



# MANNOK

## MANNOK THERM LAMINATE-KRAFT / MLK

Mannok Therm Laminate-Kraft / MLK wallboard and ceilingboard is one of the range of PIR (polyisocyanurate) foam boards we manufacture for the insulation of floors, walls and roofs.

## Benefits of Mannok Therm Laminate-Kraft / MLK (MLK)

- MLK rigid insulation is well suited to use in internal dry lining and in roofs beneath rafters on new build projects and refurbishment projects.
- MLK has a low thermal conductivity, minimising the thickness required to achieve the design U-value.
- MLK enables thermal insulation and internal finish to be applied in one operation.

### Composition

Mannok Therm Laminate-Kraft / MLK consists of a core of PIR foam with composite kraft paper facings adhered to 9.5mm, 12.5mm or 15mm plasterboard. The gas-filled cells give MLK its high thermal performance and strength while the kraft facing allows boards to be bonded directly to the wall.

### Thermal Performance

All as per IsoFrame

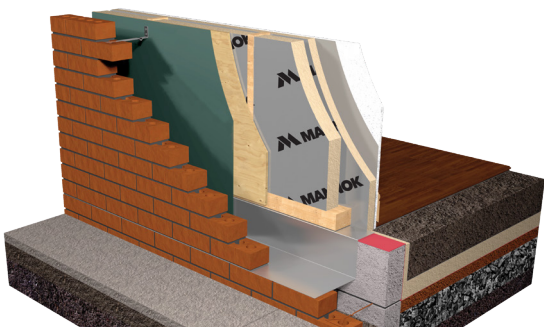
Mannok Therm Laminate-Kraft / MLK has a thermal conductivity of 0.022W/mK, making it one of the most effective rigid board insulations available.

### Environmental

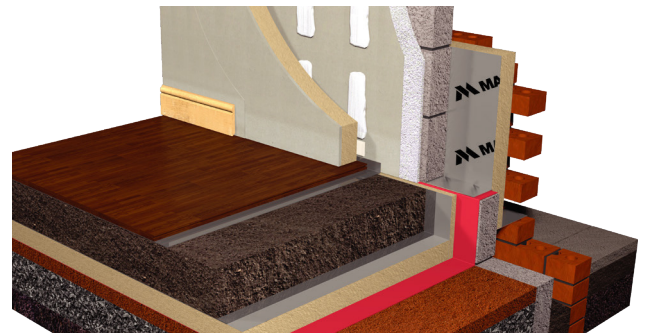
All as per IsoFrame

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

## Applications



Cavity walls: MLK in timber frame



Cavity walls: internal dry lining MLK fixed to plaster dabs



Solid walls: internal dry lining MLK fixed to plaster dabs



Pitched roof: MLK below rafters

## CE Marking



Construction Products Regulation (CPR) requires mandatory CE marking for all thermal insulation products. MLK boards are CE marked to harmonised standard EN 13165.

The Declaration of Performance, 002/20†, is available on our website (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

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	Composite kraft paper facing adhered to 9.5mm or 12.5mm
Edge:	Butt
PIR Thicknesses:	20-80mm
Length x width:	1200mm x 2400mm 1200mm x 2438mm 1200mm x 2700mm 1200mm x 2743mm 1200mm x 3000mm
Thermal conductivity	0.022W/mK
Core water vapour resistivity	≈300MNs/gm
Compressive strength:	>140kPa

## Fire Performance

Thickness	BS 476-7	BS EN 13501-1
26.5-209.5mm*	Class 1	B s1 d0

\* inclusive of plasterboard

## Dimensional stability / Durability

When tested to EN 1604 Mannok PIR Insulation achieves level DS(TH)4 to EN 13165.

Mannok PIR Insulation will perform for the service life of the building.

## Design and Installation

For design and installation information plus required thicknesses of MLK to achieve specific U-values in all 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.