



# BREAK

## PRODUCT DESCRIPTION

BREAK is a self-sealing watertight box element designed to control and seal any spontaneous cracks that develop in the reinforced concrete.

They seal automatically when water passes through, thanks to the hydro-expansive action of the bentonite joint installed inside.



## PRODUCT APPLICATION

To determine and guide contraction phenomena in reinforced concrete walls, constructed continuously, such as:

- Retaining walls in general
- Tanks
- Waste water treatment plants
- Supporting walls, etc

## ADVANTAGES

- Perfect hydraulic water-tightness
- Maximum control of shrinkage of reinforced concrete
- Possibility of preparing continuous concrete castings without joints
- Allows the reinforcement bars to be laid without interruptions
- Considerable savings in terms of time and money

## PREPARATION AND APPLICATION Application

BREAK must be placed on the pre-set point for the formation of the joint, marking the external points of the box element on the horizontal surface, in line with the blocking channels.

The holes must then be made ( $\varnothing$  12-14 mm with a minimum depth of 8 cm), in line with the previously marked points and the steel rods must then be inserted in these ( $\varnothing$  12-14 mm), which guide the box elements.

The profiles are then tied with iron wires to the steel rods in lines with the "fastening slots" and these are tied to the structure reinforcement (the installation guide is more detailed on each package).

PLEASE NOTE: The castings must be performed continuously, proceeding regularly on both sides of BREAK.

### How it works

The box elements have the function of creating "reduced section" areas in the concrete casting, in which tension due to shrinkage will be discharged.

This will result in the formation of cracks only in where BREAK is present, which can therefore be



considered a "structural fuse".

When water passes through, the straight-line cracks are self-sealed by the spontaneous expansion of the natural Sodium Bentonite-based hydro-expansive seal.

#### Inter-axis positioning

Empirical rule to calculate the position of BREAK

$$l = H/2s$$

where:

$l$  = BREAK inter-axis expressed in metres

$H$  = height of the wall expressed in metres

$s$  = thickness of the wall expressed in metres



References available at [www.volteco.com](http://www.volteco.com)

#### PACKAGING AND STORAGE

BREAK is packed in boxes containing 10 bars and can be stored for an unlimited period in a covered place.

#### WARNINGS - IMPORTANT NOTES

Do not tamper with the BREAK box profile as this would affect its functionality.

Always join BREAK with the hydro-expansive waterstops placed on the horizontal joints.

The BREAK box profile must not be held up by brackets and/or elements that can interfere with hydro-expansive seal operation: rods, ties or spacers placed alongside or next to the waterstop inside the profile.

#### PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values
Thickness	20 mm
Width	185 mm
Length	1,000 mm
Hydro-expansive profile composition	25% butyl rubber 75% Sodium Bentonite

PLEASE NOTE: Refer to the WT 102 product technical data

#### SAFETY

It is recommended to use gloves while working.

In case of accidental contact with skin or eyes, wash thoroughly with water and consult a doctor.

#### COPYRIGHT

© Copyright Volteco S.p.A. - All rights reserved.

Information, images and text found in this document are exclusive property of Volteco S.p.A.

They may change anytime without prior notice.

Updated versions of this and other documentation (specification, brochure, other) are on [www.volteco.com](http://www.volteco.com).

In case of translation text may contain technical and linguistic inaccuracies.

#### LEGAL NOTES

Note for buyer/installer:

This document prepared by Volteco S.p.A. is provided as an aid and guideline for the buyer/installer.

This does not take into consideration the details of each single operational context, for which Volteco S.p.A. will not be held liable.

This does not change and does not extend the obligations of Volteco S.p.A.

It may vary and the installer is therefore required to update his/her information prior to each application by referring to [www.volteco.com](http://www.volteco.com).

The before-after sales technical/trade information of the sales network have the same validity as this document.