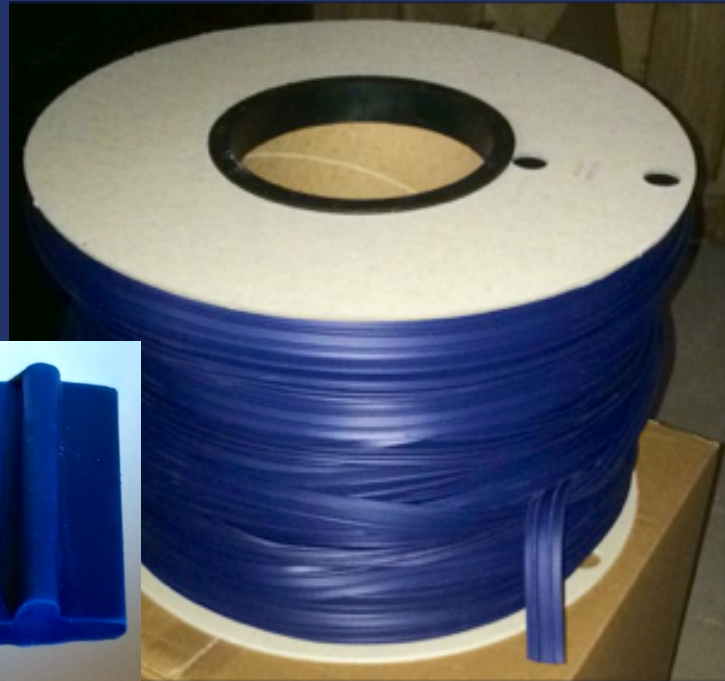


VELOSIT® WS 805

Swellable Thermoplastic Gasket for Segmental Structures

5 Bar
Water
Resistance
EN 12390-8



Application fields

VELOSIT WS 805 is a swellable gasket manufactured from a blend of proprietary thermoplastics and swelling agents compounded to produce a re-swellable seal of unique swelling ability. VELOSIT WS 805 is used to seal joints between pre-cast segments. Typical application fields include:

- Sealing between pre-cast segments.
- Sealing between potable water pipes.
- Sealing sewage & wastewater pipes.
- Waterproofing of wall/slab joints.

Properties

VELOSIT WS 805 swellable thermoplastic gaskets gradually swell when in contact with water after approximate delay period of 2 weeks to enable working in wet/rainy conditions.

VELOSIT WS 805 is easily glued or nailed to the existing hardened concrete prior to pouring of the next fresh concrete.

VELOSIT WS 805 exhibits unique properties such as:

- Profile includes 2 protrusions to form double parallel compressible sealing lines
- 450 % swelling capacity; fully reversible for an unlimited number of cycles
- High water retention means delayed shrinkage when dry
- Dimensionally stable; does not wash-out like Bentonite waterstops
- Delayed swelling; volume increase starts after approx. 2 weeks of contact with water allowing water curing of precast units and/or placing of segments and pipes in wet conditions
- Swelling pressure resistant to 5 bars (73 psi) hydrostatic water pressures up to 50 m (160 ft.) acc. to EN 12390-8.
- Extremely flexible: easily bent to take the shape of concrete segment.

Application

1.) Substrate preparation

VELOSIT WS 805 is designed to seal construction joints in concrete segments against water passage.

Remove all separating and bond-breaking substances from hardened concrete (eg. foundation and slab). Surface should be as level as possible with a minimum load bearing capacity of 15 MPa (2175 psi). Deep surface defects must be levelled off with a shrinkage-compensated, structural grade repair mortar such as VELOSIT RM 202 to a smooth finish.

2.) Processing

Due to its swelling pressure VELOSIT WS 805 must be installed minimum 25 mm (1") from the edge.

Fixing with nails: VELOSIT WS 805 can be nailed every 15 cm (6") to the prepared hardened concrete section. Use a power-actuated nail gun such as Hilti DX 76 to firmly staple VELOSIT WS 805 into place.

Joints & connections are made by cutting the gasket in a 45° angle and butting together ensuring no gap is formed. Do not allow for any gaps exceeding 2 mm below or on the sides of VELOSIT WS 805.

3.) Curing

VELOSIT WS 805's delayed swelling (approx. 12-14 days @ 23°C) allows long term contact with water (such as hardened concrete pre-dampening or exposure to rain) prior to the next concrete pour.

Estimating

The required amount is calculated with the planned length of the joint waterproofing, allowing for an extra 10mm for detailing at butt joint.

Cleaning

VELOSIT WS 805 does not cause any dirt. Dust/dirt can be cleaned off VELOSIT WS 805 with a moist cloth.

Do not install material that has already started to swell or is swollen. Wait until the material has completely dried and retrieved to its original dimensions.

Quality features

Color:	Dark Blue
Dimensions:	3 – 5mm x 20 mm
Weight:	0.04 kg/m (0.08 lb./yd.)
Substrate temperature:	5 – 35 °C (40-95 °F)
Service temperature:	5 – 90 °C (40-95 °F)
Water impermeability: (EN 12390-8)	5 bar (73 psi)
Water absorption:	0.40 kg/m (0.80 lb./yd.)
Maximum swelling - potable water:	450 %

Packaging

VELOSIT WS 805 is supplied in 240 m (782.4') rolls with 3 rolls per box (Total weight per box approx. 28.8 kg / 67 lb.).

Storage

VELOSIT WS 805 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 and water.

Safety

Please observe the actual valid material safety data sheet and follow the described safety measures for handling of the product.

Used product containers must be emptied completely after use. They can be returned to VELOSIT GmbH & Co. KG on request.

Recommendations

VELOSIT WS 805 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

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