



Rev 0
12/21



BLOCKTEK VE

Vinyl resin for chemical anchors



DESCRIPTION

BLOCKTEK VE is a two-component vinyl ester resin used for chemical anchors. The product complies with Ministerial Decree 14/01/2008 and according to the EC2 Eurocode.

FEATURES

BLOCKTEK VE is a styrene-free resin, able to be applied in the presence of water and fire resistant. You can use the product in the presence of dry, wet concrete and flooded hole (for threaded bars). The hardening reaction of the product occurs even in the presence of water. The product is approved for fixings with variable anchoring depth (60 mm and 480 mm), for high flexibility in the design phase and for a wide range of threaded bars and bars with improved adhesion. The resin has the ETA-09/0246 for bars with improved adhesion (with a diameter from 8mm to 32mm) to make post-installed connections in reinforced concrete with a reduction of the minimum anchoring depth. The operating temperatures are in the ranges: -40°C/+40°C (T° max long period = 24°C), -40°C/+80°C (T° max long period = 50°C), -40°C/+120°C (T° max long period = 72°C). Waiting times are reduced for loading with support temperatures ranging from a minimum of -10°C up to +40°C.

Based on the data and characteristics present, Option 1 is valid for installation in cracked concretes with bars from M10 to M20 and Option 7 for bars from M8 to M24 for non-cracked concrete.

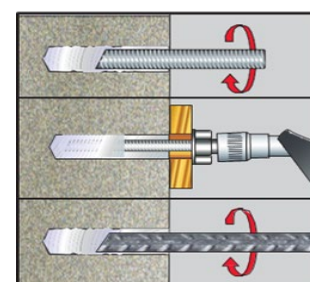
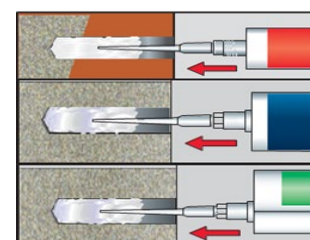
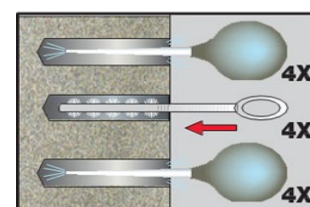
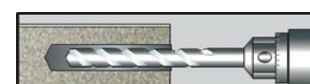
APPLICATIONS

BLOCKTEK VE 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;
- Perforated and semi-filled brick;
- Wood;
- Concrete;

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 rotary percussion drill or only rotation. With compressed air it is recommended to let out dust and other residual material and to clean the side surface of the hole with a special metal brush. In the case of use of 300 ml unscrew the cap, remove the metal clip by inserting the plastic extractor slot into the slot, pull the extractor to remove the metal clip closing the bag. Screw the mixer, insert the cartridge into the pump.

Prepare the instrumentation by unscrewing the cap of the chosen cartridge, and 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 VE resin in the prepared hole until it is filled for 2/3.



TECHNICAL DATA SHEET



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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. Insert the bar with a rotary movement to facilitate the escape of air bubbles. Depending on the temperature of the support varies the workability 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 humid support temperature of 30 ° C, the installation and workability time will be 3 min and before loading will have a wait of 1h. In the case of dry support temperature equal to 30 ° C the workability time will be equal to 3 min while the wait for loading is less and equal to 30min.

PHYSICAL PROPERTIES

Composition	Vinyl resin	
V-PLUS cartridges	400 ml	300 ml
Number of fixings (M8 hole:10X90mm):	± 72	± 54
Number of fixings (M24 hole:28X215mm):	± 5	± 4

INSTALLATION DATA

Bar type $\geq 5,8 - A4/70$	M8	M16
Min substrate thickness h_{min} (mm):	100	136
Hole diameter d_0 (mm):	10	18
Hole depth h_1 (mm):	65	105
Depth of insertion h_{nom} (mm):	60	100

LOAD DATA

Bar type $\geq 4,6/A2-70/A4-70$	Brick	Wood
Tension load N_{rec}/ϕ bar M8 (kN):	2,0	3,2
Tension load N_{rec}/ϕ bar M16 (kN):	4,0	10,7
Shear load V_{rec}/ϕ bar M8 (kN):	3,0	Rif. CNR-DT 206/2007 (7.10.2.3)
Shear load V_{rec}/ϕ bar M16 (kN):	4,2	
Bar type: B450C, BST500	Concrete	
Tension load $N_{rec}/\phi 12$ (kN):	14,0	
Tension load $V_{rec}/\phi 12$ (kN):	17,4	
Bar type: $\geq 5,8$	CALCESTRUZZO	
Tension load $N_{rec}/M16$ (kN):	24,0	
Tension load $V_{rec}/M16$ (kN):	23,3	

PACKAGING

300 ml and 400 ml cartridges.

VALIDITY

The product has a shelf life of 12 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 $h \geq 2h_{ef}$, with overall safety coefficient included and a coefficient on the load side used equal to 1.4. It is recommended to use hand and face protection devices.

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 basic 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.

