

Concrete Joint Protection - Waterstops

Serviseal®

External PVC waterstop system for passive protection of movement joints and construction joints in reinforced concrete structures.

Applications

Serviseal® is a passive external PVC waterstop system manufactured in a range of sizes for protecting joints in concrete basements and sub-structures.

Serviseal external flexible waterstop systems have a proven design using four T shaped ribs for solid embedment in in-situ concrete which create a valve action to seal the water path, and are suitable for horizontal and vertical applications. Being cast into the outside water face prevents the ingress of moisture and protects the outer layer of reinforcement from corrosion. Location on the outside face of a concrete member also promotes better compaction of the concrete around the ribs of the Serviseal since it is free from reinforcement congestion and the weight of wet concrete makes consolidation easier.

Serviseal can be used for non-suspended slabs in water retaining structures such as reservoirs, swimming pools and sewage treatment tanks.

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

Limitations

Serviseal is not suitable for walls of water retaining structures which should always have Servitite® waterstops cast centrally in the concrete wall to resist the internal water pressure.

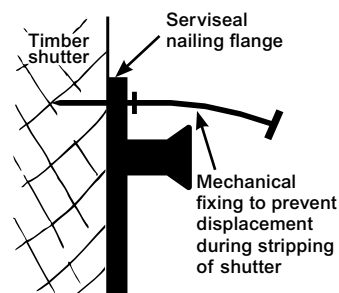
Advantages

- **Proven design** - the original external waterstop used extensively in water excluding and water retaining structures.
- **Flexible** - will accommodate movement during construction and service life.
- **External seal** - protects reinforcement from water ingress.
- **Pliable** - remains flexible at low temperatures.
- **Four ribs** - provide extended and tortuous water path.
- **Stabilising/Nailing flange** - allows fastening without damaging waterstop and prevents displacement or folding of ribs during concreting.
- **Pre formed junction pieces** - factory made range of standard junction pieces.



Installation

The waterstop network should be loose laid direct on to the blinding concrete with timber stop-ends or securely fixed into the vertical shutters using mechanical fixings staggered at 500 mm cross centres. A fully continuous waterstop network must be formed using only factory made junctions with site joints limited to simple butt welds of similar section.

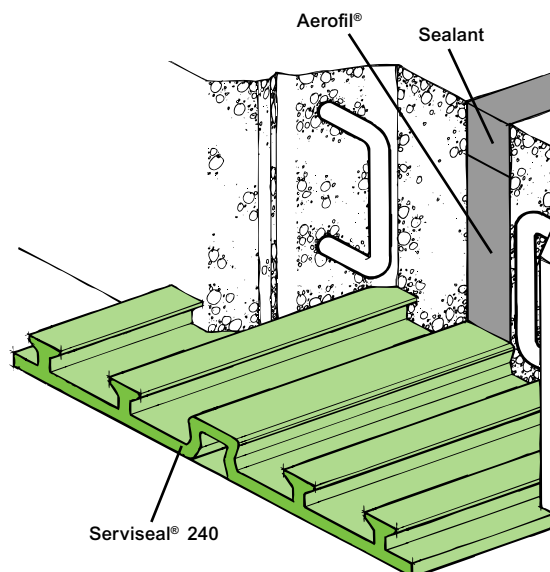


Health and Safety

There is no legal requirement for a Material Safety Data Sheet for Aerofil. For health and safety questions on these products please contact Grace Construction Products Limited.

For Serviseal and Grace Sealants read the product label and Material Safety Data Sheets (MSDS's) before use. Users must comply with all risk and safety phrases. MSDS's can be obtained from Grace Construction Products or from our web site at www.graceconstruction.com.

Irritating fumes (Hydrogen Chloride) will be liberated when the product is heat welded. Ensure adequate ventilation.



Details shown are typical illustrations only and not working drawings. For assistance with working drawings and additional technical advice please contact Grace Technical Services

Supply

Construction/expansion/movement joints

Serviseal® 195	10 m coil	wt 19 kg
Serviseal® 240	7.5 m coil	wt 20 kg
Serviseal® K 320	7.5 m coil	wt 23 kg

Pilecap and angled joints

Serviseal® Pilecap	7.5 m coil	wt 21 kg
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Ancillary Products

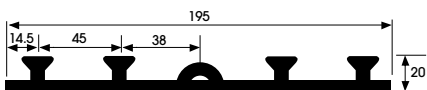
Aerofil®, Grace Sealants

Equipment by Grace

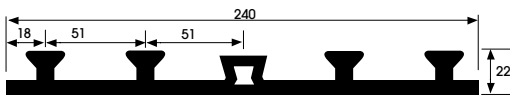
Jointing Jigs	Welding Knives
Jig Serviseal® (all sizes)	Electric Knife 110v

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.

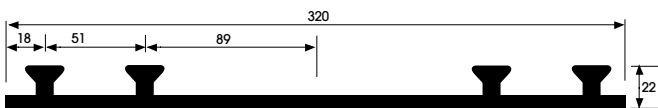
Range of sections - all dimensions nominal



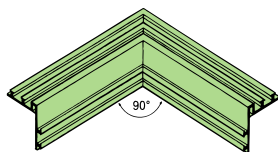
Serviseal® 195



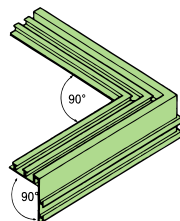
Serviseal® 240



Serviseal® K 320



Serviseal Pilecap PC3



Serviseal Pilecap PC4

Performance

Property	Values
Tensile Strength	≥ 14 N/mm ²
Elongation at break	250%
BS Softness	42
Specific Gravity	1.42

Compound tested in accordance with BS 2782 and are typical values.

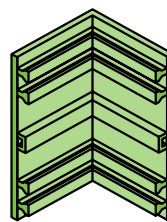
All declared values shown in this data sheet are based on test results determined under laboratory conditions and with the product sample taken directly from stock in its original packing without any alteration or modification of its component parts.

NBS Specification Clause

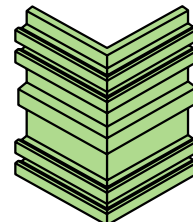
Refer to Clause E40 310.

Factory made junctions and fabrications:

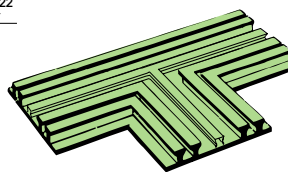
Available in all sizes and types in configurations to suit the site requirements, e.g.



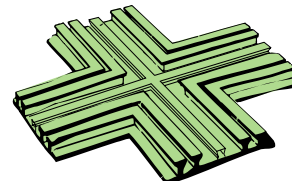
Vertical L



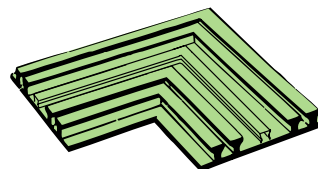
Reverse VL



Flat T

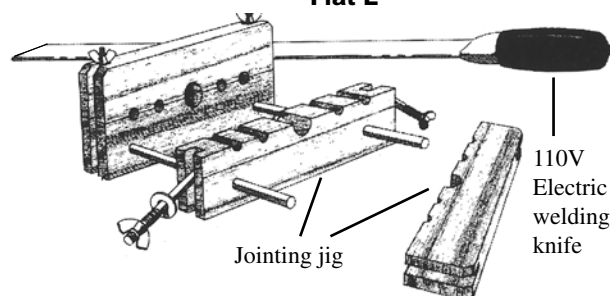
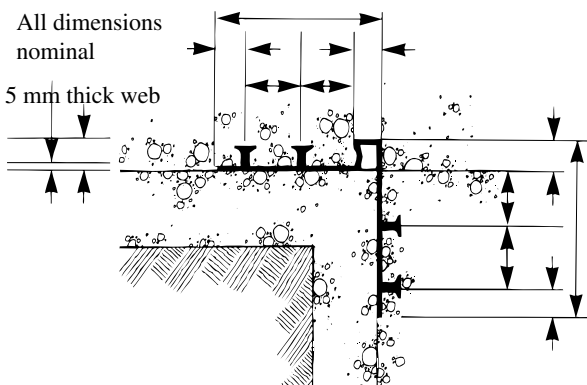


Flat X



Flat L

Section through Serviseal Pilecap



Serviseal® Pilecap can be used around pilecaps or column bases or in joints at internal angles of retaining walls and linked with other Serviseal® waterstops. Refer to separate data sheet.

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