

Applications ...

Underfloor Heating

Tiling

Wet Rooms

Bathrooms/Showers

Insulated Renders

Dry Lining

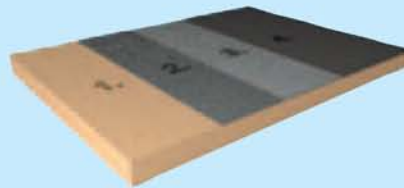
Plastering

Partition Walls

Curved Walls



Thermal Substrate Board

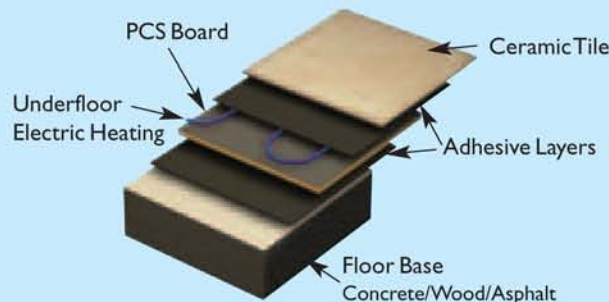


Warm Floors



Board Construction

- 1 Rigid Foam
- 2 Cementitious Adhesive
- 3 Reinforcement Mesh
- 4 Cementitious Hard Coat



Underfloor Heating Configuration

Construction Design may vary

The PCS Thermal Substrate Board provides an excellent substrate for use in a wide range of applications including external renders, bathrooms/wet rooms and for use with underfloor heating systems. The foam core of the board is manufactured from rigid extruded polystyrene. The foam core has a closed cell structure with moisture absorption of less than 0.2 %. The board is faced both sides with a factory applied reinforcement coating providing an ideal surface for tiling/rendering etc., and is fully compatible with most proprietary renders/adhesives.

Not compatible with solvent based adhesives.

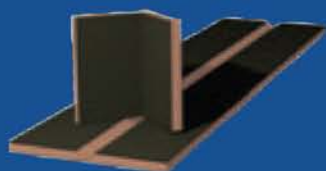
Thermal conductivity of the foam core to BSEN 13164 (0.031 W/mK) to BS 874 (0.027 W/mK)

- **Huge energy saving advantages with under floor heating**
- **Sound proofing properties**
- **Waterproof and rot proof**
- **10 year manufacturers guarantee**
- **Lightweight**
- **For use on walls or floors**
- **Internal and external applications**

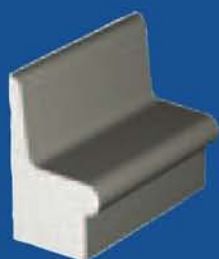
Other Construction Products



Flexicontour Boards



Quickform Pipe Boxes



Profile Bench Seating

Bespoke Fabrications also available on request

HANDYHEAT[®] Thermal Substrate Board Technical Data

Thickness (mm)	Width (mm)	Length (mm)	Weight (Kg/Board)	U value (W/m2k)
6	600	1200	2.36	4.50
10	600	1200	2.37	2.70
20	600	1200	2.59	1.35
30	600	1200	2.81	0.90
40	600	1200	3.03	0.67
50	600	1200	3.25	0.54
60	600	1200	3.47	0.45

Properties	Unit	Value
Compressive Strength	(KPa)	300
Thermal Conductivity to BS 874	(W/Mk)	0.027
Thermal Conductivity To BSEN 13164 5 years	(W/Mk)	0.031
Water Absorption	(% by volume)	0.2
Density	(Kg m3)	36
Flexural Strength (Transverse)	(KPa)	600
Flexural Strength (Longitudinal)	(KPa)	700
Temperature Range	(Deg C)	-50,+75
Fire Performance	BS 476 part 6,7 (Surface Spread of Flame)	Class O

Advice for Users

The extruded polystyrene core contains a flame retardant specially designed to inhibit localised ignition. However under extreme conditions foams are combustible. It is therefore essential to avoid the risk of exposing the PCS Board to any potential ignition source including electrical fittings which may generate heat greater than 75°C.