

Advanced  
Construction  
Technologies



# Waterstop

## SPETEC SST500

Hydrophilic Synthetic Waterproofing Strip For Sealing Joints

### Product Identifier

#### Product Name

SPETEC SST500

*SST500 is simply fastened onto an existing joint. In contact with water and in confined conditions, it will swell and stop the water infiltration. SST500 remains consistent in its performance throughout its life cycle and the flexibility allows it to fill voids and cracks in the immediate surrounding area.*

#### Supplier Details

Alchatek  
4508 Bibb Blvd  
Tucker, GA 30084  
T: (404) 618-0438

#### Emergency Phone Numbers

Call CHEMTREC  
Day or Night

1-800-424-9300  
+1 703-527-3887

### Description

- Black hydrophilic synthetic waterproofing strip of 4/5" x 1/5" and 4/5" x 2/5" (2.03 cm x 0.5 cm x 2.03 cm x 1.01 cm).
- Manufactured in lengths of 32.8 feet (10 meters).
- SST500 is simply fastened onto an existing joint. In contact with water and in confined conditions, it will swell and stop the water infiltration.
- SST500 remains consistent in its performance throughout its life cycle and the flexibility allows it to fill voids and cracks in the immediate surrounding area.

### Uses

- Construction joints in concrete.
- Cold joints.
- Pipe penetrations through concrete.
- Joints between prefabricated pipe elements.
- Joints between pre-casted concrete elements like water tanks and manholes.
- Joints between floor slabs/walls and secant pile walls/slurry walls/sheet pile.
- Sealing cold joints between concrete precast elements and tunnel elements.
- Not suitable for expansion joints.

### Advantages

- Ecologically friendly.
- Good impact resistance.
- Permanently active system "wet/dry cycles".
- Swells more than 500% when in contact with water.
- Will not sag when correctly placed.
- Can absorb movements in structures over time.
- Easy to install by nailing or gluing.
- Good resistance to chemicals, petroleum, mineral oils, vegetable oils and greases.

# SPETEC SST500

HYDROPHILIC SYNTHETIC WATERPROOFING  
STRIP FOR SEALING JOINTS

## Application

Note: the following are a few typical application descriptions. In case of other jobsite parameters, please contact our technical department.

### PRELIMINARY ANALYSES

Consult with design professionals to identify waterstop engineered design. Clearly notate performance requirements of PVC, injection tube, or polymer waterstop consideration. Many projects incorporate several systems in a single waterstop design.

### PREPARATION OF THE SUBSTRATE

Clean all surfaces from dust, oil patches and other debris by brushing or compressed air.

### PREPARATION/APPLICATION OF THE PRODUCT

- Install Alchatek SST500 in the middle of the joint.
- There should be a minimum concrete cover of 2.5" (6cm) on either site of the strip, this to avoid the concrete to chip of when the strip expands.
- Spetec SST500 needs to be in full contact with the substrate surface.
- Alchatek SST500 only functions in confined spaces where it can develop sufficient internal pressure to guarantee the complete waterproofing of joint or crack.
- Alchatek SST500 needs to be fixed to the surface by gluing SPETEC WT400 or nailing (every 1.2" (30cm)).
- Unroll SPETEC® SST500 and press firmly to make sure the strip is in contact with the surface.
- Sealing of the joint is obtained by the swelling of the strip.
- Avoid installing the strip during heavy rain or on wet surfaces. This can result in premature swelling of the strip.
- Avoid stretching the strip during installation.

### REQUIRED TOOLS

Standard caulking gun.

### COMPLIMENTARY PRODUCTS

WT400, ITS System.

### ADVICE / FOCAL POINTS

Alchatek SST500 only functions in confined spaces where it can develop sufficient internal pressure to guarantee the complete waterproofing of joint or crack. Roll ends are simply butted together to assure a waterproof seal. Do not install in overlap. Avoid installing the strip during heavy rain or on wet surfaces. This can result in premature swelling of the strip.

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## Technical Data

### APPEARANCE

Composition: SST500 is a black hydrophilic synthetic waterproofing strip

Shape	Rectangular
Color	Black
Toxicity	Nontoxic

### Physical Properties - Cured Material

Property	Value	Norm
Swelling Capacity	>400%	Internal Test Report
Density	0.16 oz/gal (1g/liter)	ASTM D71-84
Hardness	Approx. 50	Internal Test Report
Hydrostatic Pressure Resistance	101.5 psi (6,998 millibar)	Internal Test Report
Elongation at Break	>400%	Internal Test Report
Installation Temperatures	-4°F to +167°F (-20°C to 75°C)	Internal Test Report
Tensile Strength	> 290psi (19,995 millibar)	Internal Test Report
Odor	Odorless	Internal Test Report

## Estimating Quantities

Packaged and installed per 3.28' (1m).

## Packaging

Spetec SST500 is supplied by : 4/5 x 1/5 inch (2.03 cm x 0.5 cm): 32.80 foot (10 meter) rolls. 5 roll box = 164 feet (50 meters). 4/5 x 2/5 inch (2.03 cm x 1.01 cm): 32.80 foot (10 meter) rolls. 9 roll box = 295.2 feet (90 meters). 20 ounces - 12 sausages per case.

## Storage and Shelf Life

SST500 should be stored under cover, clear of the ground. Protect the materials from all sources of moisture and frost. Storage temperature must be between +41°F (5°C) and +86°F (30°C). Shelf life is unlimited in correct storage conditions.

# **SPETEC SST500**

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## **Safety Precautions**

Avoid contact with eyes and skin, always use personal protective equipment in compliance with local regulations. Read the relevant Safety Data Sheet before use. Safety Data Sheets are available on [Alchatek.com](http://Alchatek.com). When in doubt contact Alchatek Technical Service.