

pens ANCLAJE-Q70®

vinylester

Technical Data Sheet

pens ANCLAJE-Q70® is a styrene and solvents free Bi-component anchoring adhesive, designed to fix threaded rods and typical construction rods in concrete, bricks or blocks among others in non-structural residential applications, its chemical formulation allows applications in dry, wet and even flooded holes.

Uses

pens ANCLAJE-Q70® has been designed for:

- Boilers fastening.
- Handrail fastening.
- Signals fastening.
- Lights fastening.
- Shelves fastening.
- Benches fastening.
- Supports fastening in hollow block.
- Air conditioning fastening.
- Marine Ladder fastening.

Advantages

- Better resistance than expansion plugs.
- Smaller distance between anchors comparing with expansion plugs.
- Smaller distance at the edge comparing with expansion plugs.
- Requires a smaller substrate's thickness comparing with expansion plugs.
- Allow overhead applications.
- High shear strength.
- It does not contract.
- It could be applied in hollow brick.
- Fast curing.

Maintenance

- The product does not require any maintenance.

Precautions

- Use safety glasses when applying the product.
- Use gloves when applying the product.
- Keep out of the reach of children.

Limitations

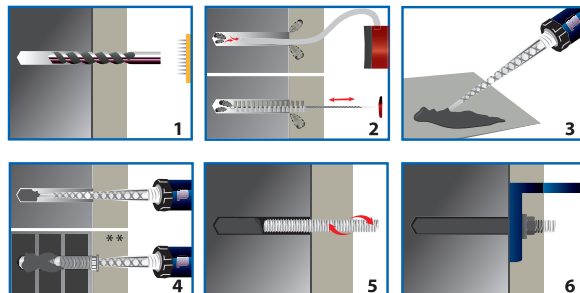
- Do not apply structurally.
- Do not apply on smooth materials.
- Do not apply on wood.

Application

- 1) Drill the hole with the correct diameter and depth. Check the installation parameters table. This could be done with a rotary percussion or rotary hammer drilling machine depending upon the substrate.
- 2) Thoroughly clean the hole with a brush with the necessary extension and a source of clean compressed air. For boreholes of 4cm or less, it could be used a manual cleaning blow pump. Clean 2 times with the pump, clean 2 times with the brush, then clean again with the pump 2 times and clean again 2 times with the brush, finally clean with the pump twice. If the hole has water, the current best practice is to eliminate the standing water before cleaning the hole and inject the adhesive. Ideally, the adhesive shall be injected in a dry and perfectly clean hole.
- 3) Select the proper mixing nozzle for the installation, remove the cap of the upper part of the cartridge and screw the nozzle in the upper part of the cartridge.
- 4) Insert the cartridge in a caulking gun with a minimum thrust ratio of 16:1. Extrude the first parts of the cartridge until achieving a uniform color of the adhesive. Insert the mixing nozzle in the lower part of the hole. Start extruding the resin and slowly remove the mixing nozzle from the borehole, making sure that there aren't air voids when removing the mixing nozzle. Fill the hole approximately $\frac{1}{2}$ to $\frac{3}{4}$ of its depth and remove the nozzle completely.
- 5) Slowly insert the clean threaded rod, free from oil or other agents, insert the rod to the end of the hole with a clockwise turning movement and counterclockwise, making sure that all the threads are covered by the product. Adjust to the correct position within the working time indicated. Any resin excess will be expelled from the hole uniformly around the steel element, this shows that the hole is full. This resin excess shall be eliminated around the mouth of the hole before it hardens. Allow the anchor to cure or harden. Do not move the anchoring until the curing or working time has elapsed, according to the substrate conditions and ambient temperature, check the drying time table.
- 6) Fasten the accessory and tighten the nut at the recommended torque.

NOTE:

During the curing time the rod shall not be moved or submitted to load.



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03-2023 (replaces all previous ones)

pens ANCLAJE-Q70®



Handling time and load

CARTRIDGE TEMPERATURE	HANDLING TIME	BASE MATERIAL TEMPERATURE	LOADING TIME
+30°C	4 minutes	+30°C to +35°C	35 minutes
+25°C a +30°C	4 minutes	+25°C to +30°C	40 minutes
+20°C a +25°C	5 minutes	+20°C to +25°C	50 minutes
+10°C a +20°C	6 minutes	+10°C to +20°C	85 minutes
+5°C a +10°C	10 minutes	+5°C to +10°C	145 minutes
Menos de +5°C	18 minutes	less than +5°C	145 minutes

Performance

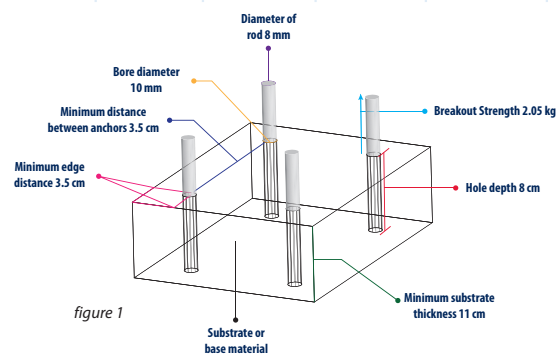
CONSUMPTION IN MILLILITERS (ML)

DIAMETER OF THE ROD IN MM	DIAMETER OF THE DRILL IN MM	DEPTH OF THE BOREHOLE IN MM											
		80	90	110	120	130	140	150	160	170	180	190	200
8	10	3	4	4	5	5	5	6	6	6	7	7	7
10	12	4	5	5	6	6	6	6	6	8	8	8	8
12	14	5	6	6	6	7	7	8	8	8	9	9	10
14	18	9	10	11	14	12	15	18	18	19	20	21	22
16	18	9	10	11	13	14	15	16	17	18	19	20	21
20	24	12	13	14	15	16	18	20	22	24	26	27	28
24	26	24	25	28	30	33	35	38	40	43	45	48	50

Installation parameters for threaded rods

ROD DIAMETER IN MM.	BOREHOLE DIAMETER IN MM.	CLEANING BRUSH DIAMETER IN MM.	BOREHOLE DEPTH IN CM.	MINIMUM THICKNESS OF SUBSTRATE IN CM.	MAXIMUM TORQUE IN NM.	RESISTANCE IN KG.	MINIMUM DISTANCES BETWEEN ANCHORING POINTS IN CM.	MINIMUM DISTANCE TO THE EDGE OF SUBSTRATE IN CM.
* 8	10	14	8	11	10	2,050	3.5	3.5
8	10	14	9.6	12.6	10	2,460	5	5
10	12	14	10	13	20	2,562	4	4
10	12	14	12	15	20	3,075	6	6
12	14	20	12	15	40	4,152	5	5
12	14	20	14.4	17.4	40	4,978	7	7
16	20	20	16	19.2	80	7,790	6.5	6.5
16	20	20	19.2	22.4	80	9,348	9.5	9.5
20	22	29	17	21	150	10,890	8	8
20	22	29	24	28	150	13,070	12	12
24	26	29	21	25.8	200	13,724	96	96
24	26	29	28.8	33.6	200	18,820	14.5	14.5

* See reference example in figure 1



Sizes and Colors



Approvals and tests

ETA-EAD 330499-00-0601 for uncracked concrete.

ETA-EAD 330076-00-0604 for hollow block installations.

ETA-EAD 330087-00-0601 systems for post installed rebar connections with mortar (for post-installed reinforce rebars from 8mm up to 20mm).

A+ classification according to French V.O.C emissions standards.

LEED 2009 EQ rule SCAQMD1168 (2005)

Shelf Life

12 months in a fresh and dry storage, in its original packaging with temperatures of +25 °C (41 °F) to +25°C (77 °F).

Technical Support

Productos Pennsylvania's Technical Support is at your service, assisting you with:

Guidance in how to apply this or any of our products.

Blueprint reviews.

Joint dimension calculus.

Compatibility and adhesion testing of our sealants with different materials.

NOTE:

Productos Pennsylvania S.A de C.V. provides technical assistance when required. Please contact our Technical Department regarding use and application of this product. It is the user's responsibility to test the product and its uses before application.

