

SERVITITE[®] Wide Joint 500

Internal PVC waterstop for movement joint in reinforced concrete structures, specially designed for wide joint opening

Description

SERVITITE[®]Wide Joint 500 is a PVC waterstop designed for movement joint in concrete basements and substructures where opening from 100 mm to a maximum additional extension of 50 mm is required, typically as in seismic area. It is suitable for both horizontal and vertical application ; it provides a passive, permanent, physical barrier to water ingress. Being cast into the centre of the concrete member, SERVITITE[®]Wide Joint 500 will provide resistance against high hydrostatic pressure from both faces.

SERVITITE[®]can be used in Type B (BS8102: 2009) reinforced concrete structures to protect against water ingress through movement for water-resisting basements. As part of the GCP system, SERVITITE[®]provides joint protection for up to Grade 3 basements as defined in BS8102: 2009.

Advantages

- Suitable for opening joint of 100 mm, up to an extension of 150 mm in total.
- Easy welding – melting temperature is easily reached to facilitate the welding operation.
- Pliable remains flexible at low temperature.
- High quality PVC compound – ensures long term expansion performance.
- Compatibility – SERWISEAL[®] is compatible with all GCP joint protection products and below ground water proofing systems.
- Salt water resistant – unaffected by salt water and saline conditions.

Application

According BS 8102:

- Joint protection of water-resisting basements – Type B protection.
- Joint protection of water-resisting basements with PREPRUFE[®] system – Type A protection.
- Joint protection of water-resisting basements with HYDRODUCT[®] CF system – Type C protection.

Tunnels and subway

Abutments and retaining walls

Installation

A continuous waterstop network should be used at all joints to prevent the ingress of moisture using only factory produced fabrication 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.

When installed centrally in a joint, minimum concrete section is 500 mm.

Slab joints

SERVITITE® should be supported in specially prepared split stopend formwork. This holds the waterstop horizontally, preventing displacement and folding so that half of the width of the waterstop will be cast into the concrete approximately half way through the slab. Care must be taken to ensure that the waterstop is retained in the horizontal plane and that adequate compaction of concrete takes place below the web of the waterstop in order to avoid “honeycombing”. Lifting the waterstop during compaction to release entrapped air will assist in forming dense compacted concrete.

After stripping the formwork supporting the waterstop, the remaining part of the waterstop can be cast into the adjoining slab taking similar precautions discussed in the previous paragraph.

Wall joints

SERVITITE® must be supported in split-end form work as described for slab joints, with great care taken to ensure that the waterstop does not fold over under the weight of poured concrete. The waterstop may be securely wired to the reinforcing steel using the appropriate Secura Clips supplied, clipped over the end bulbs.

Welding:

The welding operation are made using the GCP welding machine. The two ends of the waterstop to be joined must be straight They are placed on plate of welding machine. One end of waterstop is held firmly in position with the welding jig. Place the spacer against the fixed one end and adjust the free end of the waterstop to touch the spacer and clamp it with the welding jig. The edge of each end of waterstop should completely touch the spacer. Check the temperature of the heated welding knife with a small off-cut of SERWISEAL® waterstop. 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 blade using the lever 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. Using the lever slide the jig apart and smoothly remove the welding knife before immediately bringing the welding jig together to join the waterstop ends in the welding jig. Hold firmly for 30 seconds. The joint is now correctly jointed.

Supply

SERVITITE® Wide Joint 500

Weight	10 m coil 92 kg
Standard Junction	Flat L / Flat T / Flat X / Vert L / Rev Vert L
Special Junction Fabrication	Junction made on demand to suit with site requirements. Please contact your GCP representative
Fixing Accessories	Clamp: Flange - Wide SERVITITE® secur clip supplied in bag of 100 pieces
Ancillary Products	AEROFIL®, GCP Sealants
Equipment by GCP	<p>Welding machine: supplied in tool box including welding machine, heated welding knife, spacer, sponge & instruction manual.</p> <p>Jointing jig: Jig SERVITITE® Wide Joint to be used with welding machine</p>

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.*

Typical Properties

PROPERTY	VALUE	TEST METHOD
Shore A Hardness	75 ± 5	ISO 868
Tensile Strength	≥ 10 N/mm ²	ISO 527-2
Elongation at break	≥ 300 %	ISO 527-2

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.

Health and Safety

There is no legal requirement for a Safety Data Sheet for AEROFIL® and SERVITITE®. For health and safety questions on these products please contact GCP Applied Technologies.

For GCP Sealants read the product label and Safety Data Sheet (SDS) 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. Ensure adequate provisions are made for safe lifting and handling.

NBS Specification Clause

Refer to Clause E40 310.

North America customer service: 1-877-4AD-MIX (1-877-423-6491)

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, HYDRODUCT, PREPRUFE, SERVICEAL, and SERVITITE 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 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

P. O. Box 5006, Office 2104, 21 Floor, The Exchange Tower, Opp. JW Marriott Marquis Hotel, Business Bay, Dubai – United Arab Emirates

This document is only current as of the last updated date stated below and is valid only for use in the UAE. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.ae. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2022-11-18

gcpat.ae/solutions/products/servitite-wide-joint-500-1