



ALLGEMEINES BAUAUFSICHTLICHES PRÜFZEUGNIS (ABP)

EASY ALU

TOP MONTAGE

MOD.9026/9027

FASCIA MONTAGE

MOD.9028

Labor für Stahl- und Leichtmetallbau GmbH

Management: Prof. Dr. - Ing. Ö. Bucak
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Bay 27

General building-authority test certificate

Test certificate number: P-2019-3067

Object: linearly mounted compound safety glazing

Intended purpose: Barrier according to DIN 18008-4
Administrative instructions Technical Building
Regulations for Nordrhein-Westfalen (VV TB
NRW) Version 2019/01
Type of construction acc. to C 4.12

Barrier category: C1

System: EASY ALU

Applicant: Q-railing Europe GmbH & Co. KG
Marie-Curie-Straße 8 - 14
46446 Emmerich am Rhein

Date of issue: 27.08.2019

Valid until: 26.08.2024

This general building-authority certificate conforms that the object named above can be used in accordance with the State Building Code.

The general building-authority test certificate consists of 7 pages and 10 appendices.



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I. General regulations

1. The general building-authority test certificate does not replace the permits, approvals and certificates legally required for construction projects.
2. The general building-authority test certificate is issued without affect the rights, especially private property rights, of third parties.
3. Regardless of additional regulations under "Special regulations", the manufacturer of the design must provide the user of the construction with copies of the general building-authority test certificate and point out that the general building-authority test certificate must be available at the location of use. Upon request, the authorities involved must be provided with copies of the general building-authority test certificate.
4. The general building-authority test certificate must only be reproduced in its unshortened version. Publication in parts requires the approval of the Labor für Stahl- und Leichtmetallbau GmbH. Texts and drawings of advertising must not contradict the general building-authority test certificate. Translations of the general building-authority test certificate must contain the note "This translation of the German original version was not reviewed by the Labor für Stahl- und Leichtmetallbau GmbH".

II. Special regulations

1 Object and scope of application

1.1 Object

The object of the general building-authority test certificate are the glass barriers EASY ALU according administrative instructions Technical Building Regulations for Nordrhein-Westfalen (VV TB NRW) Version 2019/01.

1.2 Scope of application

The object named above is used in accordance with DIN 18008-4, Additional requirements for barrier glazing according to **Category C1**.

2 Requirements for the design

2.1 Description of the construction

2.1.1 Mounting

The railing system EASY ALU consists of posts made of aluminium rectangular profiles (see annex 1). These posts are either ground-mounted or front-mounted. For ground



mounting, the posts are bolted to floor plates (see appendix 2, 9 and 10). For the front-side mounting, the post profiles are applied into angle profiles and mounted (see appendix 3, 7 and 8).

The glass bearing is done on the horizontal edges of glass linearly in aluminium profiles (see appendix 4 and 5). The metal-glass contact is prevented by EPDM profiles. In cases where the glass pane reach the upper edge, the glass pane is fixed over the handrail profile (see Appendix 4). The metal-glass contact is achieved by inserting a profile rubber (see appendix 6).

In addition to the glass fillings, other bar profiles can also be installed. The glasses may be fixed by a combination of handrail profile (appendix 4) and standard profile (appendix 5) or only with standard profiles. In Appendix 7 to 10 these variants are shown.

2.1.2 Glazing

The following glass constructions can be used:

tempered glass (ESG)		4,00 mm
PVB interlayer	mind.	0,76 mm
tempered glass (ESG)		4,00 mm
total glass thickness		8,8 mm

Only glass products in accordance with DIN 18008-4 may be used. The glass and film thicknesses listed above may be exceeded or heat soaked glass may be used.

All glass constructions with intermediate layers with an appropriate general building-authority certificate may be used as laminated sheet glass.

2.2 Test procedure to be used

The test of the barrier function of the glazing was done according to Appendix A of DIN 18008-4. The bearing capacity under impact loading was tested for the standard dimensions of the described glazing using the pendulum impact test. The test results are documented in test report 2019-3071.

2.3 Use, maintenance and service

The construction must be mounted and secured using suitable measures in such a way that it meets the specified requirements as barrier permanently. The proof of secure anchoring of the glazing construction at the building must follow the applicable technical building regulations.



3 Validity and specifications for dimensioning

3.1 Area of application

The general building-authority test certificate is valid for the design described in section 2. The glazing has a barrier function according to category C1. The admissible dimensions are shown in table 1.

Tabelle 1: dimensions

width w [mm]		height h [mm]	
min	max	min	max
500	1500	560	1040

3.2 Dimensions

For the application, a calculated proof of bearing capacity under static load according to DIN 18008-4, section 6.1 must be provided for the glazing and mounting constructions.

4 Declaration of conformity

4.1 General

The design described in this general building-authority test certificate requires a declaration of conformity by the user (contractor) in accordance with Building Regulations List A part 3. In this document, the contractor declares for the client that the described design complies with this general building-authority test certificate in all details.

4.2 Production control

A production control must be set up and conducted at every location of application of the design. The production control is understood to be the continuous monitoring of the production by the contractor, with which he ensures that the design produced by him complies with the regulations of this general building-authority test certificate.

The production control must contain the description and test of the raw materials and components.

The results of the production control must be recorded and analysed. The records must contain at least the following information:

- Name of the design with a description of its components
- Date of manufacture and test of the design



- Results of the test and comparison with the requirements
- Signature of the person responsible for production control

The records must be kept for a minimum of five years and submitted to the supreme building authority in charge upon request.

5 Associated regulations

The provisions of DIN 18008-4, Additional requirements for barrier glazing, must be considered for the descriptions. Furthermore, the following standards and information sheets in their current version are referenced:

- [a] Building code for Land Nordrhein-Westfalen (BauO NRW) Fassung 2018/07
- [b] Administrative instructions Technical Building Regulations for Nordrhein-Westfalen (VV TB NRW) Version 2019/01
- [c] DIN EN 14449; Glass in building - Laminated glass and laminated safety glass
- [d] DIN 572, Part 1-2; Glass in building - Basic soda lime silicate glass products
- [e] DIN 12150, Part 1; Glass in building - Thermally toughened soda lime silicate safety glass
- [f] DIN EN 1863, Part 1; Glass in building - Heat strengthened soda lime silicate glass
- [g] DIN 18545, Part 1; Sealing of glazing with sealants
- [h] DIN 18545, Part 2; Sealing of glazing with sealants
- [i] DIN 18008, Part 1-2; Glass in Building - Design and construction rules
- [j] Test report 2019-3071; impact test according to DIN 18008-4; Labor für Stahl und Leichtmetallbau GmbH



III. Legal basis

This general building-authority test certificate was issued based on § 22 of the building code for Land Nordrhein-Westfalen (BauO NRW) Fassung 2018/07.

IV. Instruction on right to appeal

This general building-authority test certificate can be appealed within one month after issue. The appeal must be submitted in writing or for recording at the Labor für Stahl- und Leichtmetallbau GmbH.

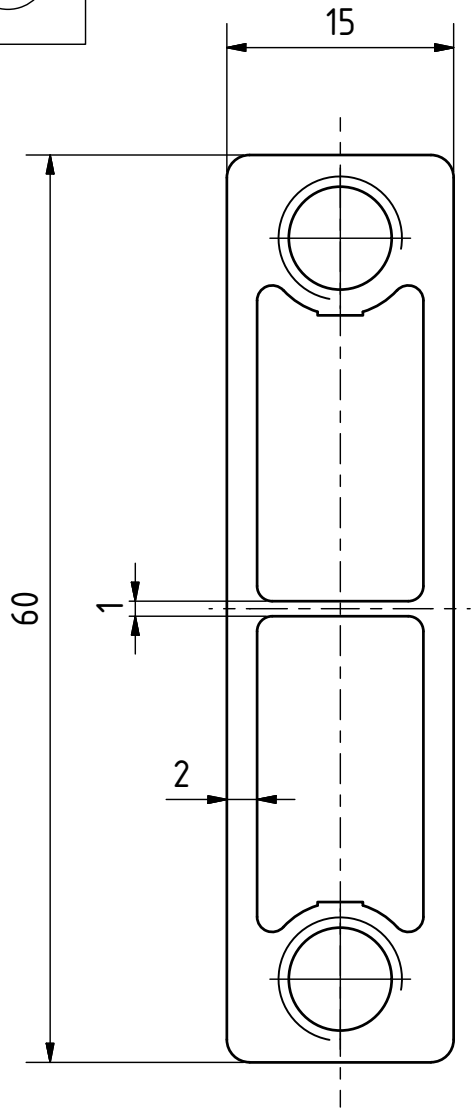
Munich, 24.10.2018

For management and administration

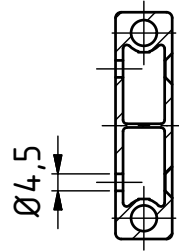


Dipl.-Ing. (FH) A. Lorenz

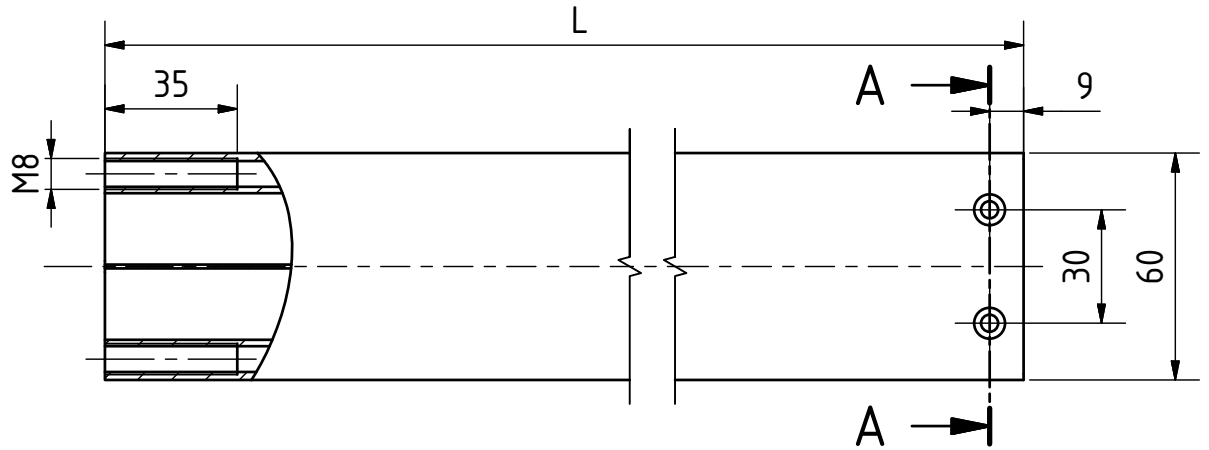
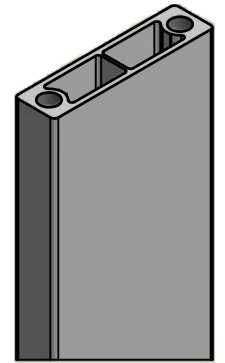
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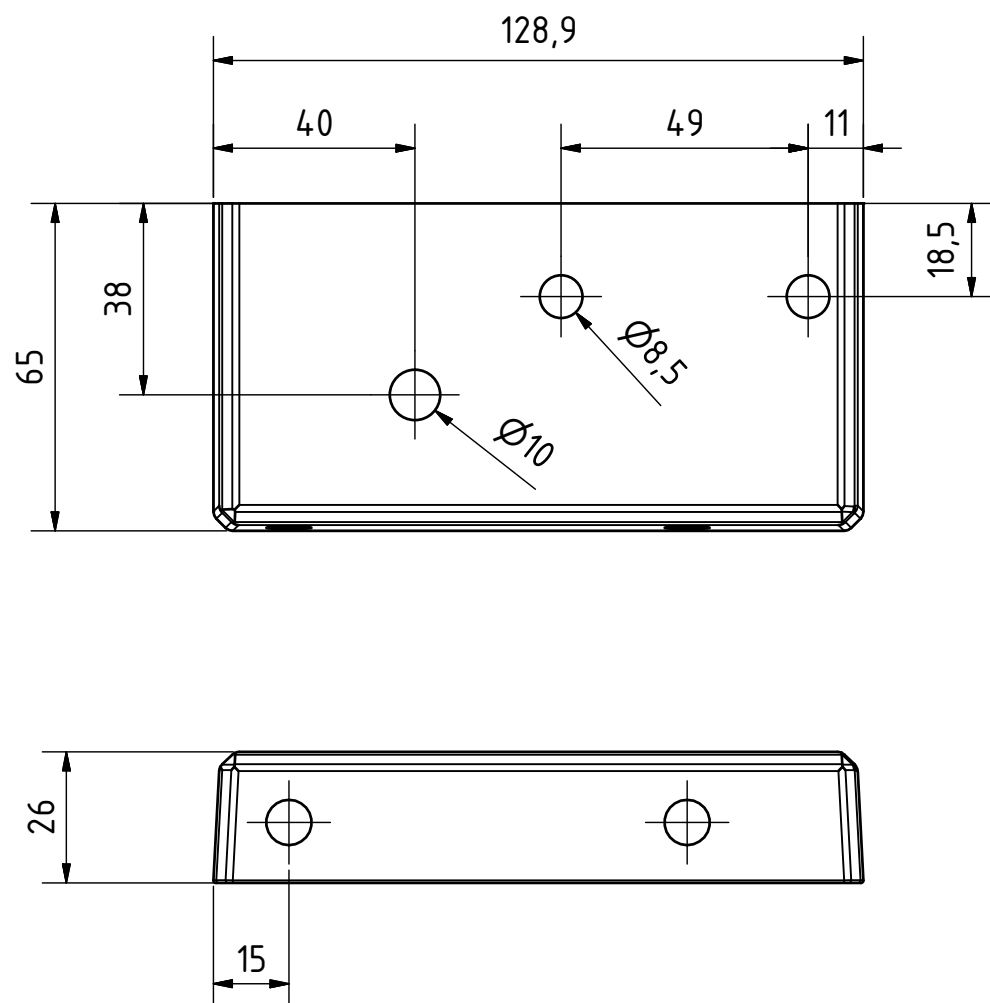
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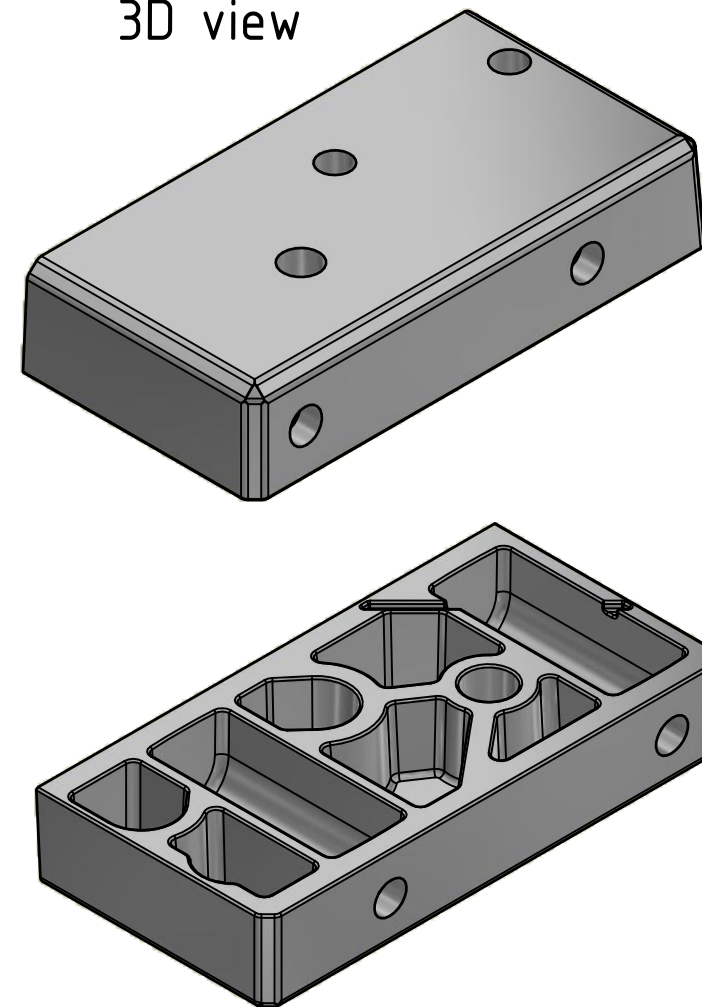
annex 1 3D view



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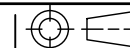


3D view



Q-railing

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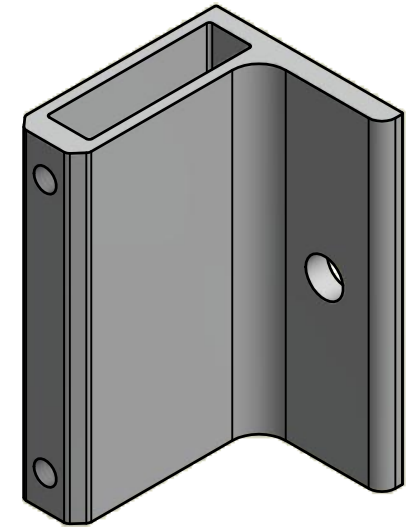
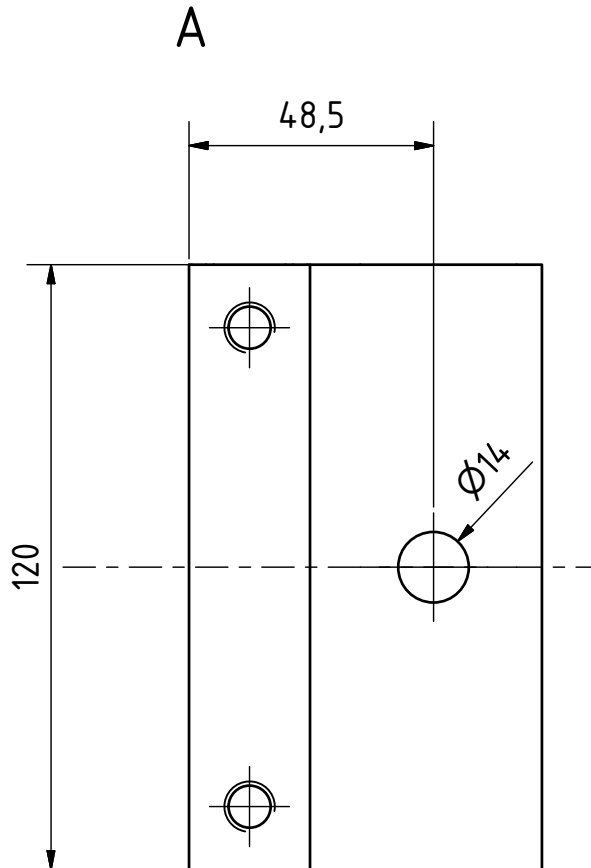
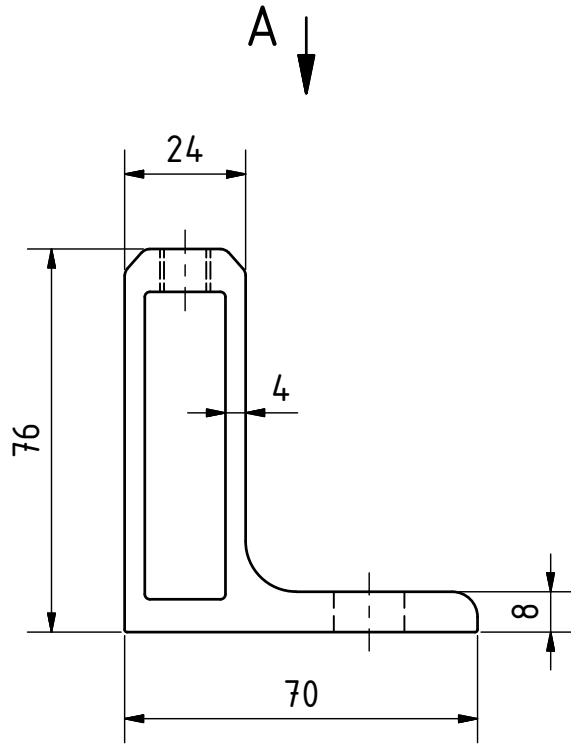
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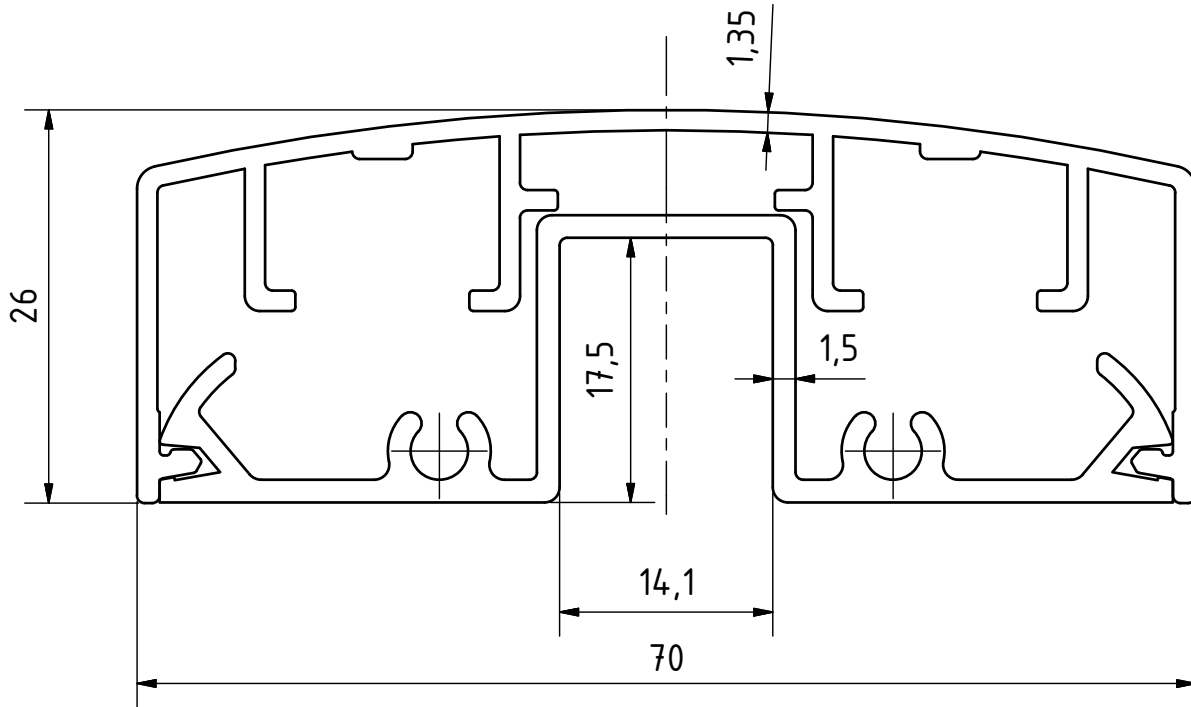
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annex 3

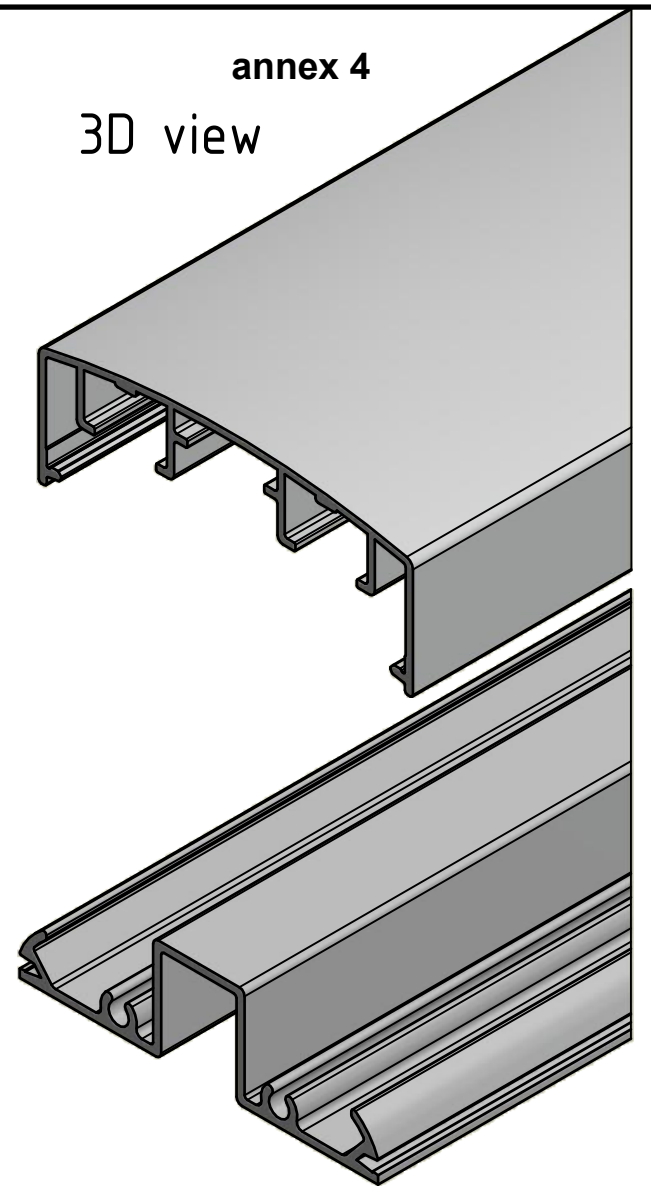


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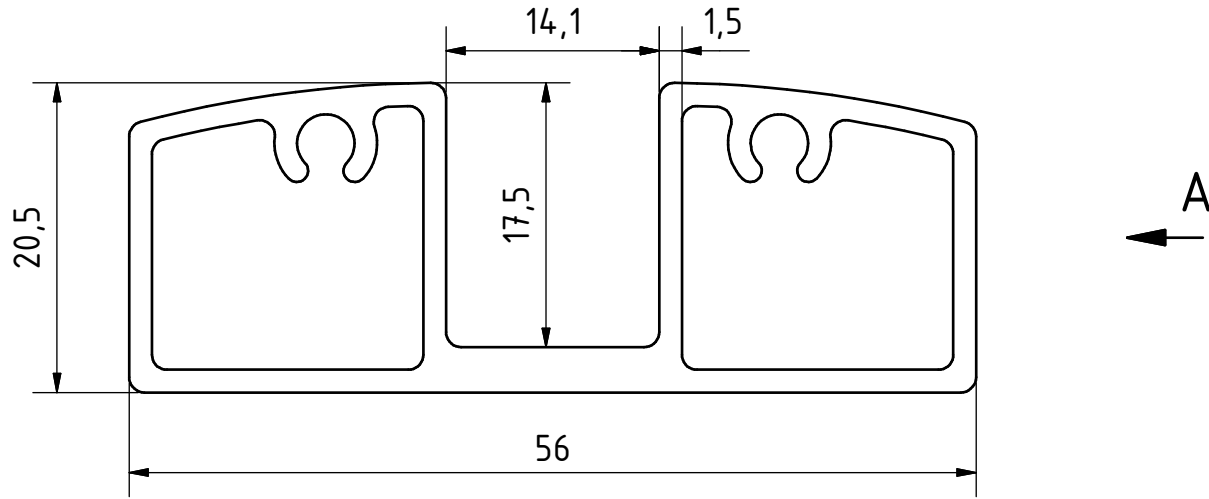
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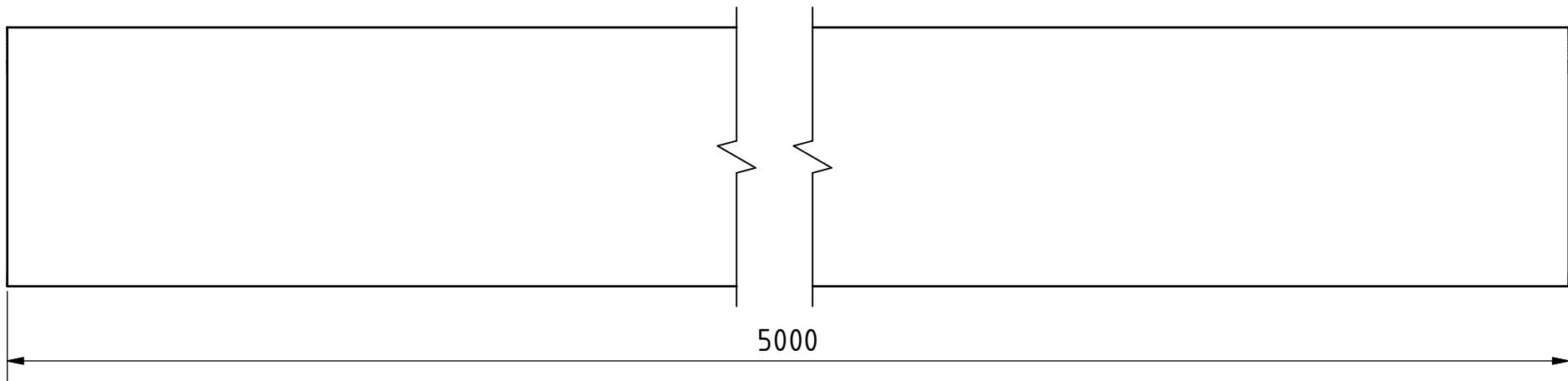
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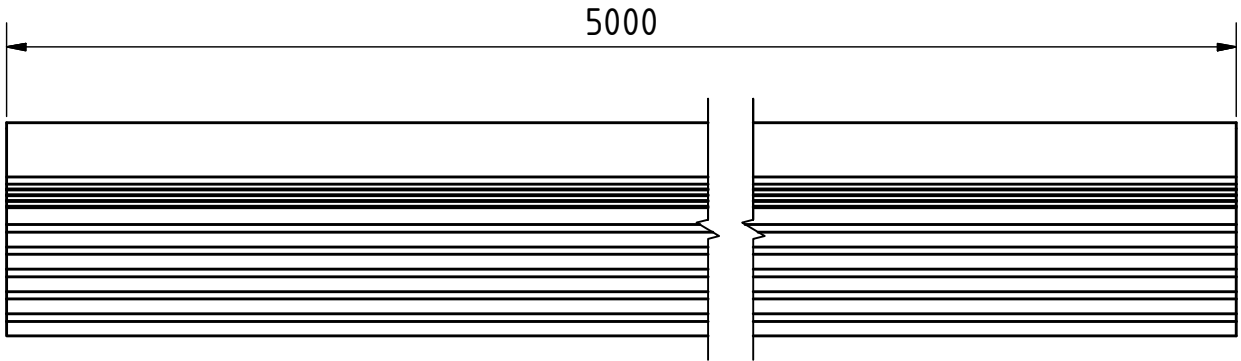
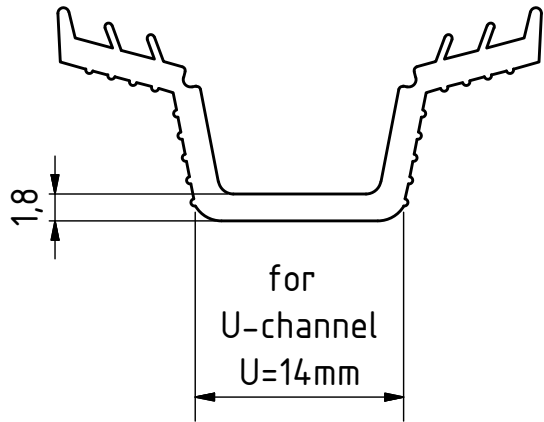


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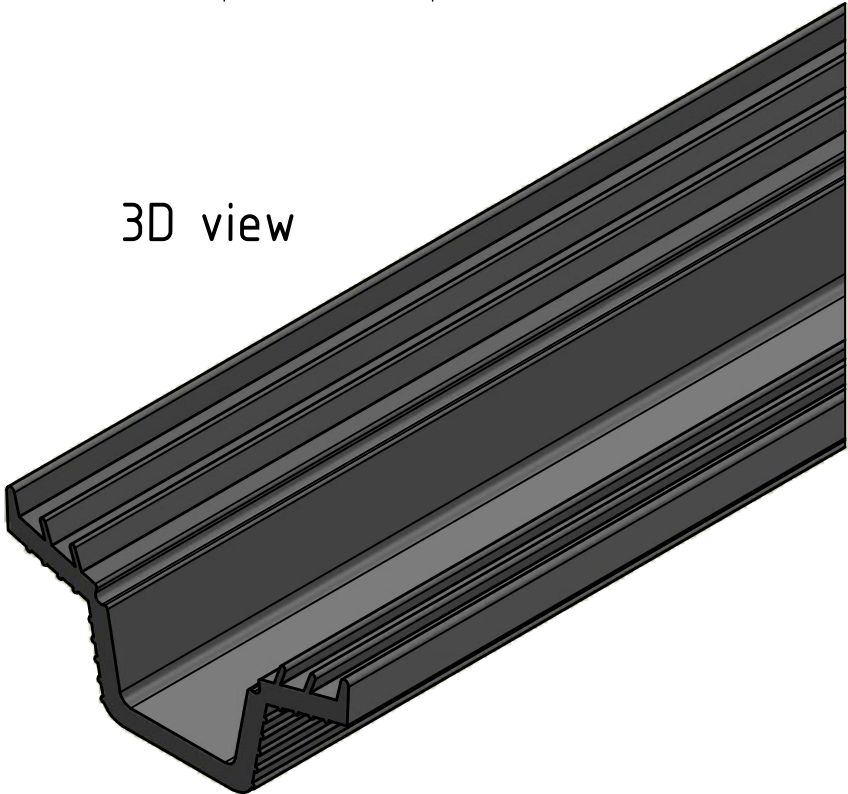


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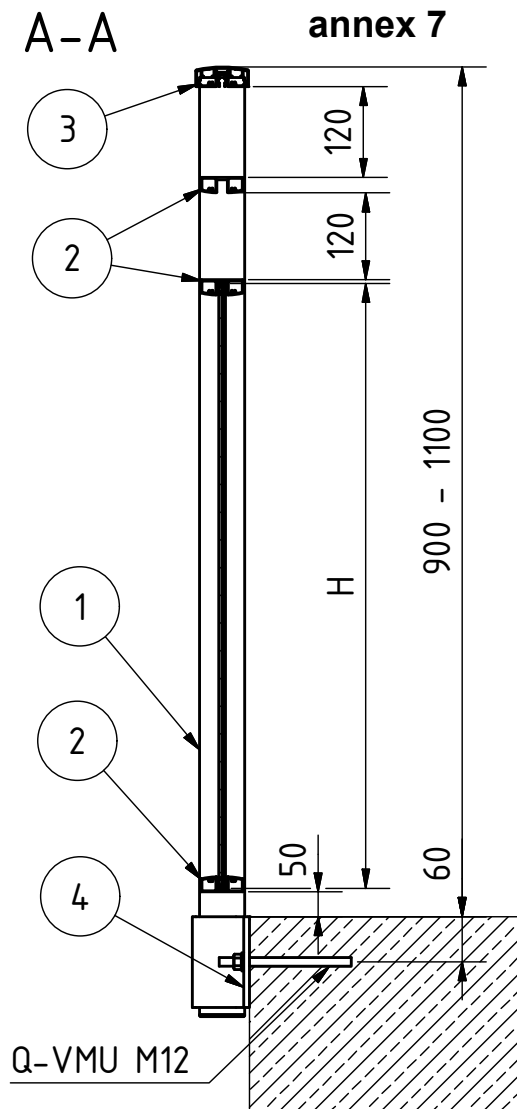
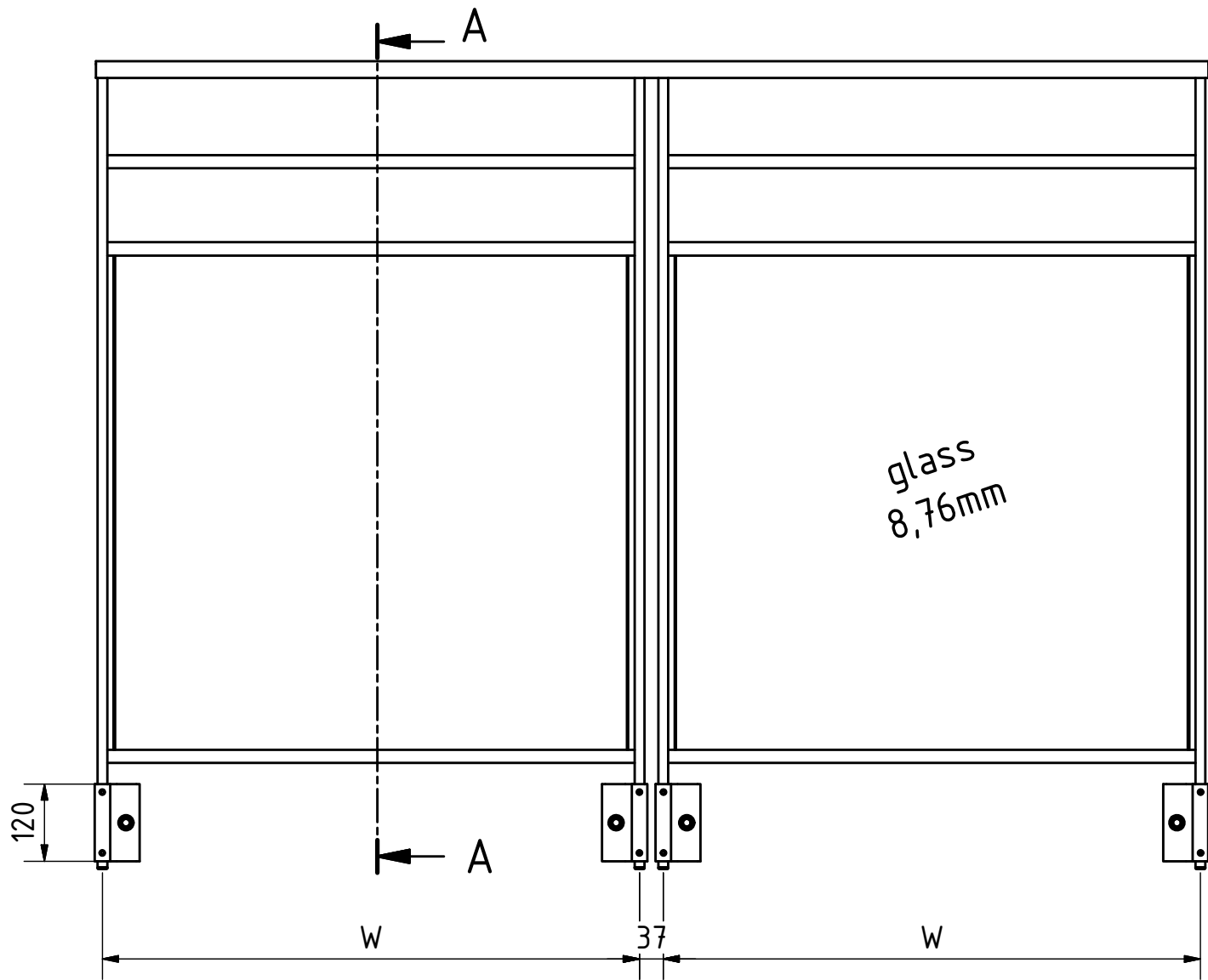
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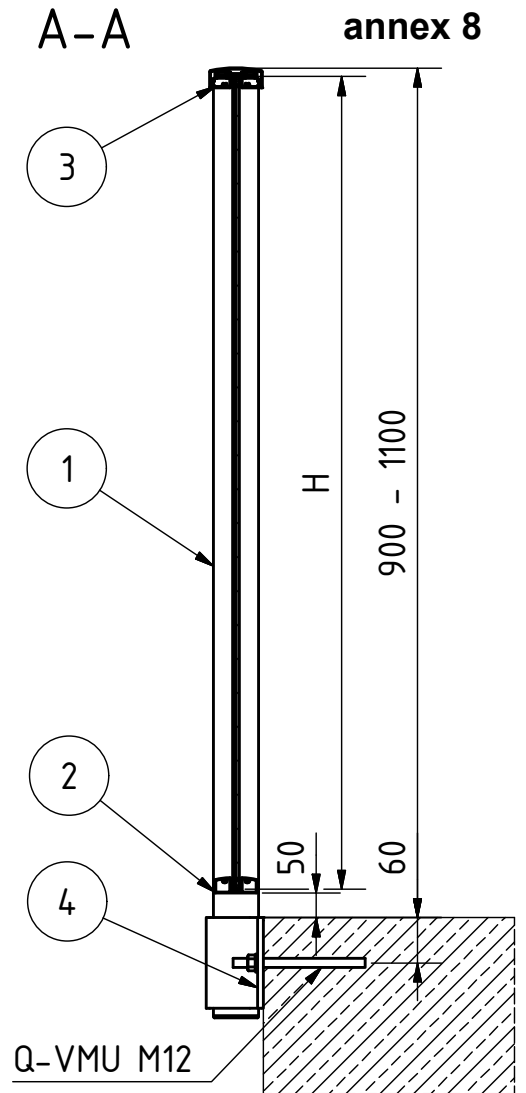
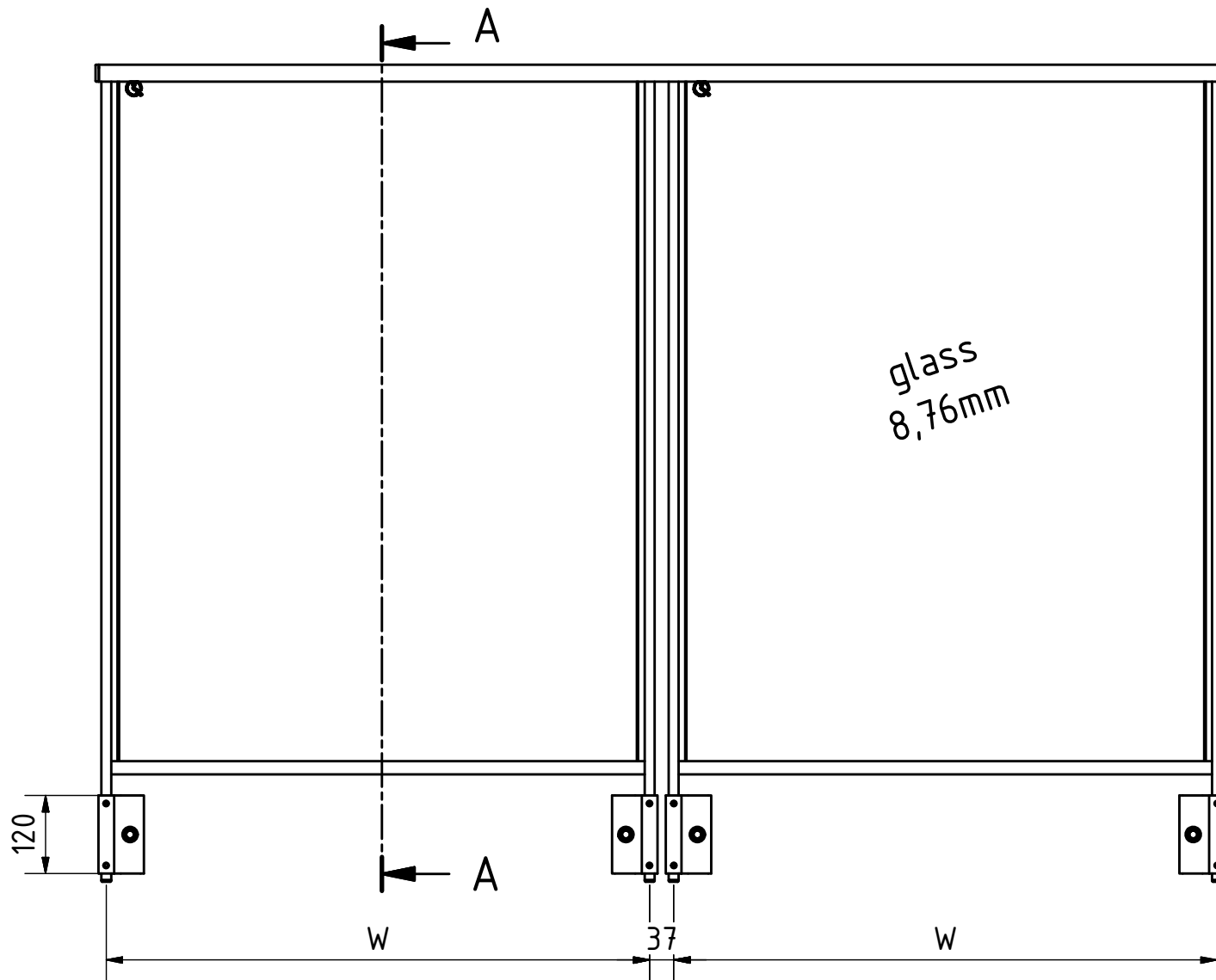
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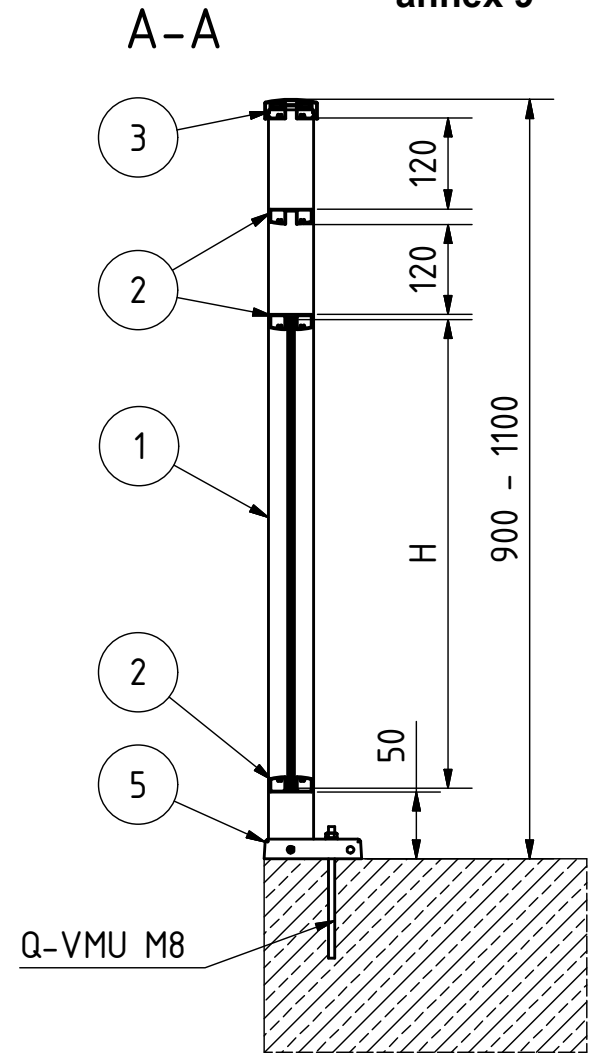
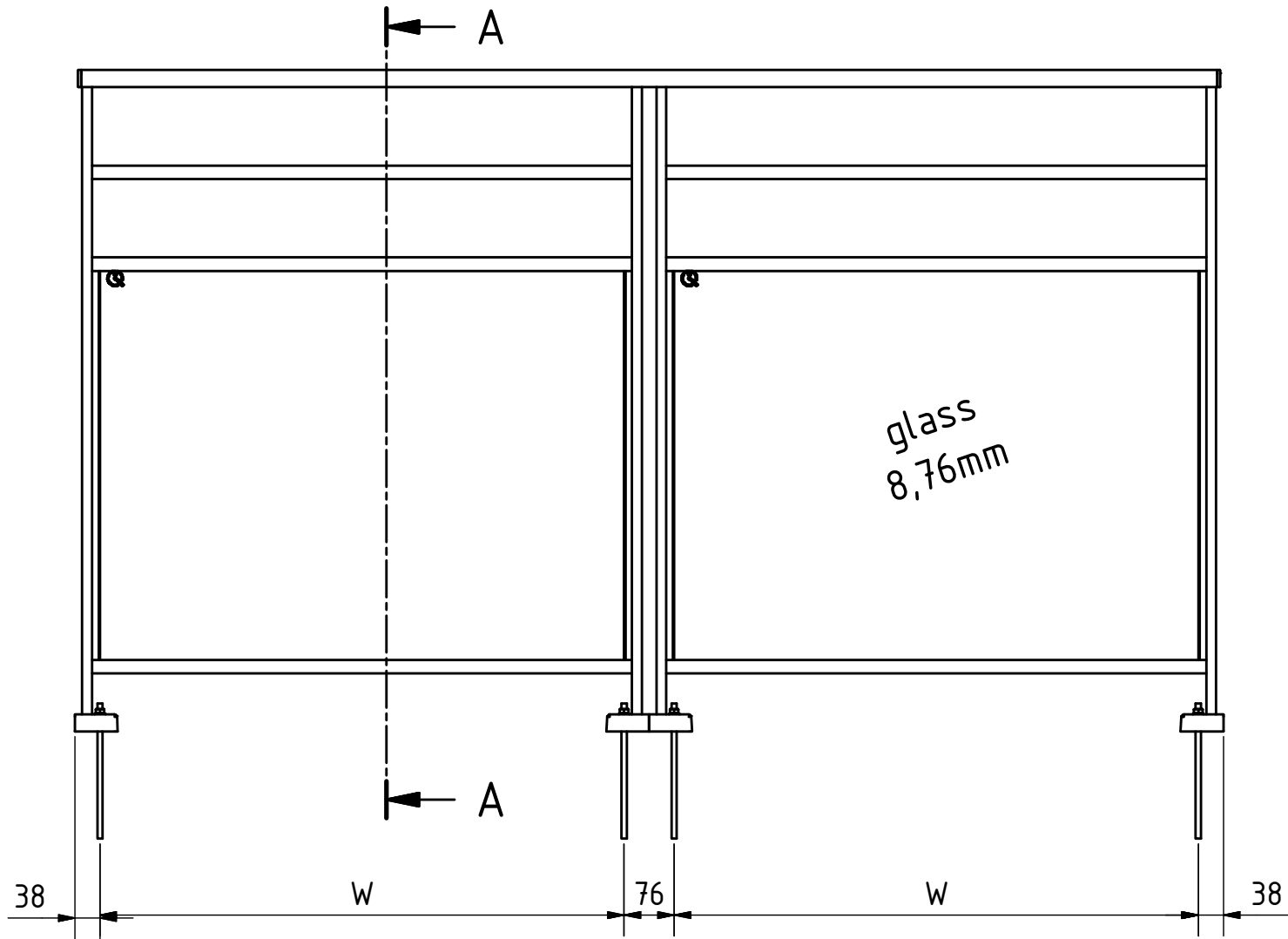
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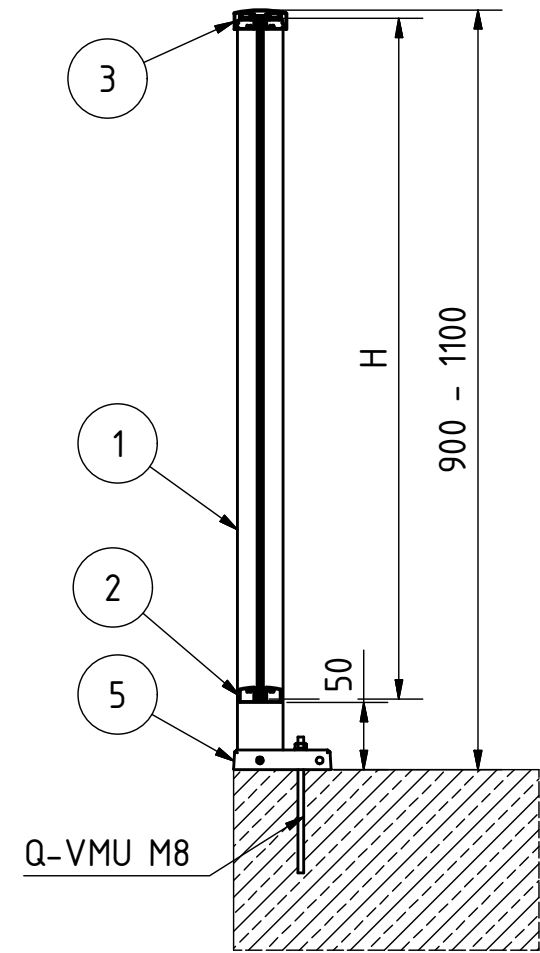
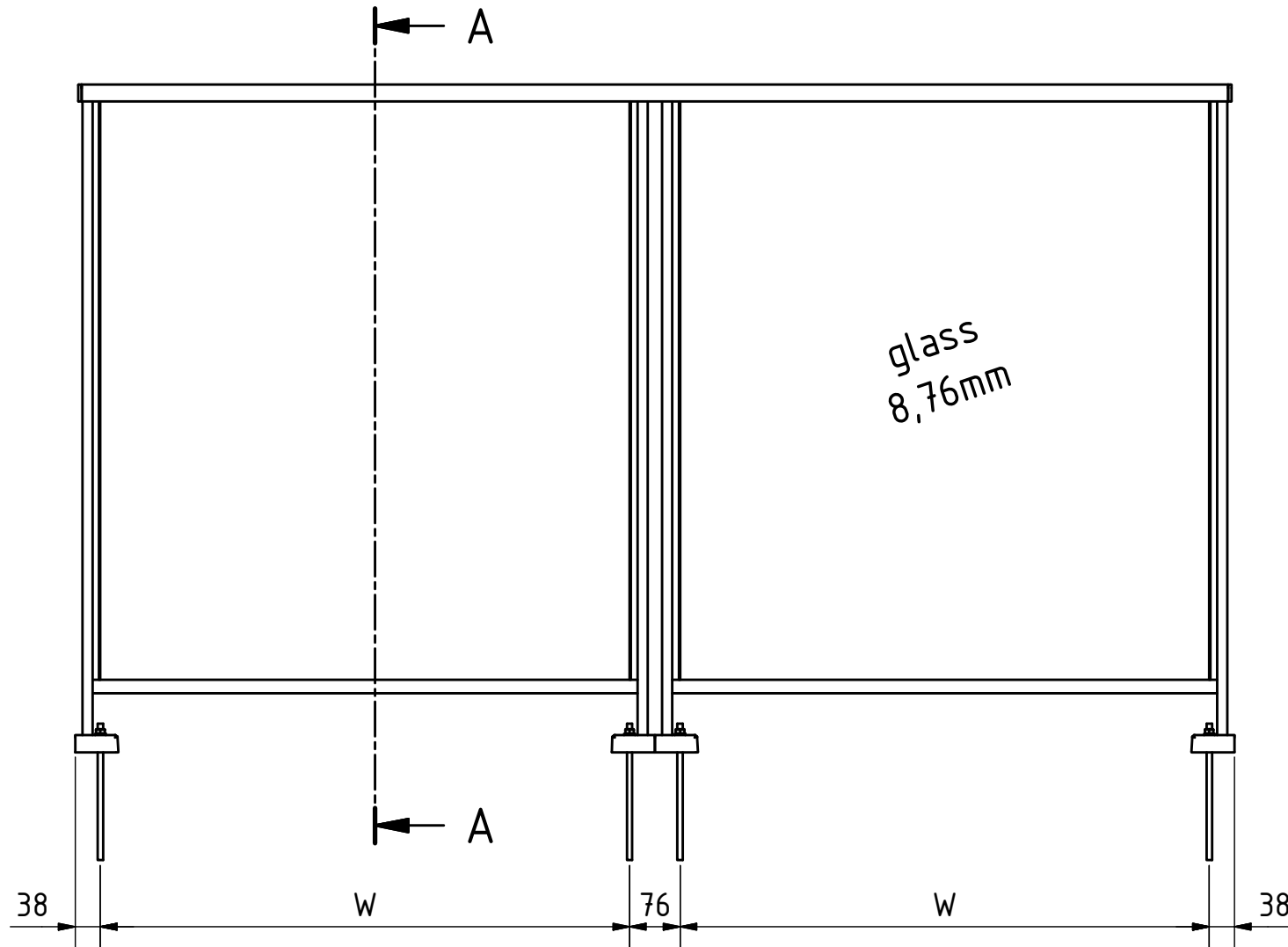


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GOOD LUCK WITH
YOUR INSTALLATION!

VIEL ERFOLG MIT
IHRER MONTAGE!

SUCCES MET
DE INSTALLATIE!