

## PISKO SAFEGRIP ROOF LADDER FOR STRAIGHT TILE ROOF, 1343

Pisko roof ladders for straight tile roofs are used as extensions of wall-mounted ladders and/or roof walkways to create safe access paths on straight tile roofs. It must be possible to move safely on the roof from the eaves to the ridge, chimney, sunroofs and other areas requiring maintenance. Pisko ladders have a rung width of 400 mm and rung diameter of 25 mm.

### INSTALLATION

Roof ladders must be attached to the load-bearing structures of the roof, at least at the top and bottom ends of the ladder (EN 12951, Section 5.3.1). Due to the strain created by snow loads, we recommend the use of more fastenings.

If the ladder is to be extended, the extension must be attached to the top end of the ladder. Secure the joint with M8x40 hexagon bolt and M8 hexagon nut (figure 4).

Roof ladders are mounted on straight tile roofs using roof ladder fasteners for straight tile roof. You also need an auxiliary batten bracket for the roof ladder fastener. Minimum auxiliary batten size 32x100 mm (structural timber quality).

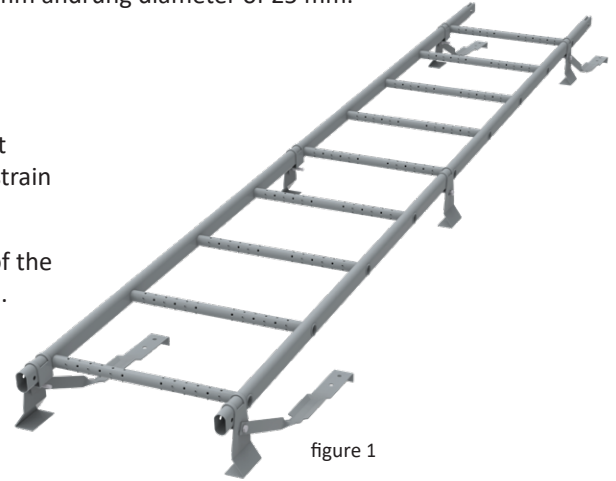
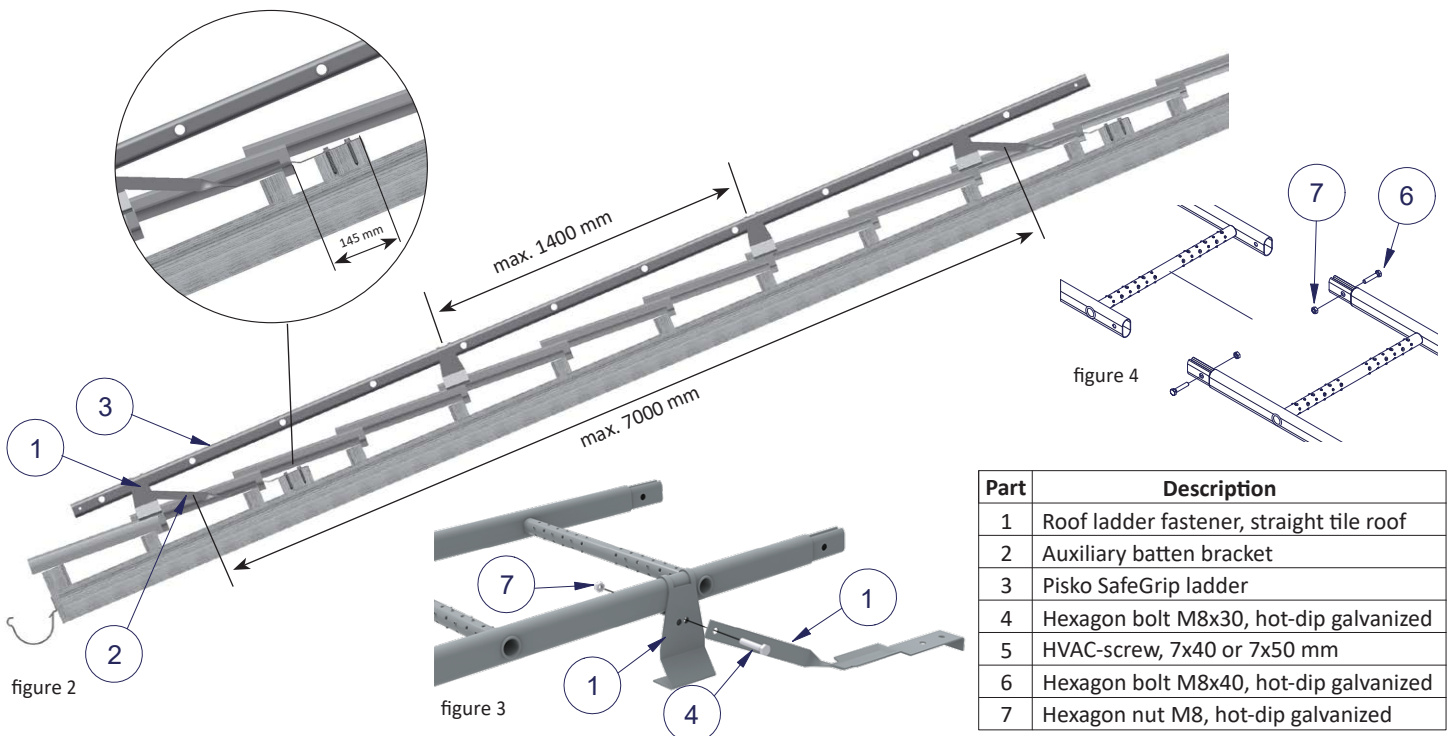


figure 1

- Glue a sealing strips on the base of the roof ladder fasteners.
- Attach the 32x100 mm auxiliary batten to the roof trusses (at least three) with 6x120 mm screws (2 per truss). Attach the highest auxiliary batten as close to roof ladder's top end as possible and the lowest auxiliary batten as close to the access level as possible. Starting from the eaves, attach the auxiliary batten under the third (3rd) tile row. If the auxiliary batten thickness is less than 50 mm, use DIN 440 M8/9 washer with 6x120 screws.
- Install the roof ladder fasteners for straight tile roofs on the ladder frame at max. 1400 mm intervals. Always install roof ladder fasteners from the outside of the frame by placing the ring around the side rail so that the tightening hole is always aligned with the ridge-side alignment hole (figure 3). This ensures that the ladder is aligned with the roof tiles correctly. Attach the roof ladder fastener to the ladder frame with one 8x30 mm hexagonal bolt and M8 hexagonal nut. Attach the auxiliary batten brackets of the roof ladder to the lowest and highest spacers. Fasten the auxiliary batten bracket with the same bolt that fastens the roof ladder fastener to the ladder frame. The maximum distance between auxiliary batten brackets is 7000 mm (figure 2).
- Place the ladder on the roof, resting on the roof ladder fasteners. Then fix the tile roof auxiliary batten brackets in place. Attach the auxiliary batten bracket with two 7x40 mm HVAC screws. Note: To prevent the tile from breaking, make a hole in the water seal of the tile above the auxiliary batten bracket, making sure the size of the hole corresponds to the width and depth of the installed product.
- Finish by carefully positioning the roof ladder fasteners in their places at the edge of the tile (on top of battens) and tighten them.



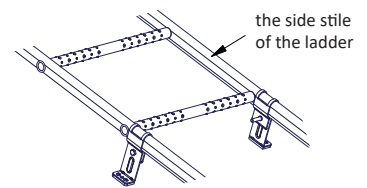
Part	Description
1	Roof ladder fastener, straight tile roof
2	Auxiliary batten bracket
3	Pisko SafeGrip ladder
4	Hexagon bolt M8x30, hot-dip galvanized
5	HVAC-screw, 7x40 or 7x50 mm
6	Hexagon bolt M8x40, hot-dip galvanized
7	Hexagon nut M8, hot-dip galvanized

## USE

Roof ladder must be used when the roof inclination is more than 1:8. 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 installation options for roof ladders: class 1 and class 2. Using personal fall protection equipment, a person is only allowed to attach themselves to a roof ladder, which is installed in accordance with class 2. 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 straight tile roof 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). Moreover, the following must be taken into consideration when using a safety rope:

- 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 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

As long as the Pisko products are installed in accordance with the instructions, they have a long life cycle and they are safe to use, guaranteed by the continuous quality control and R&D by Piristeel Oy. In order to ensure the safe use and the long life cycle, the property owner must perform the annual inspection and maintenance procedures and ensure that the snow load is not exceeded, as specified in the regulations.

**The property owner must check the roof safety products and personal protective equipment, installed in accordance with class 2, by outsourcing this annually to a person authorized by the manufacturer.**

The annual inspection and maintenance areas for the Pisko products:

- Check the tightness of the joints and points of attachment.
  - Check the fastenings in the roof.
  - Remove the excessive snow load in order to minimize the stress on structures and points of attachment (as necessary, several times during winter).
  - As necessary, remove snow and ice from the floor bridges.
- 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>
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<b>EN 12951</b> Pisko SafeGrip roof ladder for straight tile roof, 1343 TB <b>Mechanical strength:</b> Class 1 and Class 2 <b>Fire safety:</b> Class A1 <b>Durability:</b> Z275 + powder coating 80µm <b>Resistance to external fire:</b> Estimated to meet the requirement

This product has been installed by

COMPANY

INSTALLER

According to class 1:

According to class 2: