

ANCHOR VE ETA

CERTIFIED ADHESIVE FOR FAST ANCHORING ALSO UNDER WATER

Certified ETA (European Technical Approval) two-component chemical anchoring adhesive. It is designed for quick fixing of heavy loaded anchors. It is particularly advantageous for fixings in damp environments or with chemical exposure.

PROPERTIES

- ETA tested for an anchor life of 50 years.
- For internal and external use.
- Fast curing.
- Also suitable at low temperatures, even down to -10 °C, cartridge stored at 20 °C.
- High adhesive strength, so it can withstand high loads.
- Useful in wet and dry concrete.
- Simple extrusion and injection.
- Suitable for materials that are constantly under water.
- Good chemical resistance.
- Fireproof (R240).
- It does not slide on vertical surfaces.
- It does not drop, you can use it above head.
- Solvent and styrene free.
- Almost odorless.
- Temperature resistant from 40 °C to 80 °C.
- It makes a waterproof barrier.
- Suitable for cracked and uncracked concrete.
- Small shrinkage during curing, so adhesive is suitable for filling larger holes.
- Also useful for drinking water.
- VOC content: A +.

TESTS AND CERTIFICATES

ETA in accordance with ETAG 001 Part 1 and Part 5, Steel elements according to annex 3 and 4 +

CE mark

AREA OF USE

- For chemical anchoring of very and normally loaded reinforcing bars in stone, concrete, lightweight concrete, brick, wood.
- For heavy loads and materials that are constantly under water.
- As a repair mortar or adhesive for concrete elements.
- As an adhesive for facade elements, wooden structures, metal structures, consoles, fences, sanitary fittings, pipes.





- The adhesive does not swell during curing and is therefore suitable for loads placed near facilities' edges.
- Suitable for fixing doors, fences, blinds, antennas, consoles, cable reinforcement, and industrial machines.

TEHNICAL DATA

Fresh adhesive

Curing mechanism: chemical reaction

Appearance:

A component - light gray paste
B component - black paste
mixture - gray paste

Bonding time/curing time:								
Surface temperature during installation	Bonding time	Minimum curing time in dry concrete **						
−10 °C*	50 min	240 min						
−5 °C*	40 min	180 min						
5 °C	20 min	90 min						
15 °C	9 min	60 min						
25 °C	5 min	30 min						
35 °C	3 min	20 min						

^{*} Adhesive temperature must be at least 20 °C.

Full curing after 24 h.

Cured adhesive

	Standard	MPa (N/mm²)			
Compressive strength	EN ISO 604 / ASTM 695	73,0			
Flexural strength	EN ISO 178 / ASTM 790	25,0			
Flexural module	EN ISO 178 / ASTM 790	3850,0			
Tensile strength	EN ISO 527 / ASTM 638	14,6			
E Modulus	EN ISO 527 / ASTM 638	8029,7			
VOC Content		A+			

INSTRUCTION FOR USE

• Mortar and concrete must be older than 28 days. The bore must not be greasy and it has to be thoroughly cleaned with a brush and blown out with air.

Dimensioning bores for anchor screws:									
Anchor	M8	M10	M12	M16	M20	M24	M27	M30	M36
Anchor diameter (mm)	8	10	12	16	20	24	27	30	36
Bore diameter (mm)	10	12	14	18	22	28	30	35	40
Bore depth (mm)	80	90	110	125	170	210	240	280	340
Distance from edge (mm)	80	90	110	125	180	220	240	280	333
Spacing between anchors (mm)	160	200	240	320	400	460	540	560	660
Recommended load in concrete C20/25 kN – tensile	9,07	14,36	20,86	32,31	49,85	63,33	73,68	86,71	117,19
Recommended load in concrete C20/25 kN – shear	5,14	8,57	12,00	22,29	34,86	50,29	65,71	81,43	121,43

 $[\]ensuremath{^{**}}$ Minimum curing time in wet concrete is doubled.



Installation of anchors in massive materials - stone, concrete:

- Drill the bore with an impact drill perpendicular to the surface to the required bore depth.
- Clean the bore well with a round brush, which has a larger diameter than the bore, and blow it out with air.
- We can use a hand pump. Blow out at least 4 times from the bottom of the bore.
- Unscrew the cap, pull the foil from the cartridge (for 300ml only), cut it off at the cartridge thread. Screw the static mixer tightly onto the cartridge. Make sure both components are in a static mixer.
- Place the cartridge in the gun and start squeezing. The adhesive is well mixed when it is of a uniform grey colour. The first 10 cm of the mass must not be used for anchoring.
- Fill the bore from the bottom to the top.
- Fill approx. 2/3 of the bore, but ensure that the entire space between the wall and the anchor along the entire depth is filled.
- Make sure the anchor is dry and clean.
- The anchor is pressed into the filled bore while turning it slowly and the adhesive must come out of the bore on the side. Remove excess adhesive.
- Care must be taken to insert the anchor before the open time has elapsed.
- The anchor must not be moved or loaded during curing.

Installation of anchors in hollow bricks:

- Drill the holes with a suitable drill.
- Clean the bore well with a round brush, which has a larger diameter than the bore and blow it out with air
- Insert a sleeve with holes of appropriate diameter and length into the bore.
- We do the same as above, except that we fill the entire sleeve with adhesive.

PACKAGING

• 300 ml cartridge.

STORAGE

18 months at a temperature between +5 °C to +25 °C in the original sealed packaging. Do not expose to direct sunlight.

HEALTH, SAFETY, HANDLING AND DISPOSAL INFORMATION

Additional safety information, safe handling instructions, information on personal protective equipment, and disposal information can be found in the safety data sheet. The safety data sheet is available on request. You can also obtain a copy from your TKK sales representative.

WARNING

The instructions are based on our tests and practical experience. However, due to specific conditions and working methods we recommend preliminary tests for each application.

