

# Expanding Waterstops for construction and expansion joints



### PROPERTIES

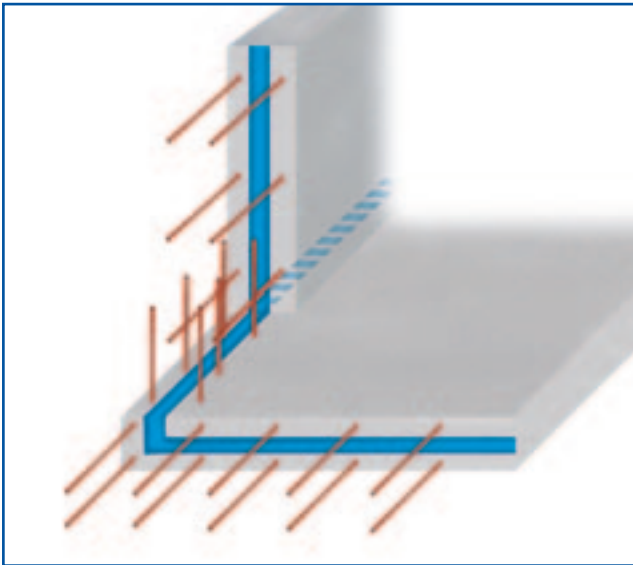
- flexible, swellable
- resistant to water-pressure up to 5 bar
- approved for use in potable water installations
- easy to install
- high chemical resistance

### AREAS OF APPLICATION

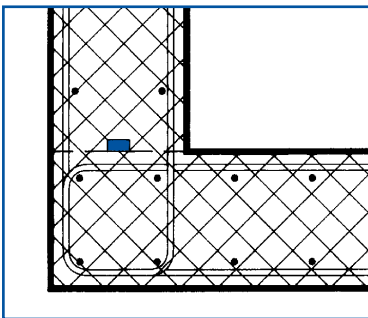
- construction and expansion joints
- movement joints which can accommodate up to 5 mm movement
- pipe encasements
- joints between prefabricated elements



**VANDEX EXPASEAL**



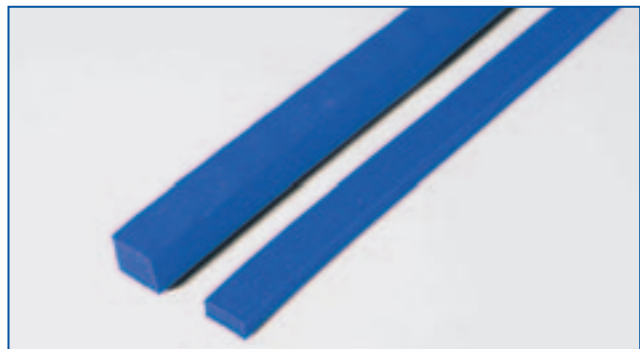
VANDEX EXPASEAL waterstops are suitable for construction joints, expansion joints, pipe encasements, joints etc.



VANDEX EXPASEAL waterstops when in contact with water swell and form a reliable and effective seal.

To select the right type of **VANDEX EXPASEAL** waterstop consider these important criteria:

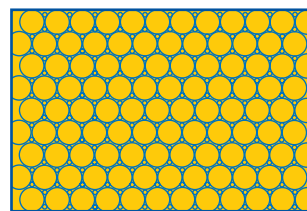
- structure size
- expected joint-/crack width
- anticipated highest water level
- settlement and movement



VANDEX EXPASEAL 2520    Size: 25 x 20 mm  
 VANDEX EXPASEAL 2010    Size: 20 x 10 mm

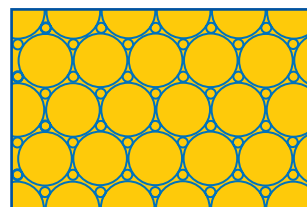
## How VANDEX EXPASEAL waterstops work

VANDEX EXPASEAL waterstops combine polymer composites with high chemical resistance which are capable of storing water in their molecular structure by increasing their volume.



*Dry state:  
hydrophilic component  
bound to an elastic matrix*

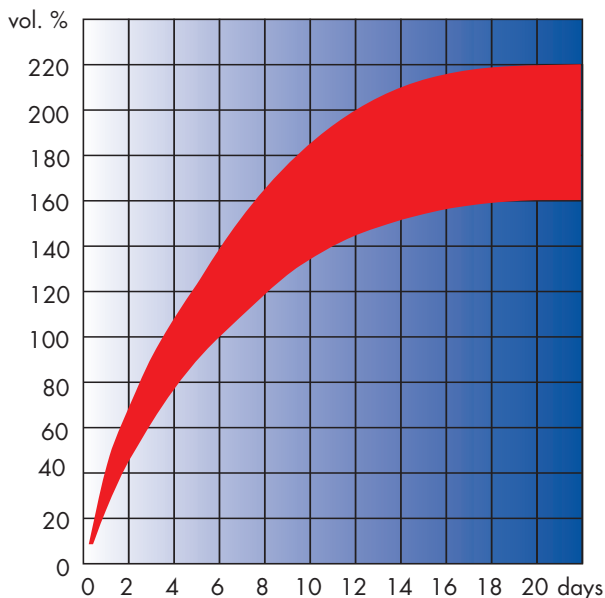
When in contact with water VANDEX EXPASEAL waterstops will slowly swell and expand without altering the homogeneous structure of the polymer matrix. The pressure of the swelling action will cause VANDEX EXPASEAL waterstop to form itself into the joint, filling all cavities, and effectively stopping water.



*When water penetrates the joint the hydrophilic compound will absorb the water and expand.*

The swelling process of all VANDEX EXPASEAL products is reversible.

## Swelling capability



## Chemical resistance:

**VANDEX EXPASEAL is resistant against the following liquids:**

Type of liquid	Examples
Water	unpolluted ground water
Acids and bases	acetic acid 10% sulfuric acid 20% sodium hydroxide solution 20% calcium hydroxide solution pH 11 – 12
Salt solutions	sodium chloride solution 20%
Hydrocarbons	gasoline, toluene, xylene

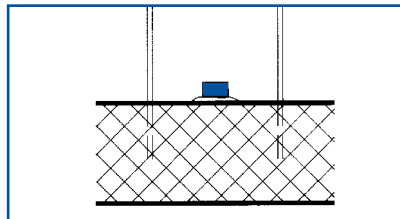
## Packaging:

### Standard sizes:

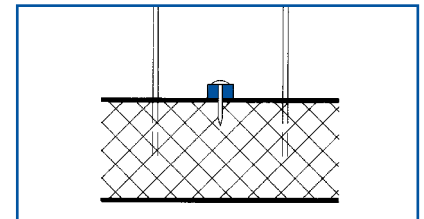
VANDEX EXPASEAL 2520	25 x 20 mm box contains 30 m = 6 rolls x 5 m
VANDEX EXPASEAL 2010	20 x 10 mm box contains 60 m = 6 rolls x 10 m

## Installation of waterstops:

- adhesive
- nails



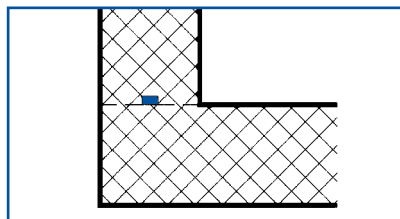
fixing with adhesive



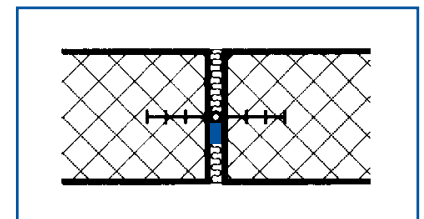
fixing with nails

## Typical areas of application:

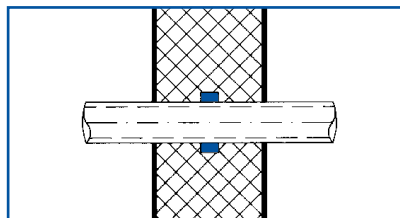
- buildings
- civil engineering, structures
- water industry
  - potable water reservoirs
  - sewage treatment plants
  - sewers
- tunnels
- marine structures
- power plants



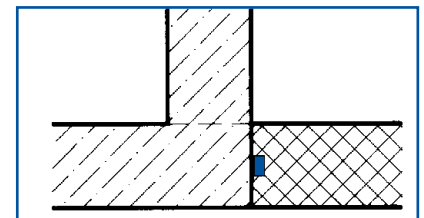
construction joints



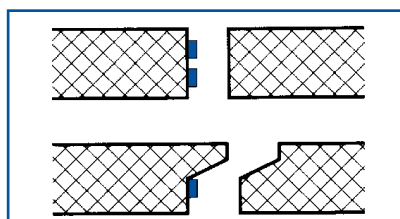
expansion joints (in combination with waterbars)



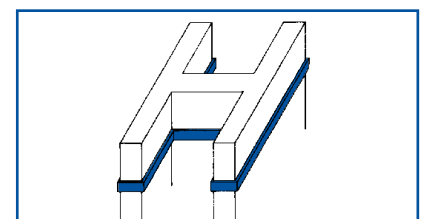
pipe encased in concrete wall



joints between adjoining structures



tunnel and pipe construction



different building materials



## Installing of VANDEX EXPASEAL



**1)** VANDEX EXPASEAL waterstops are easily cut by hand.



**2)** Fixing: The VANDEX EXPASEAL waterstop is placed on a clean, watertight and level surface ...



**3)** ... and the VANDEX EXPASEAL waterstop is pressed and eased into the glue bed immediately after applying the glue.



**4)** Close-up: The VANDEX EXPASEAL waterstop is pressed into the glue.



**5)** VANDEX EXPASEAL can also be fixed with nails (approx. 5 nails per m').



**6)** Allow one day for the glue to cure. Protect against cold and heat. Ideal working temperature +10° C to +40° C.

*For installation details refer to the relevant product data sheets and labels on the packaging.*

## For Vandex Service – please call us!



- Vandex consultation
- laboratory services
- repair methods
- training courses/site service

The information contained herein is based on our longterm 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.