

# INSTALLATION INSTRUCTIONS

## BLANKE PERMATOP SF 14

Modular, thin layer underfloor heating system for tiles and natural stone coverings



### Storage and acclimatisation

Do not store the BLANKE SF BASE fibre fabric mat in very humid places or outdoors. Store in a dry location away from direct sunlight and UV radiation. The room temperature must not fall below 10 °C. Avoid temperature fluctuations of more than 20 °C. Under the above-mentioned conditions and at temperatures between 10-30 °C, the adhesive surface has a storage life of up to 12 months before processing.

### Material properties

BLANKE PERMATOP SF 14 is a complete system consisting of a self-adhesive BLANKE SF BASE fibre fabric mat that supports the heating pipes, a 14x2 mm PE-RT 5-layer heating pipe with BLANKE SF KLETT-TEC Velcro sheathing and the fast-curing energy distribution layer BLANKE FILLOTHERM. A BLANKE RDS 5/50 self-adhesive edge insulation strip is available to prevent sound and moisture ingress on vertical structural elements.

### Substrates

It is essential that substrates (load distribution layers with insulation) on which BLANKE PERMATOP SF 14 is to be laid are examined to ensure they are level and have a firm surface that is capable of bearing the load. There must be no differences in height. Grind back any layers that could impair bonding. Component temperatures below 10°C tend to cause condensation on many installation substrates (tiles, gypsum fibreboards, etc.). For this reason always assess the on-site installation conditions. Substrates must be free of grease, dust and condensation. Primers suitable for the substrate, bedding mortar and levelling layers are to be provided as required. Levelling layers or transition profiles that exceed the potential layer thickness of the BLANKE FILLOTHERM must be applied before installing the underfloor heating. When using PERMATOP SF 14 in bathrooms, showers and other wet areas, always apply a sealant on top according to the standard specifications.

- > Screeds with installed insulation
- > Calcium sulphate screeds with installed insulation
- > Calcium sulphate screeds with installed insulation
- > Magnesium oxychloride composition/screeds with installed insulation
- > Dry screeds with installed insulation
- > Chipboards with installed insulation
- > Wooden floorboards (load-bearing) with installed insulation
- > Old, rigid ceramic floor covering (thoroughly cleaned)
- > Old natural stone floor covering (roughened)
- > Mixed substrates, no height differences
- > Glued PVC and linoleum floor coverings

### Preparation for installation

The product is designed to be installed on indoor floor surfaces. Make sure that the surface to be bonded is clean, dry and free of dust. Temperatures below 10°C tend to cause condensation on many installation substrates (tiles, gypsum fibreboards, etc.). For this reason always assess the on-site installation conditions. Substrates must be free of grease, dust and condensation. It is also recommended to check whether the existing floor structure is insulated in order to reduce the heat loss into the floor.

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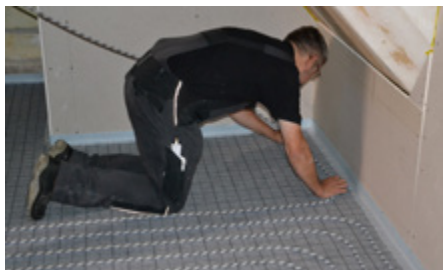
**1** Substrates must be free from non-adherent substances. The substrate must comply with level tolerances to DIN 18202. The substrate must be solid and capable of bearing the load. Apply a suitable primer to the substrate.



**2** Lay out self-adhesive Velcro mat on the substrate. The printed side must be facing up. Peel off the protective paper and press the mat onto the substrate without wrinkling. Align the mats flush. Cut to the required size with a cutter knife.



**3** Affix edge insulation strips to all the vertical structural elements. Press the self-adhesive base onto the mat.



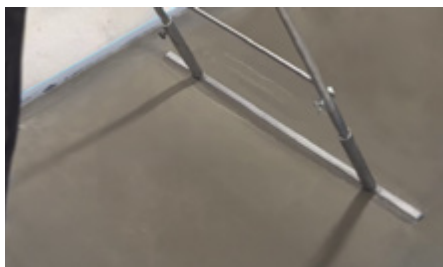
**4** Lay the BLANKE SF 14 KLETT-TEC in the spiral or serpentine pattern marked on the self-adhesive mat according to the surface heating plan, observing the prescribed installation gap. The minimum installation gap is 5 cm, the maximum installation gap 15 cm. The minimum Velcro heating pipe bending radius of 7 cm (90° deflection) or 14 cm (180° deflection) must not be undercut.



**5** Insert the BLANKE BENDS in the area of the heating circuit manifold in order to achieve a clean connection and predefined 90° radius.



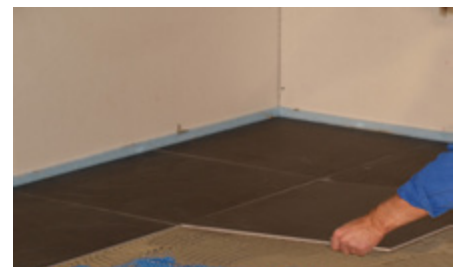
**6** When all the heating loops have been laid, level the surface. Use BLANKE FILLOTHERM to cover the pipes by at least 1 mm (in combination with BLANKE PERMAT, on soft coverings with PERMAT and a cover layer of 3-5 mm). The maximum height of the energy distribution layer is 25 mm from the hook-and-loop fleece (SF-BASE).



**7** Use a spiked roller or dapple bars on the freshly laid screed to aerate it for a better surface quality. Attention: Do not walk over the area in hobnail shoes.



**8** Once the installation readiness of BLANKE FILLOTHERM has been reached, BLANKE PERMAT can be installed directly on the fresh, clean energy distribution layer. If PERMAT cannot be installed immediately, the energy distribution layer must be primed with BLANKE GROUND before installing PERMAT at a later time.



**9** Laying of tiles on the underlayment. When laying BLANKE PERMAT and tiles, a thin-bed mortar C2 S1 to DIN 12004 or 12002 must be used. In the case of natural stone, an appropriate, suitable thin-bed mortar must be used.

**Attention:** During installation please refer to the notes in our latest technical data sheets. All work must also be carried out in compliance with current industrial standards