

Solco Polybar Waterstop

Description:

Solco Polybar Waterstop is a hydrophilic Thermoplastic Elastomer waterproofing strip made from a combination of an elastomer and a hydrophilic resin. When confined between a construction joint, and in the presence of water it will swell to over four times its original volume and build up pressure inside the joint to seal against water leaks.

The composition of the Solco Polybar Waterstop ensures that initial swelling is delayed and makes Solco Polybar Waterstop safe to install in in-situ concrete applications.

In addition to the standard version, a Salt Water Variant for use in seawater (saline concentrations up to 3%) and contaminated water, as well as a SuperSwell variant for use under highly saline conditions (salt concentrations up to 10%) are also available in all sizes.



- Saltwater version for use in salt water environments.
- Solco Polybar swells by approx 450%.
- Composition delays initial swelling allowing installation to insitu concrete applications.
- Reversible swelling through wet-dry cycles.
- Easy installation, nailing, or gluing with Waterstop Sealant.
- Has a good all-round chemical resistance (see Chemical Resistance table).

Technical Data:

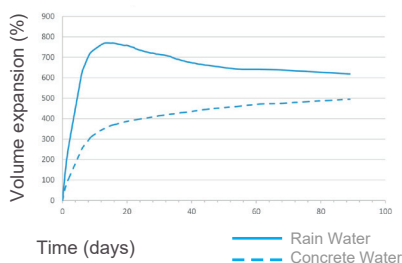
Property	Value
Swelling Capacity (Max)	450%
Density [ISO 2781]	1.21 g/cm ³
Tensile Strength [ISO 37]	2.3 MPa
Elongation at Break [ISO 37]	600%
Hardness Shore A [ISO 868]	25
Tear Strength [ISO 34-C]	14 N/mm
Installation Temperature	-50°C to +75°C
Odour	None

Typical Uses:

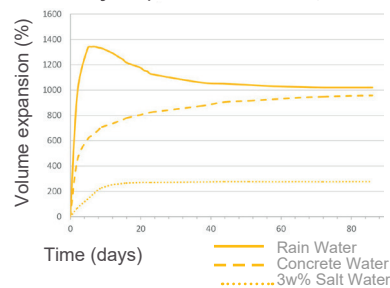
- Sealing joints between tunnel segments.
- Sealing joints between concrete precast elements.
- Horizontal/vertical construction joints & pipe penetrations.
- Sealing concrete to steel joints.
- Sealing construction joints in fresh concrete ensuring sufficient coverage to all edges (100mm in all directions).

Expansion Capacity:

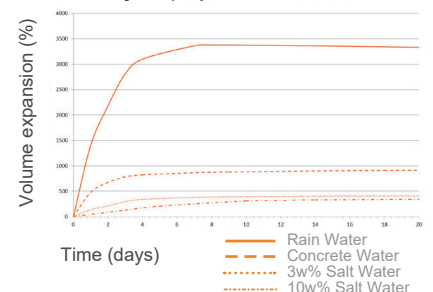
Solco Polybar (Standard Version, 20x5 mm)



Solco Polybar (Salt Water Version, 20x5 mm)



Solco Polybar (Superswell Version, 20x5 mm)



Storage:

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

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Installation:

Solco Polybar Waterstops can only function properly in a confined space.

The expansion will create pressure in the middle of the joint thus ensuring a watertight seal.

Installation during heavy rain or in prolonged contact with water can result in a premature swelling of the strip, which should be avoided.

Application surfaces should be level, dry, clean and free of oils, dust, and laitance, etc.

Procedure for the Installation of the Waterstop by means of gun nailing:

- Nail application is only recommended in insitu concrete applications.
- For precast element and segment applications, it is recommended to use the glue method due to concrete hardness.
- Solco Polybar should only be applied to level and smooth surfaces. If possible, make a rebate of the same width as the selected Solco Polybar Waterstop profile during concrete pour using a wooden or metal strip. If this rebate can not be made into the poured concrete surface and the surface is rough, it is recommended to level the surface with Solco Waterstop swellable Mastic before installation of the Solcast Waterstop.
- When nailing the strip into place, use nails with washers of a diam.
- smaller than the width of the Solco Polybar Waterstop. Ensure a minimum of 4 nails per linear meter.
- Slight tension should be applied to the waterproofing strip during nailing to assure complete contact with the joint surface. Do not stretch the strip during the application of this tension.
- The installer must ensure complete contact of the strip with the joint surface during nailing, pull the strap to ensure the correct tension without overstretching when nailing.

Procedure for the Installation of the Waterstop by means of glueing:

- Solco Polybar Waterstop, when applied to precast elements, is always applied on the outside face of the compression seal as closely inwards as possible.
- Remove dust, dirt, and loose debris by brushing firmly, level rough and irregular surfaces with Solco waterstop sealant. It is recommended to unroll and pre-cut the waterstop strip to the required length.
- Apply a layer of Solco waterstop Adhesive with a Solco sealant gun on the concrete surface.
- Unroll the Solco Polybar Waterstop strip and press firmly into the waterstop Adhesive. Wait until the adhesive is dry before pouring concrete (concrete cover of 100mm at all sides should always be maintained).
- Roll ends are simply butted together to assure a waterproof seal.
- Do not install by overlapping.
- The strip needs to be in contact with the joint over its full length.

Available Sizes

Standard Version	Product Name	Box	Pallet	Salt Water Version	Superswell Version
	Solco Polybar 20x5 mm	5x10 m	60x50 m = 3.000 m		
	Solco Polybar 20x10 mm	9x10 m	24 x 90 m = 2.160 m		
	Solco Polybar 20x20 mm	9x5 m	8 x 45 m = 360 m / 24 x 45 m = 1.080 m		
	Solco Polybar 20x30 mm	6x5 m	12 x 30 m = 360 m / 36 x 30 = 1.080 m		
	Solco Polybar 30x30 mm	3x5 m	24 x 15 m = 360 m		
	Solco Polybar 50x5 mm	4x15 m	24 x 60 m = 1.440 m		
	Solco Polybar 100x5 mm	2x15 m	24 x 30 m = 720 m		
	U JOINT 20 mm for metal waterstop	20x2,4 m	24 x 48 m = 1.152 m		
	T JOINT for PVC waterstop	20x2,4 m	24 x 48 m = 1.152 m		