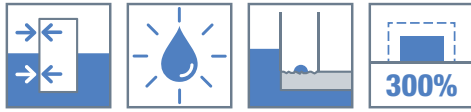


SPETEC® BST300

HYDROPHILIC BENTONITE STRIP FOR WATERPROOFING OF CONSTRUCTION JOINTS IN CONCRETE



DESCRIPTION

SPETEC® BST300 is a black hydrophilic strip 25 x 20 mm made of sodium bentonite and rubber with special fillers and crystalline admixture. SPETEC® BST300 is placed where the joint will arise. The sealing of the joint is realized by crystallization of additives in, and the swelling of the strip. In contact with water and in confined conditions, SPETEC® BST300 will swell and stop the water infiltration.

ADVANTAGES

- Ecologically friendly.
- Can withstand pressures up to 7 bars.
- Permanently active system "wet/dry cycles".
- Easy to install, no special tools required.
- Swells more than 300% when in contact with water

FIELDS OF APPLICATION

SPETEC® BST300 is used in:

- Construction joints in concrete.
- Cold joints.
- Pipe penetrations through concrete.
- Joints between pre-casted concrete elements like water tanks and manholes.
- Joints between floor slabs/walls and secant pile walls/slurry walls/ sheet piles...

APPLICATION

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

PRELIMINARY ANALYSES

Check whether the pressure, that the bentonite strip will transfer to the concrete during swelling, is not too great. Sufficient concrete coverage has to be foreseen. Always place the strip in the middle of the joint. There should be a minimum concrete cover of 8 cm on either side of the strip, this to avoid the concrete to chip of when the bar expands.

REQUIRED TOOLS

No special tools are required.

PREPARATION OF THE SUBSTRATE

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

PREPARATION OF THE PRODUCT

SPETEC® BST300 is ready for use.

PREPARATION OF THE EQUIPMENT

No special tools are required.

APPLICATION

SPETEC® BST300 needs to be fixed to the surface by gluing with SPETEC® WT400 (only for horizontal applications) or by using a wire mesh nailed in place over the strip. To assure a watertight joint an overlap of 5 - 10 cm is recommended.

The SPETEC® BST300 should be installed between the inner and outer rows of the reinforcement bars.

SPETEC® BST300 needs to be in full contact with the substrate surface.

Nailing:

- Unroll the SPETEC® BST300 in the middle of the joint and press it down. Install the SPETEC® BSTF wire mesh over the SPETEC® BST300. Fix the system by nailing. (use approx. 4 nails per metre.)

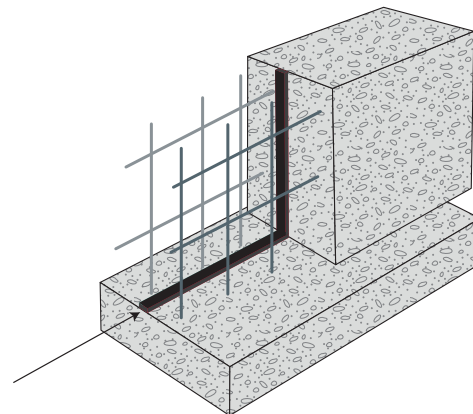


Gluing:

Apply SPETEC® WT400 with a caulking gun in a bead of about 5 to 10 mm on the concrete surface. Unroll the SPETEC® BST300 strip, and press it into the glue. The ends need to be pressed together firmly. Additional nailing will provide secure fixing onto the concrete.



Especially for overhead or vertical applications a wire mesh is recommended. Preferable 4 nails per meter are used.



FINISHING

Immediately after the installation of SPETEC® BST300, any required formwork can be placed.

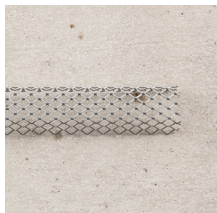
If the strip is nailed, the concrete can be poured immediately. If the strip is glued, it is necessary to wait 24 hours with pouring concrete until SPETEC® WT400 as an adhesive has hardened.

APPLICATION CONDITIONS

Avoid installing the strip during rain or on a wet surface. This can result in the premature swelling of the strip.

COMPLIMENTARY PRODUCTS

To be ordered separately



Steel wire mesh SPETEC® BSTF, profile for SPETEC® BST300.

- Length 1 meter
- Packaging 30 meches x 1 meter

And/or



As a glue, SPETEC® WT400
600 ml sausages

- 12 per cardboard box.
- 1 pallet = 40 cardboard boxes.
- Weight per sausage : 0,9 kg net

ADVICE / FOCAL POINTS

SPETEC® BST300 only functions in confined spaces where it can develop sufficient internal pressure to guarantee the complete waterproofing of the joint.

It's recommended to contact the SPETEC® representative in case of special applications.

TECHNICAL DATA

APPEARANCE - COMPOSITION

SPETEC® BST300 is a black hydrophilic strip of 25 x 20 mm.

Shape	Rectangular
Colour	Black
Coating	Talcum treated
Toxicity	Nontoxic

CONSUMPTION

The consumption depends on the total length of the construction joint that needs to be sealed. Keep in mind that you need a lateral overlapping from 5 to 10 cm.

TECHNICAL DATA

Property	Value	Norm
Swelling capacity	>550% Deionised water	Internal test report
	>340% pH>7	Internal test report
	>170% pH=4,5	Internal test report
Density	1,76 g/cm ³	ASTM D71-84
Weight	830 g/m	Internal test report
Hydrostatic pressure resistance	7 bar	Internal test report
Elongation at break	>25%	EN-527-2
Installation temperatures	- 15°C to +60°C	Internal test report
Operating temperature	- 45°C to +110°C	Internal test report
Odour	Odourless	

CHEMICAL RESISTANCE

Good chemical resistance also to hydrocarbons. For contact with heavily polluted water or specific chemicals, it is recommended to consult the SPETEC® representative.

REFERENCE DOCUMENTS



PACKAGING

Dimension 25 x 20 mm
5 m strips, 6 strips per box,
24 boxes per pallet (720 meter)

STORAGE AND SHELF LIFE

SPETEC® BST300 should be stored under cover, clear of the ground. Protect the materials from all sources of moisture and frost. Storage temperature must be between +5°C and +30°C. Shelf life is unlimited in correct storage conditions.

SAFETY PRECAUTIONS

Always use personal protective equipment in compliance with local regulations. Read the relevant Material Safety Data Sheet before use. Material Safety Data Sheets are available on www.spetec.com. When in doubt contact SPETEC® Technical Service.

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