

# Methane Pro High Performance Gas Barrier

# Product Description

Methane Pro 390 is a multi-layer virgin polythene laminate with a reinforced aluminium foil core, suitable for use as a loose laid Methane, Carbon Dioxide & Radon gas barrier and high-specification damp proof membrane (DPM). Novia® Methane Pro 390 has a weight of 390gsm and is >0.4mm in thickness. The membrane complies with current UK Building Regulations for Methane protection, including BS 8485 groundwork applications and is suitable for both taped or welded installations. Novia® Methane Pro 390 meets EN 13967 as a DPM and is UKCA approved. The membrane is blue on one side, silver on the reverse.

#### Features

- 390gsm weight and ≥0.4mm in thickness
- Suitable for BS 8485 Methane gas barrier applications
- Meets EN 13967 for use as a DPM
- UKCA approved
- Suitable for both taped or welded installations
- Joints tested to BS ISO 15105-1
- Tough, tear resistant and reinforced material
- Low vapour and methane permeability
- Also suitable as a Carbon Dioxide and Radon gas barrier

# **Typical Applications**

- Radon, Carbon Dioxide and Methane gas barrier
- Damp proof membrane

	Value
Material	Virgin grade polythene
Roll Width	1.6m
Roll Length	50m
Roll Weight	33kg
Thickness	≥0.4mm
Nominal weight	390g/m <sup>2</sup> EN 1849-2
Tensile strength MD / CD	>280 / >200 N/50mm EN 12311-2 Method A
Elongation MD / CD	>15 / >15% EN 12311-2 Method A
Resistance to tearing MD / CD	>100 / >200 N EN 12310-1
Water vapour resistance, Sd	5000m EN 1931
Watertightness	PASS At 2kPa EN 1928
Max. Methane transmission rate* (membrane)	≤0.1 ml/(m².day.atm) BS ISO 15105-1
Max. Methane transmission rate* (taped joint)	≤13.6 ml/(m <sup>2</sup> .day.atm) BS ISO 15105-1
Max. Methane transmission rate* (welded joint)	≤18.3 ml/(m <sup>2</sup> .day.atm) BS ISO 15105-1
Alkali durability	PASS EN 1847 (liquid 2) and EN 12311-2
Age durability	PASS EN 1296 and EN 1931
Reaction to fire	NPD

\*Methane transmission rate is negligible through the main body of the membrane. Taped and welded joints have been tested to BS 1SO 15101-1 and the Methane transmission rates are significantly below limits required under BS 8485.

Premier Sealant Systems Ltd.

T 01724 864 100 | E sales@sealprem.com | www.sealprem.com Mercia Way, Foxhills Industrial Park, Scunthorpe, DN15 8RE Registered in Cardiff No. 3000843



#### Installation Guidance – Taped System:

When installing as a taped system, the membrane should be installed using Novia<sup>®</sup> sealing tapes, as tested to BS ISO 15101-1: Novia<sup>®</sup> Double Sided Butyl Tape (50mm minimum width) and Novia<sup>®</sup> Single Sided Aluminium Foil Lap Tape (96mm minimum width). This is to ensure a complete gastight seal is maintained throughout the life of the product. It is very important that the product is not damaged during installation, and that all breaks or damage to the membrane, intentional or otherwise, are fully sealed. Repair any on-site damage with a patch of Novia<sup>®</sup> Methane Pro 390 material, using Novia tapes, with a minimum 150mm overlap from the puncture.

An example installation for taped system (membrane installed blue side up).



To correctly install Novia<sup>®</sup> Methane Pro 390 at all joints, ensure the surface is dry and dust free before unrolling the first length of membrane. Novia<sup>®</sup> Methane Pro 390 is installed blue side facing up. Once the membrane is flat, apply Novia<sup>®</sup> Double Sided Butyl Tape approximately 50mm from the edge, and temporarily leave the backing paper on. Prepare the second length of methane barrier by once again ensuring the surface underneath is dry and dust free. Then lay the second length of membrane with a 150mm overlap on to the first length of membrane. Join them together by unpeeling the backing paper of the butyl tape. It is recommended to apply firm pressure along all joints to form a strong sealing bond. Where the two membranes overlap, the excess membrane needs to be stuck firmly in place using Novia<sup>®</sup> Single Sided Aluminium Foil Lap Tape. Apply this tape equidistant over the two membranes and apply firm pressure to complete the seal. All other edges and entry points, such as top hats and pipe penetrations, must be sealed in the same manner (or welded). Ensuring all joints are sealed correctly and tightly will maintain the effectiveness of the membrane.

#### Installation Guidance – Welded System

When installing Novia® Methane Pro 390, welding should be undertaken by competent and experienced operatives. Tests should be undertaken prior to welding, to ensure the correct temperature and speed is achieved. Ambient temperature and the condition of the equipment used can influrence the weld temperature settings and speed. Novia® Methane Pro 390 is installed blue side facing up. The joint to be welded should be overlapped by 100mm as a minimum, with a 35mm weld typically achieved. All joints must be correctly and fully sealed to ensure the effectiveness of the installation. Welds on gas membranes, such as Novia® Methane Pro 390, are normally subject to independent verification in accordance with CIRIA C735. This includes joint integrity testing. Edges and entry points, such as top hats and pipe penetrations, must also be sealed by welding or the use of Novia installation tapes. It is very important that all breaks or damage to the membrane, intentional or otherwise, are fully sealed. Any damage should be repaired by welding a patch of material with a minimum 150mm overlap from the puncture. Alternatively, Novia® Double Sided Butyl Tape (50mm minimum width) and Novia® Single Sided Aluminium Foil Lap Tape (96mm minimum width), installation tapes can also be used for any repairs.



## General Installation Guidance:

Once installation of the membrane is complete, the Methane barrier should be protected as soon as possible. There is a minimum thickness of 50mm screed recommended. It is essential that care is taken to ensure the membrane is not damaged at any point after the membranes installation, including the application of screed or reinforced concrete. Novia® Methane Pro 390 is suitable for applications installed above/below reinforced cast concrete floor slabs or alternatively above suspended segmental subfoors, such as block and beam. This membrane is not suitable for applications where hydrostatic pressure is present.

## Other Notes:

Always handle material carefully to prevent tears and punctures.

All Novia<sup>®</sup> products should be stored horizontally, indoors and out of direct sunlight. External storage must be on a temporary basis. When stored externally, Novia<sup>®</sup> products should be covered and protected from exposure to weather conditions, especially wind, rain, frost and UV. Pallets should not be stacked.

Please note: The above technical information is given as a guide and is based on recent test data obtained under laboratory conditions. Materials should be fully tested by the end user to establish suitability of the product for the intended application. September 2024