

Expanding waterstop for construction joints

- highly flexible, easy application
- resistant to water pressure up to 2.0 bar
- also suitable for zones with tidal water movement
- suitable for contact with sea water
- temporary swelling protection in case of premature water contact
- swelling process is reversible

PRODUCT DESCRIPTION

VANDEX EXPASEAL W consists of a hydrophilic acrylate based swelling substance, embedded in a butylene copolymer based thermoplastic elastomer, with reversible swelling properties.

AREAS OF APPLICATION

VANDEX EXPASEAL W is used to waterproof construction joints and pipe inlets in concrete structures exposed to permanent or temporary hydrostatic pressure.

PROPERTIES

After contact with water, VANDEX EXPASEAL W swells up to 900% in volume. The pressure of the swelling action will cause VANDEX EXPASEAL W to expand in the joints, filling all cavities and thereby stop water flow. Reversible expansive properties, dimension remains stable. VANDEX EXPASEAL W does not entrain water through its structure. Swelling process is limited to the water contact surfaces.

SURFACE PREPARATION

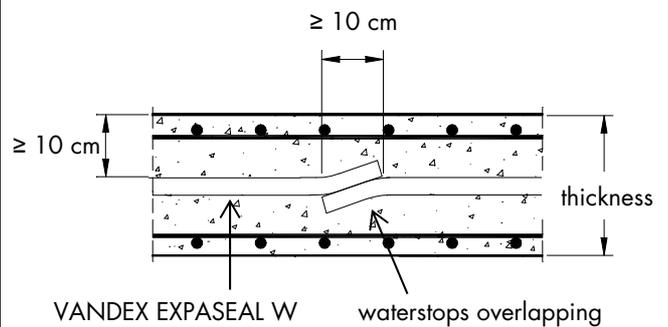
All joints to be waterproofed with VANDEX EXPASEAL W must be clean and free from loose particles. Stagnant water and sharp protrusions must be avoided or removed. VANDEX EXPASEAL W can also be applied on moist surfaces.

In case of horizontal construction joints, it is recommended to flatten the freshly applied concrete surface by wooden trowel (approx. 5 mm wide) or similar in order to receive an even and clean fixing surface for VANDEX EXPASEAL W.

APPLICATION

For joints widths of 20–40 cm VANDEX EXPASEAL W is fixed in the middle of the joint. As a precaution, thicker walls can be fitted with two VANDEX EXPASEAL W waterstops. VANDEX EXPASEAL W is set into the joint with VANDEX UNIFLEX or another suitable adhesive, or mechanically fixed in the construction joint with nails (approx. 4–5 nails per linear meter) or a fixing rail. Always ensure that it is in intimate contact with the surface of the substrate, otherwise the full waterproofing effect will not be achieved.

Plan:



VANDEX EXPASEAL W waterstops must not be stretched during installation.

Joints need an overlap of min. 10 cm (cf. plan above).

PACKAGING

VX EXPASEAL W 2010: box with 9 × 10 m = 90 m each
 VX EXPASEAL W 2005: box with 9 × 20 m = 180 m each

STORAGE

When stored in a dry, frost-free place in unopened, undamaged original packaging, shelf life is 24 months.

HEALTH AND SAFETY

VANDEX EXPASEAL W is not a dangerous substance. For further information please refer to Safety Data Sheet on www.vandex.com.

TECHNICAL DATA			
Basis		hydrophilic polymer substance (embedded in polymer and elastomer)	
Colour		white	
Density at 23 °C	[kg/dm ³]	1.27	
Tensile strength after swelling	[MPa]	0.7	
Elongation at rupture before swelling	[%]	300	
Swelling capacity highly alkaline environment	[% by vol]	≥ 350	
Application temperatures	[°C]	-30 up to +60	
		Type 2010:	Type 2005:
Dimensions	[mm]	20 × 10	20 × 5
Weight	[g/m]	249	127
All data is averaged from several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.			

The information contained herein is based on our long-term experience and the best of our knowledge. We can, however, make no guarantee since for a successful outcome, all circumstances in an individual case must be taken into consideration. Indications of quantities required are only averages which in certain cases might be greater.



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