



waterproof insulation
board

BENEFITS:

- ✓ Fully waterproof
- ✓ Heat insulating
- ✓ Holds hanging weight up to 60kg
- ✓ Light weight, easy to fix
- ✓ For walls and floors

SUITABLE FOR:

- ✓ Waterproofing wet rooms and showers
- ✓ All types of tiles
- ✓ Use with underfloor heating as a de-coupling and thermal insulation layer
- ✓ Use as a partition layer

ORBRY BOARD THICKNESS & LENGTHS:

| Thickness | OB12 1220mm | OB24 2440mm |
|-----------|----------------|----------------|
| 6mm | ✓ | |
| 10mm | ✓ | ✓ |
| 12.5mm | ✓ | ✓ |
| 20mm | ✓ | ✓ |
| 50mm | ✓ | ✓ |

| FOAM PROPERTIES | TEST | RATING |
|-----------------------------------|-------------------|--|
| Extruded polystyrene foam density | | 35kg/m ³ |
| Thermal conductance | UNI EN 12667:2002 | 0.758 + 0.014/ -0.010 w/ (m ² .K) |
| Thermal resistance | UNI EN 12667:2002 | 1.32 + 0.02/ -0.025 m ² . K/W |
| Thermal conductivity | UNI EN 12667:2002 | 0.0376 +/- 0.0005 W/(m.K) |



FIXING ORBRY BOARDS: SOLID WALLS

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PREPARATION

EXISTING PLASTER

Good quality sound plaster can only bear a maximum weight of 20kg/m². This is insufficient to bear the weight of **Orbry™ Board** and tiles when fixed. Therefore, either remove all the plaster to return to an underlying sound load-bearing surface, or mechanically fix (see mechanical fixing section) through the plaster into the underlying sound load-bearing surface using **Orbry™ Spanker Dowels**. The **Orbry™ Spanker Dowels** must penetrate the load bearing surface by a minimum of 35mm.

EXISTING TILED SURFACES

Existing tiled surfaces need to be mechanically fixed (see mechanical fixing section) through the tile and back to an underlying sound load-bearing surface using **Orbry™ Spanker Dowels**. The **Orbry™ Spanker Dowels** must penetrate the load bearing surface by a minimum of 35mm. Alternatively, remove the tiles and adhesive and return to the underlying sound load-bearing surface. All wall surfaces must be load-bearing, sound, clean, and free from dust and other contaminants including paint. Walls must be flat and even.

FIXING WITH TILE ADHESIVE TO BRICK, BLOCK OR CONCRETE WALLS

1. Apply a suitable flexible cement based tile adhesive with a trowel with a minimum notch of 8 x 8mm. Notches of up to 20 x 20mm may be used if the wall has minor irregularities.
2. Fix direct to the wall and adjust to ensure boards are perpendicular (see Fig.1).
3. Butt joint adjacent boards.

6mm boards or thicker may be used.

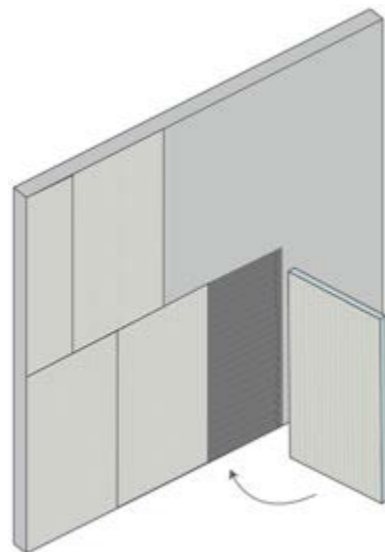


Fig.1
Fixing Orbry™ Boards with tile adhesive.

MECHANICAL FIXING

1. Offer the board to the wall, and using a 10mm drill bit, drill through the board to a depth equal to the length of the **Orbry™ Spanker Dowel** that you are using. Insert the **Orbry™ Spanker Dowel** and tap in the securing pin until board is held in place. (see Fig.2)
2. Drill additional holes every 300mm and loose fit with Orbry Spanker Dowels. Fit adjacent boards using the same method and check that they are level.
3. Hammer in all fixing pins until the **Orbry™ Spanker Dowels** are all securely fixed. Do not over hammer the dowels or they will crush the boards.

10mm boards and thicker may be used.



Fig.2
Hammer home all fixing pins until the Orbry™ Spanker Dowels are all securely fixed.

DOT AND DAB FIXING

Dot and Dab fixing can be used to fix to uneven walls.

1. Drill the board with a 10mm masonry drill at approx 600mm centres for 20mm thick boards (6 holes for a 1220mm board or 10 for a 2440mm long board), or 300mm centres for 10mm/12mm thick boards (15 holes for a 1220mm board or 27 holes for a 2440mm long board). (See Fig.3 for a layout example of 10mm boards).
2. Apply dabs of suitable cement-based adhesive to the back of the board where the drill holes are located. The adhesive thickness should not exceed 30mm and the dabs should be a minimum diameter of 120mm. (see Fig.3)
3. Offer up the board to the wall and push firmly before adjusting with a level to ensure it is true and level.

Fig.3

Apply dabs of suitable cement based adhesive to the back of the boards.

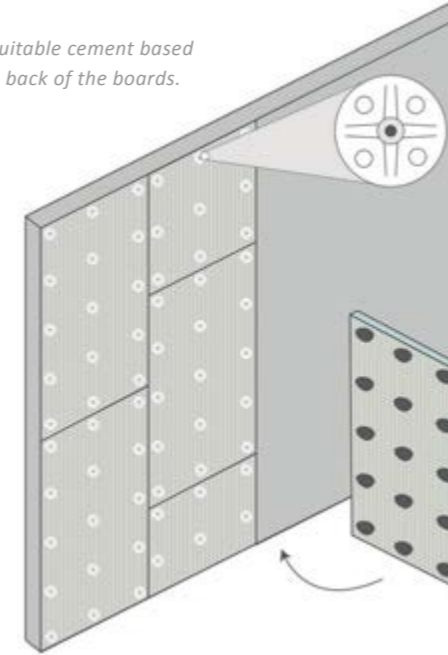
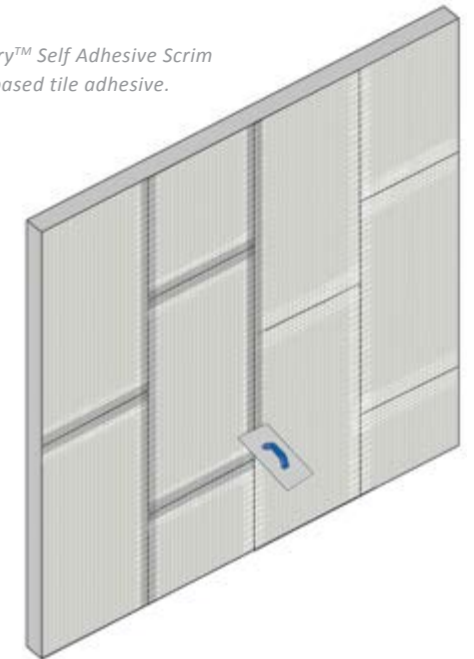


Fig.4

Application of Orbry™ Self Adhesive Scrim Tape and cement based tile adhesive.



4. Allow the adhesive to dry, then drill through the existing holes to the depth of the **Orbry™ Spanker Dowel**, insert the dowel and fixing pin and hammer in. The **Orbry™ Spanker Dowels** must penetrate the load bearing surface by a minimum of 35mm.
5. When fixing to dry areas, apply **Orbry™ Self Adhesive Scrim Tape** to all horizontal and vertical joints using a thin layer of cement based tile adhesive and a float trowel. (see Fig.4)

WATERPROOFING JOINTS FOR WET AREAS

All **Orbry™ Boards** are fully waterproof and can be used to create a waterproof system, so they are excellent for wet rooms and showers. When waterproofing a wet area, it is important to waterproof all joints.

Tape all joints using one of the following waterproof tape systems:

1. For speed of application, use **Orbry™ Self Adhesive Waterproof Tape**, available in 10m rolls.
2. **Orbry™ Waterproof Tape**, available in 5m and 10m rolls, and **Orbry™ Waterproof Corners** fixed with **Orbry™ Waterproof Sealing Compound**.

TILING

Orbry™ Boards are the ideal surfaces to tile on. They bond with all proprietary tile adhesives, so all you need to do is choose the correct adhesive for the type of tile you are fixing. If in doubt seek further advice from the adhesive and grout manufacturer. For a wet area installation you need to achieve a solid bed of adhesive, ensuring no voids are left beneath the tiles. The maximum combined weight of tiles, adhesive and grout that the boards can hold is 60kg per square metre (fixed to the wall) which is more than enough for all tile and stone finishes.

PLASTERING AND PAINTING

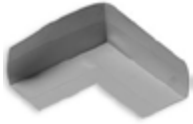
Follow the plaster manufacturers' recommendations for priming a cement based surface and apply a skim coat. Once completely dry the plaster can be decorated.

CUTTING AND HANDLING

Orbry™ Boards can be cut easily with a utility knife. Even the largest boards weigh less than 10kg and can be handled and fixed by one person. The cut edge of a board can be rough, so suitable gloves should be worn.

PARTS REQUIRED

ORBRY™ WATERPROOF
INTERNAL & EXTERNAL
CORNER



ORBRY™
WATERPROOF TAPE



+

ORBRY™ WATERPROOF
SEALING COMPOUND



SILICONE SEALANT



ORBRY™ SELF ADHESIVE
SCRIM TAPE



ORBRY™ SPANKER
DOWELS



ORBRY™ SELF ADHESIVE
WATERPROOF TAPE



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