

VELOSIT® WS 801

Highly Swellable Joint Waterstop



Application fields

VELOSIT WS 801 is a water swellable waterstop used for waterproofing of construction joints. Typical application fields besides others are as follows:

- Waterproofing of construction joints between different concrete pours
- Waterproofing of saw cut joints
- Waterproofing of pipe penetrations
- Waterproofing of the wall-slab joint
- Swellable waterstop for the treatment of construction joints between concrete pours. VELOSIT WS 801 swells even with sewage water containing elevated salt loads.

Properties

VELOSIT WS 801 is a waterstop that swells under contact with water. It is applied on the previous concrete pour into the center of the construction or expansion joint.



VELOSIT WS 801 is either glued with an adhesive (p. e. Soudal Fix All High Tack) or nailed to the concrete.

- 1000% swelling capacity, fully reversible for an unlimited number of cycles
- Dimensional stable, no wash-out like with Bentonite waterstops
- Retarded swelling, volume increase starts several hours after water contact
- Swelling pressure of > 5 bar (73 psi), extreme resistance against hydrostatic pressure
- Resists 50 m (160 ft.) water pressure acc. to EN 12390-8
- Meets and/or exceeds all requirements ASTM C 923, including physical properties of materials and performance testing.

Application

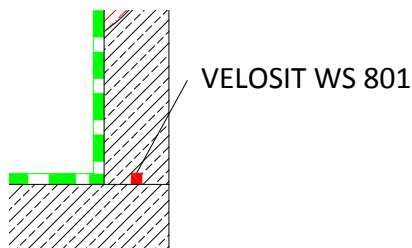
1.) Substrate preparation

VELOSIT WS 801 is suitable for reinforced joints in concrete bodies.

Remove separating and bondbreaking substances from first concrete section (for example foundation and slab). Surface should be open porous and load bearing. Minimal strength requirement is 15 MPa (2175 psi). Patch larger surface defects with VELOSIT RM 202.

2.) Processing

Due to its enormous swelling pressure VELOSIT WS 801 must be installed min. 50 mm (2") from each edge. Do not use VELOSIT WS 801 on concrete walls of less than 120 mm cross-section.



Fixing with nails:

VELOSIT WS 801 can be nailed to the first concrete section. Shoot nails each 15 cm (6") with a nail gun (for example Hilti DX 76) through VELOSIT WS 801 into the concrete.

Cut overlaps, crossings or terminations of the waterstop in a 45° angle and connect without a gap. Hollow areas of more than 4 mm may reduce watertightness significantly.

Fixing with adhesive:

Apply the adhesive to the concrete. Press VELOSIT WS 801 firmly into the adhesive until the adhesive emerges on both sides of the VELOSIT WS 801.

Plastic pipes can only be treated with VELOSIT WS 801 up to DN 50 (2") with cold water and up to DN 25 (1") for more than 30 °C (86 °F) water temperature. Due to the high swelling pressure plastic pipes may collapse under load. Larger diameters are only permitted with metal

pipes. For small pipe diameters, the product VELOSIT WS 805 is used instead of VELOSIT WS 801.

3.) Curing

VELOSIT WS 801 does not require curing. Avoid standing water on the waterstop as this may result in premature swelling of the material. Because of the retarded swelling a short term contact with rain water is not a problem.

Estimating

The required amount is calculated with the planned length of the joint waterproofing.

Cleaning

VELOSIT WS 801 does not cause any dirt. Dirty material can be cleaned with a moist cloth. Do not install material that has already swollen. Wait until the material has completely dried and achieved its original dimensions.

Quality features

Color:	blue
Dimensions:	5 x 20 mm
Weight:	0.12 kg/m (0.24 lb./yd.)
Substrate temperature:	5 – 35°C (40 – 95°F)
Water impermeability acc. EN 12390-8:	
- Positive side:	5 bar (73 psi)
Water absorption:	1.2 kg/m (2.4 lb./yd.)
Maximum swelling	
- potable water:	1060 %
- sea water:	750 %
- saline water:	580 %

Packaging

VELOSIT WS 801 is supplied in rolls á 50 m (164'). 5 rolls are packaged in a box (approx. 27 kg/59 lbs.).

Storage

VELOSIT WS 801 can be stored in unopened original packs for 5 years at 5 – 35°C (40 – 95 °F) in a dry storage place protected against sunlight.

Recommendations

VELOSIT WS 801 is only available for professional applicators.

All described product features are determined under controlled laboratory conditions according to the relevant international standards. Values determined under job site conditions may deviate from the stated values.

Please always use the latest version of this data sheet available from our website www.velosit.de.

Manufacturer

VELOSIT GmbH & Co. KG
Industriepark 5 – 7
32805 Horn-Bad Meinberg
Germany
www.velosit.de