# Sigma GPS Universal Gas Barrier Radon, carbon dioxide and methane barrier for NHBC Amber 1 situations



Value/Units

# Sigma GPS Universal Gas Barrier

Sigma GPS Universal Gas Barrier is a monolithic hybrid virgin polymer manufactured using the blown extrusion method.

The membrane contains no recycled material, as a result it is consistent and doesn't include any biodegradable content thus providing excellent results for gas permeation.

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

Sigma GPS Universal Gas Barrier prevents the transmission of harmful gases and due to the nature of its construction; the membrane overcomes associated with membranes problems manufactured from post-consumer recycled waste.

Sigma GPS Universal Gas Barrier is suitable as a radon, carbon dioxide and methane barrier for NHBC Amber 1 situations and does not normally require third party verification (NHBC issue 20 -April 2016)

For Amber 2 situations utilise Sigma GPS Total Gas Barrier. Third party verification would be required.

### Advantages

- Suitable for use on sites contaminated with radon carbon dioxide and methane (NHBC -Amber 1)
- 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, NHBC Amber 1

## SIGMA 360 Ltd Can Offer:

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

Sigma 360 Limited

|                       | Method |                 |
|-----------------------|--------|-----------------|
| Weight                |        | 356g/m2         |
| Thickness             |        | 375mu           |
| Colour                |        | Varying         |
| Roll Size             |        | 4m x 20m        |
| Technical Performance |        |                 |
| Tensile strength      | MD     | 21.5MPa         |
|                       | CD     | 29.4MPa         |
| Elongation at max     | MD/CD  | > 800%          |
| load                  |        |                 |
|                       |        |                 |
| Dart impact strength  |        | 1.012kg         |
| Tear Resistance       | MD     | 248N/mm         |
|                       | CD     | 303N/mm         |
| Radon permeability    |        | 4 x 10 -12 m2/s |
| CO2 Transmittance     |        | 26.53cc/m2/hr   |
| Methane               |        | 0.16g/m2/day    |
| transmittance         |        |                 |
| Moisture Vapour       |        | 0.16g/m2/day    |
| transmission          |        |                 |
| Roll weight           |        | 28.48kg         |

Test

### System Components

**Product Specification Physical Description** 

- Sigma GPS Gas and Lap Tape
- Sigma GPS GRM. Self-adhesive Gas Barrier
- Sigma GPS Geo-Vent + venting components
- Sigma GPS Liquid Vapour Membrane
- Sigma GPS Top Hat Pipe Cloaks
- Sigma GPS GR DPC. Gas resistant DPC
- Sigma GPS Radon Sump
- Sigma GPS Pre-Formed Cloaks, Internal / external corners, Door threshold cloaks, Party





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