

GypWall SUPERIOR

The extra strong, extra durable, sound resistant system that you can direct fix to

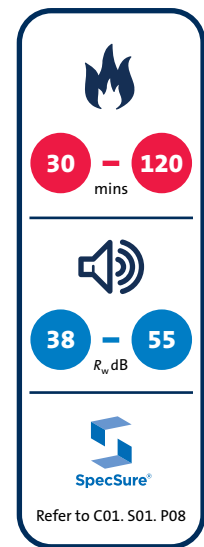


GypWall SUPERIOR

Utilising the latest addition to the Gyproc performance board range, Gyproc Habito, GypWall SUPERIOR is our extra strong, extra durable, sound resistant system that you can direct fix to. Gyproc Habito provides enhanced acoustics, impact resistance and for the first time, fixing capability.

Key benefits

- A high impact-resistant partition system for use where a more durable structure is required
- The sound insulation of GypWall SUPERIOR partitions can be increased with the inclusion of Isover Acoustic Roll
- Hang up to 15kg from one 5mm woodscrew
- Can achieve up to 120 minutes fire resistance



GypWall SUPERIOR Performance

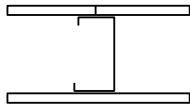
70mm Gypframe "C" Studs

For details of when
to specify fire
resistance using BS
► Refer to C02. S01. P18



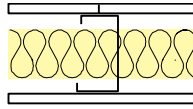
Table 1a – Solutions to satisfy requirements of BS 5234

①



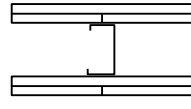
One layer of board each side of 70mm
Gypframe 'C' studs at 600mm centres

②



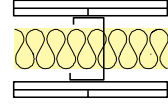
One layer of board each side of 70mm
Gypframe 'C' studs at 600mm centres
plus 50mm Isover Acoustic Roll in the
cavity

③



Two layers of board each side of 70mm
Gypframe 'C' studs at 600mm centres

④



Two layers of board each side of 70mm
Gypframe 'C' studs at 600mm centres
plus 50mm Isover Acoustic Roll in the
cavity

Detail	Partition thickness mm	Inner board type mm	Outer board type mm	Max Partition height ¹ mm	Sound insulation R_w dB	Duty rating	Approx. weight kg/m ²	System Reference
30 minutes fire resistance (BS) ²								
①	97	Habito 12.5mm		3600	38	Severe	26	K206001
②	97	Habito 12.5mm		3600	44	Severe	27	K206002
60 minutes fire resistance (BS) ²								
③	122	SoundBloc 12.5mm	Habito 12.5mm	4600	49	Severe	48	K206003
④	122	SoundBloc 12.5mm	Habito 12.5mm	4600	55	Severe	49	K206005
120 minutes fire resistance (BS) ²								
③	122	Habito 12.5mm	Habito 12.5mm	4600	48	Severe	50	K206004
④	122	FireLine 12.5mm	Habito 12.5mm	4600	52	Severe	49	K206006
④	122	Habito 12.5mm	Habito 12.5mm	4600	53	Severe	51	K206007

¹Based on a limiting deflection of L/240 at 200Pa with studs at 600mm centres. If greater heights are required, please refer to the design section. For heights between 4200mm and 8000mm, Gypframe Deep Flange Door and Ceiling Channels (DC) should be used at the head and base. Where special design requirements, please consult the Gyproc Technical Department for guidance.

² Board joints must be reinforced with Gyproc Paper Joint Tape for the quoted fire resistance periods to be achieved.

Building design

Whilst our GypWall partition systems are non-loadbearing, they are able to provide resistance to levels of horizontal uniformly distributed loads in accordance with BS 6399.

► Refer to C02. S01. P37 – Robustness.

Planning – key factors

The position of some services and heavy fixtures should be predetermined, and their installation planned into the frame erection stage. All penetrations will need to be adequately fire-stopped if integrity is to be maintained.

Fixing floor and ceiling channels

Floor and ceiling channels must be securely fixed with a row of fixings at 600mm maximum centres (148mm channels require two rows of staggered fittings at 600mm centres in each row). If the floor is uneven, a 38mm thick timber sole plate equal to the width of the channel should be used.

If the concrete or screeded floor is new, consideration should be given to the installation of a damp proof membrane between the floor surface and the channel or sole plate.

Door openings

The designer should consider the thickness tolerances of the partition types in relation to the proposed door frame detail. To satisfy BS5234 requirements for heavy and severe duty, door framing should be specified in accordance with Figure 5 or 6 (on the following pages).

Exceptionally heavy doorsets may require additional provision. Contact the Gyproc Technical Department if further guidance is required.

Cavity Fire Barriers

Minimum 12.5mm Gyproc plasterboard, screw-fixed into the web of perimeter channels or vertical studs, will provide a satisfactory closure to flame or smoke.

► Refer to C06. S06. P422 – Cavity fire barriers.

Control Joints

Control joints may be required in the partition to relieve stresses induced by expansion and contraction of the structure. The location of control joints is at the discretion of the specifier. It is recommended that they coincide with movement joints within the surrounding structure.

Deflection heads

Deflection heads, by definition, must be able to move and, therefore, achieving an airtight seal is difficult. Inevitably, this will have a detrimental effect on the acoustic performance of any wall which incorporates deflection at the head. The approach shown in C04. S06. P207 – GypWall STAGGERED, could be considered to minimise loss of performance. In most cases, a suspended ceiling will also assist in minimising loss of performance.

Services

Penetrations

Penetrations of fire resistant constructions for services need careful consideration to ensure that the integrity of the element is not impaired, and also that the services themselves do not act as a mechanism of fire spread.

It is important to use only those services and their installations which have been shown by fire test to be able to maintain the integrity of the construction.

Electrical

The installation of electrical services should be carried out in accordance with all relevant legislation, regulations and guidance. The cut-outs in the studs can be used for routing electrical and other small services.

Fixtures

Due to the inherent strength of Gyproc Habito, some fixtures can be applied directly to the board.

► Refer to C02. S01. P44 - Table 13

Jointing

When installing Gyproc Habito onto a metal frame, tape and joint preparation is recommended and approved by Gyproc. The Gyproc Jointing process can provide a durable joint reinforcement with a smooth, continuous, crack free surface.

► Refer to C08. S03. P492 – Jointing

Tiling

Tiles up to 32kg/m² can be applied to the surface of lightweight partition systems.

► Refer to C08. S04. P498 – Tiling.

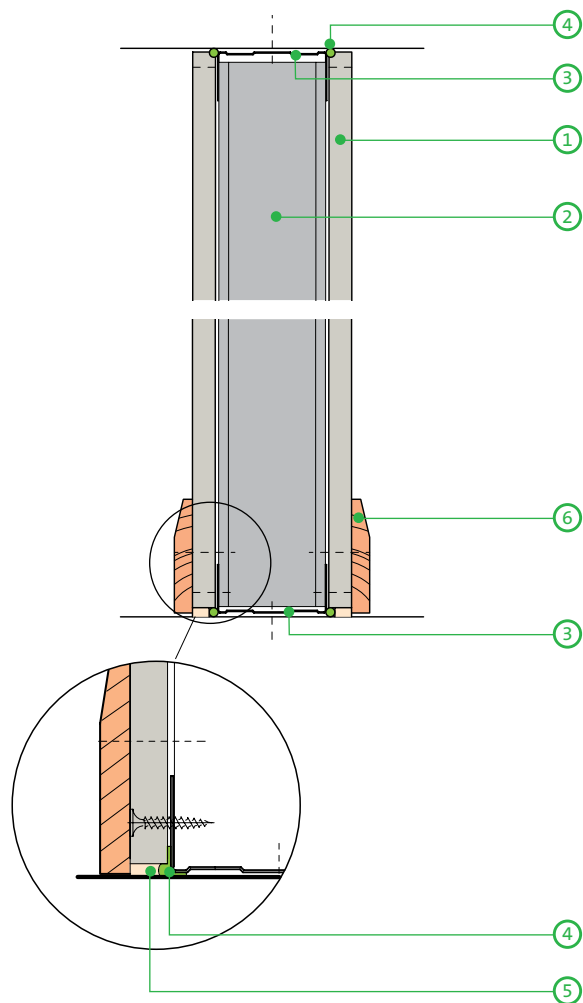
Construction details

For standard GypWall construction details

► Refer to Partitions introduction C04. S01. P110 – construction details.

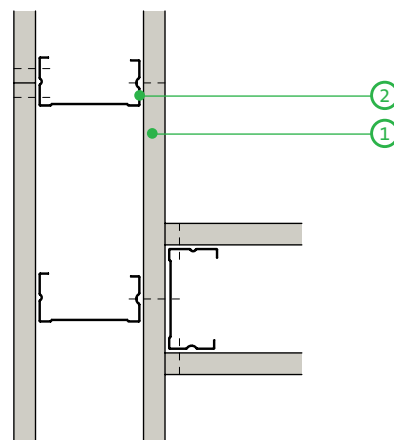
GypWall SUPERIOR construction details

1



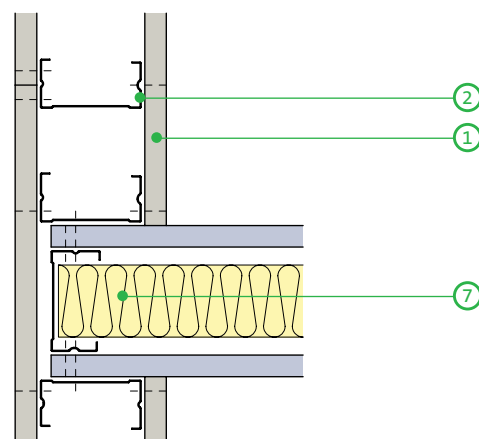
Head and base

2



'T' junction - single layer

3



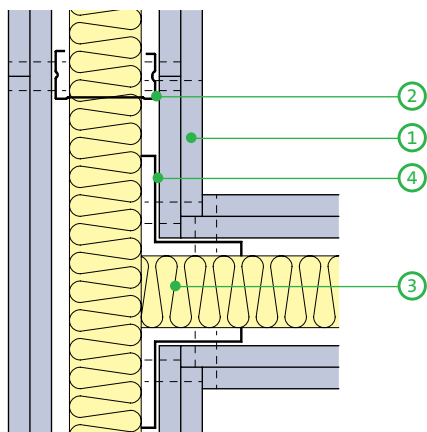
'T' Junction when partition with higher acoustic performance abuts a partition with lower acoustic performance. Acoustic principles only - detail may not be suitable for all solutions

- 1 Gyproc plasterboard
- 2 Gypframe 'C' Stud
- 3 Gypframe Floor & Ceiling Channel
- 4 Gyproc Sealant
- 5 Bulk fill Gyproc jointing materials (where gap exceeds 5mm)
- 6 Skirting

- 7 Isover Insulation

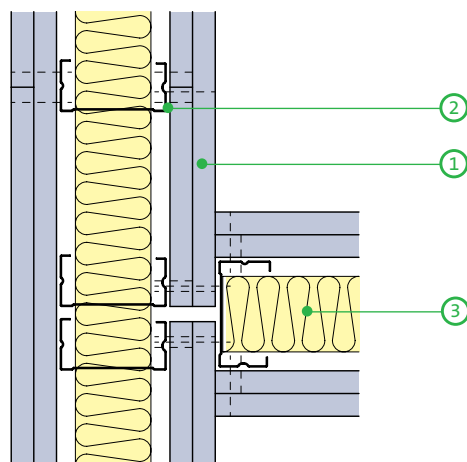
GypWall superior construction details (continued)

4



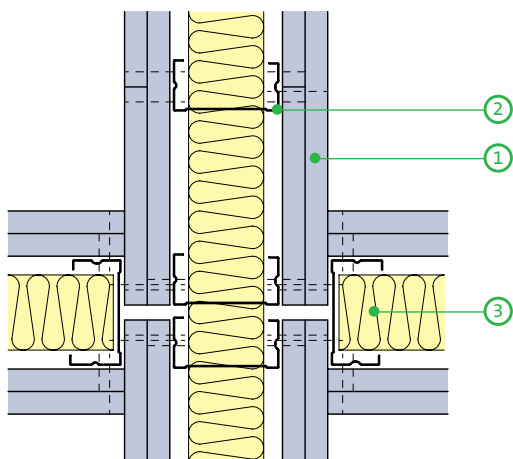
'T' junction to optimise acoustic performance and reduce flanking transmission

5



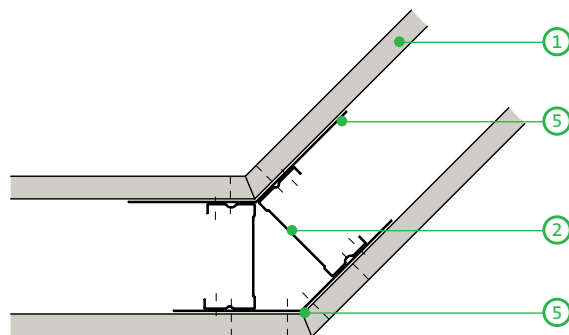
'T' junction to optimise acoustic performance and reduce flanking transmission

6



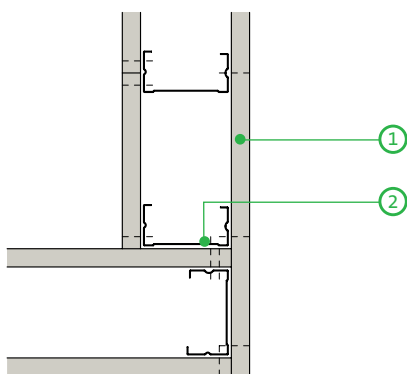
Four way junction to optimise acoustic performance and reduce flanking transmission

7



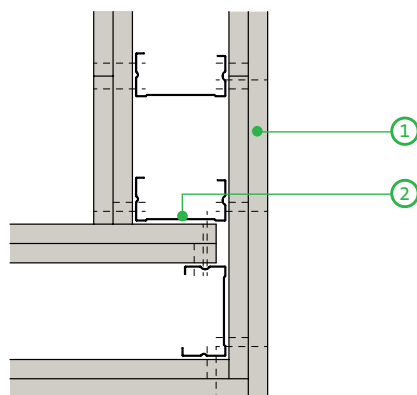
Splayed corner

8



Corner detail - single layer

9



Corner detail - double layer

1 Gyproc plasterboard

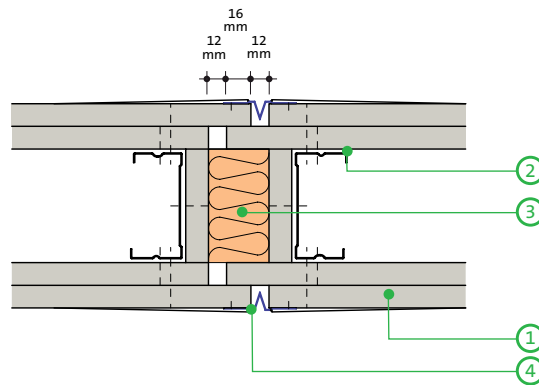
2 Gypframe 'C' Stud

3 Isover insulation

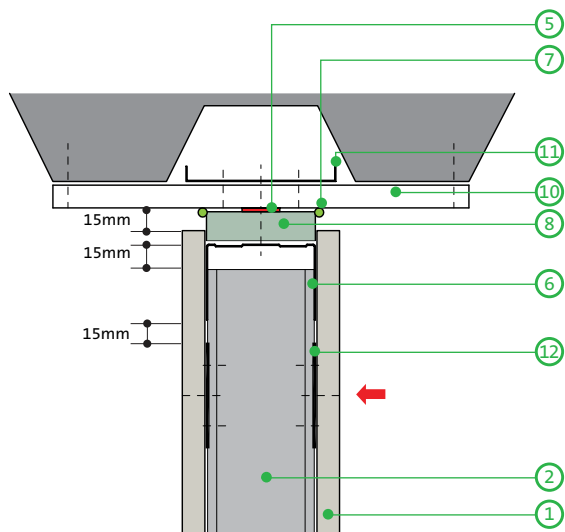
4 Gypframe GA5 Internal Fixing Angle

5 Gypframe GA6 Splayed Angle

10

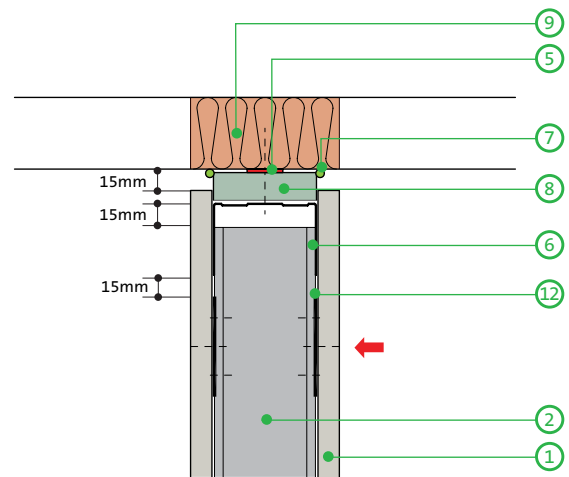


11



Deflection head parallel to floor profile for 15mm downward movement and up to 60 minutes fire resistance¹
- BS 476 Part 22: 1987

12



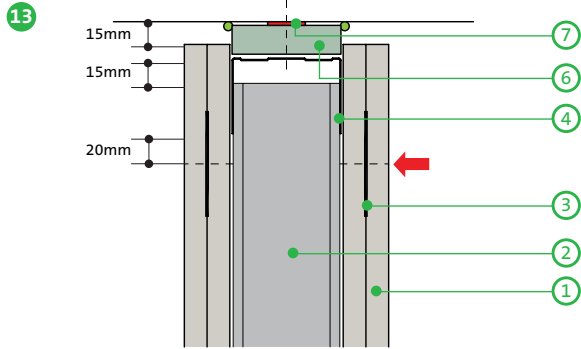
Deflection head perpendicular to floor profile for 15mm downward movement and up to 60 minutes fire resistance
- BS 476 Part 22: 1987

- 1 Gyproc plasterboard
- 2 Gyproframe 'C' Stud
- 3 Stone mineral wool (minimum density 23kg/m³) (by others)
- 4 Gyproc Control Joint
- 5 Gyproc FireStrip (continuous line)
- 6 Gyproframe Deep Flange Floor & Ceiling Channels (DC)
- 7 Gyproc Sealant

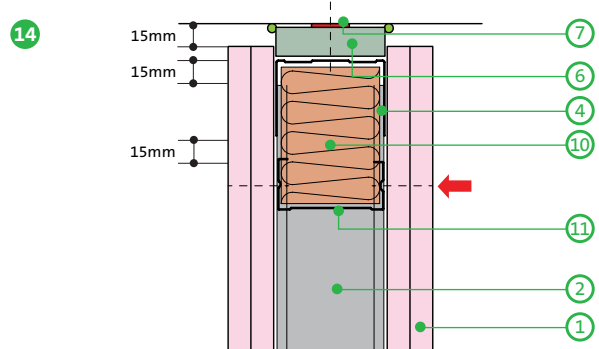
- 8 Gyproc CoreBoard
- 9 Fire-stopping (by others)
- 10 Glasroc F FIRECASE
- 11 Gyproframe 99 FC 50 Fixing Channel
- 12 Gyproframe GFS1 Fixing Strap fixed to studs with Gyproc Wafer Head Drywall Screws

NB Installing the screw into the side of the Gyproframe Service Support Plate and the web of the Gyproframe 'C' Stud will avoid creating excessive distortion to the lining board. 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 Gyproframe GFS1 Fixing Strap. Continuous Gyproc FireStrip must be installed as shown to maintain fire performance.

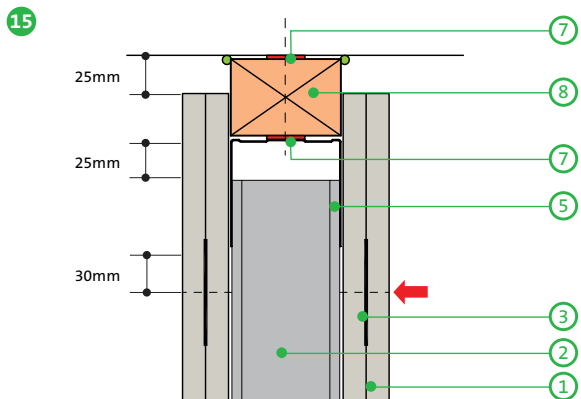
¹ To minimise acoustic downgrade, install Isover insulation within the hollow rib void.



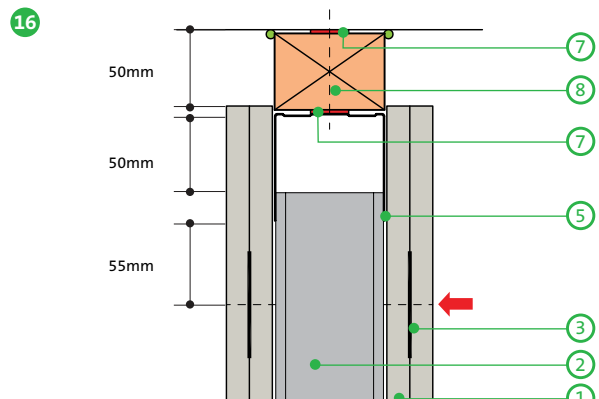
Deflection head for 15mm downward movement and 60 minutes fire resistance - BS 476 Part 22: 1987



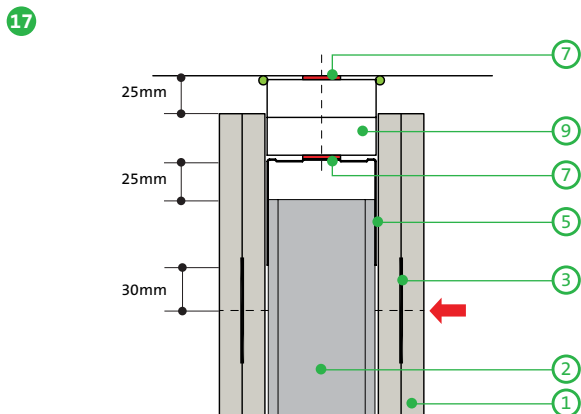
Deflection head for 15mm downward movement and up to 120 minutes fire resistance - BS 476 Part 22: 1987



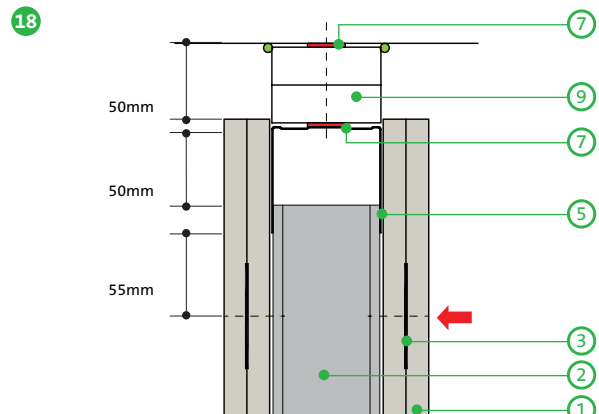
Deflection head for plus or minus 25mm movement and 60 minutes fire resistance - BS 476 Part 22: 1987



Deflection head for 50mm downward movement and 60 minutes fire resistance - BS 476 Part 22: 1987



Deflection head for plus or minus 25mm movement and 60 minutes fire resistance - BS 476 Part 22: 1987



Deflection head for 50mm downward movement and 60 minutes fire resistance - BS 476 Part 22: 1987

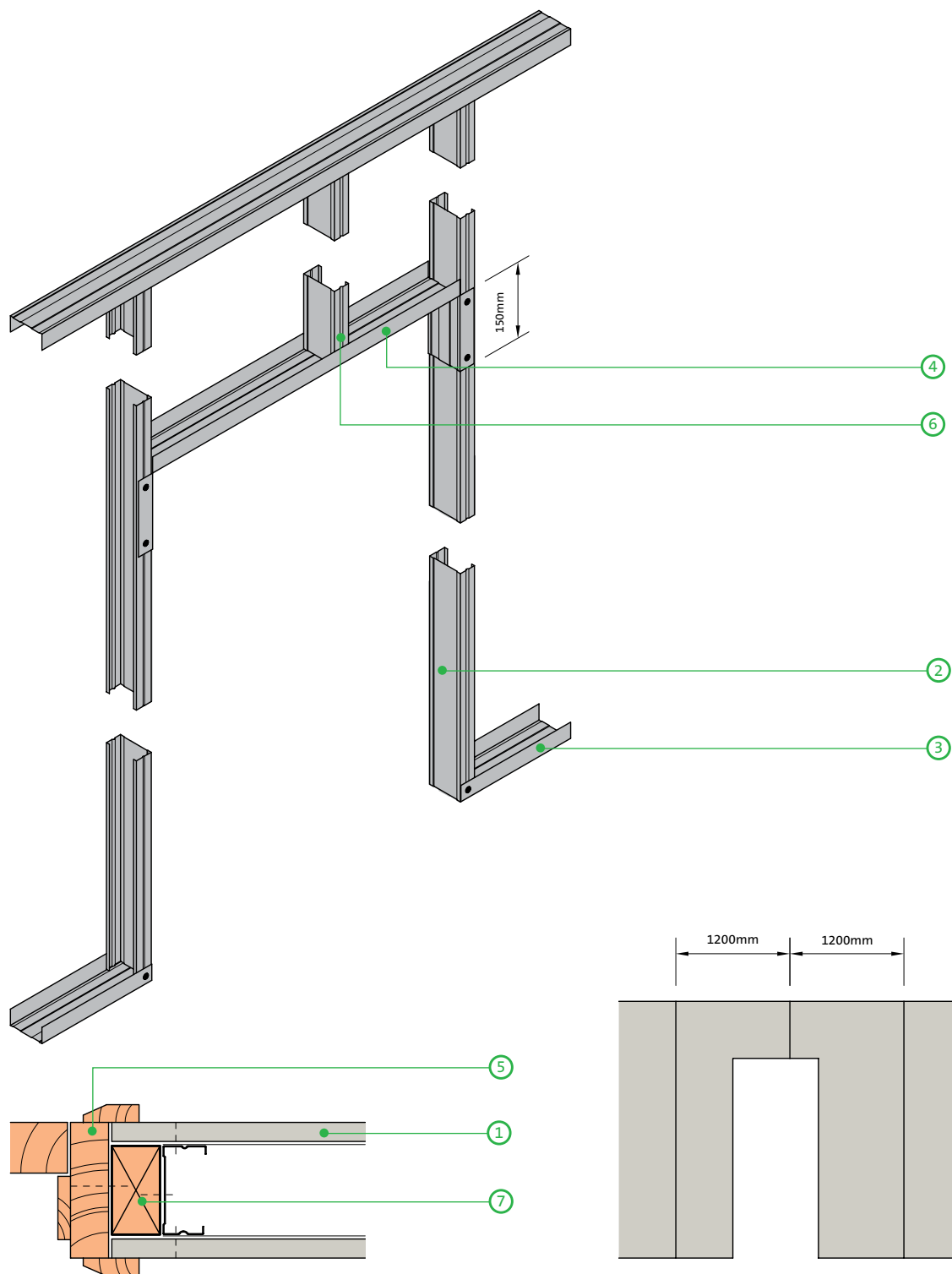
- 1 Gyproc plasterboard
- 2 Gypframe 'C' Stud
- 3 Gypframe GFS1 Fixing Strap
- 4 Gypframe Deep Flange Floor & Ceiling Channel
- 5 Gypframe Extra Deep Flange Floor & Ceiling Channel
- 6 Gyproc CoreBoard

- 7 Gyproc FireStrip (continuous)
- 8 Timber head plate suitably fixed to structure
- 9 25mm Glasroc F FIRECASE
- 10 Stone mineral wool (by others)
- 11 Nogging cut from Gypframe 'C' Stud

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 fixing, which should be made into Gypframe GFS1 Fixing Strap (or stud nogging in construction detail 14). Continuous Gyproc FireStrip must be installed as shown to maintain fire performance. Where there is a need for a deflection head in a 90 minute wall, the 120 minute solution can be used (refer to construction detail 16) or alternatively, please contact the Gyproc Technical Department for further guidance.

GypWall SUPERIOR construction details (continued)

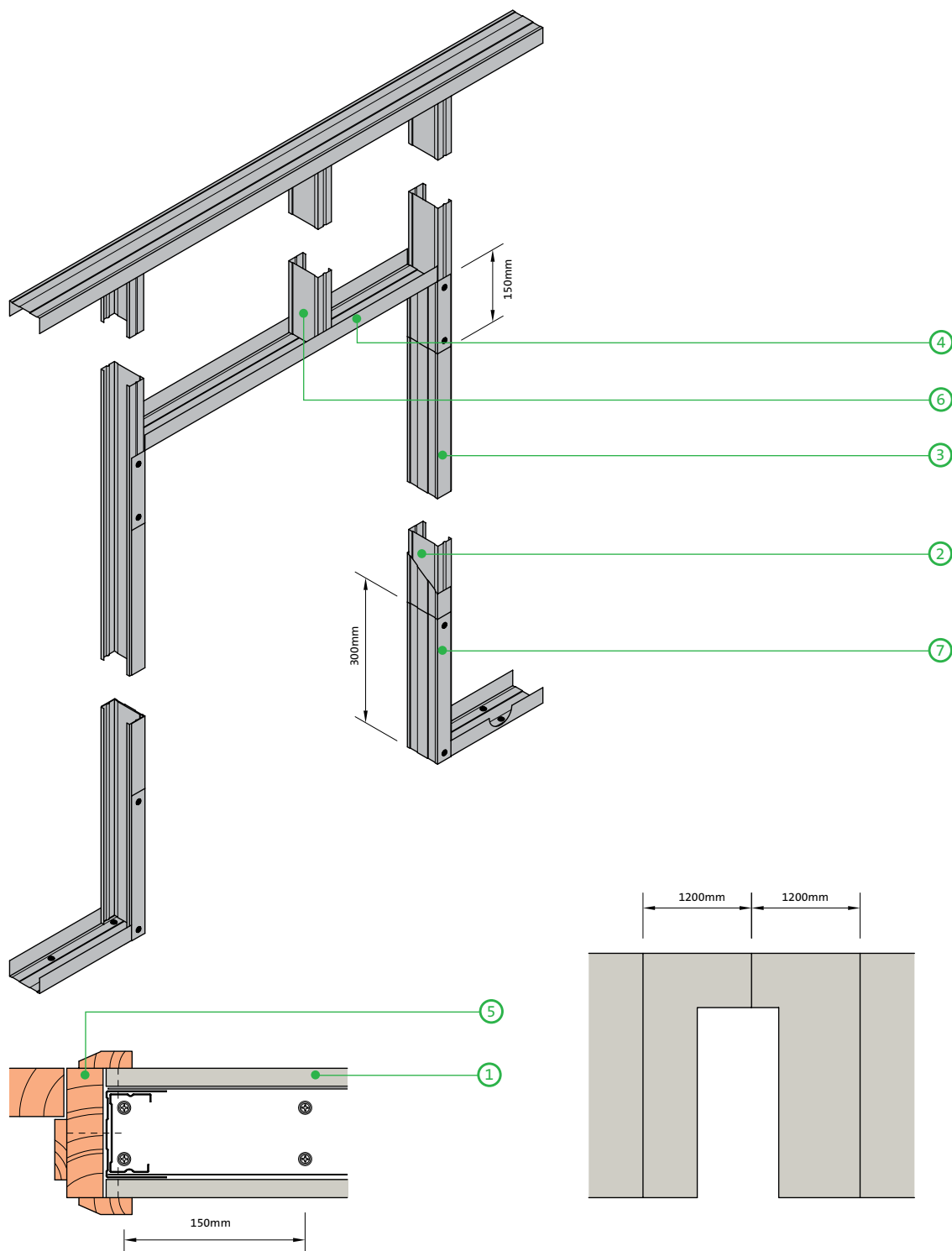
19



Door frame (maximum 1200mm width) to satisfy BS 5234: Parts 1 & 2: 1992 - Light and Medium Duty (up to 35kg door)

- | | |
|---|---|
| 1 Gyproc plasterboard | 5 Timber door frame and architrave |
| 2 Gypframe 'C' Stud | 6 Gypframe 'C' Stud to maintain stud module |
| 3 Gypframe Floor & Ceiling Channel | 7 Timber sub-frame |
| 4 Gypframe Floor & Ceiling Channel cut and bent to form door head | |

NB Advice should be sought from the door manufacturer prior to the construction of these details.



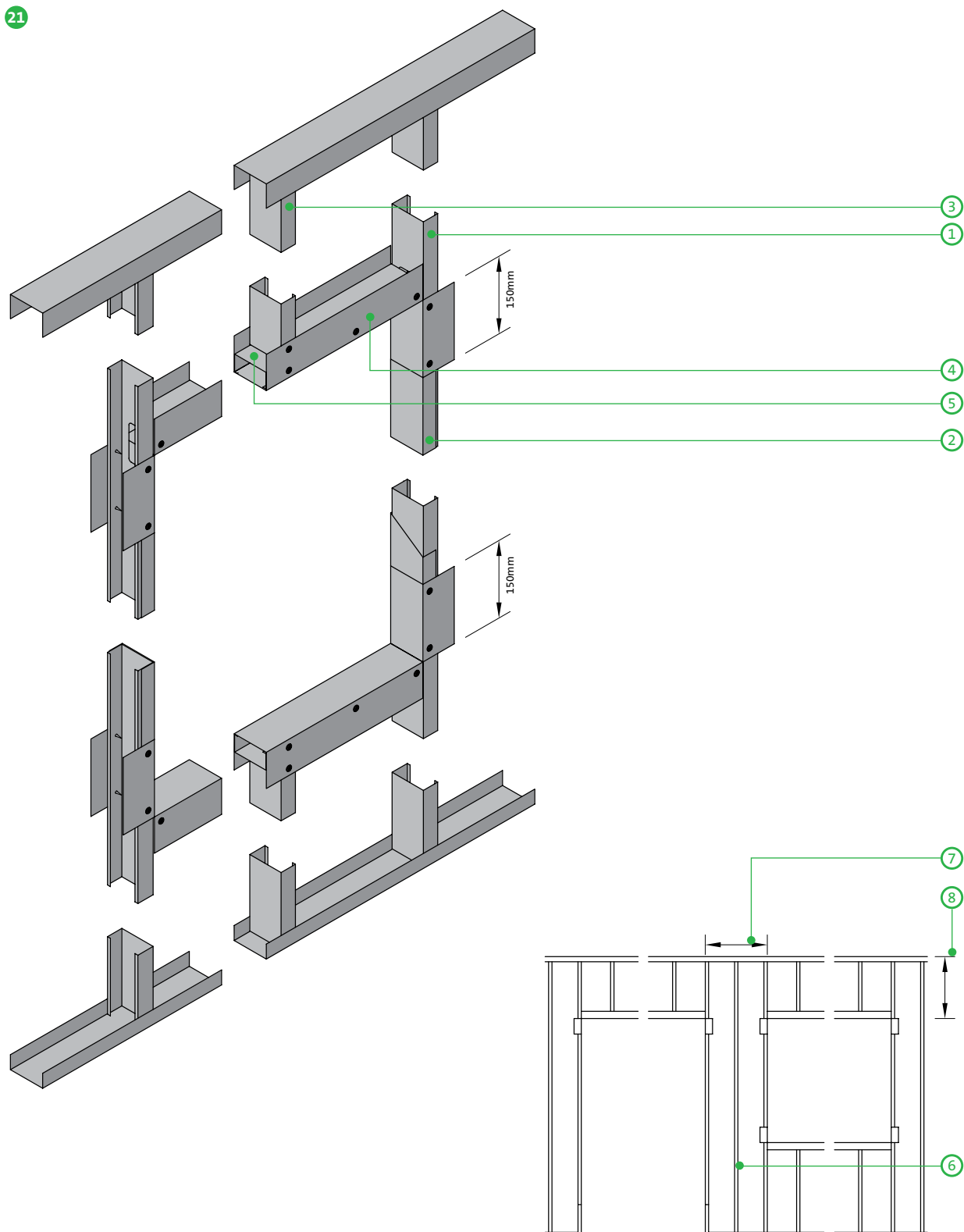
Door frame (maximum 1200mm width) to satisfy BS 5234: Parts 1 & 2: 1992 - Heavy and Severe Duty (up to 60kg door)

- | | |
|---|--|
| 1 Gyproc plasterboard | 5 Timber door frame and architrave |
| 2 Gypframe 'C' Stud | 6 Gypframe 'C' Stud to maintain stud module |
| 3 Gypframe Floor & Ceiling Channel to sleeve studs | 7 Gypframe Floor & Ceiling Channel cut and bent to extend up studs |
| 4 Gypframe Floor & Ceiling Channel cut and bent to form door head | |

NB Advice should be sought from the door manufacturer prior to the construction of these details.

NB At the base, the channel is cut and bent to extend 300mm up the studs and fixed each side with two Gyproc Wafer Head Drywall Screws. The studs each side of the opening are sleeved full height of opening with Gypframe Floor & Ceiling Channel.

21



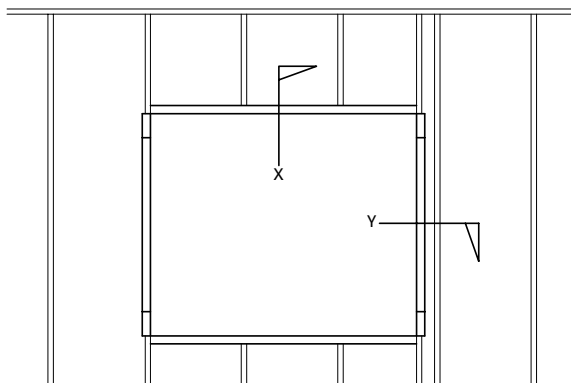
Openings 1201 - 3300mm wide, for example double doors or large windows

- | | |
|---|---|
| 1 Gypframe 'C' Stud | 6 Centre stud required for margin up to 600mm between openings |
| 2 Stud sleeved to full opening height with Gypframe Floor & Ceiling Channel | 7 Partition between openings, minimum 600mm for Gypframe 'C' Studs (minimum 300mm for Gypframe 'T' Studs) |
| 3 Gypframe studs (appropriate to system) | 8 Maximum distance 2400mm (if exceeds 2400mm contact Gyproc Technical Department) |
| 4 Gypframe Extra Deep Flange Floor & Ceiling Channel | |
| 5 Gypframe stud insert | |

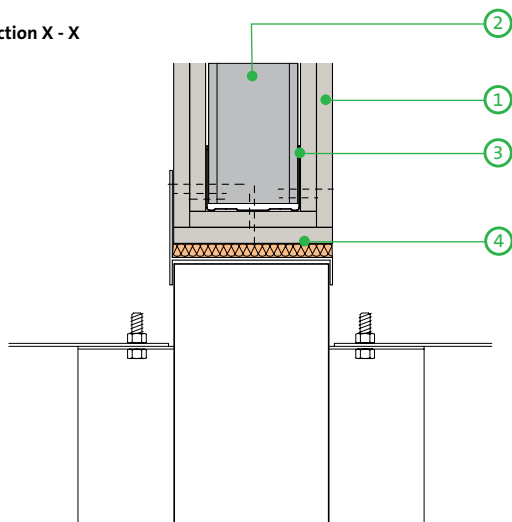
GypWall superior construction details (continued)

22

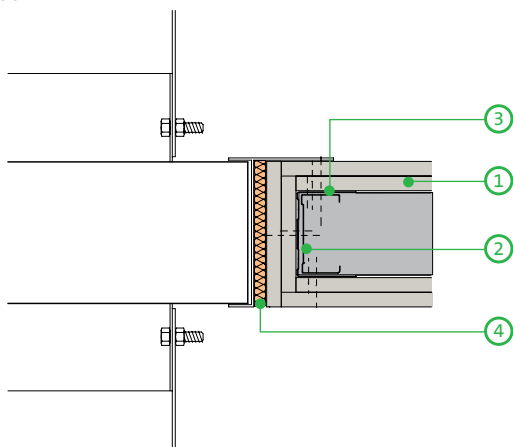
Elevation



Section X - X

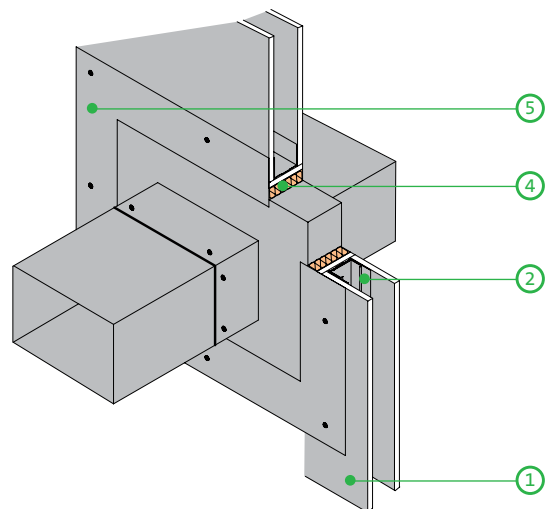


Section Y - Y



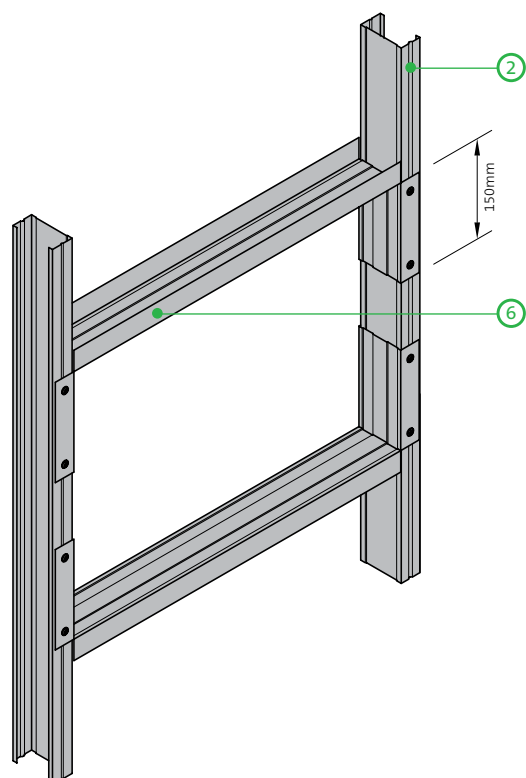
Opening for service penetrations in fire-rated partitions

23



Fire tested construction in which the damper is supported by the partition (isometric view)

24



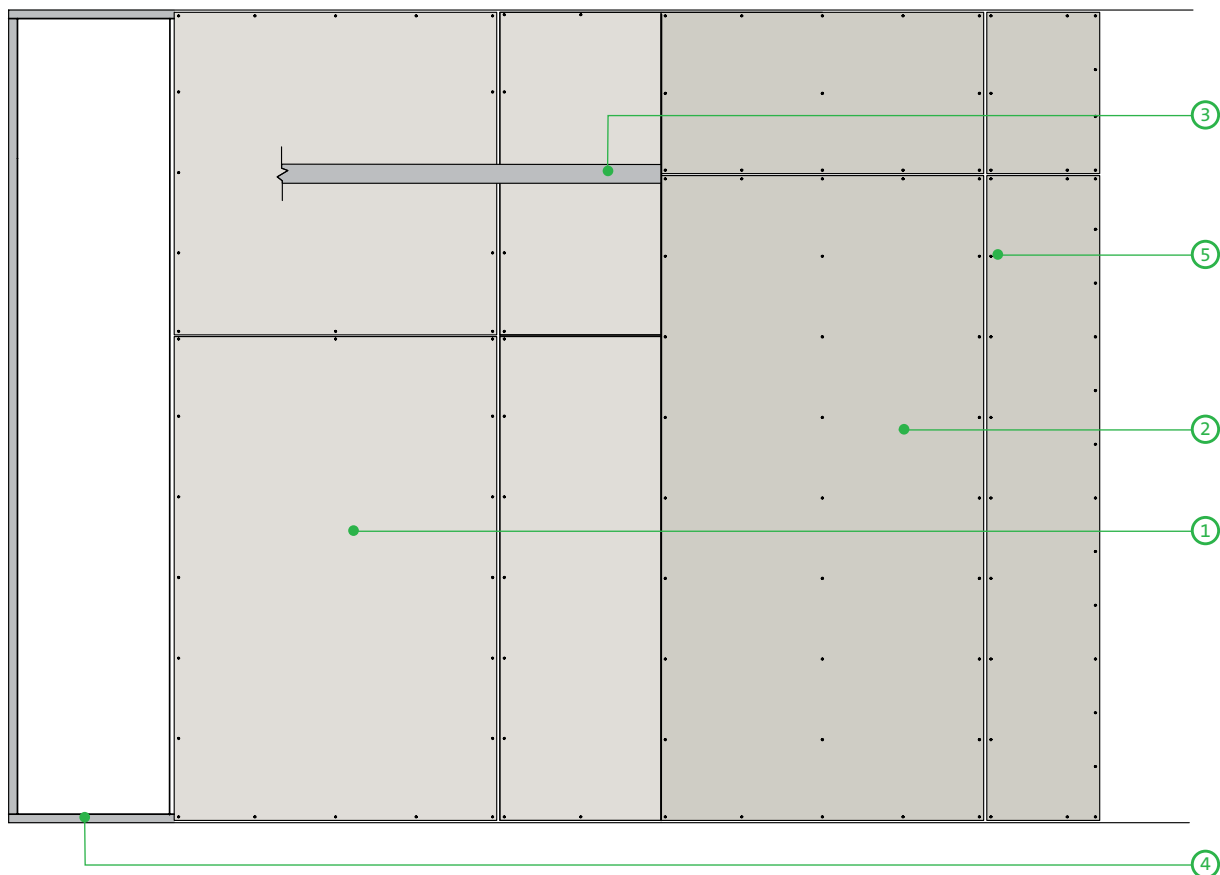
Opening up to 600mm wide for services

- 1 Gyproc plasterboard
- 2 Gypframe 'C' Stud
- 3 Gypframe Floor & Ceiling Channel
- 4 Penetration seal if required (refer to damper manufacturer for details)

- 5 Damper (by others). Weight of damper should not exceed 57kg. Size of damper should not exceed 1400 x 1200mm
- 6 Gypframe Folded Edge Standard Floor & Ceiling Channel cut and bent to form opening head and cill

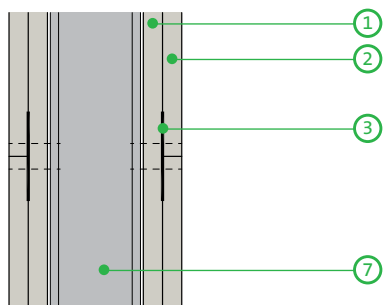
GypWall SUPERIOR construction details (continued)

25



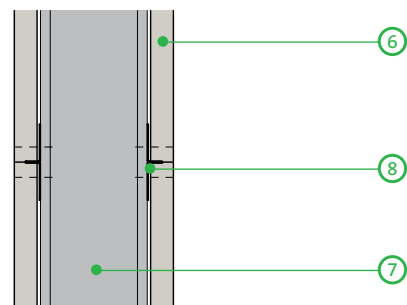
Board layout - typical configuration

26



Horizontal board joint - double layer

27



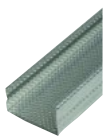
Horizontal board joint - single layer

- 1 Inner layer of Gyproc plasterboard
- 2 Outer layer of Gyproc plasterboard
- 3 Gypframe GFS1 Fixing Strap
- 4 Gypframe metal framing

- 5 Gyproc Drywall Screws or High Performance Screws
- 6 Gyproc plasterboard
- 7 Gypframe 'C' Stud
- 8 Gypframe GFT1 Fixing T (alternatively use Gypframe GSF1 Fixing Strap)

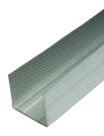
GypWall system components

Gypframe metal components



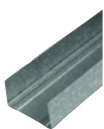
Gypframe 'C' Studs (70 S 50, 70 S 60)

Vertical stud providing acoustic and structural performances designed to receive fixing of board to both sides.



Gypframe Extra Deep Flange Floor & Ceiling Channels (72 EDC 80)

Floor and ceiling channels with extra deep flanges for retaining the Gypframe studs at floor and ceiling junctions for partitions over 8000mm high. Also used around openings and in deflection heads (maximum 50mm deflection).



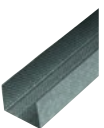
Gypframe Folded Edge Standard Floor & Ceiling Channels (72 FEC 50)

Standard floor and ceiling channels for retaining the Gypframe studs at floor and ceiling junctions and around openings to heights not exceeding 4200mm.



Gypframe 99 FC 50 Fixing Channel

A versatile metal fixing channel used to support medium weight fixtures on walls.



Gypframe Deep Flange Floor & Ceiling Channels (72 DC 80)

Floor and ceiling channels with deep flanges for retaining the Gypframe studs at floor and ceiling junctions for partitions 4200mm to 8000mm high. Also used around openings and in deflection heads (maximum 30mm deflection).



Gypframe GFS1 Fixing Strap

Used to support horizontal board joints and within deflection heads.

Board products



Gyproc Habito

Gypsum plasterboard with a reinforced core providing enhanced sound insulation, impact resistance and fixing capability.



Gyproc SoundBloc¹

Gypsum plasterboard with a high density core for enhanced sound insulation performance.



Gyproc FireLine¹

Gypsum plasterboard with fire resistant additives.

Fixing products



Gyproc High Performance Drywall Screws

Corrosion resistant high performance screws designed for fixing Gyproc Habito plasterboard to metal and timber framing systems.



Habito Winged Screw

The Gyproc Habito Winged screw is specifically used for Gyproc Habito installation on both Timber & Metal Stud. The wings at the tip of the screw burrow into Habito to allow the screw to sit flush with the board every time.

¹ Also available in a Moisture Resistant (MR) version. MR boards are specified in intermittent wet use areas.

GypWall system components (continued)

Plasterboard accessories



Gyproc Jointing Materials

Jointing compounds, ready mixes and adhesives for reinforcement and finishing of board joints.



Gyproc Sealant

Used to seal air paths for optimum sound insulation.



Gyproc FireStrip

A soft extruded linear intumescent gap sealer to maintain fire resistance located directly to the underside of the soffit when forming a deflection head.



Gyproc Paper Joint Tape

A paper tape designed for reinforcement of flat joints or internal angles.



Gyproc Control Joint

To accommodate structural movement of up to 7mm.



Gyproc Drywall Primer

Used to prepare for painting.
Tub contents 10 litre.

