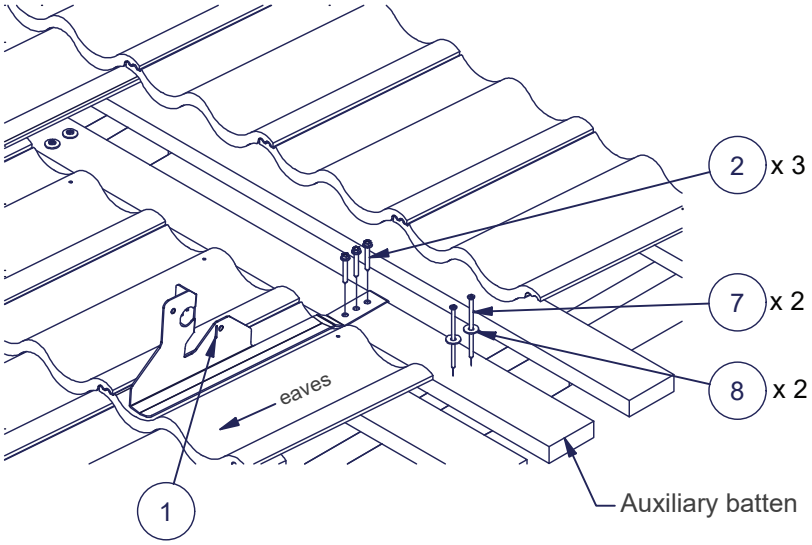
Pisko SnowDefence 150 snow fence for tile roof

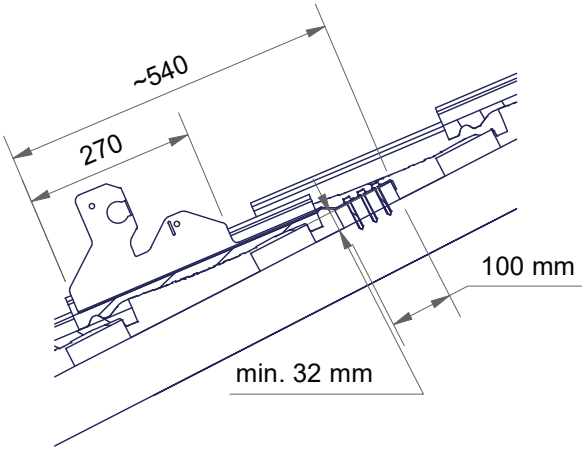
Bracket for tile roof (aux. batten) 150 Compact

INSTALLATION

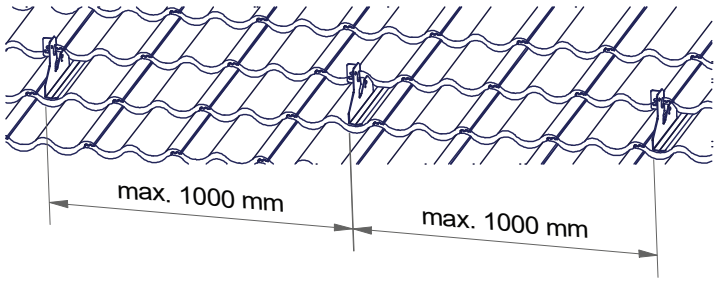
The brackets for tile roof 150 Compact (1) are attached to the roof structure by using an auxiliary batten. A 100 mm wide full-edged auxiliary batten is installed between the battens. The auxiliary batten must be at the same thickness as the batten (min. thickness 32 mm).

- The auxiliary batten is fixed to each roof chair with two 6x120 mm screws (7) and a DIN 440 M8 washer(8).
- The auxiliary batten must be fixed to at least three roof trusses.
- The distance between the auxiliary batten and the lower end of the bracket is approximately 540 mm.
- The edge of the bracket should be positioned approximately in line with the bottom edge of the tile, so that the load transmitted by the edge is placed on the most durable part of the tile. Please refer to the tile manufacturer's instructions.
- The bracket (1) is fixed to the auxiliary batten with three 7 x 50 mm HVAC screws (2), drilling a pre-hole is recommended to prevent the batten from slitting.

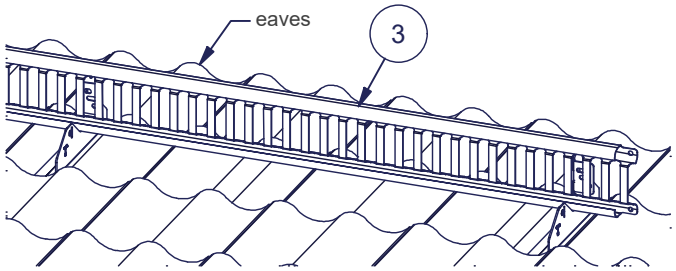




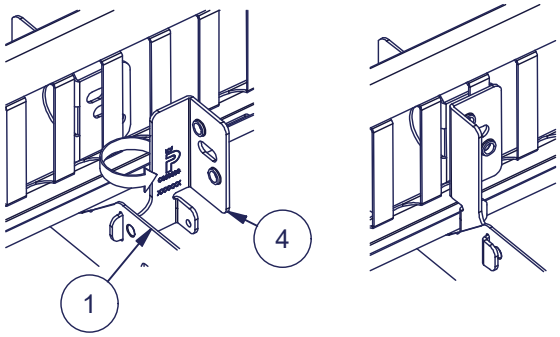
Always use at least three bracket (1) per continous lenght.
Distance between brackets max. 1000 mm

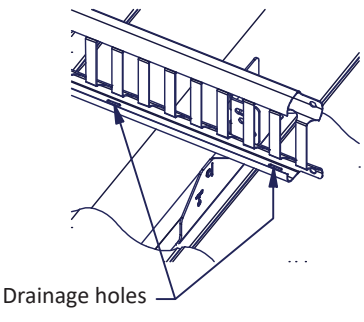


Install the Pisko SnowDefence 150 Compact snow fence (3) to the bracket (1) with the drainage holes in the fence profile facing down.

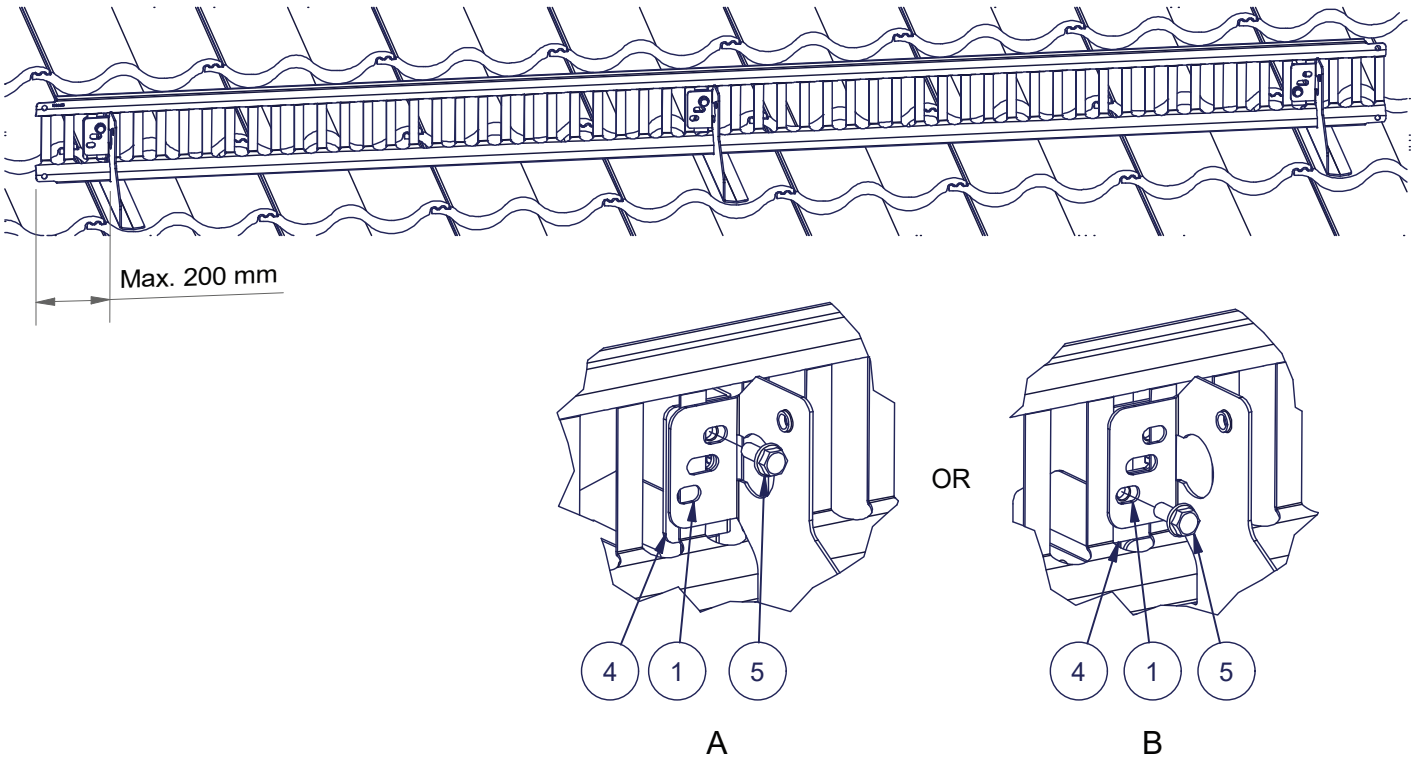


Slide the locking bracket (4) to the slot of the bracket (1) and turn it 90°.

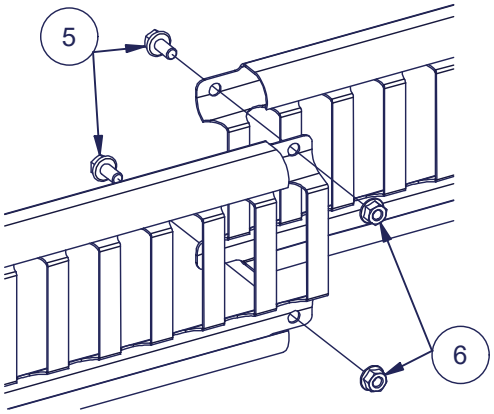




Lock the snow fence in place between each fastener (1) and locking bracket (4) with a single flange bolt (5).
The flange bolt can be screwed into one of the two threaded holes in the fixing clamp (A or B).
Alternatively, the fastening can be done from the central oval hole of the bracket, in which case M8 flange nut (6) is used on the other side of the bolt.
Max. protrusion of the fence from the outermost bracket is 200 mm.



Fence extension shall be made with 2 flange bolts (5) and nuts (7).



Part	Description
1	Bracket for tile roof (aux. batten) 150 Compact
2	HVAC screw 7x50 mm (for outdoor use)
3	Pisko Snowdefence 150 Compact snow fence
4	Locking bracket for snow fence 150 Compact
5	Flange Bolt DIN 6921 - M8 x 16 *
6	Flange Nut DIN 6923 - M8 *
7	Universal screw 6x120 mm (for outdoor use)
8	Washer DIN 440 M8 *

* HDG or equal corrosion protection

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 /m²						
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 /m²						
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 /m²						
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

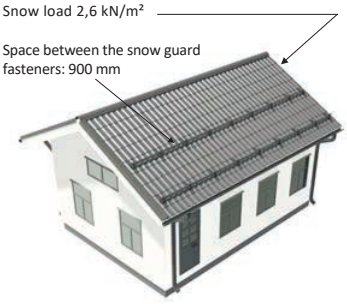
Roof angle 25°
Snow load 1,8 kN/m²

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/m²

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 make sure that excessive snow load does not accumulate on the roof.

Yearly maintenance inspection checklist for Pisko snow guards:

- Check the tightness of joints, connections and attachments.
- Check fixings to the roof
- Take care to regularly clean the accumulated debris and dirt in the snow guard (such as leaves)
- Ensure any excessive snow load is cleared to minimize the strain on structures and attachment points of snow guard (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.