

# SOLCO HYDROPHILIC WATERSTOP



## Hydrophilic Joint Sealer

Solco Hydrophilic Waterstop is used for preventative sealing of working joints in overground and underground structures to prevent ingress of pressurised water.

- Easy to install by bonding nailing or casting into joint face.
- Swelling properties unaffected by long term wet/dry cycling.
- Sustains effective seal in wet conditions.
- Non-polluting, ecological user friendly system
- Composition of Waterstop prevents premature swelling
- Can resist hydrostatic pressure of up to 70metres of water column = 7bar
- The durability & performance will exceed the life of the structure



| Colour | Product Code     | Roll Size        |
|--------|------------------|------------------|
| Black  | SOLCOHYDROPHILIC | 20mm x 25mm x 5m |

## SOLCO - Water Stops

Last Issue Date: 08.02.13

### Product Description

Solco Hydrophilic Waterstop is a green flexible hydrophilic strip made of high quality butyl rubber and Sodium Bentonite. Solco Hydrophilic Waterstop is used for preventative sealing of working joints in overground and underground structures to prevent ingress of pressurised water. Also used for sealing of concrete and steel pipework and as a system component for Bentonite mats.

The swelling properties are created by the particle structure of the clay. In contact with water and in confined conditions, Solco Hydrophilic Waterstop will expand on contact with water to seal the gaps and pores in a concrete joint.

| Technical Properties               |                        |
|------------------------------------|------------------------|
| Packaging Sizes                    | 20 x 25mm x 5m         |
| Swelling Capacity                  | max 240%               |
| Density                            | 1.43 g/cm <sup>3</sup> |
| Weight                             | 0.65 kg/m              |
| Swelling Pressure                  | 1.8 N/mm <sup>2</sup>  |
| Resistance to Hydrostatic Pressure | 7 Bar                  |
| Bending Radius on Corners          | 50mm                   |
| Installation Temperature           | 0° - 50°C              |
| Odour                              | None                   |

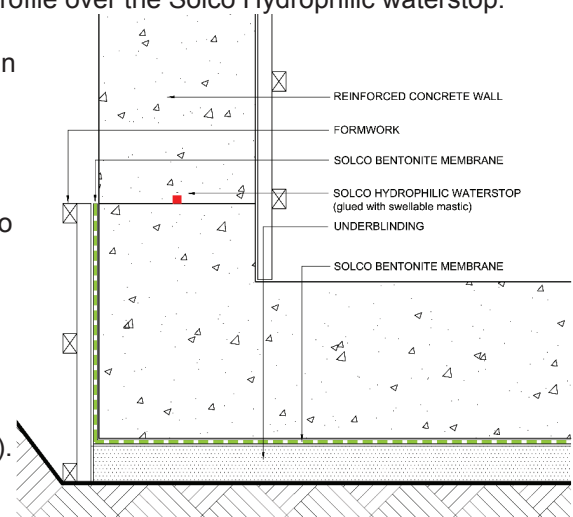
### Installation

Solco Hydrophilic Waterstop can be applied onto a smooth or scabbled surface and it can be installed under most weather conditions. Installation during heavy rain could result in a premature swelling of the strip, which should be avoided. Solco Hydrophilic Waterstop should be installed during the the placement of the 2nd phase reinforcement bars, in between inner and outer rows of reinforcing bars.

Solco Hydrophilic Waterstop can be installed by mechanically fixing using gun nailing or with the addition of Solco waterstop mesh, and in some instances by applying Solco waterstop sealant.

#### Procedure for the installation of Solco Hydrophilic Waterstop by means of gun nailing with Solco Waterstop Mesh:

- Unroll the Solco Hydrophilic Waterstop strip (a concrete cover of 75mm at all sides should always be maintained). The roll ends should have a lateral overlapping of 50 to 100mm. The ends need to be pressed firmly together.
- Place Solco waterstop mesh profile over the Solco Hydrophilic waterstop.
- Fix the system by nailing or gun nailing (use nails with washer, approx. 4 per metre).
- In case of vertical or hanging applications, only use the Solco waterstop mesh.
- Solco Hydrophilic Waterstop can be fixed around pipe penetrations with Solco waterstop mesh or Solco waterstop sealant (dry surface).



Typical Kicker Detail

**Installation (contd...)**

**Procedure for the installation of Solco Hydrophilic Waterstop by glueing:**

- Remove dust, dirt and loose debris by brushing firmly, level rough and irregular surfaces with Solco waterstop sealant
- Apply a layer of Solco waterstop sealant with a Solco sealant gun on the concrete surface.
- Unroll the Solco Hydrophilic Waterstop strip and press firmly into the waterstop sealant. Wait until the sealant is dry before pouring concrete (concrete cover of 75mm at all sides should always be maintained).

**Storage Conditions**

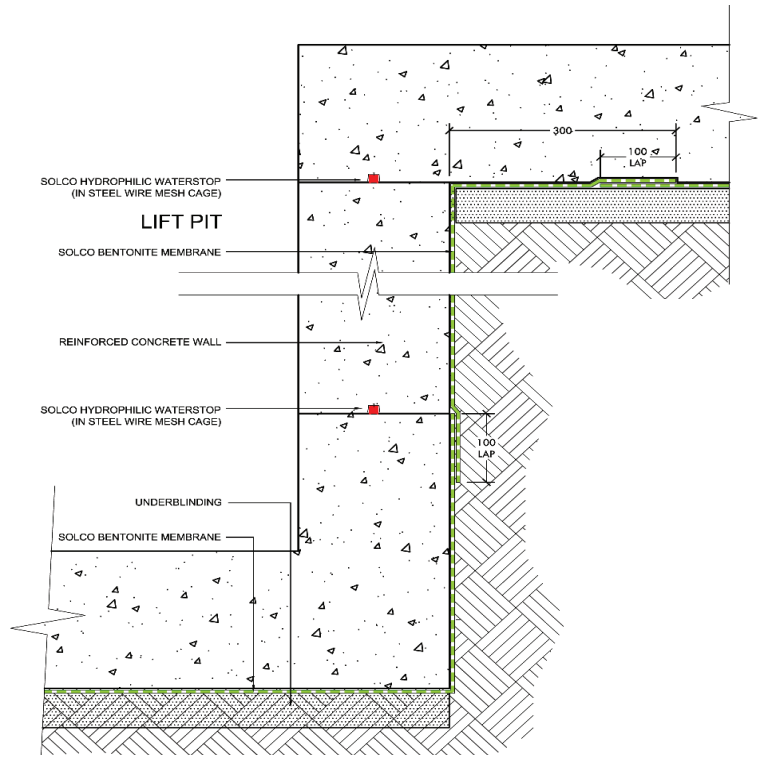
The packing per box is 6 No. rolls x 5m per box = 30m  
 The packing per pallet is 36No. boxes x 30mt = 1080mt  
 Solco Hydrophilic Waterstop should be stored under cover, clear of the ground.

**Health & Safety**

Please refer to health and safety data sheet on Solco Hydrophilic Waterstop.

**Testing**

Solco Hydrophilic Waterstop is tested for effective sealing against water pressure, detailed report and certificates are available on request.



**Typical Lift Pit Detail**

**SOLCO Waterstop Sealant**

**Description**

Solco waterstop sealant is a polyurethane based sealant which swells in contact with water and forms a permanent waterproof seal. Solco waterstop sealant is solvent free and non-toxic and is easily applied with a sealant applicator, it provides excellent adhesion on many materials including concrete.

Solco waterstop sealant can be used for the sealing of construction joints in concrete and for sealing between concrete prefabricated elements, such as sewage pipes etc. Solco waterstop sealant is particularly effective in conditions of High Salinity and is applied up to a maximum width of 20mm. Leave to cure for 24 hours before pouring concrete.

**Accessories & Components**

| Technical Data                     |  |                             |
|------------------------------------|--|-----------------------------|
| SOLCO Waterstop Mesh               | Securing Hydrophilic Waterstop by means of nailing | 1m Lengths                  |
| SOLCO Waterstop Sealant / Adhesive | Swellable Sealant / Adhesive                       | 310ml Tubes / 600ml Sausage |
| SOLCO Sealant Gun                  | Swellable Sealant Applicator                       | Each                        |

| Solco Waterstop Sealant - Technical Properties |   |
|--|---|
| Base   | Polyurethane                              |
| Curing System                                  | Moisture Cure                             |
| Tack free time                                 | 12 hours (200C/60% R.H)                   |
| Specific Gravity                               | 1.57                                      |
| Elongation at Break                            | 625% (DIN 53504)                          |
| Maximum Tension                                | 1.55 N/mm2 (DIN 53504)                    |
| Swell  | >250% in three dimensions                 |
| Joint Min / Max width                          | 2mm - 20mm                                |
| Substrate                                      | Concrete, Steel, Glass, uPVC              |
| State of Surface                               | Free of dust, grease, surface may be damp |
| Preparation                                    | No primer required                        |
| Application Method                             | Sealant Applicator                        |
| Application Temperature                        | +100C to +300C                            |
| Colour   | Off White                                 |
| Packaging                                      | 310ml Tube / 600ml sausages               |