

## Specification: Tile backer board on a Plywood sheet flooring

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

**Product Use:** Intermediate substrate to ceramic and stone tiling on a floor of plywood flooring panels.

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

<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
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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

### Fixing Method 1 – using adhesive only

Marmox Multiboard / Soundboard is adhered to the plywood with a thin bed (2 - 3mm) of flexible tile adhesive. No mechanical fixings are used.

### Fixing Method 2 – using mechanical fixings only (not suitable for SoundBoard)

Marmox Multiboard is mechanically fixed to the plywood using screws and Marmox washers spaced every c.300mm. No tile adhesive is necessary.

### Method 1) USING TILE ADHESIVE ONLY

- 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 plywood 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 applying a line of Marmox MSP-360 into the gaps between boards which seals the boards together making a waterproof barrier.
- A 5mm gap is left between the boards and the wall which is also filled with Marmox MSP-360.
- 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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### Method 2) USING MECHANICAL FIXINGS ONLY (*not suitable for SoundBoard*)

- Boards are configured in a brick-bond pattern when possible.
- Marmox Multiboard is fixed to the plywood using screws and Marmox washers at 300mm centres (*15 fixings per board – irrespective of board thickness*).
- 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.
- A 5mm gap is left between the boards and the wall which is also filled with Marmox MSP-360.
- 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.

### Mechanical Fixing

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.*

### 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:

- Compounds containing organic solvents (*including solvent-based tile sealers*) must not be used.
- Temperatures in excess of 75°C are not appropriate.
- Tiles no smaller than 5cm x 5cm should be used on the floor.
- If the floor includes expansion joints, Multiboards must not be fitted over them.