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# **GypLyner Independent**

# Identification

Upgrade the thermal performance, sound insulation and aesthetics of your space with our independent framed wall lining system

GypLyner Independent is a lightweight, non-loadbearing lining system that's built independently of the external wall construction. It's particularly suitable when you can't fix directly to the background. The wall lining system can provide fire resistance and improved acoustic performance to lightweight steel sheet clad external walls. It also increases sound insulation and is capable of meeting stringent thermal performance requirements within new or existing masonry walls.

This system can be skim finished with ThistlePro® PureFinish which contains ACTIVair®. ACTIVair makes indoor air healthier by eliminating up to 70% of formaldehyde present in indoor air.

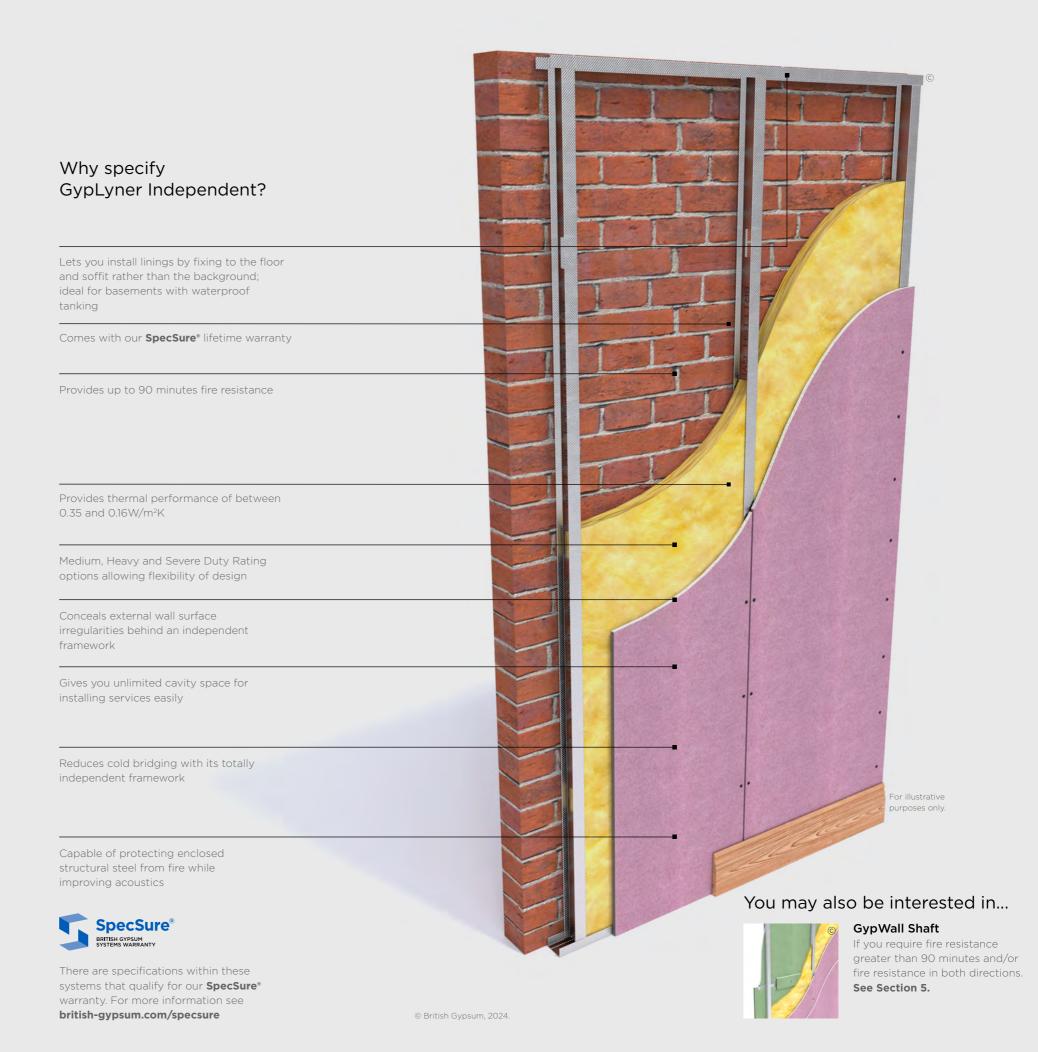












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# Design considerations

GypLyner Independent lining systems are non-loadbearing. However, they can resist horizontal uniformly distributed loads in accordance with BS EN 1991. Refer to Robustness in Section 2.

### Planning - key factors

GypLyner Independent comprises of Gypframe 'I' Studs installed at 600mm centres, within Gypframe Floor & Ceiling Channels to receive board to one side. Predetermine the positioning and installation of service penetrations and heavy fixtures before the frame erection stage. It is important that all parts of the lining system, including the thermal insulation, remains independent of the external walling. The lining is erected with the external walling in place and the windows and doors fixed.

### **Important**

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Ensure that walls are free from damp before the GypLyner Independent is installed.

### Extended heights

Where the wall heights exceeds the available length of the Gypframe 'I' Stud, sections of stud can be spliced together to the required length using 600mm lengths of the appropriate floor and ceiling channel. Use four screws per flange. Refer to construction detail 1 on page 4.6.

### Junction with a suspended ceiling

Where GypLyner is fixed to the framework of GypCeiling MF, 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. Where GypLyner Independent system passes through a GypCeiling MF ceiling, which is to one side of the lining and appropriately fixed to both this lining and perimeter walls, consider the lateral restraint provided by the ceiling. 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, to not adversely affect their performance.

# 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/gyplyner-independent



### **U-values**

For further information on U-values please please refer to Technical Support on **british-gypsum.com** 

### Acoustic performance

GypLyner Independent can be used as an independent lining to improve the sound insulation of new or existing masonry walls. Careful detailing is needed at junctions with sound insulating partitions in order to maintain acoustic performance. Refer to construction detail 2 on page 6.42.

### Handy hint

Apply a continuous coat of 6mm Gyproc SoundCoat Plus to the face of the masonry, before the installation of GypLyner systems. This will seal hidden air paths often found in mortar joints between blocks or bricks. For improved acoustic performance, the Gyproc SoundCoat Plus should not be trowelled smooth.

### Cavity barriers

Cavity barriers should be included where necessary. If both sides of the cavity are formed by non-combustible materials or materials with a Class A1 or A2 rating, barriers are necessary only every 20m. The barrier and its fixing should not detract from the general performance of the wall

### Fixing floor and ceiling channels

Fix Gypframe Floor & Ceiling Channels securely with fixings at 600mm maximum centres. Channels of 94mm and above, require two rows of staggered fixings: each row at 600mm centres and each fixing 25mm in from the flange. If the floor is uneven, use a 38mm thick timber sole plate equal to the channel width. Consider installing a dampproof membrane for new concrete or screeded floors between the floor surface and the channel.

### Deflection heads

The system can accommodate deflection at the head with suitable detailing incorporating Gypframe Deep Flange or Extra Deep Flange Floor & Ceiling Channels. Refer to construction detail 4 on page 6.43.

### Damp or rain penetration

In refurbishment work, where damp or rain penetration exists, normal corrective measures, such as a new damp proof course, tanking or external wall coating, must be taken before you install the internal lining. Consider draining the cavity between the external wall and the lining system and provide ventilation to the outside.

### Thermal performance

Uncontrolled air movement through the cavity can result in excessive heat loss. When the lining is designed to act as an air barrier to achieve airtightness, seal all perimeters to the wall and around any services and openings with a continuous fillet/ribbon of Gyproc DriWall Adhesive or Gyproc Sealant.

For further information on U-values please please refer to Technical Support on **british-gypsum.com** 

# Condensation and water vapour resistance

Gyproc WallBoard Duplex and Gyproc ThermaLine Plus and PIR laminates offer significant resistance to water vapour transmission. Applying two coats of Gyproc Drywall Sealer to Gyproc WallBoard, Gyproc Moisture Resistant or Gyproc ThermaLine Basic after installation and jointing, will provide a water vapour resistance of at least 15MNs/g. Doing this, or using a vapour control layer (VCL), significantly reduces the risk of interstitial condensation. It is important, particularly in new buildings, that external walls are properly dried out before a VCL is installed, otherwise moisture may be trapped, impairing performance.

### Handy hint

If horizontal board joints are necessary, stagger between layers by a minimum of 600mm, to avoid downgrading performance. For alternative stud types/sizes, to increase maximum partition height, further options are available. Refer to the White Book Specification Selector on the British Gypsum website.

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# **GypLyner Independent**

# Design considerations

### Solid masonry wall - internal insulation

With reference to hygrothermal properties of building components within modelling software, and to comply with BS 5250, we recommend you seek specialist guidance, before installing internal insulation to solid masonry walls, to determine the effects of condensation and moisture within the building fabric. Refer to BS 5250 'Management of moisture in buildings. Code of practice' and BS EN 15026 'Hygrothermal performance of building components and building elements - assessment of moisture transfer by numerical simulation'. PAS 2035: 2019 requires a Retrofit Assessment to be carried out. These include an Energy Assessment, an Occupancy Assessment and a Condition Assessment. A qualified Retrofit Assessor should assess whether the proposed internal wall insulation (IWI) system is suitable for specific wall constructions, e.g. solid masonry and more specifically it's water absorption properties. External climate conditions, exposure to wind-driven rain, solar gain and the physical properties of the brick/ stone are the main parameters for assessing hygrothermal performance. It is the Assessor's responsibility to determine suitability of installing IWI to solid masonry walls.

### Insulation

Insert Isover Steel Frame Infill Batts to a friction fit within the stud cavity. The slabs are self-supporting, receiving internal support from the stud flanges, except where 50mm insulation is fitted into Gypframe 92 I 90 or 146 I 80 'I' Studs. In this case, a 150mm x 50mm strip of Isover Steel Frame Infill Batts is inserted to retain the slab. With Gypframe 146 I 80 'I' Stud, insert two strips of insulation to retain the slab.

### Services

The stud cut-outs can be used for services provided that the Isover insulation remains in place. The positioning of stud cut-outs is shown in construction detail 1 on page 6.42. Locate surface mounted services against the plasterboard lining, and fixed through the lining to the stud framework. Any interruptions in the lining integrity will downgrade its performance. The installation of electrical services should be carried out in accordance with BS 7671.

### Looking for performance selection tables?

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

### british-gypsum.com/gyplyner-independent



### Fixtures

Lightweight fixtures can be made directly to the partition linings. Medium weight fixtures can be made to Gypframe 99 FC 50 Fixing Channel. Heavyweight fixtures (to BS 5234), such as wash basins and wall cupboards, can be fixed using plywood secured with Gypframe Service Support Plates. Refer to Service installations in system design principles on

## british-gypsum.com Board finishing

Refer to **british-gypsum.com** for our full range and guidance surrounding board finishing products.

### Tiling

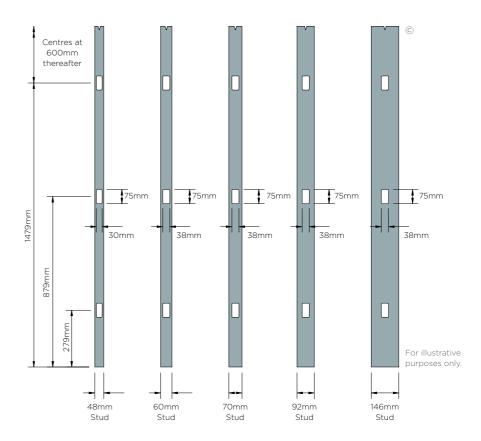
Tiles up to 32kg/m<sup>2</sup> can be fixed directly to the surface of our wall lining systems. Refer to **british-gypsum.com** for our full range and guidance on our tiling-related products.

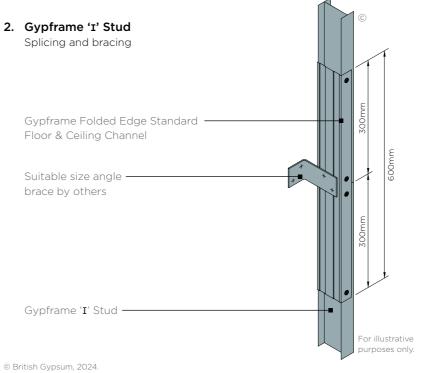
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# Construction details

### 1. Service cut-outs

Gypframe 'C' Studs and Gypframe 'I' Studs





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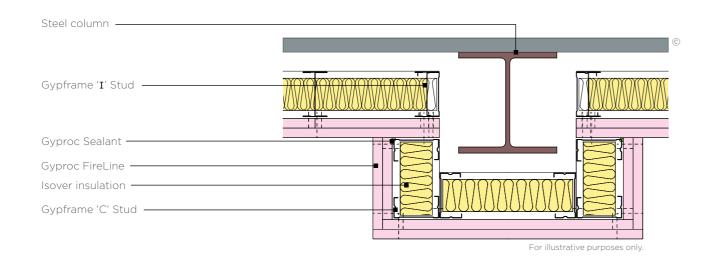
# **GypLyner Independent**

# Construction details

### 3. Head and base 4. 25mm deflection head Gypframe Folded Edge Standard — Gyproc FireStrip -Floor & Ceiling Channel Glasroc F -Gyproc Sealant — FireCase Gyproc Sealant Gypframe -25mm stud top Floor & Ceiling Gyproc plasterboard -Channel Gypframe 'I' Stud -Gypframe GFS1 Wall structure — Fixing Strap Isover insulation -Gyproc Sealant -Bulk fill with Gyproc — Gyproc plasterboard jointing materials (where gap exceeds 5mm) Gypframe 'I' Stud -Isover insulation -Gypframe Folded Edge Standard -For illustrative purposes only.

### 5. Lining around steel column

Floor & Ceiling Channel



purposes only.

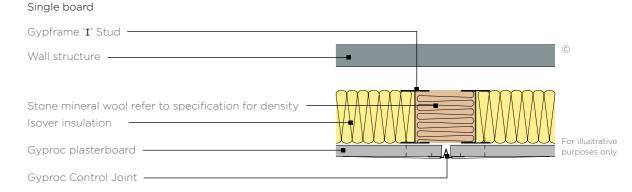
6. Partition junction

# Gyproc plasterboard Gypframe 'I' Stud Isover insulation Gypframe 'C' Stud Wall structure Gyproc plasterboard Gypframe 'I' Stud Isover insulation Wall structure Wall structure

7. Partition junction

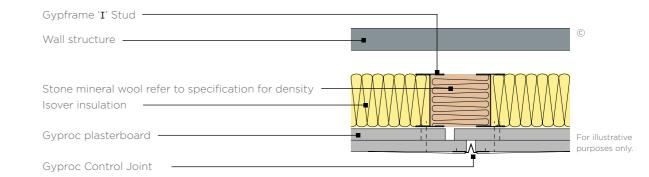
To optimise acoustic performance and reduce

8. Gyproc control joint



### 9. Gyproc control joint

Double board



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# System components

Upgrade the thermal performance, sound insulation and aesthetics of your space with our independent framed wall lining system.



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

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### Gypframe 'I' Studs

Gypframe 'I' studs are cold-rolled steel studs with an 'I' section profile. They include service cut-outs in the web. These studs provide vertical framing support in British Gypsum partitions and linings, as defined by the system design. They're available in a range of lengths depending on project requirements.



Glass mineral wool for enhanced acoustic and thermal performance.

### Isover Steel Frame Infill Batt

Glass mineral wool for enhanced acoustic and thermal performance.

### **Gyproc FireLine**

Gyproc FireLine is a plasterboard that contains glass fibre and other additives for extra fire protection. Use it in partitions, ceilings and steel encasement systems to achieve the fire performance needed in domestic separating walls, corridors, garages and steel encasements.

### Gyproc SoundBloc

Gyproc SoundBloc is a plasterboard with a high density core. Use it to achieve specified sound insulation levels through walls, ceilings and

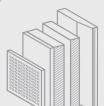
### **Gyproc ThermaLine PIR**

Gyproc ThermaLine PIR is a gypsum plasterboard with vapour control layers bonded to high performance polyisocyanurate foam insulant to reduce the risk of condensation. Use it in refurbishment and new build for walls, ceilings and room in the roof where a high level of cost effective thermal insulation is needed to reduce heat loss from buildings.

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

### What are you fixing?

Our market leading range of plasterboards and thermal laminates for Wall lining systems within any building type. See british-gypsum.com for more details.



### What are you fixing to?

Our Gypframe metal profiles provide a strong and versatile structure forwall lining systems. See british-gypsum.com for more details.



### What are you fixing with?

Our sealants and fixings offer guaranteed compatibility with our wall lining systems, and are rigorously tested to meet the highest quality standards.





# What are you finishing with?

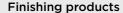
### Plaster

Our wide range of Thistle plasters and Thistle accessories give you everything you need to finish a job to the highest possible standard.



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

Where defined performance requirements are needed see our White Book Specification Selector



on british-gypsum.com



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For illustrative

# **GypLyner Independent**

# Installation

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



Suitably fix the appropriate Gypframe Floor & Ceiling Channels at the required centres to the floor and soffit. Important note - for channels 72mm and below a single row of fixings at 600mm centres are used. For anything above 72mm two rows of 600mm fixings staggered by 300mm are used.



Suitably fix Gypframe 'C' Studs to openings and abutments.



Friction fix Gypframe 'I' Studs vertically at the required centres within the channel sections to form the framework. Install additional framing to support heavy fixtures.



Use Gyproc Sealant to seal the perimeter of the partition.



Add Isover Steel Infill Batt or Isover Acoustic Partition Roll (APR 1200) to the partition cavity for optimal acoustic and plasterboard linings depending upon gauge of 'I' Studs. thermal performance.



Use British Gypsum Drywall or Jack-Point Screws to fix

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