CasoLine MF

Concealed monolithic metal frame suspended ceiling system

SpecSure®
GYPROC SYSTEMS GUARANTEE

CasoLine MF

CasoLine MF is a suspended ceiling system suitable for most internal drylining applications. The fully concealed grid and ceiling lining can be used in conjunction with Gyproc plasterboards and Gyptone and Rigitone acoustic ceiling boards to create a seamless, monolithic appearance.

30 – 120 mins

0.35 – 0.85 α_w

56 – 66 R_w dB

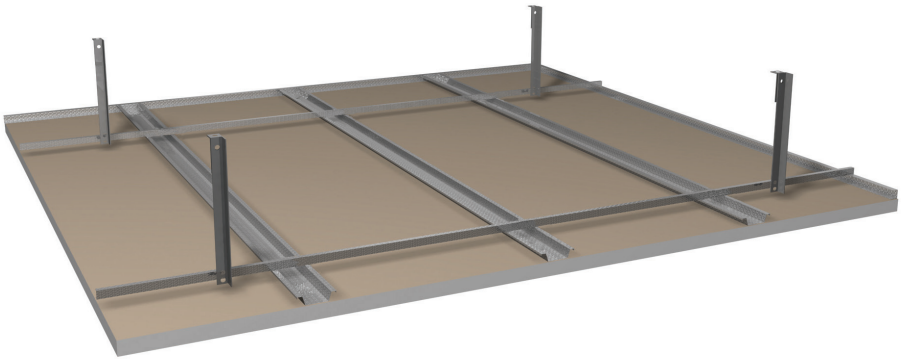
68 – 50 $L_{n,w}$ dB

SpecSure®

Refer to C01. S01. P08

Key benefits

- High level of design flexibility; bulkheads, gradients and changes in height can all be fully integrated
- Services inspection and access points are easily included during design or installation
- Adaptable metal framing system fully compatible with a wide range of Gyproc lining solutions to achieve a variety of performances tailored to meet individual project requirements
- Improvement to acoustic and fire performance can be achieved without the need to access the room above
- Partition heights can be reduced as the partition channel can be supported by the ceiling framework rather than the soffit



You may also be interested in...

ShaftWall
To achieve up to a full 120 minutes fire resistance to a ceiling void.

▶ Refer to C05. S02. P298 – horizontal **ShaftWall**.

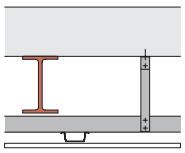
CasoLine MF performance

Fire protection to steel beams supporting concrete floors[1]

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

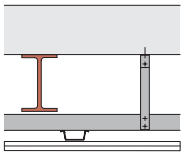
Table 1 – Solutions to satisfy requirements of *BS 476: Part 23: 1987*

1



CasoLine MF ceiling suspended beneath steel beams supporting a concrete floor. Ceiling linings as in table.

2



CasoLine MF ceiling suspended beneath steel beams supporting a concrete floor. Ceiling linings as in table.

Detail	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	MF5 support centres mm	MF7 support centres mm	System reference
30 minutes fire resistance BS						
2	Gyproc WallBoard	2 x 12.5	18	450	1200	C100013
60 minutes fire resistance BS						
1	Gyproc FireLine	1 x 12.5	11	450	1200	C100014
1	Glasroc F MULTIBOARD	1 x 12.5	12	600	1200	G100036
120 minutes fire resistance BS						
2	Glasroc F MULTIBOARD	2 x 10	20	400	1200	G100038
2	Gyproc FireLine	2 x 15	25	400	900	C100015

▶ For further assistance in choosing the right solution for your project, try our System Selector; an online tool that enables quick and easy filtering by performance criteria. It provides system specific information downloads including BIM (Revit) objects. Go to gyproc.ie

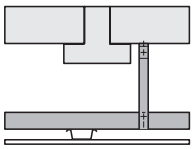
[1] Concrete floors as described in *BS 476: Part 23: 1987*. The steel beams subjected to test had a section factor A/V (Hp/A) of 205m^{-1} calculated on the basis of three sided profiled exposure. The suspended ceiling will also provide adequate protection to steel beams with a lower section factor.

CasoLine MF performance (continued)

Sound insulation

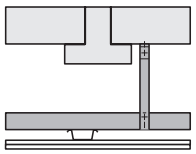
Table 2 – CasoLine MF upgrading the sound insulation of concrete floors[1]

1



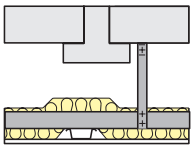
CasoLine MF ceiling suspended beneath basic floor to give 240mm cavity. Ceiling linings as in table.

2



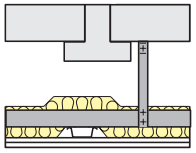
CasoLine MF ceiling suspended beneath basic floor to give 240mm cavity. Ceiling linings as in table.

3



CasoLine MF ceiling suspended beneath basic floor to give 240mm cavity, with 100mm Isover Spacesaver Ready-Cut in cavity. Ceiling linings as in table.

4



CasoLine MF ceiling suspended beneath basic floor to give 240mm cavity, with 100mm Isover Spacesaver Ready-Cut in cavity. Ceiling linings as in table.

Detail	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	Sound insulation		System reference
				Airborne R_w ($R_w + C_{tr}$) dB	Impact $L_{n,w}$ dB	
1	Gyproc WallBoard	1 x 12.5	9	56 (50)	68	C100016
2	Gyproc FireLine	2 x 12.5	21	58 (51)	66	C100017
3	Gyproc SoundBloc	1 x 12.5	12	61 (51)	60	C100018
4	Gyproc SoundBloc	2 x 12.5	23	64 (55) [2]	57	C100019

▶ For further assistance in choosing the right solution for your project, try our System Selector; an online tool that enables quick and easy filtering by performance criteria. It provides system specific information downloads including BIM (Revit) objects. Go to gyproc.ie

[1] Basic floor construction is lightweight concrete joist floor with insulated concrete infill panel (surface density of infill is 90kg/m²) and total depth 150mm. Sound insulation is R_w 35dB (airborne) and $L_{n,w}$ 91dB (impact).
[2] This Gyproc Approved System is designed to achieve minimum $D_{nTw} + C_{tr}$ 45dB and $L'_{nT,w}$ 62dB subject to Pre-Completion Testing.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to Gyproc's recommendations. The quoted performance (from the underside to the ceiling plenum only) are achieved only if Gyproc and Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specification should be checked with Gyproc.

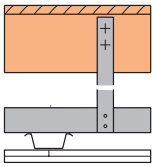
CasoLine MF performance (continued)

Fire protection to timber floor construction

For details of when to specify fire resistance using EN
▶ Refer to **C02. S01. P18**

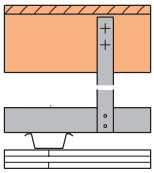
Table 3a – Solutions to satisfy requirements of *BS EN 1365-2: 2000*

1



Floor boarding of 21mm minimum t&g softwood or wood particle floor boarding. Solid timber joists 38 x 195mm at 600mm centres. **CasoLine MF** suspended ceiling fixed to joists. Ceiling linings as in table.

2



Floor boarding of 21mm minimum t&g softwood or wood particle floor boarding. Solid timber joists 38 x 195mm at 600mm centres. **CasoLine MF** suspended ceiling fixed to joists. Ceiling linings as in table.

Detail	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	MF5 support centres mm	MF7 support centres mm	System reference
60 minutes fire resistance EN						
1	Gyproc FireLine	2 x 12.5	21	450	1200	C106003
90 minutes fire resistance EN						
2	Glasroc F MULTIBOARD	3 x 10	30[1]	450	1200[1]	G106035

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[1] This system is close to its maximum allocation weight. Refer to table 6 for solutions to increase the maximum recommended load.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to Gyproc's recommendations. The quoted performance (from the underside to the ceiling plenum only) are achieved only if Gyproc and Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specification should be checked with Gyproc.

NB The maximum substantiated span on the above solid timber joist systems is 4000mm. For any spans greater than this please contact our Technical Department.

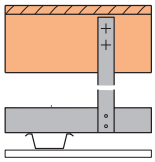
CasoLine MF performance (continued)

Fire protection to timber floor construction

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

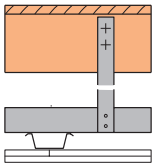
Table 3b – Solutions to satisfy the requirements of *BS 476: Part 21: 1987*

1



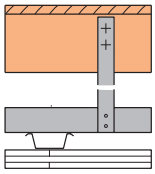
Floor boarding of 21mm minimum t&g softwood or wood particle floor boarding. Solid timber joists. 38 x 195mm at 600mm centres. **CasoLine MF** suspended ceiling fixed to joists. Ceiling linings as in table.

2



Floor boarding of 21mm minimum t&g softwood or wood particle floor boarding. Solid timber joists 38 x 195mm at 600mm centres. **CasoLine MF** suspended ceiling fixed to joists. Ceiling linings as in table.

3



Floor boarding of 21mm minimum t&g softwood or wood particle floor boarding. Solid timber joists 38 x 195mm at 600mm centres. **CasoLine MF** suspended ceiling fixed to joists. Ceiling linings as in table.

Detail	Joist size mm	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	MF5 support centres mm	MF7 support centres mm	System reference
30 minutes fire resistance BS							
1	38 x 225	Gyproc FireLine	1 x 12.5	11	450	1200	C106001
2	38 x 225	Gyproc WallBoard	2 x 12.5	18	450	1200	C106002
60 minutes fire resistance BS							
2	38 x 195	Gyproc FireLine	2 x 12.5	21	450	1200	C106003
90 minutes fire resistance BS							
2	38 x 175	Gyproc FireLine	2 x 15	25	450	900	C106004
120 minutes fire resistance BS							
3	38 x 175	Glasroc F MULTIBOARD	3 x 10	30[1]	450	1200[1]	G106035

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[1] This system is close to its maximum weight. Refer to table 6 for solutions to increase the maximum recommended load.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to Gyproc's recommendations. The quoted performance (from the underside to the ceiling plenum only) are achieved only if Gyproc and Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specification should be checked with Gyproc.

NB For non t&g floors, overlay with 6mm plywood and ensure all joints are staggered.

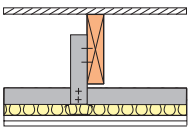
CasoLine MF performance (continued)

Upgrading the fire resistance and sound insulation of timber floors

For details of when to specify fire resistance using BS/EN ▶ Refer to **C02. S01. P18**

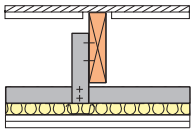
Table 4 – Solutions to satisfy requirements of *EN 1365-2: 2000* (where applicable) *and BS 476: Part 21: 1987*

1



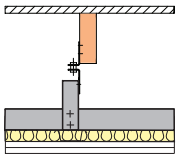
CasoLine MF ceiling suspended beneath basic floor (ceiling removed) to give 277mm cavity. 100mm Isover Spacesaver Ready-Cut laid on ceiling boards. Ceiling linings as in table.

2



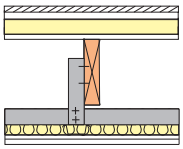
CasoLine MF ceiling suspended beneath basic floor (ceiling removed) with a layer of Gyproc Plank fixed to the underside of the chipboard to give a 258mm cavity. 100mm Isover Spacesaver Ready-Cut laid on ceiling boards. Ceiling linings as in table.

3



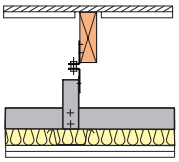
CasoLine MF ceiling suspended beneath basic floor (ceiling removed) using Gypframe Acoustic Hangers to give 277mm cavity. 100mm Isover Spacesaver Ready-Cut laid on ceiling boards. Ceiling linings as in table.

4



New floating floor[2] laid over joists. **CasoLine MF** ceiling suspended beneath 195mm x 45mm timber joists at 600mm centres to give 277mm cavity. 100mm Isover Spacesaver Ready-Cut laid on ceiling boards. Ceiling linings as in table.

5



CasoLine MF ceiling suspended beneath **GypFloor SILENT** using Gypframe Acoustic Hangers to give 277mm cavity. 100mm Isover Spacesaver Ready-Cut laid on ceiling boards. Ceiling linings as in table.

Detail[1]	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	Floor depth mm	Sound insulation		System reference
					Airborne R_w ($R_w + C_{tr}$) dB	Impact $L_{n,w}$ dB	
30 minutes fire resistance BS							
1	Gyproc SoundBloc	2 x 12.5	23	320	60	60	C106007
2	Gyproc SoundBloc	2 x 12.5	23	320	63 (51)	57	C106009
3	Gyproc SoundBloc	2 x 12.5	23	320	63 (55)[4]	54	C106013
4	Gyproc SoundBloc	2 x 12.5	23	376	66 (54)[4]	50	C106011
60 minutes fire resistance EN BS							
1	Gyproc SoundBloc	2 x 15	27	325	60	60	C106014
3	Gyproc FireLine	2 x 12.5	21	320	62 (53)[4]	55	C106022
3	Gyproc SoundBloc	2 x 15	27	325	63 (55)[4]	54	C106023
4	Gyproc SoundBloc	2 x 15	27	381	66 (54)[4]	50	C106025
5	Gyproc SoundBloc	2 x 15	27	336	63 (55)[4]	51	C106026
90 minutes fire resistance BS							
1	Gyproc FireLine	2 x 15[3]	25	325	59	61	C106004
3	Gyproc FireLine	2 x 15[3]	25	325	62 (53)[4]	55	C106024

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[1] Basic floor construction is 45mm x 195mm timber joists at 600mm centres with 21mm t&g wood chipboard flooring.
[2] 18mm t&g wood chipboard spot bonded to Gyproc Plank on Isover Sound Deadening Floor Slab laid on overlining of 12mm plywood.
[3] Gypframe MF7 Primary Support Channel at 900mm centres.
[4] These Gyproc Approved Systems are designed to achieve minimum $D_{nTw} + C_{tr}$ 45dB and $L'_{nT,w}$ 62dB subject to Pre-Completion Testing.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to Gyproc's recommendations. The quoted performance (from the underside to the ceiling plenum only) are achieved only if Gyproc and Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specification should be checked with Gyproc.

NB The maximum substantiated span on the above solid timber joist systems is 4000mm. For any spans greater than this please contact our Technical Department.

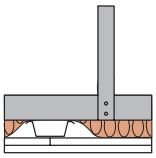
CasoLine MF performance (continued)

Fire protection to floor or roof cavity above suspended ceiling[1]

For details of when to specify fire resistance using EN
▶ Refer to **C02. S01. P18**

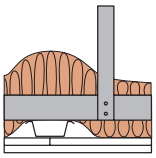
Table 5a – Solutions to satisfy requirements of *EN 1364-2: 1999*

1



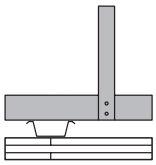
CasoLine MF suspended ceiling fixed to structure.
25mm stone mineral wool slabs (100kg/m³)
laid over Gypframe MF5 Ceiling Section.
Ceiling linings as in table.

2



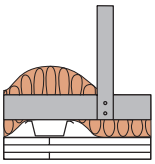
CasoLine MF suspended ceiling fixed to structure.
150mm stone mineral wool roll (24kg/m³)
laid over Gypframe MF5 Ceiling Section.
Ceiling linings as in table.

3



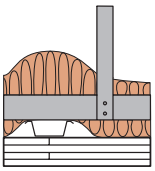
CasoLine MF suspended ceiling fixed to structure.
Ceiling linings as in table.

4



CasoLine MF suspended ceiling fixed to structure.
100mm stone mineral wool roll (24kg/m³)
laid over Gypframe MF5 Ceiling Section.
Ceiling linings as in table.

5



CasoLine MF suspended ceiling fixed to structure.
150mm stone mineral wool roll (24kg/m³)
laid over Gypframe MF5 Ceiling Section.
Ceiling linings as in table.

Detail	Board type	Ceiling lining thickness mm	Approx. weight kg/m²	MF5 support centres mm	MF7 support centres mm	System reference
30 minutes fire resistance EN						
1	Gyproc FireLine	2 x 12.5	22	450	1200	C106046
60 minutes fire resistance EN						
1	Glasroc F FIRECASE	2 x 15	28[2]	450	1200[2]	G106040
2	Gyproc FireLine	2 x 15	36[2]	400	1200[2]	C106060
3	Gyproc FireLine	3 x 15	45	400	600	C106061
90 minutes fire resistance EN						
4	Gyproc FireLine	3 x 15	50	400	600	C106062
120 minutes fire resistance EN						
5	Gyproc FireLine	4 x 15[3]	64[2]	400	600[2]	C100038
3	Glasroc F FIRECASE	3 x 15	40[2]	400	900[2]	G100042

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[1] The requirement for providing cavity barriers in the same plane as fire-resistant walls may not apply to cavities in floors and roofs if the ceiling beneath the floor or roof cavity provides a minimum of a full 30 minutes fire resistance (30 mins integrity : 30 mins insulation) in addition to satisfying other requirements. Refer to C06. S06. P422 – Cavity fire barriers.
[2] This system is close to its maximum allocation weight. Refer to table 6 for solutions to increase the maximum recommended load.
[3] An additional Gypframe GFS1 fixing strap is required behind the longitudinal joints of the outer layer of 15mm Gyproc FireLine with fixings though the plasterboard into the Gypframe GFS1 at 200mm centres.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to Gyproc's recommendations. The quoted performance (from the underside to the ceiling plenum only) are achieved only if Gyproc and Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specification should be checked with Gyproc.

CasoLine MF design

Building design

CasoLine MF comprises Gypframe MF7 Primary Support Channels and Gypframe MF5 Ceiling Sections which forms a suspended frame to which Gyproc, Gyptone, Rigitone and Glasroc boards can be fixed.

Planning – key factors

The depth of the ceiling cavity is a minimum 100mm.

Cavity fire barriers

Where cavity fire barriers are required, these can be formed using Gyproc FireLine or Glasroc F MULTIBOARD screw-fixed to a simple frame. The framing should be fixed to the structure to avoid undue loading of the ceiling suspension grid or, alternatively, additional hangers should be incorporated to support the ceiling alongside the cavity fire barrier.

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

Relative humidity

CasoLine MF ceilings lined with Gyproc, Gyptone, Rigitone or Gyproc Specialist Boards are suitable for use under normal occupancy conditions. Buildings in which they are used should be dry, glazed and enclosed, with environmental conditions of no greater than 70% RH at 10°C to 20°C. For high humidity / high moisture conditions use Gyproc plasterboard MR variants or Glasroc F MULTIBOARD.

▶ Refer to C02. S01. P39 – Robustness.

Vapour control

Isover Vario membranes may be used to provide vapour control to ceilings.

Acoustic performance

Gyptone and Rigitone boards are perforated and designed to provide sound absorption when used in conjunction with an airspace behind the ceiling. Increased levels of sound absorption can be achieved by including insulation over the back of the ceiling. Where sound insulation room-to-room is required, sound attenuation $D_{n,c,w}$ of 39dB can be achieved by the inclusion of 100mm Isover Spacesaver Ready-Cut over the back of the ceiling. Alternatively, other design considerations should be adopted such as extending adjoining partitions into the plenum void or installing a plenum barrier.

▶ Refer to C06. S01. P349 – Floors and ceilings introduction, tables 1 and 2.

Thermal performance

Isover insulation can be laid over the suspension grid to provide the required standard of thermal insulation. Contact the Gyproc Technical Department for further guidance.

Ceiling lift

Changes to Building Regulations Approved Document L, airtightness requirements within dwellings, can lead to greater changes in air pressure when a door is opened. The ceiling is normally the lightest fixed element in the room, and therefore most likely to be affected by this change in pressure.

This can cause the ceiling to lift, which may create a noise. Whilst this noise can be annoying to the occupier, it has no detrimental effect on the performance of the ceiling.

The designer should consider incorporating a pressure release system to minimise the risk of ceiling lift. Where sufficient 'pressure relief' cannot be designed in, it is recommended that the Gypframe MF5 Ceiling Section and the Gypframe MF7 Primary Support Channel should be screw-fixed together using two Gyproc Wafer Head Jack-Point Screws at each intersection, particularly where non-perforated board linings are specified.

Imposed loads

Tables 6, 7 and 8 provide loading data for the suspension grid for Gyproc, Glasroc specialist, Gyptone and Rigitone boards respectively. Maximum loads will be reduced by 25% when Gypframe FEA1 Steel Angle is fixed directly to the soffit (modified loads are shown in brackets).

Table 6 – Maximum recommended loads on CasoLine MF with Gyproc or Glasroc specialist board linings

Maximum load including weight of board, any insulation and finish plaster MF5[1] at 450mm centres kg/m² (modified load)	Suspension point centres mm	MF7[2] channel centres mm
60	1200	600
40	1200	900
35	900	1200
30 (23)	1200	1200

[1] Gypframe MF5 Ceiling Section.
[2] Gypframe MF7 Primary Support Channel.

Table 7 – Maximum recommended loads on CasoLine MF with Gyproc[3] or Gyptone board linings

Maximum load including weight of board, and any insulation MF5[1] at 600mm centres kg/m² (modified load)	Suspension point centres mm	MF7[2] channel centres mm
55	1200	600
35	1200	900
25 (19)	1200	1200

[1] Gypframe MF5 Ceiling Section.
[2] Gypframe MF7 Primary Support Channel.
[3] Only applies to ceilings that have no fire resistance or acoustic insulation performance and single layer 15mm board.

Table 8 – Maximum recommended loads on CasoLine MF with Rigitone board linings

Maximum load including weight of board, and any insulation MF5[1] at 330mm centres kg/m² (modified load)	Suspension point centres mm	MF7[2] channel centres mm
30 (23)	900	1000

[1] Gypframe MF5 Ceiling Section.
[2] Gypframe MF7 Primary Support Channel.

CasoLine MF design (continued)

Suspension – Gyproc, Glasroc specialist and Gyptone board linings

Fixing points for suspending the metal grid are commonly required at 1200mm centres in each direction. Suitable fixing devices should be employed when fixing to the structure.

The ceiling grid can be suspended from a concrete soffit using Gypframe MF12 Soffit Cleats and Gypframe MF8 Strap Hanger, or alternatively, Gypframe FEA1 Steel Angle. The latter provides a more robust suspension support, which restricts any flexing of the lining when pressure is applied from below. Gypframe FEA1 Steel Angle is therefore the preferred suspension option when a plaster finish is specified to Gyproc boards. If Gypframe FEA1 Steel Angle is used, it is recommended that it is fixed to the soffit via Gypframe MF12 Soffit Cleats.

For single board solutions only, Gypframe FEA1 Steel Angle can be used to fix direct to the soffit. The angle should be cut along the spine with both flanges bent over. However, this will reduce the maximum loads that the grid is capable of supporting by 25%. Fixing Gypframe FEA1 Steel Angles direct is also not suitable if the ceiling is likely to deflect due to varying pressures and is not suitable for fixing to a sloping substrate.

Gypframe Acoustic Hangers can be used to suspend the grid from timber joists to maximise the degree of acoustic isolation. In a comparative test a 3dB improvement in airborne sound insulation and a 6dB improvement in impact sound insulation were achieved. Refer to table 4 and construction detail 7, relating to double layer 12.5mm Gyproc SoundBloc linings. With concrete floors the high mass of the construction means that high levels of acoustic performance can be achieved when the **CasoLine MF** ceiling is suspended by conventional means, i.e. Gypframe MF8 Strap Hangers or Gypframe FEA1 Steel Angle.

Suspension – Rigitone board linings

Gypframe MF7 Primary Support Channels are fixed at 1000mm centres. Fixing points to the structure for the Gypframe MF7 Primary Support Channels are required at 900mm centres. In addition to this, the Gypframe MF5 Ceiling Section should be installed at nominal 330mm centres.

▶ Refer to the **Gyproc Installation Guide** for full details.

Partition to suspended ceiling junction

Where a **GypWall** metal stud partition is fixed to the framework of a **CasoLine MF** ceiling, in accordance with Gyproc's installation instructions, its permissible maximum height is equal to that of where it is fixed direct to a structural soffit of the same height.

Handy hint

When designing the **CasoLine MF** ceiling grid with a partition fixed to the underside, consideration should be given to ensure MF sections run parallel to the position, providing suitable restraint. This may result in additional Gypframe MF5 Ceiling Sections being required.

In situations where a **GypWall** metal stud partition passes through a **CasoLine MF** ceiling, which is to both sides of the partition and appropriately fixed to both this partition and perimeter partitions / walls, consideration can be given to the lateral restraint provided by the ceiling when developing the partition specification.

The relevant maximum height is the greater of the floor to **CasoLine MF** ceiling or ceiling to structural soffit height. Care should be taken during installation of tall partitions so as to not adversely affect their performance. Contact the Gyproc Technical Department for further guidance.

Services

The plenum can be used to route all service requirements including ducting, pipework, electrical cables and conduit. All services should be independently supported from the building structure. Where light weight light fittings, access panels and similar components are incorporated as part of the design requirements, consideration must be given to maintaining the integrity of the ceiling to meet fire resistance and sound insulation requirements.

▶ Refer to tables 6, 7 or 8 for maximum recommended loads.

▶ Refer to the Gyproc Technical Department for Gyproc Profilex Access Panels.

Fixtures

Fixings to the system should always be made into the metal grid or to supplementary framing. Some adjustment of the primary grid may be required to support heavier fixtures, refer to tables 6, 7 and 8. Where loads outside this range are anticipated, independent suspension should be provided from the structure.

Control joints

Gyproc Control Joints may be required in the ceiling to relieve stresses induced by expansion and contraction of the structure. It is recommended that they coincide with movement joints within the surrounding structure.

Rigitone expansion joints

Rigitone boards should be cut 10mm short of the perimeter wall and should not be fixed to the perimeter channel.

▶ Refer to construction details 12 - 13.

Board finishing

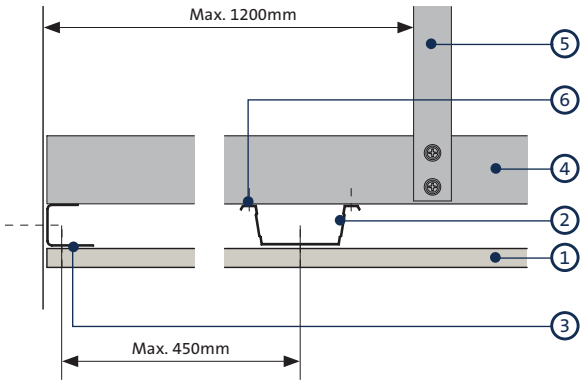
▶ Refer to C08. S01. P483 – Finishes.

Additional care and attention should be exercised when jointing Gyptone and Rigitone boards so as not to fill the perforations and impair the acoustic performance of the finished ceiling.

▶ Refer to the **Gyproc Installation Guide.**

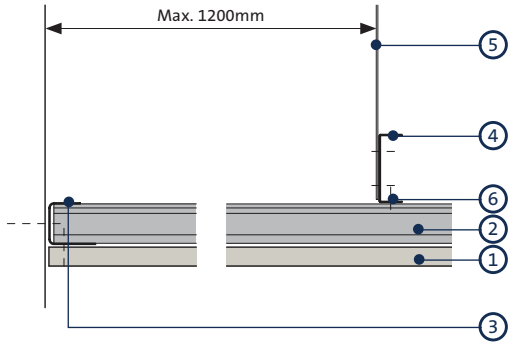
CasoLine MF construction details

1



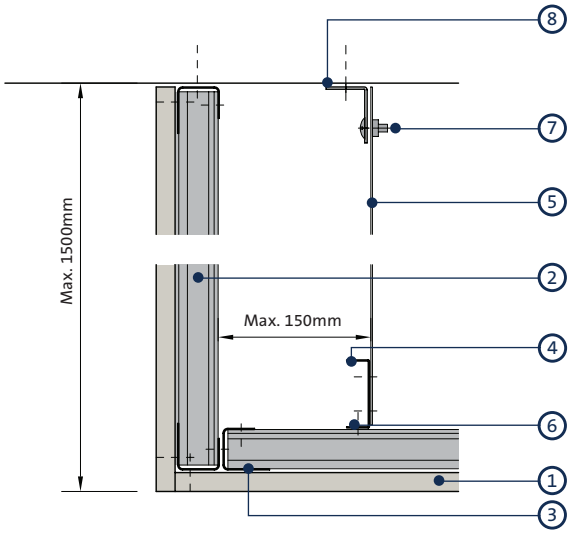
Perimeter parallel to Gypframe MF5 Ceiling Section - screw-fixed

2



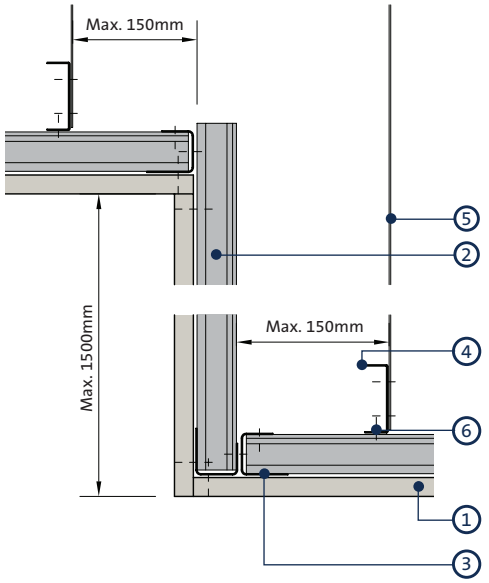
Perimeter perpendicular to Gypframe MF5 Ceiling Section - screw-fixed

3



Bulkhead - screw-fixed

4

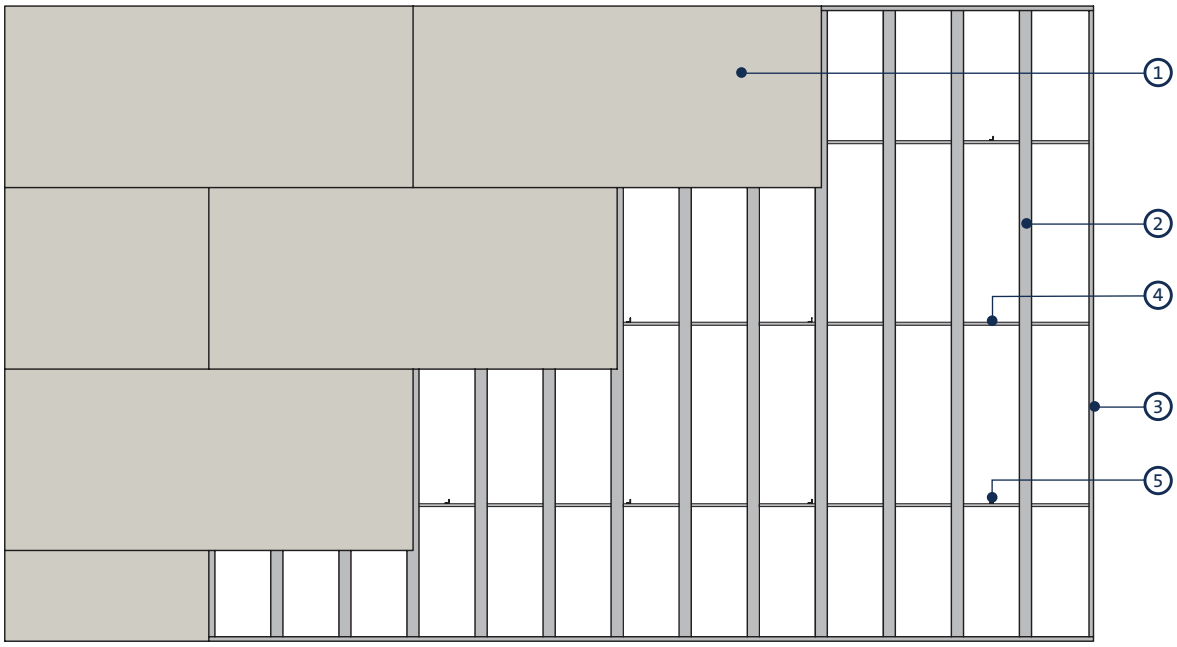


Change of level - screw-fixed

1 Gyproc plasterboard or Glasroc specialist board
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle
6 Gyproc Wafer Head Jack-Point Screw
7 Gypframe MF11 Nut and Bolt
8 Gypframe MF12 Soffit Cleat

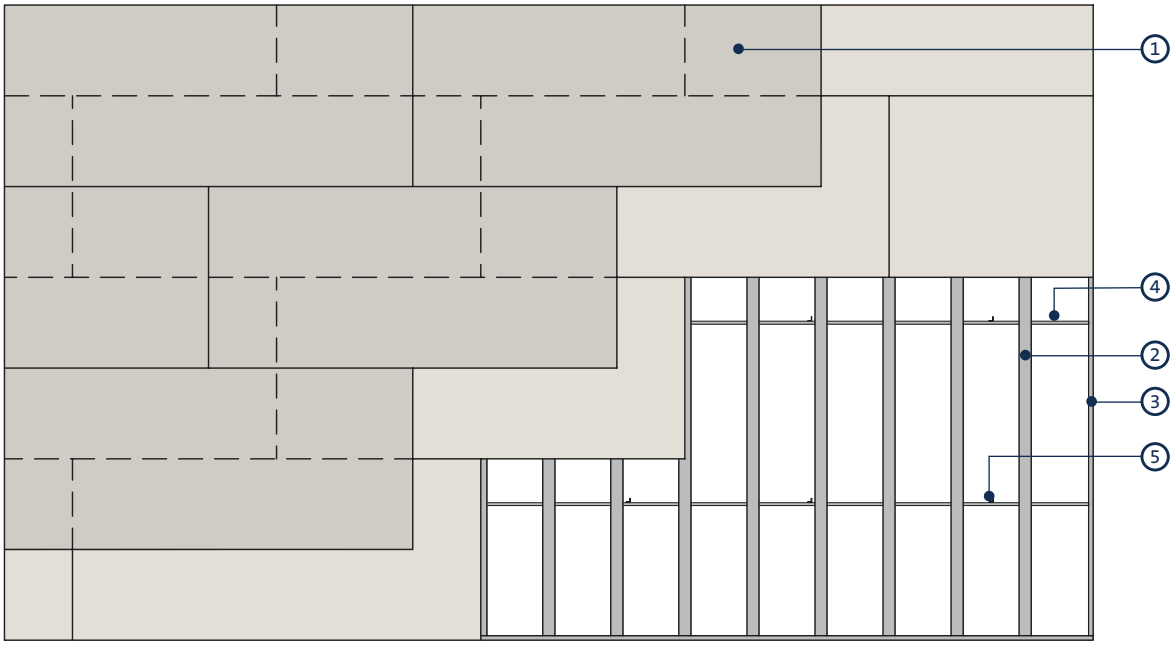
CasoLine MF construction details (continued)

5



Reflected ceiling plan - single layer

6

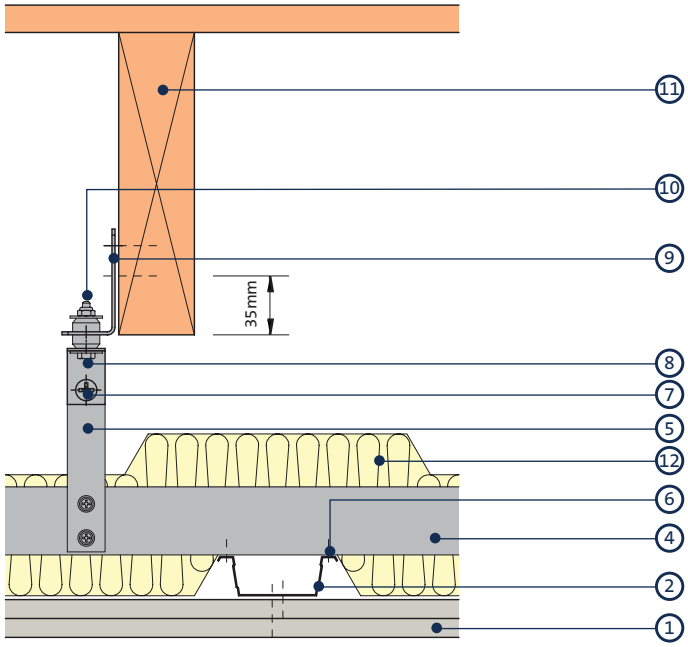


Reflected ceiling plan - double layer

1 Gyproc plasterboard or Glasroc specialist board
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle

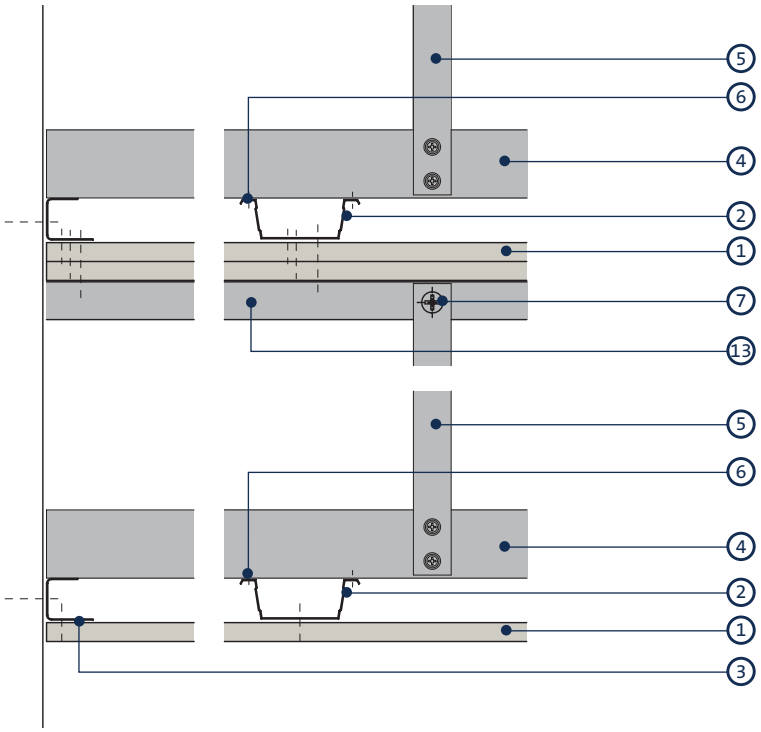
CasoLine MF construction details (continued)

7



Suspension from timber joist using Gypframe Acoustic Hangers

8

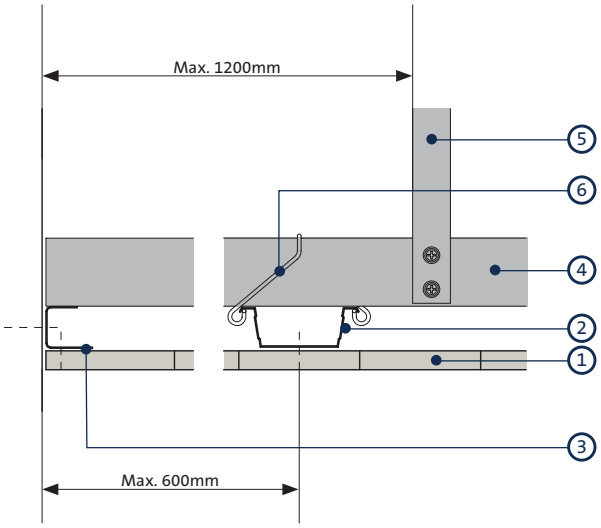


Secondary double **CasoLine MF** ceiling

1 Gyproc plasterboard or Glasroc specialist board
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle
6 Gyproc Wafer Head Jack-Point Screw
7 Gypframe MF11 Nut and Bolt
8 Gypframe MF12 Soffit Cleat
9 Gypframe Acoustic Hanger fixed with two Gyproc Drywall Screws
10 M6 bolt and locking nut (by others)
11 Timber joist floor
12 Isover insulation
13 Gypframe FEA1 Steel Angle

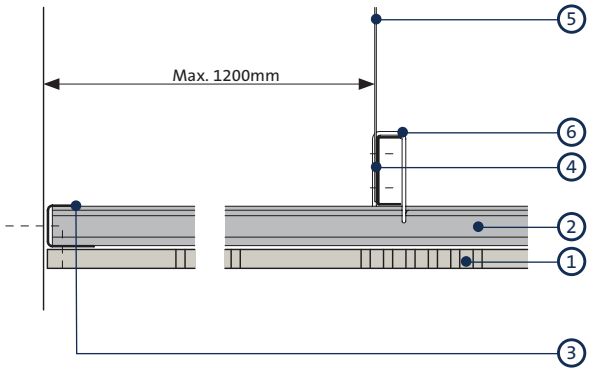
CasoLine MF construction details (continued)

9



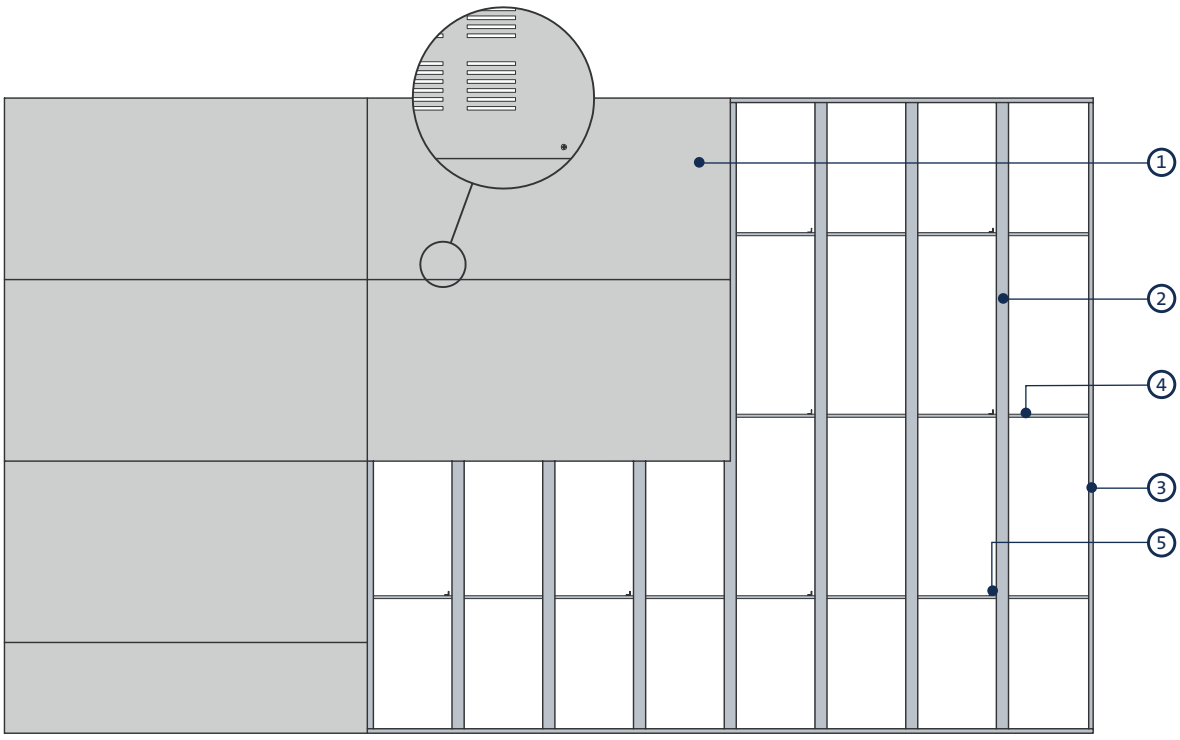
Perimeter parallel to Gypframe MF5 Ceiling Section - Gyptone

10



Perimeter perpendicular to Gypframe MF5 Ceiling Section - Gyptone

11

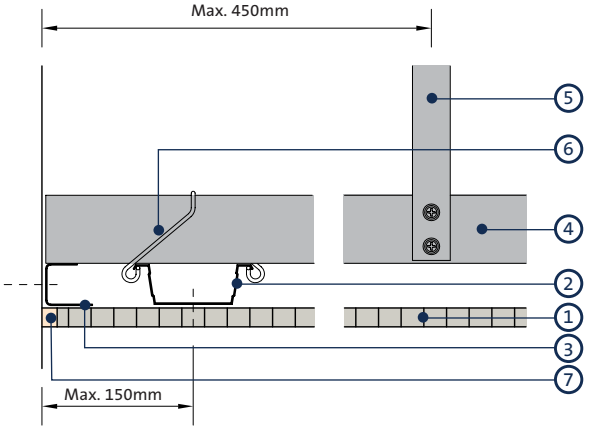


Reflected ceiling plan - Gyptone

1 Gyptone boards
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle
6 Gypframe MF9 Connecting Clip

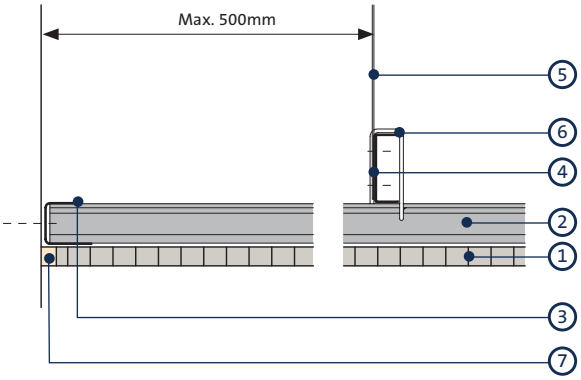
CasoLine MF construction details (continued)

12



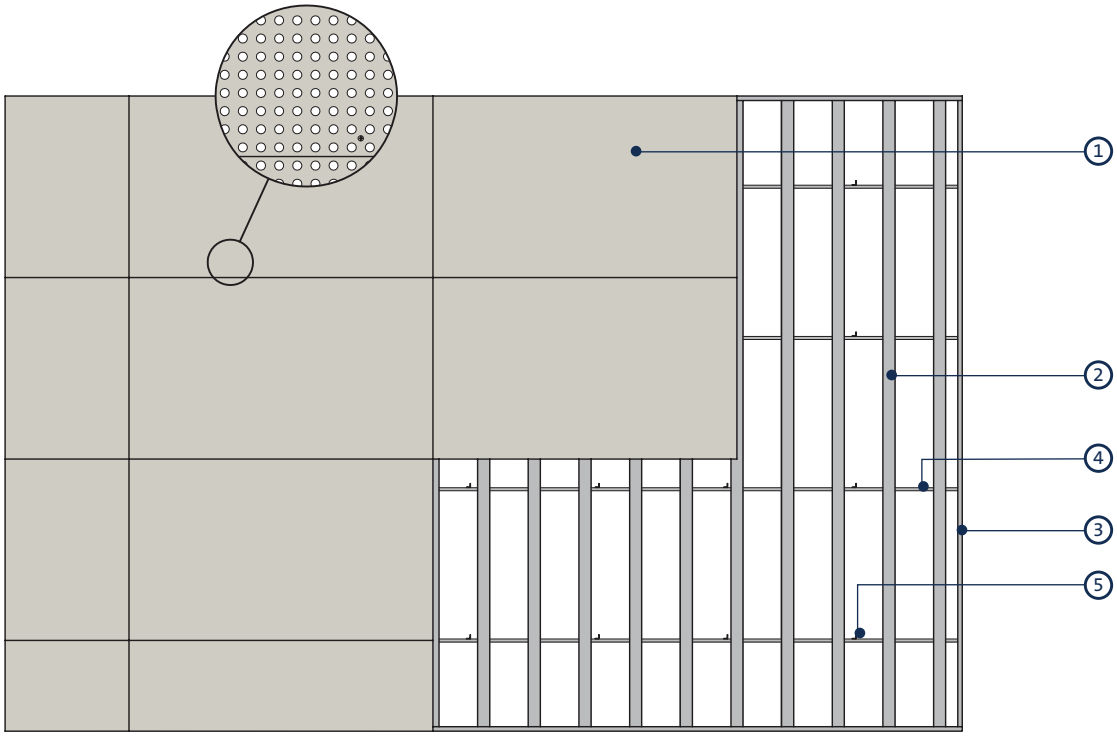
Perimeter parallel to Gypframe MF5 Ceiling Section - Rigitone

13



Perimeter perpendicular to Gypframe MF5 Ceiling Section - Rigitone

14



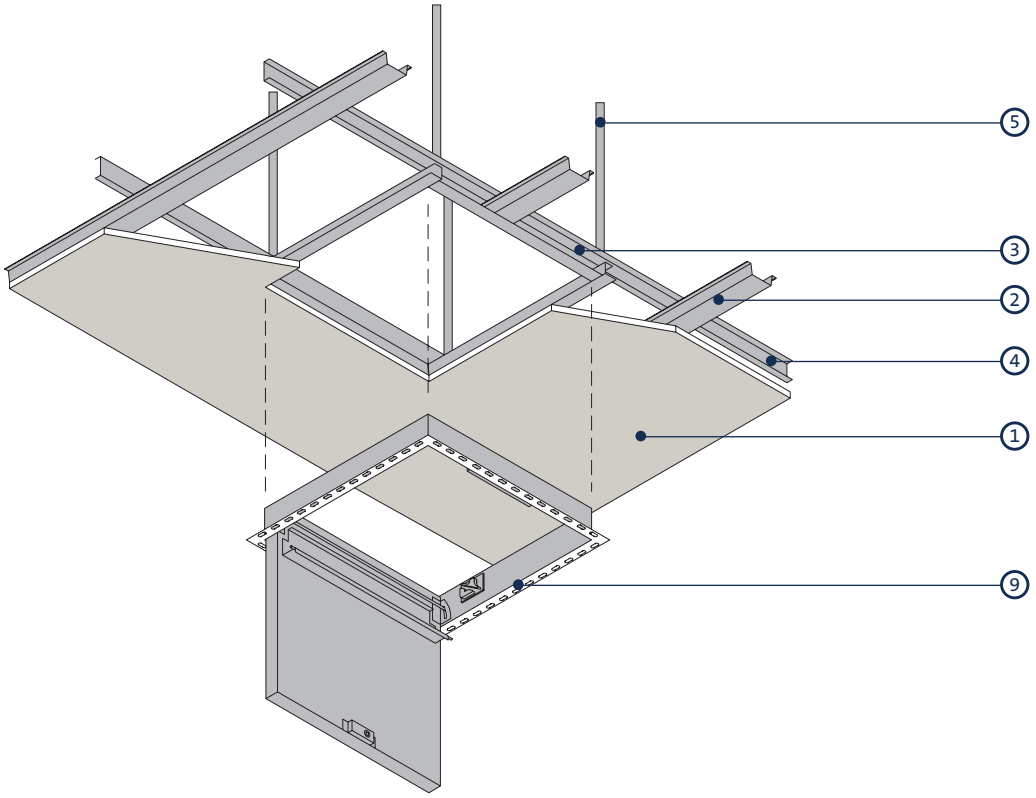
Reflected ceiling plan - Rigitone

1 Rigitone boards
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle
6 Gypframe MF9 Connecting Clip
7 Rigitone Vario 60 filler

NB A special procedure is used for fixing and jointing Rigitone boards. Detailed installation notes are given in the current **Gyproc Installation Guide**, available to download from gyproc.ie

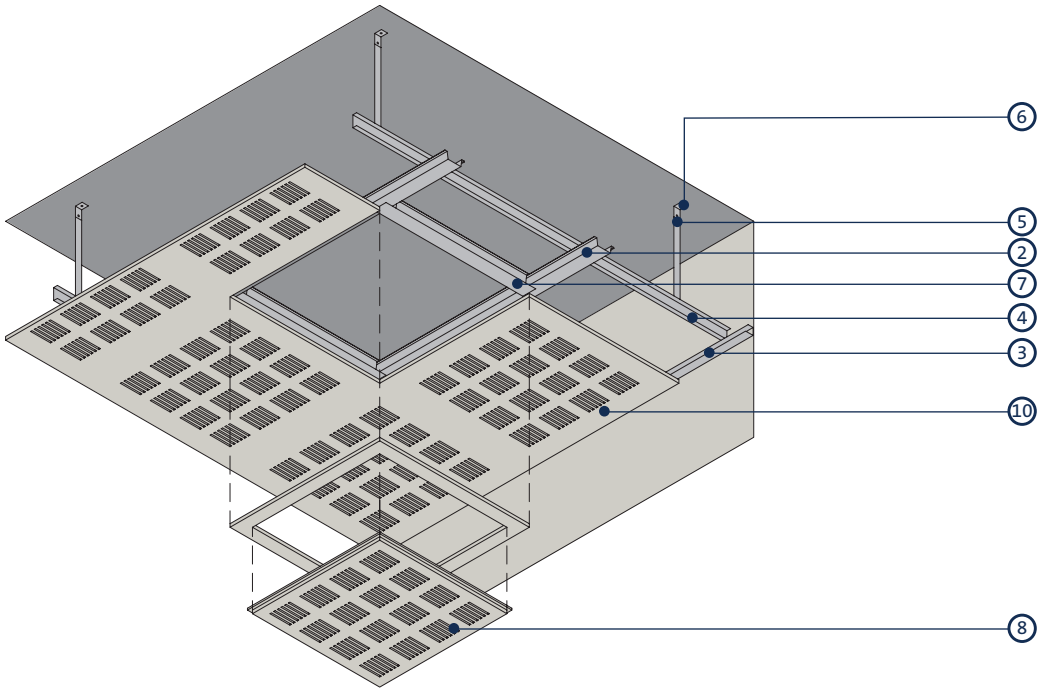
CasoLine MF construction details (continued)

15



Gyproc Profilex Access panel installation

16

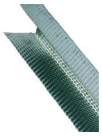


Gyptone Access Hatch installation

1 Gyproc plasterboard or Glasroc specialist board
2 Gypframe MF5 Ceiling Section
3 Gypframe MF6 Perimeter Channel
4 Gypframe MF7 Primary Support Channel
5 Gypframe MF8 Strap Hanger or Gypframe FEA1 Steel Angle
6 Gypframe MF12 Soffit Cleat with MF11 Nut and Bolt
7 Gypframe MF5 Ceiling Section with ends tabbed and fixed
8 Gyptone Access Hatch (510 x 510mm) with frame (600 x 600mm)
9 Access panel (by others)
10 Gyptone board

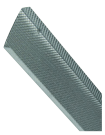
CasoLine MF system components

Gypframe metal components



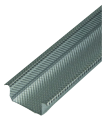
Gypframe MF6 Perimeter Channel
Perimeter section to support Gypframe MF5 Ceiling Section and fixing of board.

Gypframe MF9 Connecting Clips
Alternative method of connecting Gypframe MF5 Ceiling Section to Gypframe MF7 Primary Support Channel used in non-pressurised rooms.



Gypframe MF7 Primary Support Channel
Primary section to support Gypframe MF5 Ceiling Section.

Gypframe MF12 Soffit Cleat
Suspension point, one leg connected to structural soffit and the other leg connected to suspension hanger Gypframe FEA1 Steel Angle or Gypframe MF8 Strap Hanger recommended for all double and triple boarded solutions.



Gypframe MF5 Ceiling Section
Designed to provide seamless suspended ceilings and secondary section to support fixing of board.

Gypframe MF11 Nut & Bolt
For connecting suspension hanger (Gypframe FEA1 or MF8) to Gypframe MF12 Soffit Cleat recommended for all double and triple boarded solutions.

Gypframe MF8 Strap Hanger
Alternative suspension of ceiling grid, typically 1 metre maximum drop.

Gypframe GAH1 (35mm) or GAH2 (70mm) Acoustic Hanger
Suspension point for enhanced acoustic performance to timber floors.

Gypframe FEA1 Steel Angle
Steel angle providing framing stability and board support. Preferred rigid hanger suspension of ceiling grid.

Board products

Gyproc WallBoard[1]
Standard gypsum plasterboard.

Gyproc DuraLine[3]
Gypsum plasterboard with fire resistant additives and a high density core for enhanced sound insulation and impact resistance performance.

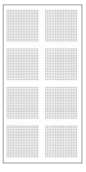
Gyproc FireLine[1 3]
Gypsum plasterboard with fire resistant additives.

Gyproc Plank
Standard gypsum plasterboard located as an inner layer.

Gyproc SoundBloc[3]
Gypsum plasterboard with a high density core for enhanced sound insulation performance.

Glasroc F MULTIBOARD
Non-combustible glass-reinforced gypsum board.

Glasroc F FIRECASE
Non-combustible glass-reinforced gypsum board giving up to 120 minutes fire protection.



Ceiling boards
A full range of Gyptone[2] and Rigitone[2] boards are available to meet specific aesthetic and/or acoustic requirements.

[1] Also available in DUPLEX grades where vapour control is required.
[2] Activ'Air® Technology as standard.
[3] Also available in Moisture Resistant (MR) version. MR boards are specified in intermittent wet use areas.

CasoLine MF system components (continued)

Fixing products

Gyproc Drywall Screws
Corrosion resistant self-tapping steel screws for fixing board-to-timber and board-to-metal framing less than 0.8mm thick.

Gyproc Wafer Head Jack-Point Screws
Corrosion resistant self-tapping steel screws for fixing metal to metal framing 0.8mm thick and greater.

Gyproc Collated Drywall Screws
Corrosion resistant self-tapping steel screws for fixing board-to-timber and board-to-metal framing less than 0.8mm thick.

Rigitone Screws
Specifically designed for fixing Rigitone board to metal framing.

Gyproc Wafer Head Drywall Screws
Corrosion resistant self-tapping steel screws for fixing metal to metal framing less than 0.8mm thick.

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 Control Joint
To accommodate structural movement of up to 7mm.

Gyproc Drywall Primer
A general purpose plasterboard primer, providing an ideal surface for decoration for most paints and wall coverings.

Gyproc Drywall Primer
Used to prepare for painting.
Tub contents 10 litre.

Gyproc Paper Joint Tape
A paper tape designed for reinforcement of flat joints or internal angles.

Plaster products

Gyproc Skimcoat
To provide a plaster skim finish on most common backgrounds including undercoat plasters and plasterboard. Can provide enhanced acoustic performance.

Gyproc Carlite Finish
To provide a plaster skim finish on most common backgrounds including undercoat plasters and plasterboard. Can provide enhanced acoustic performance.

Gyproc Carlite Ultra Finish
Offers all the benefits of Gyproc Skimcoat and Gyproc Carlite Finish with a reduced set time of 90-120mins, making it ideal for smaller jobs.

Plaster accessories
Designed for the reinforcement and finishing of board joints before plaster skimming.

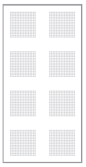
Gyproc Bonding Coat
A lightweight undercoat plaster for use over smooth or medium suction backgrounds. Applied at a depth of 10mm on walls or 8mm on ceilings. Bonding Coat Short Set also available with a reduced set time of 90-120 mins making it ideal for smaller jobs.

CasoLine MF system components (continued)

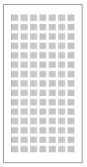
Ceiling products

Gyptone BIG QUATTRO 41[1]
Acoustic board with square perforations capable of providing Class C sound absorption.

Gyptone BIG QUATTRO 47[1]
Acoustic board with occasional square perforations and Class D absorption.



Gyptone BIG QUATTRO 46[1]
Acoustic board with intermittent square perforations capable of providing Class D absorption.

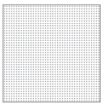


Gyptone BIG LINE 6[1]
Gyptone board with a linear perforated pattern capable of providing Class D absorption.

Gyptone SIXTO 63[1]
Gyptone board with a unique hexagonal perforated pattern capable of providing Class C absorption.

Rigitone 12-20/66[1]
Acoustic board with a perforated pattern of 12mm and 20mm circles capable of providing up to Class C absorption.

Rigitone 10/23[1]
Acoustic board with a perforated pattern of 10mm circles capable of providing up to Class C absorption.



Rigitone 15/30[1]
Acoustic board with a perforated pattern of 15mm circles capable of providing up to Class C absorption.

Rigitone 8-15-20 SUPER[1]
Acoustic board with a random pattern of 8mm, 15mm and 20mm circles capable of providing up to Class D absorption.

Rigitone 8/18[1]
Acoustic board with a perforated pattern of 8mm circles capable of providing up to Class C absorption.

Rigitone Spacing Tool
Spacer tool used to ensure accurate installation of Rigitone boards.

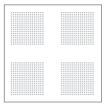
Rigitone Vario 60 Jointing Material
High-strength jointing material used for jointing of Rigitone boards.

Rigitone Large Jointing Kit
Jointing kit for application of Vario 60 into Rigitone boards.

[1] Activ'Air® technology as standard.

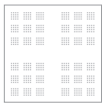
CasoLine MF system components (continued)

Ceiling products (continued)

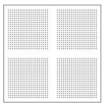


Gyptone BIG QUATTRO 46 Access Hatch[1]
Access hatch for providing access points in Gyptone QUATTRO 46 board ceilings.

Gyptone BIG LINE 6 Access Hatch[1]
Access hatch for providing access points in Gyptone LINE 6 board ceilings.



Gyptone BIG QUATTRO 47 Access Hatch[1]
Access hatch for providing access points in Gyptone QUATTRO 47 board ceilings.



Gyptone BIG QUATTRO 41 Access Hatch[1]
Access hatch for providing access points in Gyptone QUATTRO 41 board ceilings.

Gyptone BIG SIXTO 63 Access Hatch[1]
Access hatch for providing access points in Gyptone SIXTO 63 board ceilings.

Access panels (▶ Refer to the Gyproc Technical Department for details)

Profilex Access Panel
Panel for access to cavity.

Insulation products

Isover Acoustic Roll
Glass mineral wool for enhanced acoustic performance.

Isover Sound Deadening Floor Slab
Glass mineral wool for enhanced acoustic performance.

Stone Mineral Wool
(45kg/m³ or 100kg/m³, by others)
For fire performance.

Isover Spacesaver Ready-Cut
Glass mineral wool for enhanced acoustic and thermal performance.

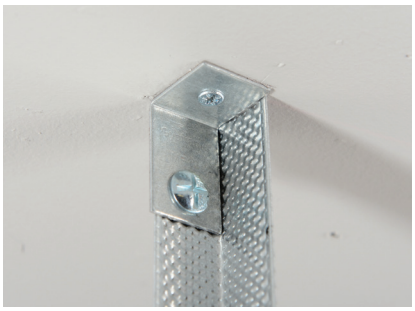
[1] ACTIV*air* technology as standard.

CasoLine MF installation overview

This is intended to be a basic description of how the system is built.
For detailed installation guidance refer to the **Gyproc Installation Guide.**

Gypframe MF6 Perimeter Channels are fixed to the perimeter walls at 600mm centres.

Gypframe FEA1 Steel Angle or Gypframe MF8 Strap Hanger is secured to Gypframe MF12 Soffit Cleats with Gypframe MF11 Nuts and Bolts to form hangers.



These hangers are then suitably fixed to the soffit at the required centres.

Gypframe MF7 Primary Support Channels are fixed to the hangers with Gyproc Wafer Head Jack-Point Screws, two per hanger.

Gypframe MF5 Ceiling Sections are fixed to the underside of the Gypframe MF7 Primary Support Channels to form a grid with Gyproc Wafer Head Jack-Point Screws.

Alternatively, in areas not prone to ceiling lift, Gypframe MF9 Connecting Clips.

Gyproc plasterboards, Glasroc specialist boards, Gyptone boards or Rigitone boards are then screw fixed to the Gypframe MF5 Ceiling Sections and Gypframe MF6 Perimeter Channels with Gyproc Drywall Screws.

Additional information

For full installation details, refer to the **Gyproc Installation Guide**, available to download from gyproc.ie