

## **BLANKE** PERMATOP BF, BF+ AND BFC

## Underfloor heating and cooling system – quick and easy installation



1 Supporting substrates must be level and compliant with DIN 18202. According to the expected static requirements and envisaged live loads, both the construction as a whole and the DEO-dh insulating underlay must be planned and matched to suit the application area. Any raised areas, grout residues or other foreign objects in the floor surface must be removed. If any pipes, cables, cable ducts or ventilation lines are laid along the substrate, levelling grout, BLANKE BASEMAX or screed, DEO-dh standard, compression-resistant thermal insulation or approved, bonded filler without compressibility may be applied.



Affix system edge insulation strips to all vertical structural elements. Rest the base of the edge insulation strip on the top insulation layer or on the existing substrate. When using bonded fillers under the system studded panel, we recommend the installation of a protective, separating layer made of PE (polyethylene) with a thickness of at least 0.15 mm and with an overlap of 10 cm.



The system studded panels must be laid with an overlap of 50 mm. When overlapping at both sides, the studded panels can be clicked into each other.

As a general rule, the system studded panels need to be protected after they have been laid.



Please avoid any stresses such as walking on the system panels, positioning ladders or erecting scaffolding, or storing equipment and loads on them. If walk-ways are to be permanent fixtures, or equipment such as uncoilers need to be set up in the property, these areas must specially covered over and protected to ensure that the studs are not pressed in or damaged.



**5** Lay the BLANKE BF/C PIPE in the system in the specified spiral or serpentine pattern according to the plan and the surface heating and cooling system calculations, observing the recommended installation gap. The minimum installation gap is 10 cm, the maximum installation gap 25 cm. The minimum bending radiuses of  $16 \times 2$  mm and  $14 \times 2$  mm of the PE-RT heating pipe must not fall short of 8 cm (90° deflection) or 16 cm (180° deflection)



6 In the area of the heating circuit manifold, insert the BLANKE BENDS in order to achieve a clean connection and predefined 90° radius.



7 Once the thin layer of screed is applied (8 - 25 mm) and is ready to be walked on, it must be protected and shielded until the final floor covering is laid.



**8** Laying of the underlayment and decoupling mat BLANKE PERMAT with thin-bed mortar C2 S1 according to DIN 12004 or 12002.



Daying 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.