

# THERMA-BOARD

Insulating & waterproof tile backer board

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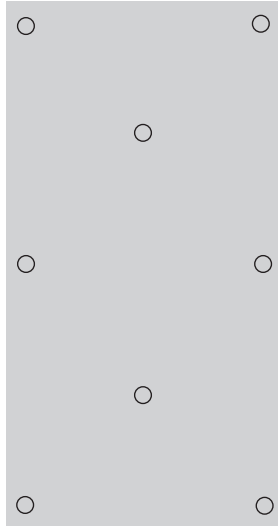
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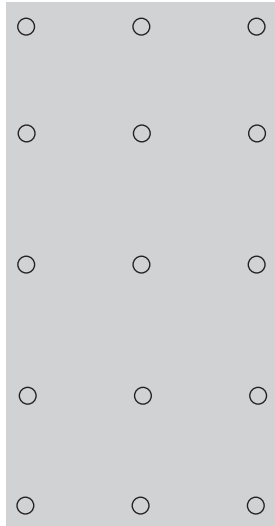


## Placement of screws and fixings



**Fig.1**

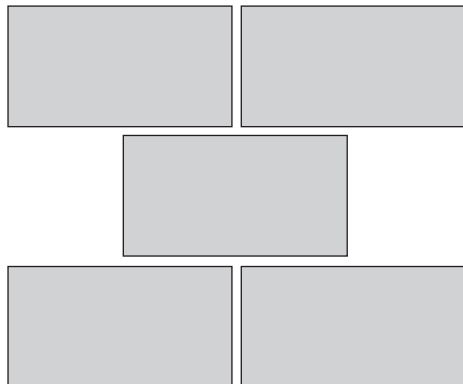
1200 x 600mm with  
8 washers or dowels



**Fig.2**

1200 x 600mm with  
300mm centres

## Staggered pattern

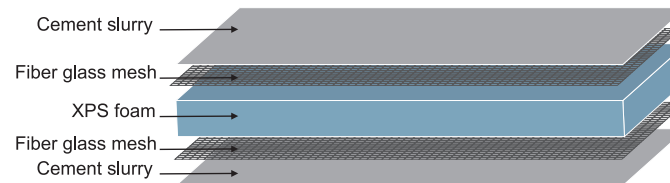


**Fig.3**

## Technical Information...

### What are THERMA-BOARDS made from?

Therma-boards are made from extruded polystyrene with high water proofing and insulation properties. Each side of the board is covered with a fibre mesh (to provide mechanical resistance) and embedded in a polymerised cement mortar. This combination provides to the system a very good mechanical resistance, waterproofing and bond to tile adhesive.



### Where can THERMA-BOARDS be used?

- ✓ Flooring underlay boards
- ✓ Wall cladding & tile backing
- ✓ Underfloor heating underlays
- ✓ Wetrooms

### Technical Data

**Construction & Materials used** - Xps Foam board / fiberglass mesh / polymer cement.

**Compressive strength** - 250~300Kpa

**Thermal conductivity** - (90 days, 10°C) - Around 0.038 W/mk

**Water absorption** - <0.03%

**Coefficient of liner expansion** - 0.03 mm/mk

**Maximum service temp** - -50°C - +75°C

Available in sizes...



## THERMA-BOARD BENEFITS

- ✓ Can replace plasterboard & plywood on a structurally secure substrate to provide a smooth surface to tile on to.
- ✓ Totally impervious to moisture, providing a waterproof barrier when used in conjunction with waterproof joint tape.
- ✓ Creates a thermal layer improving underfloor heating efficiency up to 50%
- ✓ Suitable for use with all types of underfloor heating
- ✓ Boasts sound reduction properties
- ✓ Lightweight and easy to cut making preparation time faster
- ✓ Rigid and strong providing a stable surface to tile on to
- ✓ Rot Proof
- ✓ Tested to hold a tile weight of 62kg/m<sup>2</sup>.

# THERMA-BOARD fixing guide

*Insulating & waterproof tile backer board*



## Introduction

Therma-Board is your complete cost effective solution for waterproofing & insulation in one simple operation.

Therma-Boards can replace plasterboard and plywood on a structurally secure substrate and are ideal surfaces for thin bed tiling on walls and floors, and can be fixed to any suitable framework such as brick, concrete, wood or metal.

It is simple and easy to fix, and is lightweight and easy to cut with a saw or knife.

Therma-boards are completely water resistant when joints are sealed with Tile Rite water proof matting flexible joint tape.

Therma-boards can also improve underfloor heating efficiency up to 50%. The thicker the board the greater the thermal properties.

Therma-board can hold a weight of 62kg/m<sup>2</sup>.

## Board Sizes Available

Thickness	Width	Length	Weight
6mm	600mm	1200mm	2kg
10mm	600mm	1200mm	2.2kg
12mm	600mm	1200mm	2.3kg
20mm	600mm	1200mm	2.5kg

## Accessories Available

### 60mm Galvanised Screws 100pk

Use with washers to strengthen the anchorages and connections between boards. Always check screw length suitability before fixing.

### Galvanised Washers 100pk

Use with screws to strengthen the anchorages and connections between boards.

### 50mm x 20m Glass fibre tape

Self Adhesive, glass fibre mesh tape. Helps prevent any movement and should be used to cover all the joints where Therma-boards meet.

### Waterproof matting flexible joint tape x 5m

Use this product to create a permanent waterproof seal around all shower formers where it meets the adjoining floor, the wall and the internal corners. Apply with powder based tile adhesive.

### Waterproof matting flexible pre-formed corners

Use in conjunction with flexible joint tape at corners where a waterproof seal is required. Apply with powder based tile adhesive.

## Wall Application - Stud

Therma-board can replace traditional plasterboard to create an impervious substrate ready to be tiled.

1. Fix the studwork with centres appropriate for the thickness of the board and weight of tiles to be used (See Fig.2)
2. Screw the boards using the correct number of fixing washers and drywall screws through to the studwork behind.
3. All joints should be supported by a stud. Always make cuts for pipes etc. before fixing.
4. When boards are fixed to the studwork apply glass fibre tape to all joints before tiling. If the joints need to be waterproof use Tile Rite flexible waterproof joint tape.

## Wall Application - Solid Smooth

Always use a mechanical fixing as well as adhesive to ensure a secure fixing into the brickwork behind any unstable plaster

1. Using a bradawl, pierce through the board to mark the position of the fixings. (Use 8 fixings per 1200mm x 600mm board.) See Fig.1
2. Place a dab of flexible, cement based tile adhesive on each hole and offer the board to the wall making sure it is straight and level. Tamp into position.
3. When all boards are in place and the adhesive has dried, drill a hole through the board at the bradawl holes into the sound substrate behind.
4. Insert the screws and washers into the holes and tighten until the washer has sunk slightly in to the surface of the board. Be sure not to tighten too far, as this will distort the board making tiling difficult.
5. When boards are securely fixed apply glass fibre tape to all joints before tiling. If the joints need to be waterproof use Tile Rite flexible waterproof joint tape.

## Wall Application - Solid Rough

Use 20mm Therm-aboard to reface old or damaged plasterboard.

1. Scrape off any loose material.
2. Cut the boards to size and fix using the dab and fix method as mentioned above, using flexible cement based adhesive and screws and fixing washers (See fig.1.)

3. When boards are securely fixed apply glass fibre tape to all joints before tiling.

## Floor Application - Timber

Therma-board replaces plywood when used to strengthen a timber floor, providing a smooth surface to tile on to.

1. Use a minimum of 10mm Therma-board for strengthening, and 12mm or more if installing underfloor heating.
2. Therma-board should be laid using a staggered pattern (See fig.3) When fixing Therma-board with screws and fixing washers, ensure you use the correct length screws to avoid damage to underlying pipework. (See fig.2.) for placement of screws.
3. If fixing with adhesive use an 8mm or 10mm floor trowel, the appropriate flexible powder based adhesive and ensure substrate is free of dust and is suitably primed prior to installation.
4. When installed and adhesive dry, apply glass fibre tape to all joints prior to tiling. If the joints need to be waterproof use Tile Rite flexible waterproof joint tape.

## Floor Application - Solid Floor

Ensure that the floor is free from dust and is suitably primed prior to installation.

1. If your floor is level you can use any depth of Therma-board to meet your requirements. 12mm is recommended when installing underfloor heating due to its excellent thermal properties.
2. If your floor is damaged or uneven, it is recommended that you use 20mm Therma-board.
3. Using an 8mm or 10mm notched trowel apply cement based flexible powder based adhesive to the prepared floor. Lay the sheets in a staggered pattern (see fig.3) and tamp down to ensure complete contact is made.
4. Cut panels as accurately as possible around objects such as doorframes. When all boards are laid, allow adhesive to dry before taping each joint with glass fibre tape before tiling. If the joints need to be waterproof use Tile Rite flexible waterproof joint tape.

**For more information and technical data please visit [www.tilerite.co.uk](http://www.tilerite.co.uk)**