

# Declared Performance of the Product

## Guardrail 1.1 m

- 1 Designation and trade name of the construction product:  
**Product kit for permanently installed guardrail in accordance with the system: Guardrail 1.1 m**
- 2 The construction product's type designation/names per constituent component:
- **Stanchion guardrail smooth roof 1.1 m**
  - **Stanchion guardrail walkway/roof ladder 1.1 m**
  - **Adapter kit, guardrail roof ladder**
  - **Rail tube 2.4 m**
  - **Angle tube 90°**
  - **End brace, guardrail incl. screw**
  - **Mounting plate 375 x 375 mm**
  - **Riser, smooth roof**
- 3 Intended Uses for the Construction Product
- **Limiting guardrail/lateral protection system**
  - **Collective fall protection**
  - **Provides support for people leaning against the rail and serves as a handrail when moving.**
  - **Installation on intended roof types in accordance with the specification on page 2**
- 4 Manufacturer's Name and Contact Address:  
**CW Lundberg Industri AB**  
**Landsvägen 52, Box 138, 792 22 Mora, Sweden**
- 5 Authorised representative, if such has been appointed: **Not applicable**
- 6 Assessment and inspection of performance: **In-house inspection**
- 7 Technical specifications:  
**Applied technical specification: EN 13374:2013**

- 8 Construction product's performance:

Essential properties	Performance	Remarks
Classification (Class A in accordance with 4.1)	Satisfies	-

- 9 Performance of the product for the aforementioned product is consistent with the Performance of the product specified in Section 8. This document is issued at the responsibility of the manufacturer in accordance with Section 4.

Signed on behalf of the manufacturer by:



Thomas Lundberg  
Managing Director

Mora, 12 May 2023

**The product information stated below does not constitute a portion of the declared Performance of the product.**

**The manufacture issues additional information about the product which affects or which may affect its use.**

*Installation of permanent guardrails on walkway and roof ladder is carried out according to M-294.*

*Installation of permanent guardrails on roofs is carried out according to M-236. On PVC, ECB/FPO-based membranes in accordance with installation M-349, on bitumen-based membranes in accordance with M-350, and on weldable EPDM membranes in accordance with M-351 or M-352.*

*Optional extra, flag with snow-depth indicator.*

*Products can be selected in various colours of powder lacquer for design.*

#### Other Performance

<i>Properties</i>	<i>Performance</i>	<i>Technical specifications</i>
Corrosion resistance (corrosivity class C4)	40 years	EN ISO 12944-2
Exterior reaction to fire (according to 7.3)	B <sub>roof</sub>	EN 516:2006

#### Requirements on PVC, ECB/FPO-based membranes

The waterproofing membrane must satisfy the requirements set out in EN 13956, as well as the following requirements:

<i>Properties</i>	<i>Requirement</i>	<i>Technical specifications</i>
Tensile strength	min. 500 N/50 mm	EN 12311-2
Tear resistance	min. 110 N	EN 12310-2
Shear resistance at extensions	min. 450 N/50 mm	EN 12317-2
Peel strength at extensions	min. 150 N/50 mm	EN 12316-2

#### Requirements for bitumen-based membranes

The waterproofing membrane must satisfy the requirements set out in EN 13707:2004+A2:2009, as well as the following requirements:

<i>Properties</i>	<i>Requirement</i>	<i>Technical specifications</i>
Tensile strength	min. 300 N/50 mm	EN 12311-1
Tear resistance	min. 150 N	EN 12310-1
Shear resistance at extensions	min. 500 N/50 mm	EN 12317-1
Peel strength at extensions	min. 125 N/50 mm	EN 12316-1

#### Requirements for weldable EPDM membranes

The waterproofing membrane must satisfy the requirements set out in EN 13956, as well as the following requirements:

<i>Properties</i>	<i>Requirement</i>	<i>Technical specifications</i>
Tensile strength	min. 400 N/50 mm	EN 12311-2
Tear resistance	min. 12 N	EN 12310-2
Shear resistance at extensions	min. 200 N/50 mm	EN 12317-2
Peel strength at extensions	min. 80 N/50 mm	EN 12316-2

#### Choice of attachment in concrete

**Installation may only be done with a concrete mount M10 (concrete expander, safety expander or chemical anchor) in at least class A2 that withstands a traction load of at least 10 kN a tensile load of at least 10 kN.**

In order to be able to install the anchor loop directly onto concrete, a suitable anchor must be chosen by calculating the load for the class in question on the underlying surface; moreover, one must take into account the type of reinforcement, the distance from the edge and other mounts, the thickness of the concrete and other conditions that may affect the safety of the mount. On the basis of the calculations made and the installation conditions in question, the type and dimension of the anchor is determined, as are the detailed installation instructions that shall be consistent with the manufacturer's instructions.