SERVISEAL® CJ 300

External PVC waterstop for passive protection of construction joint in reinforced concrete structures

Product Description

SERVISEAL® CJ 300 is a PVC waterstop profile designed for joint protection in concrete basements and sub structures and suitable for both horizontal (non suspended slab) and vertical application. It is a passive, permanent & physical barrier to water ingress. Located on the external concrete face ensures maximum concrete compaction around the ribs and an excellent waterstop to concrete seal minimizing water ingress and providing better corrosion protection for the reinforcement. SERVISEAL® CJ 300 can be used alone in reinforced concrete structures to protect against water ingress through construction joints for water-resisting basements – Type B. As part of the GCP system, SERVISEAL® CJ 300 provides joint protection for up to Grade 3 basements as defined in BS8102:2009. SERVISEAL® CJ 300 is for Construction Joints use in reinforced concrete joint.

Product Advantages

- **Easy fix to formwork** rather than in the middle of the reinforcement cage
- **Pliable** - remains flexible at low temperature
- **Structure protection** - external waterstops prevent water ingress at the outside face of the structure
- **Compatibility** – SERVISEAL® is compatible with all GCP joint protection products and below ground water proofing systems
- **Chemically resistant** - to most chemicals present in the ground including those in 'brown field' sites.
- **Salt water resistant** – unaffected by salt water and saline conditions

Application

According to BS 8102:

- Construction joint protection of water-resisting basements – Type B protection.
- Construction joint protection of water-resisting basements with PREPRUFE ® system – Type A protection.
- Construction joint of water-resisting basements with HYDRODUCT ® CF system – Type C protection.

Tunnels and Subway

Abutments and Retaining Walls

Water resisting basement (out of PREPRUFE ® system):

For horizontal application, SERVISEAL® CJ 300 should be loose laid directly on to the blinding concrete with timber stop-ends.
For vertical application, SERVISEAL® CJ 300 is securely fixed into the shutters using mechanical fixings staggered at 500 mm cross centres. Mechanical fixings should be located on the edge of the waterstop and should not be completely flush within the shutter to prevent displacement during stripping of shutter (see drawing below).

Water resisting basement with PREPRUFE® system:

For horizontal application, at joint location apply on the PREPRUFE® membrane the double sided waterproof sealing strip BITUSTIK™, then SERVISEAL® CJ 300 should be bed on to the BITUSTIK™. For vertical application, SERVISEAL® CJ 300 is also fixed on to the PREPRUFE® membrane with the double sided waterproof sealing strip BITUSTIK™. An additional mechanical fixing should be required on top termination (out of PREPRUFE® membrane) according to the height of the joint.

Tanking PREPRUFE® system suitable for water resisting basement Type C protection, has been designed in systemic approach. SERVISEAL® waterstops are recommended to be used as a part of the PREPRUFE® system.

Welding:

The ends of the waterstop to be joined must be straight and square. Hold them in alignment in the jig. Insert the heated welding knife between the two ends and then press them on either side of the blade. As a good practice we recommend to test the heat of the welding knife with a small off cut of PVC SERVISEAL® CJ 300 before. If the welding knife is too hot the PVC smokes and burns, if too cold then the PVC does not melt.

The welding knife heated to the correct welding temperature is placed between the two sections of waterstop. The waterstop ends are pressed onto the heated knife and held in position to allow the waterstop to melt along the full width of each face so that an even melted bead of PVC is seen. Slide the jig halves apart before lifting the welding knife upwards in one smooth action, then immediately slide the waterstop ends closed again to bring the molten waterstop ends firmly together for approximately 30 seconds.

Supply

<table>
<thead>
<tr>
<th>SERVISEAL® CJ 300</th>
<th>8 m coil</th>
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<tbody>
<tr>
<td>Weight</td>
<td>23.2 kg</td>
</tr>
<tr>
<td>Standard Junction</td>
<td>Flat L / Flat T / FLAT X / Vert L / REV VERT L</td>
</tr>
<tr>
<td>Special Junction Fabrication</td>
<td>Junction made on demand to suit with site requirements. Please contact your GCP representative.</td>
</tr>
<tr>
<td>Jointing Jig</td>
<td>SERVISEAL® CJ Jig</td>
</tr>
<tr>
<td>Equipment by GCP</td>
<td>Welding knife: electrical knife 110 V or 220 V</td>
</tr>
</tbody>
</table>
**Equipment by Others:** Fine tooth saw, wire brush, Stanley knife, 110v or 220v power source, blow lamp or gas torch if non electrical mild steel knife is used.

**Typical Properties**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Shore Hardness A</td>
<td>95-100</td>
<td>ISO 868</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>&gt; 14 N/mm²</td>
<td>ISO 527-2</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>&gt; 250 %</td>
<td>ISO 527-2</td>
</tr>
<tr>
<td>Fire resistance</td>
<td>&gt; B2</td>
<td>DIN 4102-1</td>
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All declared values shown in this data sheet are based on test results determined under laboratory conditions and with the product sample taken directly from stock in its original packing without any alteration or modification of its component parts.

**Limitations**

Not suitable for movement joint, please use our SERVISEAL ® EXP waterstop range for this application.

As any external waterstop not suitable for water retaining structures; please use our internal waterstop, PVC EDGETIE™ or SERVITITE® waterstop for this application.

**Installation**

A continuous waterstop network should be used at all joints to prevent the ingress of moisture. Only GCP factory produced fabrications should be used for changes of direction or profile with site jointing limited to simple butted welds.

Before concreting, waterstops must be clean and free from, cement laitance, oil, grease or any other contamination that might prevent a good waterstop to concrete bond.

**NBS Specification Clause**

Refer to Clause E40 310.

**Health and Safety**

There is no legal requirement for a Safety Data Sheet SERVISEAL ® CJ 300. For health and safety questions on these products please contact GCP Applied Technologies.
Irritating fumes (Hydrogen Chloride) will be liberated when the product is heat welded. Ensure adequate ventilation.