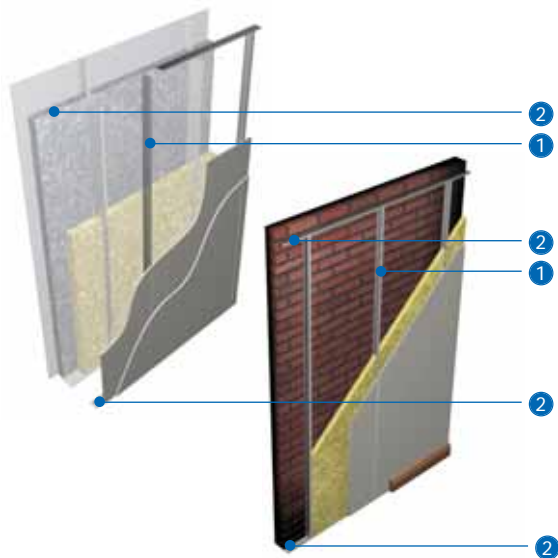


Independent wall lining system

GypLyner iWL independent wall lining is a lightweight, non-loadbearing drylining which is erected independently of the external wall construction. The system is used in all types of building, but is particularly suitable for those with reinforced concrete or steel frames. The lining provides fire resistance to structural steel sections within the lining cavity and can be used to increase sound insulation and meet thermal performance requirements of new or existing masonry walls.





- 1 Gypframe 'I' Stud
- 2 Gypframe Floor & Ceiling Channel

Key facts

- Fully independent wall lining
- Compatible with external wall constructions including curtain walling, rain screen claddings, industrial claddings, brickwork and glazed atriums
- Used to line non fire-rated service risers
- Satisfies *BS 5234* strength and robustness requirements up to Severe Duty
- Provides fire protection to structural steelwork
- Provides fire resistance in association with external structure
- Used to upgrade the sound and thermal performance of an existing masonry wall
- Provides service void

Components


Gyproc board products

			Take-off quantities ¹
	Gyproc WallBoard^{2,3}	Thickness 12.5, 15mm Width 900, 1200mm	100m ² per layer
	Gyproc FireLine³	Thickness 12.5, 15mm Width 1200mm	100m ² per layer
	Gyproc SoundBloc²	Thickness 12.5, 15mm Width 1200mm	100m ² per layer
	Gyproc DuraLine²	Thickness 15mm Width 1200mm	100m ² per layer
	Gyproc ThermaLine laminates²	Thickness 22 - 93mm Width 1200mm	100m ² per layer

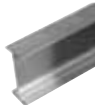

¹ Quantities are for 100m² of straight wall lining with double layer boarding. Quantities are approximate and for guidance only, no allowance has been made for waste, openings, abutments, etc.

² Moisture resistant boards are specified in intermittent wet use areas.

Specialist board products

			Take-off quantities ¹
	Glasroc H TILEBACKER⁵	Thickness 12.5mm Width 1200mm	100m ² per outer layer


Gypframe metal products



	Gypframe 'I' Studs	Width 48, 60, 70, 92, 146mm Length 2700 - 6000mm Codes 48 I 50, 60 I 50, 60 I 70, 70 I 70, 92 I 90, 146 I 80	167m
	Gypframe 'C' Studs	Width 48, 60, 70, 92, 146mm Length 2400 - 4200mm Codes 48 S 50, 60 S 50, 70 S 50, 92 S 50, 146 S 70	as required

³ Also used in DUPLEX grades where a vapour check is required.

⁴ Gypframe DC (Deep Flange) and EDC (Extra Deep Flange) Floor & Ceiling Channel are available in selected sizes for deflection head and increased height applications.




⁵ Glasroc H TILEBACKER is suitable for use in high moisture environments. For tiling guidance, refer to section 10 - Tiling.

Gypframe metal products		Take-off quantities ⁷
 Gypframe Standard Floor & Ceiling Channel⁴ Width 50, 62, 72, 94 and 148mm Length 3600mm Codes 50 C 50, 62 C 50, 72 C 50, 94 C 50 and 148 C 50		dependent on partition length
 Gypframe 99 FC 50 Fixing Channel Length 2400mm		as required
 Gypframe 150 FC 90 Fixing Channel Length 1194mm		as required
 Gypframe GFS1 Fixing Strap Length 2400mm or  GFT1 Fixing 'I' Length 2400mm		as required

Gypframe metal products		Take-off quantities ⁷
 Gypframe GA6 Splayed Angle Length 2400, 3600mm		as required
 Gypframe GA5 Internal Fixing Angle Length 3600mm		as required
 Gyproc Drywall Screws For fixing boards to stud framing up to 0.79mm thick.		1st layer - 900 2nd layer - 1100
 Gyproc Jack-Point Screws For fixing boards to stud framing 0.8mm thick or greater and 'I' studs greater than 0.55mm thick.		as above
 Gyproc Sealant Sealing air paths for optimum sound insulation.		1 cartridge per 35m based on a 6 - 10mm bead
 Gyproc edge beads Protecting and enhancing board edges.		as required

Components

Fixing and finishing products

		Take-off ¹ quantities
	Gyproc FireStrip For fire-stopping deflection heads.	as required
	Gyproc Profilex Access Panels Access to services for maintenance.	as required
	Gyproc jointing materials For a seamless finish.	as required

Fixing and finishing products

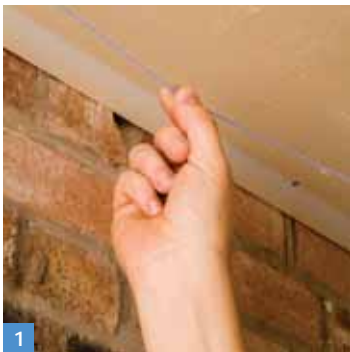
		Take-off ¹ quantities
	Thistle Multi-Finish or Thistle Board Finish To provide a plaster skim finish.	10m ² per 25kg bag
or		
	Thistle Durafinish To provide improved resistance to accidental damage.	10m ² per 25kg bag
or		
	Thistle Spray Finish Gypsum finish plaster for spray or hand application.	11m ² per 25kg bag
	Isover Acoustic Slab - High Performance 50mm and 75mm, for improved acoustic and thermal performance.	as required

¹ Quantities are for 100m² of straight wall lining with double layer boarding. Quantities are approximate and for guidance only, no allowance has been made for waste, openings, abutments, etc.

Construction tips

- Estimated construction time 3m² / man hour (single layer lining) or 2m² / man hour (double layer lining) ready for finishing
- All parts of the lining system (including thermal insulation) should remain independent of the external walling - position lining so a continuous cavity remains between the back of the insulation and the external walling
- Fire resistance is primarily to structural steel located between the lining and external cladding, but can also contribute to fire protection of the complete wall structure when the inside of the wall is exposed to fire (dependent on wall construction)
- Keep the drylining cavity closed to prevent downgrading the thermal performance - where required, apply a continuous bead of Gyproc Sealant to the perimeter of external walls, around service penetrations, openings, junctions and around the perimeter of suspended timber floors

Installation



1

- Mark lines to indicate the position of the lining framework from the highest point on the background.

NB On uneven floors a timber sole plate, 38mm x width of stud, may be required. On new concrete screeding consider installing a damp proof membrane to the full partition width before locating the sole plate or floor channel.



2

- Locate Gypframe Floor & Ceiling Channel **up to** the floor and ceiling lines. Use DC (Deep Flange) channel at head and base if lining height is between 4200mm and 8000mm.

- Fix Gypframe 'C' Studs to abutments, junctions and openings only.



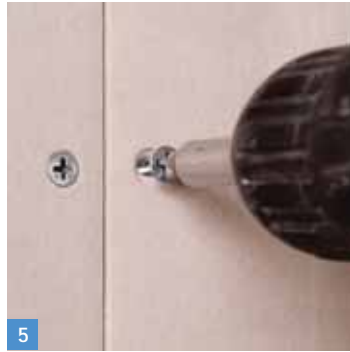
3

- Position the Gypframe 'I' Studs vertically between channel sections and twist to locate.



Board fixing - single layer

- Fix boards to all framing members at 300mm centres using the appropriate length Gyproc screws.
- Reduce centres to 200mm at external angles.



- Lightly butt boards, inserting screws not closer than 10mm from bound edges and 13mm from cut edges.



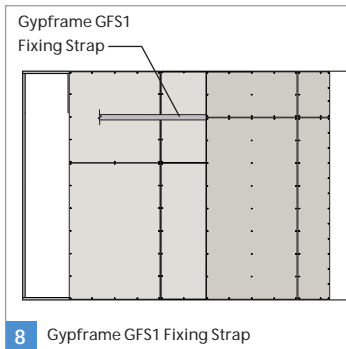
- Where door openings occur, cut boards around the opening to avoid a joint directly in line with door jambs.



7

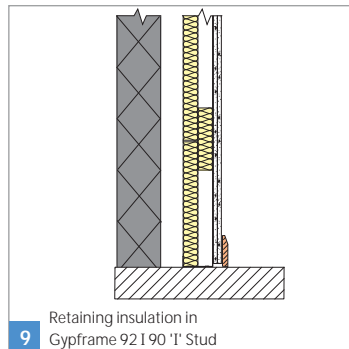
Board fixing - multi-layer

- Under-layer boards do not require centre fixings. Cut and fix the initial second layer board as appropriate so that subsequent board joints are staggered.



8 Gypframe GFS1 Fixing Strap

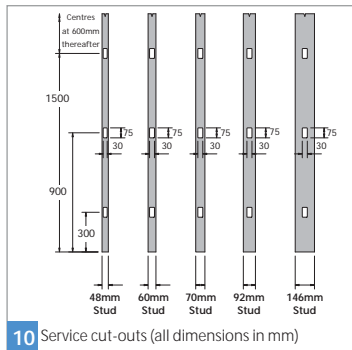
- Typical double layer board configuration is as above.



9 Retaining insulation in Gypframe 92 I 90 'I' Stud

Acoustic insulation

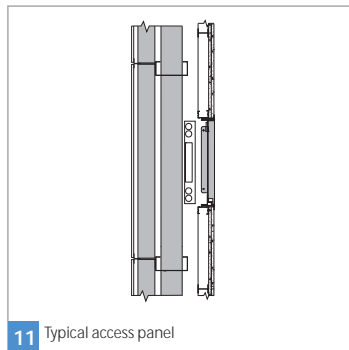
- Install Isover Acoustic Slab - High Performance to a friction fit within the stud cavity. The slabs are self-supporting, receiving internal support from the stud flanges. Where 50mm insulation is fitted into Gypframe 92 I 90 'I' Studs. We recommend a 150mm x 50mm strip of Isover High Performance Slab is inserted to retain the slab. With Gypframe 146 I 90 'I' Studs, two strips of Isover will need to be inserted to retain the slab.



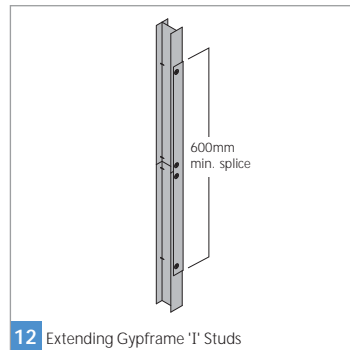
Services

- The stud cut-outs can be used for services provided that there is no undue disturbance of the Isover insulation.
- Locate surface mounted trunking against the plasterboard lining, and fix through the lining to the stud framework.

NB Any penetration in the lining may downgrade its performance.

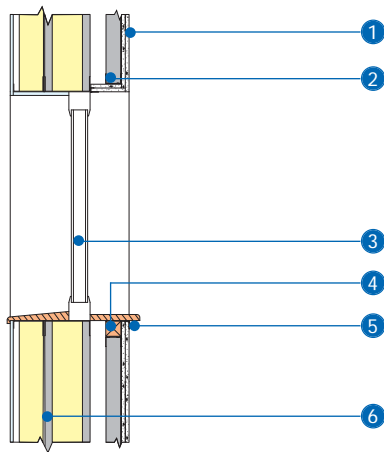


- Horizontal and vertical services can be included behind the lining, accessed via a Gyproc Proflex Access Panel (fire-rated if specified).



- NB** Where the wall height exceeds the available length of Gypframe 'I' Stud, sections of stud can be spliced together to the required length using 600mm lengths of the appropriate Floor & Ceiling Channel fixed with four Gyproc Wafer Head Screws in each flange to each side of the stud.

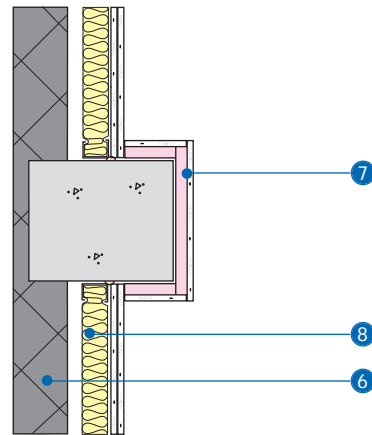
Junction details



Window opening (vertical section)

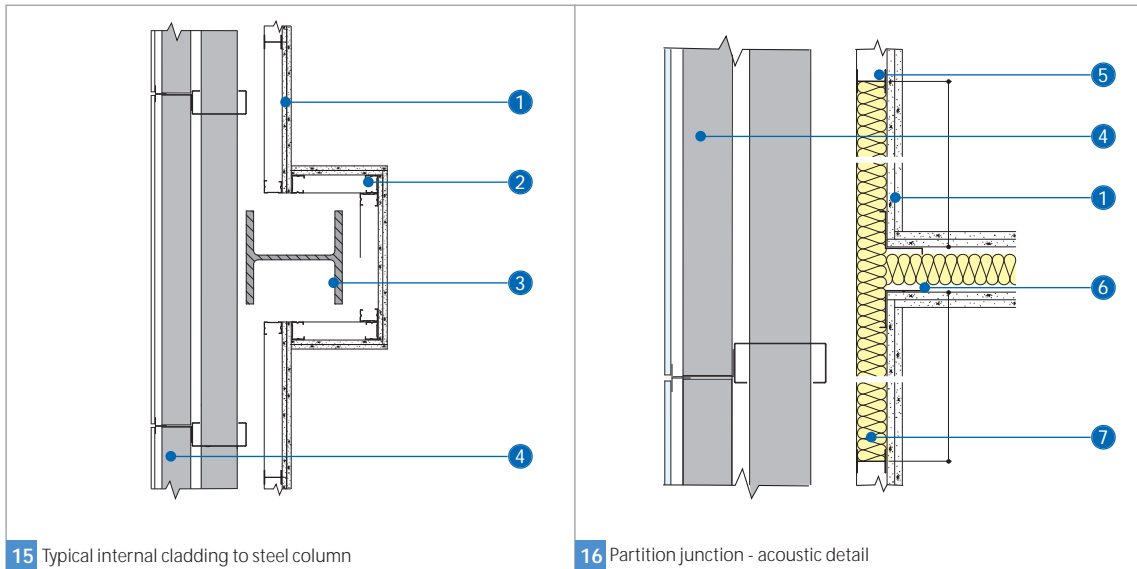
13 **NB** Ensure board joints are staggered

- | | |
|------------------------------------|------------------------------|
| 1 Gyproc plasterboard | 4 Timber head piece |
| 2 Gypframe Floor & Ceiling Channel | 5 Gyproc Edge Bead |
| 3 Window unit | 6 External wall construction |



14 Typical internal cladding to concrete column

- | |
|---|
| 7 Gyproc ThermaLine laminate |
| 8 Isover Acoustic Slab - High Performance |



- 1 Gyproc plasterboard
- 2 Gypframe 'C' Studs
- 3 Steel column

- 4 External wall construction
- 5 Gypframe 'I' Stud
- 6 Gypframe GA5 Internal Fixing Angle

- 7 Isover Acoustic Slab - High Performance