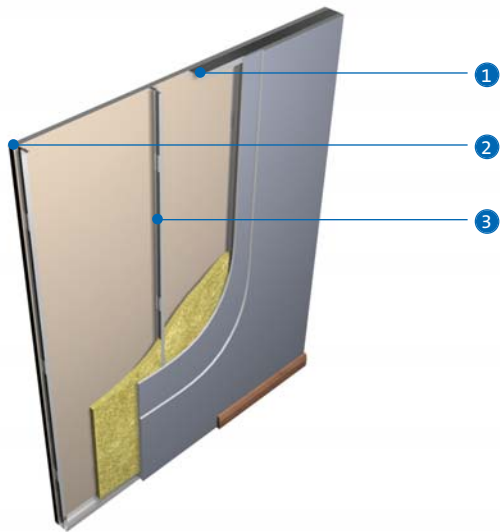


## Staggered stud acoustic partition system

GypWall™ STAGGERED is a non-load-bearing metal stud partition which provides very high levels of sound insulation. In public and commercial developments it can be used for space division within critical areas of offices, hotels, schools, hospitals, recreational complexes, shops, and conference centres. In refurbishment work on residential units it can be used as a sound resisting, space saving partition between dwellings.





- 1 Gyframe Floor & Ceiling Channel
- 2 Gyframe Spacer Clip
- 3 Gyframe 'T' Stud

### Key facts

- Choice of framing sizes to suit range of performance requirements
- Can achieve high levels of sound insulation up to  $Rw63dB$
- Up to 90 minutes fire resistance
- Satisfies *BS 5234* strength and robustness requirements up to Severe Duty
- Single layer or double layer board linings
- Uses 'T' stud framework to give a robust partition
- De-coupled linings for high acoustic performance, with space saving partition widths

## Components

### Gyproc board products



#### Gyproc SoundBloc

Thickness 12.5, 15mm  
Width 1200mm



#### Gyproc DuraLine

Thickness 15mm  
Width 1200mm

### Gypframe metal products



#### Gypframe 60 I 70 T Stud

Used with 72mm Gypframe Standard Floor & Ceiling Channel to form 60/72 combination.



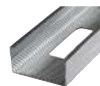
#### Gypframe 92 I 90 T Stud

Used with 148mm Gypframe Standard Floor & Ceiling Channel to form 92/148 combination.

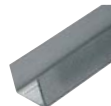
### Gypframe metal products



#### Gypframe 70 S 50 C Stud



#### Gypframe 146 S 50 C Stud



#### Gypframe Standard Floor & Ceiling Channels 60/72 Combination

Code 72 C 50

#### 92/148 Combination

Code 148 C 50 148 DC 60

### Gypframe metal sections



**Gypframe SC1 Spacer Clip**  
(used in 60/72 combination).  
**Gypframe SC2 Spacer Clip**  
(used in 92/148 combination).



**Gypframe GA5 Internal Fixing Angle**



**Gypframe GFS1 Fixing Strap**



**Gypframe 99 FC 50 Fixing Channel**



**Gypframe GA6 Splayed Angle**  
For splayed corners.



**Gypframe GFT1 Fixing 'T'**

### Fixing and finishing products



**Gyproc Drywall Screws**  
For fixing boards to stud framing up to  
0.79mm thick.



**Gyproc Jack-Point Screws**  
For fixing boards to stud framing 0.8mm  
thick or greater and 'T' studs greater than  
0.55mm thick.



**Gyproc jointing materials**  
For seamless jointing.



**Gyproc Sealant**  
Sealing airpaths for optimum sound  
insulation.

## Components

### Fixing and finishing products



#### **Gyproc edge beads**

Protecting and enhancing board edges and corners.



#### **Gyproc Control Joint**

To accommodate structural movement.



#### **Gyproc FireStrip**

For fire-stopping deflection heads.

### Fixing and finishing products



#### **Gyproc Skimcoat, Gyproc Carlite Finish or Gyproc Board Finish**

Providing a plaster finish.



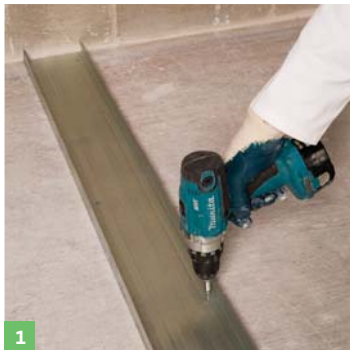
#### **Moy Acoustic Roll**

For enhanced acoustic performance.

## Construction tips

- The following points should be considered in addition to the construction tips for **GypWall™**
- Estimated construction time  $2\text{m}^2 - 2.5\text{m}^2$  / man hour (single layer partition) or  $1.5\text{m}^2 - 2\text{m}^2$  / man hour (double layer partition) ready for finishing
- To maintain the high levels of sound insulation it is essential that services, fixtures, etc, do not bridge the two sets of stud linings
- Use special detailing at deflection heads (see **Junction details - deflection** later) to maintain acoustic performance
- Openings require careful detailing to minimise loss of acoustic performance
- Specialist heavy acoustic doorsets may require additional support

## Installation



- Determine and mark the wall position and make allowance for openings.
- Fix 72mm Gypframe Floor & Ceiling Channel along centre line to the floor and ceiling at 600mm centres with suitable fixings (by others).
- On uneven floors a timber sole plate, 38mm x width of channel, may be required.
- 148mm Gypframe Floor & Ceiling Channels require two rows of staggered fixings, each at 600mm centres. Each row staggered by 300mm.



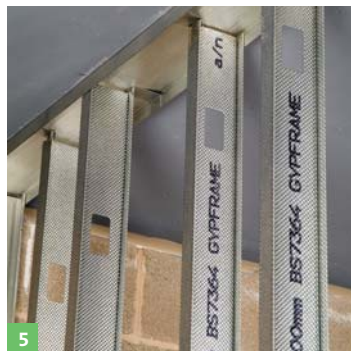
- Fix Gypframe 'C' Studs to the abutting wall at 600mm centres.
- 146mm studs require two rows of staggered fixings each at 600mm centres. Each row staggered by 300mm



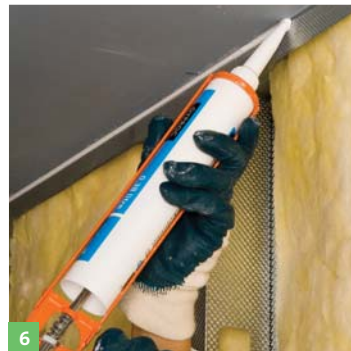
- Cut Gypframe 'I' Studs 6mm short of the floor to ceiling height using a chop saw / circular saw.
- Insert a Gypframe Spacer Clip top and bottom of the Gypframe 'I' Stud.
- NB** Use Gypframe SC1 Spacer Clips for engaging Gypframe 60 | 70 'I' Studs and Gypframe SC2 Spacer Clips for engaging Gypframe 92 | 90 'I' Studs.
- NB** Studs may require cutting shorter for specified deflection head requirements. Refer to figures 14 & 15.



- Use the clip as the pivot point when turning the stud to minimise sliding.

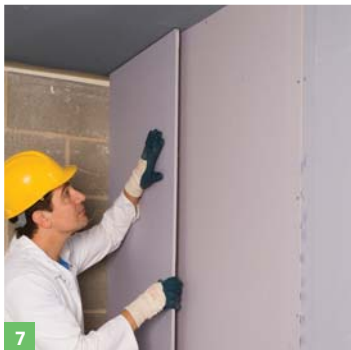


- Fit Gypframe T Studs vertically within the Gypframe Floor & Ceiling Channel at 300mm centres (Gypframe 'C' Studs to abutments – see Junction detail 12). Alternate clips on either side of the Gypframe T Stud to give the staggered stud framework.
- Fit the specified thickness of Moy Acoustic Roll insulation in the cavity.



- Apply Gyproc Sealant as a continuous bead to the perimeter of the framing on both sides before boarding commences, to ensure acoustic performance.



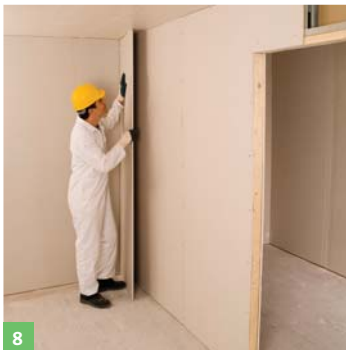


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### Board fixing - single layer

- Fix boards to alternate studs (which are in contact with board) at 300mm centres using Gyproc Jack-Point Screws.
- Reduce centres to 200mm at external angles.

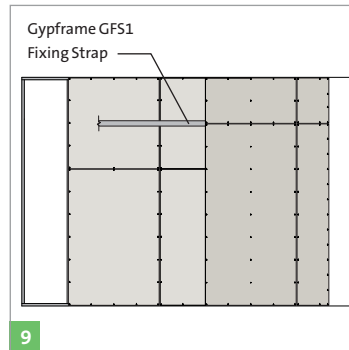
**NB** Select appropriate screw length to provide a nominal 10mm penetration into the Gypframe steel framing.



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### Board fixing - multi-layer

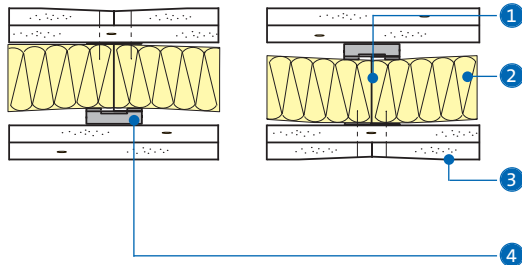
- Inner-layer boards do not require centre stud fixings.
- Cut and fix the initial second layer board as appropriate so that subsequent vertical board joints are staggered by a minimum of one stud centre.



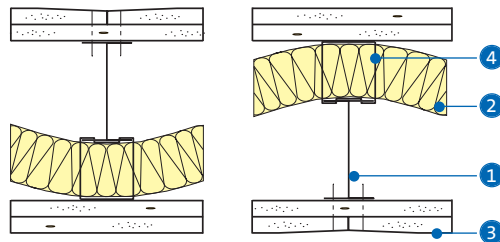
9

- Typical double layer board configuration is as above.
- Where the partition height exceeds the board length, install Gypframe GFS1 Fixing Strap progressively between board layers, to coincide with outer layer horizontal board end joints, to maintain board alignment.

## Installation details - plan



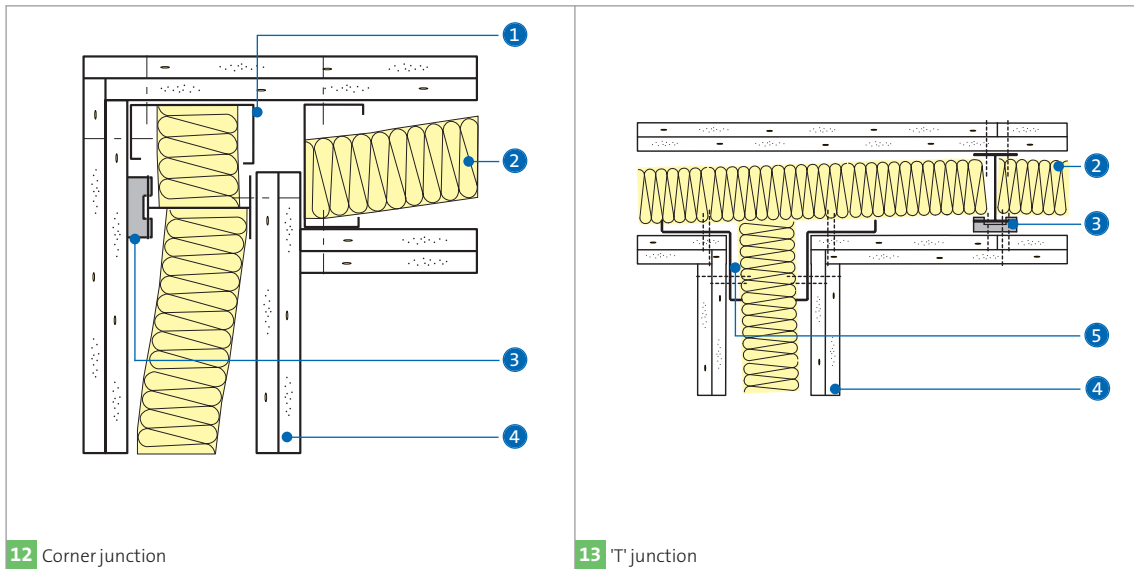
10 Plan detail (60/72 combination)



11 Plan detail (92/148 combination)

- 1 Gypframe 'I' Stud
- 2 Isover Insulation
- 3 Gyproc SoundBloc or Gyproc DuraLine
- 4 Gypframe Spacer Clip

## Junction details - returns



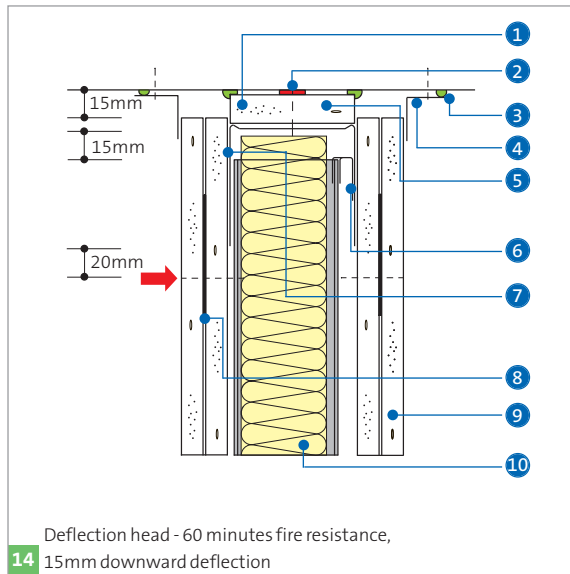
12 Corner junction

13 'T' junction

- 1 Gyproframe 'C' Stud
- 2 Isover insulation
- 3 Gyproframe Spacer Clip

- 4 Gyproc SoundBloc or Gyproc DuraLine
- 5 Gyproframe GA5 Internal Fixing Angle

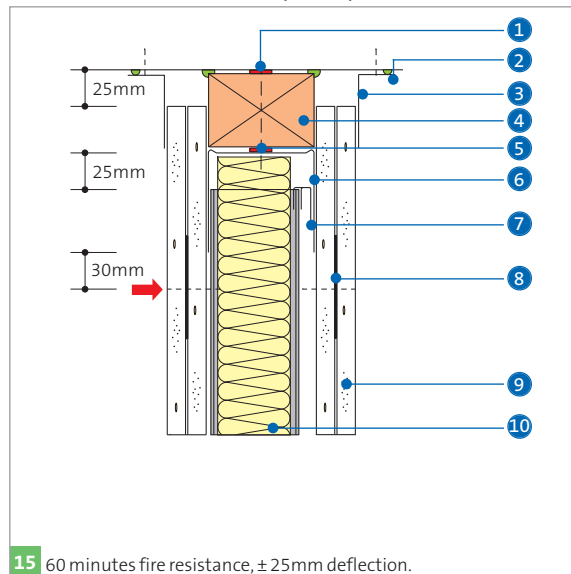
## Junction details - deflection



**NB** No fixings should be made through the boards into the flanges of the head channel. The arrow (➡) denotes the position of the uppermost board fixings which should be made into Gyproframe GFS1 Fixing Strap or studs. Continuous Gyproframe FireStrip must be installed as shown in order to maintain fire performance. Gyproframe Steel Angle or approved decorative trim (by others) should be fixed to the soffit either side of the partition as shown in order to maintain the acoustic performance. Where  $\pm$  deflection is a requirement, Gyproframe SC1 or SC2 Spacer Clips must be pre-fixed to the 'I' studs to avoid the risk of disengagement once deflection is taken up.

- |                                      |   |                                       |
|--------------------------------------|---|---------------------------------------|
| 1 Gyproc Plank                       | 5 Fixing through firestop into structure at 600mm maximum centres | 8 Gyproframe GFS1 Fixing Strap        |
| 2 Gyproc FireStrip (continuous line) | 6 Gyproframe Spacer Clip  | 9 Gyproc SoundBloc or Gyproc DuraLine |
| 3 Gyproc Sealant                     | 7 Gyproframe 72 EDC 80 Extra Deep Flange Floor & Ceiling Channel  | 10 Isover insulation                  |
| 4 Gyproframe Steel Angle trim        |   |                                       |

## Junction details - deflection (cont'd)



**NB** No fixings should be made through the boards into the flanges of the head channel. The arrow (➔) denotes the position of the uppermost board fixings which should be made into Gyproframe GFS1 Fixing Strap or studs. Continuous Gyproc FireStrip must be installed as shown in order to maintain fire performance. Gyproframe Steel Angle or approved decorative trim (by others) should be fixed to the soffit either side of the partition as shown in order to maintain the acoustic performance. Where ± deflection is a requirement, Gyproframe SC1 or SC2 Spacer Clips must be pre-fixed to the 'I' studs to avoid the risk of disengagement once deflection is taken up.

- 1 Gyproc FireStrip (continuous line on top and bottom of timber)
- 2 Gyproc Sealant
- 3 Gyproframe Steel Angle trim
- 4 Timber head plate suitably fixed to structure

- 5 Fixing of head channel into timber head plate at 600mm maximum centres
- 6 Gyproframe 72 EDC 80 Extra Deep Flange Floor & Ceiling Channel

- 7 Gyproframe Spacer Clip
- 8 Gyproframe GFS1 Fixing Strap
- 9 Gyproc SoundBloc or Gyproc DuraLine
- 10 Isover insulation

