

GLASROC

THE WHITE BOOK Product Range series



SoffitLine

Glasroc - a formidable pedigree

Glasroc products are unique. Supplied by British Gypsum, a company that combines its expertise as one of the world's leading specialist board producers, with an extensive and intimate knowledge of both modern wall lining and semi-exposed solutions.

Our unrivalled experience, technical expertise and state-of-the-art technology has enabled us to develop unique products and systems that meet the most demanding performance and build criteria and the most rigorous quality standards, yet are simple and quick to install.

With such a formidable pedigree, Glasroc specialist board products, in combination with Gyproc plasterboards; Thistle plaster products; Gypframe metal components and Artec ceilings are the first choice to provide fully tested, integrated system solutions. And they are backed by a lifetime performance warranty that ensures peace of mind for the client, the specifier, the stockist and the contractor – in fact everyone involved in the building project.





No UK building component manufacturer can offer a more comprehensive support package to the building team.

Performance warranty

With Glasroc specialist boards there are no worries about performance. Every British Gypsum product and system comes with a genuine performance warranty and Glasroc SoffitLine is no exception. It is this guaranteed performance that continues to convince professional specifiers and installers to choose our products and systems above all others for their entire system solution requirements.

World class testing

Testing and performance verification is at the very heart of the British Gypsum ethos. All Glasroc products are manufactured to very tight tolerances under a third party assurance scheme and are fully tested at our UKAS accredited Building Test Centre at East Leake, near Nottingham – one of Europe's leading suites for advanced testing. Our products are also backed by our comprehensive support on and off-site through our team of dedicated technical specialists.



Technical support

From specification to installation, Glasroc products are supported by one of the most comprehensive technical support resources in the industry, the British Gypsum Drywall Academy. Through the Drywall Academy, we can offer advice and assistance with product selection, design and detailing, health and safety, statutory requirements and any other installation issues.

SoffitLine

Typically used in semi-exposed environments, where perimeters are open to the elements, Glasroc SoffitLine provides a high performance and durable soffit lining that limits heat loss from the building above.

Glasroc SoffitLine combines all the benefits of Glasroc MultiBoard - a superior quality, glass fibre reinforced gypsum board with a high performance, Class 0 foil-backed phenolic foam.

Glasroc SoffitLine is the ideal solution for car parks and basements where its unrivalled and exceptionally smooth MultiBoard surface finish allows the panels to be left undecorated. The foil backed phenolic foam provides high levels of thermal insulation at minimal thickness, which makes all the difference when headroom is at a premium.

The CFC and HCFC-free phenolic foam with foil backing enables high standards of thermal insulation to be achieved. It also acts as an integral vapour control layer which gives Glasroc SoffitLine its inherent moisture resistant qualities.

Glasroc SoffitLine is easy to handle and quick and simple to install. It can be fixed to the underside of semi-exposed soffits in 3 ways:

- direct to concrete soffit fix
- fixing via metal framing supports
- fixing via timber batten supports.

Direct to concrete fix is predominantly used in environments where there is very little floor to soffit height, but the advantages of frame fixing far outweigh those of direct soffit fixing.

Primarily frame fixing dramatically reduces the cost of installing Glasroc SoffitLine. It creates a low emissivity air space which contributes to the thermal performance needed, while reducing the board thickness necessary to achieve the required performance levels (refer to Table 2). This decrease in thickness constitutes an average cost saving of 30% per m² when compared to direct fixing.

Glasroc SoffitLine has superior fixing and handling characteristics and is also resistant to moderate impact and on-site damage.

Its Glasroc MultiBoard surface finish has good light reflectance properties (>70%) making it the best solution for use in public areas like car parks where ambient lighting is used.

Table 1 Board dimensions

Width mm	Length mm	Thickness mm	Approx weight kg/m ²	Thermal resistance (R) m ² K/W
1200	2400	26	7.0	0.85
		36	7.5	1.32
		46	8.0	1.76
		56	8.5	2.29
		66	9.0	2.74
		76	9.5	3.20
		86	10.0	3.65

λ Glasroc MultiBoard thermal conductivity 0.286W/mK

λ Phenolic foam thermal conductivity ranging from 0.022W/mK to 0.024W/mK depending on thickness of foam

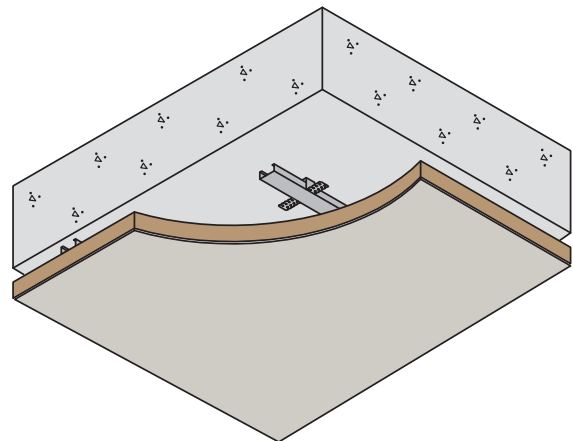


Table 2 Typical thermal performances

Construction	SoffitLine thickness mm	Dense concrete thickness mm	Screed thickness mm	U-Value W/m ² K
Fixing to concrete soffit with metal or timber framing supports at 26mm depth (with GypLyner system / Gypframe MF5)	66	200	70	0.24
Direct to concrete soffit fix	86	200	70	0.25

Key benefits

- High level of thermal insulation / thermally efficient phenolic foam
- Class 0 / Euroclass B
- CFC and HCFC free
- High impact resistance
- Tolerant to site conditions
- High quality surface finish
- Good light reflectance
- Integral vapour control layer
- Unaffected by temporary exposure to moisture
- Simple and quick to install
- Warranted performance

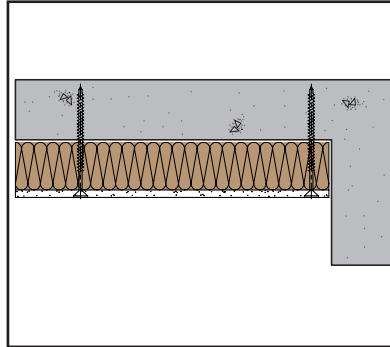
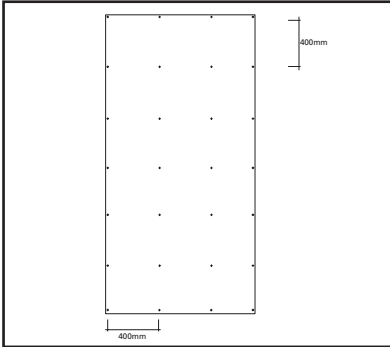


Installation

Fixing direct to the soffit

- Glasroc SoffitLine can be directly fixed to the underside of semi-exposed soffits using proprietary anchors at 400mm centres at the edges and in the field of the board.

- When fixing direct to the soffit the length of the proprietary anchors used should be determined by the manufacturer's recommendations concerning load bearing capacity.



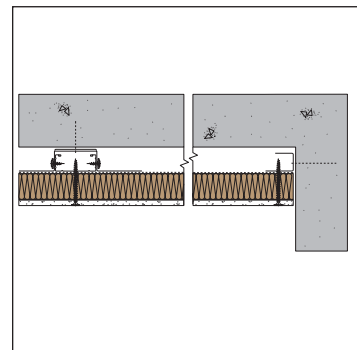
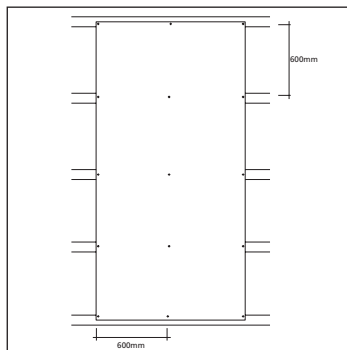
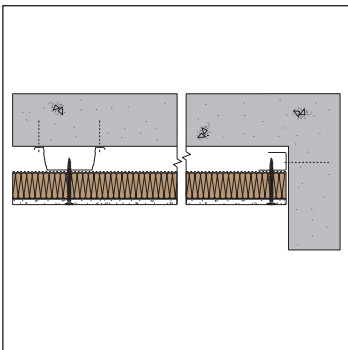
Fixing to concrete soffit with metal framing supports

- Locate CasoLine MF framing as normal (refer to **SiteBook** section **c10** - CasoLine MF) with Gypframe MF5 Ceiling Section at 600mm centres.
- Fix to the soffit using 2 suitable fixings spaced at 1200mm centres.

- Fix Glasroc SoffitLine boards at right angles to the MF5 section using Drywall Screws of sufficient length to allow a nominal 10mm penetration into the metal.
- Insert screws at 600mm centres at the edges and into the field of the board.

- Where Glasroc SoffitLine is being fixed to GypLyner, locate framing as normal (refer to **SiteBook** section **c15** - GypLyner) using channel and screw centres as for CasoLine MF previously.

NB Deflection criteria $\frac{L}{300}$ has been used. Where deflection criteria are more stringent, we recommend frame fixing and frame centres at 400mm.

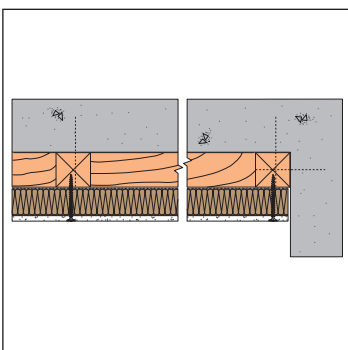


Fixing to concrete soffit with timber batten supports

- Fix timber battens at maximum 600mm centres and ensure that all four edges of Glasroc SoffitLine are supported.

- Fix boards at right angles to the battens with the long edges supported by noggings.
- Fix using Drywall Timber Screws at 600mm centres at the edges and into the field of the board. Use screws of sufficient length to allow a nominal 25mm penetration into the timber.

NB Deflection criteria $\frac{L}{300}$ has been used. Where deflection criteria are more stringent, we recommend frame fixing and frame centres at 400mm.



Technical information

The board element of Glasroc SoffitLine conforms to: *BBA Certificate No. 90/2541: Gyproc Multi-Board (Glasroc MultiBoard)*.

The exposed surface of the phenolic foam is foil-faced for improved thermal performance/low emissivity when used in conjunction with an airspace of not less than 25mm.

Both Glasroc MultiBoard and the phenolic foam surface achieve Class 0 ratings, when tested to *BS 476: Part 6: 1989 and Part 7: 1997*. Both surfaces are also designated Euroclass B for the purposes of the National Building Regulations.

Phenolic foam has an obscuration of less than 5% when tested to *BS 5111: Part 1: 1974 (Methods of testing for determination of smoke generation characteristics of cellular plastics and cellular rubber materials)*.

Glasroc SoffitLine (at minimum 46mm thickness) is capable of withstanding 'severe duty' impact in accordance with *BS 5234: Part 2: 1992*.

Glasroc MultiBoard returns a light reflectance value of 72% when tested to *ASTM E 1477-98*.

Moisture resistance

Glasroc MultiBoard absorbs less than 5% of water, by weight, after 2 hours total immersion to *BS 1230: Part 1: 1985*. When immersed in water for 2 hours and re-dried, the strength of Glasroc is the same as before wetting.

Glasroc MultiBoard is watertight to *BS 4624: Part 15: 1981*.

During construction it is acceptable for Glasroc linings to be temporarily exposed to direct rainfall, or other sources of water, so long as drying out has occurred prior to decoration.

Phenolic foam has a closed cell structure giving it good resistance to moisture.

Condensation control

Glasroc SoffitLine offers significant resistance to water vapour transmission, provided all board joints are taped and filled in accordance with British Gypsum's standard recommendations. For further details see White Book section **n15** - **Jointing**.

The boards achieve a water vapour resistance far greater than 100MNs/g when tested in accordance with *BS 4370: Part 2: 1993* (modified to include board facings).

Sitework

The brochure gives details of the installation procedure involved. For further details refer to the **SiteBook** section **f30** **Semi-exposed soffits - commercial** or from our website: www.british-gypsum.com.

Alternatively contact British Gypsum Drywall Academy Advice Centre on 08705 456123.

Environmental

When installed, Glasroc SoffitLine must not be subjected to direct exposure to the elements such as driving rain for extended periods of time. It should also not be used to isolate dampness and is not suitable for use in continuously damp or humid conditions. Glasroc MultiBoard should not be used where temperatures exceed 49°C for extended periods.

Limitations

Whilst every effort is made during manufacture to maintain uniformity of colour and texture of the surface of Glasroc SoffitLine, there may be slight variations. British Gypsum is therefore unable to guarantee exact matching.

Services

The cavity between Glasroc SoffitLine and the soffit itself can be used to incorporate services.



British Gypsum

The UK market leader in gypsum plaster and plasterboard systems, British Gypsum markets its products under the Gyproc, Thistle, Gypframe, Glasroc, Artec, Rawl and Isowool brand* names.

A BS EN ISO 9002 Quality Assured Company, British Gypsum maintains the quality and leading edge performance of its products and systems through an extensive and on-going programme of research, development and testing, supported by in-house fire, acoustic and system test facilities which are unique amongst building product manufacturers and match the best available anywhere in the UK.

British Gypsum quality does not stop at the products themselves. CAD and technical support for specifiers, comprehensive on-site support and off-site training through three dedicated Drywall Academy centres at East Leake near Nottingham, Kirkby Thore in Cumbria, and Erith in Kent, and ex-stock or next day availability through around 4000 builders' merchants nationwide are just a part of a customer support package that has, for many years, set British Gypsum apart in the market place.

British Gypsum further benefits from being a member of Europe's leading gypsum company, BPB plc, which has interests in a wide range of associated building products and provides an extensive pool of knowledge and experience to the benefit of all its member companies.

* Gyproc, Thistle, Gypframe, Glasroc, Artec and Rawl are all registered trade names of BPB United Kingdom Limited. Isowool is a registered trade name of British Gypsum-Isover Ltd, a joint venture between the insulation division of British Gypsum and Isover Saint-Gobain.

British Gypsum reserves the right to revise product specification without notice. The information given is correct to the best of our knowledge at the time of publication, but it is the users responsibility to ensure it remains current prior to use. The enclosed information should not be read in isolation as it is meant only as guidance for the customer, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of a job. We advise that you read and familiarise yourself with all the information contained in this literature prior to the commencement of the work or specification. For further details refer to our Health and Safety Handling Data Sheet which is available on request.

For a comprehensive and up to date library of information visit our website at: www.british-gypsum.com

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