

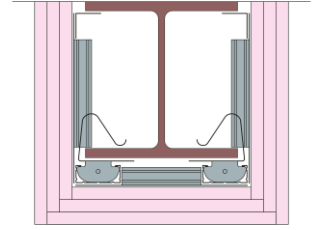
Technical Specification

This document provides guidance on how to achieve performance and warranty requirements by exclusively using British Gypsum products or system specifications.

GypLyner Encase

D150001 (K) (EN)

Three layers of Gyproc FireLine 15mm providing 120 minutes fire protection to steel columns or beams up to a section factor A/V (HP/A) m-1 (max) of 260 at a critical temperature of 550°C.



Background

| | |
|------------|----------------------|
| Background | Steel column or beam |
|------------|----------------------|

The maximum permitted steel size which can be encased is 600mm.

Framework

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|-------------------|--|
| Stud | Gypframe GL1 Lining Channel |
| Channel connector | Gypframe GL3 Channel Connector |
| Clips | Gypframe GL10 GypLyner Steel Framing Clips |
| Perimeter framing | Gypframe GA2 Steel Angle |
| Framework fixing | British Gypsum Wafer Head Drywall Screws 13mm |
| Fixing T | Gypframe GFT1 Fixing 'T' |

Fix continuous lengths of steel angle onto face of innermost steel flanges or background using suitable fire resistant fixings at 600mm centres (3-sided encasement only). Friction fit framing clips to steel flanges at 800mm maximum centres and 100mm from each end of encasement; ensure that clips are fully engaged and aligned. Lining channels are clipped over steel framing clips and can be extended by using channel connectors. For single layer encasements joints, install Gypframe GFT1 Fixing 'T' or short sections of lining channel with ends tabbed and fixed to framing using wafer head screws. For multiple layer encasements, install fixing strap between layers to support outer layer board joints. Stagger joints between adjacent faces and between layers by a minimum 600mm centres. If the steel section web or flange dimension exceeds 600mm, a nogging should be formed from lining channels with ends tabbed, installed at 600mm maximum centres, fixed to framing using wafer head screws. Fix noggings to coincide with a board end joints.

Board and fixings

| | |
|---|---|
| Encasement board, Layer 1 | Gyproc FireLine 15mm |
| Encasement board screws (board to metal), Layer 1 | British Gypsum Drywall Screws 25mm |
| Encasement board, Layer 2 | Gyproc FireLine 15mm |
| Encasement board screws (board to metal), Layer 2 | British Gypsum Drywall Screws 40mm |
| Encasement board, Layer 3 | Gyproc FireLine 15mm |
| Encasement board screws (board to metal), Layer 3 | British Gypsum Drywall Screws 55mm |

Boards are fixed securely to Gypframe metal supports at maximum 300mm centres. Fix working from the centre of each board and position screws not less than 13mm from cut edges; 10mm from bound edges of boards. Set screw heads flush with plasterboard surface; do not break paper or gypsum core.

Finish coat

To achieve the specified performances, the system should be finished using either one of our Thistle or ThistlePro plasters, or Gyproc jointing products. See the product range guides on the British Gypsum website for more information.

System performance

Please read performance data with any associated standards.

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|------------------------------|------------|
| Fire protection (mins) | 120 |
| Maximum section factor (m-1) | 260 |

Standards

These standards relate to the above performance data.

BS EN 13381-4, Test methods for determining the contribution to the fire resistance of structural members: Applied protection to steel members.

Test reports

These test reports relate to the above performance data.

Fire Resistance Test Report BTC 21719FA

Further information

SpecSure® system performance warranty confirms that British Gypsum proprietary systems will perform as specified for the lifetime of the building. The **SpecSure®** warranty requires that all components are specified in full and constructed in accordance with British Gypsum's installation guidance. For more details see the British Gypsum website. Always check with the design team before making any changes to the chosen specification, ensuring appropriate substantiation is sought to confirm that the solution still meets all required project performances.

Technical Support Team | british-gypsum.com

This Technical Specification stipulates all British Gypsum products used within a system. These must be used to achieve the stated performance and the **SpecSure®** system warranty.

This document is provided to customers free and the information shown is subject to the accuracy of the information provided to us when the document was originally requested. The document should therefore be approved by the project design and management authority before use to ensure it meets their specific project requirements. It should also be read in conjunction with current literature available at british-gypsum.com. This document is valid at the time of issue, please check with British Gypsum for the latest version. No duty of care is owed to the recipient or any third party and British Gypsum excludes all liability in respect of the information shown to the fullest extent possible save where death or personal injury is caused due to British Gypsum's negligence or for fraud.