

TEKAFIX ANCHOR VE PLUS

PROPERTIES

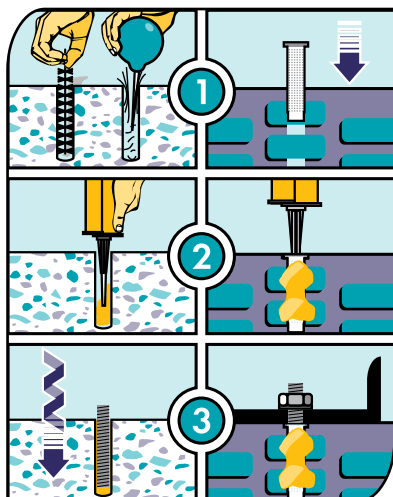
- ETA tested based on the life of the anchor of 50 years.
- Ideal for indoor and outdoor usage.
- Fast curing.
- Can also be used at low temperatures, up to -10°C.
- High bond strength with high load resistance.
- Suitable for application both in dry and wet concrete.
- Suitable for materials which are constantly under water.
- Good chemical resistance.
- Fire rated (R180).
- Does not slump on vertical surfaces.
- Does not drip; can be used on over-the-head surfaces.
- Solvent and styrene free.
- Low odour.
- Resistance to temperatures ranging between -40 and +80°C.
- Makes a water-resistant barrier.
- Suitable for both non-cracked and cracked concrete.
- Low shrinkage enables large diameter installations.
- Suitable for applications involving potable water.
- A+ Rating VOC content.

TESTS AND CERTIFICATES

ETAG 001 part 1 and part 5,
Steel elements according to Annex 3 and 4 of ETA 15/0820 CE mark

USE

- For fastening anchors supporting very heavy and normal loads in stone, concrete, lightweight concrete and bricks.
- For heavy loads and materials which are constantly under water (ports, tunnels).
- Used as sanitation mortar or adhesive for concrete components.
- Used as adhesive for façade components, wooden and metal constructions, brackets, fences, sanitary implements, pipes, blinds.
- The adhesive does not expand during hardening and is therefore appropriate for loads placed near facilities' edges.
- Used for structural hardening of bars and mounting of bolts in newly erected buildings or renovations of prefabricated concrete components.



Tekafix Anchor VE Plus

is ETA certified two component chemical anchoring system. Styrene free. It is designed as a fast curing high strength resin fixing anchor for very high loads and critical and overhead fixing especially in corrosive environments, or damp conditions.



TECHNICAL DATA

Uncured sealant:

Hardening mechanism	chemical reaction
Appearance	Component A – light grey Component B – black paste Mixture – grey paste

Working and curing time

Substrate temperature (°C)	Working time (min)	Min. curing time in dry concrete (min)	Min. curing time in wet concrete (min)
-10*	50	240	X2
-5*	40	180	X2
5	20	90	X2
15	9	60	X2
25	5	30	X2
35	3	20	X2

* Cartridge temperature must be at least 20°C; full cure: 24 hours

Hardened sealant

	Standard	MPa (N/mm ²)
Compressive Strength	EN ISO 604/ASTM 695	73,0
Flexural Strength	EN ISO 178/ASTM 790	25,0
Flexural Modulus	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+ Rating

APPLICATION

Surface preparation

Mortar and concrete must be older than 28 days. The borehole must be dry, fat free and thoroughly cleaned with a brush and blown out with compressed air.

Threaded rods – Installation parameters

Anchor	M8	M10	M12	M16	M20	M24	M27	M30	M33	M36
Φ anchor diameter (mm)	8	10	12	16	20	24	27	30	33	36
Φ borehole diameter d ₀ (mm)	10	12	14	18	24	28	32	35	37	40
Borehole depth (mm)	80	90	110	125	170	210	240	280	310	330
Minimum distance between anchors (mm)	80	90	110	125	180	220	280	80	620	660
Minimum distance from the edge (mm)	40	50	60	80	100	120	135	150	165	180
Max Torque T _{inst} (Nm)	10	20	40	80	120	160	180	200	250	300
Recommended Load (kN) Tensile strength	9,07	14,36	20,86	32,31	49,85	63,33	73,68	86,71	97,75	117,19
Recommended Load (kN) Shear strength	5,14	8,57	12,0	22,29	34,86	50,29	65,71	81,43	121,43	121,43
Max Torque Tinst (Nm)	10	20	40	80	120	160	180	200	250	300
Minimum element thickness (mm)	130	140	160	175	220	260	290	350	380	410

Installation parameters into massive materials like stone or concrete

- Drill a hole in the substrate to the required embedment depth using the appropriately sized carbide drill bit.
- Clean the borehole thoroughly with a round brush with a diameter bigger than that of a borehole and blow it out with air.
- Use a manual pump. Blow out at least 4 times from the back of the bore hole.
- Remove the threaded cap from the cartridge. Pull out the foil bag (only for 300ml) and cut it near to the thread.
- Insert the cartridge into the dispenser gun. Discard the initial trigger pulls of adhesive. Discard the first 10ml of resin.
- Inject the adhesive starting at the back of the hole.
- Fill holes approximately 2/3 full, to ensure that the annular gap between the anchor and the concrete is completely filled with adhesive along the embedment depth.
- Before use, verify that the threaded rod is dry and free of impurities.
- While turning the anchor slowly place it into the filled up borehole. The adhesive should come out at the side. Remove any excessive amounts of adhesive.
- Install the threaded rod to the required embedment depth during the open working time.
- The anchor can be loaded after the required curing time.

Installation parameters into hollow wall

- Drill a hole in the substrate to the required embedment depth using the appropriately sized carbide drill bit.
- Clean the borehole thoroughly with a round brush with a diameter bigger than that of a borehole and blow it out with air.
- Use a manual pump. Blow out at least 4 times from the back of the bore hole.
- Insert the sleeve of suitable dimensions.
- Repeat the above steps, only insert the mixer to the end of the sleeve and start injecting the resin until the sleeve is completely full.

PACKING:

- 300ml Foil Bag Cartridges (12 pcs per carton)
- 400ml Coaxial Cartridges (12 pcs per carton)

STORAGE:

12 months in a dry, cool place at temperature between +5 and 25°C, in the originally sealed packaging. Do not expose to direct sunlight.

HEALTH, SAFETY, HANDLING AND DISPOSAL INFORMATION

Additional information on safety, safe handling instructions and personal protective equipment as well as disposal information are available in a safety data sheet. Safety data sheet is available upon request. You can also ask your TKK distributor for a copy.

ATTENTION

Instructions contained in this document are based on our research and experience, however, due to specific conditions and working methods we recommend that you perform preliminary tests prior to any application of our products.