

---

# Labor für Stahl- und Leichtmetallbau GmbH

Management: Prof. Dr. - Ing. Ö. Bucak  
at University of Munich  
Faculty 02 Structural engineering / Steel construction

Römerstraße 23, 86438 Kissing  
Tel.: 0049 08233 24699 52 - 2611; E-mail: info@laborsl.de



Bay 27

---

## General building-authority test certificate

**Test certificate number:** P-2022-3006

**Object:** linearly mounted safety glazing

**Systems:** CRL VISION

**Intended purpose:** Barrier according to DIN 18008-4  
Administrative instructions Technical Building  
Regulations (VwV TB) Baden Württemberg Issue  
2017/12  
Type of construction acc. to C 4.12

**Barrier category:** B

**Applicant:** C.R. Laurence of Europe GmbH  
Boschstraße 7  
74360 Ilsfeld

**Date of issue:** 24.02.2022

**Valid until:** 23.02.2027

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 6 pages and 4 annex.



I. General regulations .....3

II. Special regulations.....3

1 Object and scope of application.....3

    1.1 Object .....3

    1.2 Scope of application.....3

2 Requirements for the design.....3

    2.1 Description of the construction.....3

    2.2 Test procedure to be used .....4

    2.3 Use, maintenance and service .....4

3 Validity and specifications for dimensioning.....5

    3.1 Area of application .....5

    3.2 Dimensions .....5

4 Declaration of conformity.....5

5 Associated regulations .....5

III. Legal basis.....6

IV. Instruction on right to appeal.....6



## 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 glass barriers according to administrative instructions Technical Building Regulations (VV TB BIn) Version 2018/04.

#### 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 B**.

### 2 Requirements for the design

#### 2.1 Description of the construction

##### 2.1.1 Mounting

##### Lower linear support

The glass panes are placed in U-shaped Aluminum profiles. The allowed profiles are shown in the drawings in annex 1 to 4. The clamping depth of the glass panes is about 100 mm. The clamping of the glass pane is obtained by setting the glass in plastic brackets. With the bracket on the inner side the glass is finally fixed with screws. Two brackets are used for a glass width of up to 800 mm.



From a glass width of more than 800 the brackets are placed with a maximum separation of 350 mm. The load-bearing capacity of the steel substructure under static loads must be proven by submitting the appropriate certificates.

#### Load-bearing handrail

The upper edges of the panes must be connected with each other by a continuous handrail. In addition to the protection of the upper glass edge, the handrail must ensure that the planned capping load is carried safely at capping height even in case of a failure of one balustrade element.

#### 2.1.2 Glazing

The following glass setups can be used:

Glass built up 1:

fully tempered glass	8,00 mm
Polyvinylbutyral-film (PVB-film)	0,76 mm
fully tempered glass	8,00 mm
<b>overall thickness</b>	<b>16,8 mm</b>

Glass built up 2:

fully tempered glass	10,00 mm
Polyvinylbutyral-film (PVB-film)	0,76 mm
fully tempered glass	10,00 mm
<b>overall thickness</b>	<b>20,8 mm</b>

Only glass products in accordance with DIN 18008-4 may be used. The glass and film thicknesses listed above may be exceeded. The fully tempered glass can be according to EN 12150 or 14179.

All glass constructions with intermediate layers with an appropriate general building-authority certificate may be used as laminated sheet glass. The above mentioned glass- and interlayer thickness may be exceeded.

## **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 2020-3060.

## **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. The



design must be regularly cleaned and serviced to maintain its function. The condition of the construction must be checked at regular intervals. Damaged parts must be replaced immediately. Only parts that correspond to this test certificate may be used for replacement.

### 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 B. The admissible dimensions are shown in table 1 and 2. Both glass fixing systems 9900 and 9900S can be used.

**Tabelle 1:** dimensions

Glass built up	Width w [mm]		Glass height h [mm]	
	min	max	Min	max
1 – 2x8 mm	500	optional	500	1297
2 – 2x10 mm	500	optional	500	1472

The pane structure must correspond to the pane structure stated in section 2.1.2.

The regulations for category B glazing must - on principle - be observed in addition to the structure characteristics stated in section 2.1. The glass panes can deviate from a rectangle form according to DIN 18008-4, B.3

#### 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

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.

### 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 Baden-Württemberg (LBO) Issue 2010/03
- [b] Administrative instructions Technical Building Regulations (VwV-TB) Issue 2017/12
- [c] DIN EN 14449; Glass in building - Laminated glass and laminated safety glass (03)



- [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 14179, Part 1; Glass in building – Heat soaked Thermally toughened soda lime silicate safety glass
- [g] DIN EN 1863, Part 1; Glass in building - Heat strengthened soda lime silicate glass
- [h] DIN 18545, Part 1; Sealing of glazing with sealants
- [i] DIN 18008, Part 1-2; Glass in Building - Design and construction rules
- [j] Test report 2020-3078; 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 § 19 of the building code for Baden Württemberg (LBO) Issue 2010/03.

### IV. Instruction on right to appeal

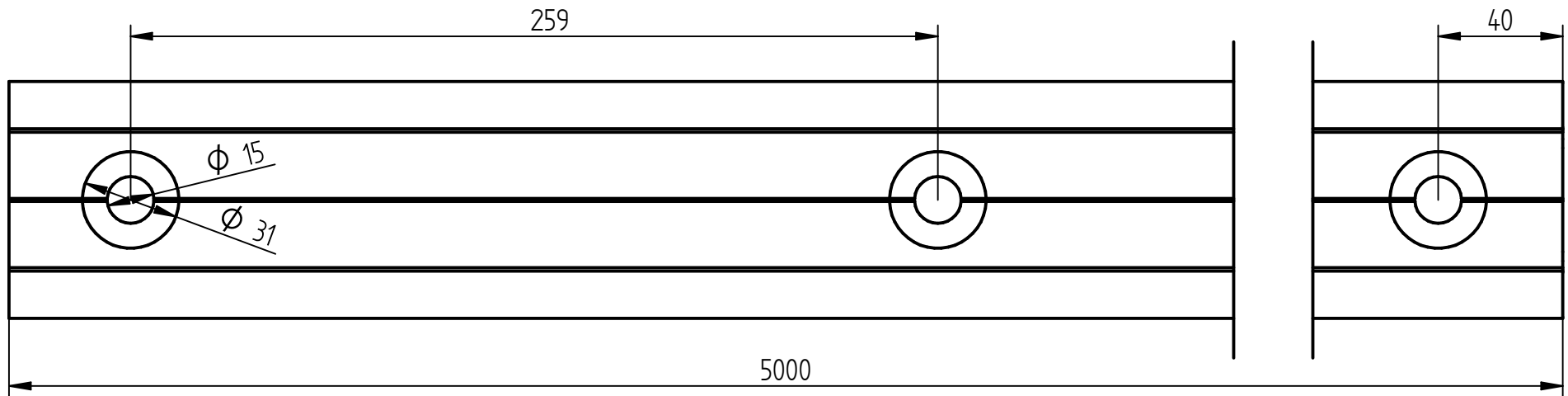
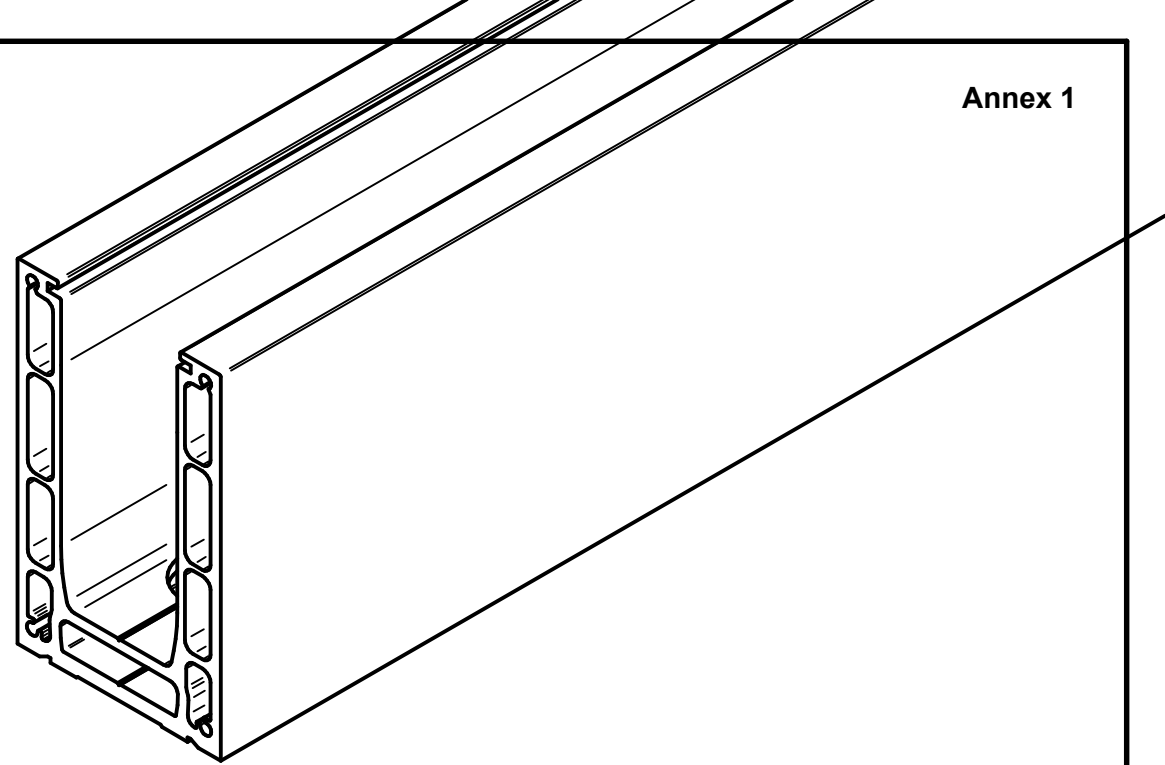
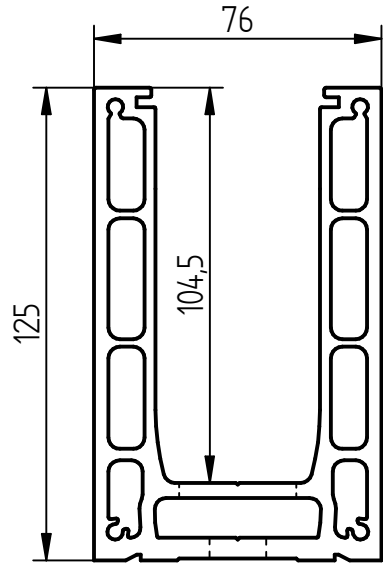
This general building-authority test certificate can be appealed within one month after issue. The appeal must be submitted in writing or for recording at the Labor für Stahl- und Leichtmetallbau GmbH.

Kissing, 24.02.2022

For management and administration



Dipl.-Ing. (FH) A. Lorenz



SOLID EDGE ACADEMIC COPY

TITLE

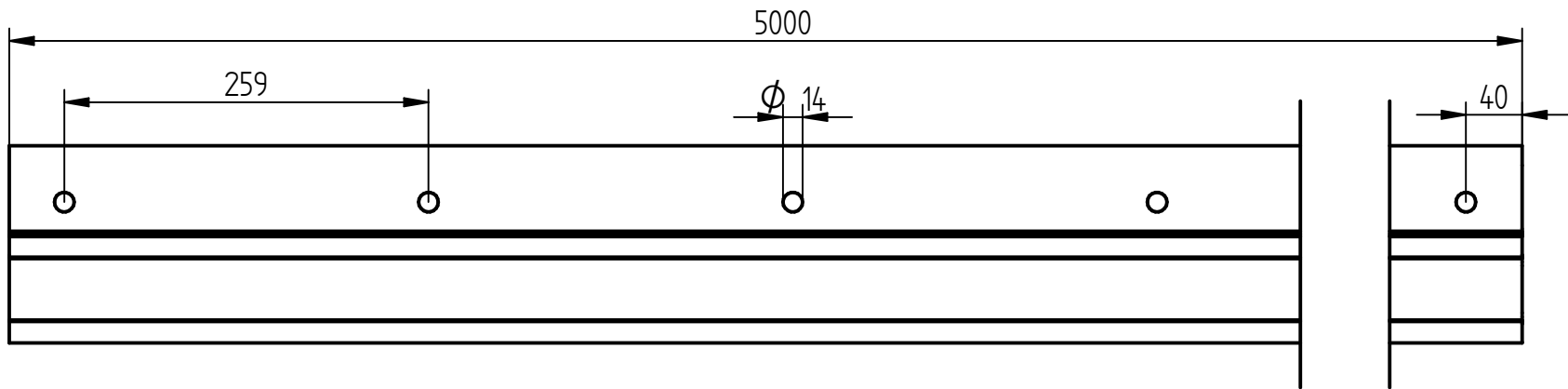
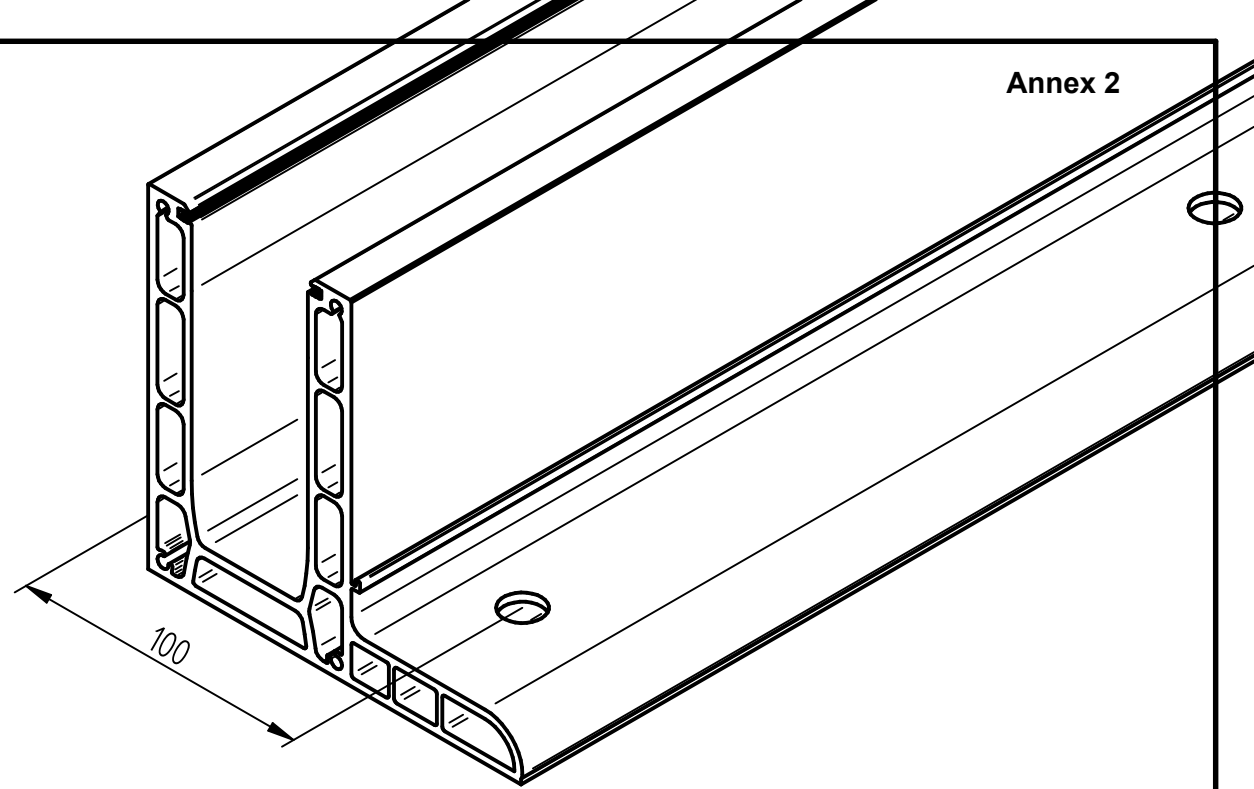
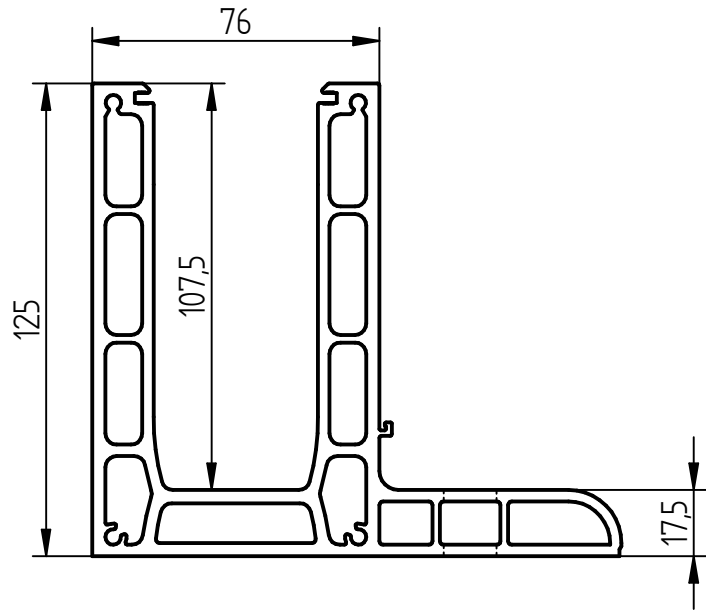
**Base mount**

SIZE A4

SCALE: 1:2

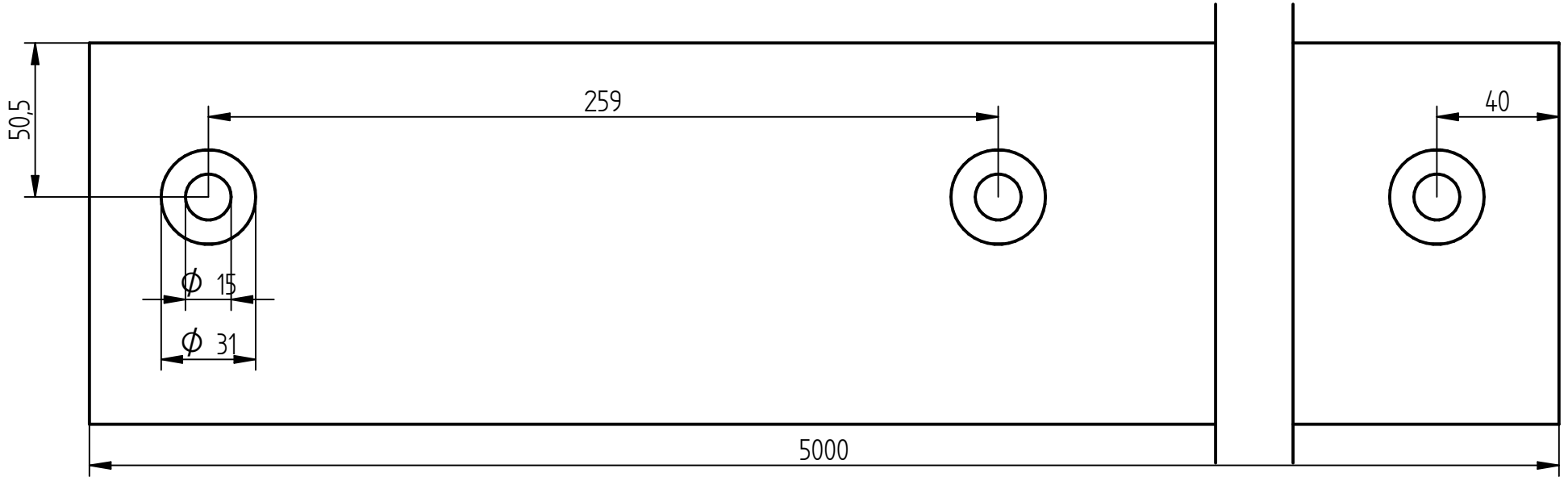
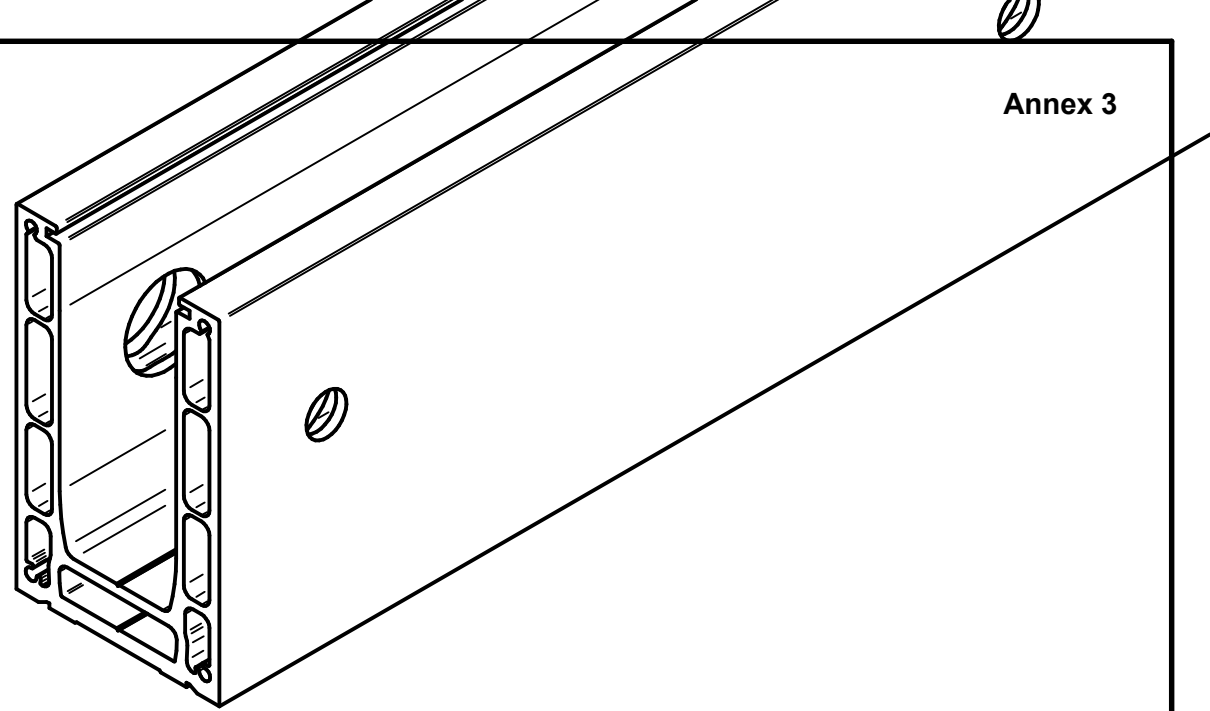
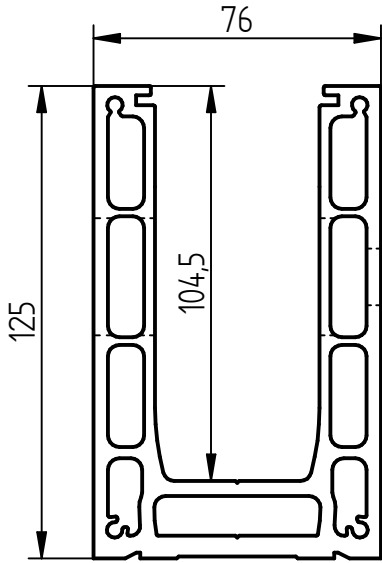
WEIGHT:

SHEET 1 OF 1



TITLE		
<b>L shape</b>		
SIZE A4		
SCALE:1:2	WEIGHT:	SHEET 1 OF 1





TITLE

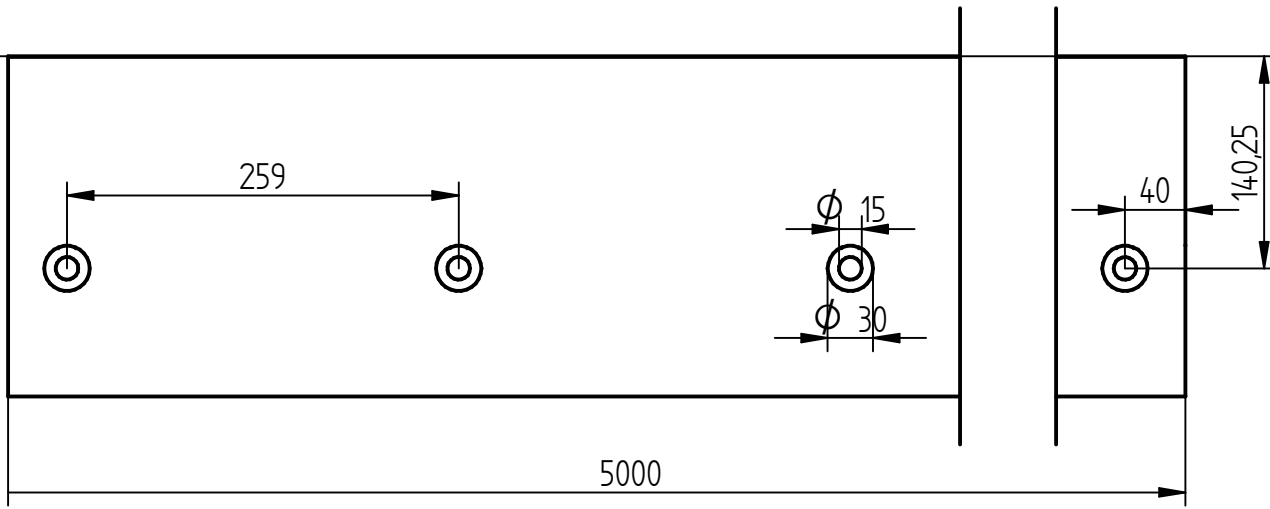
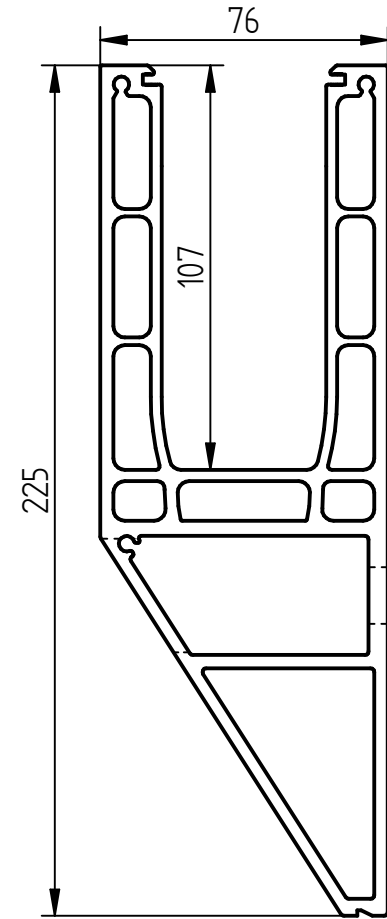
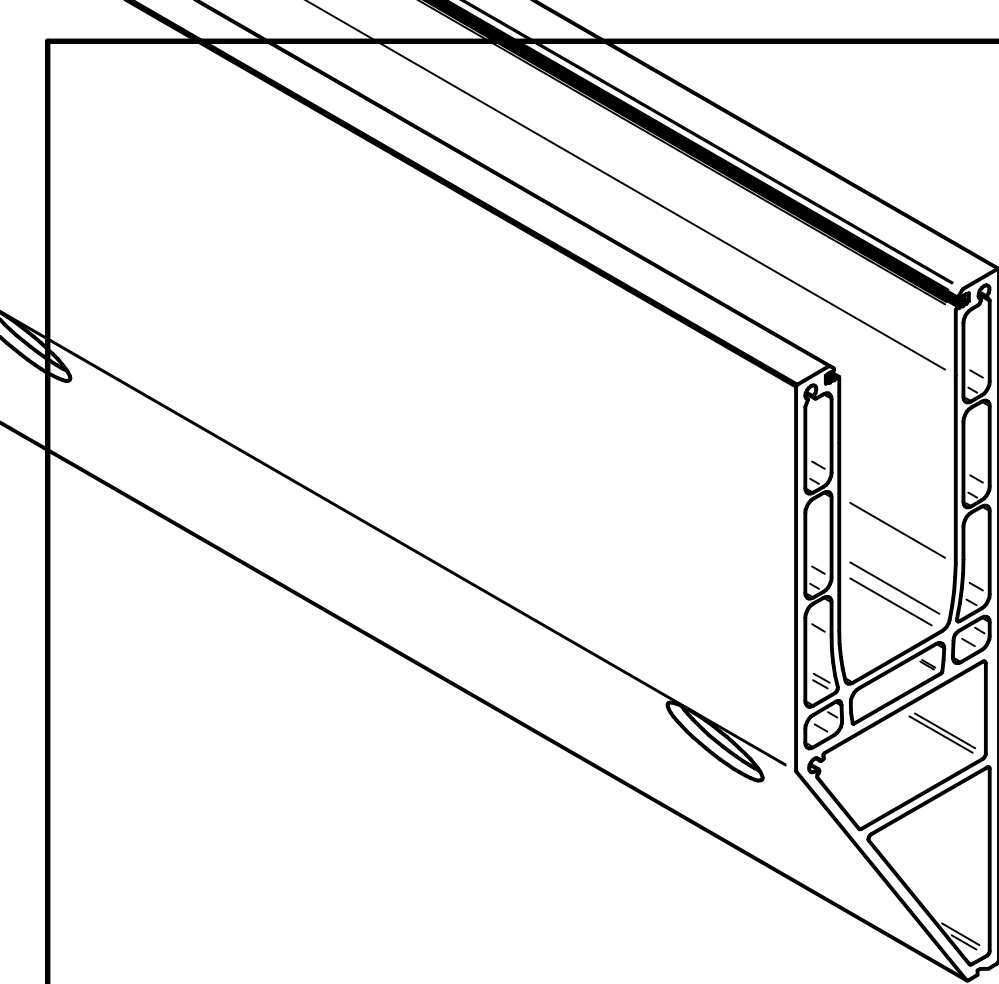
**Side mount**

SIZE A4

SCALE: 1:2

WEIGHT:

SHEET 1 OF 1



TITLE		
<b>Y shape</b>		
SIZE A4		
SCALE:1:2	WEIGHT:	SHEET 1 OF 1