

Solco Bentobar+ Waterstop

Description:

Solco Bentobar+ Waterstop is a green flexible hydrophilic strip made of high quality butyl rubber and Sodium Bentonite.

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

The Waterstop is 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 Bentobar+ Waterstop will expand on contact with water to seal the gaps and pores in a concrete joint.



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

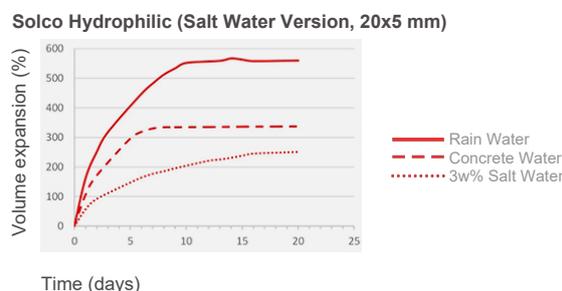
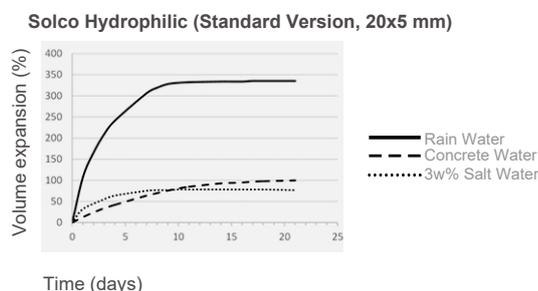
Technical Data:

Property	Value
Swelling Capacity (Max)	240%
Density	1.43 g/cm ³
Weight	0.65 kg/m
Swelling Pressure	1.8 N/mm ²
Resistance to Hydrostatic Pressure	7 bar
Bending Radius of Corners	50mm
Installation Temperature	0°C to +50°C
Odour	None

Roll Size

20mm x 25mm x 5m

Expansion Capacity:



Packaging & Storage:

- Boxes: 6 No. rolls = 30m per box.
- Pallets: 36No. boxes = 1080m per pallet.

Solco Hydrophilic Waterstop should be stored under cover, clear of the ground.

Solco, Unit 51, Portmanmoor Road Industrial Estate, Ocean Park, Cardiff, CF24 5HB

Installation:

Solco Bentobar+ Waterstop can be applied onto a smooth or scabbled surfaces 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 Bentobar+ Waterstop should be installed during the placement of the 2nd phase reinforcement bars, in between inner and outer rows of reinforcing bars.

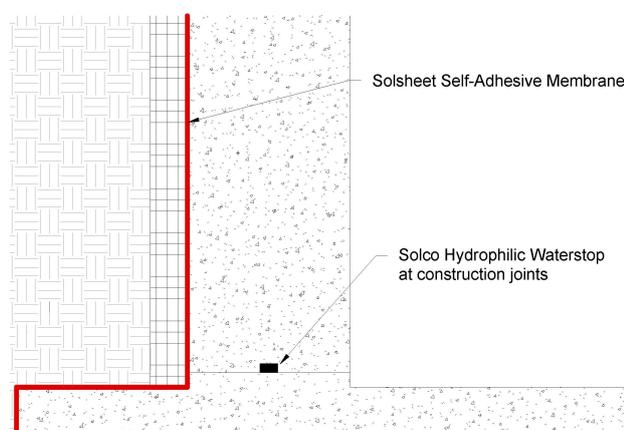
Solco Bentobar+ Waterstop can be installed by mechanically fixing using gun nailing or with the addition of Solco waterstop mesh, and in some instances by applying Solco waterstop sealant.

Procedure for the Installation of the Waterstop by means of gun nailing, with Solco Waterstop Mesh:

- Unroll the Solco Bentobar+ 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 Bentobar+ Waterstop.
- Fix the system by nailing or gun nailing (use nails with washer, approx. 4 per metre).
- In the case of vertical or hanging applications, only use the Solco waterstop mesh.
- Solco Bentobar+ Waterstop can be fixed around pipe penetrations with Solco waterstop mesh or Solco waterstop sealant (dry surface).

Procedure for the Installation of the 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 Bentobar+ 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).



Lift Pit Typical Detail

Ancillary Products

Solco Waterstop Mesh	Securing Hydrophilic Waterstop by means of nailing	1m Lengths
Solco Waterstop Adhesive / Swellable Paste	Adhesive / Swellable Sealant	290ml / 310ml
Solco Sealant Gun	Swellable Sealant Applicator	Cartridge 1 Unit

Bentonite waterstops are invaluable to the concrete and construction industries, providing an efficient means for sealing construction joints. Even after repeated wet-dry cycles, Bentobar+ maintains a perfect seal thanks to its high rubber content. Bentobar+ is also far less susceptible to washing out than traditional bentonite seals. In addition to the standard version, variants also exist for use in seawater (saline concentrations up to 3%) and contaminated water. Both exist in a wide range of sizes.

Chemical Resistance List:

COMPOUND for Solco Bentonite based sealing bars (BENTOBAR+ Std & Salt Water Version)

RUBBER Butyl based compound containing bentonite clay

COLOUR Black/green (standard version) and red (salt water version)

SWELLING 200 – 500 %

SERVICE TEMPERATURE 0°C +70°C

WEATHER RESISTANCE excellent

CHEMICAL RESISTANCE

In general good resistance to acids, alkali's and most aqueous solutions

Be careful with aromatic oils and fuels, vegetal oils and strong aromatic solvents

Below a list of products as indication:

Chemicals (concentration 1-10%)	Resistance
Inorganic acids	N
Inorganic bases	N
Organic acids/bases	
Alcohols	N
Aldehydes	N
Amines	N
Esters	N
Ethers	N
Aromatic hydrocarbons	
Benzene	M
Toluene	M
Xylene	M
100/150 solvents	M
Aliphatics (oils and fuels)	M
Halogenated hydrocarbons	M
Carbon disulfides	M
Nitrobenzene	N
Detergents and other cleaning products	N
Fats, greases, biological oils and sugars	M

N: No effect – Performance is not affected under most service conditions

M: Moderate effect – Performance can be affected especially for long-term exposure