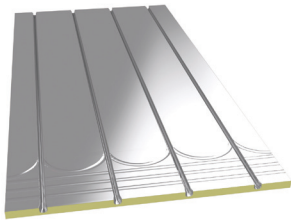


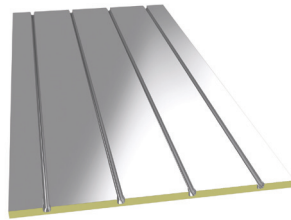
# FF12

## DATASHEET – ROUTED & LINED INSULATION PANEL

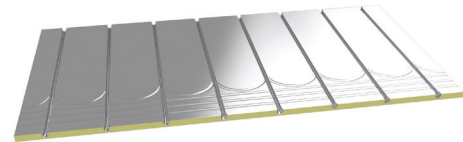
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Combination Panel (Pattern 1)  
FF12-PO1

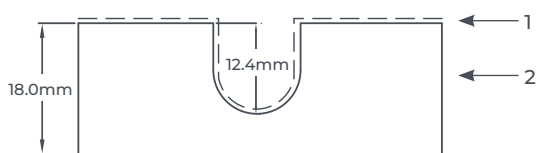


Straights Panel (Pattern 3)  
FF12-PO3



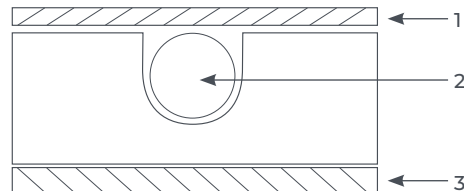
Loop with Flow and Return Channels Panel  
(Pattern 5)  
FF12-PO5

### ROUTED PANEL CROSS SECTION



- 1 – Soft temper aluminium fully lined channel (100µm)
- 2 – 300kPa XPS insulation

### APPLICATION CROSS SECTION



- 1 – Floor deck/finish
- 2 – 12mm pipe
- 3 – Sub floor

### PRODUCT OVERVIEW

High grade XPS insulation for fully floating floors to support an overlaid tongue and groove or timber floor deck above. The panel features a pre-bonded soft temper aluminium heat diffuser with fully lined straight channels. This panel can be floated, bonded or even mechanically fixed to a solid or timber substructure.

### PRODUCT TECHNICAL DATA

Material	XPS Extruded Insulation
Compressive Strength (EN 826)	300kPa
Panel dimensions	1200 x 600mm
Thickness	18mm
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
Soft temper aluminium diffuser	100µm in straight channels & over entire panel

### 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 <sup>3</sup>
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)	≤ 1.0% vol.
Thermal Expansion Coefficient	0.07mm/(mK)

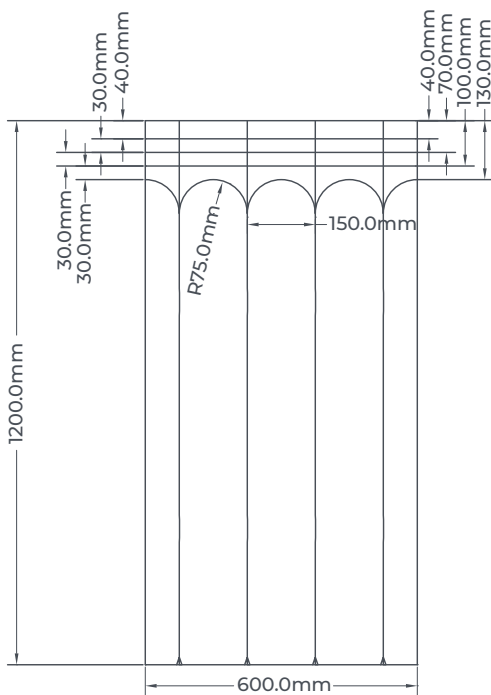
**MATERIAL CREDENTIALS**

- 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.

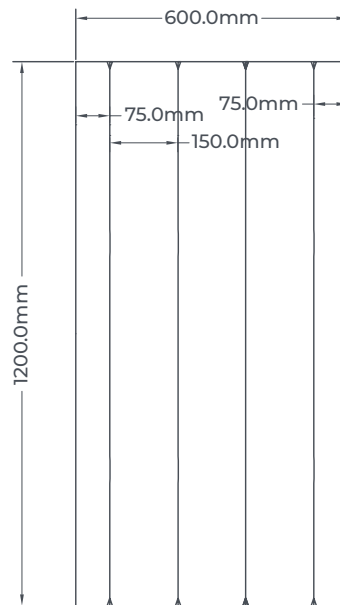
**INSTALLATION GUIDANCE**

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. Lay panels as a floating floor or fully bonded to the subfloor depending on floor finish proposed.
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. Lay deck and/or floor finish.

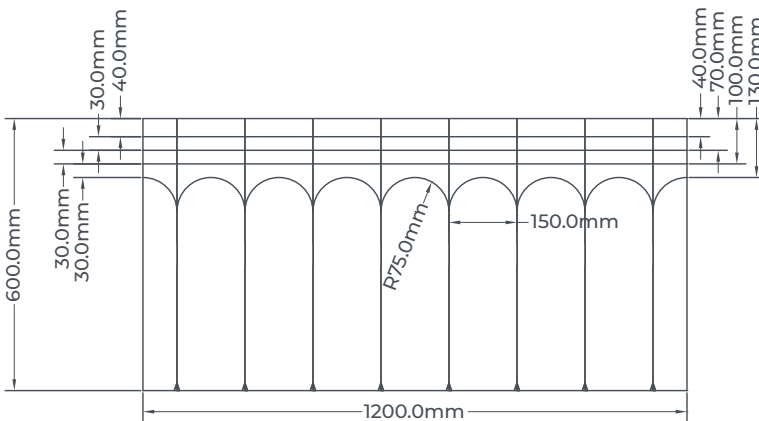
**DETAILS OF PANEL DESIGN OPTIONS**



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