



# BLOCKTEK EPOXY

Ready-to-use epoxy resin for structural chemical anchors



## DESCRIPTION

BLOCKTEK EPOXY is a pure epoxy resin used to make chemical anchors. The product has the seismic qualification according to the European Guideline EOTA ETAG-001 Annex E-C2.

## FEATURES

BLOCKTEK EPOXY is a two-component resin that has the seismic qualification according to the European Guideline ETA ETAG-001 Annex E-C2, and is indicated for structural use being in accordance with Ministerial Decree 14/01/2008. It is a resin that can be applied in the presence of water and fire resistant. The product is approved for fixings with variable anchoring depth, for high flexibility in the design phase. BLOCKTEK EPOXY is approved for a wide range of threaded bars (from M8 to M30) and bars with improved adhesion (diameter from 8 mm to 32mm).

BLOCKTEK EPOXY presents a double ETA certification (European Technical Assessment) for post-installed connections in accordance with Eurocode 2 and TR023 with a maximum allowable depth of 2500 mm, certified installation both with drill and with drilling machine (dry / wet).

Based on the data and characteristics present, Option 1 is valid for installation in cracked concretes with bars from M12 to M24 and Option 7 for bars from M8 to M30 for non-cracked concrete. The certified operating temperatures are in the ranges  $-40^{\circ}\text{C}/+40^{\circ}\text{C}$  ( $T^{\circ}$  max long period =  $24^{\circ}\text{C}$ ) and  $-40^{\circ}\text{C}/+80^{\circ}\text{C}$  ( $T^{\circ}$  max long period =  $50^{\circ}\text{C}$ ). The product has the advantage of being able to be used with wet concrete or in a flooded hole without doubling the time for loading.

## APPLICATIONS

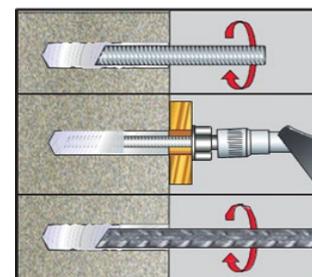
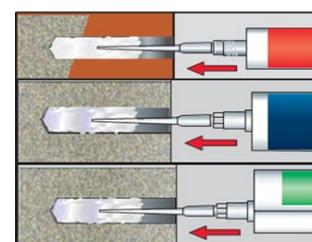
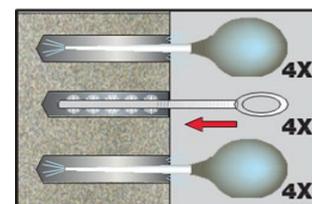
BLOCKTEK EPOXY is used to make chemical anchors subjected to heavy loads in the field of civil and industrial construction and in the electrical, hydraulic and tinsmithing sectors. The materials are:

- Stone
- Full brick
- Wood
- Concrete

BLOCKTEK EPOXY is suitable for anchorages in underwater applications and in structural consolidation and recovery. The installation procedure consists in verifying that the surface is dry, free of oil and other contaminants and in making the hole (checking its perpendicularity) with a roto-percussion drill or only rotation.

With compressed air it is recommended to leak dust and other residual material and to clean the side surface of the hole with a special metal brush.

Prepare the instrumentation by unscrewing the cap of the chosen cartridge, screw the mixer and insert the cartridge into the pump extruding a first part of the product making sure that: through the mixer (transparent) the product flow is composed of part A (white color) and part B (black color) and that the two components are completely mixed. Complete mixing is achieved when the product, obtained from the union of the two components, comes out from





the mixer with uniform color. Only then is the cartridge ready for use. In this phase it will be necessary to extrude the BLOCKTEK EPOXY resin in the prepared hole until it is filled for 2/3.

In case of perforated material insert the plastic cage. Use a threaded bar cut at 45° at the end towards the hole and insert the bar with a rotary movement to facilitate the escape of air bubbles. Depending on the temperature of the substrate varies the processing time of the resin and the waiting time for loading, the minimum temperature for the application is 5 ° C.

If you are in the presence of a support temperature of 30 ° C, the installation time and workability will be 20 min and before loading will have a wait of 12h. In the case of a support temperature of 10 ° C the working time will be equal to 1 h 40 'while the wait for loading will be 28 h.

## PHYSICAL PROPERTIES

Composition	Vinyl resin	
EPOXY 21 cartridges	470 ml	265 ml
Number of fixings (M8 Foro:10x85mm):	± 89	± 50
Number of fixings (M30 Foro:35x275mm):	± 3	± 1,5

## INSTALLATION DATA

Bar type $\geq 5,8 - A4/70$	M8	M16
Min substrate thickness $h_{min}$ (mm):	100	116
Hole diameter $d_0$ (mm):	10	18
Hole depth $h_1$ (mm):	65	85
Depth of insertion $h_{nom}$ (mm):	60	80

## LOAD DATA

Bar type $\geq 4,6/A2-70/A4-70$	BRICK	WOOD
Tension load $N_{rec} / \varnothing$ bar M8 (kN):	2,0	3,2
Traction load $N_{rec} / \varnothing$ bar M16 (kN):	4,0	10,7
Shear load $V_{rec} / \varnothing$ bar M8 (kN):	3,0	Rif. CNR-DT 206/2007
SHEAR LOAD $V_{rec} / \varnothing$ bar M16 (kN):	4,2	(7.10.2.3)

Bar type: B450C, BST500	CONCRETE
Traction load $N_{rec} / \varnothing 12$ (kN):	14,0
Traction load $V_{rec} / \varnothing 12$ (kN):	17,4

Bar type: $\geq 5,8$	CONCRETE
Traction load $N_{rec} / M16$ (kN):	16,8
Traction load $V_{rec} / M16$ (kN):	23,3

## PACKAGING

265 ml cartridges

## VALIDITY

The product has a shelf life of 24 months, if stored in a cool and dry place protected from frost and heat sources at a temperature ranging between + 5 ° C and + 30 ° C.

## WARNINGS

In the presence of a flooded hole it is recommended to reduce the load to be applied by 20%.

The cutting action is not directed towards the edge.

The loads are valid for single anchor without the influence of the wheelbase and distance from the edge and  $h \geq h_{ef}$  with overall safety coefficient included and a load side coefficient used equal to 1.4.

It is recommended to use hand and face protection devices.



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For the installation of the bar and the subsequent loading, respect the relative installation times specified in the technical sheet and on the product label.

Before loading, check the hardening of the product.

Subsequently, the cartridge can be reused by replacing the mixer with a new one. Always remember to extrude a part of the product before applying. Load data are recommended for applications on base materials (brick and wood) of medium mechanical characteristics.

Given the variety of masonry and/or wood substrates for applications on substrates other than those considered, the load values must be obtained through appropriate in situ tests.

## LEGAL NOTICES

The information contained in this technical data sheet, while representing the most advanced stage of knowledge, does not exempt the user from carrying out accurate preliminary tests in their own conditions of use and operation. We therefore decline any responsibility for improper use of the product.

