

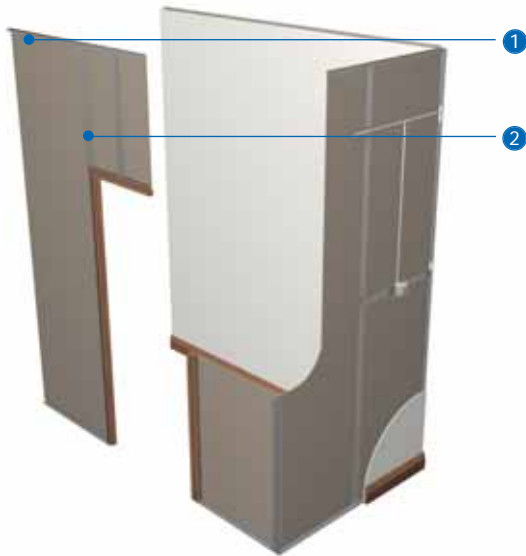
GypWall CLASSIC and GypWall ROBUST

The definitive metal stud and partition system

GypWall CLASSIC partitions are cost-effective, multi-purpose partitions, which have provided the industry standard for many years. They are suitable for all types of buildings, including residential, healthcare and commercial.

GypWall ROBUST is a high impact-resistant partition system for use where a more durable structure is required. It provides a lightweight, cost-effective, non-loadbearing partition suitable for all types of commercial, healthcare, institutional and industrial buildings.





- 1 Gypframe Standard, Deep Flange (DC) or Extra Deep Flange (EDC) Floor & Ceiling Channel
- 2 Gypframe studs

Key facts

- Range of stud options to match performance requirements
- Acoustic stud option for enhanced acoustic performance
- Satisfies *BS 5234* strength and robustness requirements up to Severe Duty
- Achieves high levels of sound insulation up to R_w 61dB
- Easily accommodates services within stud cavity
- Can allow for deflection at the head
- Gypframe metal framework will not twist, warp or rot

Components**Gyproc board products**

			Take-off quantities ¹
	Gyproc WallBoard²		
	Thickness	12.5, 15mm	200m ² per layer
	Width	1200mm	
	Gyproc FireLine²		
	Thickness	12.5, 15mm	200m ² per layer
	Width	1200mm	
	Gyproc SoundBloc²		
	Thickness	12.5, 15mm	200m ² per layer
	Width	1200mm	
	Gyproc SoundBloc F		
	Thickness	15mm	200m ² per layer
	Width	1200mm	

Specialist board products

			Take-off quantities ¹
	Gyproc Plank		
	Thickness	19mm	200m ² per layer
	Width	600mm	
	Gyproc DuraLine³		
	Thickness	15mm	200m ² per layer
	Width	1200mm	
	Length	2400, 3000mm	
	Glasroc F MULTIBOARD		
	Thickness	10, 12.5mm	200m ² per layer
	Width	1200mm	
	Glasroc H TILEBACKER⁴		
	Thickness	12.5mm	100m ² per outer layer
	Width	1200mm	








¹ Quantities are for 100m² of straight partition boarded with a double layer of board each side. Quantities are approximate and for guidance only, no allowance has been made for waste, openings, abutments, etc. Refer to section 11 - Quantity take-off details.

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






³ Where single layer Gyproc DuraLine (GypWall ROBUST) is being fixed to Gypframe 'C' Studs, these should be a minimum gauge of 0.6mm.







⁴ Glasroc H TILEBACKER is suitable for use in high moisture environments. Where the board is being used on a double layer system, it should only be used as the outer layer. For tiling guidance, refer to section 10 - Tiling.

Gypframe metal products	Take-off quantities	Gypframe metal products	Take-off quantities
 <p>Gypframe 'C' Studs Width 48, 60, 70, 92 and 146mm Length 2400 - 4200mm Codes 48 S 50, 60 S 50, 70 S 50, 70 S 60, 92 S 50, 92 S 60 and 146 S 50.</p>	167m	 <p>Gypframe Standard Floor & Ceiling Channels 50 C 50, 62 C 50, 72 C 50, 94 C 50, 148 C 50 Gypframe Deep Flange Floor & Ceiling Channels 50 DC 60, 62 DC 60, 72 DC 60, 94 DC 60, 148 DC 60 Gypframe Extra Deep Flange Floor & Ceiling Channels 50 EDC 70, 72 EDC 80, 94 EDC 70, 148 EDC 80 All channels are available in 3600mm only</p>	Dependant on partition length
 <p>Gypframe AcouStud Width 70, 92 and 146mm Length 2400 - 4200mm Codes 70 AS 50, 92 AS 50 and 146 AS 50</p>	167m	 <p>Gypframe GFS1 Fixing Strap Length 2400mm</p>	As required
 <p>Gypframe 70I50 'I' Stud Width 70mm Length 3600, 4200, 4500mm</p>	167m	 <p>Gypframe 99 FC 50 Fixing Channel Length 2400mm</p>	As required

Gypframe metal products		Take-off quantities	Fixing and finishing products		Take-off quantities ¹
	Gypframe 150 FC 50 Fixing Channel Length 1194mm	As required		Gyproc Drywall Screws For fixing boards to stud framing up to 0.79mm thick.	1 st layer - 1750 2 nd layer - 2250
	Gypframe GA5 Internal Fixing Angle Lengths 2400 & 3600mm	As required		Gyproc Jack-Point Screws For fixing boards to stud framing 0.8mm thick or greater and 'I' studs greater than 0.5mm thick.	1 st layer - 1750 2 nd layer - 2250
	Gypframe GA6 Splayed Angle Lengths 2400 & 3600mm	As required		Gyproc Wafer Head Drywall Screws For metal-to-metal fixing up to 0.79mm thick.	as required
				Gyproc Wafer Head Jack-Point Screws For metal-to-metal fixing 0.8mm thick or greater and 'I' studs greater than 0.55mm thick.	as required

¹ Quantities are for 100m² of straight partition boarded with a double layer of board each side. Quantities are approximate and for guidance only, no allowance has been made for waste, openings, abutments, etc. Refer to section 11 - Quantity take-off details.

Fixing and finishing products		Take-off quantities ¹
 Gyproc Sealant For sealing airpaths for optimum sound insulation.		1 cartridge per 35m based on a 6 - 10mm bead
 Gyproc edge beads Protecting and enhancing board edges.		as required
 Gyproc Control Joint To accommodate structural movement.		as required
 Gyproc FireStrip For sealing deflection heads.		as required
 Gyproc jointing materials For a seamless finish.		as required

Fixing and finishing products		Take-off quantities ¹
 Thistle Multi-Finish or Thistle Board Finish To provide a plaster skim finish.	or	10m ² per 25kg bag
 Thistle Durafinish To provide improved resistance to accidental damage.	or	10m ² per 25kg bag
 Thistle Spray Finish Gypsum finish plaster for spray or hand application.		11m ² per 25kg bag
 Isover APR 1200 For enhanced acoustic performance.		100m ² where specified
 Isover Modular Roll 80mm, for improved acoustic performance.		100m ² where specified
 Isover Acoustic Slab - High performance 75mm, for improved acoustic performance.		100m ² where specified

Construction tips

- Estimated construction time 2m² - 3m² / man hour (single layer partition) or 1.5m² - 2m² / man hour (double layer partition) ready for finishing
- Use full height boards wherever possible - if horizontal joints are unavoidable, endeavour to position them above the suspended ceiling or below access floor level. Avoid eyeline and strong wall lighting areas
- Fixtures / fittings - additional framing will be required to support heavyweight items (e.g. sanitary ware)
- Support horizontal joints with Gypframe GFT1 Fixing 'T', Gypframe GFS1 Fixing Strap or Gypframe 99 FC 50 Fixing Channel (where specified)
- Where single layer Gyproc DuraLine (**GypWall ROBUST**) is being fixed to Gypframe 'C' Studs these should be a minimum gauge of 0.6mm - unless using Gypframe AcouStuds
- Install Gyproc Control Joints where specified
- Incorporate deflection heads where specified
- Consider skirting fixing - mechanical or using Gyproc Sealant
- If doorsets are fixed at a later stage allow a 10mm overall tolerance in width, 5mm in height
- Consider additional door detailing to BS 5234

Installation



- Determine and mark the wall position and make allowance for openings.
- Fix Gyframe Floor & Ceiling Channel along the centre line to the floor and ceiling at 600mm centres with suitable fixings.
- For **GypWall ROBUST** use Gyframe DC or EDC Floor & Ceiling Channels.
- On uneven floors, a timber sole plate, 38mm deep x width of stud, may be required.

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



- 94mm and 148mm channels require two rows of staggered fixings (600mm centres in each row).
- For partition heights between 4200mm and 8000mm Gyframe Deep Flange Floor & Ceiling Channel (DC) should be used at head and base (subject to deflection head).
- For partitions above 8000mm Gyframe Extra Deep Flange Floor & Ceiling Channel (EDC) should be used at head and base (subject to deflection head).



- Cut studs to a neat fit (maximum possible entry into head and base channel).

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

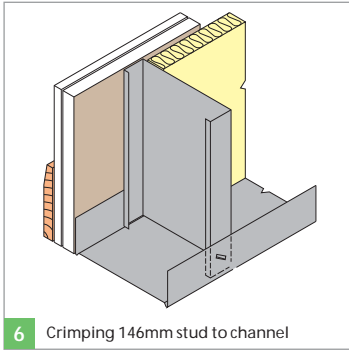
NB For deflection heads, the method will vary to suit requirement.



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



- Locate further studs at 600mm centres to a friction fit within the channel sections - this allows for adjustment during boarding. Position the studs so all face the same way.



6 Crimping 146mm stud to channel

- Where studs are used at heights greater than 4m, consider locking into the floor channels using a Gyproc Crimping Tool, or Gyproc Wafer Head Screws.



- Apply Gyproc Sealant to both sides of the frame perimeters to provide optimum acoustic performance.



Light and Medium Duty door openings

- Locate full height studs each side of the door opening. Fix to the Gyproframe Floor & Ceiling Channel at base using Gyproc Wafer Head Drywall Screws or Gyproc Wafer Head Jack-Point Screws, or crimping tool (dependant on the stud type and gauge).



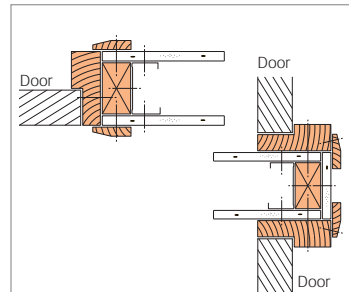
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- Form the door head from channel section, cut and bend to fit.



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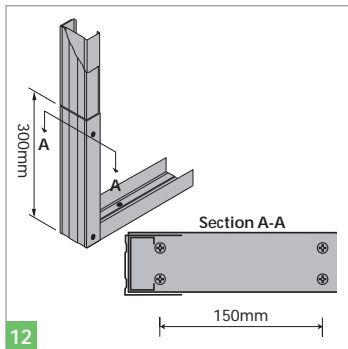
- Line the opening with timber - 38mm deep x width of stud, and fix through the metal frame into the timber.



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Standard door frame to satisfy BS 5234:
Parts 1 & 2: 1982, Light and Medium Duty

- Fix the door casing to the timber ground.
- NB** Advice should be sought from the door manufacturer prior to the construction of these details.



Heavy Duty and Severe Duty door openings

- Sleeve the studs either side of the opening with channel section, stopping 300mm short of the floor channel.

- Allow for extension of floor channel. This is then cut, bent, and interleaved as shown in section A-A, and then fixed twice to each side.



- At the head, cut and bend channel to extend 150mm down the face of the studs, and fix twice to each side of each stud.



Fixtures

- Install Gyframe 99 FC 50 Fixing Channel to accommodate medium weight fixtures.



- Install Gyframe 150 FC 90 Fixing Channel to accommodate heavyweight fixtures. If a plywood pattress is required, Gyframe Service Support Plates should be used.

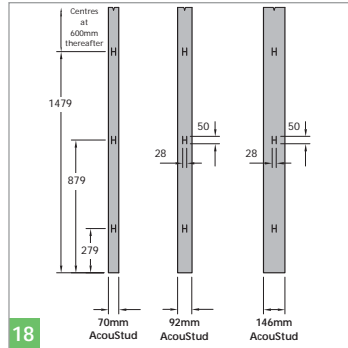


Services

- Install services (by appropriate trades), normally after one side is boarded. Pass horizontal runs through cut-outs in the studs and install Gyframe 99 FC 50 Fixing Channel or Gyframe Floor & Ceiling Channel between studs to provide support for recessed switch boxes.



- Where plastic clip in socket boxes are being used in fire-rated systems, Hilti CP617 Putty Pads can be used. Contact Hilti for full details, tel: 0800 886 100.
- All performance substantiation has to be provided by the fire-stopping manufacturer as is the case for any fire-stopping material.



- Fig 18 showing position of Gyproframe AcouStud cut-out.
- The position of cut-outs is the same for each Gyproframe 'C' Stud and Gyproframe 'I' Stud.



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.



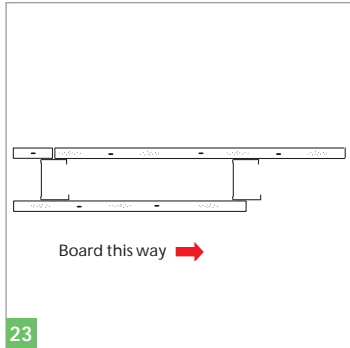
- Lightly butt boards, inserting screws not closer than 10mm from bound edges and 13mm from cut edges.



- Install Isover insulation or stone wool (as required) progressively as boarding proceeds.
- Isover insulation can be hung within the partition by trapping at the partition head using Gypframe Steel Angle.



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

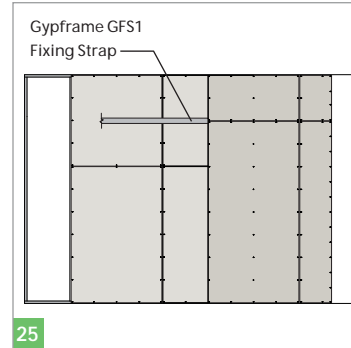


- Adjust studs as boarding proceeds and stagger board joints relative to the opposite side.
- Board partition in the direction of stud flanges as shown above.

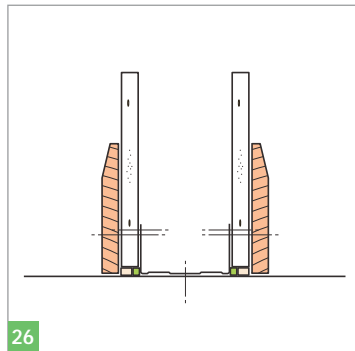


Board fixing - multi-layer

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

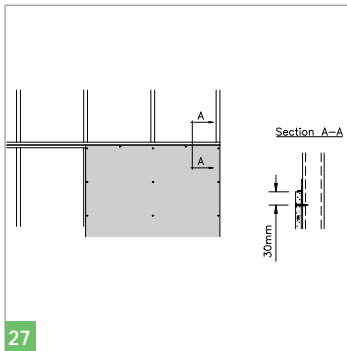


- Typical double layer board configuration is as above.
- If Gyproc Plank forms the base layer, fix horizontally with two 32mm Gyproc Drywall Screws to each stud position, including each cut end. Half stagger end joints in alternate layers.



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- Seal any gaps at the base of linings to both sides with Gyproc Sealant (in conjunction with Gyproc Joint Filler) where the partition is required to meet its optimum acoustic performance.



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Horizontal joint support - single layer

- Where the partition height exceeds the board length, install Gypframe GFT1 Fixing 'T' progressively across studs to coincide with board end joints, to maintain board alignment and to ensure system performance. Fix boards progressively to supports using Gyproc Drywall Screws of appropriate length.



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- NB** It is important that boards are levelled on their top edge. Position the top screw into the stud nominally 30mm down to allow the Gypframe GFT1 Fixing 'T' to be installed. Lightly butt and lift boards to the Gypframe GFT1 Fixing 'T' as work progresses. Position the next lift of boards to sit on the Gypframe GFT1 Fixing 'T'.



Horizontal joint support - multi-layer

- Where the partition height exceeds the board length, install Gyproframe GFS1 Fixing Strap progressively between board layers, to coincide with outer layer horizontal board end joints, to maintain board alignment and to ensure system performance.
- Fix boards progressively to supports using Gyproc Drywall Screws of appropriate length.



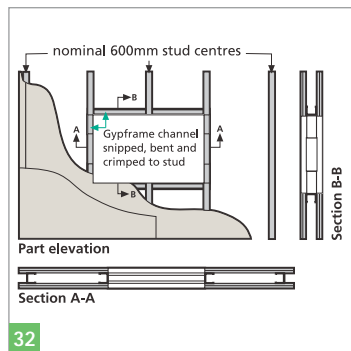
Splicing studs

- To extend studs, overlap by 600mm (minimum). Fix together using Gyproc Wafer Head Drywall Screws or steel pop rivets (two to each flange), or by using the Gyproc Stud Interlocking Tool twice to each flange.



Boxing studs

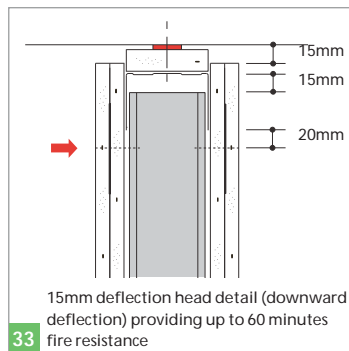
- Nest studs with minimum half overlap, allowing for an off-set at head and base to facilitate normal engagement into channels. Lock together at 600mm centres using a Gyproc Stud Interlocking Tool or Gyproc Wafer Head Drywall Screws, at 600mm centres on each flange.
- NB** Gyproc Stud Interlocking tool is not recommended for partition heights above 6 metres.



Large service openings

- Construct a framed opening, as shown above.

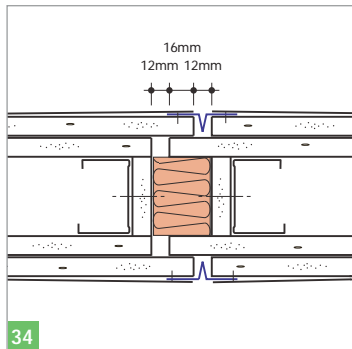
NB In fire-rated partitions, the service penetration should be fire-stopped, as specified by the appropriate contractor.



Deflection head

- Form the firestop at the head using Gyproc Plank with continuous line of Gyproc FireStrip. Gyproc Deep Flange Floor & Ceiling Channel is fixed through firestop to soffit at 600mm centres using suitable fixings. No fixings should be made through the boards into the flanges of the head channel. The arrow (→) denotes the position of the uppermost board fixing, which should be made into Gypframe GFS1 Fixing Strap or Gypframe stud nogging, ensuring the downward movement of the head channel is not impaired.

- Alternative deflection head details are available. Contact British Gypsum Drywall Academy Technical Advice Centre.

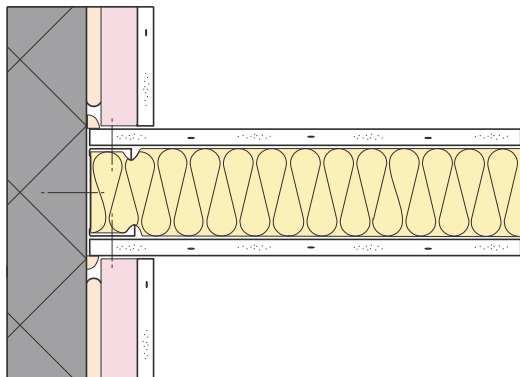


Control joints

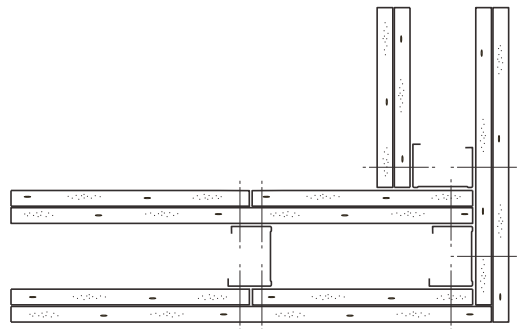
- Install as specified to relieve stress / movement and to coincide with movement joints in the external structure.
- Gyproc Control Joint may be cut with a fine-tooth saw. Butt-end joints should be aligned accurately to provide a neat fit. Place the Gyproc Control Joint into position and secure to the Gyproc plasterboard with 13mm corrosion resistant staples at 150mm maximum centres through both flanges.

Ensure the Gyproc Control Joint is cut to a neat fit at the structural floor and soffit or ceiling perimeters and the ends sealed with Gyproc Sealant.

Junction details

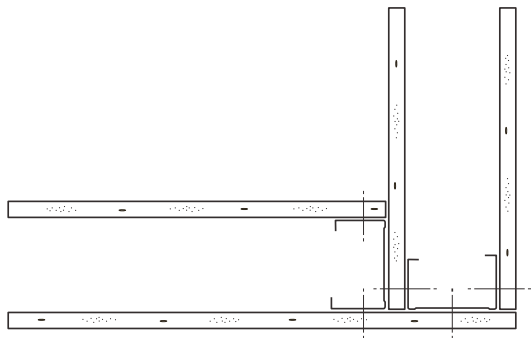


35 Abutment to external wall lined with Gyproc ThermaLine boards

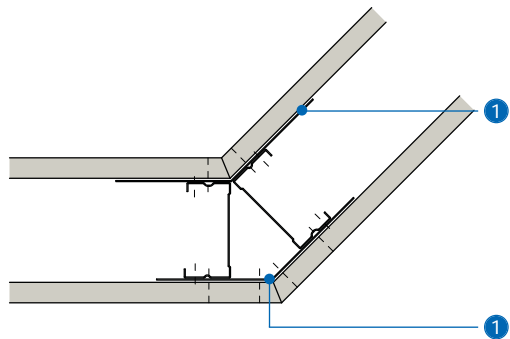


36 Corner detail - double layer

Junction details

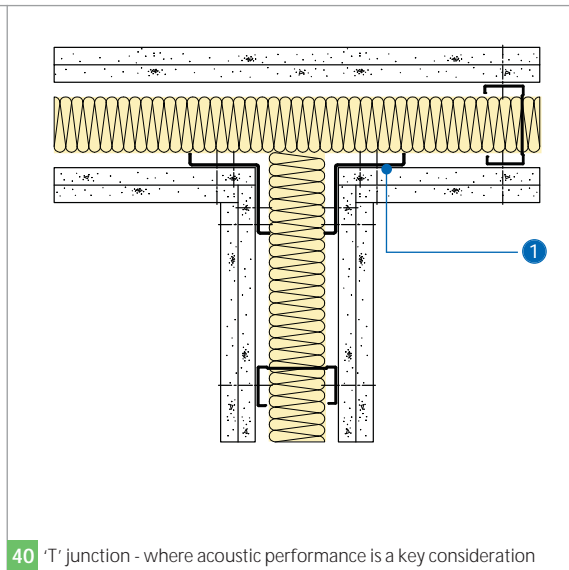
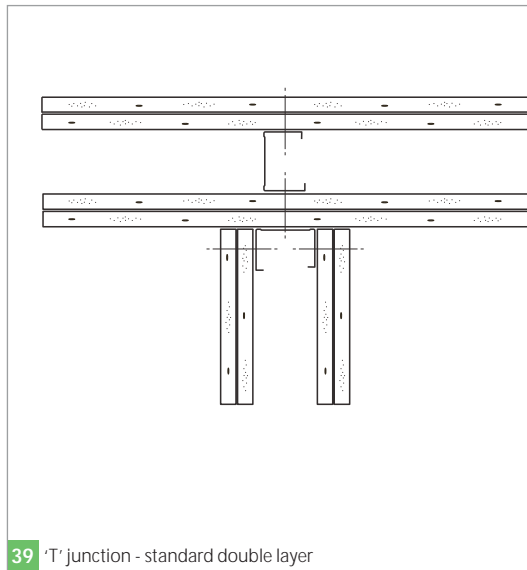


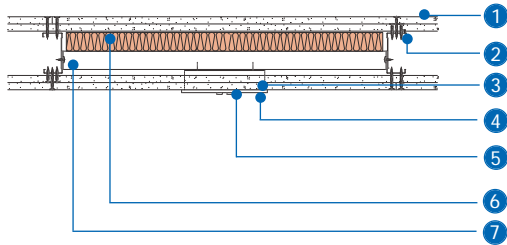
37 Corner detail - single layer



38 Splayed corner

1 Gypframe GA6 Splayed Angle





41 Socket box installation - up to 120 minutes fire resistance

- 1 Gyproc plasterboard
- 2 Gypframe 70 S 50 'C' Studs at 600mm centres
- 3 Plasterboard cut to allow a close fitting entry for the socket box
- 4 Gyproc Sealant at switch box perimeter for improved acoustics
- 5 Electrical socket with metal back box
- 6 Stone mineral wool (minimum 80kg/m³) backing to socket box
- 7 Gypframe 72 C 50 Standard Floor & Ceiling Channel receiving fixing of socket box - channel legs tabbed, bent and fixed to metal studs with Gyproc Wafer Head Drywall Screws