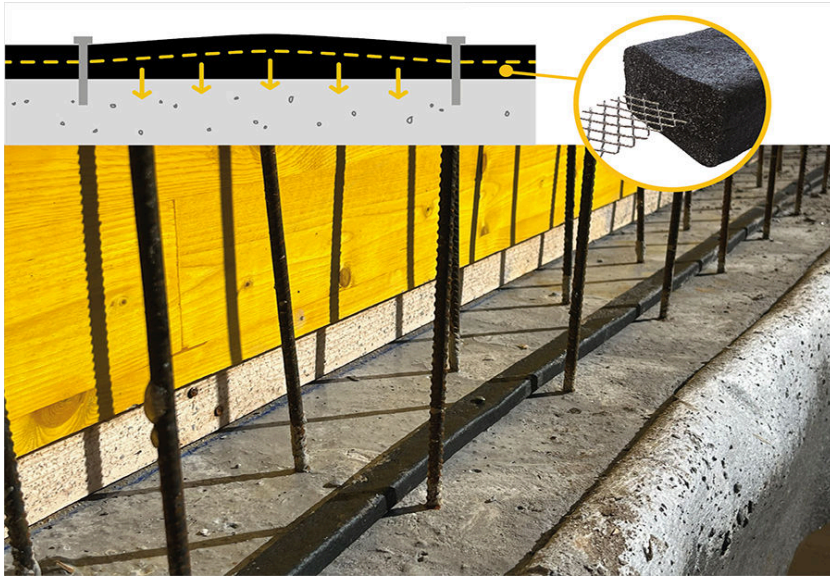




WT CONSTRUCTION

**WATERSTOP - HYDRO-EXPANDING
MASTICS**



PRODUCT DESCRIPTION

WT CONSTRUCTION is a HYDRO-EXPANSIVE profile based on AMPHIBIA copolymer in EPDM rubber, reinforced in the center with a CO-EXTRUDED steel MESH that stabilizes and directs the volumetric expansion.

PRODUCT APPLICATION

- To seal vertical and horizontal concrete construction joints

ADVANTAGES

- Versatile, adapts to various types of conditions, wet, rough, uneven, sloping, vaulted or ceiling supports, from -15°C to +50°C
- Quick and easy application by simply nailing
- Strong mechanical anchoring, does not shift during casting, impact-resistant
- Excellent adhesion to the substrate even during casting, adhesion increases as expansion increases in contact with water
- Maintains alignment during expansion
- Perfect sealing and high resistance to hydraulic load
- Resistant to rain, the profile maintains density
- Features excellent dimensional stability in the event of volume increases due to premature contact with water
- Contains microfibres, retains firmness and shape
- A special double curved shape, in version 25.05, increases the contact surface with the concrete

PREPARATION AND APPLICATION

Even out the fresh concrete along the profile application site with a straight edge or trowel.

Once the concrete has hardened, use BI MASTIC or AKTI-VO 201 hydro-expanding mastic (see relevant technical data sheets) in those sections where the application site still appears overly rough to even out the surface. Do not even out the application site with mortar.

Spread WT CONSTRUCTION on the installation surface, previously cleaned of dust and loose material, with the protective paper facing upwards, then remove it and proceed with fixing the profile **with nails every 15 cm**.

In case of "T" or "head-on-head" joining, nailing must be performed close up (see FIG. 2).

Any gaps on the joints must be filled with AKTI-VO 201 or BI MASTIC (see FIG. 3).

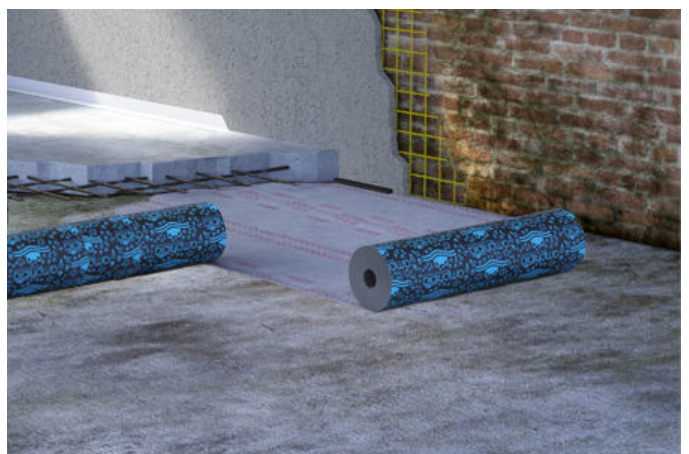
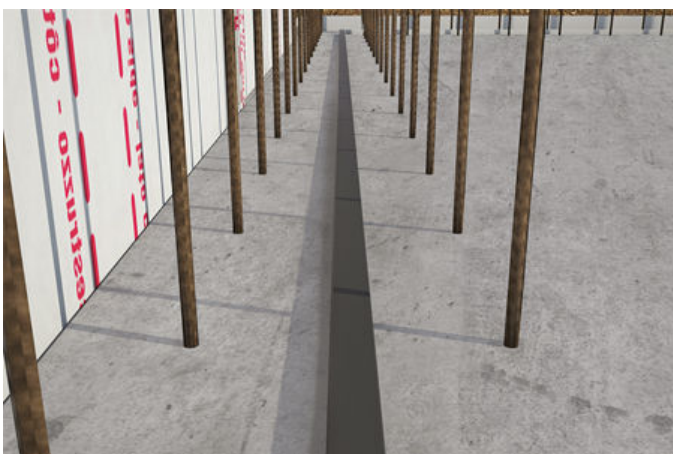
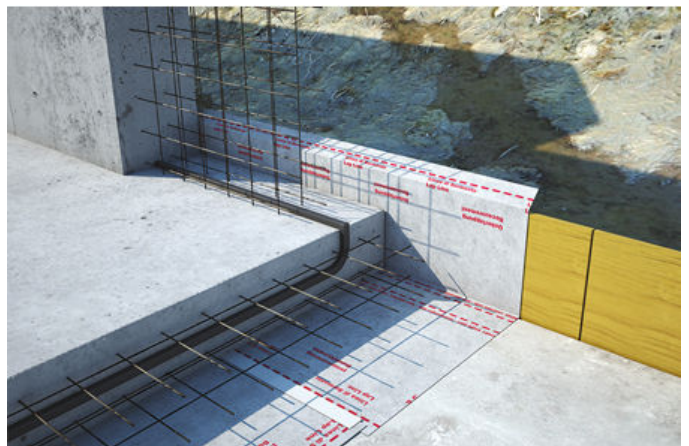
Alternatively, the joints may be performed by means of heat-welding of the heads (hairdryer).

How it works

The integrated design of hydro-expansive material, nails and mesh ensures anchorage: the matrix, activated by water, seals irregularities and generates through the mesh a 'tie-rod' effect between nails, increasing contact pressure and stabilising the profile.

WT CONSTRUCTION, in contact with water, can increase the initial volume by up to 5 times while maintaining the density and adapting the shape to the small gaps that are often present in concrete castings.

WT CONSTRUCTION ensures the sealing of construction joints, even when subjected to considerable hydraulic pressure.



PACKAGING AND STORAGE

WT CONSTRUCTION is available in the following formats:

WT C 20.10 is packaged in a cardboard box containing 30 m complete with nails for fastening.

WT C 25.15 is packaged in a cardboard box containing 21 m complete with nails for fastening.

WT C 25.05 is packaged in a cardboard box containing 45 m complete with nails for fastening.

The products must be stored in a dry place protected from sun and humidity.

WARNINGS - IMPORTANT NOTES

WT CONSTRUCTION must be fixed to the substrate with the appropriate nails every 15 cm to ensure the stability of the profile in the precast phase and its final performance.

WT CONSTRUCTION cannot be used as a dilatation joint.

WT CONSTRUCTION must be used on walls that are thick enough to guarantee a minimum cover of 8 cm on the sides.

WT CONSTRUCTION must be placed on the application surfaces, ensuring no material remains between the product and the surface itself.

Spacers or tie rods of the vertical casting must be placed at a minimum distance from the horizontal plane, of no less than 5÷10 cm (see FIG. 1).

PLEASE NOTE: Contact the Volteco Laboratory for any preventive tests when applying the product in the presence of water with a high salt concentration.

PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values
Specific weight	1.02 g/cm ³
Application temperature	-15°C +50°C
Colour	black

WT CONSTRUCTION 20.10 - 25.15

Feature	Test method	Result/Classification
Reaction to fire	EN ISO 11925-2 EN 13501-1	Class E
Dimensions WT C 20.10 WT C 25.15	EAD 2.2.2	20x10 mm (± 10%) 25x15 mm (± 10%)
Impermeability under end-use conditions	EAD 2.2.3	20 m water column / waterproof up to 5 bar
Swelling pressure WT C 20.10 WT C 25.15	EAD 2.2.6	1.2 N/mm ² 1.4 N/mm ²
Expansion in saline water (3%)		> 100%
Hydraulic seal on 5 mm crack with expansion of 100%		No passage up to 150 kPa

Feature	Test method	Test liquid	Time until constant mass is achieved	Change in mass
Expansion in contact with different liquids	EAD 2.2.4	Deionised water	25 d	1004 %
		Alkaline solution	14 d	455 %
		Acid solution	24 d	474 %
First expansion cycle Reversibility of the expansion process	EAD 2.2.5	Deionised water	16 d	1794 %
		Alkaline solution	16 d	479 %
		Acid solution	23 d	503 %
Second expansion cycle Reversibility of the expansion process	EAD 2.2.5	Deionised water	14 d	1855 %
		Alkaline solution	14 d	419 %
		Acid solution	21 d	436 %

- the expansion process is reversible
- the expansion process begins immediately

WT CONSTRUCTION 25.05

Specification	Declared performance
Colour	black
Specific weight	1.02 g/cm ³
Application temperature	-15°C + 50°C
Dimension	25 x 5 mm
Weight	170 g/m (± 10%)
Expansion in mains water (%)	> 500%
Expansion in saline water (3%)	> 100%

WATCH VIDEOS AND INSIGHTS

Safety Data Sheets

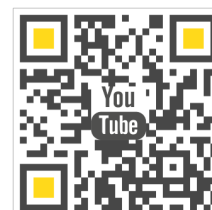
Declaration of performance

Specifications

Technical drawings and BIM

EPD Declaration

YouTube Video



SAFETY

Refer to the related Safety Data Sheet.

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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.

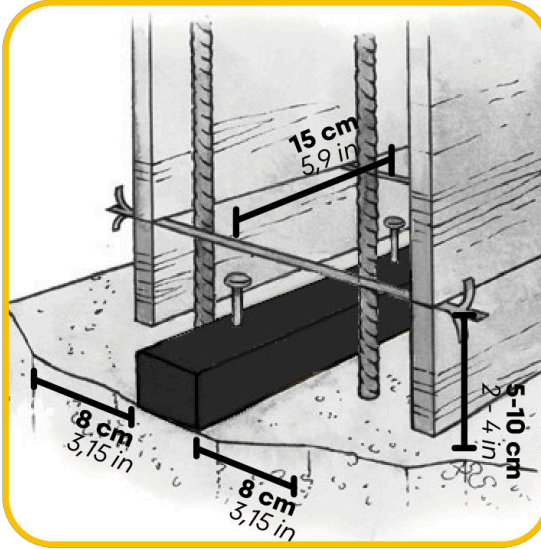
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It may vary and the installer is therefore required to update his/her information prior to each application by referring to www.volteco.com.

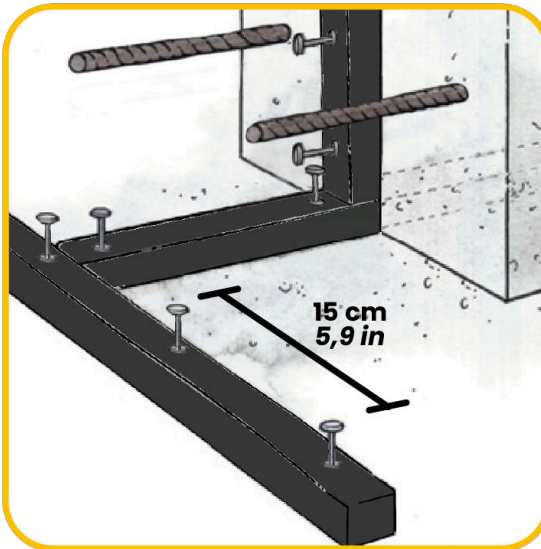
The above clarifications extend to the pre-post-sales technical/commercial information of the commercial network.

ANNEXES

1



2



3

