



Benefits of Mannok IsoFrame

- IsoFrame rigid insulation is designed for use in structural Steel/Timber Framed cavity wall construction on new build projects.
- The low emissivity foil facings increase the thermal resistance of an unventilated cavity adjacent to the insulation therefore improving the over all thermal performance of the wall.
- Mannok IsoFrame has a low thermal conductivity, minimising the thickness required to achieve the design U-value.

Composition

Mannok IsoFrame consists of a core of PIR foam with bonded foil facings. The gas filled cells give IsoFrame its high thermal performance and strength while the foil facings maximises high compressive performance.

Applications

Thermal Performance

Mannok IsoFrame has a thermal conductivity of 0.022W/mK. This low thermal conductivity combined with the low emissivity facing makes it one of the most thermally efficient insulation boards available.

Mannok IsoFrame board is one of the range of PIR (polyisocyanurate foam boards we manufacture for the insulation of floors, walls and roofs.

- Mannok IsoFrame has good dimensional tolerances, enabling boards to be tightly butted to form a continuous layer of insulation.
- Mannok IsoFrame has been tested BS EN 1365-1:2012 - Fire Resistance for Loadbearing Elements.

Environmental

Mannok PIR Insulation has an ozone depletion potential (ODP) of zero and a Global Warming Potential (GWP) of less than 5. Mannok Insulation operates under an ISO 14001 Environmental Management System which helps minimise the environmental impact of the product. An Environmental Performance Declaration, EPS, is available for all Mannok Insulation products.



Cavity walls: Mannok Therm Wall / MW in timber frame*

Cavity walls: Mannok Therm Wall / MW in steel stud frame



CE Marking

Construction Products Regulation (CPR) requires mandatory CE marking for all thermal insulation products. IsoFrame boards are CE marked to harmonised standard EN 13165. The Declaration of Performance, 011/20 is available on our website link. (see bottom of page for link)

Delivery & Storage

Mannok PIR Insulation boards are shrinkwrapped in clear polyethylene for delivery to site. Each pack is labelled with the product description, product characteristics, manufacturer's name and brand name, quantity per pack, and any identification marks.

Biological / Chemical

Mannok PIR Insulation does not rot and does not support mould or fungus. Mannok PIR Insulation is chemically inert, and poses no threat to anyone using it.

Technical Support

Mannok provides a comprehensive technical support service for designers and contractors.

CE

Mannok can provide:

- U-value calculations
- Interstitial condensation risk analysis
- design advice
- advice and assistance with thermal modeling
- guidance on the most effective ways to meet current Building Regulations and Building Standards.

Dimensional stability / Durability

Mannok PIR Insulation will perform for the service life

When tested to EN 1604 Mannok PIR Insulation

Contact Technical Support:

- Call: +44 (0) 28 6774 8866
- Email: <u>technical@mannokbuild.com</u>

achieves level DS(TH)4 to EN 13165.

Physical & Performance Characteristics

Surface	Composite foil facings
Edge:	Butt
Thicknesses:	20-200mm
Length x width:	1200mm x 2400mm
Thermal conductivity	0.022W/mK
Core water vapour resistivity	≈300MNs/gm
Compressive strength:	>150kPa

Fire Performance

Thickness	BS 476-7	BS EN 13501-1
20-200mm	Class 1	Euroclass F

Tested to EN 1365-1:2012 - Fire Resistance of Loadbearing Elements

Design and Installation

For design and installation information plus thicknesses of Mannok Insulation to achieve specific U-values or contact our technical department, consult our Product & Installation Guide, available via our website.

For further information:

of the building.

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Every effort has been taken in the preparation of this data sheet to ensure the accuracy of representations contained herein. Recommendations as to the use of materials, construction details and methods of installation are given in good faith and relate to typical situations. However, every site has different characteristics and reliance should not be placed upon the foregoing recommendations. Advice can be given as to specific applications of the products, upon request to Mannok.