VELOSIT® WS 805

SWELLABLE THERMOPLASTIC GASKET FOR SEGMENTAL STRUCTURES

HYCHEM Infrastructure

Product Description

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.

VELOSIT WS 805 is the result of many years in the field testing and research. VELOSIT WS 805 is used to seal joints between pre-cast segments.

Typical Applications

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

Properties

- Profile includes 2 protrusions to form double parallel compressible sealing lines
- 450% swelling capacity; fully reversible for an unlimited numberof 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 ofcontact with water allowing water curing of precast units and/orplacing of segments and pipes in wet conditions
- Swelling pressure resistant to 5 bars hydrostatic water pressuresup to 50 m acc. to EN 12390-8e
- Extremely flexible: easily bent to take the shape of concrete segment.

Technical Details

Colour	Dark Blue
Dimensions	3 - 5 mm x 20 mm
Weight	0.4 kg/m
Substrate temperature	5°C - 35°C
Water impermeability acc. EN 12390-8	5 bar
Water absorption	0.40 kg/m
Maximum swelling	potable water: 450%

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APPLICATION GUIDELINES

Surface 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. Deep surface defects must be levelled off with a shrinkagecompensated, structural grade repair mortar such as VELOSIT RM 202 to a smooth finish.

Processing

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

Fixing with nails

VELOSIT WS 805 can be nailed every 15 cm 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.

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 2 – 10% for detailing at butt joint.

Clean up

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.

Packaging

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

Storage

VELOSIT WS 805 can be stored in unopened original packs for 5 years at 5 – 35°C in a dry storage place protected against sunlight.

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