

# Alderprufe GRM

A loose laid membrane comprising a reinforcing grid extruded between two layers of polyethylene, with high resistance to ground contaminants. For use in all types of floor construction design solid concrete ground floors that are not subject to hydrostatic pressure, to protect buildings against gas penetration from the ground. Specifically CO<sub>2</sub> and Radon.

## General Description

Alderprufe GRM is available for use, in accordance with the relevant clauses of CP102: 1973 Code of Practice for protection of buildings against water from the ground (as amended), in concrete floors not subject to a hydrostatic pressure.

It can be installed as an oversite membrane, situated between a blinded hardcore bed and the base concrete, or as a sandwich membrane in base concrete and the screed and suspended floor construction including block and beam.

The methods of jointing provide an effective barrier to the passage of gases, liquid water and water vapour from the ground.

Alderprufe GRM will meet Requirement C4 of the Building Regulations 1985 (England and Wales), in that sheet thickness is at least 1000 gauge.

Alderprufe GRM has a high resistance to puncture. On smooth or blinded surfaces it will not be damaged by normal foot or site traffic (eg wheelbarrows) but care should be taken to avoid damage during installation, particularly when handling building materials and equipment over the surface and when placing concrete or screed since it can be punctured by sharp objects.

Alderprufe GRM may be installed under all conditions normal to the construction of ground floor slabs. However, it should be noted that in accordance with CP102: 1973 (as amended) subsoil drainage should be provided wherever there is a risk of ground becoming waterlogged

The membrane remains flexible and does not soften at the extreme temperatures likely to occur in practice. When used in accordance with the manufacturer's instructions there will be no adverse effect on the membranes from underfloor heating under normal conditions of use. Alderprufe GRM will provide an effective barrier to the transmission of gases, liquid water and water vapour for the life of the concrete slab in which it is installed.

Minimum thickness (mm)	0.375mm
Roll length (M)	50 mts
Roll width (M)	2.6 mts
Roll weight (kg)	45.5 kgs
Tensile strength	15 KN/M
Methane Gas Permeability	40 cm <sup>3</sup> m <sup>2</sup> /h
Carbon Dioxide Permeability	0.06g/m <sup>2</sup> /day
Radon Permeability	10.6x10 <sup>-12</sup> m <sup>2</sup> /day

## Application

Unless the base is smooth, a surface blinding of soft sand or Geotex Blanket should be used to avoid puncture of the membrane during installation or when the concrete or screed is being placed.

**Jointing:** Before jointing, sheets must be clean and free from dust and grease. Adjacent sheets should be overlapped by at least 100mm wide and bonded with 100mm wide Alderseal Gastite Compound.

**Perforation:** Perforation or puncture of the sheets should be patched with sheets of identical thickness lapped at least 150mm beyond the limit of the puncture and sealed with 100mm wide Alderseal Gastite Compound.

**Continuity with DPC:** Alderprufe GRM membrane must be continuous with damp-proof course in the surrounding walls. Where necessary Alderprufe MR50 should be used as a vertical course to link the two. Lapped and bonded to Aldercourse GRA for continuation through load bearing structural walls (See details drawings and separate data sheets).

**Placing Concrete or Screed:** Alderprufe GRM must be covered by a screed or Geotex protective layer as soon as possible after installation. Care should be taken to ensure that the membrane is not stretched or displaced when placing the concrete or screed.

Consideration should be given to use of ventilation systems and pre-formed details where appropriate, see separate data sheet. For all service entries the use of Tophat' factory formed units made from the same material should be considered.

All products in the Alderprufe Gas Barrier systems are fully compatible and offer versatility both in designs consideration and contractor application.

