GypCeiling MF
Identification

Create seamless, high performance suspended ceilings

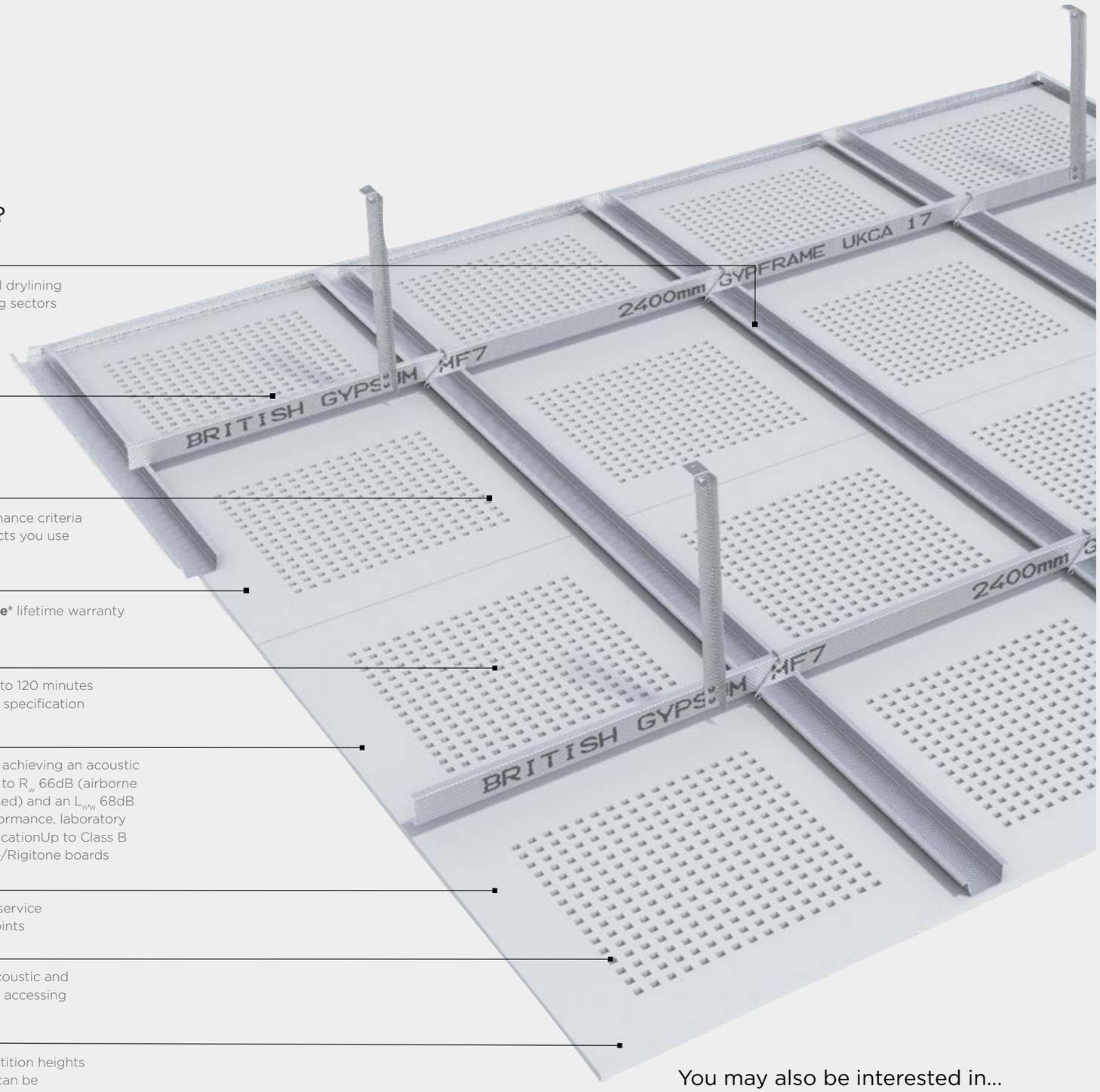
GypCeiling MF is a suspended ceiling system suitable for most internal drylining applications. The concealed grid works with Gyproc plasterboards and Gyptone and Rigitone acoustic ceiling boards to create flat and curved ceilings with a seamless, monolithic appearance. This system helps you achieve everything from simple plasterboard ceilings to perforated acoustic ceilings. It's suitable for all building sectors and can satisfy the most demanding performance requirements. And you can do it all without specialist tools or equipment.

Gyptone® products containing ACTIVair® can be used with this system. ACTIVair makes indoor air healthier by eliminating up to 70% of formaldehyde present in indoor air.

Fire resistance **30-120 mins**

Sound insulation (airborne) **60-63 R_wdB**

Why specify GypCeiling MF?



- Suitable for most internal drylining applications in all building sectors
- Creates stunning seamless ceilings
- Meets a range of performance criteria depending on the products you use
- Comes with our **SpecSure**® lifetime warranty
- Capable of achieving 30 to 120 minutes fire resistance, subject to specification
- The system is capable of achieving an acoustic performance of R_w 56dB to R_w 66dB (airborne insulation, laboratory based) and an $L_{n'w}$ 68dB to $L_{n'w}$ 50dB Impact performance, laboratory based), subject to specificationUp to Class B absorption with Gyptone/Rigitone boards
- Makes it easy to include service inspection and access points
- Allows you to improve acoustic and fire performance without accessing the room above
- Allows you to reduce partition heights as the partition channel can be supported by the ceiling framework rather than the soffit

SpecSure®
BRITISH GYPSUM SYSTEMS WARRANTY

There are specifications within this system that qualify for our **SpecSure**® warranty. For more information see **british-gypsum/specsure**

You may also be interested in...

GypCeiling MF curved
Create unique eye-catching curved ceiling designs. Please refer to Technical Support on **british-gypsum.com**

Ceilings

GypCeiling MF

Design considerations

To maximise ceiling performance, consider the following good practice guidance:

Consider flanking transmission at the design stage and ensure construction detailing is specified to eliminate reduction in acoustic performance. Sound insulation values quoted on our website are laboratory values. The practicalities of construction mean that quoted acoustic performances are difficult to achieve on site. Small openings such as gaps, cracks or holes will conduct airborne sounds and can significantly reduce acoustic performance. For optimum sound insulation a construction must be airtight. When designing spaces requiring separation by sound insulating floors and ceilings abutting structural steelwork, consider the potential loss of acoustic performance through the steelwork.

Building design

GypCeiling MF comprises Gypframe MF7 Primary Support Channels and Gypframe MF5 Ceiling Sections which form a suspended frame. Gyproc, Gyptone, Rigitone and Glasroc specialist boards are then fixed.

Cavity barriers

Form cavity barriers, if required, with Gyproc FireLine or Glasroc F MultiBoard screw-fixed to a suitable frame. Fix the framing to the structure to avoid undue loading of the ceiling suspension grid. Fix the bottom of the framework to the ceiling grid.

Relative humidity

GypCeiling MF ceilings lined with Gyproc, Gyptone, Rigitone or British Gypsum 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 70RH at 10°C to 20°C. For high humidity/high moisture conditions use Gyproc plasterboard MR variants or Glasroc F MultiBoard.

Vapour control

For areas other than where perforated Gyptone or Rigitone boards are used, a face layer of duplex grade plasterboard or two coats of Gyproc Drywall Sealer applied to the face of the lining will provide water vapour control.

Table 1: Maximum recommended loads on GypCeiling MF with Gyproc or Glasroc linings

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

Table 2: Maximum recommended loads on GypCeiling MF with Gyptone board linings

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

Table 3: Maximum recommended loads on GypCeiling MF with Rigitone board linings

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

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

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 installing insulation over the back of the ceiling.

Thermal performance

Lay Isover insulation over the framework to provide the required standard of thermal insulation. Please refer to Technical Support on **british-gypsum.com**

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. This can cause the ceiling to lift, which may create a noise. Whilst this noise can be annoying to the occupant, it has no detrimental effect on the performance of the ceiling. Consider incorporating a pressure release system to minimise the risk of ceiling lift. Where sufficient 'pressure relief' cannot be designed in, we recommend that the Gypframe MF5 Ceiling Section and the Gypframe MF7 Primary Support Channel are screw-fixed together using two British Gypsum Wafer Head Jack-Point Screws at each intersection, particularly where non-perforated board linings are specified.

GypCeiling MF

Design considerations

Imposed loads

Tables 1, 2 and 3 on page 9.6 provide loading data for the suspension grid for Gyproc, Glasroc specialist, Gyptone and Rigitone boards respectively.

Suspension

Gyproc, Glasroc specialist and Gyptone board linings

Fixing points for suspending the metal grid are commonly needed 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, 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. If Gypframe FEA1 Steel Angle is used, we recommend fixing to the soffit with Gypframe MF12 Soffit Cleats.

Use Gypframe Acoustic Hangers 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 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 GypCeiling MF ceiling is suspended by conventional means, i.e. Gypframe MF8 Strap Hangers or Gypframe FEA1 Steel Angle.

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 needed at 900mm centres. In addition to this, the Gypframe MF5 Ceiling Section should be installed at nominal 330mm centres.

Handy hint

When designing the GypCeiling MF ceiling grid with a partition fixed to the underside, ensure MF sections run parallel to the partition, providing suitable restraint. This may result in additional Gypframe MF5 Ceiling Sections being needed.

Partition to suspended ceiling junction

Where a GypWall metal stud partition is fixed to the framework of a GypCeiling MF ceiling, in accordance with our 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 GypCeiling 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 GypCeiling MF ceiling or ceiling to structural soffit height. Take care during installation of tall partitions so as to not adversely affect their performance. Please refer to Technical Support on **british-gypsum.com**

Services

You can use the ceiling void above the suspension grid to route all service requirements including ducting, pipework, electrical cables, and conduits. Ducting, ventilation units etc. must be independently supported from the structure. Where light fittings, access panels and similar components are incorporated as part of the design requirements, you must maintain the integrity of the ceiling to meet fire resistance and sound insulation requirements.

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, 2 and 3 on page 9.6. Where loads outside this range are anticipated, independent suspension should be provided from the structure.

Control joints

Gyproc Control Joints may be needed 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.

Looking for performance selection tables?

We're committed to providing technical information that is transparent, clear, accurate, and always up-to-date. So you can rely on it when making decisions at any stage of the design, specification, installation, use, maintenance and disposal process.

All performance data is now available to view and download on our website.

british-gypsum.com/gypceiling-mf

Rigitone expansion joints

Cut Rigitone boards 10mm short of the perimeter wall and do not fix to the perimeter channel. Refer to construction details 12 and 13 on page 9.15.

Board finishing

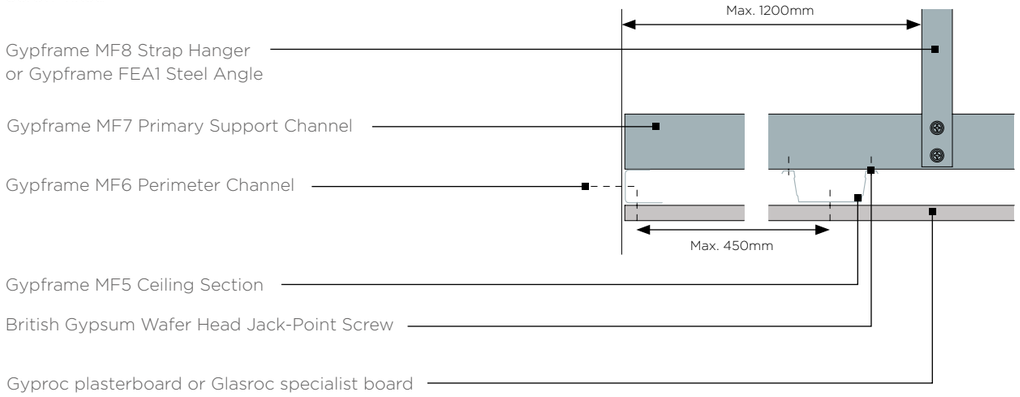
Refer to Finishes, Section 8. Take extra care when jointing Rigitone and Gyptone boards. Do not fill the perforations as this will impair acoustic performance.

GypCeiling MF

Construction details

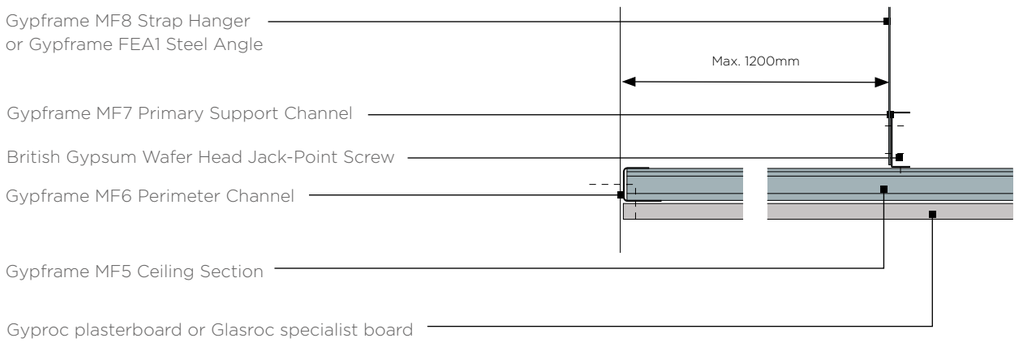
1. Perimeter parallel to Gypframe MF5 Ceiling Section

Screw-fixed



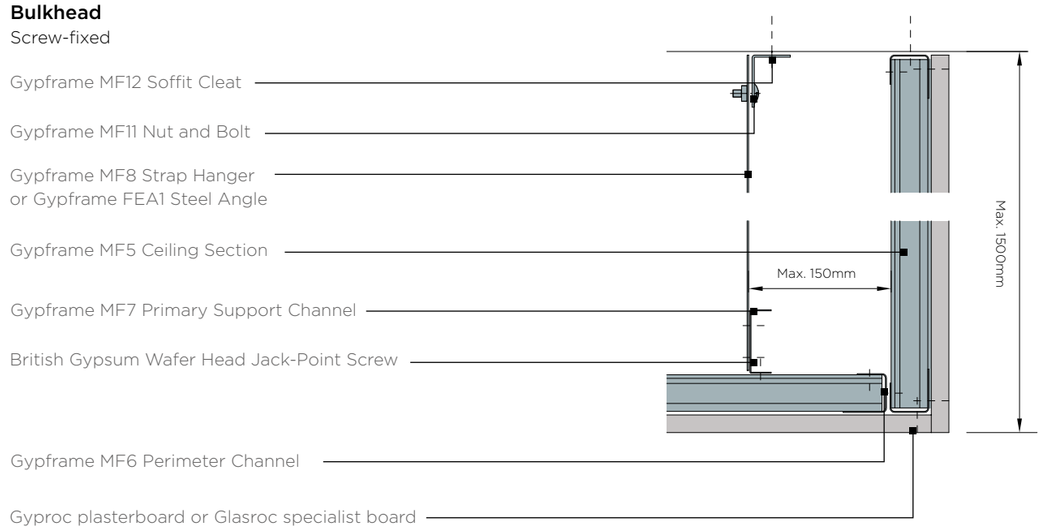
2. Perimeter perpendicular to Gypframe MF5 Ceiling Section

Screw-fixed



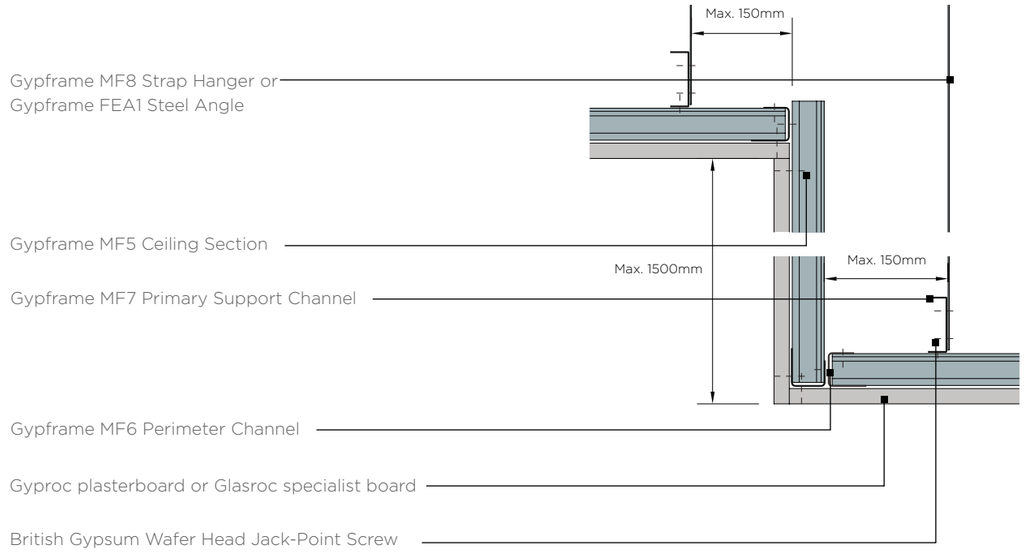
3. Bulkhead

Screw-fixed



4. Change of level

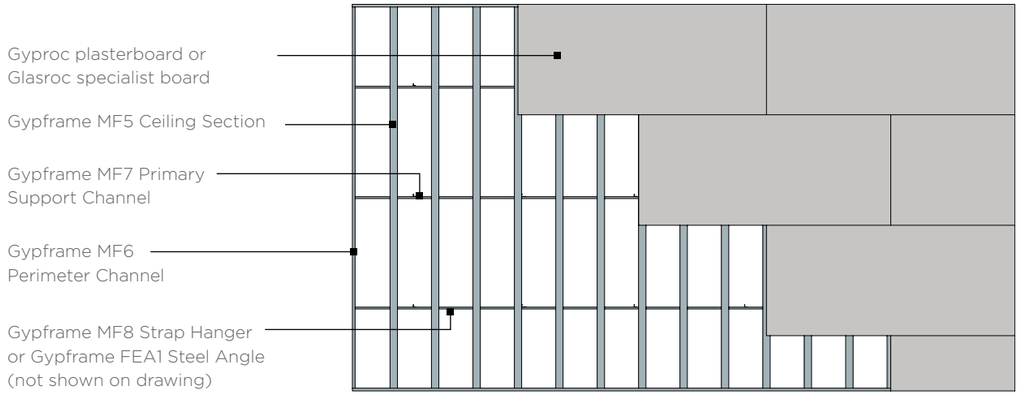
Screw-fixed



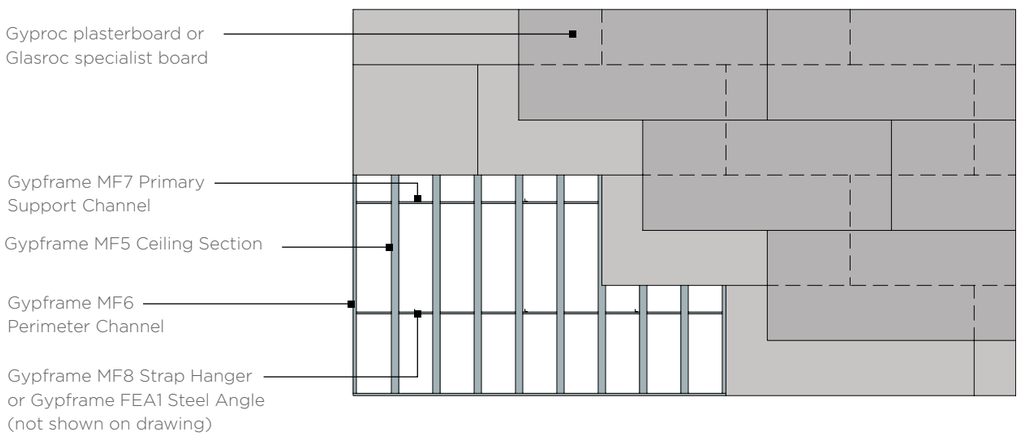
GypCeiling MF

Construction details

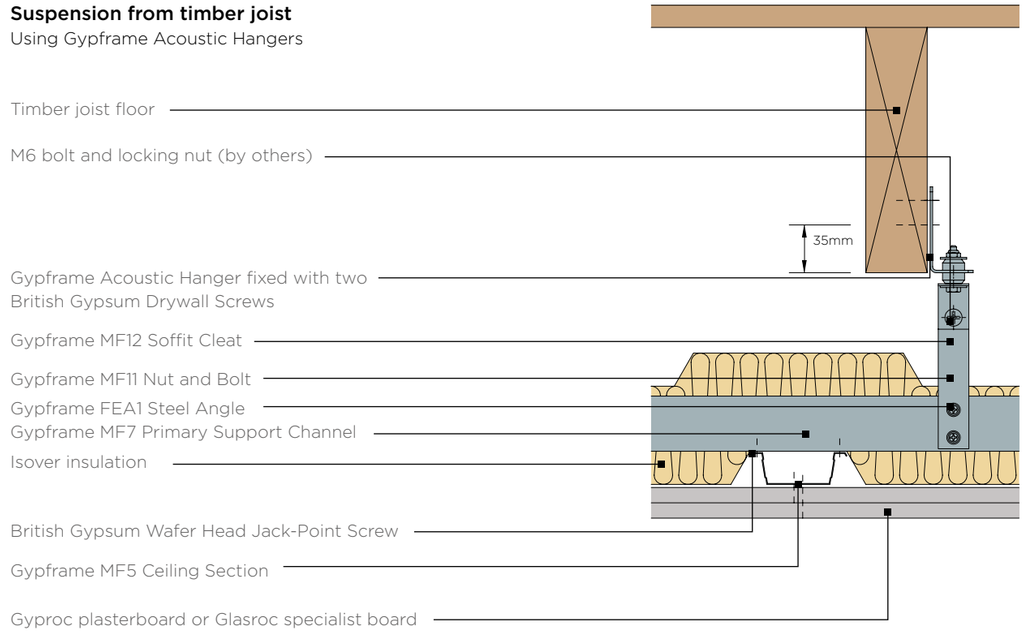
5. Reflected ceiling plan
Single layer



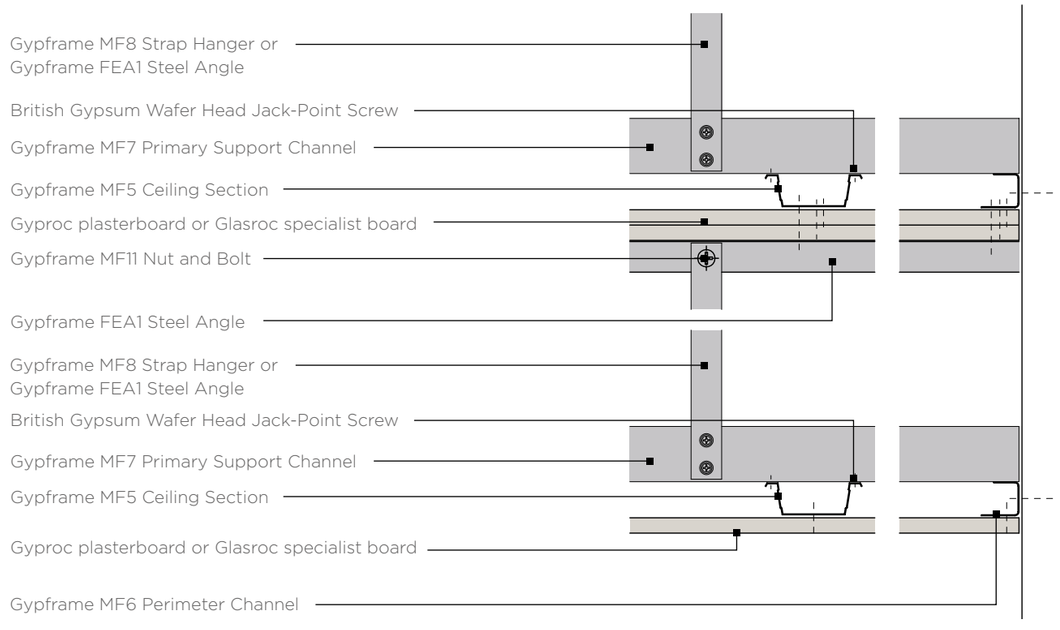
6. Reflected ceiling plan
Double layer



7. Suspension from timber joist
Using Gypframe Acoustic Hangers



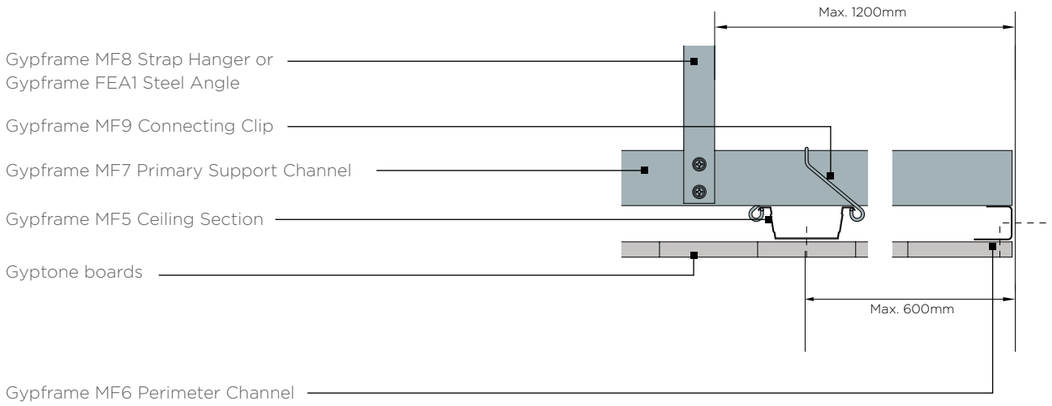
8. Secondary double GypCeiling MF ceiling



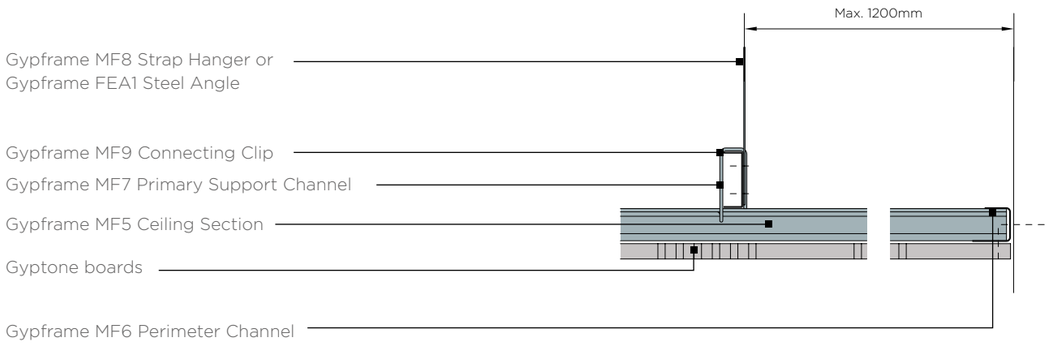
GypCeiling MF

Construction details

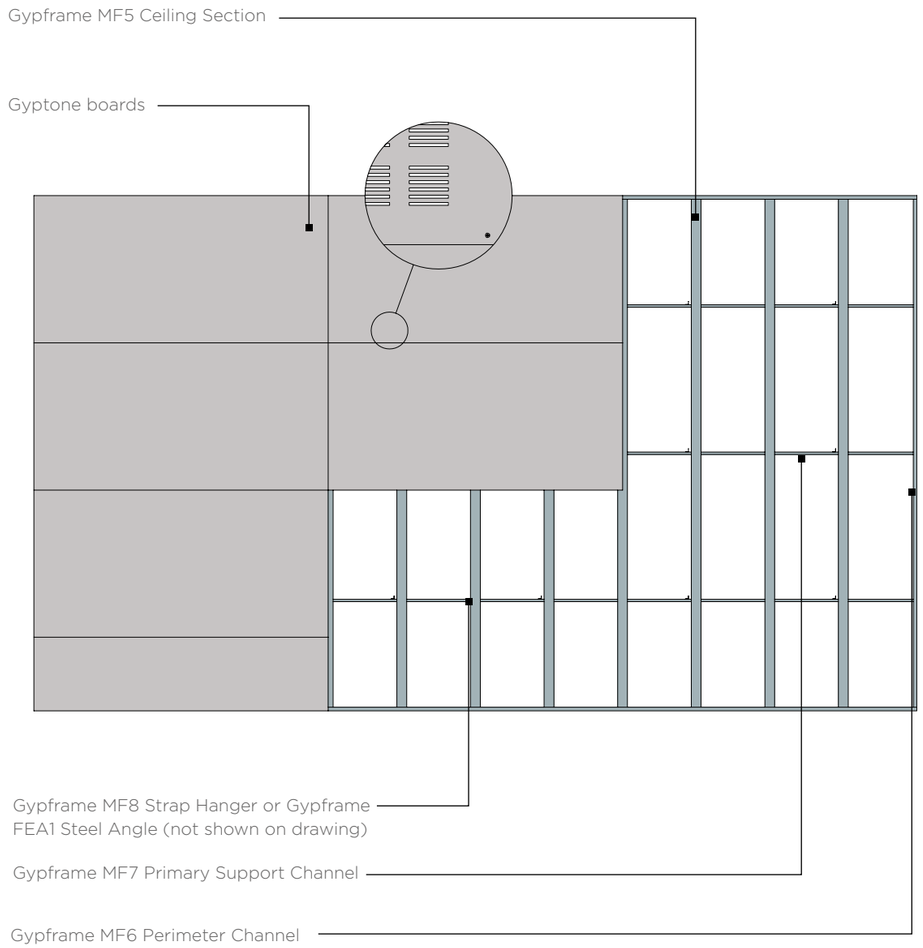
9. Perimeter parallel to Gypframe MF5 Ceiling Section – Gyptone boards



10. Perimeter perpendicular to Gypframe MF5 Ceiling Section – Gyptone boards



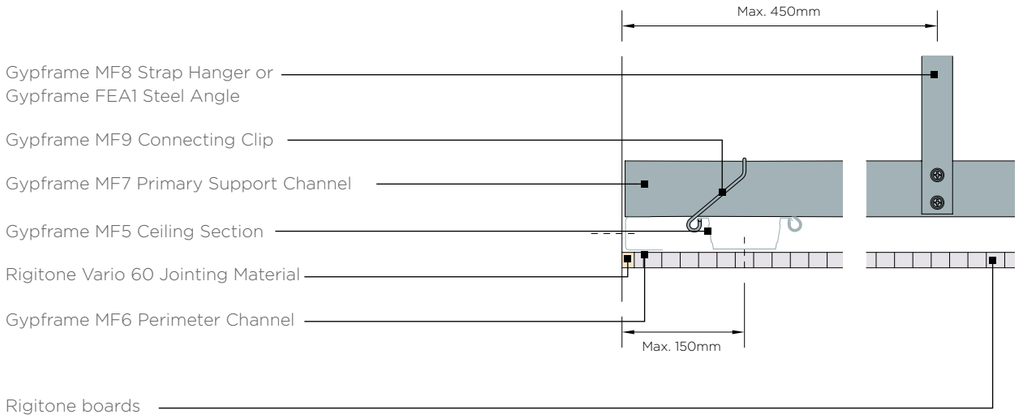
11. Reflected ceiling plan – Gyptone boards



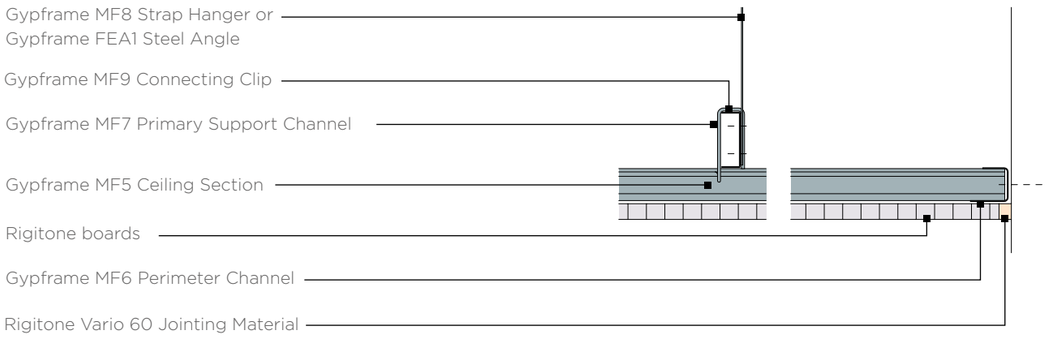
GypCeiling MF

Construction details

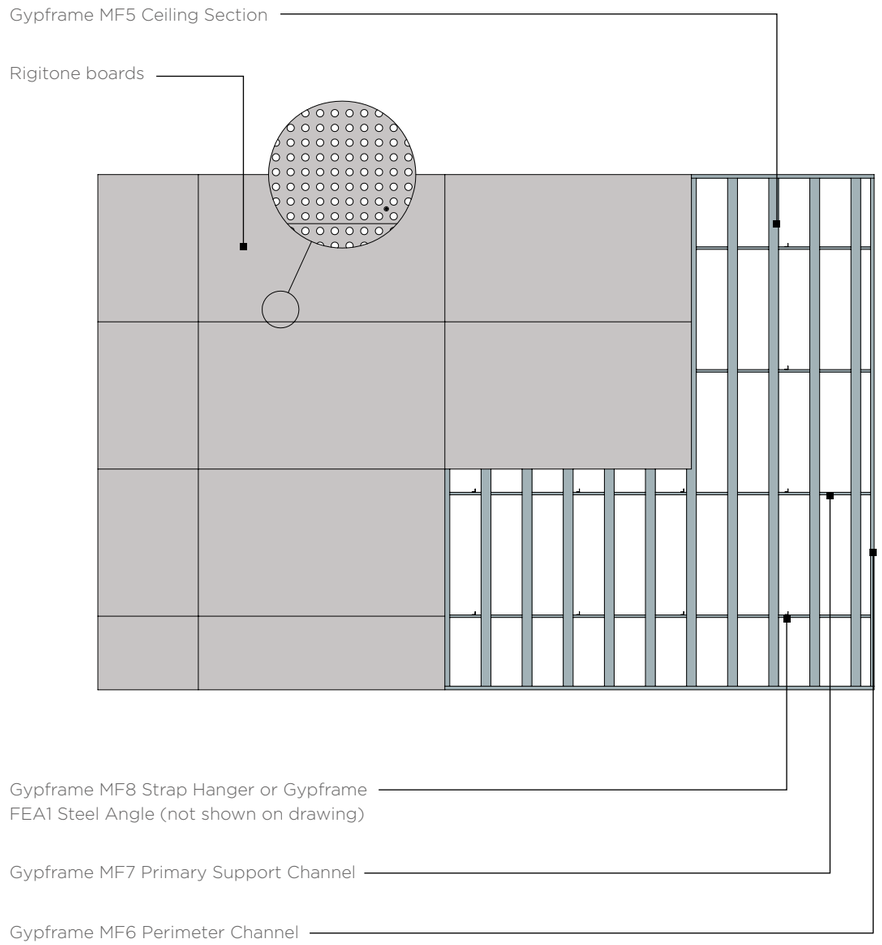
12. Perimeter parallel to Gypframe MF5 Ceiling Section – Rigitone boards



13. Perimeter perpendicular to Gypframe MF5 Ceiling Section – Rigitone boards



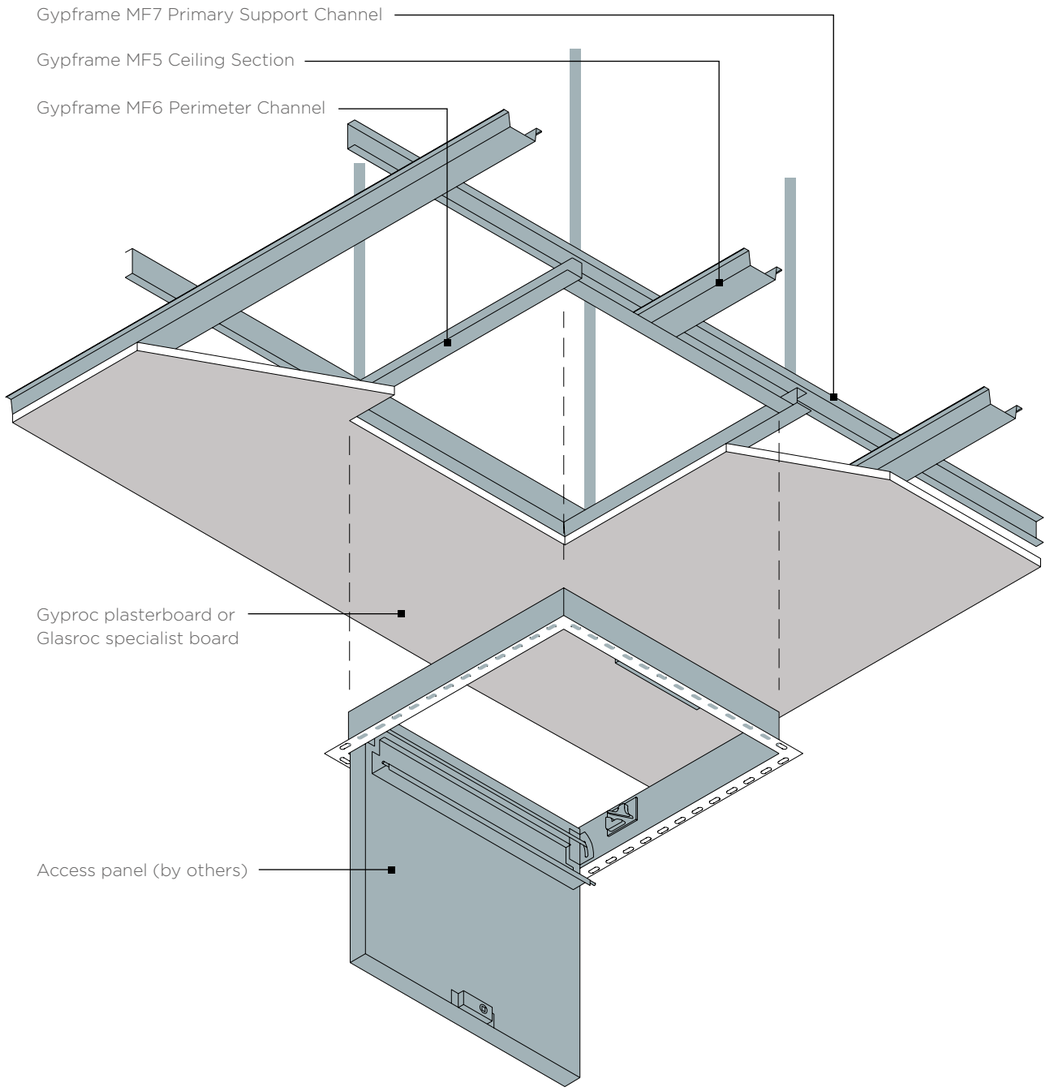
14. Reflected ceiling plan – Rigitone boards



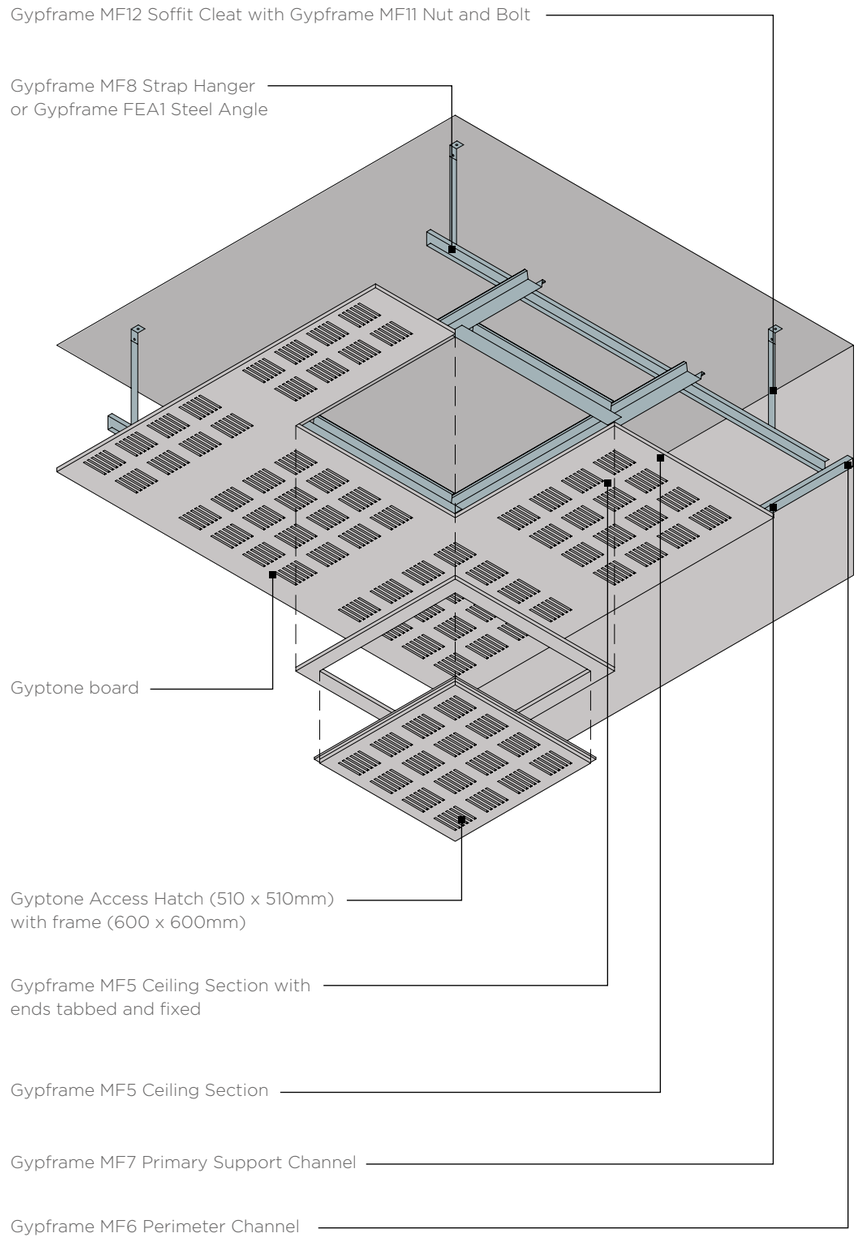
GypCeiling MF

Construction details

15. Access panel installation
(By others)



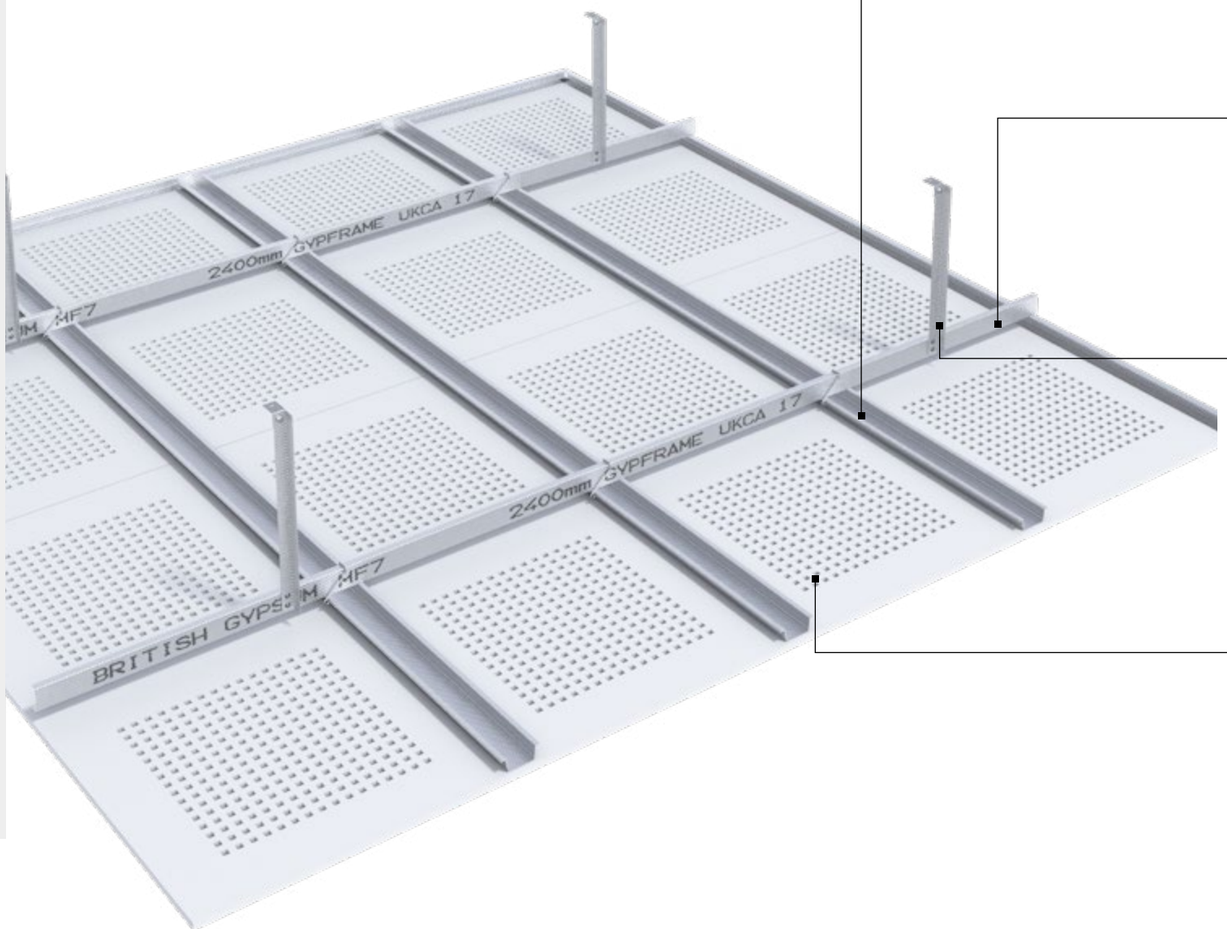
16. Gyptone Access Hatch installation

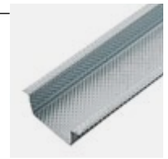


GypCeiling MF

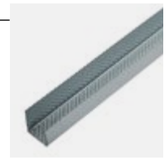
System components

Create high-performance seamless ceilings with our GypCeiling MF system.

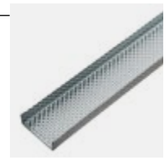




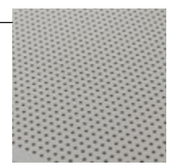
Gypframe MF5 Ceiling Section
A secondary frame component supporting plasterboard. Ceiling sections form the secondary framework in GypCeiling MF and GypCeiling Shaft systems where it is screwed or clipped to primary supports.



Gypframe MF6 Perimeter Channel
A steel profile with different length legs for perimeter support in suspended ceilings. Perimeter channel used in suspended ceilings around perimeters to receive end of Gypframe MF5 Ceiling Sections.



Gypframe MF7 Primary Support Channel
A steel profile forming primary support for suspended ceilings. Gypframe Primary Support Channel used in suspended ceilings, forming supports to Gypframe MF5 Ceiling Sections and are connected to the suspension.



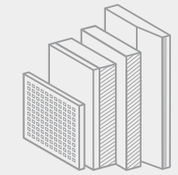
Gyptone acoustic boards
Gyptone acoustic boards combine distinctive looks with good acoustic performance. A range of perforation designs work with an acoustic fleece backing to absorb unwanted noise and make sounds like speech much clearer. All Gyptone products contain ACTIVair® which makes indoor air healthier by eliminating up to 70% of formaldehyde present in indoor air.

Rigitone acoustic boards
The Rigitone acoustic boards help you create striking seamless surfaces that make a lasting impression. A range of perforation designs and an acoustic fleece backing absorb noise to make spaces more enjoyable and easier to use. All Rigitone products contain ACTIVair® which makes indoor air healthier by eliminating up to 70% of formaldehyde present in indoor air.

Careful product choice is central to maintaining system integrity, performance requirements as well as eligibility for our **SpecSure**® warranty. **Ensure an optimum standard of build by considering...**

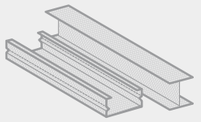
What are you fixing?

Our high-performance ceilings range includes stylish perforated gypsum boards and tiles, that provide up to Class B sound absorption. See **british-gypsum.com** for more details.



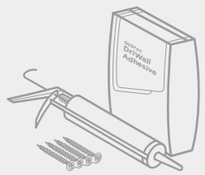
What are you fixing to?

Versatile metal framing and grid structures that provide strong and adaptable solutions for our ceiling systems. See **british-gypsum.com** for more details.



What are you fixing with?

Our fixings offer guaranteed compatibility with our systems, and are rigorously tested to meet the highest quality standards. See **british-gypsum.com** for more details.



What are you finishing with?

Finishing products
Our Gyproc jointing range gives you everything you need to complete a ceiling system, whatever the size and complexity of the project.
See **british-gypsum.com** for more details.

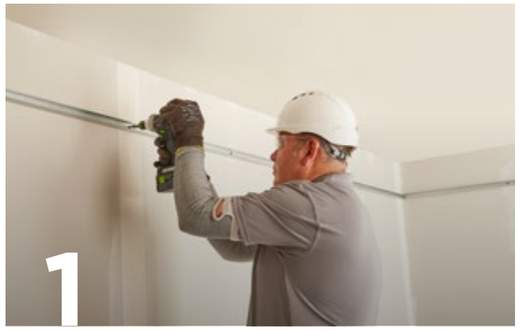
Where defined performance requirements are required see our White Book Specification Selector on british-gypsum.com

SpecSure®
BRITISH GYPSUM SYSTEMS WARRANTY

There are specifications within this system that qualify for our **SpecSure**® warranty. For more information see **british-gypsum/specsure**

GypCeiling MF
Installation

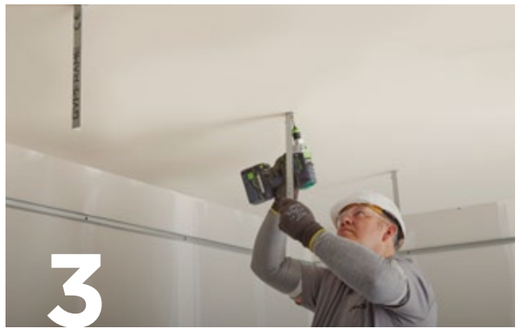
The information below is intended to be a basic description of how the system is built.



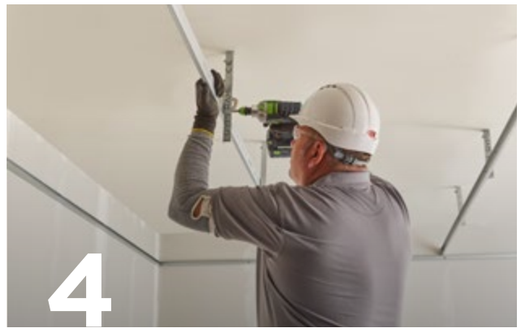
Fix Gypframe MF6 Perimeter Channels to the perimeter walls at 600mm centres.

Form hangers by securing Gypframe FEA1 Steel Angle or Gypframe MF8 Strap Hanger to Gypframe MF12 Soffit Cleats with Gypframe MF11 Nuts and Bolts.

Important note – this is the only approved hanger for a fire rated system.



Suitably fix these hangers to the soffit at the required centres.



Position Gypframe MF7 Primary Support Channels then use British Gypsum Wafer Head Jack-Point screws to fix the hangers to the side of these channels. Use two screws per hanger.

Use British Gypsum Wafer Head Jack-Point Screws to fix Gypframe MF5 Ceiling Sections to the underside of the Gypframe MF7 Primary support at required centres.

Alternatively, Gypframe MF9 Connecting Clips can be used in areas not prone to lifting.

Use Gyproc Sealant to seal the perimeter of each frame.

Use the appropriate fixing to fix Gyproc plasterboards, Glasroc specialist boards, Gyptone boards or Rigitone boards to the Gypframe MF5 Ceiling Sections and Gypframe MF6 Perimeter Channels.

Important note – boards are always fixed perpendicular to the Gypframe MF5 Ceiling Section

Ceilings