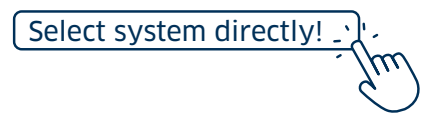


INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF-Family



BLANKE PERMATOP SF

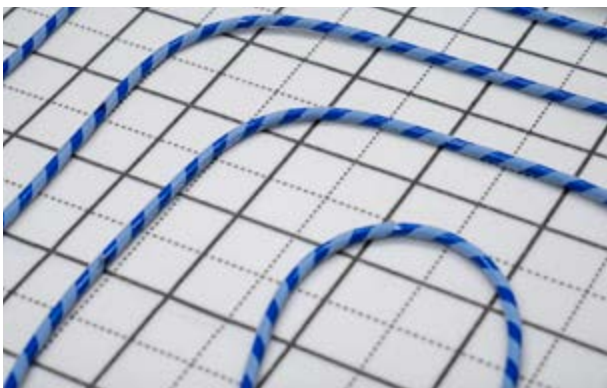
BLANKE PERMATOP SF 14

BLANKE PERMATOP SF SPA

INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF

Underfloor heating and cooling system – quick and easy installation



Storage and acclimatisation

Do not store the BLANKE SF Base fiber mesh mat in areas with high humidity or outdoors. The storage location must be dry and protected from direct sunlight and UV exposure. The room temperature must not fall below 10°C. Temperature fluctuations of more than 20°C must be avoided. Under the above-mentioned conditions and at temperatures between 10–30°C, the adhesive surface can be stored for up to 12 months prior to installation.

Material properties

BLANKE PERMATOP SF is a complete system consisting of the self-adhesive fiber mesh mat BLANKE SF BASE for accommodating the heating pipes, a 10 x 1.3 mm PE-RT heating pipe with hook-and-loop coating (Blanke SF KLETT-TEC), and the self-leveling, cement-based energy distribution layer, BLANKE SF FILLER.

A self-adhesive edge insulation strip, BLANKE RDS 5/50, is available to prevent restraint forces at rising structural elements.

Substrates

Substrates (load distribution layers with insulation) on which BLANKE PERMATOP SF is to be installed must always be checked for levelness, load-bearing capacity, and surface strength. Height offsets must be avoided.

Bond-inhibiting layers must be removed by grinding. Temperatures below 10°C promote condensation on many installation substrates (tiles, gypsum fiber boards, etc.). Therefore, installation conditions must always be assessed on a case-by-case basis. Substrates must be free of grease, dust, and condensation. Primers matched to the substrate, installation mortar, or leveling compounds must be applied as required. Leveling compounds or height adjustments exceeding the permissible layer thickness of PERMATOP SF FILLER must be completed prior to the installation of the underfloor heating system. Bathrooms, showers, and other wet areas must be waterproofed on top of PERMATOP SF in accordance with applicable standards.

- > Screeds with existing insulation
- > Calcium sulfate screeds with existing insulation
- > Mastic asphalt screeds with existing insulation
- > Magnesia / xylolite screeds with existing insulation
- > Dry screeds with existing insulation
- > Chipboard panels with existing insulation
- > Wooden floorboards (load-bearing) with existing insulation
- > Existing, sound ceramic coverings (thoroughly cleaned)
- > Existing natural stone coverings (sanded)
- > Mixed substrates without height offsets
- > Bonded PVC and linoleum coverings

Preparation for installation

The product is intended for interior floor areas. Ensure that the surface to be bonded is clean, dry, and free of dust. Temperatures below 10°C promote condensation on many installation surfaces (tiles, gypsum fiber boards, etc.). Therefore, installation conditions must always be assessed on a case-by-case basis. Substrates must be free of grease, dust, and condensation. Furthermore, it is recommended that the existing floor structure includes insulation in order to reduce heat loss into the subfloor.

INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF

Underfloor heating and cooling system – quick and easy installation



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 load bearing. If required, apply a suitable primer to the substrate.



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



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



4 Lay the BLANKE SF 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 10 cm. The minimum Klett heating pipe bending radius of 5 cm (90° deflection) or 10 cm (180° deflection) must not be undercut.



5 In the area of the heating circuit manifold, insert the Blanke bends in order to achieve a clean connection and predefined 90° radius of the heating pipes.



6 Once all the heating pipes are laid, the surface is notch-trowelled. Use BLANKE SF FILLER to cover the pipes by at least 1 mm (in combination with Blanke PERMAT, otherwise by at least 3 mm in the case of soft floor coverings). The maximum height of the energy distribution layer is 20 mm from the hook-and-loop fleece (SF BASE).



7 Use a spike-tooth roller on the freshly poured screed to aerate it for improved surface quality. Attention: Do not walk over the area in hobnail shoes



8 Once the installation readiness of the BLANKE FILLER 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 BLANKE PERMAT at a later time.



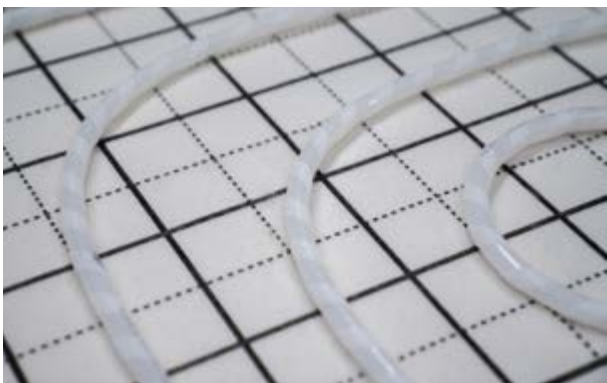
9 Laying of tile on the underlayment. When laying BLANKE PERMAT and tile, a thin-bed mortar C2 S1 to DIN 12004 or 12002 must be used. In the case of natural stone, an appropriate, suitable thin-bed mortar must be used.

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

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.

INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF 14

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



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.



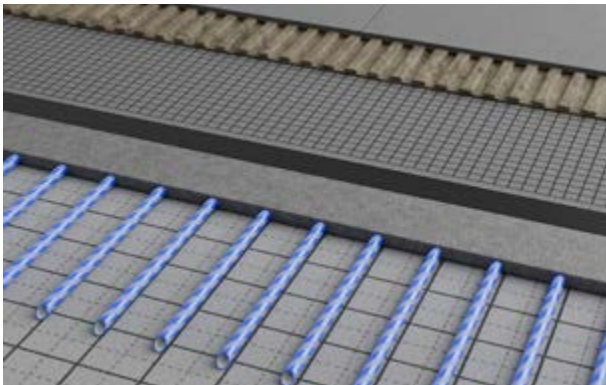
9 Laying of tiles on the underlayment. When laying BLANKE PERMAT and tiles, a thin-bed mortar C2 S1 to DIN 12004 or 12002 must be used. In the case of natural stone, an appropriate, suitable thin-bed mortar must be used.

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

INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF SPA

Underfloor heating system for bathrooms (wet rooms) incl. standard-compliant waterproofing in accordance with DIN 18534



Storage and Acclimatisation

Do not store the fiberglass mesh mat BLANKE SF Base in areas with high humidity or outdoors. The storage location must be dry and protected from direct sunlight and UV exposure. The room temperature must not fall below 10°C. Temperature fluctuations of more than 20°C must be avoided. Under the conditions stated above and at temperatures of 10–30°C, the adhesive surface can be stored for up to 12 months until installation.

Material Properties

BLANKE PERMATOP SF SPA is a complete system consisting of the self-adhesive fiberglass mesh mat BLANKE SF BASE for accommodating the heating pipes, a 10 x 1.3 mm or 14 x 2.0 mm PE-RT 5-layer heating pipe with hook-and-loop coating Blanke SF KLETT-TEC, the self-levelling calcium sulphate energy distribution layer BLANKE FILLOCREED, and the self-adhesive waterproofing membrane for bathrooms and wet rooms BLANKE DISK. A self-adhesive edge insulation strip, BLANKE RDS 5/50, is available to prevent restraint stresses at upstanding building components.

Substrates

Substrates (load distribution layers with insulation) on which BLANKE PERMATOP SF SPA is to be installed must always be checked for evenness, load-bearing capacity and surface strength. Any level differences must be excluded. Bond-inhibiting layers must be removed by grinding. Temperatures below 10°C promote the formation of condensation on many installation substrates (tiles, gypsum fibre boards, etc.). Therefore, the installation conditions must always be assessed on a case-by-case basis. Substrates must be free from grease, dust and condensation. Priming must be carried out using BLANKE GROUND. Levelling compounds or height equalisation layers that exceed the maximum layer thickness of 25 mm of PERMATOP FILLOCREED must be applied before installing the underfloor heating system. Bathrooms, showers and other wet rooms must be waterproofed in accordance with the applicable standards using the SF SPA system with the self-adhesive BLANKE DISK.

- > Screeds with existing insulation
- > Calcium sulphate screeds with existing insulation
- > Mastic asphalt screeds with existing insulation
- > Magnesia / wood magnesite screeds with existing insulation
- > Dry screeds with existing insulation
- > Chipboard panels with existing insulation
- > Wooden floorboards (load-bearing) with existing insulation
- > Existing solid ceramic coverings (thoroughly cleaned)
- > Existing natural stone coverings (abraded)
- > Mixed substrates without level differences
- > Bonded PVC and linoleum coverings

Preparation for Installation

The product is intended for indoor floor areas. Ensure that the surface to be bonded is clean, dry and free from dust. Substrates must be free from grease, dust and condensation. We also recommend that the existing floor structure includes insulation in order to reduce heat loss into the subfloor.

INSTALLATION INSTRUCTIONS

BLANKE PERMATOP SF SPA

Underfloor heating system for bathrooms (wet rooms) incl. standard-compliant waterproofing in accordance with DIN 18534



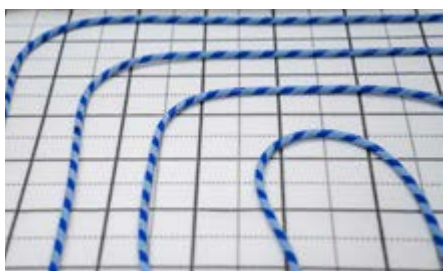
1 Substrates must be free from any bond-inhibiting components. Evenness must comply with DIN 18202. The substrate must be load-bearing and stable. A primer suitable for the substrate must be applied.



2 Lay the self-adhesive hook-and-loop fleece onto the substrate. The printed side must face upwards. Remove the release paper and press the fleece onto the substrate without wrinkles. Butt the sheets together. Cut to size using a utility knife.



3 Apply the edge insulation strip to all upstanding building components. Press the self-adhesive foil base firmly onto the fleece layer.



4 Install BLANKE SF KLETT-TEC on the hook-and-loop fleece in the pipe spacing specified in the underfloor heating design, following the predefined grid in a spiral or serpentine pattern. The minimum bending radius of the hook-and-loop heating pipe of 5x Da (90° turn) or 10x Da (180° turn) must not be exceeded.



5 In the area of the manifold, use the BLANKE BEND ELBOWS to ensure an orderly connection and a predefined 90° bending radius.



6 After all heating circuits have been installed, the area is poured. For this, BLANKE FILLOCREED is applied with a minimum pipe cover of 3 mm. The maximum thickness of the energy distribution layer is 25 mm measured from the SF-BASE fiberglass mesh mat.



7 If required, deaerate the still fresh BLANKE FILLOCREED using a spiked roller. Attention: Do not walk on the surface with spiked shoes.



8 After just 12 hours, BLANKE FILLOCREED is ready for installation and the self-adhesive waterproofing membrane BLANKE DISK can be applied directly without sanding and without priming.



9 For installing tiles on the self-adhesive waterproofing membrane DISK, a thin-bed mortar C2 S1 according to DIN 12004 and DIN 12002 must be used. For natural stone, use a suitable thin-bed mortar matched to the material.

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