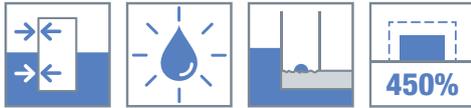


SPETEC® WT400

HYDRO-SWELLING SEALANT FOR WATERPROOFING CONSTRUCTION JOINTS IN CONCRETE.



DESCRIPTION

SPETEC® WT400 is a single component hydrophilic caulk designed to swell in the presence of water creating a water tight seal around pipe penetrations, cold joints, construction joints and joints between pre-cast segments.

Can also be used as adhesive for SPETEC® BST300 and SPETEC® SST500.

ADVANTAGES

- Single component.
- MDI based.
- Strong adhesion to concrete and steel even in humid conditions.
- High elongation.
- Remains elastic after curing.
- Solvent free.
- High expansion: 450%
- Can be applied under water.
- Non-sagging.

FIELDS OF APPLICATION

- Waterstop
- Tunnel segment joints
- Pipe penetrations
- Poured wall joints
- Cold joints
- Sheet pile joints
- Manhole joints
- Pre-cast segments

APPLICATION

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

PRELIMINARY ANALYSES

When in doubt whether SPETEC® WT400 will adhere to a specific substrate, it is always advisable to perform an adhesion test first. Check whether the pressure that the swelling strip will transfer to the concrete during swelling is not too big. A sufficient concrete coverage need to be provided. Always place the bead in the middle of the pouring joint. On each side of the SPETEC® WT400 a concrete coverage of 7 cm is required to avoid breaking the concrete under the expansion pressure.

REQUIRED TOOLS

Caulking gun for sausages (closed tube).
Nozzle for caulking gun.

PREPARATION OF THE SUBSTRATE

The SPETEC® WT400 must be applied on a dust-free concrete or metal surface to obtain maximum adherence. Clean all surfaces from dust, oil patches and other debris by brushing or compressed air.

PREPARATION OF THE PRODUCT

For the 600 ml sausages: Put de sausage in the empty tube of the caulking gun. Cut 10mm off the top of the sausage. Close the tube and install the nozzle. Cut the nozzle diagonally at the appropriate position.

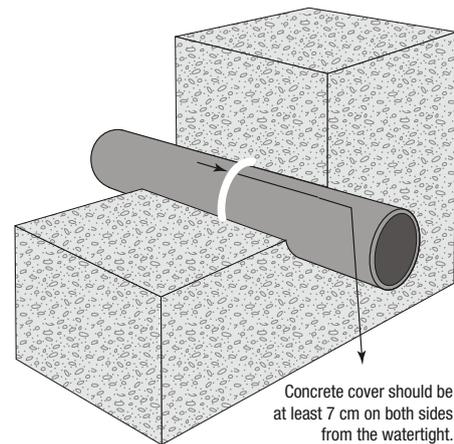
PREPARATION OF THE EQUIPMENT

No specific preparation required.

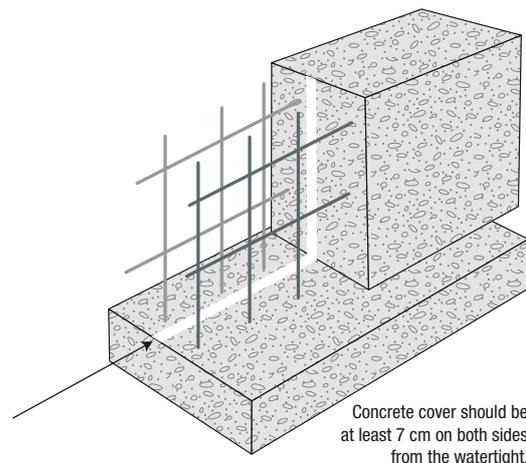
APPLICATION

SPETEC® WT400 is applied with a caulking gun in an interrupted band (minimum 10mm wide and high), in the middle of the joint or prefab element.

Pipe penetration



Joint application



Sheet pile interlock



FINISHING

Do not pour concrete directly on the fresh applied product. SPETEC® WT400 should cure for 24 hours before concrete pouring.

APPLICATION CONDITIONS

Surface can be rough, smooth, wet or dry. This material can even be applied underwater on clean surfaces.

Recommended application temperatures are between +1°C and 30°C

ADVICE / FOCAL POINTS

SPETEC® WT400 should be applied at a minimum bead of 10 to 10mm. Concrete cover should be at least 7 cm on both sides, in order to avoid cracks from the expansion pressure if SPETEC® WT400 is swelling. SPETEC® WT400 must be fully confined into the concrete to expand properly and seal the joint.

TECHNICAL DATA

APPEARANCE - COMPOSITION

One component MDI polyurethane based, solvent free, hydro swelling mastic.

REACTION TIMES

Cure Skin formation (20°C / RV 65%): 120 minutes.

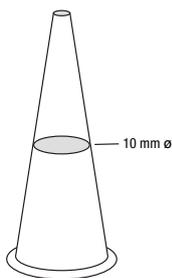
Curing Rate (20°C / RV 65%): 1,8 mm/24h.

Final Cure: 24 hours.

These values may vary depending on environmental factors such as temperature, moisture, and type of substrate.

CONSUMPTION

Average coverage depending on quality and roughness of the surface	
Nozzle diameter	Length (sausage)
10 mm	6 m



TECHNICAL DATA

Property	Value	Norm
Base Polyurethane Consistency	Stable Paste	
Curing System	Moisture	
Hydrostatic Pressure	5 bar	
Hardness	15 shore A	
Shrinkage	Max. 4%	

Specific Gravity	1,37 kg/dm ³	
Temperature Resistance	-30°C to +90°C	
Elasticity Modulus in film	0.34 MPa	(DIN 53504)
Slump None Tear Strength in film	Ca. 0.60 MPa	(DIN 53504)
Elongation at Break in film	>800%	(DIN 53504)
Elasticity Modulus in joint	Ca. 0.12 MPa	(ISO 839)
Tear Strength in joint	Ca. 0.20 MPa	(ISO 839)
Elongation at Break in joint	>250%	(ISO 839)
Swelling	450%	
Final Cure (*)	24 hours	
Solids	100%	

CHEMICAL RESISTANCE

Good overall chemical resistance.

Consult our technical service for use in heavily contaminated water.

REFERENCE DOCUMENTS



PACKAGING



600 ml sausages

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

STORAGE AND SHELF LIFE

In unopened packaging, in dry place, between +5°C and +30°C:

Sausages: 12 months

Date of Production: see packaging.

SAFETY PRECAUTIONS

Always use personal protection in accordance with locally applicable guidelines. Consult the appropriate safety data sheets before use.

Safety data sheets are available at www.spetec.com.

If in doubt, contact the technical department of SPETEC®.

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