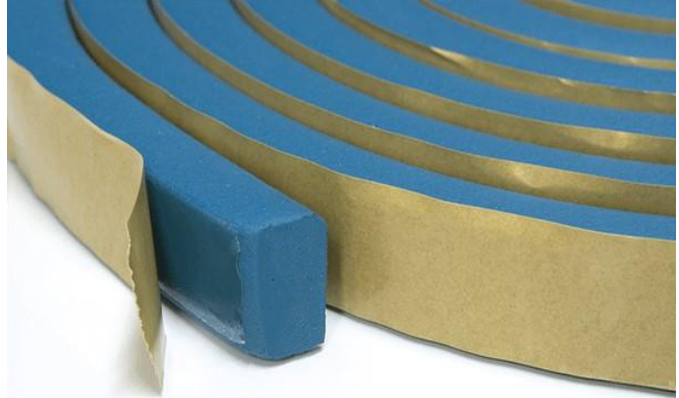


## Triton Adcor 510S Waterbar

### Description

Thick sectioned, conformable, hydro-expansive waterstop for preventing water entry through joints in concrete sub-structures. The conformable, hydro expansive and rubber component based waterstop strip expands in contact with water and when fully encapsulated by poured concrete, the expansive forces form a seal against concrete faces.

The seal resists hydrostatic pressure, stopping water from entering sub-structures. **Triton Adcor 510S** is a unique product that has been specifically developed to provide higher performance than conventional bentonite or swellable rubber waterstops.



### Applications

- Watertight construction joints for in-situ concrete structures
- Casting new concrete against existing concrete.
- Floor slabs cast against diaphragm retaining walls, steel sheet piles and secant piled walls.
- Joints between floor slabs and pile caps.
- Remedial 'breaking out' of concrete and reinstatement.

### Features / Benefits

- Optimised to prevent premature swelling in wet site conditions.
- Controlled volumetric expansion – reduces risk of concrete spalling.
- Conformable – can be installed onto a variety of irregular substrates.
- Retains cohesive strength at both original and expanded volume.
- No need for protective steel mesh.
- Resists at least 6 bar (60m) hydrostatic pressure.
- Volumetric expansion min 200% in cement water.
- Simple overlap jointing on site
- Reproducible swell after wet – dry cycling
- Can be easily joined to other GCP PVC waterstops at movement joints.

### System Components

Can be used in conjunction with:

- Triton SwellMastic: A hydrophilic mastic for use as a bedding bead within a pre-formed rebate prior to the application of **Triton Adcor 510s**.

Size: 25 x 20mm

Colour: Light Blue

The waterbar is supplied in rolls 5m in length which are packaged in cartons each containing 6 rolls and having a gross weight of approximately 23 kg. Cartons can be supplied on pallets containing a maximum of 30 cartons.

The product must be stored under cover, clear of the ground and protected from moisture, frost and other sources of contamination at a temperature between 5 and 30°C.

### Technical Data

- |   |                         |
|---|-------------------------|
| • Volumetric expansion in cement water: | 200%                    |
| • Water pressure resistance (60m head): | >6 bar                  |
| • Density:                              | 1.44 kg/dm <sup>3</sup> |
| • Weight:                               | 0.7 kg/m                |
| • Maximum bend (0°C):                   | 180°                    |
| • Application temperature:              | -15 to +60°C            |
| • Service temperature:                  | -45 to +120°C           |



## General Information

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This product is satisfactory for use in a Type B (structurally integral) protection (as defined in BS 8102: 2009) to waterproof construction joints and penetrations in underground waterproof reinforced concrete structures.

The product is not suitable for use in movement joints, e.g. expansion joints.

The product swells on contact with water and must be fully confined within the concrete structure to form an effective seal.

The unconfined **Triton Adcor 510s** will expand by up to 200% by volume in neutral pH water. The expansion under alkaline, acidic water conditions will be less but still adequate to enable the product to form an effective seal when fully confined.

The product will shrink on drying but will re-hydrate on wetting and re-swell to provide an effective seal.

The ability of the product to expand and form an effective seal can be adversely affected by the groundwater chemistry, especially saline conditions. A detailed study of this aspect must be carried out to establish the presence of any contamination and if identified advice sought from Triton Systems.

The product has not been assessed for use in saline water conditions.

The product will develop significant pressure when confined within a concrete structure and must be covered by at least 70mm of concrete from each edge to avoid damage to the concrete.

The product is supplied in rolls, 5m long lengths which are packaged in cartons each containing 6 rolls and having a gross weight of approximately 23kg. Cartons can be supplied on pallets containing a maximum of 30 cartons.

The product must be stored under cover, clear of the ground and protected from moisture, frost and other sources of contamination at a temperature between 5 and 30°C.

## Installation

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To avoid premature swelling, the product must be protected from contact with water until enclosed in the structure and must not be placed during rain or when rain is forecast.

In general use **Triton Adcor 510s** is unrolled and placed onto the concrete surface to sit centrally between the inner and outer rows of the reinforcing bars.

The product should be placed onto a pre-formed rebate formed whilst the concrete was still wet with the waterbar then held in place in the rebate with Triton Swellmastic once the concrete is cured.

A minimum of 70mm concrete coverage must be ensured around all edges.

Roll ends must be placed to have an overlap of 100mm and pressed firmly together.

When fixing the product around service penetrations, the waterstop must be additionally secured with steel ties. Triton Systems should be consulted for further advice.

### NHBC Standards 2018

**Triton Adcor 510s**, if installed, used and maintained in accordance with the relating BBA certificate, can satisfy the relevant requirements in relation to *NHBC Standards*, Chapter 5.4 *Waterproofing of basements and other below ground structures* (requiring proprietary waterproofing materials to comply with Technical Requirement R3).

Unless it can be demonstrated that the water table is permanently below the underside of the slab, the product must be used within a Type B waterproofing protection product, in combination with either a Type A or C waterproofing protection where Grade 3 protection is required and the below ground wall retains more than 600mm (measured from the top of the retained ground to the lowest finished floor level).

For further information please contact:

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