Assess Build Chem Pvt. Ltd.
A World of Concrete Solutions

SS - JointSeal SW

Hydrophilic Water Swellable Joint Profile based on Special Rubber Based Polyurethane to Seal Cold Joints in Concrete Civil Engineering Structures

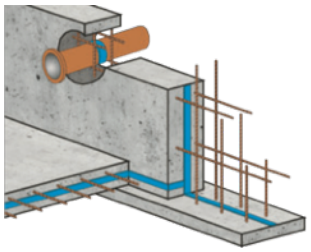
General

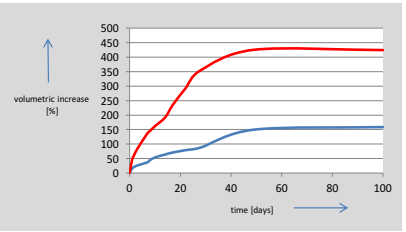
SS - JointSeal SW is a high performance, polyurethane rubber based water swellable construction joint profile - also colloquially known as a swellable waterbar. These swellable joint profiles are designed to be integrated into cold or construction joints, pipe penetrations, precast elements as well as cast in situ construction. **SS - JointSeal SW** has the distinction of a three dimensional polymer structure, consisting of unstructured polyurethane chains (macromolecules). The elastomeric features arise due to the weak cross linkage of the polymer chains. The swelling ability happens due to hydrophilic polymer resins, which can expand in contact with water up to approx. 450 % in volume. In order to avoid tensile stresses on surrounding fresh concrete by excessive swelling pressure, the expansion process is controlled. This allows its use on even wet substrates.

The profile is resistant to most common chemicals including sea water, mineral oils and most solvents. The profile is available in different cross sectional sizes and is available in rolls. The joint swells over a period of 24 to 40 days [dependent on time and temperature] to its full expansive potential. This property is handy in construction sites, where the profile may be subject to water during placement. **SS - JointSeal SW** can be installed on to concrete / other surfaces mechanically by means of nails / physical restraints or suitable sealant adhesives. The colour of the profile is dependent on available dyes and does not change performance of product.

Product Features

- Highly Flexible can be moulded to different surfaces
- Chemically resistant to selected acids, bases as well as salts
- Can be applied over vertical or horizontal joints
- Suitable for use across a wide variety of substrates
- Easy to install
- Can be used multi-functionally across substrates to seal against various areas of water ingress
- Can be used on moist substrates
- Suitable for contact with salt water as well as normal ground water
- Swells slowly, no excessive tensile stress on concrete
- Not Based on Bentonite





Areas of Application

- Used to seal construction or cold joints against the ingress of water
- Basements and underground structures
- Wet Areas
- Swimming Pools and Water Tanks
- Tunnels
- Precast Construction Joints, Manholes
- Sealing Penetrations [pipes and services]
- Post Sealing and waterproofing of expansion joints
- Increasing length of water-path to enter concrete joints
- Waterproofing joints in outdoor areas exposed to high and permanent water pressure

Areas of Application

Specification Keywords	High Performance, Chemically Resistant, Good Elongation, Hydrophilic, Swellable, Waterbar, Swellable Joint Profile
Delivered As	Profile in varying sizes, Available in Rolls, May come in varying colours
Storage Instructions	Store in a cool and dry area away from sunlight, in original packaging
Shelf Life	12 Months
Post Use	Empty packaging completely. Dispose as per local regulations.
Packing Size	25 or 50 m Rolls

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SS - JointSeal SW

Hazards and Safety

Technical Data

Profile Width & Thickness	5x20, 10x20, other sizes on request
Chemical Resistance	Solvents, Sea Water, Mineral Oil, Acetic Acid, Fuels and other Substances, details available
Sp. Density	Approx. 0.7 gm / cc
Shore Hardness	Approx. 25
Elongation	90%
Tensile Strength	0.4 MPa
Water Absorption	450% [Tap Water]; 160+% [4% Salt Water]
Water Pressure Resistance	> 1.5 bar [depending on adhesive]
E-Modulus	Approx. 0.9 MPa

Instructions for Use

For successfully using **SS - JointSeal SW** in construction joints, the profile should be placed into the centre of the reinforcement or at least 100 mm away from the concrete edges for thinner walls [< 200 mm]. For thicker sections [> 200 mm], place it at both edges, more than 75 mm from each edge. It has to be adhered to the concrete surface completely with a suitable adhesive / sealant. If necessary the profile can also be nailed on to the concrete or fixed with metal brackets. This is only to make sure that the profile does not change its position while concreting. Rough surfaces should be made smooth before laying the profile.

The application of **SS - JointSeal SW** should be carried out in dry weather conditions if possible or shortly before concreting. The slow-reacting swelling behaviour due to the formulation makes it possible to expose the product unprotected to wet weather conditions for a period of 2 to 3 days maximum. If longer periods between application and concreting under wet weather conditions are expected the profile must be protected to avoid premature swelling.

Once placed, the joint can be concreted over immediately. The colour of the profile is dependent on available dyes and does not change performance, properties, or characteristics of product.

Safety and Precautions

- Due to technical reasons the colour of the material or the printing may vary slightly from batch to batch
- The material is as such not hazardous, but exercise caution during application