



Mannok IsoShield full fill cavity insulation is a premium product from the Mannok PIR (polyisocyanurate) insulation range. For use in new cavity-wall construction.

## Benefits of Mannok IsoShield

- Mannok IsoShield is designed for use in cavity walls of new build projects.
- Mannok IsoShield consists of robust stucco aluminum facings both sides and has a shiplap joint detail on all four edges of the board. This detail eliminates any risk of moisture traveling across the cavity.
- Mannok IsoShield has a low thermal conductivity of 0.022w/mk. By filling the cavity with this board, the designer can achieve their design U values and reduce/eliminate the need for an insulated Drylining board on the inner leaf.
- Mannok IsoShield has DS (TH)4,DS (-20-)2 dimensional tolerances, enabling boards to be overlapped to form a continuous layer of insulation.
- Mannok IsoShield is manufactured in a range of thicknesses to suit standard cavity wall widths (i.e. 75mm, 100mm, 125mm & 150mm) and is also designed to suit standard wall tie spacing.

### Composition

Mannok IsoShield consists of a core of PIR foam with bonded stucco embossed pure aluminium facings both sides. The gas filled cells give IsoShield its high thermal performance and strength while the pure Aluminium facings and overlap joints ensure zero moisture transfer.

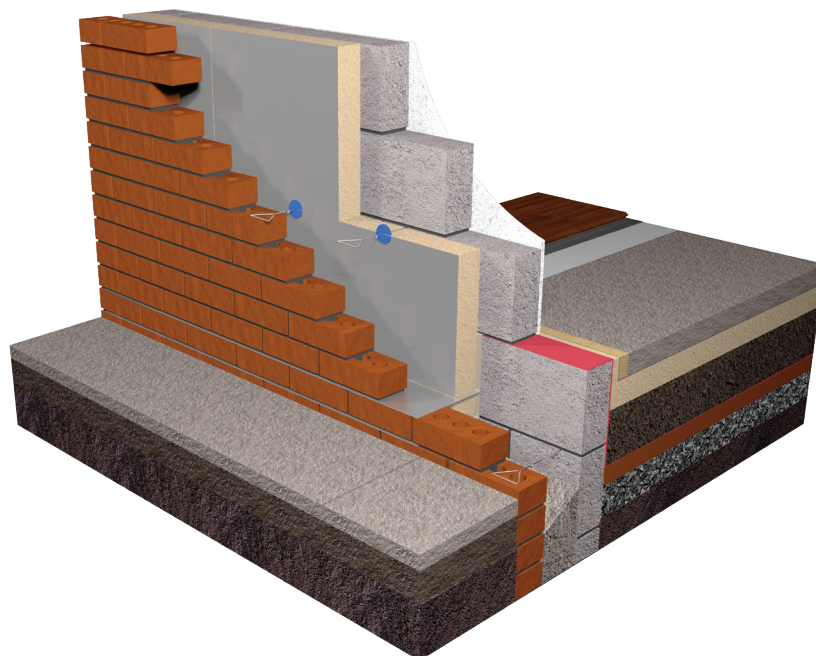
### Thermal Performance

Mannok IsoShield has a thermal conductivity of 0.022W/mK, making it one of the most thermally effective rigid board insulations available.

### Environmental

Mannok IsoShield has an ozone depletion potential (ODP) of zero and a Global Warming Potential (GWP) of less than 5, certified to ISO 14001 - Environmental Management System.

## Applications



## CE Marking



Construction Products Regulation (CPR) requires mandatory CE marking for all thermal insulation products. Mannok IsoShield boards are CE marked to harmonised standard EN 13165. The Declaration of Performance, 010/20†, is available on our website (see bottom of page for link).

## Delivery & Storage

Mannok IsoShield 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 IsoShield 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

All as per IsoFrame

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

**Mannok can provide:**

- copies of Agrément and test certificates
- U-value calculations
- interstitial risk calculations
- design advice
- guidance on the most effective ways to meet current Building Regulations and Building Standards.

**Contact Technical Support:**

- Call: +44 (0) 28 6774 8866
- Email: [technical@mannokbuild.com](mailto:technical@mannokbuild.com)

## Physical & Performance Characteristics

Surface	Embossed Aluminium
Edge:	Ship lap/rebate joint
PIR Thicknesses:	72/97/122/147mm
Length x width:	1200mm x 450mm
Thermal conductivity	0.022W/mK
Core water vapour resistivity	≈300MN/gm
Compressive strength:	>150kPa

## Fire Performance

Thickness	BS 476-7	BS EN 13501-1
72/97/122/147	Class 1	Euroclass E

## Dimensional stability / Durability

Mannok IsoShield tested to EN 1604 Mannok PIR Insulation achieves level DS(TH)4 to EN 13165. IsoShield has been tested to BS EN 1606 for 25 year compressive stability. Mannok IsoShield will perform for the service life of the building.

## Design and Installation

All as per IsoFrame

**Mannok IsoShield:**

For design and installation information plus thicknesses to achieve specific U-values in all cavity wall applications, consult our Product & Installation Guide, available via our website.

**For further information:**

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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.