

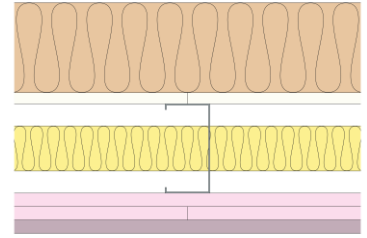
Technical Specification

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

GypLyner Xternal

T106023 MR1 (EN)

A non-loadbearing external wall construction including a 20mm deflection head with an inner layer of Glasroc X Sheathing Board 12.5mm and outer layer of 100mm Isover Polterm Max Plus insulation to external side and two inner layers of Gyproc FireLine 15mm and an outer layer of Gyproc FireLine MR 15mm to the internal side of 100mm SFS framework. 50mm Isover Acoustic Partition Roll (APR 1200) in the cavity. For heights up to 4000mm.



Head design

Head channel	104mm Hadley SFS Channel
SFS slotted channel (104mm x 70mm x 2.0mm) suitably fixed to soffit at 600mm centres.	
Deflection allowance	For vertical movement up to 20mm. To be determined by a Structural Engineer.
Dropped soffit	For principles of deflection head construction refer to detail ST-225-ZZL3-02

Framework

Stud	100mm Hadley SFS Stud
Stud centres - Max (mm)	600
Stud fixing	British Gypsum Wafer Head Jack-Point Screws 13mm

SFS studs (100mm x 50mm x 1.2mm) should be cut 25mm short and engaged into the slotted head channel and fixed through the slots with British Gypsum Wafer Head Jack-Point Screws 13mm each side of stud (25mm below the top of the slot).

Abutments and openings	100mm Hadley SFS Stud
SFS stud (100mm x 50mm x 1.2mm) suitably fixed to structure at 600mm centres.	

Base channel	104mm Hadley SFS Channel
SFS channel (104mm x 40mm x 1.2mm) suitably fixed to floor at 600mm centres. All SFS components are supplied direct from Hadley Group.	

Insulation

Insulation, Layer 1	50mm Isover Acoustic Partition Roll (APR 1200)
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Board and fixings

Board side 1, Layer 1	Gyproc FireLine 15mm	Screws side 1, Layer 1	British Gypsum Jack-Point Screws 25mm
Board side 1, Layer 2	Gyproc FireLine 15mm	Screws side 1, Layer 2	British Gypsum Jack-Point Screws 41mm
Board side 1, Layer 3	Gyproc FireLine MR 15mm	Screws side 1, Layer 3	British Gypsum Jack-Point Screws 60mm
Board side 2, Layer 1	Glasroc X Sheathing Board 12.5mm	Screws side 2, Layer 1	Glasroc X Screws 25mm

Board side 1, Layer 1 (inner) and Layer 2 (middle), fix securely to SFS supports around the perimeter of the board at maximum 300mm centres except the head channel; Board side 1, Layer 3 (outer), fix securely to all SFS supports around the perimeter of the board and intermediate stud positions at maximum 300mm centres except the head channel. The uppermost board fixings are positioned 130mm below the structural soffit through board in to fixing strap. Board side 2, Layer 1, fix securely to all SFS supports around the perimeter of the board and intermediate stud positions at maximum 300mm centres except the head channel. The uppermost board fixings are positioned 130mm below the structural soffit. External corners reduce fixings to 200mm. All joints staggered between layers. First fixing of the external board into the stud should be 100mm above the floor channel leg and then fixed working up the stud (board side 2). Fix working from the centre of each board on the internal side (board side 1). Position screws not less than 13mm from cut edges and 10mm from bound edges of boards. Set screw heads flush with plasterboard surface; do not break gypsum core.

Fixing strap	Gypframe GFS1 Fixing Strap
Used to support horizontal board joints to internal side and enable board screw fixing at 300mm centres.	

Sealant	Gyproc Sealant
On the internal side, locate sealant at junctions with adjoining structure and other air paths. Apply as a continuous bead to clean, dry, dust-free surfaces, leaving no gaps. After application of sealant, bulk fill gaps between floor and underside of plasterboard using Gyproc joint compound.	

External board joints	Glasroc X Sealant
Apply a continuous 6mm bead of Glasroc X Sealant along vertical and horizontal edges of board where boards will abut each other. Push the sheathing board up to the previous board ensuring the sealant 'mushroomed' out fully sealing the joint.	

External Insulation

External insulation, Layer 1	100mm Isover Polterm Max Plus
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External insulation must be correctly installed to ensure the performance of our system. Attach Isover Polterm Max Plus insulation 1200 x 600mm in a horizontal orientation and brick stagger with one fixing through the centre of each slab into the SFS framework. Add two further fixings 400mm apart up the slab's vertical edge into the SFS framework. Steel fixings are stainless steel self-drilling insulation fastener screw 6.3mm diameter by others with length sufficient to ensure minimum 10mm threaded penetration of the fixing into the SFS framework. Insulation is retained with stress plate square retaining washers, 70mm x 70mm, 6.8mm diameter central hole by others.

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 to the internal face. See the product range guides on the British Gypsum website for more information. For further guidance on skimming moisture resistant grade boards see the White Book - Finishes section.

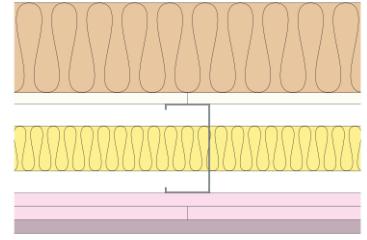
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System performance

Please read performance data with any associated standards.

Fire integrity (mins)	120
Maximum height (mm)	4000

Fire insulation (mins)	120
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The maximum heights quoted are limited by the fire state field of application or by limiting deflection of L/240 at 200 Pa, whichever is the lower of the two.

Sound insulation (Airborne) Rw (dB)	55
Approx. weight (kg/m ²)	57
Loadbearing	No

Standards

These standards relate to the above performance data.

BS EN 1364-1, Fire resistance tests for non-loadbearing elements - Walls.

BS EN ISO 10140-2, Acoustics - Laboratory measurement of sound insulation of building elements. Measurement of airborne sound insulation.

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.