

# 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 and lightweight partition systems.

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 halls<sup>†</sup> and adjacent areas.

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



<sup>†</sup> In conjunction with a suitable tanking system.



## Key facts

- Glasroc H TILEBACKER has been designed for use in high moisture applications
- Glasroc H TILEBACKER will hold tiling systems up to 32kg/m<sup>2</sup> on walls and 50kg/m<sup>2</sup> on floors
- Gyproc moisture resistant grade boards are suitable for use in low moisture applications
- Glasroc H TILEBACKER and Gyproc moisture resistant grade boards can be installed using the GypWall CLASSIC<sup>2</sup> and timber stud partitioning systems, as well as the DriLyner, DriLyner MF, GypLyner UNIVERSAL and GypLyner IWL wall lining systems

<sup>2</sup> Guidance refers to GypWall CLASSIC using 70mm Gypframe stud, but other GypWall systems can be used.

## Components

### Boards for high moisture conditions



#### Glasroc H TILEBACKER<sup>2</sup>

Thickness 6, 12.5mm  
Width 1200mm

Take-off  
quantities<sup>1</sup>

100m<sup>2</sup>  
per outer layer

### Boards for intermittent moisture conditions



#### Gyproc Moisture Resistant<sup>3</sup>

Thickness 12.5, 15mm  
Width 1200mm

100m<sup>2</sup>  
per layer



#### Gyproc FireLine MR<sup>3</sup>

Thickness 12.5, 15mm  
Width 1200mm

100m<sup>2</sup>  
per layer



#### Gyproc SoundBloc MR<sup>3</sup>

Thickness 12.5, 15mm  
Width 1200mm

100m<sup>2</sup>  
per layer



#### Gyproc SoundBloc RAPID MR<sup>3</sup>

Thickness 15mm  
Width 900mm

100m<sup>2</sup>  
per layer

### Boards for intermittent moisture conditions



#### Gyproc DuraLine MR<sup>3</sup>

Thickness 15mm  
Width 1200mm

100m<sup>2</sup>  
per layer



#### Glasroc F MULTIBOARD

Thickness 6, 10, 12.5mm  
Width 1200mm

100m<sup>2</sup>  
per layer



#### Glasroc F FIRECASE

Thickness 15, 20, 25, 30mm  
Width 600, 1200mm

100m<sup>2</sup>  
per layer



#### Rigidur H

Thickness 12.5, 15mm  
Width 1200mm

100m<sup>2</sup>  
per layer

<sup>1</sup> Quantities are for 100m<sup>2</sup> of straight wall lining with single layer boarding or for 100m<sup>2</sup> of floor lining. Quantities are approximate and for guidance only. No allowance has been made for waste, openings, abutments, etc. Refer to **SITE BOOK** section 12 - Quantity take-off details.

<sup>2</sup> Glasroc H TILEBACKER is suitable for use in high moisture environments.

<sup>3</sup> Moisture resistant boards are specified in intermittent wet use areas.

Fixing and finishing products		Take-off quantities <sup>1</sup>
	<p><b>Gyproc Nailable Plugs</b></p> <p>Diameter 6mm</p> <p>Length Minimum 60mm</p>	dependent on board
	<p><b>Waterproof tile adhesive</b> (by others)</p>	as required
	<p><b>Tiles</b> (by others)</p> <p>Weight 32kg/m<sup>2</sup> (maximum including adhesive and grout)</p>	as required
	<p><b>Waterproof sealant</b> (by others)</p>	as required

## Construction tips - General

- During installation all boards should be lifted short of the floor
- It is good practice to protect the cut ends of Gyproframe metal components to prevent corrosion
- For **DriLyner** systems, wall linings should be left to stand for seven days before tiling
- On **DriLyner BASIC, TL** and **SI**, horizontal dabs of Gyproc Dri-Wall Adhesive are required at mid-storey height
- When using **DriLyner MF**, Gypframe MF10 channels should be located at 400mm centres and board should be screw fixed at 300mm centres into each channel

## Construction tips - General (cont'd)

- **DriLyner TL** and **RF** (except Gyproc TriLine) require nine Gyproc Nailable Plugs to provide a secondary mechanical fixing
- When installing **DriLyner SI** with Gyproc TriLine, Gyproc Nailable Plugs are required at 600mm centres vertically, 15mm in from each edge
- **GypLyner IWL** requires support centres at 400mm, with mid-height support from framework to structure
- **GypLyner UNIVERSAL** requires support centres at 400mm with fixing brackets at 600mm centres
- For timber stud partitions, studs should be installed at 400mm centres for 12.5mm boards, and 600mm centres for 15mm boards. Additional supports are required vertically at 600mm centres
- For timber batten wall linings, battens should be installed at 400mm centres, with noggings at 1200mm vertical centres

## Construction tips - Glasroc H TILEBACKER

- In extreme moisture environments, the exposed surfaces of Glasroc H TILEBACKER should be treated with a suitable tanking system. Gyproc moisture resistant boards are not recommended for high or extreme moisture environments
- When installing the **GypWall CLASSIC** system using 12.5mm, studs can be located at 600mm centres. For 6mm (e.g. **GypWall CURVE**) studs must be at maximum 300mm centres
- For **DriLyner BASIC** and **RF** systems, nine Gyproc Nailable Plugs are required to provide a secondary mechanical fixing - with the exception of 900mm x 1200mm boards, which require three

Table 1 – Board lining requirements

Level of moisture	Typical application	Board
<b>Low</b>	Residential Splash backs Kitchens Toilets	Gyproc Moisture Resistant and MR variants
<b>Medium</b>	Residential Kitchens Bathrooms	Gyproc Moisture Resistant and MR variants <b>OR</b> Glasroc H TILEBACKER
<b>High</b>	Residential Shower enclosure walls Commercial Kitchens Changing rooms	Glasroc H TILEBACKER
<b>Extreme</b>	Commercial Communal shower walls Swimming pool hall walls	Glasroc H TILEBACKER <sup>1</sup>

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

## Installation – single layer partition



### GypWall CLASSIC

● The following guidance is based on GypWall CLASSIC using 70mm Gypframe stud and relates to the installation of Glasroc H TILEBACKER and Gyproc moisture resistant grade plasterboards. Additional installation procedures may need to be followed for other stud specifications and performance related constructions.

- Determine and mark the wall position, making allowances for any openings.
- Fix Gypframe Floor & Ceiling Channels to both the floor and ceiling at 600mm centres with suitable fixings.



- Cut studs to a neat fit (maximum possible entry into head and base channel). The engagement should be a minimum of 20mm, allowing for any deflection where required.

**NB** Cut studs to size using a chop saw, hacksaw or snips.



- Locate the first stud, twist into position and fix to the abutting wall at 600mm centres.



- Locate further studs at 600mm centres for 12.5mm Glasroc H TILEBACKER, or at 400mm centres for any 15mm Gyproc moisture resistant grade plasterboard.

**NB** Where 146mm studs are used, Gyproc moisture resistant grade plasterboards can be installed with Gypframe metal studs at 600mm centres. Additional studs are required at 300mm centres to the tiling height.



- When medium weight fixtures will be installed, for example a shower unit, install Gypframe 99 FC 50 Fixing Channel to accommodate the fixture.

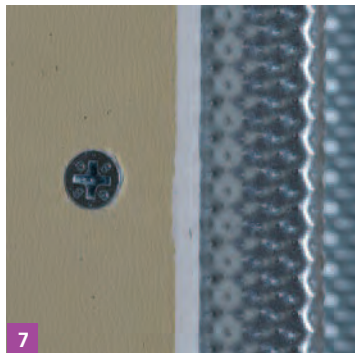


- Fix 12.5mm Glasroc H TILEBACKER or Gyproc moisture resistant grade plasterboard to all framing members at 300mm centres, using the appropriate length British Gypsum Drywall Screw, to give a minimum 10mm penetration into the stud.

- Reduce centres to 200mm at external angles.

**NB** When installing Glasroc H TILEBACKER, boards must be installed with the yellow face exposed. The pre-primed yellow acrylic face of the board has been





- Lightly butt boards, inserting screws not closer than 10mm from the edge of the board (13mm from site cut edges).
- Care should be taken not to over tighten screws.
- Boards are now ready for application of tiles, see **Tiling installation** guidance at the end of this section.
- For full installation details of GypWall CLASSIC, including components and detailing, refer to the GypWall CLASSIC section of the British Gypsum **SITE BOOK**.



### Timber stud

- If installing timber stud framework, ensure studs are installed at 400mm centres. For 6mm, studs must be at maximum 300mm centres.
- Additional support centres (battens) are also required at head, base and intermediate positions, not exceeding 1200mm centres.
- Install using British Gypsum Drywall Timber Screws at appropriate lengths to give a nominal 25mm penetration into the timber.

- Install at 300mm centres (maximum 200mm at external angles).
- Lightly butt boards, inserting screws not closer than 10mm from the board edge (13mm from site cut edge)



### DriLyner BASIC system

- The following guidance is for DriLyner BASIC, other DriLyner systems can be used. Refer to **Construction tips** on pages 4-6.
- 12.5mm Glasroc H TILEBACKER and Gyproc moisture resistant grade plasterboards can be installed using the DriLyner BASIC wall lining system.

- Determine high spots on the wall and plumb position to the ceiling and floor.
- Transfer this dimension to the room corners, add an allowance of 10mm plus the board thickness, then strike continuous chalk lines on the floor and ceiling.
- Mark the wall with lines at 1200mm centres to indicate board positioning (1200mm wide boards).

- Trowel apply a continuous band of Gyproc Dri-Wall Adhesive to the perimeter of the wall, services and openings for optimum airtightness.
- Commence the drylining from a window / door reveal or internal angle.
- Trowel apply adhesive to form dabs 50mm to 75mm wide and about 250mm long.



- Position dabs of Gyproc Dri-Wall Adhesive in three vertical rows to receive the first board.
- Ensure the dabs are adjacent to a board joint and are approximately 25mm in from the edge to avoid bridging the joint.
- Apply intermediate dabs at ceiling level.



- Apply a continuous band of Gyproc Dri-Wall Adhesive at skirting level.



- Apply horizontal dabs of Gyproc Dri-Wall Adhesive at mid board height to support tile loading.
- NB** Consider using additional dabs of adhesive where fixtures are required, for example a shower unit, to provide extra support.



- Cut 12.5mm Glasroc H TILEBACKER or Gyproc moisture resistant grade plasterboards 15mm short of the floor to ceiling height.

- Position the first board, yellow face exposed, with the bottom edge resting on board packing strips.

**NB** When installing Glasroc H TILEBACKER, boards must be installed with the yellow face exposed. The pre-primed yellow acrylic face of the board has been designed to directly receive the tiling system.



- Tap the board back firmly using a straight-edge until it aligns with the ceiling and floor chalk lines.



- Gently lift using a footlifter until the board is tight against the ceiling.
- Insert additional packing strips at the base to wedge the board in place and remove the footlifter.
- Apply dabs for the next board and continue drylining with boards lightly butted.



- When dabs have set, install nine Gyproc Nailable Plugs to provide a secondary mechanical fixing.
  - Insert a row of three plugs at top, bottom and mid-height, with outer fixings 15mm from each edge, and the middle position fixed centrally (600mm).
- NB** For 900mm x 1200mm boards, install one row of three Gyproc Nailable Plugs at mid-height (450mm).

- Boards are now ready for application of tiles, see **Tiling installation** guidance at the end of this section.
- For full installation details, refer to the DriLyner **BASIC** section of the British Gypsum **SITE BOOK**.



#### **GypLyner UNIVERSAL system**

- 12.5mm Glasroc H **TILEBACKER** and Gyproc moisture resistant grade plasterboards can be installed using the GypLyner **UNIVERSAL** wall lining system.
- Use a straight edge (e.g. Gypframe GL1 Lining Channel) to determine the maximum undulation in the wall or service protrusion. This will determine the cavity depth.



- Mark chalk lines to the floor and ceiling to indicate the positioning of the Gypframe GL8 Track.



- Fix Gypframe GL8 Track to perimeters, with the longer leg towards the lining, at 600mm centres using the appropriate fixing.



- Mark vertical lines on the wall at 400mm intervals to indicate bracket fixing centres.
- Mark horizontal lines at 600mm centres to determine individual bracket position.
- Use a 5.5mm drill bit to drill a 45mm minimum depth hole.
- Position each bracket, ribs to the wall, and fix through bracket slot into the masonry wall using a Gypframe GL11 GypLyner Anchor, which is a hammer fixing.



- Cut GL1 Lining Channels to size and round-off ends with tin snips for an easier fit.
- Friction fit Gypframe GL1 Lining Channel into the track.



- Bend bracket legs forward and fix each leg to the channel using a British Gypsum Wafer Head Drywall Screw. Insert screw through the hole in the bracket nearest to the back of the channel.

**NB** Avoid exerting any backwards or forwards pressure on the channels when screw-fixing the brackets, otherwise a straight and true lining surface may not be achieved.

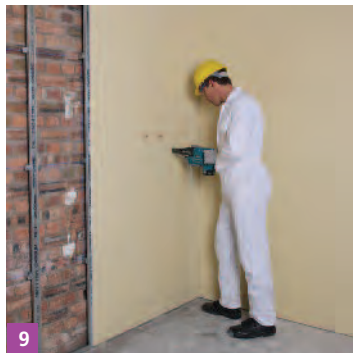


- Bend back protruding bracket legs to sit clear of the channel face.
- Friction fit remaining Gypframe GL1 Lining Channels into the track at 400mm centres.



### Internal angles

- Position a Gypframe GL1 Lining Channel tight into the corner in order to provide support for the lining.
- Bend one bracket leg across the face of the Gypframe GL1 Lining Channel and fix with a British Gypsum Wafer Head Drywall Screw to secure and restrain the channel at the corner position.



- Fix boards to framing members at 300mm centres using British Gypsum Drywall Screws, to give a minimum 10mm penetration into the channel.
- Reduce centres to 200mm at external angles.
- Lightly butt boards, inserting screws no closer than 10mm from the board edge (13mm from site cut edge).
- Boards are now ready for application of tiles, see **Tiling installation** guidance at the end of this section.
- For full installation details of GypLyner UNIVERSAL, including components and detailing, refer to the GypLyner UNIVERSAL section of the British Gypsum **SITE BOOK**.





### GypLyner iWL system

- 12.5mm Glasroc H TILEBACKER and Gyproc moisture resistant grade plasterboards can be installed using the GypLyner iWL wall lining system.
- Mark lines to indicate the position of the lining framework from the highest point on the background.



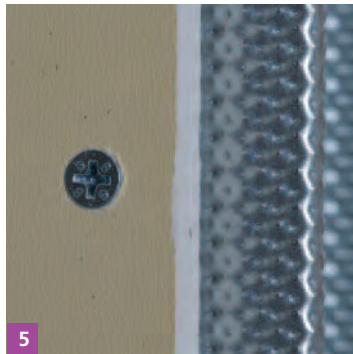
- Locate Gypframe Floor & Ceiling Channel up to the floor and ceiling lines.
- Fix Gypframe 'C' Studs to abutments, junctions and openings only.



- Position the Gypframe 'I' Studs vertically between channel sections and twist to locate.
- Install at 400mm centres.



- Fix boards to framing members at 300mm centres using the appropriate length British Gypsum screws, to give a minimum 10mm penetration into the stud.
- Reduce centres to 200mm at external angles.



- Lightly butt boards, inserting screws not closer than 10mm from board edges (13mm from site cut edge).
- Care should be taken not to over tighten screws.
- Boards are now ready for application of tiles, see **Tiling installation** guidance at the end of this section.
- For full installation details of GypLyner iWL, including components and detailing, refer to the GypLyner iWL section of the British Gypsum **SITE BOOK**.

## Installation - Timber floor

### On existing timber floors ensure

- Floor is structurally sound.
- Screws used to fix the board do not penetrate into the floor cavity.
- Floor is clean and as even as possible.
- The floor is not subject to excessive movement or flexing as this could cause tiled floor to crack.



- Ensure floor surface is clean
- 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



- Fix the boards to the timber sub floor using British Gypsum Drywall or Drywall Timber 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.
- Board joints can be reinforced with 50mm Thistle ProTape bedded into the joint using tile adhesive.

## Curved Partitions



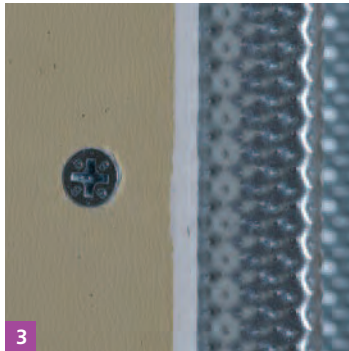
**For full installation details on GypWall CURVE system please refer to Section 5 SITE BOOK**

- 6mm Glasroc H TILEBACKER can be curved to 600mm radius, for ease of fixing where possible use 2400mm long boards. Fix the boards horizontally. Stagger the board joints and avoid joints occurring on the apex of a convex curve.
- For tight radius partitions the ease of installation can be improved by pre-bending the board.



- Fix the board using British Gypsum Drywall Screws at 300mm centres in the field of the board and 150mm centres at the board ends.

Board joints should be reinforced with 50mm Thistle ProTape bedded into the joint using tile adhesive.



- Lightly butt boards, inserting screws not closer than 10mm from board edges (13mm from site cut edge).
- Boards are now ready for application of tiles, see **Tiling installation** guidance at the end of this section.
- For full installation details of GypLyner iWL, including components and detailing, refer to the GypLyner iWL section of the British Gypsum **SITE BOOK**.

## Tiling Installation

### Using Glasroc H TILEBACKER

- Once Glasroc H TILEBACKER boards are installed, use the following guidance, in conjunction with tile system manufacturers' guidance, to ensure the system is appropriately sealed for its use.
- Where Gyproc Dri-Wall Adhesive has been used to install the boards in either the DriLyner BASIC and DriLyner MF systems, ensure the adhesive has fully set before tiling.
- A tanking system is recommended in extreme moisture conditions, e.g. swimming pool halls and communal showers.



- Ensure the boards are dust free prior to installation of the tiling system.



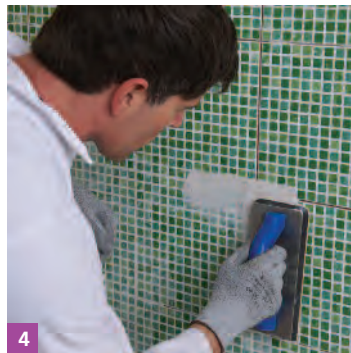
- The perimeter of the wall, e.g. base, head and wall abutments, should be sealed with a silicone-based sealant.

- Ensure all board joints within the tiling area are covered with a waterproof tile adhesive and all board perimeter junctions are sealed with a silicone-based sealant.

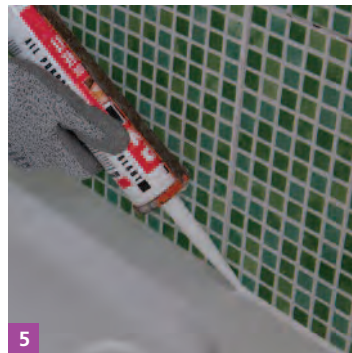


- Install tiles using a thin bed of adhesive, strictly following the manufacturers' recommendations. Ensure all screw heads are filled with adhesive.

**NB** The tiling system should weigh no more than 32kg/m<sup>2</sup> on walls and 50kg/m<sup>2</sup> on floors.

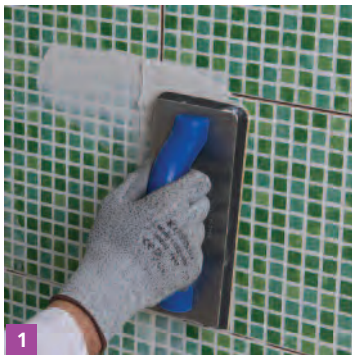


- Once set, ensure tiles are fully sealed using a waterproof grout.



- All perimeters must be sealed using a waterproof silicone sealant.

**NB** Special attention should be paid to those areas between the wall and floor joints, the junction of the shower or bath base, pipes or services passing through the walls, any frames or apertures, and joints where movement may occur.



### Skimmed plasterboard and plaster systems

- Where designs include part-tiled wall areas, e.g low moisture environments, the board can be either plaster skimmed or jointed above the line of the tiles, 6mm Glasroc H TILEBACKER applied to floors should be fully tiled.
- Thistle Board Finish, Thistle Multi-Finish and Thistle Durafinish can be used as a plaster, in conjunction with ThistleBond-it.
- Walls should be painted with an appropriate moisture-resistant paint.

- Install the tiling system using a thin bed of adhesive.
- Apply the adhesive strictly in accordance with the manufacturers' instructions except where the system includes a bonding agent. In this situation the total weight of tiles and plaster applied over a bonding agent is limited to 20kg/m<sup>2</sup>, therefore consideration should be given to tiling directly to the background.

- It is not recommended to tile directly onto undercoat plaster.
- Ensure that plasterwork is thoroughly dry and stable.

**NB** Thistle Board Finish and Thistle Multi-Finish should not be over-trowelled to a polished surface, as reduced adhesion will result. Polished plasterwork should be roughened and a suitable primer used to consolidate the surface. Dusty surfaces and plaster surfaces should also be treated with a suitable primer prior to applying a cement-based tile adhesive.

### **Tiling onto jointed plasterboard**

- Install the tiling system (up to 32kg/m<sup>2</sup>) using a thin bed of adhesive.
- Apply the adhesive strictly in accordance with the manufacturers' instructions

### **Tapered edge**

- Plasterboard joints must be filled with tile adhesive as tiling proceeds.
- If conventional jointing has already been completed, joint treatment must be thoroughly dry, because tiles will trap in any residual moisture.
- Ensure that all dust from sanding is removed.