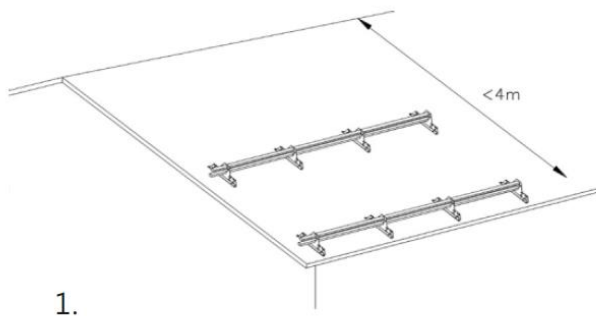


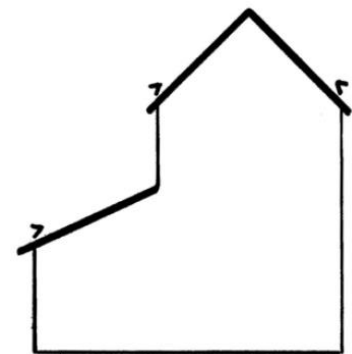
## Snow guard for corrugated steel roofing and metal multi-tile roofing

### 1. Planning the location

- The snow guard is placed where snow falling from the roof forms a hazard or some other reason exists for preventing the snow from falling.
- The snow guard must always cover the entire length of the eaves. It should not be used as short sections (e.g. 3 m) over the entrances only, for example. If this is necessary, however, two rows of snow guards must be used if the length of the roof plane above the snow guard is more than 4 metres (figure 1).
- Snow must always be prevented from falling from one roof plane to another as well (figure 2).
- Place the snow guard close to the side eaves so that the snow loads are transferred to the load-bearing structures.



1.



2.

### 2. Dimensioning of snow guards

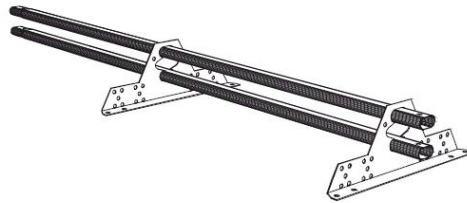
Maximum roof plane length above the snow guard (m)						
Angle (°) and slope ratio of the roof	Distance between snow guard fixtures (m)					
Snow load on the roof 1.8 kN/m <sup>2</sup> (2.6 kN/m <sup>2</sup> )						
	0.5 m	0.6 m	0.75 m	0.9 m	1.0 m	1.2 m
< 15°, (1:3.7)	21.4 (15.0)	17.9 (12.5)	14.3 (9.9)	12.0 (8.3)	10.7 (7.4)	9.0 (6.2)
15...22°, 1:3.7...1:2.5	11.4 (8.0)	9.5 (6.6)	7.6 (5.3)	6.3 (4.4)	5.7 (4.0)	4.8 (3.3)
22...27°, 1:2.5...1:2	8.4 (5.8)	7.0 (4.8)	5.6 (3.9)	4.7 (3.3)	4.2 (2.9)	3.5 (2.4)
27...37°, 1:2...1:1.3	7.4 (5.2)	6.2 (4.3)	4.9 (3.4)	4.1 (2.8)	3.7 (2.6)	3.1 (2.1)
37...45°, 1:1.3...1:1	9.0 (6.2)	7.5 (5.2)	5.9 (4.1)	5.0 (3.5)	4.5 (3.1)	3.7 (2.6)

If this load is exceeded, the snow load on the roof must be reduced.

### 3. Contents of the snow guard package

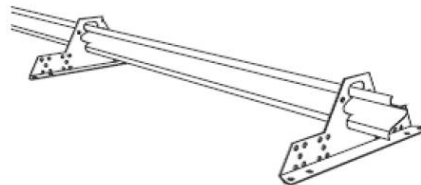
Snow guard with two oval tubes

- Snow guard tube, oval, 3.0 m
- Roof fixture KL3
- Spacer ring KT3
- Hexagonal screw M8 x 30 mm
- Nut M8
- HVAC screw 7 x 50 mm
- Rubber gasket  $\varnothing$  25 x 5 m



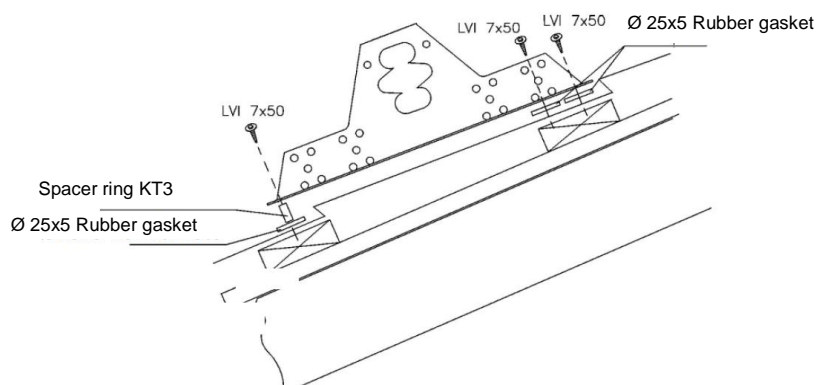
Snow guard with the LP3 profile

- LP3 Snow guard profile 3.0 m
- Roof fixture KL3
- Spacer ring KT3
- Self-drilling screw 6.3 x 19 mm
- HVAC screw 7 x 50 mm
- Rubber gasket  $\varnothing$  25 x 5 m



### 4. Installation order

1. Plan the placement. The snow guards are usually attached to the 2nd and 3rd roof batten.
2. Ensure that the distance between roof battens is 350 or 400 mm. The battens must be made of full-edged, close-grained wood.
3. Calculate the fixture distance according to the recommendation of the snow guard table.
4. Mark the locations of the snow guards (using a chalk line, for example) and make sure that the fixtures are in line.
5. Attach the fixtures one by one as shown in the figure.



Always make sure before fixing the screws that there is a roof batten underneath. Depending on the roofing type, the distance between roof battens may be 350 or 400 mm. Fixture KL3, therefore, has fixing holes for both the 350 and the 400 mm distribution. Seal the screw lead-throughs by placing  $\varnothing$  25 x 5 mm EPDM rubber gaskets between the end support and the roofing as shown in the figure.  
EPDM rubber gaskets.

In the case of metal multi-tile roofing, place a 21 mm plastic spacer KT3 between the fixture and the rubber gasket for the bottom screw as shown in the figure. NOTE! In the case of a Finnera roof, spacer ring KT4 is used with height is 29 mm, and a 7 x 70 mm HVAC screw is used with the spacer ring.

No spacer rings are needed for corrugated steel roofing.

Number of fixture screws:

Roof batten size 28–32 x 100 mm: 7 x 50 mm	Suitable for use as roof batten, fix with three HVAC screws.
Roof batten size 22 x 100 mm: one another. Fix with three 7 x 50 screws.	The allowed roof plane lengths of the snow guard table are multiplied by 0.8 or the fixtures are placed closer to mm HVAC

6. Place the snow guard tubes/profile in its place. In the profile, point A faces the ridge. The tubes/profiles closest to the ends may exceed the last fixture by maximum 100 mm.
7. Snow guard tubes can be extended by pushing the tapered end into the other tube and locking the connection with an M8 x 30 mm hexagonal screw and an M8 nut. Sideways movement is prevented by placing M8 x 30 mm hexagonal screws and M8 nuts at the ends of the tubes.

Snow guard profile LP3 can be extended by overlapping the profiles by over a distance of minimum 85 mm and locking the connection with four self-drilling screws as shown in the figure. Sideways movement is prevented by placing 6.3 x 19 mm self-drilling screws at the ends of the profiles.