

# Gyproc ThermaLine PIR

## Product Data Sheet

### Product description

#### Overview

Gyproc ThermaLine PIR consists of a 12.5mm Gyproc WallBoard produced to *BS EN 520* bonded to a rigid polyisocyanurate foam (PIR) with a multi-layer kraft/aluminium facer on both sides of the insulation board that is produced in accordance with *BS EN 13165*. The Gyproc WallBoard and PIR insulation are factory bonded together and conforms to *BS EN 13950*.

#### Applications

Gyproc ThermaLine PIR can be used in both refurbishment and new-build where a mid or high level of additional thermal insulation is required.

#### Product appearance

- Ivory face paper
- Backed with yellow polyisocyanurate foam with ivory paper coating

Gyproc ThermaLine PIR is only available in a plasterboard tapered edge finish (T/E) and in thicknesses of 38,53,63, 78 & 93mm.

Gyproc ThermaLine PIR is one of the products within our plasterboard range that is certified to *BES 6001* achieving a rating of 'Excellent'.

### Product performance

#### Reaction to fire

Gyproc ThermaLine PIR is designed to be installed in such a way that the Gyproc WallBoard face of the product always forms the exposed surface of the wall or ceiling being lined.



Gyproc ThermaLine PIR achieves a Euroclass, in accordance with The European Classification System of B (s1, d0) to *BS EN 13501-1*, when tested in the intended end use condition. This means that the product is suitable for use as an internal lining material for walls and ceilings as defined in the Building Regulations Approved Document B Vol 1 and 2.

This product is not suitable for any situation where the insulant face of the product is required to meet a reaction to fire performance criteria or where a specifier wishes to use products which are only non-combustible or of limited combustibility components throughout the wall, floor or ceiling element.

#### Fire resistance / Sound insulation

Please refer to the appropriate **White Book** section for information on the fire resistance and sound insulation of building elements lined with Gyproc ThermaLine PIR, available to download from [british-gypsum.com](http://british-gypsum.com)

#### Thermal conductivity

-  Gyproc WallBoard - 0.19W/mK
-  PIR foam - 0.022W/mK

Width mm	Length mm	Weight & thermal conductivity
38mm Board 1200	2400	Kg/m <sup>2</sup> = <b>9.3</b> R (m <sup>2</sup> K/W) = <b>1.15</b>
53mm Board 1200	2400	Kg/m <sup>2</sup> = <b>9.8</b> R (m <sup>2</sup> K/W) = <b>1.85</b>
63mm Board 1200	2400	Kg/m <sup>2</sup> = <b>10.1</b> R (m <sup>2</sup> K/W) = <b>2.30</b>
78mm Board 1200	2400	Kg/m <sup>2</sup> = <b>10.5</b> R (m <sup>2</sup> K/W) = <b>3.00</b>
93mm Board 1200	2400	Kg/m <sup>2</sup> = <b>10.9</b> R (m <sup>2</sup> K/W) = <b>3.65</b>

#### Ozone Depletion Potential (ODP)

Zero

#### Global Warming Potential (GWP)

<5

### Effect of temperature and moisture

Gyproc ThermaLine PIR is unsuitable for use in areas subject to continuously damp or humid conditions, i.e. above 70% RH, and must not be used to isolate dampness. Gyproc ThermaLine PIR is not suitable for use in temperatures above 49°C but can be subjected to freezing conditions without risk of damage.

### Effect of condensation

The thermal insulation and ventilation requirements of the Building Regulations aim to reduce the risk of condensation and mould growth in new buildings. However, designers should take care to eliminate all possibility of problems caused by condensation, particularly in refurbishment projects. For further information, please refer to The **White Book**, available to download from [british-gypsum.com](http://british-gypsum.com)

### Vapour resistance

The breakdown of the components are as follows:

Component	Vapour resistivity (MNs/gm)	Vapour resistance (MNs/g)
Foil / paper (outside)	-	4000
Polyisocyanurate foam	300	dependent on thickness
Foil / paper (inside)	-	4000
Plasterboard	50	0.625

## Application and installation

### General

It is important to observe appropriate health and safety legislation when working on site, i.e. personal protective clothing and equipment, etc. The following notes are intended as general guidance only. In practice, consideration must be given to design criteria requiring specific project solutions.

### Handling

Manual off-loading of Gyproc ThermaLine PIR product should be carried out with care to avoid unnecessary strain. For further information, please refer to the Manual Handling section of the **Site Book** or the Manual Handling Guide, available to download from [british-gypsum.com](http://british-gypsum.com)

### Cutting

This product may be cut using a plasterboard saw. Holes for switch or socket boxes should be cut out before the boards are fixed using a utility saw or sharp knife. When cutting boards, power and hand tools should be used with care and in accordance with the manufacturers' recommendations. Power tools should only be used by people who have been instructed and trained to use them safely. Appropriate personal protective equipment should be used.

### Service installation

The PIR insulating backing of Gyproc ThermaLine PIR laminates should not be chased to accommodate services.

### Fixing

There are various system fixing methods – refer to the appropriate system and fix in accordance with the **White Book/Site Book**.

### Finishing to plasterboard face

Finishing should only be applied to the plasterboard face of Gyproc ThermaLine PIR. Plastering should occur with minimum delay after completion of the lining. Gyproc ThermaLine PIR can be finished with any Thistle or ThistlePro finish plaster.

Gyproc ThermaLine PIR is generally jointed with Gyproc Joint Filler, Gyproc QuickSand Joint Cement, Gyproc ProMix LITE or Gyproc Ready Mix Joint Cement with Gyproc Joint Tape.

### Decoration

If a jointing finish has been used, and any final sanding is complete, the surface should be dusted down and Gyproc Drywall Primer applied by brush, roller or suitable spray equipment prior to decoration. The primer evens out differences in surface texture and absorption between the board and jointed areas, to create the ideal surface to receive final decoration. Decoration should follow with the minimum of delay. Follow the guidance of the paint manufacturer. See section 8 of the **White Book** for further decoration details.

# Maintenance

## Repair

**Minor damage** - Lightly sand the surface to remove burrs and fill flush with Gyproc EasiFill, or two applications of Gyproc QuickSand Joint Cement. When dry, apply Gyproc Drywall Primer or Gyproc Drywall Sealer to leave the surface ready for decoration. Follow the guidance of the paint manufacturer.

**Extensive damage** - When the damage is more extensive, it may be necessary to replace that area of Gyproc ThermaLine  $\mu$ R plasterboard. It is important that the replacement board is of the same thickness as specified and installed. Where fixed to framing, cut out the affected area back to the nearest framing members. Replace the Gyproc ThermaLine  $\mu$ R accurately cutting and fixing the same thickness of board. Fill edge joints, then tape and finish in the recommended way. When dry, apply Gyproc Drywall Primer or Gyproc Drywall Sealer to leave the surface ready for decoration. Follow the guidance of the paint manufacturer.

NB - It is essential that repairs are made 'like for like. If the finish is skim plaster, jointing materials must not be used in the repair.

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British Gypsum reserves the right to revise product specification without notice. The information herein should not be read in isolation as it is meant only as guidance for the user, 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 work. For a comprehensive and up-to-date library of information visit the British Gypsum website at: [british-gypsum.com](http://british-gypsum.com). For information about products supplied by Artex Limited or Saint-Gobain Isover please see their respective websites.

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