

Solco Form-Tie Waterstop System



Form-Tie Plug

(Externally inserted into the Form-Tie Conduit Sleeve)



Form-Tie Sealing UFO

(Externally applied around the Form-Tie Conduit Sleeve or the Form-Tie Rod)



Form-Tie Sealing Connector

(Externally applied around the Tie-Rod, with a Form-Tie ring completing the seal)

Description:

Solco Form-Tie Waterstops are produced from a unique hydrophilic rubber sealing compound that expands in a controlled fashion when exposed to moisture to form a compression seal inside or around the form-tie system in the concrete structure, to give a permanent flexible watertight seal.

Available in a number of different sizes and profiles to suit the form-tie system and once installed, forms a continuous barrier, making Solco Form-Tie Waterstops ideal for preventing water penetration or egress.

Features and Benefits:

- Excellent sealing capabilities available in many different sizes, shapes, and profiles
- Provides a permanent, flexible gasket and compression seal inside the concrete.
- High quality, non-biodegradable hydrophilic rubber that provides long-term durability and integrity.
- Ability to expand up to 400% in contact with concrete water and over 200% expansion in saltwater.
- Has been tested to withstand over 60 metres of hydrostatic water head pressure.
- Most suited to water retaining structures where direct water pressure is applied against the concrete.
- No external grout required to fill form-tie conduit sleeve hole after Solco Form-Tie Plug has been positioned.
- Non-toxic and can be used in potable water structures.
- Unaffected by repeated wet and dry cycles.
- Fast and simple to install.

Typical Uses

Water Retaining Structures:

- Water Tanks, Reservoirs, and Dams.
- Water Treatment Plants.
- Sewage Treatment Plants.
- Swimming Pools.

Water Excluding Structures:

- Basements
- Underground Car Parks
- Tunnels & Subways
- Retaining Walls
- Pits & Manholes

Installation:

Form-Tie Conduit Sleeve:

- Thoroughly clean out the form-tie conduit sleeve to ensure that it is free of any dust, debris, and foreign matter.
- Place the Solco Form-Tie Plug manually into the open end of the form-tie conduit sleeve.
- With a hammer and with a light-slow action, hammer the Solco Form-Tie Plug into the hole until flush with the outside edge of the form-tie conduit sleeve. No extra finishing is required.
- Check and make sure that the Solco Form-Tie Plug has a tight and secure fit.



1. Insert the Solco Form-Tie Plug into the open end of the conduit sleeve.



2. Hammer the Solco Form-Tie Plug with light blows from a hammer, until flush with the conduit sleeve.



3. Solco Form-Tie Plug installed. No further finishing is required.

Form-Tie Sleeves & Form-Tie Rods:

- Thoroughly clean the outside surface of the form-tie conduit sleeve or rod, free of any dust, debris, and foreign matter.
- Place the Solco Form-Tie Ring over the outside face of the form-tie conduit sleeve or rod and slide it along to approx the middle section.
- A minimum of 75mm of cover from any outside edge of the concrete to the Solco Form-Tie Ring should be followed.
- Check and make sure that the Solco Form-Tie Ring has a tight and secure fit around the sleeve or rod.
- The Form-Tie Ring assembly is now ready for the concrete to be placed.

Limitations:

- Due to the expansive forces of the hydrophilic rubber compound, Solco Form-Tie Rings must be installed with a minimum concrete cover of 75mm from any outside edge. Increase concrete cover when using lightweight or low strength concrete.
- Expansion rates can vary in concrete water and saltwater environments.



Form-Tie Sleeves & Form-Tie Rods:



1. Position the sealing connector against the Tie Rod.



2. Close the sealing connector around the Tie Rod.



3. Slide the sealing UFO over the Tie Rod.



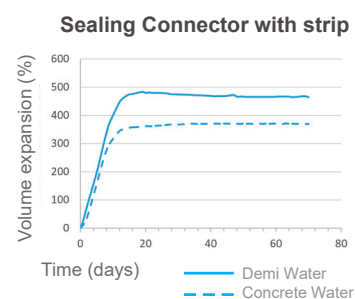
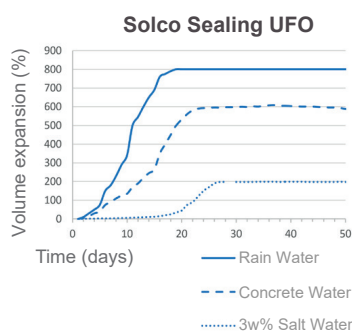
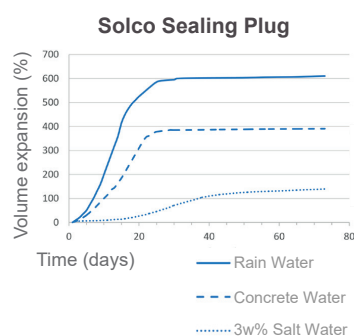
4. Anchor the sealing connector in place, using the sealing UFO.

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Technical Data:

Property	Value
Material (Rubber Plugs & Rings)	SEBS Rubber Compound containing special hydrophilic polymers
Material (Plastic for Plugs)	Hard Core impact resistant Polyamide
Hydrostatic Water Pressure Resistance	>6 Bar (60 metres)
Service Temperatures	-50°C to + 70°C
Expansion Capacity	Concrete Water - 400% Salt Water - 200%

Expansion Capacity:



Chemical Resistance:

In general, good resistance to Acids, Alkalies, and most Aquas solutions. Be careful with solvents and hydrocarbons.

Storage & Shelf Life:

2 years from the date of production if stored properly and in original unopened and undamaged sealed packaging in dry conditions, out of direct sunlight, not exposed to moisture, and kept at temperatures between +10°C to +40°C.

Form Tie Plugs

Sealing Plug 22mm

Sealing Plug 22mm

O.D 23mm x 39mm long

To be used with Form Tie sleeve with Internal Dia. 22mm



Sealing Plug 24mm

Sealing Plug 24mm

O.D 25mm x 51mm long

To be used with Form Tie sleeve with Internal Dia. 24mm












Sealing Plug 26mm

Sealing Plug 26mm

O.D 27mm x 51mm long

To be used with Form Tie sleeve with Internal Dia. 26mm



Sealing UFO's & Connectors			
Sealing UFO Rings		Sealing Connectors	
Sealing UFO 12mm Sleeve/rod O.D 16mm to 20mm		Sleeve/rod O.D 16mm to 20mm	
Sealing UFO 17mm Sleeve/rod O.D 24mm to 30mm		Sleeve/rod O.D 24mm to 30mm	
Sealing UFO 24mm (use with Sealing Connector 15mm)		Sealing Connector 15mm To be used with Tie-rod O.D 15mm	
Sealing UFO 31mm (use with Sealing Connectors 20mm & 23mm)		Sealing Connector 20mm & 23mm To be used with Tie-rod O.D 20mm	
Sealing UFO 39mm (use with Sealing Connectors 26mm & 30mm)		Sealing Connector 26mm & 30mm To be used with Tie-rod O.D 26mm	