

PROTECH GM HM*

*ACHIEVES 2 POINTS WHEN PROFESSIONALLY INSTALLED AND INDEPENDENTLY VALIDATED, UNDER THE BS8485 TABLE 3 SCORING SYSTEM

• HIGH RISK CHARACTERISTIC SITES •

REGULATIONS COMPATIBILITY TABLE

	CIRIA 665 CHARACTERISTIC SITUATION 2	CIRIA 665 CHARACTERISTIC SITUATION 3-6	BS8485 AMBER 1	BS8485 AMBER 2 & RED	BRE 211 RADON	NHBC AMBER 1	NHBC AMBER 2
METHANE	✓	✓	✓	✓	N/A	✓	✓
CARBON DIOXIDE	✓	✓	✓	✓	N/A	✓	✓
RADON	N/A	N/A	N/A	N/A	✓	N/A	N/A
HYDROCARBON VAPOURS & LIQUID	✓	✓	✓	✓	N/A	✓	✓

DESCRIPTION

Protech GM HM is a high impact proprietary hydrocarbon and gas resistant barrier; with outstanding chemical resistance, mechanical properties, environmental stress crack resistance, dimensional stability and thermal ageing characteristics, that has been specifically designed to conform with the latest guidance documents. Due to its composition, the membrane is extremely robust and therefore reinforced steel can be placed directly on the membrane without the need for a protection board prior to the floor being cast. The membrane is also ideally suited for laser screed applications. The membrane also provides protection from Damp and therefore there is no need to install a separate DPM.



SPECIFICATION

Ciria 665, BS8485 & Local Authority Ground Gas Handbook recommends that membranes are specified on the basis of the need to survive construction, i.e. use one that is puncture and tear resistant.

Thickness should not be the main determinant of the suitability of a membrane for a particular site, although it can indirectly influence some key performance parameters.

In practise, because of the nature of construction sites, the durability, survivability and robustness of membranes are equally important than purely permeability to gas.

Protech GM HM is 1mm thick and has a high puncture resistance to ensure that maximum protection is achieved from follow on trades when installed to manufacturers' instructions.

The need for high quality workmanship during installation should not be under-estimated. The health and safety of the occupants of the building is dependent on its satisfactory performance.

If installed incorrectly or damaged during the construction process, the membrane is rendered ineffective and will fail to provide adequate protection against the ingress of ground gas or vapours.

TYPICAL PROPERTIES	
Roll Length	4m
Width	12.5m
Density	0.94g/cm ³
Thickness	1.0mm
Colour	Black
PHYSICAL CHARACTERISTICS	
Tensile Strength @ Break ASTM D-638	W / mm ²
Elongation @ Break ASTM D-638	>700%
Puncture Resistance	240N
Tear Resistance	93N
Moisture Vapour g/m ² /day	<0.1
Methane Permeability g/m ² /24h/atm	<0.11
Petrol Vapour Transmission Rate (g/m ² /h)	<1.06

www.proctorgroup.com

The Haugh, Blairgowrie, Perthshire, PH10 7ER

Tel: +44 (0) 1250 872 261 Fax: +44 (0) 1250 872 727 email: ask@proctorgroup.com

PROTECH GM HM

REQUIRED ACCESSORIES

- Protech GR-DPC
- Protech GM Tape
- Protech GM Tophats
- Protech SAGM (Self Adhesive Gas Membrane)
- Protech GM Flashing Strip
- Protech GM Corner Units
- Protech GM Primer
- Protech GM 3mm Protection Board

VENTING

On sites where venting is required, our Provoid Venting System should be used. We can provide design advice for both passive and active venting systems to suit individual site requirements.

TAPED JOINT INSTALLATION PROCEDURE

Protech GM HM should be unrolled over the prepared ground or sub-floor which should be free from any sharp protrusions. When the membrane is to be laid below the concrete slab, it should be loosely laid to accommodate any small movements. Prior to the application of the Protech GM tape, all surfaces must be dried thoroughly. A strip of Protech GM tape, (see separate specification), is unrolled over the membrane at its nearest edge 50mm from the membrane edge.

Remove protective paper from tape, prior to rolling adjacent run of membrane, which should be carefully unrolled over the Protech GM tape, ensuring a 150mm overlap. Alternatively, the membrane may be welded; however, this should only be carried out by a competent specialist installer.

In areas where the membrane crosses cavity walls or internal single skin walls, Protech GR-DPC should be used in conjunction with Protech GM HM Internal & External preformed corner units.

Pipe penetrations should be sealed with Protech GM Tophats or Protech GM Flashing Strips.

Stanchions and columns should be sealed with Protech Bitumen Primer and Protech GM Flashing Strips (Photos, Isometric and Sectional CAD details are available to view on our new updated website).

