

THERMAL SURFACES

Surface Heating & Cooling Specialists

SOLID FLOORS

SCREED OVER CLIP RAIL PIPE FIXING WITH POLYTHENE BARRIER AND PLAIN FLOOR INSULATION



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.

Clip Rail Pipe Fixing System for plain rigid insulation.

The Clip-rail system when installed below a floor screed is a low cost useful system for installing underfloor heating or cooling pipe-work in a serpentine layout as it fixes the centres at a uniform distance and when used in conjunction with pipe staples will hold the pipe-work more securely than pipe staples alone. . It is important to remember a vapour barrier/separating layer is still required above the plain floor insulation and that the floor insulation is rigid (typically expanded polystyrene, extruded polystyrene, polyisocyanurate or phenolic foam) and a minimum of 25mm depth. This system is popular because the main contractor can provide the insulation and vapour barrier to control the installation and duration of this element of the work.

SOLID FLOORS - FLOOR SECTION SCREED OVER CLIP RAIL SYSTEM WITH POLYTHENE BARRIER AND PLAIN INSULATION

