This section includes updated information, added since it was first published in December 2015.
Last updated 10/06/2019

C09. S02. P02 – P14
CasoLine MF

Including C09. S01. P02 – P08

Sound absorbing solutions introduction

Sound absorbing solutions

This section details sound absorbing solutions which both provide reverberation control and improved aesthetics

Sound absorbing solutions

British Gypsum sound absorbing solutions, incorporating Gyptone, Rigitone and Gyprex tiles, boards and planks, combine exciting aesthetic design with excellent acoustic absorption performance.

With performance levels up to Class A sound absorption, our ceilings meet the demands of industry standards in sectors such as education, healthcare and residential, making them ideal for schools, high-rise multi-occupancy buildings, healthcare buildings as well as offices and retail premises.

Our quick reference sound absorbing solutions guide, below, allows you to understand the key benefits of each solution, including grid concealment and flange size. Further detail can be found within the subsequent sections to help further refine your choice.

Description	System	Page
A suspended ceiling system, that can be used in conjunction with Gyptone and Rigitone ceiling boards to create a seamless, monolithic appearance.	CasoLine MF	C09. S02. P02
Concealed suspended ceiling system for constructing curved ceilings.	CasoLine CURVE	C09. S03. P02
A concealed ceiling system with minimal cavity depth suitable for a wide range of installations, and utilising the same components as GypLyner UNIVERSAL wall lining solution.	GypLyner UNIVERSAL	C09. S04. P02
A demountable, exposed 24mm wide grid ceiling system compatible with a range of Gyprex, Gyptone and tiles.	CasoLine QUICK-LOCK GRID T24	C09. S05. P02
A demountable, exposed 15mm wide grid ceiling system compatible with a range of Gyprex, Gyptone and tiles.	CasoLine QUICK-LOCK GRID T15	C09. S06. P02
The ideal ceiling solution for spanning between corridor walls, unsuspended up to 2.4m incorporating Gyptone Planks.	CasoLine QUICK-LOCK Corridor Systems	C09. S08. P02

Sound absorbing solutions

Areas to consider when specifying

Acoustics

A suspended ceiling can provide two levels of acoustic performance; sound insulation, preventing the passage of sound into the room from an external source, and sound absorption, which is the control of undesirable sound within the room, in the form of reverberation. Ceiling systems incorporating products such as Gyproc SoundBloc provide the greatest level of sound insulation, while the Gyptone or Rigitone ranges provide excellent sound absorption performance for reverberation control.

Aesthetics

The ceiling provides a large blank canvas which can form part of the overall interior design scheme. Patterns, colours and shape can all be easily incorporated using products such as Gyptone or Rigitone. A lower key, minimalist appearance can be achieved with the clean, white finish of Gyprex systems.

Air quality

Historically, the role of a suspended ceiling has been limited to passive performance in terms of aesthetics, acoustics and fire resistance. With our VOC-absorbing ACTIV*air* technology now available as standard in all Gyptone and Rigitone products, the ceiling can now take on a more active functional role within the room. It actively improves the indoor air quality and provides the associated benefits to the occupants in the space below.

▶ Refer to C02. S01. P49 – Indoor air quality.

Accessibility

Whatever type of ceiling is designed (table 1), access to the cavity above the ceiling will inevitably be required. whether this is for inspection, maintenance or repair of HVAC and similar services. A seamless system such as **CasoLine MF** can accommodate access points in the form of Profilex or Gyptone access hatches, whilst lay-in grid ceilings have the advantage of allowing access at virtually any point across the ceiling.

Types of ceiling

Demountable

A traditional demountable ceiling consists of individual ceiling tiles which are laid into a metal grid. More recent innovations of the traditional lay-in grid ceiling include the **CasoLine QUICK-LOCK-GRID Corridor System**. The plank system can be used to provide totally clear, unobstructed access to M&E services in commercial buildings. Lay-in ceilings are generally simple to install, easy to maintain and can be dismantled, repositioned or even reused.

Seamless

Systems such as **CasoLine MF** or **GypLyner UNIVERSAL** ceilings provide a smooth, seamless monolithic ceiling. These types of ceiling can be used to achieve high levels of sound insulation, absorption, or both. These systems provide a large degree of flexibility and can be installed horizontally, sloped, vertically or - using **CasoLine CURVE** - giving a contoured shape.

Cleanability

Commercial ceilings are subject to a diverse range of cleaning regimes. A hospital ceiling, needs to cope with the frequent and/or aggressive cleaning regimes required in clinical areas. Ceiling systems such as Gyprex BIO provide a wipeable vinyl surface with an integral biocide, preventing the growth of fungi and bacteria, including MRSA, E. coli O157 and Salmonella.

Additional Information

Our Gyptone range offers the highest level of accessibility to the ceiling cavity. Gyptone Hatch, Gyptone Plank and the Gyptone TRAP system are ideally suited to where regular or unrestricted access to the cavity is required and can be used either as a stand-alone solution or in conjunction with another Gyptone ceiling.

For full details of these products and suitable systems, please refer to the **British Gypsum Ceilings Installation Guide**, available to download from british-gypsum.com.

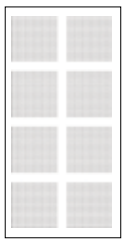
Table 1 – Ceiling system combinations

	Demountable systems			Seamless systems		
	T15	T24	Plank	CasoLine MF	GypLyner	CasoLine CURVE
Gyprex tiles	■	■				
Gyptone Tiles	■	■				
Gyptone Plank			■			
Gyptone board				■	■	■
Rigitone board				■	■	■

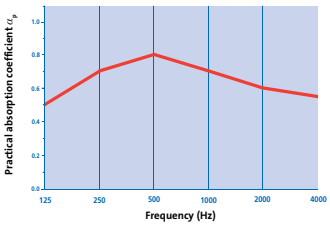
Gyptone performance

Table 2 – Sound absorption data for Gyptone boards

QUATTRO 41



Sound absorption coefficient α_p



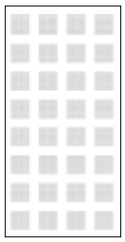
System reference C10A091

Gyptone QUATTRO 41 (plenum depth 187mm)

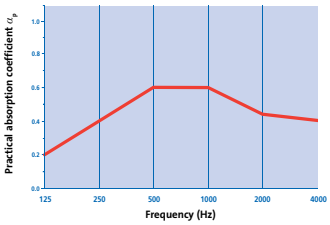
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.50	0.70	0.80	0.70	0.60	0.55	**0.65**	**C**	**0.70**

QUATTRO 42



Sound absorption coefficient α_p



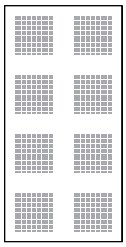
System reference C10A110

Gyptone QUATTRO 42 (plenum depth 50mm)[3]

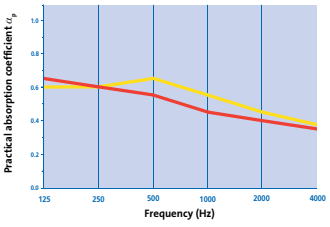
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.20	0.40	0.60	0.60	0.45	0.40	**0.50**	**D**	**0.55**

QUATTRO 46



Sound absorption coefficient α_p



System reference C10A014
C10A015

Gyptone QUATTRO 46 (plenum depth 400mm)
Gyptone QUATTRO 46 (plenum depth 400mm plus 100mm Isover Spacesaver Ready-Cut)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.65	0.60	0.55	0.45	0.40	0.35	**0.45(L)**	**D**	**0.50**
0.60	0.60	0.65	0.55	0.45	0.40	**0.50(L)**	**D**	**0.55**

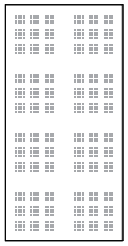
[1] AC – Absorption Class.
[2] NRC – Noise Reduction Coefficient.
[3] Due to installation limitations the minimum cavity size that can be constructed with **CasoLine MF** or **CasoLine CURVE** system is 100mm. The sound absorption performance for these systems is estimated to be equivalent to that of the same system built with a 50mm plenum.

NB All products have been tested to *BS EN 20354* and *ISO 354*. The single figure rating practical sound absorption coefficient α_w is calculated in accordance with *EN ISO 11654*. Suffix letters indicate where performance is limited at either low, medium or high frequencies.

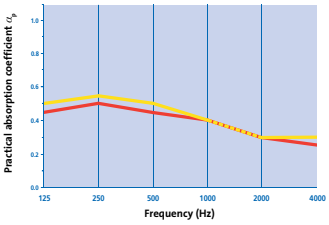
Gyptone performance (continued)

Table 2 (continued) – Sound absorption data for Gyptone boards

QUATTRO 47



Sound absorption coefficient α_p



System reference

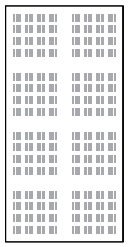
C10A016
C10A017

Gyptone QUATTRO 47 (plenum depth 400mm)
Gyptone QUATTRO 47 (plenum depth 400mm plus 50mm Isover Acoustic Partition Roll (APR 1200))

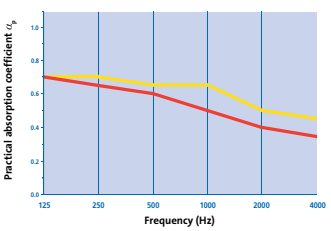
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.45	0.50	0.45	0.40	0.30	0.25	**0.35(L)**	**D**	**0.40**
0.50	0.55	0.50	0.40	0.30	0.30	**0.40(L)**	**D**	**0.45**

LINE 6



Sound absorption coefficient α_p



System reference

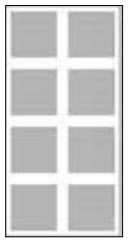
C10A001
C10A002

Gyptone LINE 6 (plenum depth 400mm)
Gyptone LINE 6 (plenum depth 400mm plus 100mm Isover Spacesaver Ready-Cut)

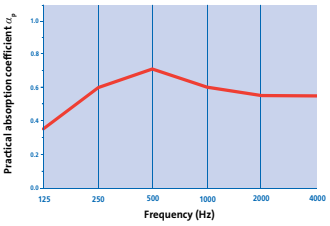
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.70	0.65	0.60	0.50	0.40	0.35	**0.45(L)**	**D**	**0.55**
0.70	0.70	0.65	0.65	0.50	0.45	**0.55(L)**	**D**	**0.65**

SIXTO 63



Sound absorption coefficient α_p



System reference

C10A115

Gyptone SIXTO 63 (plenum depth 200mm)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.35	0.60	0.70	0.60	0.55	0.55	**0.60**	**C**	**0.60**

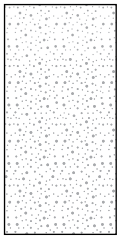
[1] AC – Absorption Class.
[2] NRC – Noise Reduction Coefficient.

NB All products have been tested to *BS EN 20354* and *ISO 354*. The single figure rating practical sound absorption coefficient α_w is calculated in accordance with *EN ISO 11654*. Suffix letters indicate where performance is limited at either low, medium or high frequencies.

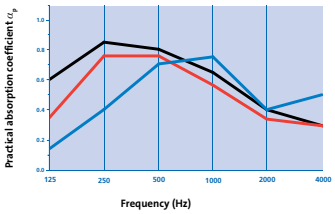
Rigitone performance

Table 3 – Sound absorption data for Rigitone boards

8-15-20 SUPER



Sound absorption coefficient α_p



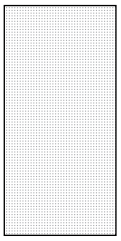
System reference
- C10A058
- C10A059
- C10A069

- **Rigitone 8-15-20 SUPER** (plenum depth 50mm)[3]
- **Rigitone 8-15-20 SUPER** (plenum depth 200mm)
- **Rigitone 8-15-20 SUPER** (plenum depth 200mm plus 50mm Isover Frame Batt 32)

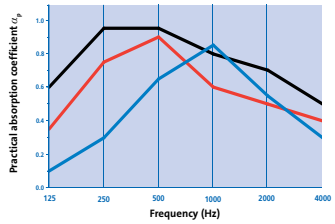
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.15	0.40	0.70	0.75	0.45	0.40	**0.50(M)**	**D**	**0.55**
0.35	0.75	0.75	0.55	0.40	0.30	**0.45(LM)**	**D**	**0.60**
0.60	0.85	0.80	0.65	0.45	0.30	**0.45(LM)**	**D**	**0.70**

8/18



Sound absorption coefficient α_p



System reference
- C10A036
- C10A037
- C10A060

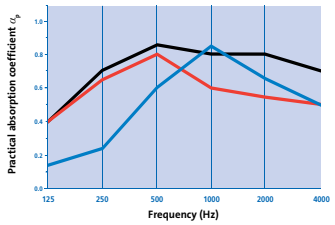
- **Rigitone 8/18** (plenum depth 50mm)[3]
- **Rigitone 8/18** (plenum depth 200mm)
- **Rigitone 8/18** (plenum depth 200mm plus 50mm Isover Frame Batt 32)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.10	0.30	0.65	0.85	0.55	0.30	**0.50(M)**	**D**	**0.55**
0.35	0.75	0.90	0.60	0.50	0.40	**0.55(LM)**	**D**	**0.70**
0.60	0.95	0.95	0.80	0.70	0.50	**0.70(LM)**	**C**	**0.85**

8/18 Q

Sound absorption coefficient α_p



System reference
- C10A125
- C10A124
- C10A126

- **Rigitone 8/18 Q** (plenum depth 50mm)[3]
- **Rigitone 8/18 Q** (plenum depth 200mm)
- **Rigitone 8/18 Q** (plenum depth 200mm plus 25mm Isover Acoustic Partition Roll (APR 1200))

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.15	0.25	0.60	0.85	0.65	0.50	**0.55(M)**	**D**	**0.60**
0.40	0.65	0.80	0.60	0.55	0.50	**0.60**	**C**	**0.65**
0.40	0.70	0.85	0.80	0.80	0.70	**0.80**	**B**	**0.80**

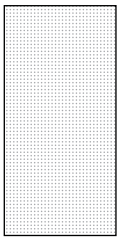
[1] AC – Absorption Class.
[2] NRC – Noise Reduction Coefficient.
[3] Due to installation limitations the minimum cavity size that can be constructed with **CasoLine MF** or **CasoLine CURVE** system is 100mm. The sound absorption performance for these systems is estimated to be equivalent to that of the same system built with a 50mm plenum.

NB All products have been tested to *BS EN 20354* and *ISO 354*. The single figure rating practical sound absorption coefficient α_w is calculated in accordance with *EN ISO 11654*. Suffix letters indicate where performance is limited at either low, medium or high frequencies.

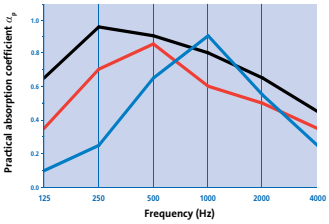
Rigitone performance (continued)

Table 3 (continued) - Sound absorption data for Rigitone boards

10/23



Sound absorption coefficient α_p



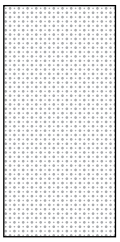
System reference
- C10A038
- C10A039
- C10A061

- **Rigitone 10/23** (plenum depth 50mm)[3]
- **Rigitone 10/23** (plenum depth 200mm)
- **Rigitone 10/23** (plenum depth 200mm plus 50mm Isover Frame Batt 32)

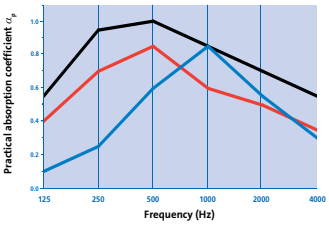
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.10	0.25	0.65	0.90	0.55	0.25	**0.45(M)**	**D**	**0.60**
0.35	0.70	0.85	0.60	0.50	0.35	**0.50(LM)**	**D**	**0.65**
0.65	0.95	0.90	0.80	0.65	0.45	**0.65(LM)**	**C**	**0.80**

12-20/66



Sound absorption coefficient α_p



System reference
- C10A042
- C10A043
- C10A063

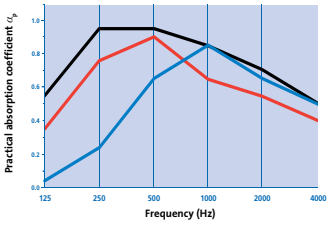
- **Rigitone 12-20/66** (plenum depth 50mm)[3]
- **Rigitone 12-20/66** (plenum depth 200mm)
- **Rigitone 12-20/66** (plenum depth 200mm plus 50mm Isover Frame Batt 32)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.10	0.25	0.60	0.85	0.55	0.30	**0.45(M)**	**D**	**0.55**
0.40	0.70	0.85	0.60	0.50	0.35	**0.50(LM)**	**D**	**0.65**
0.55	0.95	1.00	0.85	0.70	0.55	**0.70(LM)**	**C**	**0.90**

12/25

Sound absorption coefficient α_p



System reference
- C10A127
- C10A129
- C10A128

- **Rigitone 12/25** (plenum depth 50mm)[3]
- **Rigitone 12/25** (plenum depth 200mm)
- **Rigitone 12/25** (plenum depth 200mm plus 50mm Isover Frame Batt 32)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.05	0.25	0.65	0.85	0.65	0.50	**0.55(M)**	**D**	**0.60**
0.35	0.75	0.90	0.65	0.55	0.40	**0.55(LM)**	**D**	**0.70**
0.55	0.95	0.95	0.85	0.70	0.50	**0.70(LM)**	**C**	**0.85**

[1] AC – Absorption Class.
[2] NRC – Noise Reduction Coefficient.
[3] Due to installation limitations the minimum cavity size that can be constructed with **CasoLine MF** or **CasoLine CURVE** system is 100mm. The sound absorption performance for these systems is estimated to be equivalent to that of the same system built with a 50mm plenum.

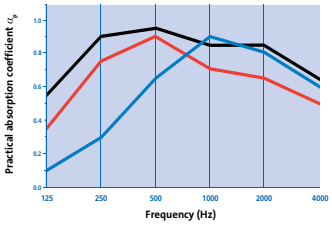
NB All products have been tested to *BS EN 20354* and *ISO 354*. The single figure rating practical sound absorption coefficient α_w is calculated in accordance with *EN ISO 11654*. Suffix letters indicate where performance is limited at either low, medium or high frequencies.

Rigitone performance (continued)

Table 3 (continued) - Sound absorption data for Rigitone boards

12/25 Q

Sound absorption coefficient α_p



System reference

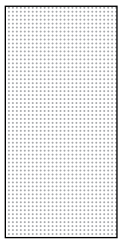
C10A131
C10A130
C10A132

Rigitone 12/25 Q (plenum depth 50mm)[3]
Rigitone 12/25 Q (plenum depth 200mm)
Rigitone 12/25 Q (plenum depth 200mm plus 50mm Isover Frame Batt 32)

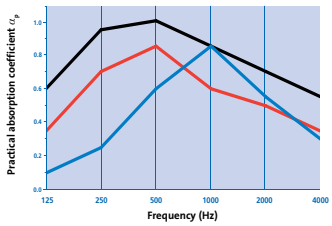
Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.10	0.30	0.65	0.90	0.80	0.60	**0.60(M)**	**C**	**0.65**
0.35	0.75	0.90	0.70	0.65	0.50	**0.65(LM)**	**C**	**0.75**
0.55	0.90	0.95	0.85	0.85	0.65	**0.85(L)**	**B**	**0.90**

15/30



Sound absorption coefficient α_p



System reference

C10A040
C10A041
C10A062

Rigitone 15/30 (plenum depth 50mm)[3]
Rigitone 15/30 (plenum depth 200mm)
Rigitone 15/30 (plenum depth 200mm plus 50mm Isover Frame Batt 32)

Practical absorption coefficient α_p

125	250	500	1k	2k	4k	α_w	AC[1]	NRC[2]
0.10	0.25	0.60	0.85	0.55	0.30	**0.45(M)**	**D**	**0.55**
0.35	0.70	0.85	0.60	0.50	0.35	**0.50(LM)**	**D**	**0.65**
0.60	0.95	1.00	0.85	0.70	0.55	**0.70(LM)**	**C**	**0.85**

[1] AC – Absorption Class.
[2] NRC – Noise Reduction Coefficient.
[3] Due to installation limitations the minimum cavity size that can be constructed with **CasoLine MF** or **CasoLine CURVE** system is 100mm. The sound absorption performance for these systems is estimated to be equivalent to that of the same system built with a 50mm plenum.

NB All products have been tested to *BS EN 20354* and *ISO 354*. The single figure rating practical sound absorption coefficient α_w is calculated in accordance with *EN ISO 11654*. Suffix letters indicate where performance is limited at either low, medium or high frequencies.

CasoLine MF

Concealed monolithic metal frame suspended ceiling system

SPECSURE Lifetime System Warranty

All our systems are covered by **SpecSure®** when using genuine British Gypsum and Saint-Gobain Isover products

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 Gyptone and Rigitone acoustic ceiling boards to create a seamless, monolithic appearance.

0.35 – 0.85 α_w

ACTIV air

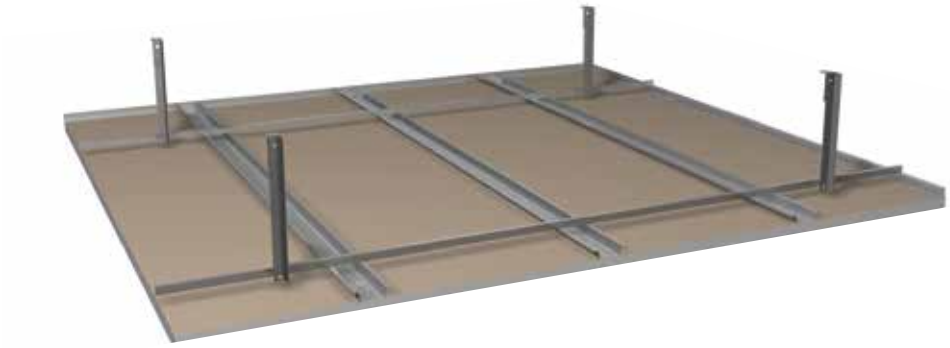
Refer to C02. S01. P49

SPECSURE Lifetime System Warranty

Refer to C01. S01. P07

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 British Gypsum lining solutions to achieve a variety of performances tailored to meet individual project requirements
- 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...

CasoLine MF

To achieve fire performances up to 120 minute airborne and impact sound insulation performances.

▶ Refer to C06. S02. P02 – Floors and ceilings, **CasoLine MF**.

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 Gyptone and Rigitone boards can be fixed.

Planning – key factors

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

Relative humidity

CasoLine MF ceilings lined with Gyptone or Rigitone 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.

▶ Refer to C02. S01. P30 – Robustness.

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 C09. S01. P04 – Sound absorbing solutions introduction, tables 2 and 3.

Thermal performance

Isover insulation can be laid over the suspension grid to provide the required standard of thermal insulation. Contact the British Gypsum Technical Advice Centre for further guidance.

Imposed loads

Tables 1 and 2 provide loading data for the suspension grid for 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) but must only be used in non-fire rated construction.

Table 1 – Maximum recommended loads on CasoLine MF with Gyptone board linings

Maximum load including weight of board, any insulation and finish plaster MF5[1] at 600mm centres kg/m² (modified load[3])	Suspension point centres mm	MF7[2] channel centres mm
55	1200	600
35	1200	900
25 (19[3])	1200	1200

[1] Gypframe MF5 Ceiling Section.
[2] Gypframe MF7 Primary Support Channel.
[3] Non fire-rated constructions only.

Table 2 – Maximum recommended loads on CasoLine MF with Rigitone board linings

Maximum load including weight of board, any insulation and finish plaster MF5[1] at 330mm centres kg/m² (modified load)	Suspension point centres mm	MF7[2] channel centres mm
30 (23[3])	900	1000

[1] Gypframe MF5 Ceiling Section.
[2] Gypframe MF7 Primary Support Channel.
[3] Non fire-rated constructions only.

Suspension – Gyptone board linings

Fixing points for suspending the metal grid are 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. 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. The Gypframe MF5 Ceiling Section should be installed at nominal 600mm centres.

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 British Gypsum Ceilings 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 British Gypsum'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.

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 British Gypsum Technical Advice Centre for further guidance.

Services

CasoLine MF design (continued)

The plenum can be used to route all service requirements including ducting, pipework, electrical cables and conduit. Where 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 1 or 2 for maximum recommended loads.

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 1 and 2. Where loads outside this range are anticipated, independent suspension should be provided from the structure.

Control joints

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 9 - 10.

Board finishing

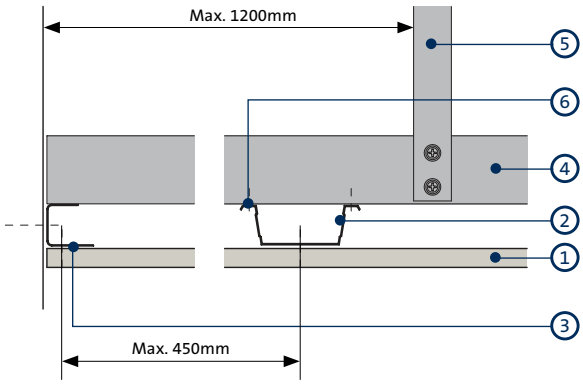
▶ Refer to C08. S03. P04 – Jointing.

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 **British Gypsum Ceilings Installation Guide** for full details.

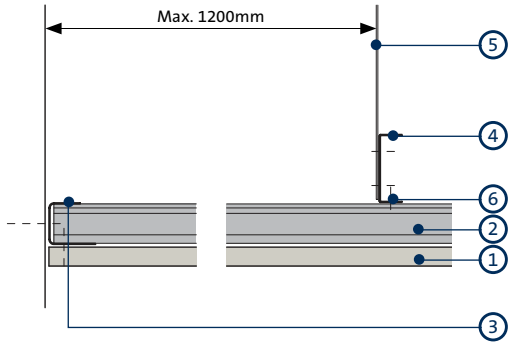
CasoLine MF construction details (plain border and bulkheads)

1



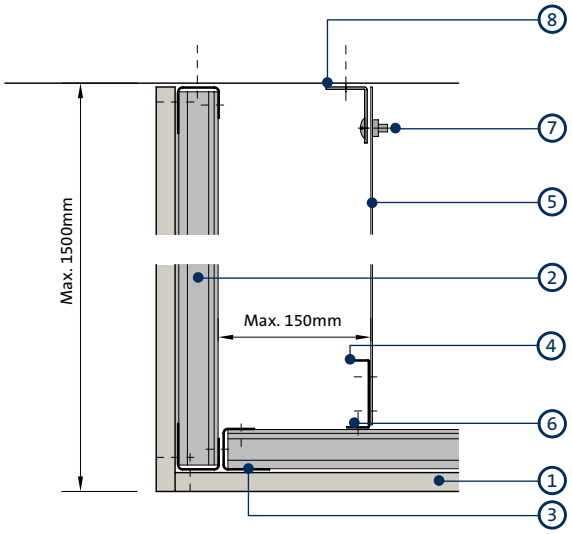
Perimeter parallel to Gypframe MF5 Ceiling Section - screw-fixed

2



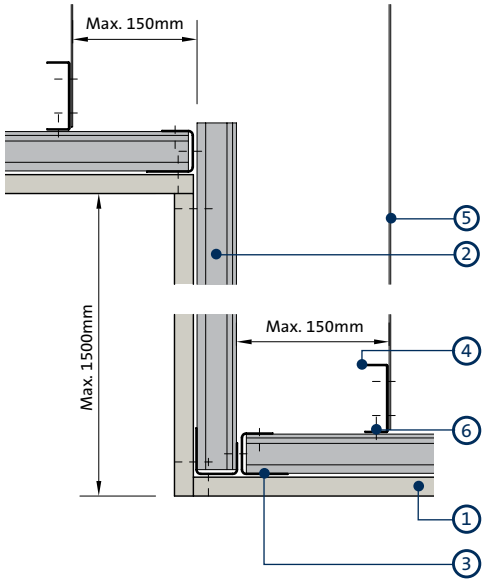
Perimeter perpendicular to Gypframe MF5 Ceiling Section - screw-fixed

3



Bulkhead - screw-fixed

4

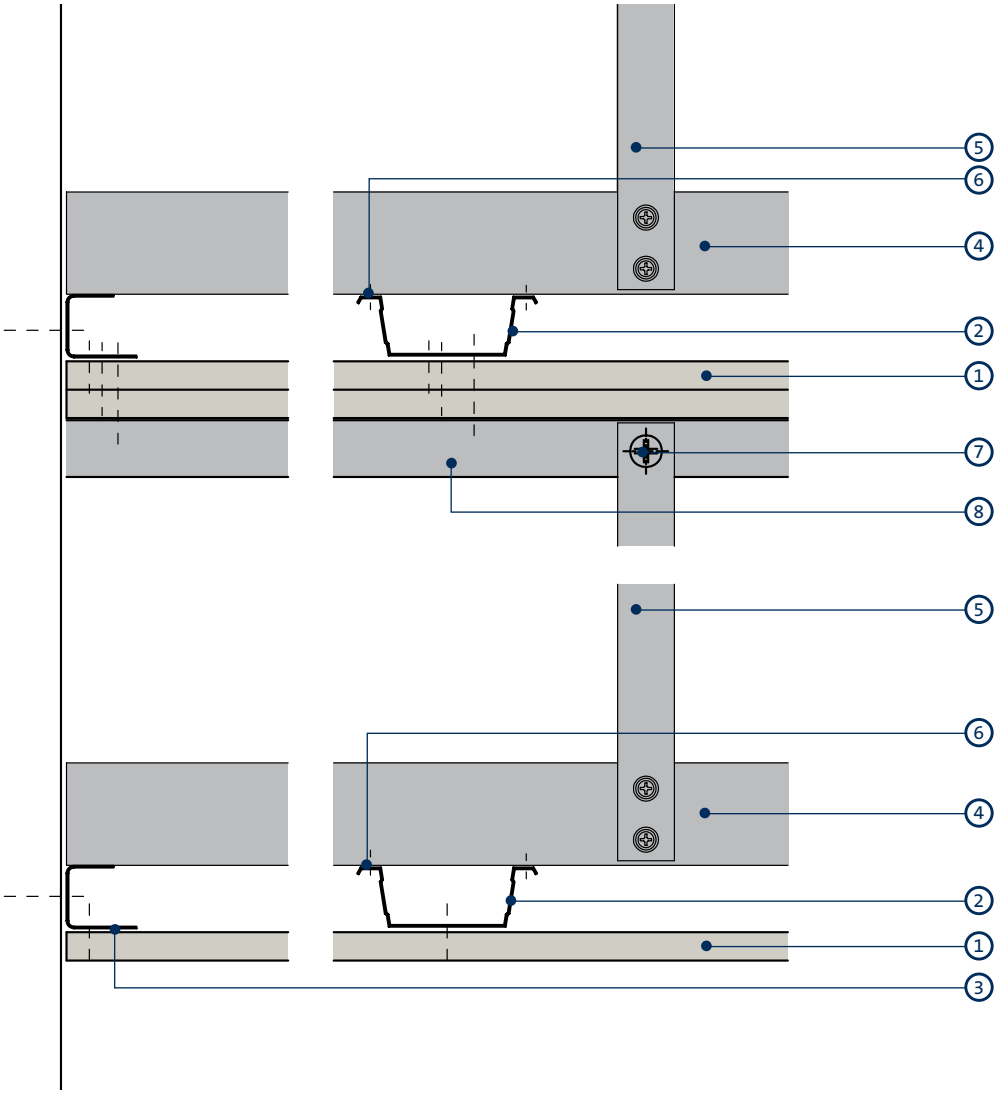


Change of level - screw-fixed

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 British Gypsum Wafer Head Jack-Point Screw
7 Gypframe MF11 Nut and Bolt
8 Gypframe MF12 Soffit Cleat

CasoLine MF construction details (plain border) (continued)

5

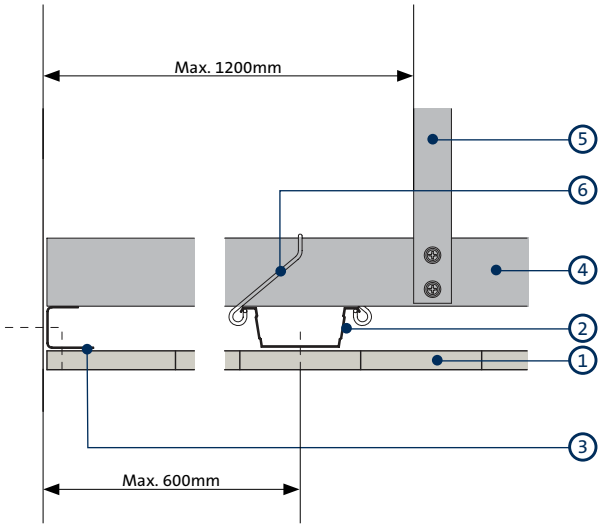


Secondary double **CasoLine MF** ceiling

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 British Gypsum Wafer Head Jack-Point Screw
7 Gypframe MF11 Nut and Bolt
8 Gypframe FEA1 Steel Angle

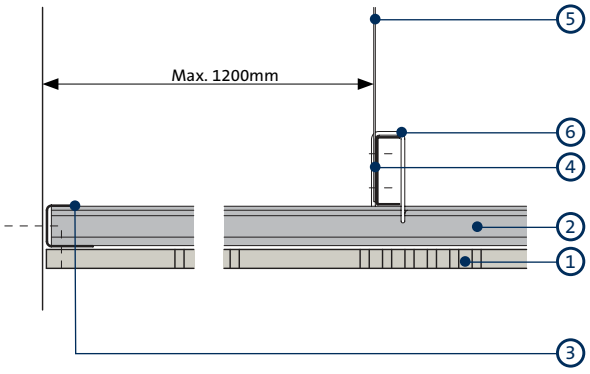
CasoLine MF construction details (continued)

6



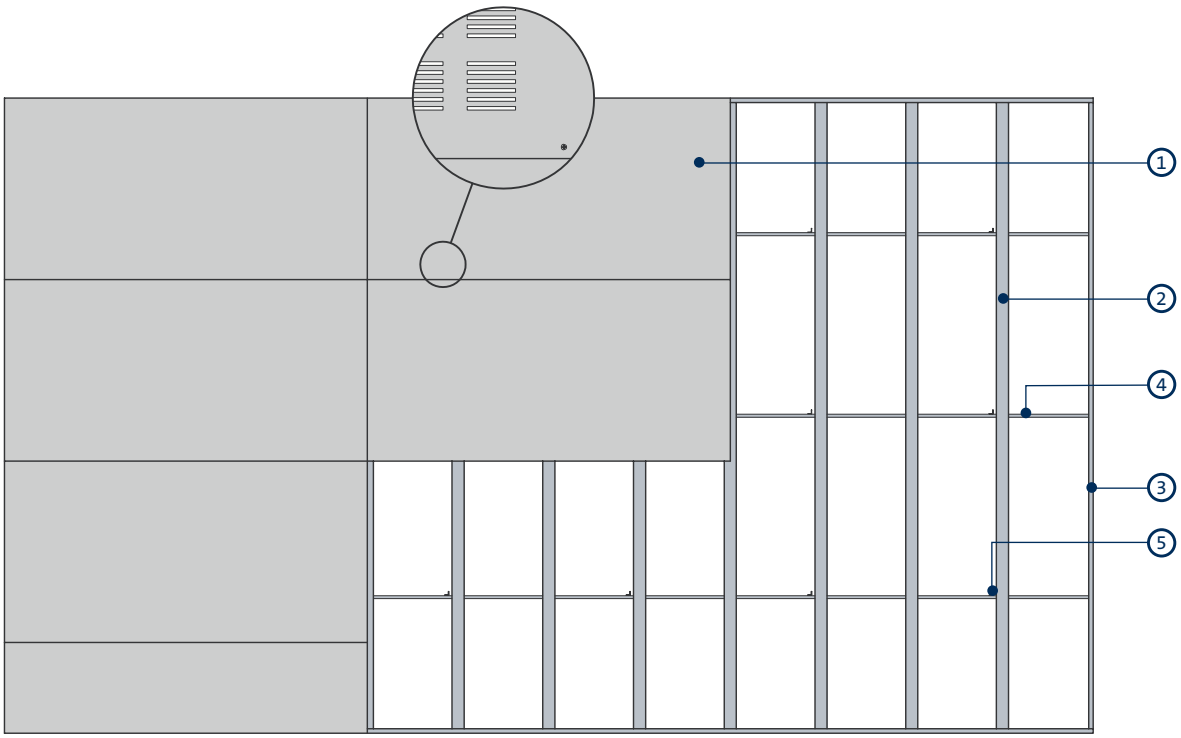
Perimeter parallel to Gypframe MF5 Ceiling Section - Gyptone

7



Perimeter perpendicular to Gypframe MF5 Ceiling Section - Gyptone

8

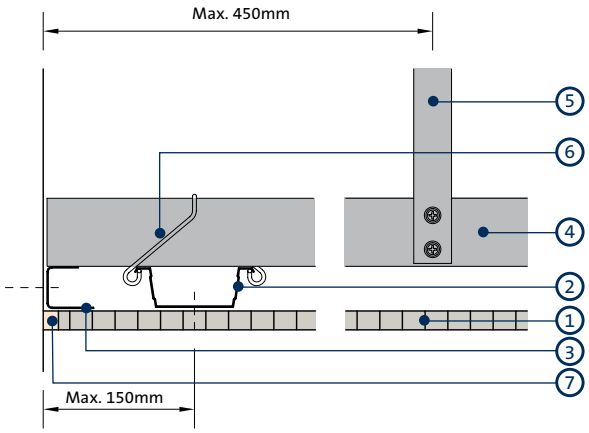


Reflected ceiling plan - Gyptone

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

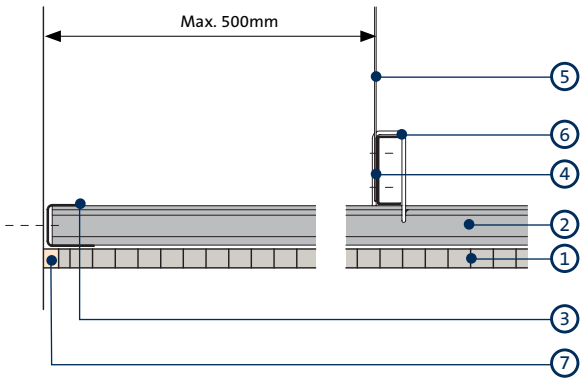
CasoLine MF construction details (continued)

9



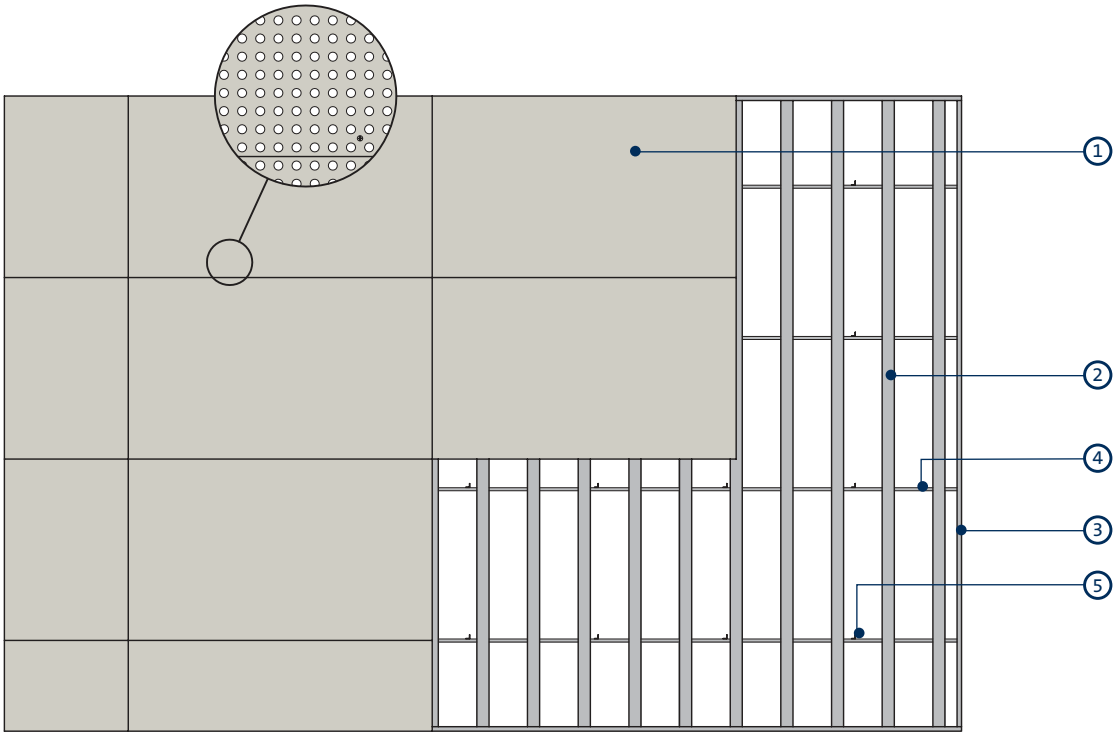
Perimeter parallel to Gypframe MF5 Ceiling Section - Rigitone

10



Perimeter perpendicular to Gypframe MF5 Ceiling Section - Rigitone

11



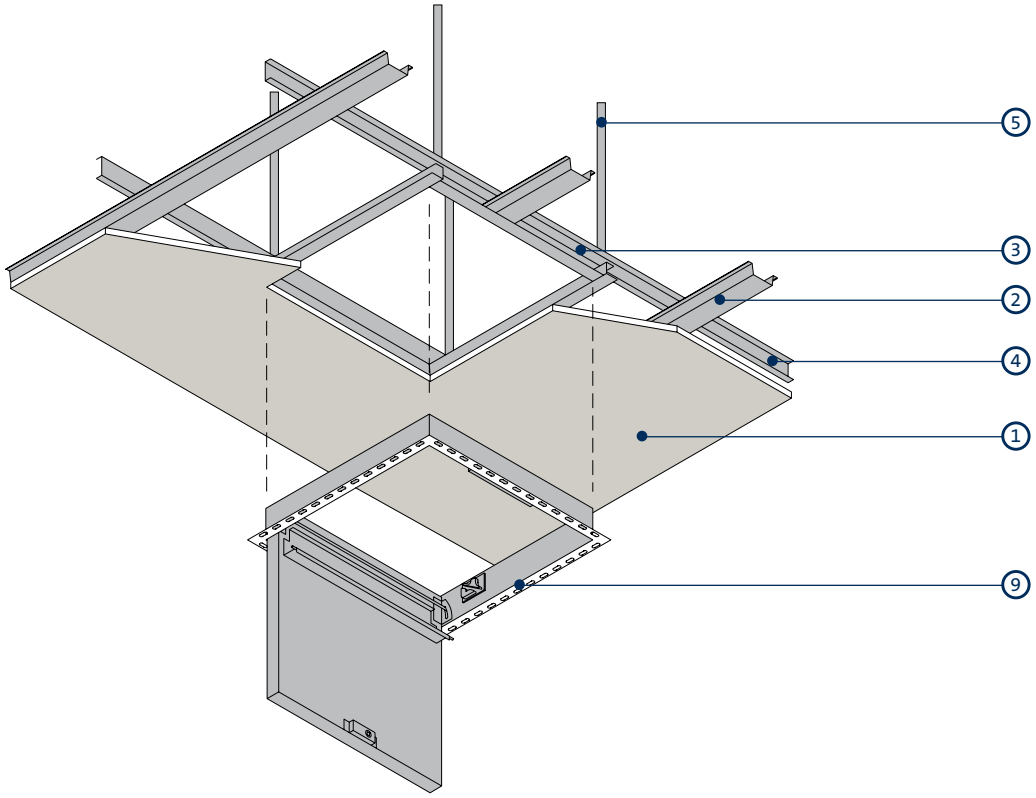
Reflected ceiling plan - Rigitone

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 **British Gypsum Ceilings Installation Guide**, available to download from british-gypsum.com

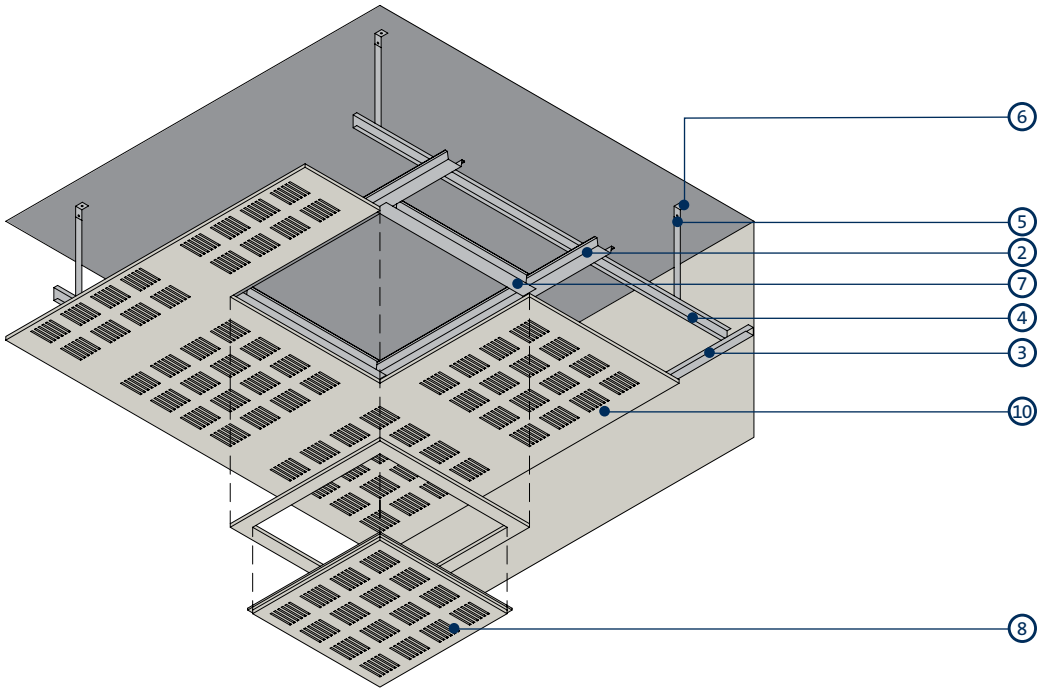
CasoLine MF construction details (continued)

12



Access panel installation

13



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

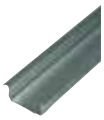
Gypframe metal components (▶ Refer to C10. S02. P02 for details)

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

Gypframe MF9 Connecting Clips
Method of connecting Gypframe MF5 Ceiling Section to Gypframe MF7 Primary Support Channel.

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 (▶ Refer to C10. S03. P02 for details)

Gyproc WallBoard
Standard gypsum plasterboard.

Gyproc Plank
Standard gypsum plasterboard located as an inner layer.

Ceiling boards
A full range of Gyptone[1] and Rigitone[1] boards are available to meet specific aesthetic and/or acoustic requirements.

▶ Refer to C10. S08. P02

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

[1] ACTIV*air* technology as standard.

CasoLine MF system components (continued)

Fixing products (▶ Refer to C10. S04. P02 for details)

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

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

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

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

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

Plasterboard accessories (▶ Refer to C10. S05. P02 for details)

Gyproc Jointing Material
Jointing compounds, ready mixes and adhesives for reinforcement and finishing of board joints. Primers and sealers for treatment of boards for pre-decoration.

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 edge and angle beads
Protecting and enhancing board edges and corners.

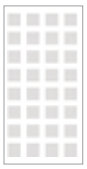
Gyproc Joint Tape
A paper tape designed for reinforcement of flat joints or internal angles.

CasoLine MF system components (continued)

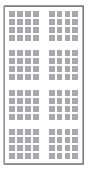
Ceiling products (▶ Refer to C10. S08. P02 for details)

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

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



Gyptone QUATTRO 42[1]
Acoustic board with square perforations capable of providing Class D sound absorption.



Gyptone 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.

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

Rigitone 8/18 Q[1]
Acoustic board with a perforated pattern of 8mm squares capable of providing up to Class B 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 12/25 Q[1]
Acoustic board with a perforated pattern of 12mm squares capable of providing up to Class B absorption.

Rigitone 12/25[1]
Acoustic board with a perforated pattern of 12mm 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) (▶ Refer to C10. S08. P02 for details)

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

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

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

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

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

Gyptone QUATTRO 42 Access Hatch[1]
Access hatch for providing access points in Gyptone QUATTRO 42 board ceilings.

Access pannels (▶ Refer to profilex.co.uk for details)

Profilex Access Panel
Panel for access to cavity.

Insulation products (▶ Refer to C10. S09. P02 for details)

Isover Acoustic Partition Roll (APR 1200)
Glass mineral wool for enhanced acoustic performance.

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

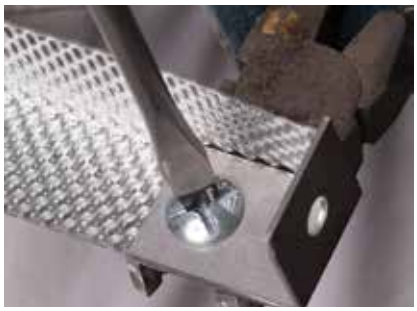
Isover Frame Batts 32
Glass mineral wool for improved acoustic performance.

[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 **British Gypsum Ceiling 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 British Gypsum 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 Gypframe MF9 Connecting Clips.

Gyptone boards or Rigitone boards are then screw fixed to the Gypframe MF5 Ceiling Sections and Gypframe MF6 Perimeter Channels with British Gypsum Drywall Screws.

Additional information

For full installation details, refer to the **British Gypsum Ceiling Installation Guide**, available to download from british-gypsum.com