

GRID-TYPE SNOW GUARD RLE/VARMA 120

Utility model No. 7853

Patent application 20055563

1. Picture of the product

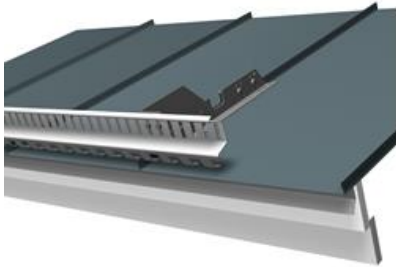


Figure 1. PLE/VARMA 120 for standing seam roofing (mechanical lock)
PLE/VARMA 120 for brick roof

Figure 2.

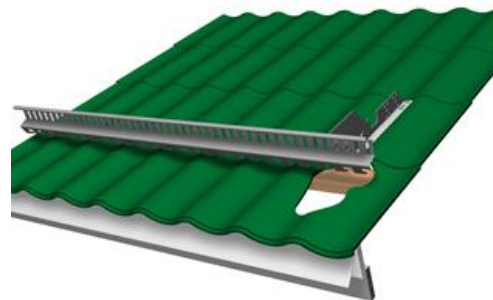
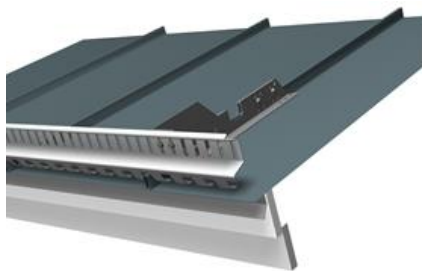


Figure 3. PLE/VARMA 120 for Classic roof roofing

Figure 4. PLE/VARMA 120 for metal multi-tile

2. Product description

The tube and grid snow guards currently in the market have difficulties keeping ice floes from falling down between the roofing and the snow guard. An ice floe forms above the snow guard when snow melts and an icy floe remains. Such an icy floe is life-threatening if it falls down. This problem concerns buildings with mechanically locked standing seam roofs and Classic roofing in particular. The ice/snow volumes accumulating between the snow guard and the eaves are another problem because the snow guard cannot be installed close enough to the eaves.

3. Why should I use a PLE/VARMA 120 snow guard?

Tube-type snow guards in new and older buildings have been repaired afterwards by installing an additional snow grid on the tubes. However, PLE/VARMA 120 is considerably

PRODUCT CARD

NESCO

more economical, since just one snow guard is needed for creating a fully functional snow guard.

The grooves at the bottom edge of the profile snow guard PLE/VARMA 120 allow installing the guard in such a way that ice floes cannot slide past the guard. Furthermore, the fixture designed for PLE/VARMA allows installation as close to the eaves as possible, minimising the risk of snow and ice falling due to accumulation between the snow guard and the eaves.

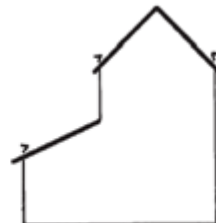
4. For what kinds of properties is the grid-type snow guard PLE/VARMA 120 recommended?

The profile snow guard PLE/VARMA 120 is recommended for use in all low buildings with maximum 2 storeys instead of the customary tube-type snow guards. Especially if a public route runs by the building or if this is required by the purpose of use of the building (e.g. day-care centre, school, retirement home).

A higher version of the profile snow guard PLE/VARMA 120 also exists: grid snow guard RLE/VARMA 180 (see separate product card) that is recommended for use in all buildings with more than 2 storeys instead of tube-type snow guards and customary grid-type snow guards. The higher grid-type snow guard RLE/VARMA 180 is also recommended for roofs with a slope of 1:1.5 or more, since when snow starts to move, it may cross over the tube-type snow guards and possibly also PLE/VARMA 120 on high pitched roofs.

The height of the profile snow guard PLE/VARMA 120 is 120 mm, length 3 m, and it can be extended. The profile snow guard PLE/VARMA 120 can also be used on brick and metal multi-tile roofing, but the biggest benefits are obtained on mechanically locked standing seam roofs and on Classic type roofs.

5. Snow guard table



Maximum roof plane length above the snow guard (m)

PRODUCT CARD**NESCO**

Angle (°) and slope ratio of the roof	Distance between snow guard fixtures (m)					
Snow load on the roof 1.8 kN/m ² (2.6 kN/m ²)						
	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)

The maximum allowed distance between the fixtures of profile snow guard PLE/VARMA 120 is 1,050 mm.