

# 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.

## 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

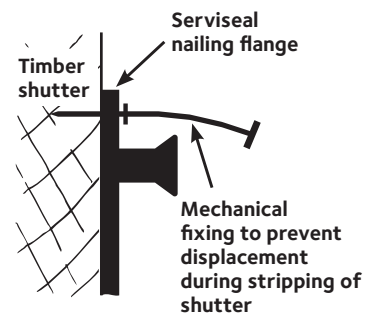
- **Proven design** – the original external waterstop used extensively in water excluding and water retaining structures
- **Flexible** – will accommodate movement during construction and service life
- **External seal** – protects reinforcement from water ingress
- **Pliable** – remains flexible at 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.

n55Plus

## Installation

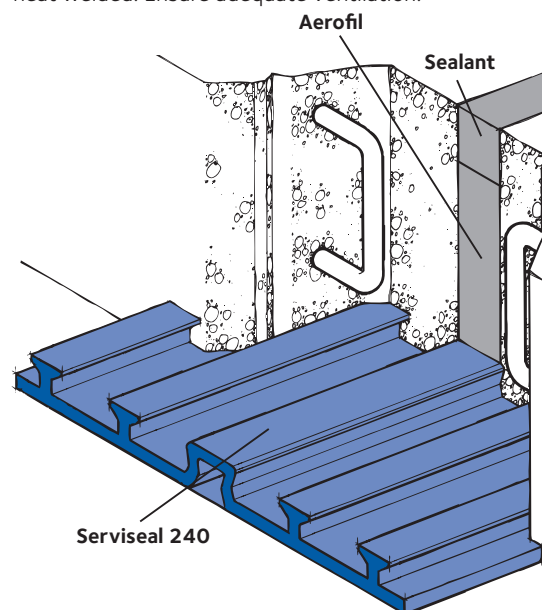
A continuous waterstop network should be used at all joints to prevent the ingress of moisture using only factory produced fabrications for changes of direction or profile with site jointing limited to simple butted welds. Before concreting, waterstops must be clean and free from concrete laitance, oil, grease or any other contamination that might prevent a good waterstop to concrete bond.

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.



## Health and Safety

There is no legal requirement for a Safety Data Sheet (SDS) for Aerofil. For health and safety questions on these products please contact GCP Applied Technologies. For Serviseal and GCP Sealants read the product label and SDS's before use. Users must comply with all risk and safety phrases. SDS's can be obtained from GCP Applied Technologies or from our web site at gcpat.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 GCP Technical Services.*

## Supply

### Construction/expansion/movement joints

|                        |                     |
|------------------------|---------------------|
| <b>Serviseal 195</b>   | 10 m coil wt 19 kg  |
| <b>Serviseal 240</b>   | 7.5 m coil wt 20 kg |
| <b>Serviseal K 320</b> | 7.5 m coil wt 23 kg |

### Pilecap and angled joints

|                   |                     |
|-------------------|---------------------|
| Serviseal Pilecap | 7.5 m coil wt 21 kg |
|-------------------|---------------------|

### Ancillary Products

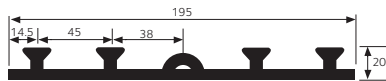
|                       |  |
|-----------------------|--|
| Aerofil, GCP Sealants |  |
|-----------------------|--|

### Equipment by GCP

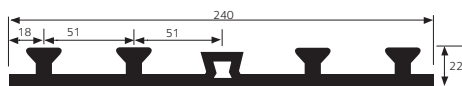
| Jointing Jigs             | Welding Knives             |
|---------------------------|----------------------------|
| Jig Serviseal (all sizes) | Electric Knife 110v & 220v |

**Equipment by Others:** Fine tooth saw, wire brush, Stanley knife, 110v or 220v power source, blow lamp or gas torch if nonelectrical mild steel knife is used.

### Range of sections - all dimensions nominal



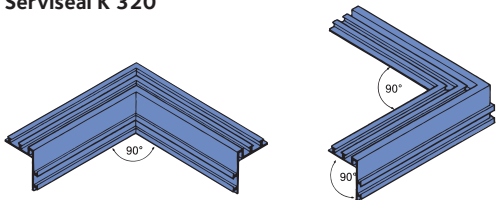
Serviseal 195



Serviseal 240



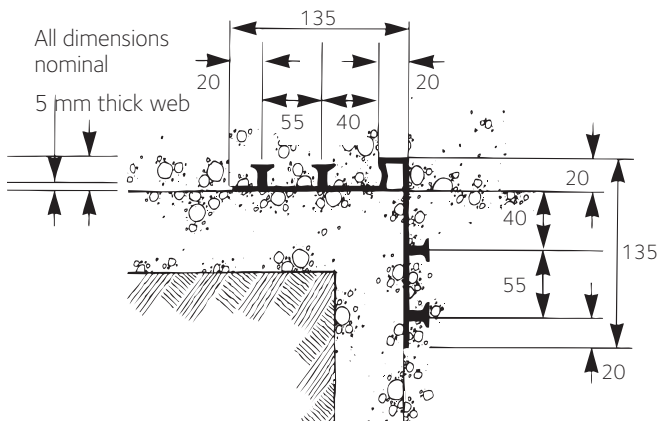
Serviseal K 320



Serviseal Pilecap PC3

Serviseal Pilecap PC4

### Section through Serviseal Pilecap



## Performance

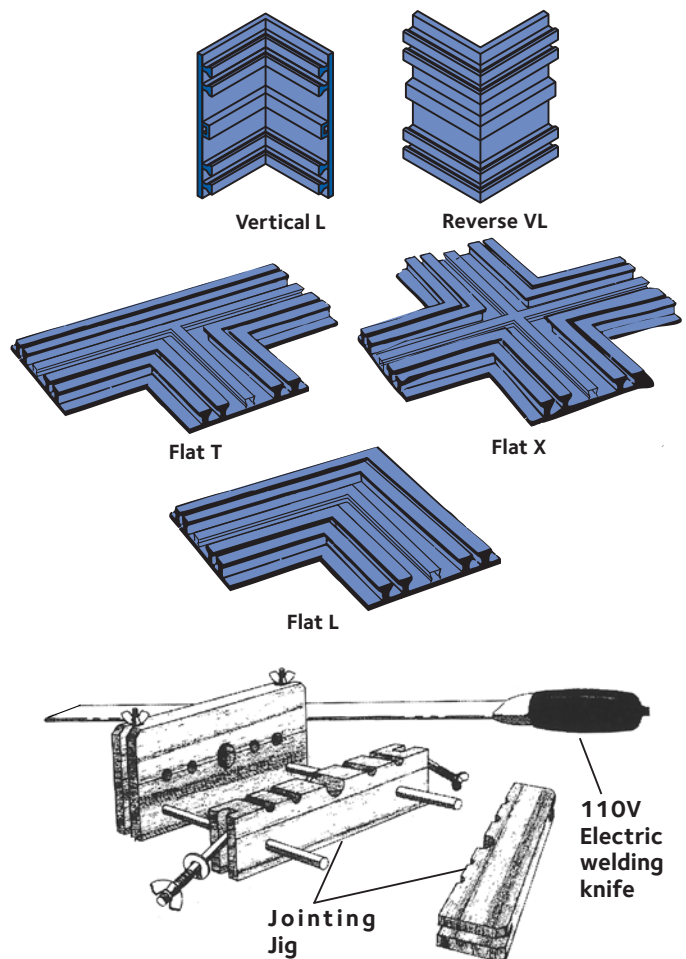
| Property            | Typical Values           |
|---------------------|--------------------------|
| Tensile Strength    | $\geq 14 \text{ N/mm}^2$ |
| Elongation at break | $> 250\%$                |
| Shore A Hardness    | $80 \pm 4$               |
| Specific Gravity    | 1.4                      |

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.



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.

gcpat.com | Customer Service: Tel +44 (0)1753 490000 | Fax +44 (0)1753 490001

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

Aerofil and Serviseal are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2016 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA

In the UK, Ipswich Road, Slough, Berkshire, SL1 4EQ, UK

GCP0082\_0816 Serviseal\_UK



gcp applied technologies