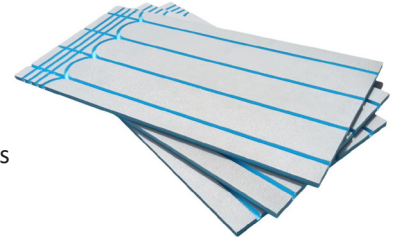
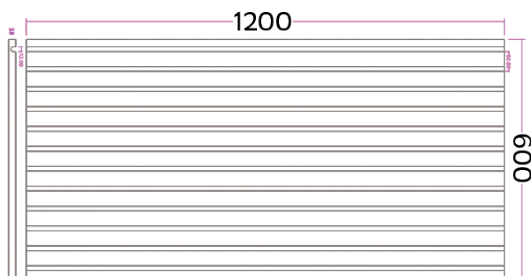
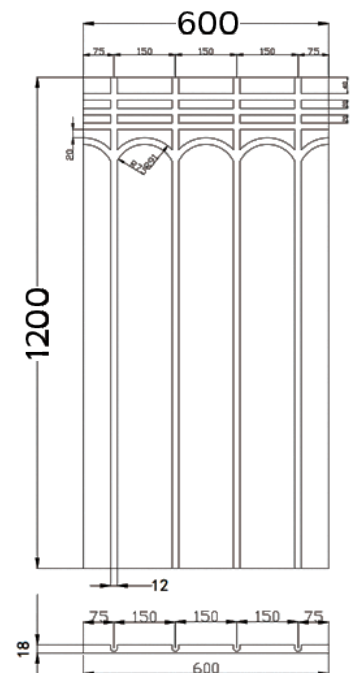
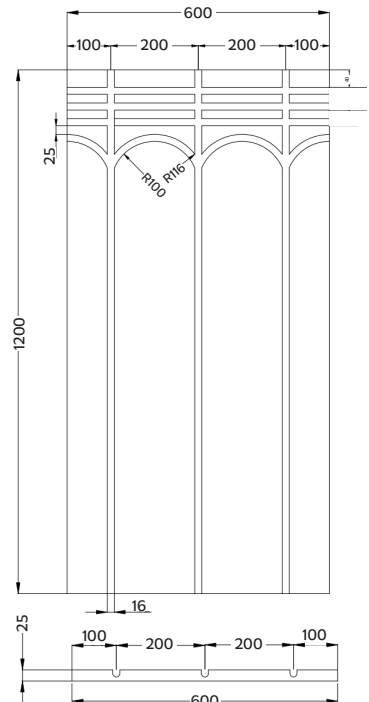
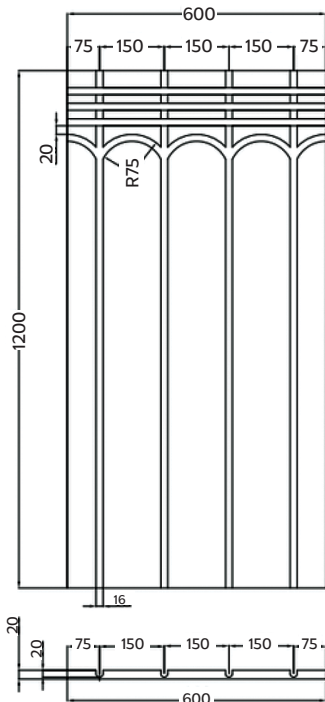


## XPS Tile Backer Board Technical Data and Installation Guide

Tio XPS Tile Backer Boards are a low-profile overlay system for use in a variety of applications, constructed from 20mm or 18mm thick, Super High Density XPS400 with cement coating, boards are pre-routed to suit 16mm or 12mm pipe with heating boards available in 150mm and 200mm pipe spacing with transitions.



Product Code	Product Description	Dimensions
TIOTBB0001	XPS tile backer board	1200 x 600 x 20mm - 150mm centers
TIOTBB0002	XPS tile backer board	1200 x 600 x 20mm - 200mm centers
TIOTBB0003	XPS tile backer board	1200 x 600 x 18mm - 150mm centers
TIOTBB0004	XPS tile backer transition board	1200 x 600 x 20mm - 50mm centers
TIOTBB0005	XPS tile backer transition board	1200 x 600 x 18mm - 50mm centers



### Tio XPS Technical Data

Product description	XPS Transition Board
Dimensions	1200 x 600 x 20mm
Material	XPS insulation board
Compressive strength	400kPa
Thermal conductivity	0.035
Temperature range	-20°C ~ 70°C
Pipe diameter	16/12mm
Pipe centres	50mm
Fire retardant class	Europe B Class

### Tio XPS Tile Backer Board Technical Data

Thermal conductivity (10 days at 90°C)	≤0.03W/mK
Compressive strength at 10% deflection or yield	≥400kPa
Bond strength	0.3N/mm <sup>2</sup>
Bond strength after 21 days	0.2N/mm <sup>2</sup>
Resistance to body impact	3*120Nm
Impact of sound reduction	21dB
Tensile strength	≥400kPa
Water absorption	≤1.00% Vol-%
Capillary	nil
Coefficient of linear thermal expansion	0.07mm/mK
Temperature range	-50°C - 80°C
Fire protection class	B2
Quality management system	ISO9001

**Preparation**

Tio XPS Tile Backer Boards can be installed on most substrates, provided they are suitably flat to receive the boards and free from friable/loose material and/or excessive movement. It is recommended that all subfloors should have a minimum surface regularity of SR2 (5mm departure under a 2 meter straight edge).

Pipe and board layouts should be carefully planned prior to cutting and fixing boards. It can be beneficial to loose lay boards prior to fixing to ensure all pipe runs line up and to minimise wastage

**Cutting and Laying Boards**

Boards can be cut with a saw or sharp knife and straight edge, ensuring correct PPE is used and safe practices are followed. Always start board laying from the corner of a room, use spacers against the wall to allow for a 3-5mm perimeter expansion gap, working back into the room from the start point in a liner fashion. Off cuts of pipe can be used to ensure boards line up correctly while being laid.

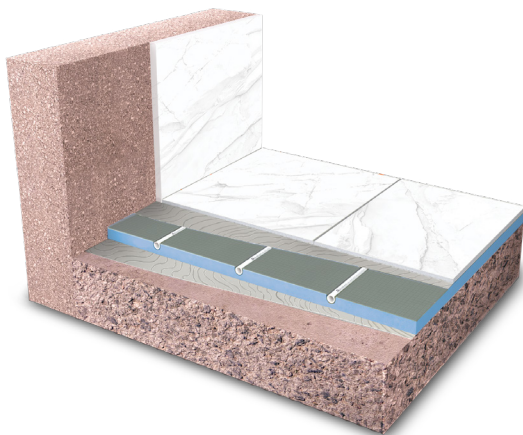


**Timber Sub-Floor Installation**

Structural timber subfloors such as chipboard and OSB should be fixed to mechanically using 40mm board washers and wood screws, a minimum of 9 fixings per board should be evenly spaced to ensure a solid lamination with as little movement as possible. Additional fixings can be used in transit areas or if there is any excess movement.



Product Code	Product Description
TIOWAS0100	Washers and 40mm screws - pack of 100



**Solid Sub-Floor Installation**

Flexible Tile adhesive should be used when fixing boards to concrete and screed subfloors, suitable primer may be required prior to adhesive being laid and manufacturers recommendations should be followed. Adhesive should be allowed to cure prior to laying pipework.



Product Code	Product Description
TIOFTA0001	Flexi Tile Adhesive - 20kg
TIOCEM0001	Tio EasyCem TX leveling compound - 25kg

**Overlaying and Floor Finishes**

Tiles can be installed directly to Tio Tile Backer Boards, suitable flexible tile adhesive and primer should be used following manufacturer’s guidance. Ensure even distribution of adhesive over the boards surface filling all holes and recesses. For all other flooring applications including Carpet, Vinyl and Wood a 5mm minimum Fibre reinforced commercial levelling compound with suitable primer should be applied following manufacturer’s guidance. Ensure even distribution of levelling compound over the boards surface filling all holes and recesses.