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Installation guide

Installation guide

For Thistle plaster and Gyproc plasterboard

British Gypsum

British Gypsum

Creating better living spaces

Whether you're renovating a room, a house or even a whole series of houses, you need to ensure that plasterboard, plaster and drylining materials are correctly installed, to create living spaces designed to last long after the work has been completed.

This guide gives you an overview of the most cost-effective ways to use plaster and plasterboards, depending on factors such as:

- Whether you're building an internal partition, ceiling, wall lining, or separating wall or floor.
- The type of backgrounds that already exist in the building.
- The additional benefit you need to bring to the property, such as meeting Building Regulations for thermal and acoustic insulation.

If you're new to drylining, refer to the 'Where do I begin?' section to make sure you have all you need to get started. Whilst using the guide, if you find any unfamiliar terms, please refer to the glossary on page 80.

Contents

Where do I begin?

1 External and separating walls
3 New internal partitions
2 Lining ceilings

Depending on the level of refurbishment you're undertaking, consider working around the property or room in a logical manner, so that the drylining fits together well at wall and ceiling joints and is correctly sealed to prevent gaps or voids where fire, noise or heat could escape through.

If the room is a blank canvass and a separating wall is not being installed, begin with the external walls to ensure they provide a high level of thermal insulation and reduce the chance of interruptions in the wall lining, which could downgrade the thermal insulation it provides.

Ceilings can then be lined, to give a level surface for all subsequent wall linings and internal partitions to be built, completing the room.

Using this guide

Throughout the guide the following symbols are used to highlight the additional building performances you can achieve. Some will also advise on how to meet Building Regulations:

Thermal insulation
Fire resistance
Acoustic insulation
Impact resistance
Moisture resistance
Special requirements
Vapour control
Standard performance

The system selector, which starts on page 8, will help you decide which system is best suited to your needs and which construction methods to use.

What equipment do I need?

Before you start don't forget to have all your tools ready for the job, and consider what equipment you need to keep you safe whilst working.

Plastering and drylining tools

Different systems will need different tools. Here's a quick overview of the tools you'll need:

Activity	Equipment
Setting out and measuring up	Chalk and chalk line Straight edge Spirit level Tape measure
Applying Thistle plasters and Gyproc adhesives	Hawk and trowel Mixing bucket Mastic or skeleton gun
Installing Gypframe metal	Tin snips Crimping tool (optional) Cordless drill / screwdriver Gyproc fixings
Cutting Gyproc plasterboards	BladeRunner[1] (safer option) Utility knife
Installing and fixing Gyproc plasterboards	Gyproc Footlifter Cordless drill / screwdriver Gyproc fixings Hammer

1 BladeRunner is a unique tool specifically designed for the safe cutting of plasterboard reducing the risk of injury and halving the cutting time compared to standard utility knives. Visit www.gyprocbladerunner.com for further details.

Personal Protection Equipment (PPE)

PPE is required when handling plaster, plasterboards and drylining materials, as it'll help keep you safe and protect you where it matters.

Here is a list of items you should consider when undertaking these activities:

Activity	Equipment
All	Safety shoes Gloves
Mixing powders and installing insulation	Eye protection Dust mask
Working overhead (ceilings)	Hard hat

For further information and to download Product Data Sheets, visit www.british-gypsum.com

Gypframe metal components

Timber stud is the traditional method of building partitions, but there is also a quicker and easier method using Gypframe metal framing.

Gypframe metal components provide the backbone for many British Gypsum systems tested to work together to provide a lifetime warranted performance.

However Gypframe is no ordinary metal. It uses a process that transforms plain steel into a material that not only looks unique, but is physically superior to plain steel components.

Rigidised surface of Gypframe metal components.

The benefits

Over timber stud

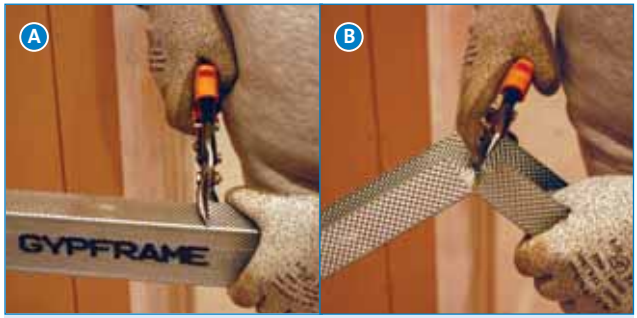
- It is up to 80% lighter than comparative timber stud, so easier to carry around site.
- Simpler to cut and install than timber stud as there's no need to work the timber.
- Gypframe won't warp or rot like timber, giving a better result to stand the test of time.

Over plain steel

- Stronger steel strength gauge for gauge.
- Easier and safer to install with reduced screw slippage.
- 20% more screw retention than plain steel of the same gauge.

Cutting tips

Cutting Gypframe metal is very easy.



A Cut down either side of the stud or channel

B Fold and cut across the formed crease

For thicker gauge metal, such as Gypframe 'I' Studs, consider using a chop saw or circular saw.

System warranty

When using Gypframe as part of the British Gypsum systems featured in this guide, along with other British Gypsum components, you'll qualify for the SpecSure® system warranty.

SpecSure® is simple; we guarantee that our products, when installed in accordance with our recommendations, will achieve the performances stated in this guide, giving you peace of mind that the systems will last.

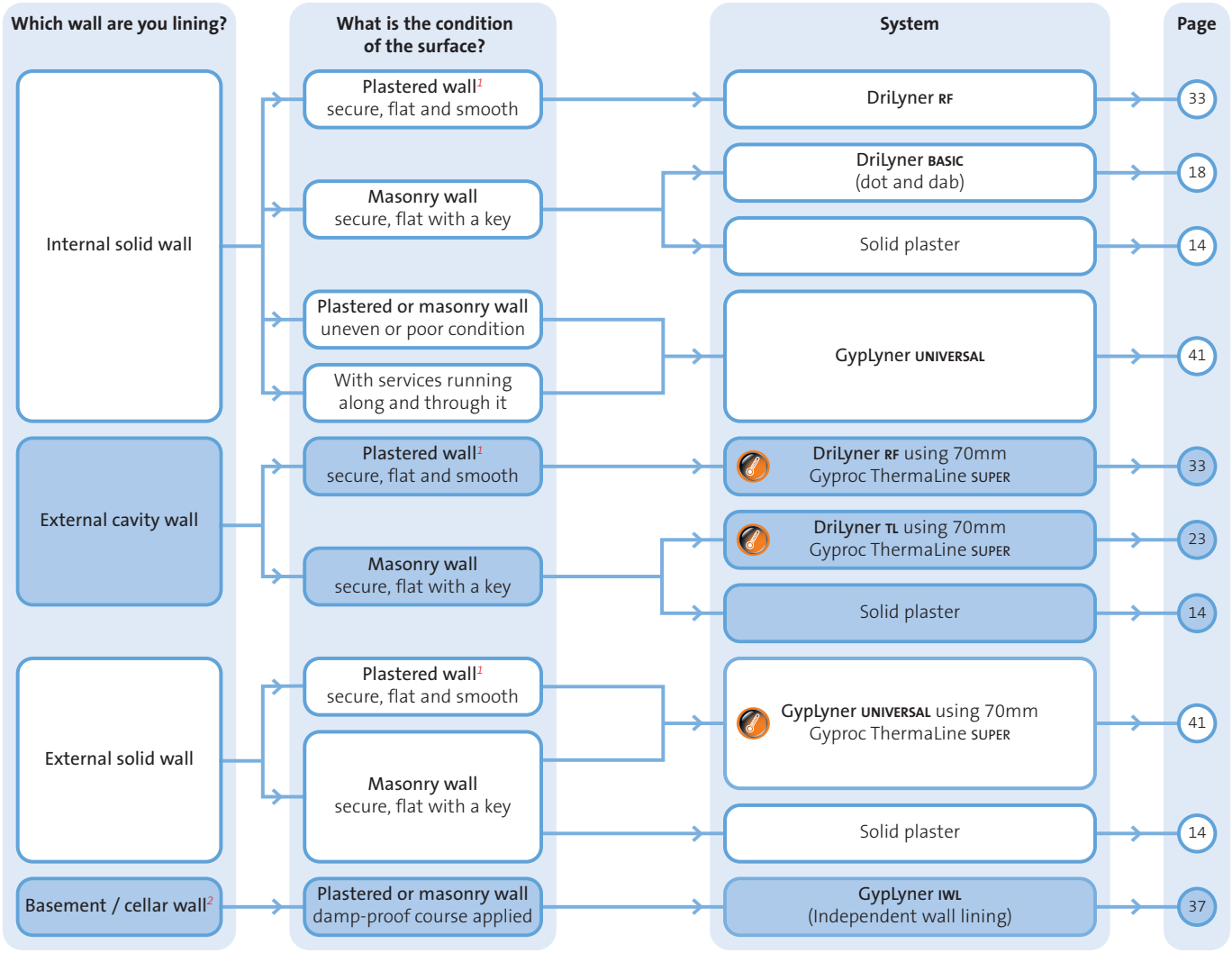
To qualify for the SpecSure® warranty, ensure you choose all British Gypsum products, including:

- Gyproc plasterboard and drylining materials.
- Gyproc fixings and accessories.
- Thistle plasters and accessories.
- Gypframe metal components.
- British Gypsum specialist boards.

For further information on SpecSure® visit www.british-gypsum.com

Which system should I use?

Wall linings



1 If the plaster surface (including painted plaster) is loose, friable and / or flaky, it must be removed along with any wallpaper. Alternatively, **GypLyner UNIVERSAL** can be used, avoiding time consuming removal.

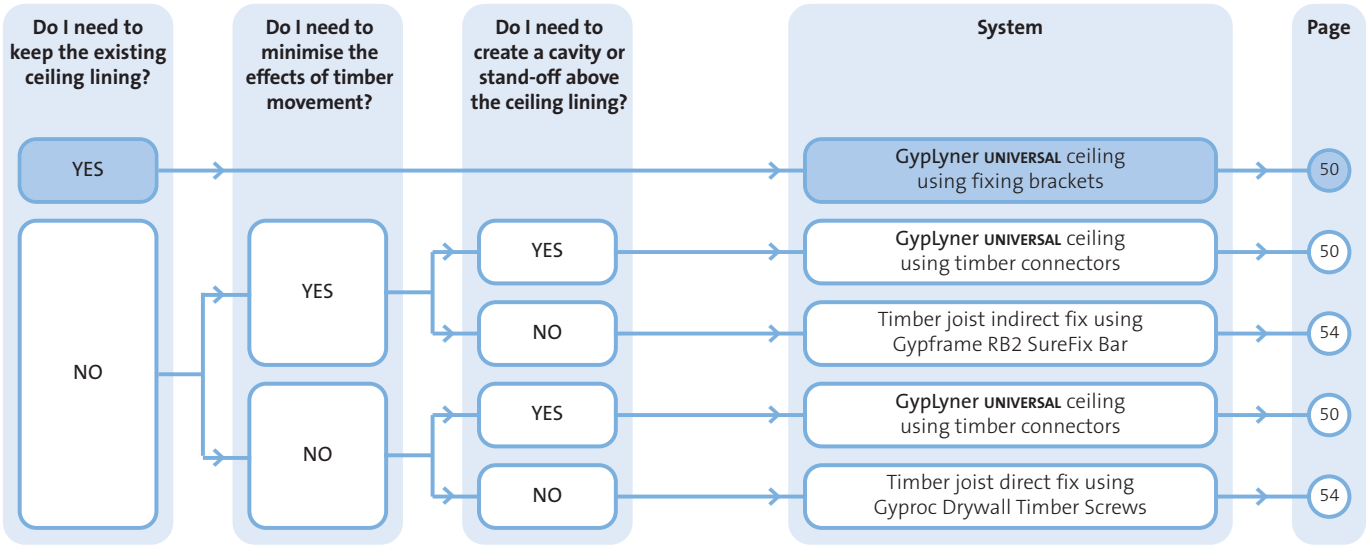
2 Specialist advice must be sought where working below ground level to avoid penetration of any damp proof membranes.

Key

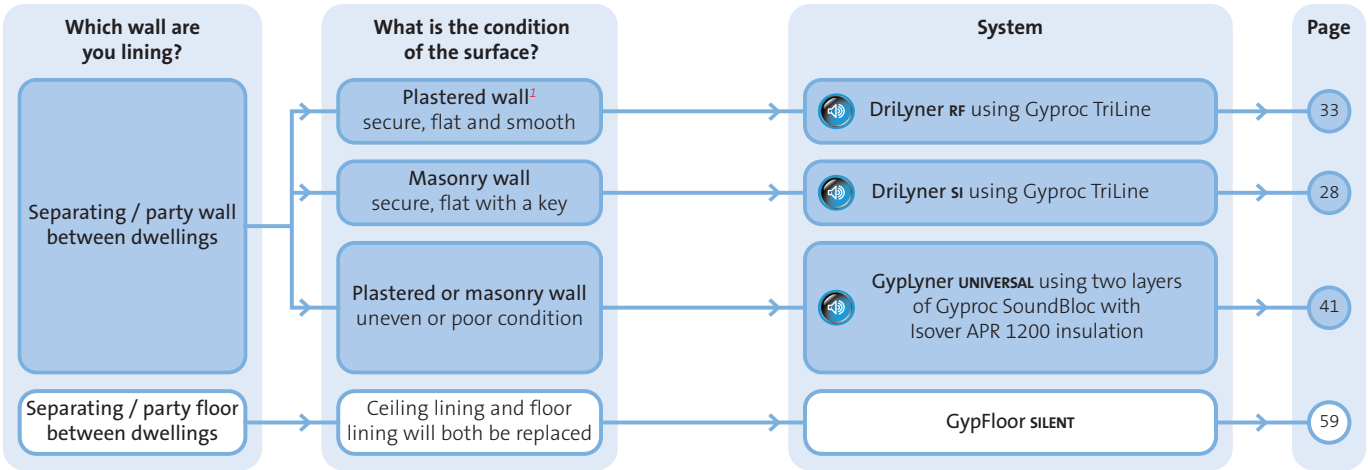
Systems can be used to meet Building Regulations Approved Document L. When renovating external walls, provision should be made to improve the thermal insulation of the wall, particularly where current insulation is poor.

Which system should I use?

Ceiling linings



Separating walls and floors



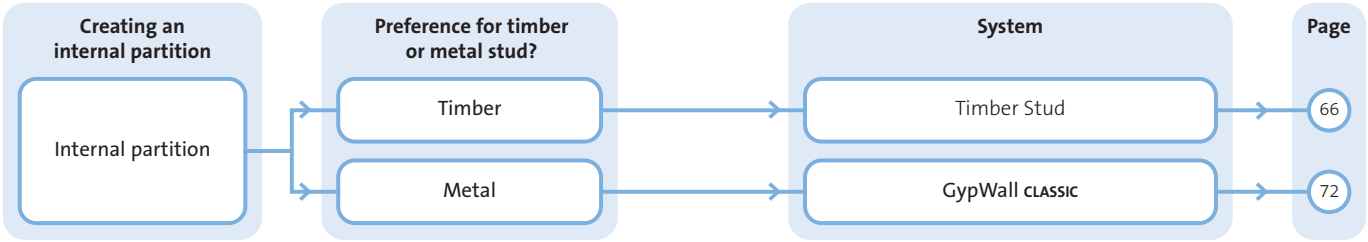
1 If the plaster surface (including painted plaster) is loose, friable and / or flaky, it must be removed along with any wallpaper. Alternatively, **GypLyner UNIVERSAL** can be used, avoiding time consuming removal.

Key

Systems can be used to meet Building Regulations Approved Document E.

Which system should I use?

Partitions



Solid plaster

Thistle plasters have been formulated to suit a wide variety of backgrounds, including brick, blockwork and concrete. Used with Thistle finish plasters they can provide the perfect surface, ready for decoration.

1	Thistle undercoat plaster
2	Thistle finish plaster

Choice of plasters	Suitable for
Thistle Bonding Coat	Smooth, low suction or flexible backgrounds, such as medium density blocks
Thistle Browning	Bricks and blocks with moderate suction
Thistle Hardwall	Most masonry backgrounds, giving higher impact resistance
Thistle Tough Coat	Most masonry backgrounds, giving higher impact resistance
Thistle Dri-Coat	Replastering after installation of a damp-proof course
Thistle Multi-Finish	Finish coat plaster

Installation options	Suitable for
ThistleBond-it	Bonding smooth and low suction backgrounds, such as concrete and engineering bricks before plastering
Thistle GypPrime	Controlling suction on very dry backgrounds before plastering
Thistle Plaster Angle Bead	Reinforcing external angles
Thistle Plaster Stop Bead	Defining and reinforcing edges of solid plasterwork

Installation tips

- Ensure the room temperature is controlled. Plaster should not be applied to frozen backgrounds or in very hot or dry conditions. Take precautions to avoid rapid loss of water.
- Identify the type of background and choose a suitable plaster for this type.
- Check the use-by dates on the bags, make sure you use the oldest material first.
- Sequence the work. Setting time is approximately 90 minutes, but finishing times can be extended in low temperatures by 30 minutes or more. As a result, do not mix more than you'll be able to use in this time. We recommend a maximum of two bags.

Solid plaster

Installation tips (continued)

- For coverage guidance, one bag of undercoat plaster will cover approximately 3m² at 11mm thickness (see back of bag for further details), but remember to add an allowance for waste.

ThistleBond-it

Thistle GypPrime

Example guidance applying Thistle undercoat plaster to blockwork:

Stage 1:

- All mixing equipment should be cleaned before use to prevent contamination of the plaster.
- Thistle plasters are pre-mixed. Add only clean water and do not use any additives.
- Mix Thistle plasters by pouring the required amount of clean water into the mixing bucket and then adding the plaster.
- Mix using a mixing paddle to disperse lumps and achieve a thick creamy consistency.

Stage 2:

- Fix Thistle Plaster Angle Beads to external wall angles, by embedding in undercoat plaster.
- Thistle Plaster Stop Beads can also be used for defining and reinforcing edges of solid plasterwork. Fix to the wall by embedding in the undercoat plaster.

- Before the plaster sets, any surplus must be wiped from the bead, as scraping it away after setting may affect the coating of the bead.

Stage 3:

- Using a hawk and trowel, apply undercoat plaster with firm pressure.
- Build out to the required thickness in successive coats of 8mm.
- Wire scratch each coat and allow to set before applying the next.

Stage 4:

- Rule the final coat to an even surface and lightly scratch to form a key for finish coat plasters.
- The maximum thickness of the undercoat is 25mm. Greater thickness will usually require additional support, such as metal lathing, spaced away from the background if necessary.

Stage 5:

- Allow the plaster to set before applying the finish coat.
- Completely clean all tools before using a finish coat plaster.

Stage 6:

- Apply finish coat plaster with firm pressure to approximately 1mm thickness.

Stage 7:

- A second application of finish plaster is applied, building out to a total of 2mm in thickness.
- Apply onto the first coat while still wet.
- Trowel to a smooth matt finish as the plaster is setting.
- Use any additional water sparingly and only in the latter stages of trowelling.

The 'Finishing guide' provides further details on applying finishing coat plasters, available to download from www.british-gypsum.com

DriLyner BASIC

DriLyner BASIC is a simple way to directly bond plasterboard to secure flat walls that have a key. This type of installation is more commonly known as dot and dab.

When improving thermal or sound insulation refer to the DriLyner TL or DriLyner SI sections.

1	Gyproc Dri-Wall Adhesive
2	Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

Choice of plasterboard	Suitable for
12.5mm or 15mm Gyproc SoundBloc	Reducing noise transferring between rooms, ideal for use between bedrooms when used in a conjunction with Gyproc Soundcoat Plus
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gyproc Dri-Wall Adhesive	Fixing boards to masonry walls

Installation options	Suitable for
Gyproc Soundcoat Plus	A parge coat designed to seal air gaps in masonry walls, for improved acoustic and thermal performance

Installation tips

Cutting

- When cutting boards to fit internal angles, ensure the cut edge is positioned into the corner to protect it.

Window reveals

- At windows apply a continuous band of adhesive above the reveal to give a stronger fixing for curtain tracks.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

Installation tips (continued)

Medium-heavy fixtures

- Consider applying additional dabs where cupboards, radiators, and other fixtures are likely to be positioned, to provide additional strength.
- When choosing fixings for medium and heavy fixtures, ensure they are of sufficient length to penetrate well into the masonry wall, using an appropriate wall plug to secure it in place.

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Determine any high spots on the wall.
- Use this dimension to mark the ceiling and floor, allowing an additional 10mm for the thickness of the adhesive and 12.5mm for the thickness of the plasterboard (dependent on board thickness).
- Mark the walls with a chalk line at 900mm or 1200mm centres (distance apart), depending on plasterboard width.

Stage 2:

- Cut the Gyproc plasterboard 15mm short of the floor to ceiling height.

Stage 3:

- Mix Gyproc Dri-Wall Adhesive to a thick consistency.
- Using a trowel, apply a continuous band around the perimeter of the wall, ceiling edge, and around any services or openings to provide greater airtightness.

Stage 4:

- Apply Gyproc Dri-Wall Adhesive in dabs 50mm to 75mm wide and approximately 250mm long (trowel length), in three vertical rows to receive the first board.
- Ensure that dabs near a board joint are approximately 25mm from the edge of the board.

Stage 5:

- Apply another continuous band of Gyproc Dri-Wall Adhesive along the floor edge at skirting level.

Stage 6:

- Position the board reverse side against the dabs.
- Plasterboard off-cuts should be used as packing strips to rest the bottom edge of the board against.
- Tap the board back firmly using a straight edge until the board is aligned with the chalk marks on the floor.

DriLyner BASIC

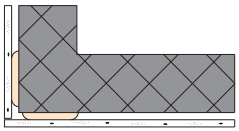
Stage 7:

- Gently lift the board using a footlifter until the board is tight against the ceiling.
- Insert additional packing strips to wedge the board in place, and then remove the footlifter.

Continue to board out the room, and remove the packing strips once the adhesive has set.

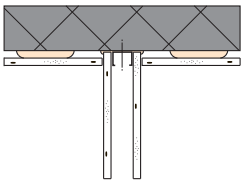
External angles:

- At external angles apply rows of Gyproc Dri-Wall Adhesive dabs close to the edge on each side. Position the cut board edge to the inside.



Abutting partitions:

- Where partitions join the wall lining, apply rows of Gyproc Dri-Wall Adhesive dabs close to each side of the partition.
- Cut lining boards to a neat fit.



DriLyner TL

DriLyner TL is a similar fixing method to **DriLyner BASIC**, but is only used when fixing Gyproc ThermaLine boards to secure masonry backgrounds.

1	Gyproc Dri-Wall Adhesive
2	Gyproc ThermaLine board
3	Gyproc Nailable Plugs

For full installation details refer to the British Gypsum **SITE** BOOK *available to download from www.british-gypsum.com*

Thermal insulation

Gyproc ThermaLine laminates are a range of Gyproc plasterboards with an insulated backing, designed to provide higher levels of thermal insulation than standard plasterboards.

To upgrade the thermal insulation of external cavity walls to meet Building Regulations Approved Document L you'll need:

Choice of plasterboard	Suitable for
70mm Gyproc ThermaLine SUPER[1]	Upgrading the thermal insulation of external cavity walls
27mm Gyproc ThermaLine PLUS	Where space is tight, such as window reveals

Fixing materials	Suitable for
Gyproc Dri-Wall Adhesive	Fixing boards to masonry walls
Gyproc Nailable Plugs	Providing a secondary fixing to boards

Installation options	Suitable for
Gyproc Soundcoat Plus	A parge coat designed to seal air gaps in masonry walls, for improved acoustic and thermal performance
Gyproc Sealant	Fixing thinner laminates at window reveals
Gypframe G106 Skirting Plates	Providing a solid backing for screw-fixing skirting boards

1 Thinner laminates are available, however they may be less effective and insufficient to meet the Building Regulations Approved Document L for unfilled cavity walls.

Installation tips

Skirting boards

- Use skirting plates to provide a solid background when screw-fixing skirting boards.

External angles

- At external angles, run linings past the corner and cut the insulant backing to form a neat junction.

Insulated backing

- Insulated backings to boards should not be chased to accommodate services such as cabling and pipes, as this will downgrade overall performance.

Medium-heavy fixtures

- Consider applying additional dabs where cupboards, radiators, and other fixtures are likely to be positioned, to give additional strength.
- When choosing fixings for medium and heavy fixtures, ensure they are of sufficient length to penetrate well into the masonry wall, using an appropriate wall plug to secure it in place.

Example guidance using 70mm Gyproc ThermaLine SUPER:

Stage 1:

- Determine any high spots on the wall.
- Use this dimension to mark the ceiling and floor allowing an additional 10mm for the thickness of the adhesive and 70mm for the thickness of Gyproc ThermaLine SUPER (dependent on board thickness).
- Mark the walls with a chalk line at 1200mm centres (distance apart).

Stage 2:

- Cut Gyproc ThermaLine SUPER 15mm short of the floor to ceiling height.

Stage 3:

- Push skirting plates under the bottom of the plasterboard, with the rear of the plate (the largest part) inserted in-between the plasterboard and the insulated backing.
- Position these at 600mm centres (distance apart) and 300mm in from each board edge.

Stage 4:

- Mix Gyproc Dri-Wall Adhesive to a thick consistency.
- Using a trowel, apply Gyproc Dri-Wall Adhesive in dabs 50mm to 75mm wide and approximately 250mm long (trowel length), in three vertical rows to receive the first board.
- Ensure that dabs near a board joint are approximately 25mm from the edge of the board.
- Apply a continuous band around the perimeter of the wall, ceiling edge, floor and around any services or openings to provide greater airtightness.

Stage 5:

- Position the board laminate side against the dabs.
- Plasterboard off-cuts should be used as packing strips to rest the bottom edge of the board against.
- Tap the board back firmly using a straight edge until the board is aligned with the chalk marks on the floor.

Stage 6:

- Gently lift the board using a footlifter until the board is tight against the ceiling.
- Insert additional packing strips to wedge the board in place, and then remove the footlifter.

Continue to board out the room, and remove the packing strips once the adhesive has set.

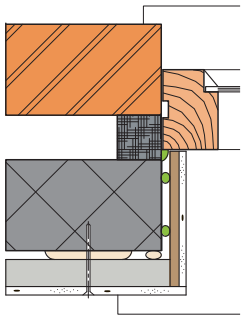
Stage 7:

- Once set, insert two Gyproc Nailable Plugs per board to provide a secondary fixing.
- These should be installed 15mm in from the edge of the board at mid-height.

- The length of the plugs should give a 25mm penetration into the solid wall (excluding plaster thickness), as well as allow for the 10mm thickness of the Gyproc Dri-Wall Adhesive.
- In this instance use a 110mm Gyproc Nailable Plug.
- The drilled hole must be 5mm longer than the plug.
- Hammer each Gyproc Nailable Plug into the board, slightly below the liner, but without fracturing it.

Window reveals:

- Use Gyproc ThermaLine BASIC at window and door reveals to minimise the risk of thermal bridging.
- Fix using Gyproc Sealant where space is tight (green blobs).
- Consider applying a continuous band of Gyproc Dri-Wall Adhesive above the reveal to give a stronger fixing for curtain tracks.



For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

DriLyner SI

DriLyner SI is very similar to **DriLyner BASIC**, but is used only when fixing Gyproc TriLine board to solid masonry backgrounds.

1	Gyproc Dri-Wall Adhesive
2	Gyproc TriLine
3	Gyproc Nailable Plugs

Acoustic insulation

To upgrade acoustic insulation on separating / party walls to meet Building Regulations Approved Document E (subject to background type) you'll need:

Choice of plasterboard	Suitable for
52mm Gyproc TriLine	Upgrading the acoustic insulation of separating walls

Fixing materials	Suitable for
Gyproc Dri-Wall Adhesive	Fixing Gyproc TriLine to masonry walls
Gyproc Nailable Plugs	Providing a secondary fixing to boards

Installation options	Suitable for
Gyproc Soundcoat Plus	A parge coat designed to seal air gaps in masonry party walls, for improved acoustic performance
Gypframe G106 Skirting Plates	Providing a solid backing for screw-fixing skirting boards

Installation tips

Skirting boards

- Use skirting plates to provide a solid background when screw-fixing skirting boards.

External angles

- At external angles, run linings past the corner and cut the insulant backing to form a neat junction with adjacent linings.

Insulated backing

- Insulant backings to plasterboards should not be chased to accommodate services such as cabling and pipes, as this will downgrade overall performance.

For full installation details refer to the British Gypsum **SITE** BOOK *available to download from www.british-gypsum.com*

Medium-heavy fixtures

- Consider applying additional dabs where cupboards, radiators, and other fixtures are likely to be positioned, to provide additional strength.
- When choosing fixings for medium and heavy fixtures, ensure they are of sufficient length to penetrate well into the masonry wall, using an appropriate wall plug to secure it in place.

Example guidance using 52mm Gyproc TriLine:

Stage 1:

- Determine any high spots on the wall.
- Use this dimension to mark the ceiling and floor allowing an additional 10mm for the thickness of the adhesive and 52mm for the thickness of Gyproc TriLine (dependent on board thickness).
- Mark the walls with a chalk line at 900mm centres (distance apart).

Stage 2:

- Cut Gyproc TriLine 15mm short of the floor to ceiling height.

Stage 3:

- Push skirting plates under the bottom of the plasterboard, with the rear of the plate (the largest part) inserted in between the plasterboard and the insulated backing.
- Position these at 600mm centres and 150mm in from each board edge.

Stage 4:

- Mix Gyproc Dri-Wall Adhesive to a thick consistency.
- Using a trowel, prime the surface of the insulation on the reverse of the board with Gyproc Dri-Wall Adhesive in bands of approximately 200mm wide around the perimeters of the board and also down the centre (to coincide with the positioning of the dabs of adhesive).

Stage 5:

- Using a trowel, apply a continuous band around the perimeter of the wall, ceiling edge, and around any services or openings to provide greater airtightness.

Stage 6:

- Apply the adhesive in dabs 50mm to 75mm wide and approximately 250mm long (trowel length), in three vertical rows to receive the first board.
- Ensure that dabs near a board joint are approximately 25mm from the edge of the board.

Continue to board out the room, and remove the packing strips once the adhesive has set.

DriLyner SI

Stage 7:

- Position the insulation side against the dabs.
- Plasterboard off-cuts should be used as packing strips to rest the bottom edge of the board against.
- Tap the board back firmly using a straight edge until the board is aligned with the chalk marks on the floor.

Stage 8:

- Gently lift the board using a footlifter until the board is tight against the ceiling.
- Insert additional packing strips to wedge the board in place, and then remove the footlifter.

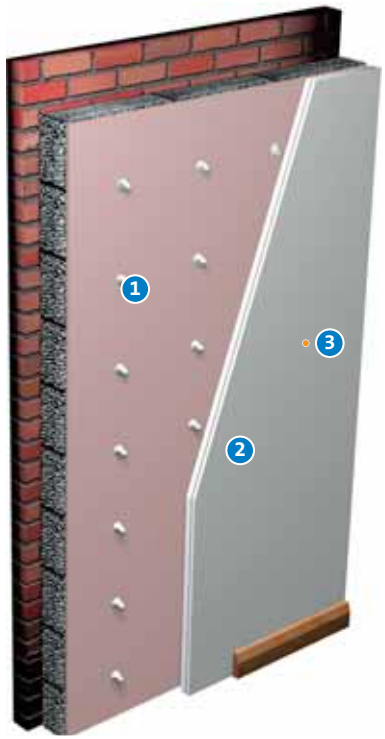
Stage 9:

- Once the dabs have set, insert two Gyproc Nailable Plugs per board to provide a secondary fixing.
- These should be installed 15mm in from the edge and 200mm down from the top of the board.
- The length of the plugs should give a 25mm penetration into the solid wall (excluding plaster thickness), as well as allow for the 10mm thickness of the Gyproc Dri-Wall Adhesive.

- In this instance use an 110mm Gyproc Nailable Plug.
- The drilled hole must be 5mm longer than the plug.
- Hammer each Gyproc Nailable Plug into the board, slightly below the liner, but without fracturing it.

DriLyner RF

DriLyner RF is only suitable for backgrounds which are secure, flat and smooth, such as existing plastered walls and level brick or block work. Any wallpaper covering and adhesive must be removed prior to installation.



1	Gyproc Sealant
2	Gyproc plasterboard
3	Gyproc Nailable Plugs

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

DriLyner RF

Choice of plasterboard for thermal insulation	Suitable for
70mm Gyproc ThermaLine SUPER[1]	Upgrading the thermal insulation of external cavity walls
27mm Gyproc ThermaLine PLUS	Where space is tight, such as window reveals

Choice of plasterboard for acoustic insulation	Suitable for
52mm Gyproc TriLine	Upgrading the acoustic insulation of separating walls
12.5mm or 15mm Gyproc SoundBloc	Reducing noise transferring between rooms, ideal for use between bedrooms

Choice of plasterboard for other uses	Suitable for
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gyproc Sealant	Fixing plasterboards to smooth backgrounds, as well as seal board perimeters for optimum thermal and acoustic insulation
Gyproc Nailable Plugs	Providing a secondary fixing to boards

1 Thinner laminates are available, however they may be less effective and insufficient to meet the Building Regulations Approved Document L for unfilled cavity walls.

Installation options	Suitable for
Gypframe G106 Skirting Plates	Providing a solid backing for screw-fixing skirting boards

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Marking out is not required. This system should only be used where the background alignment is satisfactory.

Stage 2:

- Using a Mastic or skeleton gun, apply blobs of Gyproc Sealant to the reverse of the board.
- Blobs should be approximately 25mm in diameter (a single squeeze) and placed at 300mm centres (distance apart) in both directions.
- If fixing Gyproc TriLine boards, use a trowel to prime the surface of the insulation on the reverse of the board with Gyproc Sealant, using the measurements given above. Then apply the blobs of adhesive to the wall, to coincide with the primed areas of the board.

Stage 3:

- Ensure any blobs adjacent to the board joint are approximately 25mm in from the edge of the board.
- Tap the board back firmly using a straight edge ensuring that the vertical edge is plum.

Stage 4:

- Insert two Gyproc Nailable Plugs per board to provide a secondary fixing.
- These should be installed 15mm in from the edge and 200mm from the top of the board when fixing Gyproc TriLine and at mid-height for fixing Gyproc ThermaLine boards.
- The length of the plugs should give a 25mm penetration into the solid wall (excluding plaster thickness), and the drilled hole must be 5mm longer than the plug.

Continue to board out the room, and remove the packing strips once the adhesive has set.

GypLyner IWL is built independently of the wall construction and is ideal where the masonry background is uneven or where improvements in the sound or thermal performance are required.

1	Gypframe 'C' Stud (wall-end studs)
2	Gypframe 'I' Stud (internal studs)
3	Gypframe Floor & Ceiling Channel
4	Isover Acoustic Slab (optional)
5	Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

For full installation details refer to the British Gypsum **SITE** BOOK *available to download from www.british-gypsum.com*

GypLyner IWL
(Independent Wall Lining)

Choice of plasterboard	Suitable for
12.5mm or 15mm Gyproc SoundBloc	Reducing noise transferring between rooms, ideal for use between bedrooms
Gyproc ThermaLine laminate	To improve thermal insulation, subject to U-value requirement
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gypframe 'C' Studs	Vertical framing members at perimeters
Gypframe 'I' Studs	Internal vertical framing members
Gypframe Standard Floor & Ceiling Channel	Floor and ceiling
Gyproc Drywall Screws	Fixing plasterboards to Gypframe 'C' Studs less than 0.6mm gauge or greater than 0.8mm gauge and to 'I' studs less than 0.6mm gauge
Gyproc Jack-Point Screws	Fixing plasterboards to Gypframe 'I' Studs 0.6mm gauge or greater

Installation options	Suitable for
Gyproc Sealant	Sealing board perimeters for optimum thermal and acoustic insulation

Installation tips

- On uneven floors, a timber sole plate can be used (38mm x width of stud).
- When fixing to new concrete screeding, consider installing a damp-proof membrane to the full partition width, before locating the sole plate or floor channel.
- Gyproc Sealant can be used around all perimeter edges to improve the acoustic and thermal seal.

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Use a chalk line to mark the position of the lining framework on the floor and ceiling, choosing the highest point of the background to measure from.

Stage 2:

- Screw-fix Gypframe Floor & Ceiling Channel along the marked out lines.
- Fix Gypframe 'C' Studs to wall abutments, junctions and openings only.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

GypLyner IWL
(Independent Wall Lining)

Stage 3:

- Position the Gypframe 'I' Studs vertically between channel sections and locate into place.
- Insert Gypframe 'I' Studs at 300mm centres (distance apart).

Stage 4:

- Fix boards to all Gypframe 'I' Studs at 300mm centres.
- Reduce centres to 200mm at external angles.
- Select the appropriate length of screw to provide a nominal 10mm penetration into the steel framing (dependent on board thickness). For 12.5mm plasterboard use a 25mm Gyproc Jack-Point Screw.

Stage 5:

- Lightly butt boards together, inserting screws no closer than 10mm from bound edges and 13mm from cut edges.

Stage 6:

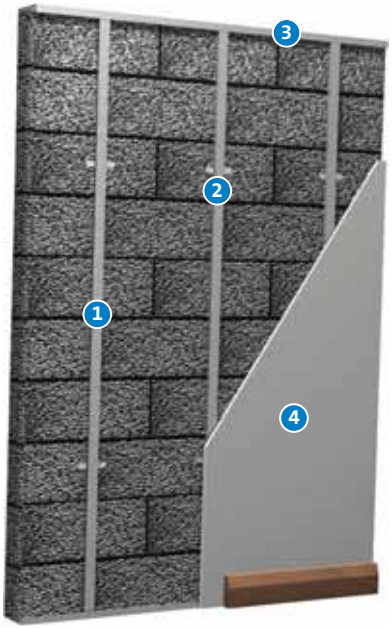
- Where door openings occur, cut boards around the opening to avoid a joint directly in line with door jambs.

Continue boarding, fixing boards to framing members, working around the room in sequence.

GypLyner UNIVERSAL

GypLyner UNIVERSAL is a partially isolated metal frame wall lining system.

It's ideal when you need to build away from existing walls, either due to their poor quality or to create a clear cavity to accommodate services such as cabling, heating, waste or soil pipes.



1	Gypframe GL1 Lining Channel
2	Gypframe GL2 / GL9 Bracket
3	Gypframe GL8 Track
4	Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

GypLyner UNIVERSAL

To upgrade the thermal insulation of solid walls, e.g. solid 215mm brick walls, to meet Building Regulations Approved Document L you'll need:

Choice of plasterboard for thermal insulation	Suitable for
70mm Gyproc ThermaLine SUPER[1]	Upgrading the thermal insulation of external walls
27mm Gyproc ThermaLine PLUS	Where space is tight, such as window reveals

To upgrade acoustic insulation on separating walls to meet Building Regulations Approved Document E you'll need:

Choice of plasterboard for acoustic insulation	Suitable for
2 layers of 12.5mm Gyproc SoundBloc	Upgrading the acoustic insulation of separating walls
25mm Isover APR 1200	Upgrading the acoustic insulation of separating walls

Choice of plasterboard for other uses	Suitable for
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gypframe GL1 Lining Channel	Vertical framing members
Gypframe GL8 Track	Horizontal floor and ceiling track to support Gypframe GL1 Lining Channels, also providing vertical support when fixing to adjacent linings

1 Thinner laminates are available, however they may be less effective and insufficient to meet the Building Regulations Approved Document L for solid walls.

Fixing materials	Suitable for
Gypframe GL2 Bracket	Holds the vertical channels from the wall and provides a maximum stand-off of 75mm
Gypframe GL11 Anchor	Fixing the brackets to the wall
13mm Gyproc Wafer Head Drywall Screws	Fixing metal framing together
Gyproc Drywall Screws	Fixing plasterboards to the metal framing

Installation options	Suitable for
Gyproc Sealant	Sealing board perimeters for optimum thermal and acoustic insulation
Gypframe GL9 Bracket	Provides a larger maximum stand-off of 125mm

Installation tips

Installing metal studs

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

Stand-off and insulated backings

- If using Gyproc ThermaLine laminates, ensure the stand-off from the wall is sufficient to avoid laminated backings coming into contact with PVC covered cables.
- Insulated backings to plasterboards should not be chased to accommodate services such as cabling and pipes, as this will downgrade its performance.

GypLyner UNIVERSAL

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Use a straight edge to determine the maximum stand-off from the wall, considering wall undulation, services such as pipes, or required cavity depth behind the lining.
- Mark chalk lines on the floor and ceiling to indicate the positioning of the Gypframe GL8 Track.

Stage 2:

- Fix Gypframe GL8 Track to ceiling and floor perimeters, with the longer leg of the track on the side where the plasterboard lining will sit.
- Fix at 600mm centres (distance apart).

Stage 3:

- Mark vertical lines on the walls at 600mm intervals to indicate bracket fixing centres.
- Horizontally mark lines at 800mm centres to pinpoint individual bracket positions.
- Position each bracket (its ribs to the wall), and fix through the bracket into the masonry wall using a Gypframe GL11 GypLyner Anchor.

Stage 4:

- Cut Gypframe GL1 Lining Channels to required height using tin snips.
- Slightly bend ends using tin snips to allow for easier installation.
- Insert Gypframe GL1 Lining Channel into the track, with the solid part of the channel facing out.

Stage 5:

- Bend bracket legs inward and fix to each side of the lining channel using 13mm Gyproc Wafer Head Drywall Screws.
- Insert the screw through the hole in the bracket nearest the back of the channel.

Stage 6:

- Bend back the protruding legs to sit clear of the channel face.

Stage 7:

- When fixing internal angles, position a Gypframe GL1 Lining Channel tight to the corner to provide support for the lining.
- Bend one bracket leg across the face of the channel and fix with a 13mm Gyproc Wafer Head Drywall Screw, to secure the channel at the corner position.

Stage 8:

- Fix boards to all framing members at 300mm centres from top to bottom.
- Select the appropriate length of screw to provide a nominal 10mm penetration into the steel framing (dependent on board thickness). If double-layering 12.5mm Gyproc plasterboards, use 25mm Gyproc Drywall Screws on the first layer and 36mm on the second layer.
- Lightly butt boards together, inserting screws not closer than 10mm from the bound edges and 13mm from cut edges.

Stage 9:

- Adjacent linings must be fixed through the plasterboard previously installed and into the Gypframe GL1 Lining Channel behind.
- Locate the Gypframe GL8 Track tight to the wall at the corner position and fix through into the ceiling and floor.

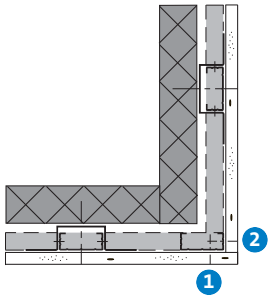
Stage 10:

- If double-layering boards to achieve acoustic performance on separating walls, ensure all board joints between the top layer and under-layer are staggered.
- The under-layer does not require centre fixings.

External angles

Stage 1:

- When working on an external angle, locate a Gypframe GL1 Lining Channel in the Gypframe GL8 Track at the corner and board over.

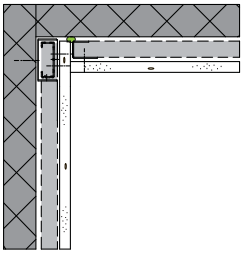


Stage 2:

- Proceed to install the Gypframe GL8 Track on the adjoining wall, ensuring it meets the back of the track from the first wall.
- When lining the second wall, fix the plasterboard into the edge of the Gypframe GL1 Lining Channel (as shown) to provide full lining rigidity.

Internal angles:

- On internal angles seal the perimeter of the first lining (using Gyproc Sealant) before beginning to line the adjacent wall.
- This will help to ensure airtightness.



Openings

Stage 1:

- Position a Gypframe GL1 Lining Channel either side of the opening to compensate for the thickness of the plasterboard to be fixed to the reveal. Ideally use Gyproc ThermaLine BASIC.
- Cut an oversized piece of Gypframe GL8 Track to form the head of the opening. Cut and bend the ends of the track to form the side supports, then fix using two 13mm Gyproc Wafer Head Drywall Screws (as shown).

Stage 2:

- Position a short length of Gypframe GL1 Lining Channel midway above the opening and fix with two 13mm Gyproc Wafer Head Drywall Screws. This will provide additional support.

Stage 3:

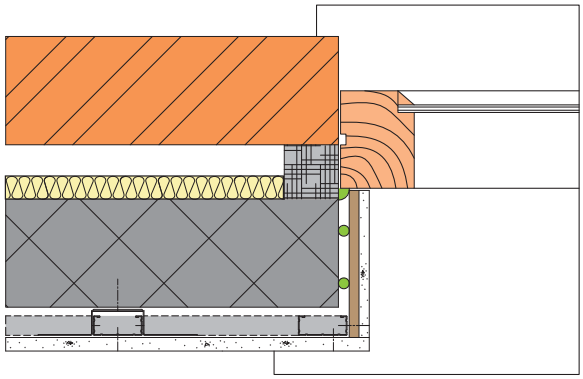
- Fix Gyproc Metal Edge Bead to the perimeter of the window frame to provide edge protection to the reveal and soffit linings.
- Cut the plasterboard to the width of the reveal and locate in the edge bead.
- Fix to the channel using 25mm Gyproc Drywall Screws, and 36mm for a second layer (where required).

Stage 4:

- Where door openings occur in the run of plasterboard lining, cut the board around the opening to avoid a joint directly in line with door jambs.

Stage 5:

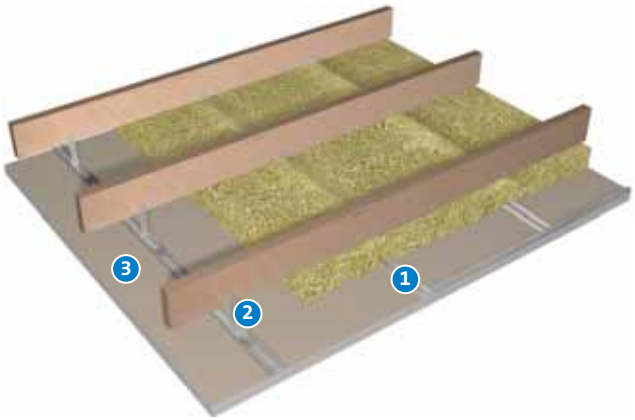
- When lining walls around window reveals, fix Gyproc ThermaLine BASIC using Gyproc Sealant – one row of blobs at 300mm centres for narrow reveals and two rows for wider reveals. Gyproc Sealant blobs are shown as green in the diagram.
- This will help to reduce thermal bridging.



GypLyner UNIVERSAL
(ceilings)

GypLyner UNIVERSAL is a partially isolated metal framing ceiling system.

It's ideal when you need to build away from existing ceilings, either due to their poor quality or to create a clear cavity to accommodate services such as cabling or heating pipes.



Gypframe GL1 Lining Channel

Gypframe GL5 / GL6 Timber Connector

Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

Choice of plasterboard	Suitable for
12.5mm Gyproc SoundBloc	Reducing noise transfer between rooms above / below
12.5mm Gyproc WallBoard DUPLEX	Bathroom ceilings to prevent interstitial condensation forming within roof voids
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gypframe GL1 Lining Channel	Main framing members
Gypframe GL8 Track	Providing a secondary fixing to boards
Gypframe GL5 or GL6 Timber Connector	Providing a maximum 35mm or 120mm drop from ceiling joists
Gyproc Drywall Screws	Fixing plasterboards to metal framing

Installation options	Suitable for
Gypframe GL3 Channel Connector	Joining channels together on longer runs
Gyproc Sealant	Sealing board perimeters for optimum acoustic insulation
Gypframe GL2, GL9 or GL12 Bracket	For use where the existing ceiling is retained
Gyproc Wafer Head Drywall Screws	For fixing Gypframe GL1 Lining Channel to Gypframe GL2, GL9 or GL12 Brackets

Installation tips

Board size

- Recommended board size is 900mm x 1800mm for easier lifting.
- If larger boards are required, lift and hold against the ceiling using a Gyproc Projack or Gyproc Board Lift.

Using timber connectors

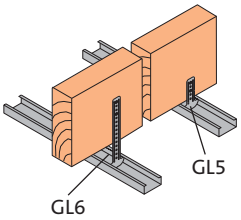
Where the original ceiling has been removed

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Determine the required ceiling level, then mark and fix the Gypframe GL8 Track at the perimeter.
- Fix the Gypframe GL8 Track with the longer leg at the bottom (where the plasterboard lining will abut).
- Mark lines beneath the joists to determine the timber connector fixing positions.
- Position lines at 450mm for 12.5mm plasterboards.

Stage 2:



- Fix timber connectors at 1200mm maximum centres.
- Fix each timber connector to the side of a joist using two Gyproc Drywall Timber Screws.
- The diagram shows the additional stand-off that can be obtained using the Gypframe GL6 Timber Connector compared to the GL5.

Stage 3:

- Allow one hole between fixings when using the Gypframe GL5 Timber Connector and two holes between fixings for the Gypframe GL6 Timber Connector.
- Ensure they are aligned accurately as they cannot be adjusted once fixed.

Stage 4:

- Engage one side of the Gypframe GL1 Lining Channel into a row of timber connectors and twist into position.
- Push the channel to locate in the perimeter track.
- Where there are long runs, channel sections can be extended by engaging the channel ends over a Gypframe GL3 Channel Connector.

Stage 5:

- Screw fix board to the lining channel with long edges at right angles to the framing, ensuring the board edge joints do not coincide with the position of the timber connectors.
- Insert Gyproc Drywall Screws at 230mm maximum centres in the field of the boards and 150mm maximum centres at board-ends.
- Select the appropriate length of screw to provide a nominal 10mm penetration into the steel framing (dependent on board thickness). For 12.5mm plasterboard use a 25mm Gyproc Drywall Screw.

Using fixing brackets

Where the original ceiling is retained

When installing from existing ceilings, fixing brackets are required rather than timber connectors, to fix the lining channel in place.

- Gypframe GL2, GL9 or GL12 Brackets can be used to support the Gypframe GL1 Lining Channel (depending on the depth of cavity or stand-off required).
- For further advice on how to fix using this method, go to page 41 where the GypLyner UNIVERSAL wall lining method is shown.
- The principal is similar except you'll be working above your head!

Timber joist

Gyproc plasterboard can be directly fixed to timber joists to form the ceiling lining. Depending on the need for added acoustic insulation or the benefit of eliminating nail popping (which can occur if new timber joists have been installed) you can also choose to indirectly fix using Gypframe RB2 SureFix bars.

1 Gypframe RB1 Resilient Bar / Gypframe RB2 SureFix Bar – indirect fix	
2 Gyproc plasterboard	

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

Choice of plasterboard	Suitable for
12.5mm Gyproc SoundBloc	Reducing noise transfer between rooms above / below
12.5mm Gyproc WallBoard DUPLEX	Bathroom ceilings to prevent interstitial condensation forming within roof voids
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gyproc Drywall Timber Screws	Fixing plasterboards direct to timber joists

Installation options	Suitable for
Gypframe RB2 SureFix Bar	An indirect fix to improve acoustic insulation and also reduce the occurrence of nail popping
Gyproc Drywall Screws	Fixing plasterboards to Gypframe RB2 SureFix Bars
Gyproc Sealant	Sealing board perimeters for optimum acoustic insulation
Isover APR 1200	Installing between joists to improve the acoustic insulation between rooms

For full installation details refer to the British Gypsum **SITE** BOOK *available to download from www.british-gypsum.com*

Timber joist

Installation tips

Risk of cracking and nail popping

- To minimise the risk of cracking of plasterboard joints, use seasoned timber with a moisture content not exceeding that recommended in *BS 5268 Part 2* (ask your local merchant for advice).
- Even timber that complies with this standard may shrink and twist as it dries and nail popping may still occur.
- To minimise the risk of fixing defects, use Gyproc Drywall Timber Screws for fixing into standard softwood, rather than using nails.
- To improve acoustic insulation Gypframe RB2 SureFix Bar can be used. It also eliminates nail popping, as the metal can withstand minor movements in the structure.

Board size

- Recommended board size is 900mm x 1800mm for easier lifting.
- If larger boards are required, lift and hold against the ceiling using a Gyproc Projack or Gyproc Board Lift.

Direct fix

Using Gyproc Drywall Timber Screws

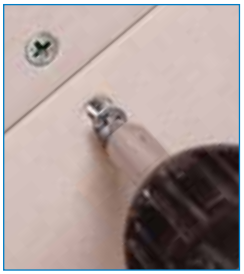
Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Install plasterboards with the long edges 90° to the joists.
- Fix with Gyproc Drywall Timber Screws at 230mm centres.
- Select the appropriate length of screw to provide a 25mm penetration into the timber. For 12.5mm plasterboard use a 38mm Gyproc Drywall Timber Screw.

Stage 2:

- Lightly butt boards together, inserting fixings no closer than 10mm from bound edges and 13mm from cut edges.
- Stagger all board-end joints.



Indirect fix

Using Gypframe RB2 SureFix Bar

Stage 1:

- Position the bar at maximum 450mm centres for a single layer of 12.5mm plasterboard.
- Fix Gypframe RB2 SureFix Bar through the single fixing flange to the underside of the joists using 36mm Gyproc Drywall Screws.
- Run Gypframe RB2 SureFix Bars at 90° to the timber joists.

Stage 2:

- The first and last rows of Gypframe RB2 SureFix Bar should be fixed as close to the perimeter wall as possible.

Stage 3:

- Fix noggings of Gypframe RB2 SureFix Bar to remaining perimeters, i.e. those perimeters parallel to the joists.

Timber joist

Stage 4:

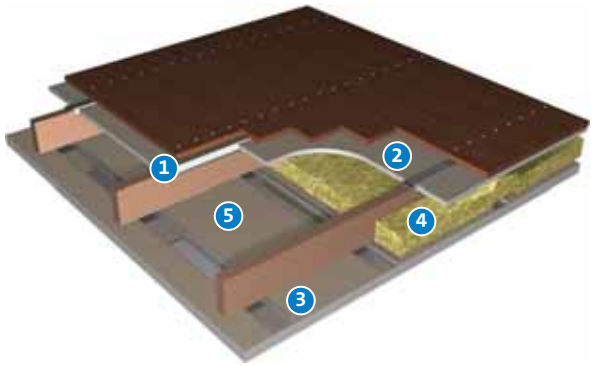
- Where long runs dictate, overlap ends of bars by 75mm over a joist.

Stage 5:

- Fix board at 90° to Gypframe RB2 SureFix Bars with end joints staggered.
- Locate screws at 230mm centres in the field of the board and at 150mm centres at board ends.
- When fixing a single layer of 12.5mm plasterboard use 25mm Gyproc Drywall Screws. Ensure the screw fixing is not driven through the joist when fixing plasterboard, as this will reduce acoustic benefits of using the Gypframe RB2 Surefix Bar.

GypFloor SILENT

GypFloor SILENT is a floor and ceiling system designed to be used on separating floors in renovation work where it can be built around the existing timber joist floor.



1	Gypframe SIF1 Floor Channel, Gypframe SIF2 Floor Channel or Gypframe SIF4 Floor Channel
2	19mm Gyproc Plank
3	Gypframe RB1 Resilient Bar
4	100mm Isover General Purpose Roll
5	12.5mm Gyproc SoundBloc

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

GypFloor SILENT

Choice of plasterboard	Suitable for
12.5mm Gyproc SoundBloc	The outer layer of the ceiling lining
19mm Gyproc Plank	The under-layer in the ceiling lining as well as between the floor channels

Fixing materials	Suitable for
Gypframe SIF1 Floor Channel	Sitting on top of joists up to 63mm wide
Gypframe RB1 Resilient Bar	Fixing to the underside of joists as a fixing for the ceiling
Gypframe SIF5 Floor Screws	Fixing floor boards through Gyproc Plank into the floor channel flange
Gyproc Drywall Screws	Fixing plasterboard to metal framing and Gypframe RB1 Resilient Bars to the timber joists
Gyproc Sealant	Sealing board perimeters for optimum acoustic insulation
100mm Isover General Purpose Roll	Providing acoustic performance

Installation options	Suitable for
Gypframe SIF2 Floor Channel	Joists over 75mm wide
Gypframe SIF4 Floor Channel	Joists 64mm-75mm wide

Installation options	Suitable for
Chipboard or tongue and groove floor boards	Use as the final floor covering, but either must be a minimum of 21mm in thickness

Installation tips

Minimising waste

- Cut Gyproc Plank across its length to create tiles which lie bound-edge to bound-edge.

Joists over 75mm

- For joists over 75mm, use two Gypframe SIF2 Floor Channels per joist, cutting away the foam inlay on one channel to facilitate overlap and leaving a 2mm-3mm gap between each channel and the side of the joist.

Maintaining acoustic performance

- Seal all perimeters and gaps between wall and floor linings with Gyproc Sealant.
- Glue joints of chipboard flooring.
- Gypframe SIF Floor Channels must not be mechanically fixed to the joists.
- If the existing ceiling is being maintained, additional acoustic performance will be required.
- Ensure provision is made to reduce flanking sound in the surrounding structure.

Floor height

- The system will add approximately 7mm height to the finished floor level, therefore consideration should be made to ensure doors and framing are adjusted accordingly.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

GypFloor SILENT

Example guidance for standard joists (63mm or less) and using 12.5mm Gyproc SoundBloc and 19mm Gyproc Plank:

Stage 1:

- Locate Gypframe SIF1 Floor Channel sections centrally over the joists, leaving a 6mm clearance gap at walls.
- Where joints in the channel occur, butt the sections together (as shown).

Stage 2:

- Where joists run close to the wall (30mm gap or less), locate Gypframe SIF2 Floor Channel in place of Gypframe SIF1 floor channel.

Stage 3:

- Where strutting or services interrupt the channel location, stop the Gypframe SIF floor channel either side.

Stage 4:

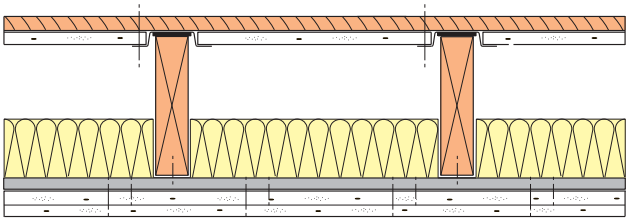
- Where joists overlap, cut away the channel legs to allow channels to run through.

Stage 5:

- Cut Gyproc Plank to a neat, but not tight, fit and locate between the channels.
- Allow for a 3mm gap between Gyproc Plank and the channel sides.
- Ensure vertical flanges of the channel do not impinge on the sides of the joist when the Gyproc Plank infills are installed.

Stage 6:

- Lay flooring across the channels and screw-fix through the Gyproc Plank to the channel flange on one side only using a Gypframe SIF5 Floor Screw. See image below.



For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

Stage 7:

- For joists over 75mm, use two Gypframe SIF2 Floor Channels per joist, cutting away the foam inlay on one channel to facilitate overlap and leaving a 2mm-3mm gap between each channel and the side of the joist.
- Fix each channel using a Gypframe SIF5 Floor Screw to both sides.

Stage 8:

- Where water pipes or other services penetrate the floor, cut Gyproc Plank and flooring to allow a small clearance.
- Seal any gaps to minimise the loss of acoustic performance and fire-stop where required.

Stage 9:

- Install the Gypframe RB1 Resilient Bar.
- Mark the underside of joists at a maximum of 450mm centres to indicate the positioning of Gypframe RB1 Resilient Bars.

Stage 10:

- Cut Gypframe RB1 Resilient Bar noggings to fit between the rows of bars at the ceiling perimeter, screw-fixing to the joist.
- Only screw through the flange at this stage.

Stage 11:

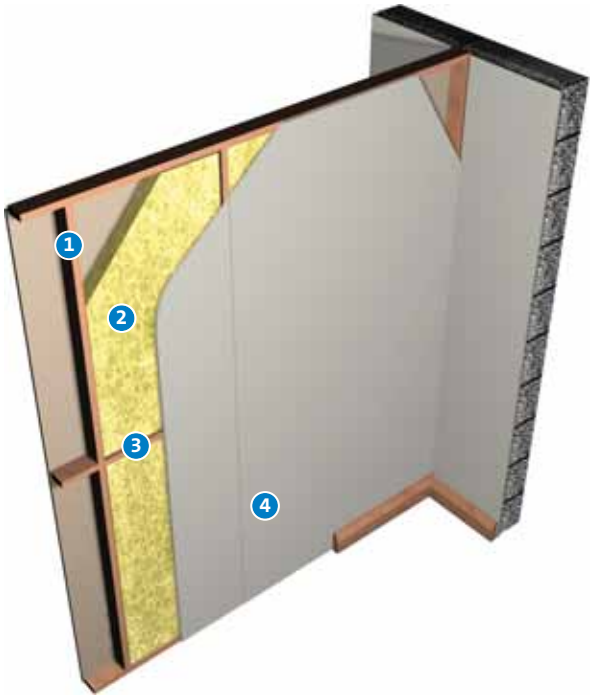
- Lay 100mm Isover General Purpose Roll between joists to rest on the resilient bars.
- Fix the under-layer of board (Gyproc Plank) to the resilient bars using Gyproc Drywall Screws.
- The screw must provide 10mm penetration into the Gypframe RB1, but not penetrate the timber joist behind. In this instance use a 25mm Gyproc Drywall Screw.
- Boards should be fixed with the long edge at right angles to the Gypframe RB1 and screws should be inserted at 230mm maximum centres in the field of boards and 150mm at board-ends.

Stage 12:

- Finally fix the face-layer of board (Gyproc SoundBloc) to all Gypframe RB1 supports using 36mm Gyproc Drywall Screws (for 12.5mm board). Screws must not penetrate the timber joist.
- Insert screws no closer than 10mm from bound edges and 13mm from cut edges.
- Stagger all board joints relative to the under-layer of board.

Timber stud

Timber stud is the 'traditional' method of creating a plasterboard partition. To enhance the acoustic insulation of the partition, Gypframe RB1 Resilient Bars can be used in construction.



1	Timber studs
2	25mm Isover APR 1200
3	Horizontal timber noggings
4	Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

Choice of plasterboard	Suitable for
15mm Gyproc SoundBloc	Reducing noise transferring between rooms, ideal for use between bedrooms
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc SoundBloc MR	Reducing noise transfer between rooms and wet use areas, such as bathrooms adjacent to bedrooms
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Timber stud	Vertical framing members
Timber screws	Joining timber stud work together
Gyproc Drywall Timber Screws	Fixing plasterboards to timber studs

Installation options	Suitable for
Gypframe RB1 Resilient Bar	Improving acoustic performance
Gyproc Drywall Screws	Fixing plasterboards to Gypframe RB1 Resilient Bars
Gyproc Sealant	Sealing board perimeters for optimum acoustic insulation
Isover APR 1200	Between joists to improve acoustic insulation

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

Timber stud

Installation tips

Risk of cracking

- To minimise the risk of cracking of plasterboard joints, use seasoned timber with a moisture content not exceeding that recommended in *BS 5268*.
- Even timber that complies to this standard may shrink and twist as it dries and nail popping may still occur.

Nail popping

- To minimise the risk of fixing defects occurring, use Gyproc Drywall Timber Screws for fixing into standard softwood, rather than nails.

Fixing to floors

- When fixing to new concrete screeding, consider installing a damp-proof membrane to the full partition width, before locating the sole plate or floor channel.

Acoustic insulation

- Gyproc Sealant can be used around all perimeter edges to improve the acoustic and thermal seal.
- Gypframe RB1 Resilient Bar can be used to partially isolate plasterboard linings from the timber framing, enhancing acoustic performance of the partition.
- Isover insulation can be installed between the stud work progressively.

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Determine and mark the wall position, making allowance for any openings.
- Fix the timber to the wall and ceiling perimeter and to frame any openings.

Stage 2:

- Fix timber studs at the required centres (distance apart) using timber screws.
- Install additional framing as required to support medium to heavy fixtures.
- Install noggings as required.
- Stagger the noggings to allow fixing from back of studs.

Stage 3:

- Apply Gyproc Sealant to frame perimeters to provide optimum acoustic performance.

Stage 4:

- Fix timber noggings to support recessed switch boxes / socket outlets.

Stage 5:

- Form door openings by fixing full-height studs to each side, together with a timber head piece.
- Door casings can be fixed to these timbers.

Stage 6:

- Services are normally installed after one side is boarded.
- Drills or hole saws will be required to form service holes in timber studs.

Timber stud

For installation using Gypframe RB1 Resilient Bar see page 71

Stage 7:

- Fix boards to timber supports using Gyproc Drywall Timber Screws.
- Select the appropriate length of screw to provide a 25mm penetration into the metal stud. For 15mm plasterboard use a 41mm Gyproc Drywall Timber Screw.
- Install at 300mm maximum centres (distance apart), reducing to 200mm maximum centres (distance apart) at external angles.

Stage 8:

- Drive fixings straight and firmly home (not skewed).
- Lightly butt boards together, inserting screws no closer than 10mm from bound edges and 13mm from cut edges.

Stage 9:

- Where door openings occur, cut boards around the openings to avoid a joint directly in line with door jambs.
- Stagger board joints relative to the opposite side of the partition.

Using Gypframe RB1 Resilient Bar

For optimum acoustic insulation (continued from stage 6)

Stage 7:

- Where acoustic upgrades to the partition are required, install Gypframe RB1 Resilient Bars horizontally to the timber studs, to either one, or for better results, to both sides.
- Fix at 600mm centres (distance apart) using 36mm Gyproc Drywall Screws.
- The bars are fixed with the base flange on the top side, except when fixing the uppermost bar, which should be fixed with the base flange at the bottom.
- Timber packers can be used for skirting board fixing.

Stage 8:

- Install Gypframe RB1 Resilient Bar noggings where required to support the lining at corners, openings and abutments.

Stage 9:

- Install boards vertically, fixing at 300mm centres (distance apart) along each Gypframe RB1 using Gyproc Drywall Screws.
- The fixing should give a minimum penetration of 10mm into the metal. For 15mm plasterboard use a 25mm Gyproc Drywall Screw.
- Ensure the board fixings do not enter the timber stud, as this will impair the acoustic insulation.

GypWall CLASSIC

GypWall CLASSIC is a perfect fixing system for building a partition wall and dividing spaces.

The system is adaptable to suit different build requirements, including the option to upgrade from a Gypframe 'C' Stud to 'I' Stud to provide a stronger partition.

1 1	Gypframe 'C' Stud or Gypframe 'I' Stud
2	Gypframe Floor & Ceiling Channel
3	Gyproc plasterboard

When plaster skimming, square-edge or tapered-edge plasterboard can be used. When jointing, tapered-edge plasterboard should be used.

Choice of plasterboard	Suitable for
12.5mm or 15mm Gyproc SoundBloc	Reducing noise transferring between rooms, ideal for use between bedrooms
12.5mm Gyproc Moisture Resistant	Use on bathroom and kitchen walls and other wet use areas
15mm Gyproc SoundBloc MR	Reducing noise transfer between rooms and wet use areas, such as bathrooms adjacent to bedrooms
15mm Gyproc DuraLine	On walls more likely to get knocks and scuffs, such as hallways and stairways
12.5mm Gyproc WallBoard	Use in all other areas

Fixing materials	Suitable for
Gypframe 70 S 50 'C' Stud[1]	Vertical framing members
Gypframe 72 C 50 Floor & Ceiling Channel[1]	Horizontal framing supports
13mm Gyproc Wafer Head Drywall Screws	Fixing metal framing together
Gyproc Drywall Screws	Fixing plasterboards to the metal framing

1 Other width studs and channels are available.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

GypWall CLASSIC

Installation options	Suitable for
Gypframe 70 I 50 'I' Stud	Increased height
13mm Gyproc Wafer Head Drywall Screws	For metal to metal fixing less than 0.8mm gauge
Gyproc Jack-Point Screws	Fixing plasterboard to Gypframe 'I' studs greater than 0.6mm
Gyproc Sealant	Sealing board perimeters for optimum acoustic insulation
Gypframe 99 FC 50 Fixing Channel	Fixing behind the plasterboard liner to hold medium weight fixtures
Gypframe 150 FC 90 Fixing Channel	Fixing behind the plasterboard liner to hold heavyweight fixtures

Installation tips

Fixing to floors

- On uneven floors, a timber sole plate can be used (38mm x width of stud).
- When fixing to new concrete screeding, consider installing a damp-proof membrane to the full partition width, before locating the sole plate or floor channel.

Acoustic insulation

- Gyproc Sealant can be used around all perimeter edges to improve the acoustic and thermal seal.
- Using Gypframe 70 S 50 'C' Studs with Gypframe 72 C 50 Floor & Ceiling Channels, and boarded with 12.5mm Gyproc SoundBloc either side, will achieve the 40 dB requirements to meet the Building Regulations for internal partitions.

Fixtures and services

- Before beginning the partition, consider where additional support may be required to hold medium and heavyweight objects, as well as the location of any services, such as electrical sockets.

Example guidance using 12.5mm Gyproc plasterboards:

Stage 1:

- Determine and mark the wall position, making allowance for any openings.
- Fix the Gypframe Floor & Ceiling Channel along the centre line to the floor and ceiling at 600mm centres.

Stage 2:

- Cut studs 5mm short of ceiling height using tin snips.

Stage 3:

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

Stage 4:

- Insert further studs at 600mm centres with a friction-fit into the floor and ceiling channels.
- This will allow for adjustment during boarding.
- All studs should face in the same direction.

Stage 5:

- Apply Gyproc Sealant to both sides of the frame perimeters.
- This will give optimum acoustic performance by reducing air gaps.

Stage 6:

- Fix boards to all framing members at 300mm centres.
- At external angles reduce centres to 200mm.
- Select the appropriate length of screw to provide a 10mm penetration into the metal stud. For 12.5mm plasterboard use a 25mm Gyproc Drywall Screw.

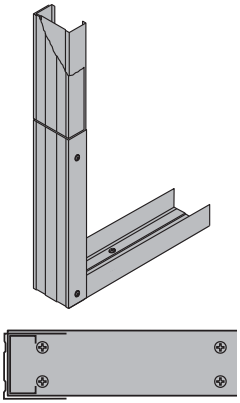
Stage 7:

- Lightly butt boards together, inserting screws no closer than 10mm from bound edges and 13mm from cut edges.
- Stagger board joints relative to the opposite side.

Door openings

Stage 1:

- Decide where door openings will be located and insert full-height studs into the floor and ceiling channels each side of the door opening.
- Cut the side of the floor channel and bend upright 300mm to support the 'C' stud.
- Fix the stud and the channel together at the head and base using 13mm Gyproc Wafer Head Drywall Screws.



Stage 2:

- Form the door head from a cut channel section, by cutting both sides of the channel and bending to fit.
- The channel should extend 150mm down the face of the stud, on both sides.
- Fix twice using 13mm Gyproc Wafer Head Drywall screws.

Stage 3:

- Box the remainder of the Gypframe 'C' Stud on both sides using channel and fix with 13mm Gyproc Wafer Head Drywall Screws.

Stage 4:

- When boarding, cut the boards around the opening to avoid a joint directly in line with door jambs.
- This will provide a stronger door frame.

Fixtures

- Identify where both medium weight and heavyweight fixtures will be installed.
- Using 13mm Gyproc Wafer Head Drywall Screws fix Gypframe 99 FC 50 Fixing Channel for medium weight fixtures, such as kitchen units, or Gypframe 150 FC 90 Fixing Channel for heavyweight fixtures, such as wash basins and plasma televisions.

Installing services

Stage 1:

- Install services (by appropriate trades) in accordance with *BS 7671*, normally after one side is boarded.
- Pass horizontal runs of cabling through cut-outs in the studs.
- Install a Gypframe 99 FC 50 Fixing Channel, or a Gypframe Floor & Ceiling Channel between the studs to provide support for recessed switch boxes.
- Where plastic clip-in socket boxes are being used in fire-rated systems, use Hilti CP617 Putty Pads.

Stage 2:

- If double-layering boards, ensure all board joints between the top layer and under-layer are staggered.
- The under-layer does not require centre fixings.

Gyproc jointing accessories

Gyproc Joint Tape

- A paper tape for reinforcing flat joints.
- Available in 150m rolls.

Gyproc Corner Tape

- A paper tape with two corrosion resistant metal strips for reinforcing external angles.
- Available in 33m rolls.

Gyproc No-Coat Ultraflex 325

- A joint tape providing high performance corner reinforcement, which can be adjusted for both internal and external corners.
- Available in 30m rolls.

Gyproc Drywall Metal Angle Bead

- Galvanised metal angle bead used for reinforcing 90 degree external angles; ideal where maximum protection is required.
- Available in 3000mm lengths.

Gyproc Drywall Metal Edge Bead

- Galvanised metal edge bead used for protecting and defining exposed edges of plasterboard.
- Available in 2400mm and 3000mm lengths.

Gyproc Drywall Primer

- A general purpose plasterboard primer used before decoration to equalise suction.
- Available in 10 litre tubs.

Gyproc Drywall Sealer

- A single coat provides protection from future steam-stripping and two coats provides a vapour control barrier.
- Available in 10 litre tubs.

For full installation details refer to the British Gypsum SITE BOOK *available to download from www.british-gypsum.com*

Glossary

Airtightness

If a wall or ceiling is not airtight, air will pass through gaps, allowing heat, noise or fire to escape. This can happen at the edges of linings, such as where one wall meets another wall, floor or ceiling, and where boards are cut to allow pipes or cables through.

To ensure the lining or partition is airtight, seal all joints and gaps using Gyproc Sealant or Gyproc Dri-Wall Adhesive when using the DriLyner systems.

Building Regulations

Building Regulations determine the minimum standards that buildings must be built and renovated to. Where Building Regulations are mentioned in this guide, the solutions given will meet the required criteria.

Centres

Centres can refer to either the distance at which studs are installed or distance between plasterboard fixings. Chosen centres depend on the required strength of the partition and the board size.

Door jambs

The vertical portion of the frame on which the door is secured. Avoid plasterboard joints above a door jamb, as this could deteriorate the joint over time through door usage.

Field

The face of the plasterboard excluding the perimeter.

Flanking sound

Sound can travel around separating elements (e.g. walls and ceilings) via the easiest path possible.

When upgrading ceilings or walls, consider improving the surrounding areas, and sealing any potential gaps to overcome this.

Friable

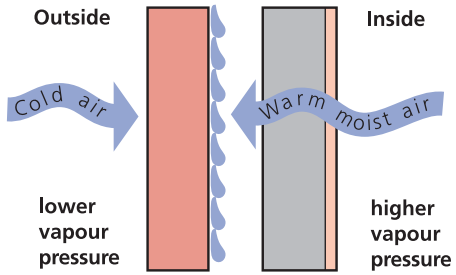
A surface that is easily dislodged as parts are loose. This surface should either be removed before lining, or use GypLyner UNIVERSAL or GypLyner IWL.

Interstitial condensation

If relatively warm moisture-laden air travels through porous materials, such as plasterboard or brick, into a space or cavity on the other side and the air here is cooler, liquid can form if the air reaches dew point (the temperature at which vapour will condense into water).

Rooms such as bathrooms and kitchens, where daily use of hot water can create warm damp air, are particularly susceptible.

Installing Gyproc WallBoard DUPLEX, which has a vapour control membrane lining, can help control interstitial condensation occurring. Install with the metalised lining facing into the cavity or against the wall or ceiling.



Nogging or dwang

A horizontal cross member used to provide support between main members, such as joists. These can be made from timber or metal stud.

Rigidisation

A manufacturing process that alters the characteristics of plain steel by providing a higher strength capacity at a lighter gauge. This effectively works the steel to make it much stronger.

Screw or nail popping

Occurs when movement in timber pushes out nails or screws, usually popping the plaster or jointing finish.

Screw and nail popping can be eliminated by screw-fixing into metal framing. Gypframe RB2 SureFix Bar is ideal for ceilings and Gypframe metal studs can be used in partitions and wall linings.

Glossary

Thermal bridging

Occurs where insulation is interrupted or where materials meet and one is a much poorer insulator.

A thermal bridge is where heat travels through this weak point, reducing the overall effectiveness of the insulation.

To avoid this, ensure adjoining surfaces (wall and ceilings) are appropriately insulated and all joints and gaps are sealed using Gyproc Sealant or Gyproc Dri-Wall Adhesive when using the DriLyner series of systems.

U-value

The U-value describes how well a building element, such as a wall or ceiling, conducts heat. If the wall or ceiling has a lower U-value, the thermal insulation of the element will be better.

What next?

Once your background is in place, you'll need to decide how to get the perfect finish.

Our 'Finishing guide' contains relevant information on plaster skimming and jointing methods, including application guidance.

To receive your copy, you can join our mailing list using the reply card at the back of this guide, or download a copy from www.british-gypsum.com

Further training

The British Gypsum Drywall Academy is the industry leading centre for training and development in plaster and drylining courses.

Installation courses available:

- **DriLyner** 'dot and dab' systems.
- **GypLyner** wall lining systems.
- Combined partitioning and ceiling systems.

Also available:

- Basic trowel skills and skim finishing.
- Hand jointing and finishing plasterboards.
- Mechanical jointing.

Courses are run throughout the year at all of our training centres at Erith in Kent, East Leake near Nottingham, and Kirkby Thore in Cumbria.

If you would like to attend a training course to enhance or refresh your skills, then call us to request an information pack.

Training enquiries: 0844 561 8810

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INSTALL-02

Tear along perforated guide