

## Specification: Tile backer board on a concrete floor

**Product Ref:** Marmox Multiboard / Marmox SoundBoard

**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.  
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**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.  
(*Soundboard has an additional 2mm layer of SBR rubber on one face*)

<p><b>Dimensions</b>     <b>Multiboard:</b> Width = 600mm, Length = 1250mm, Thickness = 4/6/10/12.5/20/30/40/50/60mm  <b>Soundboard:</b> Width = 600mm, Length = 1250mm, Thickness = 8/12mm</p>
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**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.  
**SoundBoard only:** Impact Sound Insulation through a ceramic tiled surface ( $\Delta L_w$ ) = 20dB

**Authorities:** BBA Certified (09/4687), ISO9001 (Bureau Veritas), Energy Saving Trust Recommended for insulation.

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

<p><b>Fixing Method:</b> Marmox Multiboard / SoundBoard is fixed to the concrete floor on a continuous bed (3-5mm) of flexible cement-based tile adhesive</p>
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- Boards are configured in a brick-bond pattern when possible.
- 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.
- Lay and evenly push the Marmox board into position and check the flatness. *If using SoundBoard, lay the rubber side down to the floor.*
- Lay subsequent Marmox boards with a small gap of c.2-3mm between boards
- Apply a line of Marmox MSP-360 into the gaps between boards which seals the boards together making a waterproof barrier.
- Marmox self-adhesive waterproof tape should also be used in extreme.
- Reinforcing tape (scrim tape) is applied over the joints just prior to tiling except in extreme wet areas (*e.g. where there is likely to be standing water*) where Marmox self-adhesive Waterproof Tape should be used instead.

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### Mechanical Fixing

Unless the concrete of the floor is of very poor quality unlikely to provide a good key for the adhesive, it is not necessary to also use mechanical fixings.

Mechanical fixings should never be used with SoundBoard as they will act as sound bridges negating the acoustic benefit.

Screws and washers can be used with Multiboard although they are counter-productive because: -  
*they pierce the waterproof barrier*  
*they reduce the flexibility of the foam core which is there to absorb lateral movement in the subfloor to prevent tile/grout cracking.*

If additional mechanical fixings are needed, for example if the quality or integrity of the concrete floor is questionable, typically five fixings (*screws and washers*) per board are used - *one in each corner and one in the middle.*

### Notes

Short boards are much easier to fix to floor than long boards (0.6 x 2.4m) or big boards (1.2 x 2.4m) but those dimensions are also approved for this application (longer boards are not manufactured in thicknesses less than 10mm)

### 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.
- 5) If the floor includes expansion joints, the tile backer boards must not be fitted over them.

