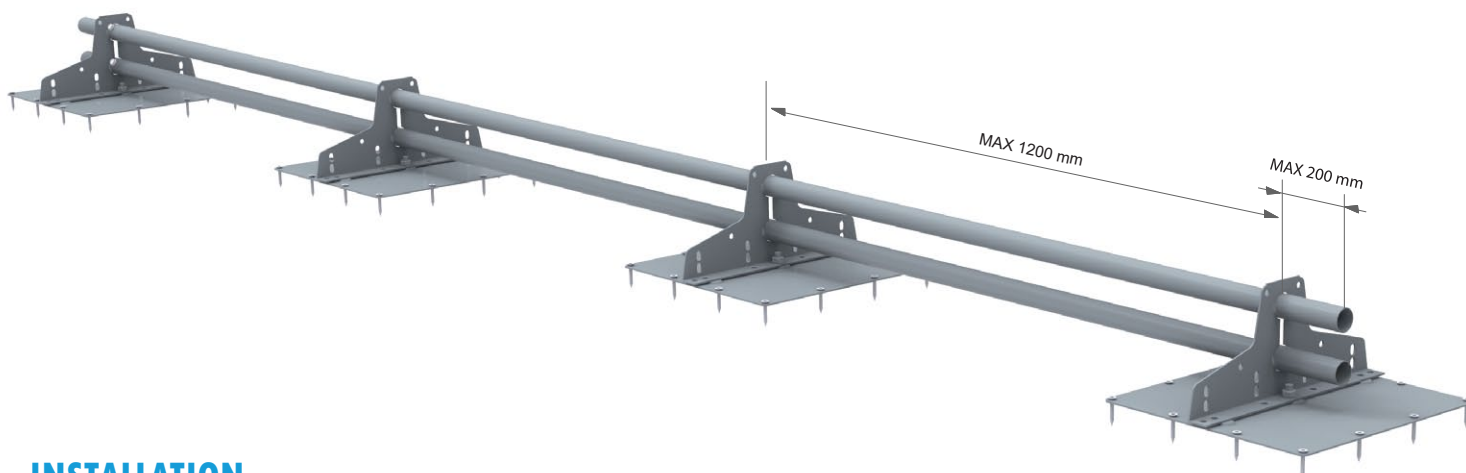


## PISKO SNOW GUARD FOR BITUMEN ROOF



(figure 1)

### INSTALLATION

The snow guards must be positioned as close to the eaves as possible so that they transfer the loads onto the load-bearing structures.

The installation of the mounting plate for bitumen roof should be done according to the instruction for installation, mounting plate for bitumen roof. Figure 2 shows the installation principle of the fastening solution.

Fix dedicated seals to the ends of the base of the of the snow guard fastener. Alternatively, two pieces of approx. 50 mm long sealing strips may be used instead of the seals.

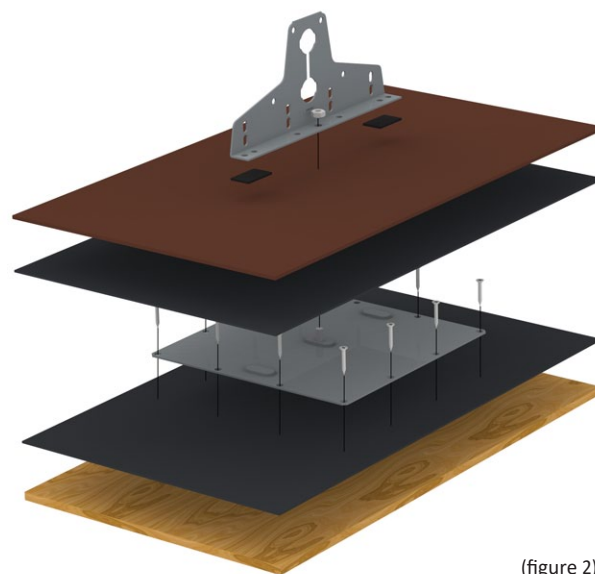
Fix the snow guard fastener LE SK 350 to the mounting plate, using one hot dip galvanized M10 nut.

Slide the snow guard pipes through the round holes of the roof brackets and secure the pipes in place by pipe fixing screws through the pipes, next to the inner side of outmost brackets.

The extensions of the snow guard pipes shall be done by sliding the pipe end with solid reducer inside the adjacent non-reduced pipe.

The distance between the adjacent roof brackets shall not be more than 1200 mm.

The maximum overhang of the snow guard pipe from the outermost fastener is 200 mm (figure 1).



(figure 2)

### 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.

- Check the tightness of joints, connections and attachments.
- 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). Product durability in accordance with the certification certificate.
- Check the paintwork and zinc coating of the products; repair faults and touch up paintwork if necessary
- Replace or repair any damaged or faulty parts as soon as possible.

| Part list  |
|--|
| LE SK 350  |
| Seal or sealing strip  |
| Hot dip galvanized M10 nut [1 nut/fastener]  |
| Snow guard pipe 32 mm  |
| Pipe fixing screw, e.g. 4,8x25 self-tapping farmer screw or 4,8x19 self drilling screw |
| Mounting plate for bitumen roof  |
| Universal screw for outdoor use 5x35 mm [12 pcs/fastener]                              |

## MAXIMUM LENGTH OF ROOF SLOPE (RT Reference Card 85-11132)

Indicative figures for the maximum distance (m) of the roof slope above the snow guard on a smooth surface. The maximum distance on coarse roofs, such as bitumen roofs can be increased by 1.3 – 1.5 times the stated amount. The snow load values shown are the actual snow loads on a roof.

| Roof's inclination angle (°) and snow ratio<br>(the ratio of the slope to the horizontal<br>width of the roof pane) | Maximum length of slope above the snow guards |       |        |       |       |       |
|---|---|-------|--------|-------|-------|-------|
| The characteristic value of the snow load on the roof: 1,8 kN /m <sup>2</sup>                                       |   |       |        |       |       |       |
| Space between the snow guard fasteners  | 0,5 m   | 0,6 m | 0,75 m | 0,9 m | 1,0 m | 1,2 m |
| Roof's inclination angle and snow ratio   |   |       |        |       |       |       |
| < 15°, (1:3,7)  | 21,4  | 17,9  | 14,3   | 12,0  | 10,7  | 9,0   |
| 15... 22°, 1:3,7... 1:2,5   | 11,4  | 9,5   | 7,6    | 6,3   | 5,7   | 4,8   |
| 22... 27°, 1:2,5... 1:2   | 8,4   | 7,0   | 5,6    | 4,7   | 4,2   | 3,5   |
| 27... 37°, 1:2... 1:1,3   | 7,4   | 6,2   | 4,9    | 4,1   | 3,7   | 3,1   |
| 37... 45°, 1:1,3... 1:1   | 9,0   | 7,5   | 5,9    | 5,0   | 4,5   | 3,7   |
| The characteristic value of the snow load on the roof: 2,0 kN /m <sup>2</sup>                                       |   |       |        |       |       |       |
| Space between the snow guard fasteners  | 0,5 m   | 0,6 m | 0,75 m | 0,9 m | 1,0 m | 1,2 m |
| Roof's inclination angle and snow ratio   |   |       |        |       |       |       |
| < 15°, (1:3,7)  | 19,1  | 16,1  | 12,9   | 10,8  | 9,6   | 8,1   |
| 15... 22°, 1:3,7... 1:2,5   | 10,2  | 8,6   | 6,9    | 5,7   | 5,1   | 4,3   |
| 22... 27°, 1:2,5... 1:2   | 7,6   | 6,3   | 5,1    | 4,2   | 3,8   | 3,2   |
| 27... 37°, 1:2... 1:1,3   | 6,7   | 5,6   | 4,4    | 3,7   | 3,3   | 2,8   |
| 37... 45°, 1:1,3... 1:1   | 8,2   | 6,8   | 5,3    | 4,5   | 4,1   | 3,3   |
| The characteristic value of the snow load on the roof: 2,6 kN /m <sup>2</sup>                                       |   |       |        |       |       |       |
| Space between the snow guard fasteners  | 0,5 m   | 0,6 m | 0,75 m | 0,9 m | 1,0 m | 1,2 m |
| Roof's inclination angle and snow ratio   |   |       |        |       |       |       |
| < 15°, (1:3,7)  | 15,0  | 12,5  | 9,9    | 8,3   | 7,5   | 6,2   |
| 15... 22°, 1:3,7... 1:2,5   | 8,0   | 6,6   | 5,3    | 4,4   | 4,0   | 3,3   |
| 22... 27°, 1:2,5... 1:2   | 5,8   | 4,8   | 3,9    | 3,3   | 2,9   | 2,4   |
| 27... 37°, 1:2... 1:1,3   | 5,2   | 4,3   | 3,4    | 2,8   | 2,6   | 2,1   |
| 37... 45°, 1:1,3... 1:1   | 6,2   | 5,2   | 4,1    | 3,5   | 3,1   | 2,6   |

PICTURED IS AN EXAMPLE OF SNOW GUARDS BEING USED ACCORDING TO THE TABLE.

Maximum length of the slope above the snow guards: 4,7 m

Roof angle 25°  
Snow load 1,8 kN/m<sup>2</sup>

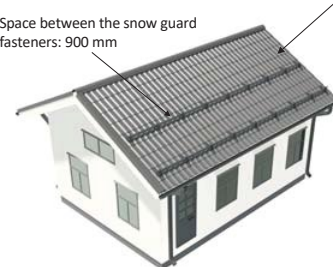
Space between the snow guard fasteners: 900 mm



Maximum length of the slope above the snow guards: 3,3 m

Roof angle 25°  
Snow load 2,6 kN/m<sup>2</sup>

Space between the snow guard fasteners: 900 mm



Pisko Snow Guards are capable of bearing a load of at least 5 kN/m, in the direction of the inclined roof. By following the values in the table these requirements are fulfilled.

|                                 |   |
|---------------------------------|---|
| <br>EUFI29-19002814-VA          | Piristee Oy<br>Metallitie 4<br>FI-62200 Kauhava   |
| Product                         | Pisko snow guards   |
| Intended Purpose                | A roof safety product – The snow guards are used for preventing snow and ice falling from the roof.   |
| Performance levels              |   |
| 1. Minimum height               | Declared  |
| 2. Extensions                   | Fixed   |
| 3. Static load-bearing capacity | With a 1.5-kN concentrated load and a 5-kN load in the inclination direction of the pitched roof area, the deflection is less than 20 mm and the permanent deflection less than 5 mm. |
| 4. Corrosion resistance         | Corrosion resistance class C3 medium  |