



### 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.

With German AbP (Allgemeines Bauaufsichtliches Prüfzeugnis = General Building Supervisory Test Certificate).

#### 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

The concrete substrate must satisfy the following requirements:

- Concrete with high water penetration resistance;
- Surface is clean, level, free from burrs and fault sites, without any loose structural elements of concrete slabs, and free from formwork oil and other disconnecting structural elements that interfere with the adhesive bond;
- Free from ice and snow, and free from standing water.

#### APPLICATION

VANDEX EXPASEAL W must be arranged in the structural element as an internal seal. To guarantee the functionality of the swelling tape, the increase in volume must be prevented by means of a complete embedding in concrete, so that evasion of the material in the joint gap is not possible and sufficient swelling pressure can build up.

VANDEX EXPASEAL W may only be processed when dry and in dry weather conditions. The geometry may not be changed. Swelling joint sealing tapes whose rectangular geometry has changed or is soiled or damaged, may not be installed. Using VANDEX ADHESIVE supplied by the manufacturer, VANDEX EXPASEAL W must be fully bonded onto

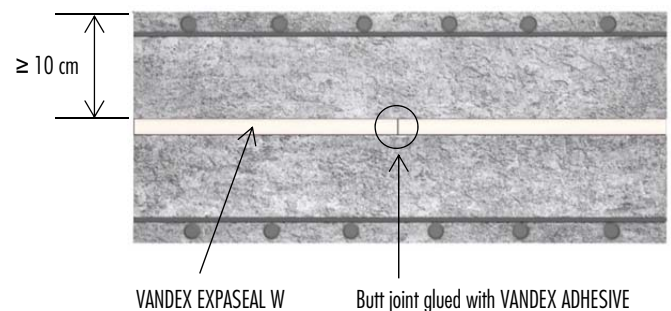
the level substrate in such a way that its position remains unaffected during concreting, whilst ensuring that loose components have been removed from the substrate.

In addition to bonding, support grids can be used for fastening. The spacing at which the support grids are fastened to the concrete substrate must not exceed 25 cm in the longitudinal direction of the joint sealing tape. Joints must be formed as butt joints and additionally secured with VANDEX ADHESIVE.

A distance from the edges of 10 cm must be observed on all sides.

VANDEX EXPASEAL W may not come into contact with water over an extended period of time following installation, in order to prevent premature swelling. Joint sealing tapes which have already expanded, or products whose cross-section has change, may not be installed.

#### Plan:



VANDEX EXPASEAL W waterstops must not be stretched during installation.

#### 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](http://www.vandex.com).

TECHNICAL DATA			
Basis		hydrophilic polymer substance (embedded in polymer and elastomer)	
Colour		white	
Density at 23 °C	[kg/dm <sup>3</sup> ]	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.



**HEAD OFFICE AND INTERNATIONAL SALES:**  
**Vandex International Ltd**  
 P.O. Box · CH-4501 Solothurn/Switzerland  
 +41 32 626 36 36 · info@vandex.com · www.vandex.com



**PRODUCTION:**  
**Vandex Isoliermittel-Gesellschaft m.b.H.**  
 P.O. Box · D-21487 Schwarzenbek/Germany

