The expanding joint sealing tape
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Manufactured by Vita Cellular Foams. VitaSeal is a unique combination of a resilient foam and a water resisting binder. The combination produces a “dry” pre-formed strip seal used to resist weather ingress in fenestration, roofing and construction applications. The viscoelastic properties also offer noise and vibration damping.

VitaSeal is manufactured using an open cell polyurethane foam heavily impregnated with acrylics creating flame retardant properties.

Under high compression the product will create a weather-proof seal, under low compression the product is suitable for draught sealing.

VitaSeal 600 is recommended for use in more extreme weather applications (tested to DIN 52453 Watertight Against Driving Rain) and is fully resistant to UV.

The product is supplied in rolls, pre-compressed to approximately 85%.

Vitaseal HPE has been developed for the more demanding application, especially in timber frame construction, where movement within the structure has to be accommodated whilst ensuring that a weather tight seal remains constant.

The open cell nature of the product ensures good ventilation preventing moisture build up in the joint whilst still providing the thermal barrier and acoustic performance required.

As with the Vitaseal 600, HPE provides good stability to UV ageing and sealing against driving rain.
Improving Standards

In the article on ‘Perimeter sealing of doors and windows’ published in the NHBC Standards Extra June 2010 it is observed that three key factors come into play to maintain performance and durability being weathertightness, airtightness and insulation. It is recognised that foam tapes with a minimum 600 Pascal rating provide the necessary performance criteria together with the flexibility required for movement to meet today’s exacting standards. Further detail may be obtained by following the NHBC link:


Applications:

- Perimeter seals for windows and doors
- Expansion joints
- Side/end laps on roofing sheets
- Joints for portable or sectional buildings
- Abutment seals for conservatories
- Acoustic seal
- Timber buildings
- Ductwork
- Sealing roof lights
- Installation of solar panels
- Caravan and mobile home manufacture

Benefits:

- Quick installation
- Easy to apply
- Improves energy efficiency in buildings
- Expands to find its own level
- Seals against uneven surfaces
- Clean product (in comparison to silicones and mastics)
- Accommodates joint movement
- Allows ventilation of joint
- Easy to quantify usage
- Minimal wastage
- Can be painted after installation
- Only need one product to make watertight

Long-life flexibility in multiple use

VitaSeal is supplied as a pre-compressed roll, with one side being self adhesive to assist with initial positioning. Available in a number of different widths and thicknesses. Used in the correct way, VitaSeal is suitable for many different applications when used at the specific compression shown below.

<table>
<thead>
<tr>
<th>Compression Level</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>Soundproofing and anti-vibration</td>
</tr>
<tr>
<td>50%</td>
<td>Thermal insulation and dust particle insulation.</td>
</tr>
<tr>
<td>75%</td>
<td>Water resistance (after 75% compression the performance of the joint improves)</td>
</tr>
</tbody>
</table>
### Technical Specification

<table>
<thead>
<tr>
<th>Material</th>
<th>Polyurethane cellular foam, impregnated with a flame retardant acrylic resin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Classification</td>
<td>Class 1 according to NF P85-570, BG1 according to DIN 18 542 (P-NDS04-479).</td>
</tr>
<tr>
<td>Fire Resistance</td>
<td>B1, self-extinguishing.</td>
</tr>
<tr>
<td>Watertight Against Driving Rain DIN 52453</td>
<td>600 pa minimum, according to the range of use of Vitaseal 600 as described below. Independently tested by AMPA Hanover.</td>
</tr>
<tr>
<td>Vapour Resistivity DIN 18542</td>
<td>µ &lt; 10</td>
</tr>
<tr>
<td>Tensile Strength ISO 1798</td>
<td>&gt;170 kPa</td>
</tr>
<tr>
<td>Elongation at breaking ISO 1798</td>
<td>&gt;250%</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Will cause no corrosion with iron, steel, zinc coated sheet, aluminium or copper. Will not corrode PVC, glazing, wood, concrete or tiles.</td>
</tr>
</tbody>
</table>

### Product Selector

#### Gap to be filled (mm) | Tape width into joint depth (mm) | Vitaseal 600 reference to order
---|---|---
1-3 | 10 | 600 10 1-3
2-4 | 10 | 600 10 2-4
2-4 | 15 | 600 15 2-4
3-7 | 10 | 600 10 3-7
3-7 | 15 | 600 15 3-7
3-7 | 20 | 600 20 3-7
3-7 | 25 | 600 25 3-7
5-10 | 15 | 600 15 5-10
5-10 | 20 | 600 20 5-10
5-10 | 25 | 600 25 5-10
7-12 | 15 | 600 15 7-12
7-12 | 20 | 600 20 7-12
8-15 | 20 | 600 20 8-15
8-15 | 30 | 600 30 8-15
10-18 | 20 | 600 20 10-18
10-18 | 25 | 600 25 10-18
10-18 | 30 | 600 30 10-18

#### Gap to be filled (mm) | Tape width into joint depth (mm) | Vitaseal HPE reference to order
---|---|---
13-24 | 30 | HPE 30 13-24
13-24 | 40 | HPE 40 13-24
24-40 | 40 | HPE 40 24-40

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A Vita Group Product
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