Non-absorbent, semi-rigid, polyethylene joint filler

Uses
For use in forming expansion joints in concrete, brickwork and blockwork and in the construction of water retaining and water excluding structures.

- Brickwork
- Deck slabs
- Basement structures and subways
- Retaining walls
- Raw and potable water reservoirs
- Sewage treatment works
- Irrigation channels and culverts

Advantages
- Non-absorbent
- Rot proof
- Non-tainting
- Resilient
- Bitumen free
- Heat resistant in applications up to 80°C

Standards Compliance
Complies with Road and Traffic Authority of NSW specification T1204.

Description
Stiffjoint is a semi-rigid, UV resistant, cross-linked, non-absorbent, closed-cell polyethylene sheet material.

Stiffjoint is non-tainting and rot proof, therefore, suitable for use in conjunction with suitable joint sealants in structures for the storage of potable water.

Technical Support
Parchem offers a technical support package to specifiers and contractors as well as on-site technical advice from staff experienced in the construction industry.

Design Criteria

Example of a sealed expansion joint

Typical detail of a wall expansion joint

Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Semi-rigid, closed-cell, polyethylene foam sheet</td>
</tr>
<tr>
<td>Density</td>
<td>110kg ± 5 kg per m³</td>
</tr>
<tr>
<td>Water absorption</td>
<td>Less than 2% after 28 days</td>
</tr>
<tr>
<td>Compression strength 50% deflection MR610 / T1150:</td>
<td>420 Kpa</td>
</tr>
<tr>
<td>Recovery T1150:</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Extrusion MR610 / T1150:</td>
<td>0.5 mm</td>
</tr>
<tr>
<td>Accelerated Weathering Test MR610 / T1150:</td>
<td>Excellent / no degredation</td>
</tr>
<tr>
<td>Resistance to bacteriological attack:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Resistance to chemicals - Immersion for 7 Days</td>
<td>No reaction</td>
</tr>
<tr>
<td>Hydrochloric acid 10%:</td>
<td>No reaction</td>
</tr>
<tr>
<td>Caustic soda 10%:</td>
<td>No reaction</td>
</tr>
<tr>
<td>Acetone:</td>
<td>No reaction</td>
</tr>
<tr>
<td>Premium motor fuel:</td>
<td>No reaction, slight swelling</td>
</tr>
<tr>
<td>Diesel fuel:</td>
<td>No reaction, slight swelling</td>
</tr>
</tbody>
</table>
Application Instructions

Joint sealing slots
When forming expansion joints with Stiffjoint in in-situ concrete, Stiffjoint can be supplied pre-cut with a “zip top” to site requirements or joint sealing slots can be readily formed in the following manner. Before installing, simply cut off a strip to the required depth then pin the strip back onto the main filler using small nails. Then install the filler flush with the finished surface.

Prior to sealing, the top strip can then be pulled easily from the joint to provide an uncontaminated sealing slot ready for preparation and sealing. As elastomeric sealants will not bond to Stiffjoint the additional need for bond breaker strips to is eliminated.

Suspended Slabs
When installing Stiffjoint in expansion joints between suspended slabs, partly projecting copper nails or daubs of adhesive may be used to prevent displacement.

Estimating
Stiffjoint is supplied in the following sheet sizes and can be easily cut to the required size with a Stanley knife or saw:

<table>
<thead>
<tr>
<th>Sheet size:</th>
<th>2.4 m long x 1 m wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet thickness:</td>
<td>7, 10, 12, 15, 20 mm (25, 30 and 40mm thickness made to order)</td>
</tr>
</tbody>
</table>

Also supplied in 2.4 m long, 10 mm thick strip sizes:
50 mm, 75 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm and 300 mm depths

10 mm thick footpath lengths:
75mm deep: 1.2 m, 1.4 m, 1.45 m and 1.5 m
100 mm deep: 1.4 m, 1.45 m and 1.5 m
125 mm deep: 1.4 m and 1.5 m

Profiles:
A range of profiles for kerb and gutters is also available.

Storage
Stiffjoint should be stored in a clean area and not left exposed for long periods, especially in hot climates.