

# technical datasheet

**cordeneps**  
environmental protection systems

## CORDENEPS Radon Membrane (Rn)



Radon is a naturally occurring radioactive gas formed by the breakdown of uranium and radium.

**CORDENEPS** Radon Barrier/Membrane is a high quality LDPE blown film membrane with high puncture resistance and tear resistance.

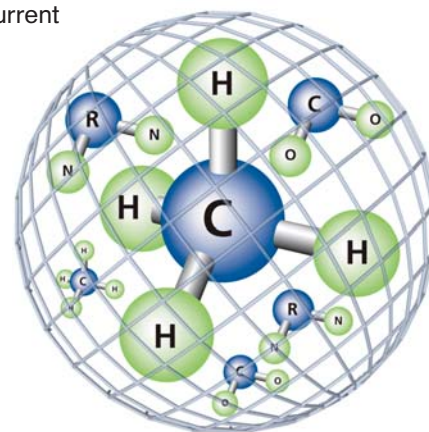
The product is used as part of a full radon gas protection system and will meet all current legislation as listed below.

The membrane is suitable for use as a damp proof membrane.

**CORDENEPS** Radon Barrier/Membrane prevents the transmission of harmful gases and due to the nature of its construction, the membrane overcomes problems associated with membranes manufactured from post-consumer recycled waste.

Under new legislation, requirements may include:

- Independent verification supported with photographic documentation.
- Integrity testing in certain gas regimes. i.e upper levels of CS3/Amber 2.
- Quality assurance measures to be applied as per watchpoints in BRE 211/414
- The use of proprietary membranes (independently tested) with robust jointing.
- The use of pre-formed corner, threshold and pipe cloaks.



## Product Specification

Physical Description	Test Method	Value/Units
Weight		276g/m <sup>2</sup>
Thickness		300µm
Colour		Anthracite
Roll Size		4m x 20m
<b>Technical Performance</b>		
Tensile strength	MD	17.7MPa
	CD	17.3MPa
Elongation at max load	MD	Greater than 860%
	CD	Greater than 910%
Dart impact strength		0.710kg
Tear Resistance	MD	100N/mm
	CD	94.5N/mm
Radon permeability		4.7 x 10 <sup>-12</sup> m <sup>2</sup> /s
Moisture Vapour transmission		0.12g/m <sup>2</sup> /day

The performance of gas membranes is heavily dependent on the quality and design of the installation, resistance to damage after installation and the integrity of the joints (BS 8485)

## Advantages

- Suitable for use on sites contaminated with higher concentrations of Radon
- 4 metre wide membrane
- Premium DPM/vapour barrier
- Corden EPS Radon Membrane should be laid in accordance with BRE 211 (2007)
- Extremely tough with excellent resistance to tear and puncture
- Compatible with vented systems

## Installation Details

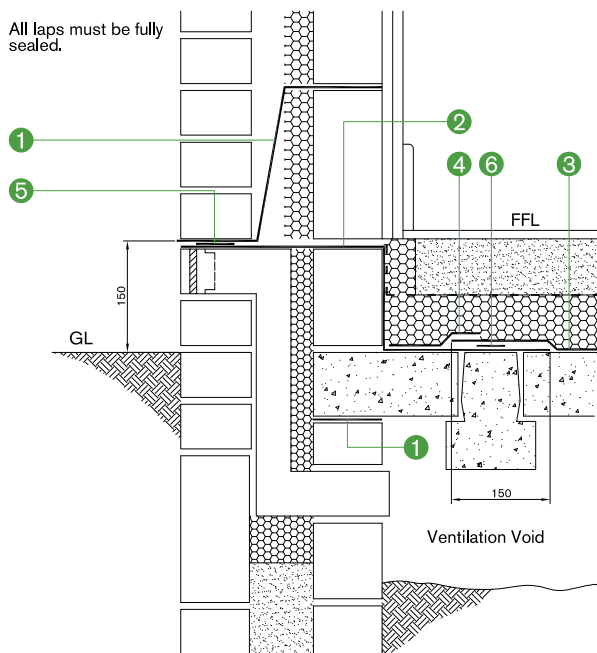
**CORDENEPS** Gas Protection systems should be installed in accordance with current guidance including BRE 211/414, CIRIA C665 & BS8485 and should provide a complete system to cover the whole footprint of the building. The membrane should be laid on a smooth or sand blinded surface free from voids/hollows and objects which may damage the membrane. **CORDENEPS** membrane should be jointed with **CORDENEPS** Double sided Gas Tape with 150mm overlap and then sealed down with a **CORDENEPS** Lap Tape. The membrane should be clean, dust-free and dry. **CORDENEPS** Gas Membranes should provide continuity through walls by sealing and jointing to the DPC/cavity tray formed with **CORDENEPS** GR DPC. Preformed details including internal/external corner units, top hat units, partition wall tray units and door reveal cloaks are available to complement the DPC providing added integrity to the system. Damaged or punctured areas should be patch repaired utilising the above method for jointing. Depending on subsequent covering, protection may be required to protect the system from puncture. Should integrity testing or a validation report be required, this should be factored in prior to the concrete/screed pour.

## Ancillary Products

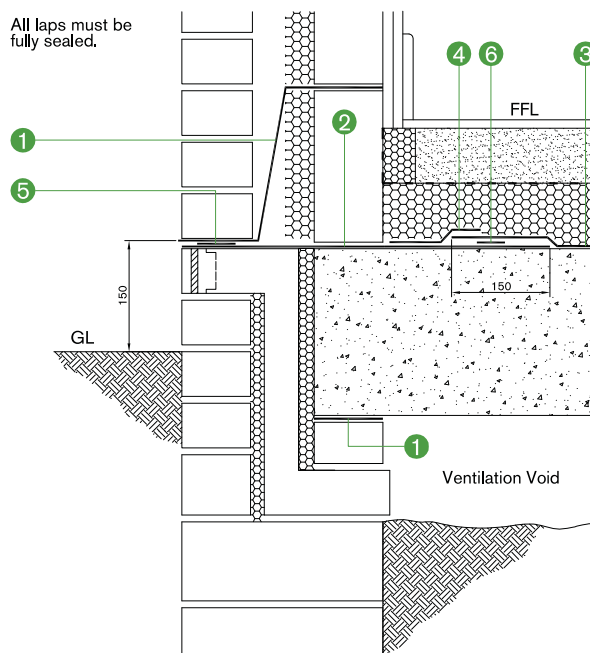
- **CORDENEPS** Jointing system. Gas and Lap Tape
- **CORDENEPS** GRM. Self adhesive gas barrier
- **CORDENEPS** Geo-Vent + venting components
- **CORDENEPS** Liquid Vapour Membrane
- **CORDENEPS** Top Hat Pipe Cloaks
- **CORDENEPS** GR DPC. Gas resistant DPC
- **CORDENEPS** Radon Sump.
- **CORDENEPS** Pre-formed Cloaks. Internal/external corners. Door threshold cloaks. Party wall tray.

See separate data sheet for more information.

## Typical Details



- 1) **CORDENEPS** GR DPC
- 2) **CORDENEPS** GR DPC
- 3) **CORDENEPS** Gas membrane to specification
- 4) **CORDENEPS** Lap Tape
- 5) **CORDENEPS** Gas Tape to specification
- 6) **CORDENEPS** Gas Tape to specification



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## Typical Details

To ensure that the specified system is capable of meeting the functional requirement of the application and current legislation and guidelines, **CORDENEPS** offer project specific technical support through our team of experienced office and field based operatives.

### **CORDENEPS** can offer;

- Design solutions offering the most cost effective system to comply with current legislation.
- Independent Integrity testing (site based)
- Bespoke systems to overcome difficult situations
- Independent Verification reports (site based)
- Next-day Delivery
- Supply and install service with on-site fabrication/welding

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