

Tiling

In rooms subject to high or intermittent moisture conditions, the range of boards available for tiling offers flexibility of design and peace of mind when installed in both wall linings, lightweight partition system and floor systems



Tiling

Specifically designed for direct tiling applications, Glasroc H TILEBACKER is the ideal substrate for tiling in environments subjected to moisture, providing protection for shower enclosures, bathrooms, swimming pool changing halls and adjacent areas.

For wall areas where intermittent moisture conditions are more common, including kitchens and bathrooms, Gyproc moisture resistant grade boards are suitable.

Key benefits

- Glasroc H TILEBACKER has been designed for use in high moisture applications
- Glasroc H TILEBACKER will hold tiling systems up to 32kg/m² on walls and 50kg/m² on floors
- Gyproc moisture resistant grade boards are suitable for use in walls in intermittent moisture conditions



You may also be interested in...

If you require acoustic insulation or fire resistance performance, GypWall partition systems, incorporating Glasroc H TILEBACKER are available.

► Refer to C04. S02. P125 – GypWall

Tiling performance

Table 1 – Tiling on partition systems

Partition system	Board type (including MR variants)	Stud centres mm	Additional support / comments
GypWall partitions including GypWall, GypWall ROBUST , GypWall EXTREME , GypWall QUIET , GypWall QUIET IWL and GypWall AUDIO	1 x 12.5mm Glasroc H TILEBACKER each side	600	-
	Inner layer 1 x 12.5mm Gyproc plasterboard and outer layer 1 x 12.5 Glasroc H TILEBACKER each side	600	-
	1 x 15mm Gyproc plasterboard (or Rigidur where appropriate) each side or 2 x 12.5mm (minimum) Gyproc plasterboard each side (including outer layer Rigidur where appropriate)	400	If using Gypframe 146mm studs, they can be located at 600mm centres to full partition height with extra studs to give 300mm centres up to tiling height
GypWall QUIET SF	Tiles over double layer lining board fixed on Gypframe RB1 Resilient Bar side	600 ¹	Horizontal Gypframe RB1 Resilient Bar at 400mm vertical centres
	Tiles over double layer lining board fixed to studs (non Gypframe RB1 Resilient Bar side)	400 ¹	-
GypWall STAGGERED	1 x 15mm Gyproc SoundBloc each side 2 x 12.5mm (minimum) Gyproc SoundBloc each side	400	-
Timber stud partitions and separating walls	12.5mm Gyproc plasterboard each side (single or double layer)	400	Timber noggings 50 x 38mm minimum at 600mm vertical centres
	15mm Gyproc plasterboard each side (single or double layer)	600	Timber noggings 50 x 38mm minimum at 600mm vertical centres
ShaftWall	1 x 15mm Gyproc FireLine	300	-
	2 x 12.5mm (minimum) Gyproc FireLine	600	Gyproc Sealant applied in a full height continuous vertical bead midway between studs
FireWall	2 x 15mm Gyproc plasterboard ²	400	-

¹ If the tiling side is unknown, or tiling is to both sides, the studs should be at 400mm centres and the horizontal Gypframe RB1 Resilient Bars at 400mm vertical centres.

² FireWall specifications incorporating outer layer 6mm Glasroc F **MULTIBOARD** are suitable for tiling.

NB An outer layer of Glasroc H **TILEBACKER** 12.5mm can be added if appropriate to the system.

NB Reducing the centres of the metal studs within GypWall partition systems can have a detrimental effect on the sound insulation performance of the system. Refer to C02. S01. P39 – Robustness.

NB The recommendations given are based on experience and laboratory / site testing. In practice, performance will be dependent on factors such as workmanship and site conditions.

Tiling performance (continued)

Table 2 – Tiling on wall lining systems

Wall lining system	Board type (including MR variants)	Support centres mm	Additional support / comments
DriLyner ² Dabs of Gyproc Plasterboard Compound in rows	12.5mm Glasroc H TILEBACKER	600	Horizontal dabs of Gyproc Plasterboard Compound at mid-storey height Nine Gyproc Nailable Plugs through each board in the area to be tiled ¹
	9.5mm Gyproc WallBoard (1200mm wide)	400	For 9.5mm Gyproc WallBoard (900mm wide) support centres can be at 450mm Horizontal dabs of Gyproc Plasterboard Compound at mid-storey height
	12.5mm or 15mm Gyproc plasterboard	600	Horizontal dabs of Gyproc Plasterboard Compound at mid-storey height Nine Gyproc Nailable Plugs through each board in the area to be tiled
Gyplyner	12.5mm Glasroc H TILEBACKER 12.5mm or 15mm Gyproc plasterboard (single or double layer)	400	Fixing brackets at 600mm vertical centres
Gyplyner iwl	12.5mm Glasroc H TILEBACKER 12.5mm or 15mm Gyproc plasterboard (single or double layer)	400	Mid-height support from background structure to framework for single layer specifications
Timber battens	12.5mm Glasroc H TILEBACKER 12.5mm or 15mm Gyproc plasterboard (single or double layer)	400	Horizontal battens at head, base and intermediate positions not exceeding 1200mm centres

¹ 900mm x 1200mm Glasroc H TILEBACKER boards require three Gyproc Nailable Plugs per board.

² These lining systems should be left to stand for seven days before tiling begins.

NB The recommendations given are based on experience and laboratory / site testing. In practice, performance will be dependent on factors such as workmanship and site conditions.

Tiling design

Choosing tiling boards

When designing wall linings and lightweight partition systems, the following guidance details the appropriate board, application and details to use.

Table 3 – Board lining requirements

Level of moisture	Typical wall application	Board
Low	Residential Splash backs Kitchens Toilets	Gyproc Moisture Resistant, MR variants, Glasroc F MULTIBOARD and Rigidur
Medium	Residential Bathrooms	Gyproc Moisture Resistant and MR variants, Glasroc H TILEBACKER, Glasroc F MULTIBOARD and Rigidur
High	Residential Shower enclosure walls	Glasroc H TILEBACKER
	Commercial Kitchens Changing rooms	Glasroc H TILEBACKER
Extreme	Commercial Communal shower walls	Glasroc H TILEBACKER ¹

¹ In extreme moisture environments, the exposed surfaces of Glasroc H TILEBACKER should be treated with a suitable tanking system.

Guidance for high to extreme moisture environments

Planning - key factors

Glasroc H TILEBACKER is recommended for use as a tile backing substrate in environments subjected to moisture. The board can be used on both wall linings, lightweight partition systems and existing timber floors. Glasroc H TILEBACKER is not a structural grade flooring board and cannot be used as a walking surface.

Where the board is installed using the **Drilyner** systems, ensure the Gyproc Plasterboard Compound has set seven days before tiles are applied to the board surface. The tolerance on the finished tile surface quoted in *BS 5385: Part 1*, i.e. 3mm under a 2m straight edge with thin-bed adhesives, is such that it will reflect very accurately the standard of the background surface.

Moisture resistance

Glasroc H TILEBACKER should not be exposed to running water. Care should be taken not to over tighten screws when fixing boards and all screw heads should be fully filled with adhesive.

In areas of high and extreme moisture and humidity, extra care should be given to detailing at junctions, perimeter sealing and tiling.

Perimeter and junction sealing

Designers must give consideration to the precautions necessary at junctions to ensure that moisture is not allowed to penetrate or collect. Cut edges of boards must be appropriately sealed and waterproofed at abutments.

Waterproof sealant should be used around baths or shower trays, between the wall surface and the floor at the base of partition or wall lining, to prevent any possible moisture being absorbed by the board core.

Tanking systems

In extreme moisture environments, the exposed surfaces of Glasroc H TILEBACKER should be treated with a suitable tanking system.

Continuity of linings

All partitions and wall linings should be complete. There should be no omissions to board linings, e.g. behind baths.

Tiling design (continued)

Tiling

Before tiling commences, fully fill all edge joints included in the tiling area with tile adhesive. Install tiles following the manufacturer's guidance, using a waterproof tile adhesive. Tiles can be applied directly to the pre-primed surface of Glasroc H TILEBACKER, ensuring the board is dust free prior to tiling. Ensure tiles are sealed using a waterproof grout and sealant at perimeters.

Timber stud external walls or partitions

Where tiling is specified, designers should ensure that the timber is of sufficient dimensions to give a stable base for the additional loading.

The moisture resistance of the timber should be within the limits given in *BS 5268: Structural use of timber - Part 2*.

Underfloor heating systems

Glasroc H TILEBACKER is suitable for use in conjunction with electric underfloor heating systems. Glasroc H TILEBACKER is installed as per standard installation, electric underfloor heating systems should be installed in accordance with manufacturers installation details. The operating temperature of the heating system should not exceed 40°C.

Guidance for low to medium moisture environments

Planning – key factors

Glasroc H TILEBACKER, Gyproc moisture resistant grade boards, Glasroc F MULTIBOARD or Rigidur are recommended for intermittent moisture applications, including splashbacks. The tolerance on the finished tile surface quoted in *BS 5385: Part 1*, i.e. 3mm under a 2m straight edge with thin-bed adhesives, is such that it will reflect very accurately the standard of the background surface.

Perimeter and junction sealing

Designers must give consideration to the precautions necessary at junctions to ensure that moisture is not allowed to penetrate or collect. Cut edges of boards must be appropriately sealed / waterproofed at abutments.

Waterproof sealant should be used around baths or shower trays, between the wall surface and the floor at the base of partition or wall lining, to prevent any possible moisture being absorbed by the board core.

Once boards are installed, the perimeter of the wall, e.g. base, head and wall abutments, should be sealed with a waterproof sealant.

Continuity of linings

All partitions and wall linings should be complete. There should be no omissions to board linings, e.g. behind baths.

Timber stud external walls or partitions

Where tiling is specified, designers should ensure that the timber is of sufficient dimensions to give a stable base for the additional loading. The moisture resistance of the timber should be within the limits given in *BS 5268: Structural use of timber - Part 2*.

Tiling directly onto plasterboard

Before tiling commences, joints and taper recesses included within the tiling area should be filled with tile adhesive.

Only boards that are dimensionally stable in changing moisture conditions, such as MR grade and Glasroc H TILEBACKER boards should be used when tiling onto surfaces that will be subject to occasional wetting (e.g. domestic sinks and baths).

When tiling onto surfaces in high moisture areas (but are not immersed in water) e.g. communal changing rooms and shower areas, Glasroc H TILEBACKER should be used.

Where designs include part-tiled areas, e.g. low moisture environments, apply a layer of ThistleBond-it when using moisture resistant variant boards prior to the board being plaster skimmed above the line of the tiles.

Tiling design (continued)

Glasroc H TILEBACKER on existing timber floors

Glasroc H TILEBACKER is designed as a tiling substrate for use on an existing timber floor, it is not suitable as a walking surface and is not a structural flooring grade board. On existing timber floors ensure the floor is structurally sound and is not subject to excessive movement or flexing as this could cause a tiled floor to crack. Place a bed of tile adhesive directly onto the floor surface. Bed the board into the tile adhesive to create a level surface. Make sure the yellow pre-primed finish faces outwards for tiling. Boards are fixed through to timber sub floor using Gyproc Drywall Screws at 200mm centres. The length of fixing used should be selected to avoid penetrating through the floor surface into the cavity to prevent damage to any services that may be within the floor cavity.



Tiling components

Board products



Glasroc H TILEBACKER

Non-combustible glass-reinforced gypsum board with a water resistant pre-primed acrylic coating to receive tiling.



Glasroc F MULTIBOARD

Non-combustible glass-reinforced gypsum board.



Gyproc FireLine MR

Plasterboard with additional additives to increase fire and moisture performance.



Rigidur

Gypsum fibre board with additives for rigidity, durability and mechanical strength.



Gyproc Moisture Resistant

Gypsum plasterboard with moisture resistant additives in the core.



Gyproc DuraLine MR

Gypsum plasterboard with fire and moisture resistant additives and a high density core for enhanced sound insulation and impact resistance performance.



Gyproc SoundBloc MR

Gypsum plasterboard with moisture resistant additives and a high density core for enhanced sound insulation performance.



Glasroc F FIRECASE

High performance, non-combustible glass reinforced plasterboard giving up to 120 minutes fire protection.

Fixing products



Nailable Plugs

Secondary mechanical fixing for increased stability when tiling.

Plasterboard accessories

Waterproof tile adhesive (by others)

Tiles (by others)

Available in: 32kg/m² (maximum including adhesive and grout)

Waterproof sealant (by others)



Additional information

For full installation details, refer to the **Gyproc Installation Guide**, available to download from gyproc.ie