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DATA SHEET No. ICO1832
Rev. 10/08

Monarflex
Geomembranes



PRODUCT DATA SHEET

Monarflex RAC Gas Membrane

Gas Containment

The most commonly occurring gases for which protection is required are: methane, carbon dioxide (CO₂) and radon. Accumulation of gases in buildings can reach dangerous concentrations and constitute a health hazard with danger of explosions. High concentrations of gases are usually found on ground previously utilized for industrial processes ex. chemical factories and on former landfill areas.

A Mechanical Barrier

The easiest precaution to avoid high concentrations in buildings is the installation of a gas control system. To prevent the gas from entering the house, a high performance gas membrane must be installed across the whole footprint of the building. The mechanical barrier must be strong and reinforced to avoid puncture from stones.

Monarflex RAC Membrane

Monarflex RAC membrane is developed specifically for installation on contaminated ground to prevent gases from entering the house, A well protected aluminium foil serves as an efficient gas barrier and the reinforcement secure that traffic on the membranes will not lead to puncture. The composition if the membrane with 6 independent layers, makes it a perfect gas barrier for projects with rough conditions where the membrane will be exposed to heavy traffic from equipment during installation. Concrete can be poured directly into the membrane.

Installation

Installation of the gas barrier must only be carried out by professionals. For welding of the gas membranes on site, Monarflex recommends the Monarflex Extrusion Welding Machine.

Test Standards & Certificates

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

Technical Approvals

- DNV Certificate 1162-CPD-0254
- BBA Certificate 00/3668



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Technical Data

Available Sizes	2 x 25m 2 x 50m 2 x 100m
Net Weight	900 g/m ²
Thickness	0.9
Roll Weight	2 x 25m = 41kg 2 x 50m = 81kg 2 x 100m = 161kg
Tensile Strength	>11 kN/m
Thermal Stability	-40°C to +75°C
Methane Gas Transmission	<0,005cm ³ /hm ² atm

Composition of RAC gas membrane:

Monarflex RAC membrane is a specially designed membrane with multiple layers consisting of several layers of blown virgin polyethylene (LDPE) film, a reinforced polyester scrim and a 12 microns aluminium layer laminated together by several coater layers to a tough and durable gas membrane. The membrane consists of 6 layers in total ensuring a gas tight membrane with high mechanical properties. The special composition and properties of each layer of the product make a tight and effective barrier to prevent gas from entering houses and buildings to constitute a health hazard for the inhabitants.