

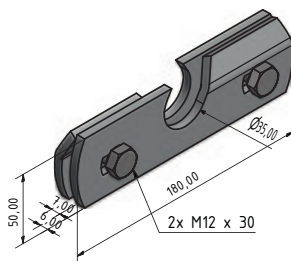
Snow retention system profile standing seam roof

The snow retention clamp, invented by Meinhard Kling, is the central component of the Kling snow retention system and allows the snow retention system to be installed on a sheet metal roof without penetrating the roof skin.

With the aid of the Kling snow retention systems, slipping of the snow quantities is prevented by means of snow retention rows, which are fixed on the standing seam.

- On request, the snow retention systems can be powder coated in a RAL colour of your choice.

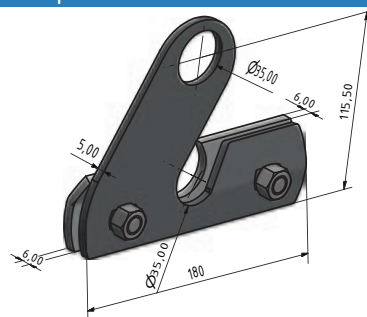
Snow retention clamp



Snow retention clamp for standing seam and angle seam roofs, suitable for tubes with 32 mm Ø. Material of the clamp is selectable, screws out of stainless steel V2A 1.4301. PU 10 pcs

Material	Article-No.
Aluminium	P A10010
Copper	P C10010
Stainless Steel	P E10010

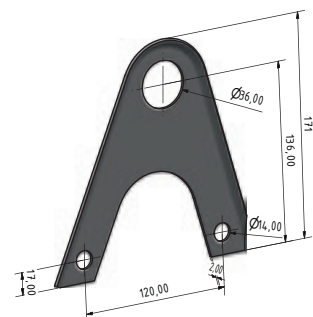
Double-tube snow retention clamp



Manufactured in one piece. Suitable for tubes with 32 mm Ø. PU 10 pcs

Material	Article-No.
Aluminium	P A20010
Copper	P C20010
Stainless Steel	P E20010

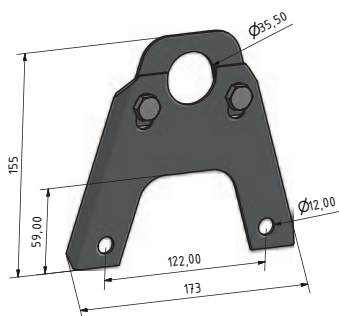
Double-tube add-on element triangular form



Suitable for 2 pipes with 32 mm Ø. The stacking element is mounted on the snow retention clamp (not included in the article). PU 50 pcs

Material	Article-No.
Aluminium	P A35010
Copper	P C35010
Stainless Steel	P E35010

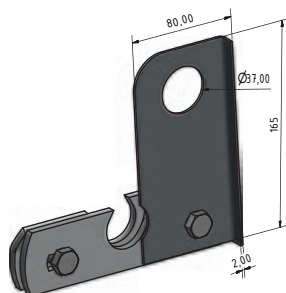
Double tube add-on element for tube fixing



For tube fixing ▪ suitable for 2 tubes with 32 mm Ø ▪ The stacking element is mounted on the snow retention clamp (not included in the article) ▪ PU 10 pcs

Material	Article-No.
Aluminium	P A30010
Copper	P C30010
Stainless Steel	P E30010

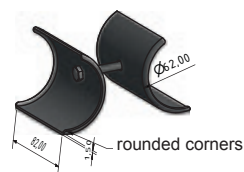
Double tube add-on element rectangular form



Suitable for 2 pipes with 32 mm Ø ▪ The stacking element is mounted on the snow retention clamp (not included in the article) ▪ PU 10 pcs

Material	Article-No.
Aluminium	P A40010
Copper	P C40010
Stainless Steel	P E40010

Ice holder



Ice holder with V2A screws for mounting under the snow tube ▪ PU 100 pcs

Material	Article-No.
Aluminium	P A50010
Copper	P C50010
Stainless Steel	P E50010

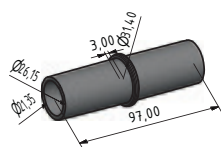
Snow retention tubes end caps



For snow retention tubes 32/2 mm ▪ PU 10 pcs

Material	Article-No.
PVC black	P Z20020

Internal tube jointer



Internal tube jointer ▪ for a safe expansion of the snow retention tubes ▪ PU 20 pcs

Material	Article-No.
black Ø 25 mm	P Z10010
grey Ø 27 mm	P Z20010

Snow retention tubes



32/2 mm ▪ for attachment to the snow retention clamp

Material		Article-No.
Aluminium	rm	P Z30020
Copper	rm	P Z40020
Stainless Steel	rm	P Z50020

Application

The number and arrangement of the snow retention systems depends on the roof inclination, the length of the panels and the expected snow load (snow load zone) (DIN 1055-5).

Note: In all cases the technical regulations (of the respective countries), legal regulations (of the respective countries), statics and local conditions must be observed!

Quality

All snow retention systems are industrially produced with stamping and bending machines. Internal quality controls ensure a consistently high quality.

Extraction values

The extraction values of the snow retention clamp are dependent on a correct assembly and the observation of the required tightening torques of the screws of 55 Nm. For the Kling Dach snow retention clamp deduction values of 1200 N (120 kg) can be assumed for the calculation.

Assembly

Careful assembly of the individual snow retention clamp is indispensable. The snow retention clamps must be fastened to the seam with a tightening torque of 55 Nm. The standard mounting is described in the mounting instructions video at www.klingdach.de.

Roof substructure

The roof skin and the snow retention system can only withstand the stresses the roof substructure can withstand. Before applying the fastening, the structure of the subconstruction must be checked for the required quality and strength.

The required nominal thickness of the formwork for roofing is at least 24 mm (22 mm for wood-based panels) at the time of installation. The thrust force of the snow load must be taken into account when arranging the fixed clips.

Arrangement

The arrangement of the required number of snow retention clamps in order to safely hold the thrust force of the snow load must be calculated expertly according to the regulations of the ZVSHK.

The snow retention clamps shall be placed on each or at least every second fold in the snow retention line, but the maximum distance between the snow retention clamps may not exceed 80 cm. The required number of snow retention rows should be installed at the same distance on the roof.