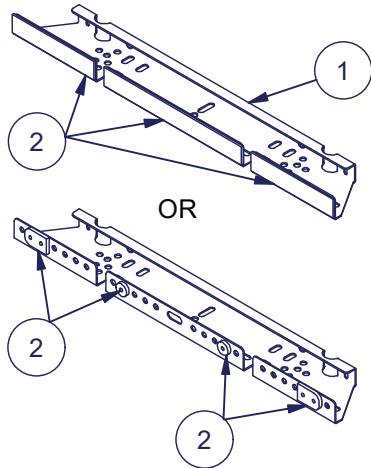


## Pisko SafeGrip roof ladder for standing seam roofs with Pisko MultiFast Optim

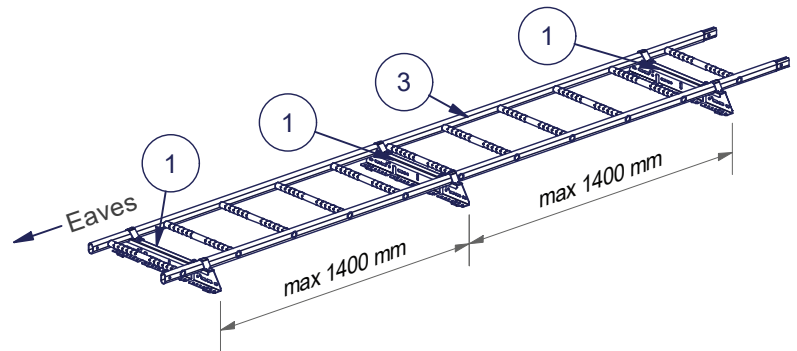
### INSTALLATION

Place EPDM sealant strip (2) or alternatively Pisko 2+1 sealants (2) (2 / fastener) to the bottom of the MultiFast Optim bracket (1).



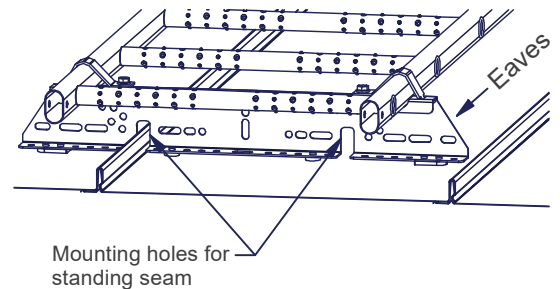
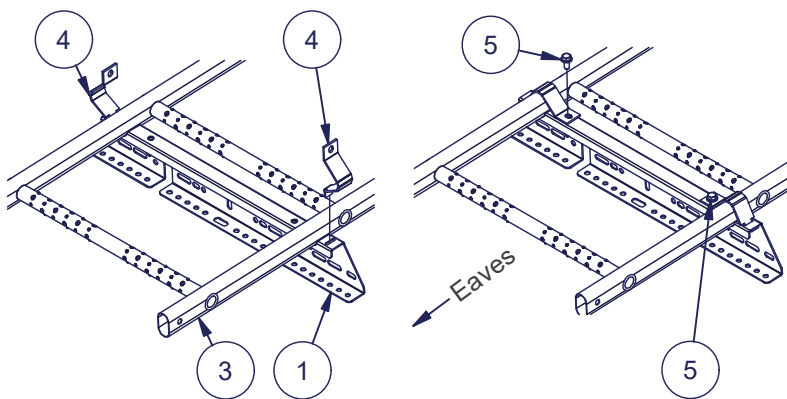
Install the MultiFast brackets (1) to the Pisko SafeGrip ladder (3) frame.

- Min. 3 MultiFast brackets.
- The max. distance between the brackets is 1400 mm.
- The lowest and highest bracket should be installed between two lowest and two highest rungs of the ladder.
- The narrowed ends of the stiles are placed towards the ridge of the roof.



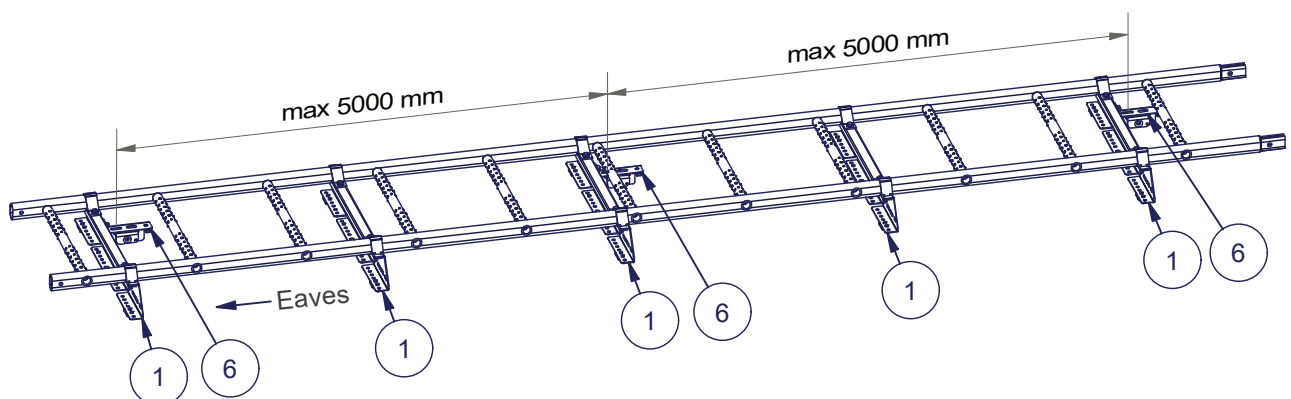
Attach MultiFast Optim (1) to the ladder (3) with 2 x MultiFast stile bracket Optim (4). Insert the hook end of the Stile bracket to oval hole on top of the MultiFast bracket, turn it around the stile of the ladder and fasten it with flange bolt (5). The MultiFast bracket should be installed as close as possible to the underside of the rung, to ensure good usability of the ladder. Notice the mounting direction of the MultiFast bracket.

Place the ladder to roof. Roof seam is inserted into one of the two mounting holes on the MultiFast Optim bracket.

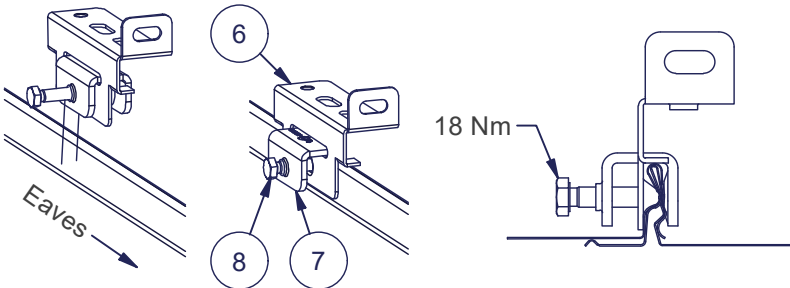


The ladder is attached to the roof seam with a multi-purpose standing seam bracket (6).

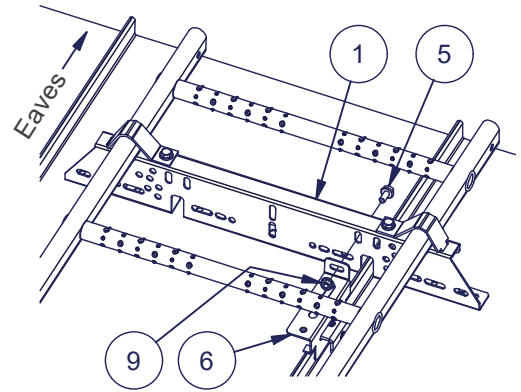
- Min. 3 multi-purpose brackets.
- In areas of heavy snow loads it is recommended to use more than min. amount of multi-purpose brackets.
- The max. distance between multi-purpose standing seam brackets is 5000 mm.
- The top and bottom MultiFast Optim bracket must always be attached to the seam with a multi-purpose standing seam bracket.



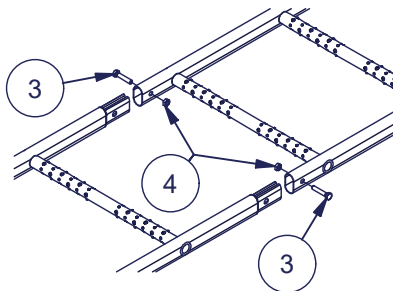
Multi-purpose standing seam brackets (6) are mounted on lock- / tinsmith-seam with SG tightening clamps (7). Attach bracket and tightening clamp to the seam. Correct tightening torque will spread out the tightening clamp a bit, in order to create a tight long-lasting connection. Tightening torque of the fixing bolt (8) is 18 N/m.



Multi-purpose standing seam bracket (6) is installed on the ridge side of the MultiFast bracket (1) and fastened to MultiFast bracket with M8x16 flange bolt (5) and M8 flange nut (9).



If the ladder is to be extended, the extension must be attached to the top end of the ladder (3). Secure the joint with 2 M8x40 bolts (10) and M8 nuts (11).

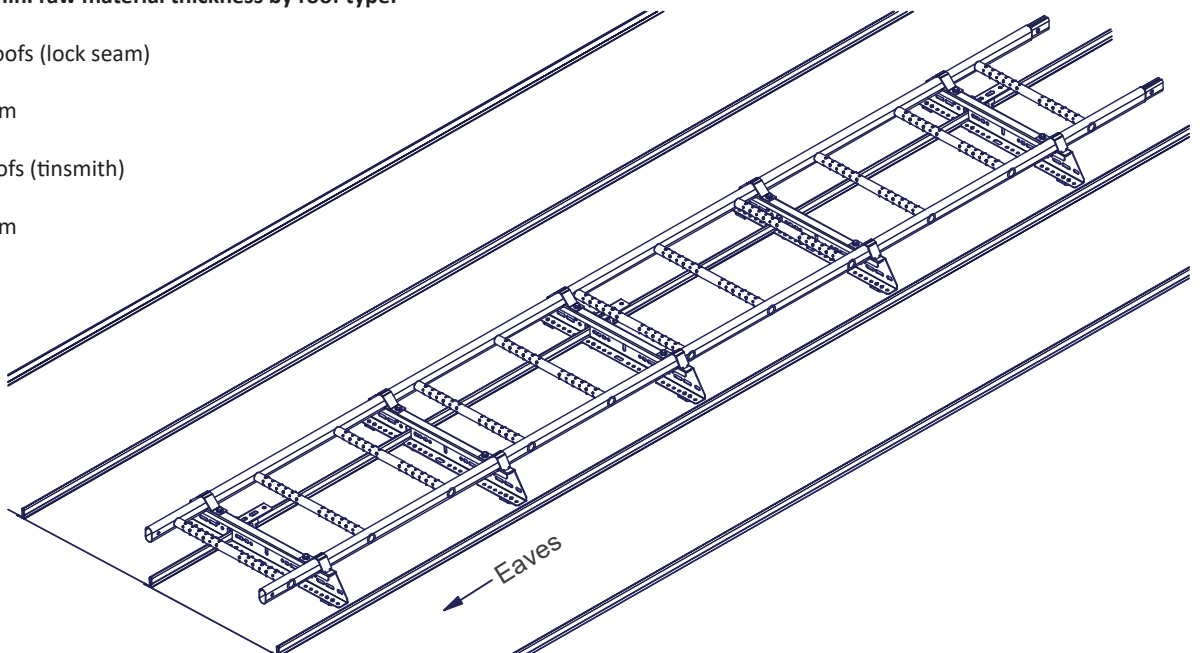


Part	Description
1	MultiFast Optim
2	Adhesive sealant / Pisko 2+1 sealant
3	Pisko Safegrip ladder
4	MultiFast Stile Bracket Optim
5	Flange bolt DIN 6921 - M8 x 16 HDG *
6	Multi-purpose standing seam bracket
7	SG Tightening clamp Pisko Uniseam
8	Fixing bolt M8 x 30
9	Flange nut DIN 6923 - M8 HDG *
10	Bolt DIN 933 - M8x40 HDG*
11	Nut DIN 934 M8 HDG *

\* HDG or equal corrosion protection

#### Requirements for min. raw material thickness by roof type:

- Standing seams roofs (lock seam)
  - steel 0,5 mm
  - aluminum 0,7 mm
- Standing seam roofs (tinsmith)
  - steel 0,5 mm
  - aluminum 0,8 mm

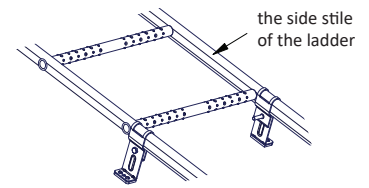


**USE**

Roof ladder must be used when the roof inclination is more than 1:8 and they are also recommended for roofs with lower slopes than this. If the height of the building is more than 9 meters, safety rope fixing structures must be provided (Ministry of the Environment Decree on the safe use of buildings on January 1, 2018). Standard EN 12951 provides two performance classes for roof ladders: class 1 and class 2. Class 1 means that the product is suitable for use as access way and class 2 means that the product can also be used as safety rope anchoring point. Using personal fall protection equipment, a person is only allowed to attach themselves to a roof ladder with class 2 performance level. Pisko SafeGrip roof ladder has been dimensioned against 1,5 kN (~150 kg) concentrated load (load from the user).

The Pisko SafeGrip roof ladder for seam roof with Pisko MultiFast Optim fastener conforms to standard EN 12951, having undergone static and dynamic tests per class 2. An appropriate safety rope can be fixed to a roof ladder, which is installed in accordance with class 2. The safety rope must be intended to be used as a personal safety rope and it must conform to relevant standards such as e.g. EN 353-2 and should be equipped with a shock absorber (EN 355). On Pisko SafeGrip ladders, the safety rope anchoring point is the Pisko SafeLine wire system's glider (see separate installation instructions) or the ladder frame. When using the safety rope, the following points must be taken into account:

- The ladder has undergone periodic inspections and is suitable for use as safety rope anchoring point
- Only safety ropes (e.g. EN 353-2) or retractable lanyards (EN 360) that are meant to be used as a personal fall protection equipment should be used
- The Pisko SafeLine installed on the roof ladder may only be used by one person at a time, for more information see the Pisko SafeLine instructions for installation, use and maintenance
- If the ladder is not equipped with the Pisko SafeLine system, the recommended safety rope fixing point is the side stile of the ladder
- Only one person at a time, with a total weight of max. 100 kg, including the equipment, is allowed to fix a safety rope to the roof ladder.
- The safety rope must be fixed to the roof ladder only in the space between the roof ladder fasteners that connect the ladder to the roof structure.
- The safety rope shall never be fixed to the support foots of the ladder
- The safety rope may only be used towards the eave on the pitched roof area where the roof ladder is installed



**MAINTENANCE**

Pisko products are hard-wearing and safe to use, guaranteed by the ongoing quality control and development work by Piristeel Ltd, as well as correct installation of the products according to the manufacturer's instructions. To ensure the reliability and safety of the products, the property owner must carry out yearly inspection and maintenance procedures, and monitor that the snow load specified by the regulations is not exceeded.

**To ensure the durability of the performance of the products, the property owner should have the class 2 roof safety products inspected annually by a person authorised by the manufacturer.**

The annual inspection and maintenance areas for the Pisko roof ladders:

- Check the tightness of the joints and points of attachment.
- Check the roof attachments (fixings).
- Ensure any excessive snow load is cleared to minimize the strain on structures and attachment points (as necessary; there might be a need several times during the winter).
- As necessary, clear the roof ladders of snow and ice.
- Check the the painted and galvanized product surfaces and, as necessary, repair local damages and perform touch-up painting.
- Replace or repair any damaged or faulty parts as soon as possible.

<b>CE</b>
<b>Piristeel Oy</b> <b>Metallitie 4, 62200 Kauhava</b> <b>Finland</b> <b>24</b>
<b>EN 12951</b> Pisko SafeGrip ladder for seam roofs with Pisko MultiFast Optim bracket 1388  TB <b>Mechanical strength:</b> Class 1 and Class 2  <b>Reaction to fire:</b> Class A1  <b>Durability:</b> Z275 + powder coating 80 µm  <b>External fire performance:</b> DTS

**This product has been installed in accordance with the installation instructions by**

Company	Installer	Date