Drywall masonry lining systems

The DriLyner systems are simple, effective techniques for direct bonding of boards to solid backgrounds. The variants are:

- **DriLyner Basic**: bonding Gyproc WallBoard, Gyproc Moisture Resistant or Gyproc DuraLine using Gyproc Compound.
- **DriLyner TL**: bonding Gyproc Thermal laminates using Gyproc Compound, for thermal upgrading.
- **DriLyner RF**: bonding Gyproc plasterboards to flat walls in refurbishment situations, using blobs of Gyproc Sealant.
- **DriLyner MF**: fixing Gyproc plasterboards (including duplex grades) or Gyproc Thermal Laminate Boards to Gypframe MF10 Channels which are bonded to the wall using Gyproc Compound.
Key facts

- Comfortable room temperatures are quickly achieved
- Services incorporated with minimum chasing
- Suitable for use in both new build and refurbishment work
## Components

### Gyproc board products

<table>
<thead>
<tr>
<th>Product</th>
<th>Thickness</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gyproc WallBoard</td>
<td>9.5, 12.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc WallBoard Duplex</td>
<td>9.5, 12.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc DuraLine</td>
<td>13.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc Thermal laminate</td>
<td>1200mm</td>
<td></td>
</tr>
</tbody>
</table>

1. Moisture resistant boards should be specified for intermittent wet use areas e.g. shower areas, bathrooms and kitchens.

May 2008
### Gypframe metal products

- **Gyfframe MF10 Channel**
- **Gyfframe G106 Skirting Plate**
  
  To provide a fixing for skirtings over Gyproc Thermal Laminate Board.

### Fixing and finishing products

- **Gyproc Compound**
  
  For dab fixing in the DriLyner BASIC, TL and MF systems. 25kg bags.

- **Gyproc Nailable Plugs**
  
  Diameter: 6mm  
  Length: 60, 80, 100mm

- **Gyproc Sealant**
  
  Used as an adhesive in DriLyner MF and DriLyner MF when fixing thermal laminates, and for sealing small air gaps and options for fixing skirting boards.

- **Gyproc Skimcoat, Gyproc Carlite Finish or Gyproc Board Finish**
  
  To provide a plaster skim finish.

- **Gyproc jointing materials**
  
  For a seamless finish.
Construction tips

- Estimated construction times ready for finishing, are as follows:
  - DriLyner BASIC 7m², DriLyner TL 6m², DriLyner MF 5m², DriLyner RF 11m²-12m² per man hour
- To determine lining dimensions at reveals & soffits, allow for minimum cavity thickness plus the board thickness (10mm for Dryliner BASIC & TL, 20mm for MF, 3mm for RF from the high point of the background)
- Install ceilings before DriLyner linings, ensuring the boards are cut close to the wall. Normally partitions which abut the inner leaf of the external wall should also be installed before the wall lining to achieve optimum acoustic performance
- Backgrounds should be reasonably dry and protected from the weather. Brush down backgrounds to remove dust. Cast concrete must be free of shutter release agents and dampened before applying adhesive dabs. Some concrete will need pre-treatment with ThistleBond-it applied in bands corresponding to adhesive dab locations (e.g. if exceptionally dense or smooth, or made with limestone, brick or granite aggregates)
- Backgrounds for DriLyner RF must be suitably pre-treated, dry, sound and flat, existing plastered walls or level brick, block or fair-faced concrete
- Allow for variations in background suction - allow backgrounds to dry, and in hot/dry conditions take care to avoid rapid loss of moisture prior to the set of the adhesive
**Construction tips (cont’d)**

- Ensure walls are thoroughly dry before installing a vapour control layer, if specified.
- Close the drylining cavity to maintain thermal performance, by ensuring abutting elements are well fitted and junctions sealed. Where perimeter sealing is to be done by the drylining contractor, apply a continuous fillet of Gyproc Compound or Gyproc Sealant to the wall perimeter and around any service penetrations or openings.
- Allow for skirting fixing by providing a continuous band of adhesive for mechanical fixing, using Gypframe G106 Skirting Plates or fixing with Gyproc Sealant as appropriate.
- Seal small gaps with Gyproc Sealant to avoid loss of acoustic performance.
- Form vertical cavity barriers in long runs of lining, using a continuous line of dabs where specified.
- Allow the lining to bridge structural columns — do not locate dabs on the column.
- Ensure dabs cover minimum 20% of the board area. This is particularly important with heavier board linings.
- Ensure installation is carried out in accordance with relevant codes of practice.
- Where specified, use secondary mechanical fixings, which delay board fall in the event of a fire.
- Use GypLyner™ if cavity thickness over 25mm is required.
Installation

Drivyner basic system
Installing 12.5mm or 15mm, 1200mm width Gyproc plasterboards, or 9.5mm 900mm wide plasterboards.

- 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 and strike continuous chalk lines on the floor and ceiling.

- Mark wall with lines at 900mm or 1200mm centres to indicate board positioning.
• Trowel apply a continuous fillet of Gyproc Compound to the perimeter of the wall, services and openings for optimum air tightness.
• Commence drylining from a window / door reveal or internal angle.
• Trowel apply Compound to form dabs 50mm to 75mm wide and about 250mm long.

• Position dabs of Gyproc Compound in three vertical rows to receive the first board.
• Ensure that the dabs adjacent to a board joint are approximately 25mm in from the edge to avoid bridging the joint.
• Apply intermediate dabs at ceiling level.

• Apply a continuous band of Gyproc Compound at skirting level.
• Cut plasterboard 15mm short of the floor to ceiling height.
• Position the first board, reverse side against the dabs, with the bottom edge resting on plasterboard packing strips.
• 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 plasterboard and continue the drylining with boards lightly butted.
• At internal angles cut board to fit and position the cut edge to the angle.
• At external angles apply rows of Gyproc Compound dabs close to the angle on each side. Position the cut board edge to the inside.

• At partition abutments apply rows of Gyproc Compound dabs close to each side and cut lining boards to a neat fit.

• At windows apply a continuous band of dabs just above the head as a ground for fixing curtain track. Consider additional dabs at the position of cupboards, radiators, etc.

NB When applying dabs ensure that they are in a regular pattern and that the contact area between board and background is at least 20%.
Services

- Where appropriate the cavity between the linings and the background can be used to incorporate services. This minimises the depth of chasing required in the background.
- Fix pipes and conduits in position before commencing lining work.
- Maintain an airtight construction by sealing the perimeter of any penetration as required at the time of installing the services.

- All services should be installed in accordance with all available standards, guidelines and recommendations.

Fixtures

Lightweight fixtures can be made directly to the lining. For other fixtures, the fixing device used should be long enough to give adequate penetration into the solid wall.

Installing 9.5mm x 1200mm Gyproc WallBoards
Install as for 900mm boards but apply dabs of Gyproc Compound in four vertical rows per board.

Installing MR grade or Gyproc DuraLine boards
Install as for Gyproc WallBoard of equivalent size. When installing MR grade no pre-treatment is required to the back of the board.
Installing Gyproc Thermal laminates
Proceed as for DriLyner BASIC system with the following exceptions:

1. Locate Gypframe G106 Skirting Plates (optional) over the bottom board edge with rear of plate inserted between the plasterboard and insulating backing.

2. Position at 600mm centres, 300mm in from each long edge.
• At reveals and external angles run the lining past the corner and cut back the insulating backing so as to form a neat junction with the reveal board or wall lining.

NB The insulating backing of the laminates should not be chased to accommodate services. PVC covered cables must not come into direct contact with polystyrene insulation. Suitable isolation methods such as conduit or capping should be used.

• When the dabs have set, install Gyproc Nailable Plugs to provide secondary mechanical fixings. Insert two plugs per board, 15mm in from each edge at mid-height.
  • Select plugs of sufficient length to give a 25mm nominal penetration into the solid wall and drill hole 5mm longer than the plug.
  • Drive each plug in until the head is slightly below the liner without fracturing it.

DrilLyner MF system
Proceed as for DrilLyner basic system with the following exceptions:
• For 12.5mm, 1200mm wide boards, mark walls with lines at 600mm centres to indicate position of vertical Gypframe MF10 Channels.
  • For 9.5mm, 1200mm wide boards, vertical MF10 Channels should be provided at 400mm centres.
  • For all 900mm wide boards, vertical MF10 Channels should be provided at 450mm centres.

May 2008
• A continuous fillet of Gyproc Compound is applied to the wall perimeter and around services and openings as board fixing proceeds.
• Trowel apply dabs of adhesive progressively to the wall to each vertical line to form dabs 200mm long at maximum 450mm intervals.
• Gypframe MF10 Channels are located onto the adhesive dabs and 'tapped' into position.

• Additional vertical Gypframe MF10 Channels are adhesive fixed to complete the run of wall.
• Consider additional channels at the position of cupboards, radiators etc.

• Horizontal channels are similarly located at the head and base.
• At angles and reveals, Gypframe MF10 Channels are installed close to the corner to provide support. Door and window openings are framed with Gypframe MF10 Channels.
• At window openings, the channel at the head forms a ground for fixing curtain track. Where a partition abuts, an additional Gypframe MF10 Channel is installed to provide a fixing ground.
• Board fixing can proceed when the adhesive has fully set. Boards are positioned with the back against the Gypframe MF10 Channels and bottom edge resting on plasterboard packing strips and lifted tight to the ceiling using a footlifter.
• Additional packing strips are inserted at the base to wedge the board in place.

Installing 1200mm Gyproc thermal laminates
Install as plasterboards with the following exceptions:
• Gun apply a continuous bead of Gyproc Sealant to the Gypframe MF10 Channels just prior to locating the boards.
• Three screws should be located in each tapered edge – one at mid-height, one 600mm above and one 600mm below.
• Whilst the horizontal Gypframe MF10 Channels at the base can be used as a ground for skirting, Gyproc Skirting Plates provide an alternative fixing method.
• At external angles and reveals run the lining past the corner, and cut back the insulating backing so as to form a neat junction.
• Fix the reveal board by direct bonding with Gyproc Sealant (for high suction backgrounds treat first with a suitable bonding agent).
• Where a partition abuts it should be fixed directly to the masonry wall.

GypWall™
CLASSIC
DriLyner

5

www.gypsum.ie

May 2008
Installation

Drilnyer™ system
Installing 1200mm width Gyproc plasterboards or Gyproc Thermal laminates.

- Mark wall with lines at 1200mm centres to indicate board positioning.
- Commence drylining from a window/door reveal or internal angle.

- Following suitable pretreatment of the surface (where necessary), gun apply blobs of Gyproc Sealant to the wall or the back of the board approximately 25mm in diameter (single squeeze), at 300mm centres in both directions.

- Ensure that the blobs adjacent to a board joint are approximately 25mm in from the edge to avoid bridging the joint.

Technical support: T 01 629 8400 E technical.enquiries@gypsum.ie

May 2008
• Cut board 15mm short of the floor to ceiling height. Position the first board, with the bottom edge resting on plasterboard packing strips.
• Tap the board back firmly using a straight-edge, ensuring that the vertical edge is plumb.
• 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.
• Continue drylining in the same manner with boards lightly butted.

• At internal angles cut board to fit and position the cut edge to the angle.
• At reveals and external angles, run the lining past the corner (and, when installing Gyproc Thermal laminates, cut back the insulating backing) so as to form a neat junction with the reveal board or wall lining.

• Install Gyproc Nailable Plugs to provide secondary mechanical fixings. Insert two plugs per board, 15mm in from each edge at mid-height.
• Select plugs to give a nominal 25mm penetration into the solid wall (excluding plaster thickness). Drill hole 5mm longer than the plug.
• Drive in each plug until the head is slightly below the liner without fracturing it.

May 2008