

Surface Heating & Cooling Specialists

SOLID FLOORS

SCREED OVER CASTELLATED FLOOR PLATES



Thermal Surfaces underfloor heating/cooling systems can be incorporated in to any type of floor construction that has a floor screed above it.

The elements of the system above the concrete sub-floor are perimeter/edge insulation to all walls and elevations projected through the screed, floor insulation, vapour barrier/separating layer above the insulation, pipe fixing system and underfloor heating/cooling pipe-work.

The system will be selected according to the constructional requirements of the project and we can recommend the most suitable underfloor heating/cooling system for the application. We can also provide guidance on the type and depth of screed most suitable for the system being installed. Typically solid floor underfloor heating systems can give outputs up to 120 watts/m2 dependant on flow water temperature to the underfloor heating pipe-work and the floor finish type.

Once the underfloor heating/cooling pipe-work has been installed, it is pressure tested to ensure it is mechanically sound before the floor screed is installed. The floor screed is then allowed to dry and cure on the recommendations of the floor screed installer/manufacturer. Once the floor screed is sufficiently dry and cured the floor finish can be installed.

Castellated Floor Plate System.

Thermal Surfaces castellated floor plates are lightweight plastic panels that interlock together to form a continuous layer acting as a vapour barrier and slip membrane below the floor screed. The castellated floor plates are laid over the sub floor that should be thermally insulated in accordance with building regulations. The underfloor heating pipe-work is then installed between the castellations that secure the pipe in position. The castellated floor plate system allows the floor screed to fully surround the pipe to ensure maximum heat output and dissipation of heat.

The castellated floor plate system is useful when there is restricted height or as an alternative means of fixing the underfloor heating pipe-work such as if there is a drainage membrane below that cannot be penetrated by fixings for the underfloor heating pipe-work.

SOLID FLOORS - FLOOR SECTION SCREED OVER CASTELLATED FLOOR PLATES AND PLAIN INSULATION

