

## SNOW GUARD FOR LOAD-BEARING PROFILED SHEETS OVER 45 MM OF HEIGHT

The snow guard must be positioned as close to the eaves as possible so that the load of the snow is directed towards load-bearing structures. Secure the snow guard pipes in place by pipe fixing screws through the pipes, next to the outmost brackets (figures 2,6).

The distance between the adjacent roof brackets shall not be more than 1000 mm.

The edges of the snow guard pipes shall not outreach the closest roof bracket by more than 200 mm. (figures 1)

### INSTALLATION

The requirement to use this option, is that the sheet has been designed and executed as a load bearing steel structure, and the minimum thickness of the material is 0.70 mm.

The "LE 350 on top of profile" brackets shall be installed directly to the crown of the profile. Fix the bracket to the sheet by using four 7x40 HVAC screws, on the bended side edge of the bracket (figures 3,4).

Ensure the water tightness by using a suitable rubber sealant between the bracket and the profiled sheet (figure 3).

When the snow guard is fixed to a high load bearing sheet, it is recommended to use separate Pisko valley guards, that are to be designed according to the height of the load bearing sheet's crown. Valley guards prevents the ice and snow from sliding under the snow barrier pipes.

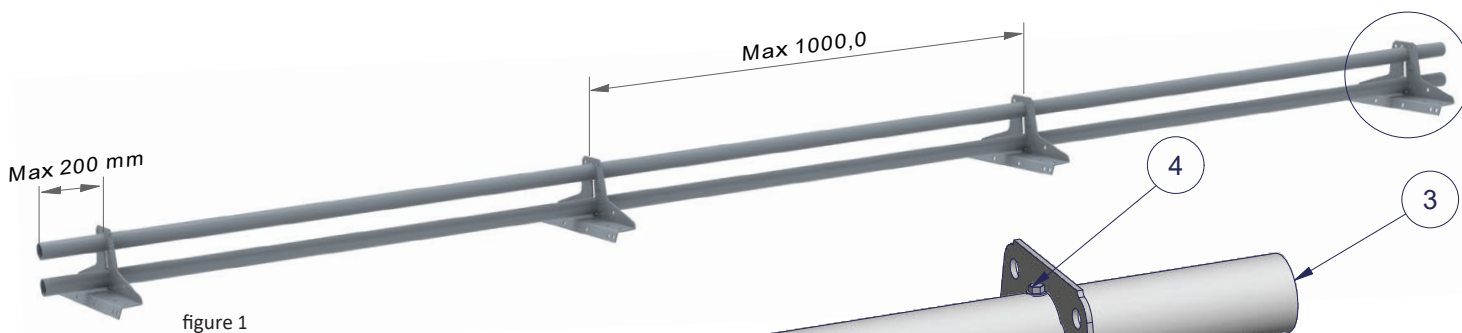


figure 1

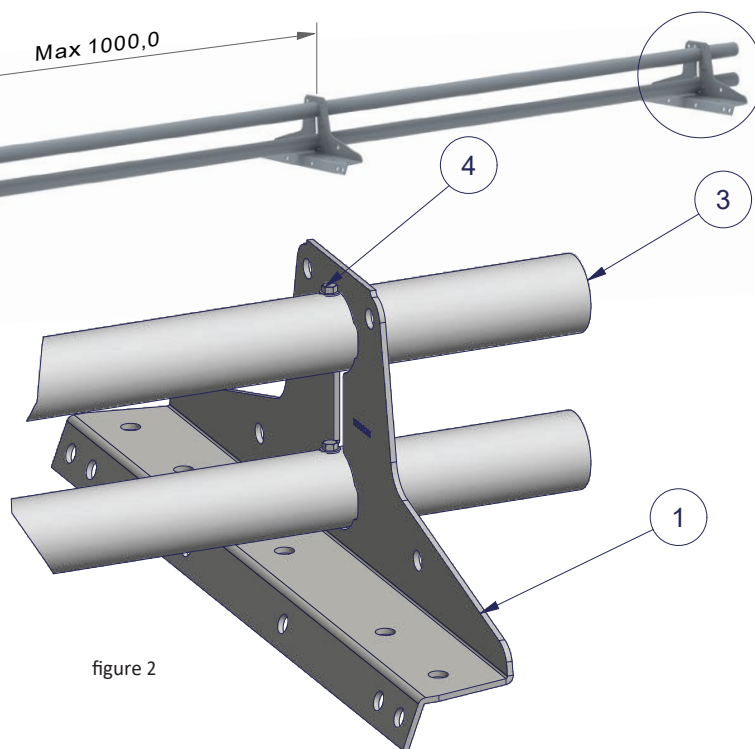


figure 2

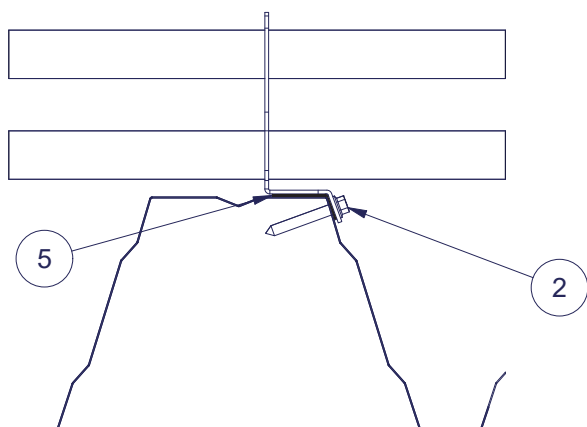


figure 3

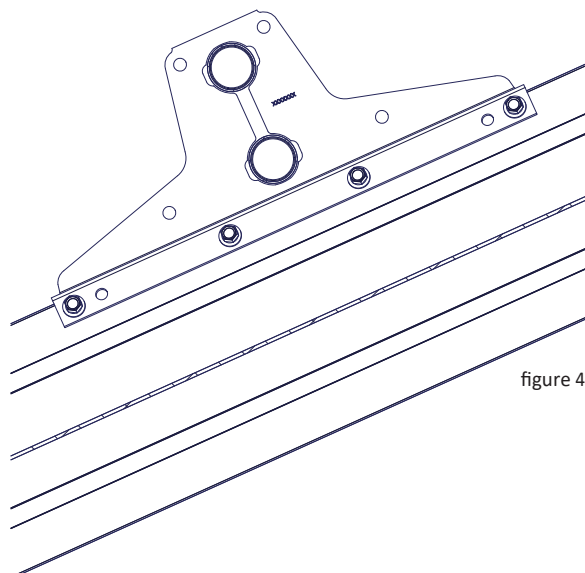


figure 4

Part	Description
1	LE 350 on top of profile
2	HVAC-screw 7x40 or 7x50 [4 pcs/bracket]
3	Snow guard pipe 32 mm / 3000 mm
4	Pipe fixing screw, e.g. 4,8x25 self-tapping farmer screw or 4,8x19 self drilling screw [4 pcs]
5	EPDM sealant strip

## 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 (the ratio of the slope to the horizontal 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.

## 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.