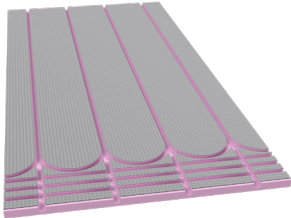


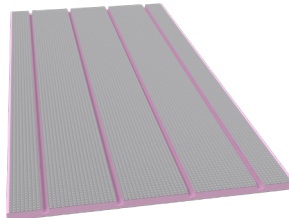
TB12

DATASHEET – ROUTED CEMENT FACED INSULATION PANEL

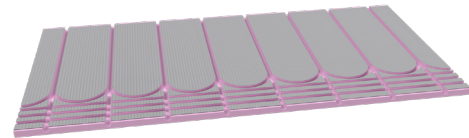
DS_TB12_01.0



Combination Panel (Pattern 1)
TB12-PO1

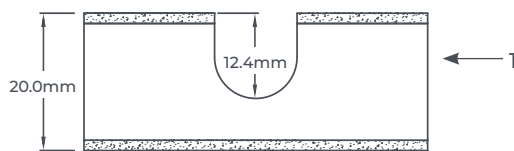


Straights Panel (Pattern 3)
TB12-PO3



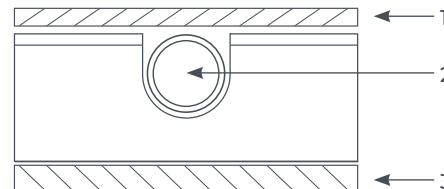
Loop with Flow and Return Channels Panel
(Pattern 5)
TB12-PO5

ROUTED PANEL CROSS SECTION



1 – 20mm Cement Faced XPS insulation

APPLICATION CROSS SECTION



1 – Tile adhesive and finish

2 – 12mm pipe

3 – Sub floor

PRODUCT OVERVIEW

High density XPS insulated panel faced on both sides with a fibre mesh and cement. Suitable for adhering or mechanically fixing over both flat and even solid or timber floors. Ideal for tiling directly to the top surface using the correct adhesive for the type of tile. As the tiles and adhesive are conductive the heat output and warm-up are sufficient and a aluminium diffuser is not required.

PRODUCT TECHNICAL DATA

Material	XPS Extruded Insulation with textile glass mesh reinforced mortar coating top and bottom sides
Compressive Strength at 10% deformation (EN 826)	≥ 250kPa
Panel dimensions	1200 x 600mm
Thickness	20mm
Panel options	a) Combination panel (P1) b) Separate straights & loops with flow and return channels (P3 + P5)
Pipe centres	150mm
Pipe channels/external pipe diameter	12mm

Insulation properties

Regularity (EN 824)	≤ 5
Creep with compression 2% reduction, 1.5% deformation over 50 years (EN 1606)	90kPa
Modules of compressive elasticity (EN 826)	15000kPa
Bulk Density (EN 1607)	32kg/m ³
Nominal thermal conductivity (EN 13164)	0.034 W/mK
Application Temperature Range	-150 to +75°C
Fire Behaviour (EN 1305-1)	E
Water absorption on long immersion (EN 12087)	≤ 1.5% vol.
Thermal Expansion Coefficient	0.07mm/(mK)

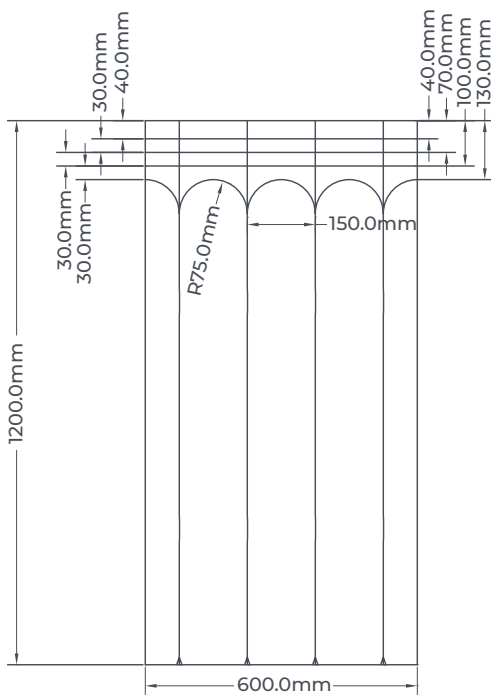
MATERIAL CREDENTIALS

- 100% recyclable.
- Raw material manufactured in accordance with EN 13164.
- No CFC, HCFC or HFC gases or fire retardants that contain hazardous bromine compounds are used in the manufacturing of the insulation. Neither do any gases, particles or fibres that are hazardous to health evaporate or release from the insulation. Rated M1 for emissions, i.e. the best indoor air quality.

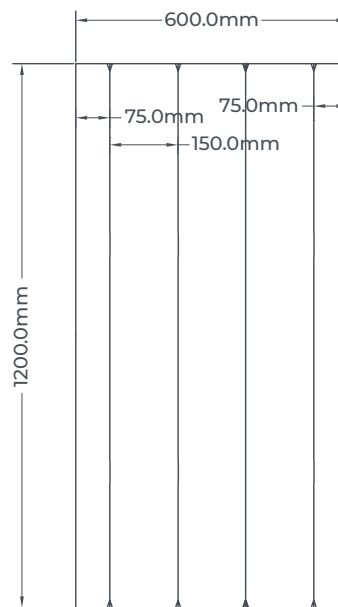
INSTALLATION GUIDANCE

1. Store panels in a safe dry, weather tight area out of direct sunlight.
2. Ensure that the subfloor is level and free from dust & debris (best practice to use a primer and to refer to the floor finish manufacturers' instructions which should always take precedence).
3. Bond the panels with a suitable ceramic tile adhesive.
4. Once laid use walking boards to protect the panels, especially in areas of high-level foot traffic.
5. Pipe up the panels following your installation drawing.
6. Pressure test the system.
7. Bed your tiles with a suitable adhesive straight on top of the panel.

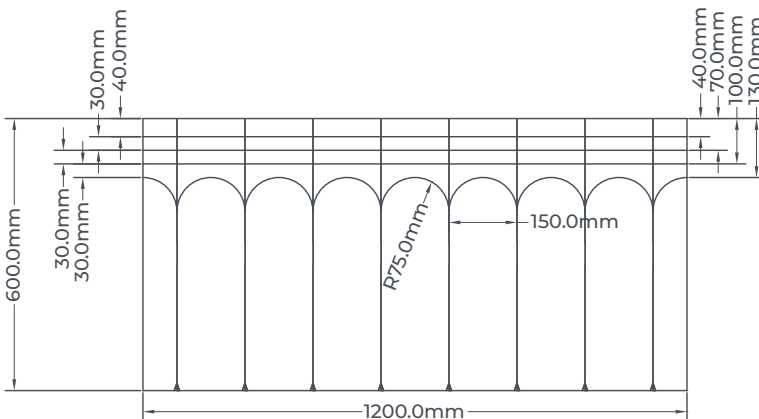
DETAILS OF PANEL DESIGN OPTIONS



Combination Panel (Pattern 1)



Straights Panel (Pattern 3)



Loop with Flow and Return Channels Panel (Pattern 5)

PRODUCT TOLERANCE	
Panel	
Length	+/-2mm
Width	+/-2mm
Thickness	+/-0.5mm
Channel routed depth	
12mm pipe	-0/+0.3mm