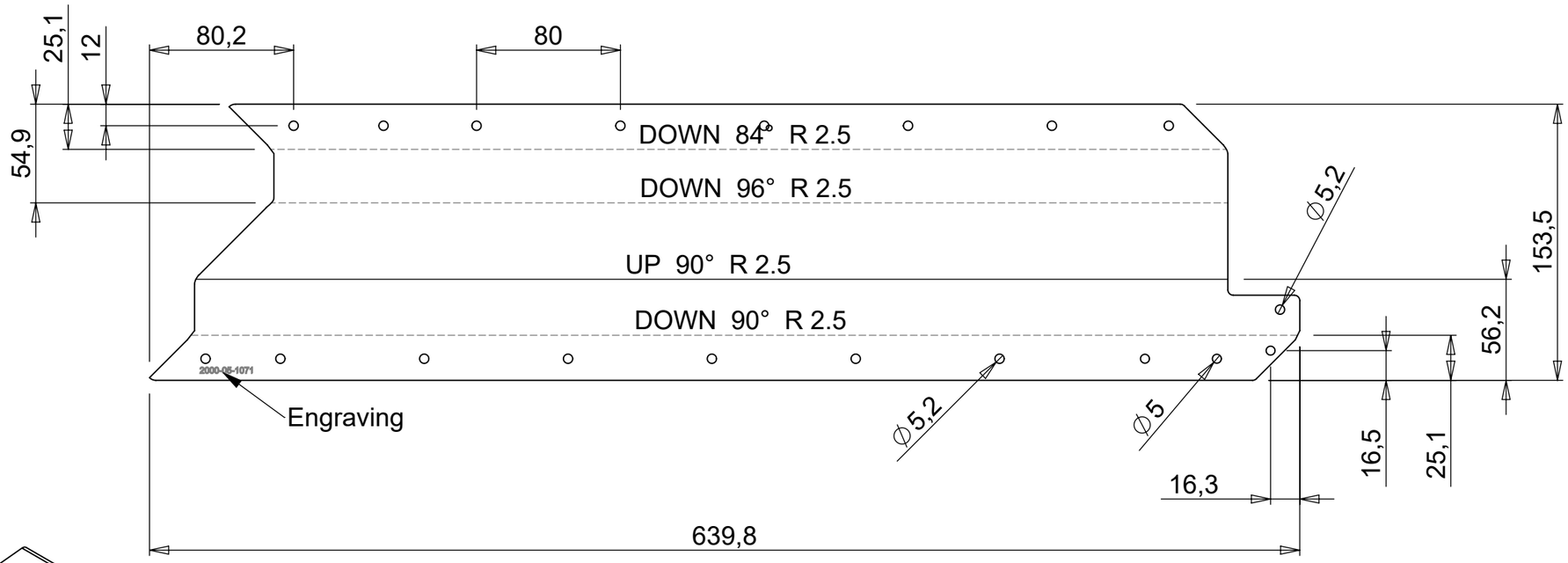
Projection

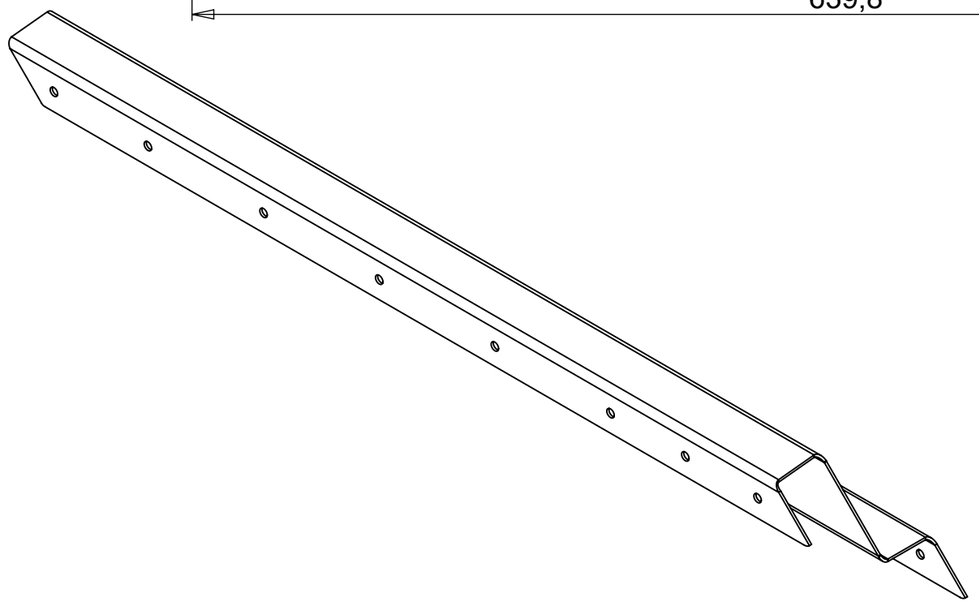
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1071	AISI 304	Bend with V16

Scale: 1:3	Date:	Drawing no.: 2000-05-1071	Issue: A
Drawn: HS	28-03-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 1.04 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

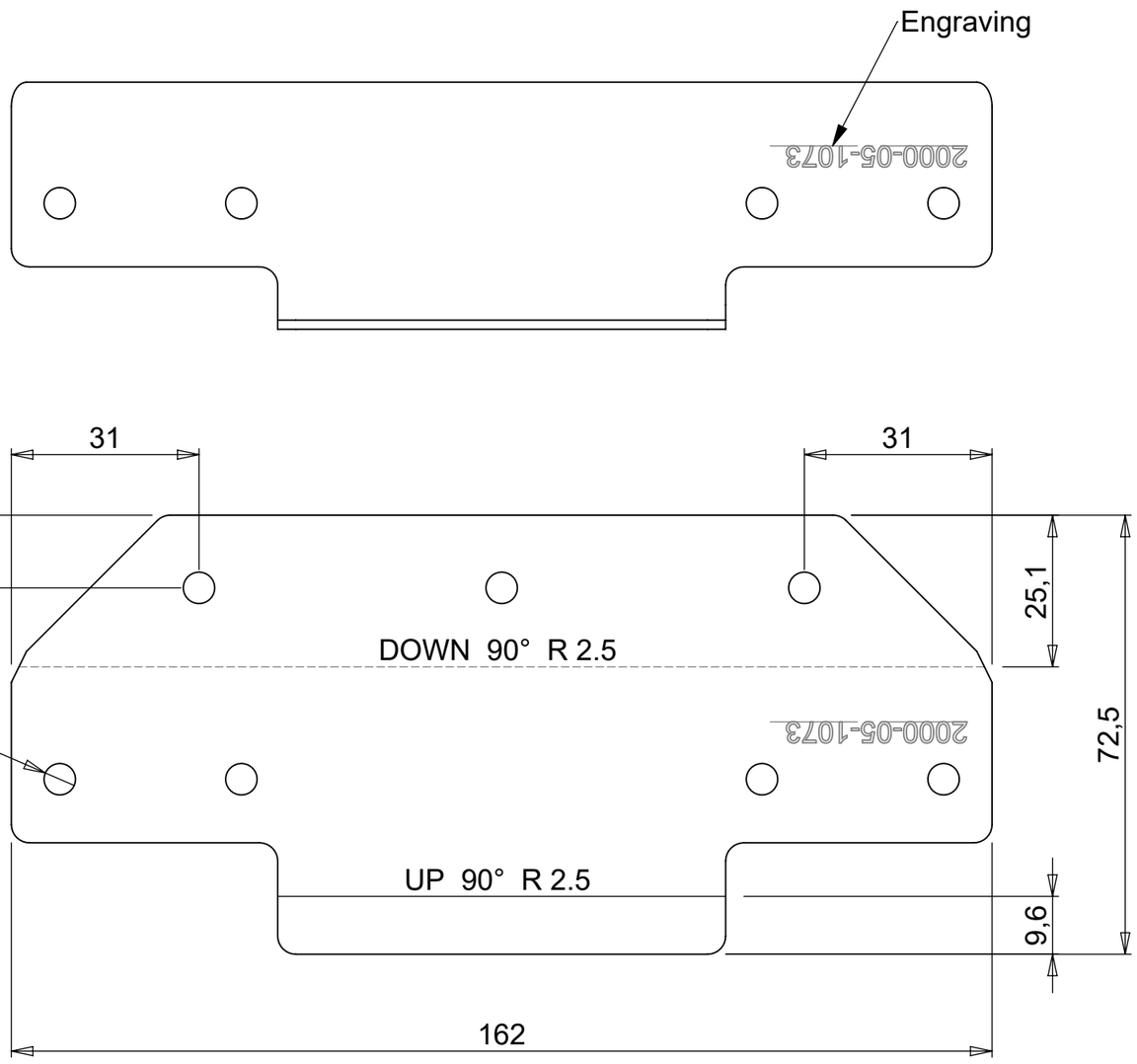
Title: **Sheet; door frame**

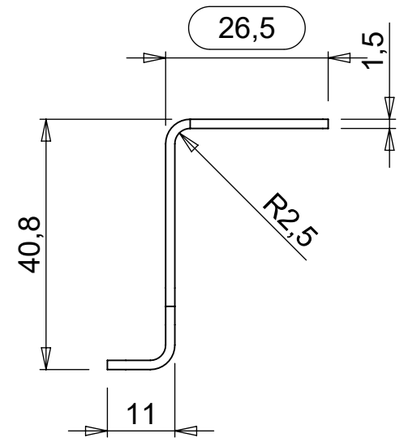
Iss.	Changes	Date	Name

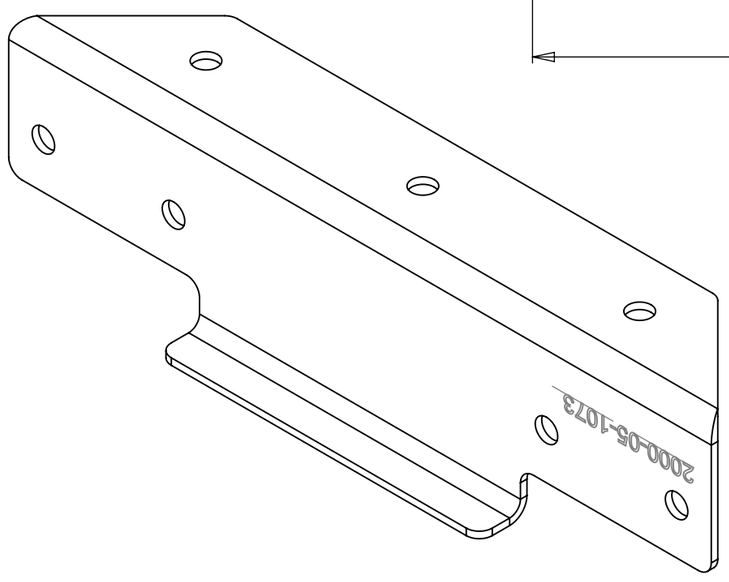
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Sheet; door frame	162	72,5	1,5	2000-05-1073	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:1	Date:	Drawing no.: 2000-05-1073	Issue: A
Drawn: HS	27-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019	Sheet : 1 of 1	
Mass: 0.11 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

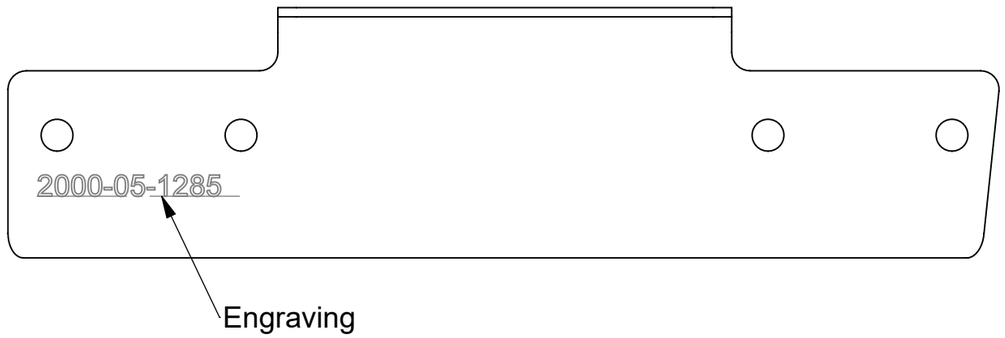
Title: **Sheet; door frame**

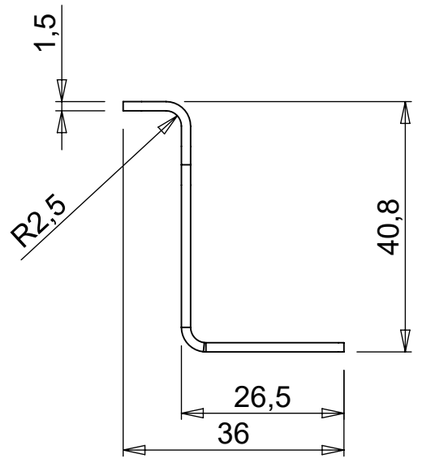
Iss.	Changes	Date	Name

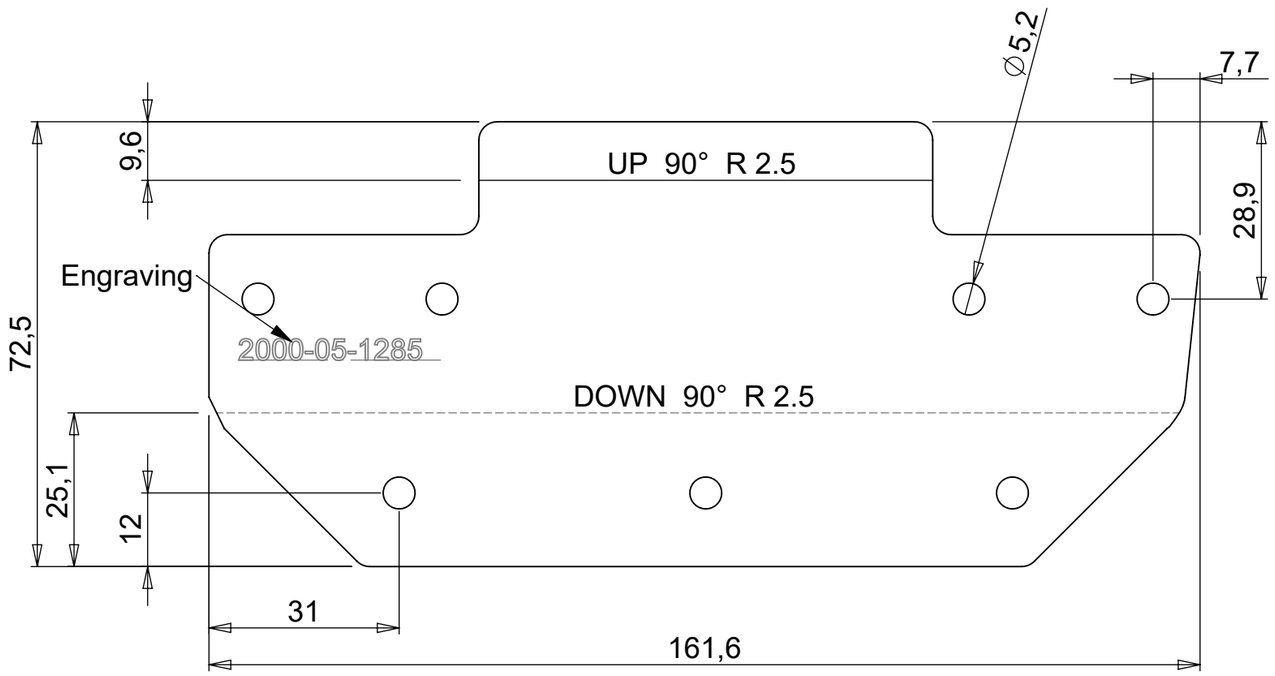
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1285	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:1	Date:	Drawing no.: 2000-05-1285 Sheet : 1 of 1	Issue A
Drawn: HS	28-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.11 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Sheet; door frame**

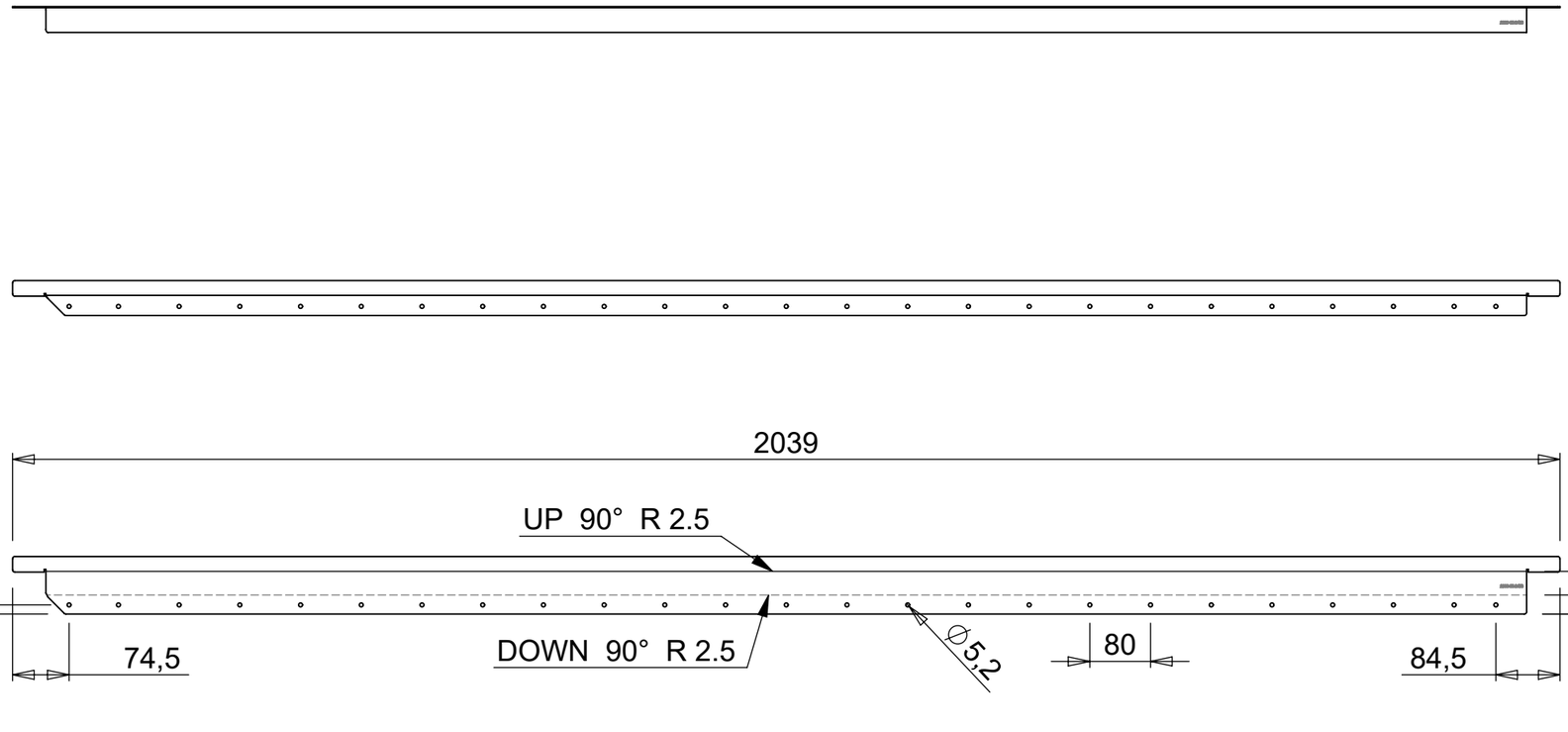
Iss.	Changes	Date	Name

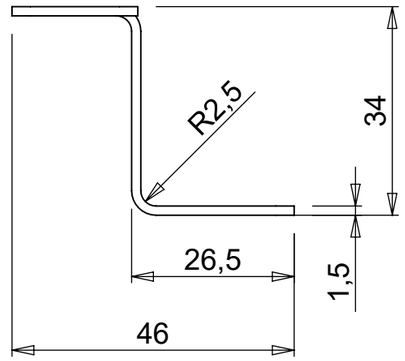
Projection

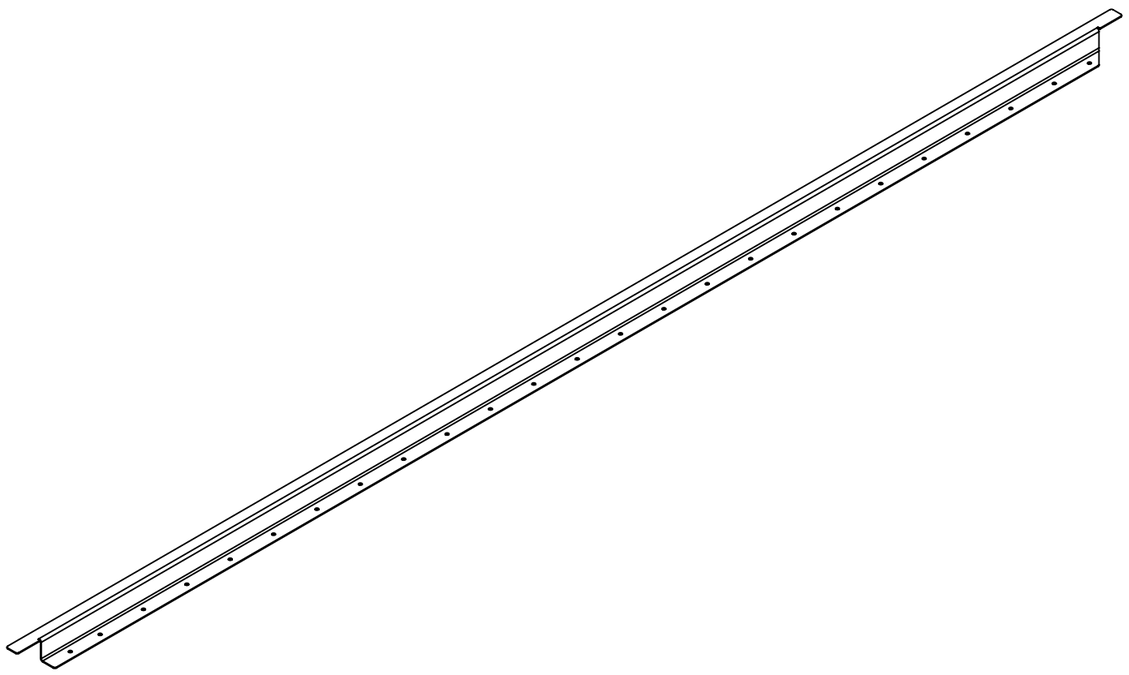
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

Scale 1:1







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	2039	75,7	1,5	2000-05-2458	AISI 304	Bend with V16

Scale: 1:8	Date:	Drawing no.: 2000-05-2458	Issue: B
Drawn: HS	06-05-2019	Sheet : 1 of 1	
Checked: HS	04-11-2019		
Approved: JWR	04-11-2019		
Mass: 1.78 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

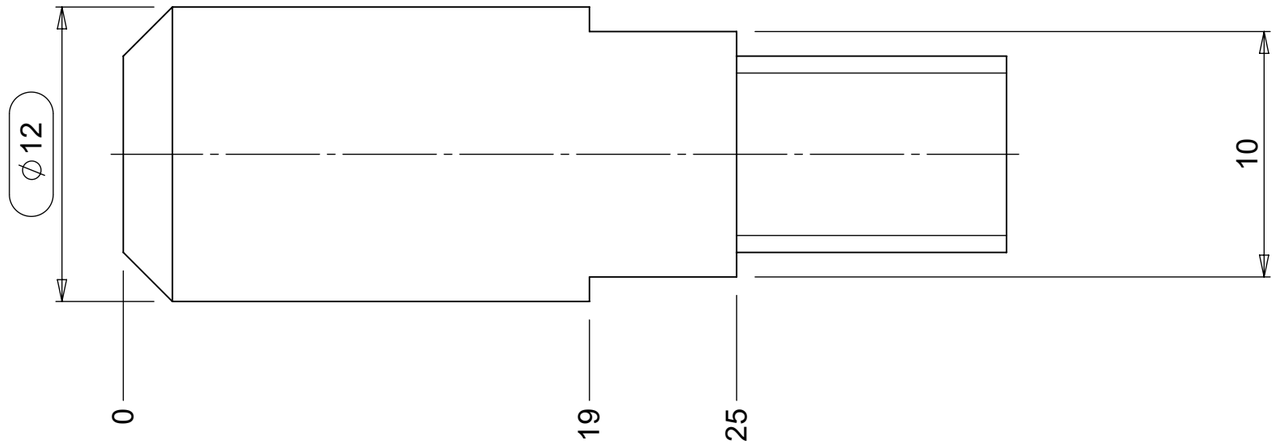
Title: **Sheet; door frame**

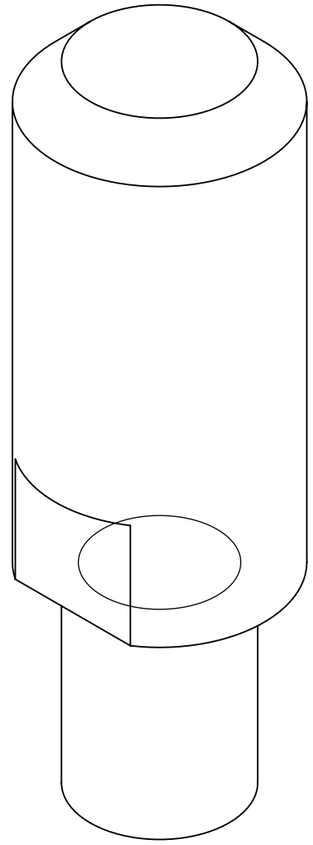
Iss.	Changes	Date	Name
B	flatpattern corrected	04-11-2019	JWR

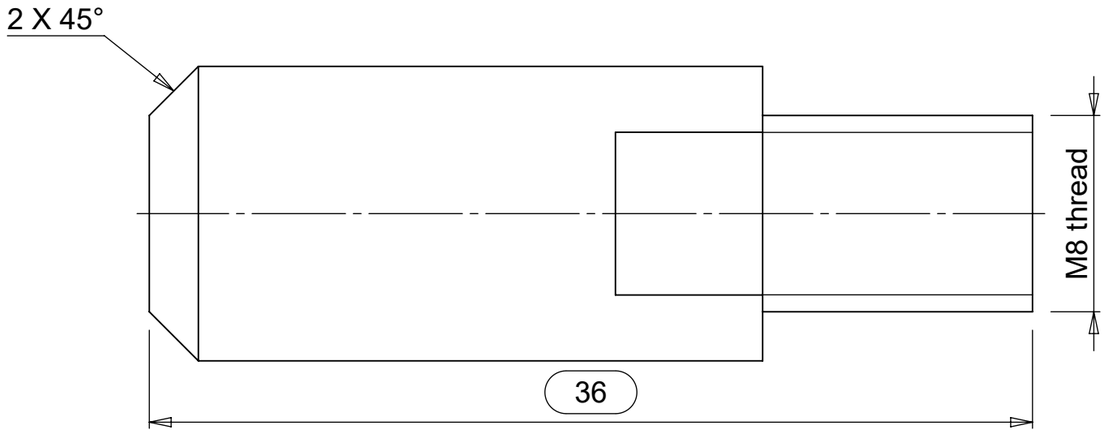
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Pin	36	12		2000-05-0530	AISI 304	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 4:1	Date:	Drawing no.: 2000-05-0530	Issue B	Tolerances (u.n.o.)
Drawn: HS	27-03-2019			< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / 2000 >
Checked: HS	13-02-2020			±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2
Approved: JWR	10-03-2020	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.03 kg		Finish:		Dimensions in mm (u.n.o.)
Title: Pin				

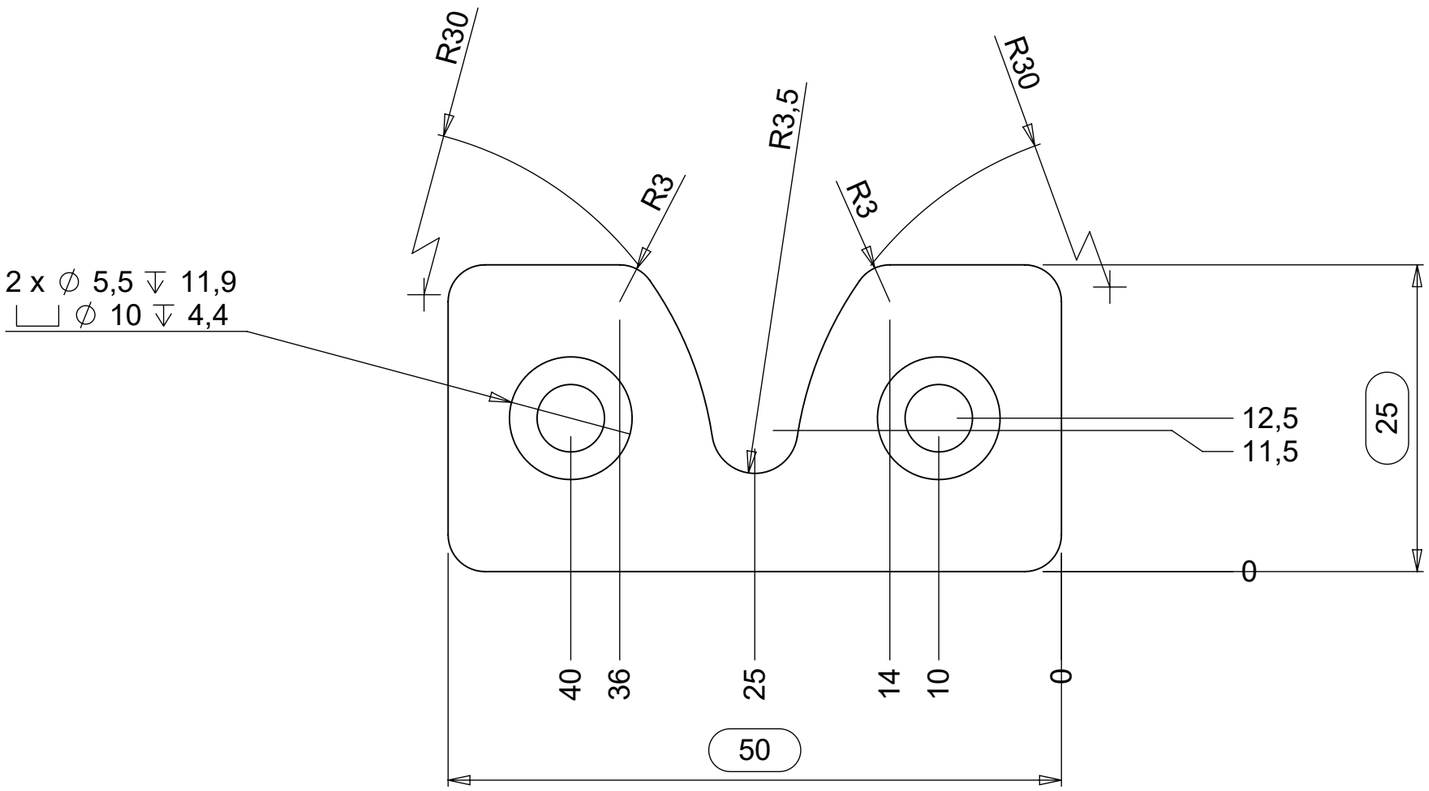
Iss.	Changes	Date	Name
B	~Pin length	10-03-2020	MVE

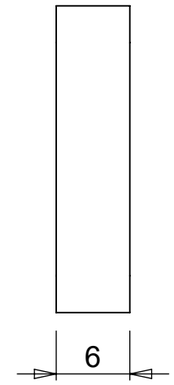
Projection

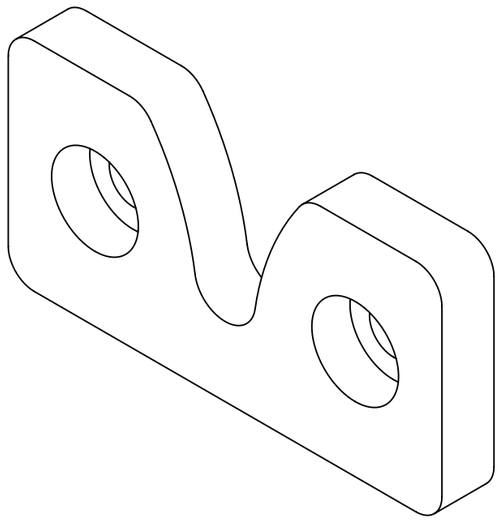
Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Guide	50	25	6	2000-05-1321	AISI 304	

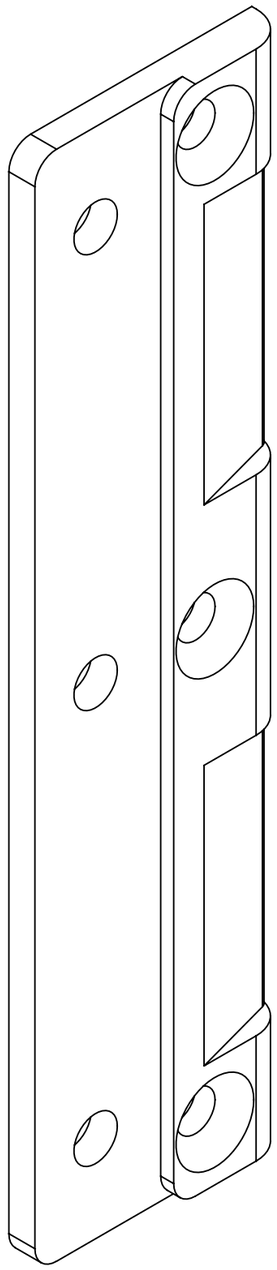
Scale: 2:1	Date:	Drawing no.: 2000-05-1321	Issue: A
Drawn: HS	27-03-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: VvM	18-04-2019		< 7 30 120 400 1000 2000
Approved: JWR	10-05-2019		7 30 120 400 1000 2000 >
			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.04 kg		Finish:	Raw extrusion in accordance with OEM drawing and EN755-9
Title: Guide			Dimensions in mm (u.n.o.)

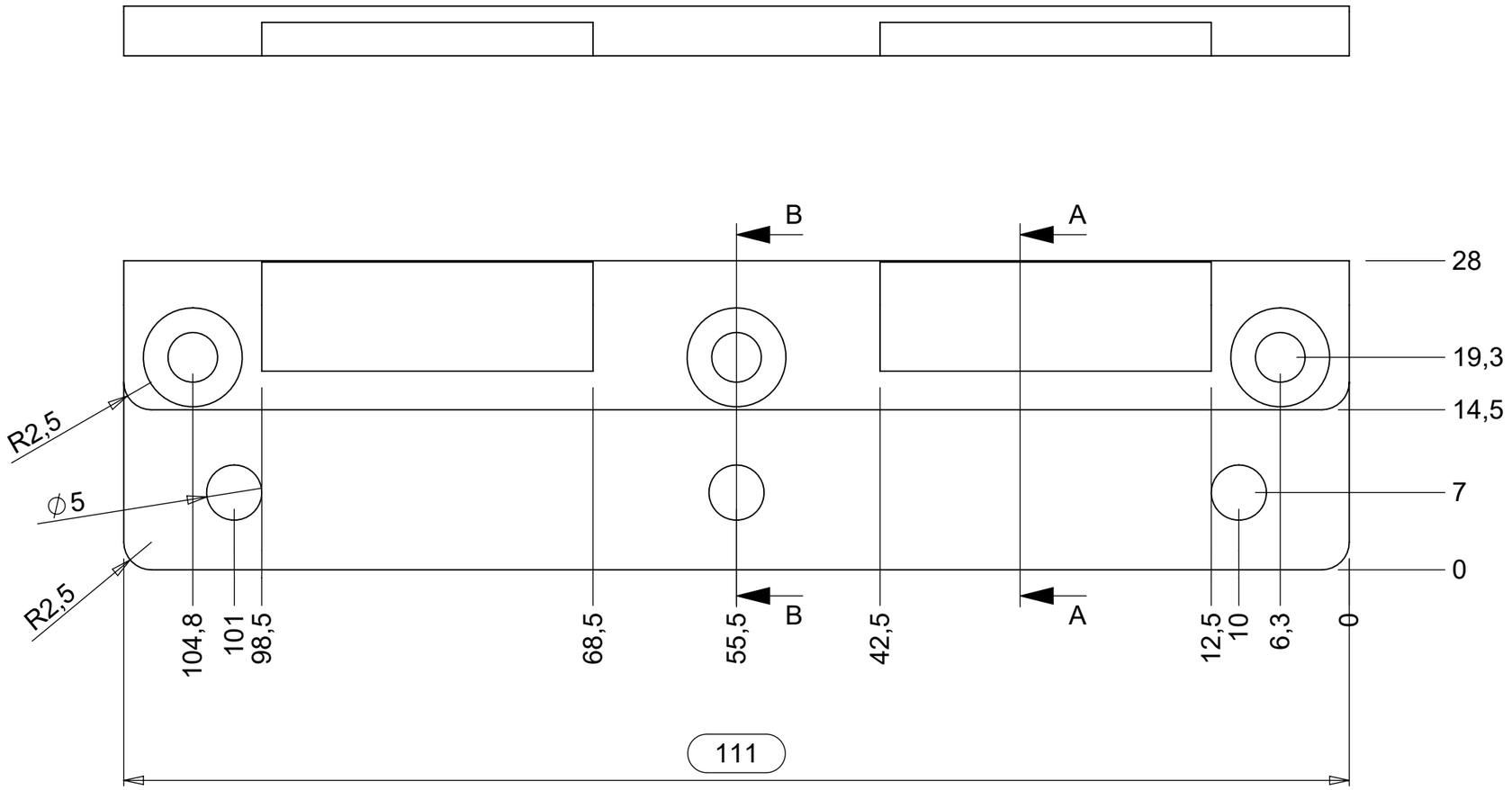
Iss.	Changes	Date	Name

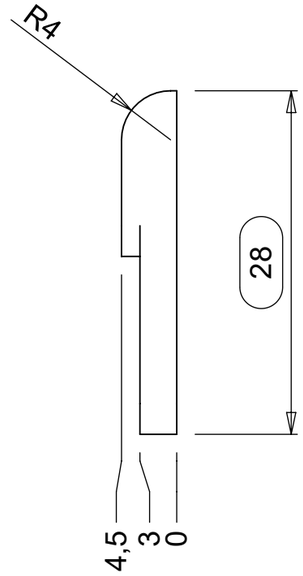
Projection

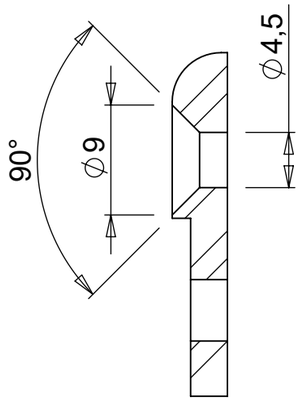
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

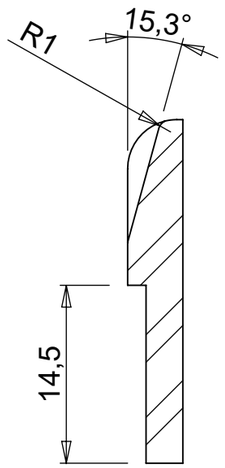








SECTION B-B



SECTION A-A

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Detent	111	28	4,5	2000-05-3877	AISI 304	

Scale: 2:1	Date:	Drawing no.: 2000-05-3877 Sheet : 1 of 1	Issue B
Drawn: HS	05-09-2019		
Checked: HS	09-04-2020		
Approved: JWR	10-04-2020		
Mass: 0.08 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

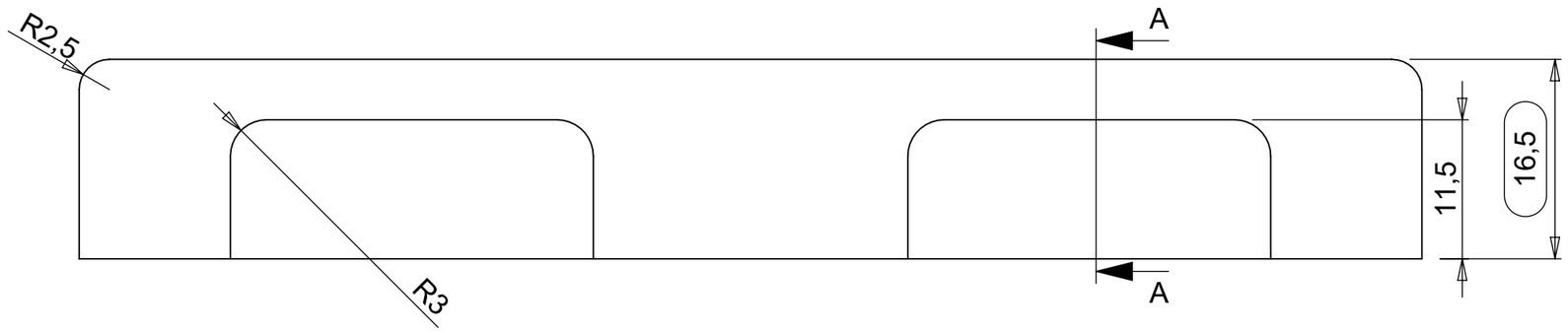
Title: Detent

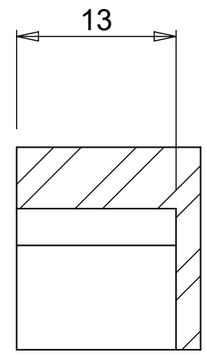
Iss.	Changes	Date	Name
B	~Thickness	10-04-2020	MVE

Projection

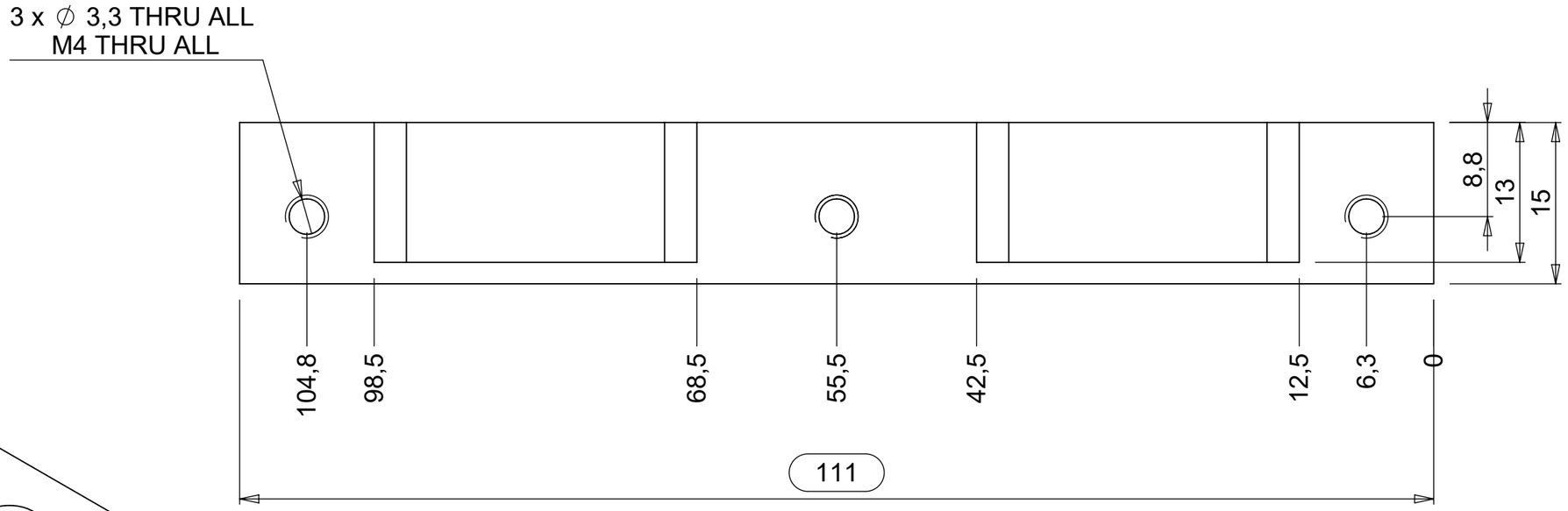
Size A3

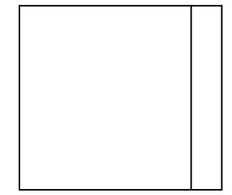
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

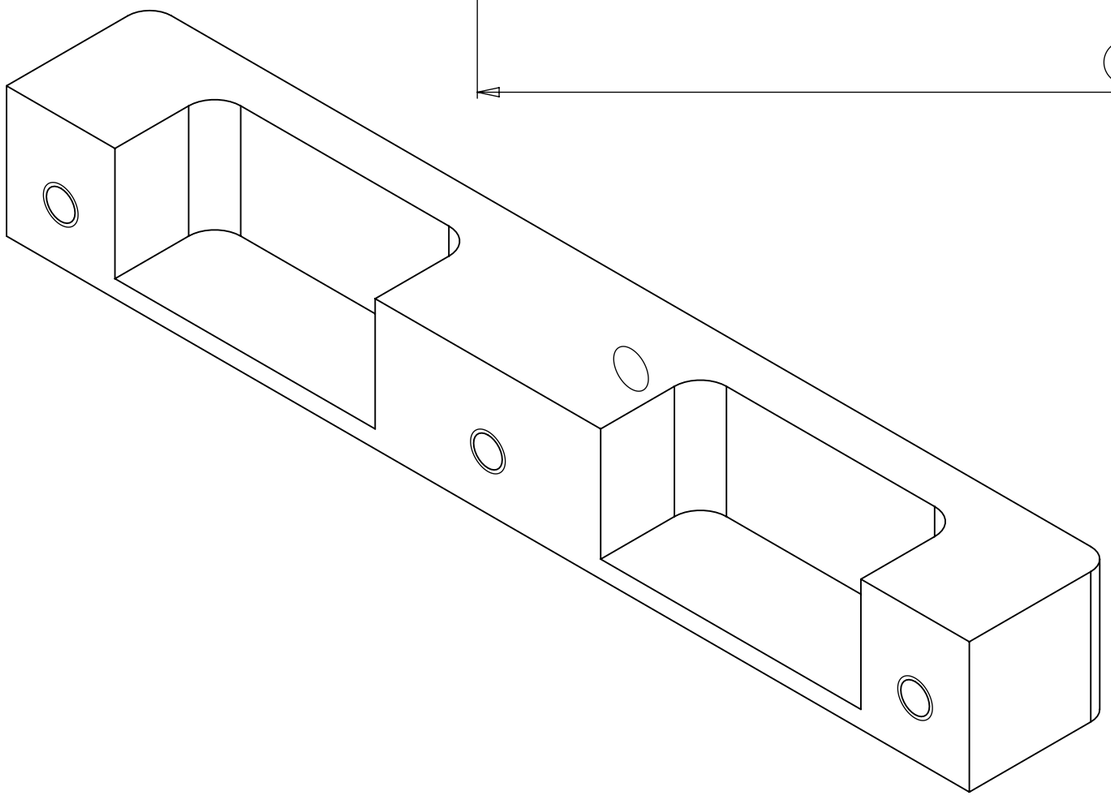




SECTION A-A







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Detent; back	111	16,5	15	2000-05-3880	AISI 304	

Scale: 2:1	Date:	Drawing no.: 2000-05-3880 Sheet : 1 of 1	Issue B
Drawn: HS	05-09-2019		
Checked: HS	09-04-2020		
Approved: JWR	10-04-2020		
Mass: 0.15 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

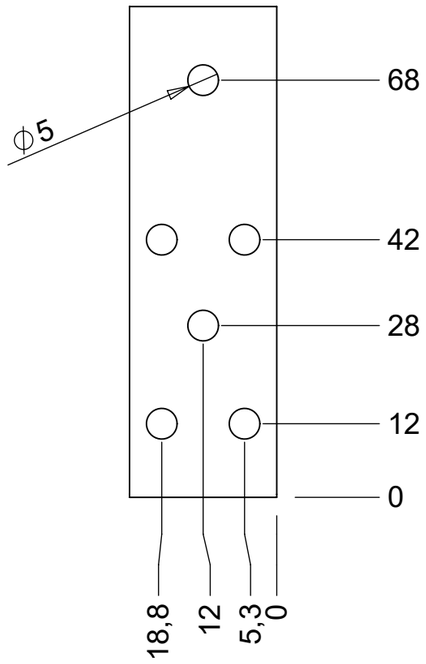
Title: **Detent; back**

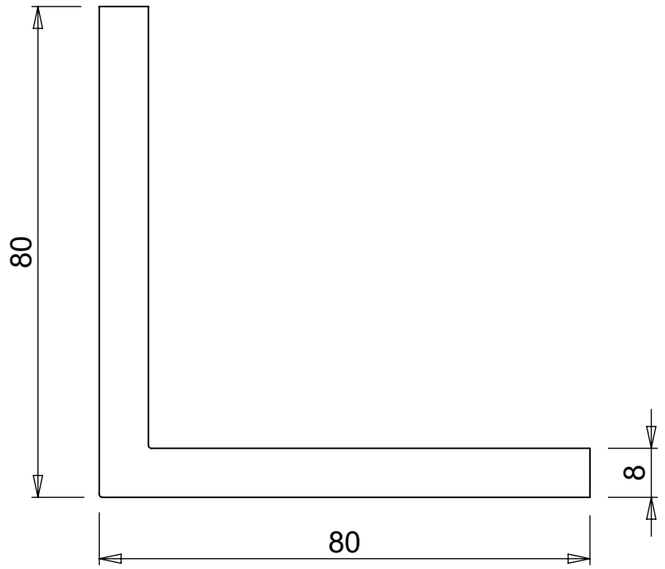
Iss.	Changes	Date	Name
B	~Width	10-04-2020	MVE

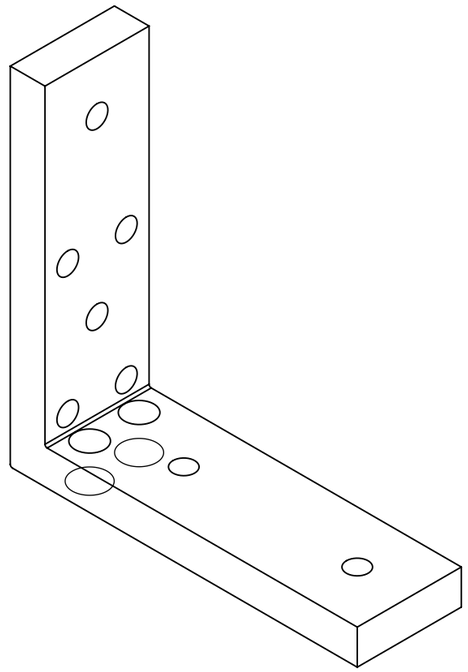
Projection

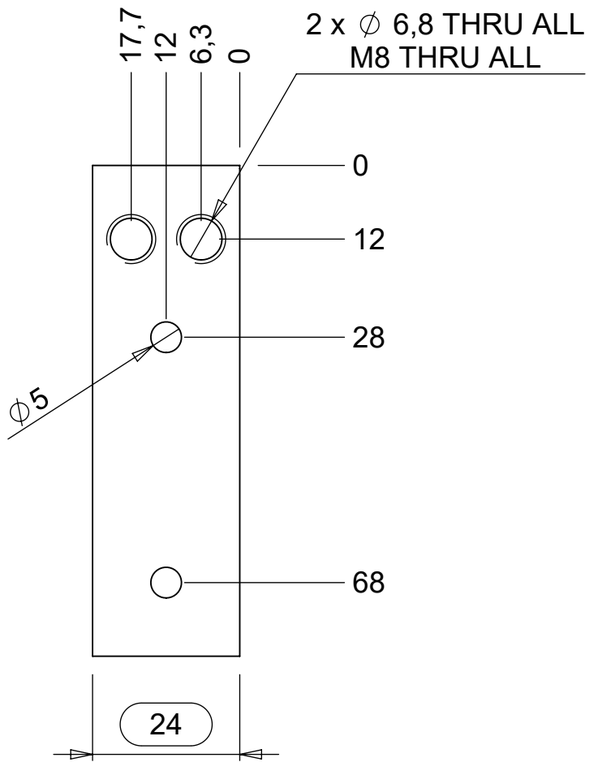
Size A3

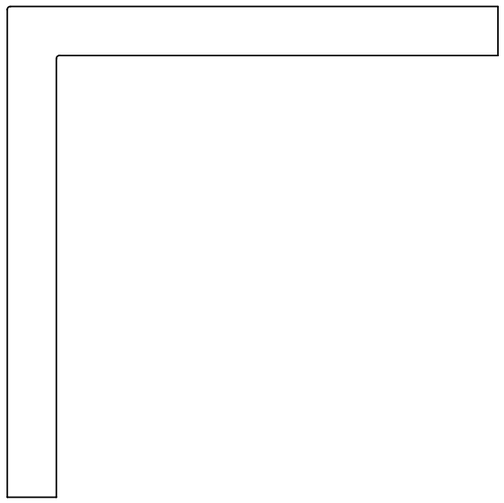
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	L-Extrusion 80x80x8	24	80/80	8	2000-05-2448	Alu. 6060-T66	

Scale: 1:1	Date:	Drawing no.: 2000-05-2448 Sheet : 1 of 1	Issue: A
Drawn: HS	03-05-2019		
Checked: VvM	06-05-2019		
Approved: JWR	10-05-2019		
Mass: 0.07 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

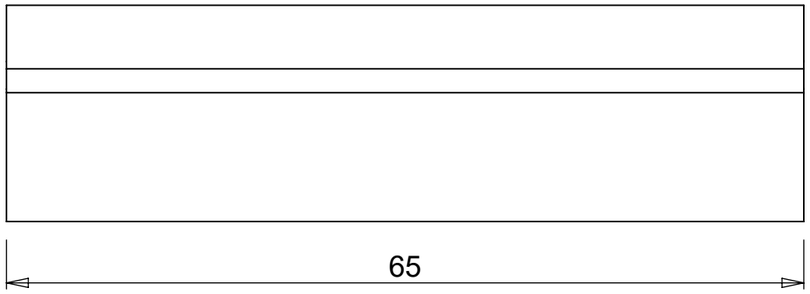
Title: L-Extrusion 80x80x8

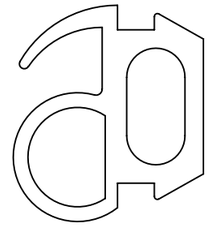
Iss.	Changes	Date	Name

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion Door (Rubber)	65			2000-05-0528	Rubber	Almet (AN625)

Scale: 2:1	Date:	Drawing no.: 2000-05-0528 Sheet : 1 of 1	Issue B
Drawn: HS	28-03-2019		
Checked: MH	11-09-2019		
Approved: JWR	12-09-2019		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

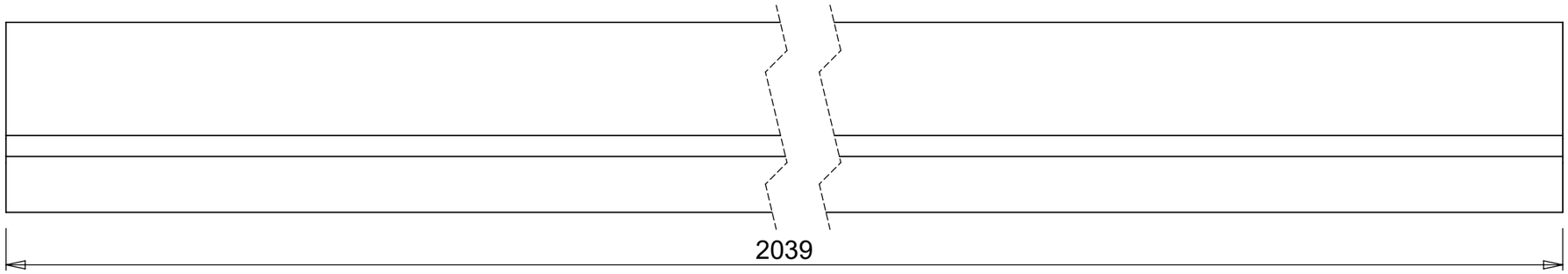
Title: # Extrusion Door (Rubber)

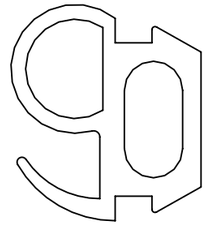
Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion Door (Rubber)	2039			2000-05-1242	Rubber	Almet (AN625)

Scale: 2:1	Date:	Drawing no.: 2000-05-1242	Issue: B
Drawn: HS	01-04-2019	Sheet : 1 of 1	
Checked: MH	11-09-2019		
Approved: JWR	12-09-2019		
Mass: 0.21 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

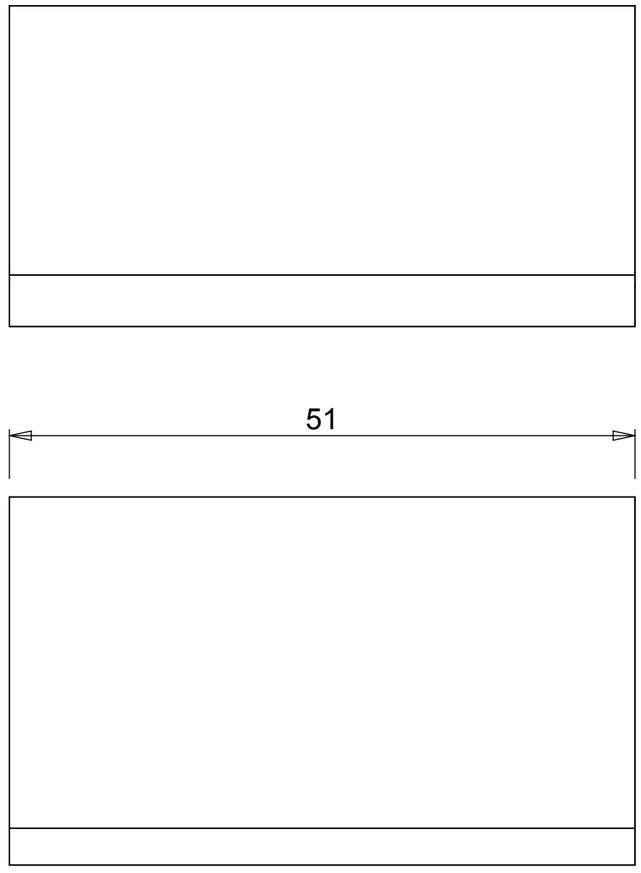
Title: Extrusion Door (Rubber)

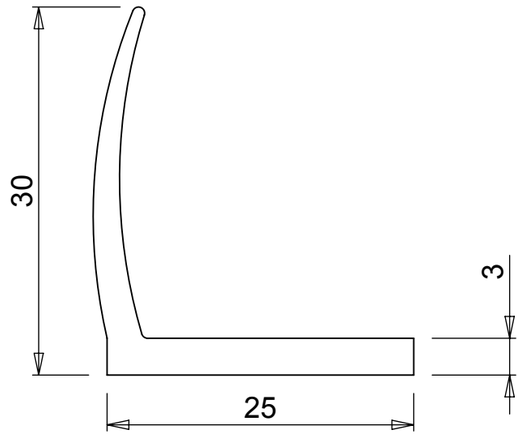
Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

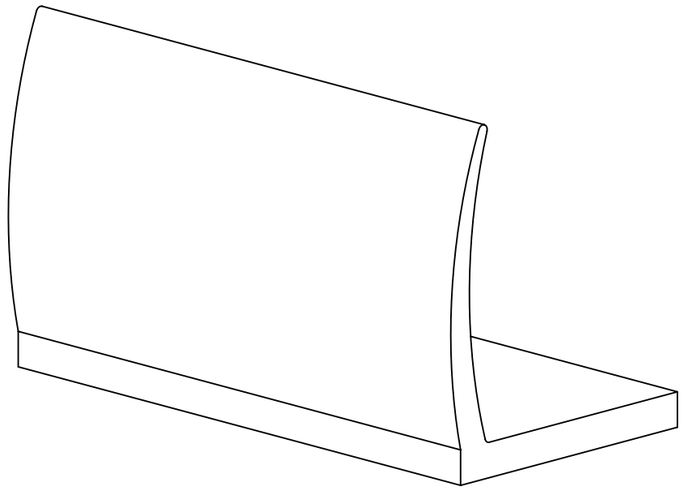
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Rubber L-extrusion	51	30/25	3	2000-04-1446	SEBS70	Technirub VRR001r
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 2:1	Date:	Drawing no.: 2000-04-1446 Sheet : 1 of 1	Issue B
Drawn: PvT	16-06-2017		
Checked: BP	01-08-2018		
Approved: PvT	02-08-2018		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

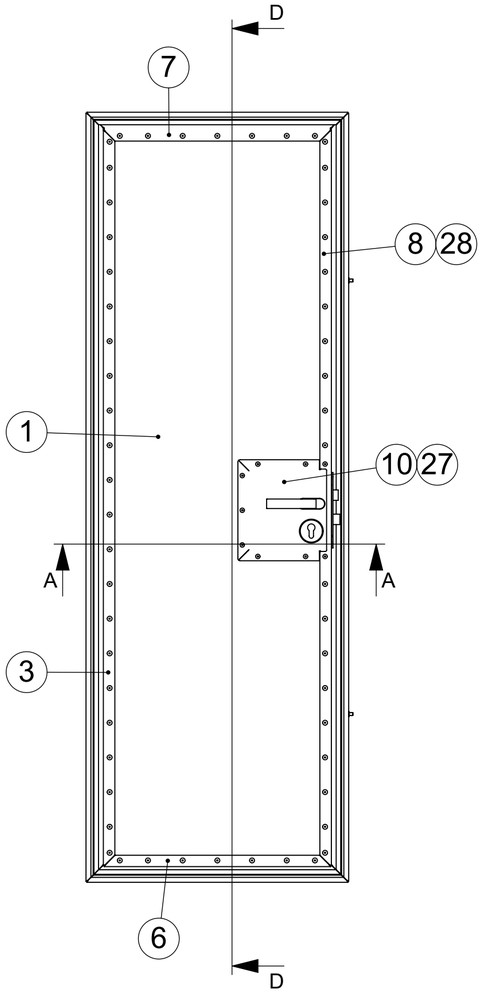
Title: # Rubber L-extrusion

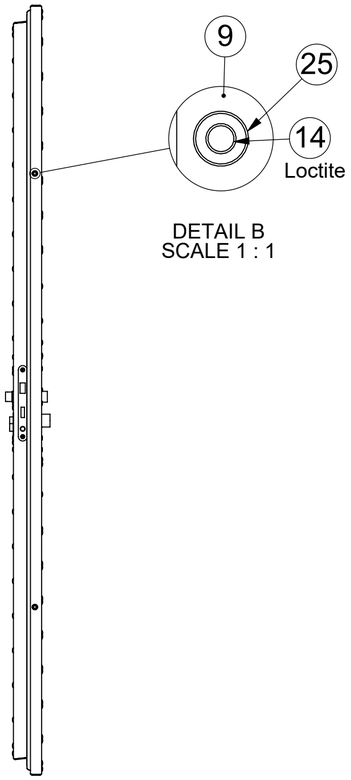
Iss.	Changes	Date	Name
B	~ Length	02-08-2018	PvT

Projection

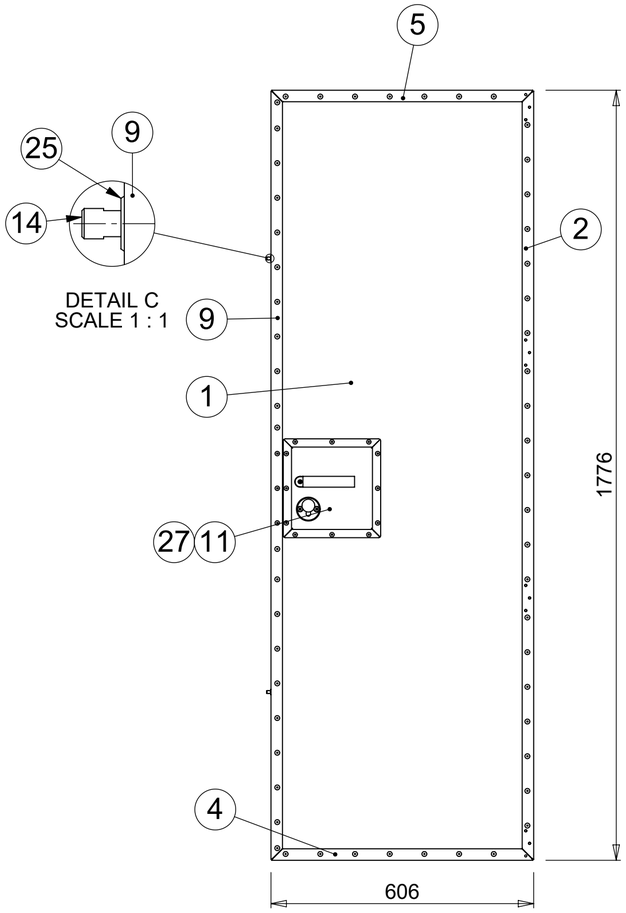
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

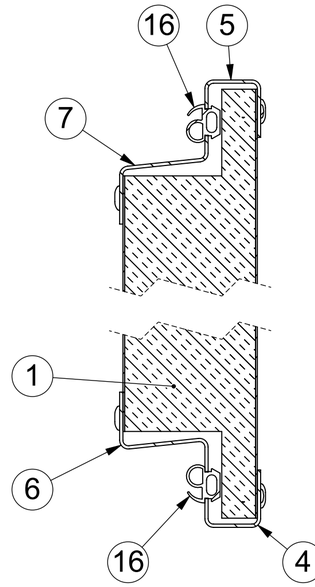




DETAIL B
SCALE 1 : 1



DETAIL C
SCALE 1 : 1

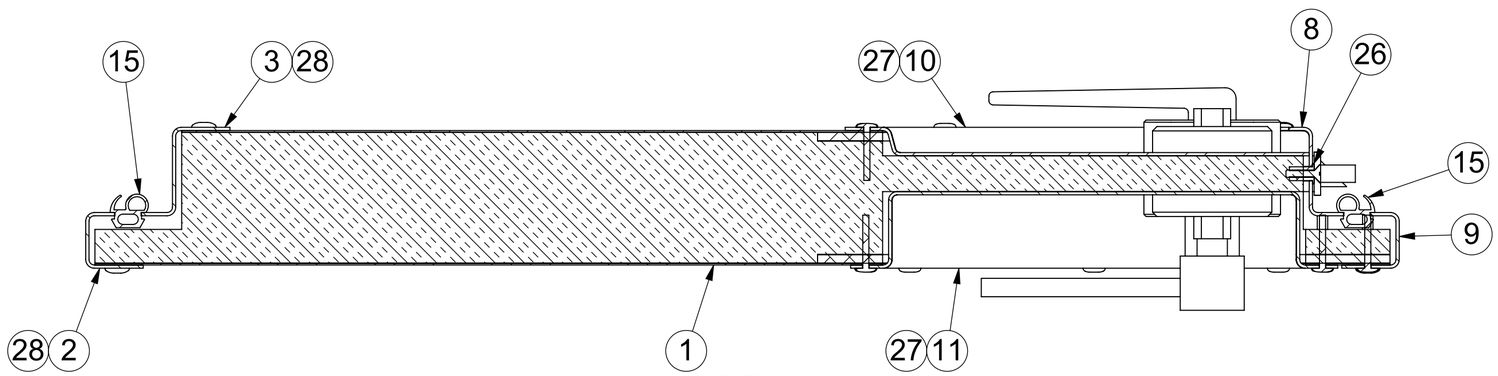


SECTION D-D
SCALE 1 : 2

Sheet 2: Rivet usage
Sheet 3: Details lock and door handle

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.



SECTION A-A
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
26	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
25	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
24	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
23	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
22	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	290,1	286,7	1,5	2000-05-0984	AISI 304	Bend with V16
10	1	Sheet door handle	247,9	221,5	1,5	2000-05-0978	AISI 304	Bend with V16
9	1	Sheet; door frame	1772	59,9	1,5	2000-05-0539	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-0538	AISI 304	Bend with V16
7	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
6	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-0534	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0532	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3479	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 1 of 3	
Mass: 17.53 kg		Finish:	
Title: DBJ door left 3			

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Iss.	Changes	Date	Name

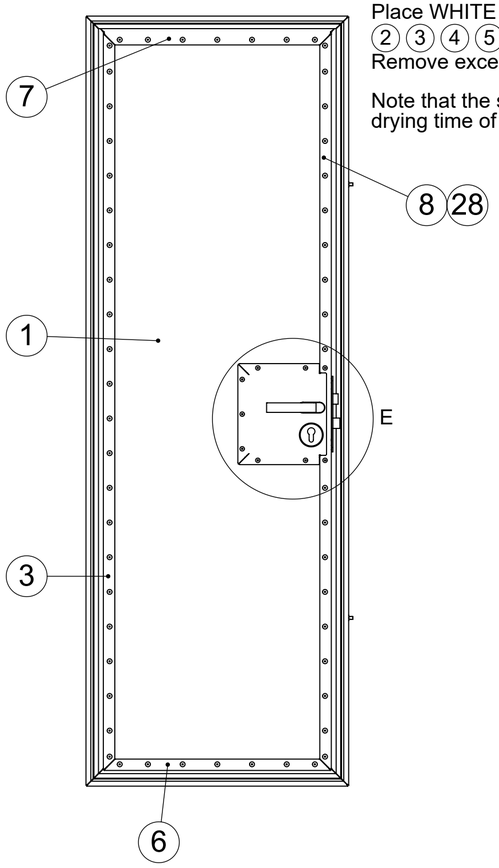
Projection

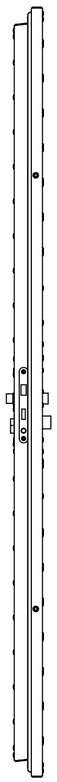
Size A2

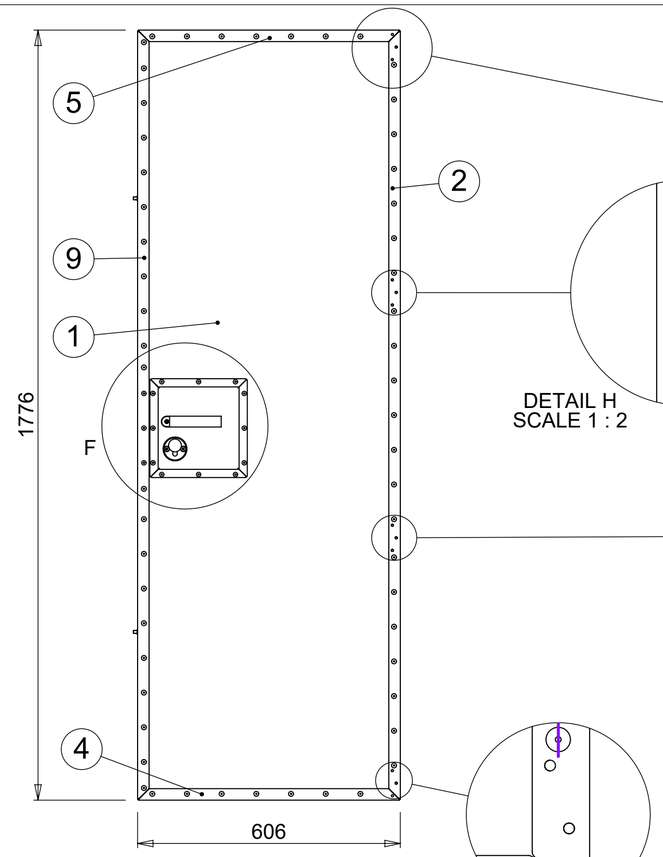
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

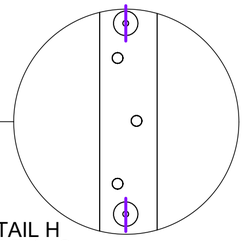
Place WHITE INNO SEAL on
(2) (3) (4) (5) (6) (7) (8) (9) before placing on (1)
Remove excess sealant

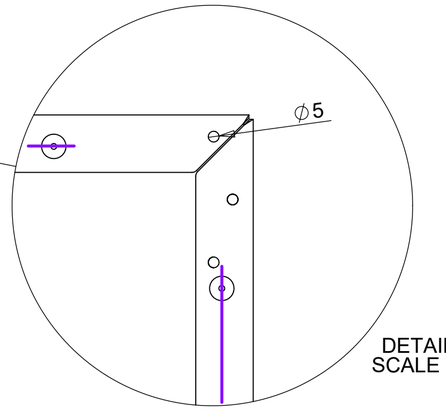
Note that the sealant has a
drying time of 2 hours.

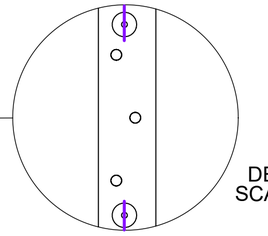




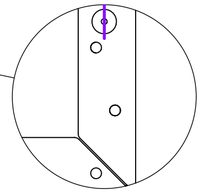


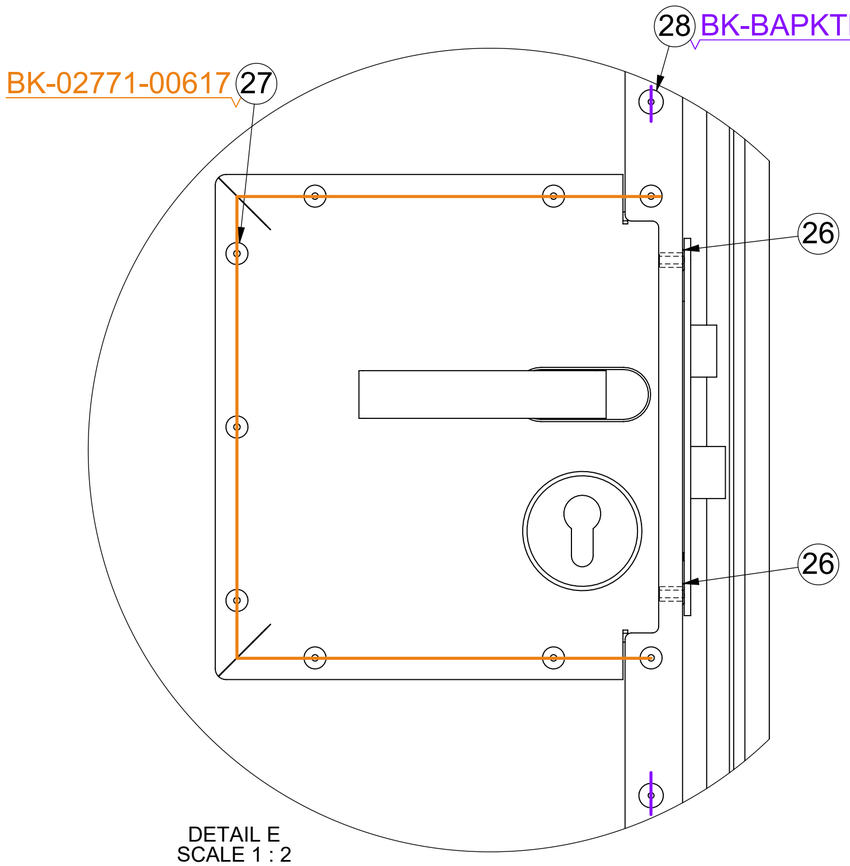


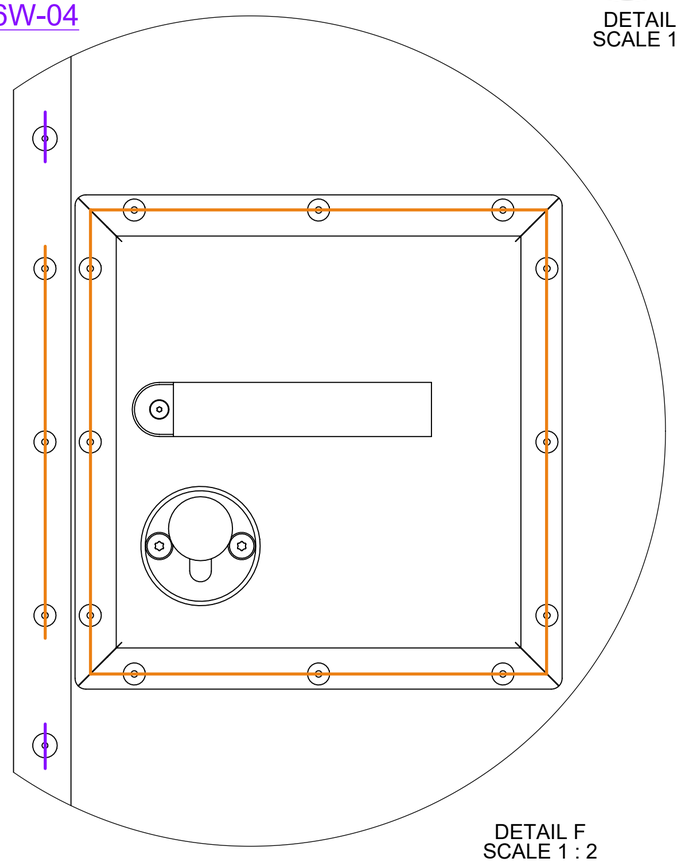




Leave holes open
shown in details G - K







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
26	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
25	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
24	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
23	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
22	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	290,1	286,7	1,5	2000-05-0984	AISI 304	Bend with V16
10	1	Sheet door handle	247,9	221,5	1,5	2000-05-0978	AISI 304	Bend with V16
9	1	Sheet; door frame	1772	59,9	1,5	2000-05-0539	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-0538	AISI 304	Bend with V16
7	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
6	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-0534	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0532	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3479	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023	Sheet : 2 of 3	
Mass: 17.53 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

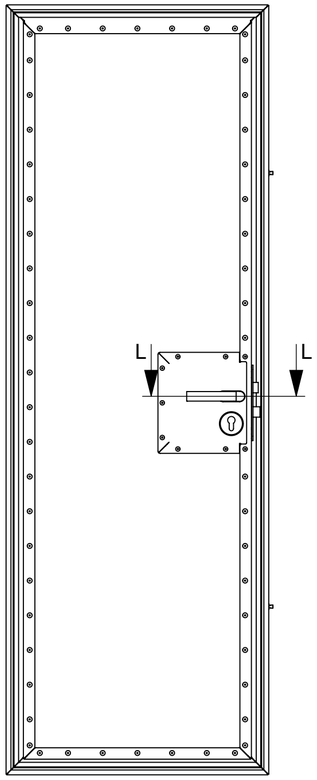
Title: DBJ door left 3

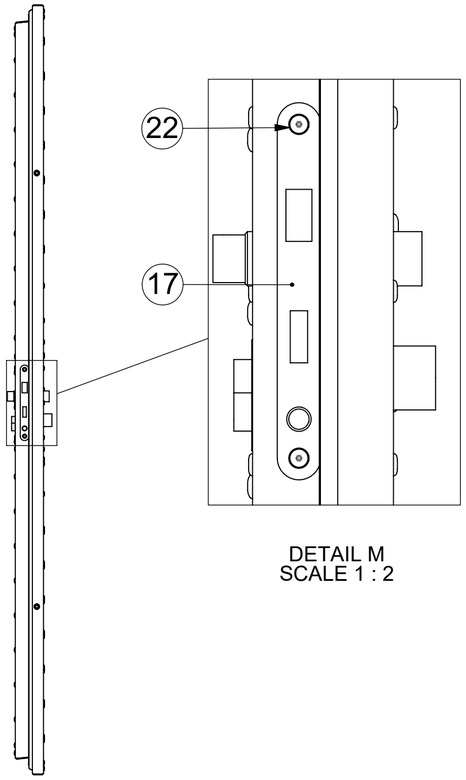
Iss.	Changes	Date	Name

Projection

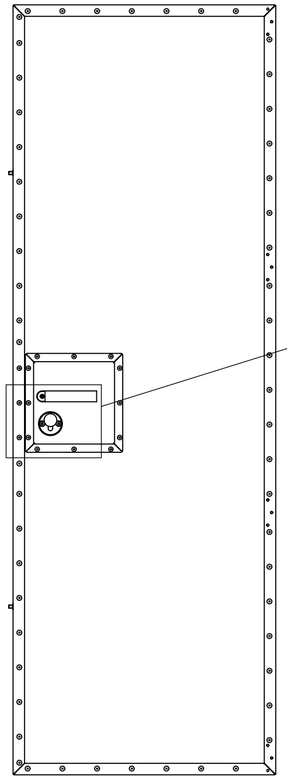
Size A2

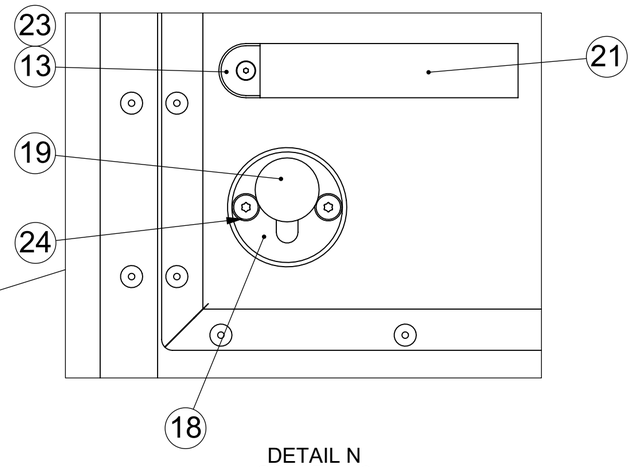
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



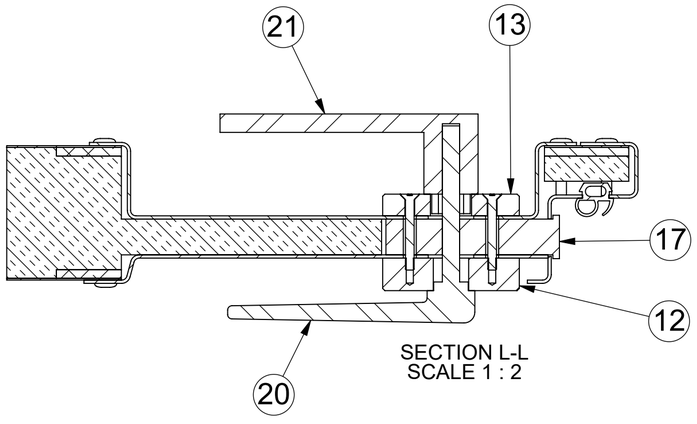


DETAIL M
SCALE 1 : 2





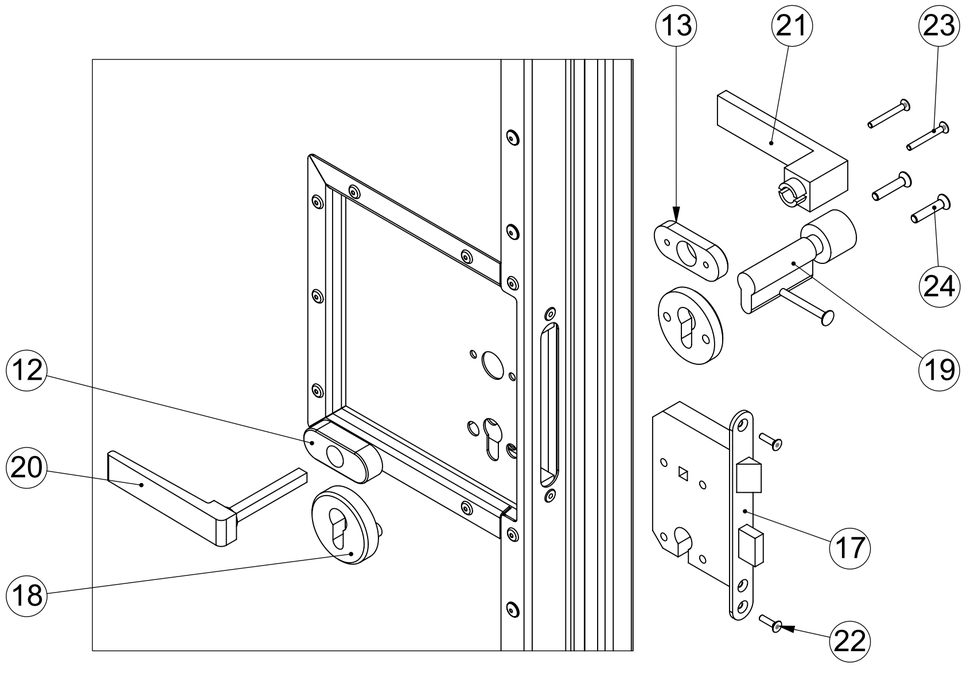
DETAIL N
SCALE 1 : 2



SECTION L-L
SCALE 1 : 2

Shorten shaft of Doorhandle (20) so body of Doorhandle (21) is in conctact with Rosette (13)

Details lock and door handle



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
27	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
26	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
25	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
24	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
23	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
22	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	290,1	286,7	1,5	2000-05-0984	AISI 304	Bend with V16
10	1	Sheet door handle	247,9	221,5	1,5	2000-05-0978	AISI 304	Bend with V16
9	1	Sheet; door frame	1772	59,9	1,5	2000-05-0539	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-0538	AISI 304	Bend with V16
7	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
6	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-0534	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-0532	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3479	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023	Sheet : 3 of 3	
Approved: HS	08-08-2023		
Mass: 17.53 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

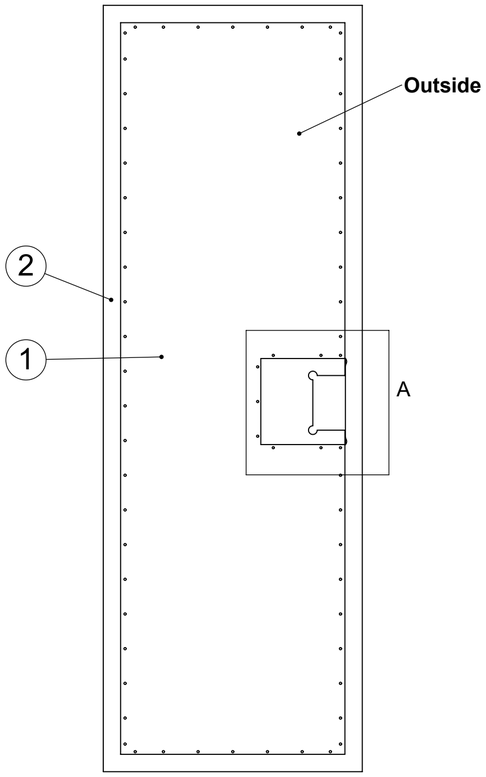
Title: DBJ door left 3

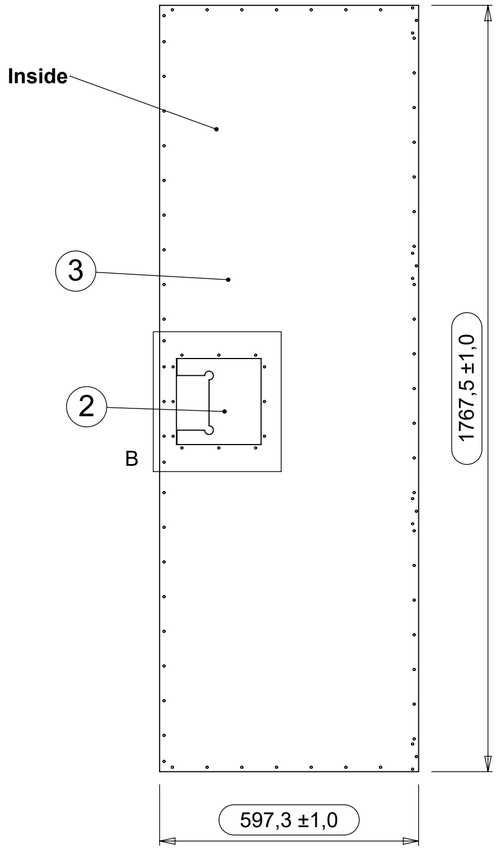
Iss.	Changes	Date	Name

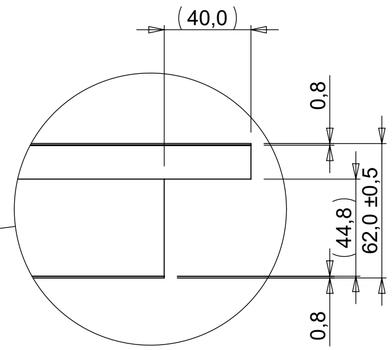
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

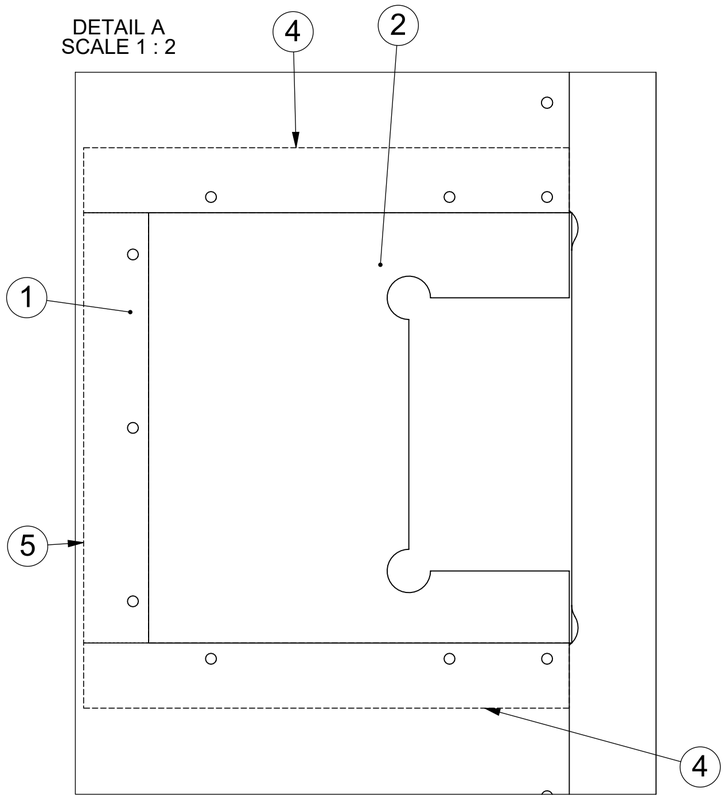




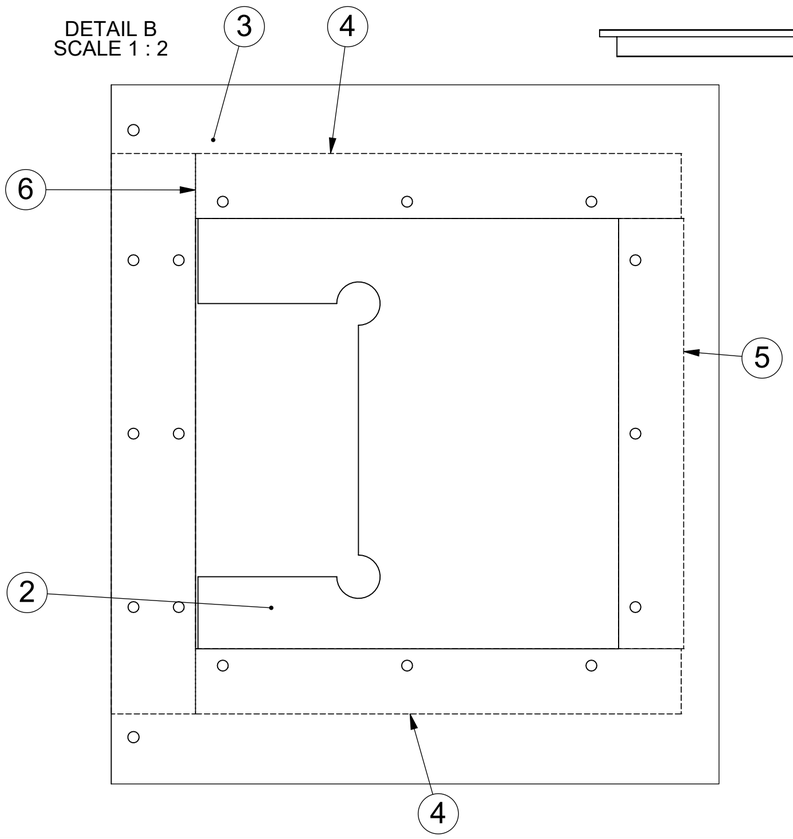


DETAIL C
SCALE 1 : 2

DETAIL A
SCALE 1 : 2



DETAIL B
SCALE 1 : 2



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	1	Lock insert	258,5	38,9	4	2000-05-1320	Alu. 6082-T6	
5	2	Lock insert	198,5	30	4	2000-05-1319	Alu. 6060-T66	
4	4	Lock insert	224	30	4	2000-05-1316	Alu. 6060-T66	
3	1	Inner sheet	1767,5	597,3	0,8	2000-05-1185	PE-GEGW 0,8 NF	
2	1	Insulation	1767,5	597,3	60,4	2000-05-1186	RTM-Plus	
1	1	Outer sheet	1687,5	517,3	0,8	2000-05-1183	PE-GEGW 0,8 NF	

Scale: 1:10	Date:	Drawing no. 2000-05-0532	Issue C
Drawn: HS	29-03-2019	Sheet : 1 of 2	Tolerances (u.n.o.)
Checked: HS	13-02-2020		< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / > 2000
Approved: JWR	10-03-2020		±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2
Mass: 5.42 kg		Finish:	Raw extrusion in accordance with OEM drawing and EN755-9
			Dimensions in mm (u.n.o.)

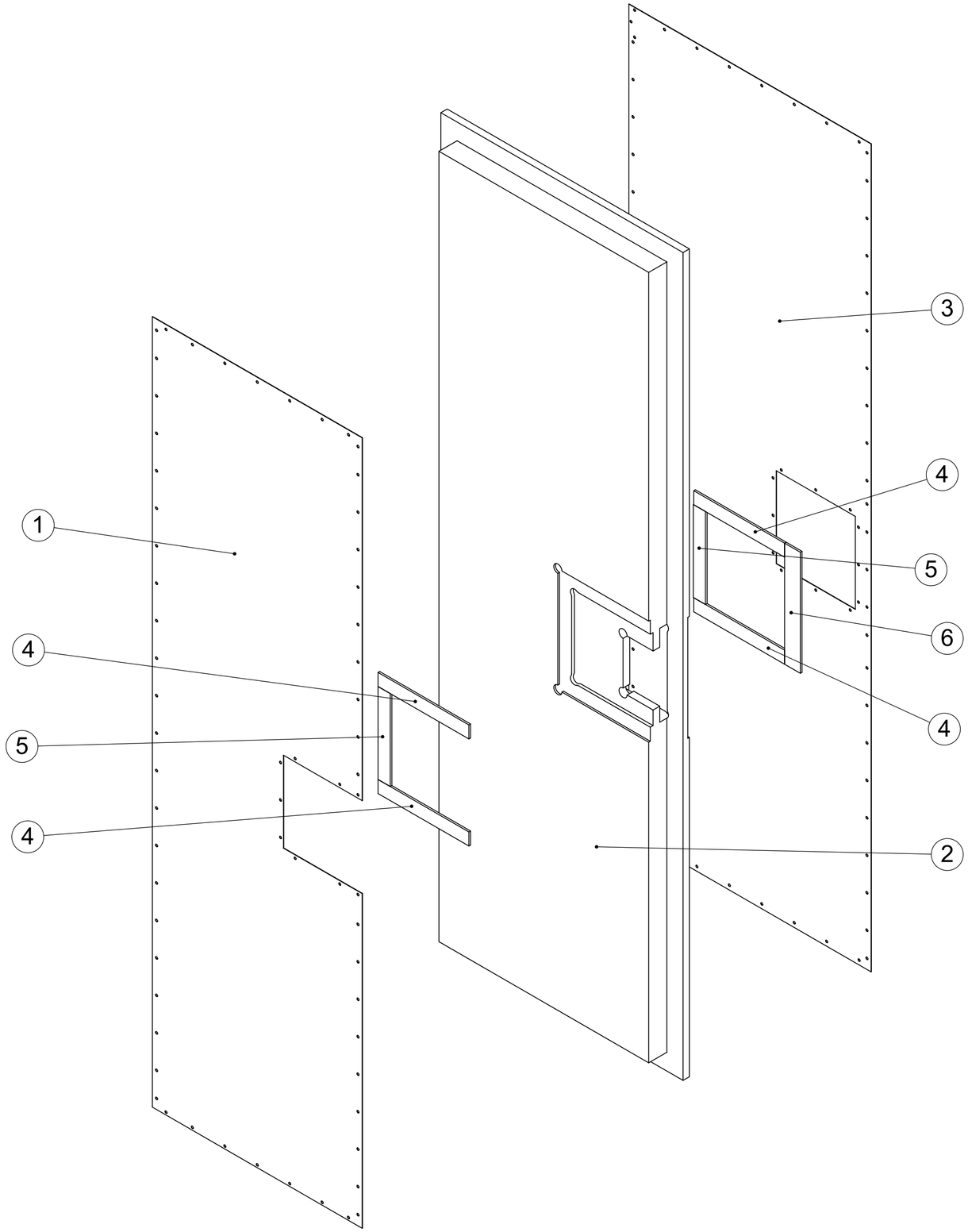
Title: DBJ panel door

Iss.	Changes	Date	Name
C	~Parts	10-03-2020	MVE
B	~Parts	11-09-2019	HS

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	1	Lock insert	258,5	38,9	4	2000-05-1320	Alu. 6082-T6	
5	2	Lock insert	198,5	30	4	2000-05-1319	Alu. 6060-T66	
4	4	Lock insert	224	30	4	2000-05-1316	Alu. 6060-T66	
3	1	Inner sheet	1767,5	597,3	0,8	2000-05-1185	PE-GEGW 0,8 NF	
2	1	Insulation	1767,5	597,3	60,4	2000-05-1186	RTM-Plus	
1	1	Outer sheet	1687,5	517,3	0,8	2000-05-1183	PE-GEGW 0,8 NF	

Scale: 1:6	Date:	Drawing no. 2000-05-0532 Sheet : 2 of 2	Issue C
Drawn: HS	29-03-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 5.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

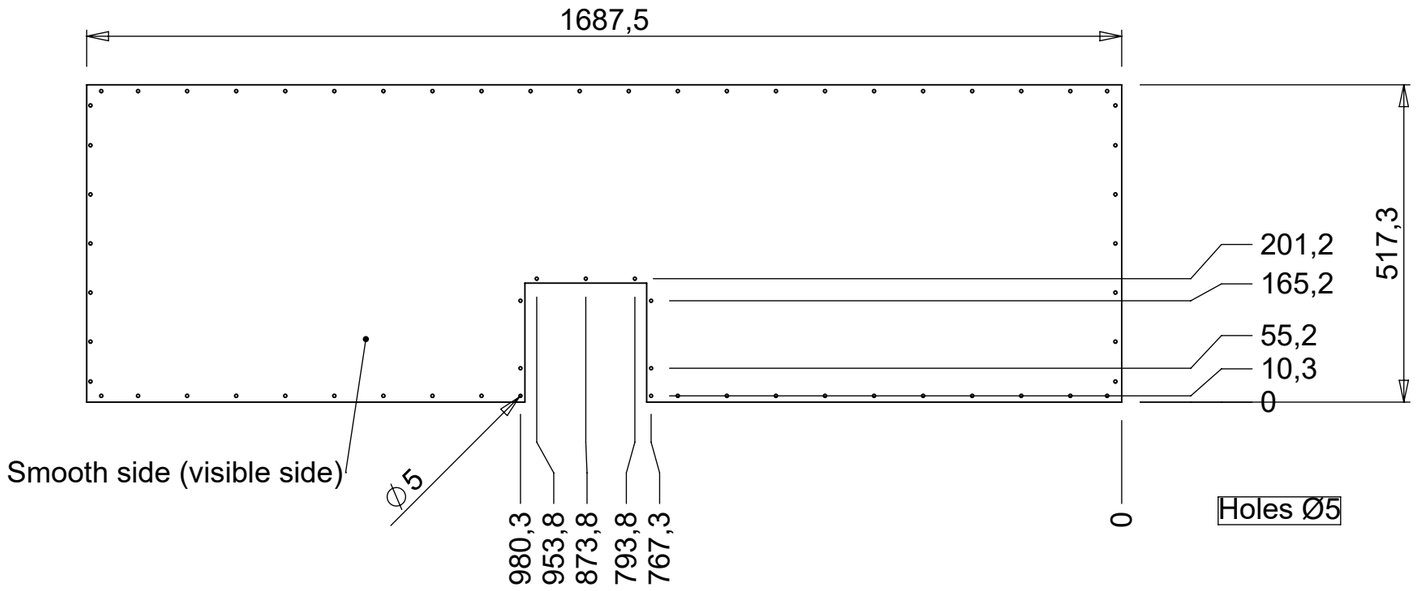
Title: DBJ panel door

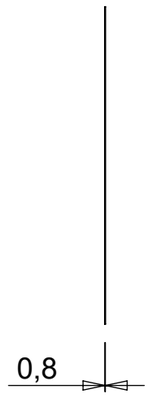
Iss.	Changes	Date	Name
C	~Parts	10-03-2020	MVE
B	~Parts	11-09-2019	HS

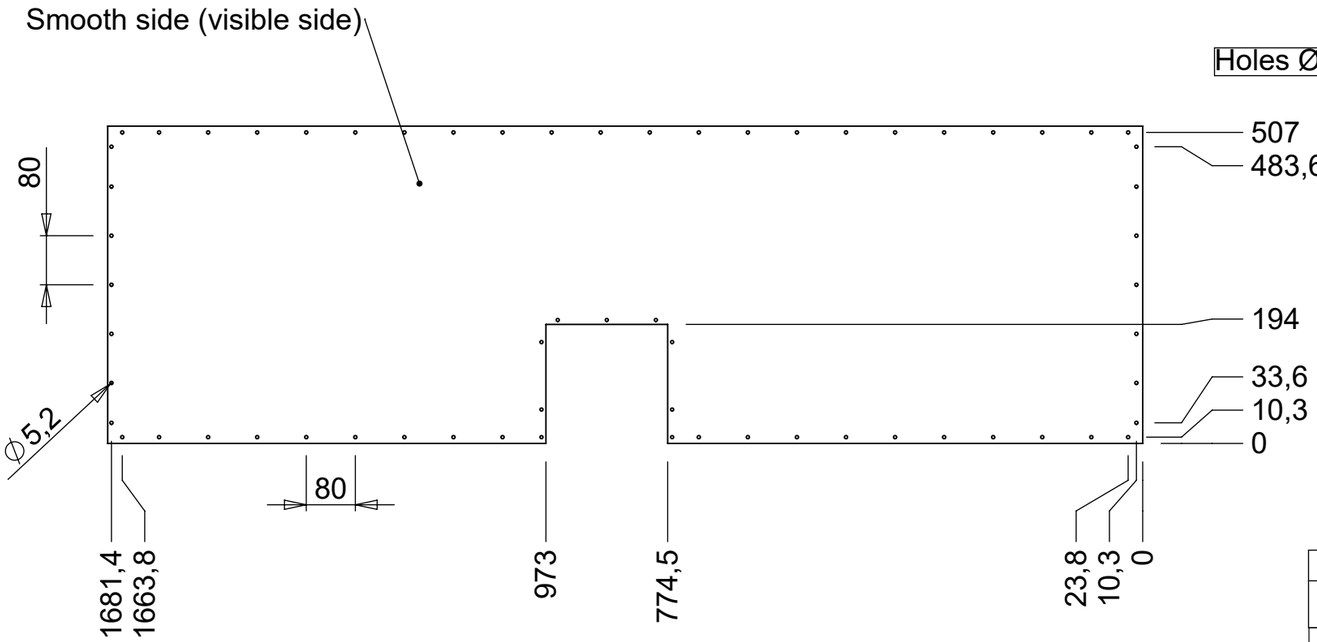
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







1	1	Outer sheet	1687,5	517,3	0,8	2000-05-1183	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-1183 Sheet : 1 of 1	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	11-09-2019		
Mass: 1.05 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

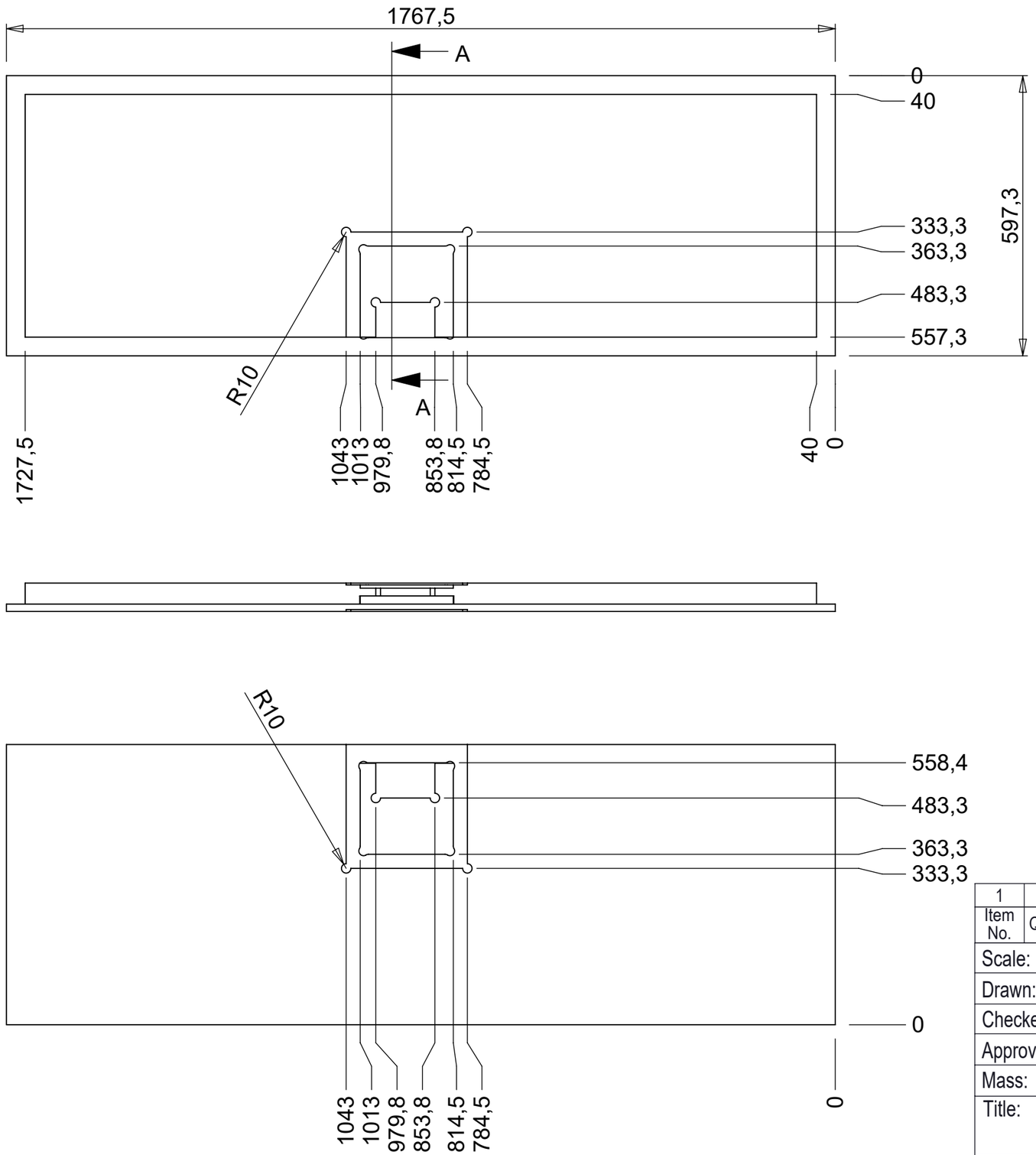
Title: **Outer sheet**

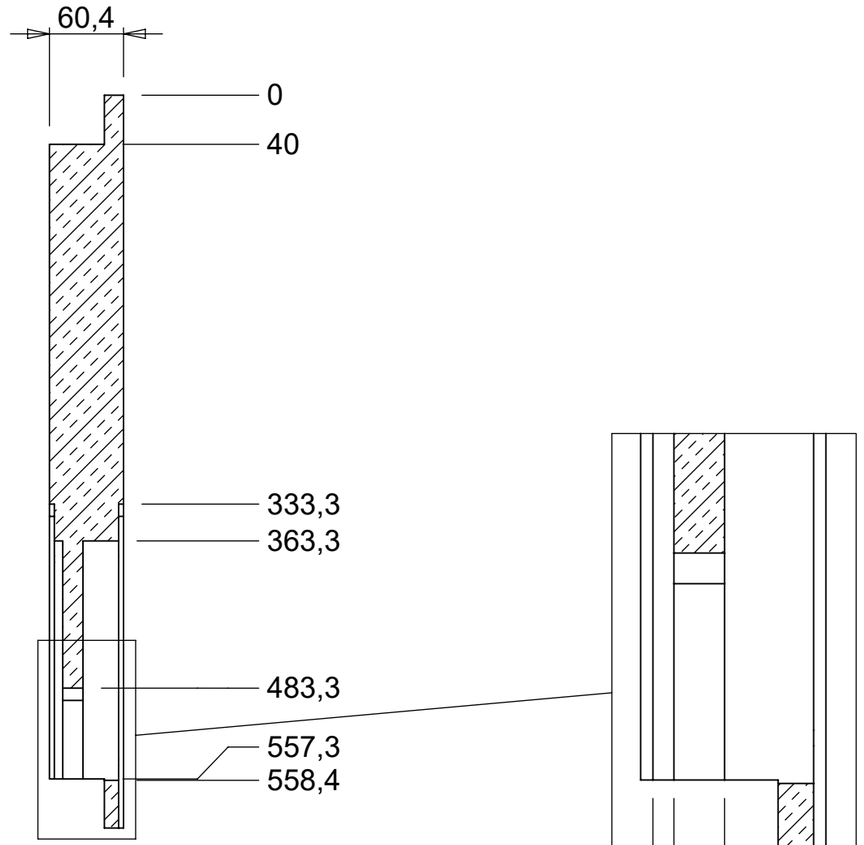
Iss.	Changes	Date	Name
B	~Cut out, holes	11-09-2019	HS

Projection

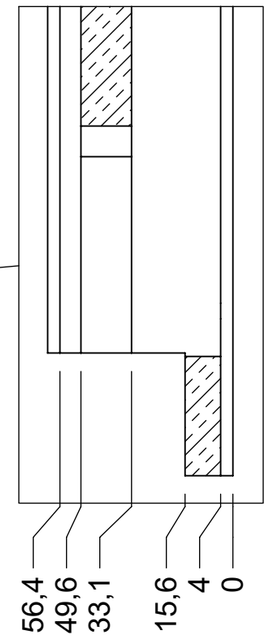
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





SECTION A-A
SCALE 1 : 5



DETAIL B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation	1767,5	597,3	60,4	2000-05-1186	RTM-Plus	

Scale: 1:10	Date:	Drawing no.: 2000-05-1186	Issue: C
Drawn: HS	29-03-2019	Sheet : 1 of 1	
Checked: HS	13-02-2020		
Approved: JWR	09-03-2020		
Mass: 2.57 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

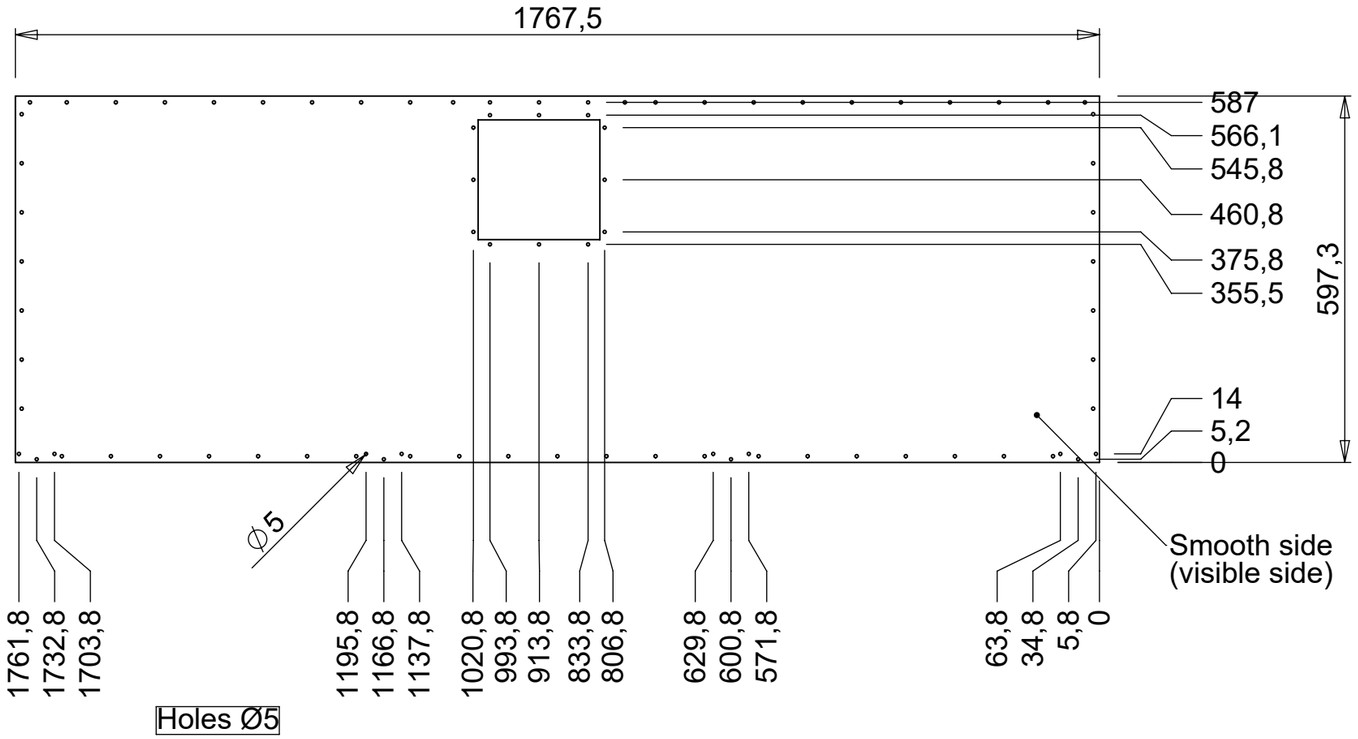
Title: Insulation

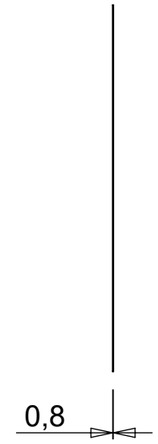
Iss.	Changes	Date	Name
C	~cut-out	09-03-2020	MVE
B	~Cut out	11-09-2019	HS

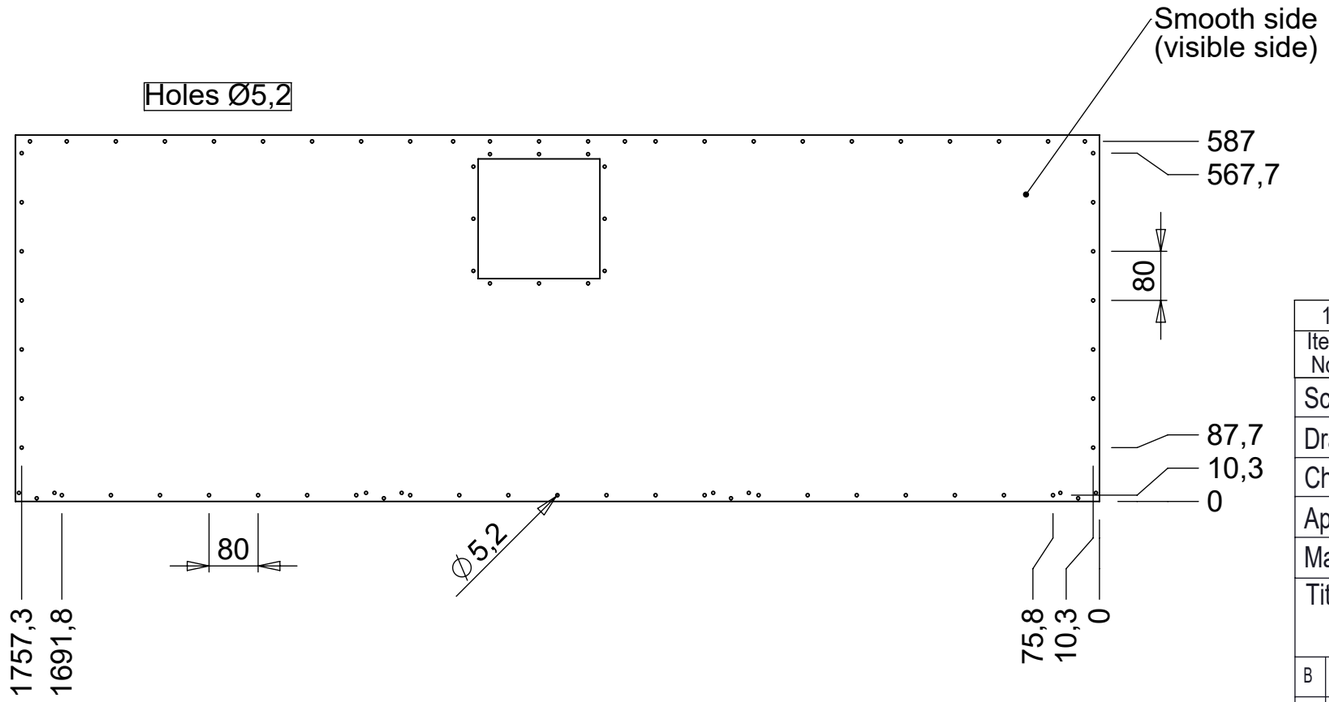
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







1	1	Inner sheet	1767,5	597,3	0,8	2000-05-1185	PE-GEGW 0,8 NF	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:10	Date:	Drawing no.: 2000-05-1185	Issue B	Tolerances (u.n.o.)
Drawn: HS	29-03-2019			< 7 30 120 400 1000 2000
Checked: VvM	10-09-2019			7 30 120 400 1000 2000 >
Approved: JWR	11-09-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 1.28 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

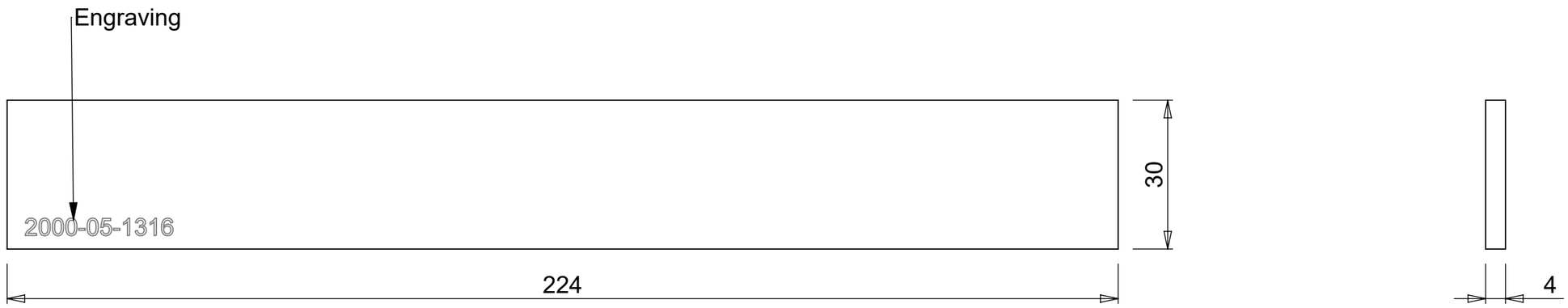
Title: **Inner sheet**

Iss.	Changes	Date	Name
B	~Cut out, holes	11-09-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	224	30	4	2000-05-1316	Alu. 6060-T66	

Scale: 1:1	Date:
Drawn: HS	29-03-2019
Checked: VvM	10-09-2019
Approved: JWR	11-09-2019
Mass: 0.07 kg	

Drawing no.: 2000-05-1316

Sheet : 1 of 1

Issue: B

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

Title: Lock insert

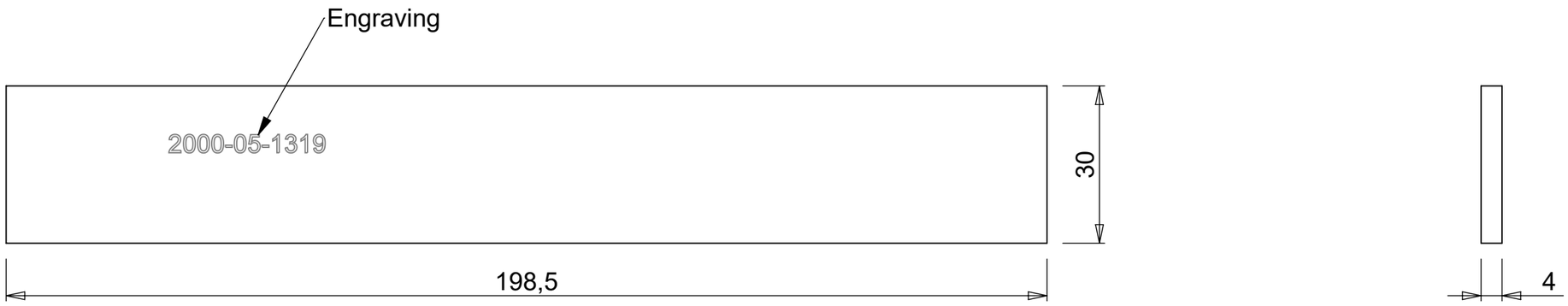
Iss.	Changes	Date	Name
B	~Dimensions	11-09-2019	HS

Projection

Size A3

VRR

Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	198,5	30	4	2000-05-1319	Alu. 6060-T66	

Scale: 1:1	Date:	Drawing no.: 2000-05-1319 Sheet : 1 of 1	Issue A
Drawn: HS	29-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.06 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

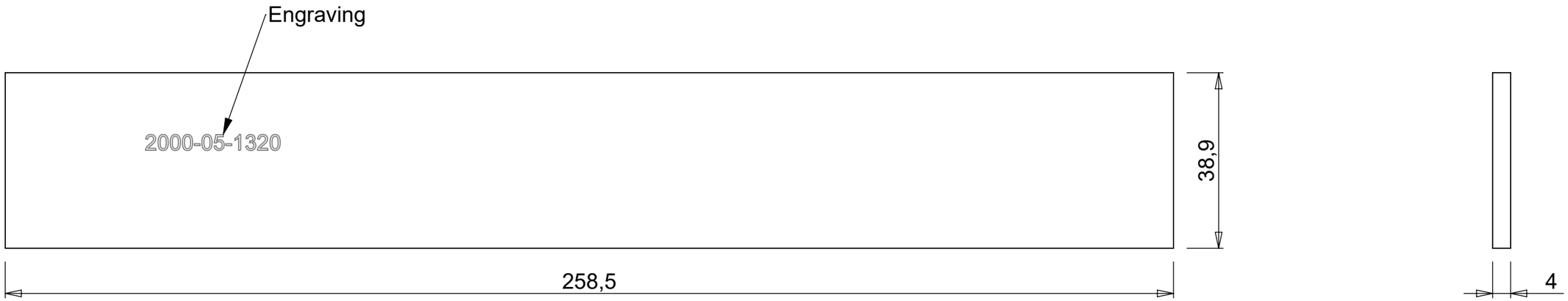
Title: **Lock insert**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Lock insert	258,5	38,9	4	2000-05-1320	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-05-1320 Sheet : 1 of 1	Issue A
Drawn: HS	29-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.11 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

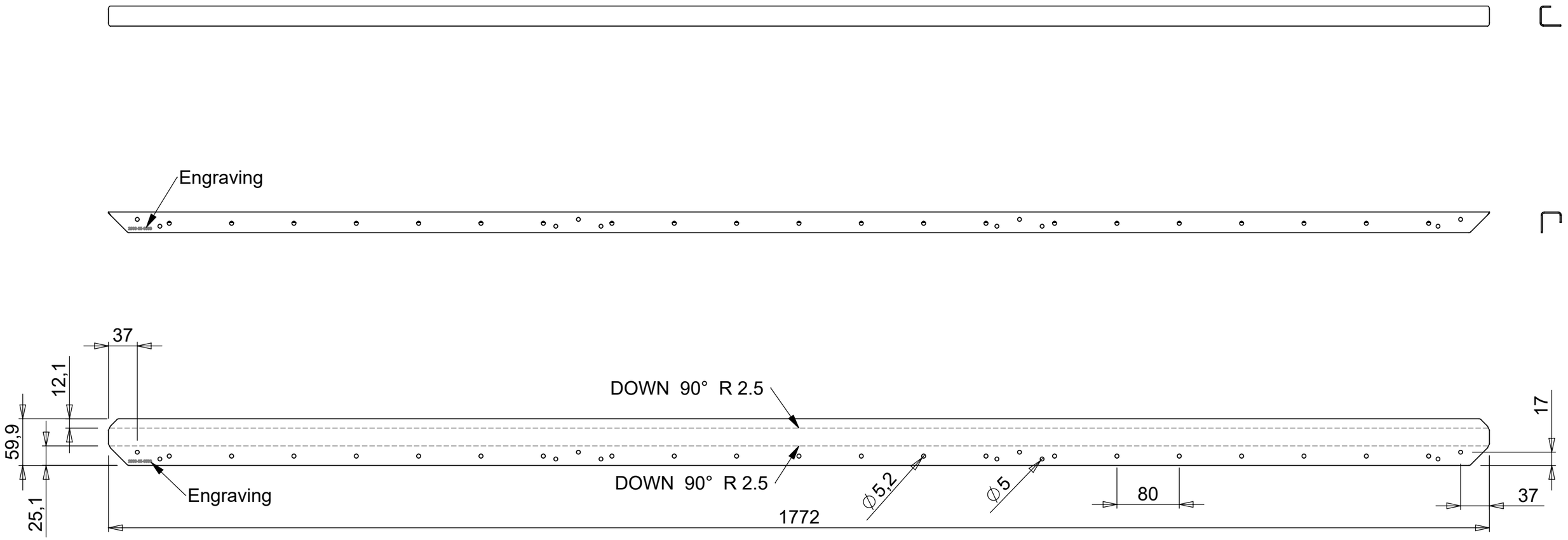
Title: **Lock insert**

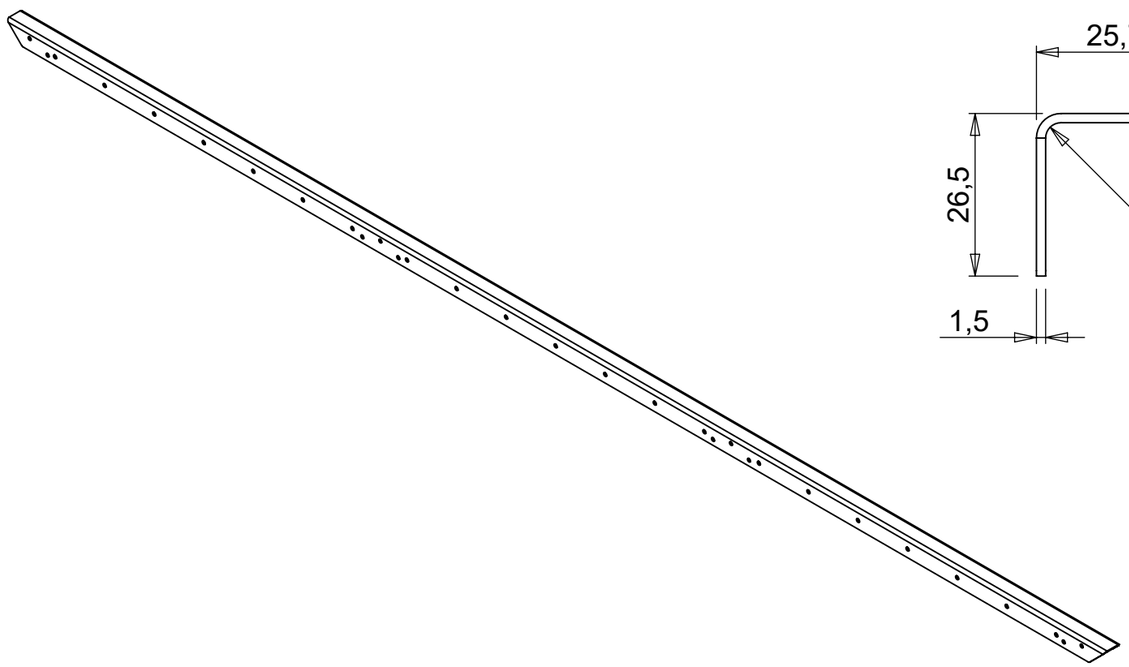
Iss.	Changes	Date	Name

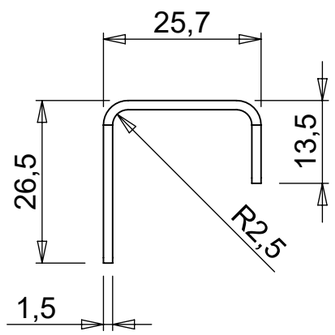
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16

Scale: 1:5	Date:	Drawing no.: 2000-05-0533	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 1.26 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Sheet; door frame**

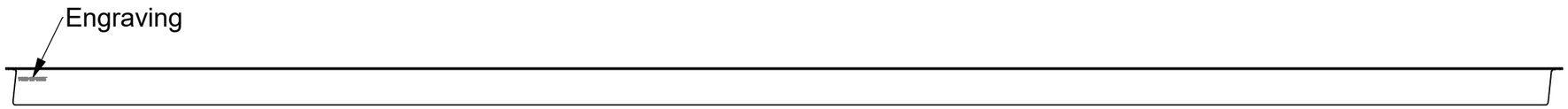
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

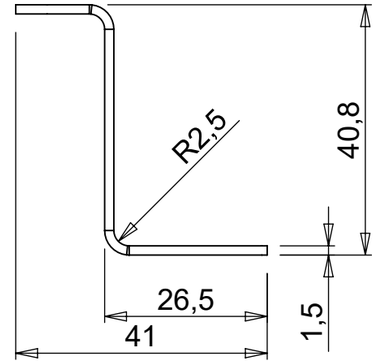
Projection

Size A3

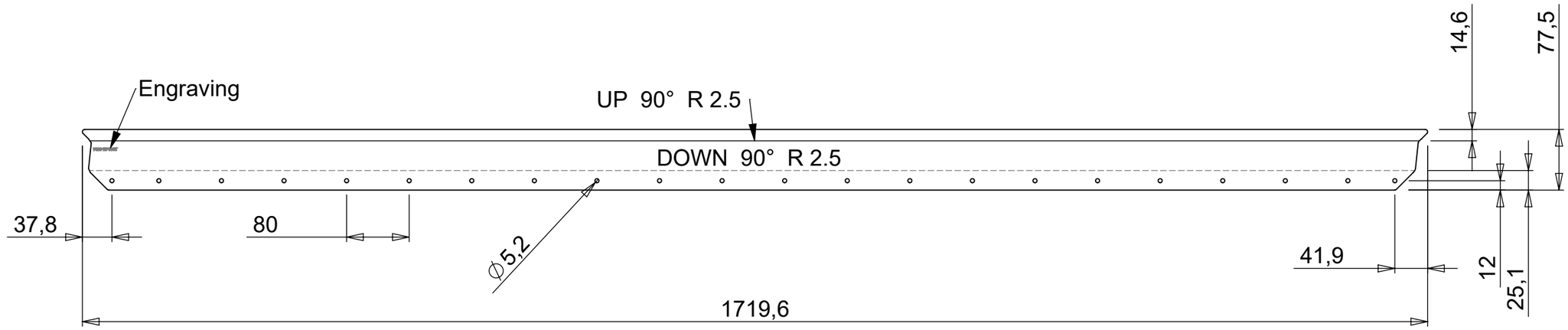
VRR

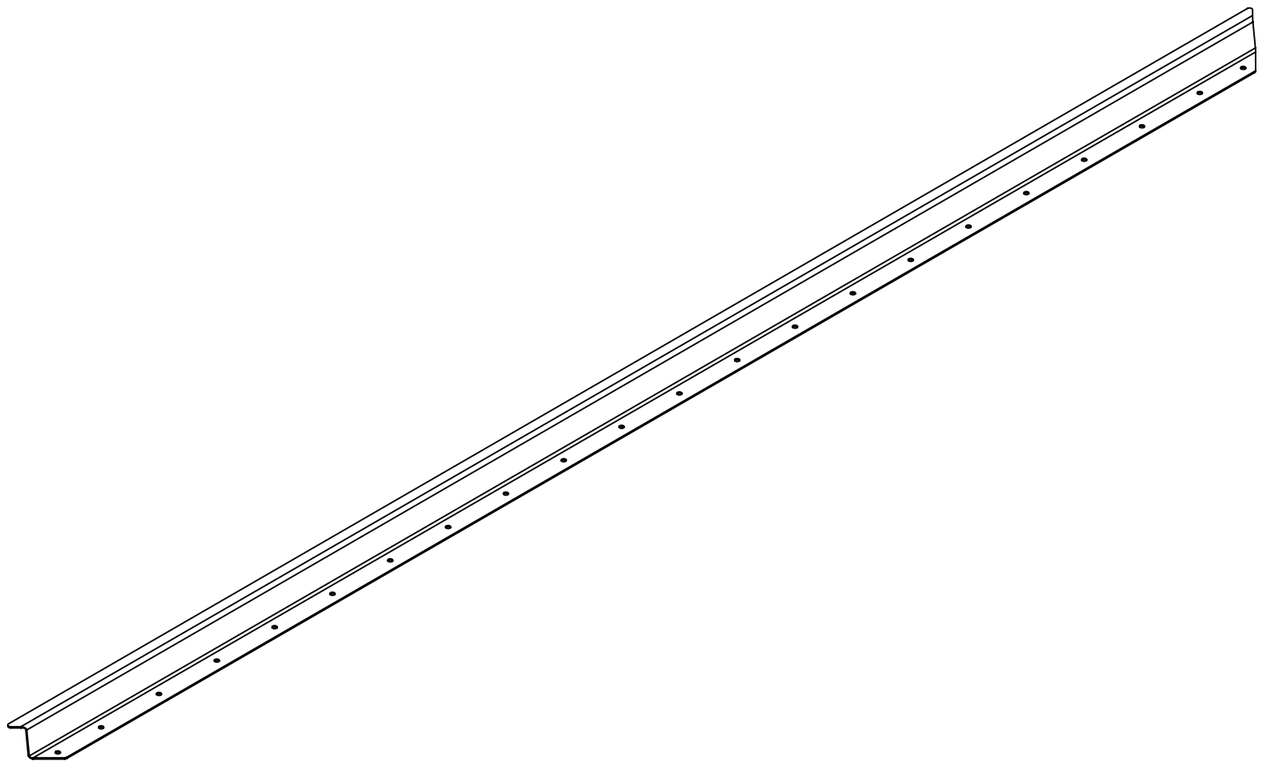
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





Scale 1:1





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-0534	AISI 304	Bend with V16

Scale: 1:6	Date:	Drawing no.: 2000-05-0534	Issue: A
Drawn: HS	29-03-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: VvM	18-04-2019		< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / 2000 >
Approved: JWR	10-05-2019		±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2
Mass: 1.57 kg		Finish:	Raw extrusion in accordance with OEM drawing and EN755-9
			Dimensions in mm (u.n.o.)

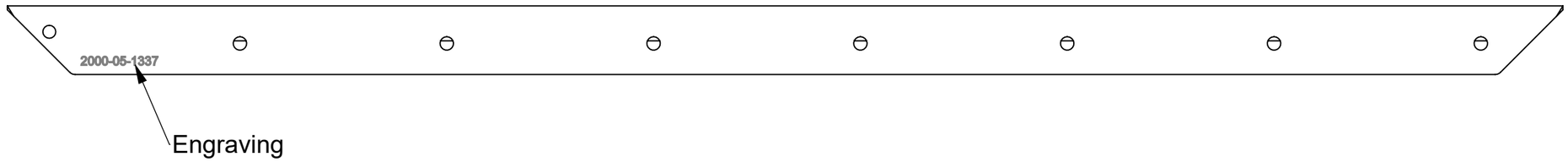
Title: **Sheet; door frame**

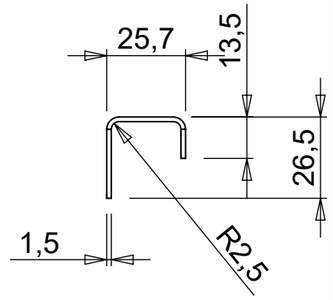
Iss.	Changes	Date	Name

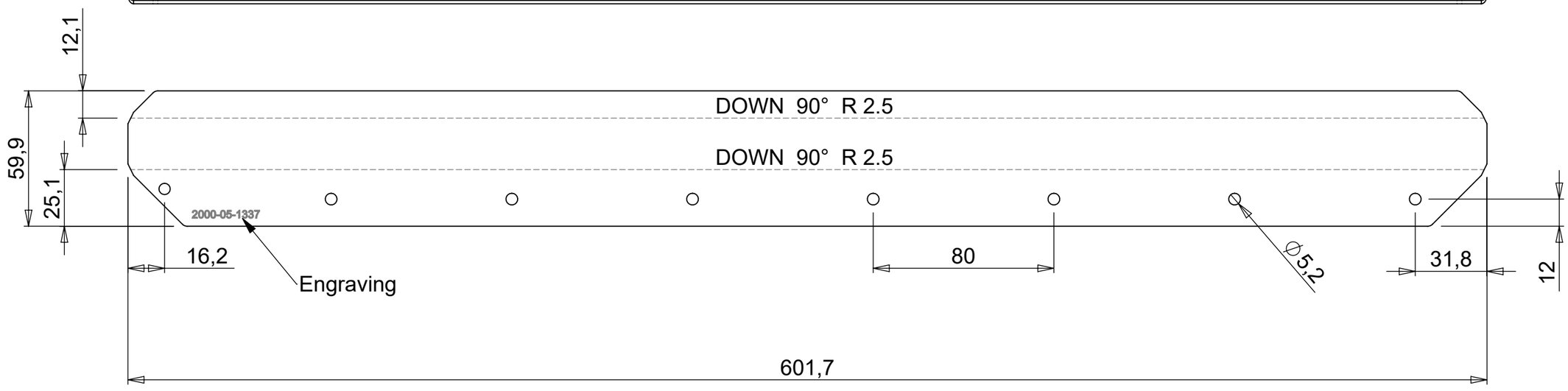
Projection

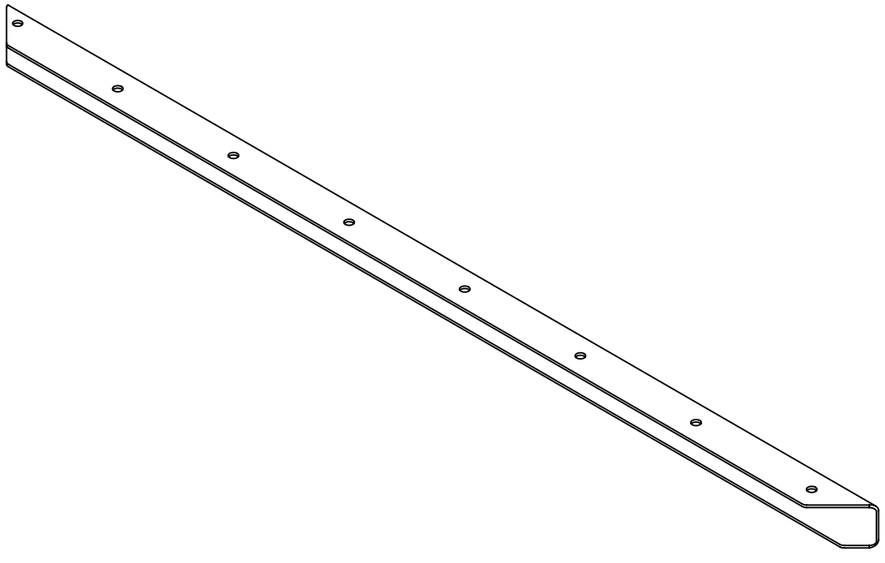
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-1337	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 0.42 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

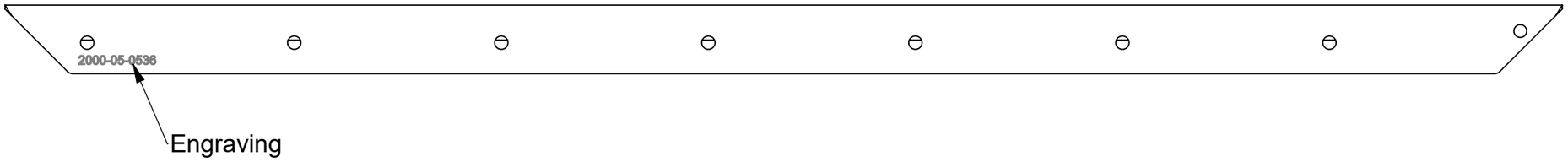
Title: **Sheet; door frame**

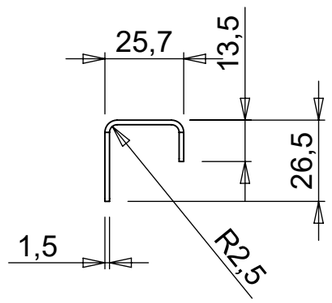
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

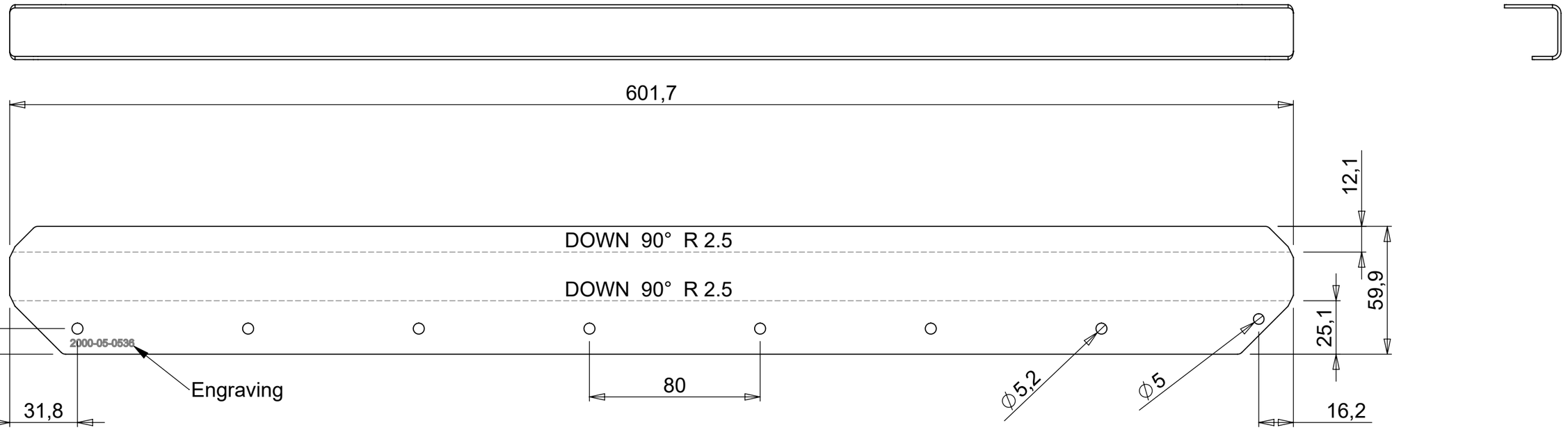
Projection

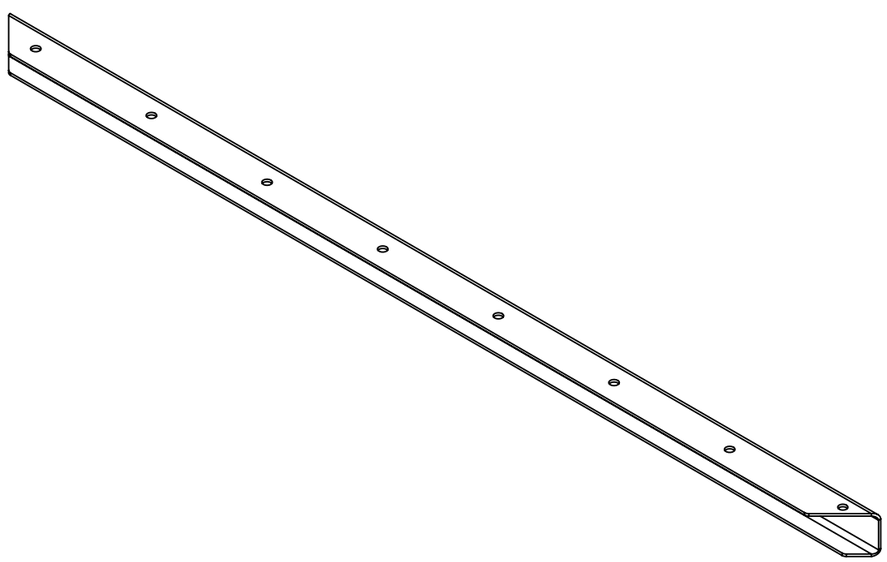
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-0536 Sheet : 1 of 1	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019		
Mass: 0.42 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

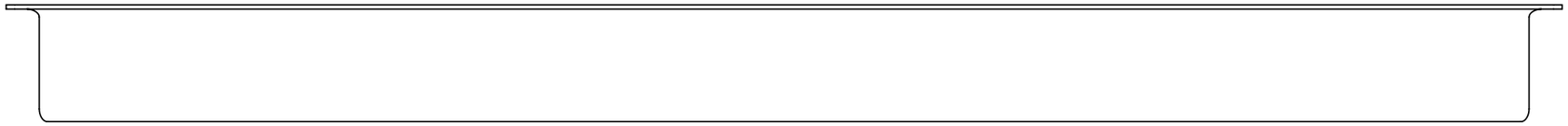
Title: **Sheet; door frame**

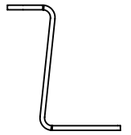
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

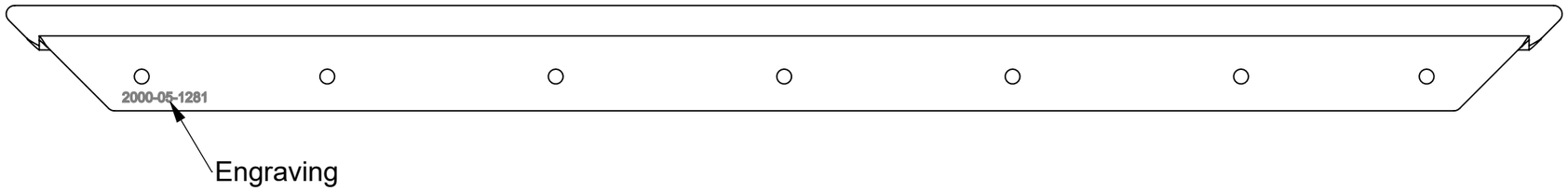
Projection

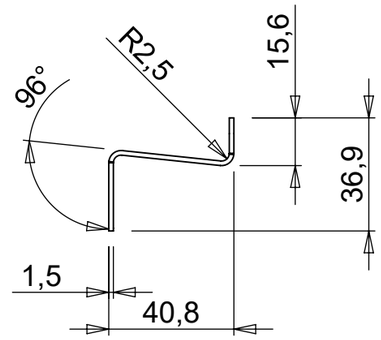
Size A3

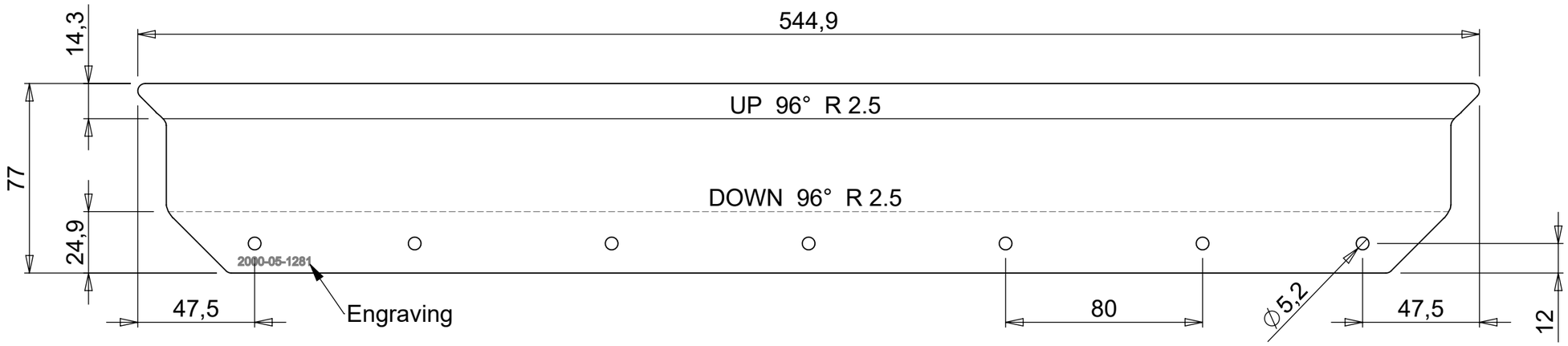
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

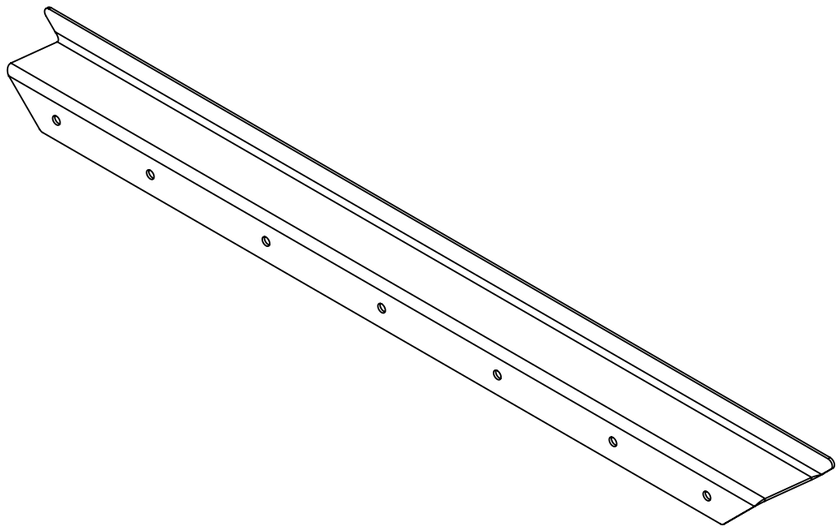












1	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-1281	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 0.48 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

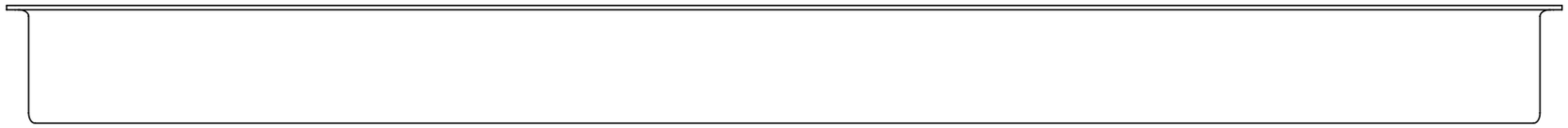
Title: **Sheet; door frame**

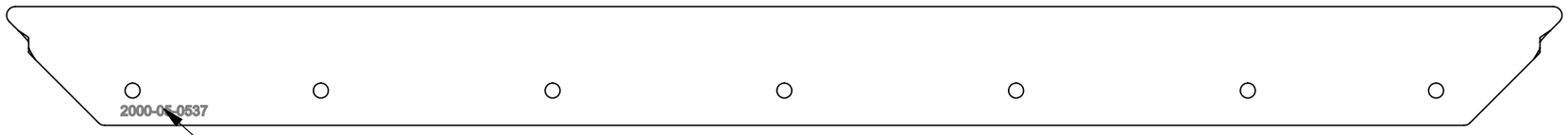
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

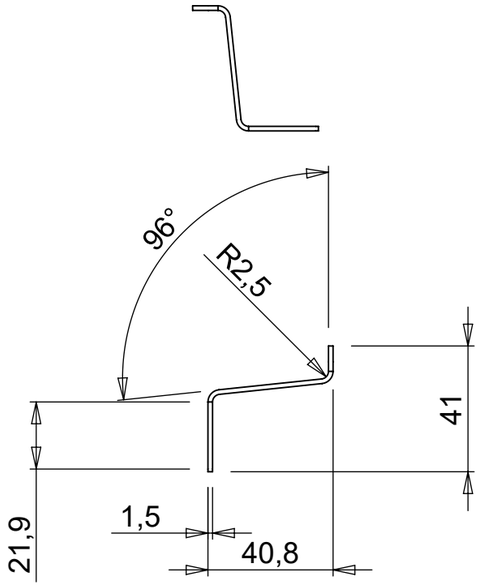
Projection

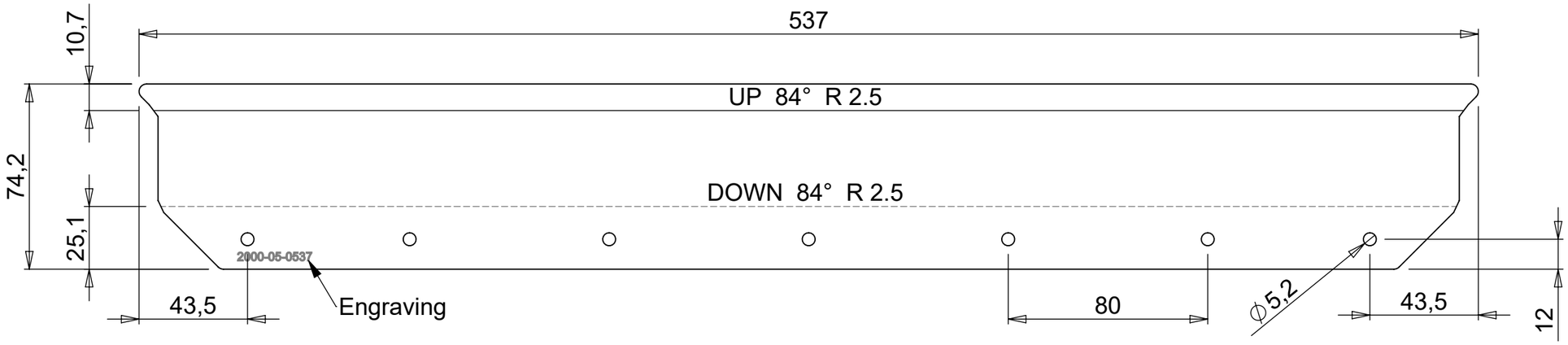
Size A3

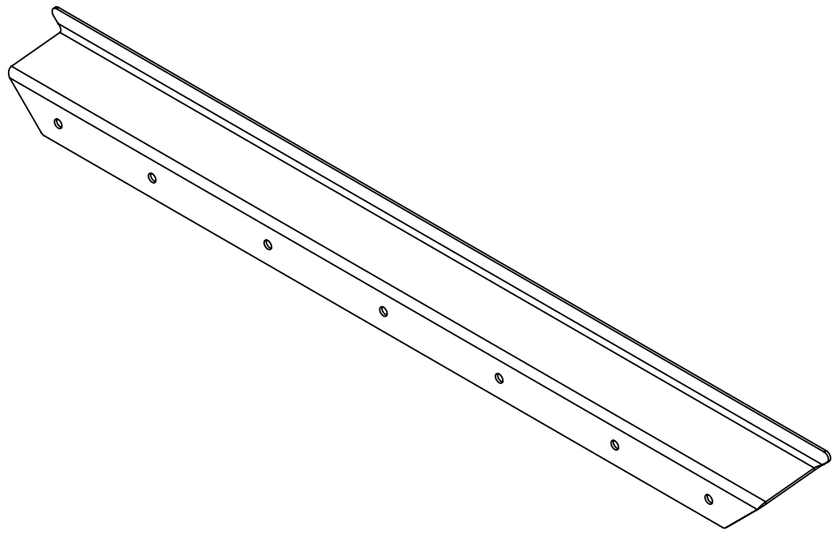
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100











1	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:2	Date:	Drawing no.: 2000-05-0537	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 0.46 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

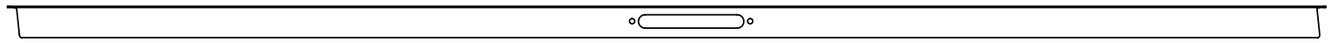
Title: **Sheet; door frame**

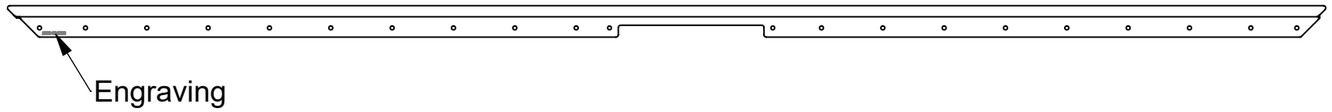
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

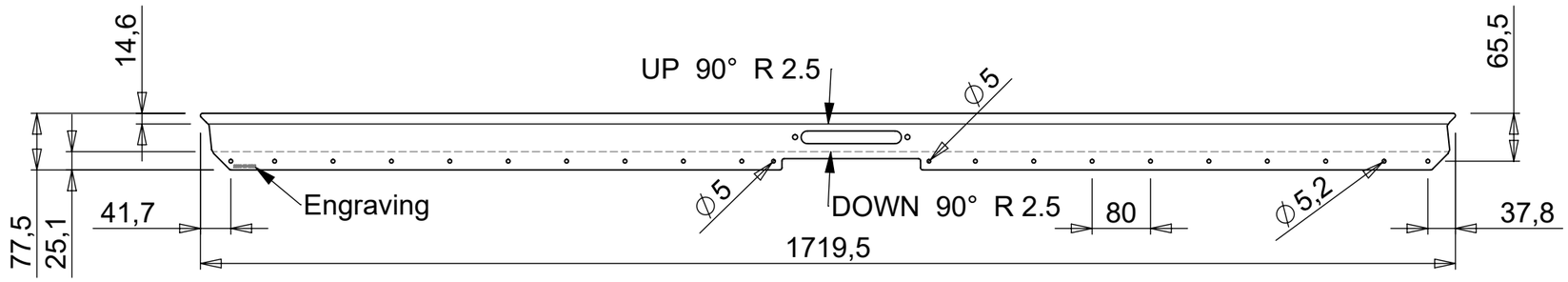
Projection

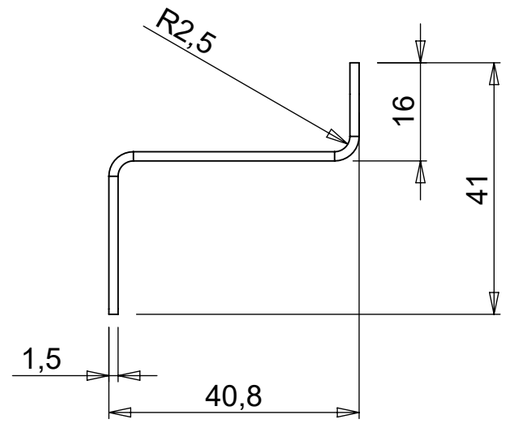
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

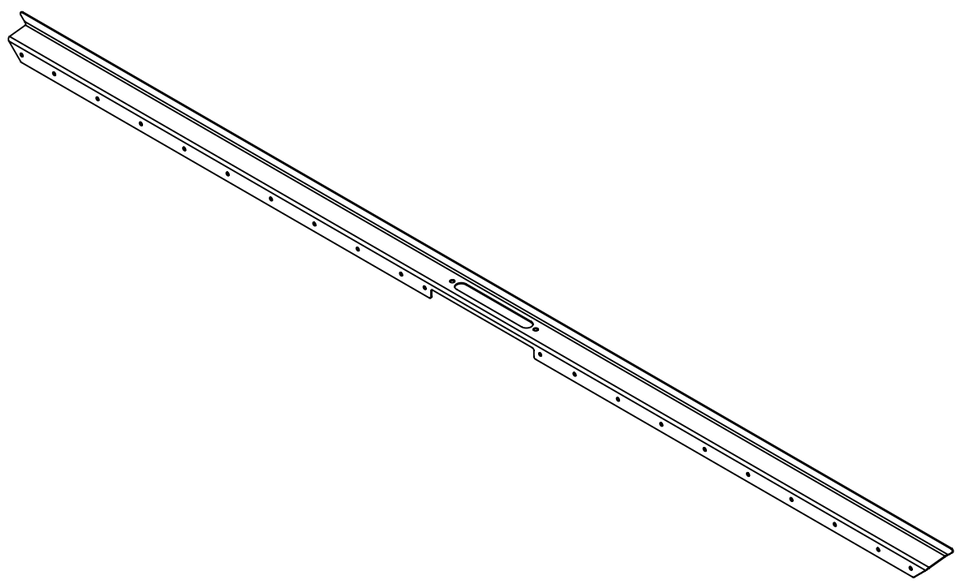








Scale 1:1



1	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-0538	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:8	Date:	Drawing no.: 2000-05-0538 Sheet : 1 of 1	Issue: C
Drawn: HS	29-03-2019		
Checked: VvM	04-11-2019		
Approved: JWR	04-11-2019		
Mass: 1.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

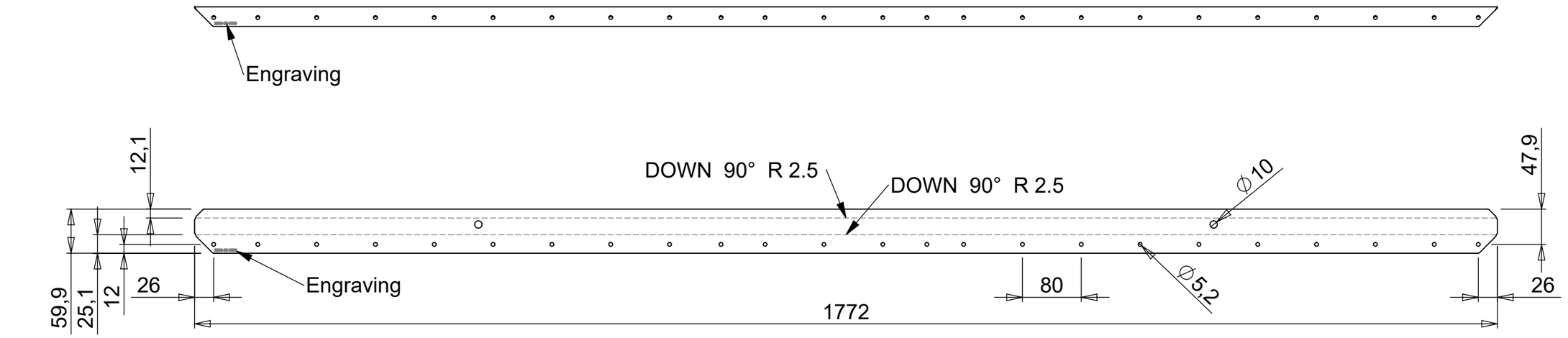
Title: **Sheet; door frame**

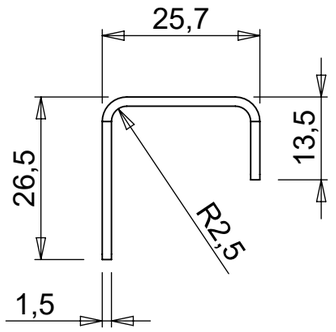
Iss.	Changes	Date	Name
C	Flat pattern corrected	04-11-2019	HS
B	~Cut out	11-09-2019	HS

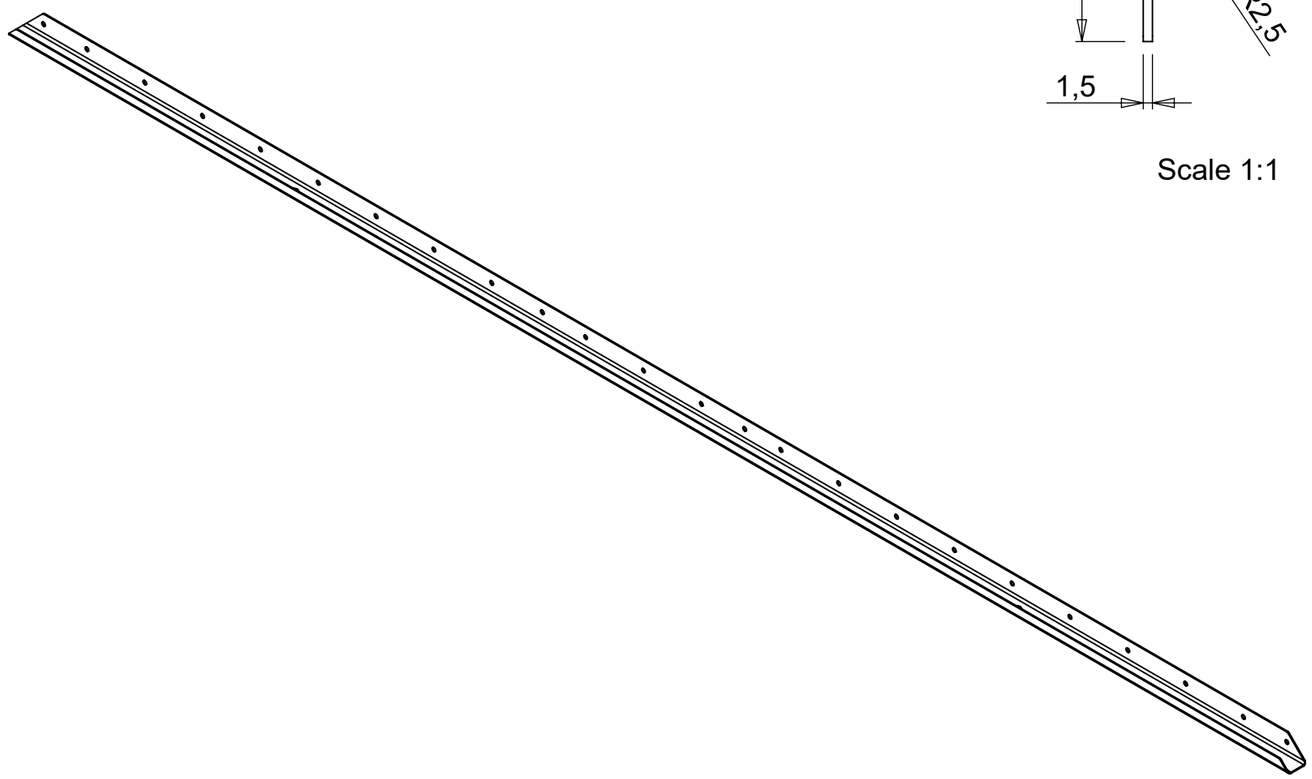
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







Scale 1:1

1	1	Sheet; door frame	1772	59,9	1,5	2000-05-0539	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-0539 Sheet : 1 of 1	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	04-11-2019		
Approved: JWR	04-11-2019		
Mass: 1.26 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

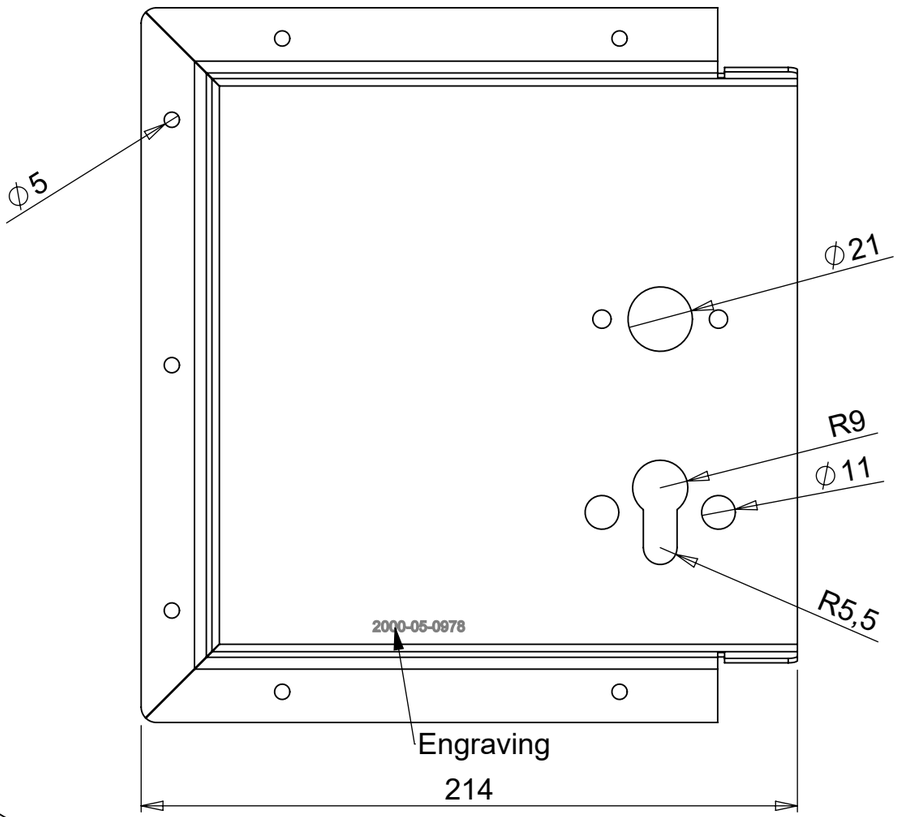
Title: Sheet; door frame

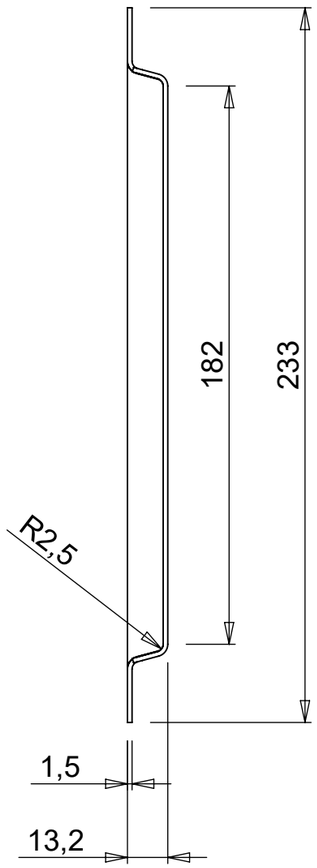
Iss.	Changes	Date	Name
B	Flat pattern corrected	04-11-2019	HS

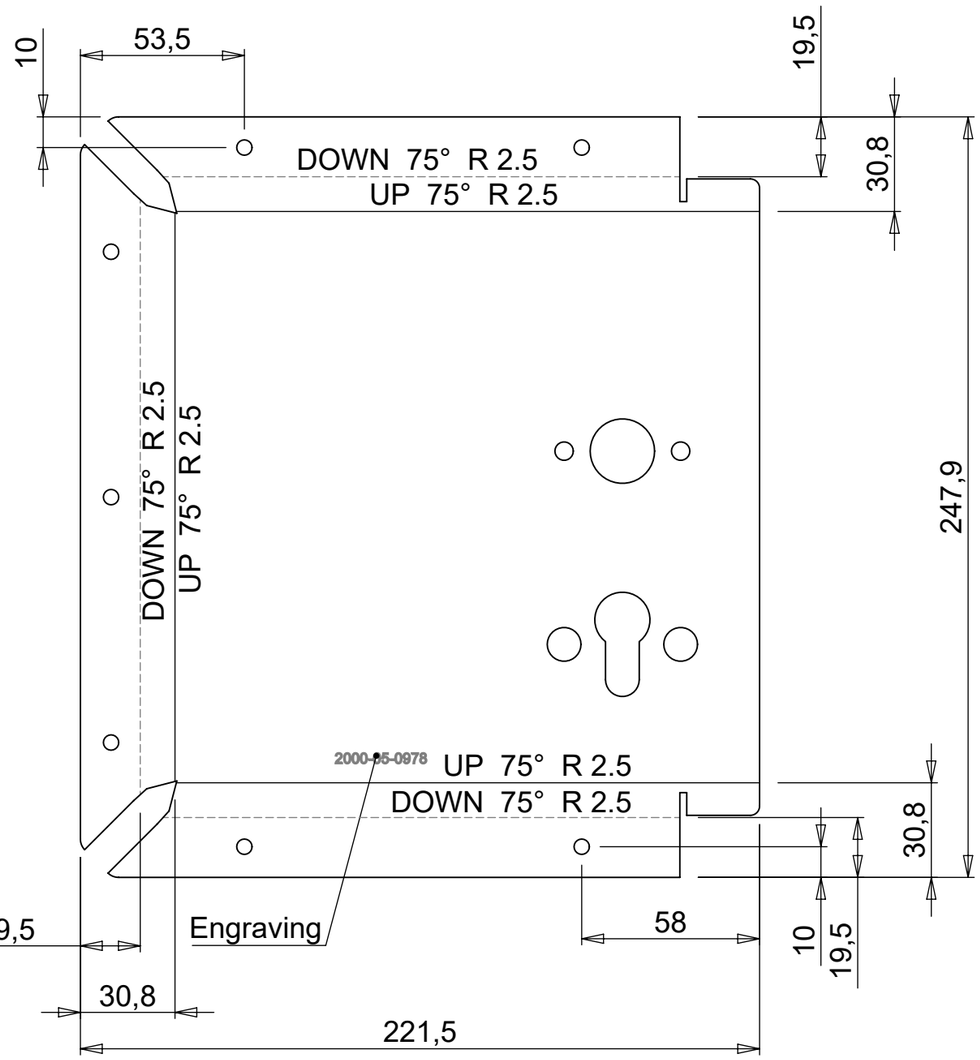
Projection

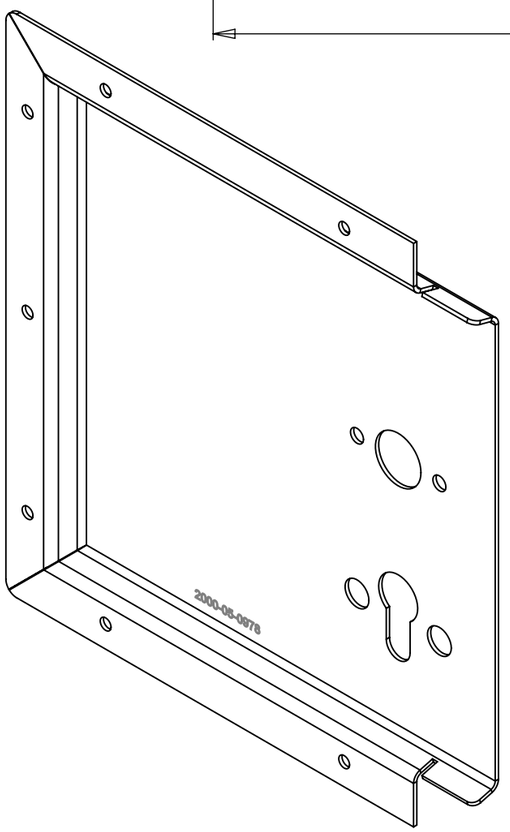
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet door handle	247,9	221,5	1,5	2000-05-0978	AISI 304	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-0978	Issue: B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	11-09-2019	Sheet : 1 of 1	
Mass: 0.62 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

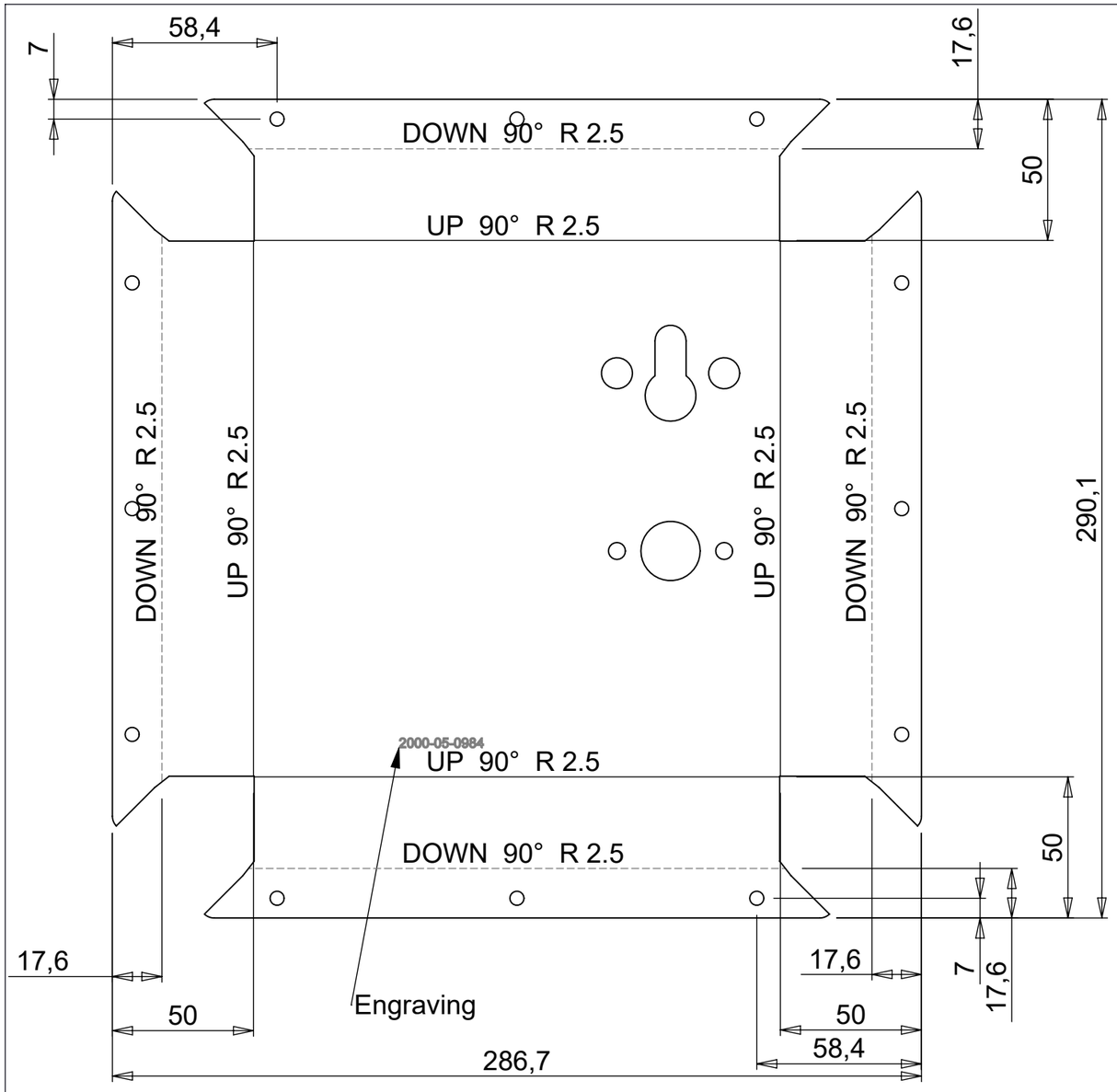
Title: **Sheet door handle**

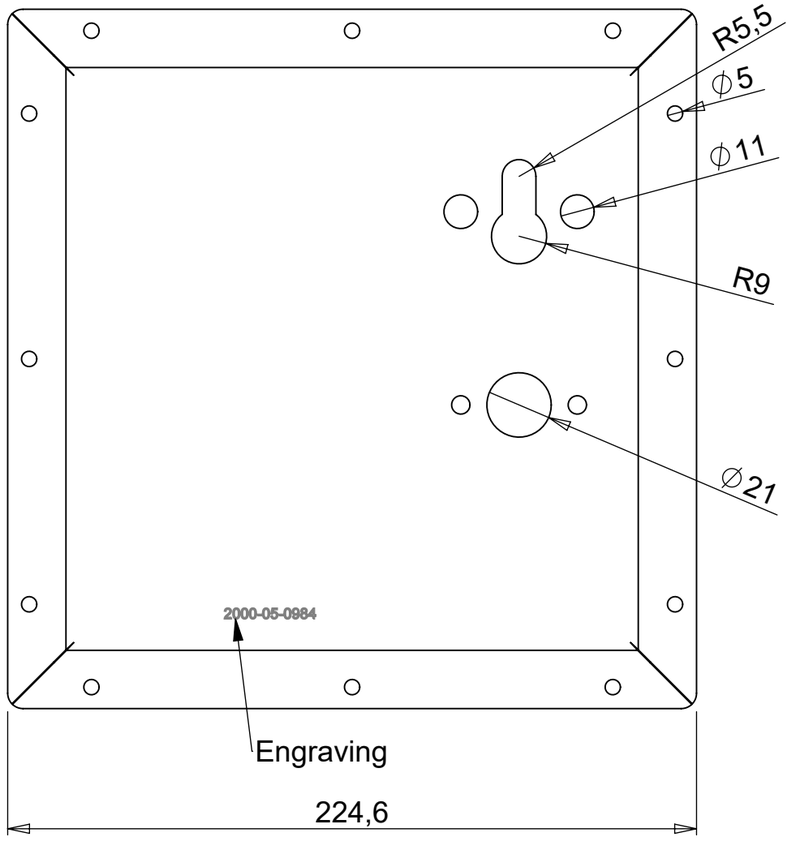
Iss.	Changes	Date	Name
B	~Dimensions	11-09-2019	HS

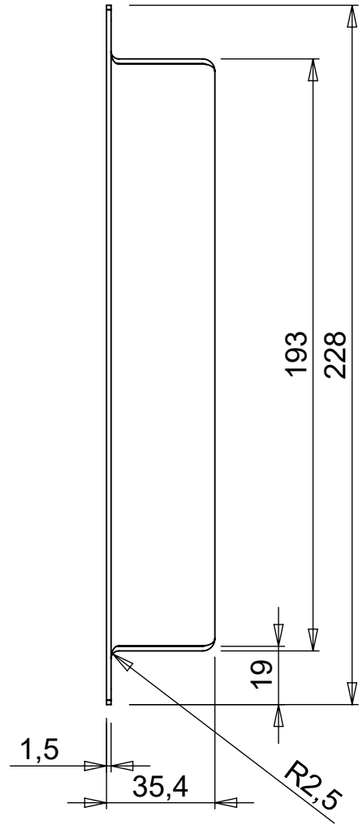
Projection

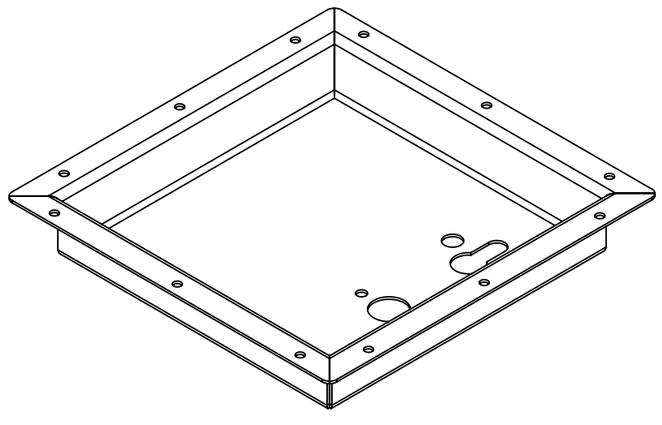
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet door handle	290,1	286,7	1,5	2000-05-0984	AISI 304	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-0984	Issue B
Drawn: HS	29-03-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019	Sheet : 1 of 1	
Mass: 0.88 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

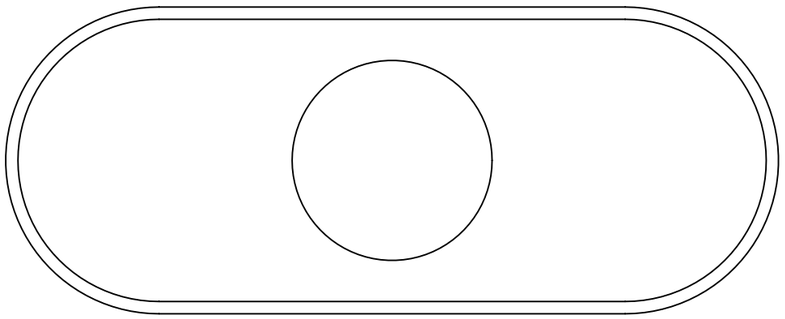
Title: **Sheet door handle**

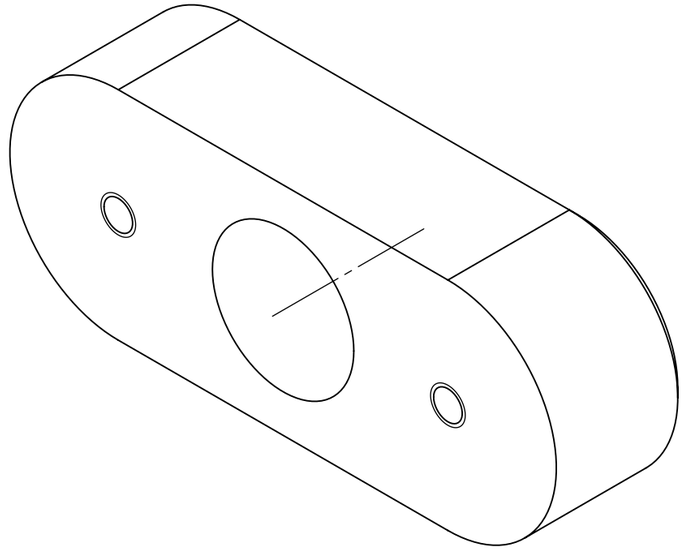
Iss.	Changes	Date	Name
B	~Dimensions	10-09-2019	HS

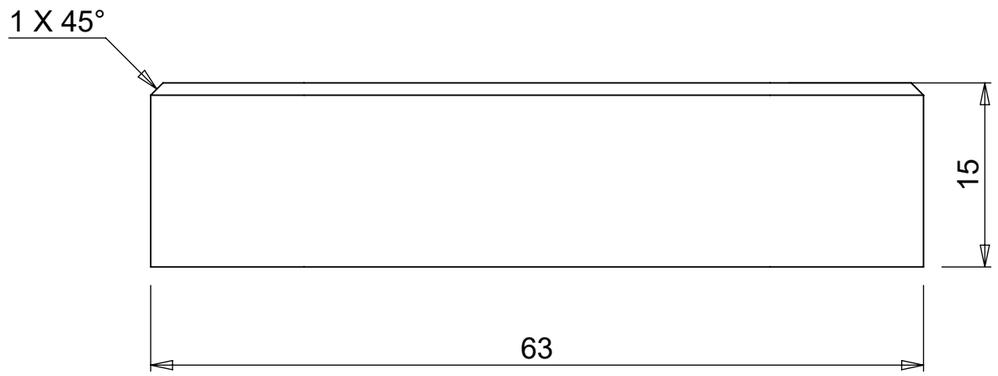
Projection

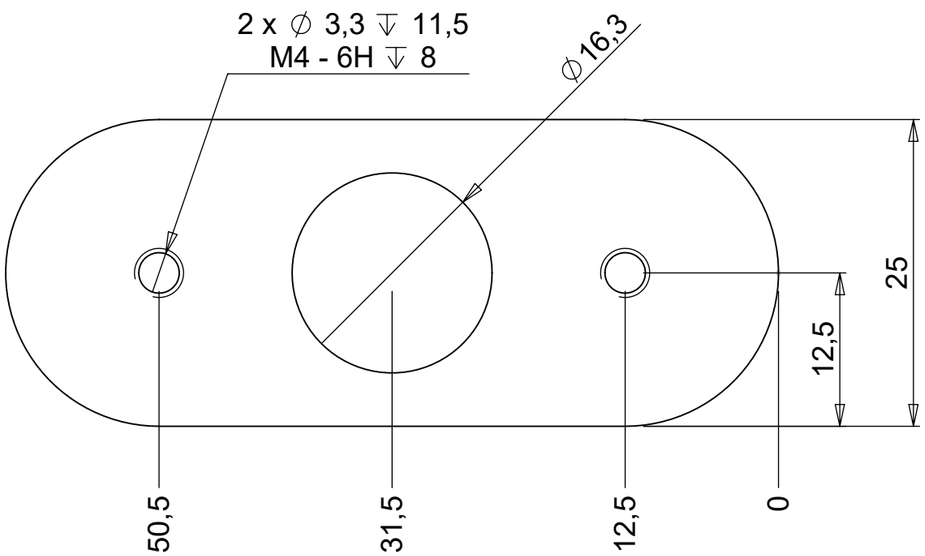
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 2:1	Date:	Drawing no.: 2000-05-3886	Issue B	Tolerances (u.n.o.)
Drawn: HS	09-09-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: HS	13-02-2020			±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	10-03-2020	Sheet : 1 of 1		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.15 kg		Finish:		Dimensions in mm (u.n.o.)

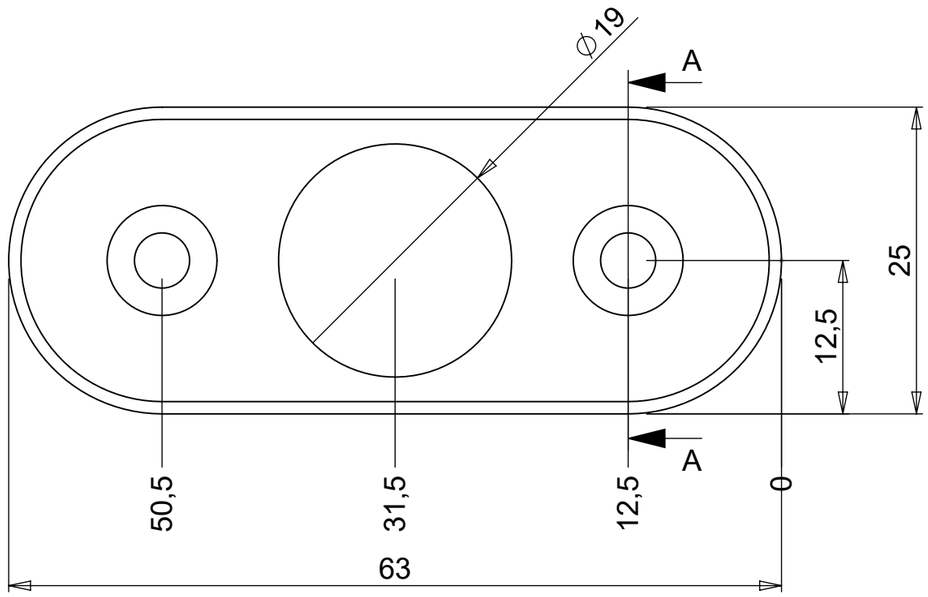
Title: **Rosette outside**

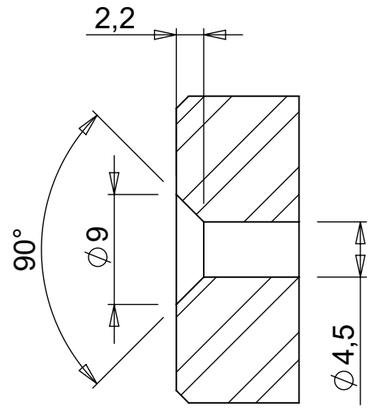
Iss.	Changes	Date	Name
B	~hole dimension	10-03-2020	MVE

Projection

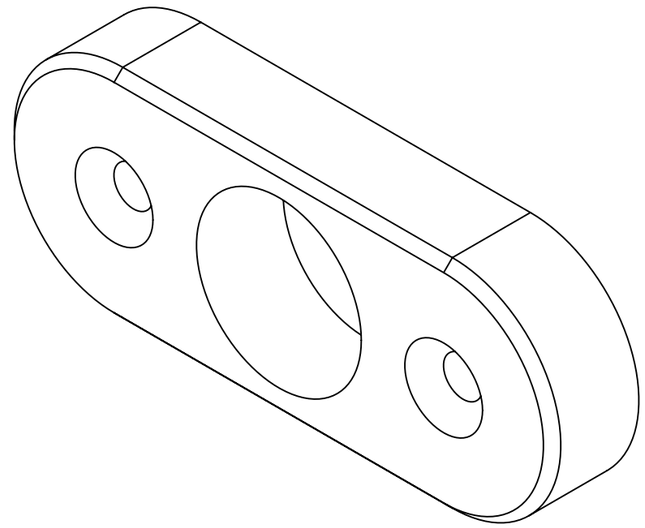
Size A3

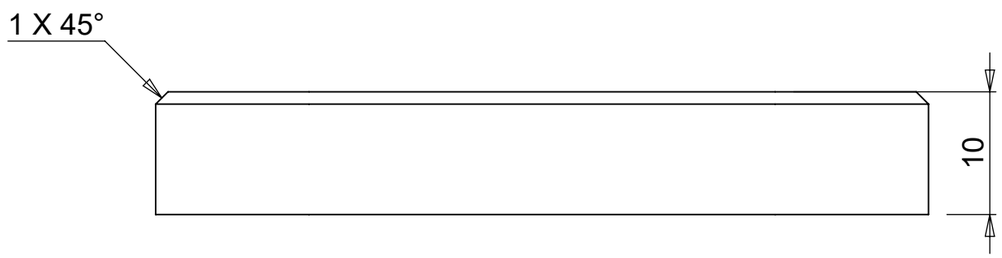
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





SECTION A-A





1	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 2:1	Date:	Drawing no.: 2000-05-3888 Sheet : 1 of 1	Issue B
Drawn: HS	09-09-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 0.09 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

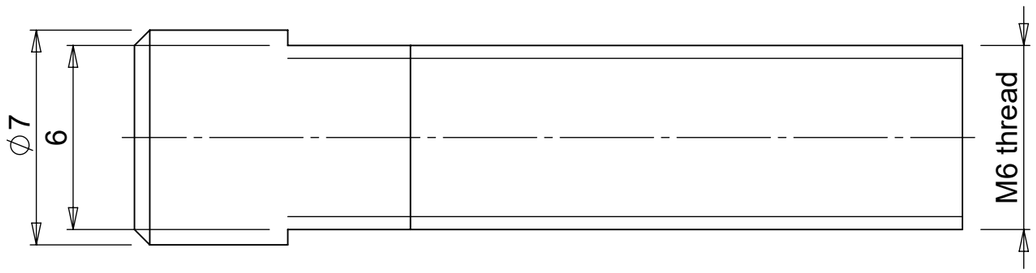
Title: **Rosette inside**

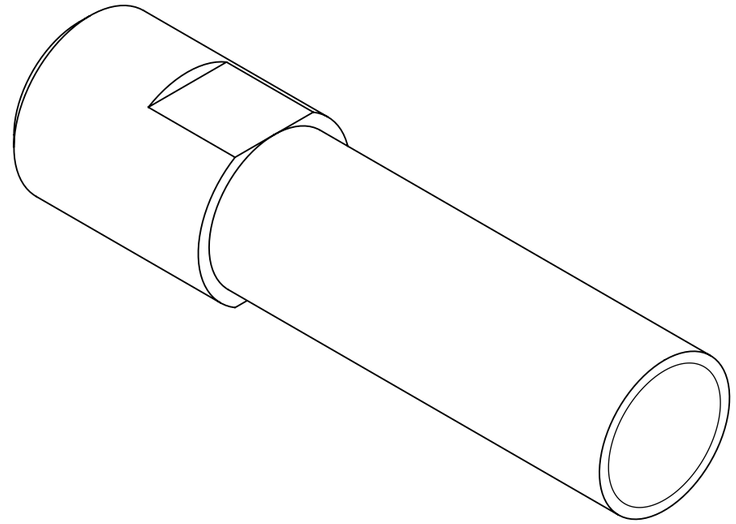
Iss.	Changes	Date	Name
B	~hole dimension	10-03-2020	MVE

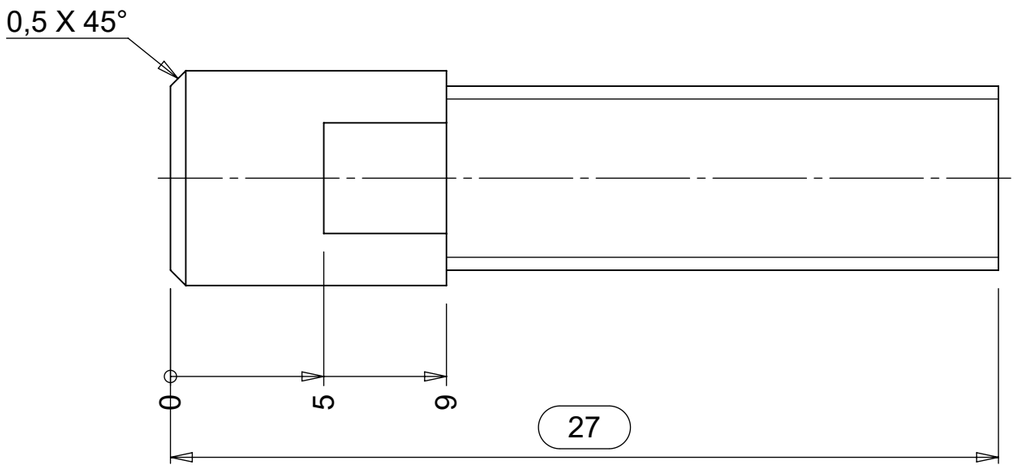
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







1	1	Guide pin	27	7		2000-05-1366	AISI 304	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 5:1	Date:	Drawing no.: 2000-05-1366 Sheet : 1 of 1	Issue A
Drawn: HS	29-03-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

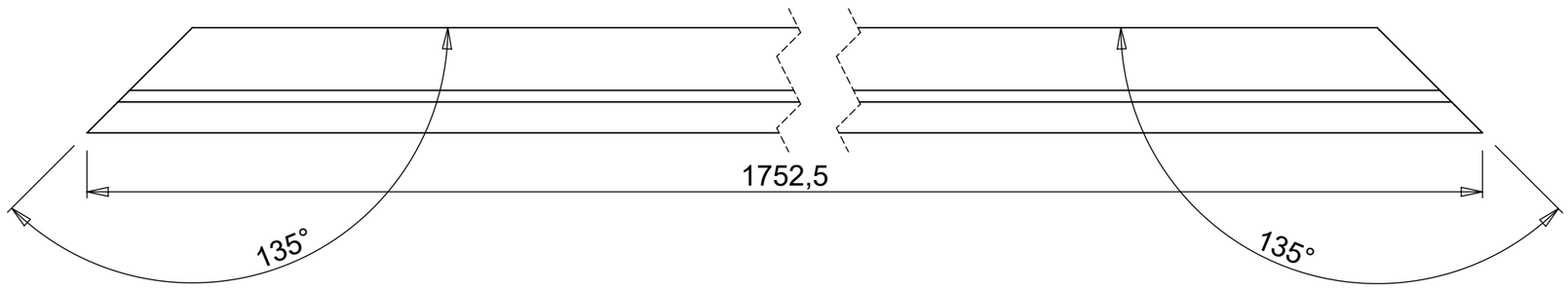
Title: **Guide pin**

Iss.	Changes	Date	Name

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)

Scale: 1:1	Date:	Drawing no.: 2000-05-0540 Sheet : 1 of 1	Issue B
Drawn: HS	29-03-2019		
Checked: MH	11-09-2019		
Approved: JWR	12-09-2019		
Mass: 0.18 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

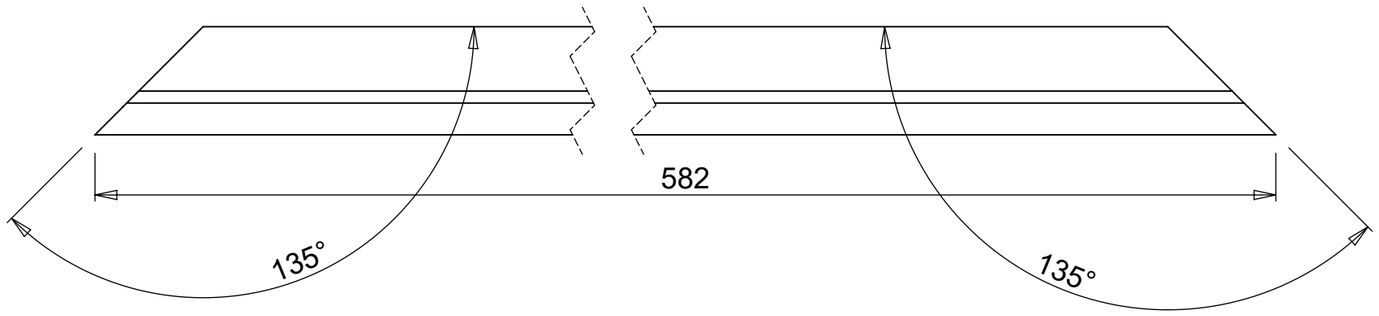
Title: **Extrusion Door (Rubber)**

Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)

Scale: 1:1	Date:	Drawing no.: 2000-05-0541	Issue: B
Drawn: HS	29-03-2019	Sheet : 1 of 1	
Checked: MH	11-09-2019		
Approved: JWR	12-09-2019		
Mass: 0.06 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

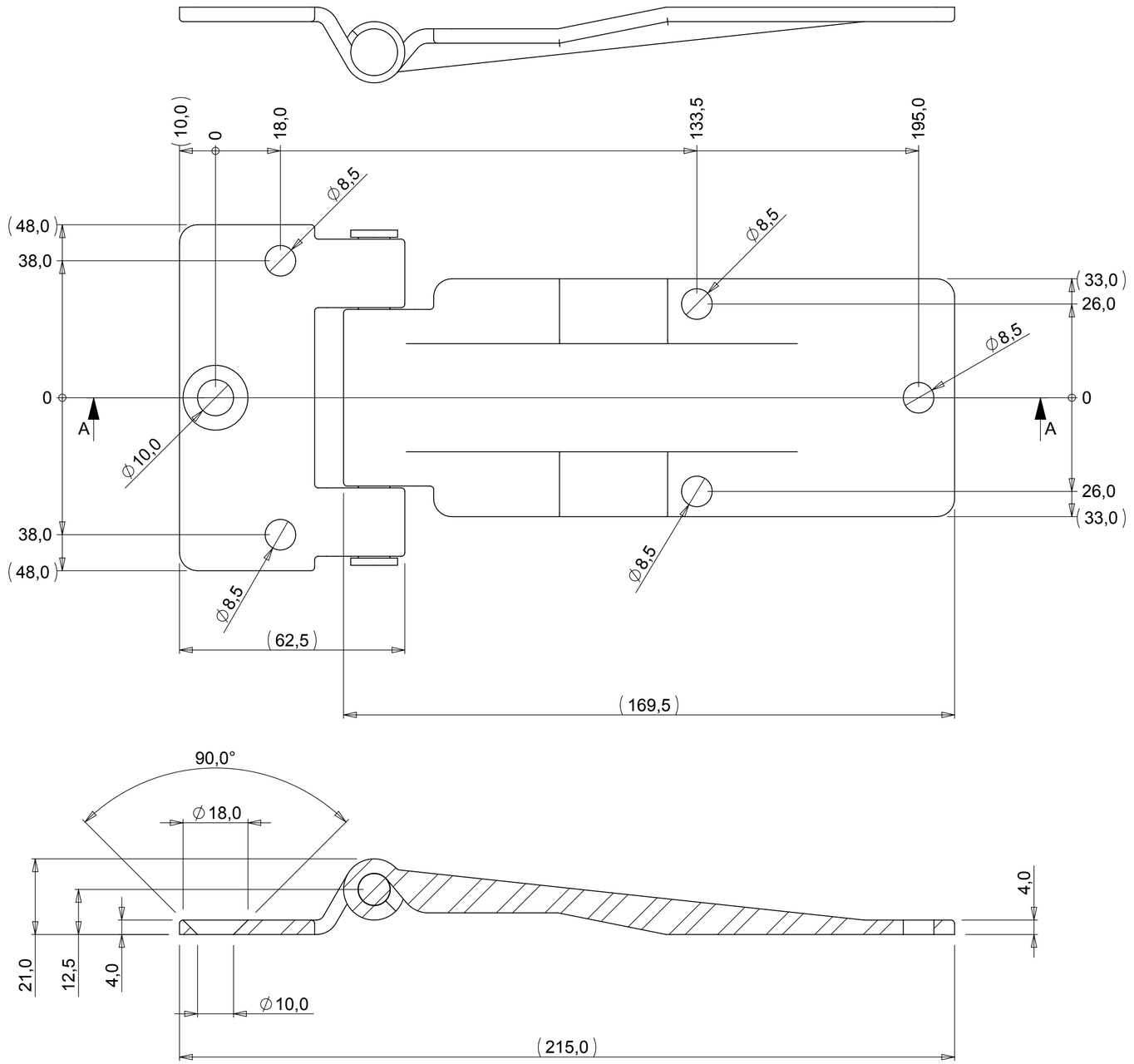
Title: **Extrusion Door (Rubber)**

Iss.	Changes	Date	Name
B	~ remark & material	12-09-2019	VvM

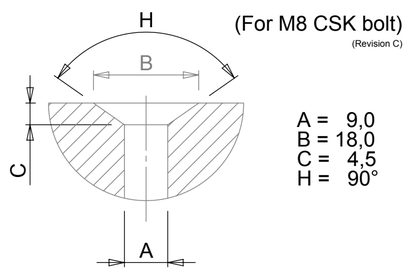
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

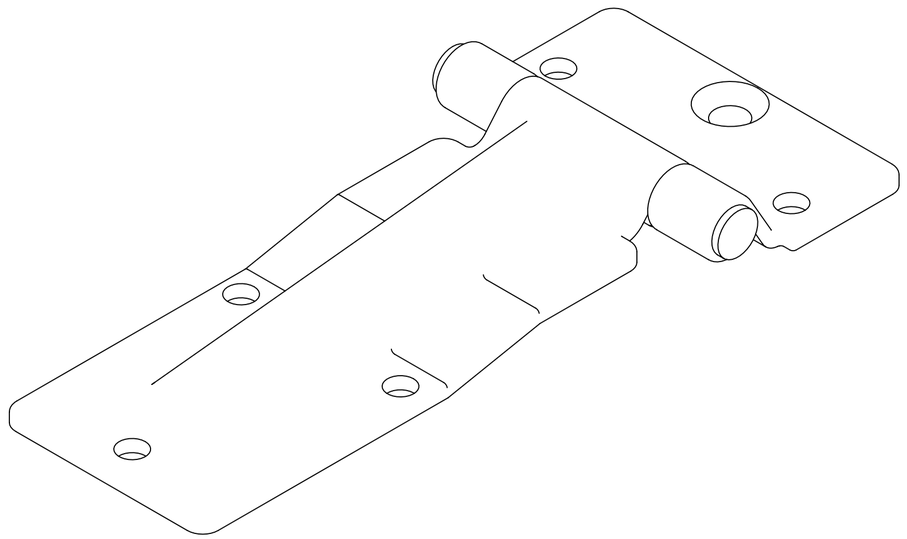


SECTION A-A



(For M8 CSK bolt)
(Revision C)

A = 9,0
B = 18,0
C = 4,5
H = 90°



- all edges R1 radius

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	1	hinge moveable				SL-NJ214Sc	AISI 304	
2	1	hinge pin				SL-NJ214Sb	AISI 304	
1	1	hinge fixed				SL-NJ214Sa	AISI 304	

Scale: 1:1	Date:	Drawing no. SL-NJ214S	Issue A
Drawn: PvT	20-03-2018	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: WvdV	20-03-2018		< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: WvdV	20-03-2018		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.88 kg		Finish:	Dimensions in mm (u.n.o.)

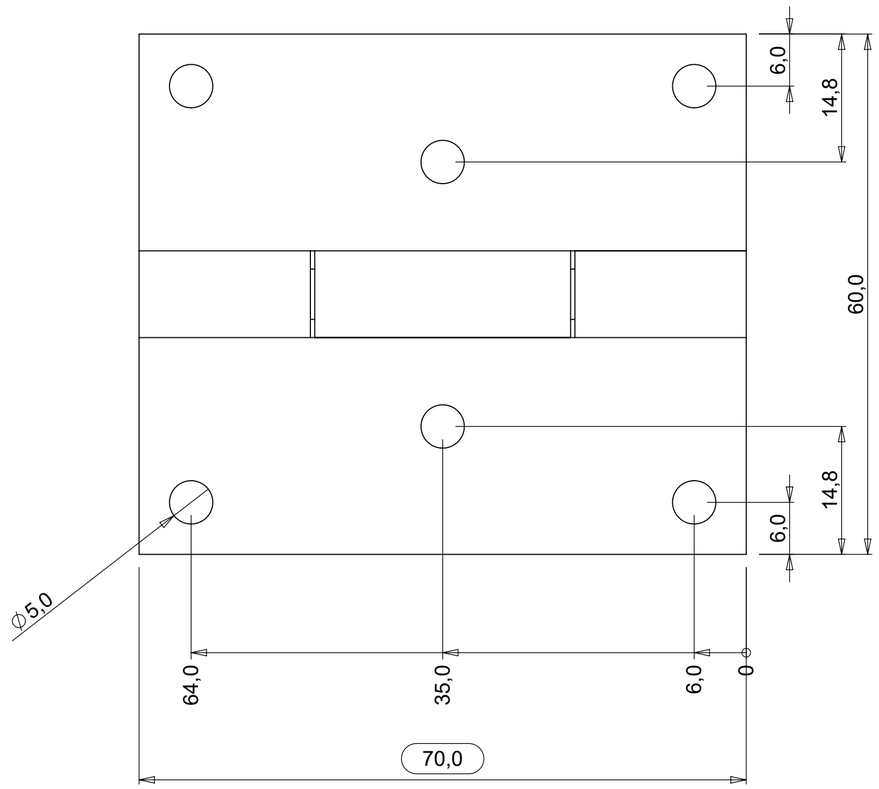
Title: **Door hinge 214S**

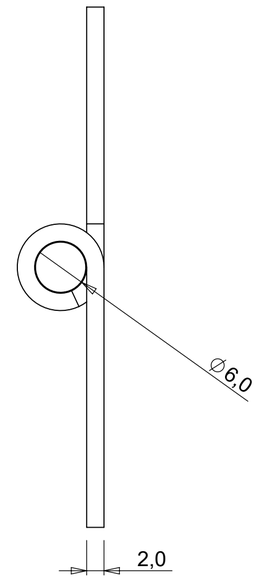
Iss.	Changes	Date	Name

Projection

Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Piano Hinge 60x2	2500	60	2	SL-7663410B	Stainless	Bosch (7663410)

Scale: 2:1	Date:	Drawing no. 2000-05-2212 Sheet : 1 of 1	Issue A
Drawn: HS	15-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.10 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

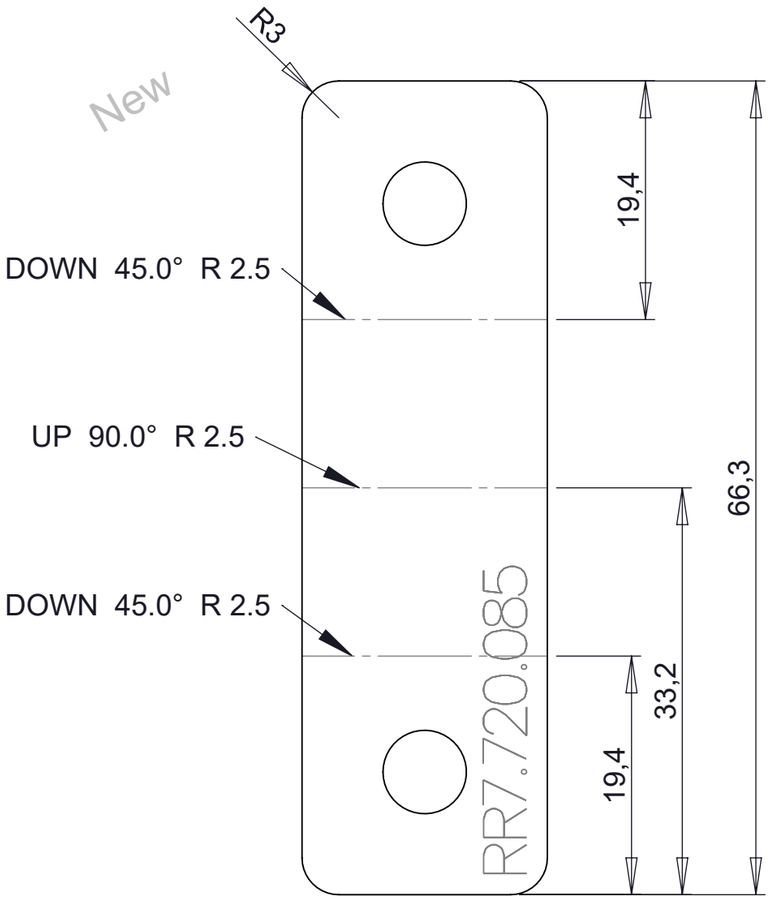
Title: Hinge

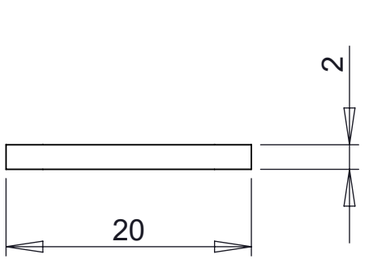
Iss.	Changes	Date	Name

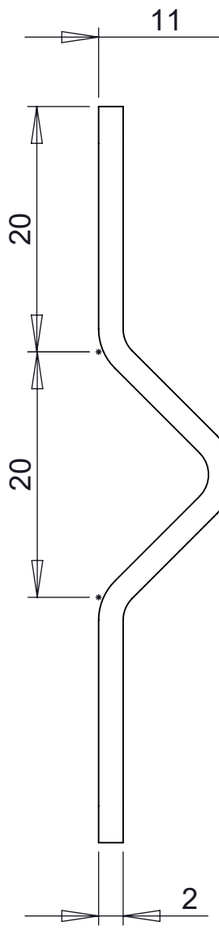
Projection

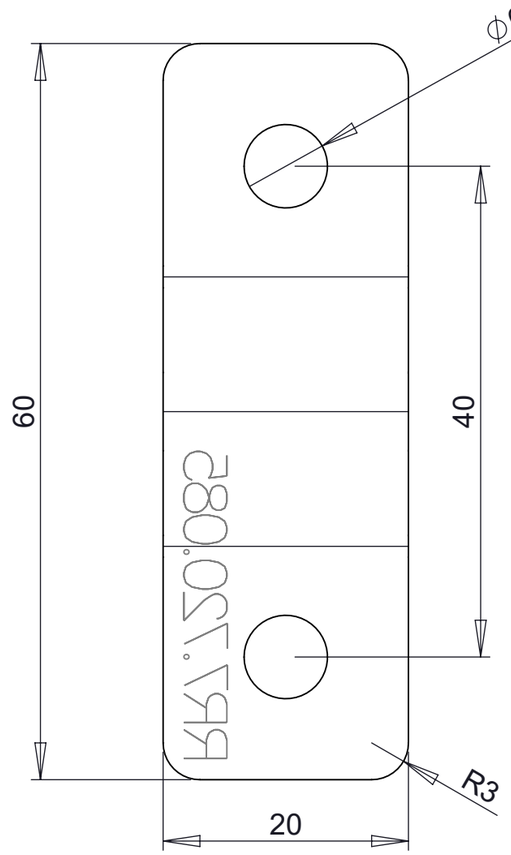
Size A2

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Remove sharp edges (barrel finishing)

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Net Bracket (SS)	60	67.3	20	RR7.720.085	AISI 304	

Scale: 2:1	Date:	Drawing no.: RR7.720.085	Issue: B
Drawn: PvT	10-09-2009		
Checked: WvdV	06-10-2011	Sheet : 1 of 1	
Approved: BH	30-03-2012		
Mass: 0.02 kg		Finish: New	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: **Net Bracket (SS)**

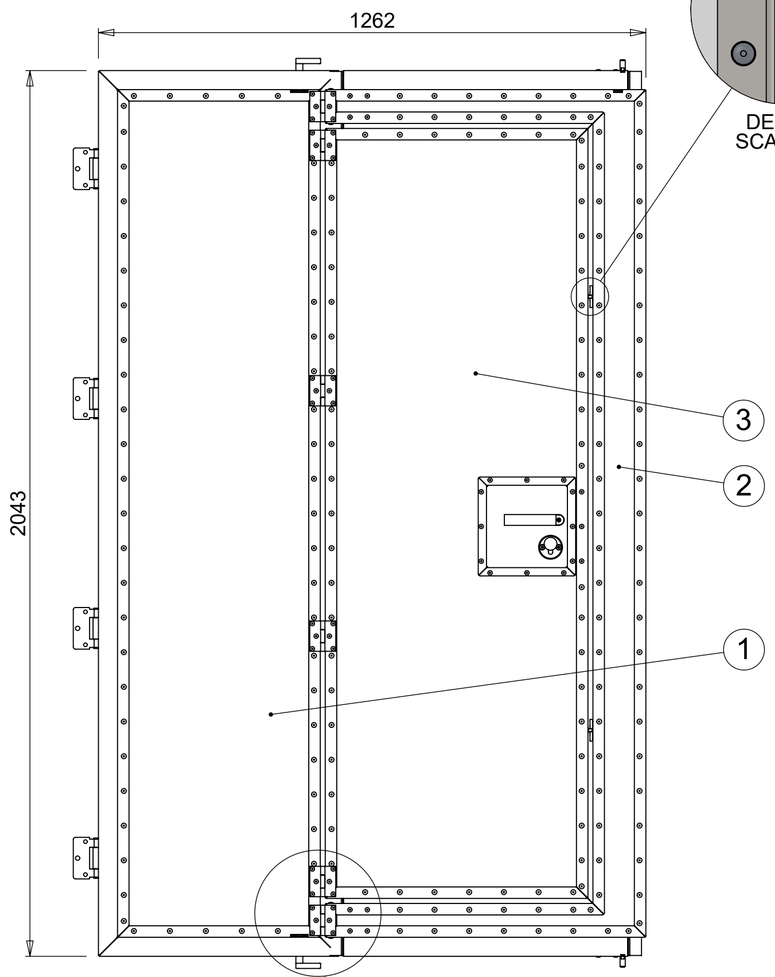
Iss.	Changes	Date	Name
B	R3 radius; Bend radius	06-10-2011	WvdV

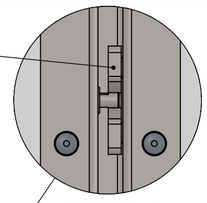
Projection

Size A3

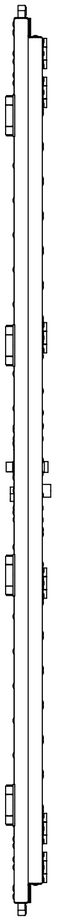
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

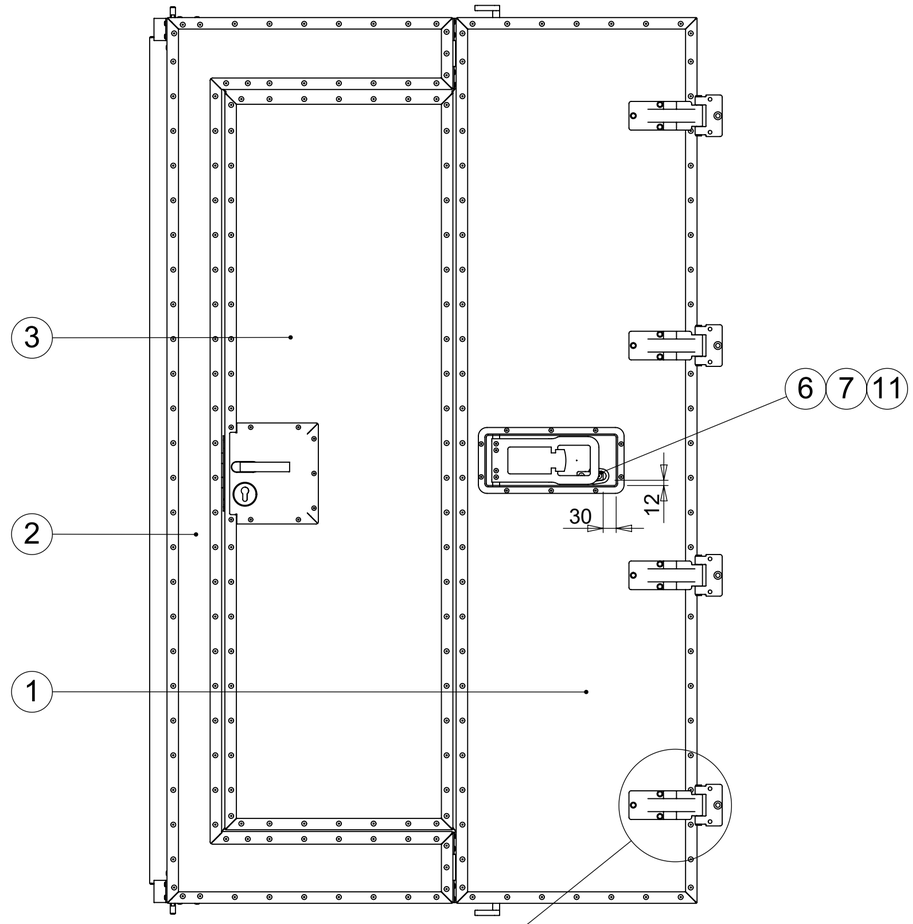
Adjust guiding block on door (2) such that door (3) locks vertically, then tighten the bolts of guiding block

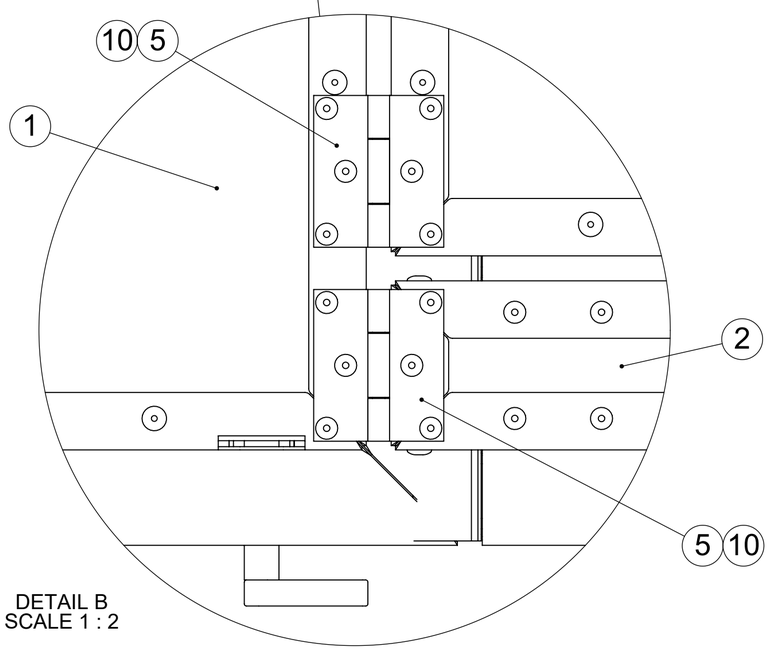




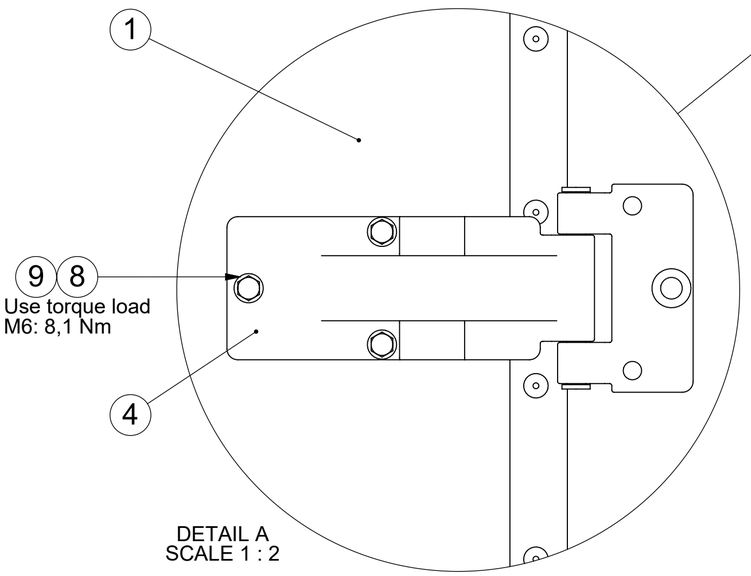
DETAIL C
SCALE 1 : 2







DETAIL B
SCALE 1 : 2



DETAIL A
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
11	2	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
10	36	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
9	12	Hex. Head Screw	25	M6		BO-4017-06025-A2	AISI 304	ISO4017/DIN933
8	12	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
7	1	D-Ring 25mm	44	37		ZN-VRR-DRNG2	St52	min.2250daN
6	1	Net Bracket (SS)	60	67.3	20	RR7.720.085	AISI 304	
5	6	Hinge				2000-05-2212	Assembly	
4	4	Door hinge 214S				SL-NJ214S	Assembly	
3	1	DBJ door right 3				2000-07-3477	Assembly	
2	1	DBJ door right2				2000-05-1234	Assembly	
1	1	DBJ door 1				2000-05-0511	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3476 Sheet : 1 of 2	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 57.36 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: DBJ Door Right

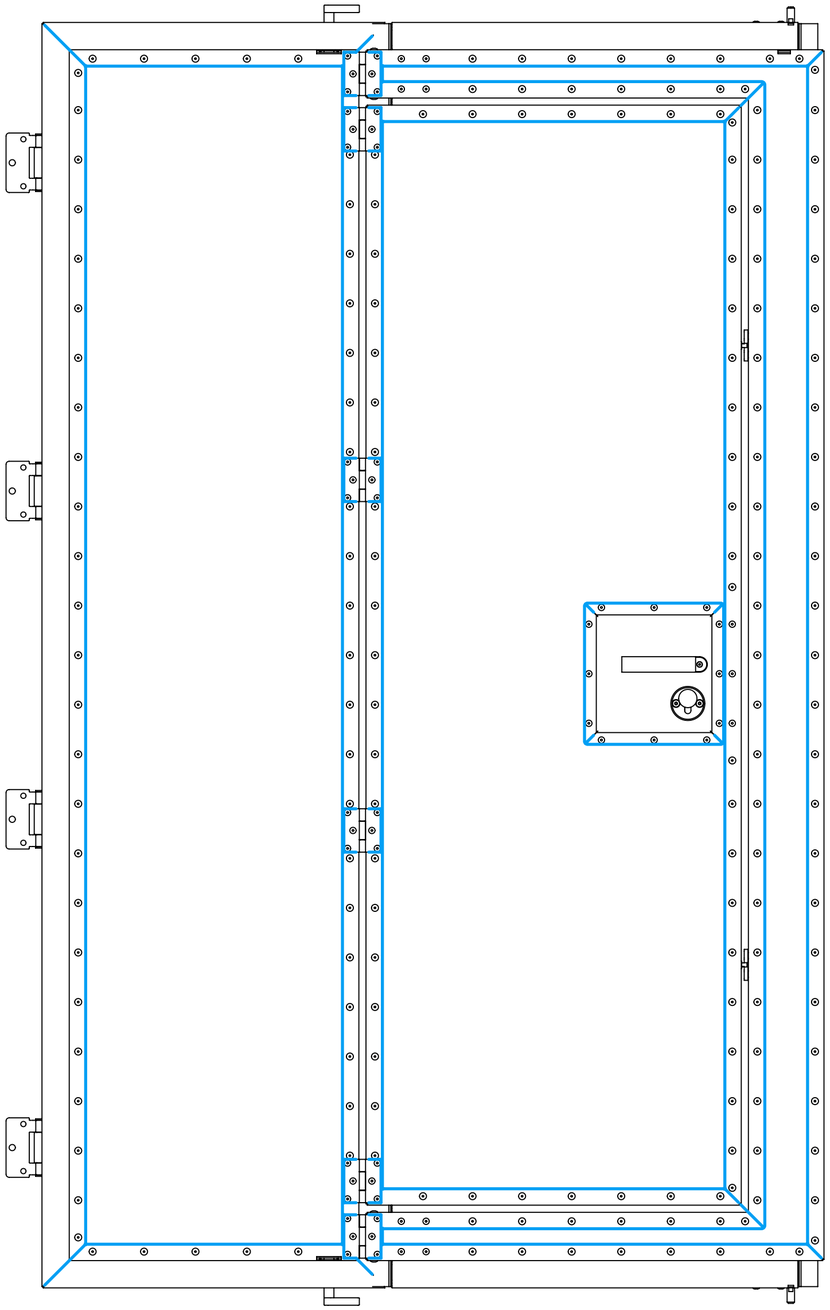
Iss.	Changes	Date	Name

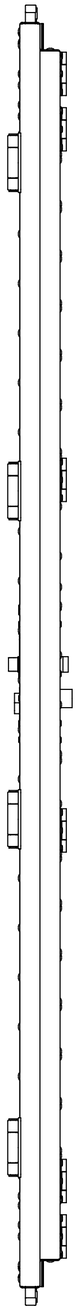
Projection

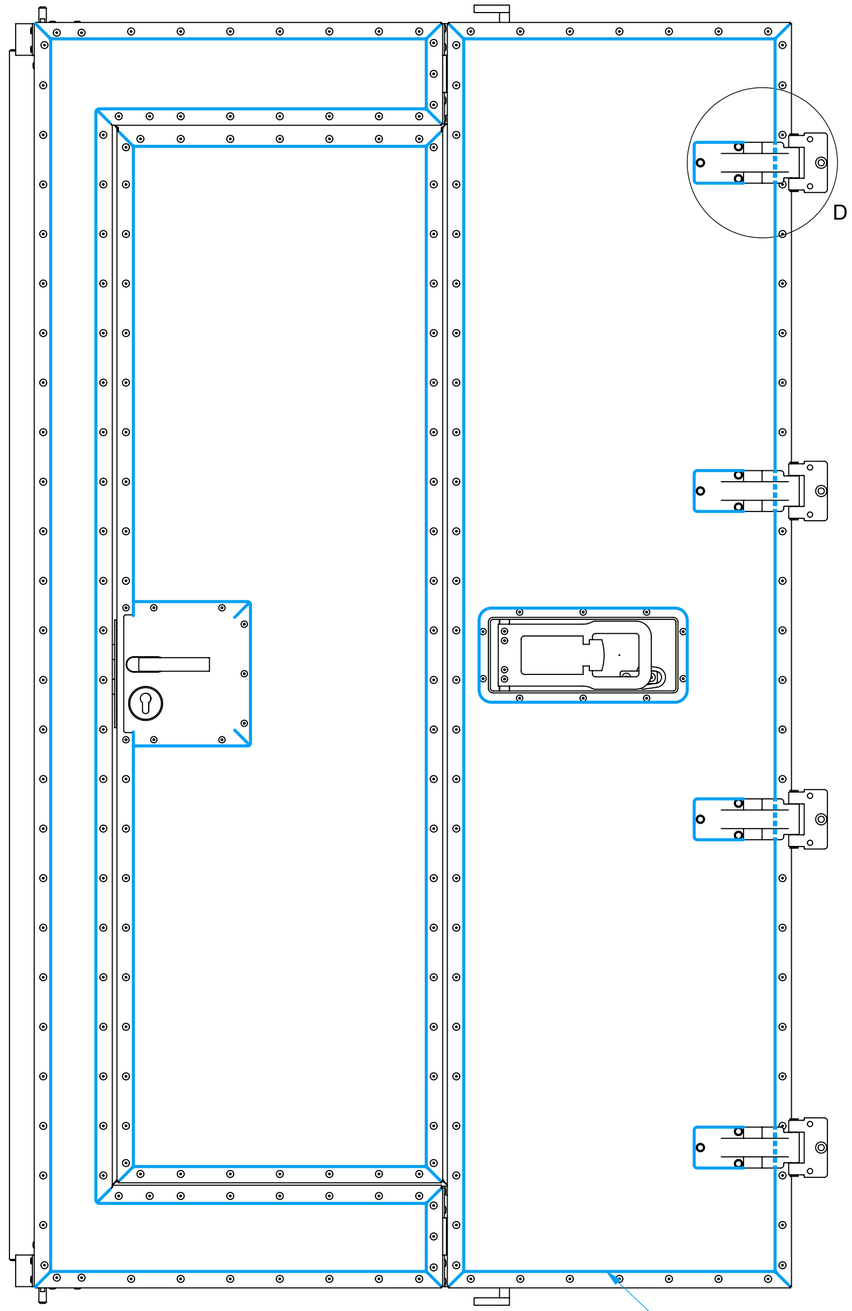
Size A2

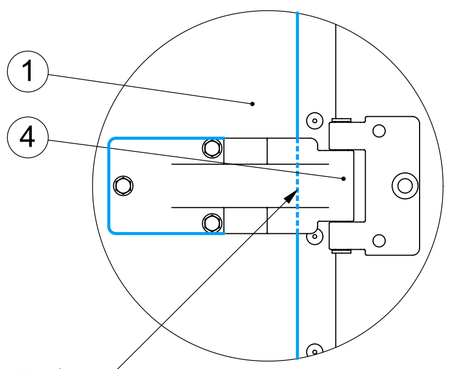
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

Sealant instructions









NOTE: Apply sealant (dashed line) before attaching (4) to (1)

DETAIL D
SCALE 1 : 3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
12	1	INNO-SEAL White		290 ml		LI-INNO.SEAL-WIT	Kit	
11	2	Bk.St. Monobolt 6,4	2,0-15,9	Ø6,4		BK-02771-00824	Steel	(MGLP-R8-10)
10	36	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
9	12	Hex. Head Screw	25	M6		BO-4017-06025-A2	AISI 304	ISO4017/DIN933
8	12	Nord-Lock Large Washer M6	ø13,5	M6	2,0	BO-NORDLCK-06SP-SMO	245 SMO	SMO
7	1	D-Ring 25mm	44	37		ZN-VRR-DRNG2	St52	min.2250daN
6	1	Net Bracket (SS)	60	67.3	20	RR7.720.085	AISI 304	
5	6	Hinge				2000-05-2212	Assembly	
4	4	Door hinge 214S				SL-NJ214S	Assembly	
3	1	DBJ door right 3				2000-07-3477	Assembly	
2	1	DBJ door right2				2000-05-1234	Assembly	
1	1	DBJ door 1				2000-05-0511	Assembly	

Iss.	Changes	Date	Name

Scale: 1:7 | Date:
Drawn: MBMH | 28-06-2023
Checked: PvT | 31-07-2023
Approved: HS | 08-08-2023
Mass: 57.36 kg
Finish:

Drawing no. 2000-07-3476
Sheet : 2 of 2

Issue A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

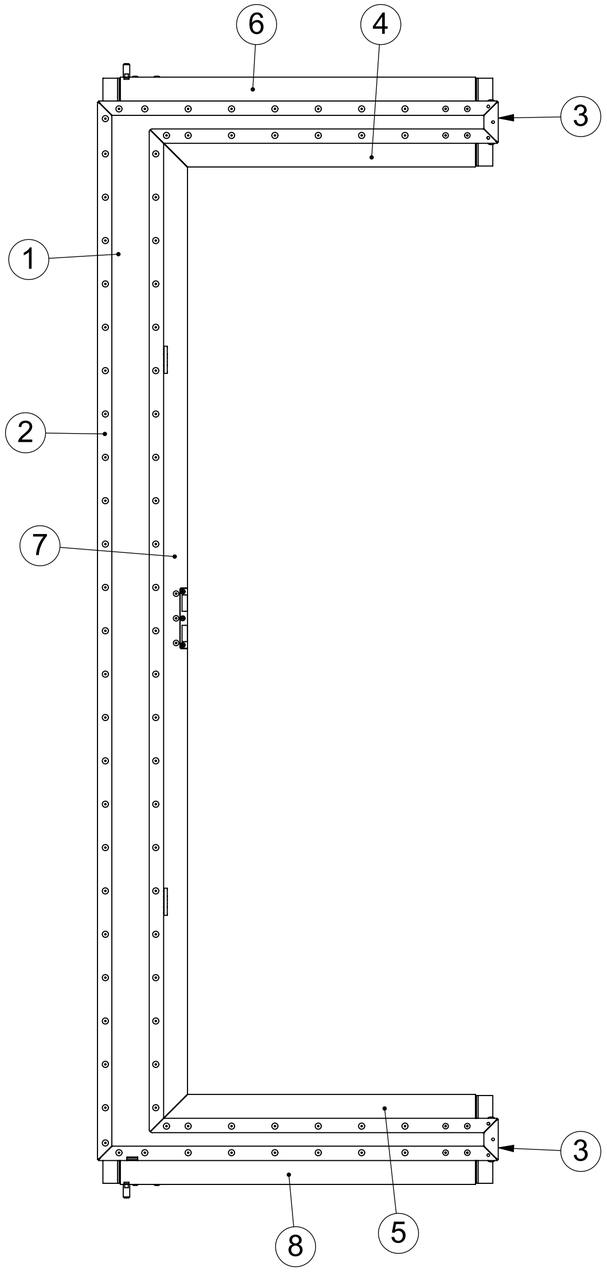
Dimensions in mm (u.n.o.)

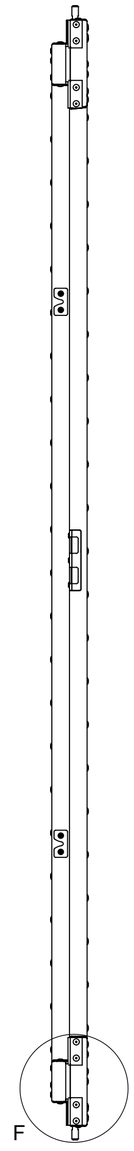
Title: DBJ Door Right

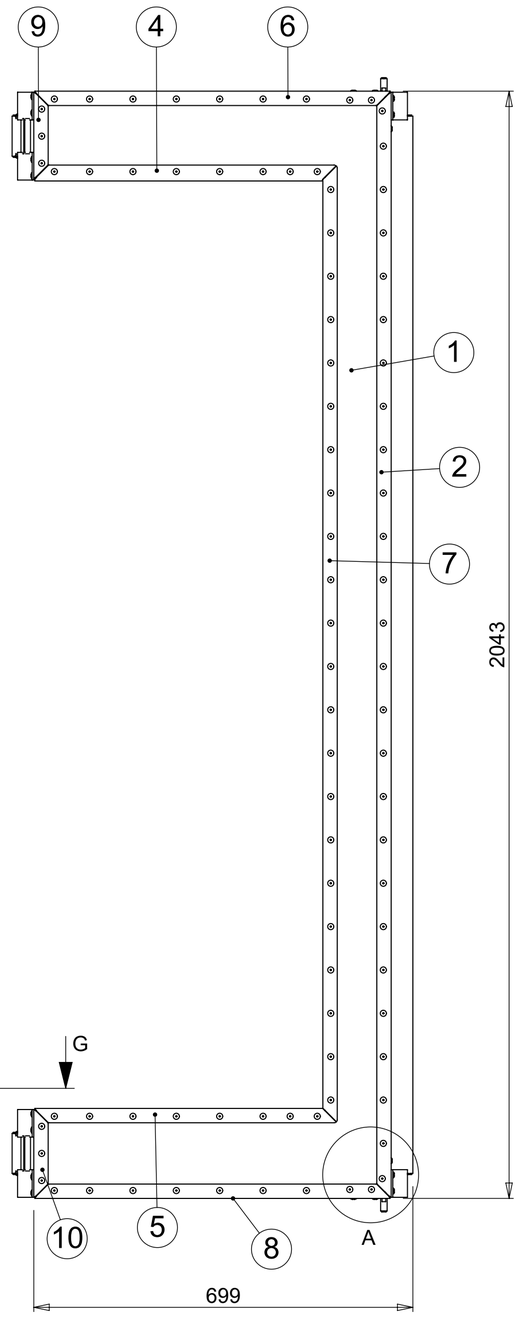
Projection

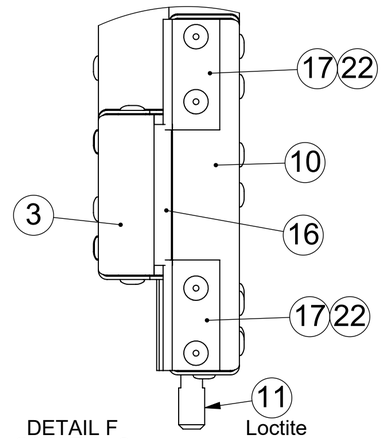
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

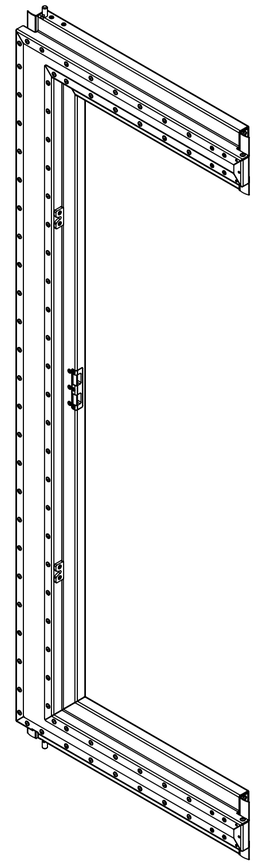


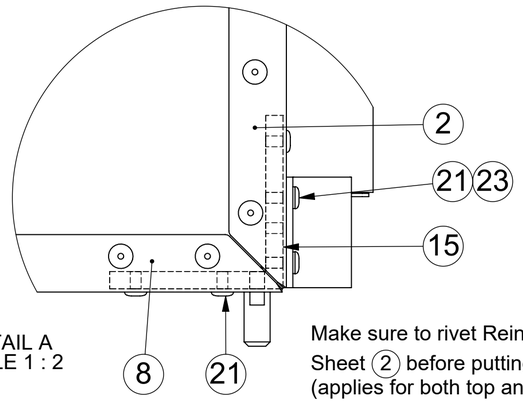






DETAIL F
SCALE 1 : 2



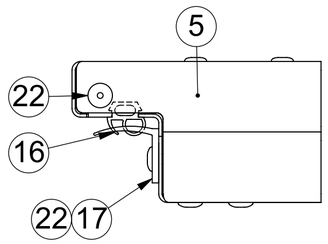


DETAIL A
SCALE 1 : 2

Make sure to rivet Reinforcement sheet (15) to Sheet (2) before putting it on the insulation panel (applies for both top and bottom corner)

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) (10) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.



SECTION G-G
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
23	4	Plain Washer Normal		M5		BO-7089-05-PA	Nylon	ISO7089/DIN125A
22	178	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
21	21	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
20	4	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
19	3	Hex. Socket Csk. Screw	20	M4		BO-10642-04020-A2	AISI 304	ISO10642/DIN7991
18	4	Hex. Socket Cap Screw	16	M4		BO-4762-04016-A2	AISI 304	ISO4762/DIN912
17	6	Rubber L-extrusion	51	30/25	3	2000-04-1446	SEBS70	Technirub VRR001r
16	2	Extrusion Door (Rubber)	65			2000-05-0528	Rubber	Almet (AN625)
15	2	L-Extrusion 80x80x8	24	80/80	8	2000-05-2448	Alu. 6060-T66	
14	1	Detent; back	111	16,5	15	2000-05-3880	AISI 304	
13	1	Detent	111	28	4,5	2000-05-3877	AISI 304	
12	2	Guide	50	25	6	2000-05-1321	AISI 304	
11	2	Pin	36	12		2000-05-0530	AISI 304	
10	1	Sheet; door frame	162	72,5	1,5	2000-05-1073	AISI 304	Bend with V16
9	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1396	AISI 304	Bend with V16
8	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1377	AISI 304	Bend with V16
7	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-1070	AISI 304	Bend with V16
6	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1238	AISI 304	Bend with V16
5	1	Sheet; door frame	639,8	153,4	1,5	2000-05-0527	AISI 304	Bend with V16
4	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1378	AISI 304	Bend with V16
3	2	Sheet; door frame	102,2	64,9	1,5	2000-05-0523	AISI 304	Bend with V16
2	1	Sheet; door frame	2039	149,4	1,5	2000-05-1236	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-1244	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-1234 Sheet : 1 of 2	Issue C
Drawn: HS	01-04-2019		
Checked: HS	09-04-2020		
Approved: JWR	10-04-2020		
Mass: 14.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

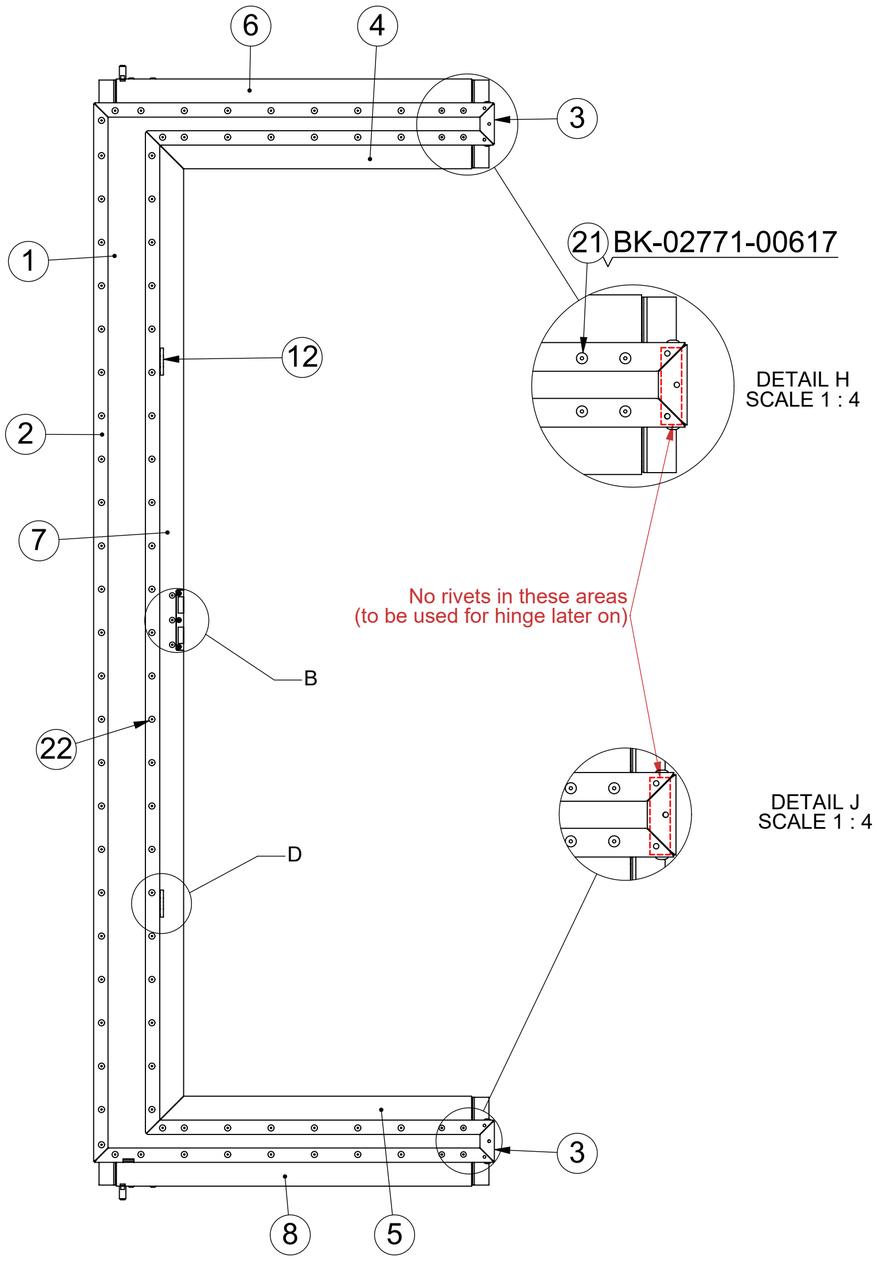
Title: DBJ door right2

Iss.	Changes	Date	Name
C	Washers added	10-04-2020	MVE
B	~Parts	10-09-2019	HS

Projection

Size A2

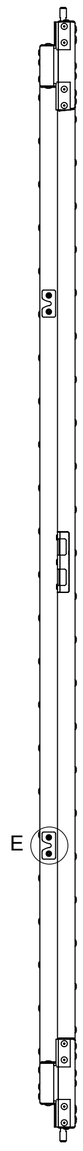
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

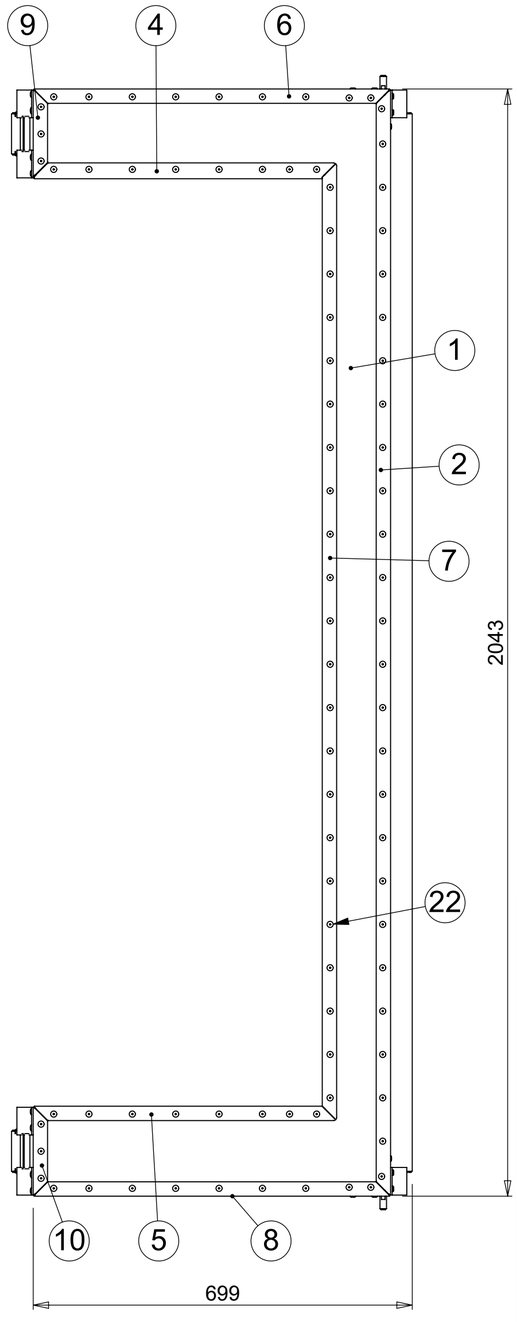


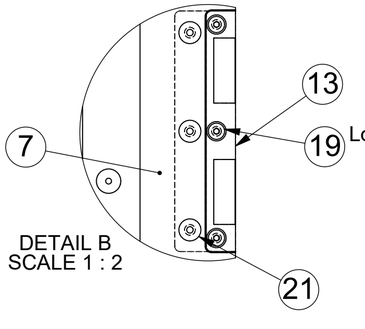
DETAIL H
SCALE 1 : 4

No rivets in these areas
(to be used for hinge later on)

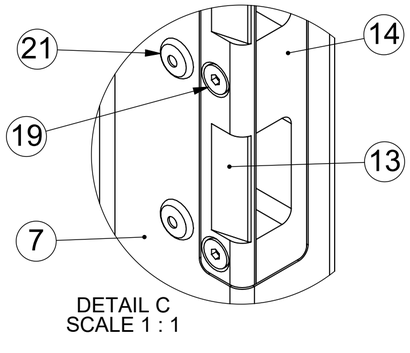
DETAIL J
SCALE 1 : 4





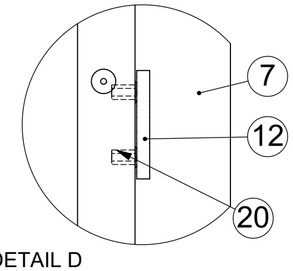


DETAIL B
SCALE 1 : 2

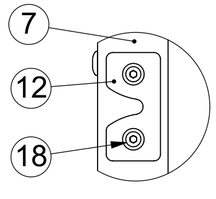


DETAIL C
SCALE 1 : 1

Tighten Screw (18) after assembling total door and adjusting the position of Guide (12)



DETAIL D
SCALE 1 : 2



DETAIL E
SCALE 1 : 2

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) (10) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
23	4	Plain Washer Normal		M5		BO-7089-05-PA	Nylon	ISO7089/DIN125A
22	178	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
21	21	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
20	4	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
19	3	Hex. Socket Csk. Screw	20	M4		BO-10642-04020-A2	AISI 304	ISO10642/DIN7991
18	4	Hex. Socket Cap Screw	16	M4		BO-4762-04016-A2	AISI 304	ISO4762/DIN912
17	6	Rubber L-extrusion	51	30/25	3	2000-04-1446	SEBS70	Technirub VRR001r
16	2	Extrusion Door (Rubber)	65			2000-05-0528	Rubber	Almet (AN625)
15	2	L-Extrusion 80x80x8	24	80/80	8	2000-05-2448	Alu. 6060-T66	
14	1	Detent; back	111	16,5	15	2000-05-3880	AISI 304	
13	1	Detent	111	28	4,5	2000-05-3877	AISI 304	
12	2	Guide	50	25	6	2000-05-1321	AISI 304	
11	2	Pin	36	12		2000-05-0530	AISI 304	
10	1	Sheet; door frame	162	72,5	1,5	2000-05-1073	AISI 304	Bend with V16
9	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1396	AISI 304	Bend with V16
8	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1377	AISI 304	Bend with V16
7	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-1070	AISI 304	Bend with V16
6	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1238	AISI 304	Bend with V16
5	1	Sheet; door frame	639,8	153,4	1,5	2000-05-0527	AISI 304	Bend with V16
4	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1378	AISI 304	Bend with V16
3	2	Sheet; door frame	102,2	64,9	1,5	2000-05-0523	AISI 304	Bend with V16
2	1	Sheet; door frame	2039	149,4	1,5	2000-05-1236	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-1244	Assembly	

Scale: 1:8	Date:	Drawing no. 2000-05-1234	Issue C
Drawn: HS	01-04-2019		
Checked: HS	09-04-2020		
Approved: JWR	10-04-2020	Sheet : 2 of 2	
Mass: 14.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

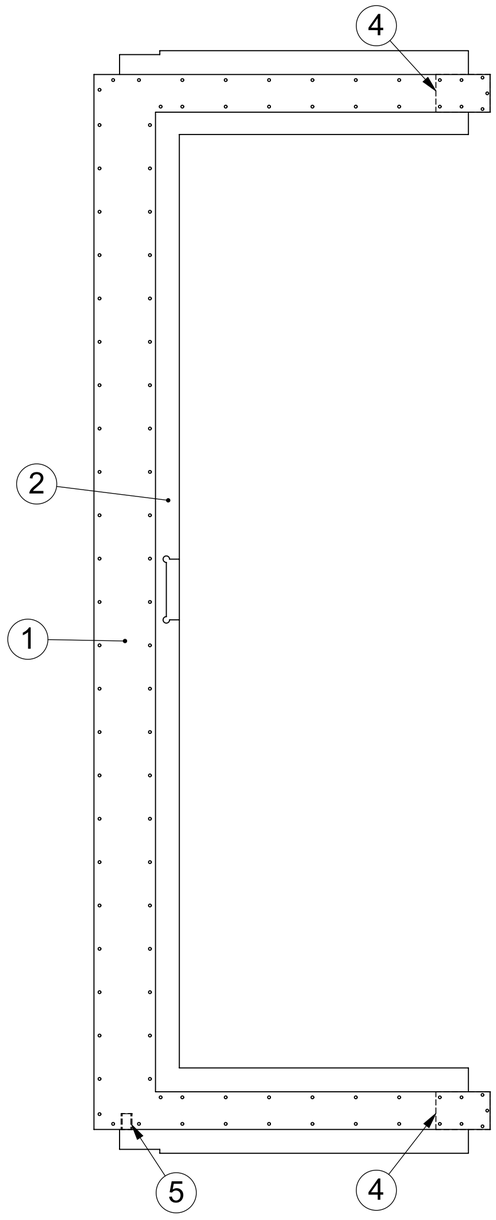
Title: DBJ door right2

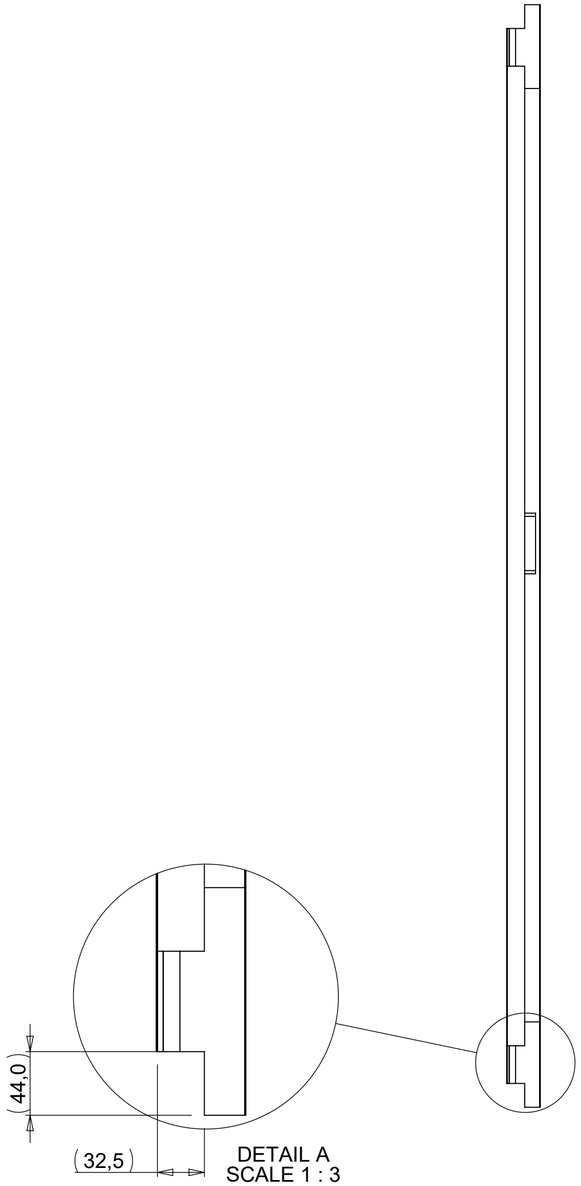
Iss.	Changes	Date	Name
C	Washers added	10-04-2020	MVE
B	~Parts	10-09-2019	HS

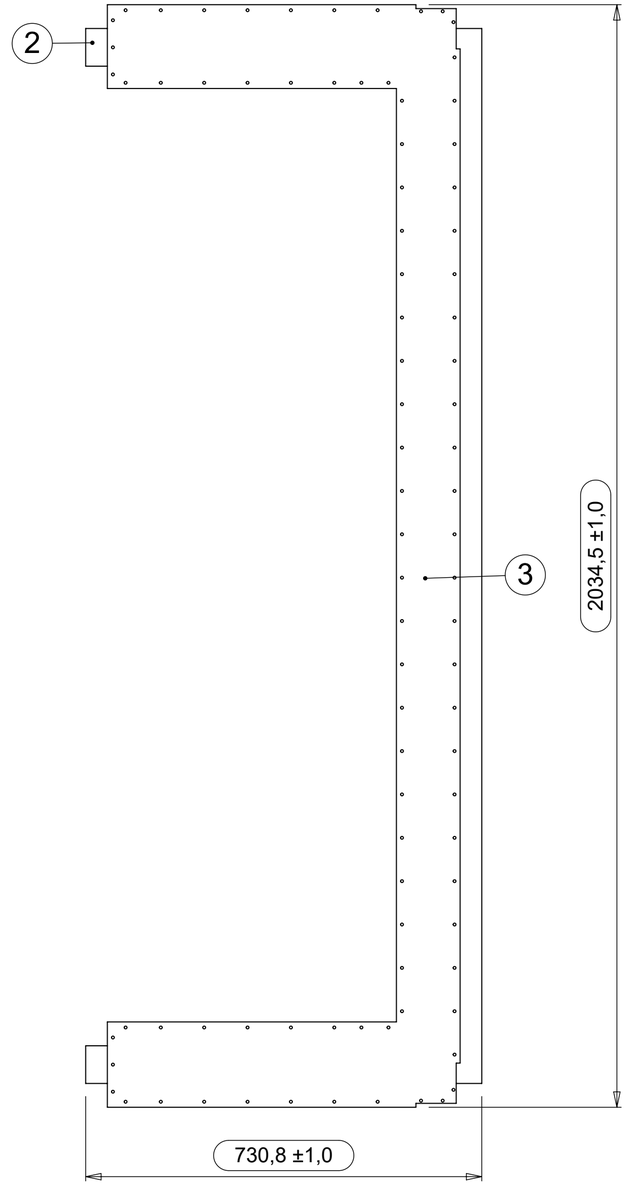
Projection

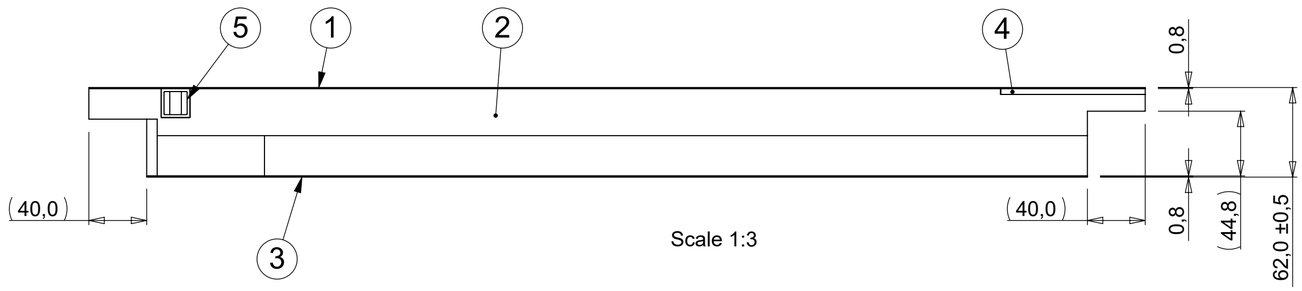
Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Scale 1:3

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Tube 20x20x2	29	20/20	2	2000-04-8840	Alu. 6060-T66	
4	2	Reinforcement sheet	100	69,5	4	2000-05-1206	Alu. 6082-T6	
3	1	Outer sheet	2034,5	650,8	0,8	2000-05-1246	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	730,8	60,4	2000-05-1247	RTM-X	
1	1	Inner sheet	1946,5	730,8	0,8	2000-05-1245	PE-GEGW 0,8 NF	

Scale: 1:8	Date:	Drawing no. 2000-05-1244 Sheet : 1 of 2	Issue B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 2.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

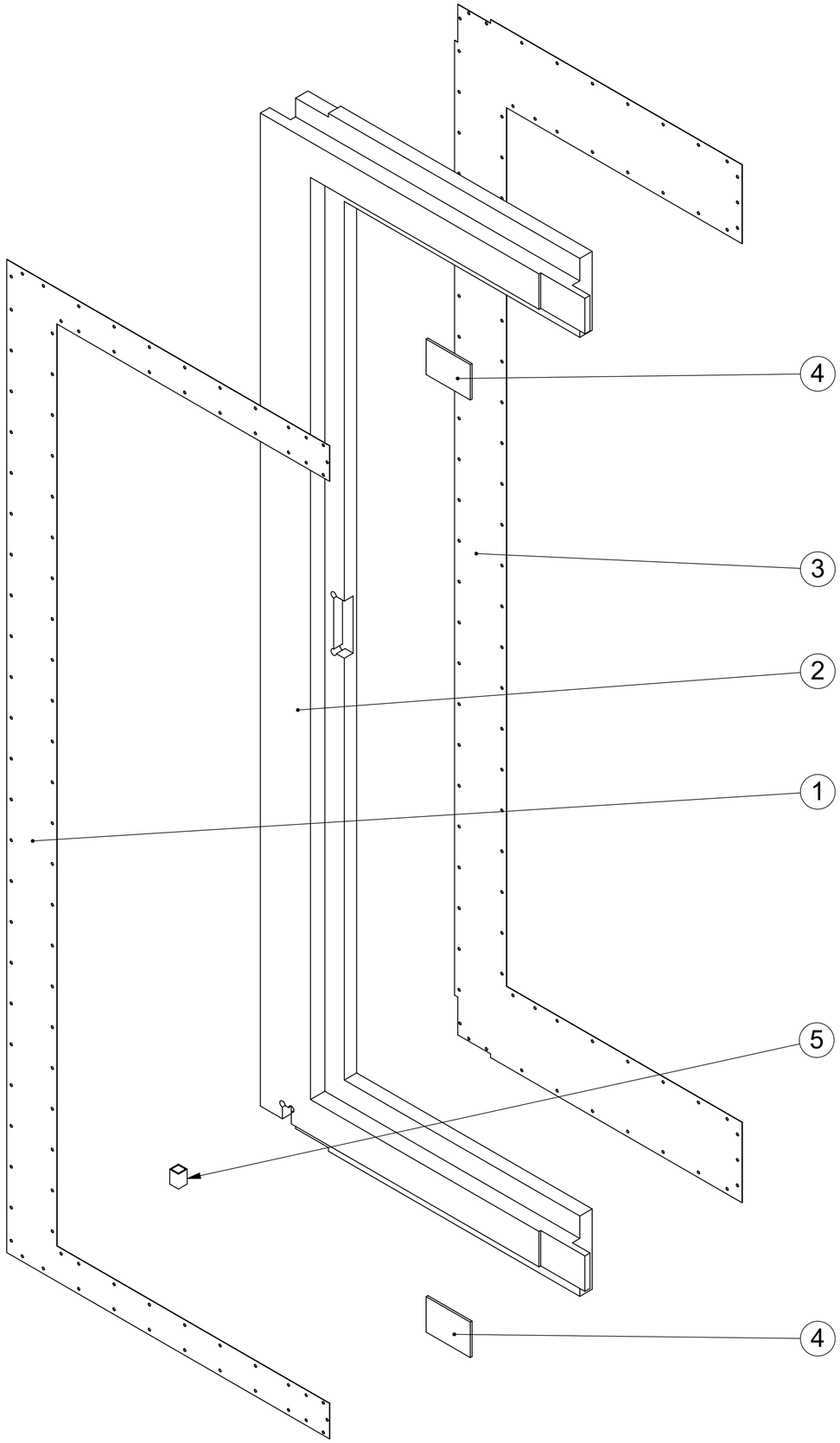
Title: DBJ panel door

Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
5	1	Tube 20x20x2	29	20/20	2	2000-04-8840	Alu. 6060-T66	
4	2	Reinforcement sheet	100	69,5	4	2000-05-1206	Alu. 6082-T6	
3	1	Outer sheet	2034,5	650,8	0,8	2000-05-1246	PE-GEGW 0,8 NF	
2	1	Insulation	2034,5	730,8	60,4	2000-05-1247	RTM-X	
1	1	Inner sheet	1946,5	730,8	0,8	2000-05-1245	PE-GEGW 0,8 NF	

Scale: 1:6	Date:	Drawing no. 2000-05-1244 Sheet : 1 of 2	Issue B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 2.01 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

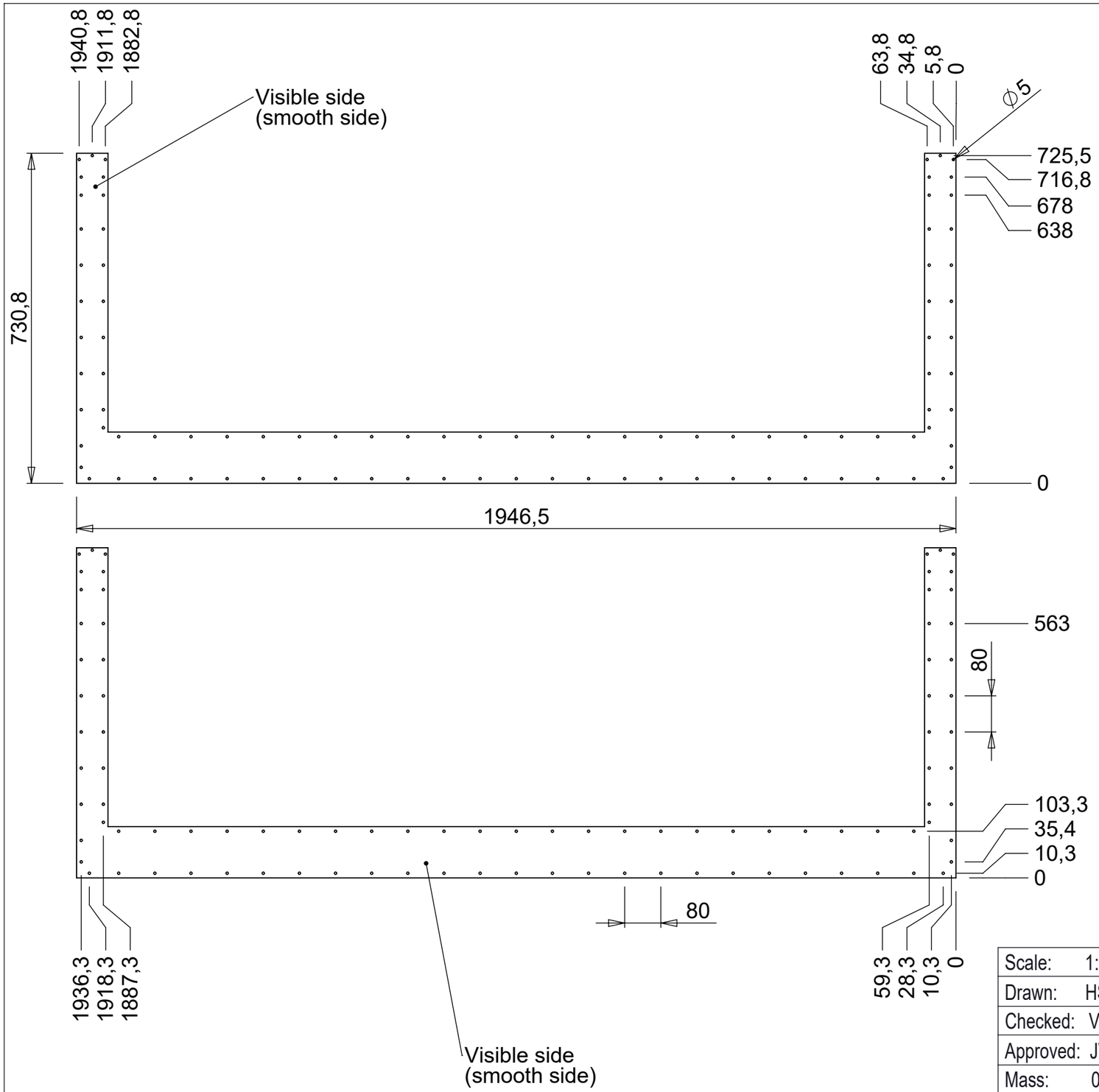
Title: DBJ panel door

Iss.	Changes	Date	Name
B	~Parts	10-09-2019	HS

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Scale: 1:10	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: HS	01-04-2019	2000-05-1245	A	< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 >
Checked: VvM	18-04-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Approved: JWR	10-05-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 0.38 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Inner sheet**

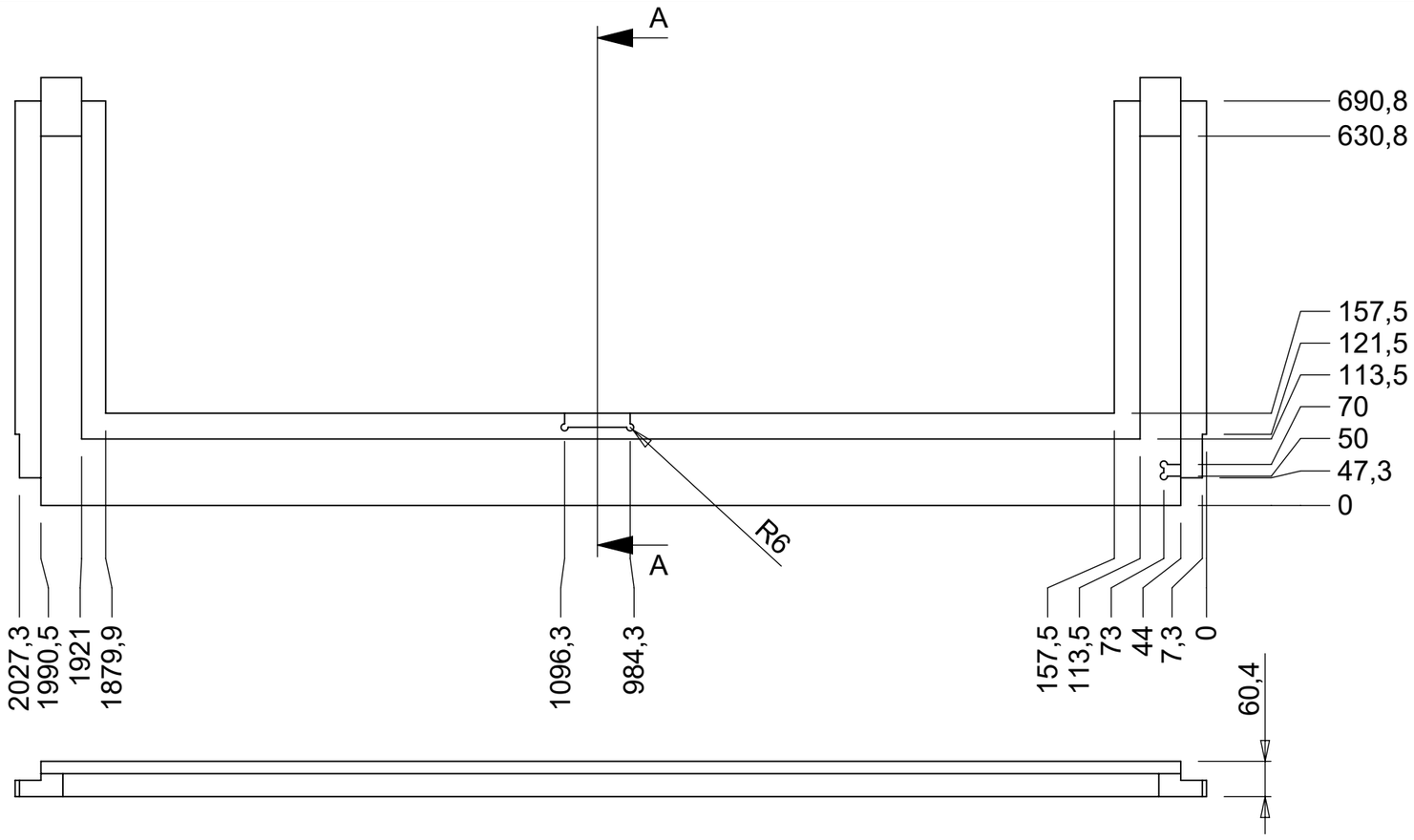
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Inner sheet	1946,5	730,8	0,8	2000-05-1245	PE-GEGW 0,8 NF	

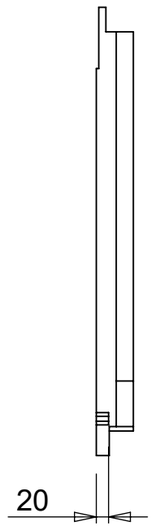
Iss.	Changes	Date	Name

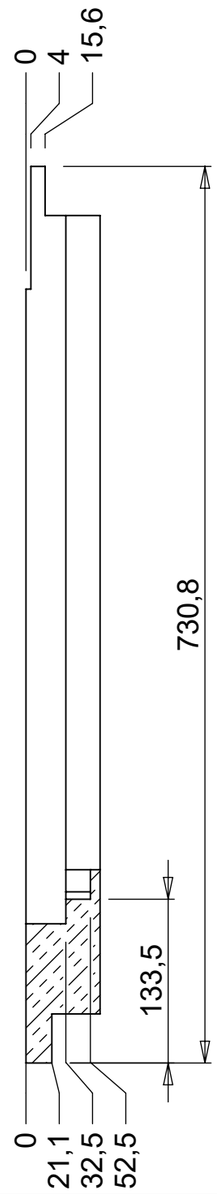
Projection

Size A3

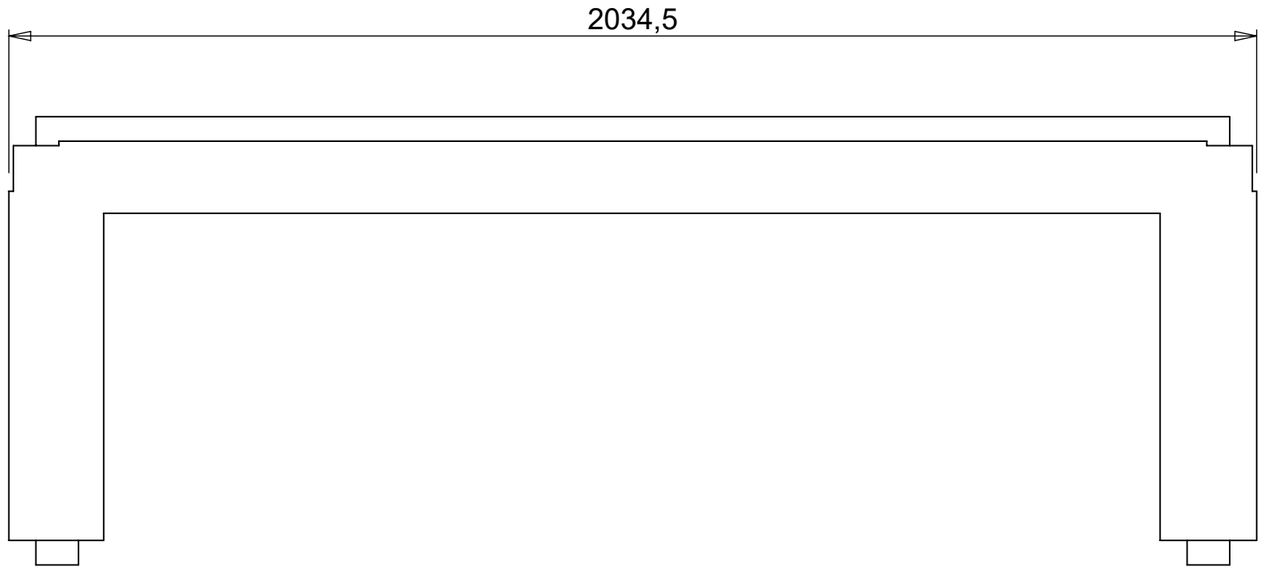
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







SECTION A-A
SCALE 1 : 5



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation	2034,5	730,8	60,4	2000-05-1247	RTM-X	

Scale: 1:10	Date:	Drawing no.: 2000-05-1247 Sheet : 1 of 1	Issue B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 0.96 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

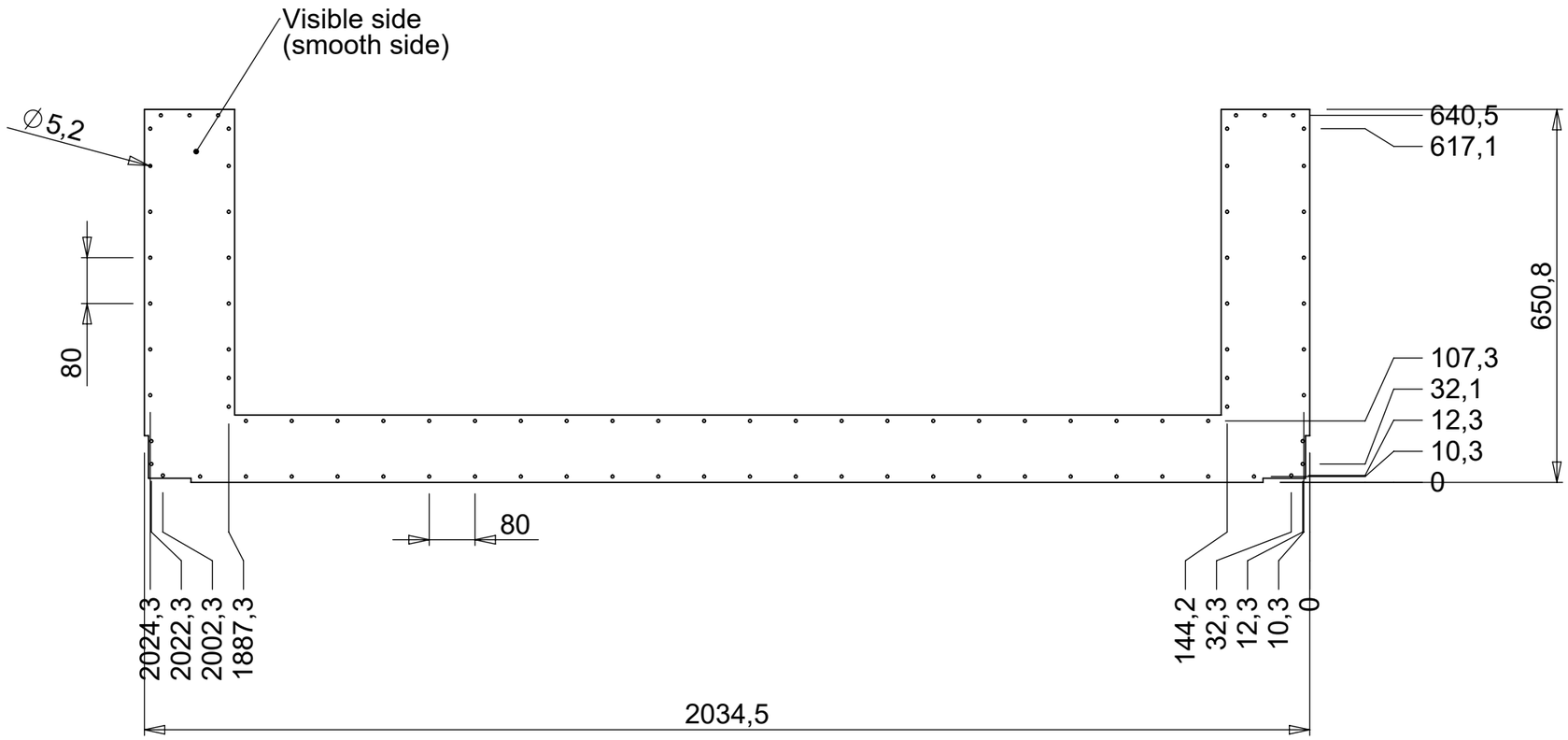
Title: Insulation

Iss.	Changes	Date	Name
B	~Cut out	10-09-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Outer sheet	2034,5	650,8	0,8	2000-05-1246	PE-GEGW 0,8 NF	

Scale: 1:10	Date:	Drawing no.: 2000-05-1246 Sheet : 1 of 1	Issue A
Drawn: HS	01-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 0.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

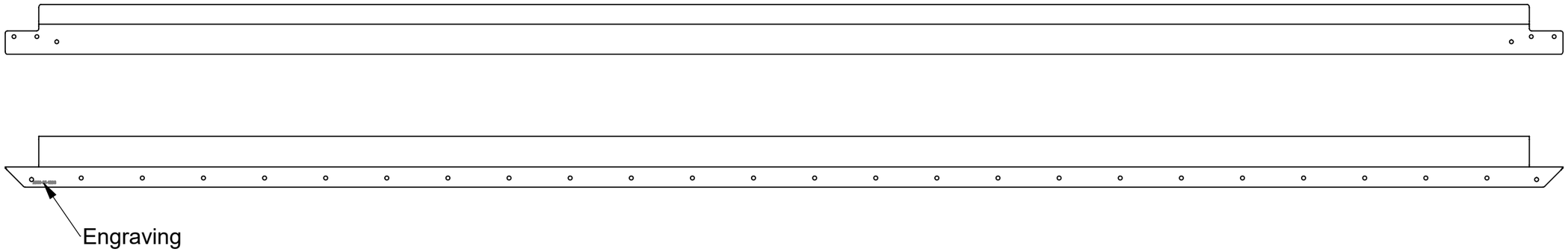
Title: **Outer sheet**

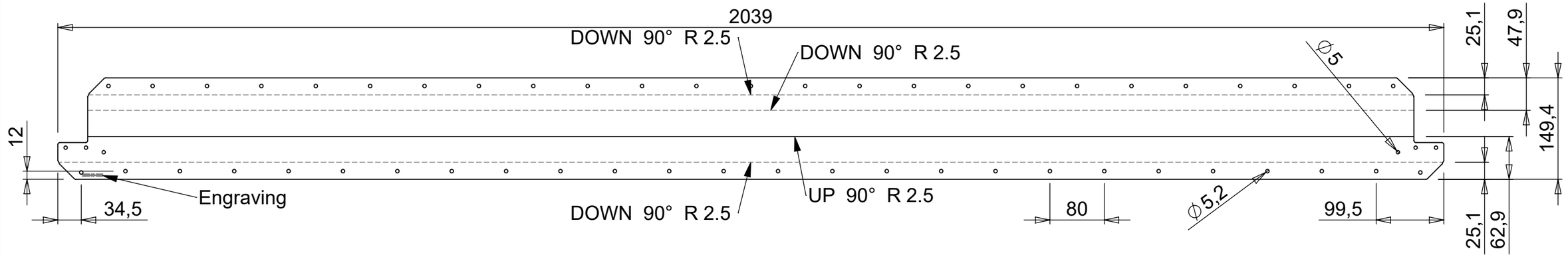
Iss.	Changes	Date	Name

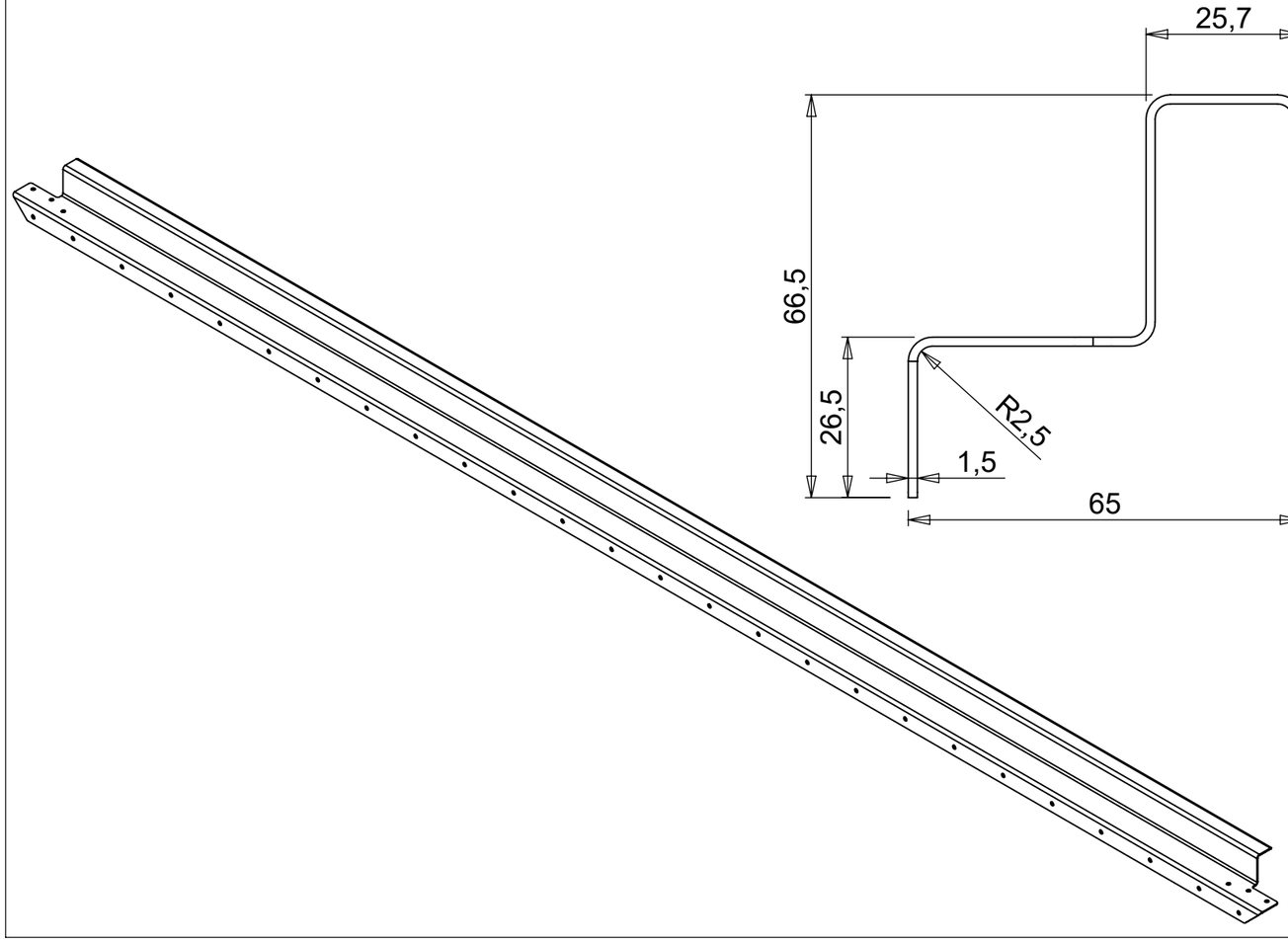
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Sheet; door frame	2039	149,4	1,5	2000-05-1236	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-1236	Issue: B
Drawn: HS	01-04-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: VvM	06-11-2019		< 7 ±0.2 / 7 30 ±0.3 / 30 120 ±0.5 / 120 400 ±0.8 / 400 1000 ±1.0 / 1000 2000 ±1.4 / > 2000 ± 2
Approved: JWR	26-11-2019		Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 3.52 kg		Finish:	Dimensions in mm (u.n.o.)

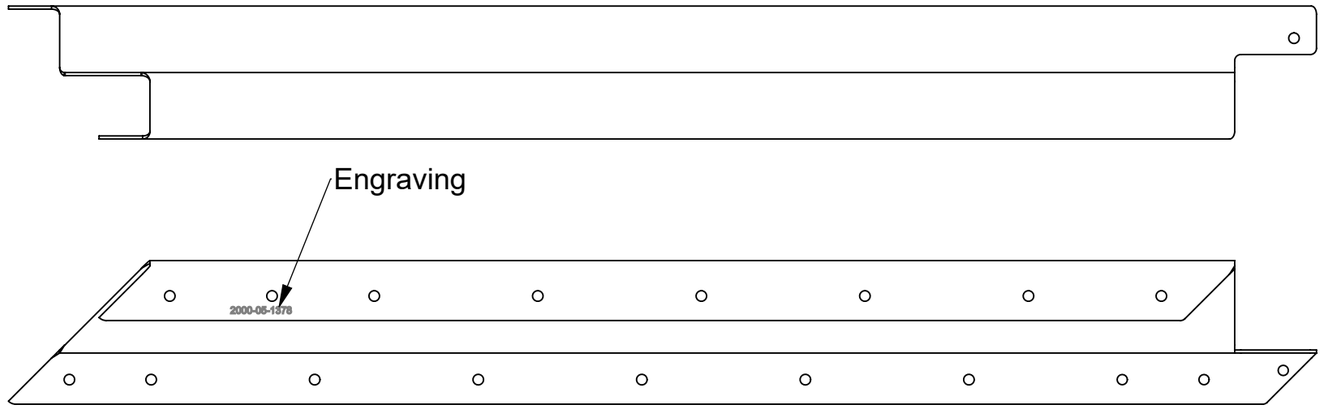
Title: **Sheet; door frame**

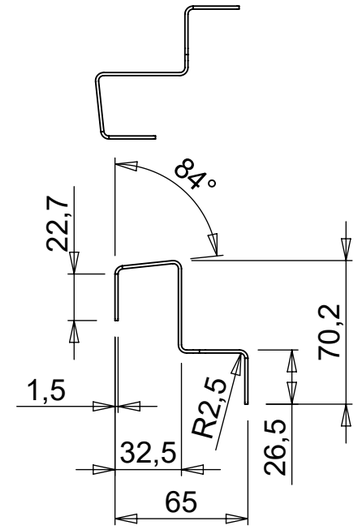
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

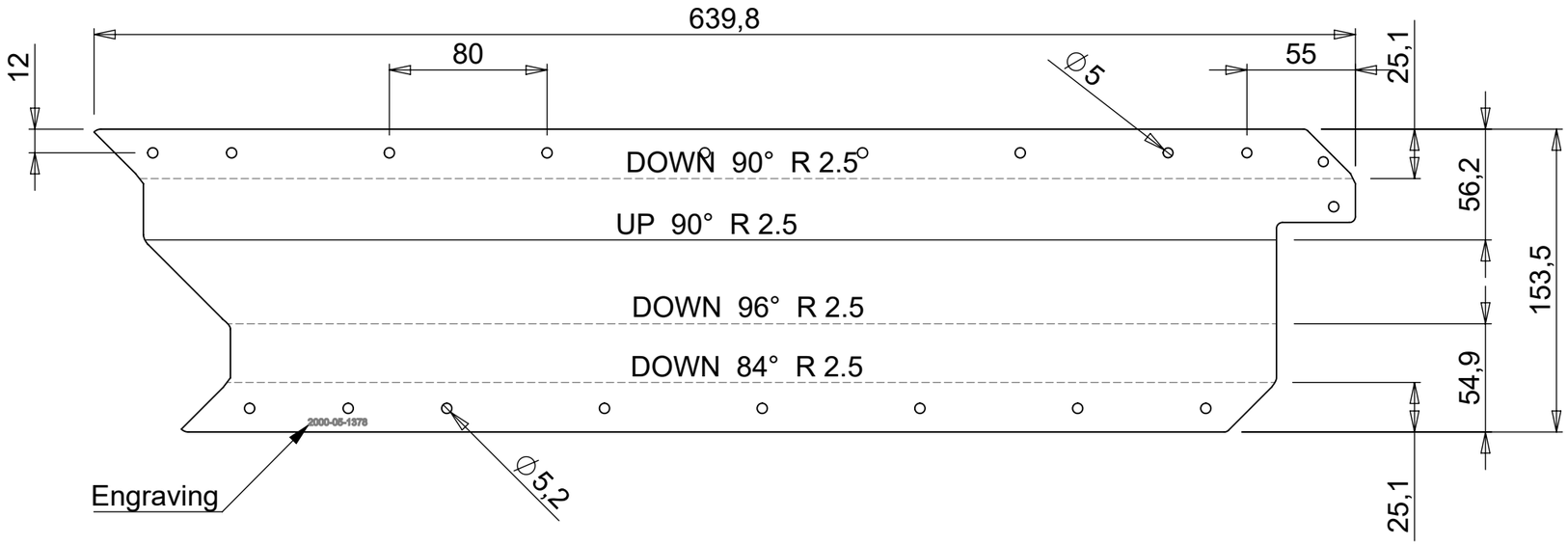
Projection

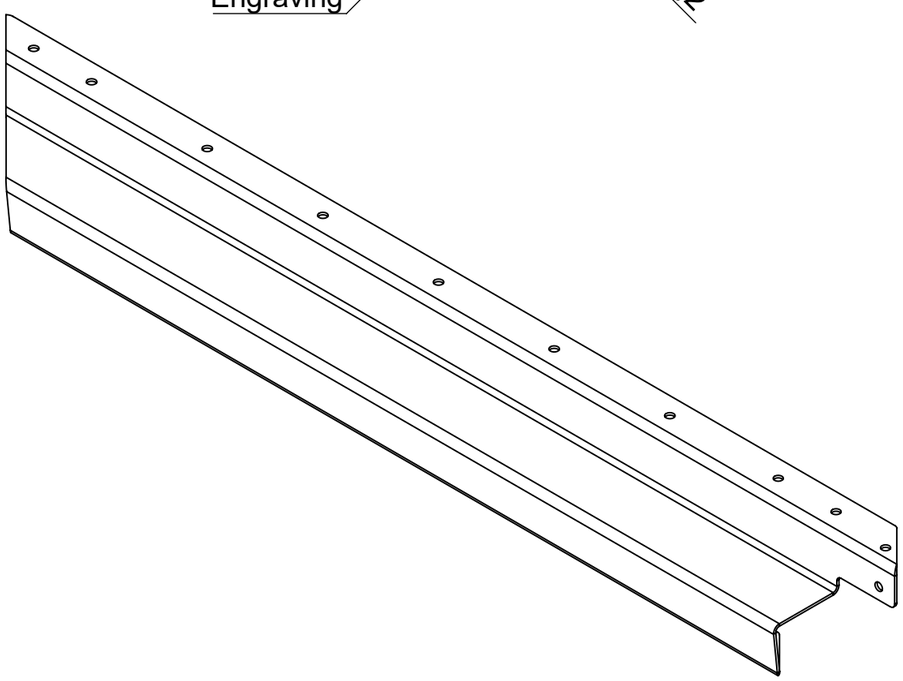
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Sheet; door frame	639,8	153,5	1,5	2000-05-1378	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.: 2000-05-1378 Sheet : 1 of 1	Issue A
Drawn: HS	01-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR (VvM)	10-10-2019		
Mass: 1.04 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

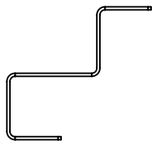
Title: **Sheet; door frame**

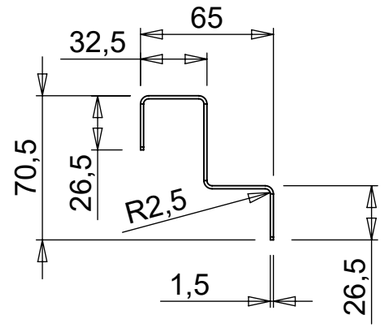
Iss.	Changes	Date	Name

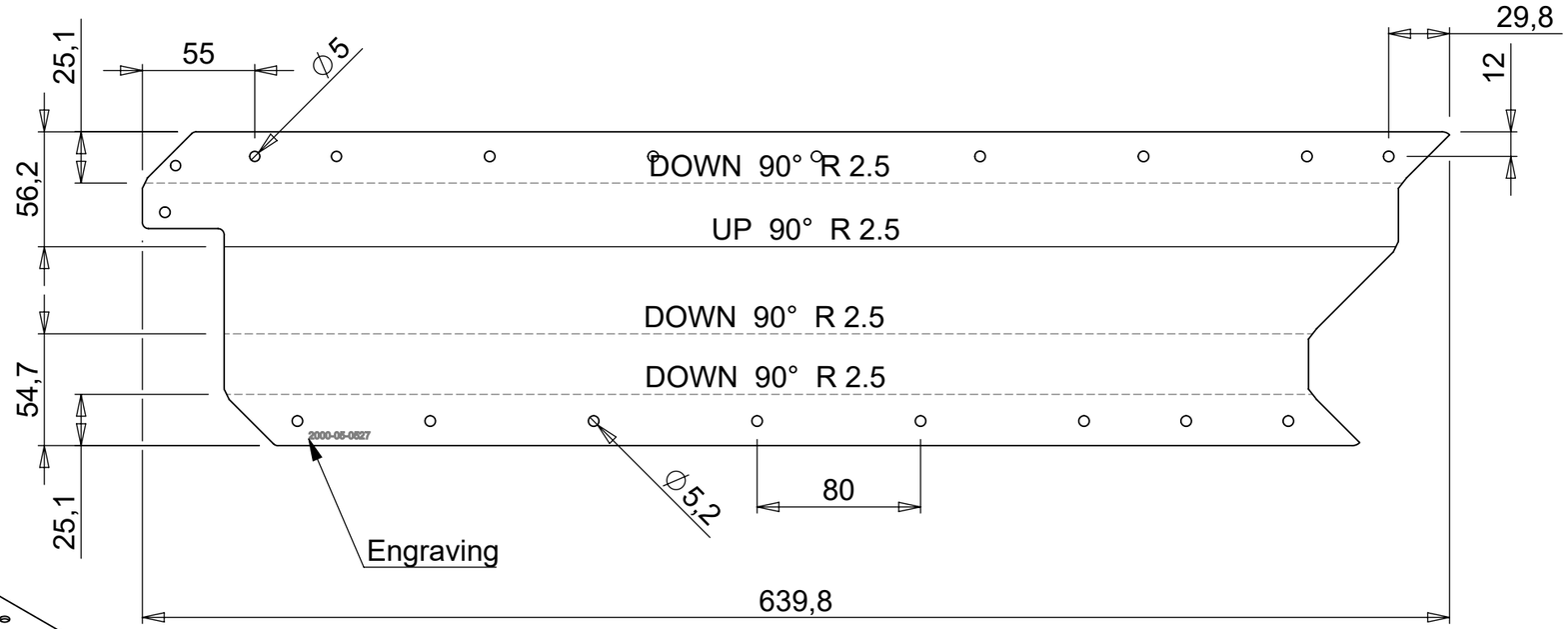
Projection

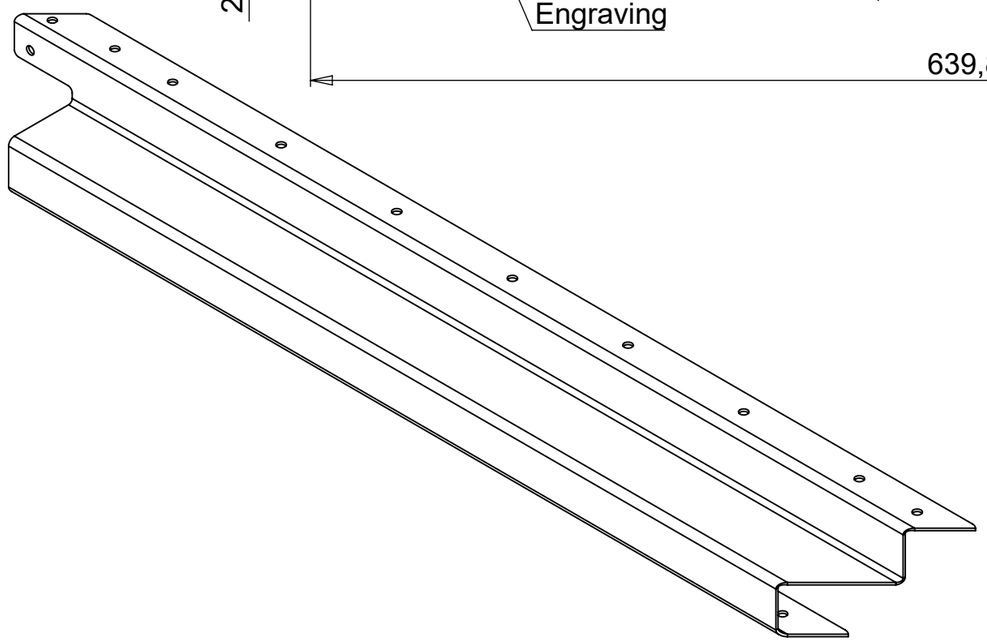
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	639,8	153,4	1,5	2000-05-0527	AISI 304	Bend with V16

Scale: 1:3	Date:	Drawing no.: 2000-05-0527	Issue: A
Drawn: HS	01-04-2019	Sheet : 1 of 1	
Checked: VvM	18-04-2019		
Approved: JWR (VvM)	10-10-2019		
Mass: 1.04 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

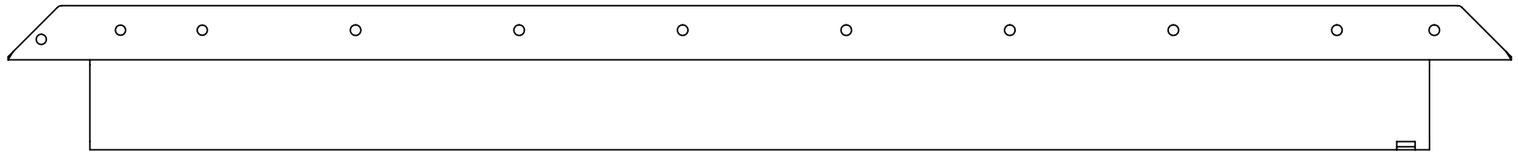
Title: **Sheet; door frame**

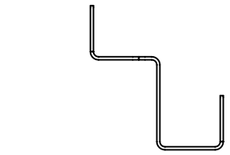
Iss.	Changes	Date	Name

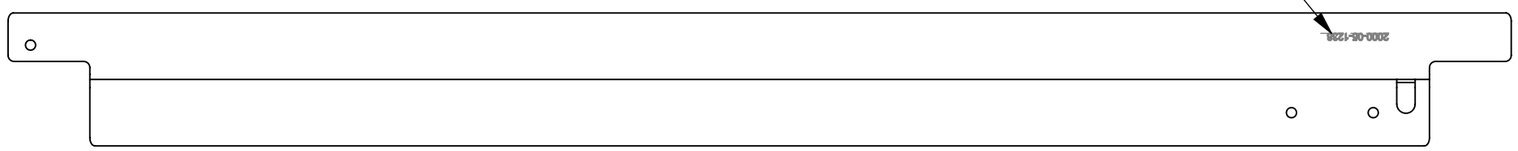
Projection

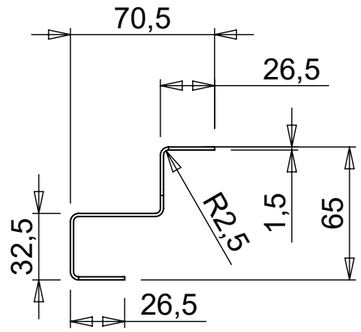
Size A3

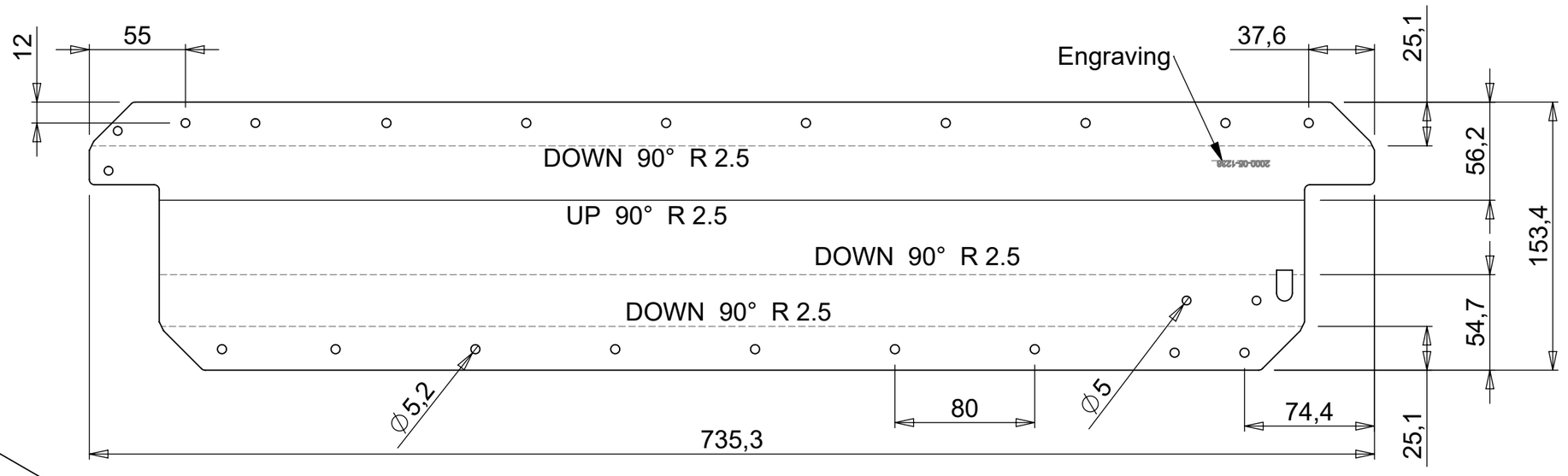
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

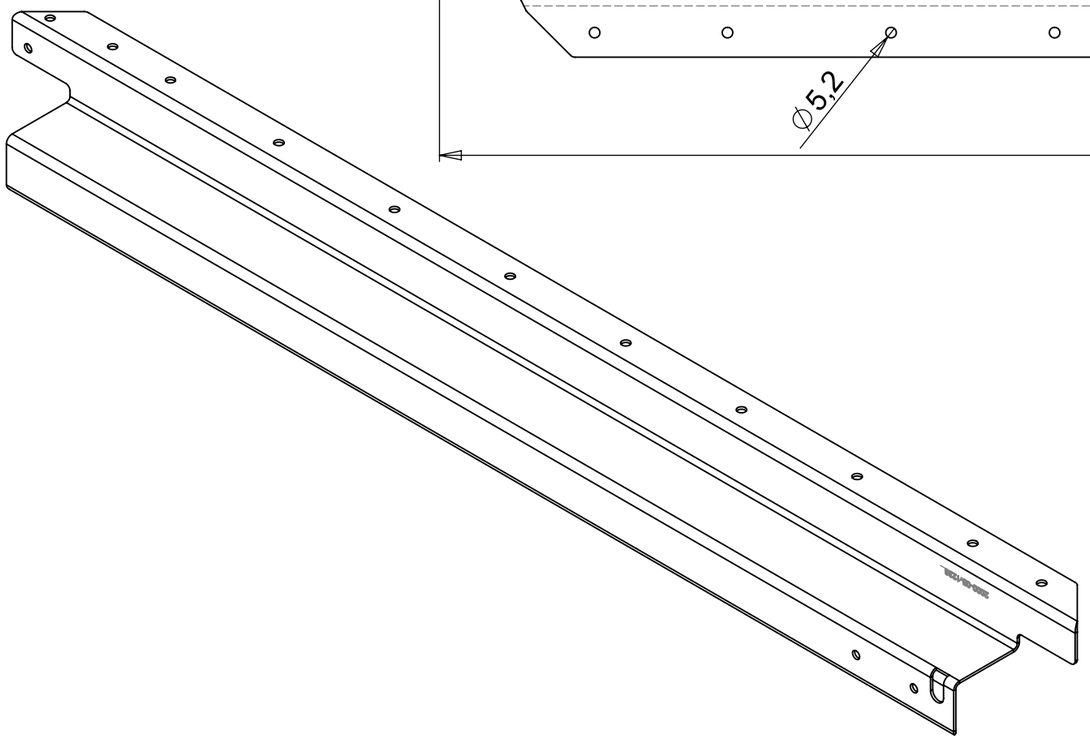












1	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1238	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:3	Date:	Drawing no.:	Issue	Tolerances (u.n.o.)
Drawn: HS	01-04-2019	2000-05-1238	A	< 7 / 7 30 / 30 120 / 120 400 / 400 1000 / 1000 2000 / 2000 >
Checked: VvM	18-04-2019	Sheet : 1 of 1		±0.2 / ±0.3 / ±0.5 / ±0.8 / ±1.0 / ±1.4 / ± 2
Approved: JWR	10-05-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Mass: 1.23 kg		Finish:		Dimensions in mm (u.n.o.)

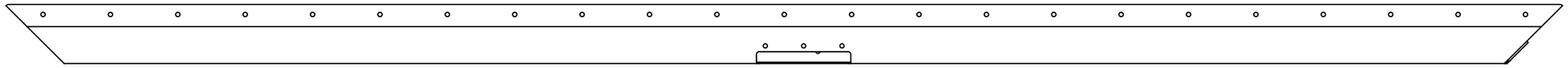
Title: **Sheet; door frame**

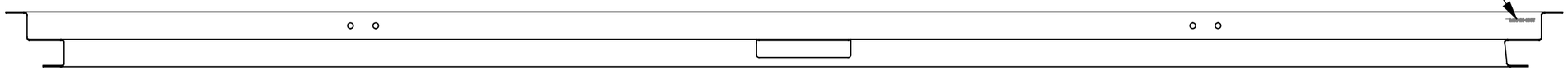
Iss.	Changes	Date	Name

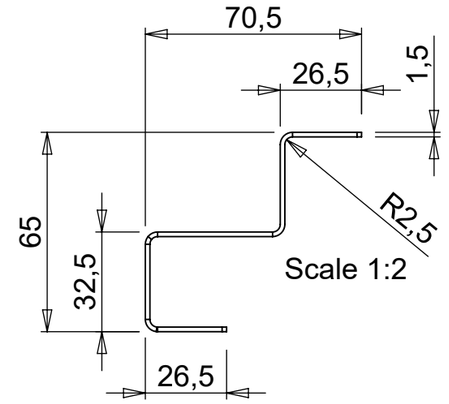
Projection

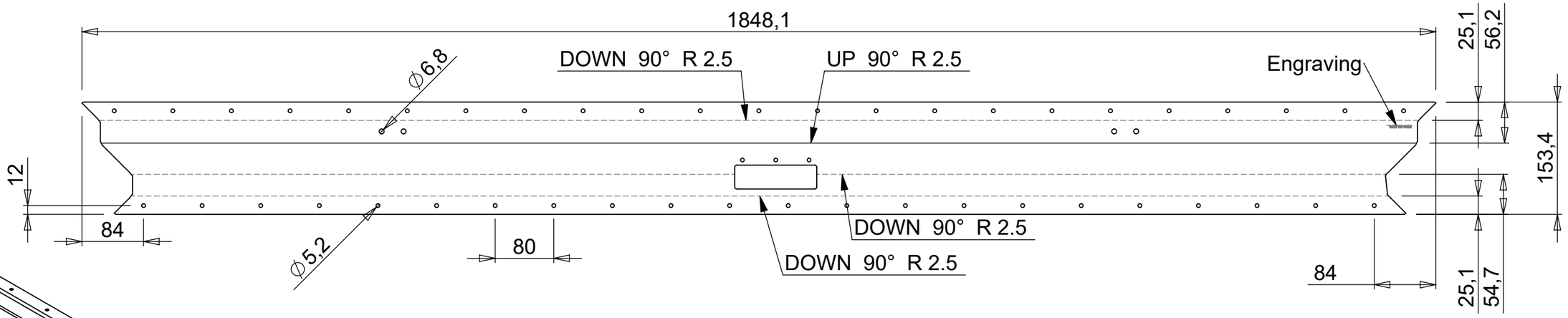
Size A3

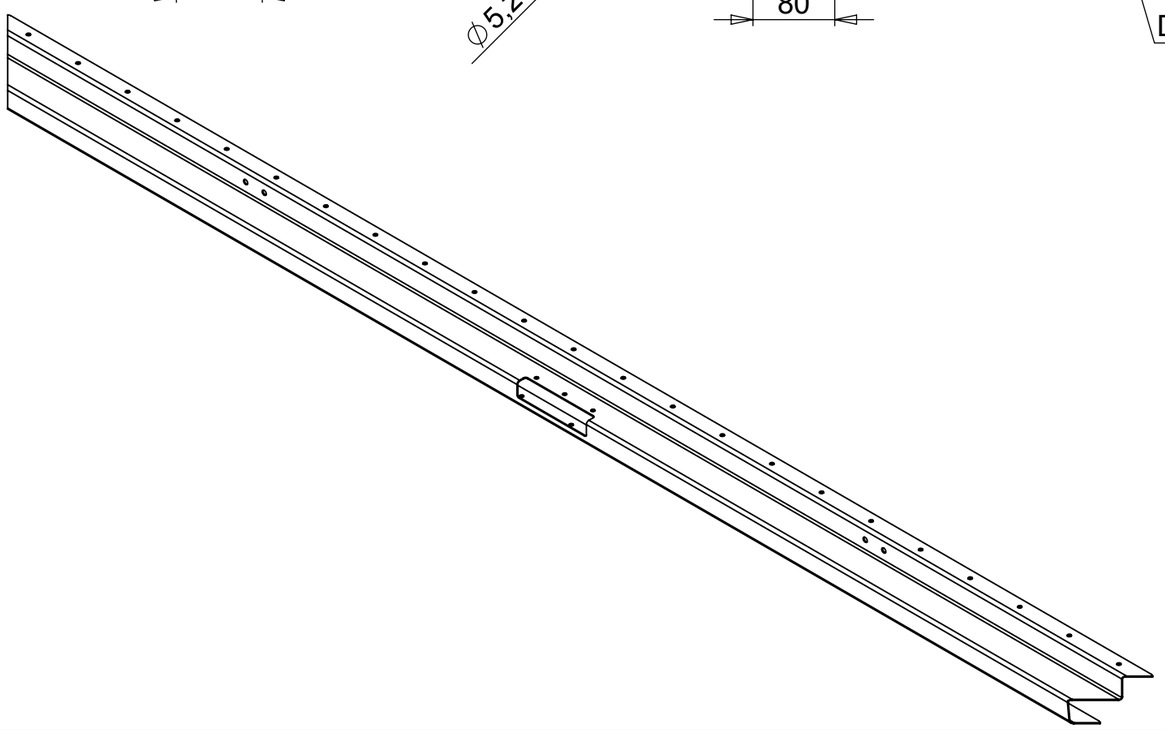
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478











1	1	Sheet; door frame	1848,1	153,4	1,5	2000-05-1070	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:6	Date:	Drawing no.: 2000-05-1070	Issue B	Tolerances (u.n.o.)
Drawn: HS	01-04-2019			< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Checked: VvM	10-09-2019			Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	10-09-2019	Sheet : 1 of 1		
Mass: 3.19 kg		Finish:		Dimensions in mm (u.n.o.)

Title: **Sheet; door frame**

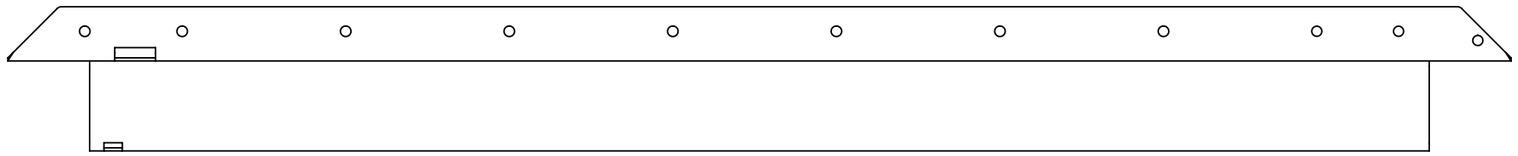
Iss.	Changes	Date	Name
B	~Cut out	10-09-2019	HS

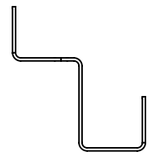
Projection

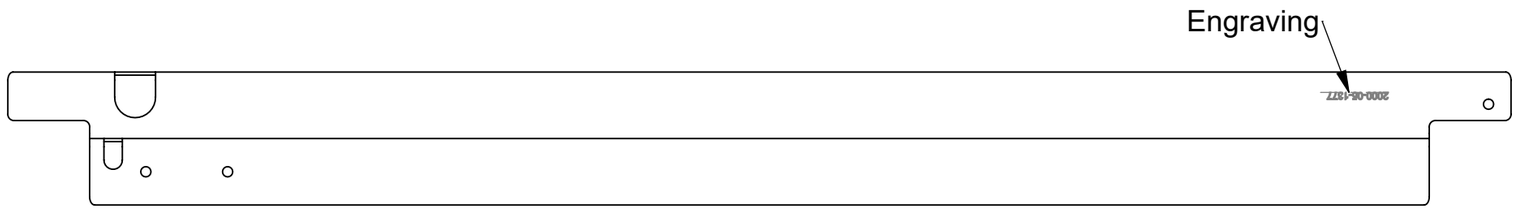
Size A3

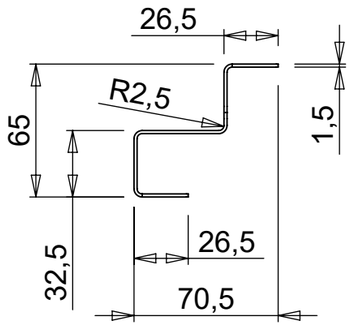
VRR

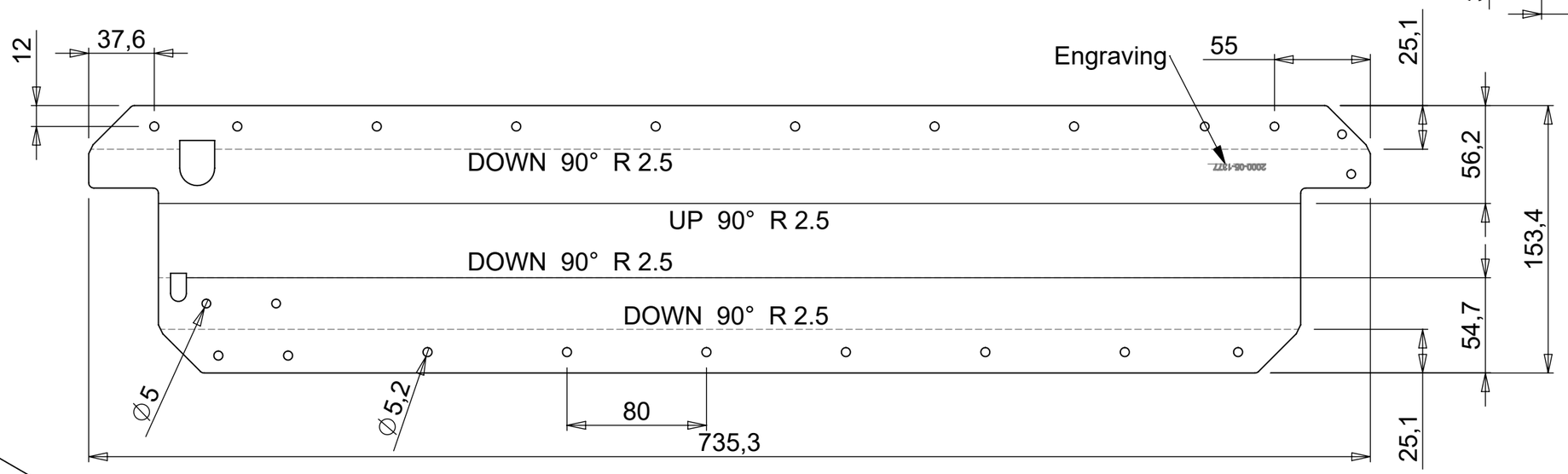
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

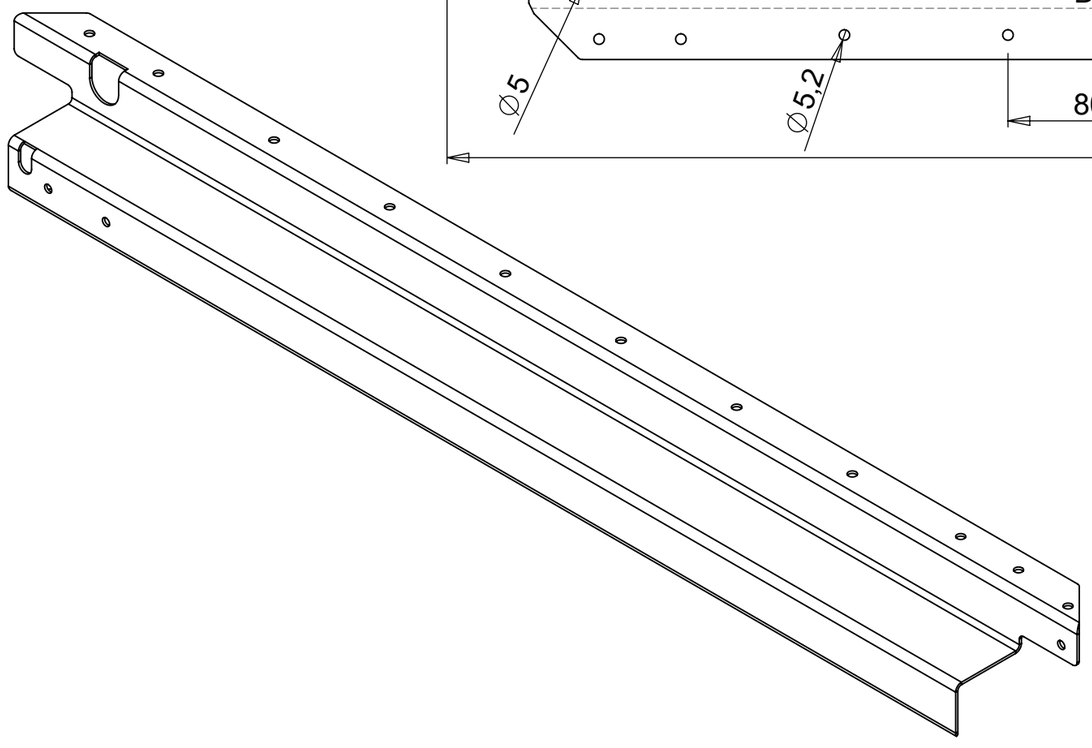












Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	735,3	153,4	1,5	2000-05-1377	AISI 304	Bend with V16

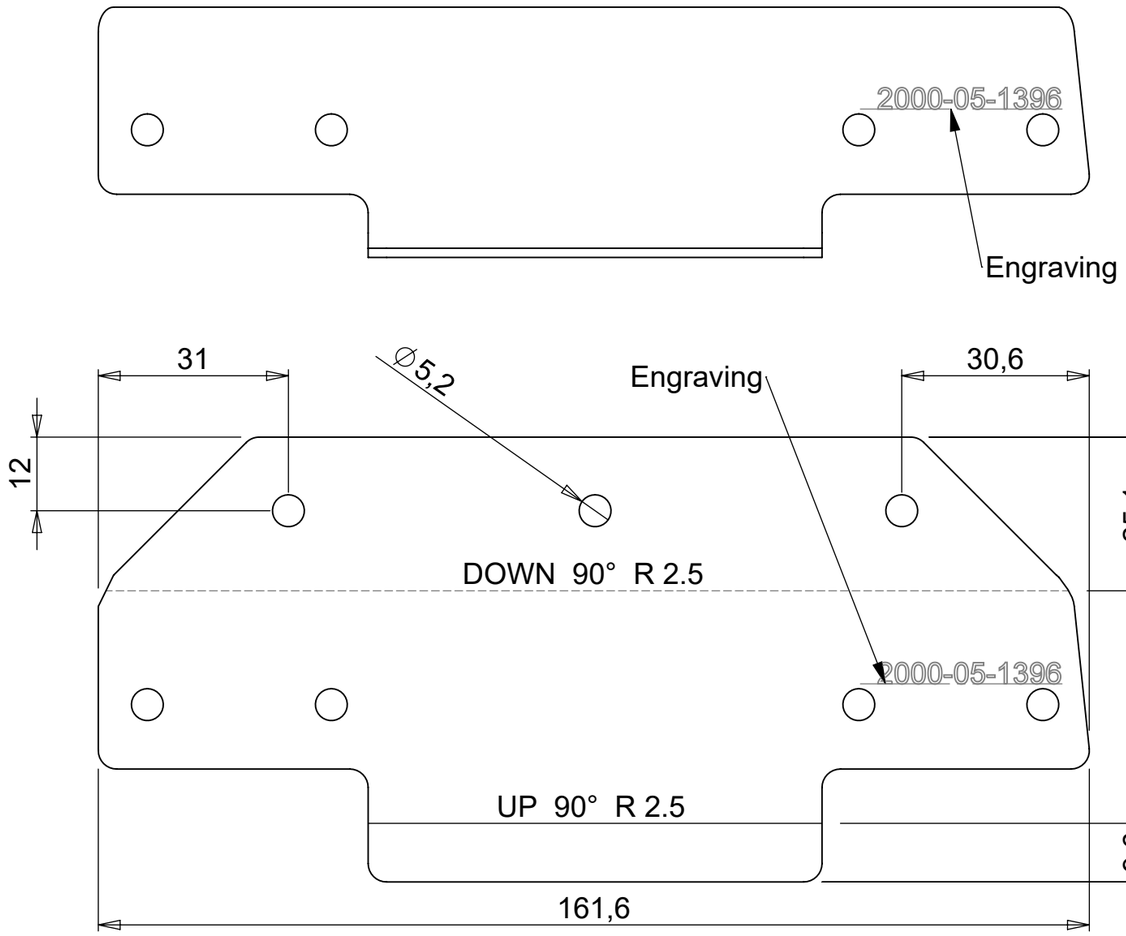
Scale: 1:3	Date:	Drawing no.: 2000-05-1377	Issue A	Tolerances (u.n.o.)
Drawn: HS	01-04-2019			< 7 30 120 400 1000 2000
Checked: VvM	18-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	10-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 1.22 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
Title: Sheet; door frame				Dimensions in mm (u.n.o.)

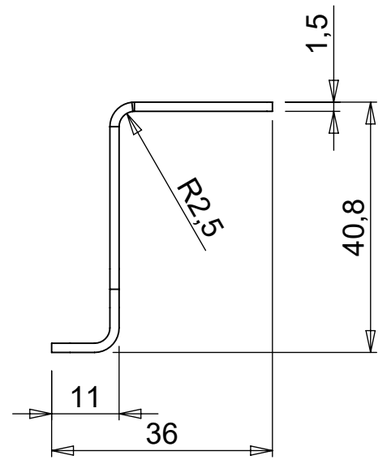
Iss.	Changes	Date	Name

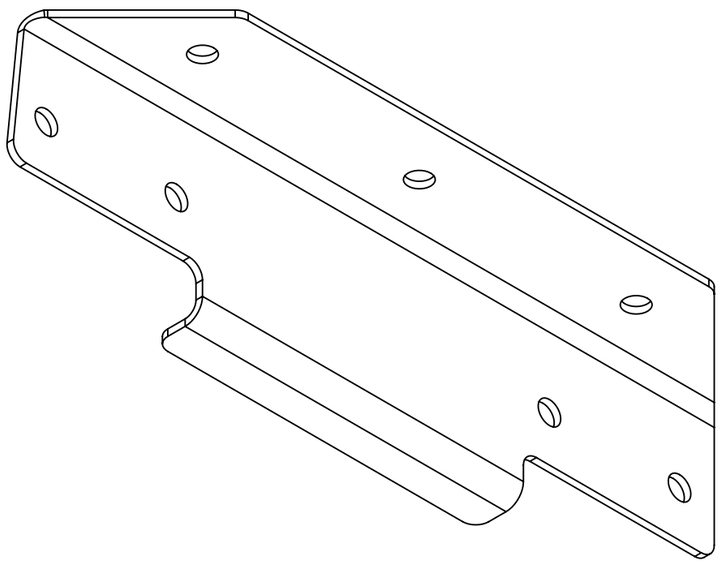
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	161,6	72,5	1,5	2000-05-1396	AISI 304	Bend with V16

Scale: 1:1	Date:	Drawing no.: 2000-05-1396	Issue: A
Drawn: HS	01-04-2019	Sheet : 1 of 1	Tolerances (u.n.o.)
Checked: VvM	18-04-2019		< 7 30 120 400 1000 2000 7 30 120 400 1000 2000 > ±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2 Raw extrusion in accordance with OEM drawing and EN755-9
Approved: JWR	10-05-2019		
Mass: 0.11 kg		Finish:	Dimensions in mm (u.n.o.)

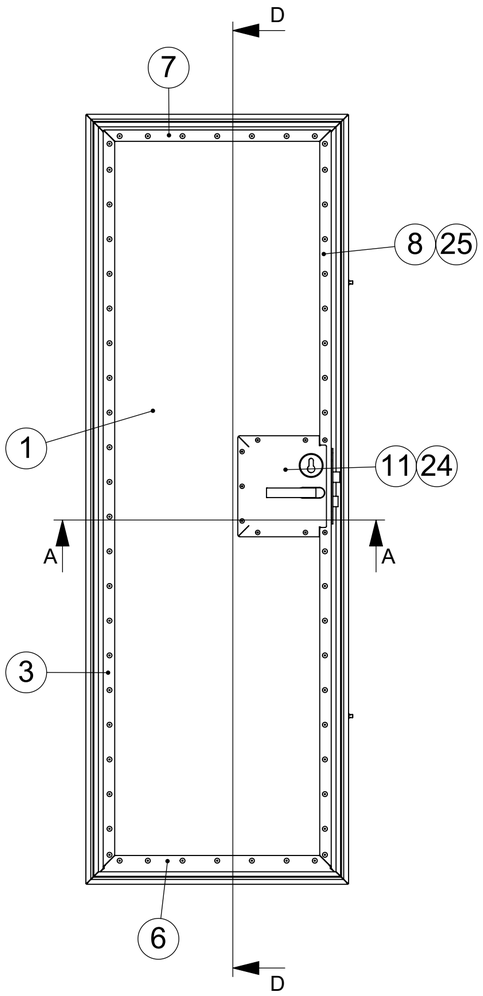
Title: **Sheet; door frame**

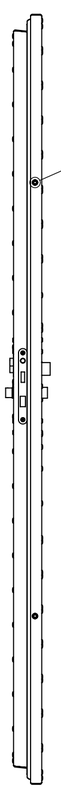
Iss.	Changes	Date	Name

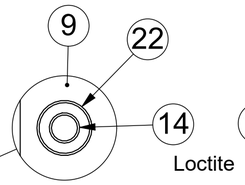
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

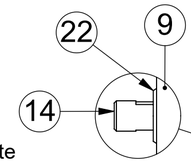




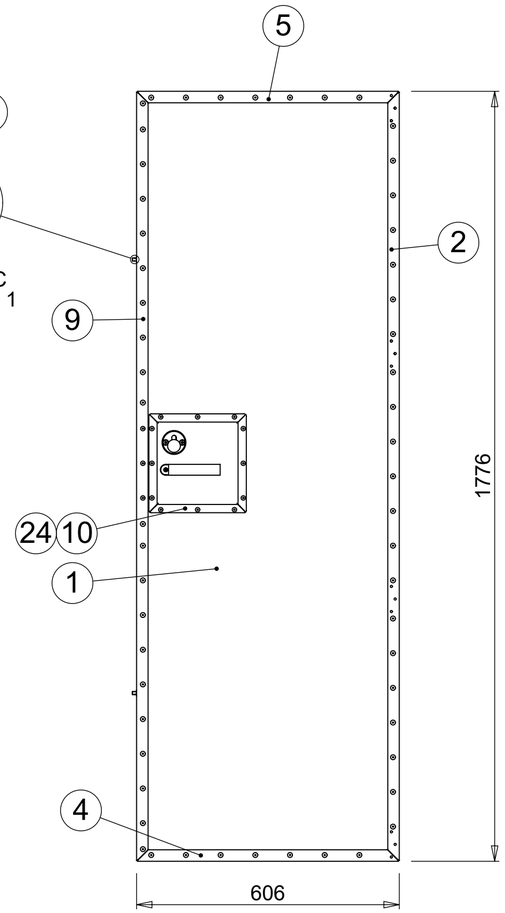


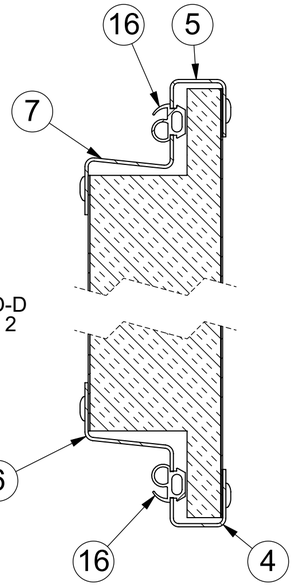
DETAIL B
SCALE 1 : 1

Loctite



DETAIL C
SCALE 1 : 1



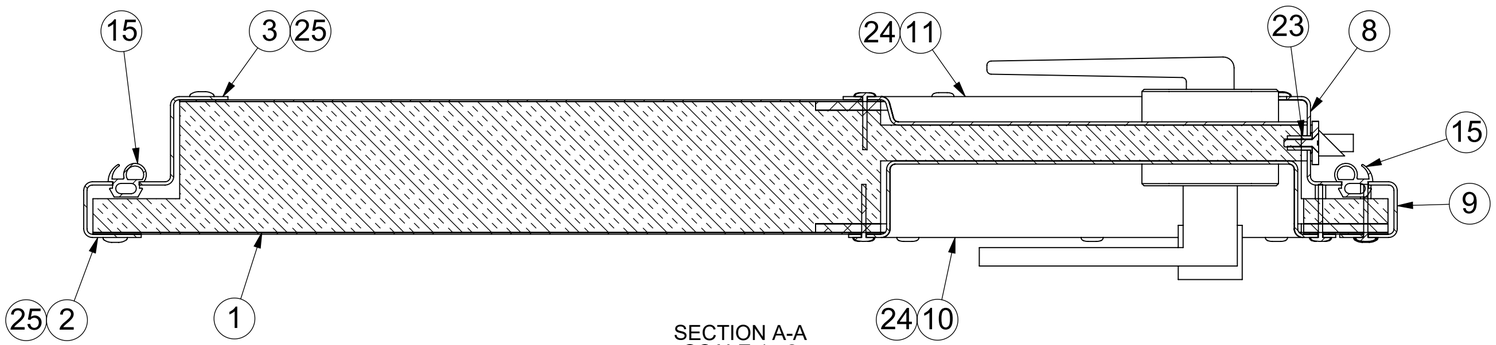


SECTION D-D
SCALE 1 : 2

Sheet 2: Rivet usage
Sheet 3: Details lock and door handle

Place WHITE INNO SEAL on (2) (3) (4) (5) (6) (7) (8) (9) before placing on (1)
Remove excess sealant

Note that the sealant has a drying time of 2 hours.



SECTION A-A
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
27	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
26	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
25	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
24	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
23	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
22	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	247,3	221,2	1,5	2000-05-1406	AISI 304	Bend with V16
10	1	Sheet door handle	289,4	286	1,5	2000-05-1249	AISI 304	
9	1	Sheet; door frame	1778	64,5	1,5	2000-05-1405	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-1410	AISI 304	Bend with V16
7	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
6	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-1413	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-1229	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3477	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023	Sheet : 1 of 3	
Approved: HS	08-08-2023		
Mass: 17.53 kg		Finish:	Dimensions in mm (u.n.o.)

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Title: DBJ door right 3

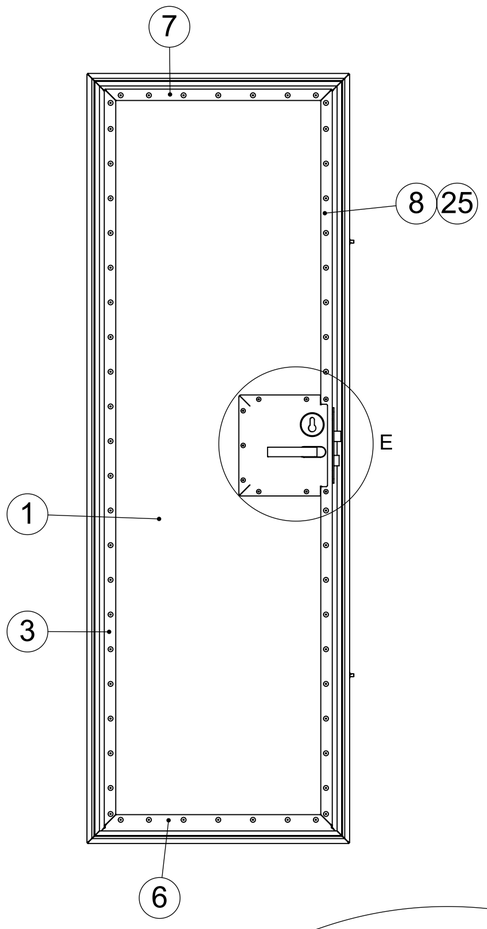
Iss.	Changes	Date	Name

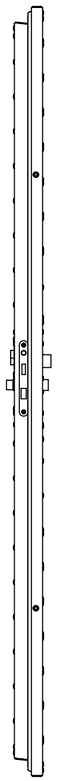
Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

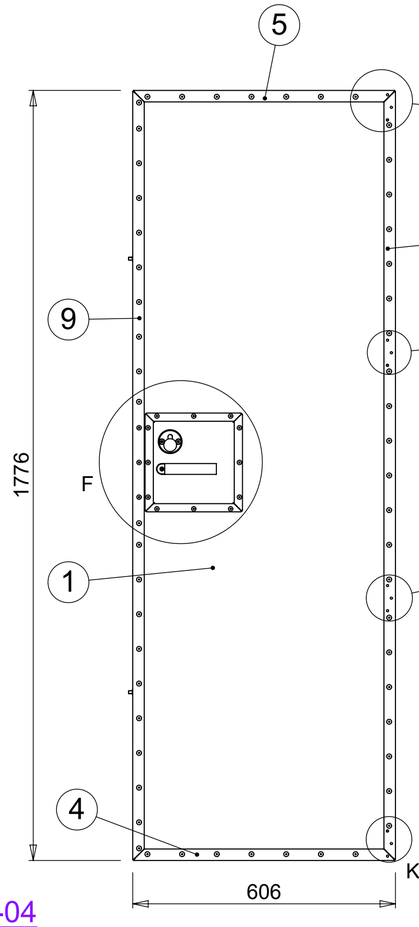
Rivet usage

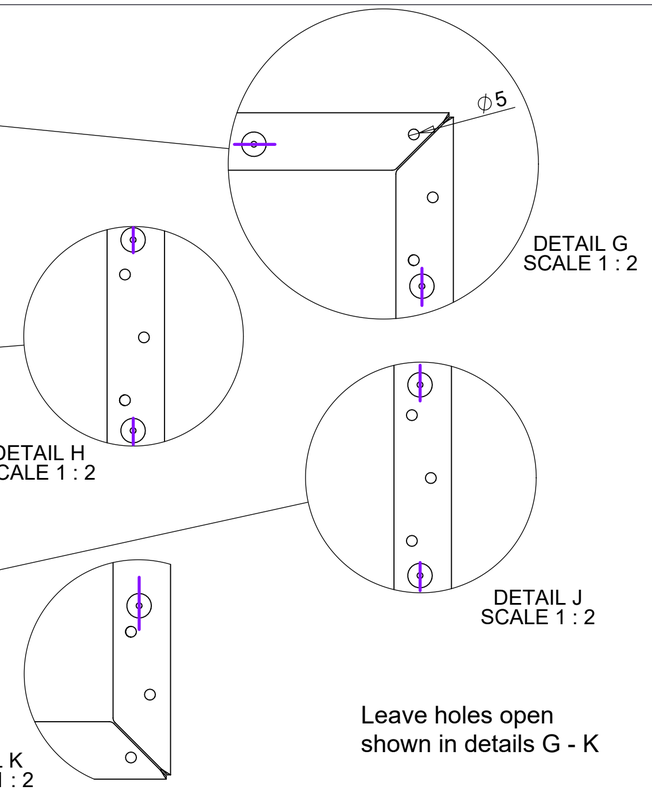




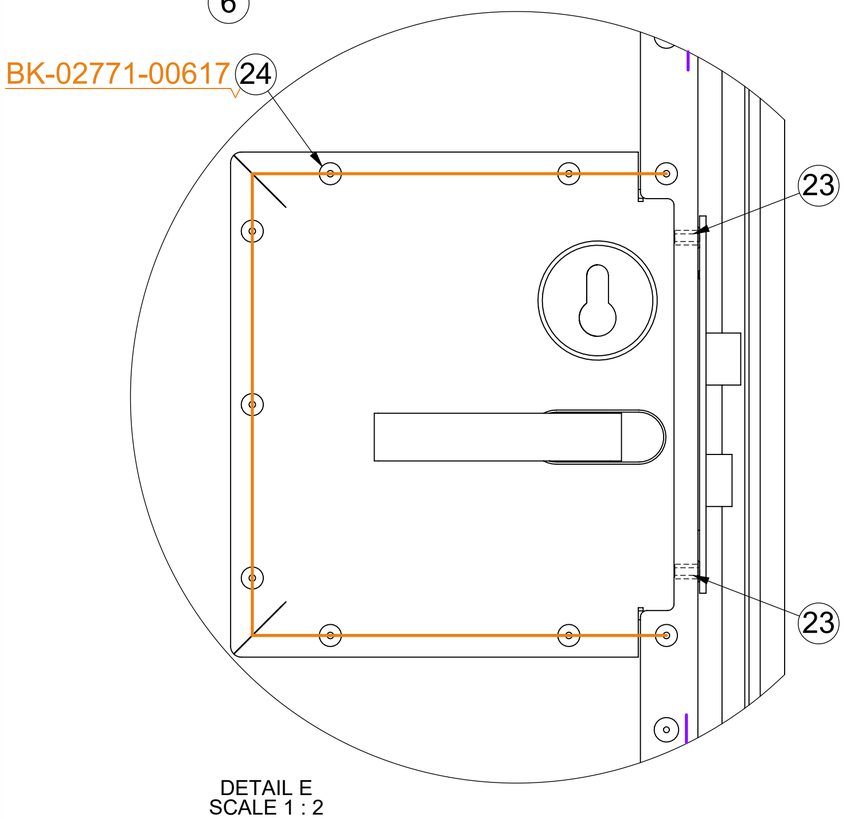
Place WHITE INNO SEAL on
(2) (3) (4) (5) (6) (7) (8) (9) before placing on (1)
Remove excess sealant

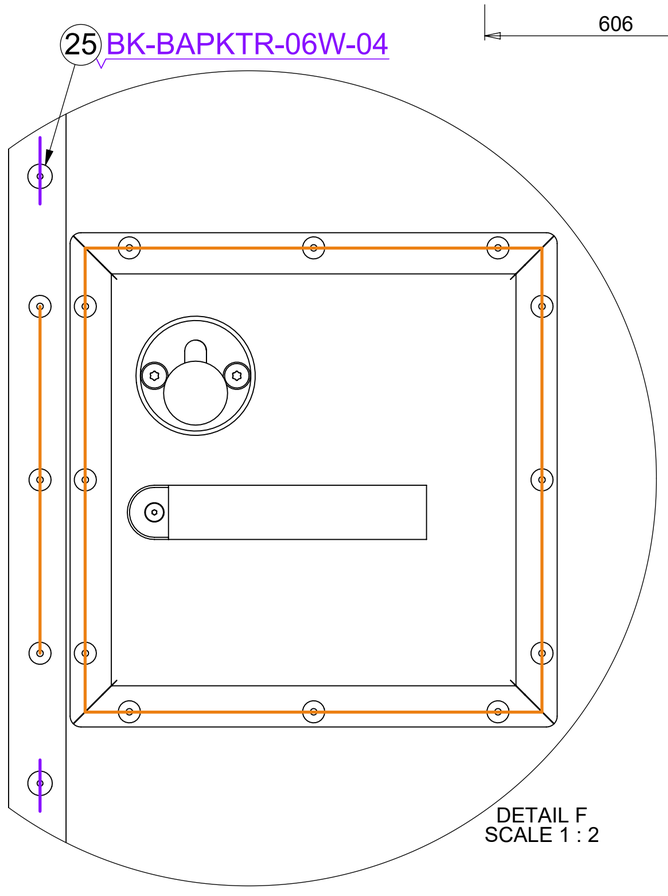
Note that the sealant has a drying time of 2 hours.





Leave holes open
shown in details G - K





Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
27	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
26	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
25	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
24	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
23	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
22	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	247,3	221,2	1,5	2000-05-1406	AISI 304	Bend with V16
10	1	Sheet door handle	289,4	286	1,5	2000-05-1249	AISI 304	
9	1	Sheet; door frame	1778	64,5	1,5	2000-05-1405	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-1410	AISI 304	Bend with V16
7	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
6	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-1413	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-1229	Assembly	

Scale:	1:10	Date:	
Drawn:	MBMH	28-06-2023	
Checked:	PvT	31-07-2023	
Approved:	HS	08-08-2023	
Mass:	17.53 kg		

Drawing no. 2000-07-3477
Sheet : 2 of 3

Issue: A

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Finish:

Dimensions in mm (u.n.o.)

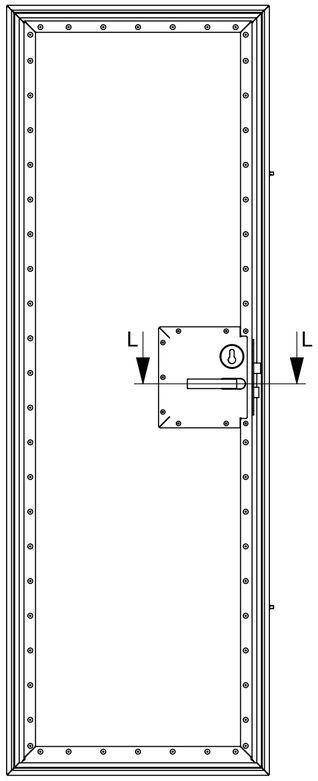
Title: DBJ door right 3

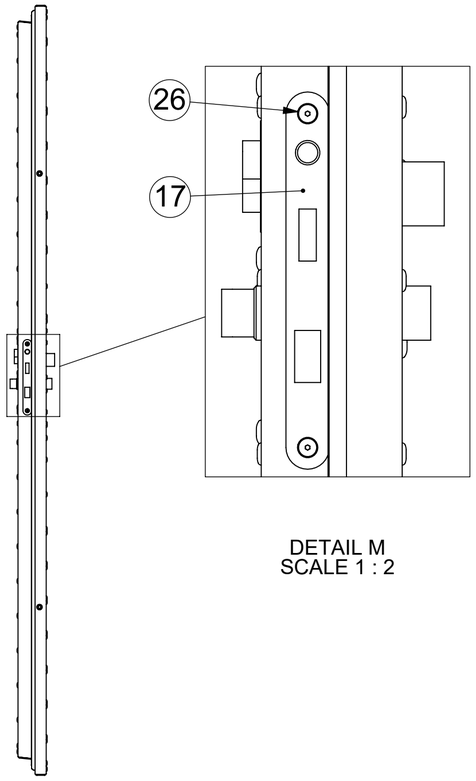
Iss.	Changes	Date	Name

Projection

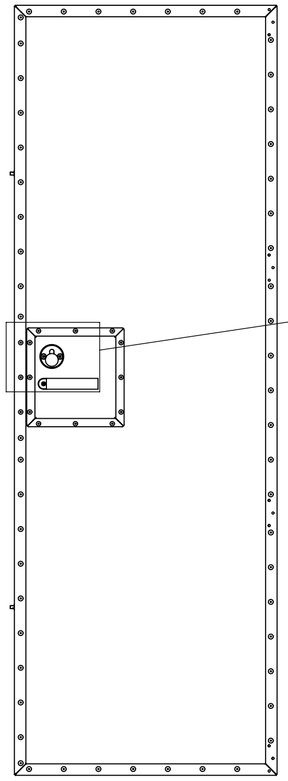
Size: A2

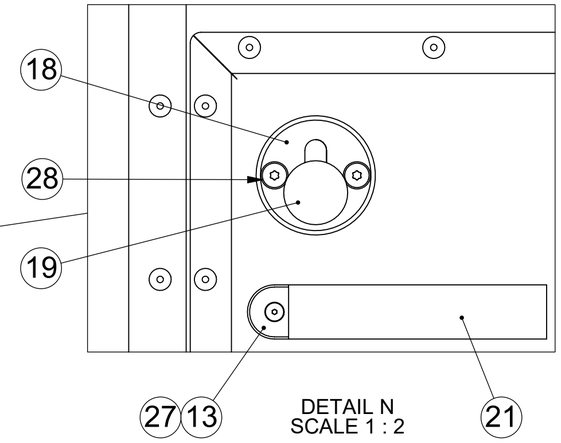
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



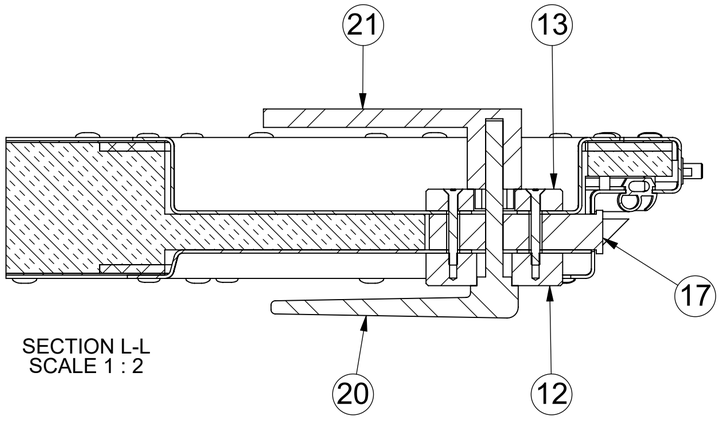


DETAIL M
SCALE 1 : 2





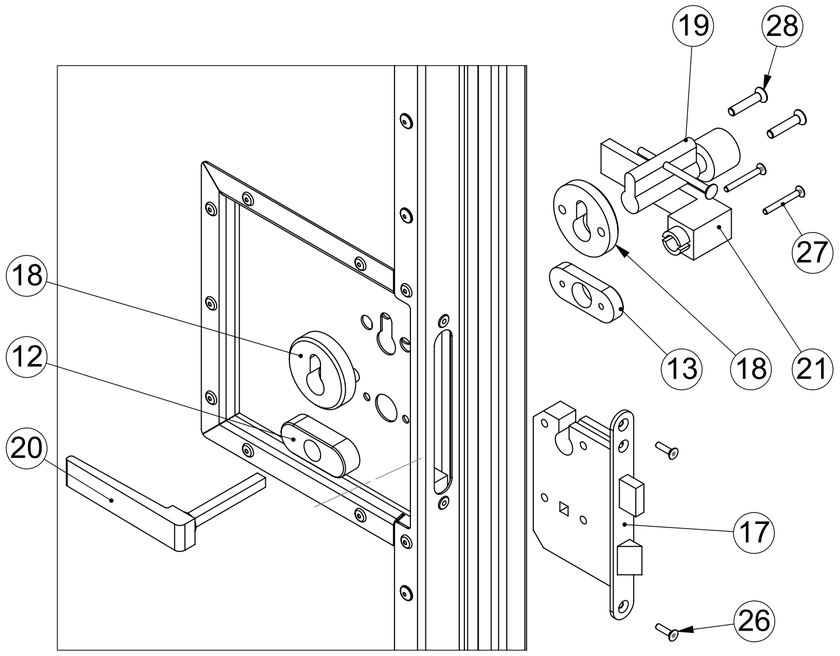
DETAIL N
SCALE 1 : 2



SECTION L-L
SCALE 1 : 2

Shorten shaft of Doorhandle (20) so body of Doorhandle (21) is in contact with Rosette (13)

Details lock and door handle



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
28	2	Torx Socket Csk. Screw	30	M6		BO-14581T-06030-A2	AISI 304	ISO14581 torx
27	2	Torx Socket Csk. Screw	35	M4		BO-14581T-04035-A2	AISI 304	ISO14581 torx
26	2	Torx Socket Csk. Screw	16	M4		BO-14581T-04016-A2	AISI 304	ISO14581 torx
25	111	Bk.Rivet Klamp-Tite 4,8	1,3-6,3	Ø4,8		BK-BAPKTR-06W-04	Alu.	w. Rub. washer
24	24	Bk.St. Monobolt 4,8	1,6-11,1	Ø4,8		BK-02771-00617	Steel	(MGLP-R6-7)
23	2	St. Blind rivet nut M4 HT	0,5-2,0	Ø6,75	10,7	BO-ALS3T-470-2,0	Steel 1010	Onkh 080320
22	2	St. Blind rivet nut M6 HT	0,7-4,2	Ø10	15,5	BO-AKS3T-610-4,2	Steel 1010	Onkh 080233
21	1	Door handle				SL-0023.057100	AISI 304	Intersteel
20	1	Doorhandle				SL-0035.056400C	AISI 304	Intersteel
19	1	Knob cylinder	60	30/30		SL-NT3501611045	Nickel	
18	1	Hoppe veiligheidsrozet rond SKG3				SL-Hoppe rozet	Assembly	
17	1	Mortice lock				SL-0094.954229	AISI 304	Intersteel
16	2	Extrusion Door (Rubber)	582			2000-05-0541	Rubber	Almet (AN625)
15	2	Extrusion Door (Rubber)	1752,5			2000-05-0540	Rubber	Almet (AN625)
14	2	Guide pin	27	7		2000-05-1366	AISI 304	
13	1	Rosette inside	63	25	10	2000-05-3888	AISI 304	
12	1	Rosette outside	63	25	15	2000-05-3886	AISI 304	
11	1	Sheet door handle	247,3	221,2	1,5	2000-05-1406	AISI 304	Bend with V16
10	1	Sheet door handle	289,4	286	1,5	2000-05-1249	AISI 304	
9	1	Sheet; door frame	1778	64,5	1,5	2000-05-1405	AISI 304	Bend with V16
8	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-1410	AISI 304	Bend with V16
7	1	Sheet; door frame	544,9	77	1,5	2000-05-1281	AISI 304	Bend with V16
6	1	Sheet; door frame	537	74,2	1,5	2000-05-0537	AISI 304	Bend with V16
5	1	Sheet; door frame	601,7	59,9	1,5	2000-05-0536	AISI 304	Bend with V16
4	1	Sheet; door frame	601,7	59,9	1,5	2000-05-1337	AISI 304	Bend with V16
3	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-1413	AISI 304	Bend with V16
2	1	Sheet; door frame	1772	59,9	1,5	2000-05-0533	AISI 304	Bend with V16
1	1	DBJ panel door				2000-05-1229	Assembly	

Scale: 1:10	Date:	Drawing no. 2000-07-3477 Sheet : 3 of 3	Issue A
Drawn: MBMH	28-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 17.53 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

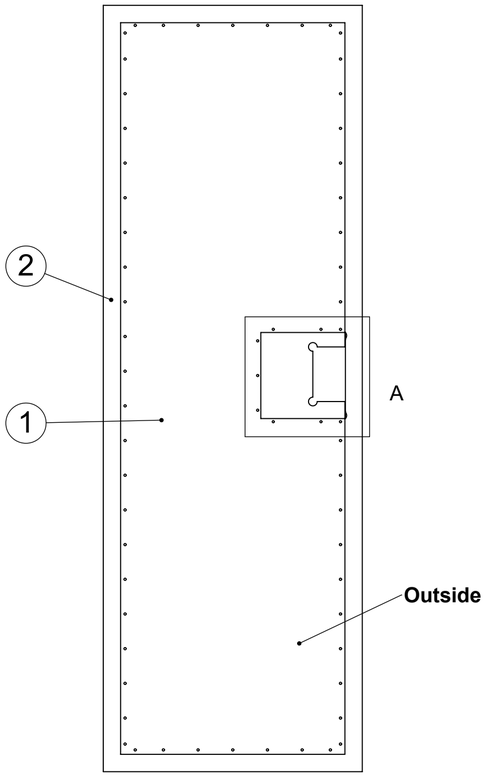
Title: DBJ door right 3

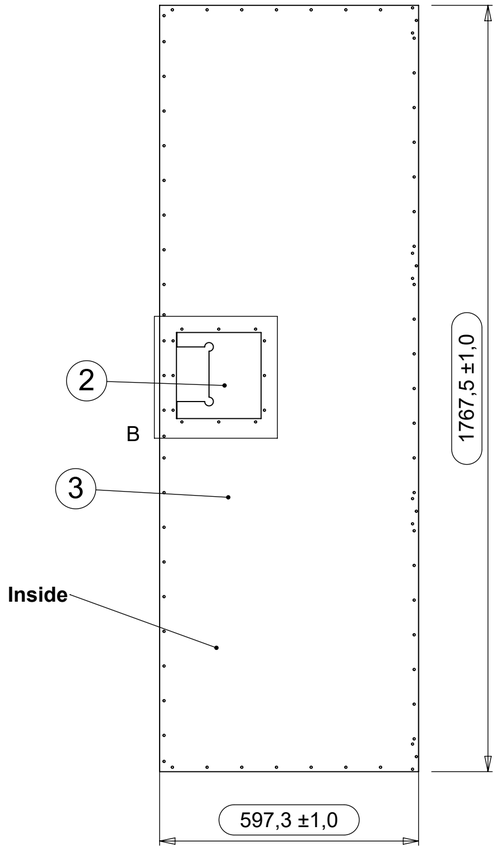
Iss.	Changes	Date	Name

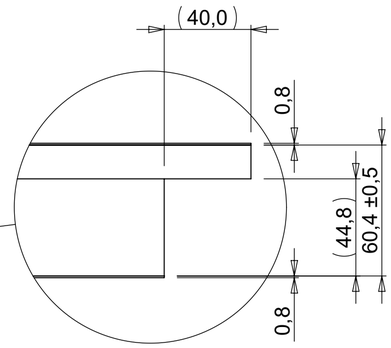
Projection

Size A2

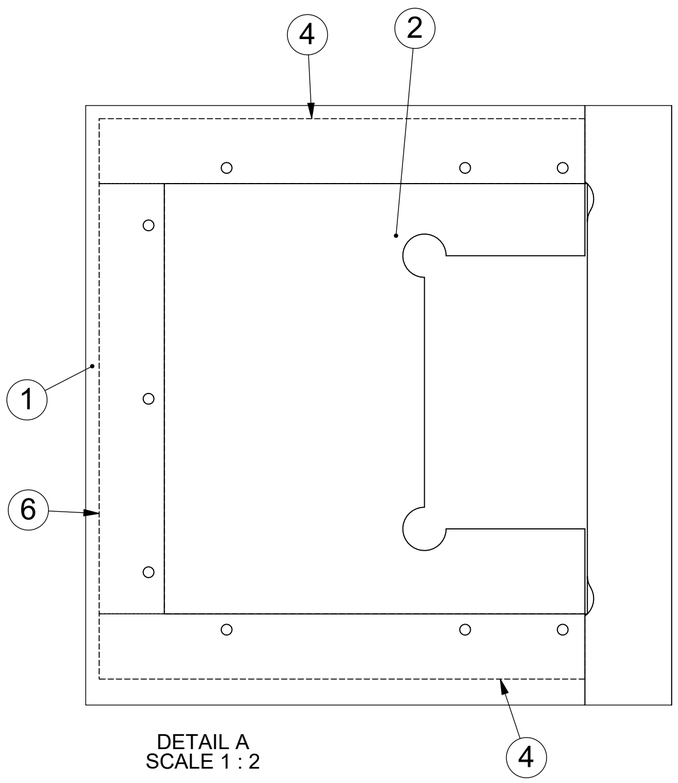
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



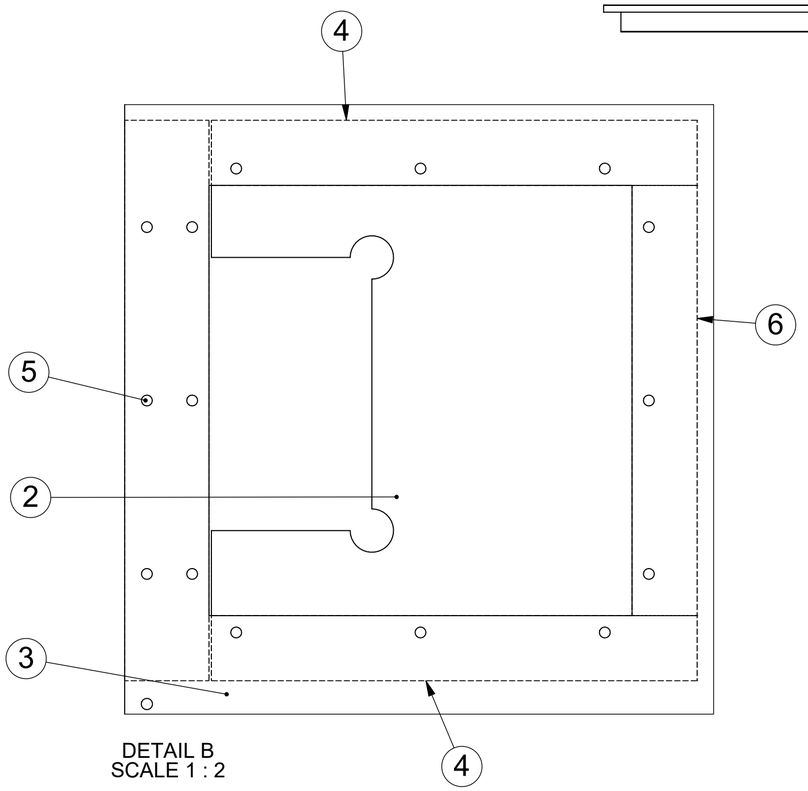




DETAIL C
SCALE 1 : 2



DETAIL A
SCALE 1 : 2



DETAIL B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	2	Lock insert	198,5	30	4	2000-05-1319	Alu. 6060-T66	
5	1	Lock insert	258,5	38,9	4	2000-05-1320	Alu. 6082-T6	
4	4	Lock insert	224	30	4	2000-05-1316	Alu. 6060-T66	
3	1	Inner sheet	1767,5	597,3	0,8	2000-05-1185	PE-GEGW 0,8 NF	
2	1	Insulation	1767,5	597,3	60,4	2000-05-1232	RTM-Plus	
1	1	Outer sheet	1687,5	517,3	0,8	2000-05-1183	PE-GEGW 0,8 NF	

Scale: 1:10	Date:	Drawing no. 2000-05-1229 Sheet : 1 of 2	Issue C
Drawn: HS	01-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 5.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

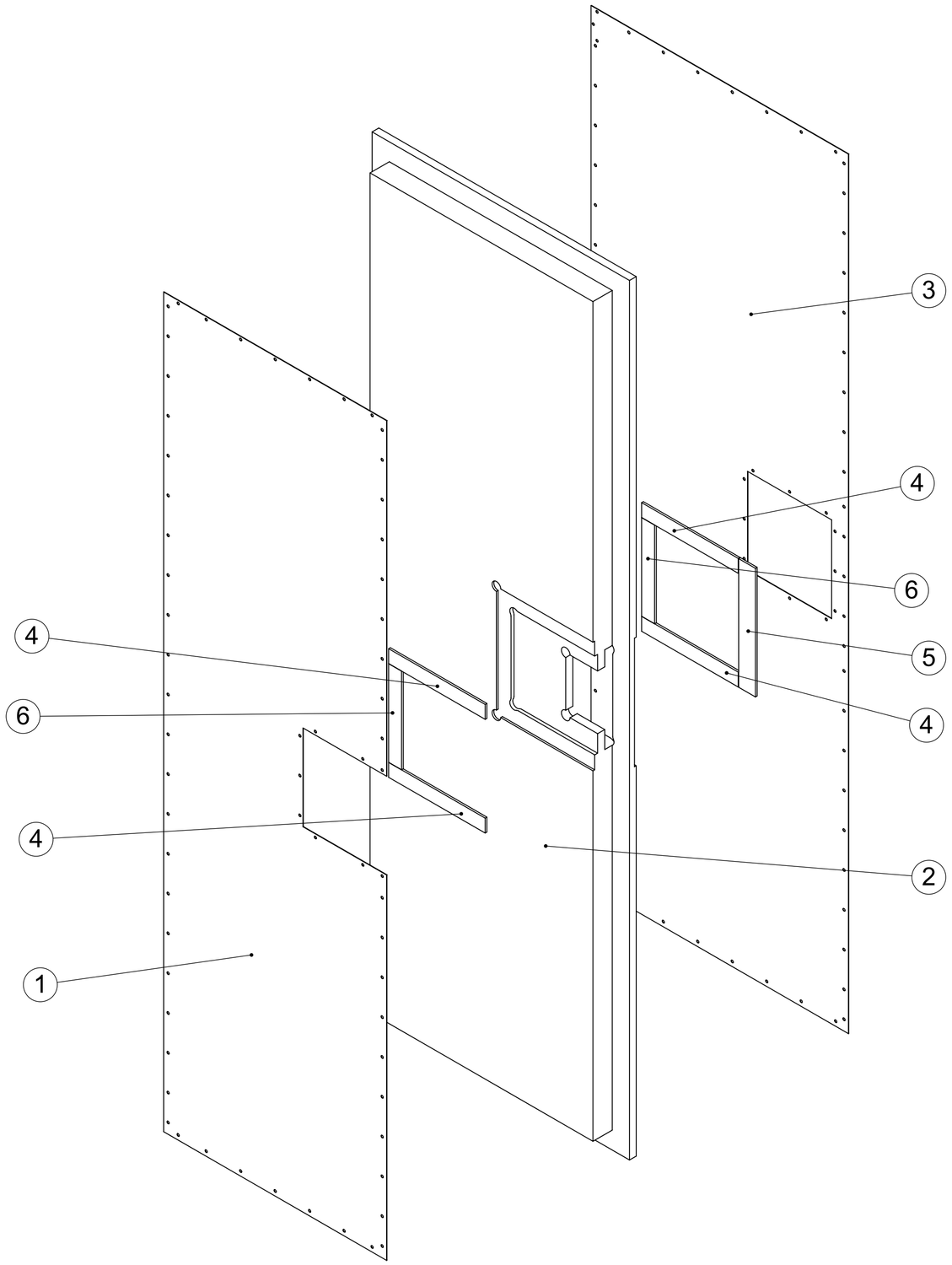
Title: DBJ panel door

Iss.	Changes	Date	Name
C	~Parts	10-03-2020	MVE
B	~Parts	11-09-2019	HS

Projection

Size A2

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
6	2	Lock insert	198,5	30	4	2000-05-1319	Alu. 6060-T66	
5	1	Lock insert	258,5	38,9	4	2000-05-1320	Alu. 6082-T6	
4	4	Lock insert	224	30	4	2000-05-1316	Alu. 6060-T66	
3	1	Inner sheet	1767,5	597,3	0,8	2000-05-1185	PE-GEGW 0,8 NF	
2	1	Insulation	1767,5	597,3	60,4	2000-05-1232	RTM-Plus	
1	1	Outer sheet	1687,5	517,3	0,8	2000-05-1183	PE-GEGW 0,8 NF	

Scale: 1:6	Date:	Drawing no. 2000-05-1229 Sheet : 2 of 2	Issue C
Drawn: HS	01-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 5.42 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

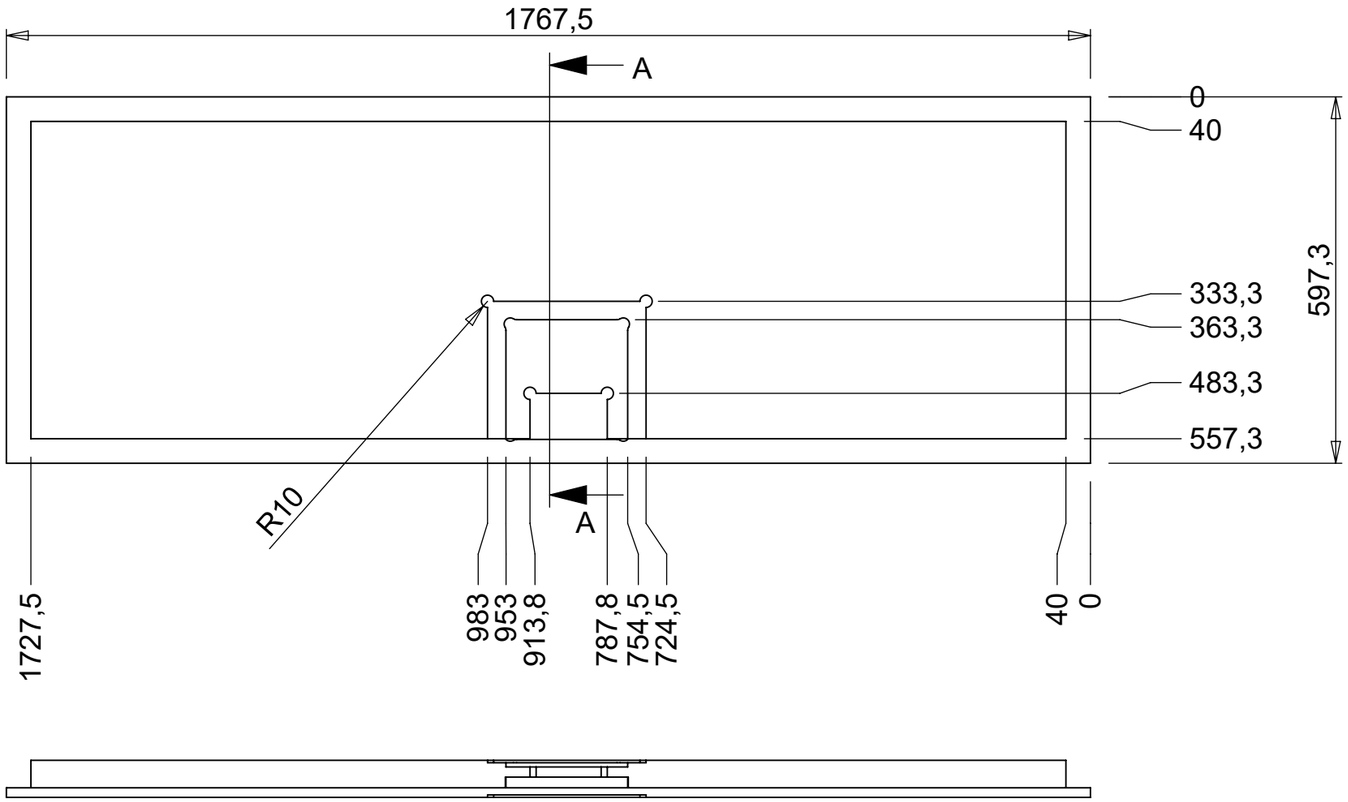
Title: DBJ panel door

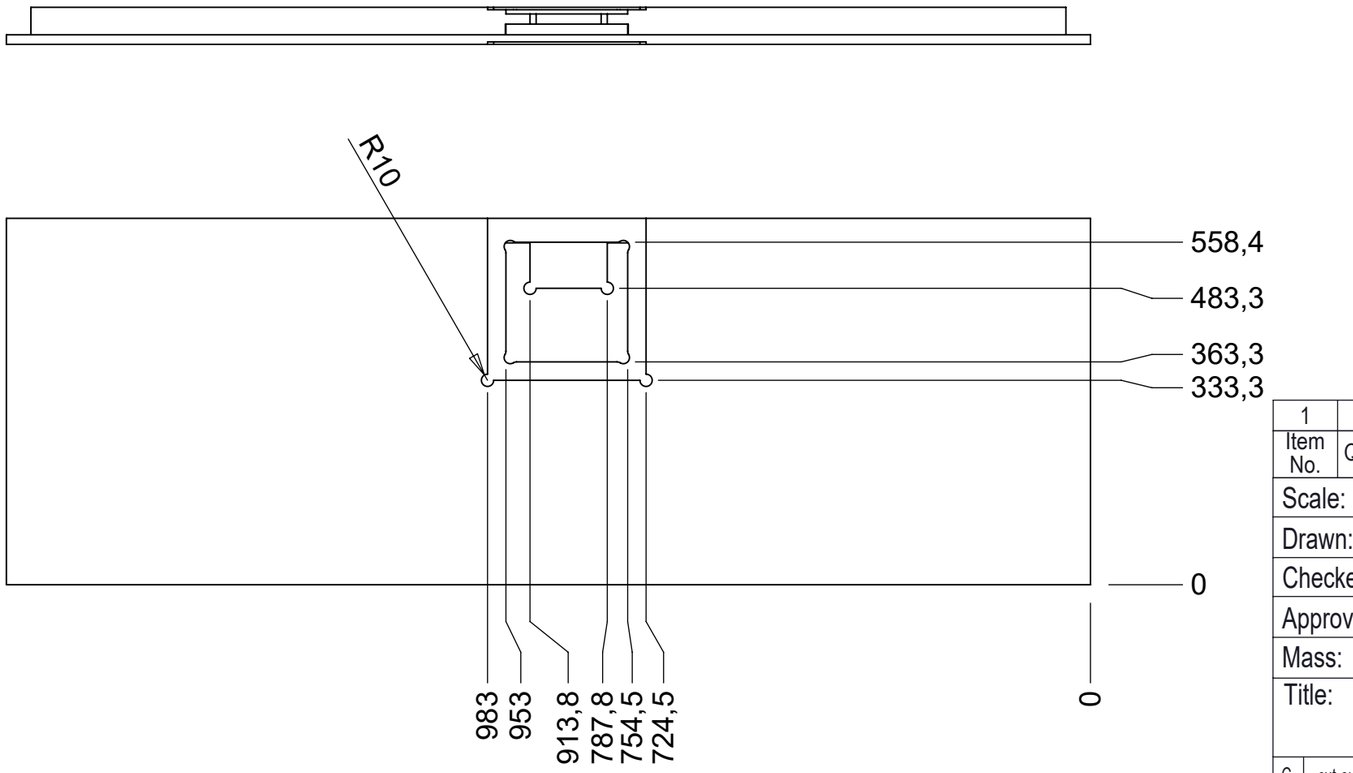
Iss.	Changes	Date	Name
C	~Parts	10-03-2020	MVE
B	~Parts	11-09-2019	HS

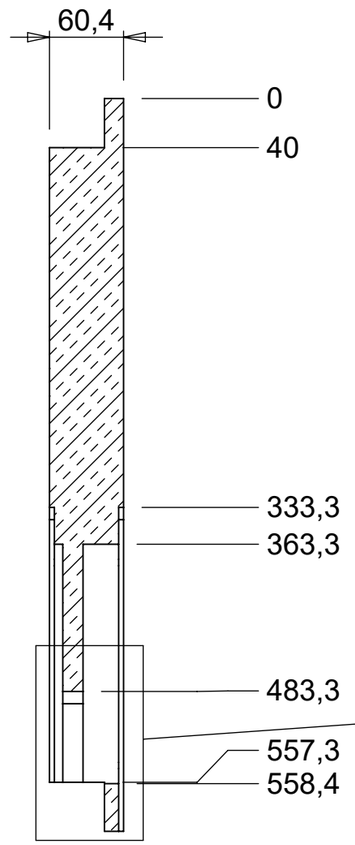
Projection

Size A2

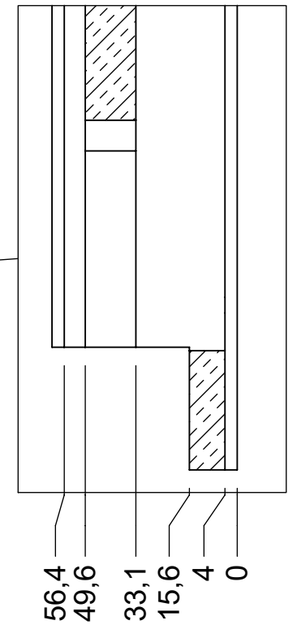
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







SECTION A-A
SCALE 1 : 5



DETAIL B
SCALE 1 : 2

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Insulation	1767,5	597,3	60,4	2000-05-1232	RTM-Plus	

Scale: 1:10	Date:	Drawing no.: 2000-05-1232 Sheet : 1 of 1	Issue: C
Drawn: HS	01-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	09-03-2020		
Mass: 2.57 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

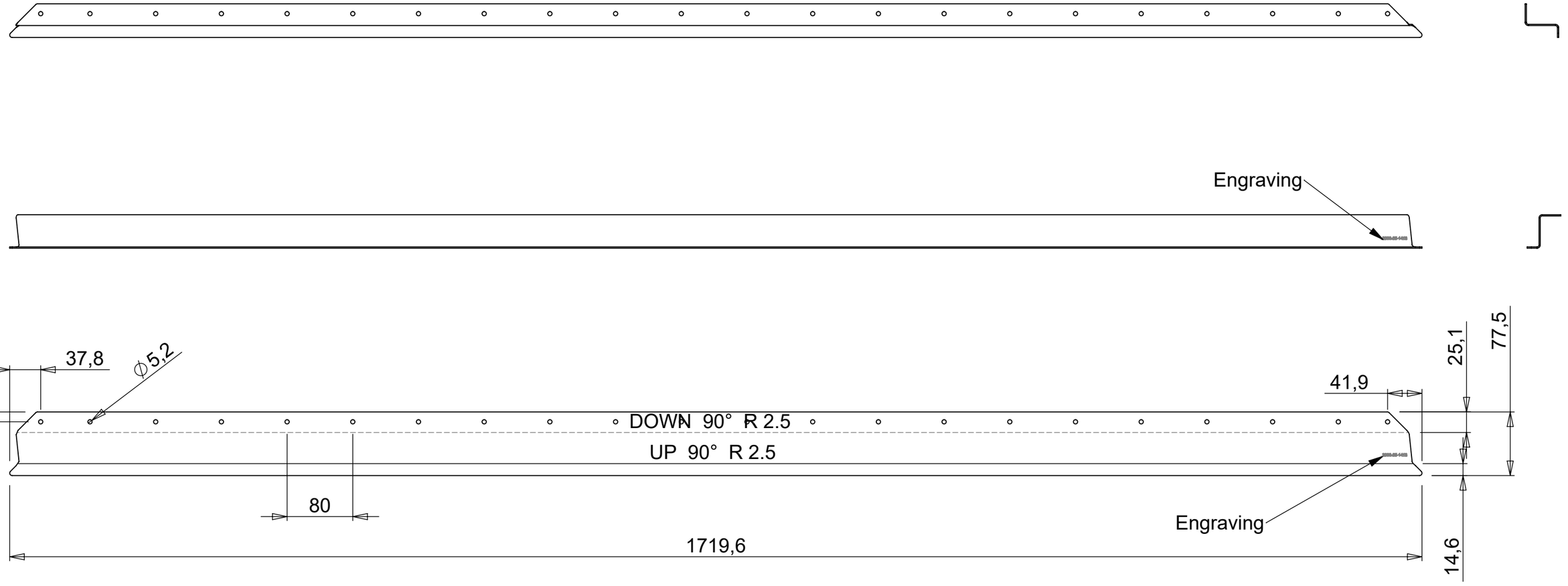
Title: **Insulation**

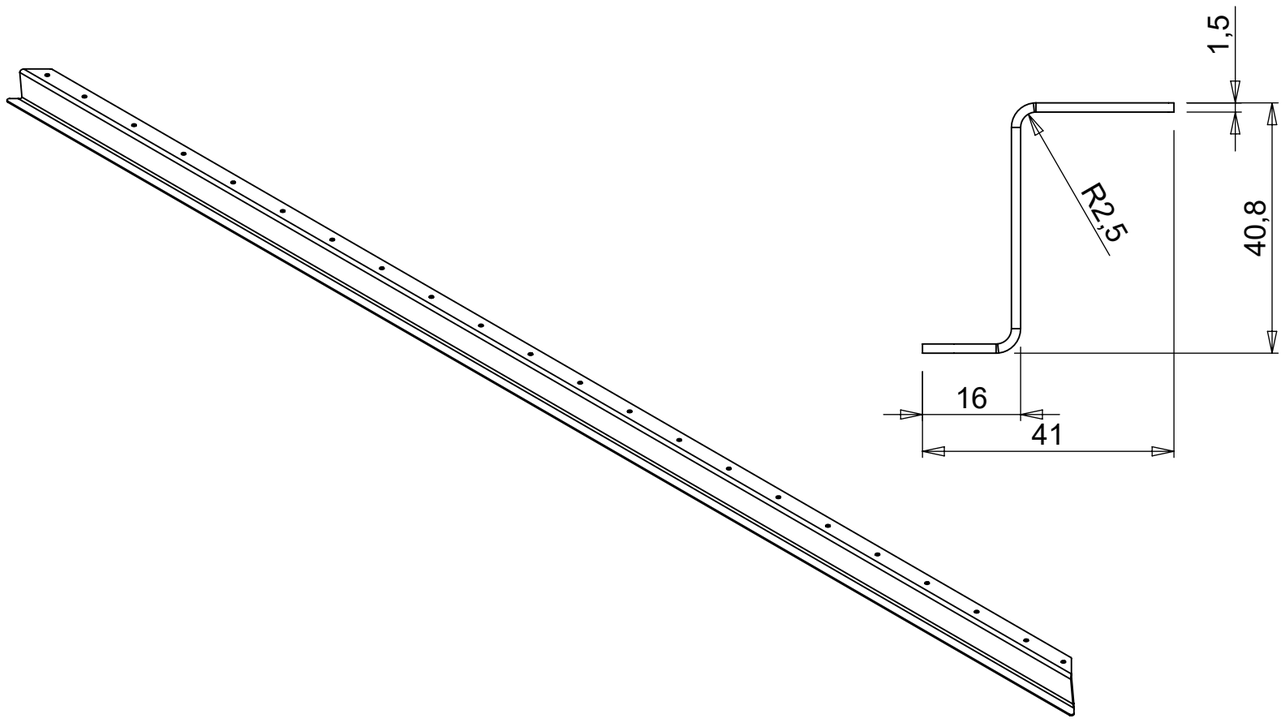
Iss.	Changes	Date	Name
C	~cut-out	09-03-2020	MVE
B	~Cut out	11-09-2019	HS

Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





1	1	Sheet; door frame	1719,6	77,5	1,5	2000-05-1413	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-1413 Sheet : 1 of 1	Issue A
Drawn: HS	01-04-2019		
Checked: VvM	18-04-2019		
Approved: JWR	10-05-2019		
Mass: 1.57 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

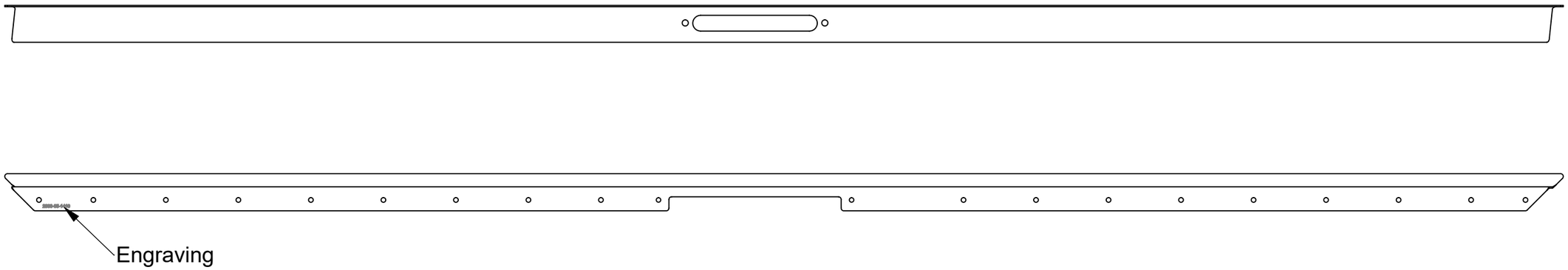
Title: **Sheet; door frame**

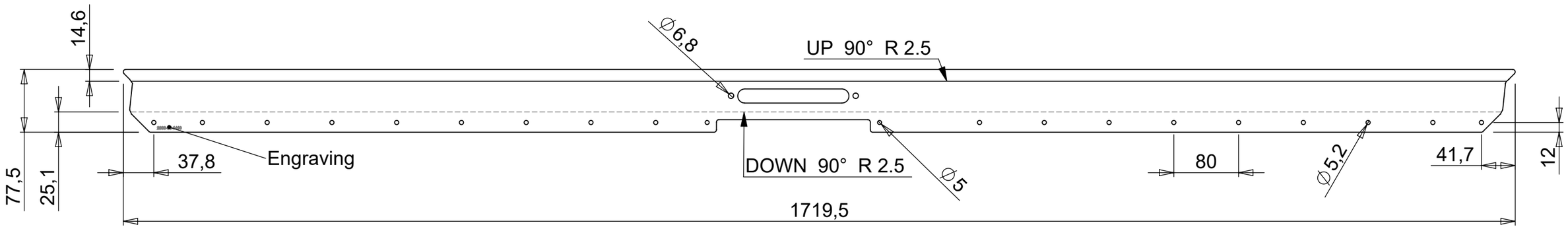
Iss.	Changes	Date	Name

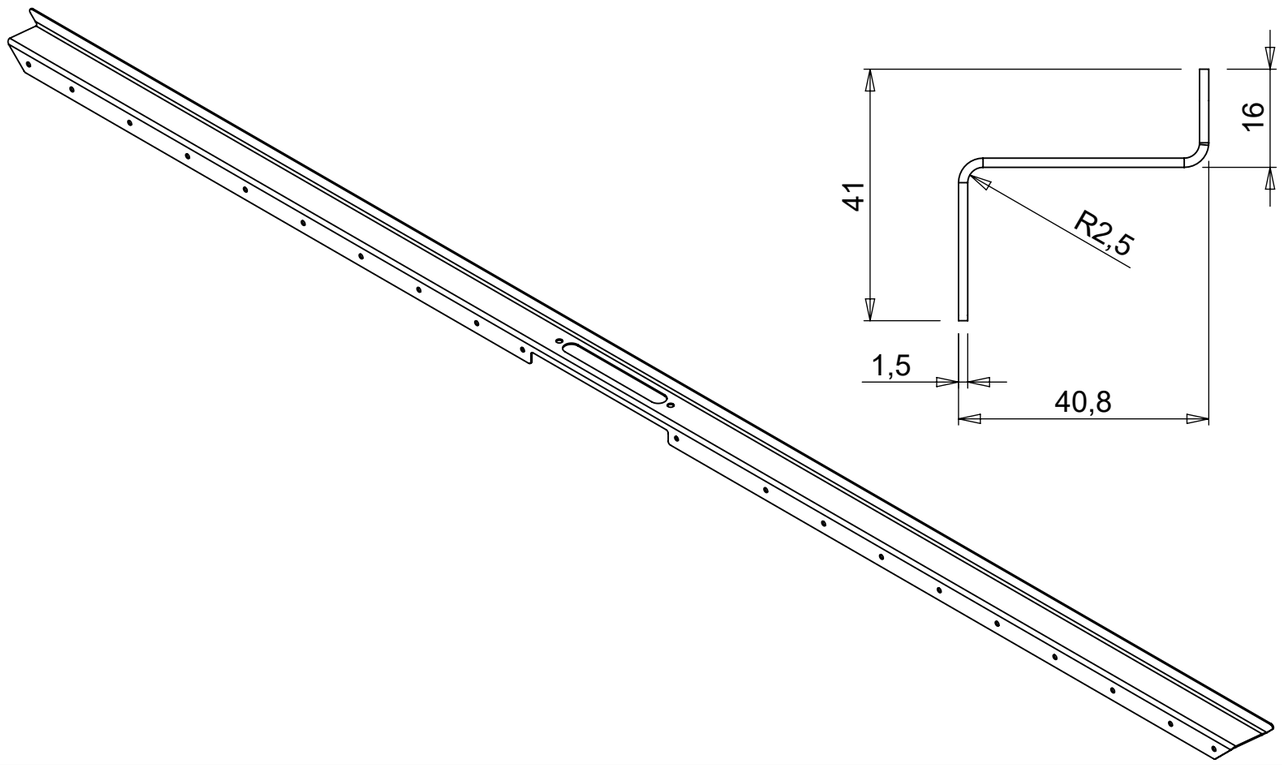
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet; door frame	1719,5	77,5	1,5	2000-05-1410	AISI 304	Bend with V16

Scale: 1:5	Date:	Drawing no.: 2000-05-1410 Sheet : 1 of 1	Issue: B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	11-09-2019		
Mass: 1.50 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

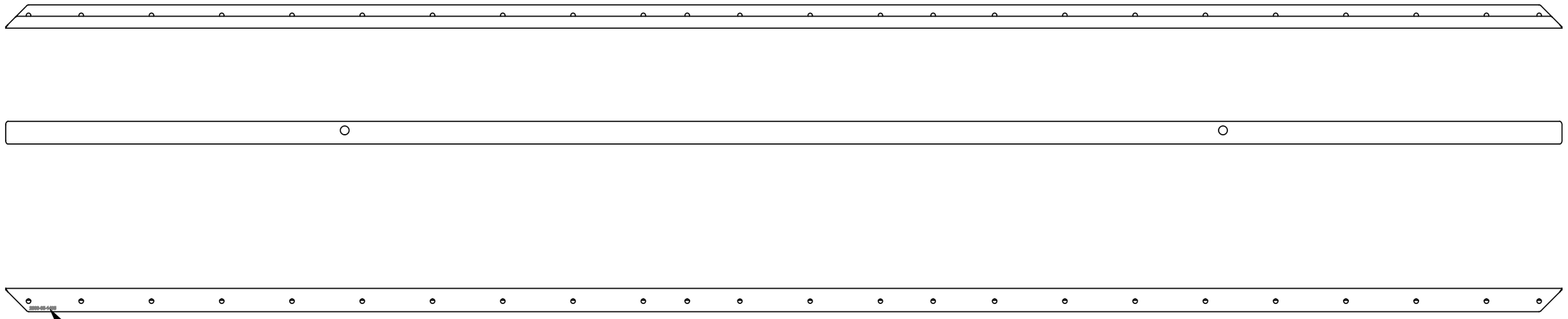
Title: **Sheet; door frame**

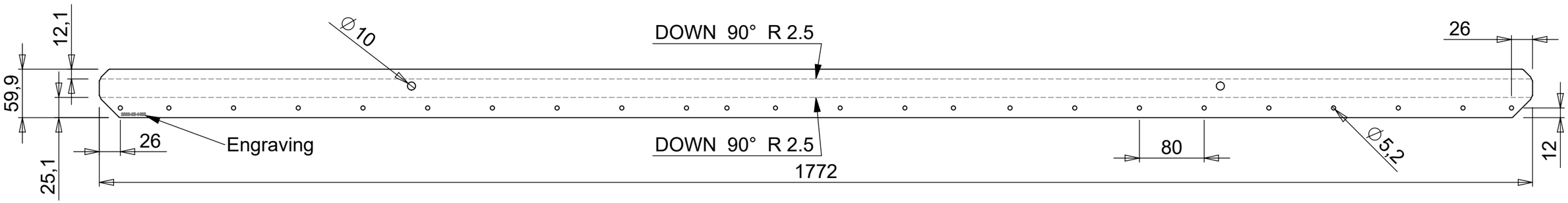
Iss.	Changes	Date	Name
B	~Cut out	11-09-2019	HS

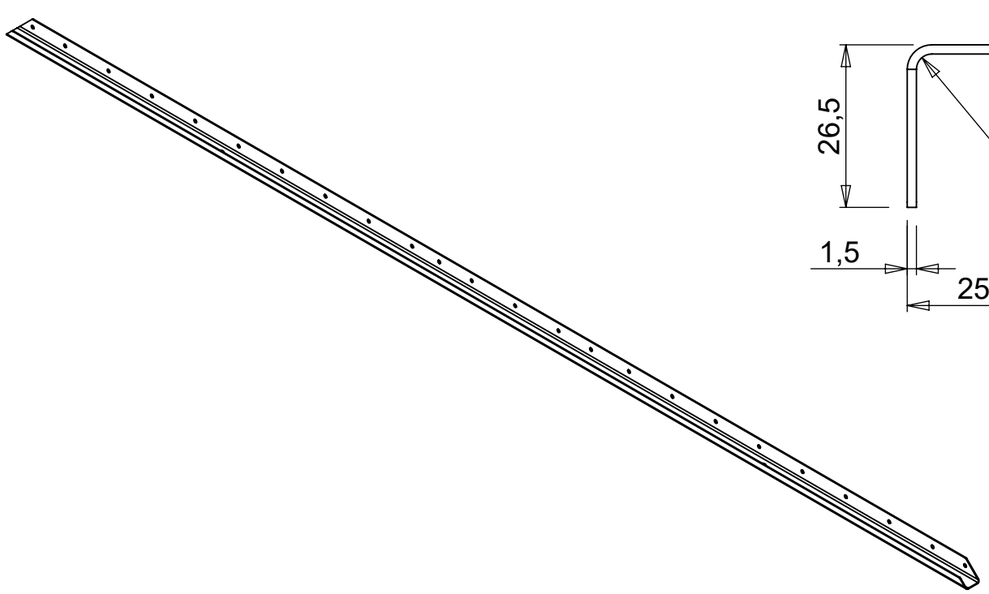
Projection

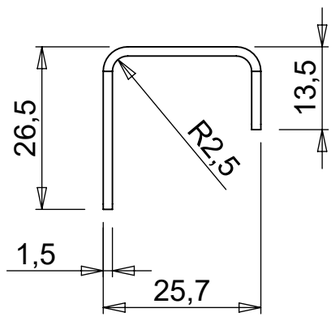
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









1	1	Sheet; door frame	1778	64,5	1,5	2000-05-1405	AISI 304	Bend with V16
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 1:5	Date:	Drawing no.: 2000-05-1405	Issue B
Drawn: HS	01-04-2019		
Checked: VvM	06-11-2019		
Approved: JWR	26-11-2019	Sheet : 1 of 1	
Mass: 1.26 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

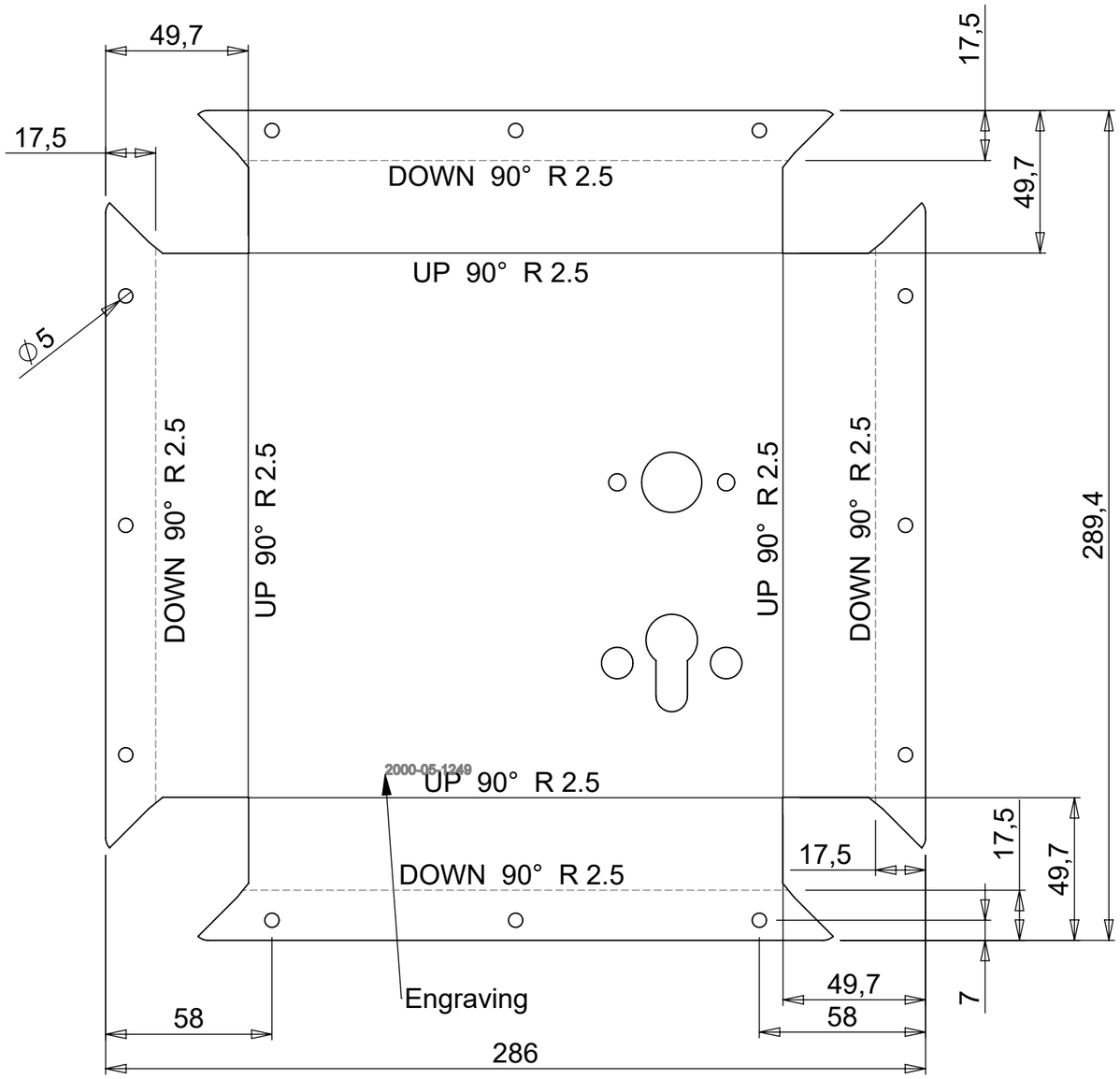
Title: Sheet; door frame

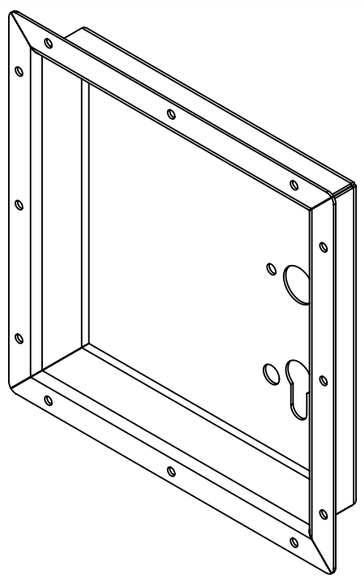
Iss.	Changes	Date	Name
B	Flat pattern corrected	26-11-2019	HS

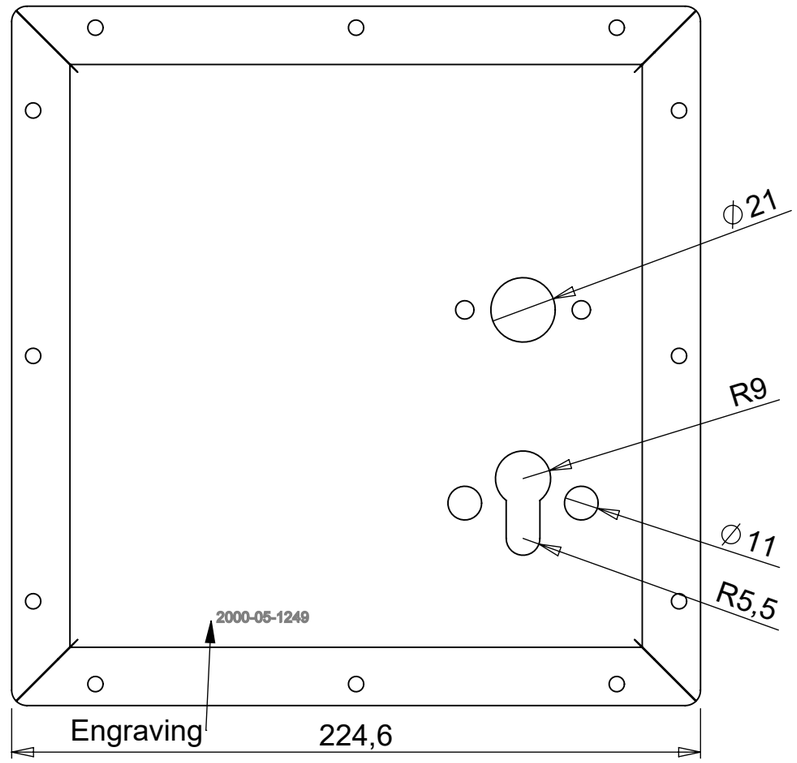
Projection

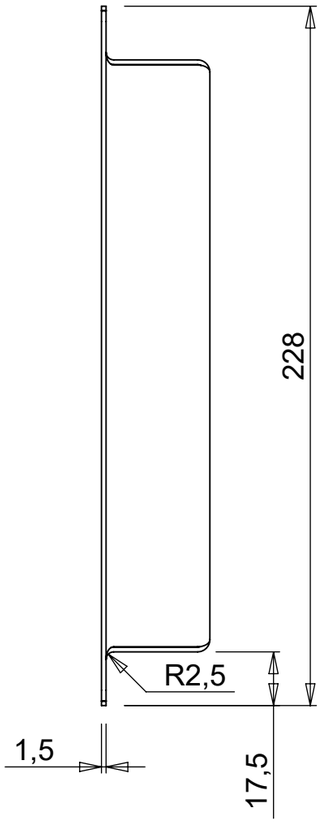
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet door handle	289,4	286	1,5	2000-05-1249	AISI 304	

Scale: 1:2	Date:	Drawing no.: 2000-05-1249 Sheet : 1 of 1	Issue: B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	10-09-2019		
Mass: 0.88 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

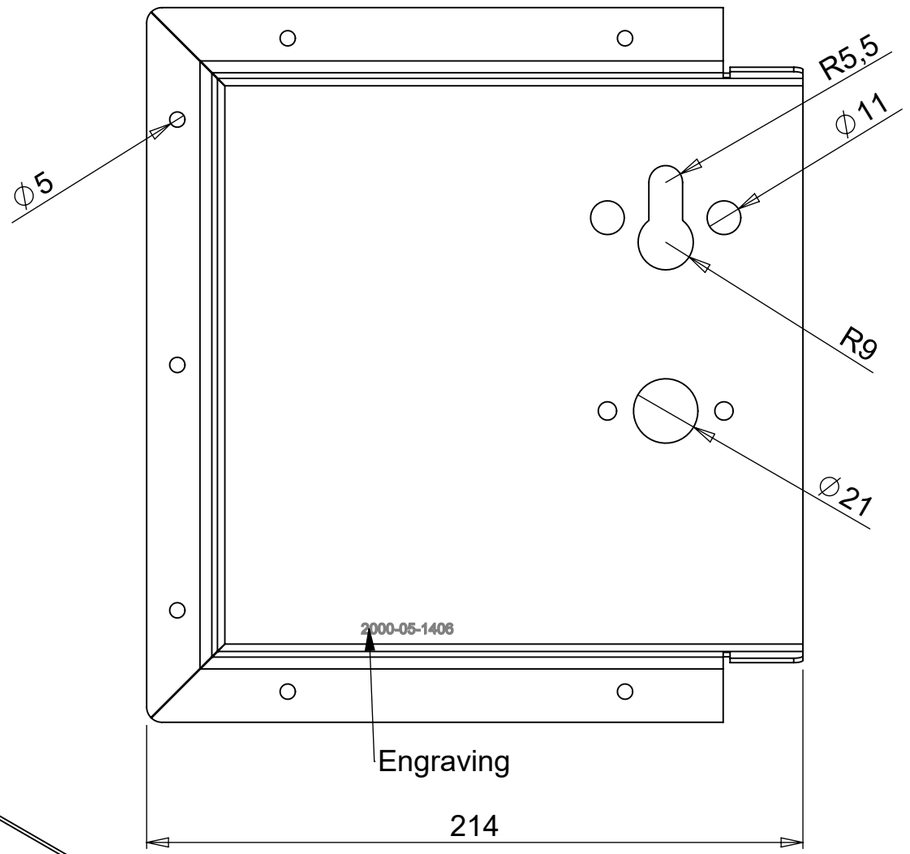
Title: **Sheet door handle**

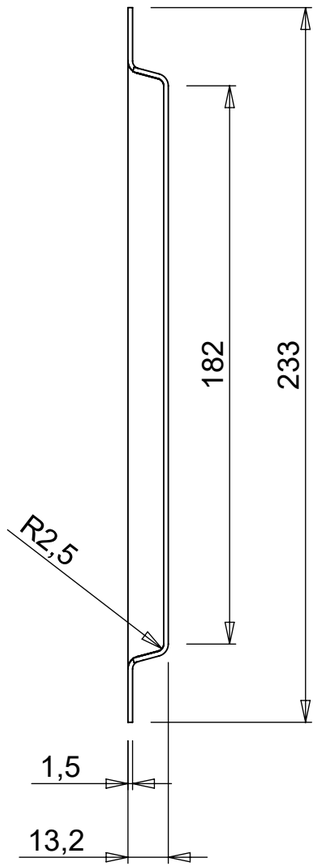
Iss.	Changes	Date	Name
B	~Dimensions	10-09-2019	HS

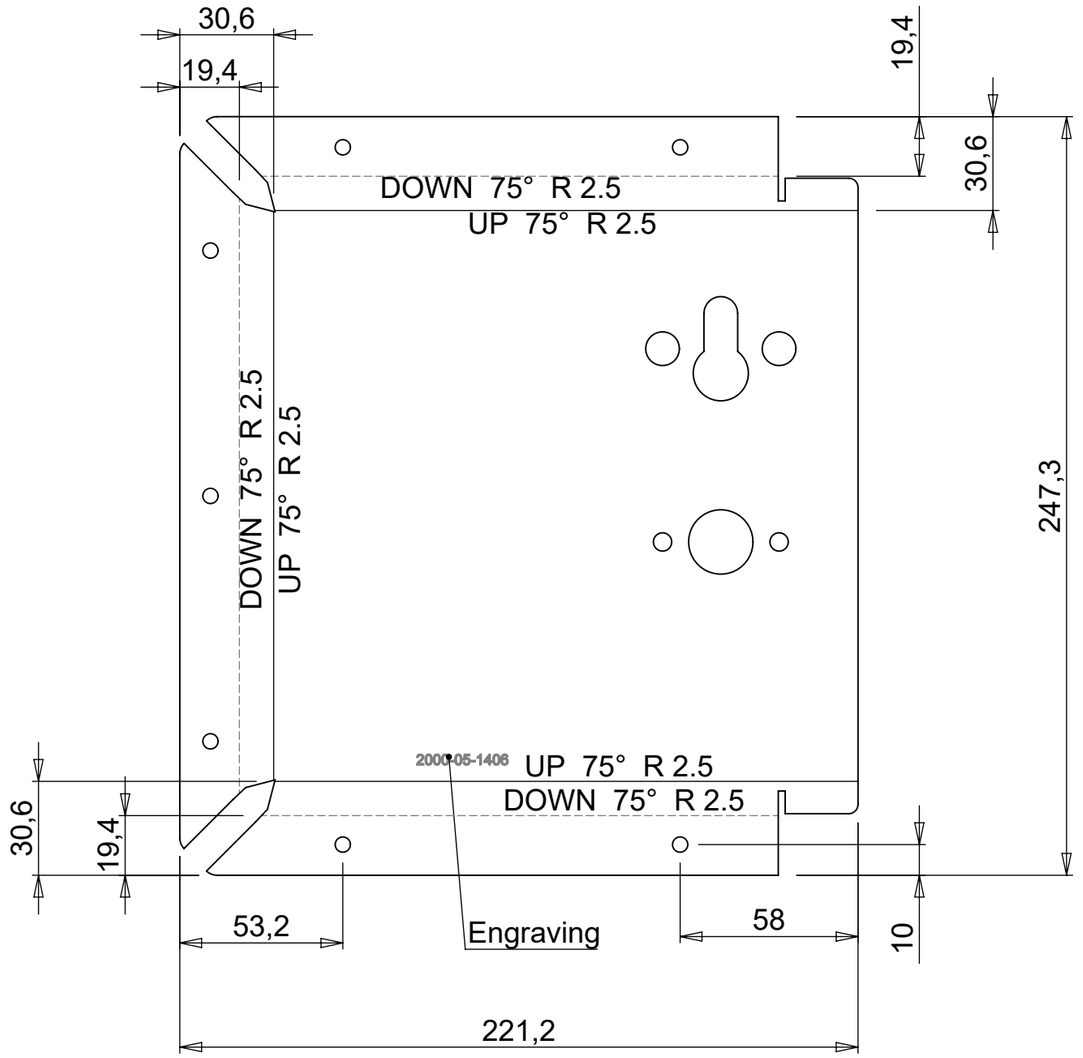
Projection

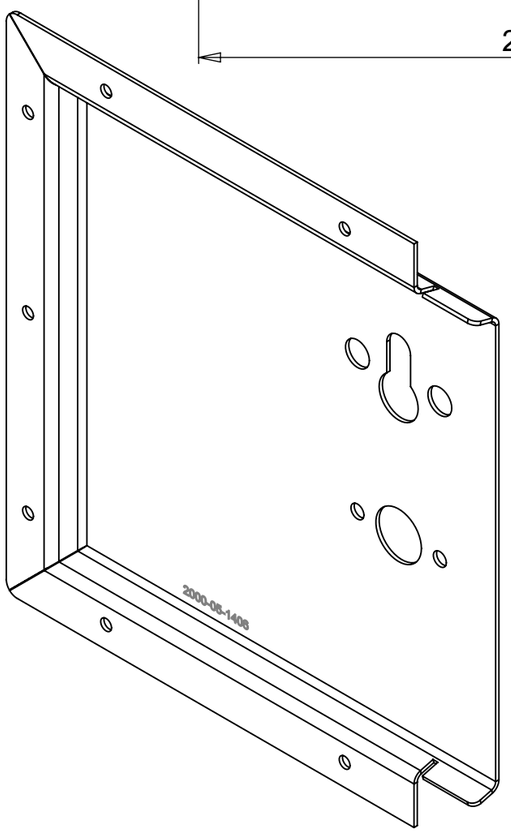
Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100









Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Sheet door handle	247,3	221,2	1,5	2000-05-1406	AISI 304	Bend with V16

Scale: 1:2	Date:	Drawing no.: 2000-05-1406 Sheet : 1 of 1	Issue: B
Drawn: HS	01-04-2019		
Checked: VvM	10-09-2019		
Approved: JWR	11-09-2019		
Mass: 0.62 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

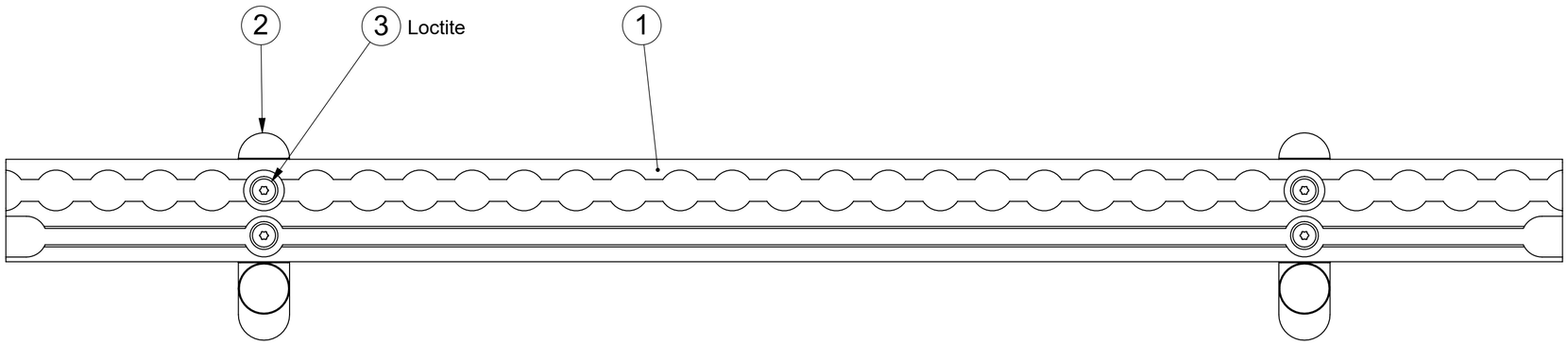
Title: **Sheet door handle**

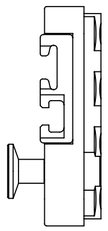
Iss.	Changes	Date	Name
B	~Dimensions	11-09-2019	HS

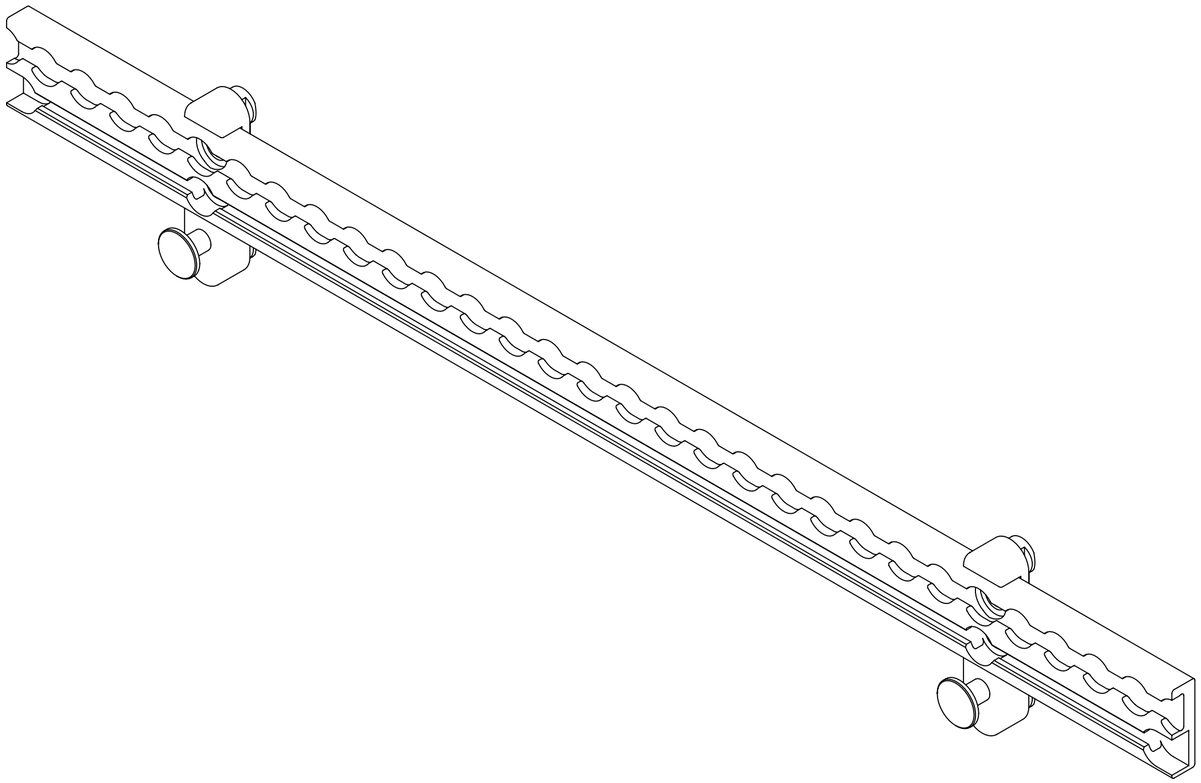
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100







Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
3	4	Torx Socket Csk. Screw	16	M6		BO-14581T-06016-A2	AISI 304	ISO14581 torx
2	2	Track bar stud				2000-05-2116	Assembly	
1	1	Extrusion RR205	760	50	15	2000-04-8885	Alu. 6061-T6	

Scale: 1:2	Date:	Drawing no. 2000-07-3488 Sheet : 1 of 1	Issue A
Drawn: MBMH	29-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 1.17 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	> 2000
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Track bar

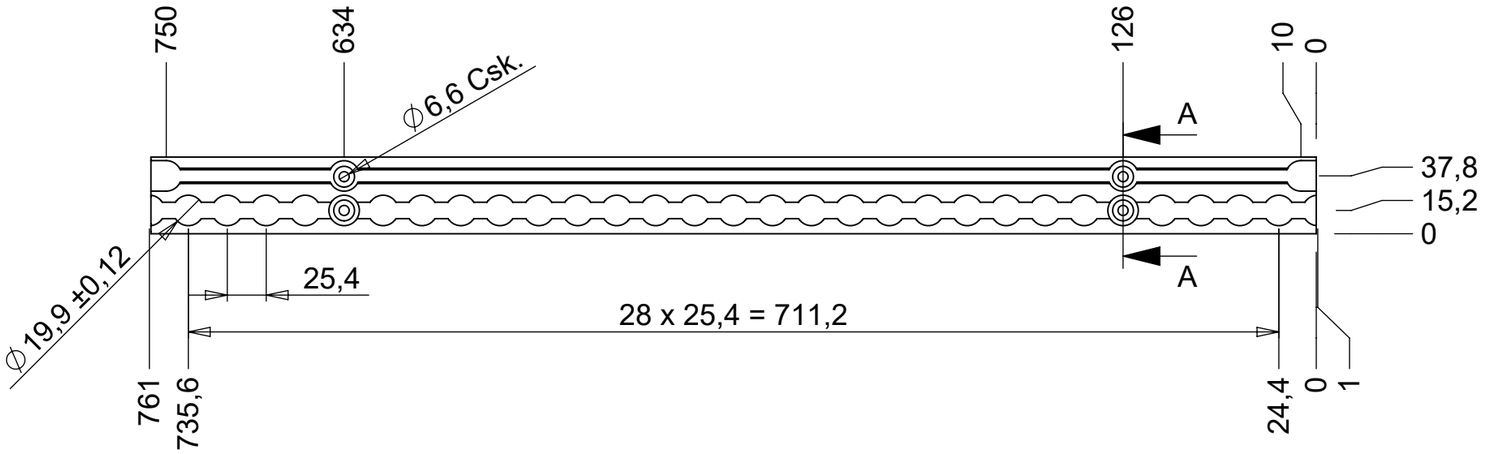
Rivets according to VRR-SP2201

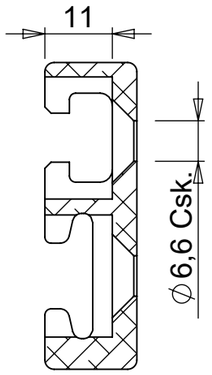
Iss.	Changes	Date	Name

Projection

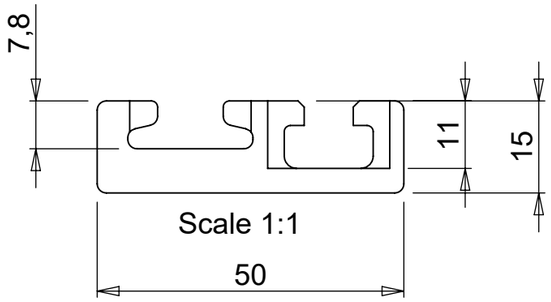
Size A2

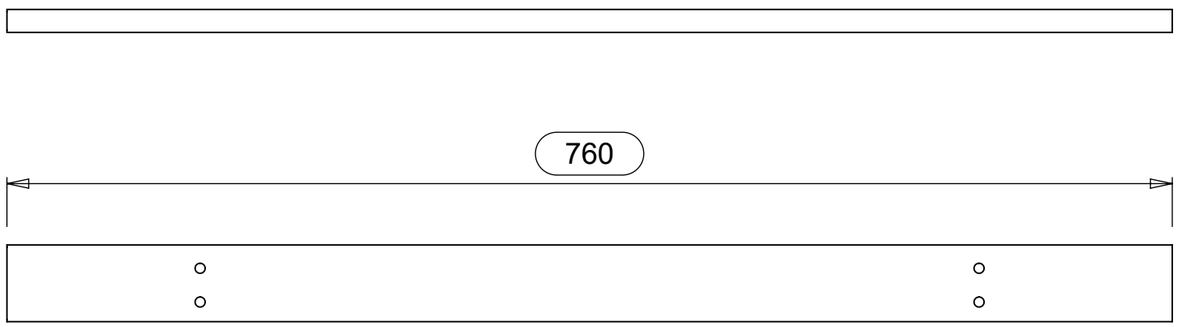
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

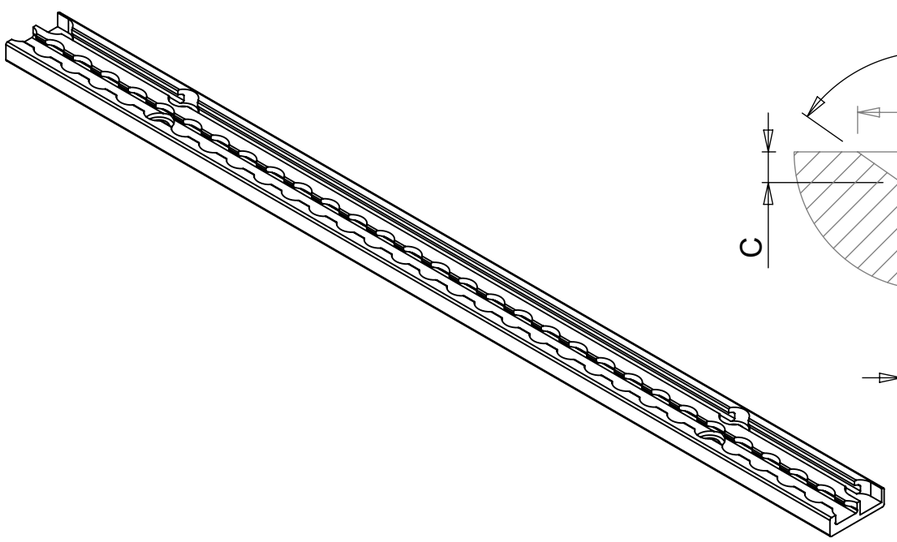


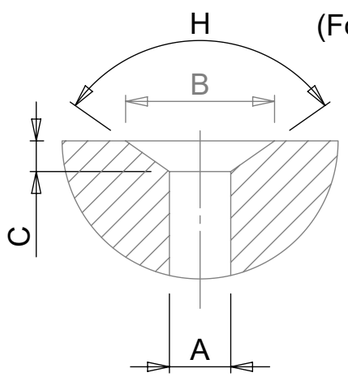


SECTION A-A
SCALE 1 : 1









(For M6 CSK bolt)
(Revision C)

A = 6,6
B = 13,6
C = 3,5
H = 90°

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Extrusion RR205	760	50	15	2000-04-8885	Alu. 6061-T6	

Scale: 1:4	Date:	Drawing no.: 2000-04-8885 Sheet : 1 of 1	Issue A
Drawn: HS	05-04-2019		
Checked: VvM	15-04-2019		
Approved: JWR	09-05-2019		
Mass: 0.97 kg		Finish: U001 - Aludon	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

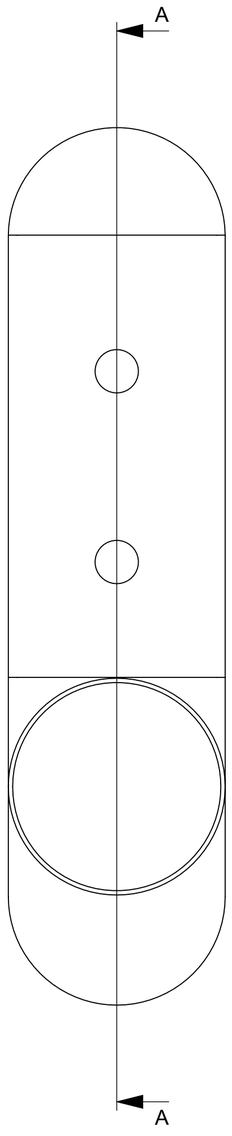
Title: Extrusion RR205

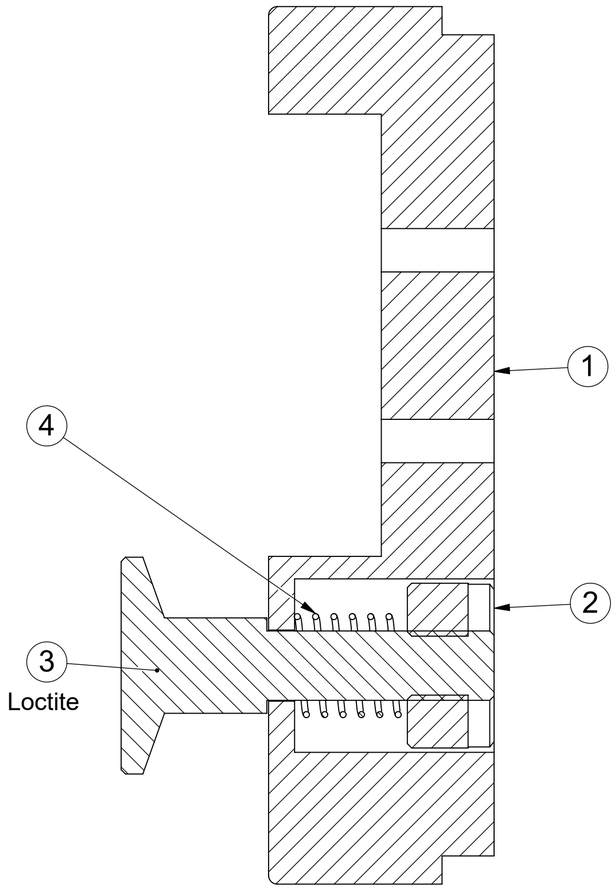
Iss.	Changes	Date	Name

Projection

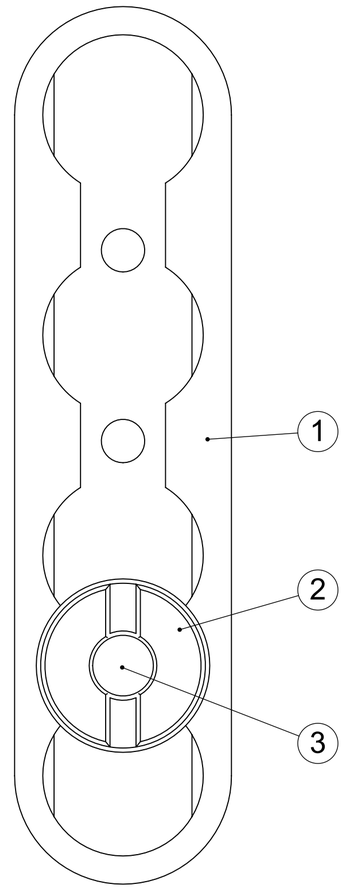
Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478





SECTION A-A



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
4	1	Compression Spring	32,7-5,8	ø11,3	ø0,7	VE-D-115E	AISI 304	ATV-D115E
3	1	Plunger Pin	43	ø25	-	2000-05-2117	Alu. 6082-T6	
2	1	Plunger	10	ø19		2000-02-5680	Alu. 6082-T6	
1	1	Stud bracket	101,6	26	25	2000-04-8887	Alu. 6082-T6	

Scale: 2:1	Date:	Drawing no. 2000-05-2116	Issue A
Drawn: HS	05-04-2019		
Checked: VvM	15-04-2019		
Approved: JWR	09-05-2019	Sheet : 1 of 1	
Mass: 0.10 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

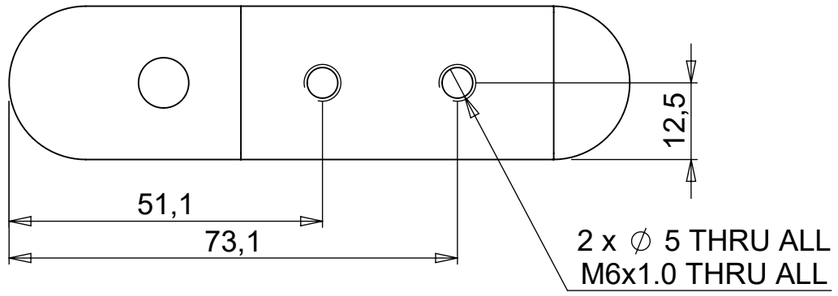
Title: **Track bar stud**

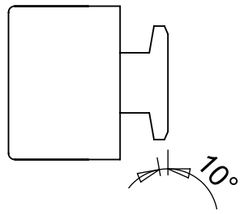
Iss.	Changes	Date	Name

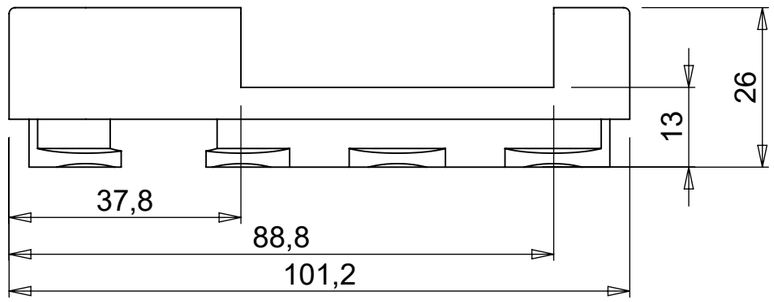
Projection

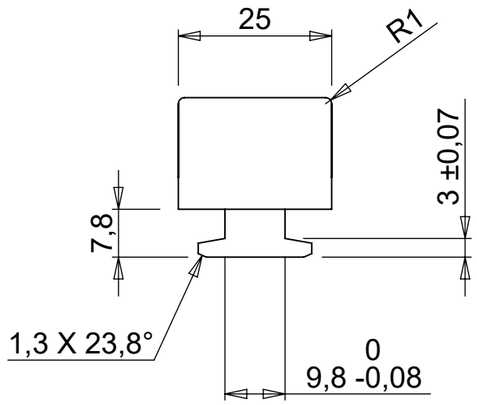
Size A2

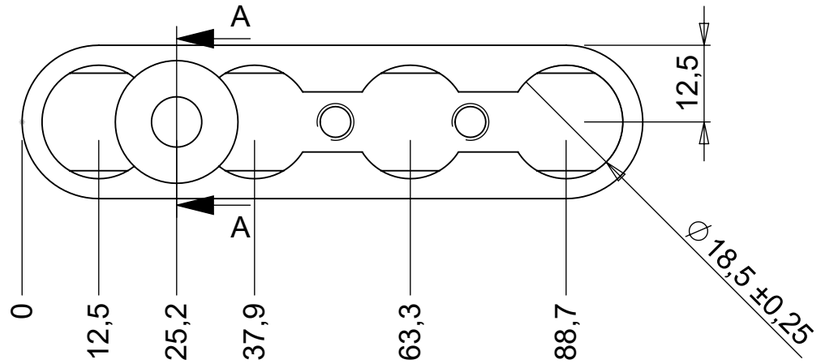
VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478

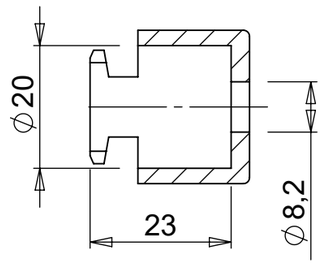




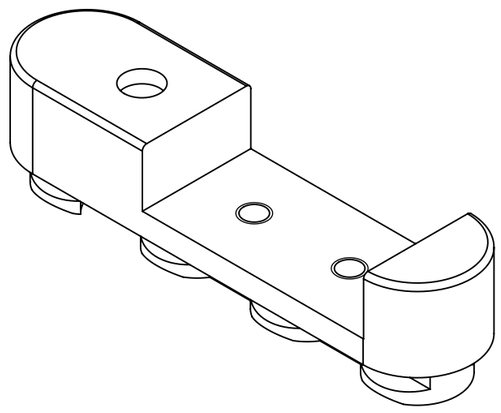








SECTION A-A



Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Stud bracket	101,6	26	25	2000-04-8887	Alu. 6082-T6	

Scale: 1:1	Date:	Drawing no.: 2000-04-8887 Sheet : 1 of 1	Issue B
Drawn: HS	05-04-2019		
Checked: HS	13-02-2020		
Approved: JWR	10-03-2020		
Mass: 0.08 kg		Finish:	

Tolerances (u.n.o.)

<	7	30	120	400	1000	2000
7	30	120	400	1000	2000	>
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

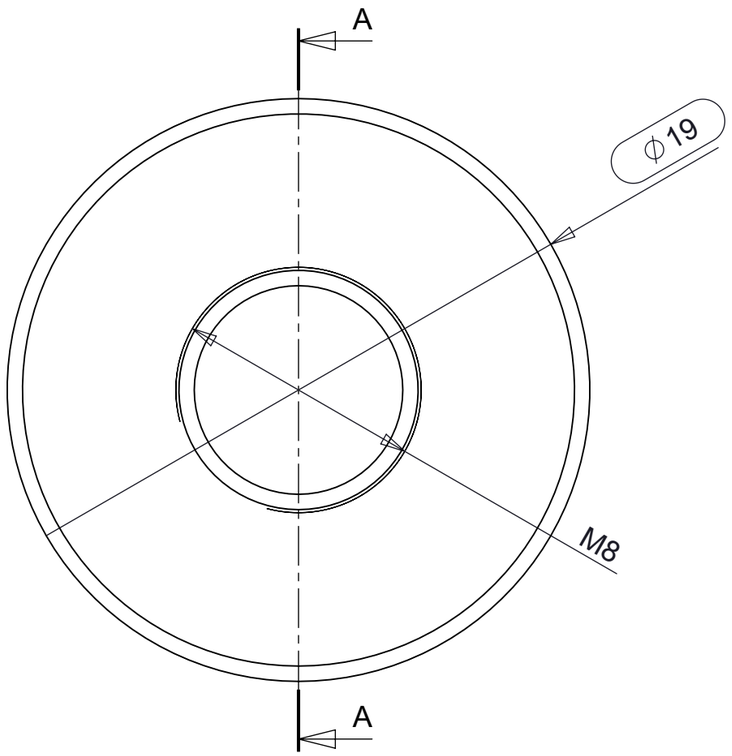
Title: **Stud bracket**

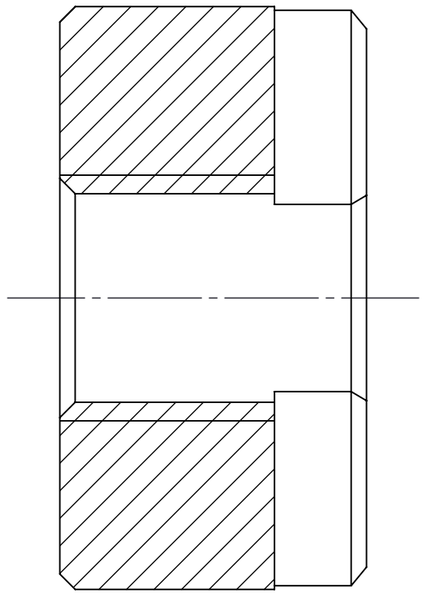
Iss.	Changes	Date	Name
B	Cut-out	10-03-2020	MVE

Projection

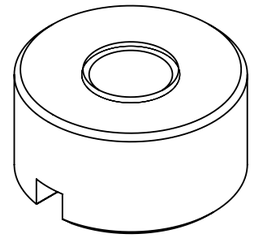
Size A3

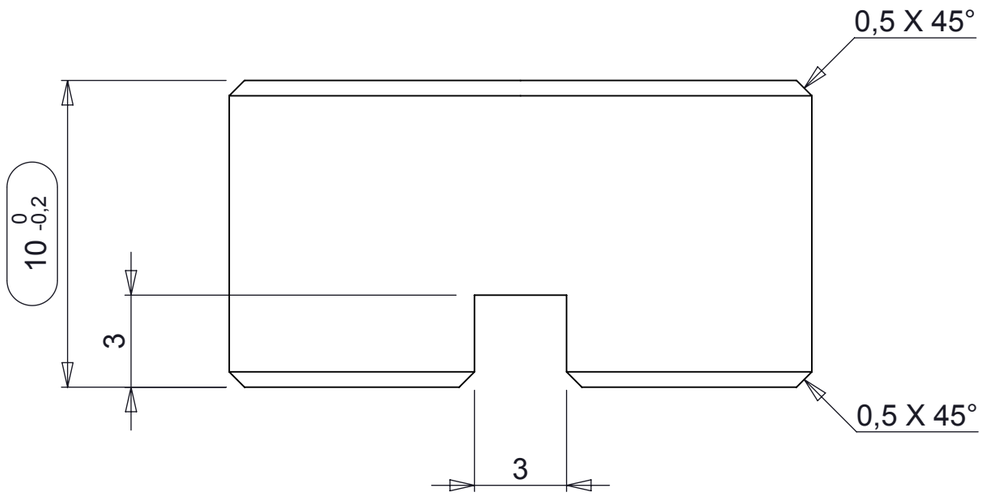
VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100





SECTION A-A





1	1	Plunger	10	ø19		2000-02-5680	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale : 5:1	Date:	Drawing no. 2000-02-5680	Issue A
Drawn : RK	28-05-2015		
Checked : JWR	28-05-2015		
Approved: WvdV	28-05-2015	Sheet : 1 of 1	
Expired : NO	-	Weight : 0.01 Kg.	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title

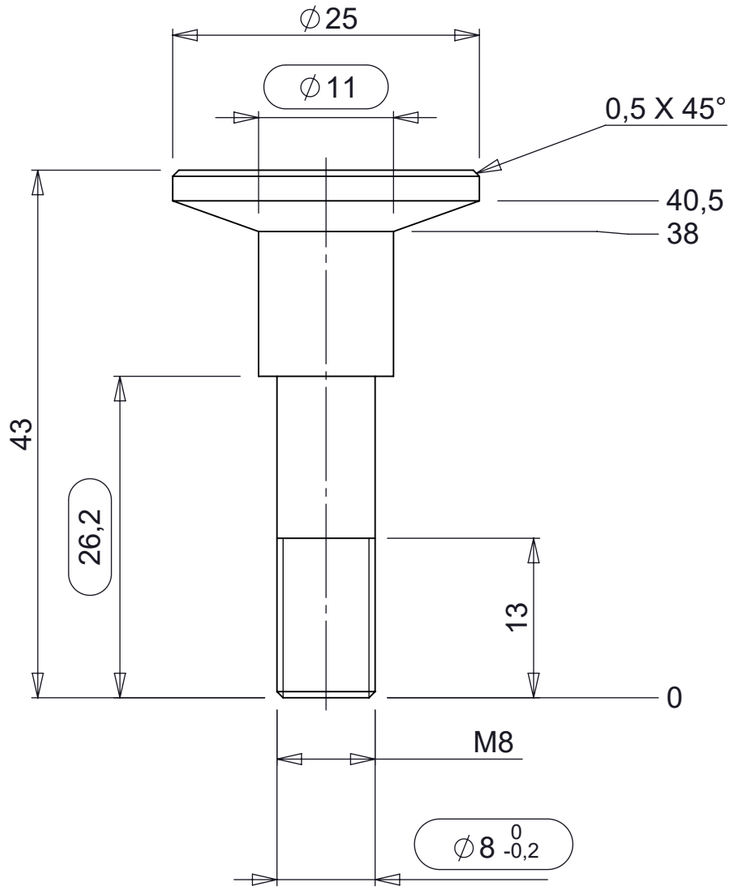
Plunger

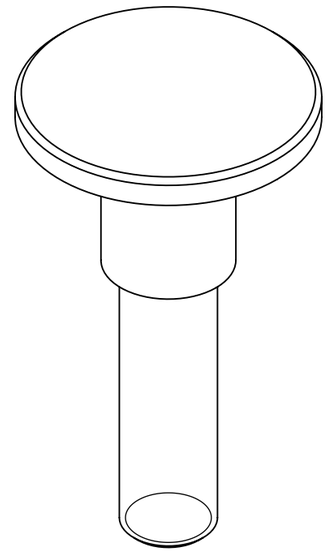
Iss.	Changes	Date	Name

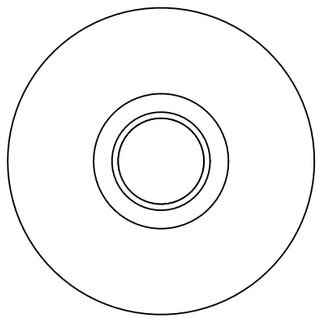
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







1	1	Plunger Pin	43	ø25	-	2000-05-2117	Alu. 6082-T6	
Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks

Scale: 2:1	Date:	Drawing no.: 2000-05-2117	Issue A	Tolerances (u.n.o.)
Drawn: HS	05-04-2019			< 7 30 120 400 1000 2000
Checked: VvM	15-04-2019			7 30 120 400 1000 2000 >
Approved: JWR	09-05-2019	Sheet : 1 of 1		±0.2 ±0.3 ±0.5 ±0.8 ±1.0 ±1.4 ± 2
Mass: 0.01 kg		Finish:		Raw extrusion in accordance with OEM drawing and EN755-9
				Dimensions in mm (u.n.o.)

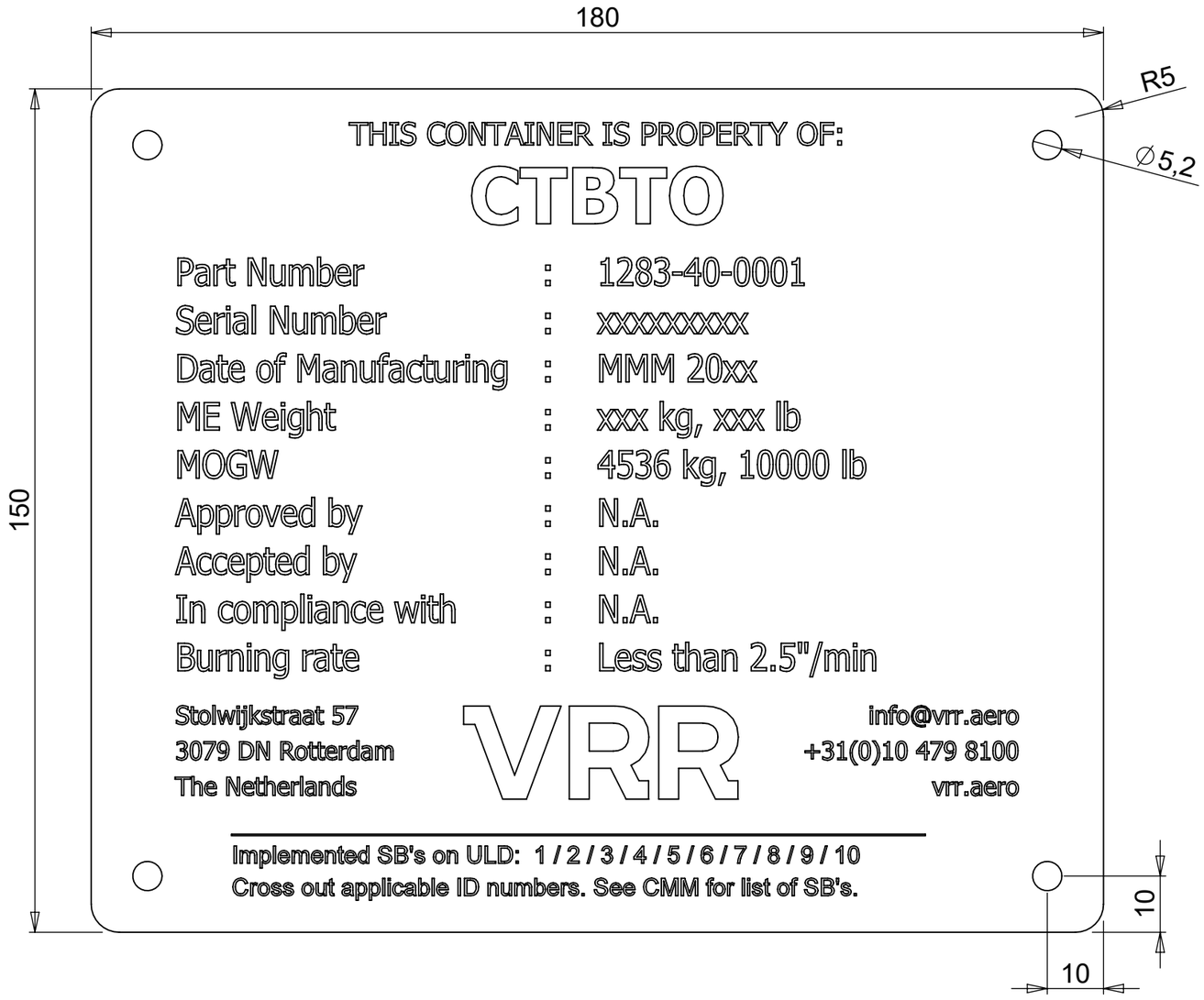
Title: **Plunger Pin**

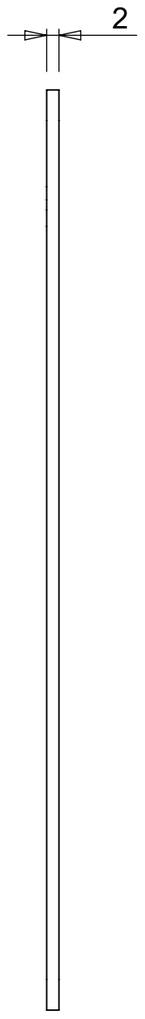
Iss.	Changes	Date	Name

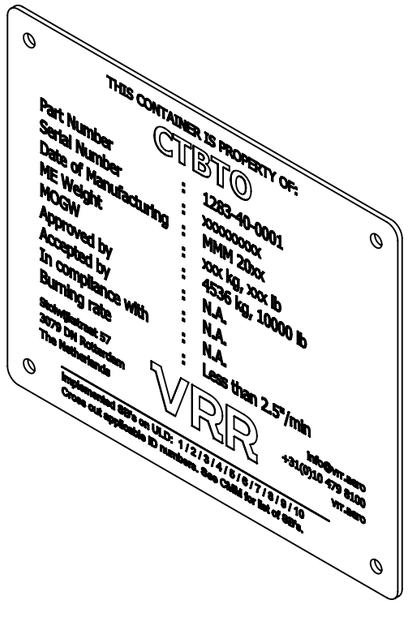
Projection

Size A3

VRR Air Cargo Equipment
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
info@vrr-aviation.com
Tel: +31 10 479 8100
Fax:+31 10 479 5478







Weigh container for exact tare
and update this drawing

Solidworks Weight: 825 kg
Weighed Weight: xxx kg, xxx lb

(ME Weight = Manufacturer's Empty Weight
MOGW = Max Operational Gross Weight)

For ID-codes/serial numbers see Clevrr
For In compliance with see Clevrr order

Item No.	QTY.	Description	Length	Width/ Dia	Height/ Thickn.	Part Number	Material	Remarks
1	1	Manufacturer plate	180	150	2	2000-07-2969	Alu. 5754-H22	Blk.anod-Engrav.

Scale: 1:1	Date:	Drawing no.: 2000-07-2969 Sheet : 1 of 1	Issue A
Drawn: MBMH	17-06-2023		
Checked: PvT	31-07-2023		
Approved: HS	08-08-2023		
Mass: 0.14 kg		Finish:	

Tolerances (u.n.o.)

< 7	7 30	30 120	120 400	400 1000	1000 2000	2000 >
±0.2	±0.3	±0.5	±0.8	±1.0	±1.4	± 2

Raw extrusion in accordance with OEM drawing and EN755-9

Dimensions in mm (u.n.o.)

Title: Manufacturer plate

Iss.	Changes	Date	Name

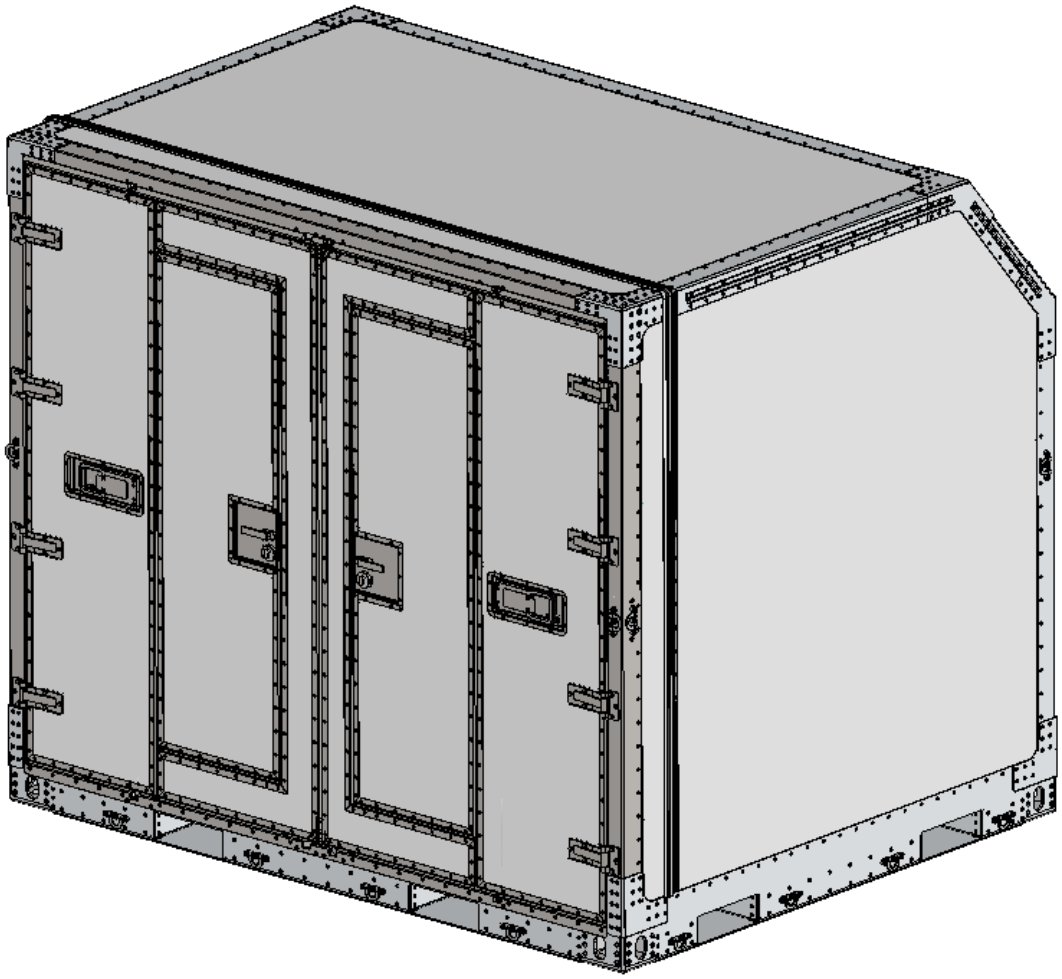
Projection

Size A3

VRR
Stolwijkstraat 57
3079 DN Rotterdam
The Netherlands
vrr.aero
info@vrr.aero
+31 (0)10 479 8100

VRR

RR 335
Structural Substantiation Report
DBJ-container
P/N 1283-40-0000; 1283-40-0001
Issue 3.00 / 07-08-2023



DBJ 1283-40-0000 & 1283-40-0001

VRR | Van Riemsdijk Rotterdam BV | Stolwijkstraat 57 | 3079 DN Rotterdam | The Netherlands
T +31 10 479 8100 | F +31 10 479 5478 | E info@vrr-aviation.com | I www.vrr.aviation.com

Record of revision

Revision	Date of Revision	Effect on pages	Reason for Revision
1.00	03-05-2019	All	Initial revision
2.00	24-09-2019	Pages 8, 16 to 27 (Base results)	Thickness bottom sheet changed from 3.0 to 2.5 mm
3.00	07-08-2023	Front page, header, page 2, 3, 4 & 5	P/N 1283-40-0001 added to report

Role	Name	Function	Date
Prepared	Danielle de Vreede	Compliance Engineer	25-07-2023
Checked	Anthony Choi	Compliance Engineer	04-08-2023
Approved	Evelien Vogelaar	Senior Compliance Engineer	07-08-2023

Document control is managed by an electronic PDM-system, therefore script signatures are not used.

Table of contents

1. General

1.1. Notations

Below a list of notations that have been used in this substantiation report:

List of used symbols and abbreviations	
CoG	Centre of Gravity
CSK	Countersunk
N	Newton
daN	Deca Newton
kN	Kilo Newton
lb	Pound
MPa	Mega Pascal
Rf	Reserve factor
ULD	Unit Load Device
DBJ	IATA ULD Code: D = Non-certified aircraft container, for B-size pallet, J-contour

1.2. References

Reference in this substantiation report have been made to the following:

Ref.	Title	No
1	Air Cargo Unit Load Devices - Performance Requirements and Test Parameters	AS 36100 A
2	Air Cargo Unit Load Devices - Load Distribution Model	AS 36101
3	Air Cargo Unit Load Devices - Testing Methods	AS 36102
4	Multi-Spring representation of fasteners for MSC/NASTRAN Modelling. By Boeing Commercial Airplane Group Strut Structures Technology.	
5	FEMAP v11.4, SIEMENS 2017	
6	NX NASTRAN 11.2, SIEMENS 2017	
7	VRR Drawing set for DBJ-container	1283-40-0000; 1283-40-0001
8	Rivet joint test analyses	R100247-02-1 RR319
9	Interface Lifting & Tie-down provisions	MIL-STD-209K
10	Testreport_seattrack	RR327

1.3. Drawings

Below a list of applicable drawings

Drawing number	Drawing title	Issue	Pages
1283-40-0000	DBJ container	A	4
1283-40-0001	DBJ container	A	4

2. Substantiation strength DBJ-container

2.1. Introduction

The figure below shows the DBJ-container with its outside dimensions. Figure 2.1.2 shows the container interior.

Differences between P/N 1283-40-0000 and 1283-40-0001 are not structural and will not influence the results stated in this report. See VRR drawing set for DBJ-container (ref. 7) for construction details.

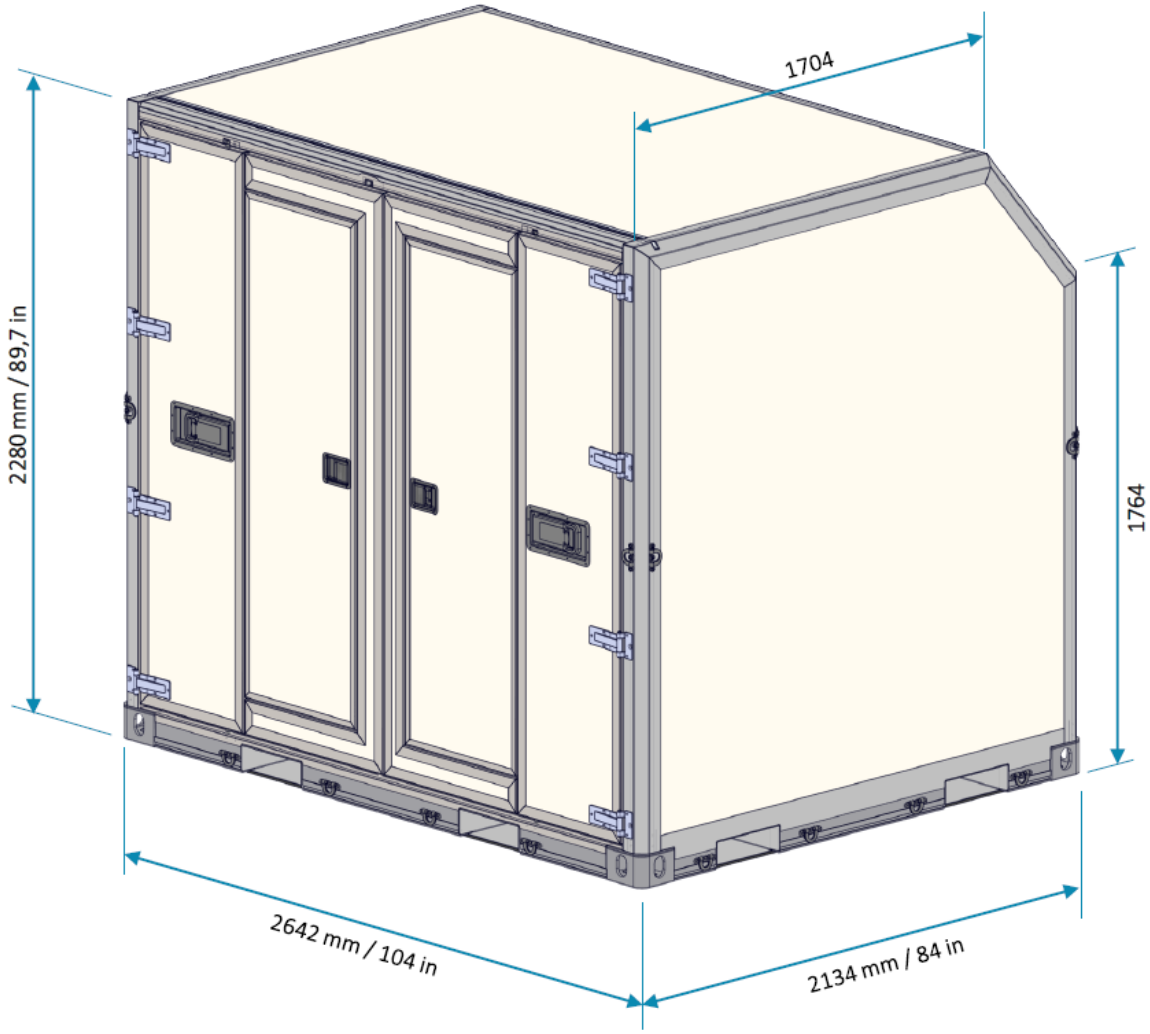


Fig. 2.1.1 DBJ-container

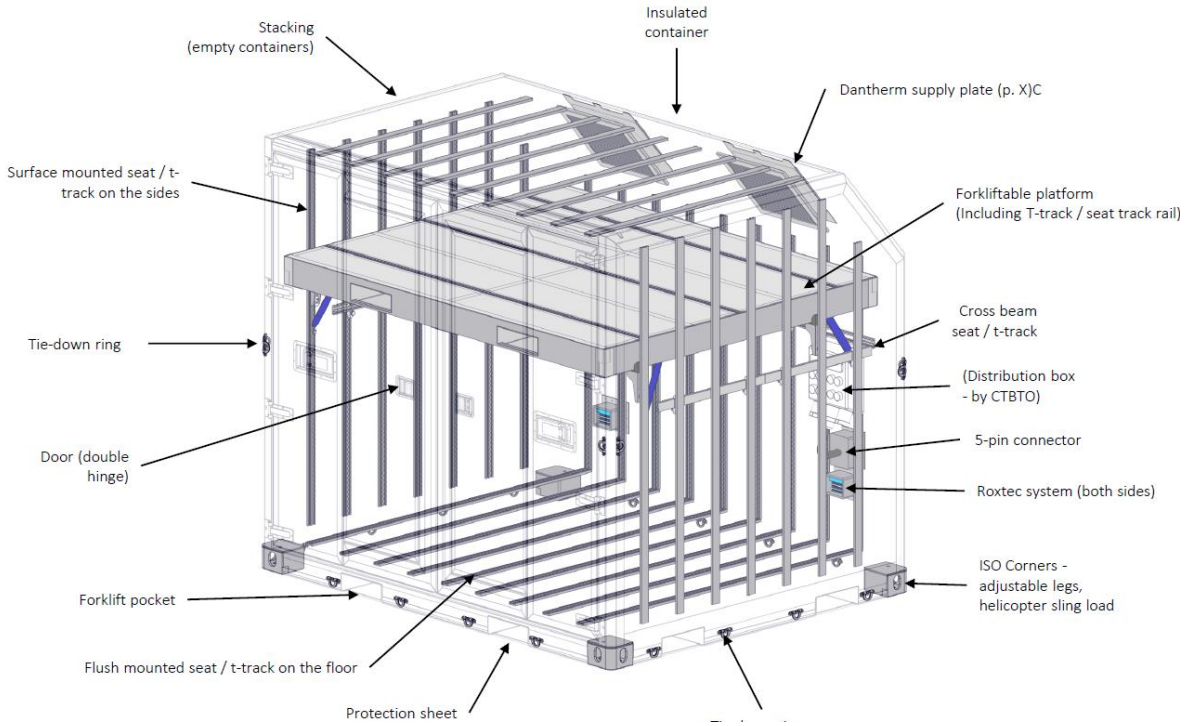


Fig. 2.1.2 DBJ-container with interior overview

2.2. Purpose

The purpose of this VRR internal report is to demonstrate that the strength of the DBJ-container complies with the airworthiness requirements.

The strength will be substantiated by means of Finite Element Analysis of the base and shelf. And by means of hand calculations.

3. Substantiation strength base in DBJ-container

3.1. Introduction

The DBJ-container is equipped with a forkliftable base (see figure below).

In this chapter the strength of the base will be substantiated by means of Finite Element Analyses.

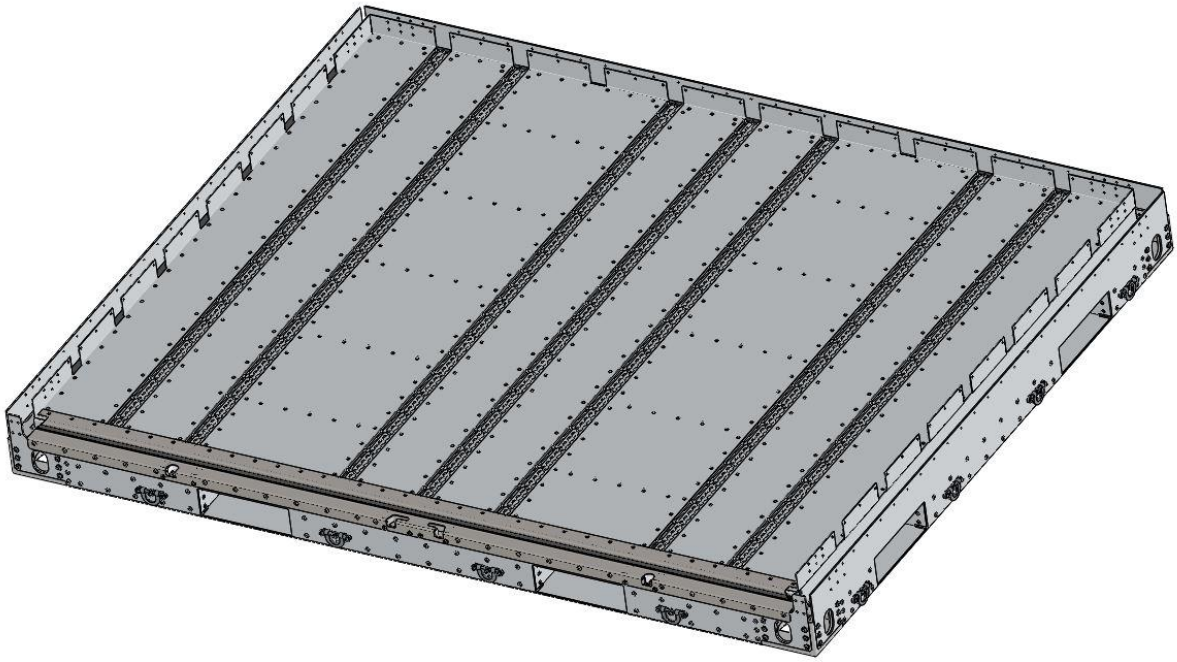


Fig. 3.1.1 Base of DBJ-container

3.2. Material properties

The figures below show the material properties of the parts in the base.

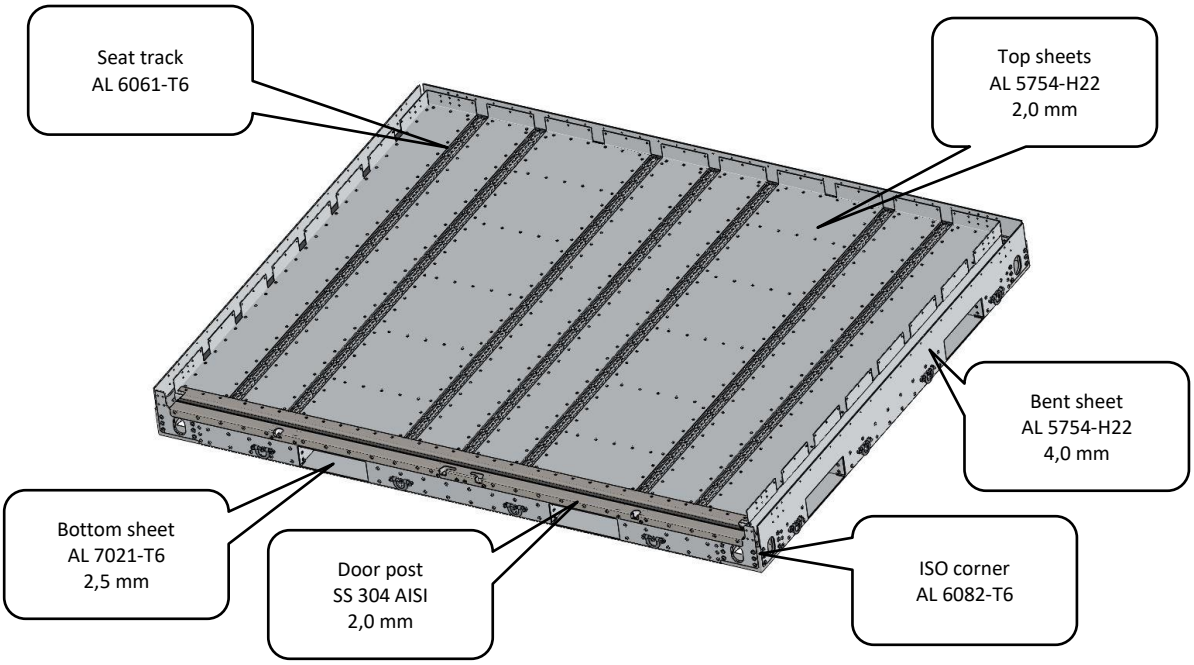


Fig. 3.2.1 Base - properties

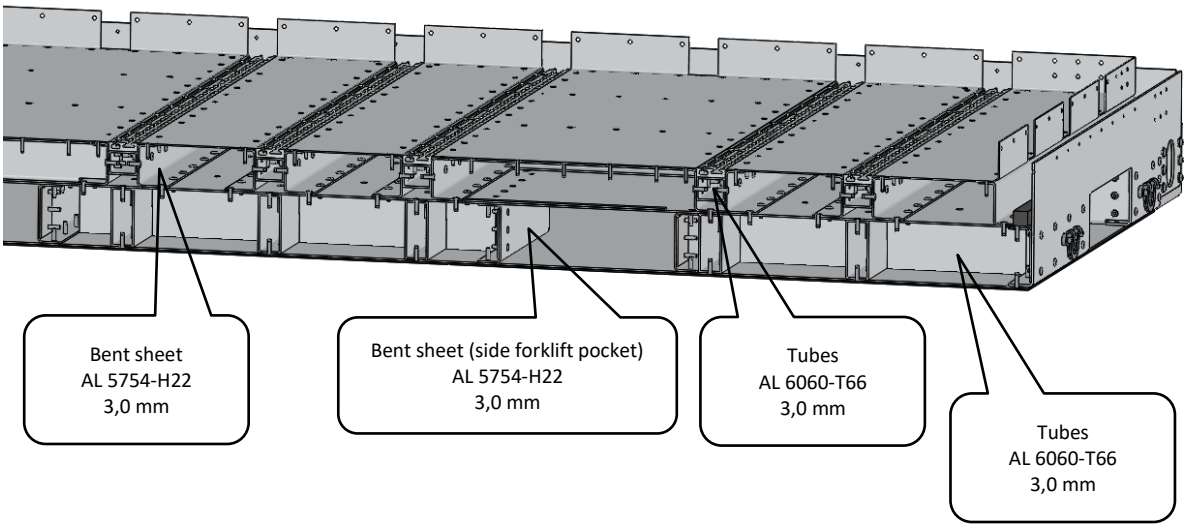


Fig. 3.2.2 Base – properties section view

3.3. Loads

The DBJ-container must be able to be hoisted by a helicopter. Document MIL-STD-209K, Interface Lifting & Tie-down provisions [ref. 9] shows how to determine the helicopter sling load (HSL) material lift point load factor (LF). This LF is used to calculate the design limit load for the hoisting simulation for the DBJ-container.

For the helicopter sling load weight (HSLWT) the MGW of the DBJ-container is used, this is 10000 lb. The Maximum Projected Frontal Area (MPFA) of the DBJ-container is 83 sq ft. See figure 3.3.1 for visualization of the MPFA for a single point lift with a helicopter.

See table 3.3.2 for LF calculation. HSLWT / MPFA = 10000 lb / 83 sq ft = 120 lb/sq ft.

➔ LF = 3,2

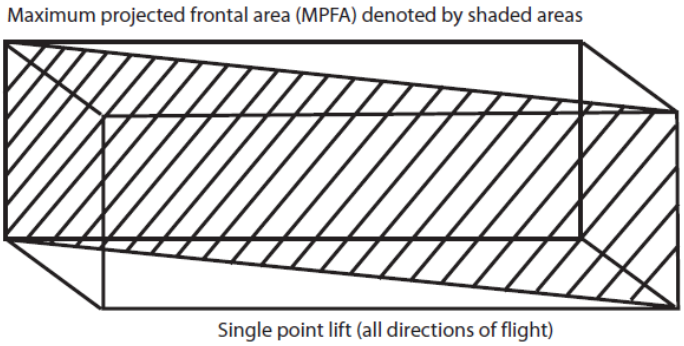


Fig. 3.3.1 MPFA single point lift

HSLWT/MPFA (lb/sq ft)	HSLWT (lb)	Load Factor
<45	<5,000	5.9
<45	5,000 - 15,000	5.6
<45	15,001 - 36,000	3.2-[0.000038x(HSLWT-15,000)]+2.4
>45 but <60	<5,000	3.5+[0.16x(60-(HSLWT/MPFA))]
>45 but <60	5,000 - 15,000	3.2+[0.16x(60-(HSLWT/MPFA))]
>45 but <60	15,001 - 36,000	3.2-[0.000038x(HSLWT-15,000)] +[0.16x(60-(HSLWT/MPFA))]
>60	<5,000	3.5
>60	5,000 - 15,000	3.2
>60	15,001 - 36,000	3.2-[0.000038x(HSLWT-15,000)]

Table 3.3.2 Calculation of lift point LF

Design Limit Load
The design limit load for the DBJ-container is calculated using the HSL material lift point LF (=3,2) and the MGW of the container. No plastic deformation is allowed with this load.

In the simulation two loads will be applied on the base, namely a body load and cargo load. Both loads are applied in downward direction (see figure below).

A body load of 3,2 g in downward direction is used, which is an acceleration of structure mass.
The body load is calculated as follows:

$$9{,}81 * 3{,}2 = 31{,}392 \text{ m/s}^2$$

The maximum gross weight of the DBJ-container is 4536 kg.
The mass of the base model is 304,5 kg

The applied downward load is calculated as follows:

$$(4536\text{-}304{,}5) * 9{,}81 * 3{,}2 = 123835 \text{ [N]}$$

Ultimate load
No failure in the structure is allowed with this load.
The ultimate load is calculated as follows:

$$\text{Design limit load} * 1{,}5 = 199253 \text{ [N]}$$

3.4. Load application

The load has been applied by means of a nodal load on a RBE2 element in combination with soft DOF spring elements, taking in account the cg-offset of 10% in x- and y-direction. This way, static load application by means of pressurized aircushion is simulated. The applicable acceleration per §3.3 has been applied as a body load.

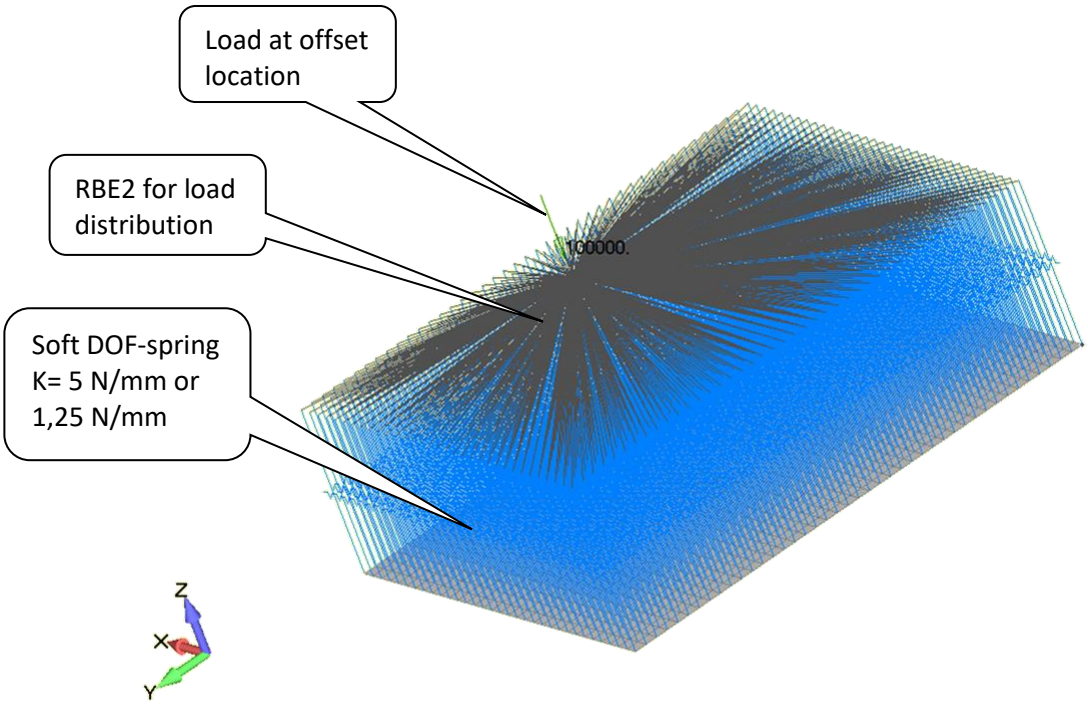


Fig. 3.4.1 Load application, example

Since the element size on the sheets differs from the element size on the extrusion profiles two different DOF-spring stiffness are used for applying the load.

The stiffness of the DOF-springs applied on the sheets is 5 N/mm.
The size of plate elements of the sheets is 40 x 40 = 1600 mm^2 and the size of the plate elements of the extrusion profiles is 20 x 20 = 400 mm^2.

$$\frac{1600}{400} = 4$$

So the elements of the sheets are 4 times as large as the elements on the extrusion profiles.

Therefore the stiffness of the DOF-springs applied on the extrusion profiles is divided by 4:

$$\frac{5}{4} = 1{,}25 \text{ N/mm}$$

3.5. Centre of gravity

A centre of gravity shift of 10% is used. The shift of the centre of gravity is towards the front and towards one side of the container.

This is considered to be a critical but realistic load case.

3.6. Restraints

Hoisting will be done at the ISO-corners. The base is restrained in the 4 ISO-corners by a hoisting tool which is fastened one or two openings per ISO-corner.

Since the hoisting procedure is not exactly specified, all following hoisting situations are analysed:

- 1 side per ISO-corner, only at the sides (see Fig. 3.6.2)
- 1 side per ISO-corner, only at the front and aft (see Fig. 3.6.3)
- 2 sides per ISO-corner, so both sides and front and aft (see Fig. 3.6.4)

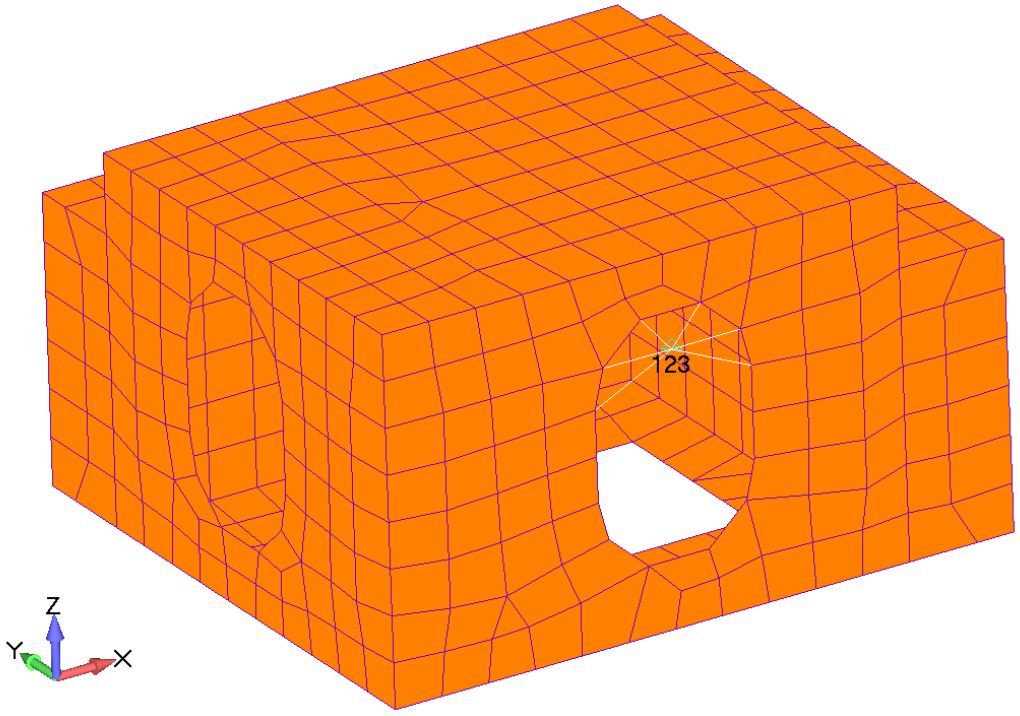


Fig. 3.6.1 Restraint in ISO-corner by RBE2-element

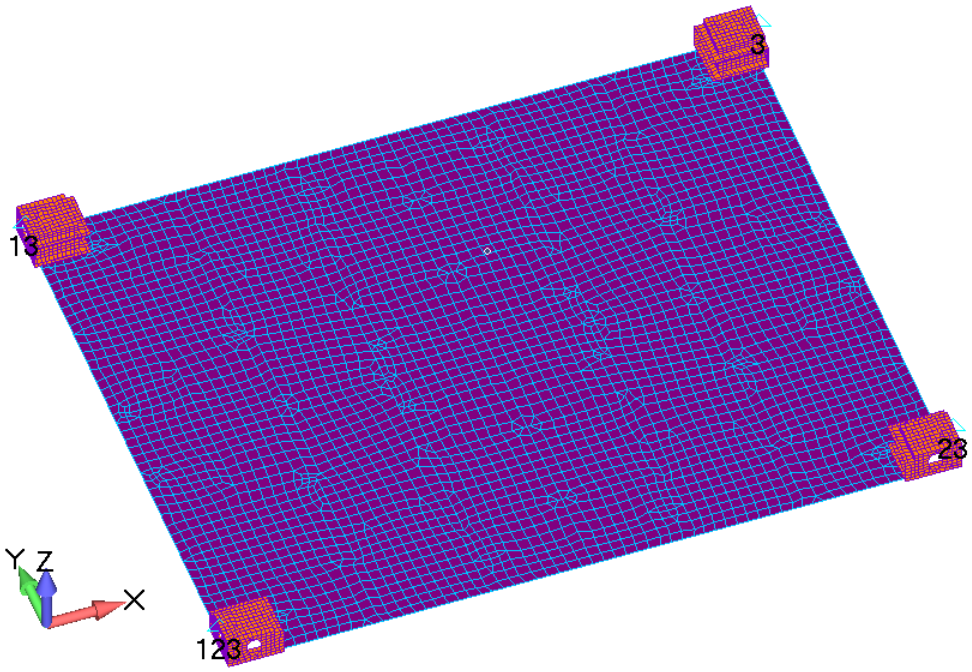


Fig. 3.6.2 Degrees of freedom per ISO-corner (restraints on sides only)

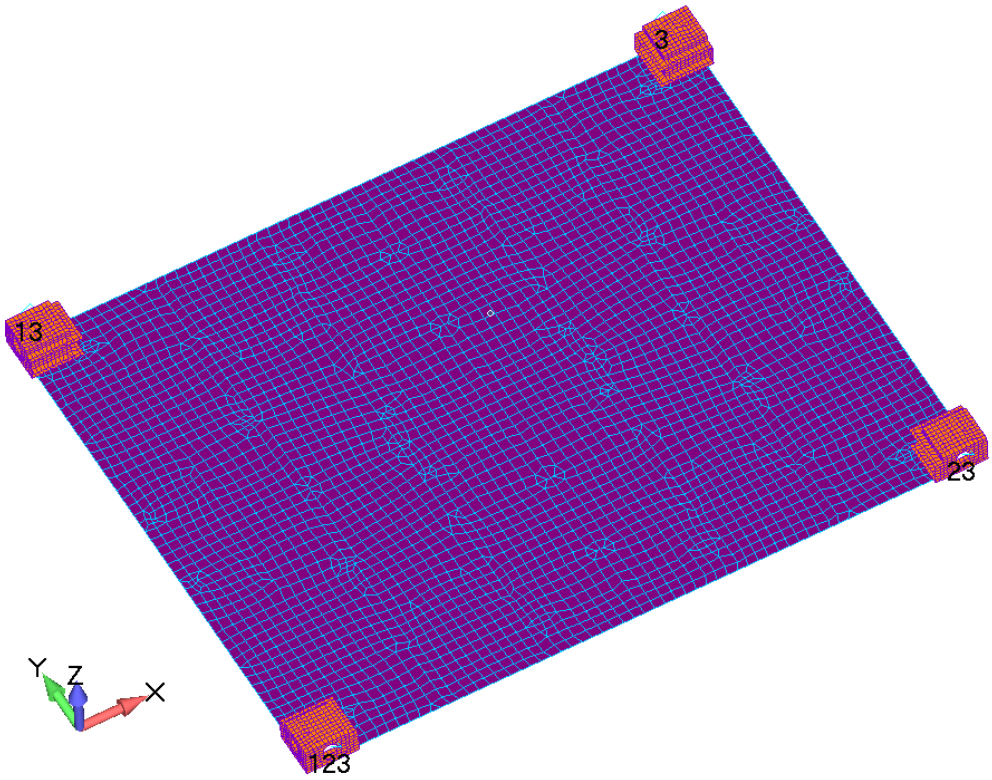


Fig. 3.6.3 Degrees of freedom per ISO-corner (restraints on front and aft only)

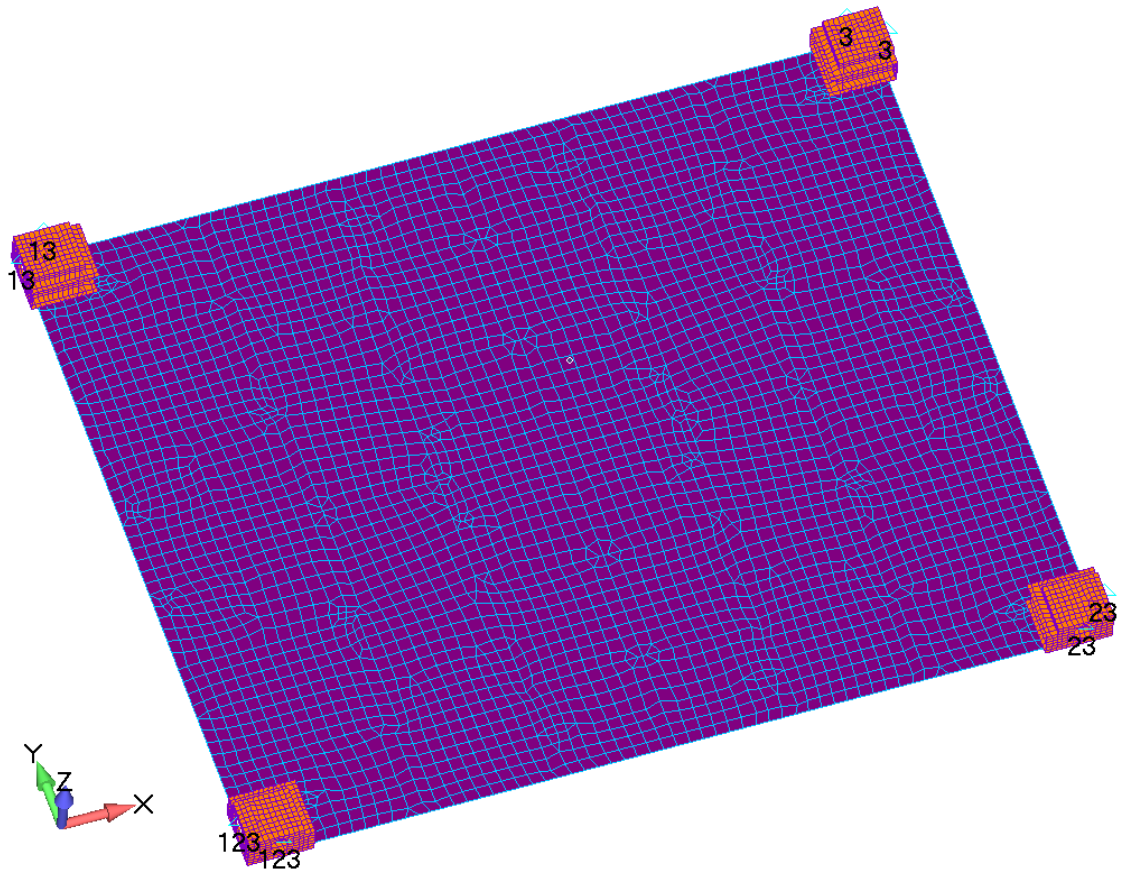


Fig. 3.6.4 Degrees of freedom per ISO-corner (all restraints in both front, aft and sides)

3.7. Finite element model

The figure below shows the finite element model of the base.

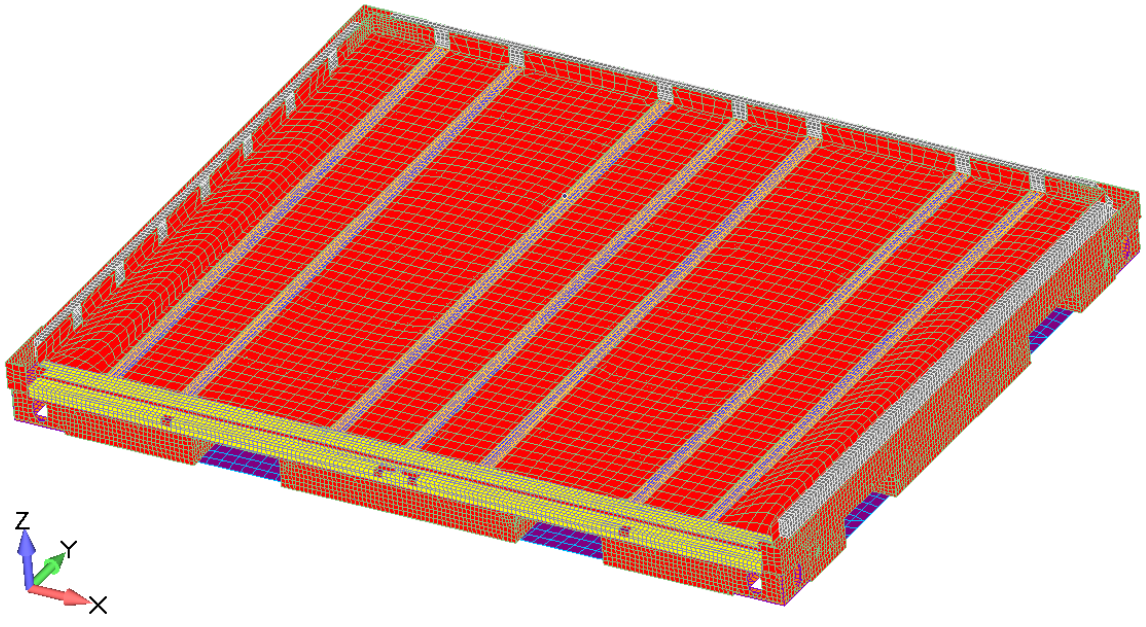


Fig. 3.7.1 Finite element model of base

Since the hull and doors add a lot of stiffness to the base, they are partly simplified modelled and included in analyses, see figure below.

The entire top structure, door portal and door rubbers are excluded from analyses. The door panels and door locks are partly excluded from analyses, only the lower part is included in the model.

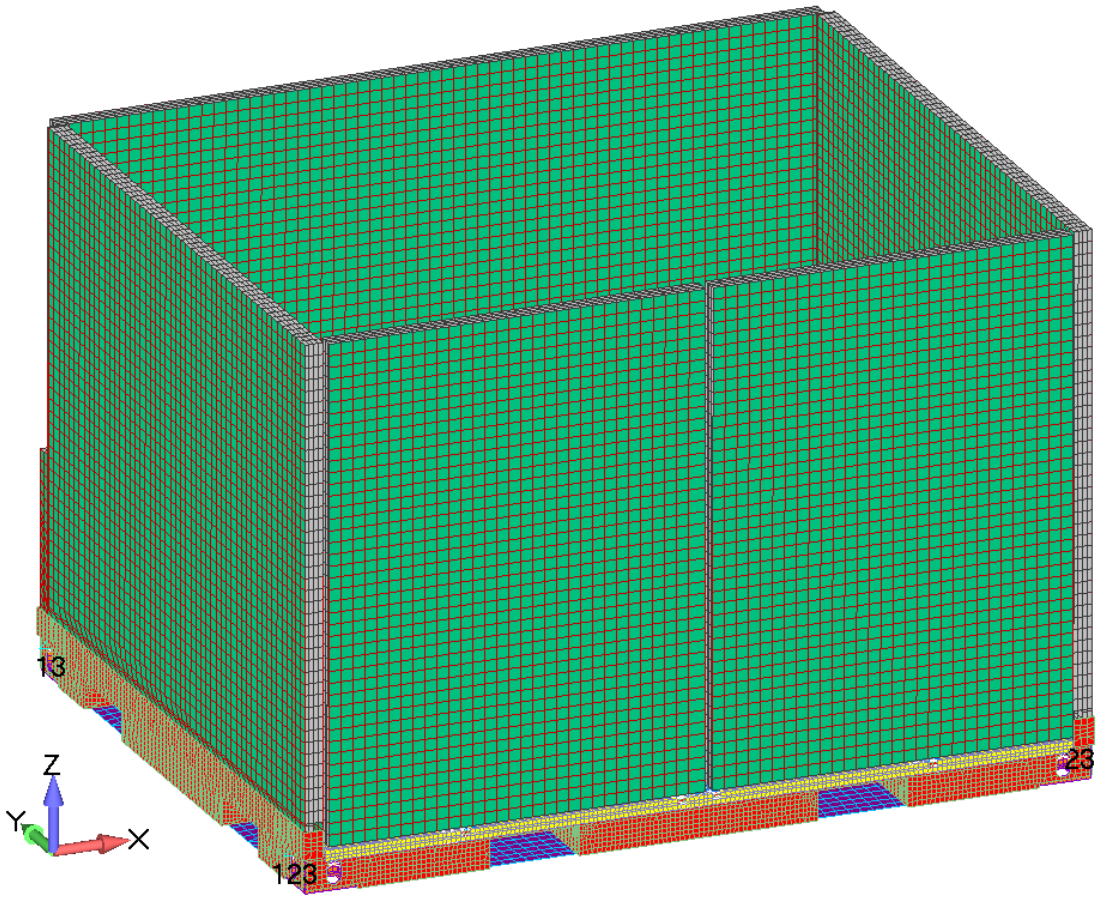


Fig. 3.7.2 Finite element model of base with hull and door panels

3.8. Analyses results – Limit load (ISO-restraints on sides only)

The results below are calculated with a limit load of 4536 kg x 3,2 G (see §3.3). The load is applied on the entire surface of the base with a 10% centre of gravity shift. The stress may not exceed the yield strength during this load case.
During this calculation the base was supported in the 4 ISO-corners on the sides only, so restraints according to Fig. 3.6.2.

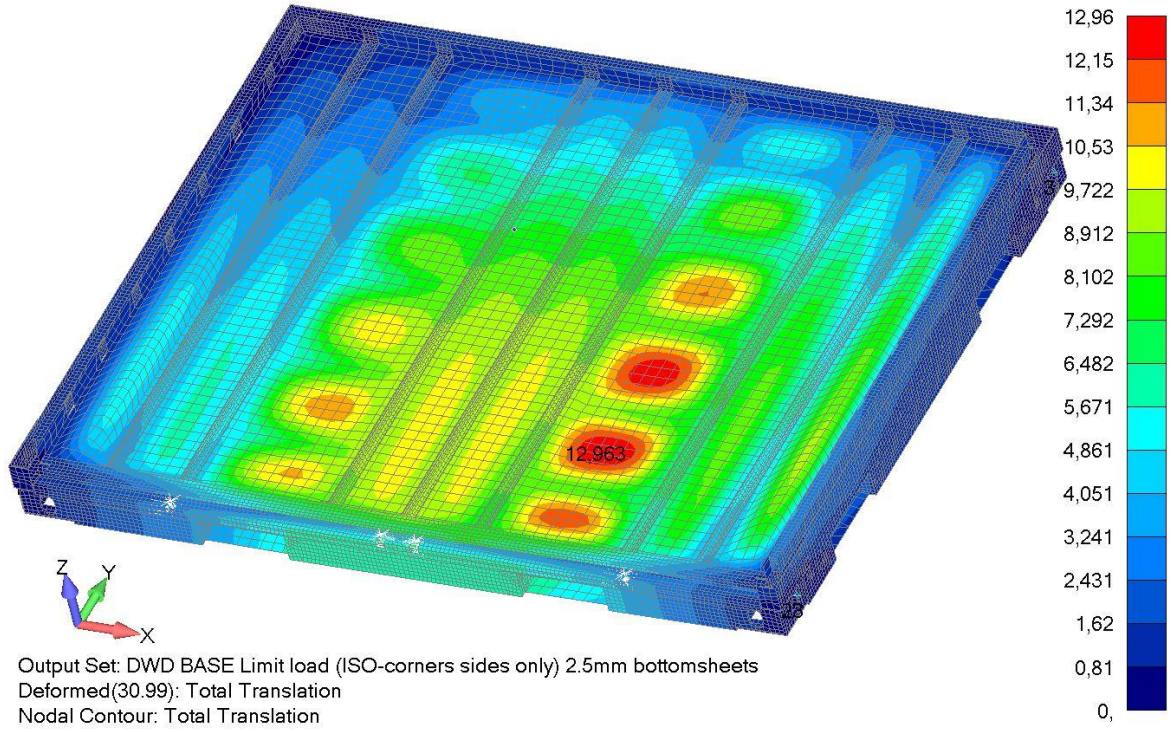


Fig. 3.8.1 Deformation, downward limit load [mm]

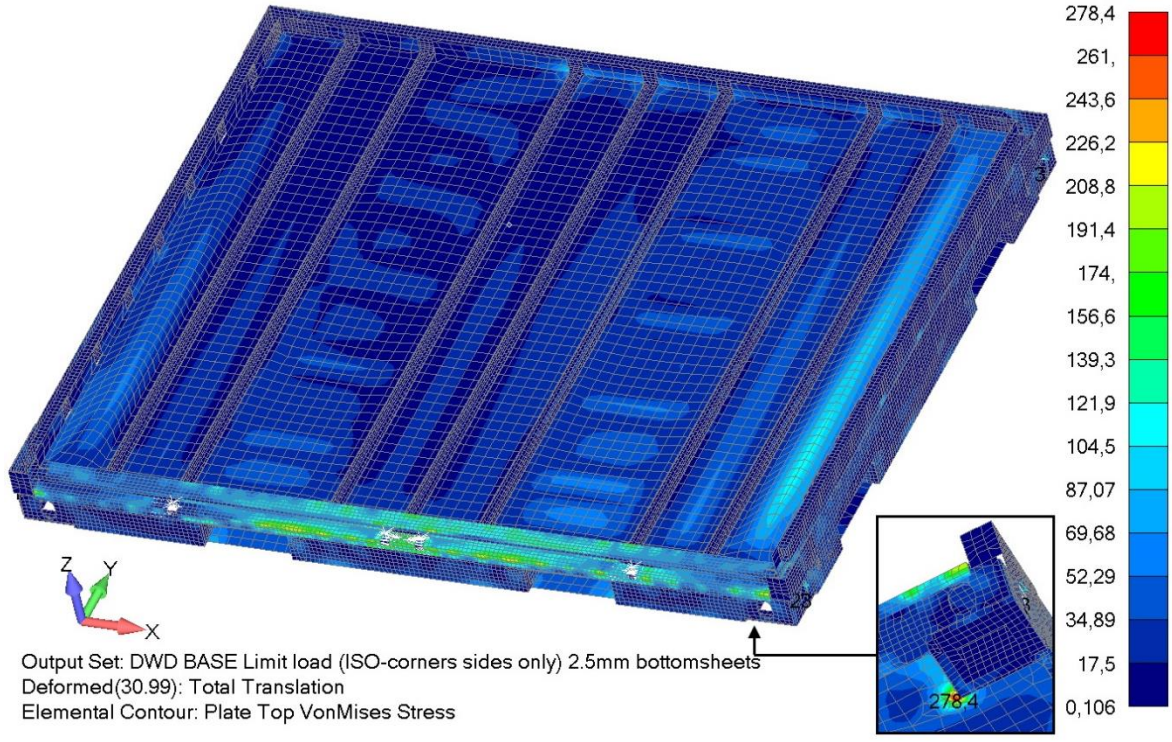


Fig. 3.8.2 VonMises Stress, downward limit load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on yield strength
AL 5754-H22	130,6	130	245	1,00
AL 6060-T66	141,0	160	215	1,13
AL 6061-T6	22,9	240	260	10,46
AL 6082-T6	123,9	260	310	2,10
AL 7021-T6	278,4	350	400	1,26
SS 304 AISI	206,9	205	517	0,99

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	2828	5800	789	4400	OK
Monobolt Steel 6,4 Rivets	4987	11000	1775	8200	OK
Csk. Monobolt Steel 6,4 Rivets	4333	11000	1602	8200	OK
Hex. Socket Screw SS M8	4880	14792	653	10620	OK

Some stress peaks of AL 5754-H22 and SS 304 AISI are just above their yield value. These peaks occur at the front of the pallet. Since the entire top structure, door panels (partly), door locks (partly), door portal and door rubbers are excluded from analyses (conservative approach) all material stresses and fastener forces are considered within the allowable.

3.9. Analyses results – Ultimate load (ISO-restraints on sides only)

The results below are calculated with ultimate loads, so the load and body load of the previous paragraph are multiplied by 1,5 (see §3.3). During this load case the stress may not exceed the tensile strength.

During this calculation the base was supported in the 4 ISO-corners on the sides only, so restraints according to Fig. 3.6.2.

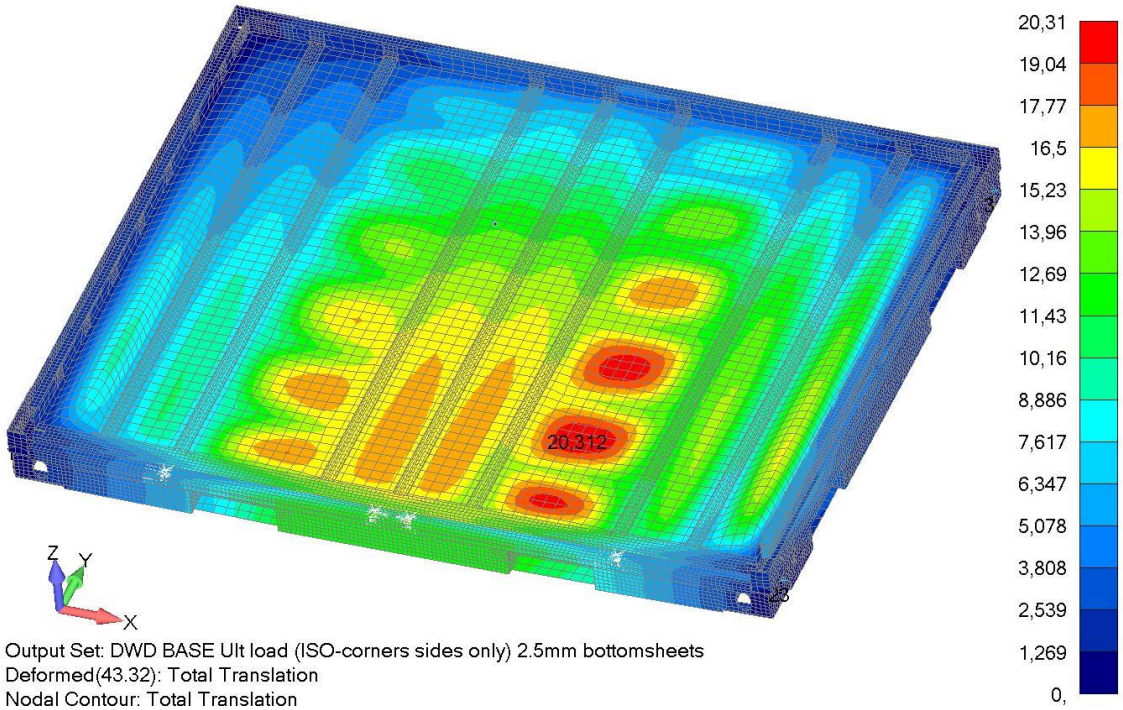


Fig. 3.9.1 Deformation, downward ultimate load [mm]

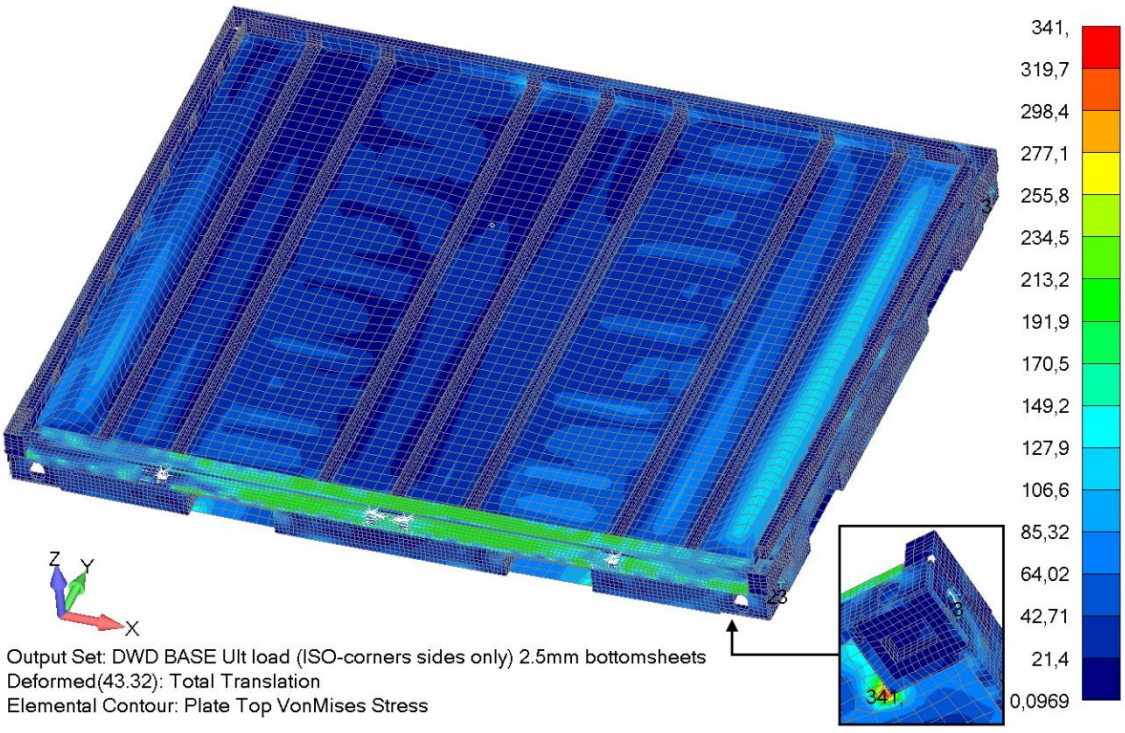


Fig. 3.9.2 VonMises Stress, downward ultimate load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on tensile strength
AL 5754-H22	132,7	130	245	1,85
AL 6060-T66	161,4	160	215	1,33
AL 6061-T6	32,3	240	260	8,05
AL 6082-T6	180,6	260	310	1,72
AL 7021-T6	341,0	350	400	1,17
SS 304 AISI	211,6	205	517	2,44

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	4864	5800	1058	4400	OK
Monobolt Steel 6,4 Rivets	9006	11000	2635	8200	OK
Csk. Monobolt Steel 6,4 Rivets	6687	11000	2518	8200	OK
Hex. Socket Screw SS M8	7196	14792	906	10620	OK

All material stresses and fastener forces are within the allowable.

3.10. Analyses results – Limit load (ISO-restraints on front and aft only)

The results below are calculated with a limit load of 4536 kg x 3,2 G (see §3.3). The load is applied on the entire surface of the base with a 10% centre of gravity shift. The stress may not exceed the yield strength during this load case.
During this calculation the base was supported in the 4 ISO-corners on the front and aft only, so restraints according to Fig. 3.6.3.

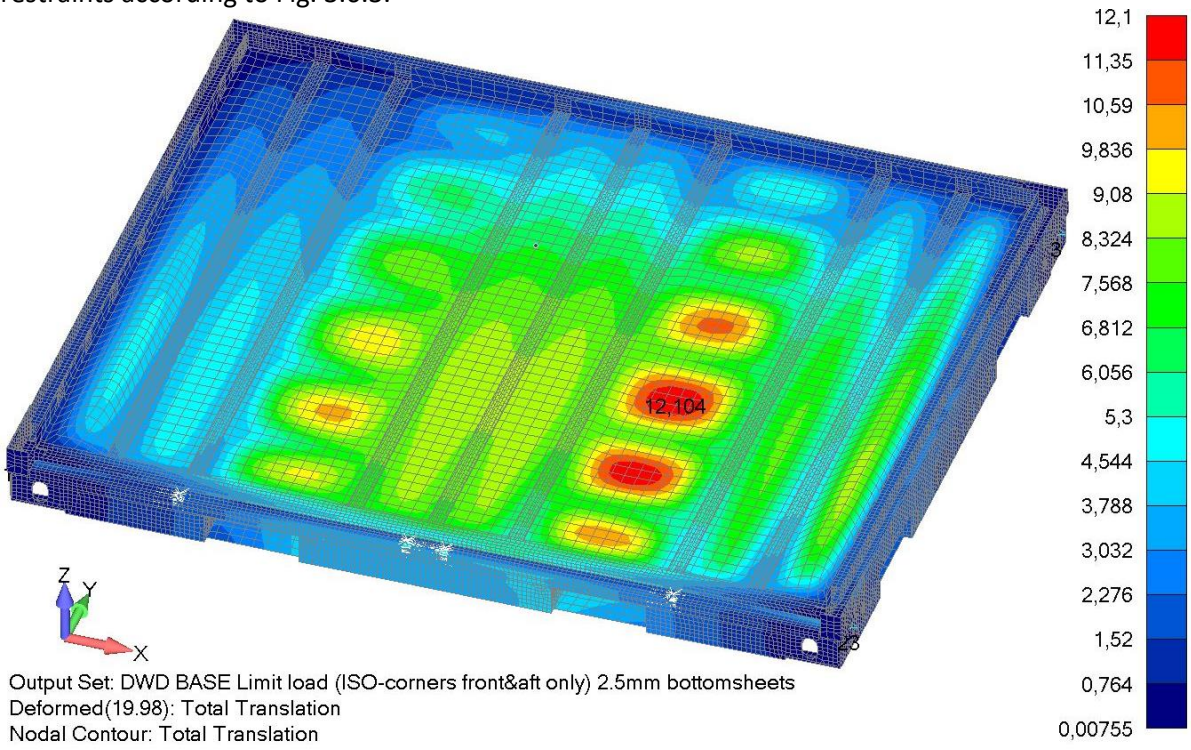


Fig. 3.10.1 Deformation, downward limit load [mm]

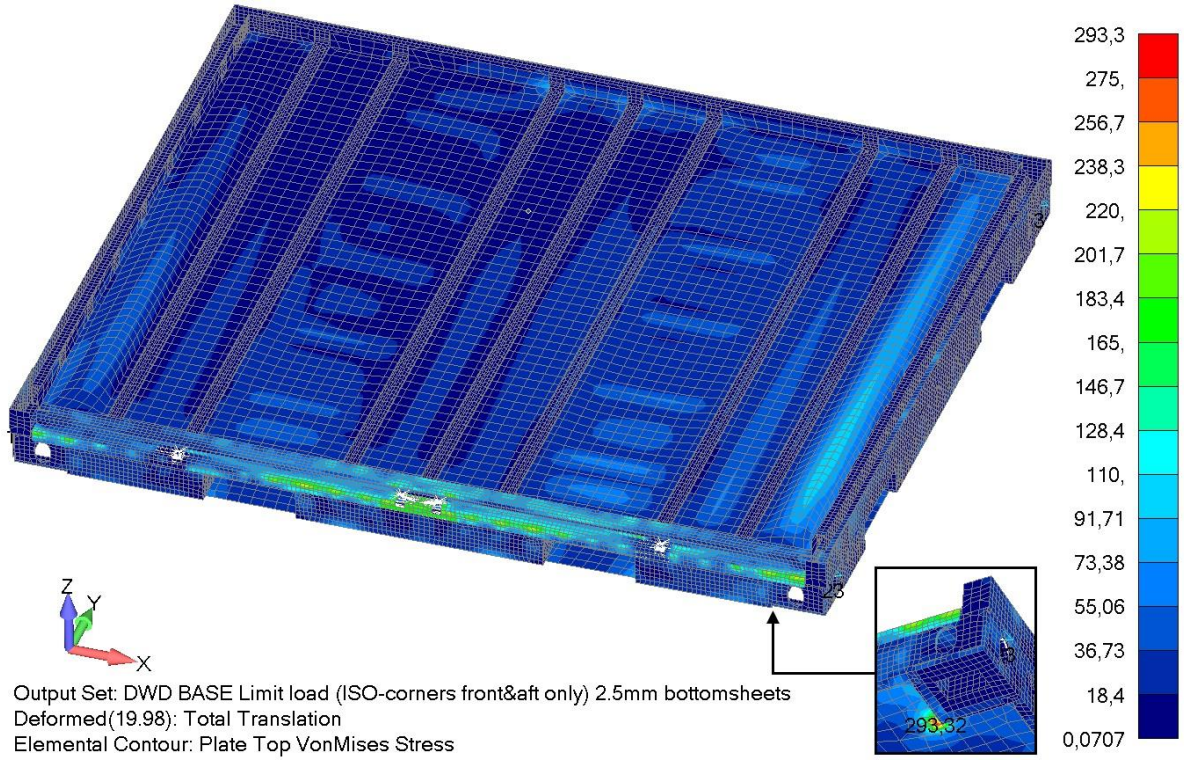


Fig. 3.10.2 VonMises Stress, downward limit load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on yield strength
AL 5754-H22	130,8	130	245	0,99
AL 6060-T66	142,6	160	215	1,12
AL 6061-T6	23,5	240	260	10,20
AL 6082-T6	103,9	260	310	2,50
AL 7021-T6	293,3	350	400	1,19
SS 304 AISI	209,2	205	517	0,98

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	2704	5800	767	4400	OK
Monobolt Steel 6,4 Rivets	5949	11000	238	8200	OK
Csk. Monobolt Steel 6,4 Rivets	4364	11000	1651	8200	OK
Hex. Socket Screw SS M8	4790	14792	418	10620	OK

Some stress peaks of AL 5754-H22 and SS 304 AISI are just above their yield value. These peaks occur at the front of the pallet. Since the entire top structure, door panels (partly), door locks (partly), door portal and door rubbers are excluded from analyses (conservative approach) all material stresses and fastener forces are considered within the allowable.

3.11. Analyses results – Ultimate load (ISO-restraints on front and aft only)

The results below are calculated with ultimate loads, so the load and body load of the previous paragraph are multiplied by 1,5 (see §3.3). During this load case the stress may not exceed the tensile strength.

During this calculation the base was supported in the 4 ISO-corners on the sides only, so restraints according to Fig. 3.6.3.

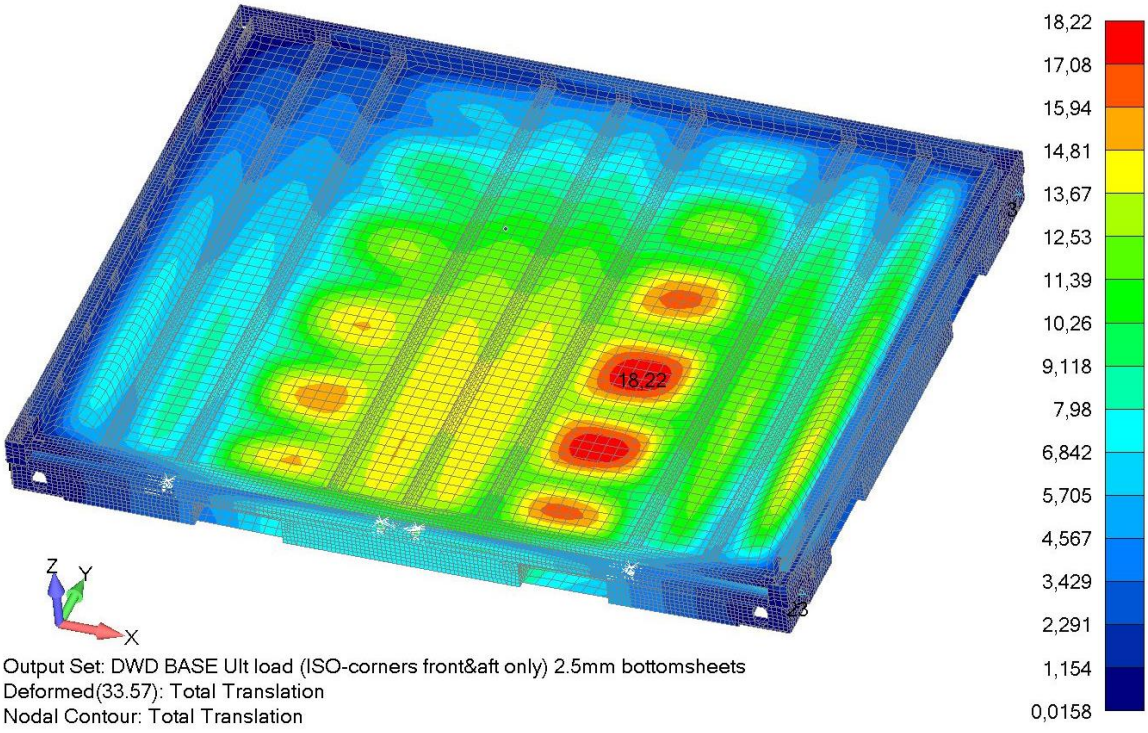


Fig. 3.11.1 Deformation, downward ultimate load [mm]

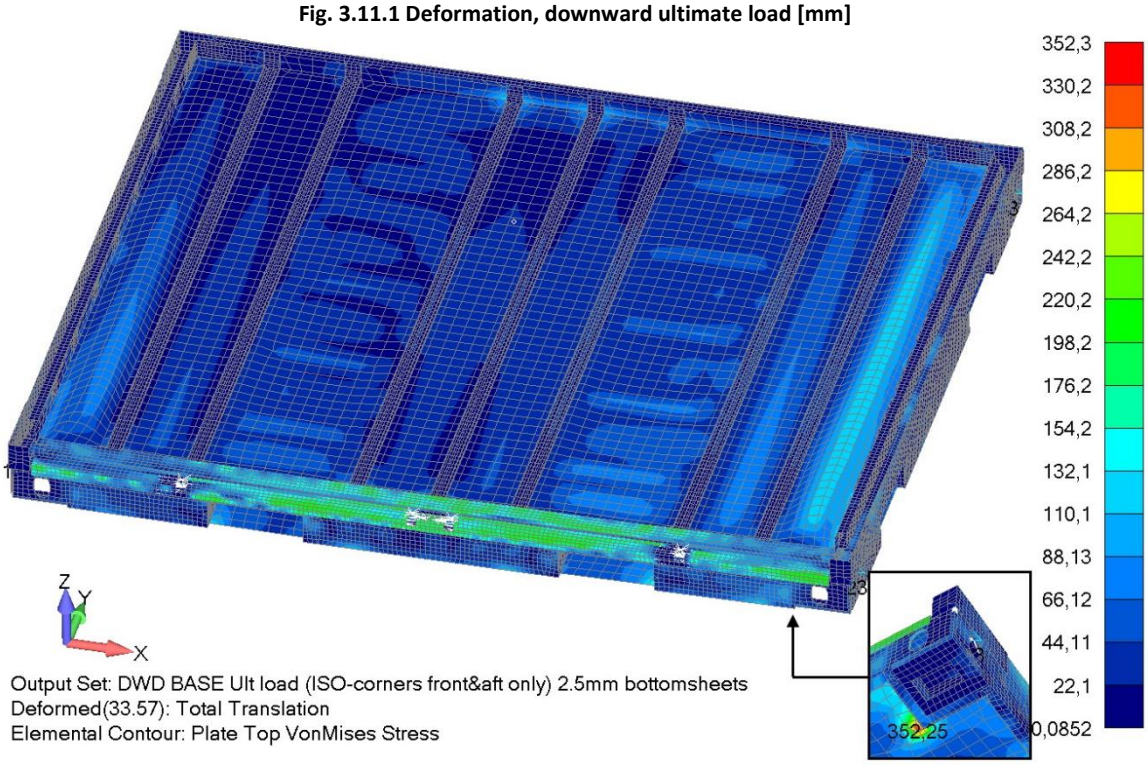


Fig. 3.11.2 VonMises Stress, downward ultimate load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on tensile strength
AL 5754-H22	134,1	130	245	1,83
AL 6060-T66	161,7	160	215	1,33
AL 6061-T6	35,3	240	260	7,37
AL 6082-T6	158,1	260	310	1,96
AL 7021-T6	352,3	350	400	1,14
SS 304 AISI	216,2	205	517	2,39

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	4495	5800	1159	4400	OK
Monobolt Steel 6,4 Rivets	7253	11000	2603	8200	OK
Csk. Monobolt Steel 6,4 Rivets	7392	11000	2568	8200	OK
Hex. Socket Screw SS M8	5473	14792	647	10620	OK

All material stresses and fastener forces are within the allowable.

3.12. Analyses results – Limit load (all ISO-restraints)

The results below are calculated with a limit load of 4536 kg x 3,2 G (see §3.3). The load is applied on the entire surface of the base with a 10% centre of gravity shift. The stress may not exceed the yield strength during this load case.
During this calculation the base was supported in the 4 ISO-corners on both the sides and front and aft, so restraints according to Fig. 3.6.4.

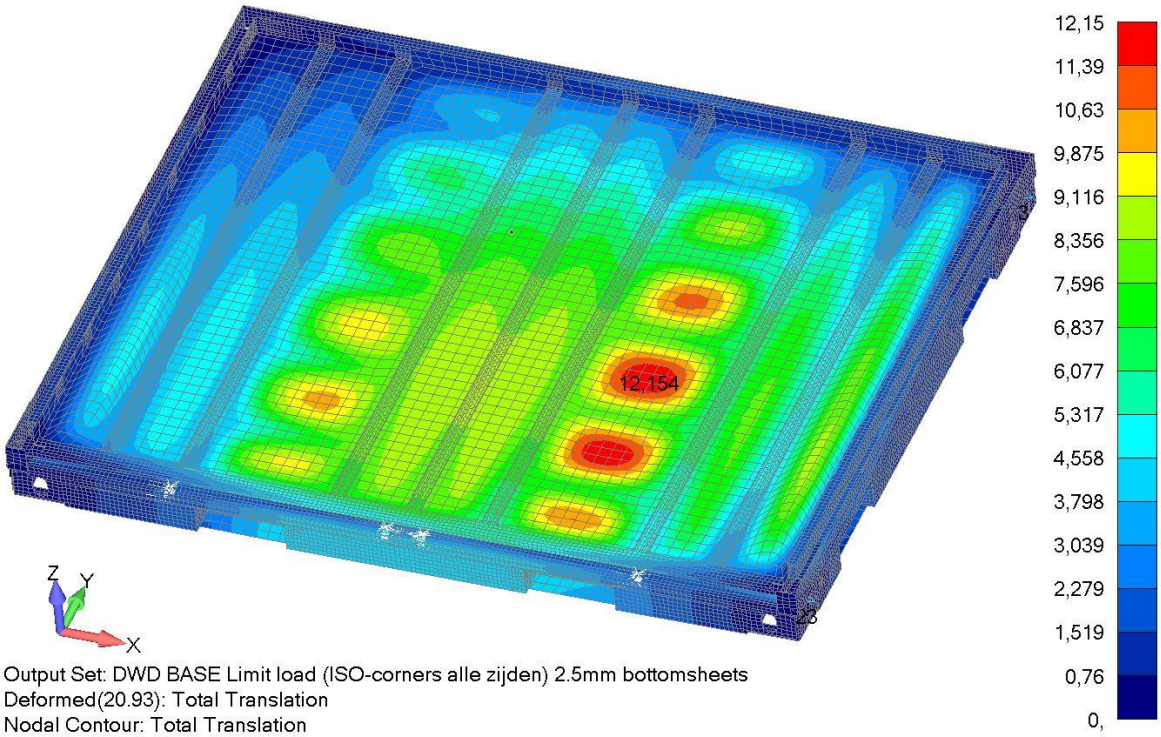


Fig. 3.12.1 Deformation, downward limit load [mm]

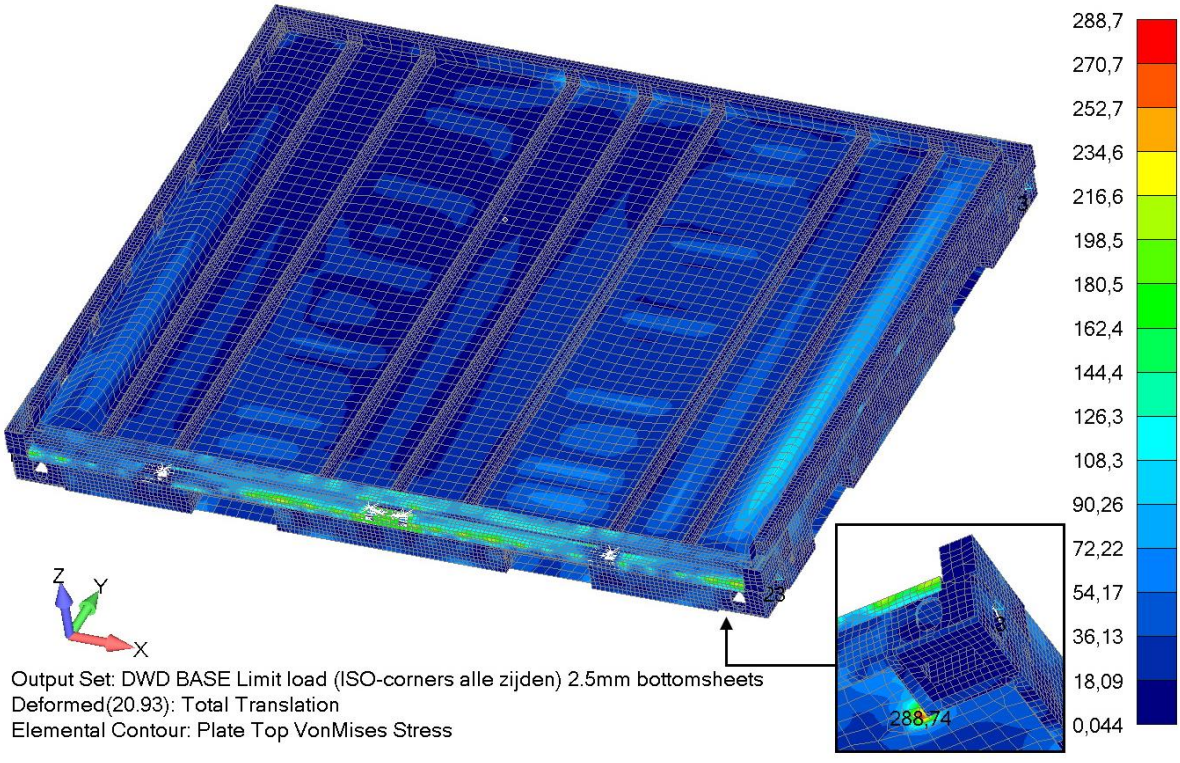


Fig. 3.12.2 VonMises Stress, downward limit load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on yield strength
AL 5754-H22	130,9	130	245	0,99
AL 6060-T66	142,3	160	215	1,12
AL 6061-T6	23,5	240	260	10,21
AL 6082-T6	99,2	260	310	2,62
AL 7021-T6	288,7	350	400	1,21
SS 304 AISI	208,8	205	517	0,98

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	2682	5800	783	4400	OK
Monobolt Steel 6,4 Rivets	5590	11000	195	8200	OK
Csk. Monobolt Steel 6,4 Rivets	4382	11000	1637	8200	OK
Hex. Socket Screw SS M8	3784	14792	423	10620	OK

Some stress peaks of AL 5754-H22 and SS 304 AISI are just above their yield value. These peaks occur at the front of the pallet. Since the entire top structure, door panels (partly), door locks (partly), door portal and door rubbers are excluded from analyses (conservative approach) all material stresses and fastener forces are considered within the allowable.

3.13. Analyses results – Ultimate load (all ISO-restraints)

The results below are calculated with ultimate loads, so the load and body load of the previous paragraph are multiplied by 1,5 (see §3.3). During this load case the stress may not exceed the tensile strength.

During this calculation the base was supported in the 4 ISO-corners on the sides only, so restraints according to Fig. 3.6.4.

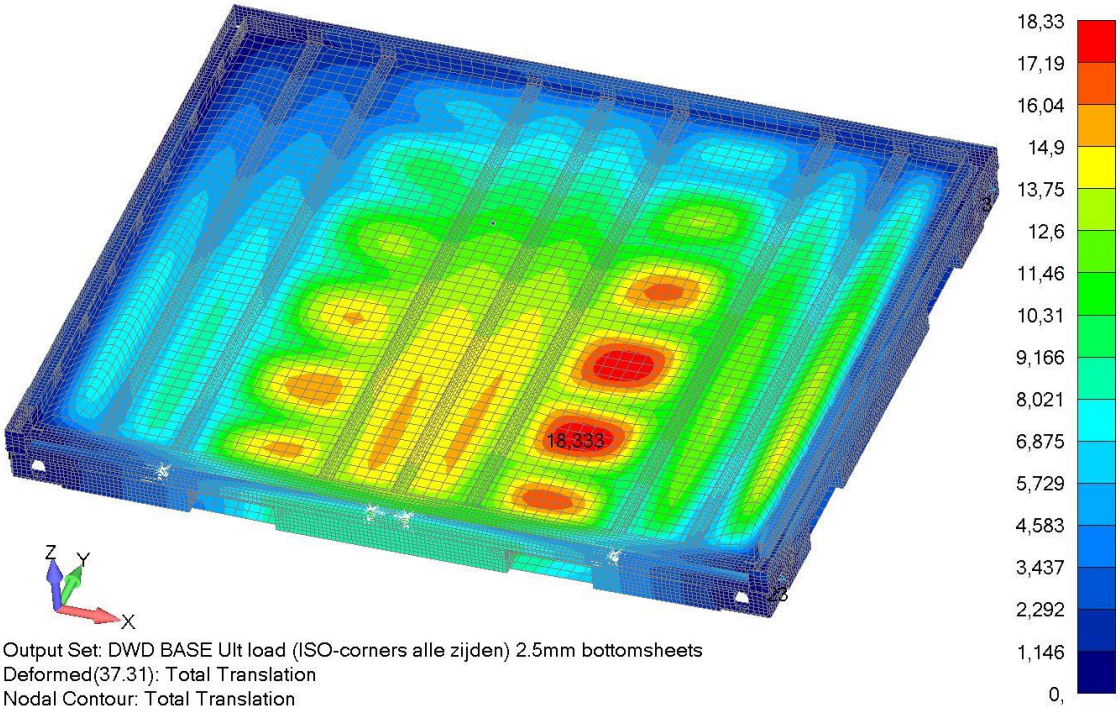


Fig. 3.13.1 Deformation, downward ultimate load [mm]

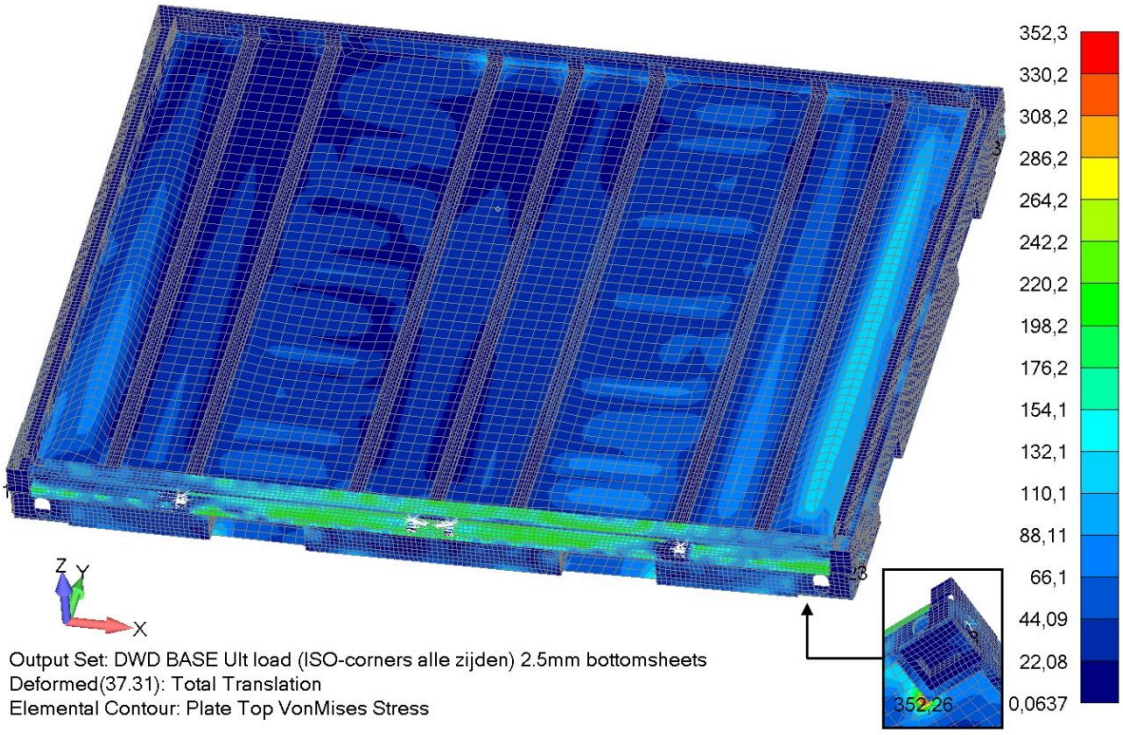


Fig. 3.13.2 VonMises Stress, downward ultimate load [MPa]

Material	Maximum stress	Yield strength	Tensile strength	Reserve factor on tensile strength
AL 5754-H22	133,4	130	245	1,84
AL 6060-T66	161,4	160	215	1,33
AL 6061-T6	34,5	240	260	7,54
AL 6082-T6	181,5	260	310	1,71
AL 7021-T6	352,3	350	400	1,14
SS 304 AISI	214,2	205	517	2,41

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Csk. Monobolt Steel 4,8 Rivets	4217	5800	1149	4400	OK
Monobolt Steel 6,4 Rivets	7240	11000	2620	8200	OK
Csk. Monobolt Steel 6,4 Rivets	7182	11000	2576	8200	OK
Hex. Socket Screw SS M8	5296	14792	642	10620	OK

All material stresses and fastener forces are within the allowable.

3.14. Conclusion base – hoisting load cases

During all analysed hoisting load cases all material stresses and fastener forces are within the allowable.

The maximum deformation of the base at the location of a door lock is 11,09 mm, so the doors remain closed when this deformation occurs considering the length of the lock pins (overlap is 20 mm).

3.15. Analyses results – floor load

Maximum floor load

The figure below shows the top view of the base of the DBJ container.
Three critical areas are highlighted. The 2 mm AL 5754-H22 top sheet is not supported underneath these areas.

Area 1 (A1): 10 x 10 mm = 1 cm^2
Area 2 (A2): 25,4 x 25,4 mm = 1 $inch^2$
Area 3 (A3): 304,8 x 304,8 mm = 1 $foot^2$

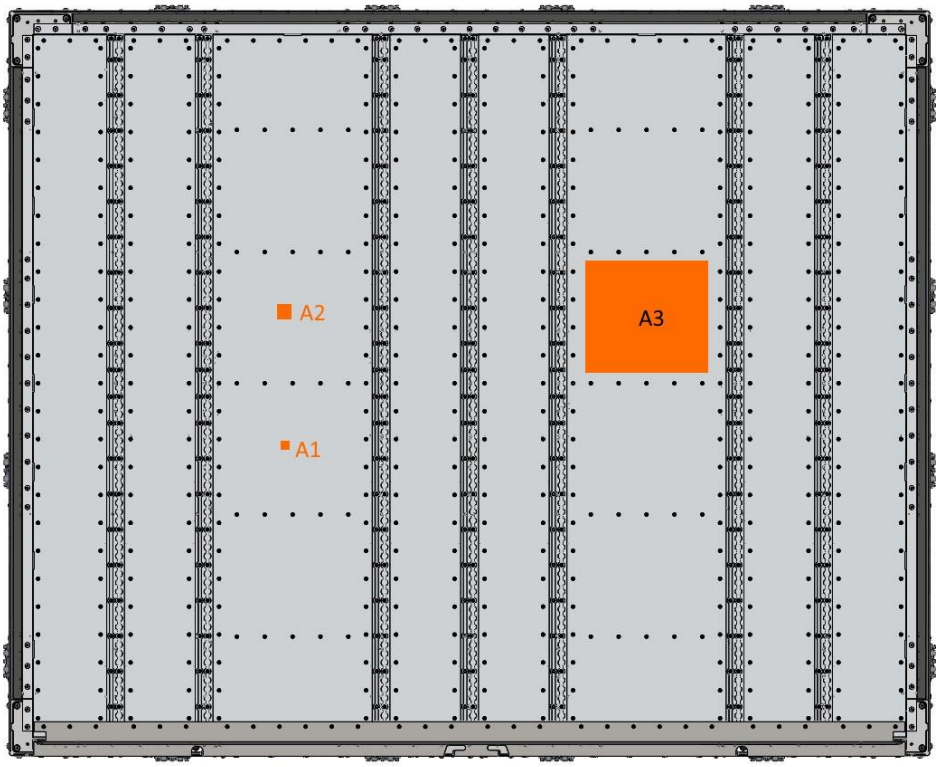


Fig. 3.15.1 Top view of base with critical surface areas

The following load cases are analysed, see table below.

Load cases	
Load	**Surface**
200 kg	1 cm^2
440 lb	1 $inch^2$
2200 lb	1 $foot^2$

In the figures below the Von Mises stress is shown in the top sheet of the base during the different floor load cases. The alloy of the top sheet is aluminium 5754-H22, which has a yield strength of 130 MPa.

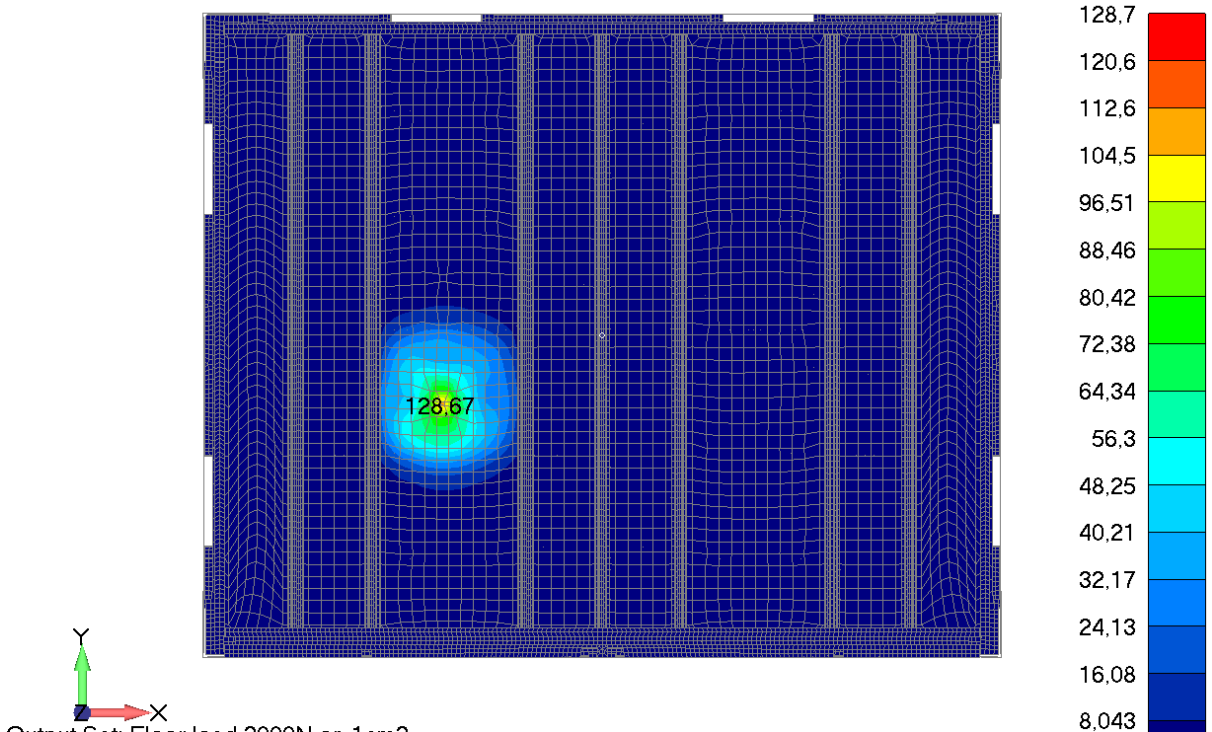


Fig. 3.15.2 VonMises stress in top sheet, load case 200 kg / cm²

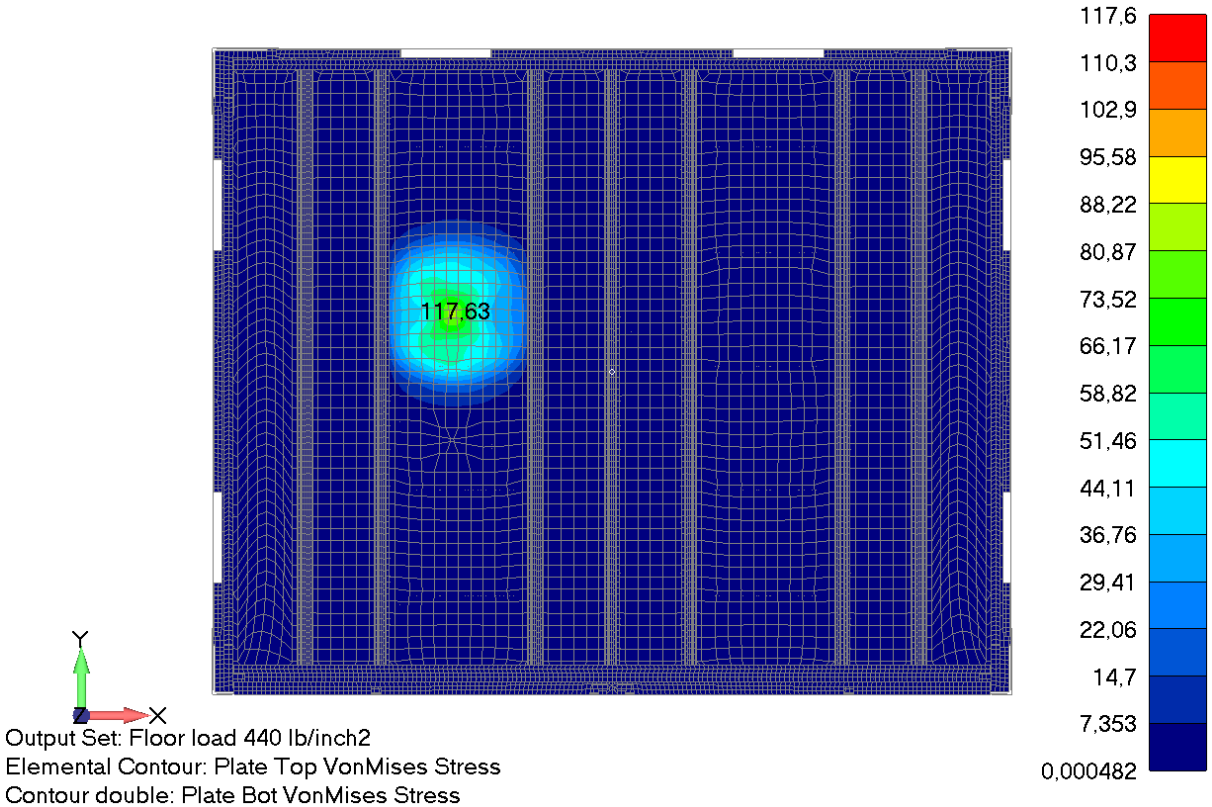


Fig. 3.15.3 VonMises stress in structure, load case 440 lb / inch²

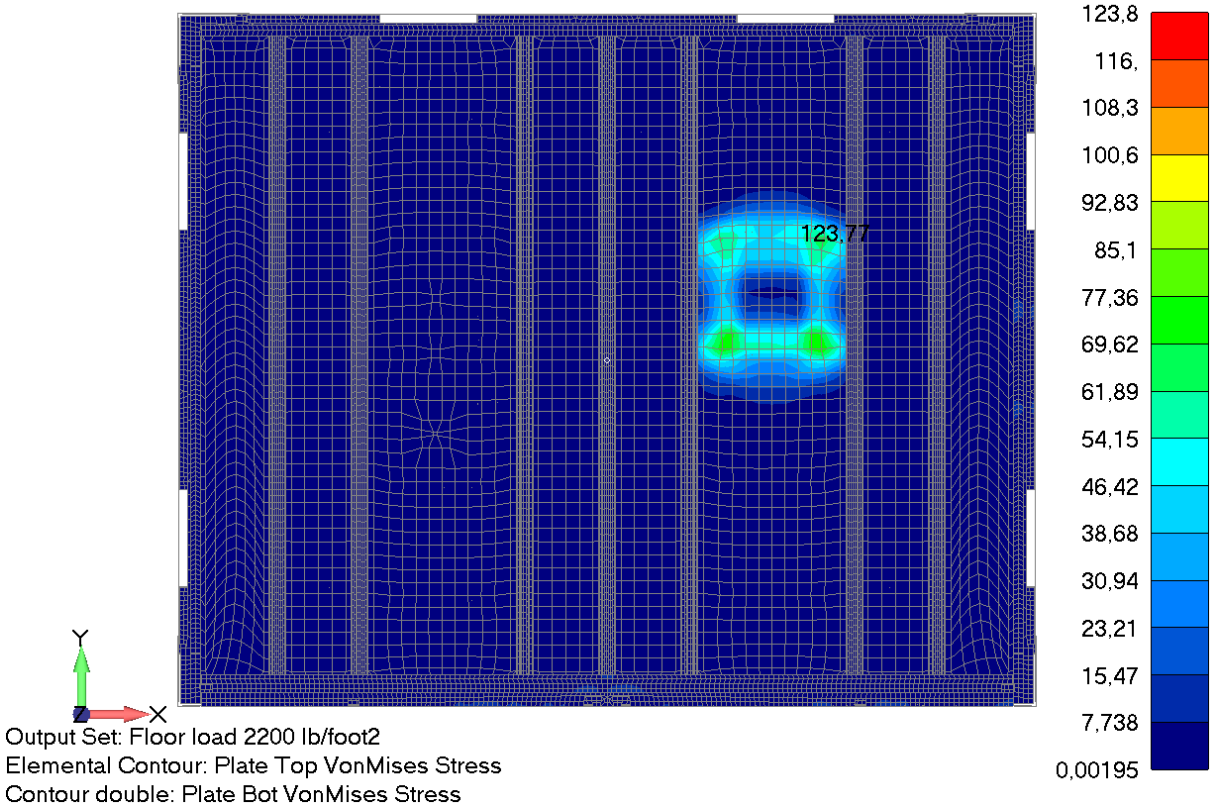


Fig. 3.15.4 VonMises stress in structure, load case 2200 lb / foot²

3.16. Conclusion base – floor load

During all floor load cases the material stresses in the entire pallet do not exceed the yield strength.

4. Substantiation strength shelf in DBJ-container

4.1. Introduction

The DBJ-container is equipped with a forkliftable shelf (see figure below). This shelf is supported by loading blocks which can be connected to the seat tracks in the DBJ-container.

In this chapter the allowed amount of load on the shelf and the corresponding conditions will be substantiated.

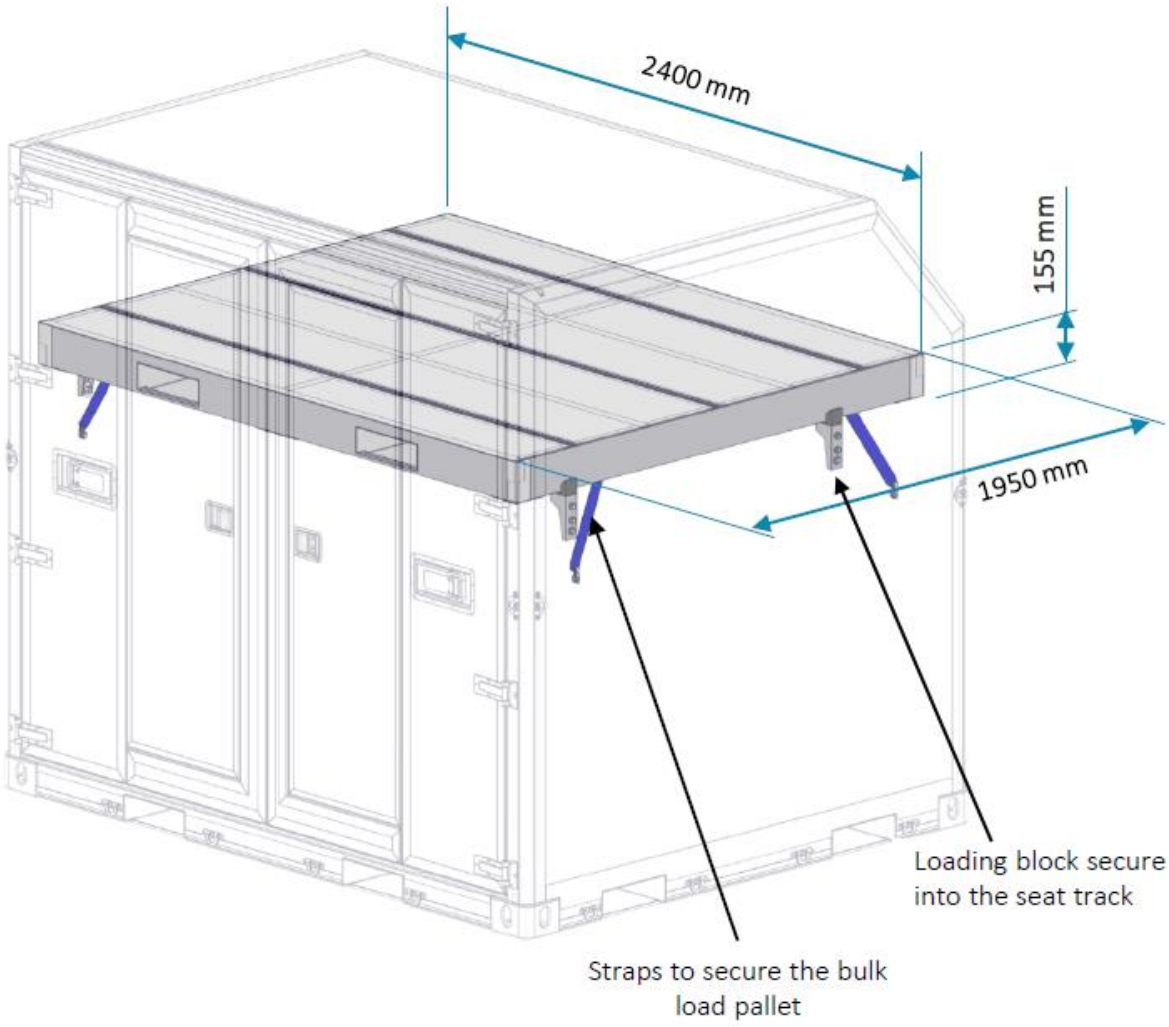


Fig. 4.1.1 Shelf in DBJ-container

4.2. Material properties

The figures below show the material properties of the parts in the shelf.

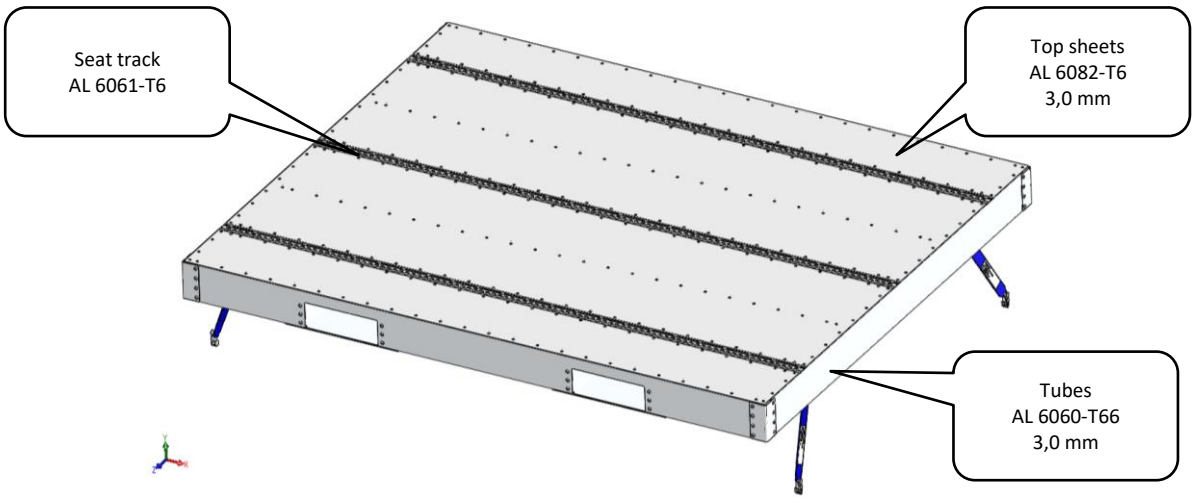


Fig. 4.2.1 Shelf - properties

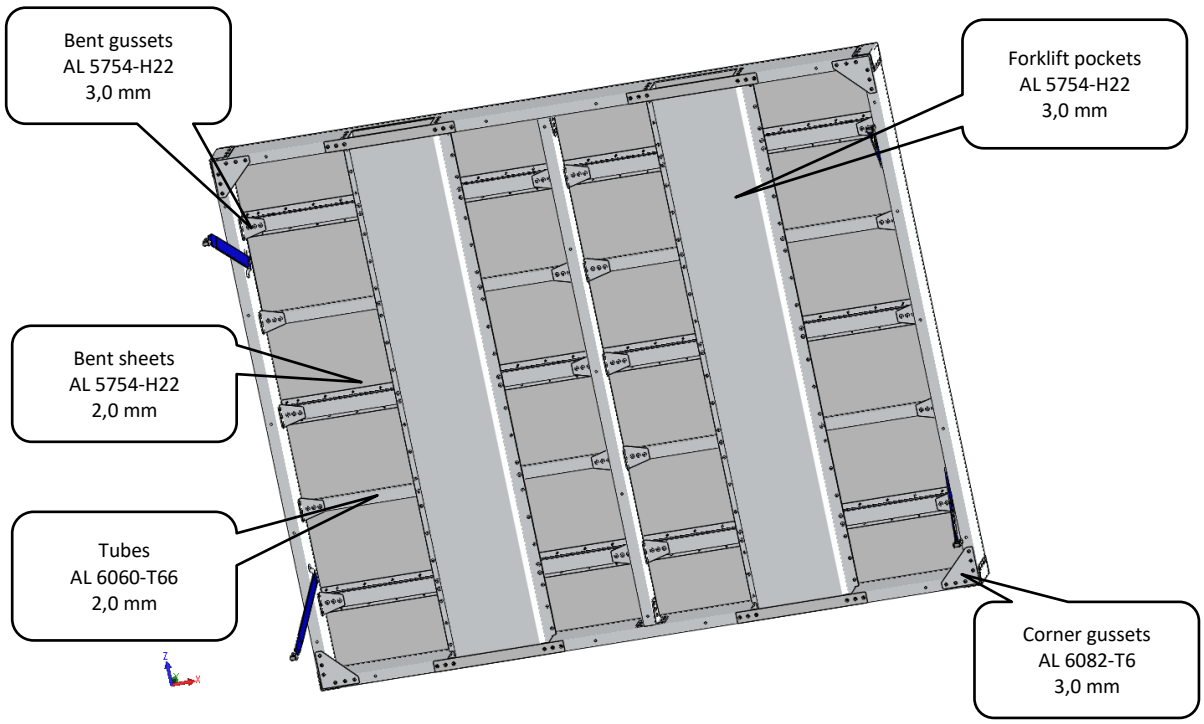


Fig. 4.2.2 Shelf – properties bottom view

4.3. Loads

Two loads will be applied on the shelf, namely a body load and cargo load. Both loads are applied in downward direction (see figure below).

A body load of 3,2 g in downward direction is used, which is an acceleration of structure mass.
The body load is calculated as follows:
9,81 * 3,2 = 31,392 m/s^2

The applied cargo load is 1000 kg.
The applied downward load is calculated as follows:
1000 x 9,81 x 3,2 = 31392 N

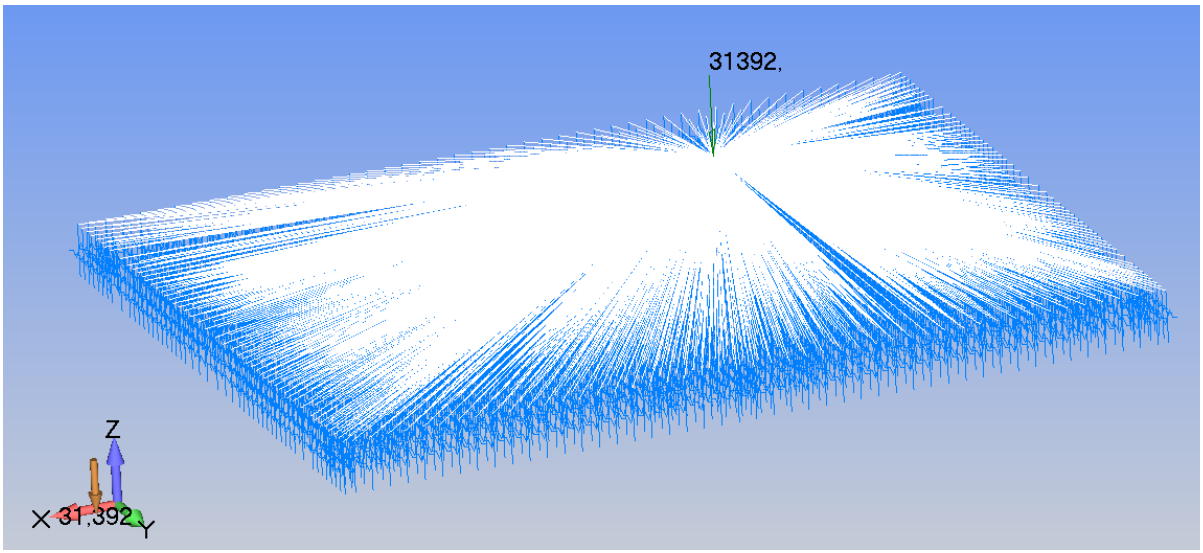


Fig. 4.3.1 Load application

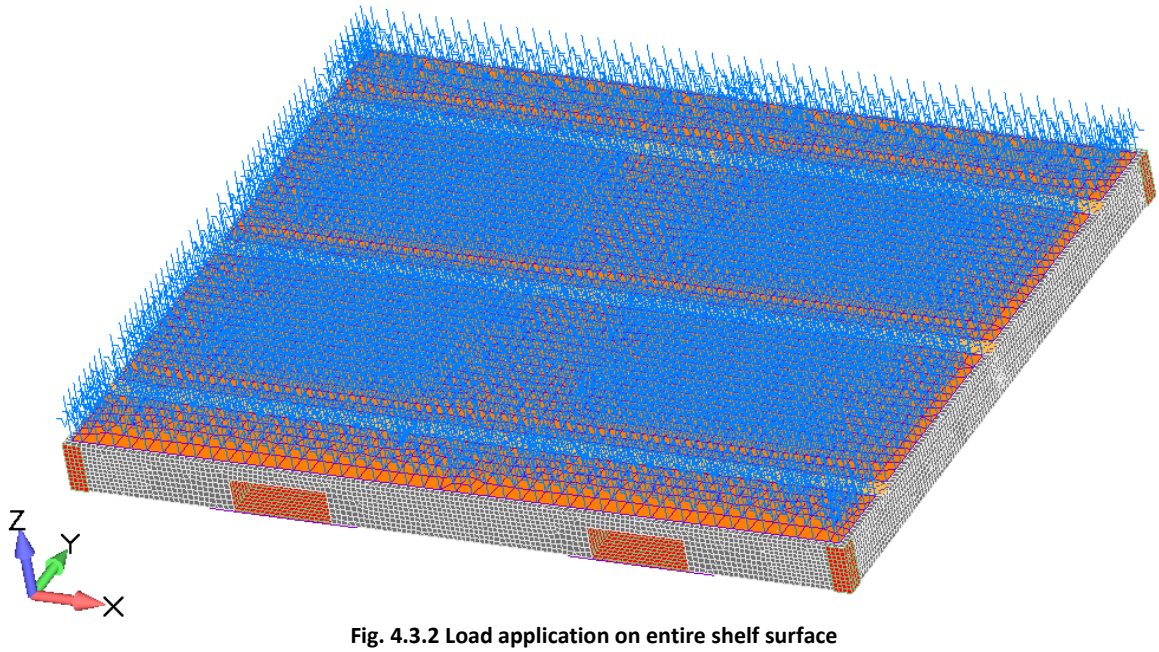


Fig. 4.3.2 Load application on entire shelf surface

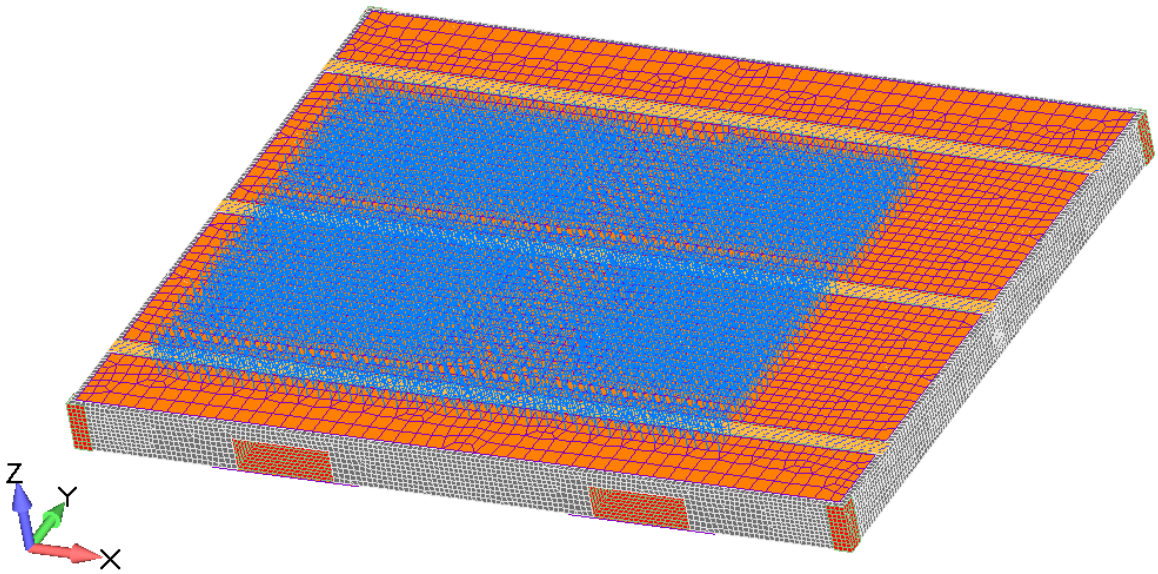


Fig. 4.3.3 Load application on smaller area of shelf

4.4. Centre of gravity

A centre of gravity shift of 15% is used. The shift of the centre of gravity is towards the front and towards one side of the container.

This is considered to be a critical but realistic load case.

4.5. Restraints

The red areas in the figure below show all locations of the vertical seat tracks where loading blocks can be placed.

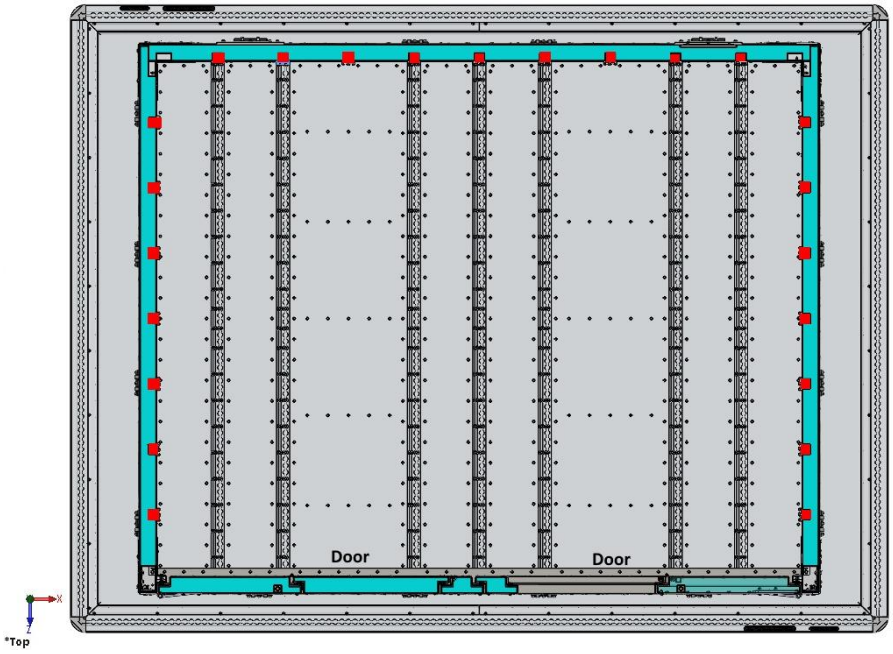


Fig. 4.5.1 Possible shelf support locations (top section view)

FEM-analyses are performed on the shelf with at least the 4 locking blocks marked with orange circles in the figure below.

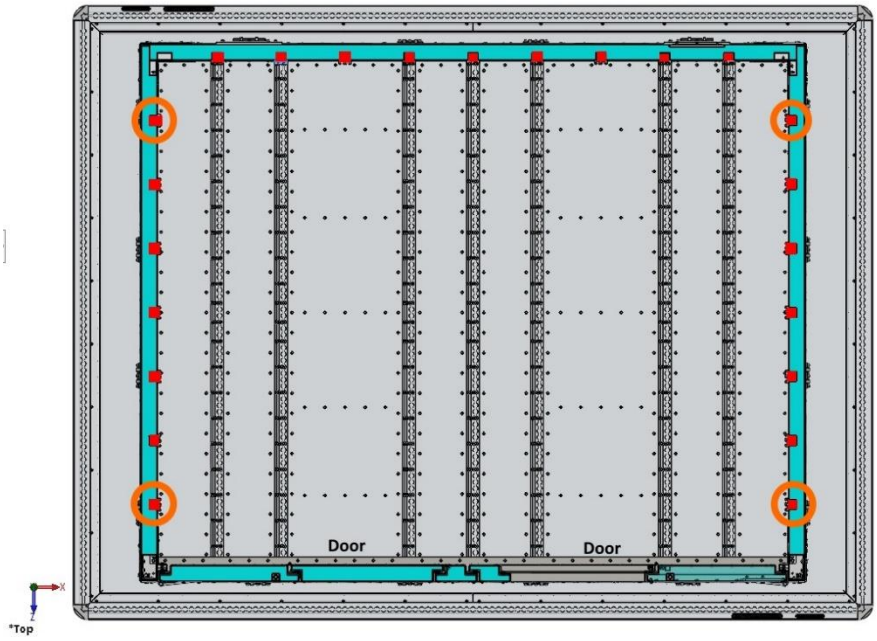


Fig. 4.5.2 Shelf support situation

To prevent horizontal shifting of the shelf during FEM-analyses, the shelf-model is constrained in Y-direction on the aft side and constrained in X-direction on the left side of the shelf.

The figure below shows a loading block which is used for supporting the shelf in the DBJ-container.

According to seat track tests (see report RR327) the maximum break force in X-direction for a slightly weaker aluminium alloy is 18894 N.
The maximum tensile break force in Z-direction according seat track tests is 26617 N for a double stud, so for a single stud: $\frac{26617}{2}$ = 13308,5 N.

$Z = X\frac{L1}{L2} \rightarrow Z = 18894 \times \frac{54}{120} = 8502\ N$
This value in Z-direction is lower than the tested value, so the force in Z is not critical when X is loaded to its maximum value.

$F = Zmax\frac{L2}{L1} \rightarrow F = 13308{,}5 \times \frac{120}{54}$ = 29574 N
So the maximum load at F until break is 29574 N.
The maximum load at F until yield is $\frac{29574}{2}$ = 19715 N.

Each seat track profile is fastened with 36 Monobolt 4.8 mm rivets, which have a maximum shear force of 5800 N per rivet. Since the direction of the load on the loading blocks is only downward and the seat track is well fastened in that direction the calculation for the maximum load on the loading block can be based on the test values of the seat track tests (most critical part of this construction). So the maximum load in F-direction = 19715 N. This means that each loading block can withstand +/- 1970 kg before plastic deformation of the seat track starts.

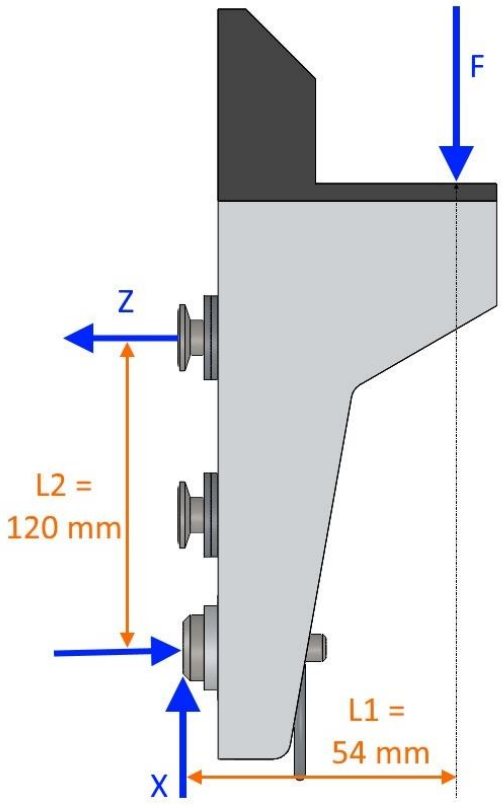


Fig. 4.5.3 Loading block

The mass of a fully loaded shelf is 1100 kg, multiplied by the load factor 3,2 this is 3520 kg.

4.6. Finite element model

The figure below shows the finite element model of the shelf.

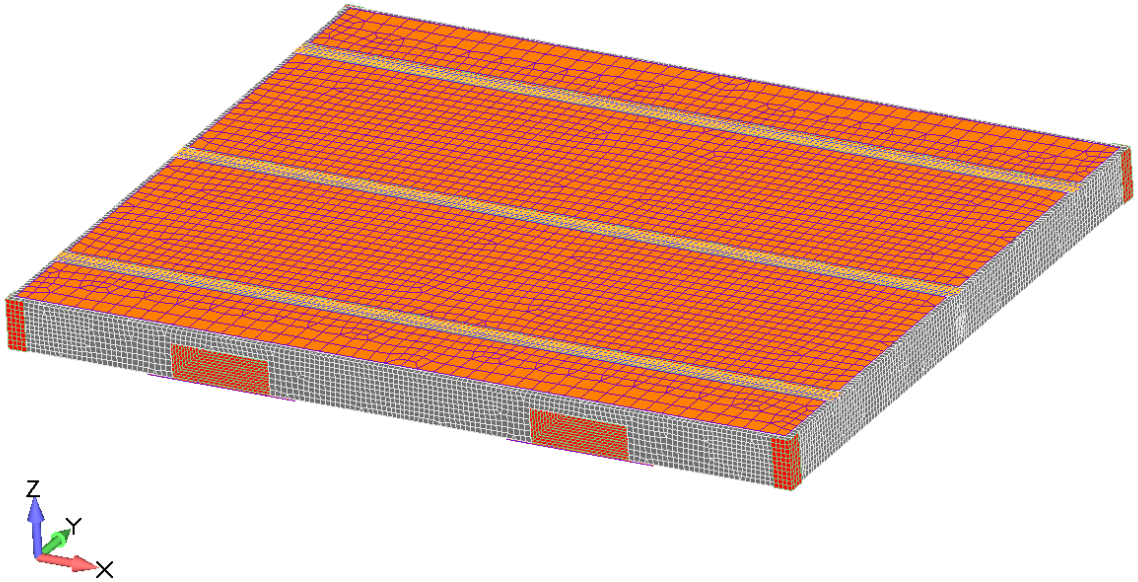


Fig. 4.6.1 Finite element model of shelf in DBJ-container

4.7. Analyses results

The results below are calculated with a load of 1000 kg (load factor 3,2), applied on the entire surface of the shelf (see Fig. 4.3.2). During this calculation the shelf was supported in the 4 corners and in the middle of the aft side.

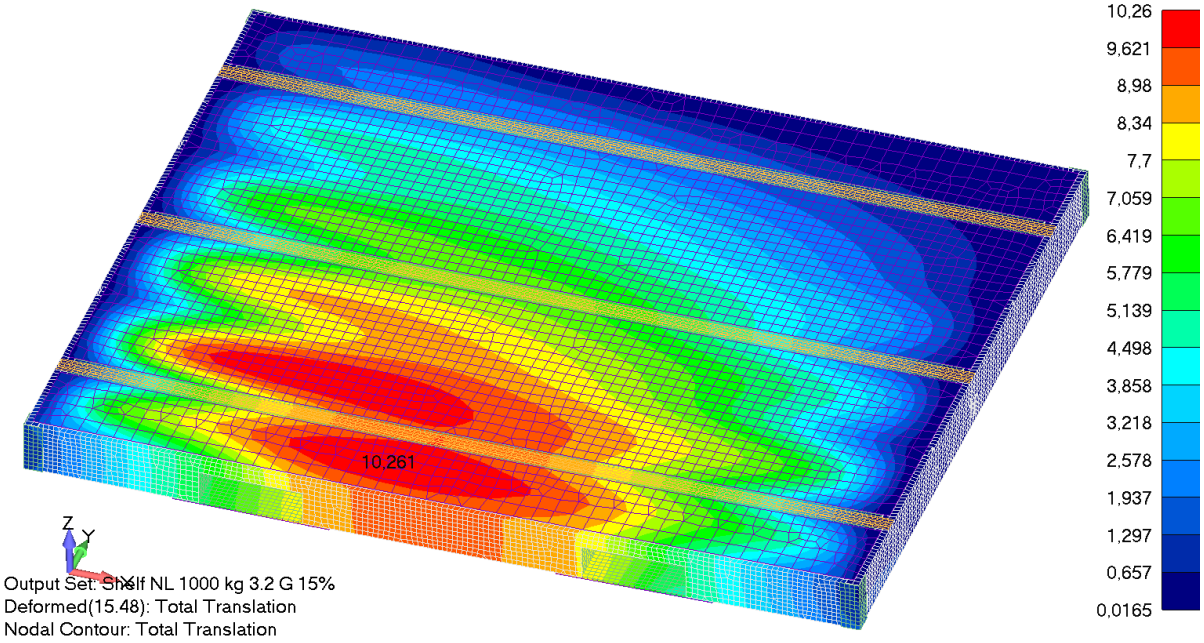


Fig. 4.7.1 Deformation, downward load case [mm]

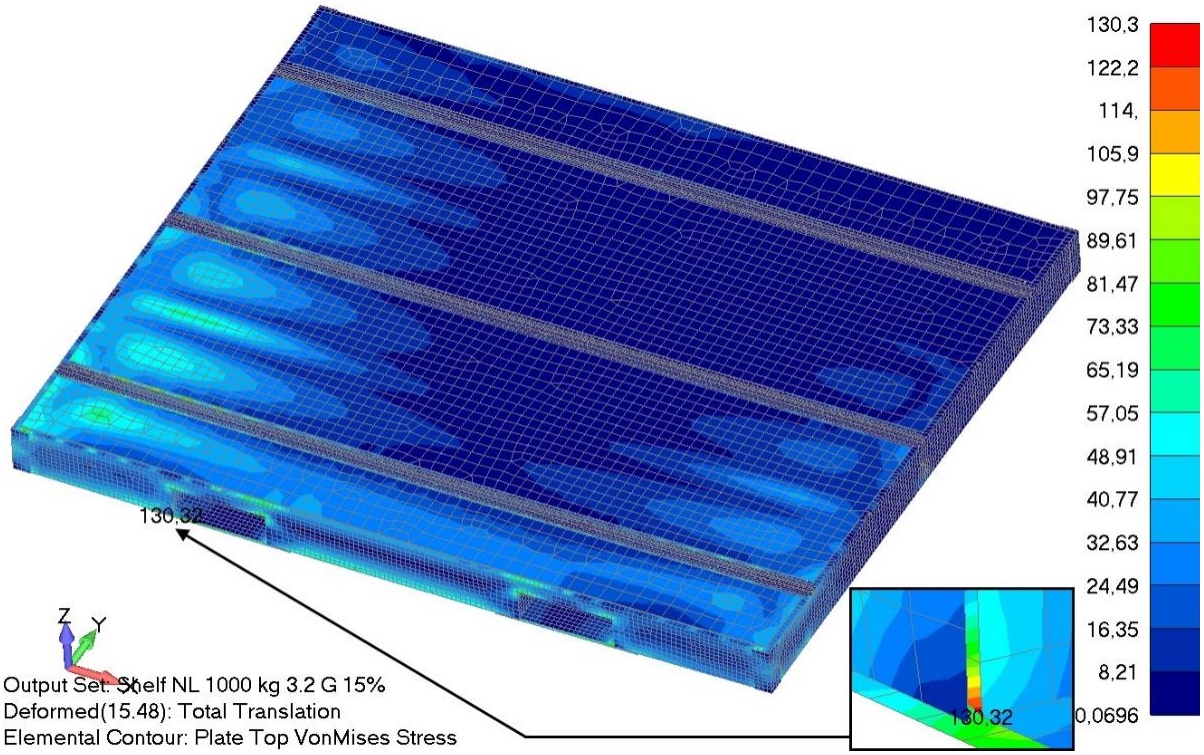


Fig. 4.7.2 VonMises Stress, downward load case [MPa]

All material stresses and fastener forces are within the allowable.

Material	**Maximum stress**	**Tensile strength**	**Reserve factor**
AL 5754-H22	130,3	245	1,88
AL 6060-T66	102,6	215	2,10
AL 6061-T6	24,1	260	10,79
AL 6082-T6	122,0	310	2,54

Fastener	Shear force [N]		Tensile force [N]		separate components
	max	allowed	max	allowed	
Monobolt Steel 4,8 Rivets	1717	5800	64	4400	OK
Csk. Monobolt Steel 4,8 Rivets	2759	5800	876	4400	OK
Monobolt Steel 6,4 Rivets	2579	11000	595	8200	OK
Csk. Monobolt Steel 6,4 Rivets	5714	11000	762	8200	OK

The maximum downward force on a loading block is 15094 N. This is well below the yield force.

The results below are calculated with a load of 1000 kg (load factor 3,2), applied on a small area around the centre of gravity (see Fig. 4.3.3). During this calculation the shelf was only supported in the 4 corners.

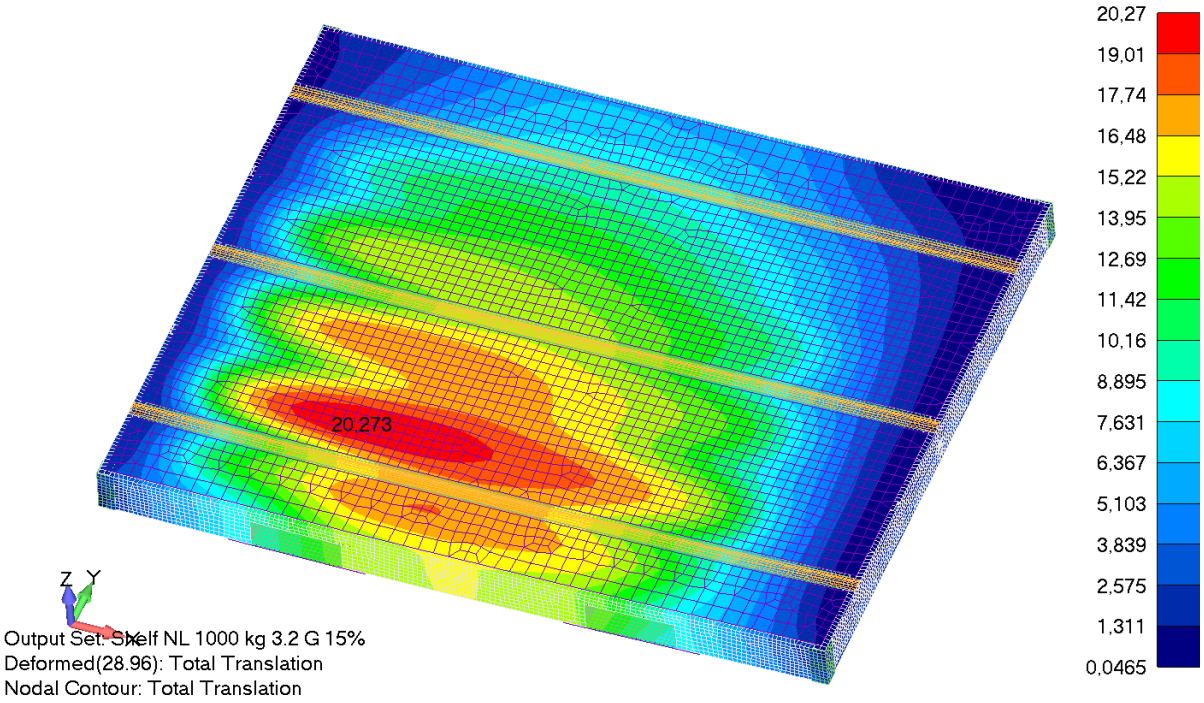


Fig. 4.7.3 Deformation, downward load case [mm]

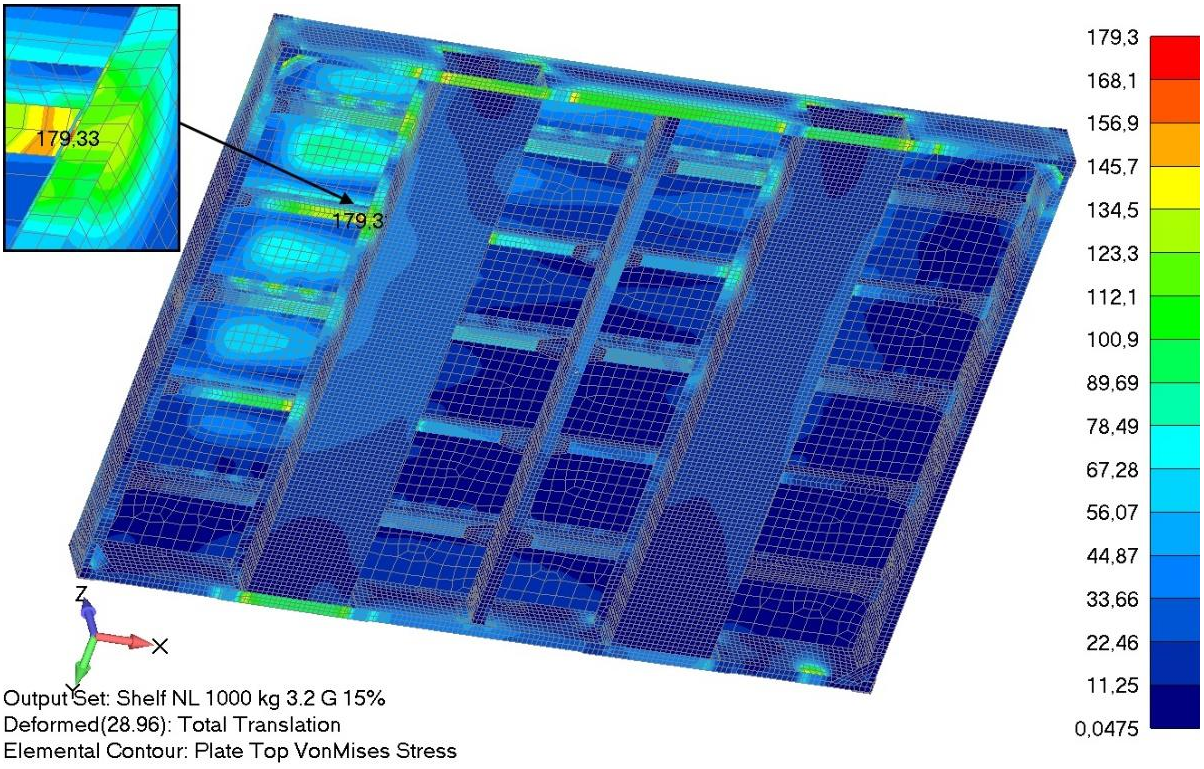


Fig. 4.7.4 VonMises Stress, downward load case [MPa]

Material	**Maximum stress**	**Tensile strength**	**Reserve factor**
AL 5754-H22	131,9	245	1,86
AL 6060-T66	158,3	215	1,36
AL 6061-T6	43,5	260	5,97
AL 6082-T6	179,3	310	1,73

Fastener	Corresponding		Rf,min
	shear force [N]	axial force [N]	
Monobolt Steel 4,8 Rivets	3042	0	1,91
Csk. Monobolt Steel 4,8 Rivets	4233	1456	1,25
Monobolt Steel 6,4 Rivets	3447	0	3,19
Csk. Monobolt Steel 6,4 Rivets	9507	1323	1,14

The maximum downward force on a loading block is 19835 N. This is approximately the yield force according to the seat track test results with a slightly weaker alloy.
So if the shelf is only supported at the 4 corners and the 3,2 G load is shifted 15% in both lateral and longitudinal directions, the seat track of the most critical corners reaches the yield stress.
Since the test values are based on a weaker alloy with the same seat track thickness, it can be concluded that the stress in the seat track is within the allowables during this load case and it does not exceed the yield value.

4.8. Conclusion shelf

A load of maximum 1000 kg can be placed on the shelf, when taking into account the following:

- When using the shelf, **never** use supports at the location of the forklift pockets. The forklift pockets are not able to withstand these local high forces.
- The shelf has to be supported by at least 4 loading blocks in the corners, at the locations marked in orange (see Fig. 4.5.2).
  It is advised to use more loading blocks to support the shelf, the 4 at the corners, as mentioned before, is the absolute minimum amount.

5. Loading Limits

5.1. Centre of Gravity (CoG)

The Maximum Gross Weight (MGW) of the container is limited to 4536 kg (10000 lb).

When loaded to this MGW of 4536 kg (10000 lb), the Centre of Gravity (CoG) of the loaded container has to be within the following limits:

- Height of CoG, measured from the pallet bottom, must be below 1219 mm (48 inch).
- In the X-direction (parallel to the long side), the CoG must be in the centre of the container base (1321 mm / 52 inch from the side edge) with a tolerance of ± 10% (264 mm / 10,4 in).
- In the Y direction (parallel to the short side), the CoG must be in the centre of the container base (1067 mm / 42 inch from the front edge) with a tolerance of ± 10% (213 mm / 8,4 in).

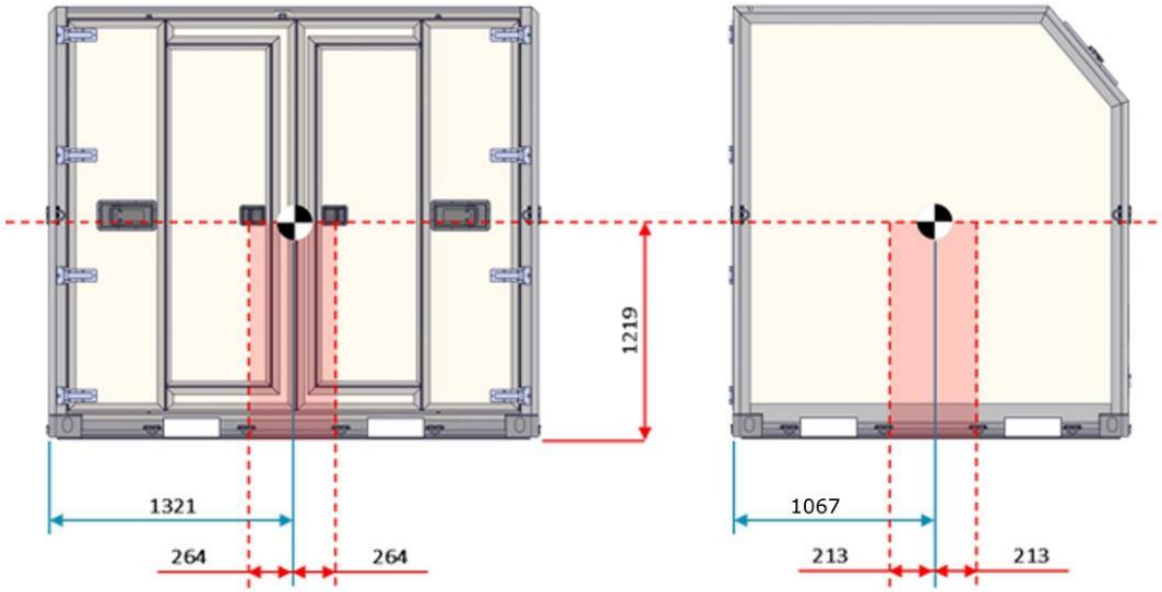


Fig. 5.1.1 Centre of gravity area

From document SAE AS36101 – Load distribution model [Ref. 2] is known that when the actual ULD gross weight is lower than the max gross weight (4536 kg / 10000 lb), linear trade-off may be used for increased CoG eccentricity limits in proportion of the lower gross weight. See figure 5.1.2 for this trade-off.

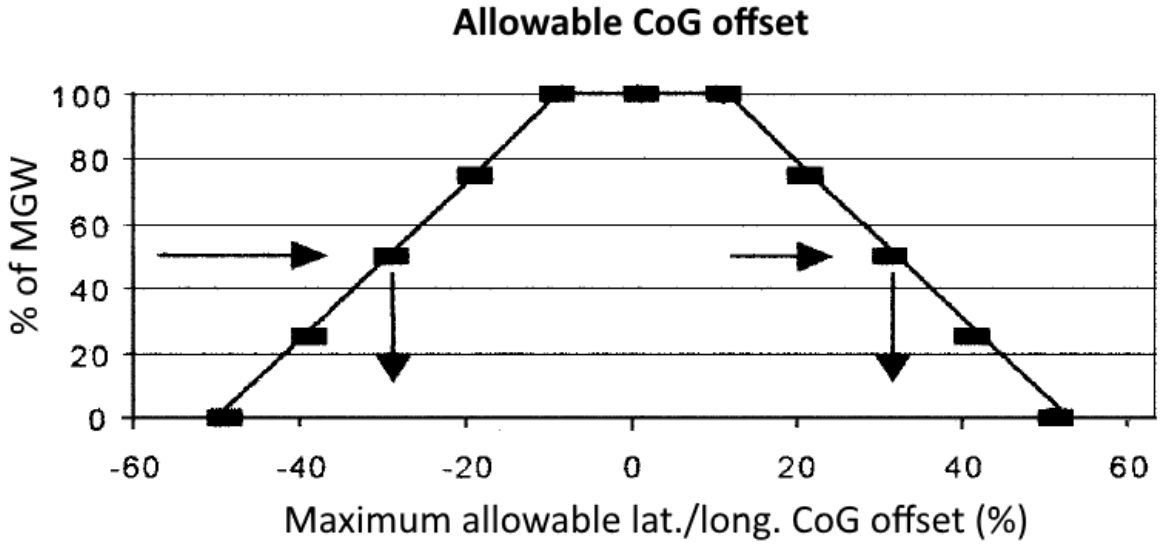


Fig. 5.1.2 Allowable CoG offset

Figure 5.1.2 illustrates, as an example, that for payload that weighs only 50% of the MGW, the lateral and longitudinal CoG offset can vary up to +/- 30% instead of +/- 10% at Maximum gross weight.

Whether at maximum gross weight or the lower gross weight trade-off limitation of fig. 5.1.2, the reference load distribution model shall not be used as a method for actually distributing cargo on a container base at ULD build-up. If a piece of cargo will occupy only part of the base surface, it shall be centred on the base and not in a corner. If only a partial load is planned, stacking shall start in the base centre area rather than at the edge [Ref. 2].

During ULD build-up all steps should be taken to provide a loaded ULD CoG location as closely as possible to its geometric centre. When the nature or shape of cargo makes this impossible in practice, the objective should be to limit CoG offset to one direction only, either longitudinal or lateral, not exceeding the maximum allowable offset in that direction. Only as a last resort should both longitudinal and lateral maximum CoG offset be simultaneously used [Ref. 2]

Example calculation CoG

See figure 5.1.4 for example dimensions
The file 'CoG_calculation_CTBTO.xlsx' is used for calculating the centre of gravity.

The origin of this calculation is chosen at the left corner at the back of the container, positive x-direction is to the right, positive y-direction is to the front of the container, positive z-direction is upwards. See figure 5.1.3. for location of origin.

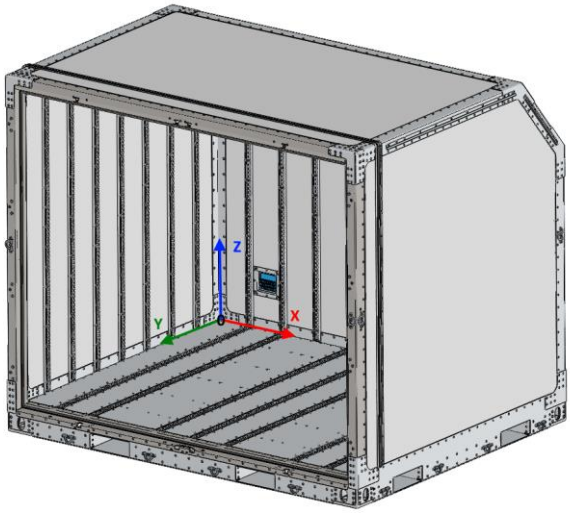


Fig. 5.1.3 Location of origin for CoG calculation

For this example the following loads are used:

M1 = weight of empty container = 827 [kg]
M2 = weight of shelf = 128 [kg]
M3 = bulk on shelf = 500 [kg]
M4 = bulk on base = 3000 [kg]

Locations of loads are shown in the table below and in figure 5.1.4

M	Mass [kg]	X [mm]	Y [mm]	Z [mm]
1	827	1250	1000	690
2	128	1250	1000	1440
3	500	2250	1300	1540
4	3000	650	1800	40

Total mass = 4455 [kg]
Total mass < MGW*

*The total mass must be smaller than the MGW of the container (= 4536 [kg])

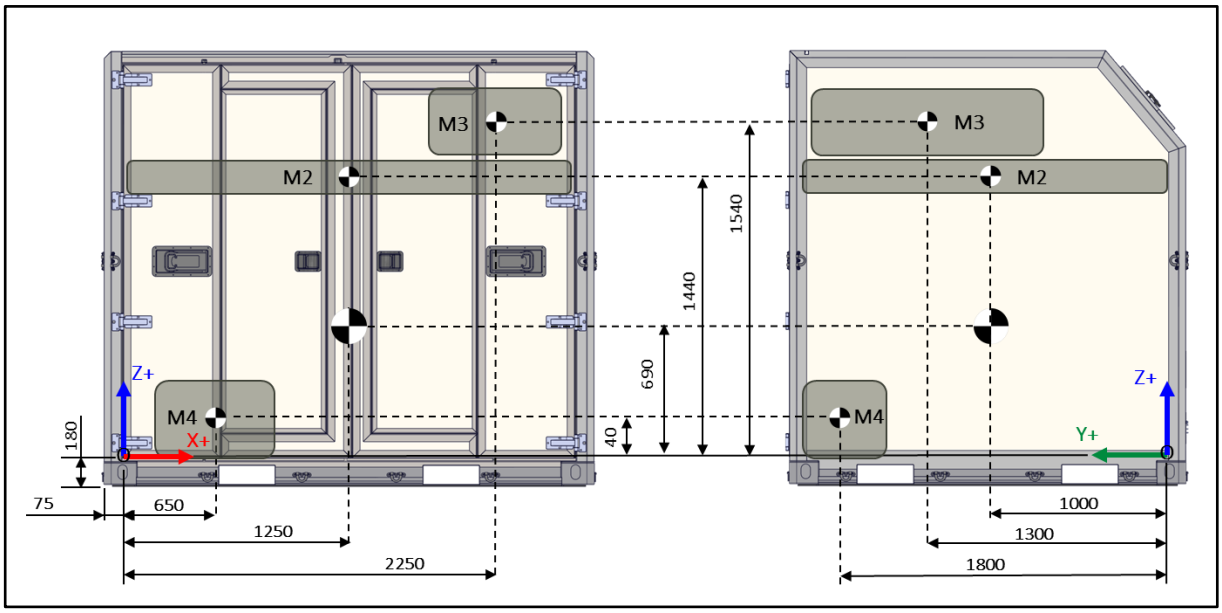


Fig. 5.1.4 Loading example of container

With a moment calculation around the origin the location of the CoG can be obtained in x-, y- and z-direction.

	Mass * X	Mass * Y	Mass * Z
	1033750	827000	570630
	160000	128000	184320
	1125000	650000	770000
	1950000	5400000	120000
SUM	4268750	7005000	1644950

The CoG shift is obtained by dividing the sum of the moments by the total mass. See figure 5.1.5 for allowed CoG limits.

	X_{shift}	Y_{shift}	Z_{shift}
CoG_{shift}	958	1572	369
Limits	986 - 1514	787 - 1213	0 - 1040

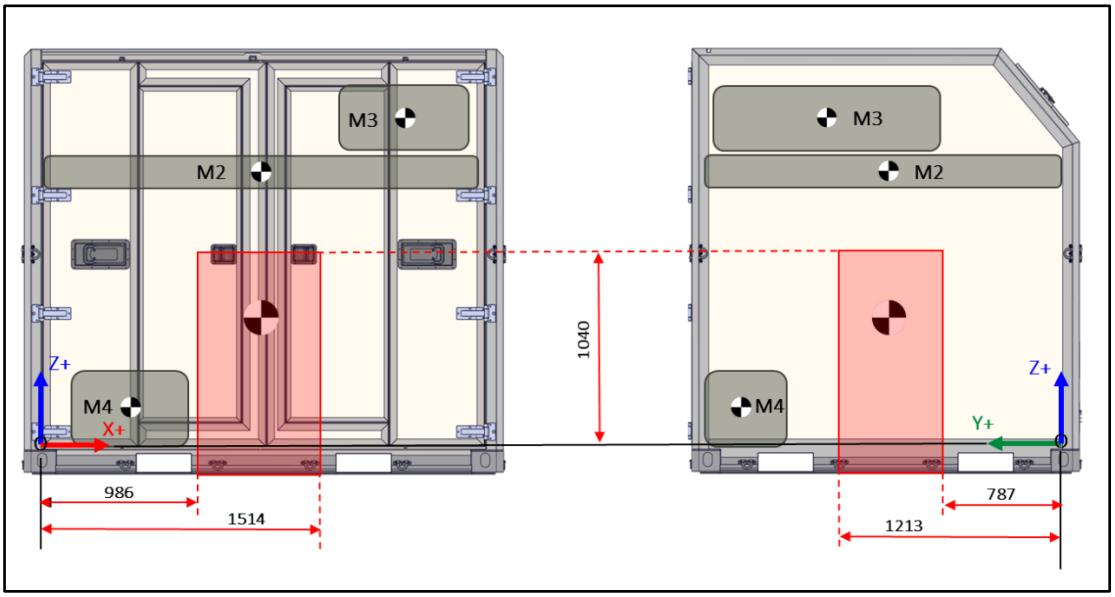


Fig. 5.1.5 CoG limits (origin in left rear corner)

The way of loading the container in this example is insufficient. The CoG shift in x- and y- direction is outside the limits set in chapter 5.1.

One solution is to shift the bulk on the base to a location where the container will be more in equilibrium.

Current location M4 [x; y] = [650; 1800].
New location M4 can be [850; 1200]

The CoG shift will now be within the limits, see table below.

	X_{shift}	Y_{shift}	Z_{shift}
CoG_{shift}	1093	1168	369
Limits	986 - 1514	787 - 1213	0 - 1040

A second solution is to lower the weight of the bulk. When minimizing the load, the limits of the CoG shifts are expanded according to figure 5.1.2.

5.2. Seattrack / T-track

Seattrack tests are performed at VRR, results are stated in report: RR327_i1_Testreport_Seattrack [Ref. 10]. Extrusion RR172 is comparable with the new Seattrack/T-track extrusion for the DBJ container. The maximum force until break for RR172 is shown in the table below. Directions of load are shown in Fig. 5.2.1. Tests are performed with double stud connections, values for maximum force are translated to single stud connection values.

RR172	Direction	Double F_{break} [N]	Single F_{break} [N]
	X	18894	18894
	Y	15767	7883
	Z	26617	13308

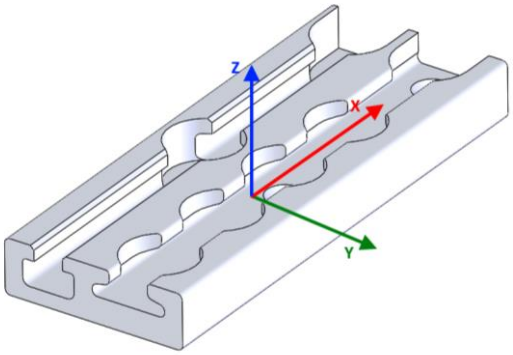


Fig. 5.2.1 Seattrack with orientation

Maximum load capacity seattrack / T-track extrusion in hull

Fig. 5.2.2 shows the structure of the hull of the DBJ-container. The side wall is considered most critical.

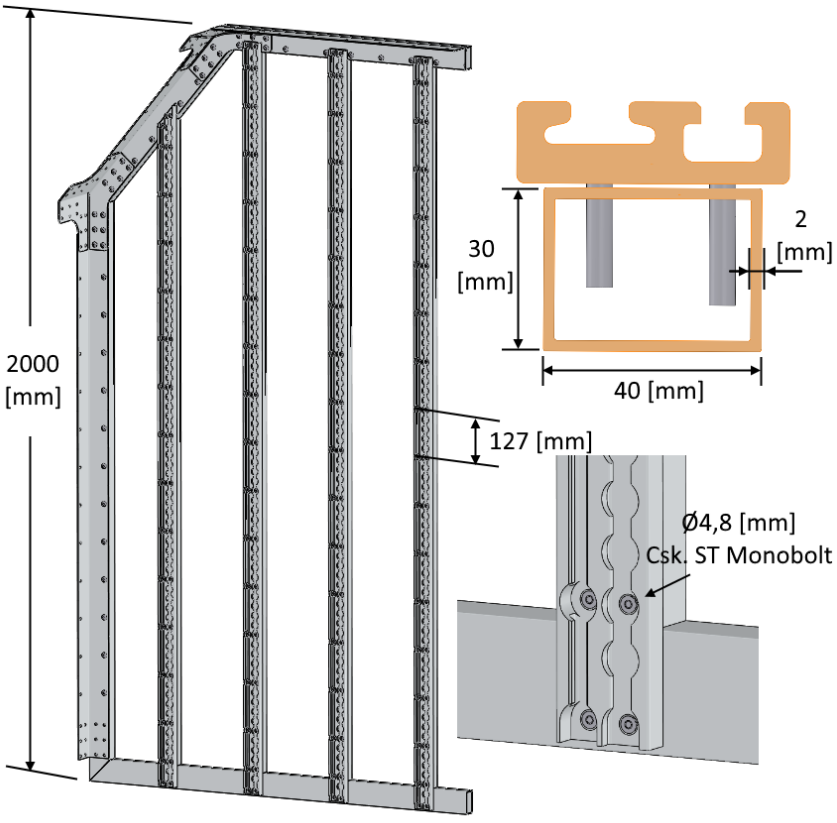


Fig. 5.2.2 Seattrack and T-track in hull

Test values:
7800 [N] every 25,4 [mm] in all directions

Rivets:
Maximum Tensile Force for Ø4,8 ST Monobolt is 4400 [N]. Seattrack is fastened with two rivets every 127 [mm]. So (4400*2) = 8800 [N] can be applied on the seattrack extrusion every 127 [mm].

Construction tubes in the side panels:
Length = 2000 [mm]
I_{zz} = 126875 [mm^4]
e_t = 16 [mm]
$\sigma_{AL\ 6061\ T6}$ = 240 [MPa]
W = I_{zz} / e_t = 8000
F_{max} = (4*σ*W) / length = 3800 [N]*

The distance between two load applications must be minimal 1000 [mm]*.

*When the load decreases, distance linear decreases with load.

To summarize:

	Test	Rivets	Construction
F_{max} [N]	7800	8800	3800
Span [mm]	25,4	127	1000

Table 5.2.1 maximum load seattrack side panels

The construction of the side panels is the most critical factor concerning the maximum loading capacity of the seattrack / T-track extrusions.

Conclusion side panels
Concerning the maximum loading capacity of the seattrack / T-track extrusion for the hull of the DBJ-container, the construction of the panels is the critical factor.

Static:
F_{max} = 3800 [N] in all directions
Minimum distance between loads = 1000 [mm]*

Dynamic:
In flight applies a load factor of 3,2 in downward direction. This extra load does not affect the structure. From the seattrack test results (see table in paragraph 5.3) there is known that the maximum force in the downward direction is 18894 [N]. 18894 / 3,2 = 5900 [N]

According to AS36100 a flight load factor of 1,53 applies in sideward direction. This extra load does affect the structure and therefore the maximum load is 3800 / 1,53 = 2484 [N]

F_{max} = 2484 [N] in all directions.
Minimum distance between loads = 1000 [mm]*

*When the load decreases, distance linear decreases with load.

For example:
Applied load on seattrack is F_{max} / 3 = 828 [N]; minimum distance is 1000 / 3 = 334 [mm].

Conclusion roof panel
The length of the construction tubes in the roof panel is shorter than in the side panels (L=1550 [mm]). So maximum load can be higher:

F_{max} = (4*σ*W) / length = 4900 [N]

From table 5.2.1 can be seen that the construction of the roof panel is still the critical factor.
In flight applies a load factor of 3,2 in downward direction. This immediately affects the structure.

F_{max} = 4900/3,2 = 1530 [N] in all directions
Minimum distance between loads = 1000 [mm]*

*When the load decreases, distance linear decreases with load.

Maximum load capacity seattrack / T-track extrusion in base
Fig. 5.2.3 shows the structure of the base of the DBJ-container. The part spanning the fork pockets is considered most critical.

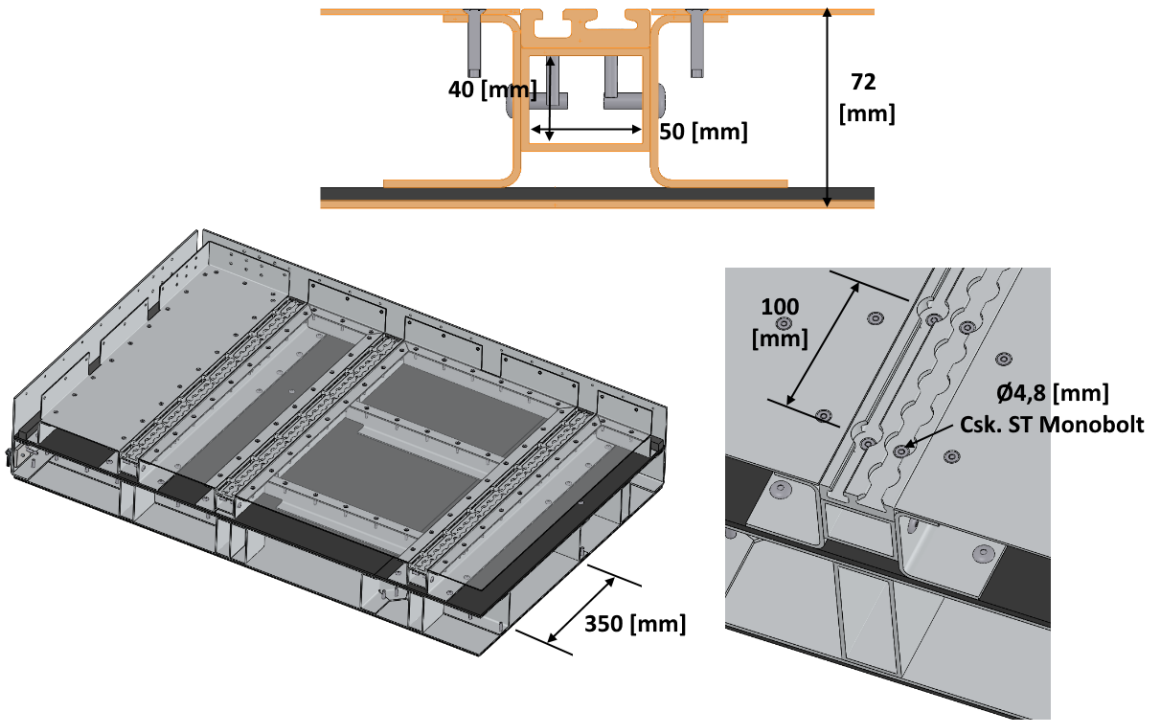


Fig. 5.2.3 Structure of base with seattrack and T-track

Test values:
7800 [N] every 25,4 [mm] in all directions

Rivets:
Maximum Tensile Force for Ø4,8 ST Monobolt is 4400 [N]. Seattrack is fastened with two rivets every 100[mm]. So (4400*2) = 8800 [N] can be applied on the seattrack extrusion every 100 [mm].

Construction tubes in the base:
Length = 350 [mm]
I_{zz} = 2237640 [mm^4]
e_t = 40 [mm]
$\sigma_{AL\ 6061\ T6}$ = 250 [MPa]
W = I_{zz} / e_t = 54000 [mm^3]
F_{max} = (4*σ*W) / length = 140000 [N]

To summarize:

	Test	Rivets	Construction
F_{max} [N]	7800	8800	140000
Span [mm]	25,4	100	1000

The test value of the extrusion and the rivet connection to the structure are the most critical factors concerning the maximum loading capacity of the seattrack / T-track extrusions.

Conclusion base
Concerning the maximum loading capacity of the seattrack / T-track extrusion for the base of the DBJ-container, the design of the extrusion and the rivet connection to the base are the critical factors.

According to AS36100 a flight load factor of 2,2 applies in upward direction. This extra load has immediately effect on the extrusion and its rivet connection. Therefore the maximum load is 7800 / 2,2 = 3545 [N]

F_{max} = 7800/2,2 = 3545 [N]
Minimum distance between loads = 100 [mm]

Maximum load capacity track bar
Fig. 5.2.3 shows the horizontal track bar fastened in the vertical seattrack / T-track extrusions of the side wall. For each track bar counts the same maximum load as for the seattrack / T-track extrusions of the side wall: F_{max} = 2484 [N] in all directions.

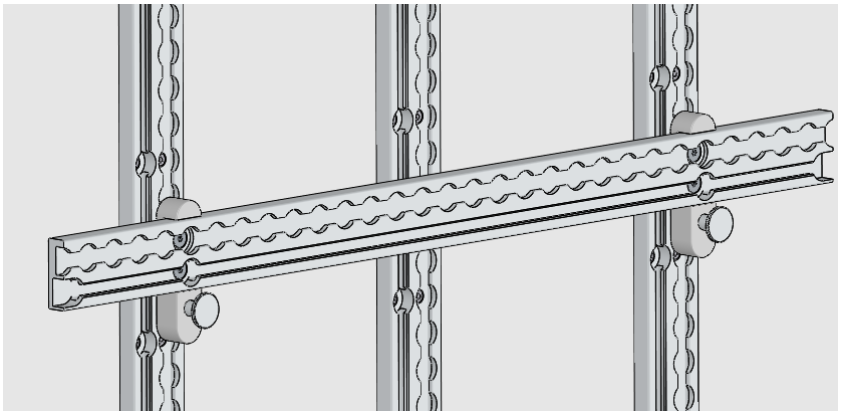


Fig. 5.2.4 Horizontal track bar

5.3. Conclusion allowable loads on Seattrack / T-track

Seattrack is considered more critical than T-track.
Conservative approach because strength and stiffness of panels is disregarded.
Loads in all directions.

	F_{max} [N]	[kg]	Distance [mm]*
Side walls	2484	250	1000
Roof	1530	150	1000
Base	3545	360	100
Track bar	2484	250	Each track bar

*When the load decreases, distance linear decreases with load.

6. Conclusion

6.1. Conclusion

All loads and stresses are within the acceptable values in all load cases. The rivet loads are within the allowable determined in Appendix A.

Therefore it is concluded that the VRR DBJ-container 1283-40-0000 and 1283-40-0001 is in compliance with the requirements as set by VRR.

7. Appendix A

7.1. Rivets 4,8 and 6,4 mm steel Monobolt

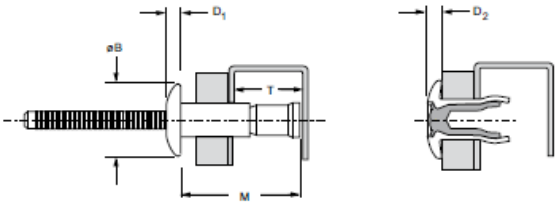
At VRR Monobolt rivets and Magna-Lok rivets are interchangeble. To accomplish this interchangebility, the values for maximum shear force and tensile force are set to the lowest value of both rivets in FEM calculations. The values for Magna-Lok rivets are used in this case. This approach is conservative.

Monobolt® 2771

For installation information please refer to the tooling overview and manuals on our website www.avdel-global.com.
Pour les conditions de pose, merci de vous référer à la description de l'outil et aux manuels disponibles sur notre site Web.
Angaben zur Verarbeitung entnehmen Sie bitte der Geräteübersicht und den Betriebsanleitungen auf unserer Website.
Per informazioni sull'installazione preghiamo consultare i manuali e la panoramica degli attrezzi sul nostro sito web.
Para ver información sobre máquinas de colocación, consulte nuestra página web, apartados visión general de máquinas y manuales.

English	Français	Deutsch	Italiano	Español
Protruding head	Tête bombée	Flachrundkopf	Testa tonda	Cabeza alomada
Body: carbon steel* Zinc plated Clear trivalent passivated with top seal	Corps: Acier au carbone* Revêtement zingué Passivation claire trivalente avec top seal	Hülse: Stahl* Verzinkt Klar passiviert, Cr6-frei mit Versiegelung	Corpo: Acciaio carbonio* Zincato Passivazione chiara trivalente con sigillante	Cuerpo: Acero carbono* Zincado Pasivado claro trivalente con sellante
Stem: medium carbon steel** Zinc plated Clear trivalent passivated with top seal	Tige: Acier au carbone** Revêtement zingué Passivation claire trivalente avec top seal	Dorn: Stahl** Verzinkt Klar chromatiert, Cr6-frei mit Versiegelung	Gambo: Acciaio carbonio** Zincato Passivazione chiara trivalente con sigillante	Vástago: Acero medio en carbono** Zincado Pasivado claro trivalente con sellante

*: BS 3111 Type 9 SAE 10B21 DIN 1654 22B2
**: BS 3111 Type 10 SAE 10B35 DIN 1654 35B2



ø					M	ø B	D_1	T	D_2			Part No/ref
nom.	min.	max.	min.	max.	max.	max.	max.	min.	max.	kN[1]	kN[1]	
4.8 (3/16")	1.63	6.86	4.9	5.1	18.2	10.1	2.1	10.5	1.9	6.4	5.1	02771-00613
	1.63	11.10			24.5			13.5				02771-00617
6.4 (1/4")	2.03	9.53	6.6	7.0	23.7	13.4	2.9	12.2	2.7	11.7	10.4	02771-00817
	2.03	15.87			33.0			16.4				02771-00824
10.0 (3/8")	3.04	15.88	9.9	10.4	36.2	20.3	4.1	22.3	4.0	26.3		02771-01228

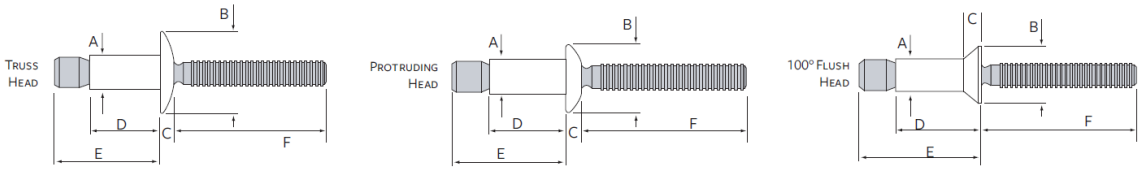
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milimetros
1) typical values / valeurs moyennes / typische Werte / Valori tipici / resistencias máximas recomendadas

ST Monobolt 4.8 mm
Shear strength 6400 N
Axial strength 5100 N

ST Monobolt 6.4 mm
Shear strength 11700 N
Axial strength 10400 N

Huck® Magna-Lok

Head Style Options



Installed Values in Nominal Grip

Material	Diameter	Shear		Tensile		Pin Retention	
		Min	Typical	Min	Typical	Min	Typical
Steel	6 (3/16")	1300	1450	1000	1200	150	250
	8 (1/4")	2500	2750	1850	2200	300	400
	10 (3/8")	6000	6300	4000	5000	600	1000
	16 (1/2")	10000	11200	7000	9400	1000	1700
Aluminum	6 (3/16")	600	700	500	580	75	150
	8 (1/4")	1300	1300	890	950	100	220
	12 (3/8")	2950	3000	1900	2100	250	450
	16 (1/2")	5100	5400	100	4300	400	800
300 Series Stainless	6 (3/16")	1300	1400	50	1100	100	125
	8 (1/4")	2350	2500	0	2000	200	250

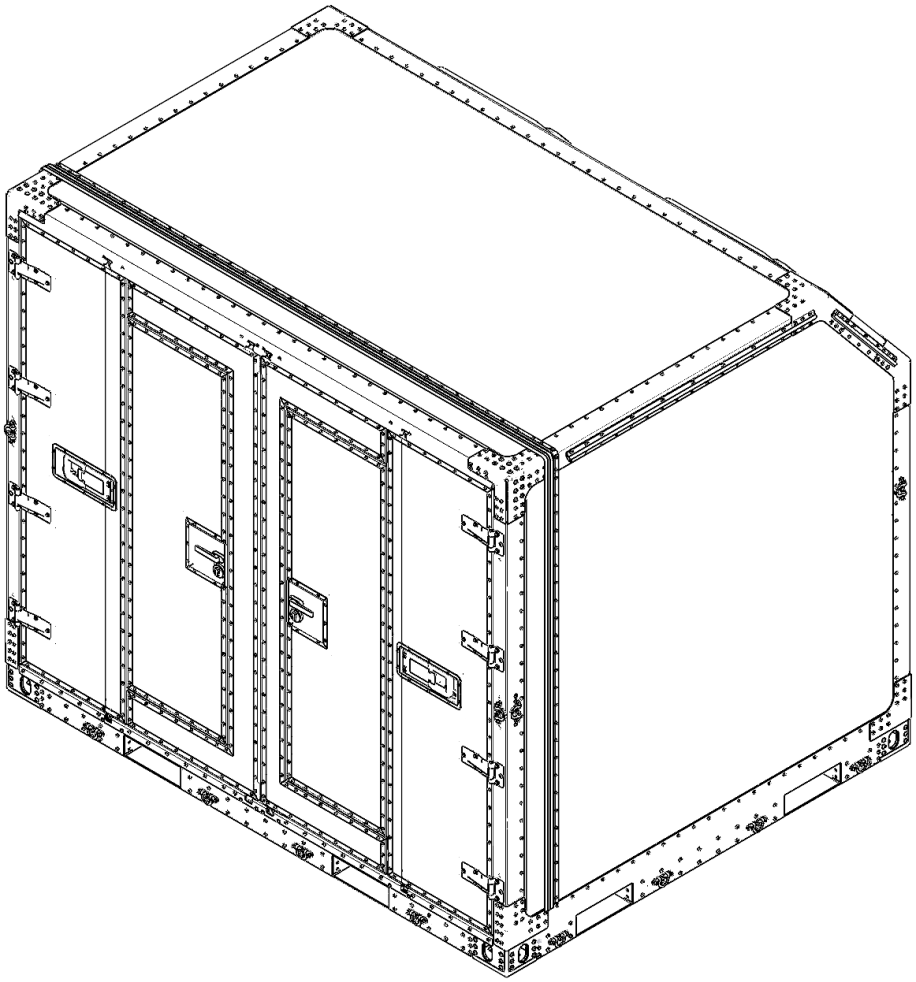
ST Magna-Lok 4.8 mm
Shear strength1300 lbf = 5700 N
Axial strength 1000 lbf = 4400 N

ST Magna-Lok 6.4 mm
Shear strength 2500 lbf = 11000 N
Axial strength 1850 lbf = 8200 N

VRR

CMM 25-56-28 / RRM 628-1

Issue 1 / 29-09-2023



DBJ Container / 1283-40-0001

vrr.aero **info@vrr.aero** **+31 (0)10 479 8100** **Stolwijkstraat 57** **3079 DN** **Rotterdam** **The Netherlands**

Record of revision

Issue	Date of revision	Effect on pages	Reason Revision
1	29-09-2023	All pages	New issue

Responsible for	Authorisation	Date
Created Michaël Heijmer	Design Engineer	31-08-2023
Checked Bryan Peters	Design Engineer	01-09-2023
Approved Danielle de Vreede	Compliance Engineer	29-09-2023

Document control is managed by an electronic PDM-system, therefore script signatures are not used.

The technical content of this document is approved under the Authority of EASA ref. AP103 and have been produced in accordance with alternative procedure to DOA nr. EASA.AP103

List of effective pages

Chapter	Page	Issue
Title page		1
Record of revision	0001	1
List of effective pages	0002	1
Table of contents	0003	1
Introduction	1001	1
Description and operation	1002 - 1002	1
Disassembly	3001	1
Cleaning	4001	1
Check prior to use	5001 - 5010	1
Maintenance	6001 - 6019	1
Assembly	7001	1
Fits and clearances	8001	1
Special tools and equipment	9001	1
Illustrated part list	10001 - 10081	1

Table of contents

1. Introduction

1.1. General

This component maintenance manual (CMM) has been compiled in accordance with the requirements set out in specification ATA 100. It is intended for provision as necessary for an approved maintenance facility to return an unserviceable assembly/component/part in a serviceable condition.

An illustrated part list (IPL) is also included.

1.2. Layout of manual

This manual contains a general description and operation followed by data for maintenance, disassembly and assembly of the ULD. This is followed by an illustrated parts list providing detailed information.

1.3. Revision service

Revision of the product will result in an update of the manual. Service bulletins may be issued separately. These will become available on the customer portal when relevant, and their applicability will be stated in the Service Bulletin itself.

1.4. Reporting of Failures, Malfunctions and Defects

VRR Design Organisation has a system for collecting, investigating and analysing reports of and information related to failures, malfunctions, defects or other occurrences which cause or might cause adverse effects on the continuing airworthiness of any part, appliance or article identified in this manual.

In case of any failure, malfunction, defect or other occurrence related to a part, appliance or article identified in this manual which has resulted in or may result in an unsafe condition, please submit the following information:

- Organisation name
- Approval reference (if relevant)
- Information necessary to identify the aircraft (call-sign) and/or the part affected (part-number / serial number and manufacturer)
- Location, date and time of occurrence (UTC Date and Time)
- A written summary of the occurrence, including damage and injuries if applicable.
- Any other specific information required, including if the unsafe condition has already been reported to a reporting entity, if there was third party damage, the risk classification (if applicable), the status of the part
- The contact person in case of additional questions.

The email address for submitting the information listed above is Quality@vrr.aero

2. Description and operation

2.1. Part number and certification

This component maintenance manual is applicable to:

Type: Container
Model: DBJ - 0628
Part number: **1283-40-0001**

The ULD is a non-certified unit.

2.2. Description

The ULD contains a 84"x 104" (2134mm x 2642mm) base. The construction consists of aluminium extrusions, (bent) sheets and sandwich panels. The height of the ULD is 89,9" (2284mm). The ULD is designed to facilitate efficient replacement of parts.

2.3. Technical data

2.3.1. Weight ULD

Theoretical ME Weight	825	kg	1819	lb

2.3.2. General cargo

Maximum Operational Gross Weight	4536	kg	10000	lb
Maximum Net weight	3711	kg	8181	lb
Maximum Height Centre of Gravity	1219	mm	48,0	inch

2.3.3. Outside dimensions (max)

Width	2182	mm	85,9	inch
Length	2672	mm	105,2	inch
Height	2284	mm	89,9	inch

2.3.4. Inside dimensions

Internal volume	9,7	m^3	343	ft^3

2.3.5. Door opening

Width	2432	mm	95,7	inch
Height	1989	mm	78,3	inch

2.4. Operation

The ULD shall be checked for damages prior to loading, as damaged ULDs may damage the aircraft loading and/or the restraint system invalidating the certified airworthiness. To ensure that a unit is in a serviceable condition, it must be inspected before each use.

Serviceability limits are indicated in the chapter "Check prior to use".

2.4.1. General

Try to visualize the whole ULD load before commencing to pack, leave heavy and/or big items on the bottom. Spread load equally.

The local-base loading must not exceed:

- 200 kg/cm^2
- 440 lb/inch^2
- 2200 lb/foot^2
- 1000 kg/m^2

Cargo must be tied down to the seattrack in the ULD. For details on the maximum loads in the ULD and on the shelf as well as limitations on the location of the Centre of Gravity, refer to the operation manual (RRM628-OM).

Before transporting the ULD on dollies, transporters or other vehicles, ensure that restraint stops, locks or other securing devices have been applied correctly.

The ULD can be transported by a forklift truck. The base is designed to lift a fully loaded ULD.

⚠ **CAUTION**

» Door must be properly closed when ULD is moved.

» When the container is moved, the hose locks must be closed off by the gaskets, locked with the handles, and covered by zipping up the hose lock covers.

2.4.2. Transport by aircraft

The DBJ is a non-certified container without a pallet base. Before transport the DBJ needs to be placed on a certified aircraft pallet such as an HCU/6E or a PMC pallet and fastened to the pallet with a certified cargo net.

Refer to the operation manual (RRM628-OM) for further details, as well as details on transport by truck.

3. Disassembly

3.1. General

The ULD is built up from insulating panels with internal tube frames. These are joined with sheets, gussets and rivets. Some gussets are fastened with bolts or blind rivets (for example Monobolt rivets).

The doors are joined with bolts.

When disassembling the ULD blind rivets should be drilled out.

4. Cleaning

The interior and exterior faces of the ULD may be cleaned with any good grade industrial detergent, cleaner and/or water. The interior has to be wiped dry with a clean cloth. There are no objections to blowing out the ULD with compressed air or using a vacuum cleaner.

In extremely contaminated condition, steam cleaning is permissible but only with a maximum temperature of 70 degrees Celsius.

If sealing is damaged or missing it shall be restored immediately.

It's permitted to clean the interior and exterior of the ULD with a high pressure cleaner but with a maximum pressure of 2,5 bar.

⚠ **CAUTION**

» Never use aggressive agents or chemicals.

» The use of household chemicals is preferred. Iso-Propyl Alcohol (IPA) or Phenolic-based disinfection agents (with the correct dilution ratio) are allowed.

5. Check prior to use

5.1. General

The DBJ container is a non-certified assembly, and as such not airworthy without the use of a certified net and a certified pallet.

Although not mandatory it is recommended that the container is also checked for each shipment.

The DBJ container has to be used by the airline in combination with a certified pallet and air cargo net.

5.2. Limitations of damages

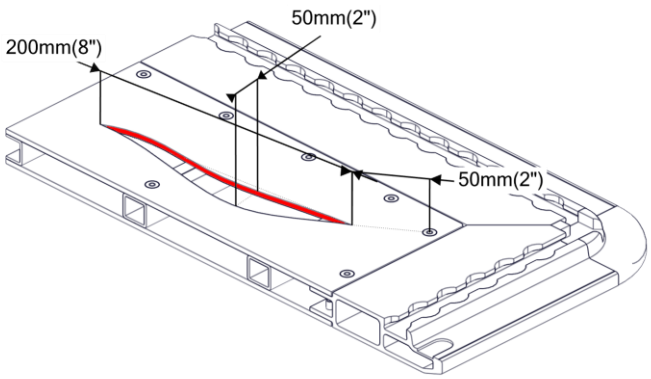
Due to non-airworthiness of the container, limitation of damages could be used as reference and are not mandatory to follow. Due to possible effect to aircraft when entering the cargo hold with damaged equipment, we strongly recommend to adhere to our damage limitations.

If any damages are found that exceed the limitations described below, the unit has to be taken out of services for repair.

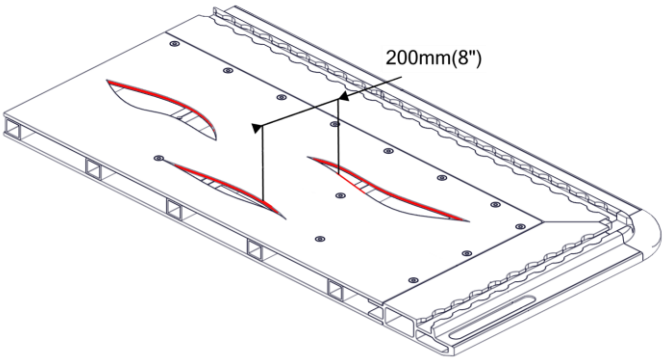
5.2.1. Limitations: damaged top sheet base

Damage to the top sheet base is allowed, as long as:

- cracks or holes do not exceed an area of more than 50 x 200mm (2" x 8");
- the distance between extrusion / assembly fasteners and crack (or hole) is not less than 50mm (2");



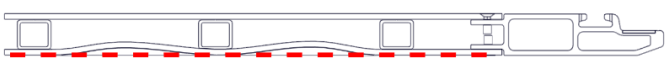
- the maximum number of unpatched cracks or holes per sheet does not exceed 3;
- the distance between two cracks/holes is not less than 200mm (8").



5.2.2. Limitations: damaged bottom sheet base

Damage to the bottom sheet base is allowed, as long as:

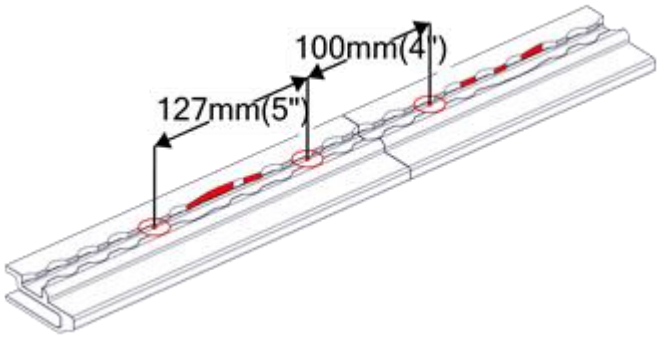
- there shall be no cracks or holes in the bottom sheet of the pallet;
- no more than 5 mm indentation in a local area of Ø200 mm (Ø8").



5.2.3. Limitations: damaged seat track lips

Damage to the seat track of an edge pallet is allowed, as long as:

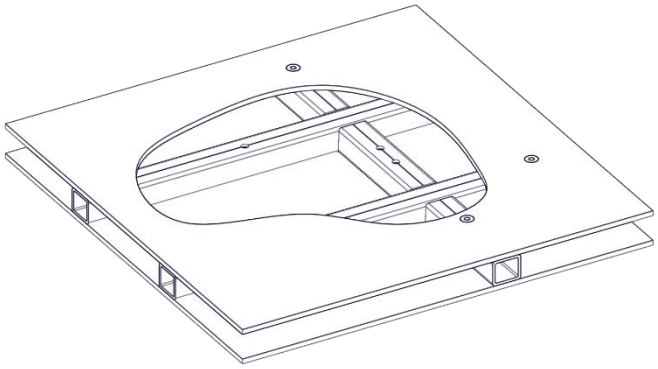
- the distance between 2 usable seat track holes is no more than 125mm (5″);
- the distance between 2 damaged areas is no less than 100mm (4″);
- there are no more than 5 damaged areas per long side;
- there are no more than 3 damaged areas per short side.



Damaged seat track lips should be clearly marked and repaired as soon as possible.

5.2.4. Limitations: damaged internal extrusions base

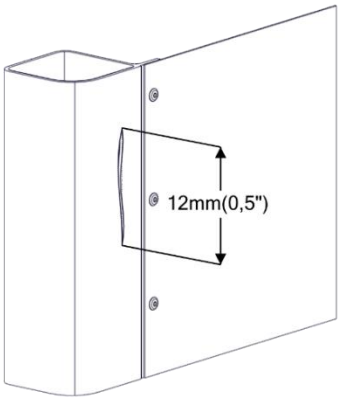
- there shall be no cracks or holes in the internal extrusions (through holes or cracks in the sheets).



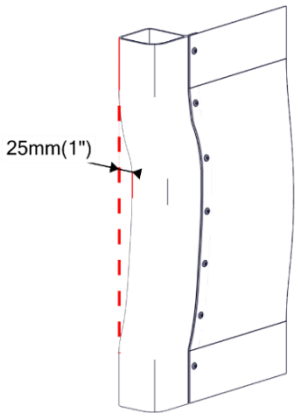
5.2.5. Limitations: damaged frame extrusions

Damage to the frame extrusions is allowed, as long as:

- There is not more than 1 crack per extrusion.
- The crack in the extrusion does not exceed 12mm (½").



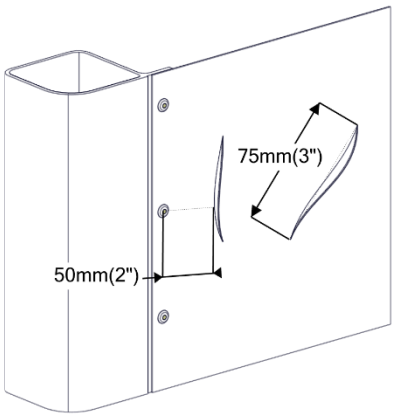
- A permanent deformation of an extrusion does not exceed 25mm (1").
- The deformation does not interfere with the function of the extrusion.



5.2.6. Limitations: damaged frame sheets

Damage to frame sheets is allowed, as long as:

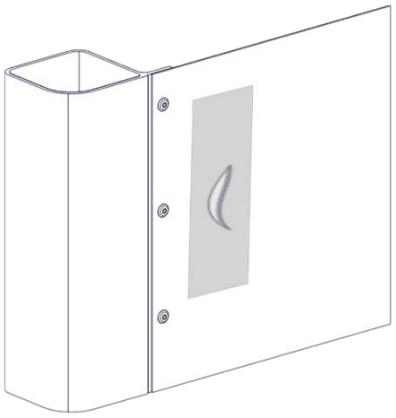
- Length of cracks or holes do not exceed 75mm (3″).
- The distance between extrusion / assembly fastener and crack (or hole) is more than 50mm (2″).
- The maximum number of unpatched cracks or holes per sheet (smaller than 75mm (3″)) do not exceed 2.



Important notice: Taping is not a substitute for patching.

- Cracks and holes smaller than 20mm (0,8″) can be covered by 3M™ aluminium foil tapes 425 or an equivalent.
  This tape can also be used for temporary taping holes smaller than 75mm.

- The maximum number of covered holes with 3M™ aluminium foil tapes 425 does not exceed 4.

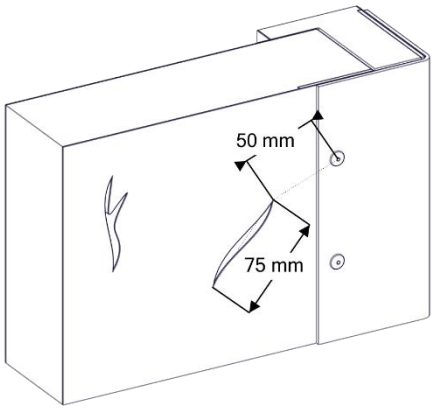


Important notice: This is no repair method.

5.2.7. Limitations: damaged monopan panel

Damage to Monopan panels is allowed, as long as:

- The length of cracks or holes does not exceed 75mm (3”).
- The distance between extrusion / assembly fastener and crack (or hole) is not less than 50mm (2”).
- The maximum number of unpatched cracks or holes per sheet, smaller than 75mm (3”), does not exceed 2.
- Panels with a crack or hole with an area of more than Ø300mm, and through both skins, shall be replaced.



Important notice: Taping is not a substitute for patching.

Temporary covering cracks and holes:

- 3M™ aluminium foil tapes 425 or an equivalent can be used for temporary covering holes smaller than 75mm.
- The maximum number of covered holes with 3M™ aluminium foil tapes 425 does not exceed 4.

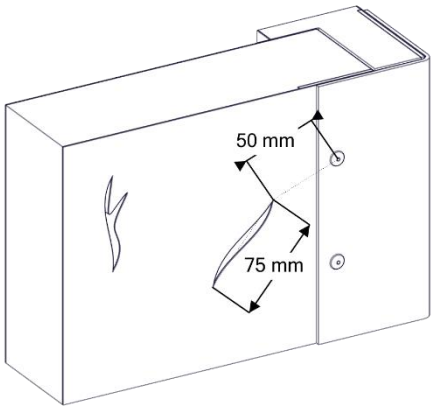
Important notice: This is no repair method.

5.2.8. Limitations: damaged insulation panel

Damage to insulation panels is allowed, as long as:

- The length of cracks or holes does not exceed 75mm (3").
- The distance between extrusion / assembly fastener and crack (or hole) is not less than 50mm (2").
- The maximum number of unpatched cracks or holes per sheet, smaller than 75mm (3"), does not exceed 2.
- Panels with a crack or hole with an area of more than Ø300mm, and through both skins, shall be replaced.

Although cracks smaller than 75mm does not need to be repaired, in respect to insulation values all damages must be repaired.



Important notice: Taping is not a substitute for patching.

Temporary covering cracks and holes:

- 3M™ aluminium foil tapes 425 or an equivalent can be used for temporary covering holes smaller than 75mm.
- The maximum number of covered holes with 3M™ aluminium foil tapes 425 does not exceed 4.

Important notice: This is no repair method.

5.2.9. Limitations: damaged weldments

Damage in the welds is allowed, as long as:

- Cracks in weld does not exceed 15mm (0,6").
- The crack is no longer than 50% of total length of weld.

5.2.10. Limitations: damaged door

Damage to the doors is allowed, as long as:

- The door panels are not distorted so that the safe and secure closing and latching of the door is affected.
- The deformation of the doors does not exceed the normal external shape of the container.
- There are no damaged or missing door catches or hinge mechanisms.
- The length of cracks or holes do not exceed 50mm (2").
- There are no more than two damaged areas in one panel.

5.2.11. Limitations: damaged cover

Damage to the cover is allowed, as long as:

- the length of a tear does not exceed 100mm (4”);
- There are no worn out or broken stitches.

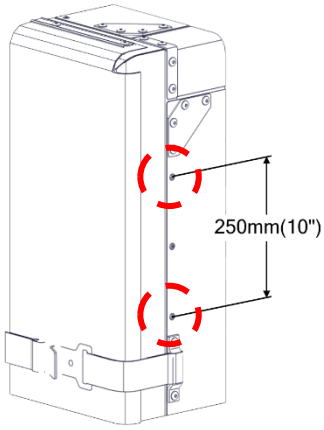
5.2.12. Limitations: missing fasteners (screws/bolts/washers/nuts)

There shall be no missing fasteners (screws/bolts/washers/nuts).

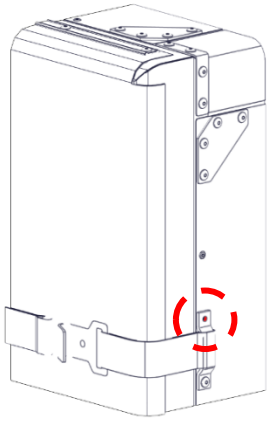
5.2.13. Limitations: missing rivets

Missing or damaged rivets on a container are allowed, as long as:

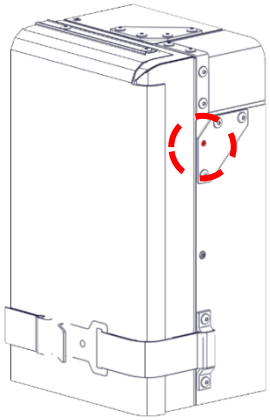
- No more than 10 % of the rivets of one panel are missing or damaged.
- The distance between two missing rivets is not less than 250mm (10").



- There are no missing rivets on strap handles.



- There are no missing rivets on gussets.



5.2.14. Limitations: damaged or missing manufacturing plate

Damages on the manufacturing plate is not allowed. The manufacturing plate should be replaced when:

- the manufacturing plate is missing or damaged;
- the manufacturing plate is not readable.

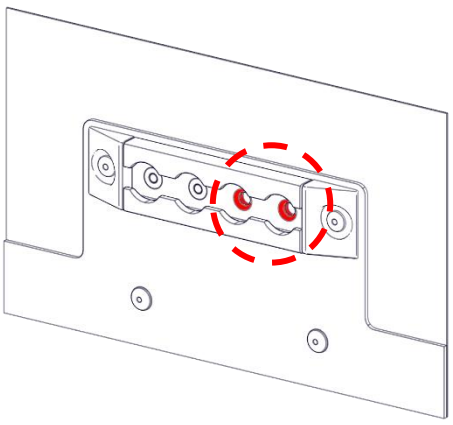
If the container is not omni-directional (indicating the direction of loading), the applicable marking must be clearly visible and readable.

5.2.15. Limitations: damaged seattrack, tie-down points

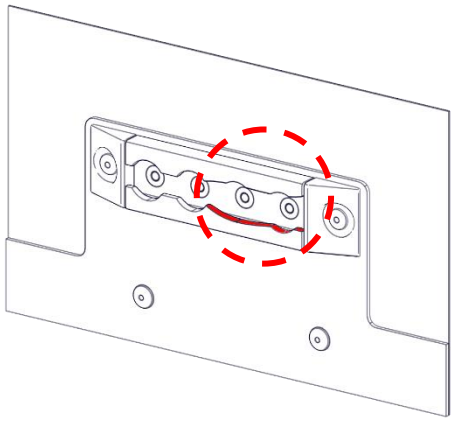
Damage to seat track/tie down points is not allowed.

Seat track/tie down points may only be used when:

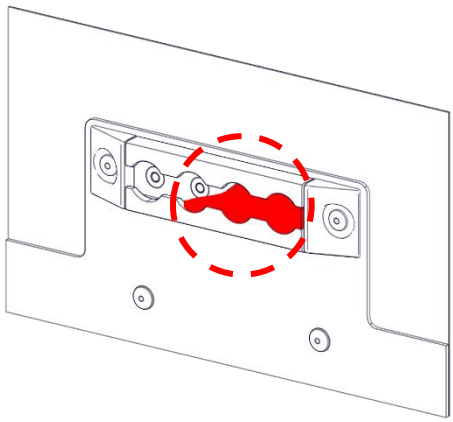
- There are no missing rivets or bolts on the tie-down points.



- There are no missing lips on the seat track.



- The tie-down points are not clogged.



6. Repair methods

6.1. General

Repair of the ULD should only be performed by a Part-145 approved repair station. Any substitute material that is not sourced through the manufacturer directly should be approved by the manufacturer before implementation.

6.2. Prior to repair work

Define a 'record classification of damage' for damages and define repairs on a repair work record form. Record ULD p/n as engraved on the TSO marking. Check that p/n corresponds to the CMM, latest issue, which can be found on the VRR customer portal.

6.3. Repair work in process

Check that all materials and repair methods are according to this CMM. Check that all repair methods are in accordance with methods, techniques and standards accepted by aviation authorities.

6.4. Replace work in process

All parts that are damaged beyond the limitations stated in Chapter 5 should to be replaced. The replaced parts should be installed on the ULD in the same manner as the original part. A complete list of replacement parts can be found in the IPL.

6.5. After repair work

Determine that all repair work has been completed and that the markings are complete. Record all performed work, defined damages etc. in the ULD maintenance log. Release ULD back to service with an EASA Form1 or equivalent.

6.6. Standard patches

Standard patches are available from VRR. Patches are equipped standard with Ø5 holes (not countersunk). Part numbers for the patches are issued as followed:

RR1.P2030-15-60 where:

- RR1.P is standard for all VRR patches.
- 2030 is the dimensions of the patch in cm (centimetre).
- 15 is the thickness of the patch in mm (millimetre) in which the comma has been left out.
- 60 is the material code; -60 for Alu. 6082-T6 and -70 for Alu. 7021-T6/7075-T6.
- PC is the material code for polycarbonate.
- TW is the material code for Twintex skin.

Example 1:
RR1.P2030-08-60 is a patch of 200x300mm and 0.8mm thick from Alu. 6082-T6.

Example 2:
RR1.P1530-15-60 is a patch of 150x300mm and 1.5mm thick from Alu. 6082-T6.

Example 3:
RR1.P2525-40-70 is a patch of 250x250mm and 4.0mm thick from Alu. 7021-T6/7075-T6.

Example 4:
RR1.P3030-10-TW is a patch of 300x300mm and 1.0mm thick from Twintex skin.

6.7. Standard patches sandwich panels

Standard patches for sandwich panels are available from VRR.
Part numbers for the patches are issued as followed:

SP2030_1234-56-7890 where:

-	SP	is sandwich patch.
-	2030	is the dimensions of the patch in cm (centimetre).
-	1234-56-7890	is the part number of the panel for which the patch is required; (see IPL for part number)

Example 1:
SP2030_2000-04-1324 is a patch of 200x300mm for DRY ICE DOOR PANEL (p/n 2000-04-1324).

Example 2:
SP1530_2000-04-1246 is a patch of 150x300mm for BOTTOM PANEL (p/n 2000-04-1246).

6.8. Repair material list

The following aluminium alloys and other (raw) materials and parts are used for repairing the ULD:

- The use of salvaged material from a ULD with identical part number is acceptable, subject to the use of such material being within the scope of work of the Part-145 repair station.

Description	Material	Part number
Extrusion	Alu. 7003-T5 Alu. 6061-T6	See IPL
Sheet	Alu. 5754-H22	See IPL
Gusset	Alu. 5754-H22	See IPL
Blind Rivet	Steel/Alu./Stainless steel	See IPL
Sealant	Acrylic/Silicone	

6.9. Repair top sheet of base with patches

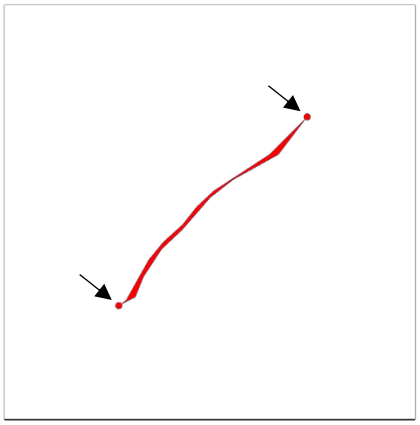
If the cracks and holes in the sheet are beyond the limits described in the damage limitations, the sheet shall be repaired according to the following procedure within the following limitations:

Limitations:

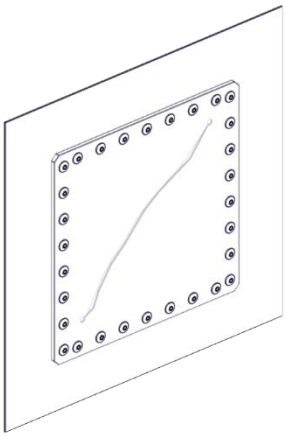
- If any stiffener extrusions are damaged, enlarge the patch so the damaged extrusions can be removed easily;
- Incorporating an existing patch into a new larger patch repair is acceptable. (old patch is replaced by one larger patch);
- The maximum surface of the patches shall not exceed 50% of the surface per segmented part;
- To make sure the patch is making full contact with the sheet, cut away any excess material and make sure the sheet is flat.
- Holes in the patch need to be Ø5mm and spaced no more than 25mm. The holes need to be at least 10mm from the edge of the patch.

Procedure:

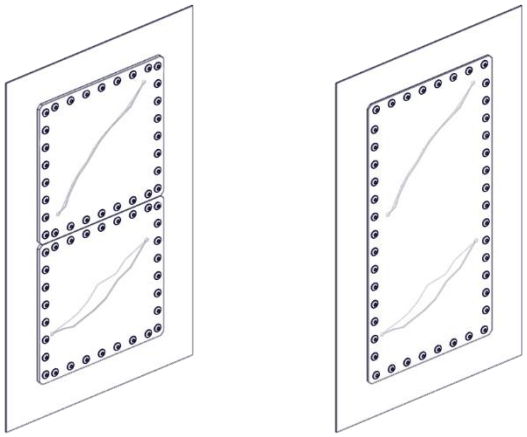
- Drill Ø 5,0mm holes at the end of the cracks to prevent further cracking.



- Cracks and / or holes have to be covered by an aluminium (6082-T6) sheet of at least the same thickness as the sheet being patched. For patches on the top panel aluminium 7021-T6/7075-T6 may be used as well;
- Make sure the crack is at least overlapped by 25mm (1”) of the patch;



- When placing 2 patches close to each other, it is best that the top patch overlaps the bottom patch;
- It is preferred to use bigger patches for multiple cracks.



6.10. Repair bottom sheet with patches

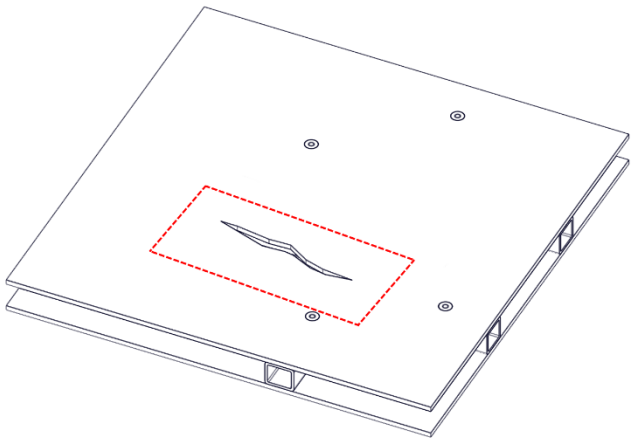
If the cracks and holes in the sheet are beyond the limits described in the damage limitations, the sheet shall be repaired according to the following procedure within the following limitations:

Limitations:

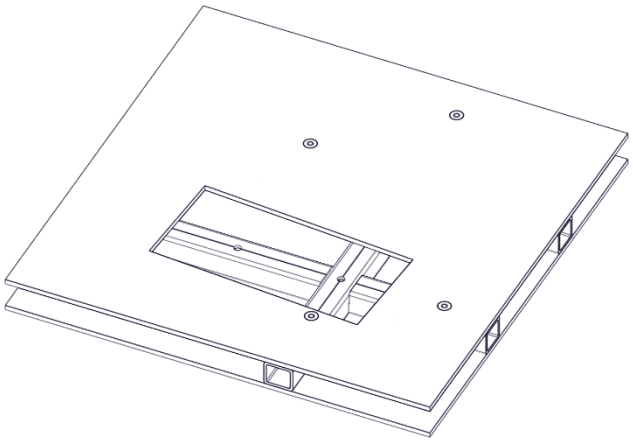
- Incorporating an existing patch into a new larger patch repair is acceptable. (old patch is replaced by one larger patch);
- The maximum surface of the patches shall not exceed 50% of the surface of the repaired sheet.

Procedure:

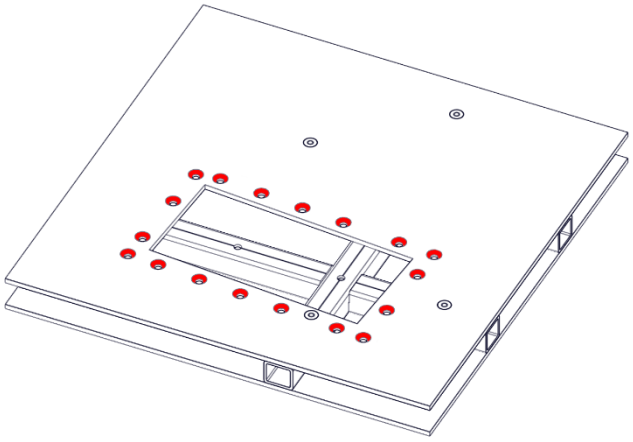
- Locate the place of the crack or hole by drawing a square or rectangular box around the crack on the pallet (using a marker). The box drawn should overlap a minimum of 25 mm around the crack or hole.



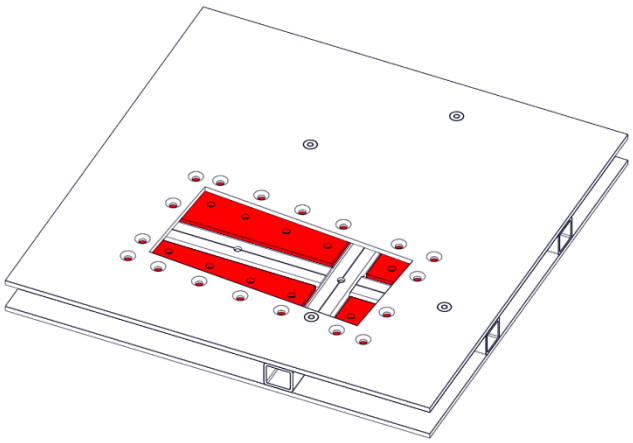
- Carefully cut out the drawn box of the sheet by using a sheet-cutter or vertical grinder;
- If the cut-out is within 20mm from an inner extrusion, the cut-out has to be extended to 20mm over the inner extrusion. Make sure the corners of the cut-out have a radius of 5mm.



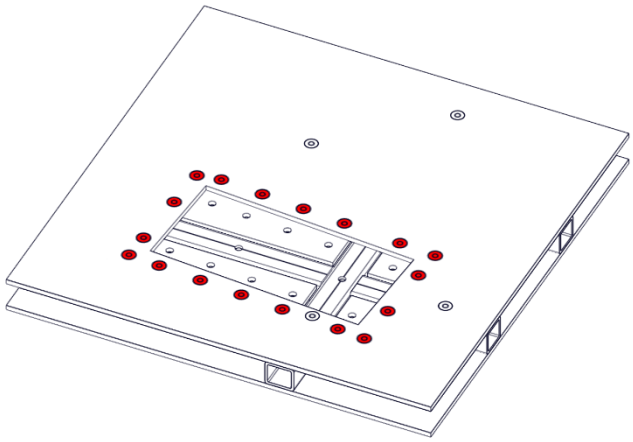
- Drill and countersunk holes (Ø5mm) around the cut out (centreline of holes to be 10mm from the edge of sheet cut-out) with a maximum distance of 30 mm between the holes.



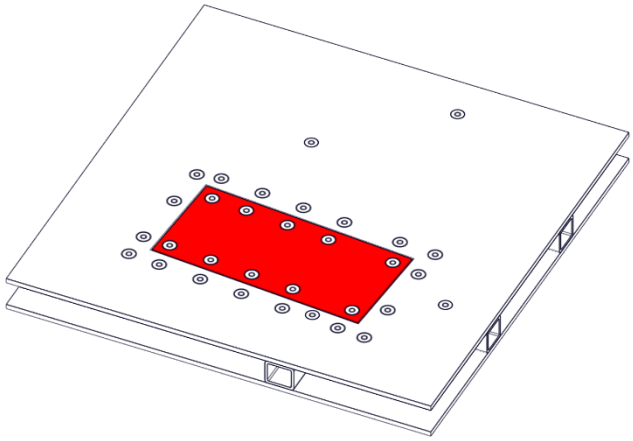
- Install an aluminium strip of 40x3 mm on the internal face of the bottom sheet (overlap minimum 20 mm);
- When there are internal extrusions under the edge of the cut-out, no strip has to be installed at this location.
- Drill holes Ø5mm into the strip by matching the holes around the cut out;



- Fasten the aluminium strip with blind rivets (Ø4.8mm type BK-MGL100-R6-6);



- Fabricate a patch which will fit exactly (tolerance: 1mm) into the cut-out. The thickness of the patch must be the same as the thickness of the bottom sheet (check with p/n in IPL);
- Drill and countersunk holes (Ø5mm) at the edges. The centreline of holes shall be 10mm from the edge of sheet cut out. The maximum distance is 30mm between each hole;
- Mount the patch with countersunk rivets (Ø4.8mm, BK-MGL100-R6-6);
- Apply silicone to seal the edges of the patch.



When Ø4.8mm countersunk rivets (type BK-MGL100-R6-6) are not available, then it is allowed to use countersunk rivets: Ø6.4mm BK-MGL100-R8-8;.

Patches in bottom sheets may also be fastened with an AK countersunk rivet (closed type rivet).

The maximum distance between each hole is 15mm.

6.11. Repair aluminium sheet with patches

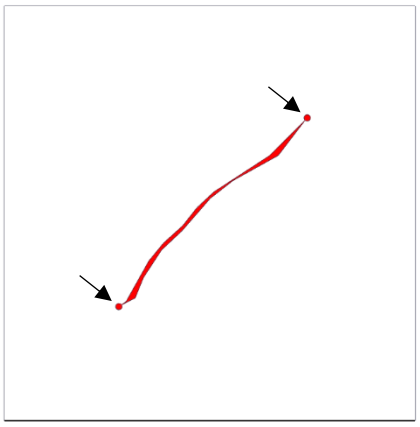
If the cracks and holes in the sheet are beyond the limits described in the damage limitations, the sheet shall be repaired according to the following procedure within the following limitations:

Limitations:

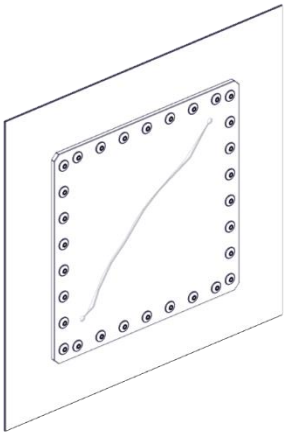
- Incorporating an existing patch into a new larger patch repair is acceptable. (old patch is replaced by one larger patch);
- The maximum surface of the patches shall not exceed 50% of the surface per segmented part;
- To make sure the patch is making full contact with the sheet, cut away any excess material and make sure the sheet is flat.
- Holes in the patch need to be Ø5mm and spaced no more than 35mm. The holes need to be at least 10mm from the edge of the patch.

Procedure:

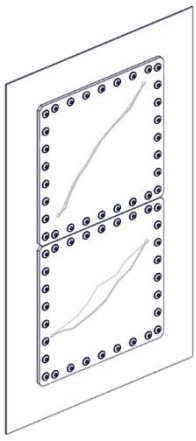
- To prevent further cracking, drill Ø 5,0mm holes at the end of the cracks.

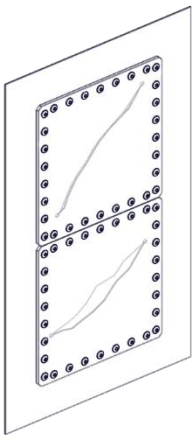


- Cracks and / or holes have to be covered by an aluminium (6082-T6) sheet of at least the same thickness as the sheet being patched;
- Make sure the crack is at least overlapped by 25mm (1") of the patch.



- When placing 2 patches close to each other, it is best that the top patch overlaps the bottom patch.
- It is preferred to use bigger patches for multiple cracks.





6.12. Repair of bent extrusions

Straighten the bent edge rail by pressing it in opposite direction.

When using heat, keep in mind that:

- the temperature of the extrusion may not exceed 200°C (392°F);
- the heating period should not be longer than 10 minutes.

6.13. Replacement of damaged frame extrusions

Remove the damaged frame extrusion by removing the rivets.

Replace the damaged extrusion by a new one and drill holes (when necessary) for the rivets by matching these holes with the holes on the sheet.

6.14. Welding of extrusions

Although the container is a non-welded construction, welding can be used to repair extrusions in case of a crack. The length (lengthwise of extrusion) of the weld may not exceed 150mm (6”). The length (width wise of extrusion) of the weld may not exceed 20mm (0.75”). The distance between two welded cracks should not be less than 500mm (20”). Only crack welding permitted.

Use MIG or TIG welding equipment and welding wire:

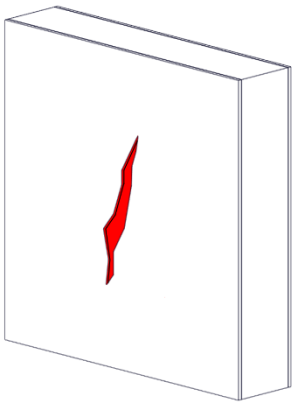
- AA5183 - AlMg4.5Mn /
- AA5356 - AlMg5.

6.15. Repair Monopan panel (of modular roof)

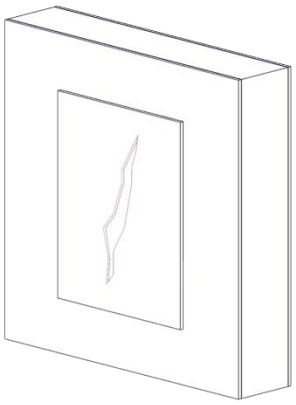
If damages to the Monopan panel are beyond the limitations described in the damage limitations, the MonoPan panel should be repaired according to one of the following two procedures:

Crack through skin only

- Cut a piece of Twintex skin which should overlap the crack by 30mm on each side;
- Clean the Twintex skin and the panel with *IsoPropyl Alcohol (IPA);*
- Apply *Saba Primer 4518* to the face of the Twintex skin and to the face of the panel and let dry for 15 minutes.

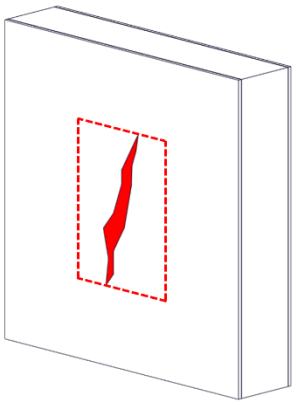


- Apply adhesive to the face of the Twintex Skin and the panel.
- Fix the Twintex skin on the panel;
- The adhesive is dry after 48 hours.

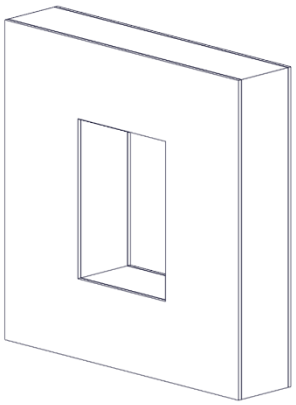


Crack through panel

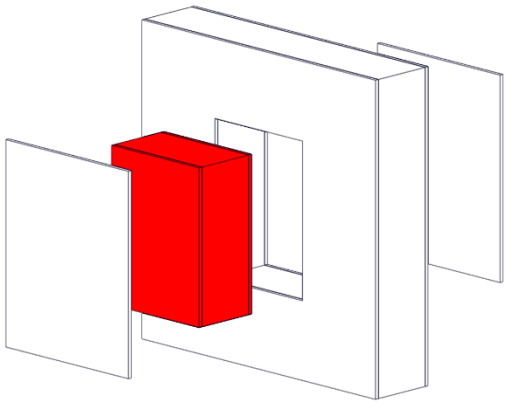
- Cracks and holes which are through both Twintex skins have to be cut out;
- Make a panel-insert with exact the same dimensions as the cut out piece.



- Remove all burrs and roughen the edges of both the hole and the insert with abrasive paper;
- Clean the end sides of both the cut out and the insert with *IsoPropyl Alcohol (IPA)*;
- Apply *Saba Primer 4518* to the end sides of the cut out and insert;
- let dry for 15 minutes.
- Apply structural adhesive to the edges of the panel-insert and the cut out.



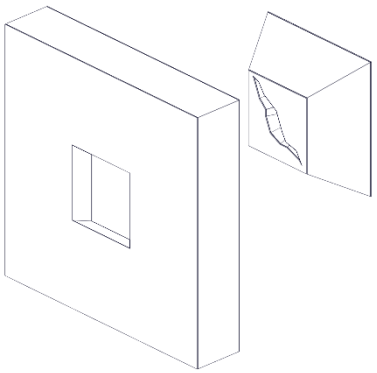
- Place the new panel on its position of the cut out and let dry for 48 hours.
- Cut two pieces of Twintex skin which should overlap the cut out by 30mm on all sides;
- Clean the Twintex skins and the panel with *IsoPropyl Alcohol (IPA);*
- Apply *Saba Primer 4518* to the face of the Twintex skins and to the face of the panel and allow to dry for 15 minutes.
- Apply structural adhesive to the face of the Twintex Skins and the panel.
- Fix the Twintex skin on the panel.
- Let dry for 48 hours



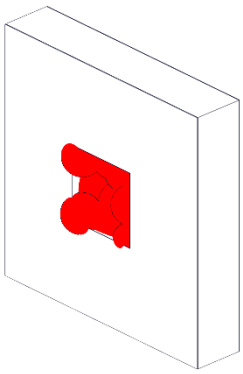
6.16. Repair of insulation material

When the insulation is damaged or missing due to damages of the outer and or the inner sheets, the following actions have to be taken:

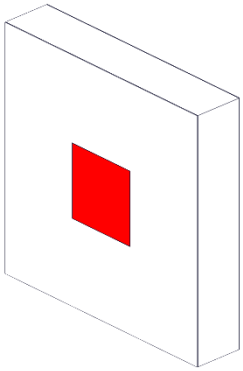
- Remove the insulation material in the area around the hole with a sharp knife
- It is advised to cut at an angle by which the open side is smaller than the opposite side
- Clean the hole with a vacuum cleaner;



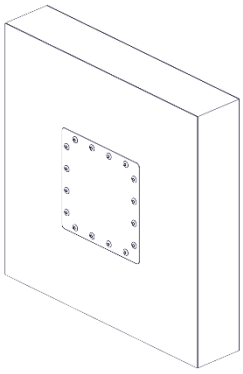
- Use self-expanding insulation foam and spray it into the hole;



- When the self-expanding foam is dry and fully expanded, cut away excess material;



- Patch the skin of the panel.
- Seal all patch edges.



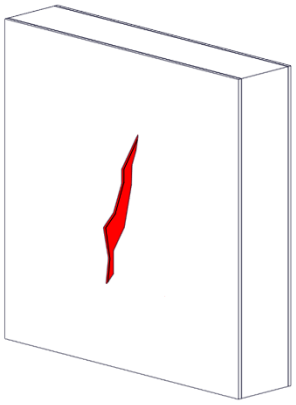
6.17. Repair of delamination

If there is any delamination of the panel (inside or outside) the delaminated part of the panel sheet should be cut out and repaired with a patch.

6.18. Repair of damaged sandwich panel

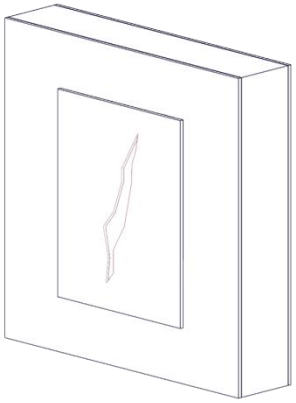
If damages to a sandwich panel are beyond the limitations described in the damage limitations, the sandwich panel should be repaired according to the following procedure:

- Determine the material of the sheet being patched.
- For composite panel, place patches according to the 'composite' description.
- For aluminium panel, place patches according to the 'aluminium' description.



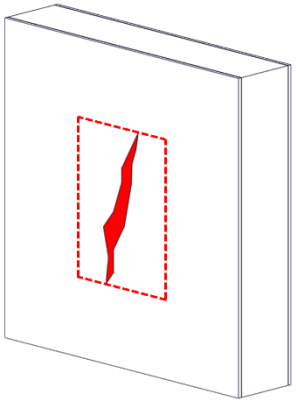
Damage to the composite sheet:

- Damages to the sheet only can be patched in the same way a single sheet would be.

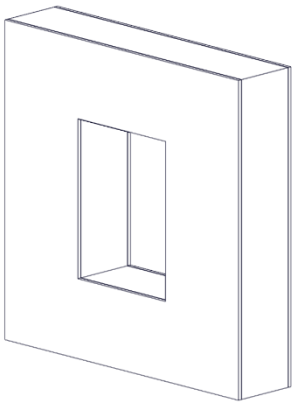


Damage to the panel (composite sheet):

- Cut out the damage to the panel;

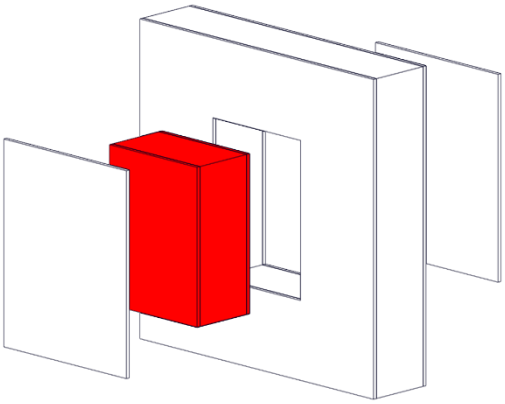


- Make a panel-insert with a clearance of 1mm on all sides from the cut out piece.



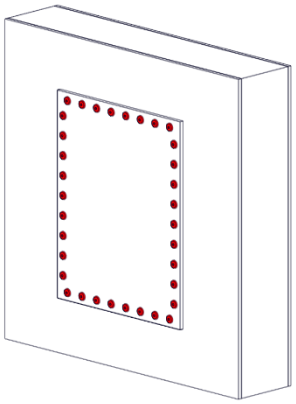
See STANDARD PATCHES SANDWICH PANELS for ordering panel inserts.

- The materials to be bonded should be dry and dust free.
- Clean all joints with IsoPropyl Alcohol (IPA) and let dry.
- Apply SABA Primer 4518 and allow to dry for at least 15min. The maximum drying time is approximately 4 hours.
- Apply SABA Activator 9400 to the aluminium parts (with a soft / lint-free cloth).
- Apply structural adhesive in small beads and insert the insert into the panel. Allow adhesive to cure for 24 hours per 3mm of bead thickness.



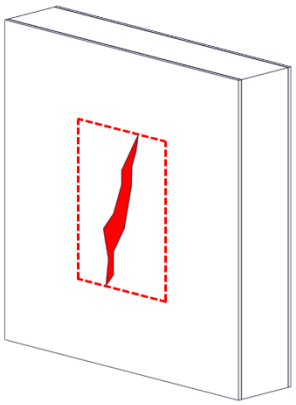
Damage to the aluminium sheet:

- Damages to the sheet only can be patched in the same way a single sheet would be.

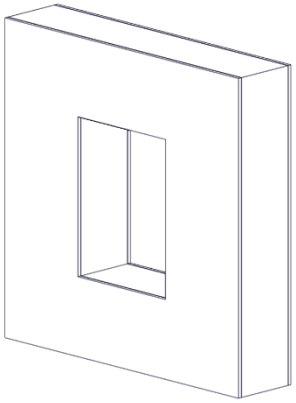


Damage to the panel (aluminium sheet):

- Cut out the damage to the panel;

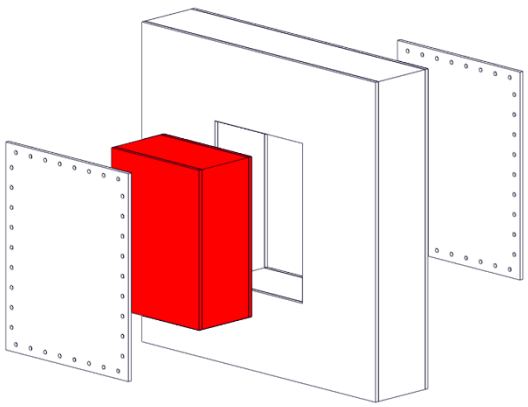


- Make a panel-insert with a clearance of 1mm on all sides from the cut out piece.



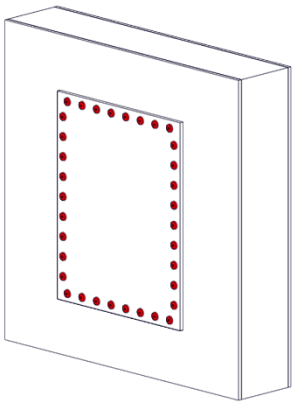
See STANDARD PATCHES SANDWICH PANELS for ordering panel inserts.

- Place the new insert in the cut hole and place patches on both sides of the panel;
- Drill holes (Ø5mm, 25mm apart and 10mm from the edge) though the patches and the panel skins.



- Install Ø 4,8 mm rivets BK-AD064SB or BK-AD066SB, which is a blind type.

Substitute rivets should have a minimum shear strength of 1810 N (=185kg or 407lbs).



6.19. Replacing rubber door extrusions

When the door seals (being rubber and plastic extrusions) are damaged beyond the limitations described in the damage limitations, the seals should be repaired according to the following method:

Remove damaged extrusion
- Remove any rivets that keep the extrusion in place;
- Remove the extrusion gently, for the extrusions are glued to the panel;

Clean door panel and replacement extrusion
- Use a cleaner to clean the parts holding the seal extrusion;
- Clean the seal extrusion;

Replace extrusion
- Apply sealant to the new seal extrusion.
- Directly after applying the sealant, place the seal onto the door panel.
- Fasten the extrusion with Masterbulb rivets (See IPL to see which rivet to use);
- Let the sealant dry.

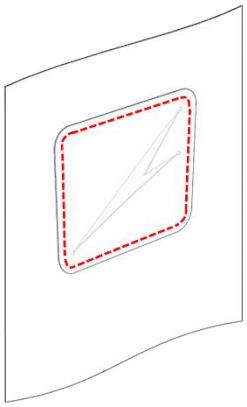
6.20. Repair of cover

If the cover is damaged beyond the limits described in the damage limitations the cover has to be repaired according to the following procedure and within the following limitations:

Limitations:
- Tears and holes need to be covered by a patch;
- The patch shall have at least the same strength as the cover that is being repaired;
- The patch shall be at least as thick as the cover that is being repaired;
- Preferred direction of patch is parallel to frame;
- Tears close to existing patches are preferred to be patched by a larger patch, covering both tears. This replaces the existing patch;
- Stitches shall be repaired using the original pattern and thread size;
- Sewing shall be done in a 'locking stitch' pattern;
- The area of the patches does not exceed 50% of the part of the cover being repaired.

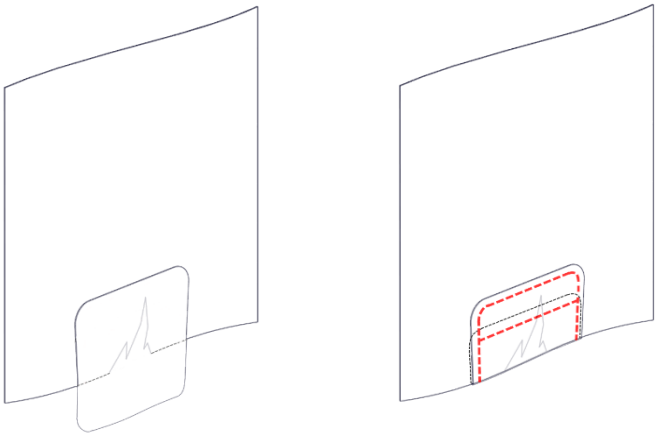
Patch procedure

- To prevent further tearing, cut holes in all tear ends.
- Use an overlap of 25mm (1"). Round off corners of the patch;
- Stitch 5mm (0,2″) from the edge of the patch.



When thermal welding, the temperature in the weld must be between 170°C (340°F) and 205°C (400°F). Press patch firmly on cover during welding.

- When patching on the edge of the cover, flip 50mm of the patch to aft side of cover. Stitch 5mm (0.2″) from the edges of the patch.



Replaced (additional) pieces of cover or Velcro has to be stitched all around, 5mm (0.2″) from all edges.

6.21. Missing rivets

Replacement of rivets should be in conformity with the illustrated spare part list. When possible, the new rivets should be larger than the original.

Below the table that describes the interchangeability of commonly used rivets:

Rivet				**Equivalent**			
Monobolt	Ø4.8		BK-02771-00613	Magna-lok	Ø4.8		BK-MGLP-R6-4
Monobolt	Ø4.8	Csk.	BK-02761-00615		Ø4.8	Csk.	BK-MGL100-R6-6
	Ø4.8	Csk.	BK-02721-00615		Ø4.8	Csk.	BK-MGL100-U6-6
Monobolt	Ø6.4		BK-02771-00817		Ø6.4		BK-MGLP-R8-6
Monobolt	Ø6.4		BK-02771-00824		Ø6.4		BK-MGLP-R8-10
Monobolt	Ø6.4	Csk.	BK-02761-00821		Ø6.4	Csk.	BK-MGL100-R8-8
	Ø6.4	Csk.	BK-02721-00821		Ø6.4	Csk.	BK-MGL100-U8-8

6.22. Guidelines for replacing Nord-Lock securing washers

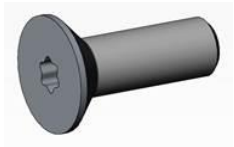
Use below torque values for fastening bolts with Nord-Lock rings.
Apply CU/C paste (copper/graphite paste A2-70, A4-70).

M4	:	3,0	Nm
M5	:	5,5	Nm
M6	:	8,1	Nm
M8	:	18,0	Nm
M10	:	26,0	Nm
M12	:	41,0	Nm
M16	:	108,0	Nm

6.23. Missing bolts

Replacement of bolts should be in conformity with the illustrated spare part list.

Below the table that describes the interchangeability of commonly used bolts:

Bolt	Equivalent
ISO 4762 hexogonal / torx head bolts – class 70 or higher	ISO 14579 TORX – class 70 or higher
	
ISO 10642 hexogonal and torx head bolts – class 70 or higher	ISO 14581 TORX – class 70 or higher
	

6.24. Repair / Restore of the sealed edges in the container

When sealed edges are damaged or missing, they should be restored immediately.

The edges should be cleaned and degreased using a non-corrosive degreaser such as IsoPropyl Alcohol (IPA) or household degreaser/dish washing soap.

For restoring the sealing the appropriate sealant should be used, which can be found in the repair material list.

6.25. Repair of corrosion protection

The doors are provided with steel hardware, which has a zinc-based coating from the manufacturer. Due to intense operational use in a humid environment, as well as bumps and scratches, corrosion might occur.

If corrosion occurs, remove the corrosion with a wire brush, and use a zinc-based etch primer on the corroded parts. This method should also be used for corrosion on powdercoated (white) skin sheets, but should in that case be followed with a colour-matched, 1K automotive finishing paint.

Apply a mild grease (MIL-PRF-81322 or similar) on moving parts, for smooth operation and as protection against environmental elements.

7. Assembly

The ULD will be delivered fully assembled in accordance to the applicable drawings.

8. Fits and clearances

Not applicable

9. Special tools, fixtures and equipment

Not applicable

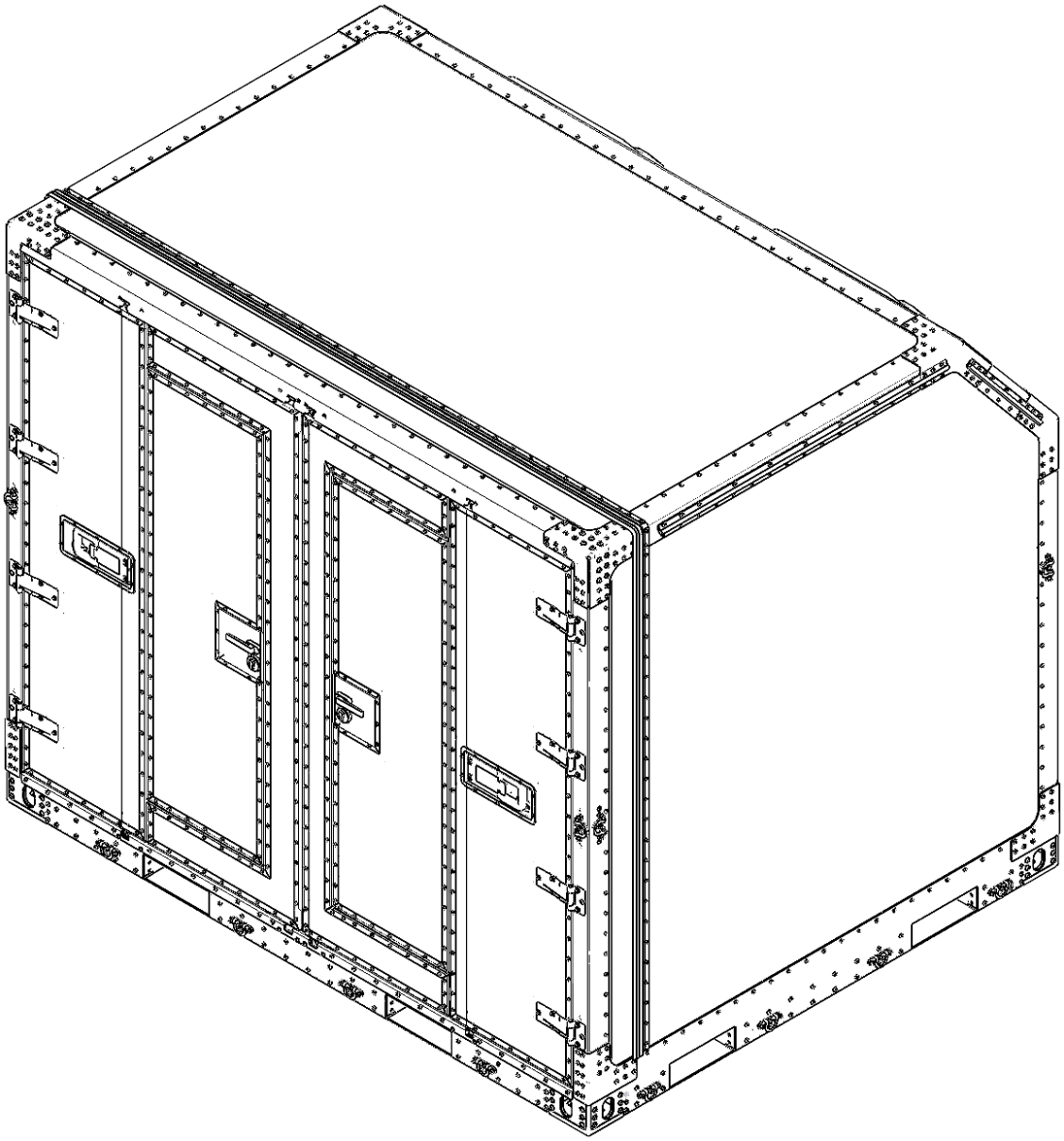
10. Illustrated parts list

The illustrated parts list describes all parts required for the unit listed on the title page.

The item numbers in the bill of material correspond to the numbers on the illustrations of the applicable assembly.

The following version of the container are indicated in this IPL:

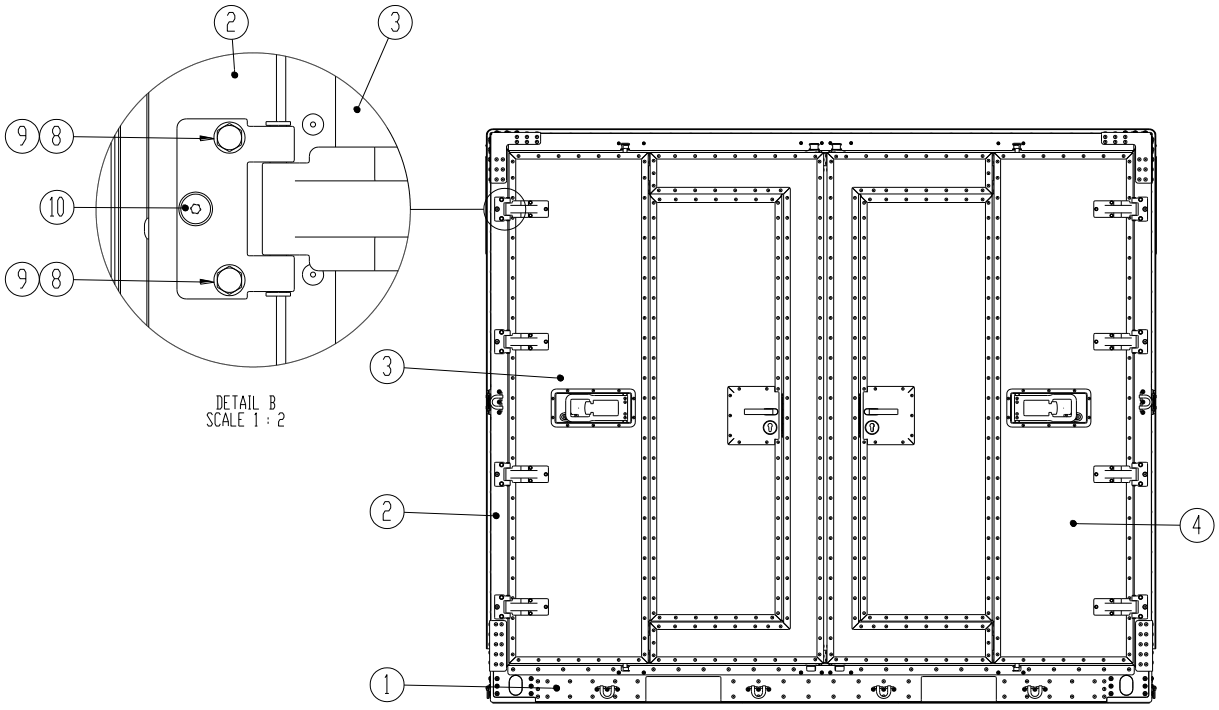
Partname: DBJ Container
Partnumber: 1283-40-0001



DBJ CONTAINER

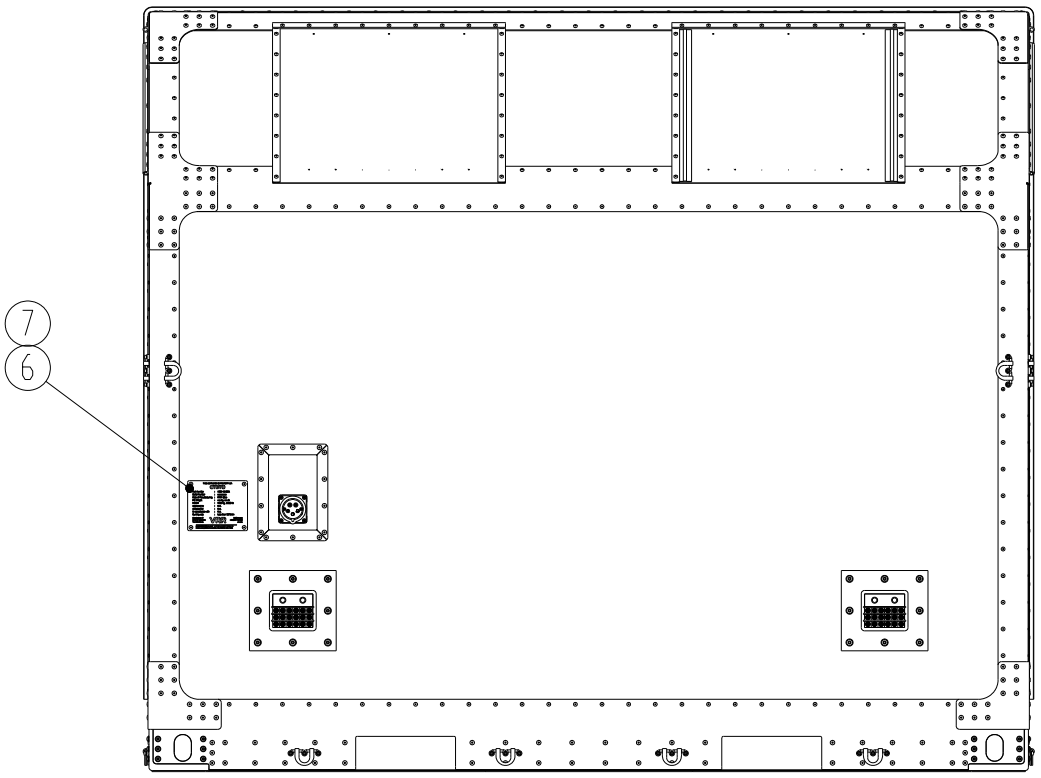
P/N 1283-40-0001

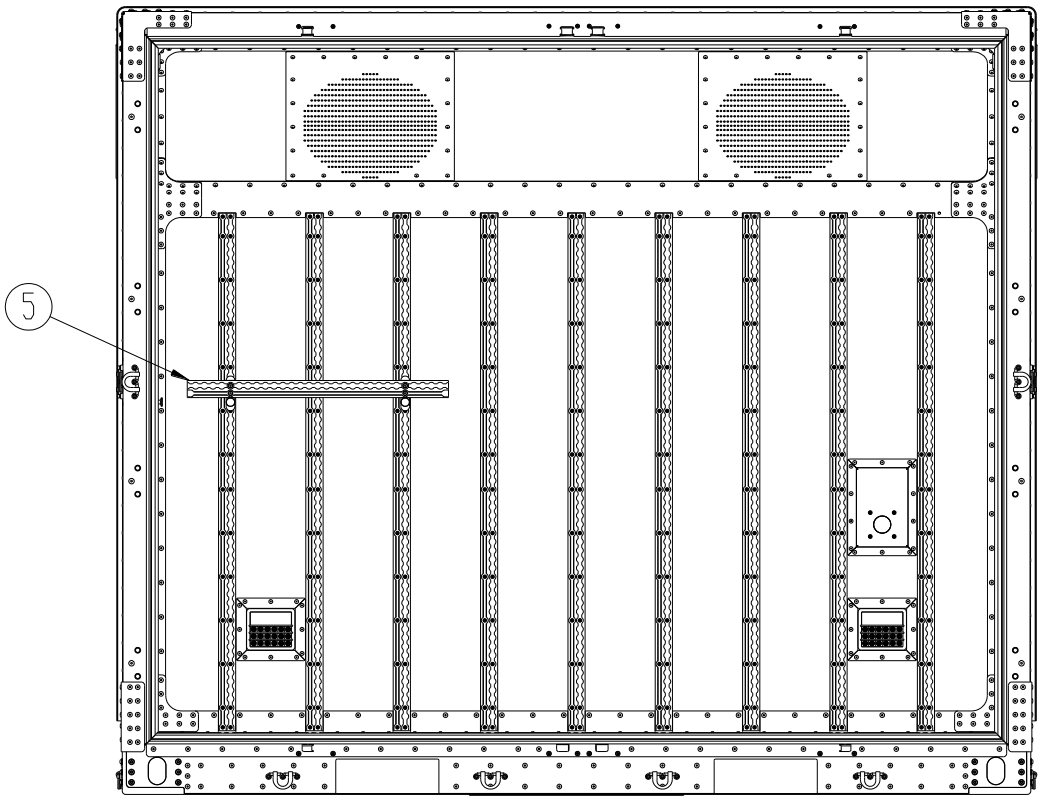
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2725	DBJ base level 1	1
2	2000-07-2646	Hull DBJ	1
3	2000-07-3478	DBJ Door Left	1
4	2000-07-3476	DBJ Door Right	1
5	2000-07-3488	Track bar	2
6	2000-07-2969	Manufacturer plate	1
7	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	4
8	BO-NORDLCK-08SP-SMO	Nord-Lock Large Washer M8	16
9	BO-4017-08025-A2	Hex. Head Screw	16
10	BO-14581T-08025-A2	Torx Socket Csk. Screw	8
11	LI-INNO.SEAL-WIT	INNO-SEAL White	1



DBJ CONTAINER

P/N 1283-40-0001





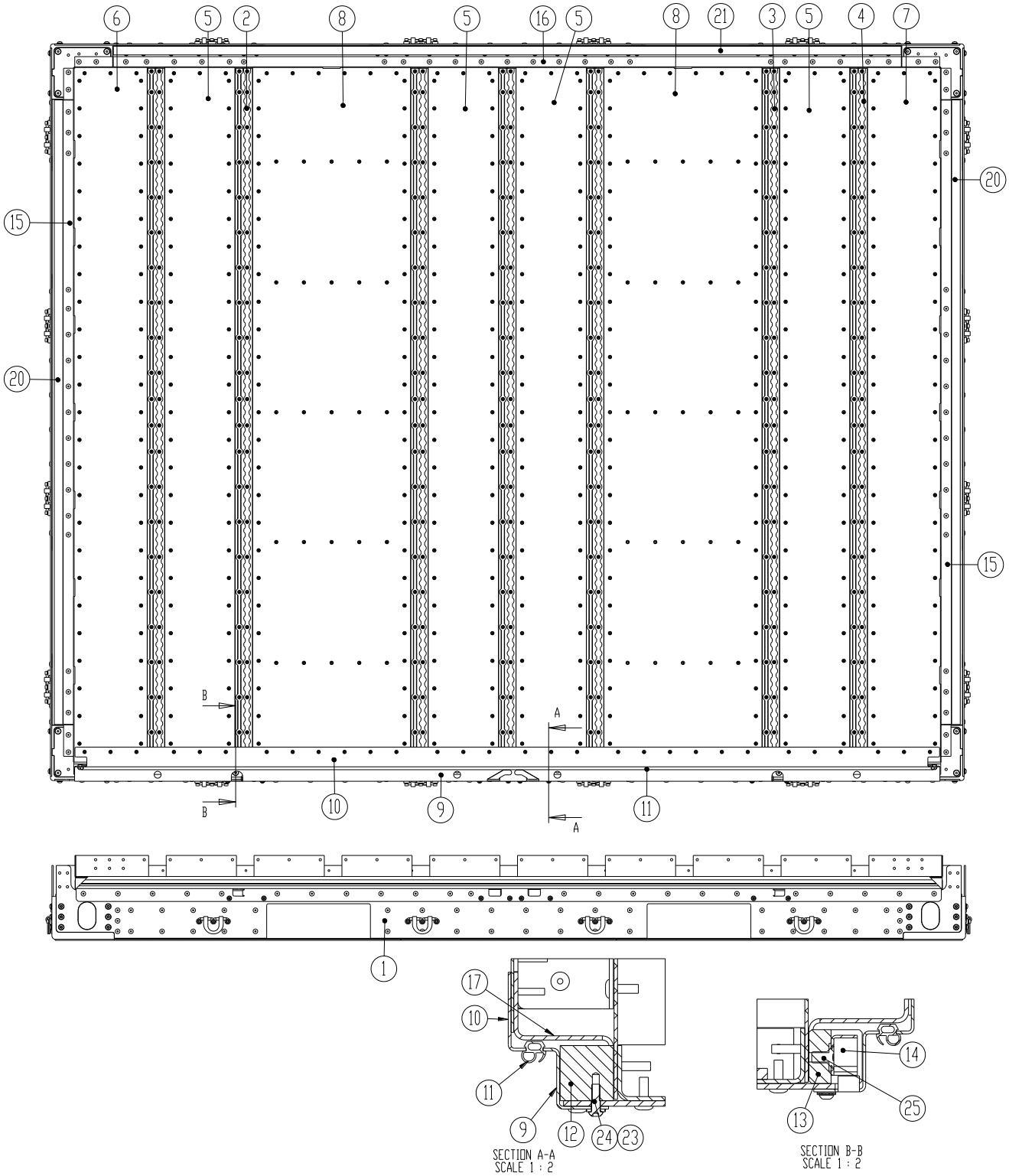
DBJ BASE LEVEL 1

P/N 2000-07-2725

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2726	DBJ base Level 2	1
2	2000-05-1114	Seat/T-track beam	1
3	2000-05-1117	Seat/T-track beam	1
4	2000-05-1083	Seat/T-track beam	5
5	2000-05-0272	top base sheet	4
6	2000-05-0273	top base sheet	1
7	2000-05-0394	top base sheet	1
8	2000-05-1098	top base sheet	2
9	2000-04-8710	outside doorpost	1
10	2000-04-8713	Inside doorstep	1
11	2000-04-8336	Door rubber Extrusion	1
12	2000-05-1764	Doorkeeper base	1
13	2000-05-1763	Locking block	2
14	SL-1201436	Keeper	2
15	2000-05-0265	upper floor	2
16	2000-05-0268	Topfloor Aft Edge	1
17	2000-05-0916	Top floor edge Front	1
18	2000-05-1097	Leg bracket	10
19	2000-05-1116	Leg bracket	2
20	2000-05-1625	Cel rubber	2
21	2000-05-1626	Cel rubber	1
22	BK-02771-00824	Bk.St. Monobolt 6,4	502
23	BO-NORDLCK-06SP-SMO	Nord-Lock Large Washer M6	8
24	BO-7380T-06020-A2	Torx Socket Button Screw	8
25	BO-10642-08016-A2	Hex. Socket Csk. Screw	4
26	BK-02761-00619	Csk.St. Monobolt 4,8	502

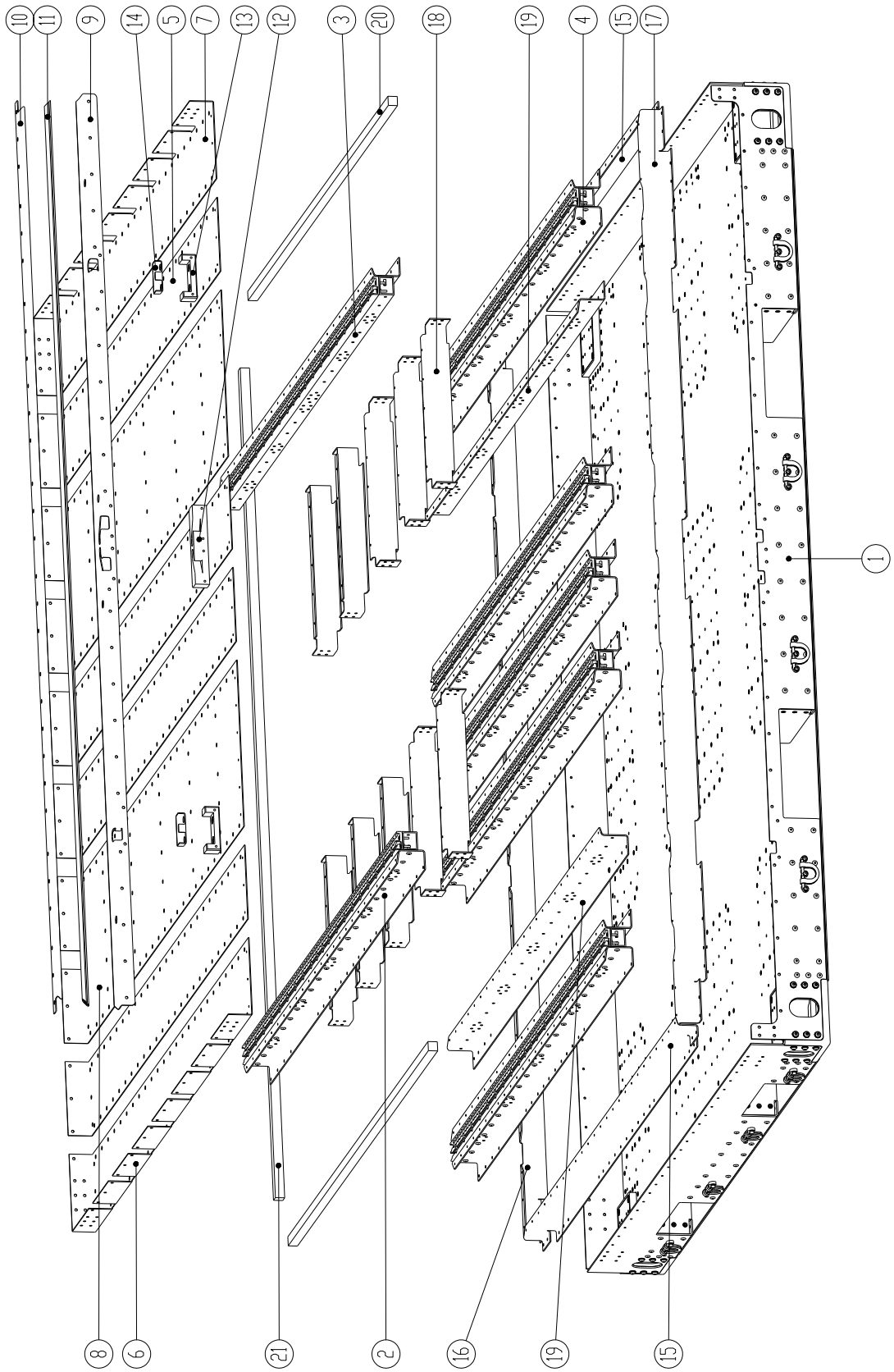
DBJ BASE LEVEL 1

P/N 2000-07-2725



DBJ BASE LEVEL 1

P/N 2000-07-2725



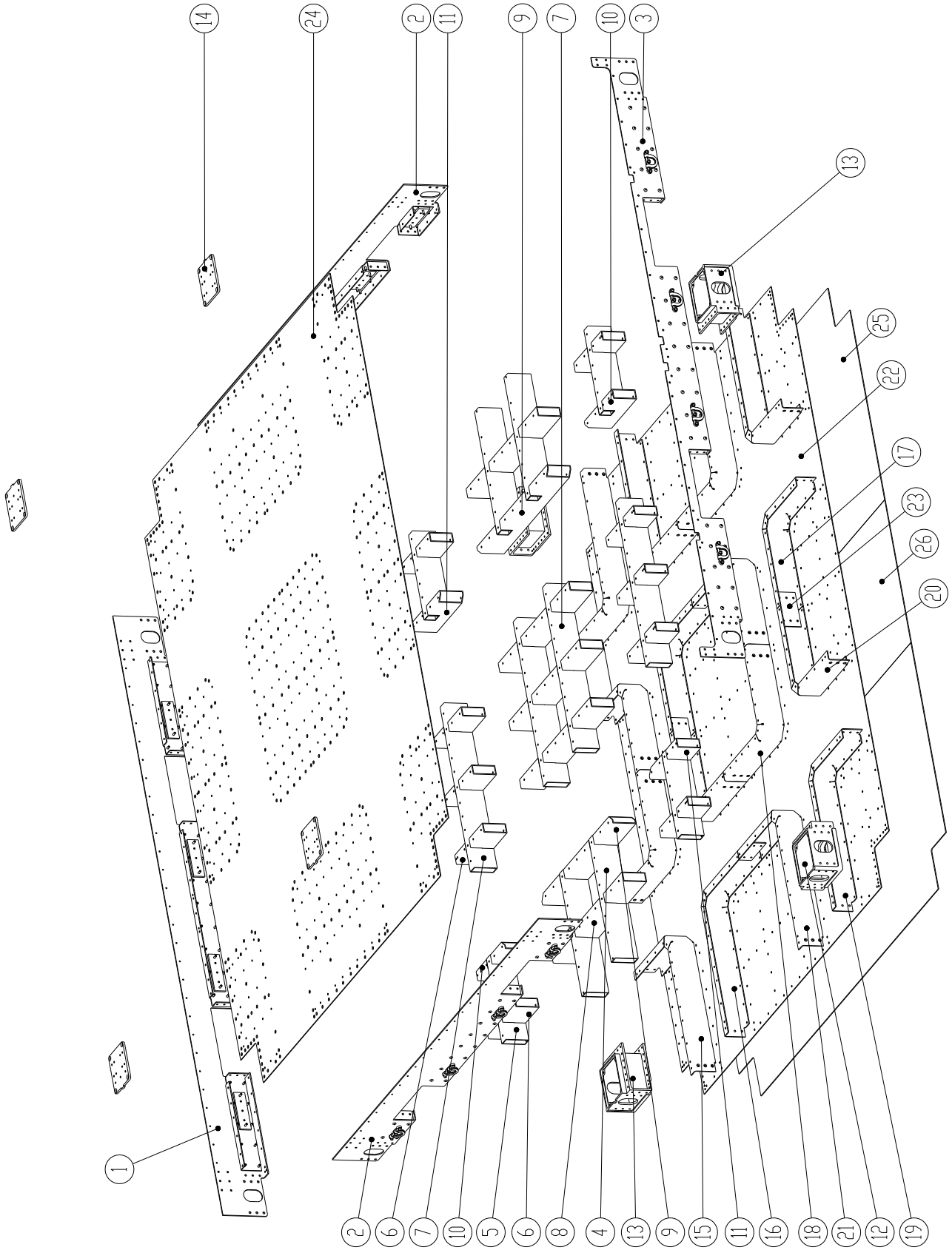
DBJ BASE LEVEL 2

P/N 2000-07-2726

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2727	Base edge rear	1
2	2000-07-2728	Base edge side	2
3	2000-07-2968	Base edge front	1
4	2000-05-0245	Tube 100x40x3	4
5	2000-05-0247	Tube 100x40x3	4
6	2000-05-0242	Tube 100x40x3	10
7	2000-05-0618	Tube 100x40x3	4
8	2000-05-0227	Tube 100x40x3	5
9	2000-05-0619	Tube 100x40x3	2
10	2000-05-0622	Tube 100x40x3	2
11	2000-05-0642	Tube 100x40x3	2
12	2000-04-8211	Corner Right	2
13	2000-05-0246	Corner Left	2
14	2000-04-8214	Isocorner top plate	4
15	2000-05-0229	Fork pocket sheet	2
16	2000-05-0231	Fork pocket sheet	2
17	2000-05-0233	Fork pocket sheet	2
18	2000-05-0234	Fork pocket sheet	4
19	2000-05-0633	Fork pocket sheet	2
20	2000-05-0636	Fork pocket sheet	2
21	2000-05-0638	Fork pocket sheet	2
22	2000-04-8205	Bottom sheet base	1
23	2000-05-0260	Connection plate	8
24	2000-05-1112	Mid Sheet base	1
25	2000-05-0834	Pallet rubber	2
26	2000-05-1099	Pallet rubber	1
27	BO-7380T-08020-A2	Torx Socket Button Screw	48
28	BO-14581T-08016-A2	Torx Socket Csk. Screw	16
29	BK-02771-00824	Bk.St. Monobolt 6,4	24
30	BK-02761-00821	Csk.St. Monobolt 6,4	1015
31	BO-NORDLCK-08SP-SMO	Nord-Lock Large Washer M8	48

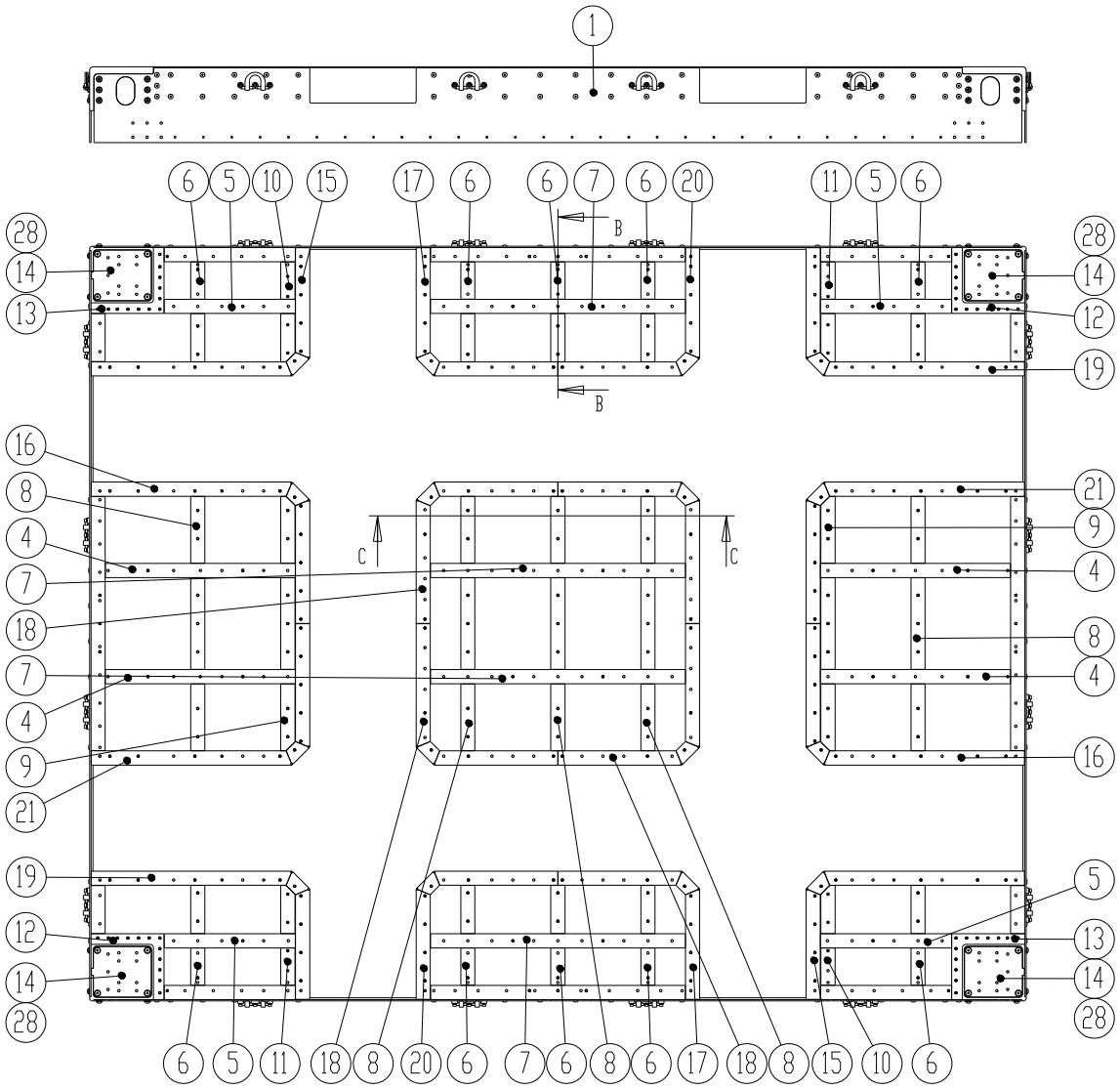
DBJ BASE LEVEL 2

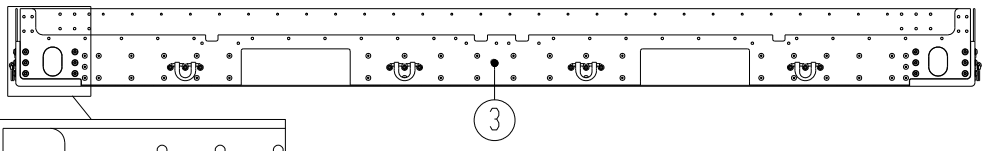
P/N 2000-07-2726

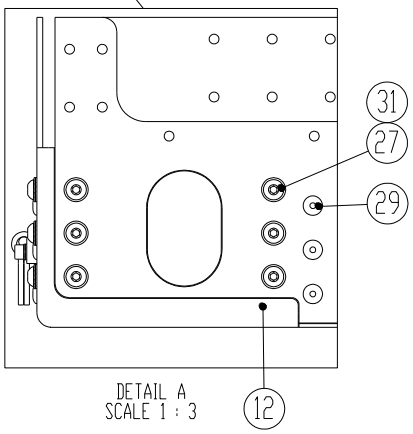


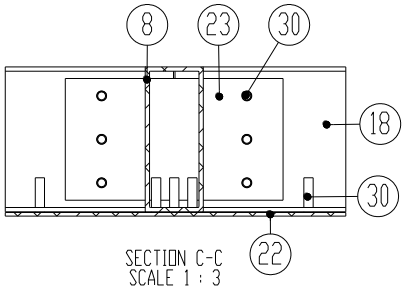
DBJ BASE LEVEL 2

P/N 2000-07-2726









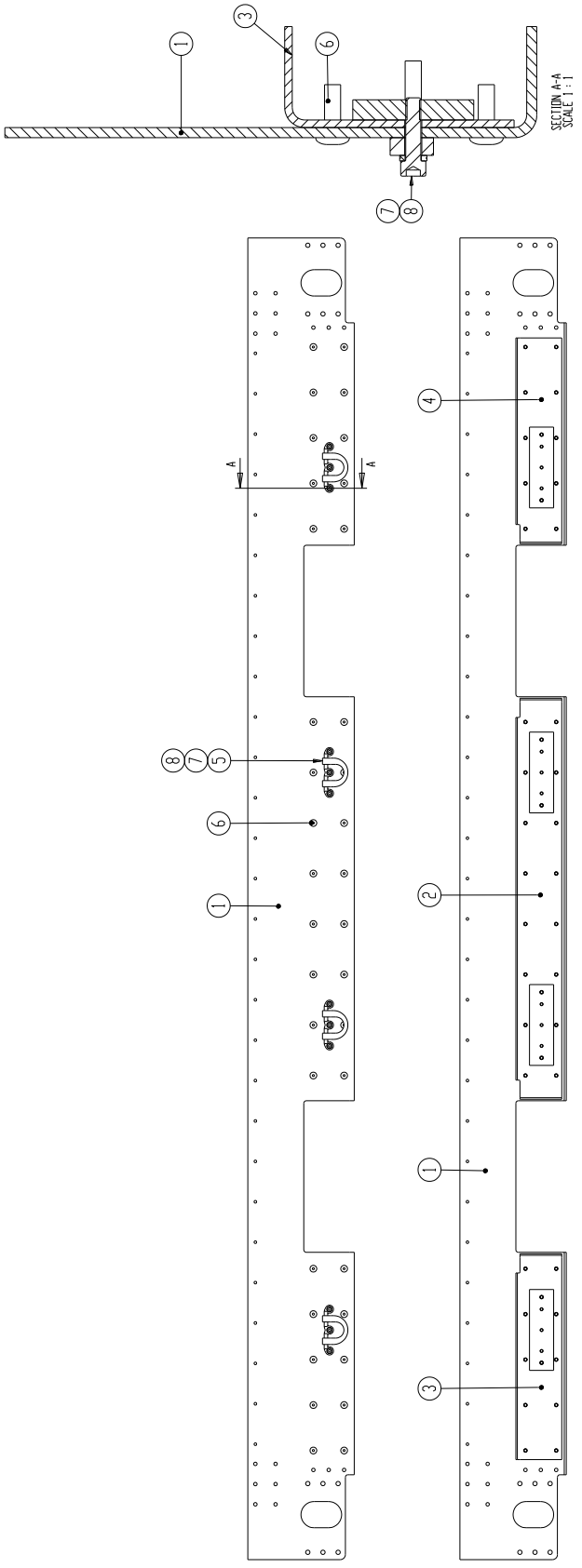
BASE EDGE REAR

P/N 2000-07-2727

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0226	Base edge sheet	1
2	2000-05-0828	Flange assy	1
3	2000-05-0832	Corner flange long	1
4	2000-05-0831	Corner flange long	1
5	ZN_VRR-DFSTN	Tie-Down Ring	4
6	BK-02771-00824	Bk.St. Monobolt 6,4	36
7	BO-NORDLCK-06-SMO	Nord-Lock Washer M6	12
8	BO-14579T-06025-A2	Torx Socket Cap Screw	12

BASE EDGE REAR

P/N 2000-07-2727



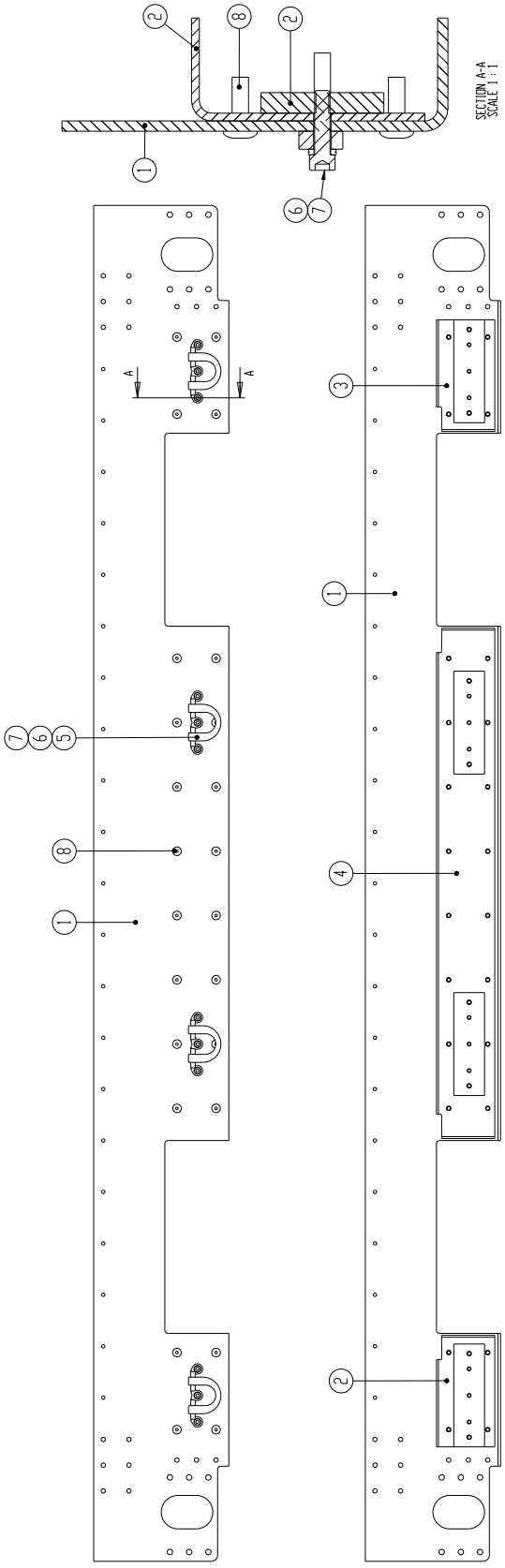
BASE EDGE SIDE

P/N 2000-07-2728

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0223	Base edge sheet	1
2	2000-05-0830	Corner flange short	1
3	2000-05-0829	Corner flange short	1
4	2000-05-0828	Flange assy	1
5	ZN_VRR-DFSTN	Tie-Down Ring	4
6	BO-NORDLCK-06-SMO	Nord-Lock Washer M6	12
7	BO-14579T-06025-A2	Torx Socket Cap Screw	12
8	BK-02771-00824	Bk.St. Monobolt 6,4	24

BASE EDGE SIDE

P/N 2000-07-2728



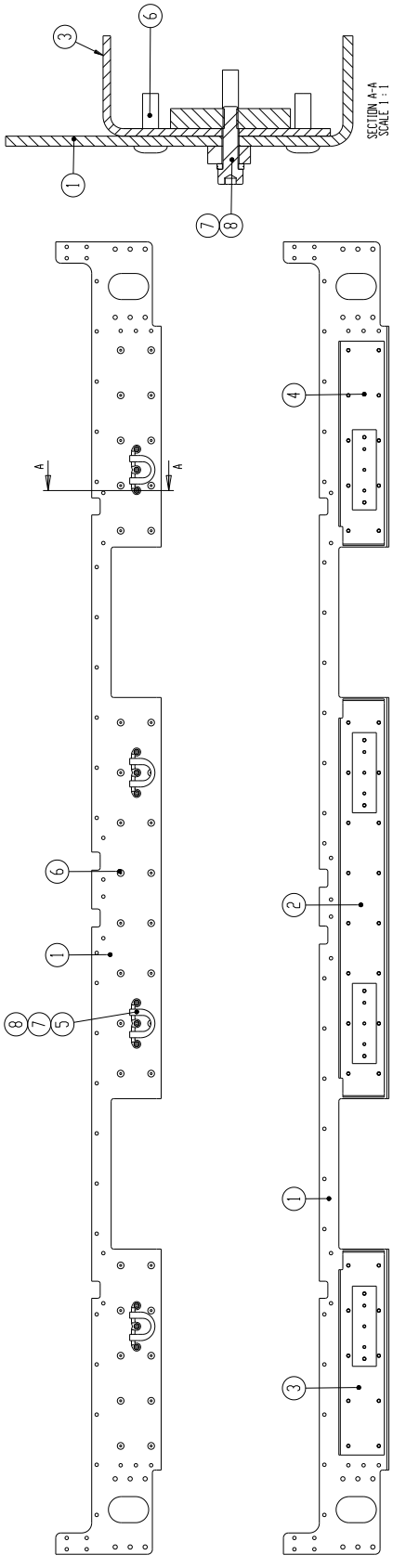
BASE EDGE FRONT

P/N 2000-07-2968

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0249	Base edge sheet	1
2	2000-05-0828	Flange assy	1
3	2000-05-0832	Corner flange long	1
4	2000-05-0831	Corner flange long	1
5	ZN_VRR-DFSTN	Tie-Down Ring	4
6	BK-02771-00824	Bk.St. Monobolt 6,4	36
7	BO-NORDLCK-06-SMO	Nord-Lock Washer M6	12
8	BO-14579T-06025-A2	Torx Socket Cap Screw	12

BASE EDGE FRONT

P/N 2000-07-2968



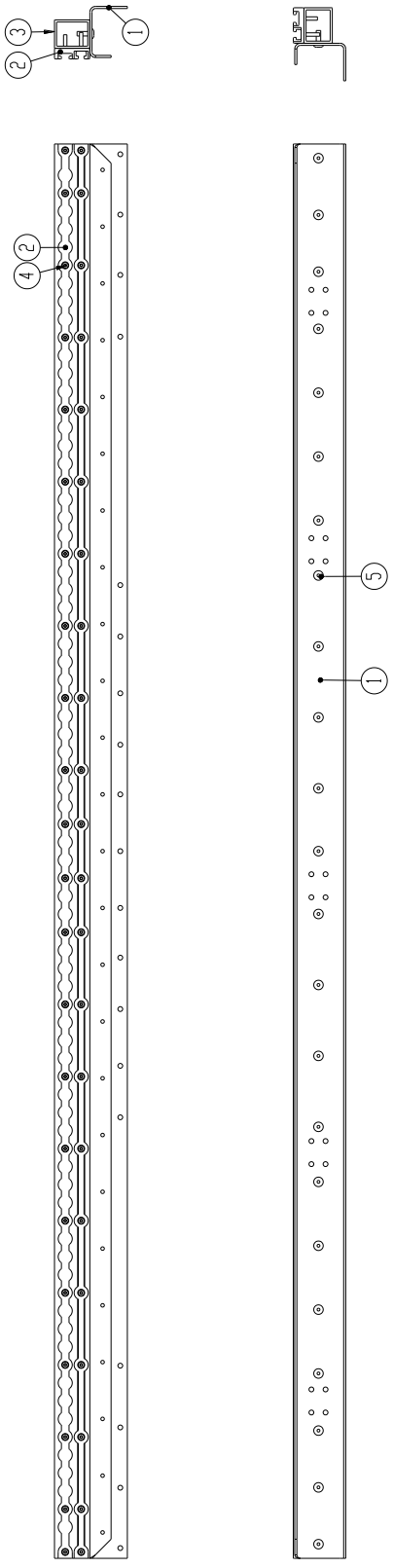
SEAT/T-TRACK BEAM

P/N 2000-05-1114

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1081	Leg bracket	1
2	2000-04-8266	Seat-T track profile	1
3	2000-05-0261	Tube 50x40x3	1
4	BK-02761-00619	Csk.St. Monobolt 4,8	44
5	BK-02771-00824	Bk.St. Monobolt 6,4	23

SEAT/T-TRACK BEAM

P/N 2000-05-1114



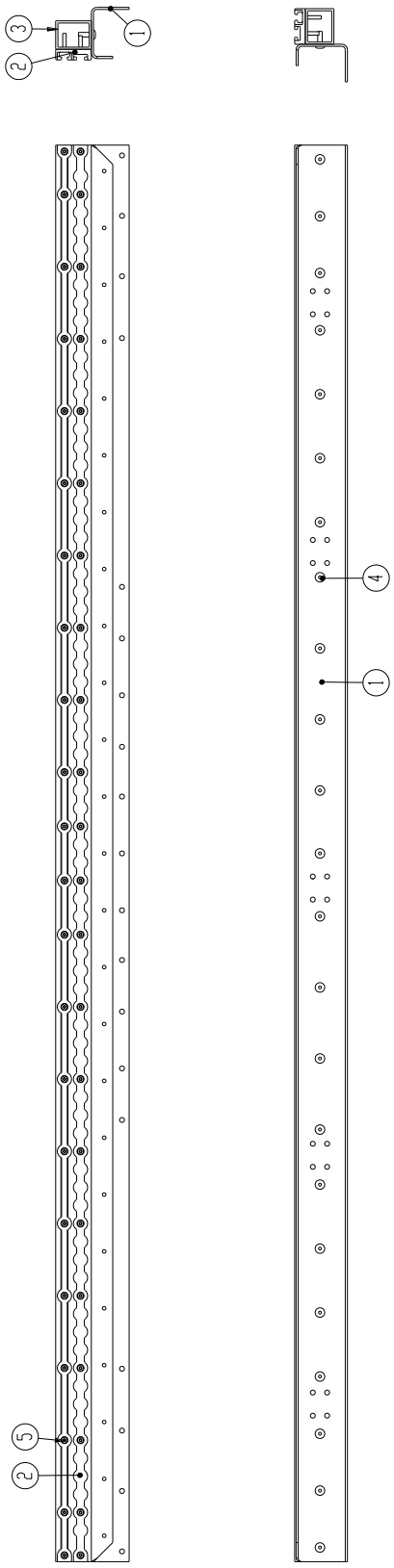
SEAT/T-TRACK BEAM

P/N 2000-05-1117

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1081	Leg bracket	1
2	2000-04-8266	Seat-T track profile	1
3	2000-05-0261	Tube 50x40x3	1
4	BK-02771-00824	Bk.St. Monobolt 6,4	23
5	BK-02761-00619	Csk.St. Monobolt 4,8	44

SEAT/T-TRACK BEAM

P/N 2000-05-1117



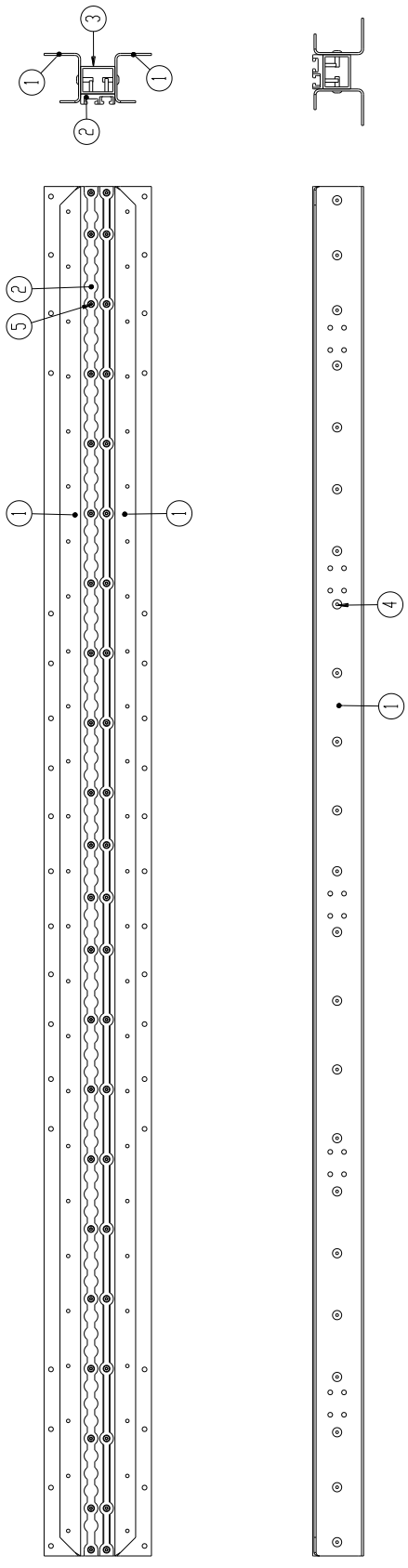
SEAT/T-TRACK BEAM

P/N 2000-05-1083

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1081	Leg bracket	2
2	2000-04-8266	Seat-T track profile	1
3	2000-05-0261	Tube 50x40x3	1
4	BK-02771-00824	Bk.St. Monobolt 6,4	46
5	BK-02761-00619	Csk.St. Monobolt 4,8	44

SEAT/T-TRACK BEAM

P/N 2000-05-1083



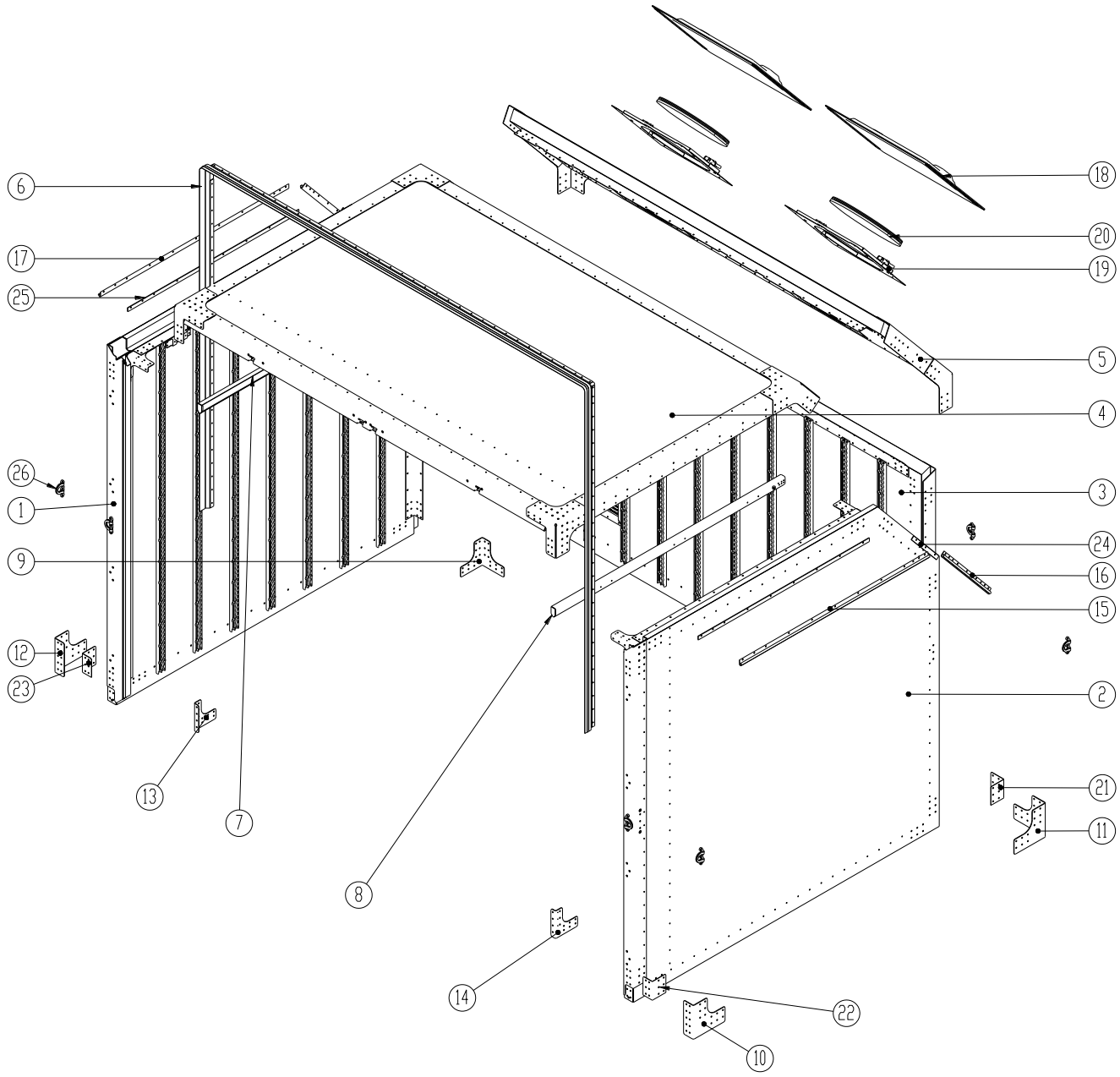
HULL DBJ

P/N 2000-07-2646

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2647	DBJ panel left	1
2	2000-07-2972	DBJ panel right	1
3	2000-07-2685	DBJ panel rear	1
4	2000-07-3665	DBJ panel top	1
5	2000-05-0357	DBJ panel slanted	1
6	2000-05-2107	Cover connection assy	1
7	2000-07-2750	Roller track left assy	1
8	2000-07-2975	Roller track right assy	1
9	2000-05-0386	Gusset	2
10	2000-05-0491	Corner gusset	1
11	2000-05-0480	Corner gusset	2
12	2000-05-0496	Front Corner gusset	1
13	2000-05-1280	Gusset	1
14	2000-05-1279	Gusset	1
15	2000-05-1536	Rope profile	1
16	2000-05-1539	Rope profile	2
17	2000-05-1686	Rope profile	1
18	2000-05-1507	Hose lock cover	2
19	WO-041636	Hose lock system Color: FS 33446	2
20	2000-05-1465	Plug	2
21	2000-05-1415	Fill plate corner gusset	2
22	2000-05-1416	Fill plate corner gusset	1
23	2000-05-1417	Fill plate corner gusset	1
24	2000-05-1541	Fill strip	2
25	2000-05-1540	Fill strip	2
26	ZN_VRR-DFSTN	Tie-Down Ring	8
27	BK-02771-00824	Bk.St. Monobolt 6,4	660
28	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	176
29	BO-NORDLCK-08SP-SMO	Nord-Lock Large Washer M8	12
30	BO-NORDLCK-06-SMO	Nord-Lock Washer M6	24
31	BO-7380T-06010-A2	Torx Socket Button Screw	4
32	BO-7380T-08025-A2	Torx Socket Button Screw	12
33	BO-14579T-06030-A2	Torx Socket Cap Screw	24
34	BK-TVD603GT	TVD Rivet	12
35	DIN508-8-M6-NI	T-nut	4

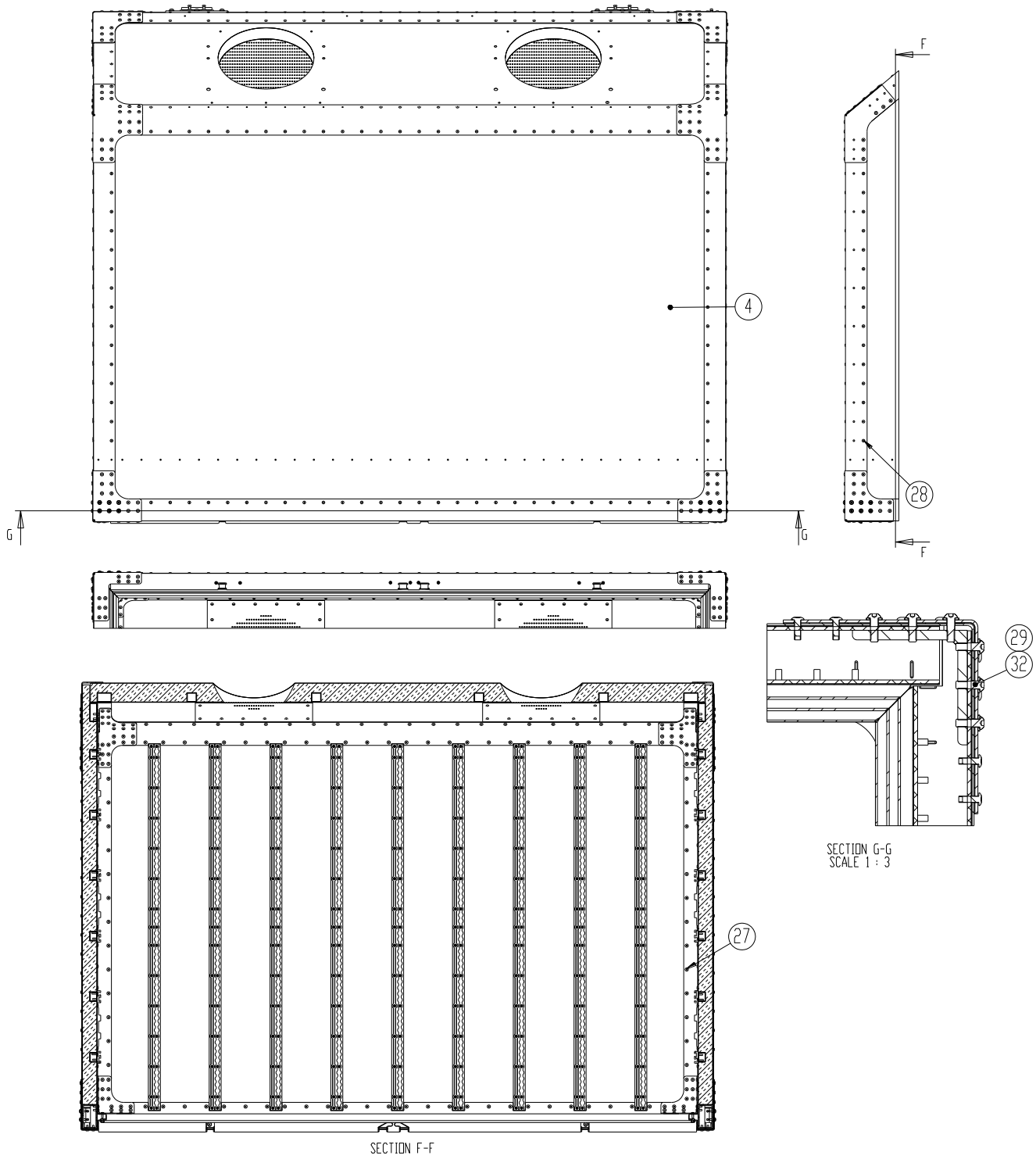
HULL DBJ

P/N 2000-07-2646



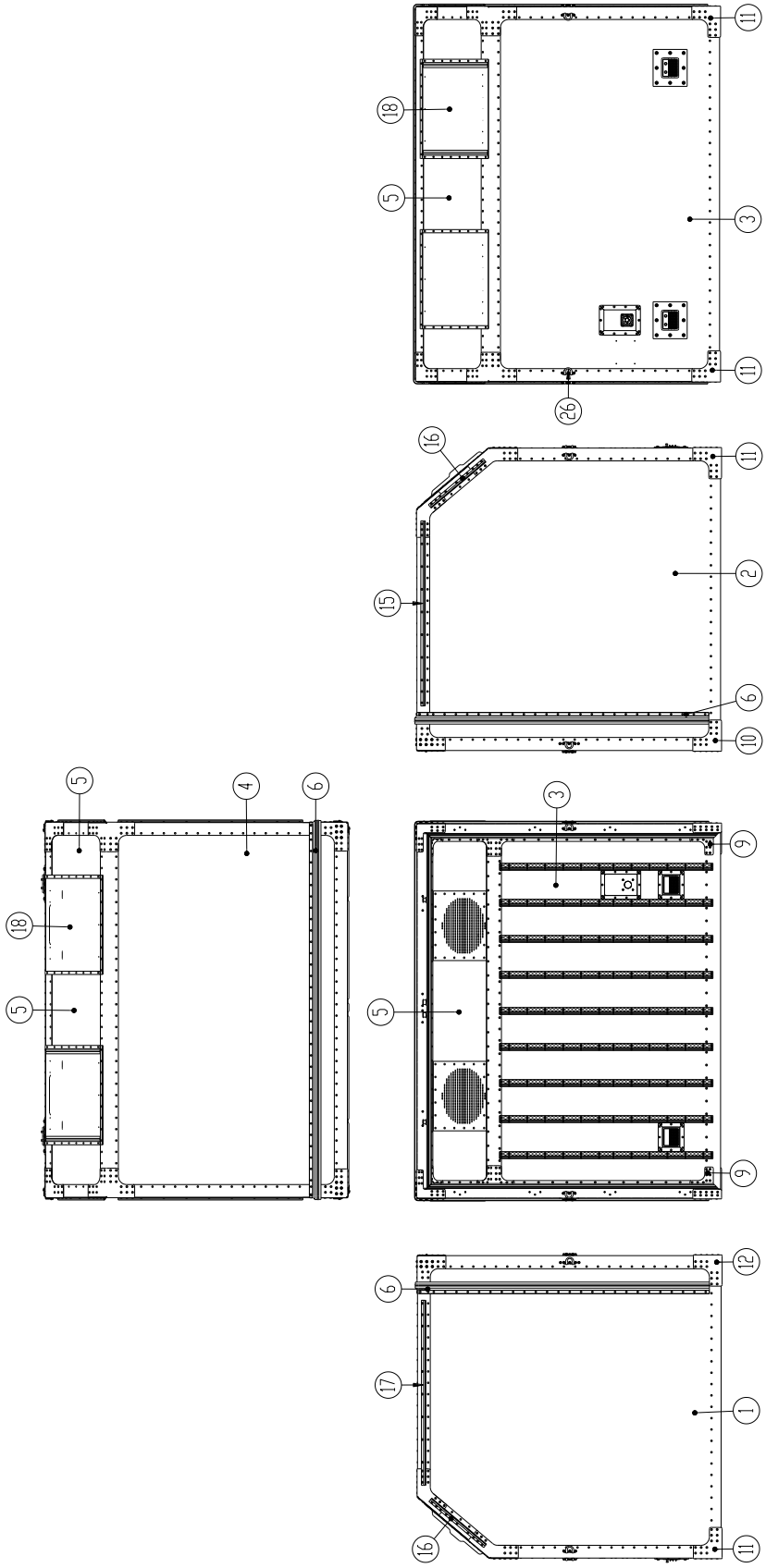
HULL DBJ

P/N 2000-07-2646



HULL DBJ

P/N 2000-07-2646



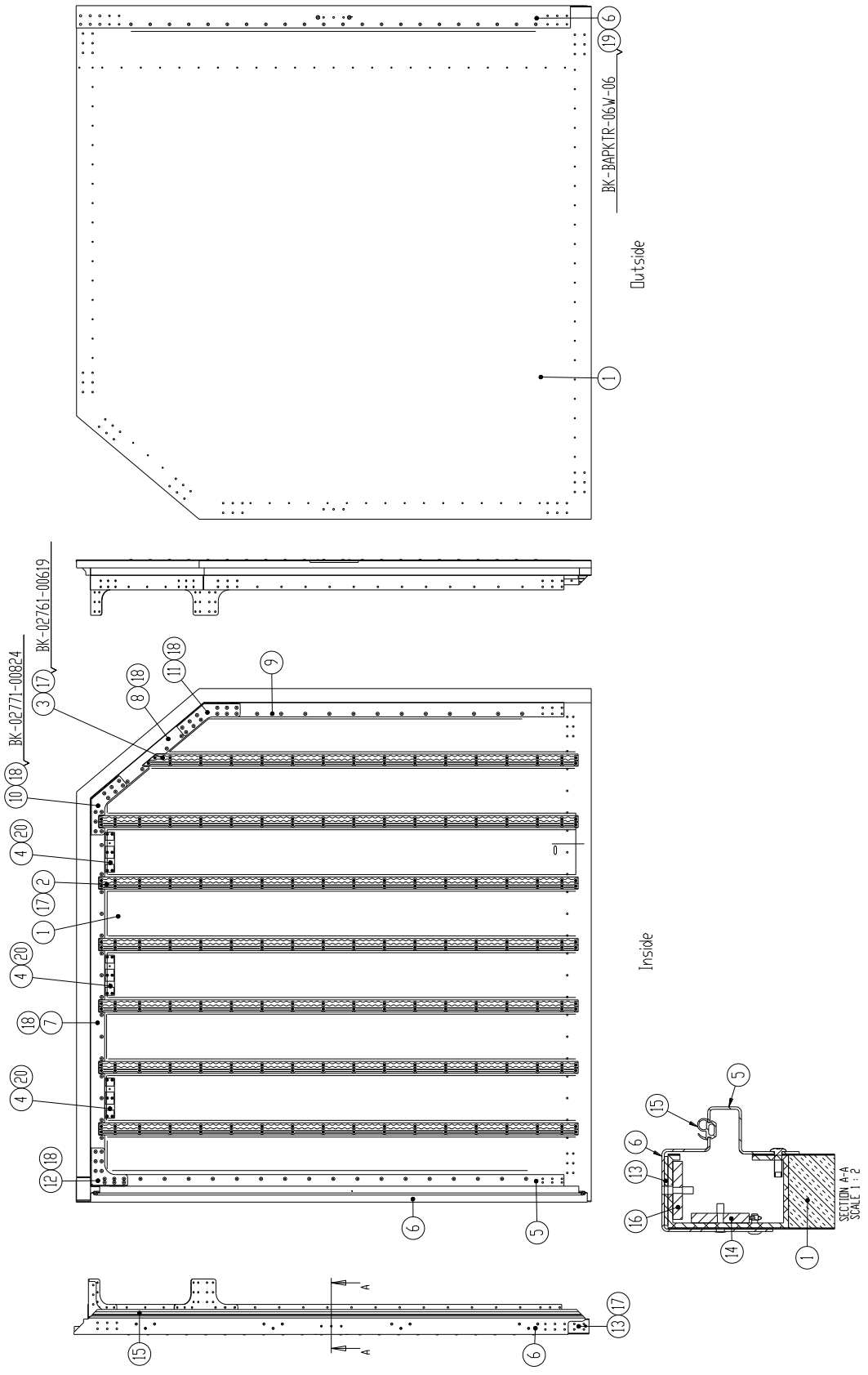
DBJ PANEL LEFT

P/N 2000-07-2647

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2751	DBJ panel left	1
2	2000-04-8198	Seat-T track profile RR 205	6
3	2000-05-1457	Seat-T track profile RR 205	1
4	2000-07-2645	Tube 40x15x2	3
5	2000-05-0492	Door post	1
6	2000-05-0493	DBJ corner sheets	1
7	2000-05-0373	Internal frame sheet	1
8	2000-05-0369	Internal frame sheet	1
9	2000-05-0368	Internal frame sheet	1
10	2000-05-0507	Left slanted corner gusset	1
11	2000-05-0508	Left slanted corner gusset	1
12	2000-05-1459	Left inner corner gusset	1
13	2000-05-1747	Fill plate base gusset	1
14	2000-05-0259	Thread block Tie-down points	1
15	2000-05-1537	Door rubber Extrusion	1
16	2000-05-1627	Thread block doors	1
17	BK-02761-00619	Csk.St. Monobolt 4,8	252
18	BK-02771-00824	Bk.St. Monobolt 6,4	92
19	BK-BAPKTR-06W-06	Bk.Rivet Klamp-Tite 4,8	22
20	BK-TVD603GT	TVD Rivet	18
21	2000-05-4188	Malplate DBJ side panel LEFT inside	1
22	2000-05-4178	Malplate side panel outside	1

DBJ PANEL LEFT

P/N 2000-07-2647



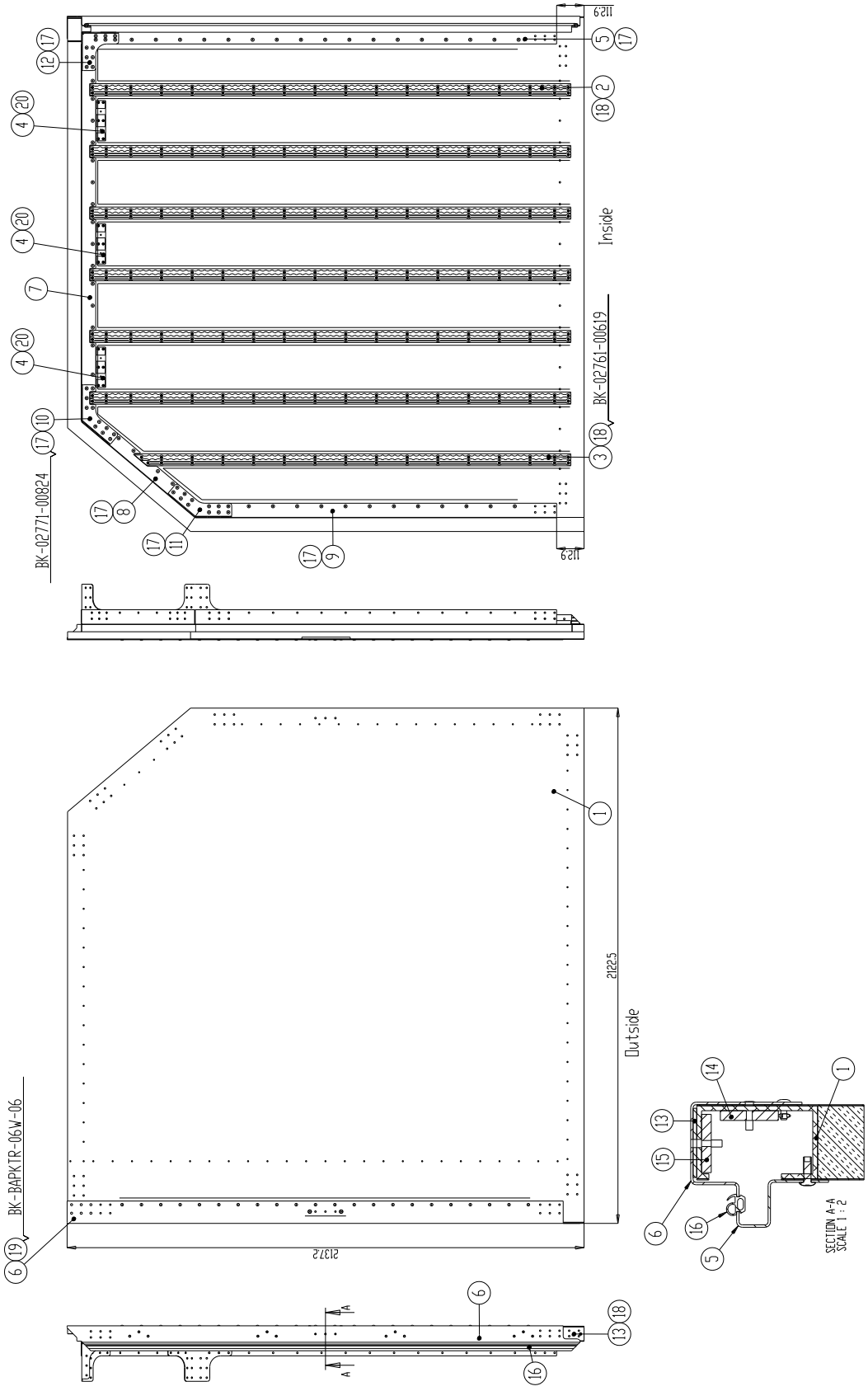
DBJ PANEL RIGHT

P/N 2000-07-2972

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2973	DBJ panel right	1
2	2000-04-8198	Seat-T track profile RR 205	6
3	2000-04-8265	Seat-T track profile RR 205	1
4	2000-07-2645	Tube 40x15x2	3
5	2000-05-0435	Door post	1
6	2000-05-0434	DBJ corner sheets	1
7	2000-05-0381	Internal frame sheet	1
8	2000-05-0380	Internal Frame Sheet	1
9	2000-05-0374	Internal Frame Sheet	1
10	2000-05-1254	Right Slanted corner gusset	1
11	2000-05-1255	Right Slanted corner gusset	1
12	2000-05-1256	Right inner corner gusset	1
13	2000-05-1282	Fill plate base gusset	1
14	2000-05-0259	Thread block Tie-down points	1
15	2000-05-1627	Thread block doors	1
16	2000-05-1537	Door rubber Extrusion	1
17	BK-02771-00824	Bk.St. Monobolt 6,4	92
18	BK-02761-00619	Csk.St. Monobolt 4,8	252
19	BK-BAPKTR-06W-06	Bk.Rivet Klamp-Tite 4,8	22
20	BK-TVD603GT	TVD Rivet	18

DBJ PANEL RIGHT

P/N 2000-07-2972



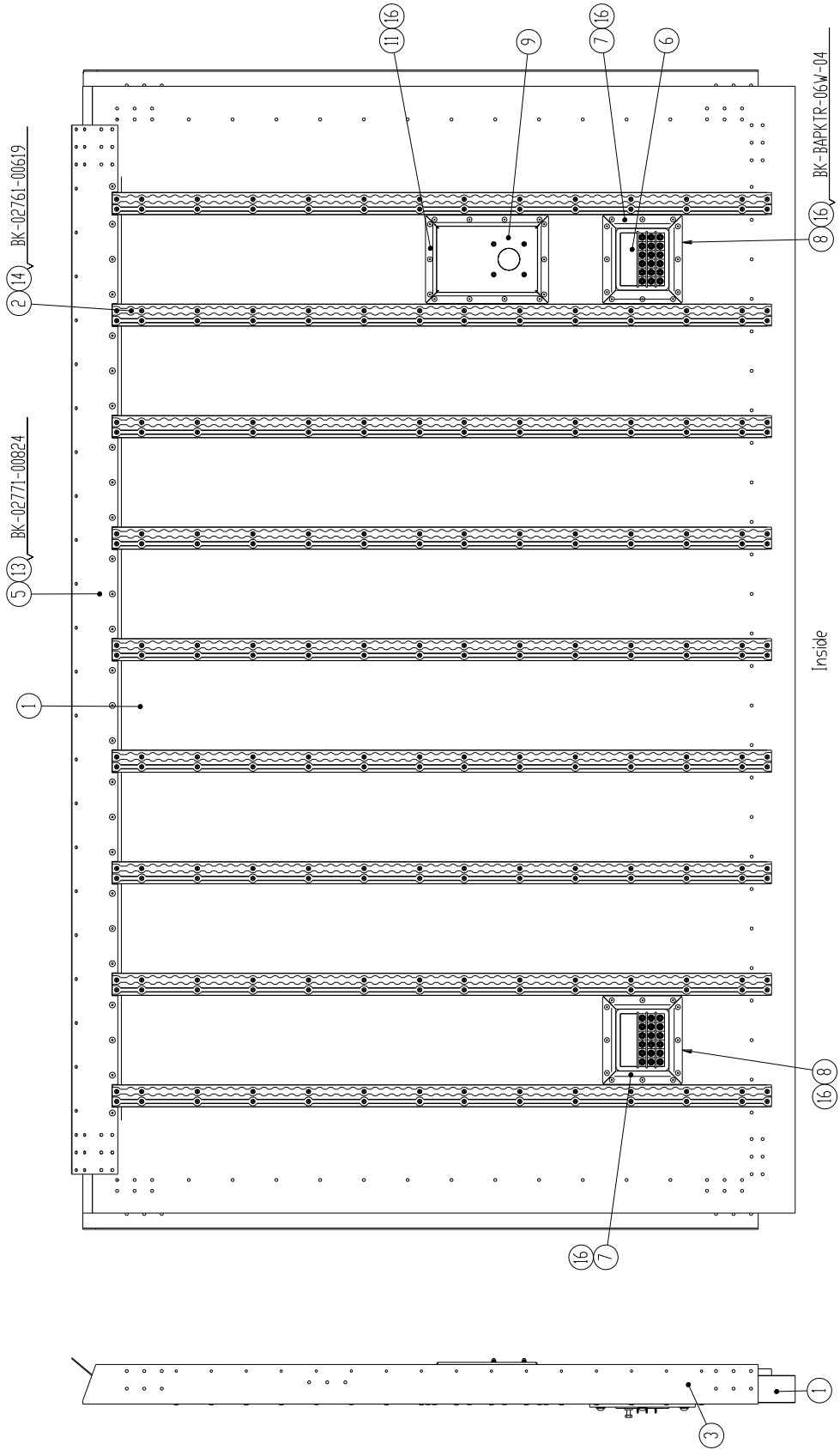
DBJ PANEL REAR

P/N 2000-07-2685

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2705	DBJ panel rear	1
2	2000-05-0354	Seat-T track profile RR 205	9
3	2000-05-0389	Outer frame sheet	1
4	2000-05-0395	Outer frame sheet	1
5	2000-05-0384	Internal Frame Sheet	1
6	2000-05-1205	Roxtec cable seal	2
7	2000-05-1217	Flange roxtec	4
8	2000-05-1218	Flange roxtec	4
9	2000-07-2684	Connector plate	1
10	2000-07-2720	Flange connector	2
11	2000-05-1343	Flange connector	2
12	WO-821	Panel mounted inlet 32A 5p	1
13	BK-02771-00824	Bk.St. Monobolt 6,4	40
14	BK-02761-00619	Csk.St. Monobolt 4,8	252
15	BK-02771-00617	Bk.St. Monobolt 4,8	4
16	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	66
17	BO-NORDLCK-10SP-SMO	Nord-Lock Large Washer M10	16
18	BO-NORDLCK-05SP-SMO	Nord-Lock Large Washer M5	8
19	BO-7380T-10025-A2	Torx Socket Button Screw	16
20	BO-7380T-05025-A2	Torx Socket Button Screw	4
21	BO-10511-05-A2	Nyloc Hex Nut	4

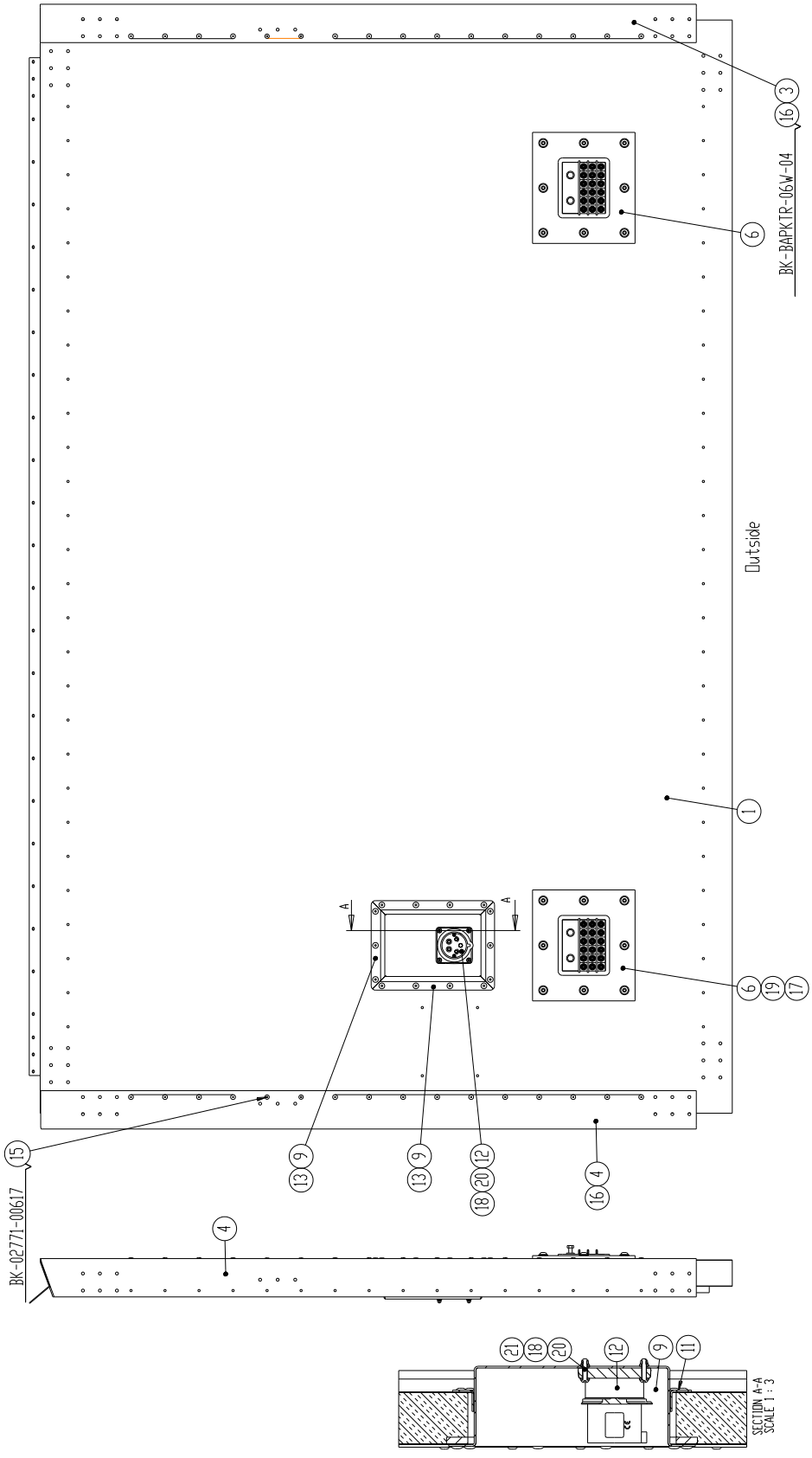
DBJ PANEL REAR

P/N 2000-07-2685



DBJ PANEL REAR

P/N 2000-07-2685



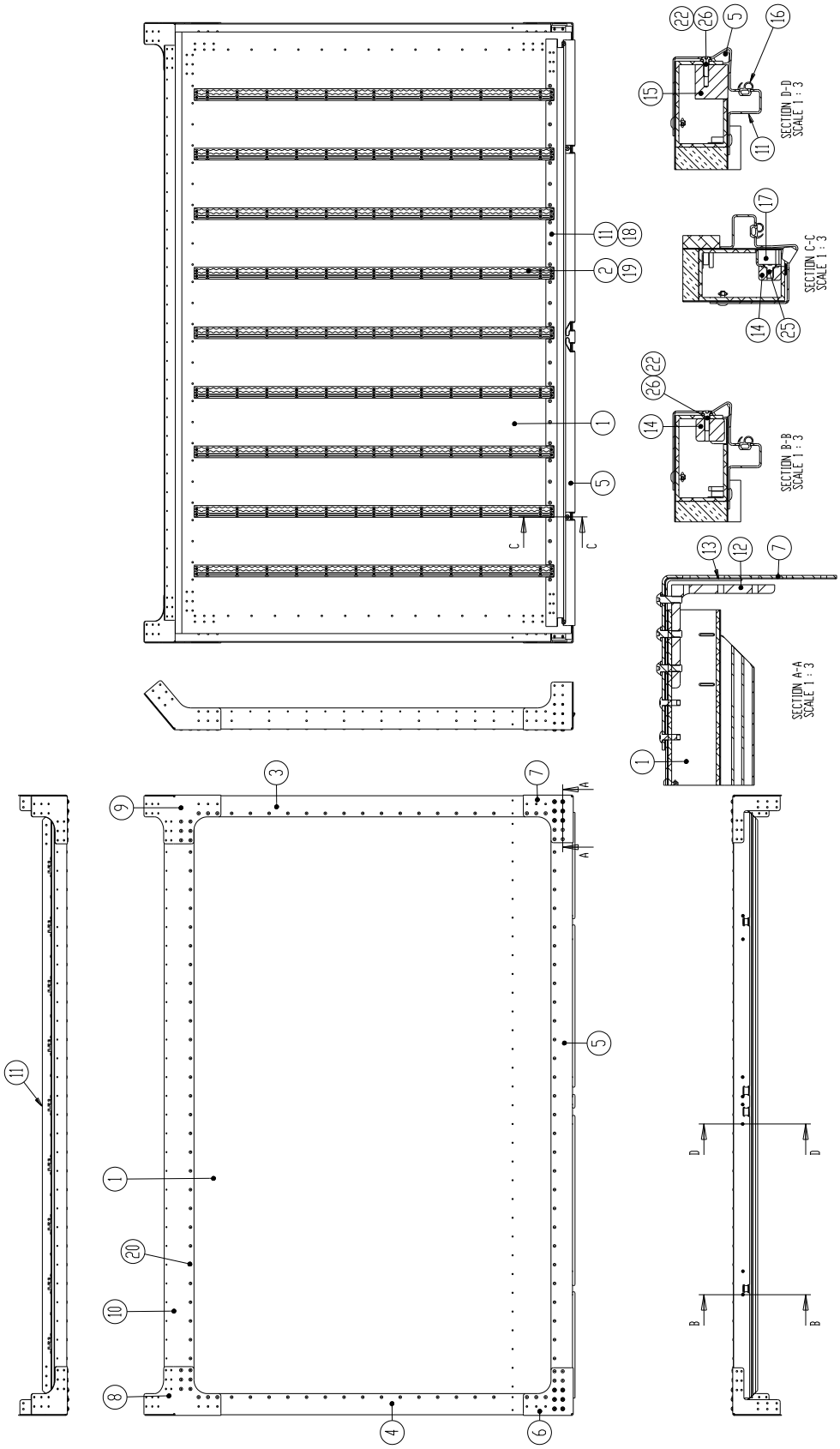
DBJ PANEL TOP

P/N 2000-07-3665

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0336	DBJ panel top	1
2	2000-05-0343	Seat-T track profile RR 205	9
3	2000-05-0397	Outer frame sheet	1
4	2000-05-0392	Outer frame sheet	1
5	2000-05-0437	Frame sheet door	1
6	2000-05-0494	Gusset	1
7	2000-05-0479	Gusset	1
8	2000-05-0497	Slanted corner gusset	1
9	2000-05-0482	Slanted corner gusset	1
10	2000-05-0495	Frame sheet slanted	1
11	2000-07-3667	Door post	1
12	2000-04-6140	L-extrusion	2
13	2000-05-1233	Fill strip front gusset	2
14	2000-05-1527	Locking block	2
15	2000-05-1528	Doorkeeper	1
16	2000-04-8336	Door rubber Extrusion	1
17	SL-1201436	Keeper	2
18	BK-02771-00824	Bk.St. Monobolt 6,4	58
19	BK-02761-00619	Csk.St. Monobolt 4,8	270
20	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	58
21	BK-BAPKTR-06W-06	Bk.Rivet Klamp-Tite 4,8	28
22	BO-NORDLCK-06SP-SMO	Nord-Lock Large Washer M6	8
23	BO-NORDLCK-08SP-SMO	Nord-Lock Large Washer M8	12
24	BO-7380T-08025-A2	Torx Socket Button Screw	12
25	BO-14581T-08016-A2	Torx Socket Csk. Screw	4
26	BO-7380T-06020-A2	Torx Socket Button Screw	8

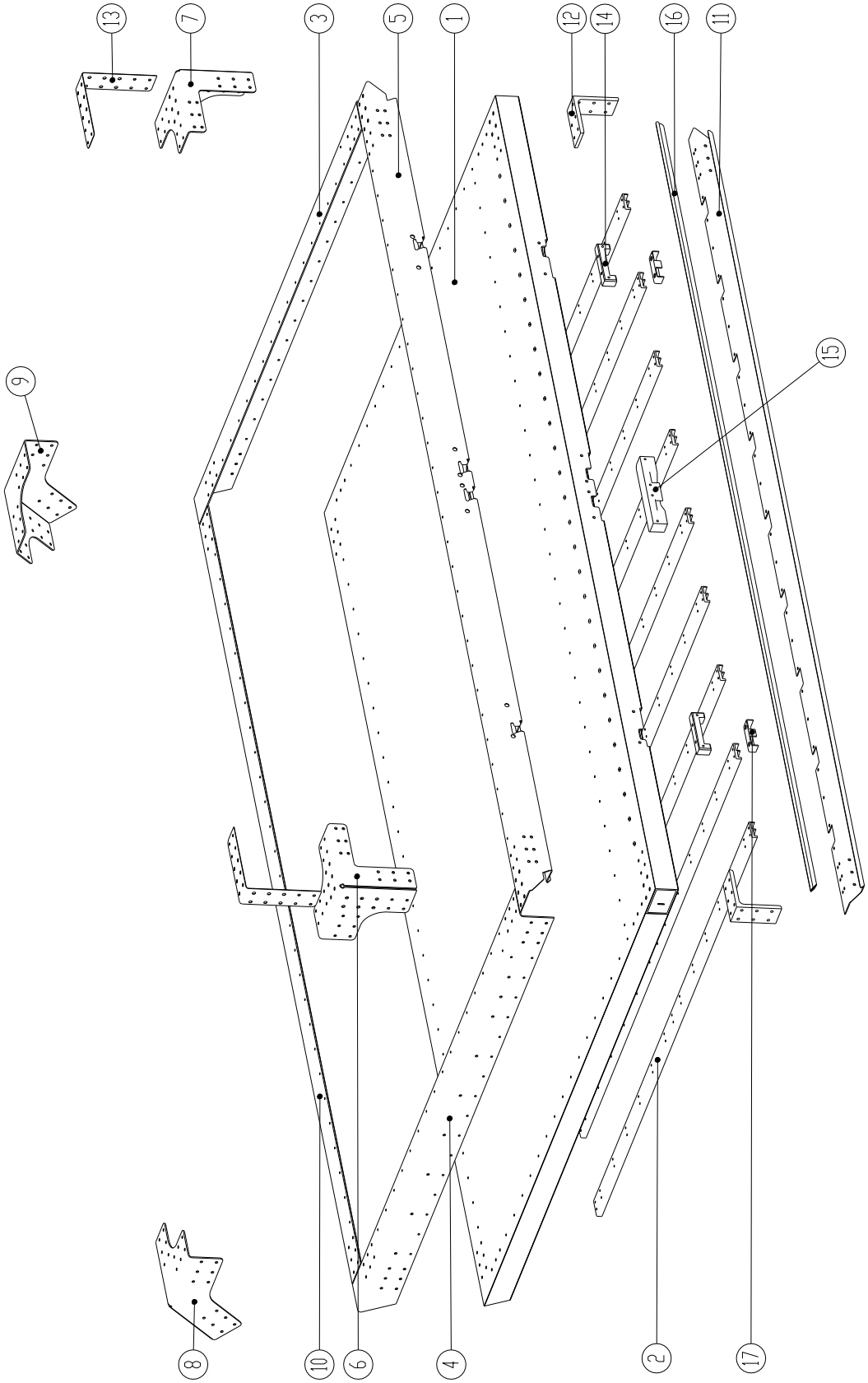
DBJ PANEL TOP

P/N 2000-07-3665



DBJ PANEL TOP

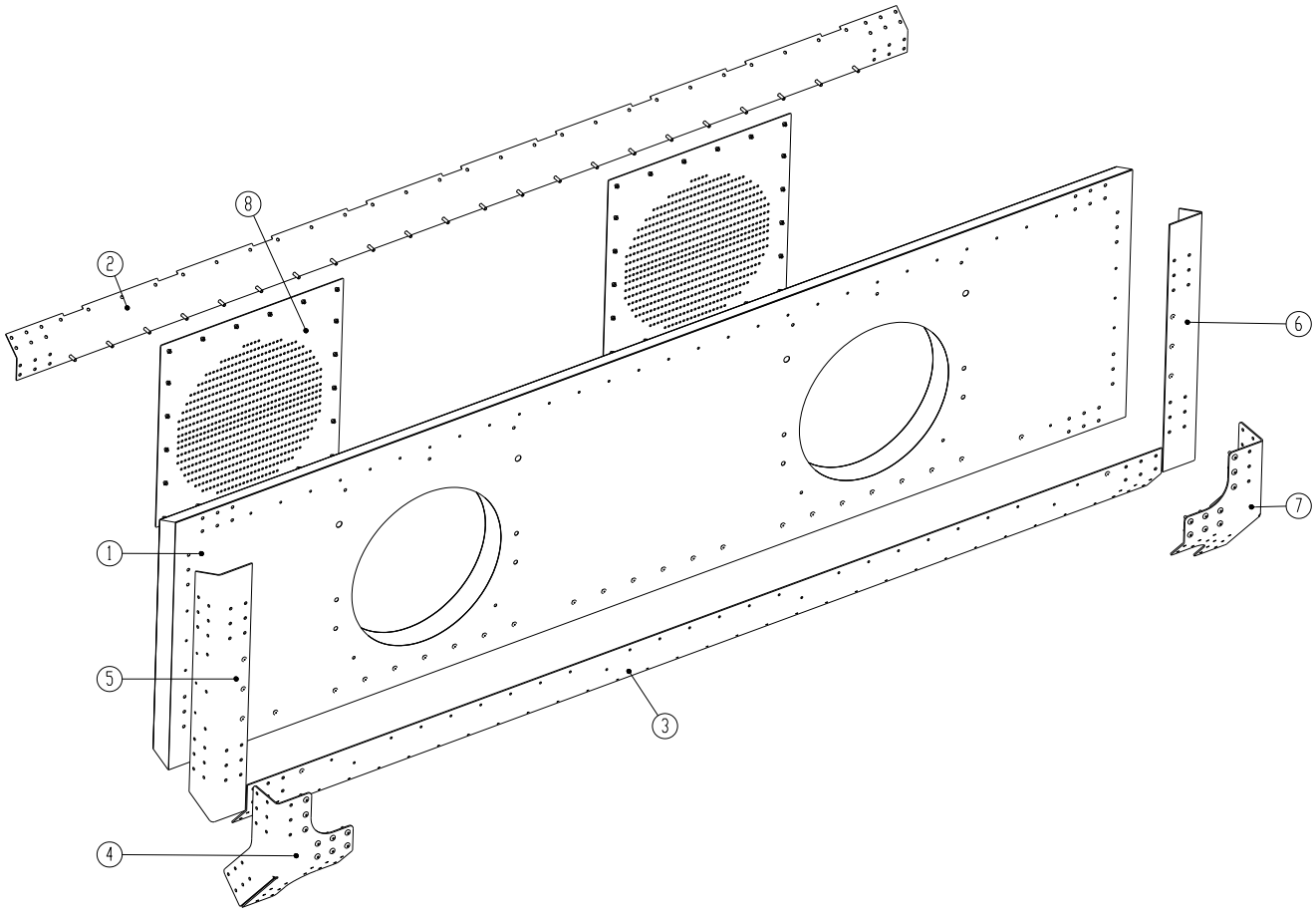
P/N 2000-07-3665



DBJ PANEL SLANTED

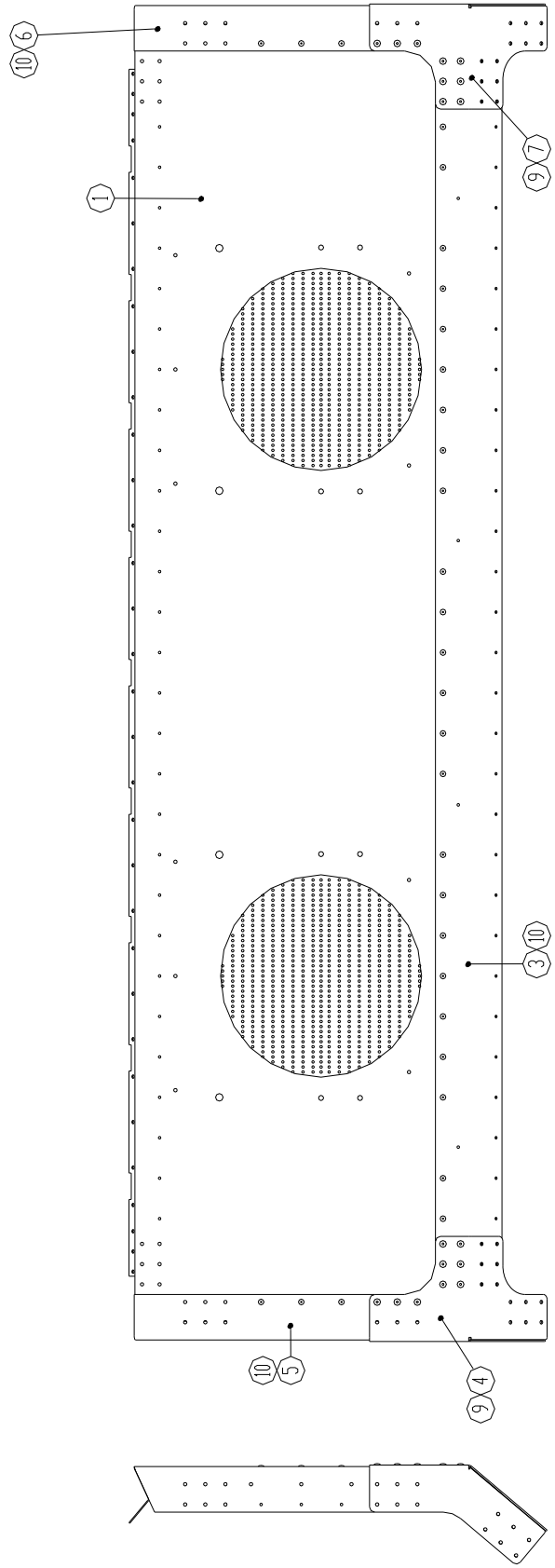
P/N 2000-05-0357

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0358	DBJ panel slanted	1
2	2000-05-0382	Internal gusset	1
3	2000-05-0481	Frame sheet	1
4	2000-05-0490	Slanted corner gusset	1
5	2000-05-0398	Outer Frame sheet	1
6	2000-05-0390	Outer frame sheet	1
7	2000-05-0506	Slanted corner gusset	1
8	2000-05-1525	Grill	2
9	BK-02771-00824	Bk.St. Monobolt 6,4	40
10	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	66



DBJ PANEL SLANTED

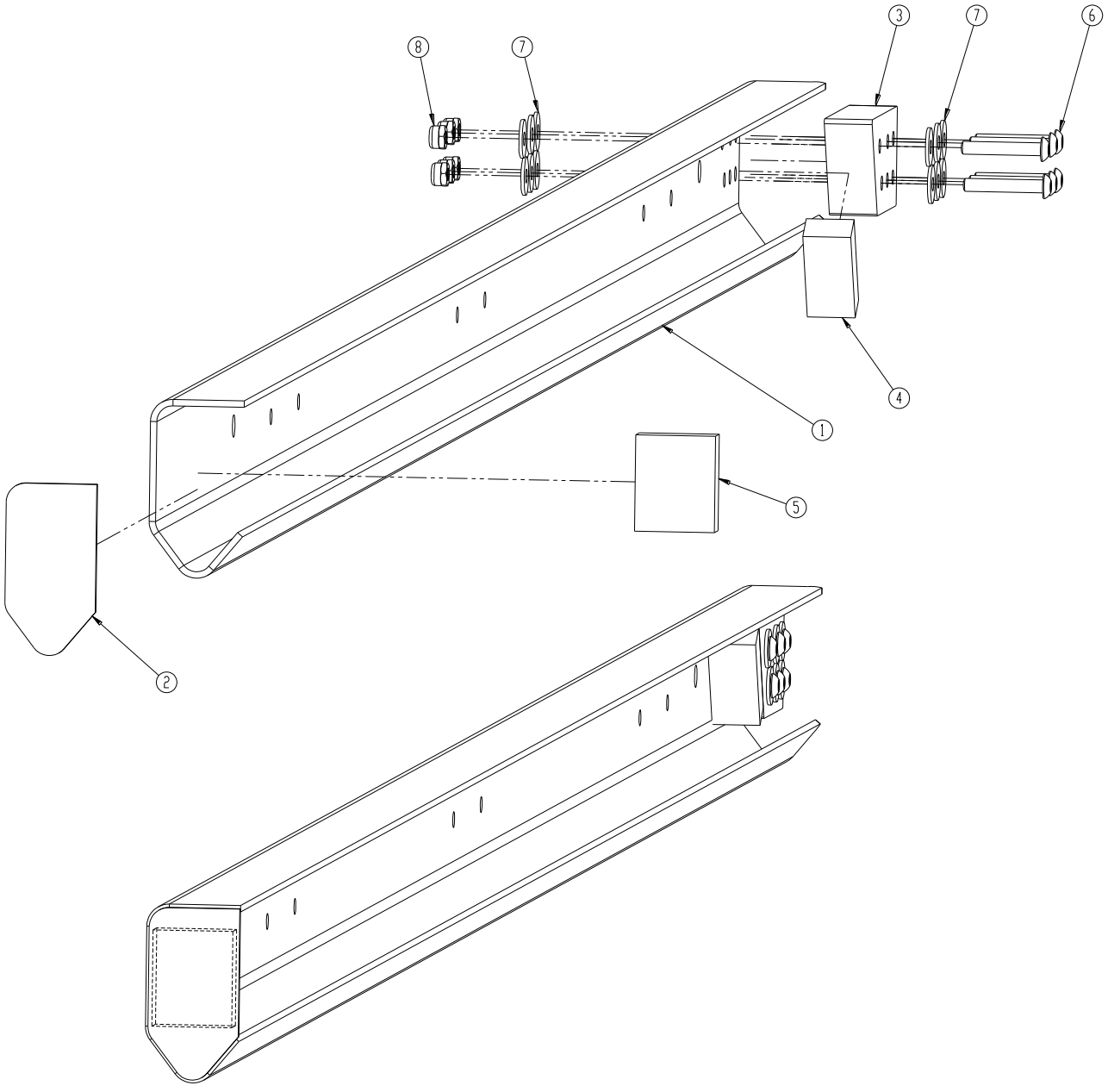
P/N 2000-05-0357



ROLLER TRACK LEFT ASSY

P/N 2000-07-2750

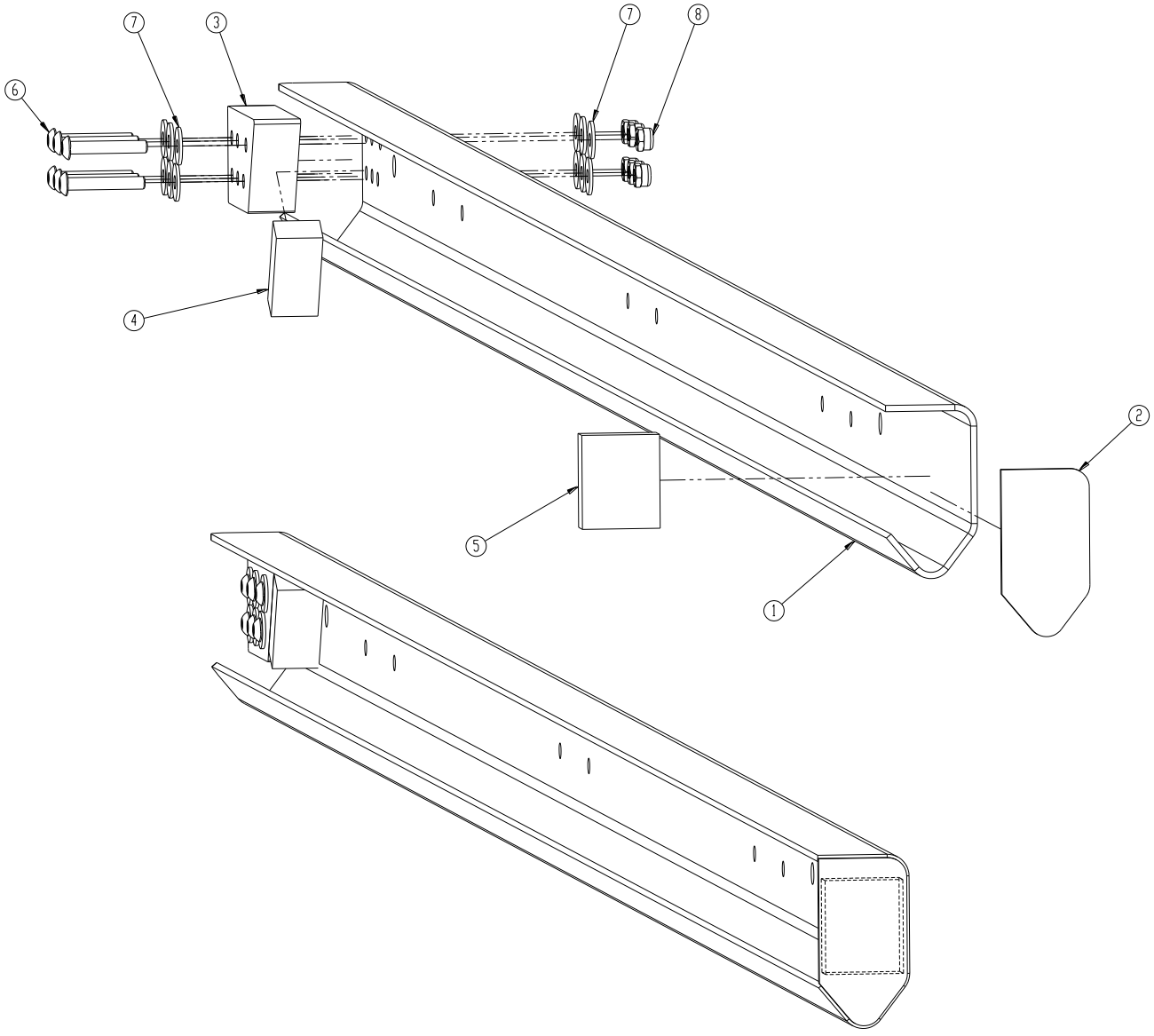
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2730	Roller track left	1
2	2000-07-3475	Roller track end plate	1
3	2000-07-2648	End stop block	1
4	2000-07-3409	EPDM Foam Rubber	1
5	2000-07-3408	EPDM Foam Rubber	1
6	BO-7380T-04025-A2	Torx Socket Button Screw	6
7	BO-7093-04-A2	Plain Washer Large	12
8	BO-10511-04-A2	Nyloc Hex Nut	6



ROLLER TRACK RIGHT ASSY

P/N 2000-07-2975

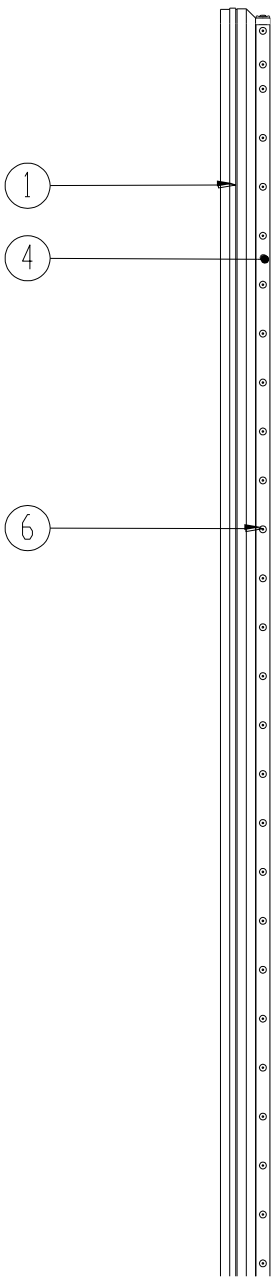
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2976	Roller track right	1
2	2000-07-3475	Roller track end plate	1
3	2000-07-2648	End stop block	1
4	2000-07-3409	EPDM Foam Rubber	1
5	2000-07-3408	EPDM Foam Rubber	1
6	BO-7380T-04025-A2	Torx Socket Button Screw	6
7	BO-7093-04-A2	Plain Washer Large	12
8	BO-10511-04-A2	Nyloc Hex Nut	6



COVER CONNECTION ASSY

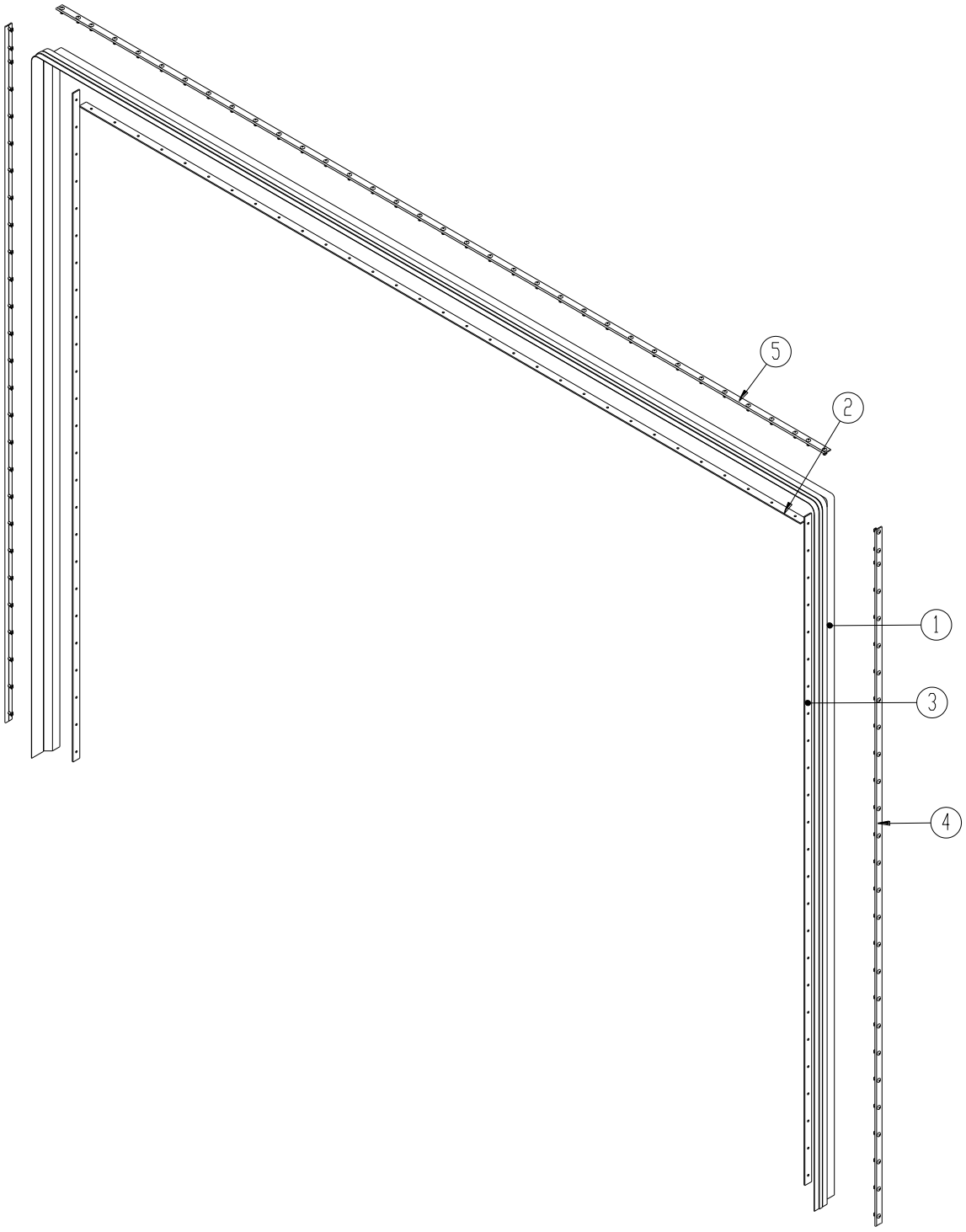
P/N 2000-05-2107

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1641	Cover connection	1
2	2000-05-1688	Fill strip cover	1
3	2000-05-1689	Fill strip cover	2
4	2000-05-1690	Extrusion RR148	2
5	2000-05-1687	Extrusion RR148	1
6	BK-BAPKTR-06W-06	BK.RIVET KLAMP-TITE 4,8	89



COVER CONNECTION ASSY

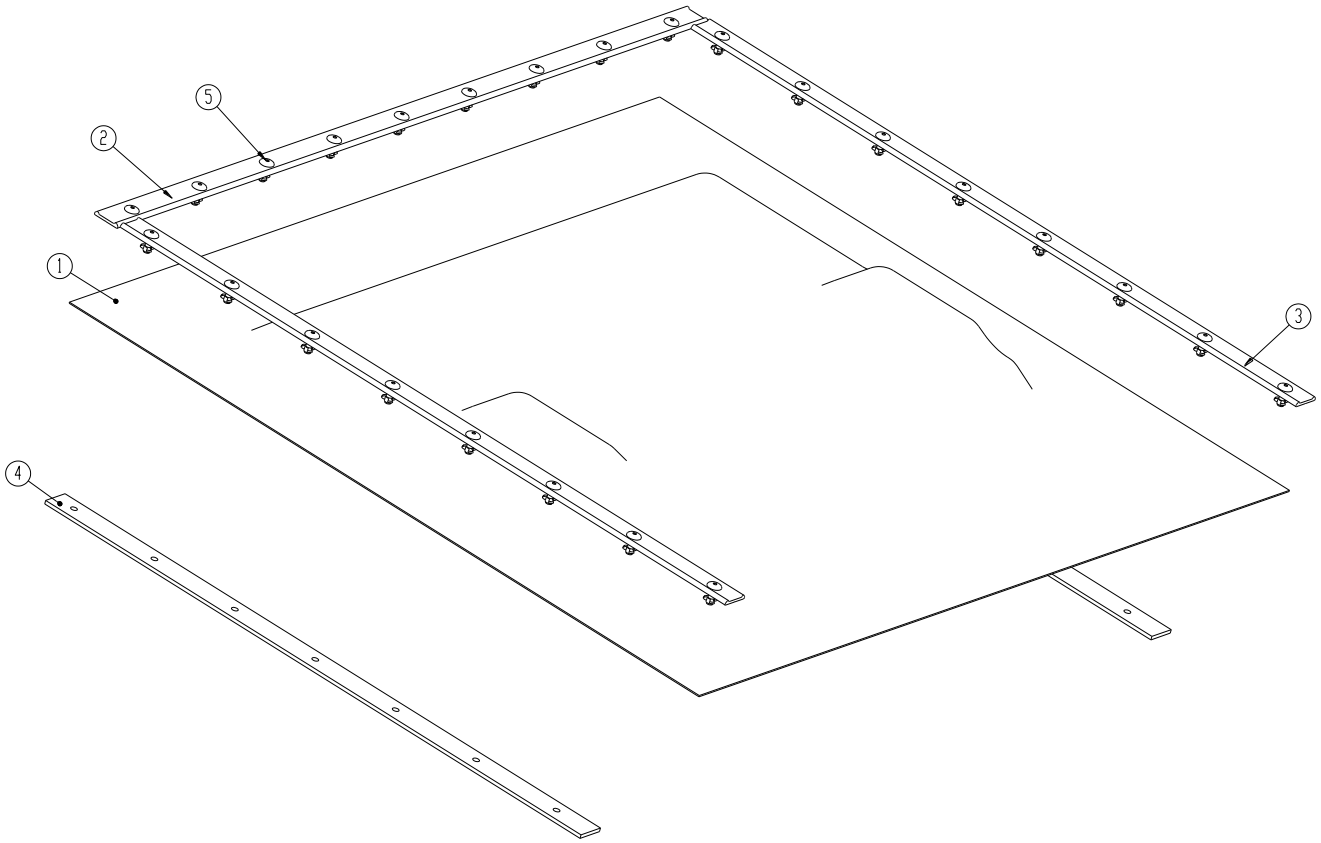
P/N 2000-05-2107



HOSE LOCK COVER

P/N 2000-05-1507

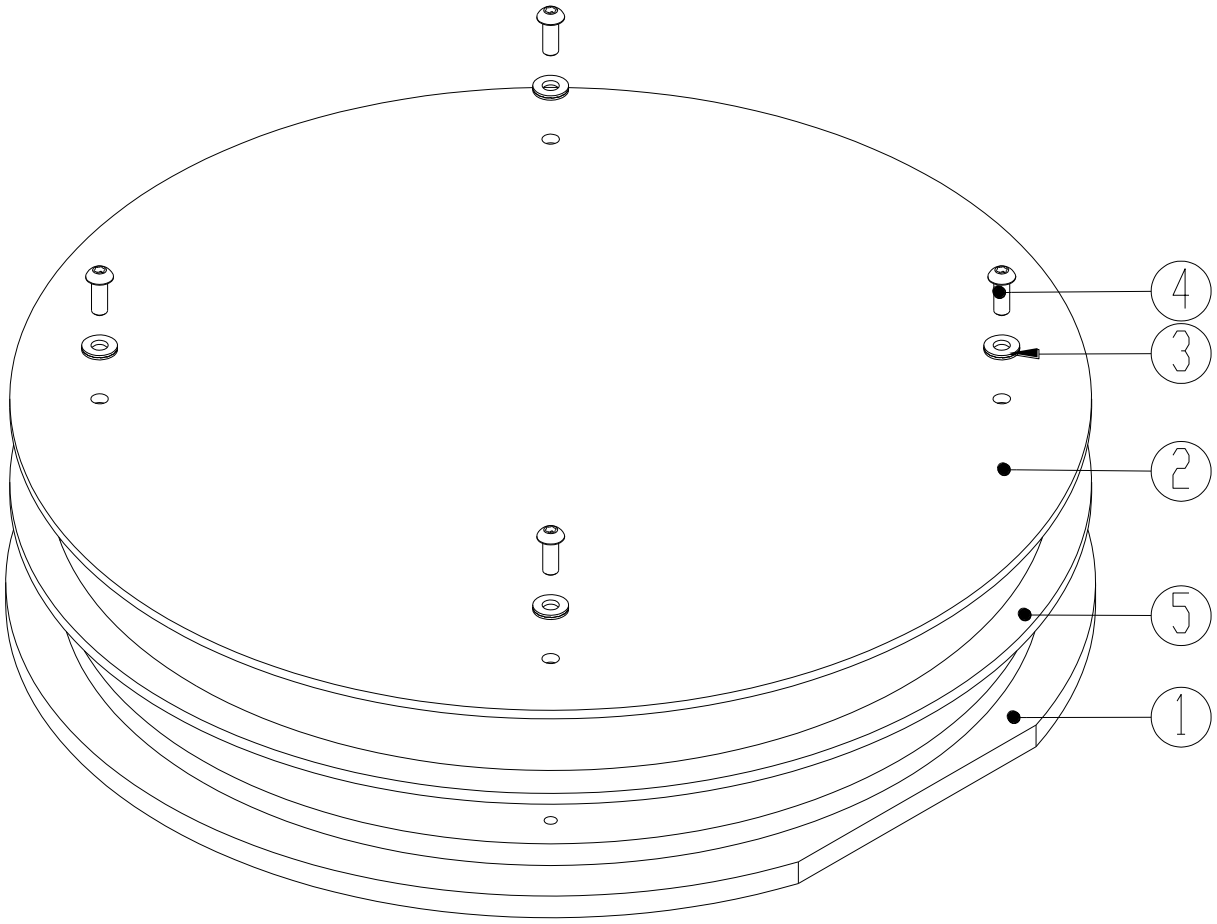
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-2059	Hose lock cover	1
2	2000-05-1505	Extrusion RR148	1
3	2000-05-1510	Extrusion RR148	2
4	2000-05-2104	Fill plate cover	2
5	BK-BAPKTR-06W-06	Bk.Rivet Klamp-Tite 4,8	25



PLUG

P/N 2000-05-1465

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1463	Plug bottom	1
2	2000-05-1464	Plug top	1
3	BO-NORDLCK-06SP-A4	Nord-Lock Large Washer M6	4
4	BO-7380T-06016-A2	Torx Socket Button Screw	4
5	2000-05-1467	Celrubber 15x5	1



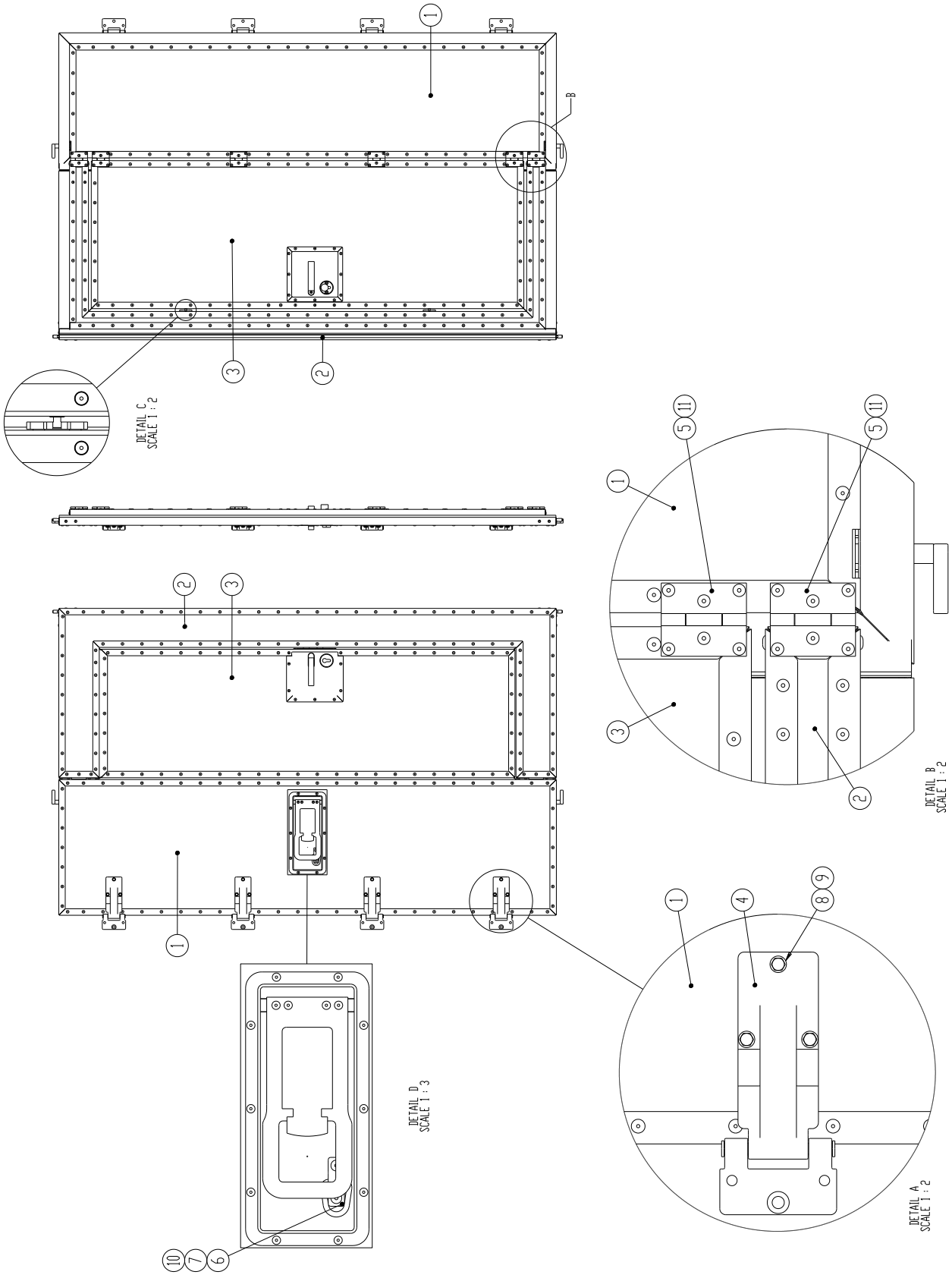
DBJ DOOR LEFT

P/N 2000-07-3478

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0511	DBJ door 1	1
2	2000-05-0520	DBJ door left2	1
3	2000-07-3479	DBJ door left 3	1
4	SL-NJ214S	Door hinge 214S	4
5	2000-05-2212	Hinge	6
6	RR7.720.085	Net Bracket (SS)	1
7	ZN-VRR-DRNG2	D-Ring 25mm	1
8	BO-NORDLCK-06SP-SMO	Nord-Lock Large Washer M6	12
9	BO-4017-06025-A2	Hex. Head Screw	12
10	BK-02771-00824	Bk.St. Monobolt 6,4	2
11	BK-02771-00617	Bk.St. Monobolt 4,8	36
12	LI-INNO.SEAL-WIT	INNO-SEAL White	1

DBJ DOOR LEFT

P/N 2000-07-3478



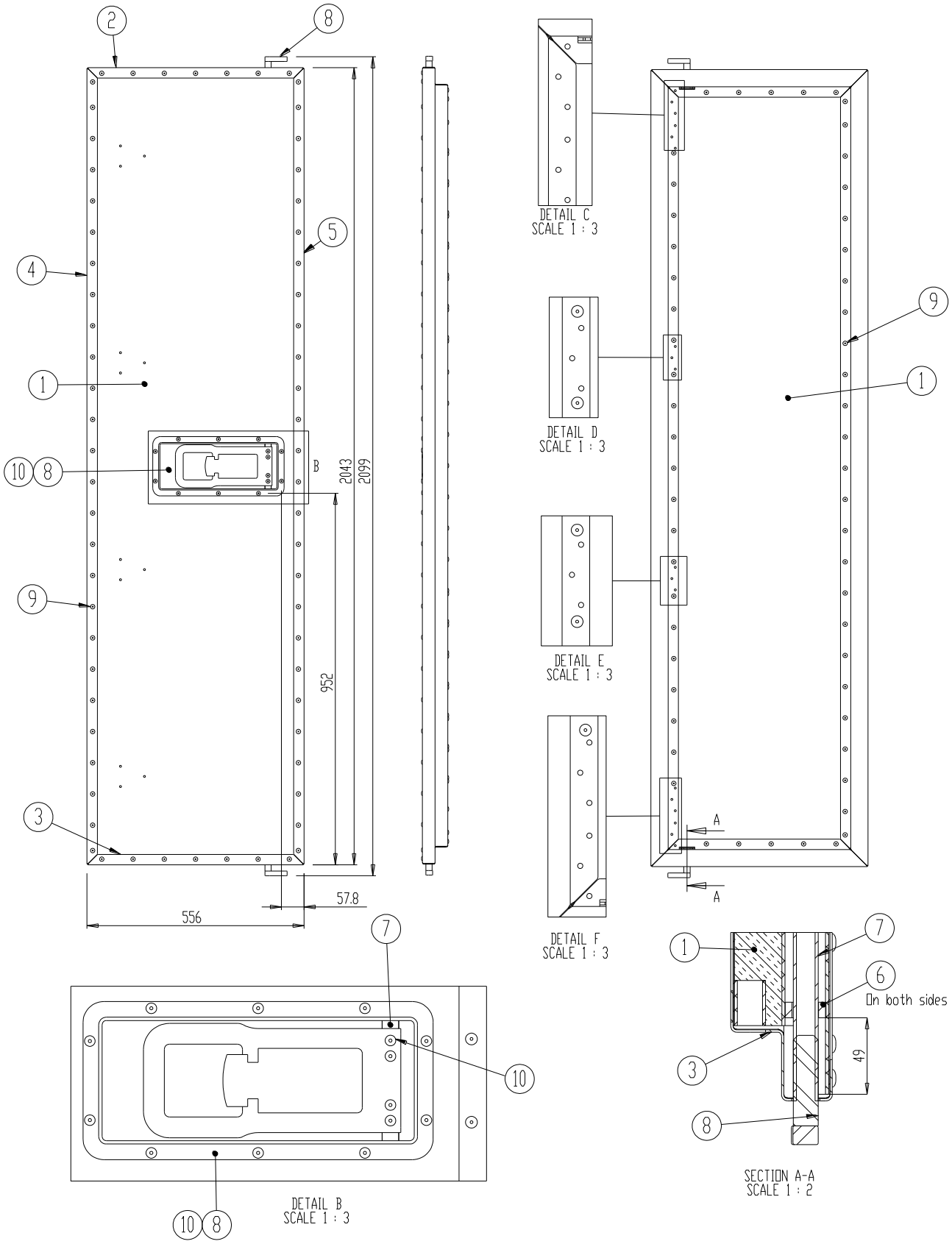
DBJ DOOR 1

P/N 2000-05-0511

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0512	DBJ panel door	1
2	2000-05-0446	Sheet; door frame	1
3	2000-05-1367	Sheet; door frame	1
4	2000-05-0514	Sheet; door frame	1
5	2000-05-1257	Sheet; door frame	1
6	2000-00-5783	Center block	2
7	2000-05-1421	Tube 16x2	2
8	SL-1202530	Internal Door Lock	1
9	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	122
10	BK-02771-00613	Bk.St. Monobolt 4,8	14

DBJ DOOR 1

P/N 2000-05-0511



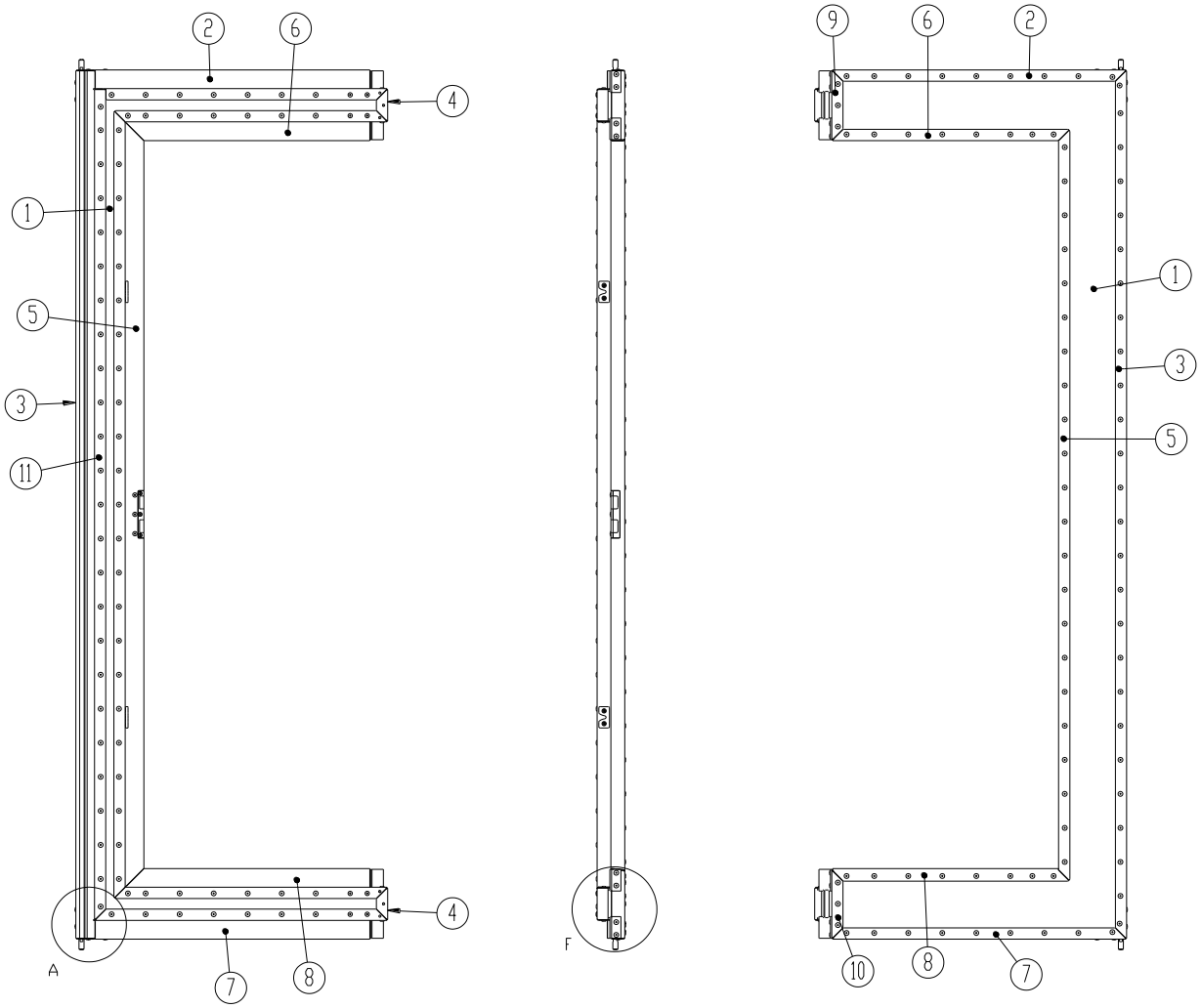
DBJ DOOR LEFT2

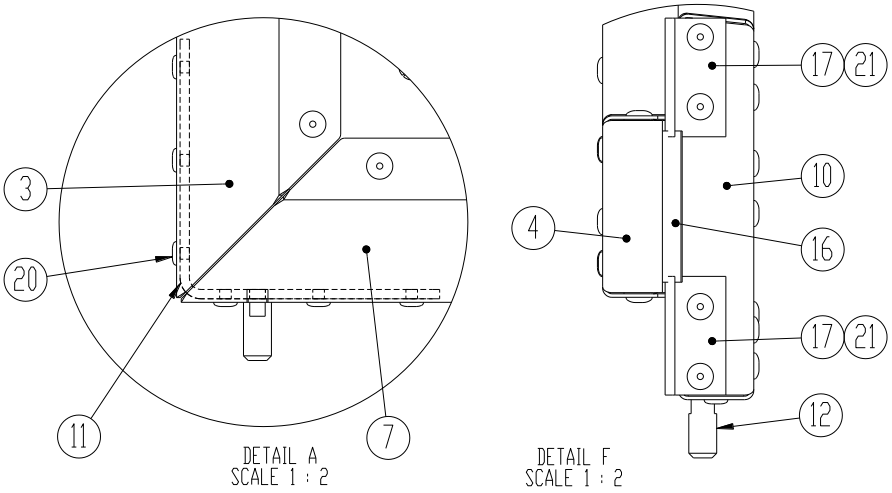
P/N 2000-05-0520

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0521	DBJ panel door	1
2	2000-05-0522	Sheet; door frame	1
3	2000-05-1433	Sheet; door frame	1
4	2000-05-0523	Sheet; door frame	2
5	2000-05-0525	Sheet; door frame	1
6	2000-05-1068	Sheet; door frame	1
7	2000-05-1069	Sheet; door frame	1
8	2000-05-1071	Sheet; door frame	1
9	2000-05-1073	Sheet; door frame	1
10	2000-05-1285	Sheet; door frame	1
11	2000-05-2458	Sheet; door frame	1
12	2000-05-0530	Pin	2
13	2000-05-1321	Guide	2
14	2000-05-3877	Detent	1
15	2000-05-3880	Detent; back	1
16	2000-05-2448	L-Extrusion 80x80x8	2
17	2000-05-0528	Extrusion Door (Rubber)	2
18	2000-05-1242	Extrusion Door (Rubber)	1
19	2000-04-1446	Rubber L-extrusion	4
20	BO-4762-04016-A2	Hex. Socket Cap Screw	4
21	BO-ALS3T-470-2,0	St. Blind rivet nut M4 HT	4
22	BK-02771-00617	Bk.St. Monobolt 4,8	19
23	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	176
24	BO-10642-04020-A2	Hex. Socket Csk. Screw	3

DBJ DOOR LEFT2

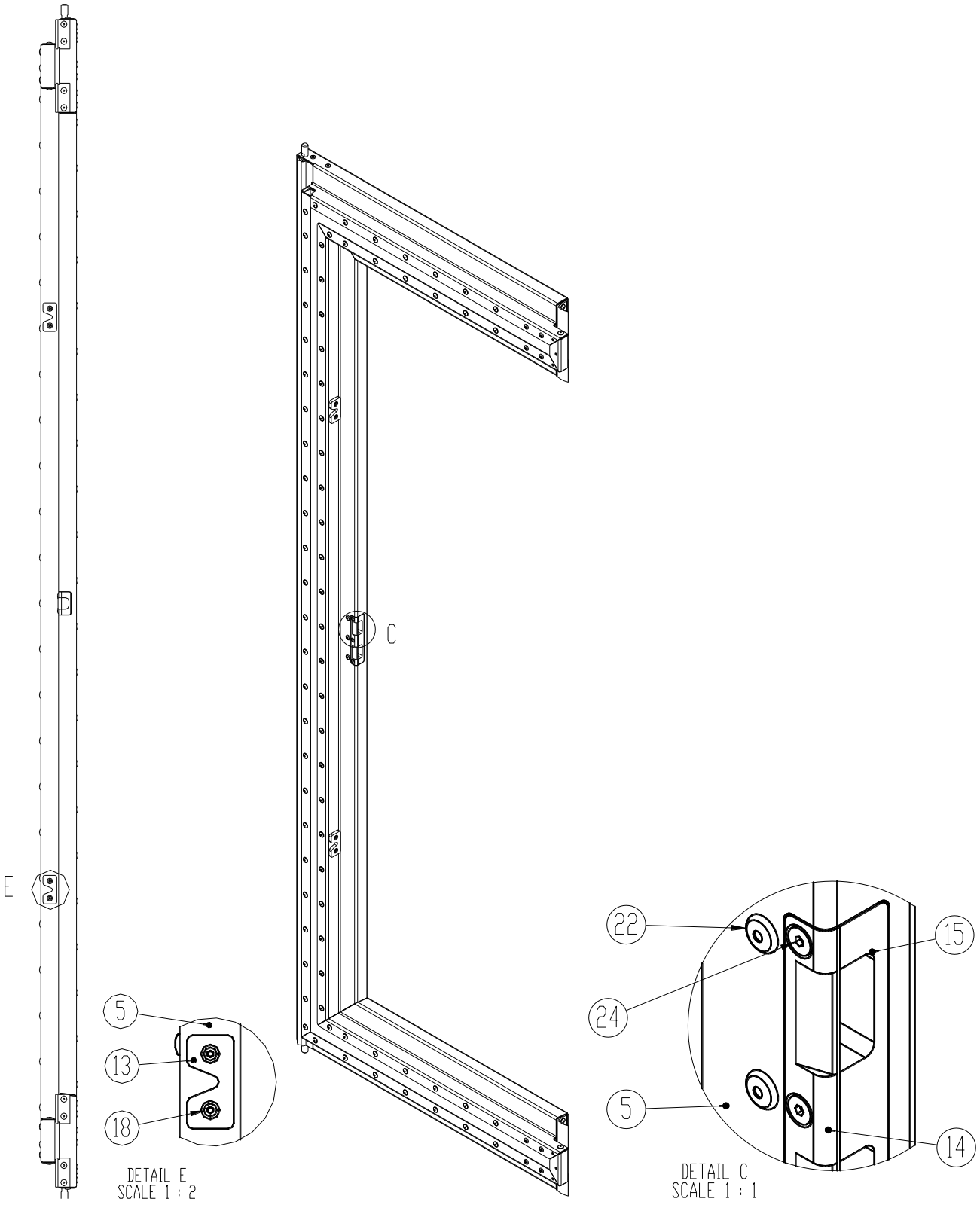
P/N 2000-05-0520





DBJ DOOR LEFT2

P/N 2000-05-0520

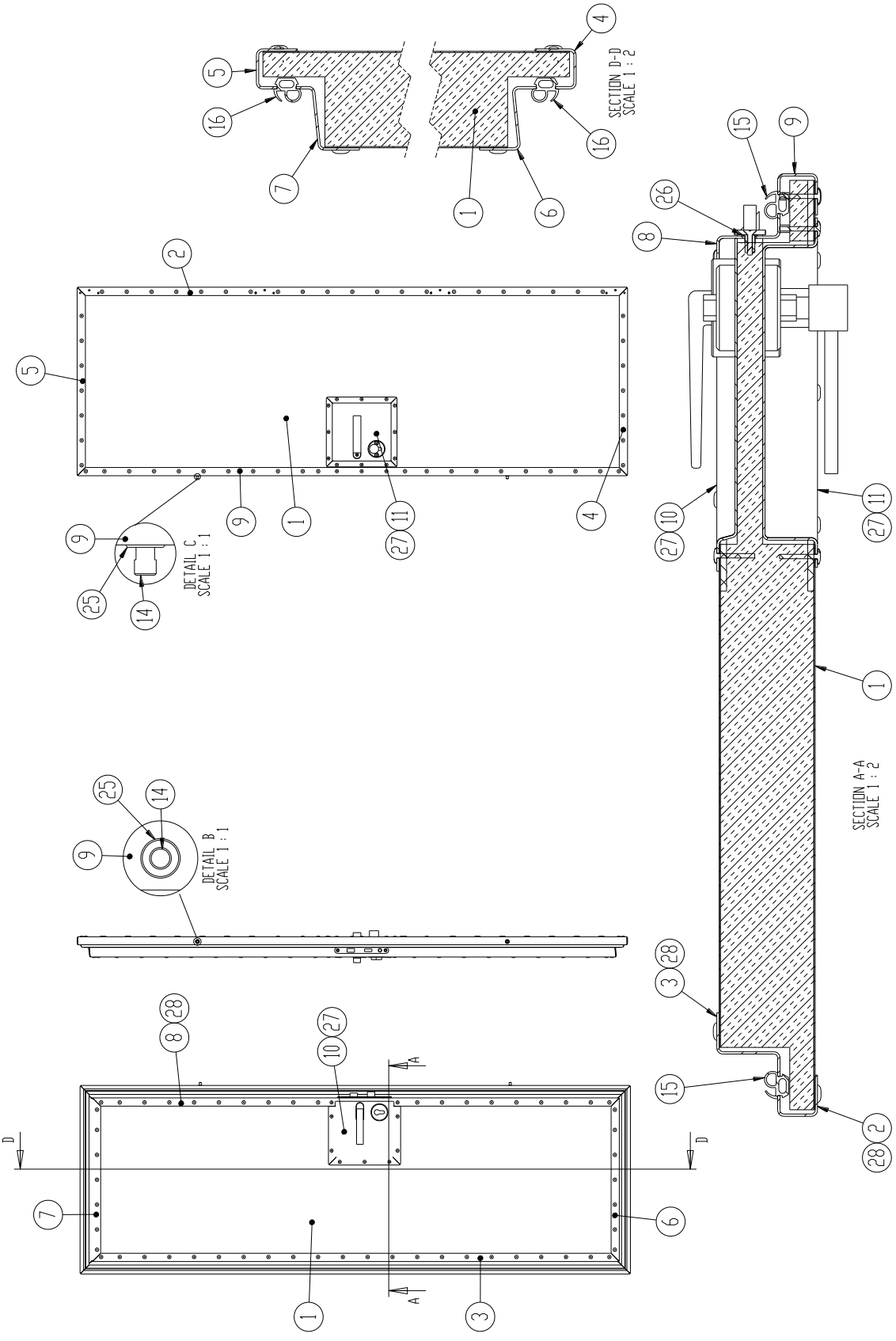


DBJ DOOR LEFT 3

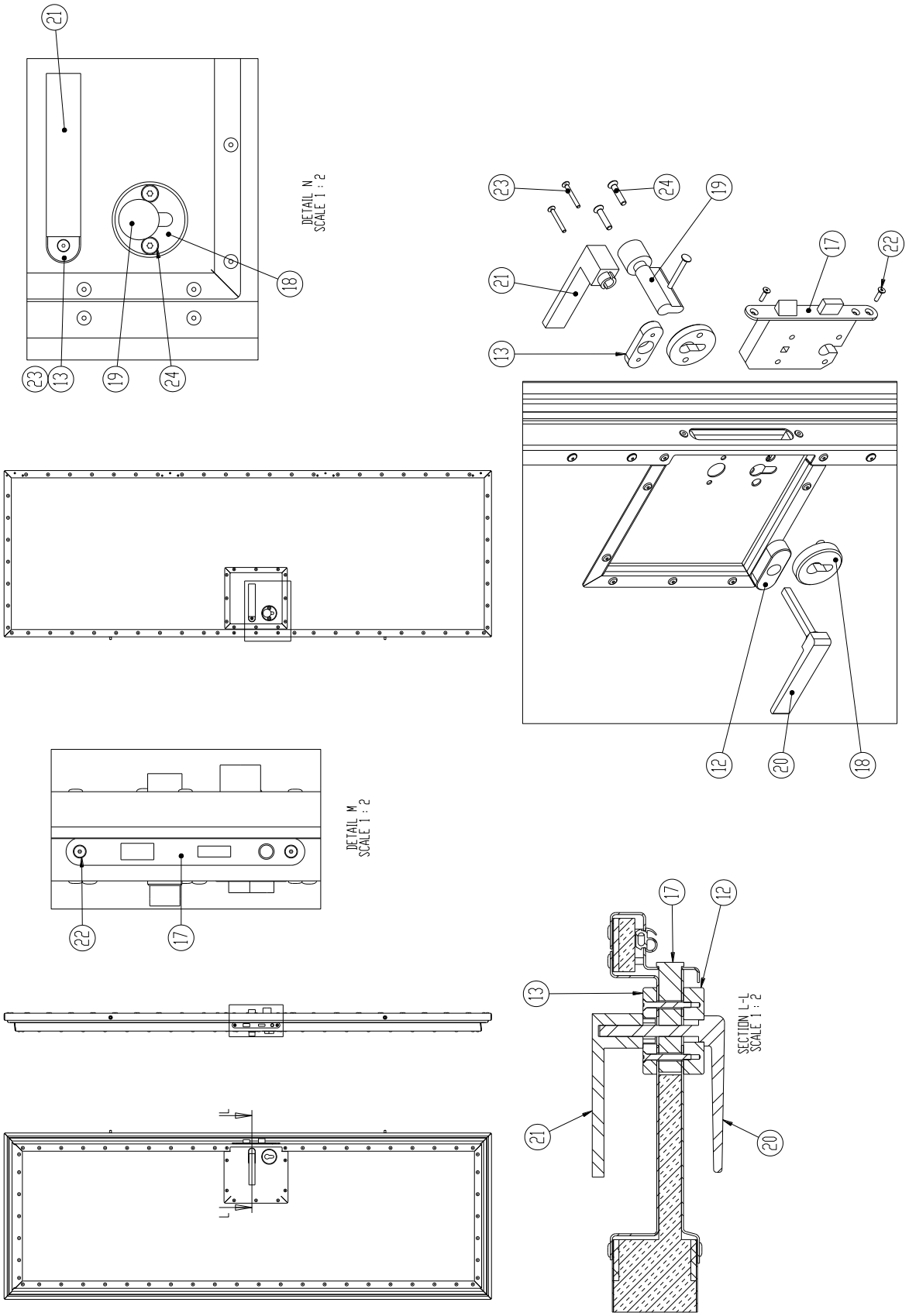
P/N 2000-07-3479

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0532	DBJ panel door	1
2	2000-05-0533	Sheet; door frame	1
3	2000-05-0534	Sheet; door frame	1
4	2000-05-1337	Sheet; door frame	1
5	2000-05-0536	Sheet; door frame	1
6	2000-05-1281	Sheet; door frame	1
7	2000-05-0537	Sheet; door frame	1
8	2000-05-0538	Sheet; door frame	1
9	2000-05-0539	Sheet; door frame	1
10	2000-05-0978	Sheet door handle	1
11	2000-05-0984	Sheet door handle	1
12	2000-05-3886	Rosette outside	1
13	2000-05-3888	Rosette inside	1
14	2000-05-1366	Guide pin	2
15	2000-05-0540	Extrusion Door (Rubber)	2
16	2000-05-0541	Extrusion Door (Rubber)	2
17	SL-0094.954229	Mortice lock	1
18	SL-Hoppe rozet	Hoppe veiligheidsrozet rond SKG3	1
19	SL-NT3501611045	Knob cylinder	1
20	SL-0035.056400C	Doorhandle	1
21	SL-0023.057100	Door handle	1
22	BO-14581T-04016-A2	Torx Socket Csk. Screw	2
23	BO-14581T-04035-A2	Torx Socket Csk. Screw	2
24	BO-14581T-06030-A2	Torx Socket Csk. Screw	2
25	BO-AKS3T-610-4,2	St. Blind rivet nut M6 HT	2
26	BO-ALS3T-470-2,0	St. Blind rivet nut M4 HT	2
27	BK-02771-00617	Bk.St. Monobolt 4,8	24
28	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	111

DBJ DOOR LEFT 3
P/N 2000-07-3479



DBJ DOOR LEFT 3
P/N 2000-07-3479



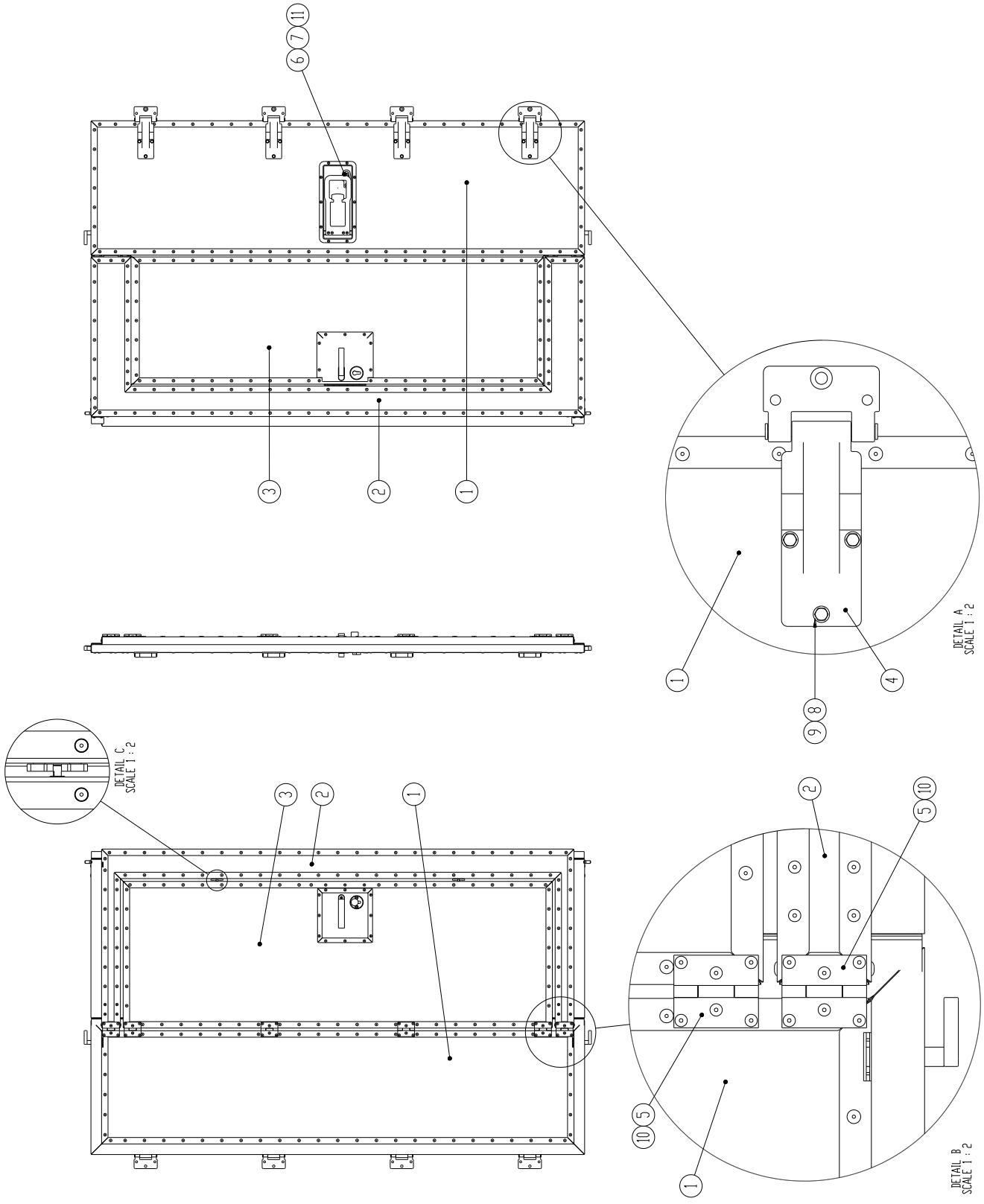
DBJ DOOR RIGHT

P/N 2000-07-3476

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0511	DBJ door 1	1
2	2000-05-1234	DBJ door right2	1
3	2000-07-3477	DBJ door right 3	1
4	SL-NJ214S	Door hinge 214S	4
5	2000-05-2212	Hinge	6
6	RR7.720.085	Net Bracket (SS)	1
7	ZN-VRR-DRNG2	D-Ring 25mm	1
8	BO-NORDLCK-06SP-SMO	Nord-Lock Large Washer M6	12
9	BO-4017-06025-A2	Hex. Head Screw	12
10	BK-02771-00617	Bk.St. Monobolt 4,8	36
11	BK-02771-00824	Bk.St. Monobolt 6,4	2
12	LI-INNO.SEAL-WIT	INNO-SEAL White	1

DBJ DOOR RIGHT

P/N 2000-07-3476



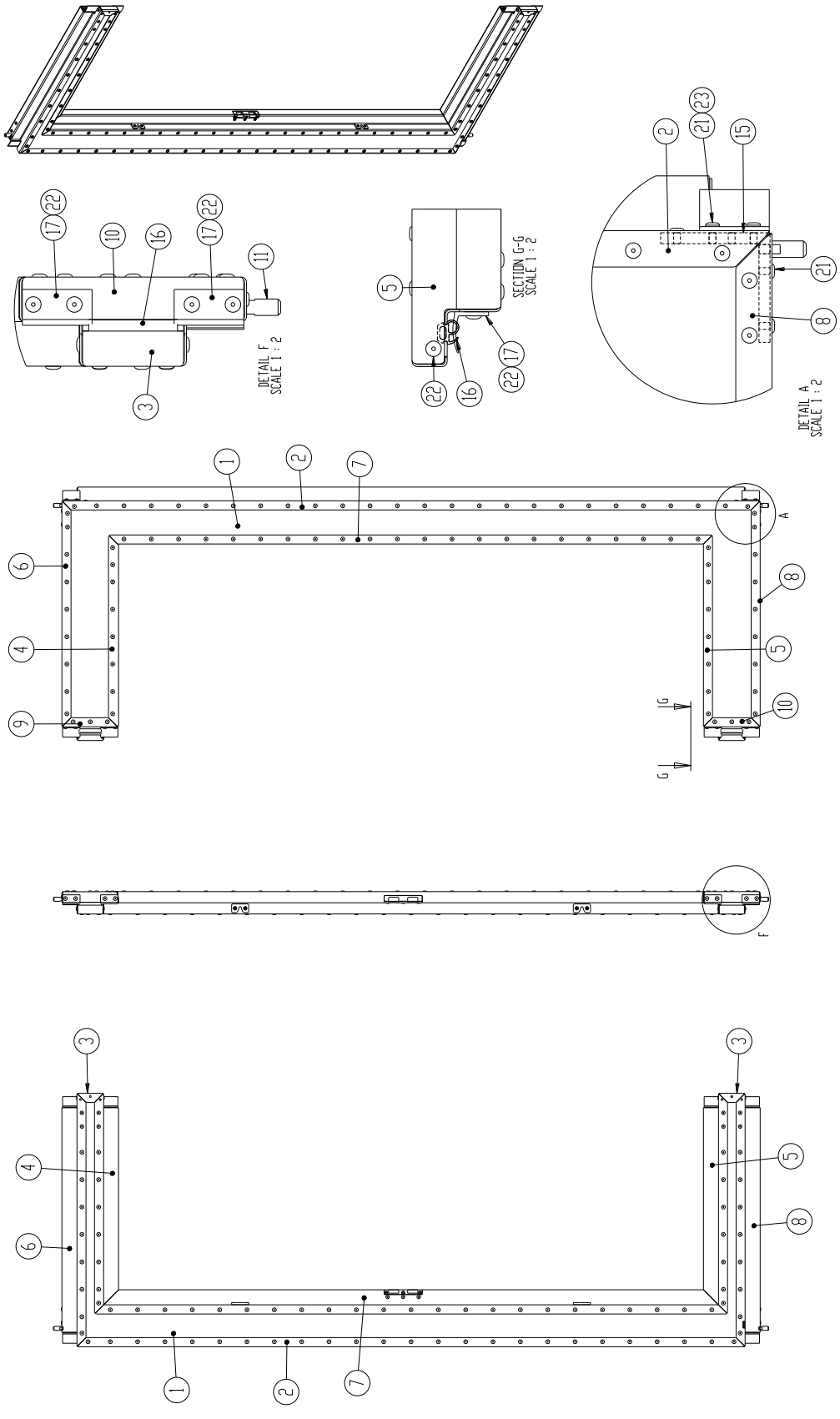
DBJ DOOR RIGHT2

P/N 2000-05-1234

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1244	DBJ panel door	1
2	2000-05-1236	Sheet; door frame	1
3	2000-05-0523	Sheet; door frame	2
4	2000-05-1378	Sheet; door frame	1
5	2000-05-0527	Sheet; door frame	1
6	2000-05-1238	Sheet; door frame	1
7	2000-05-1070	Sheet; door frame	1
8	2000-05-1377	Sheet; door frame	1
9	2000-05-1396	Sheet; door frame	1
10	2000-05-1073	Sheet; door frame	1
11	2000-05-0530	Pin	2
12	2000-05-1321	Guide	2
13	2000-05-3877	Detent	1
14	2000-05-3880	Detent; back	1
15	2000-05-2448	L-Extrusion 80x80x8	2
16	2000-05-0528	Extrusion Door (Rubber)	2
17	2000-04-1446	Rubber L-extrusion	6
18	BO-4762-04016-A2	Hex. Socket Cap Screw	4
19	BO-10642-04020-A2	Hex. Socket Csk. Screw	3
20	BO-ALS3T-470-2,0	St. Blind rivet nut M4 HT	4
21	BK-02771-00617	Bk.St. Monobolt 4,8	21
22	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	178
23	BO-7089-05-PA	Plain Washer Normal	4

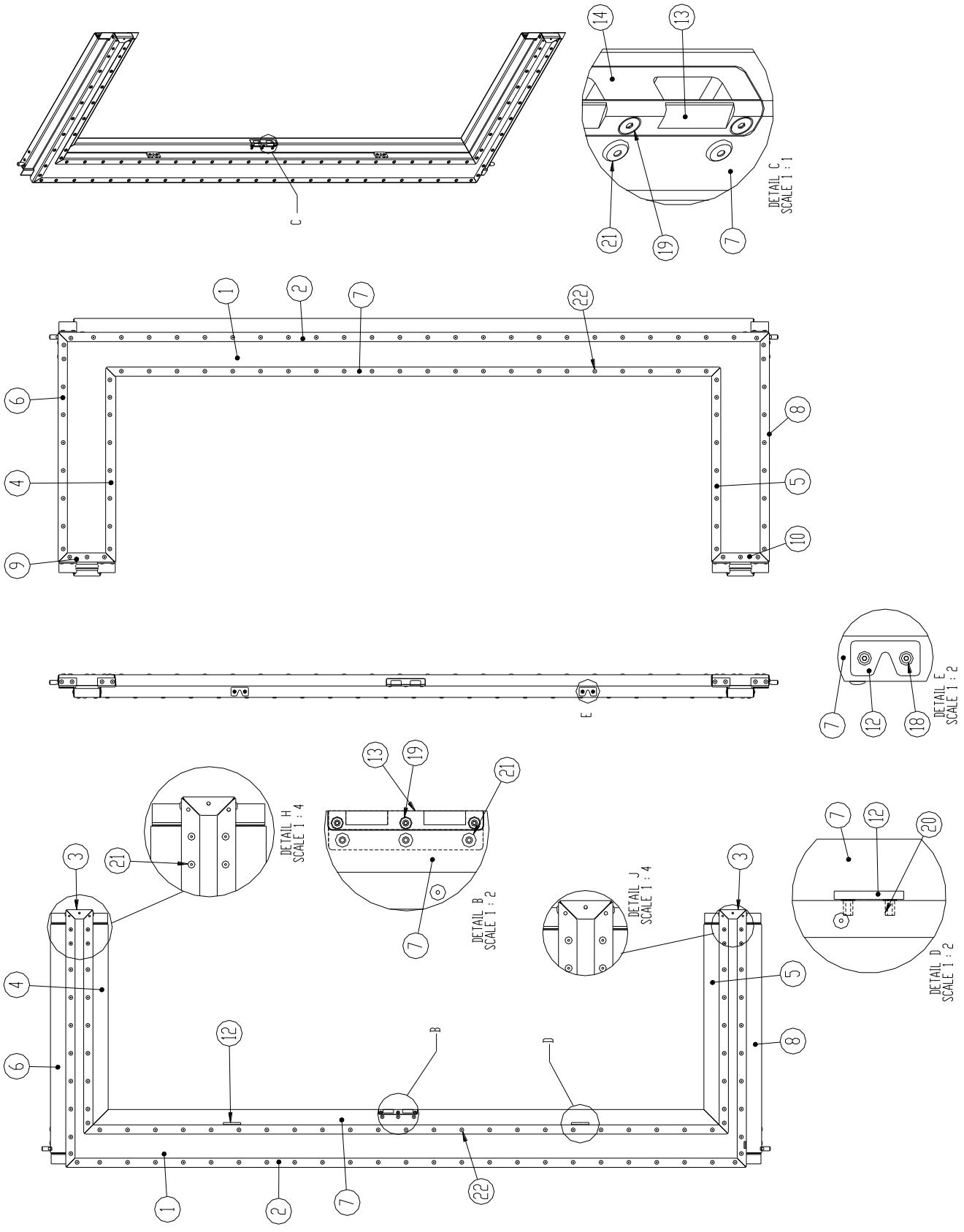
DBJ DOOR RIGHT2

P/N 2000-05-1234



DBJ DOOR RIGHT2

P/N 2000-05-1234



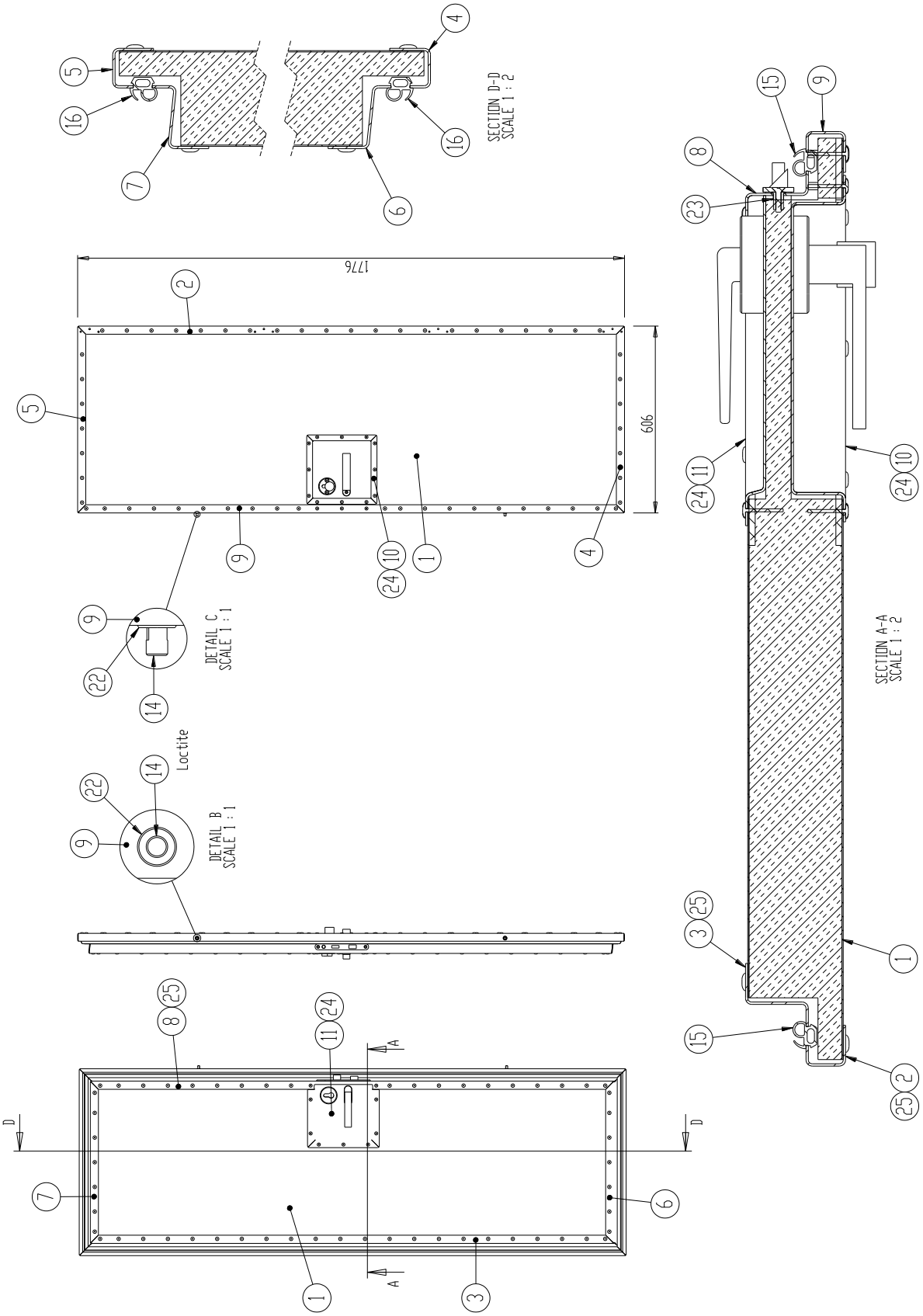
DBJ DOOR RIGHT 3

P/N 2000-07-3477

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1229	DBJ panel door	1
2	2000-05-0533	Sheet; door frame	1
3	2000-05-1413	Sheet; door frame	1
4	2000-05-1337	Sheet; door frame	1
5	2000-05-0536	Sheet; door frame	1
6	2000-05-0537	Sheet; door frame	1
7	2000-05-1281	Sheet; door frame	1
8	2000-05-1410	Sheet; door frame	1
9	2000-05-1405	Sheet; door frame	1
10	2000-05-1249	Sheet door handle	1
11	2000-05-1406	Sheet door handle	1
12	2000-05-3886	Rosette outside	1
13	2000-05-3888	Rosette inside	1
14	2000-05-1366	Guide pin	2
15	2000-05-0540	Extrusion Door (Rubber)	2
16	2000-05-0541	Extrusion Door (Rubber)	2
17	SL-0094.954229	Mortice lock	1
18	SL-Hoppe rozet	Hoppe veiligheidsrozet rond SKG3	1
19	SL-NT3501611045	Knob cylinder	1
20	SL-0035.056400C	Doorhandle	1
21	SL-0023.057100	Door handle	1
22	BO-AKS3T-610-4,2	St. Blind rivet nut M6 HT	2
23	BO-ALS3T-470-2,0	St. Blind rivet nut M4 HT	2
24	BK-02771-00617	Bk.St. Monobolt 4,8	24
25	BK-BAPKTR-06W-04	Bk.Rivet Klamp-Tite 4,8	111
26	BO-14581T-04016-A2	Torx Socket Csk. Screw	2
27	BO-14581T-04035-A2	Torx Socket Csk. Screw	2
28	BO-14581T-06030-A2	Torx Socket Csk. Screw	2

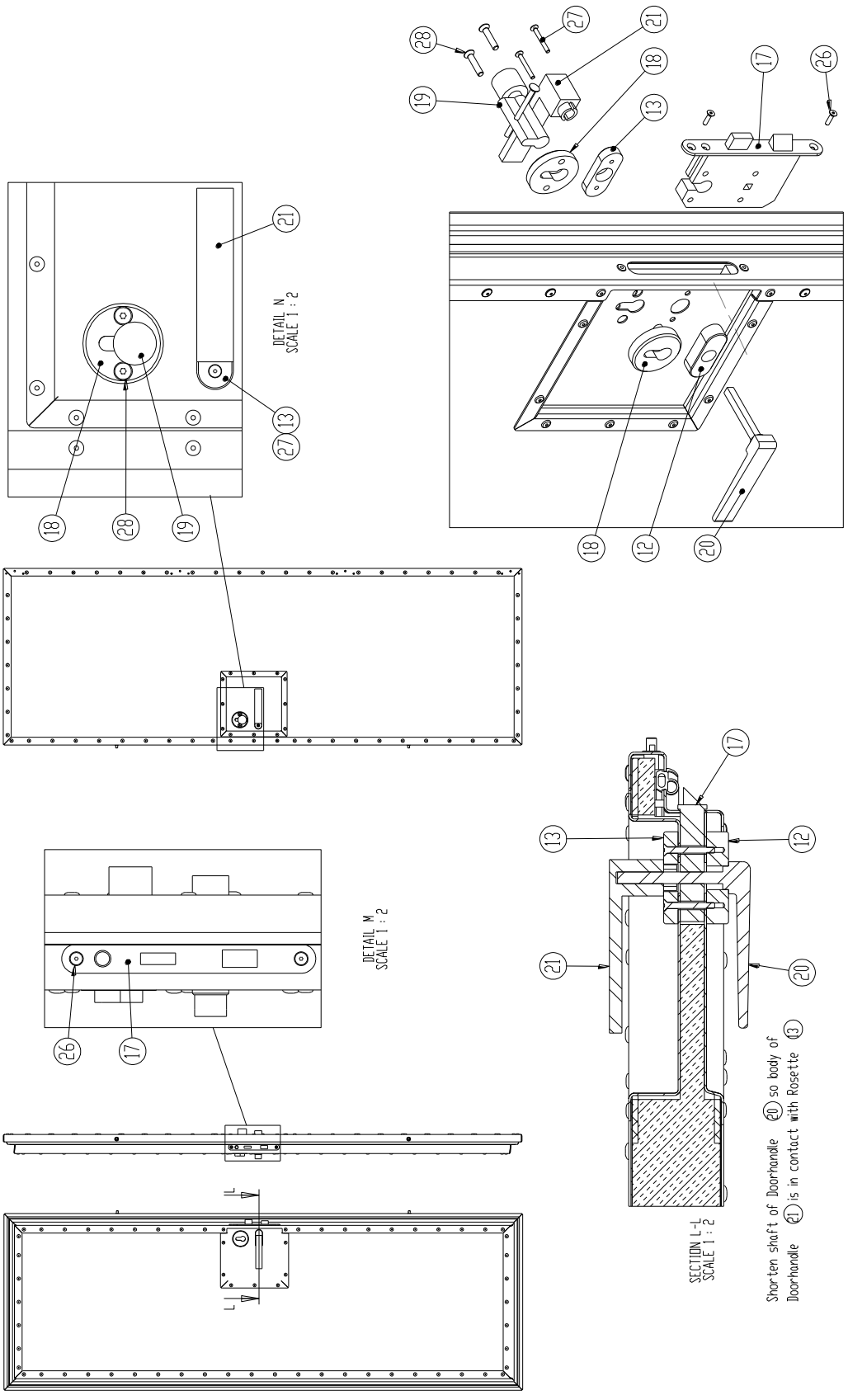
DBJ DOOR RIGHT 3

P/N 2000-07-3477



DBJ DOOR RIGHT 3

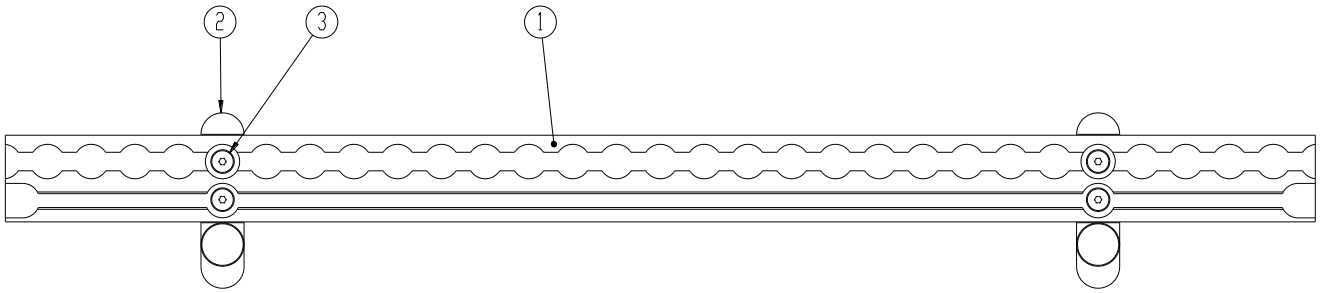
P/N 2000-07-3477



TRACK BAR

P/N 2000-07-3488

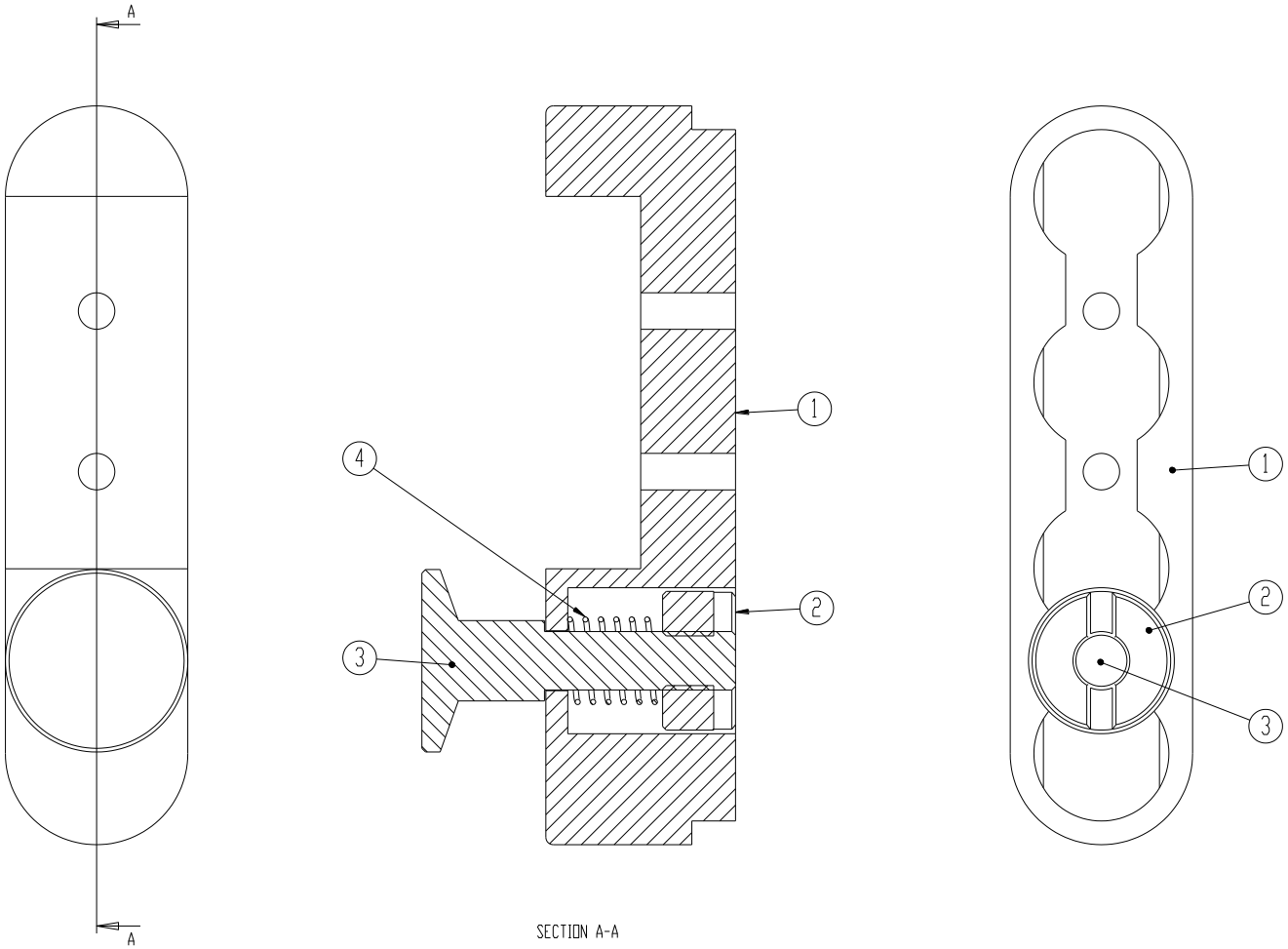
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-04-8885	Extrusion RR205	1
2	2000-05-2116	Track bar stud	2
3	BO-14581T-06016-A2	Torx Socket Csk. Screw	4



TRACK BAR STUD

P/N 2000-05-2116

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-04-8887	Stud bracket	1
2	2000-02-5680	Plunger	1
3	2000-05-2117	Plunger Pin	1
4	VE-D-115E	Compression Spring	1



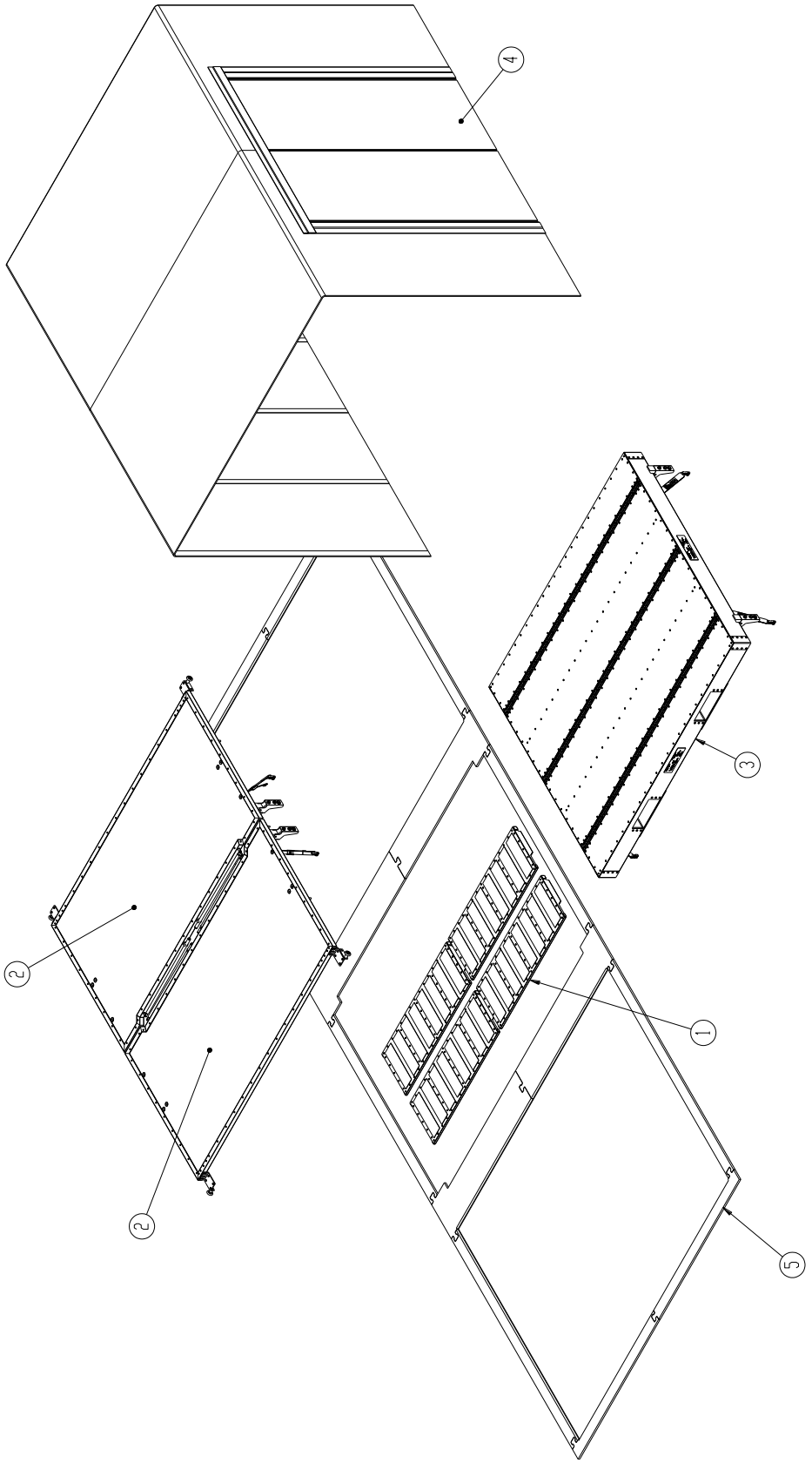
EXTENDIBILITY PACK

P/N 2000-07-2624

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-04-9116	Ramp	4
2	2000-07-2626	Modular roof	2
3	2000-05-0438	Shelf	1
4	2000-05-1771	Cover	1
5	2000-07-2664	Contour guidance pieces	1

EXTENDIBILITY PACK

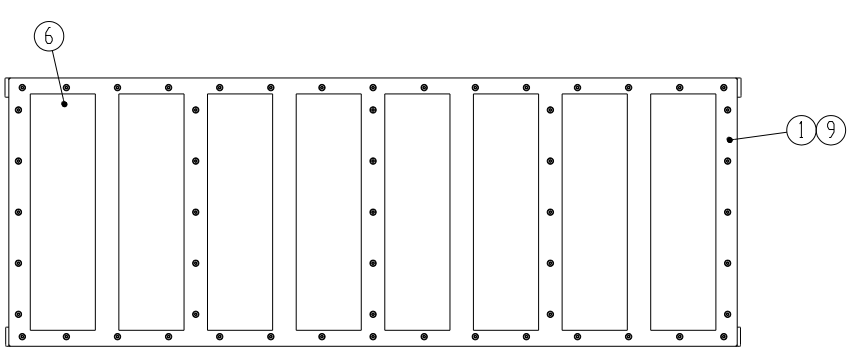
P/N 2000-07-2624

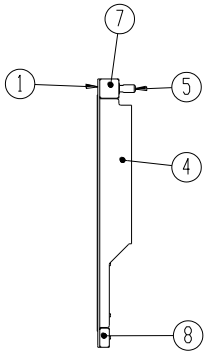


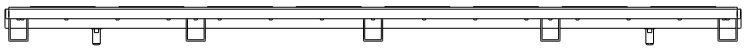
RAMP

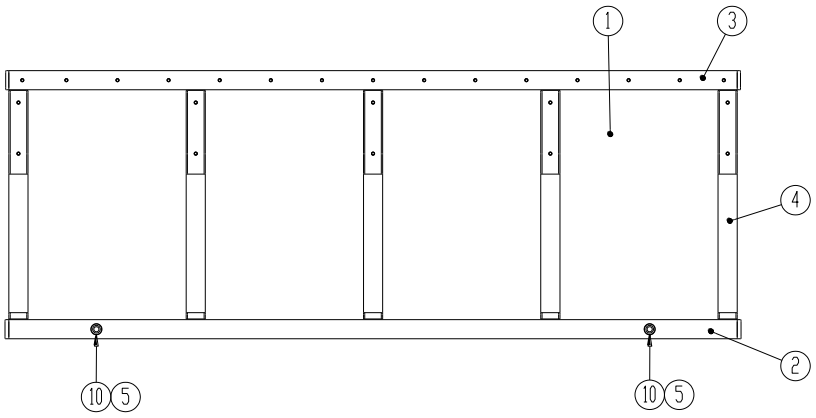
P/N 2000-04-9116

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-0850	Ramp sheet	1
2	2000-04-9117	Tube 30x30x2	1
3	2000-05-1790	Tube 30x15x2	1
4	2000-05-2105	Tube 50x30x2	5
5	2000-05-0530	Pin	2
6	2000-05-1532	Anti-slip	8
7	DP-056030062003	Ribbed insert 30x30	2
8	DP-057301562003	Ribbed insert 30x15	2
9	BK-02761-00615	Csk.St. Monobolt 4,8	55
10	BO-ALS3T-8125-3,8	St. Blind rivet nut M8 HT	2









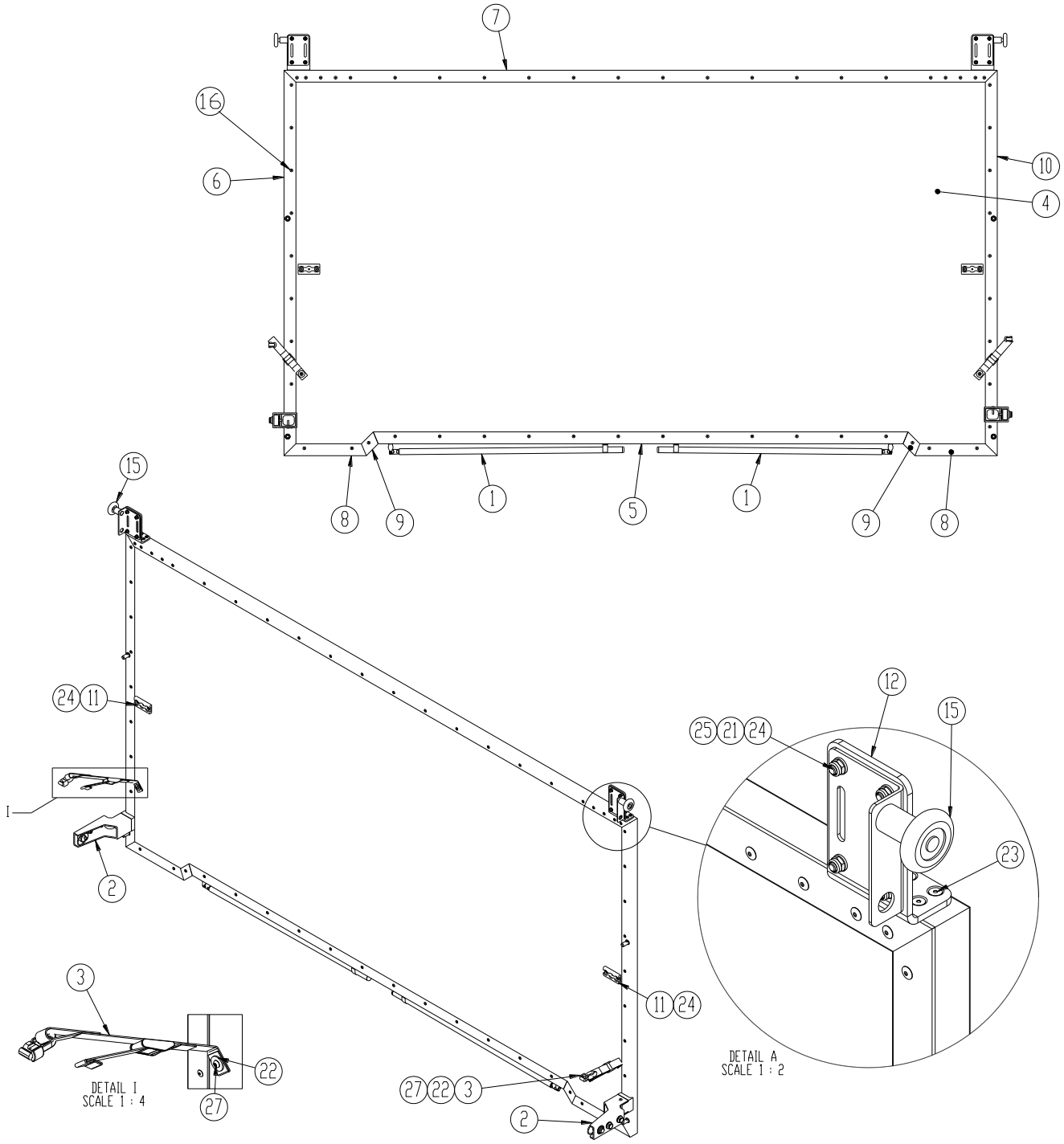
MODULAR ROOF

P/N 2000-07-2626

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	136.061-250	Top door handle	2
2	2000-07-2774	Roof support bracket	2
3	2000-07-3403	Strap assy	2
4	2000-05-2038	Monopan panel	1
5	2000-05-2039	Extrusion RR185	1
6	2000-05-2050	Extrusion RR185	1
7	2000-07-2650	Extrusion RR185	1
8	2000-05-2089	Extrusion RR185	2
9	2000-05-2100	Extrusion RR185	2
10	2000-05-2101	Extrusion RR185	1
11	2000-02-9501	Seattrack RR180	2
12	2000-07-2733	Wheel bracket	2
13	2000-05-0530	Pin	4
14	2000-05-2097	Thread bush	6
15	2000-07-2633	Top roller self alligning	1
16	BK-BN01-0614	Avibulb rivet	116
17	BO-ALS3T-1015-3,8	St. Blind rivet nut M10 HT	2
18	BO-ALS3T-8125-3,8	St. Blind rivet nut M8 HT	4
19	BO-AKS3T-580-3,3	St. Blind rivet nut M5 HT	14
20	BO-7094-05-A2	Wood Washer	2
21	BO-7089-06-A2	Plain Washer Normal	8
22	BO-7094-06-A2	Wood Washer	2
23	BO-14581T-05016-A2	Torx Socket Csk. Screw	12
24	BO-14581T-06016-A2	Torx Socket Csk. Screw	12
25	BO-10511-06-A2	Nyloc Hex Nut	8
26	BO-7380T-05020-A2	Torx Socket Button Screw	2
27	BO-7380T-06020-A2	Torx Socket Button Screw	2
28	SI-Alu_monopan	Lijminstructie Monopan	1
29	2000-07-3626	Malplate Modular roof DBJ	1

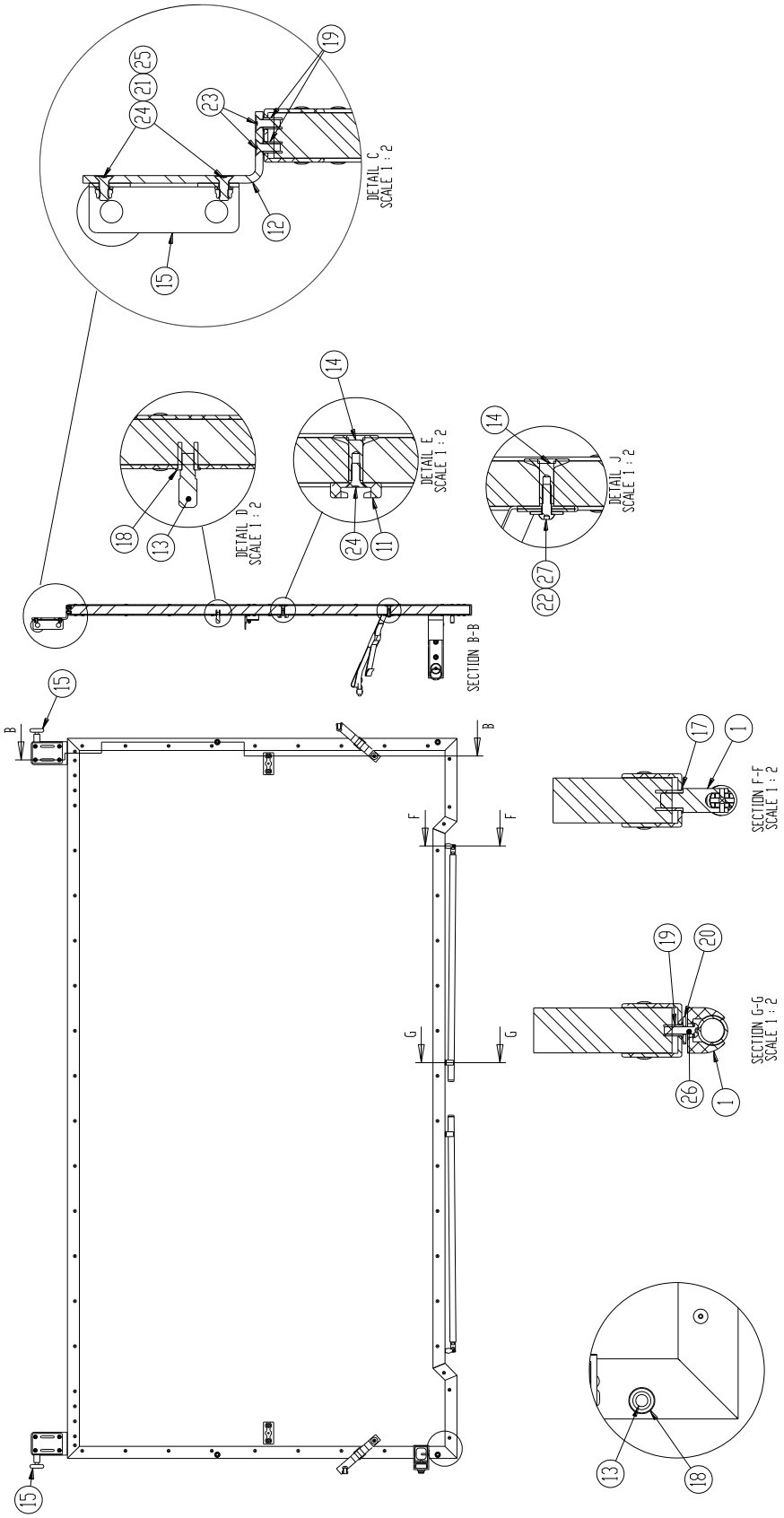
MODULAR ROOF

P/N 2000-07-2626



MODULAR ROOF

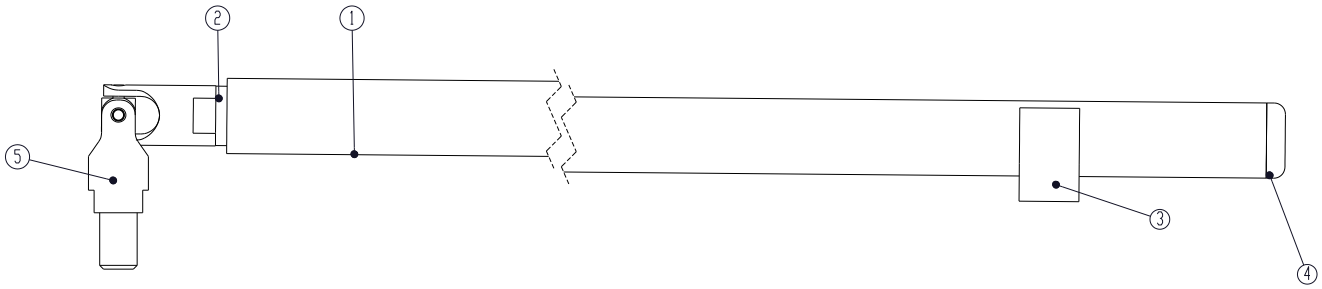
P/N 2000-07-2626



TOP DOOR HANDLE

P/N 136.061-250

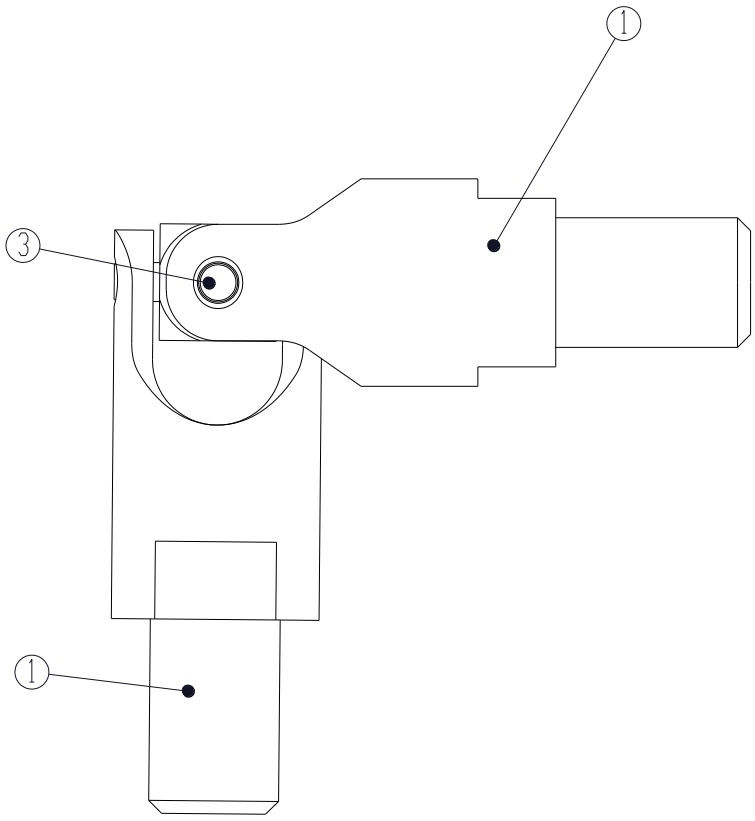
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	136.061-251	Tube ø20x2	1
2	136.061-253	Bush M10	1
3	SL-OBO2955_M20	OBO 2955 buisklem 0-20mm	1
4	DP-085020069903	Ribbed insert Ø20	1
5	2000-02-0921	Cardan joint	1
6	BK-02711-00617	Bk.SS.Monobolt 4,8	1
7	BO-7089-05-A2	Plain Washer Normal	1



CARDAN JOINT

P/N 2000-02-0921

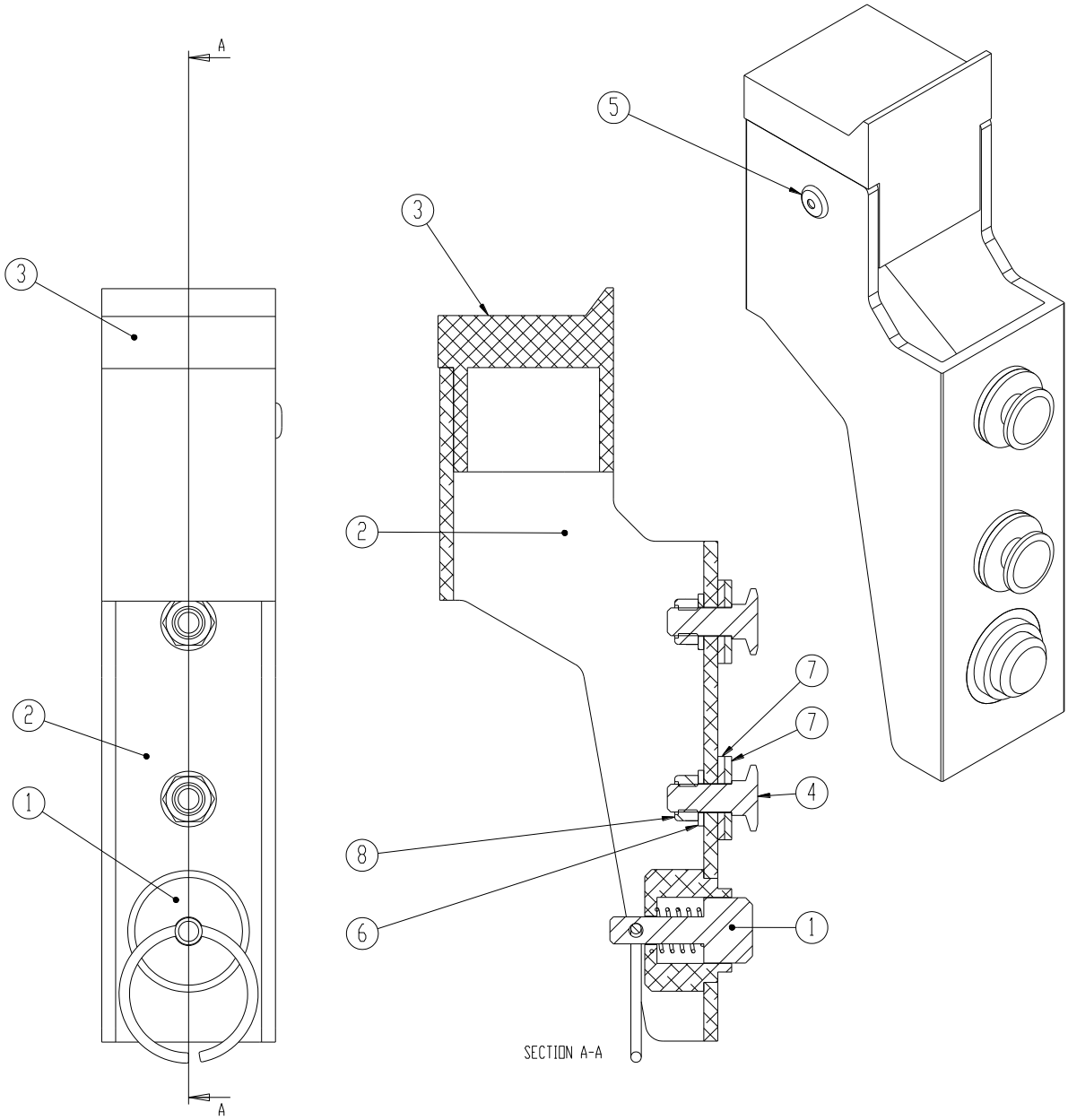
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-02-0922	Cardan joint 1	2
2	2000-02-0923	Cardan joint 2	1
3	BO-2338-0306-A2	Parallel Pin	4



ROOF SUPPORT BRACKET

P/N 2000-07-2774

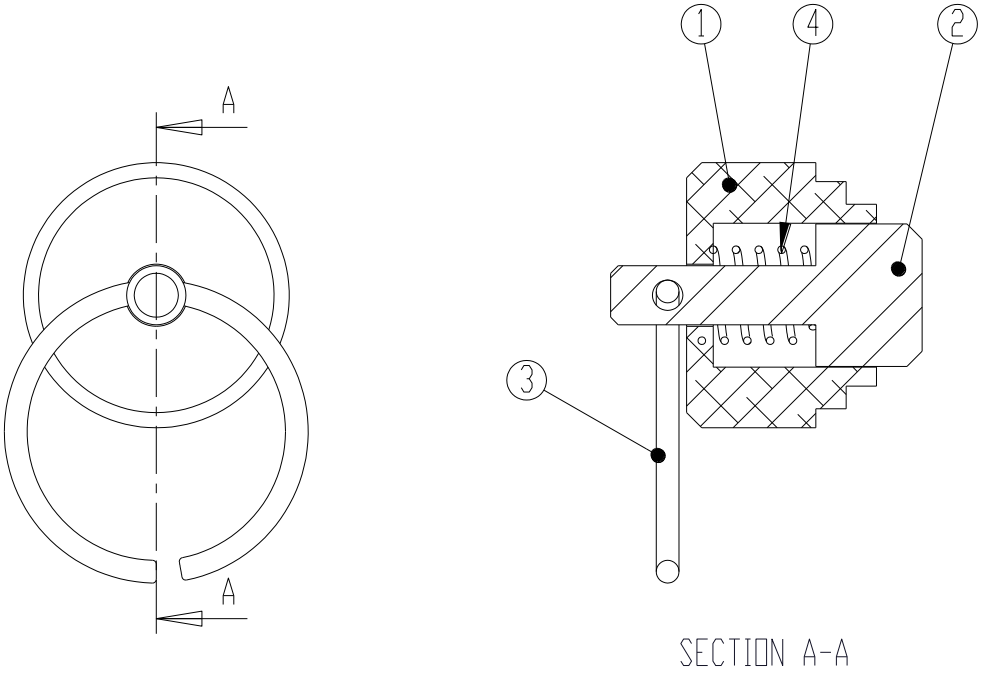
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-01-6016	Plunger-Assy	1
2	2000-07-2776	Tube 80x50x4	1
3	2000-07-2780	Roof support insert	1
4	2000-01-5988	Stud M8	2
5	BK-02771-00617	Bk.St. Monobolt 4,8	1
6	BO-7089-08-A2	Plain Washer Normal	2
7	BO-7093-08-A2	Plain Washer Large	4
8	BO-10511-08-A2	Nyloc Hex Nut	2



PLUNGER-ASSY

P/N 2000-01-6016

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-01-6017	Rod ø35	1
2	2000-01-6019	Rod ø20	1
3	BO-SLTRNG_40	Sleutelring Ø40	1
4	VE-D12050	Compression spring	1



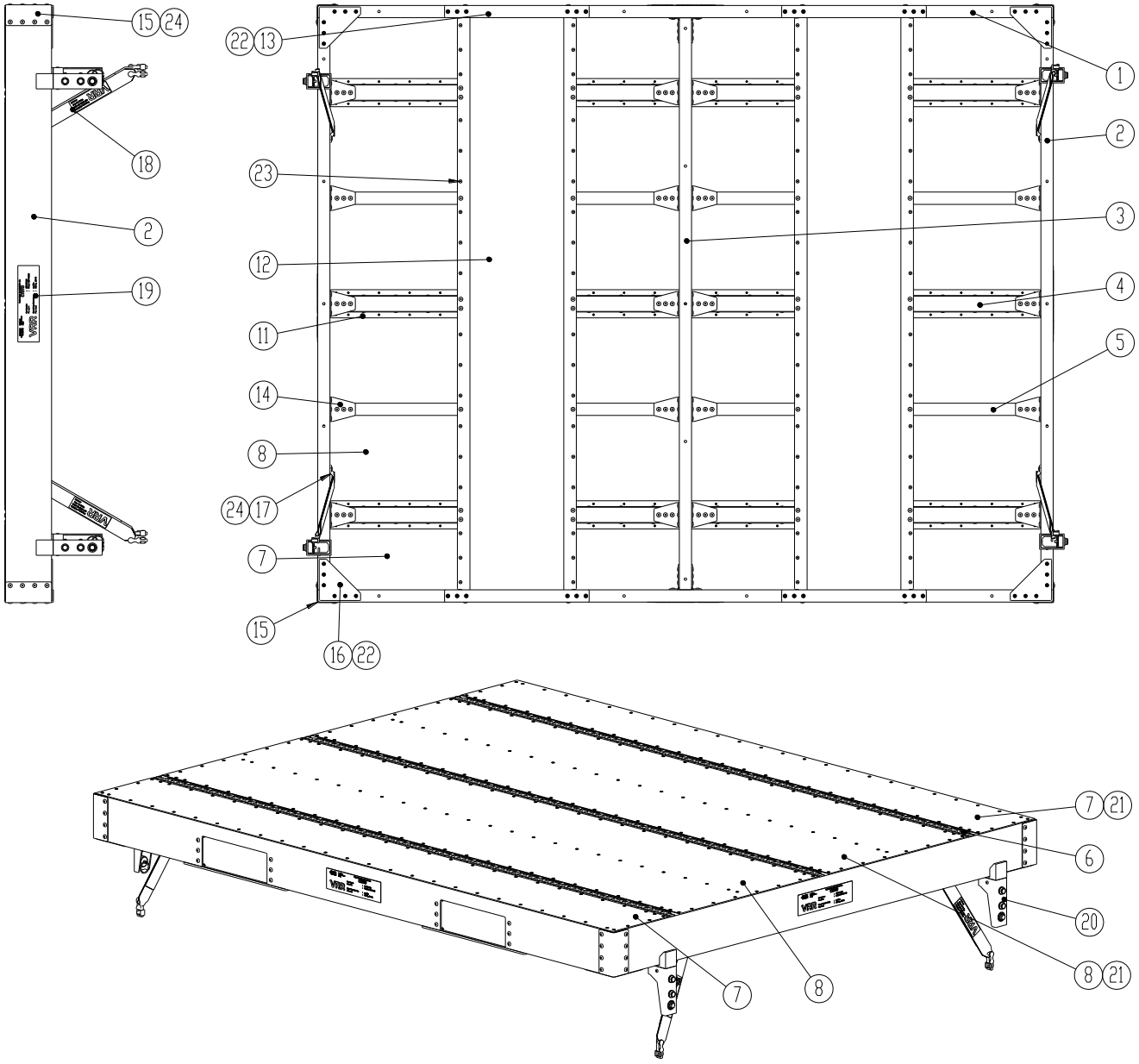
SHELF

P/N 2000-05-0438

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-04-8896	Tube 150x40x4	2
2	2000-04-8901	Tube 150x40x4	2
3	2000-04-8943	Tube 100x40x2	1
4	2000-05-0393	Tube 50x30x2	3
5	2000-05-0399	Tube 40x40x2	2
6	2000-05-0365	Seat-T track profile	3
7	2000-04-8897	Sheet	2
8	2000-04-8898	Sheet	2
9	2000-05-0400	Sheet	2
10	2000-05-0544	Fill sheet	4
11	2000-05-0425	Support	6
12	2000-04-8921	Forkpocket	2
13	2000-05-1092	Connection sheet	4
14	2000-01-5973	Gusset, bent	24
15	2000-05-0595	Gusset bent	4
16	2000-01-6003	Sheet; Gusset	4
17	RR7.220.085	Net Bracket (alu)	4
18	2000-05-2372	Strap assy	4
19	2000-05-0623	Max load sticker	4
20	2000-04-8893	Panel Bracket	4
21	BK-02761-00615	Csk.St. Monobolt 4,8	440
22	BK-02761-00821	Csk.St. Monobolt 6,4	48
23	BK-02771-00613	Bk.St. Monobolt 4,8	210
24	BK-02771-00824	Bk.St. Monobolt 6,4	240

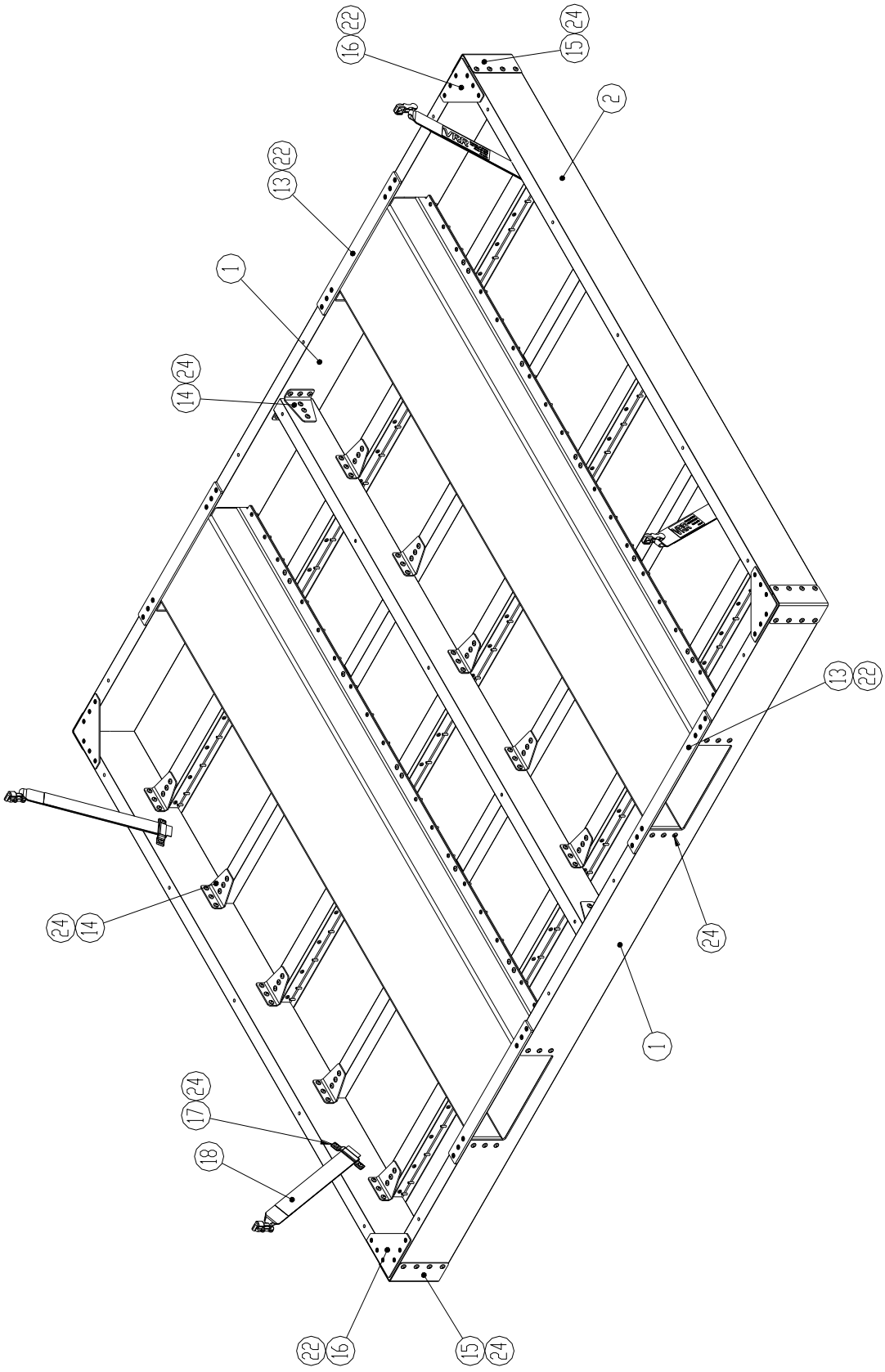
SHELF

P/N 2000-05-0438

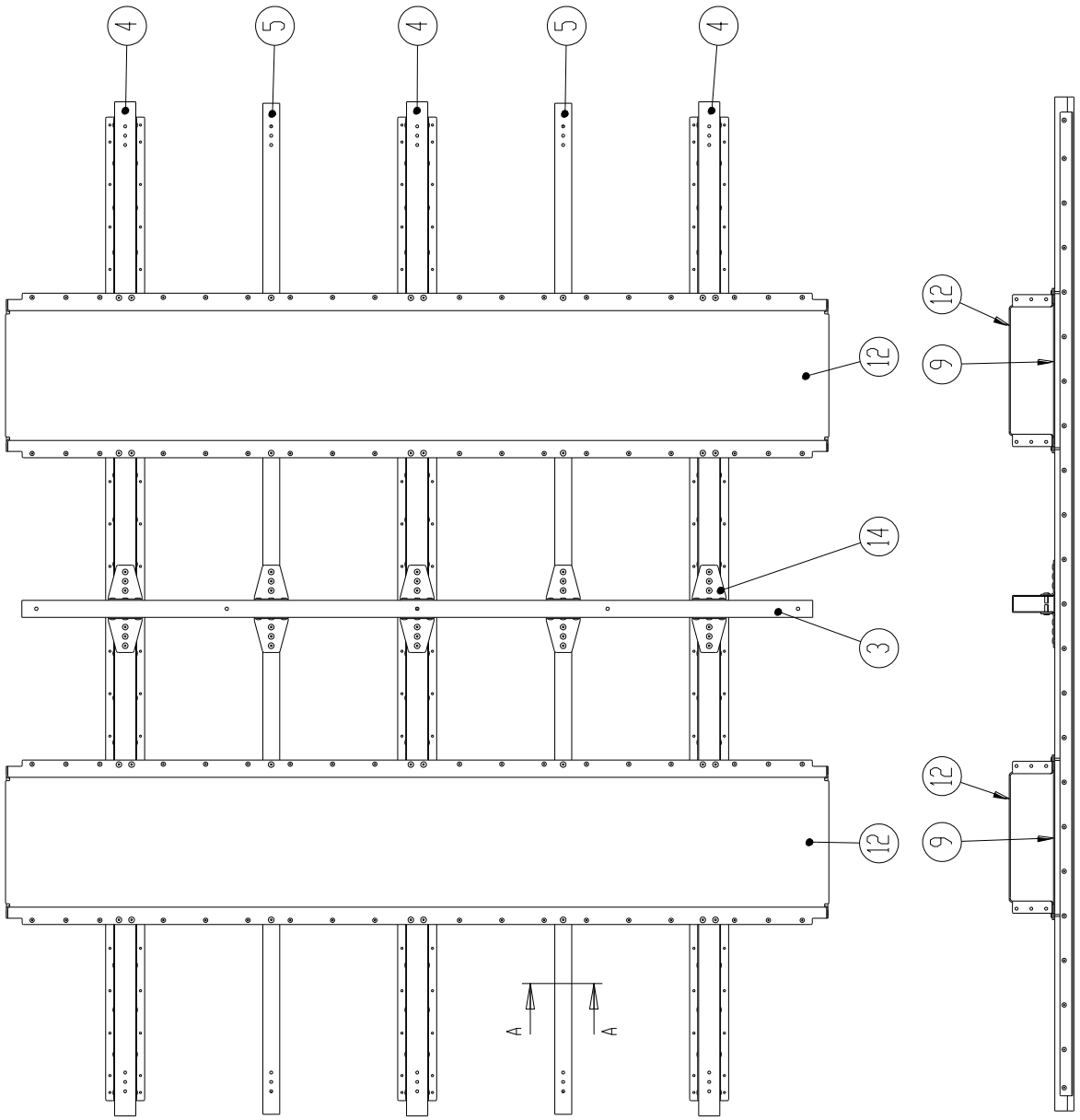


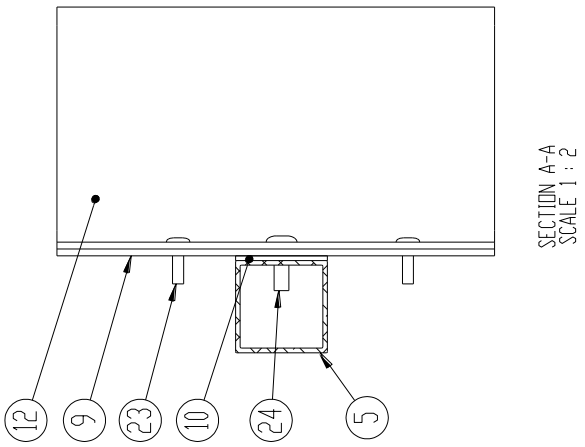
SHELF

P/N 2000-05-0438



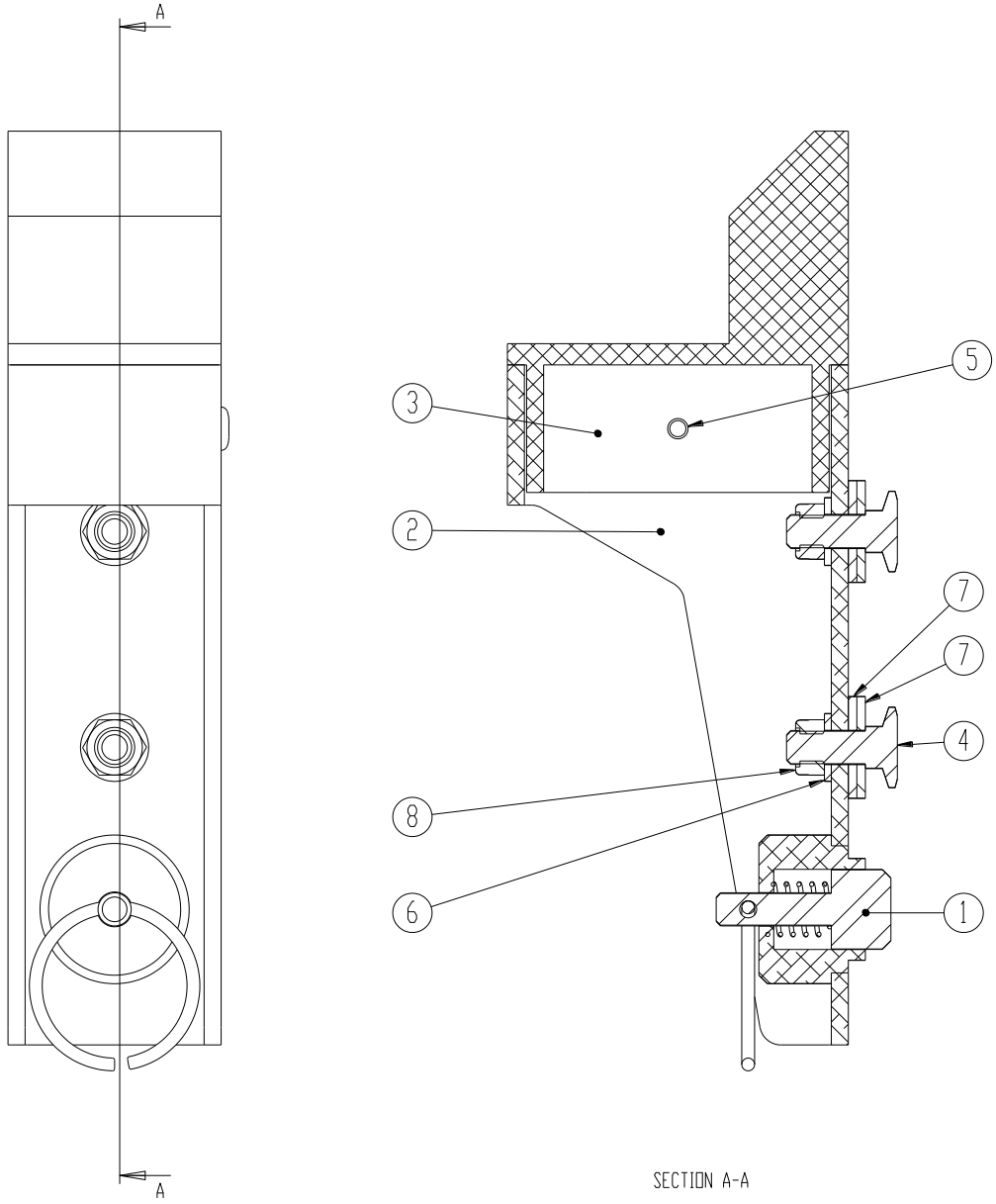
SHELF
P/N 2000-05-0438





PANEL BRACKET
P/N 2000-04-8893

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-01-6016	Plunger-Assy	1
2	2000-05-2033	Tube 80x50x4	1
3	2000-04-8902	Support insert 80x50	1
4	2000-01-5988	Stud M8	2
5	BK-02771-00617	Bk.St. Monobolt 4,8	1
6	BO-7089-08-A2	Plain Washer Normal	2
7	BO-7093-08-A2	Plain Washer Large	4
8	BO-10511-08-A2	Nyloc Hex Nut	2



SECTION A-A

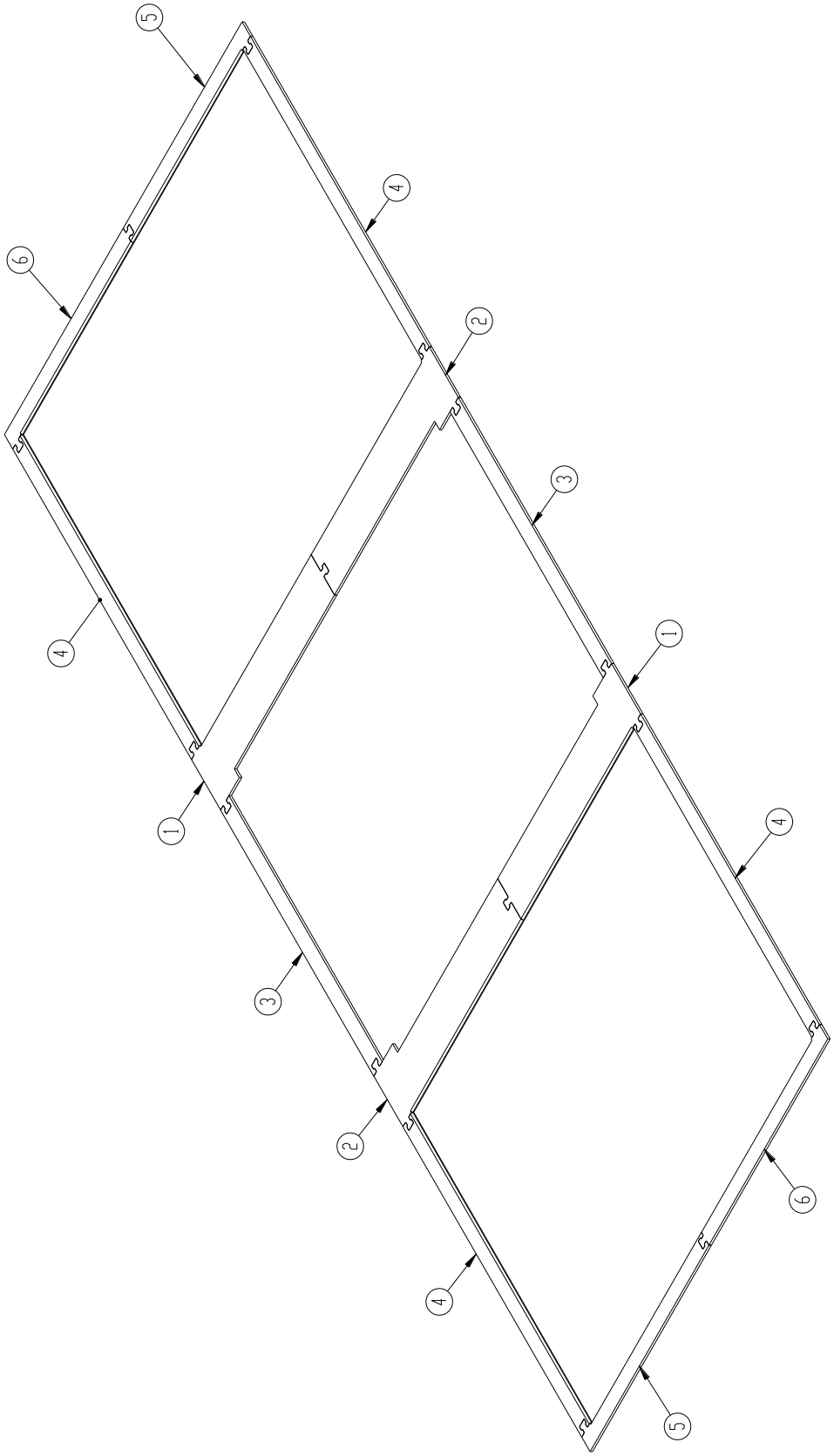
CONTOUR GUIDANCE PIECES

P/N 2000-07-2664

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-07-2652	Contour guidance piece	2
2	2000-07-2668	Contour guidance piece	2
3	2000-07-2669	Contour guidance piece	2
4	2000-07-2671	Contour guidance piece	4
5	2000-07-2672	Contour guidance piece	2
6	2000-07-2673	Contour guidance piece	2

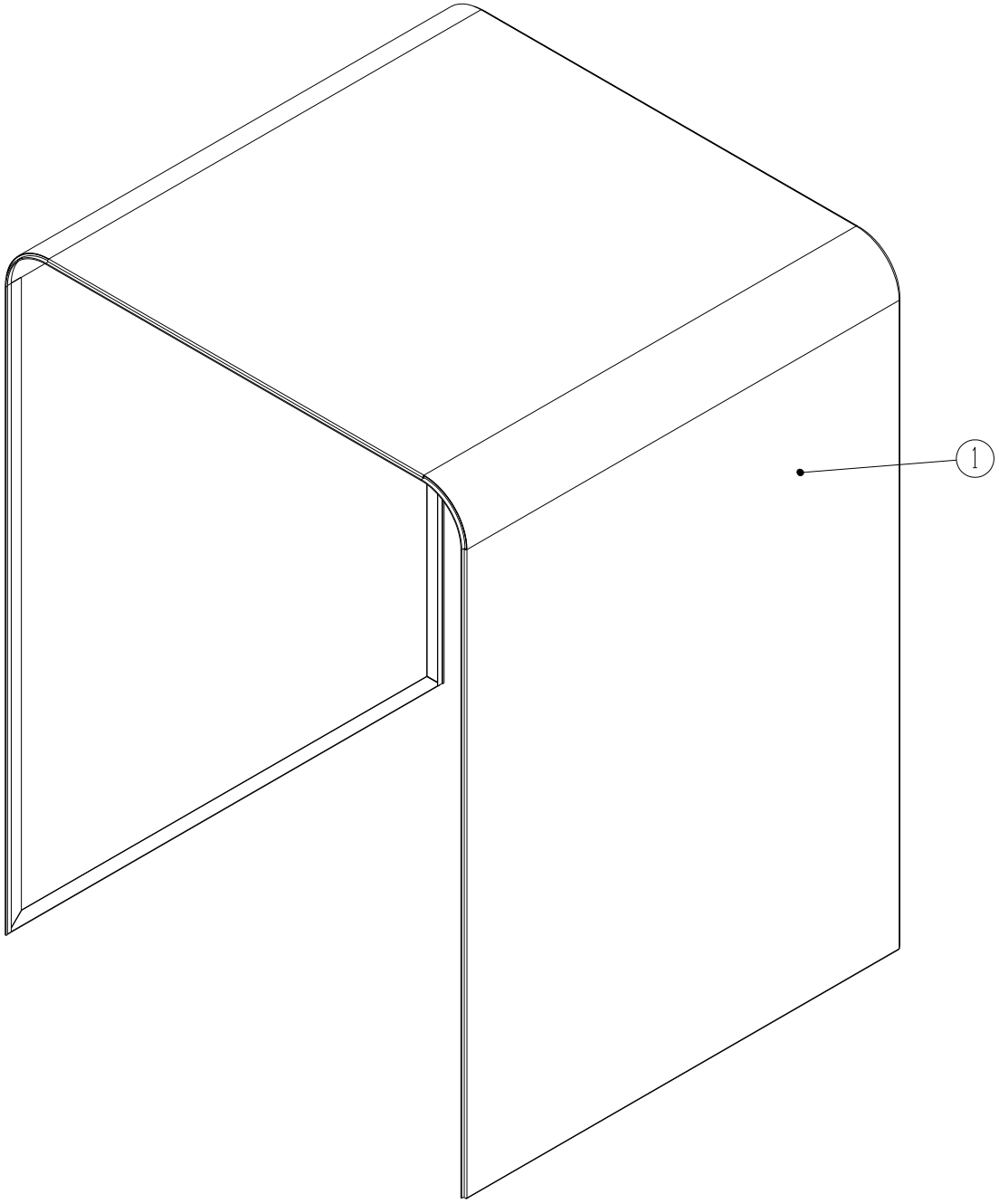
CONTOUR GUIDANCE PIECES

P/N 2000-07-2664



TUNNEL
P/N 2000-05-1667

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2000-05-1667	Tunnel	1



STATEMENT OF CONFIRMATION

On behalf of (name of firm or organization):_____, I hereby attest and confirm that:

a) The firm/organization possesses the legal status and capacity to enter into legally binding contracts with the Commission for the supply of equipment, supplies, services or work.

b) The firm/organization is not insolvent, in receivership, bankrupt or being wound up, and not under administration by a court or a judicial officer, and that it is not subject to the suspension of its business or legal proceedings for any of the foregoing reasons.

c) The firm/organization has fulfilled all its obligations to pay taxes and social security contributions.

d) The firm/organization has not, and that its directors and officers have not, within the last five years been convicted of any criminal offense related to professional conduct or the making of false statements or misrepresentations as to their capacity or qualifications to enter into a procurement or supply contract.

e) The Commission, in the event that any of the foregoing should occur at a later time, will be duly informed thereof, and in any event, will have the right to disqualify the firm/organization from any further participation in procurement proceedings.

f) The firm/organization did not/will not attempt to influence any other bidder, organization, partnership or corporation to either submit or not submit a proposal/bid/quotation.

g) The firm/organization will not, in the absence of a written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Quotation/Bid/ Proposal or the procurement process if the person:

   a. at any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
   b. at any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.

h) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) have been identified on, or associated with any individual, groups, undertakings and entities identified on, the list established pursuant to the UN Security Council Resolution 1267 (Consolidated Sanctions List).[1]

i) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) are subject to any form of sanction imposed by an organization or body within the United Nations System, including the World Bank.

[1] The Consolidated United Nations Security Council Sanctions List can be found on the following website: **https://www.un.org/securitycouncil/content/un-sc-consolidated-list**

j) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any), is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

k) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) will use the funds received under contracts/purchase orders with the Commission to provide support to individuals, groups, undertakings or entities associated with terrorism.

l) The prices in the firm/organization's proposal/bid/quotation have been arrived at independently, without consultation, communication or agreement with any other interested companies, competitor or potential competitor with a view to restricting competition.

m) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings, if it offers, gives or agrees to give, directly or indirectly, to any current or former staff member of the Commission a gratuity in any form, an offer of employment or any other thing of service or value, as an inducement with respect to an act or a decision of, or a procedure followed by, the Commission in connection with a procurement proceeding.

n) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings if it does not disclose to the Commission any situation that may appear as a conflict of interest, and if it does not disclose to the Commission if any official or professional under contract with the Commission have an interest of any kind in the firm/organization's business or any kind of economic ties with the firm/organization.

o) The firm/organization expressly agrees to abide by the United Nations Supplier Code of Conduct.[1]

Name (print):_____ Signature: _____

Title/Position: _____

Place (City and Country):_____ Date: _____

[1] https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct

VENDOR PROFILE FORM (VPF) – FOR PRODUCTS/SERVICES/WORK

1. Name of Company:	
2. Street Address:	3. Telephone:
P.O. Box: City:	4. E-Mail:
Zip Code: Country:	5. Website:
6. Contact Person:	Title:
7. Legal Status (e.g. Partnership, Private Limited Company, Government Institution) PLEASE INCLUDE A COPY OF THE CERTIFICATE OF INCORPORATION	
8. Year Established:	9. Number of Employees:
10. Gross Corporate Annual Turnover (US$m)*:	11. Annual Export Turnover (US$m)*:
12. Type of Business/Products: Manufacturer ☐ Sole Agent ☐ Supplier ☐ Other ☐ (please explain)	
13. Type of Business/Services/Work: Engineering ☐ Civil Work ☐ Governmental Institution ☐ Other ☐ (please explain)	
14. References (your main customers, country, year and technical field of products, services or work): **	
15. Previous Supply Contracts with United Nations Organizations (over the last 3 years)**	
Organization: Value in US$ Equivalent: Year:	
Organization: Value in US$ Equivalent: Year:	
16. Summary of any changes in your company's ownership during the last 5 years:	

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
** Please provide supplementary documentation on these items.

17. List of Products/Services/Work offered:

Product/Service/Work #	Product/Service/Work Description

18. This section shall be **signed and stamped** by an official legally authorized to enter into contracts on behalf of your organization:

Name: Title: Signature: Date:

Bank Details	**Beneficiary Details**
Bank Name: Bank Address: Exact Account Holder Name:	Beneficiary Name: (exactly as stated on bank statements) IBAN: (if applicable) Account number: SWIFT/BIC: ABA/Sort Code:

Additional Details (if applicable)

Correspondent bank:

Correspondent account number:

Correspondent SWIFT/BIC:

Tax Identification Number:

FOR CTBTO USE ONLY		
Evaluated By:	Initials	Date:
Updated By:	Initials	Date:
Remarks:		

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
** Please provide supplementary documentation on these items.