

System description

ROOFWALK GARDCO TRAPEZ is a walkway for maintenance and inspection purposes according to EN 516:2006 class 1 type C on metal roofs with hand seamed roofing or metal profiles with a guardrail GARDCO in accordance with DIN EN 13374:2019 Class A and DIN ISO 14122-3.

Possible product version

ROOFWALK GARDCO TRAPEZ 500 Z, Width of grating 500 mm galvanized

ROOFWALK GARDCO TRAPEZ 600 Z, Width of grating 600 mm galvanized

ROOFWALK GARDCO TRAPEZ 500 A, Width of grating 500 mm aluminium



Installation

Please read the installation instructions before installing the walkway.

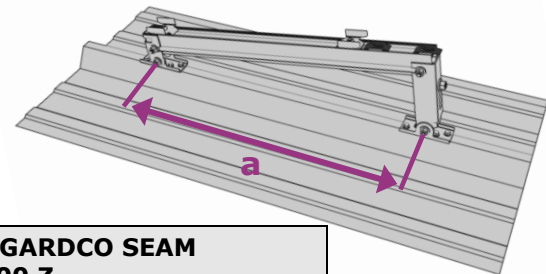
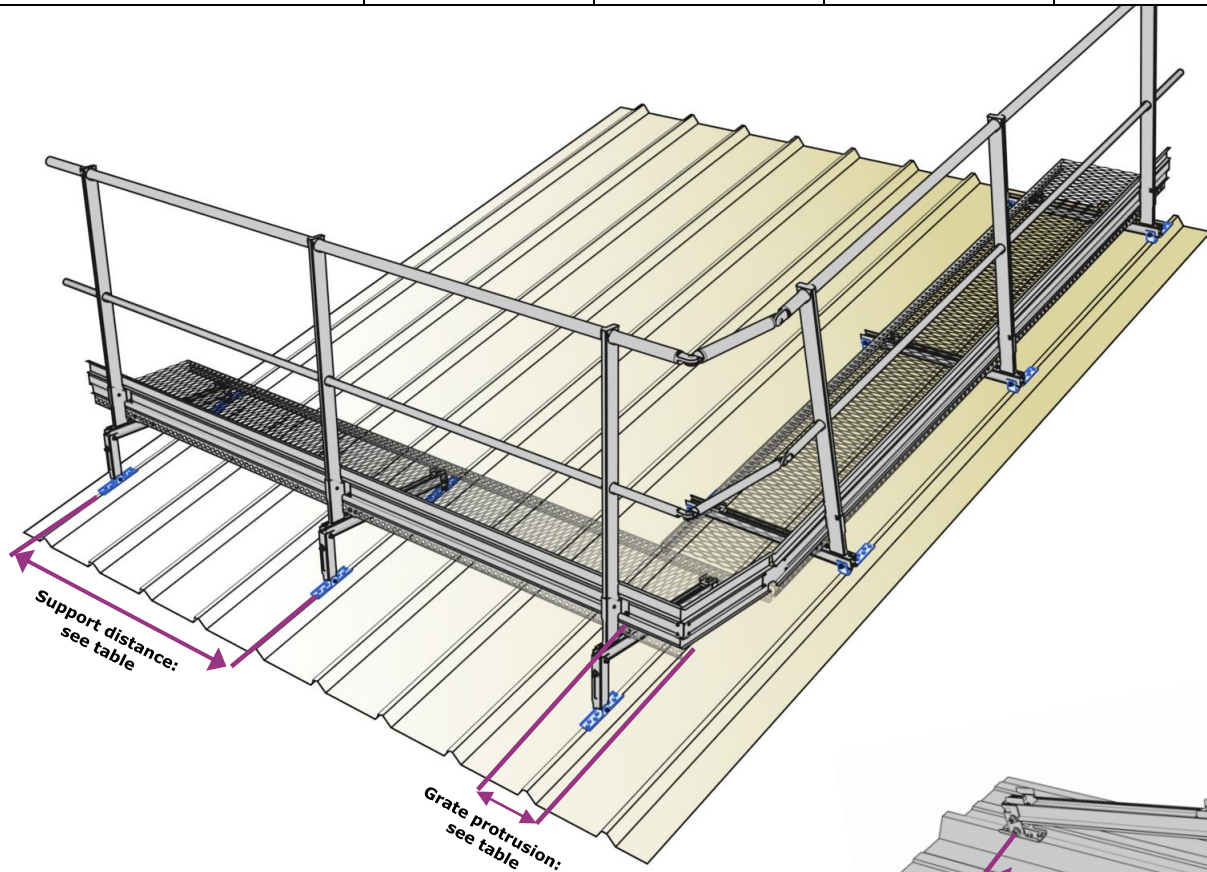
Before installation, the load-bearing capacity of the roof structure and thus its suitability for installation must be checked. The dead load of the walkway system is 0.25 kN/m, the design load for the walkway according to DIN EN 516 is 1.5 kN.

For roofs with a roofpitch of more than 1:5 (approx. 11°) has to be equipped with treads. According to DIN 4426, from a slope of 1:2.75 (about 20°), traffic routes must be constructed with steps.

In areas with aggressive environmental conditions, such as in the vicinity of chemical plants or near the coast, an additional coating or anodizing of the aluminum parts and a design of the grate in stainless steel may be necessary.

Layout Please note your installation pan!

Maximum support distance	ROOFWALK 500A	ROOFWALK 500Z	ROOFWALK 600Z	Grate protrusion
to DIN ISO 14122-3	1,50 m	1,50 m	1,50 m	max. 30 cm
to DIN EN 13374:2019 Kl. A	1,50 m	2,00 m	1,75 m	max. 30 cm

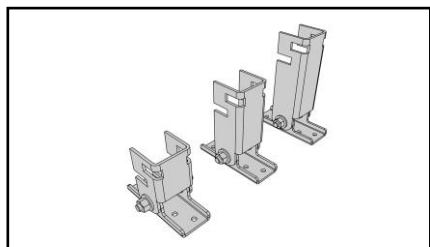


Distance table

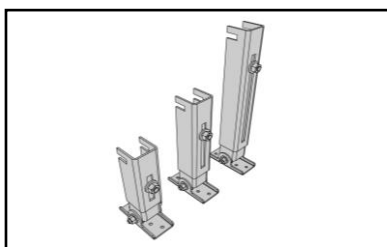
The spacing of the clamps and supports please us the following table:

ROOFWALK GARDCO SEAM 500 Z / A				ROOFWALK GARDCO SEAM 600 Z			
Roof pitch	a = Holder distance	Supports 1	Supports 2	Roof pitch	a = Holder distance	Supports 1	Supports 2
3°	600 mm	SAK	SAM	3°	701 mm	SAK	SAM
5°	602 mm	SAK	SAL	5°	703 mm	SAK	SAL
8°	606 mm	SAK	SAL	8°	707 mm	SAK	S1
10°	610 mm	SAK	S1	10°	711 mm	SAK	S1
15°	622 mm	SAK	S2	15°	726 mm	SAK	S2
20°	641 mm	SAK	S2	20°	747 mm	SAK	S3
25°	666 mm	SAK	S3	25°	776 mm	SAK	S3
30°	699 mm	SAK	S3	30°	815 mm	SAK	S3
35°	741 mm	SAK	S3				

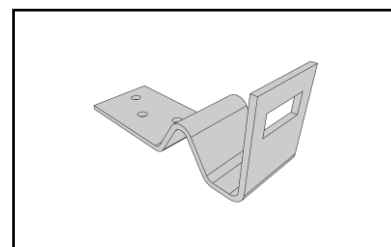
Components



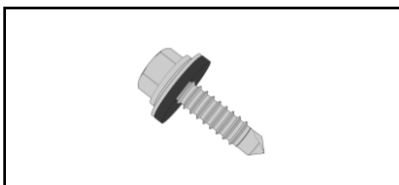
Support: SAK, SAM and SAL



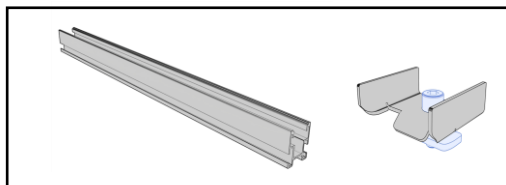
Telescopic support 1-3



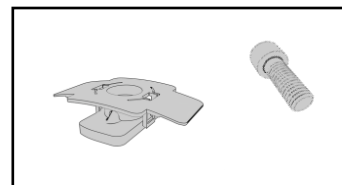
Eave to ridge bracket



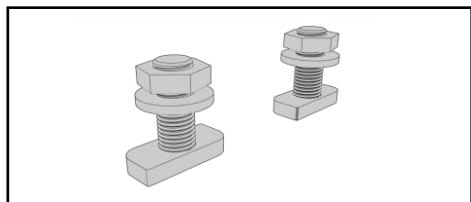
Thin sheet metal screw 6,0x25
 with sealing washer



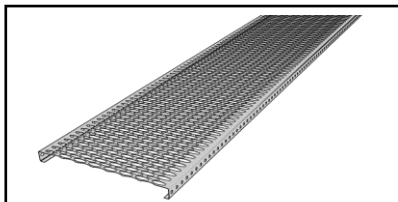
Set: support rail and 2 grate clamps



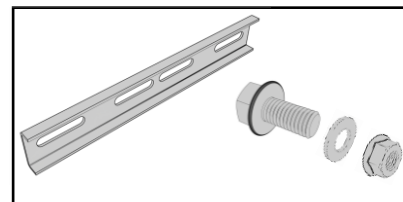
Slot nut with screw
 M8x25



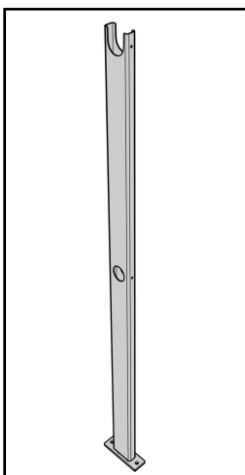
Set for fixing the support rail:
 2 hammer head screws M10x25
 (Typ 28/15) with washer and nut



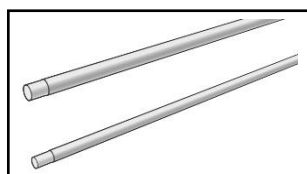
Grating 500 mm galvanized
 Grating 600 mm galvanized
 Grating 500 mm aluminium



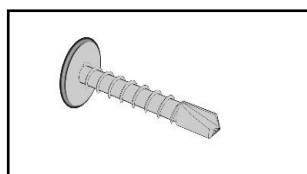
Set: longitudinal connector with
 4 Screws M8x20, washers
 and self-locking nuts



Post H 118 cm



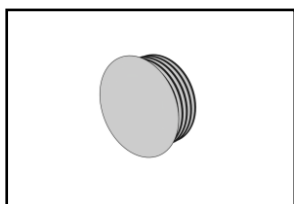
Handrail Ø 45 mm
 Kneerail Ø 35 mm



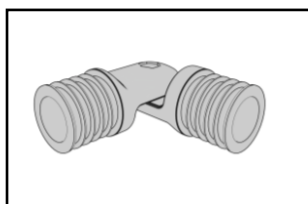
Drilling screw
 4,8x25 & 4,8x16



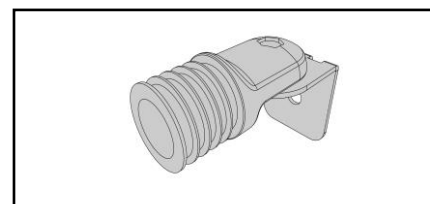
Cap for post



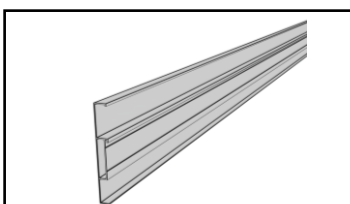
Cap for tube



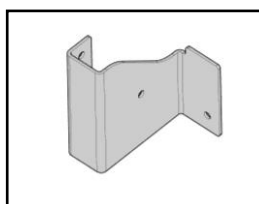
Flexible corner
 connector



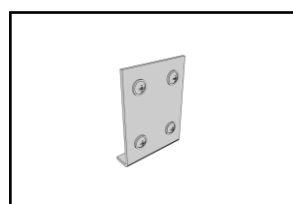
Wall connector for
 handrail and kneerail



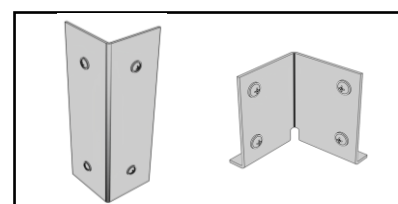
Baseboard 19x150x3000mm



Holder for baseboard

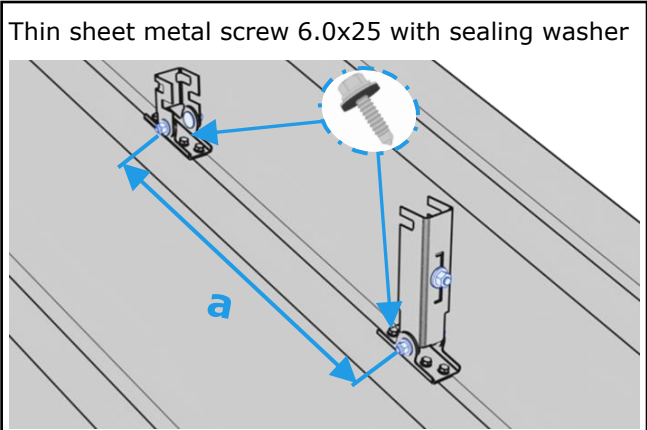


Connector for baseboard

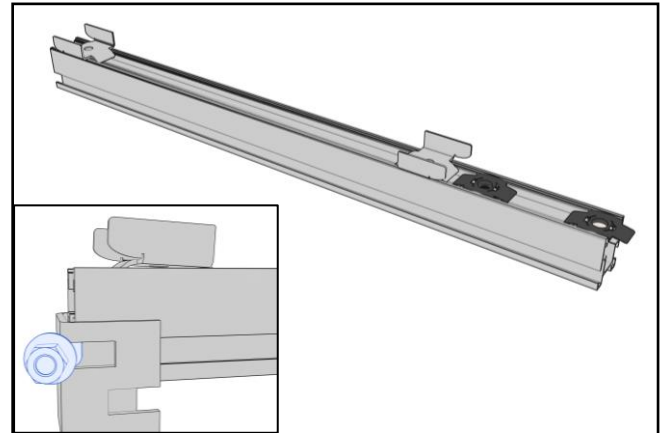


Corner connector baseboard

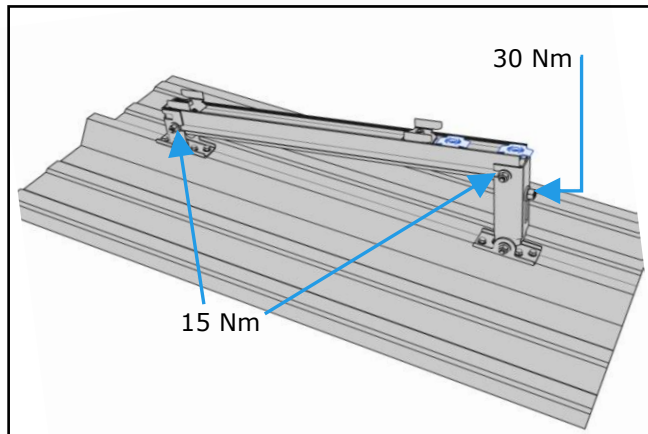
Montage



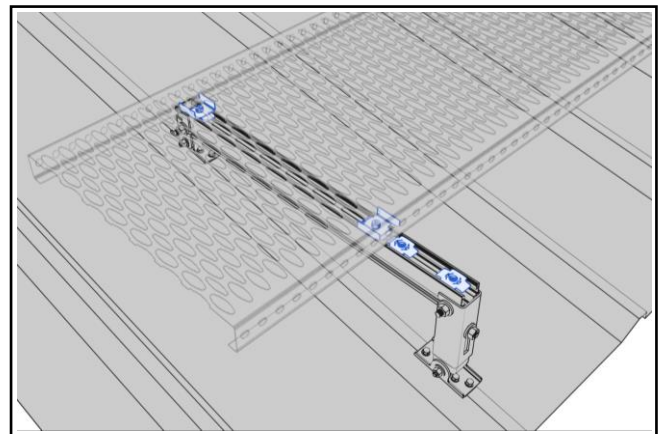
For spacing of the holders, see table on page 2!
 Place the holder and fix it to the bead with 4 thin sheet metal screws each.



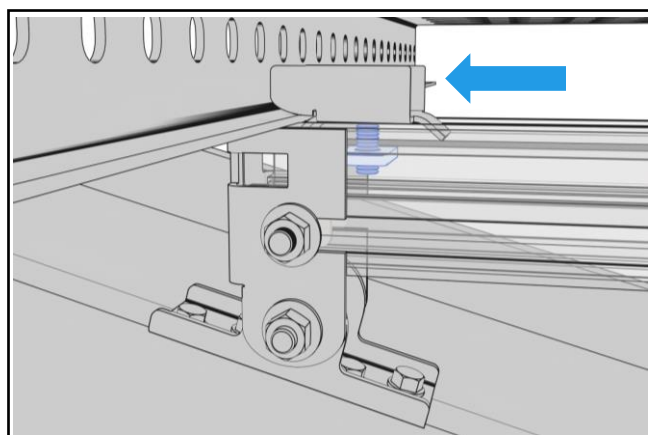
Push 2 grate clamps on the ridge side and 2 insert nuts on the eaves side into the support rail.
 Fasten the support rail to the supports on both sides with 2 hammerhead screws each (30 Nm).



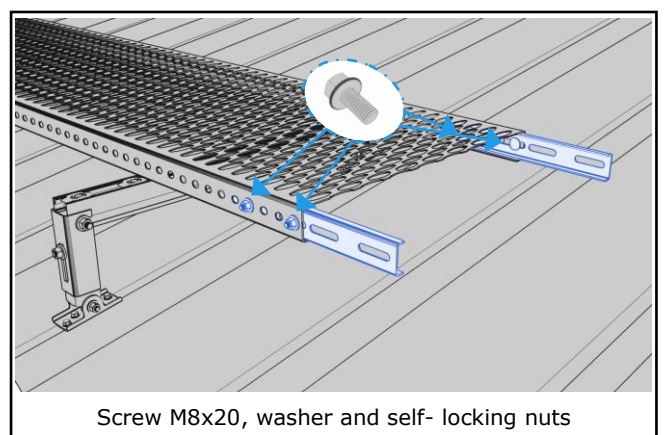
Align the support rail horizontally and tighten the remaining screws.



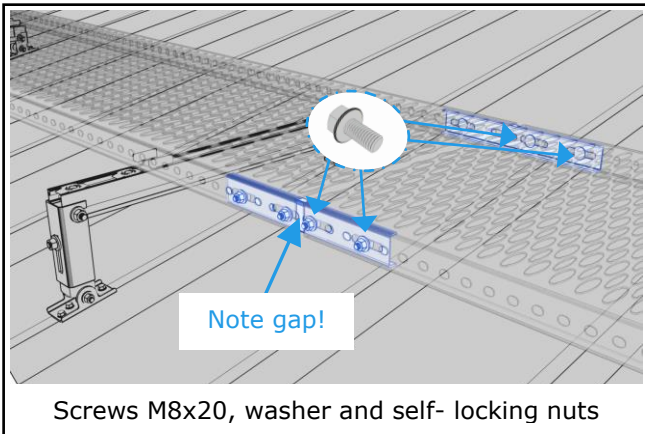
Place the prepared grate on the substructure.



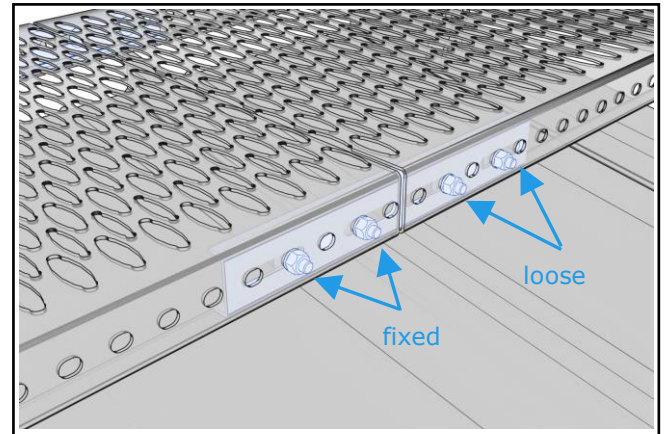
Push the grate clamps outwards over the back edge of the grate and tighten the screws (7 Nm).



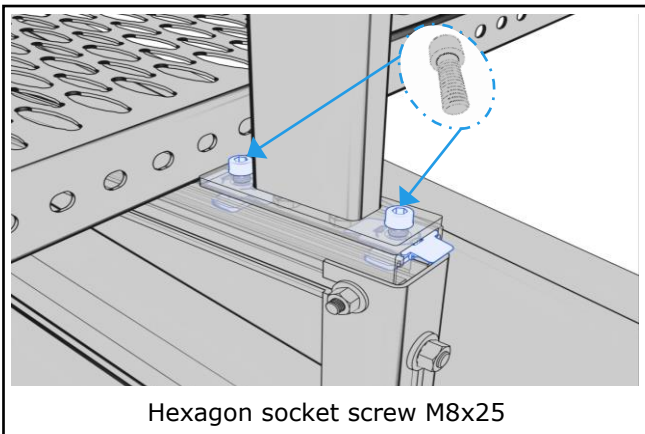
Fix 2 longitudinal grate connectors to the grate with 2 screws each.



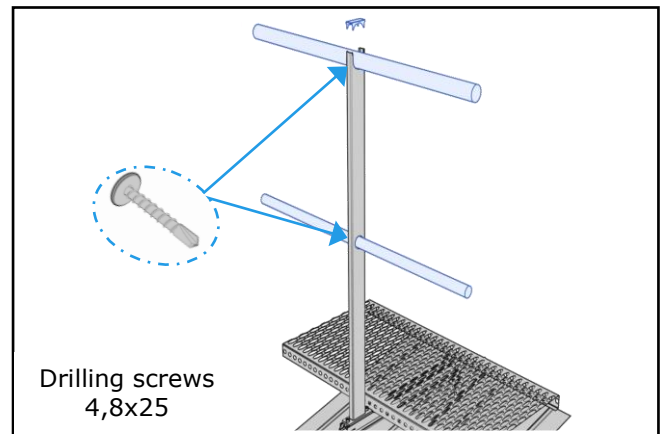
Place the prepared grate on the base and push it against the already mounted grate, leaving a gap 5-10 mm. Fasten the grate clamps and loosely fix the longitudinal connectors with 2 screws each.



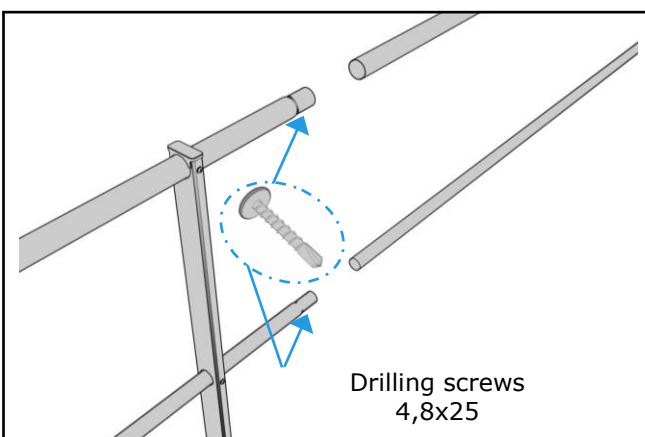
Due to thermally induced length changes, the screws are screwed tightly on one side and loosely on the other.



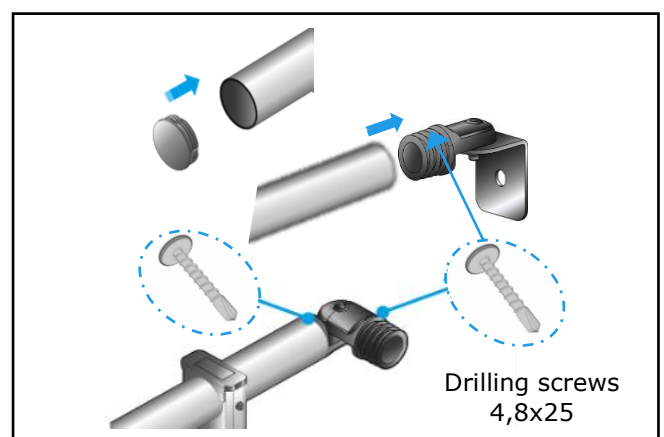
Fasten the post to the insert nuts with 2 screws (15 Nm).



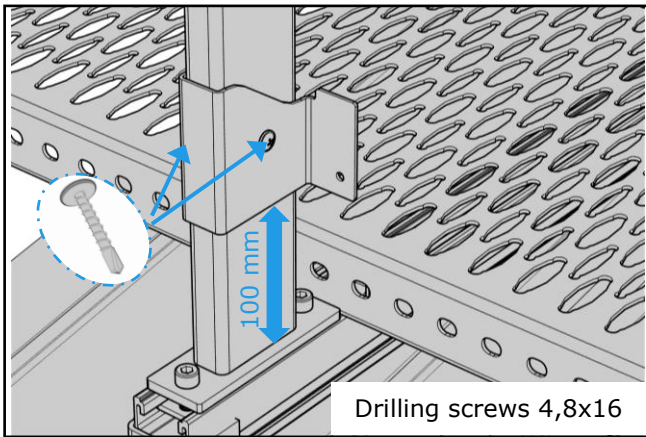
Thread the kneerail and insert the handrail. Put on the cover cap. Fix the kneerail and the handrail with 2 drilling screws.



Insert the handrail and the kneerail into each other and fix each with a drilling screw placed diagonally from below.

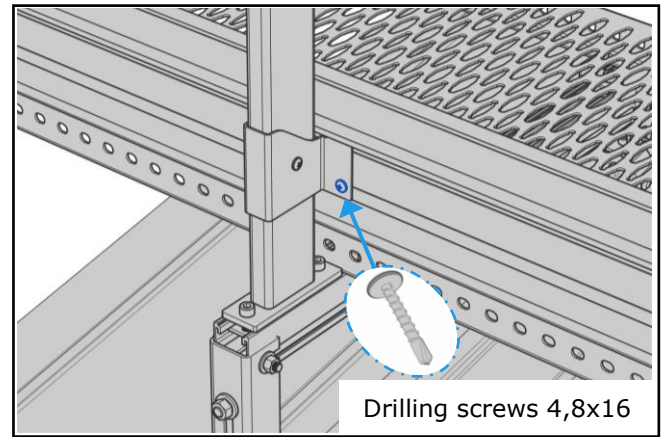


Put on the cover caps at the ends. Insert the handrails and kneerails into wall connections or into flexible corner connectors and fix them with drilling screws.



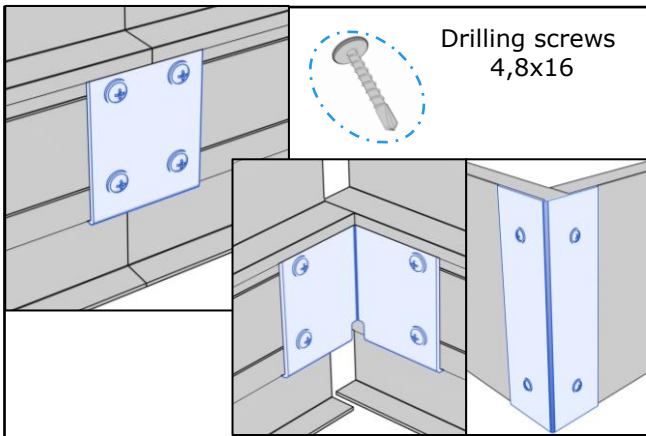
Drilling screws 4,8x16

Fix the baseboard holder to the post at a height of 100 mm with 2 drilling screws.



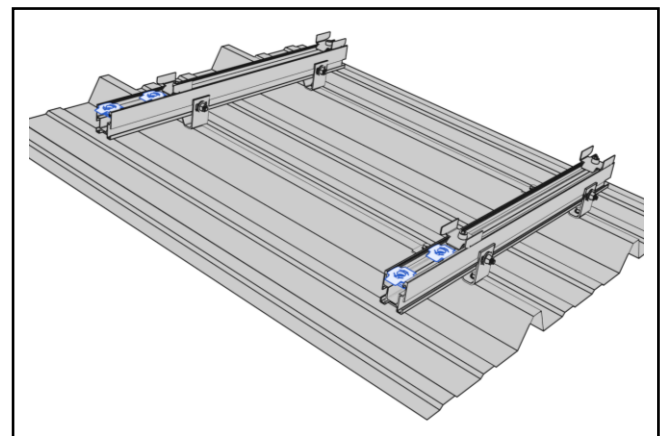
Drilling screws 4,8x16

Hang the baseboard and fix it with a drilling screw. The lower edge of the baseboard is flush with the grating surface.



Drilling screws
4,8x16

Join the baseboard at the joint. Insert the connector and fix it with 4 drilling screws. Place the corner connectors on the inside and outside of the corners and fix each with 4 drilling screws.



Orientation from eaves to ridge:
 Here, the support rails are mounted on the brackets at right angles to the beading.

Storage

The grates are made of aluminium or galvanised steel, the support structure is made of aluminium. In case of moisture ingress, the surfaces can oxidise and lose their shine or develop stains. This oxidation does not attack the metal itself, but forms a natural protective layer. The optical changes have no effect on the quality of the components and the maintenance path. We recommend that the components are stored in a dry and ventilated place, protected from moisture before installation.

Maintenance

ROOFWALK GARDCO TRAPEZ must be inspected at intervals of max. 2 years. Particular attention should be paid to loose or deformed parts as well as corrosion. If there are any concerns about the functionality of the walkway or railing, they must be inspected and, if necessary, serviced before the next time the roof is entered.

General safety instruction

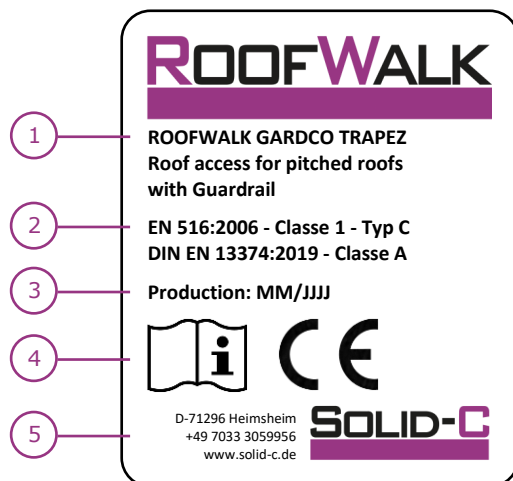
For the duration of the assembly, protection against falling must be provided, e.g. by means of an appropriate scaffold or anchoring devices. Care must be taken to ensure that assembly is only carried out by instructed specialists in compliance with the specifications for carrying out work at the appropriate height. Openings between side guardrail systems and other structures must be as small as possible, not exceeding 120 mm for guardrail rails and 20 mm for toe board. The guardrail system must not be used as an anchor device.

Only undamaged original parts are to be used for assembly, and no changes may be made to them that impair their function or safety. Should it be necessary to dismantle the catwalk, this must be done in reverse order to the assembly instructions.

Workplaces and traffic routes on the roof may only be accessed by persons who have been instructed for this work. Workplaces and traffic routes on the roof may only be accessed when they are free of snow and ice. For roof pitches > 10°, other PPE must be used on the ridge side when entering the roof above the maintenance walkway.

After a fall of a person as well as after an incorrect installation, the catwalk and the anchor device may only be used again if they have been checked by a competent person and approved in writing for the intended use.

Marking



- 1 Product and type identification
- 2 Standard and classification
- 3 Year of manufacture and serial number
- 4 Note that instructions for use must be observed
- 5 Manufacturer

Disclaimer

The load-bearing capacity of the substrate must be checked by the customer. Solid-C cannot make any statements about this. In addition to these installation instructions, the installing company has to observe the valid regulations and rules of technology. Solid-C GmbH is not liable for the dimensioning instructions contained in commercial offers, since it is generally not possible to agree on all technical framework conditions within the scope of tender submissions. The installation company is responsible for the mechanical durability of the mounted products to the building envelope, especially for their tightness. The components of Solid-C GmbH are designed for this purpose according to the expected loads and the valid state of the art. Solid-C GmbH does not assume any liability for damages caused by improper installation.