



Mannok Therm Roof / MFR-PLY flat roof board is one of the range of PIR (polyisocyanurate) foam boards we manufacture for the insulation of floors, walls and roofs.

Benefits of Mannok Therm Roof / MFR-PLY (MFR-PLY)

- MFR-PLY composite insulation is well suited for use in warm timber flat roof decks on new build and refurbishment projects.
- MFR-PLY is designed to be finished with partially bonded built-up felt waterproofing systems and single ply and hot and cold liquid waterproofings.
- MFR-PLY has a low thermal conductivity, minimising the thickness required to achieve the design U-value while the composite board offers rapid coverage and straightforward installation.
- Warm roof construction reduces the risk of condensation within the roof structure and eliminates the need for ventilation beneath the deck.

Composition

Mannok Therm Roof / MFR-PLY consists of a core of PIR (polyisocyanurate) foam with a 6mm plywood laminate top and a bonded foil facing on the underside. The gas filled cells give MFR-PLY its high thermal performance and strength while the foil facing has a very high vapour resistance and can be formed into an AVCL by sealing the joints between boards.

Thermal Performance

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

Environmental

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

Mannok Therm Roof / MFR-PLY achieved an A+ rating when compared to the BRE Green Guide.

Applications



MFR-PLY partially bonded Felt



CE **CE Marking**

Construction Products Regulation (CPR) requires mandatory CE marking for all thermal insulation products.

MFR-PLY boards are CE marked to harmonised standard EN 13165. The Declaration of Performance, 012/20†, 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

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

Physical & Performance Characteristics

| Surface | 6 mm plywood/ composite foil facing |
|-------------------------------|--|
| Edge: | Butt |
| Thicknesses: | 56-206mm |
| Length x width: | 1200 x 2400mm |
| Thermal conductivity | 0.022W/mK |
| Core water vapour resistivity | ≈300MNs/gm |
| Compressive strength: | >150kPa |

Fire Performance

| Thickness | BS EN 13501-1 |
|-----------------------|---------------|
| 56 -206mm (see above) | Euroclass F |

Dimensional stability / Durability

When tested to EN 1604 Mannok PIR Insulation achieves level DS(TH)4 to EN 13165. Mannok PIR Insulation foil faced board tested to BS EN 1606-1 Compressive Creep (extrapolated 25

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

Design and Installation

For design & installation information plus required thicknesses of Mannok Therm Roof / MFR-PLY to achieve specific U-values in all roofing 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.