

Adcor® SAS 500S

Self adhered waterstop for fast, secure application, protecting joints in concrete sub-structures against water penetration

Product Description

Adcor® SAS 500S is a swellable hydrophilic waterstop that provides a continuous bond to substrates, preventing water entry through joints in concrete sub-structures. It allows quick installation in any construction assembly, making it the smart choice over nail and mesh fixing.

Adcor® SAS 500S combines GCP's proven self adhesive SIS technology with the Adcor® conformable, swellable polymer/butyl rubber waterstop strip that expands when in contact with water.

Adcor® SAS 500S bonds on concrete, metal, or PVC substrates. It is designed for the engineer who wants a continuously well sealed joint, and the applicator who wants a fast and easy way to apply a swellable hydrophilic waterstop between the steel reinforcing bars, in vertical, horizontal & overhead surfaces. You simply peel the release paper and press the strip onto a clean surface to install it.

The sealing of the joint is achieved by the expansion of Adcor®. 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.

Adcor® SAS 500S has been specifically developed to provide a faster waterstop application and higher performance than conventional bentonite or other swellable rubber waterstops.

Applications

- Construction joints in in-situ concrete structures.
- Casting new concrete against existing.
- Floor slabs cast against diaphragm retaining walls, steel sheet piles and secant piled walls.
- Joints between floor slabs and pile caps.
- Pipe penetrations through floors and walls.
- Remedial 'breaking out' of concrete.
- Vertical, overhead, soffit, horizontal locations.

Product Advantages

Faster, safer installation without fixings or tools.

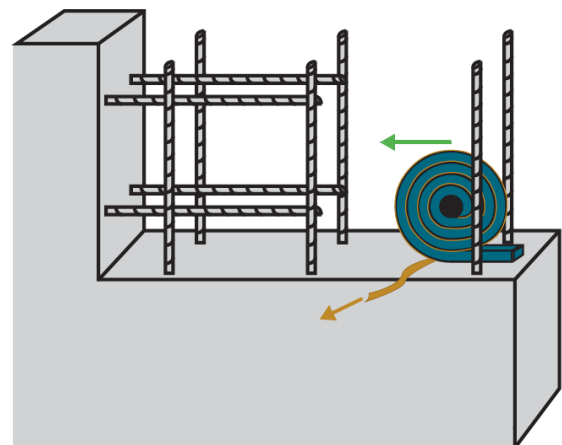
- Strong instant adhesion to substrates in any position (horizontal, vertical or overhead).
- Easy application between steel bars.
- All in one – fixing and swelling waterstop.
- Conformable – can be installed onto a variety of irregular geometrical substrates.
- Controlled volumetric expansion – reduces risk of concrete spalling and premature swelling,
- Volumetric expansion min 100% in cement water
- Retains cohesive strength at both original and expanded volume,
- Resists at least 87 psi (6 bar) hydrostatic pressure.
- Reproducible swell after wet – dry cycling.
- Unaffected by freeze/thaw cycling.
- Simple overlap jointing on site.

Performance benefits of self adhered waterstop

To ensure an efficient seal, hydrophilic waterstops must be in continuous contact with the clean substrate achieved before being fully encapsulated by poured concrete. They should expand freely to form a seal against concrete faces.

Adcor® SAS 500S is the superior choice in waterstop technology. Our unique formulation allows this continuous bond onto substrate and the waterstop strip to expand freely when fully encapsulated by poured concrete that is not achievable with nails and mesh installations.

Our self-adhered strip technology enhances the joint seal by reducing the risk of improper installation.



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

Recommendations

In case of gap between strip and irregular concrete surface, apply a bedding bead of De Neef Swellseal® WA prior to installing the Adcor® SAS 500S.

Design

Waterstop networks must be continuous through all joints and penetrations if they are to be effective.

Installation

Substrate preparation

As with all Hydrophilic waterstops, Adcor® SAS 500S must be installed on a clean and dry surface, free of all contaminants such as oil, loose laitance or other construction debris.

- Concrete surfaces must be sound, smooth, dense concrete free of voids or honeycombed areas
- The prepared surface must be free from ice, frost, condensation. Surface can be damp but not wet.
- On irregular concrete faces gun a 0.5 in (10 mm) bead of De Neef Swellseal® WA as a bedding for Adcor® SAS 500S

Fixing on Horizontal and Vertical

1. During application, the substrate temperature should be between 40°F (5°C) and 104°F (40°C).
2. Take the Adcor® SAS 500S from the box – coil should not be unrolled.
3. Place it in the middle of the joint, and out of the keyway if possible then unroll the coil.
4. Peel off the release paper by ½ – 1 in, starting from the beginning of the strip.
5. Press the strip firmly, onto the substrate taking care not to distort the manufactured dimensions and repeat the process along the unrolled coil of Adcor® SAS 500S.
All joints should be overlapped min. 4 in. (100 mm), ensure full contact between jointed pieces.
6. For applications below 40 F (5 C), damp or very irregular substrates where adhesion of Adcor SAS 500S is marginal or poor, mechanical fastening must be used. When fastening is necessary, the use of a 1-½-2" masonry nail with a ¾" washer or shot fired fixings in similar length with a ¾" washer may be used. Spacing should be 12 in. O.C. or as required to ensure continuous contact with the immediate substrate.

Adcor® SAS 500S can be bent around corners, however on complex geometry use De Neef Swellseal® as a gap filler.

Any damaged sections should be removed and repaired with either a new section of Adcor® SAS 500S or a 1 in (25 mm) min bead of De Neef Swellseal® WA.

Keep dry prior to pouring concrete.

In inclement weather, it is advisable to cover the Adcor® SAS 500S to prevent premature swelling. Any sections showing evidence of premature swelling should be cut out and replaced prior to concreting.

Concrete Placement

Normal weight structural concrete should be placed carefully to avoid damage to the waterstop.

Adcor® SAS 500S should be encapsulated with a min. 3 in. (76 mm) of concrete cover.

Storage

Adcor® SAS 500S should be stored covered, clear of the ground. Protect the materials from all sources of moisture and frost. Storage temperature must be between 40°F (5°C) and 90°F (30°C).

One year shelf life in correct storage conditions.

Health and Safety

Read the product label and Safety Data Sheets before use. Users must comply with all risk and safety phrases. For health and Safety questions on this product please contact GCP.

Limitations

Not suitable for use in movement joints.

Not suitable for use with pre-cast concrete components.

Physical Properties

Adcor® SAS 500S	16 ft rolls 6 rolls/carton 30 cartons/pallet pallet weight 1545 lbs
De Neef Swellseal® Sealant WA	10.5 oz cartridge

Typical Properties

Property	Value
Profile size	3/4 in. x 1 in. (19 mm x 25 mm)
Color	light blue
Volumetric expansion in cement water	min 100%
Water pressure resistance	> 6 bar (87 psi)
Density	91 lb/ft ³
Weight	0.5 lb/ft
Maximum bend	180° at 32°F (0°C)
Service temperature range	9°F to 248°F
Minimum concrete cover	3 in. (76 mm)
Minimum overlap	4 in (100 mm)

All declared values shown in this data sheet are based on swelling component 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.

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