

---

*Translation of the original version by Dipl.-Wirt.-Ing. (FH) Klaus Lang, Sunexx GmbH for information without obligation. (Date: 08<sup>th</sup> of May 2023)*  
*! Translation of the original German version not verified by the Labor für Stahl- und Leichtmetallbau GmbH!*

**Labor für Stahl- und Leichtmetallbau GmbH**  
*(Laboratory for Steel and Light Metal Construction Ltd.)*



Head: Prof. Dr. - Ing. Ö. Bucak  
Affiliated institute of the Munich University of Applied Sciences  
Faculty 02 Civil Engineering / Steel Construction

Römerstraße 23, 86438 Kissing  
Telephone :0049 08233 24699 52 - 2611; [E-mail: info@laborsl.de](mailto:info@laborsl.de)

Bay 27

---

## General appraisal certificate

**Test certificate number:** P-2022-3038

**Subject:** Linear glazing on all sides

**Intended use:** Fall protection according to DIN 18008-4  
Additional requirements for barrier glazing  
Administrative regulation on technical building regulations  
(VwV TB) Baden-Württemberg Edition 2022/12  
Type according to Serial No. C 4.12

**Fall protection category:** A

**Applicant:** Sunexx GmbH  
Zollernring 32  
72186 Empfingen

**Date of issue:** 05.05.2023

**Period of validity until:** 04.05.2028

Based on this general appraisal certificate, the above-mentioned subject applicable according to state building regulations.

The general test certificate issued by the building authorities comprises 6 pages.

Signed by Alexander Lorenz on 05.05.2023

I.	General regulations .....	3
II.	Special regulations .....	3
1	Subject matter and scope of application .....	3
	1.1 <i>Subject</i> .....	3
	1.2 <i>Scope of application</i> .....	3
	1.3 <i>Basis of the appraisal certificate</i> .....	3
2	Requirements for the type of construction / technical design .....	4
	2.1 <i>Description of the construction</i> .....	4
	2.2 <i>Test methods to be applied</i> .....	4
	2.3 <i>Use, maintenance and repair</i> .....	4
3	Scope of application and provisions for assessment .....	5
	3.1 <i>Scope</i> .....	5
	3.2 <i>Dimensioning</i> .....	5
4	Verification of conformity .....	5
5	Other Applicable provisions .....	5
III.	Legal basis .....	6
IV.	Remedies .....	6



## I. General provisions

1. The general appraisal certificate does not replace the permits, approvals and certificates required by law for the implementation of building projects.
2. The general appraisal certificate is issued without prejudice to the rights of third parties, in particular private property rights.
3. Manufacturers of the type of construction shall, without prejudice to further regulations in the "Special provisions", provide the user of the type of construction with copies of the general appraisal certificate and point out that general appraisal certificate must be available at the place of use. Upon request, copies of the general appraisal certificate must be made available to the authorities involved.
4. The general appraisal certificate may only be reproduced in full. Publication of extracts requires the consent of the Laboratory for Steel and Light Metal Construction. Texts and drawings of advertising material must not contradict the general test certificate. Translations of the general building authority test certificate must contain the note "Translation of the original German version not verified by Labor für Stahl- und Leichtmetallbau GmbH".

## II. Special provisions

### 1 Subject matter and scope of application

#### 1.1 Subject

The subject of the general appraisal certificate is linear glazing designed by Sunexx GmbH in accordance with the Administrative Regulation on Technical Building Regulations of Baden-Württemberg, issue 2022/12.

#### 1.2 Scope of application

The above-mentioned item is used in accordance with DIN 18008-4, additional requirements for barrier glazing according to **category A**.

#### 1.3 Basis of the appraisal certificate

The basis of the test certificate is the assessment 2023-3030.

## 2 Requirements for the type of construction / technical design

### 2.1 Description of the construction

#### 2.1.1 Support

The glazing is linearly supported on all sides in accordance with DIN 18008-2.

A detailed description of the glass installation can be found in test report **2023-3030**.

#### 2.1.2 Glazing

The following glass structures are used.

##### Glazing structure:

Float glass / mirror glass	4.00 mm	Impact side
Polyvinyl butyral film (PVB)	0.76 mm	
Float glass / mirror glass <sup>4</sup>	.00 mm	
Air gap	approx. 160.00 mm	
Toughened safety glass (ESG)	4.00 mm	
Space between panes (SZR)	16.00 mm	
Toughened safety glass (ESG)	4.00 mm	

Only glass products according to DIN 18008-4 may be used or must have a corresponding approval. The above-mentioned glass and film thicknesses may be exceeded.

Glass structures with other intermediate layers may also be used as laminated safety glass, provided they have the corresponding general building authority approval. Single-pane safety glass may also be used instead of float glass. The space between the panes can be extended by any glass panes according to DIN 18008-4 to form multiple insulating glass. When using monolithic toughened safety glass panes, the current building inspectorate specifications must be observed.

### 2.2 Test methods to be applied

The test of the fall arrest function of the glazing was carried out in accordance with Annex A of DIN 18008-4. The verification of the load-bearing capacity under impact load was tested on the relevant dimensions of the described glazing by means of pendulum impact tests.

### 2.3 Use, maintenance and repair

The construction according to section 2.1.1 must be installed and suitable measures must be taken to ensure that it permanently fulfils the requirements regarding fall protection. When verifying the secure anchoring of the glazing constructions to the building, the relevant technical building regulations must be observed.

### 3 Scope of application and provisions for assessment

#### 3.1 Scope

The general appraisal certificate is valid for the type of construction described in point 2. The glazing has a barrier glazing / fall protection function according to category A. The limit dimensions are summarised in Table 1.

**Table 1:** Dimensions planar glazing

Width [mm]		Height [mm]	
Min.	Max.	Min.	Max.
1000	1500	2600	3000

The pane construction must correspond to the glass construction mentioned in point 2.1.2. In the case of curved glazing, the convex side must represent the impact side.

#### 3.2 Dimensioning

For the application, a mathematical verification of the load-bearing capacity under static action for glazing and retaining structure must be provided in accordance with DIN 18008-4 Section 6.

### 4 Verification of conformity

The type of construction listed in this general building inspection test certificate requires proof of conformity by the user (contractor) in accordance with the State Building Code for Baden-Württemberg (LBO) § 16a.

### 5 Other applicable provisions

For the designs, the provisions of DIN 18008-4, Additional requirements for barrier glazing, must be observed. In addition, reference is made to the following standards and leaflets in the current version:

- [a] State Building Code for Baden-Württemberg (LBO) Version 2010/03
- [b] Administrative Regulation on Technical Building Regulations (VwV TB) Baden-Württemberg Edition 2022/12
- [c] DIN EN 14449; Glass in building - Laminated glass and laminated safety glass
- [d] DIN EN 572, part 1-2; Glass in building - Basic soda lime silicate glass products
- [e] DIN EN 12150, part 1; Glass in building - Thermally toughened soda lime single pane safety glass
- [f] DIN EN 14179; Part 2; Glass in building - Heat-strengthened soda lime single-pane safety glass
- [g] DIN EN 1863, part 1; Glass in building - Partially tempered soda lime glass

- [h] DIN 18545; Sealing of glazing with sealants
- [i] DIN 18008, Part 1-2; Glass in building - Design and construction rules
- [j] Test report 2023-303; Pendulum impact tests on the window glazing

### III. legal basis

This general appraisal certificate is issued on the basis of § 16a of the State Building Code for Baden-Württemberg in conjunction with the Administrative Regulation on Technical Building Regulations of Baden-Württemberg. If provided for in the relevant building regulations, the general appraisal certificate is also valid in other federal states.

### IV. Remedies

An objection to this general appraisal certificate may be lodged within one month of notification. The objection must be submitted in writing or on record to Labor für Stahl- und Leichtmetallbau GmbH.

Munich, the 05.05.2023

For the management and executing technician



Dipl. -Ing. (FH) A. Lorenz

**Notice:**

*This translation is for non-binding information only.  
Legally binding is the original German version with seal of LSL.*