

## Tile backer board on a concrete floor comprising the base of an Outdoor Sauna

**Product Ref:** Marmox Multiboard

**Product Use:** Intermediate substrate to ceramic and stone tiling on a concrete floor.

**Manufacturer:** Marmox Ltd

**Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [sales@marmox.co.uk](mailto:sales@marmox.co.uk); <http://www.marmox.co.uk/>.

**Description:** Extruded polystyrene covered on both sides with fibreglass mesh encased in a c.0.75mm layer of polymer modified concrete which permanently bonds the mesh to the polystyrene.

**Dimensions**      **Multiboard:** Width = 600mm, Length = 1200mm, Thickness = 20mm or 30mm

**Properties:** Resistant to external environment and temperatures.  
Low thermal conductivity ( $0.034W/mK$ ) unaffected by moisture.  
Does not expand or contract as temperature and humidity alters.  
Absorbs lateral movement in the sub-floor to reduce the risk of cracking in the tiled surface.  
Completely impermeable to water.

**Recommended Method** Marmox Multiboard is fixed to the concrete floor on a continuous bed (3-5mm) of flexible cement-based tile adhesive

- It is advisable to apply a liquid tanking membrane over the existing concrete layer prior to installing the Marmox boards.
- Apply a continuous bed of cement-based 'flexible grade' (*a.k.a. 'C2 grade'*) tile adhesive to the floor using a 6-4mm notched trowel.
- Ideally, boards are configured in a brick-bond pattern when possible. The boards can be pre-cut using a Stanley knife or a hand saw.
- Lay and evenly push the first Marmox board into position and check the flatness.
- A 5mm expansion gap should be left where the boards meet the wall *which is subsequently filled with MSP-360*
- The sealant: Marmox MSP-360 is also applied around the perimeter of all the boards to create a waterproof layer. Apply a bead of MSP-360 to the edge of the board on the floor prior to pressing the adjacent board into place. Press together until the sealant starts to ooze over the gap.
- just prior to tiling, reinforcing tape (also known as *scrim tape*) is applied over the joints.
- Marmox Multiboards are water and vapour proof barriers. The MSP-360 is an effective water barrier which is sufficient to most applications. Where there is likely to be standing water such in swimming baths, we also supply a waterproof tape – this is used instead of the scrim tape but because it is quite expensive, need only be used in very, very wet areas
- Tiles should now be fixed to the boards with a flexible grade cement-based tile adhesive – no priming is required.

## Specification: Tile backer board on a concrete floor

**Authorities:** BBA Certified (09/4687), ISO9001.

**CE+UK Marking:** EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

### UnderFloor Heating

This is the method used with both electric and water-fed under-tile heating systems.

- With wet systems, the castellated routed board is glued onto the Marmox board.
- With electrical systems, when the electric wires have been positioned, a layer of self-levelling compound is poured on top, just enough to cover the cables. This cured surface is subsequently tiled.

### Limitations:

- 1) Compounds containing organic solvents (*including solvent-based tile sealers*) must not be used.
- 2) Temperatures in excess of 75°C are not appropriate.
- 3) Tiles no smaller than 5cm x 5cm should be used on the floor.
- 4) Should not be installed upon fresh concrete / screed as the waterproof nature of the board will limit evaporation.