

Corden EPS 2000

Radon, carbon dioxide and low level methane for NHBC Amber 1 situations

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A low permeability, highly robust, monolithic, thermoplastic LDPE membrane for use as a radon, carbon dioxide and methane barrier for NHBC Amber 1 situations.

Corden EPS 2000 prevents the transmission of harmful gases. Due to the nature of its construction; the membrane overcomes problems associated with membranes manufactured from post-consumer recycled waste.

Corden EPS 2000 also acts as a damp proof membrane and can be heat welded.

Corden EPS 2000 fully complies with the recommendations of the Building Research Establishment Document: 414 and with the requirements NHBC Guidance on methane and carbon dioxide report issue 20 for Amber 1 sites.

Advantages

- Suitable for use on sites contaminated with higher concentrations of Radon.
- 4 metre wide centre-fold membrane
- Premium DPM/vapour barrier
- Extremely tough with excellent resistance to tear and puncture.
- Compatible with vented systems
- Conforms to the requirements of BR211

Product Specification

| Method | Test Unit | Mean Results |
|-------------------------------|--|---|
| | Roll size | 4m x 12.5m |
| | Thickness | 500mu |
| | Density (Kg/m2) | 920 |
| | Colour | Grey |
| | | |
| MOAT 27 5.1 | Tear strength – Nail tear (N) | Long' Trans |
| BS 2782 (360B) | | 215 185 |
| BS 2782 (320) (12) | Elongation at break (%) | Long' Trans |
| | | 500 525 |
| MOAT 27 5.1.6.1 | Dimensional stability (%) (4) at 80°C 72 hours | Long' Trans |
| | | +0.17 0.37 |
| MOAT 27 5.4.2 | Low temperature flexibility (5) 20mm dia | Long' Trans |
| | mandrel (-27°C) | No cracking |
| WVTR (g/m2/day) | Resistance to water vapour | 0.24 |
| Radon Permeability | | 4 x 10 ⁻¹² m ² /s |
| CO ² Transmittance | | 26.53cc/m²hr |
| Methane Transmittance | | 6.43cc/m²/hr |
| MVTR | | 0.16g/m²/day |

References

BR211 "Radon - Guidance on protective measures for new buildings"

BRE414 "Protective measures for housing on gas-contaminated land"

CIRA C735 2014 Good practice on the testing and verification of protection systems for buildings against hazardous ground gases.

BS8485: 2015 Code of Practice for the Characterization and Remediation from Ground Gas in Affected Developments

NHBC "Guidance on methane and carbon dioxide" and technical extra April 2016, issue 20.



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NHBC expectations for verification to satisfy the Traffic Light gas regime classifications are as detailed in below.

Table 1: Typical NHBC expectations and verification requirements

| Gas regime | Minimum gas protection expectations | Verification or information requirements |
|------------|--|--|
| Green | N/A – but need to comply with BR211 radon requirements, where applicable | |
| Amber 1 | Ventilation – subfloor venting to achieve at least one | Construction drawings – showing position |
| | air exchange per day (minimum 150mm void height; | of membrane; sealing details and |
| | 1500mm2/m air vent opening or 500mm2/m2 floor | ventilation points to be provided. |
| | area spaced at not more than 2m centres on at least | Membrane specification – technical data |
| | two opposing sides). | sheet(s) for gas membrane (including gas |
| | Membrane – must be suitable for purpose. | permeability data) to be provided. |
| | Membrane installation/design - to achieve complete | Installation – photographic evidence of |
| | integrity across entire building footprint. Penetrations | installed membrane may be requested. |
| | and joints sealed. | |

Note: Corden EPS 2000 is not suitable for "Amber 2" situations. See Corden EPS Total Gas Barrier for guidance.

Ancillary Products

- CORDEN EPS Gas and Lap Tape
- CORDEN EPS GRM Self-adhesive Gas Barrier
- CORDEN EPS Geo-Vent + venting components
- CORDEN EPS Liquid Vapour Membrane
- CORDEN EPS Top Hat Pipe Cloaks
- CORDEN EPS GR DPC. (Gas resistant DPC)
- CORDENEPS Radon Sump
- CORDEN EPS Pre-formed Cloaks, Internal / external corners, Door threshold cloaks, Party wall tray.

Corden EPS Can Offer:

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







