



PRODUCT DATA SHEET

Monarflex RMB 400

Reinforced Polyethylene Radon Barrier

Application

Monarflex RMB 400 is part of Icopal's Monarflex radon control systems and may be used loose-laid with ground supported or suspended slabs. It is satisfactory for use as a DPM and when properly sealed and detailed to restrict the ingress of radon. Monarflex RMB 400 is recommended for use in situations of low to medium concentrations of radon gas.

Description

Monarflex RMB 400 is a three layer membrane manufactured from virgin low-density polyethylene (LDPE) with a polyester reinforcing grid. The membrane is coloured red on the upper and underside surface.

Performance and Properties

| Performance and Properties | |
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| Roll Length | 25m |
| Roll Width | 2m |
| Weight | 410gm ⁻² |
| Thickness | 0.4mm |
| Tensile Strength | 750N/50mm |
| Tear Resistance | >400N |
| Elongation | 15% |
| Moisture Vapour Transmission | <0.03gm ⁻² 24hr ⁻¹ |
| Water Vapour Resistance | >1024MNsg ⁻¹ |
| Radon Transmittance | <20x10 ⁻⁹ ms ⁻¹ |
| Radon Permeability | <10x10 ⁻¹² m ² s ⁻¹ |

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Installation Details

Ground Bearing Slabs:

Monarflex RMB 400 may be laid over or under the slab. When laid below slab Monarflex RMB 400 should be placed on top of a gas permeable layer, such as hardcore blinded with sand. When placed above slab, the concrete should be dense, smooth and free from any projections which may damage the membrane. Monarflex RMB 400 should then be covered with a screed or other suitable protective layer.

Suspended Floors:

Monarflex RMB 400 should be laid over the floor slab, which should be free of debris and any projections which may damage the membrane. It should be covered with a screed or other suitable protective layer.

Monarflex RMB 400 should be installed and fixed in accordance with the manufacturer's instructions.

Jointing

To form joints between adjacent sheets of Monarflex RMB 400 lap the membrane by a minimum of 150mm and seal with a strip of 50mm wide Monobond tape.

Penetrations

Where service ducts or pipes penetrate the membrane, gas tight joints are sealed using Monobond tape, along with top hat units with retention clips.

Complex junctions around penetrations such as, steel stanchions and concrete columns may be detailed and sealed by using a fully bonded membrane such as Monarseal self adhesive gas resisting membrane with an overlap of 150mm on each surface.

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Detail work should be completed first. Once completed, Monarflex RMB 400 may be laid and overlapped and sealed in accordance with the manufacturer's recommendations. The membrane should be checked to ensure an effective bond and seal.

Steel, concrete and masonry surfaces should be primed with Xtra-Seal Quick Drying Primer prior to the application of the fully bonded membrane.

Quality Assurance

Monarflex Reflex Super is manufactured under a Quality Management System approved to ISO 9001:2000 by BSI Quality Assurance.

Test Standards & Certificates

Monarflex Reflex Super membrane is manufactured and CE marked according to the EN 13967 standard.

Typical Specification

Monarflex RMB 400 as manufactured by Monarflex Geomembranes Ltd, PO Box 6318, Leighton Buzzard LU7 6AN. The gas membrane is to be installed and sealed in accordance with the manufacturer's instructions.

NBS Specification (available separately)

Monarflex RMB 400 radon and damp-proof membrane is specified using the following:

Clauses: J40

Product: Monarflex RMB 400 radon membrane

Manufacturer: Monarflex Geomembranes Ltd, PO Box 6318, Leighton Buzzard LU7 6AN.

Tel: 08444 123 175 Fax: 01525 384 477.

Technical Services

Specialist advice and design guidance on all matters relating to Monarflex RMB 400, including CAD detailing for all gas and damp-proofing requirements, is freely available from our Technical Department at the address below.