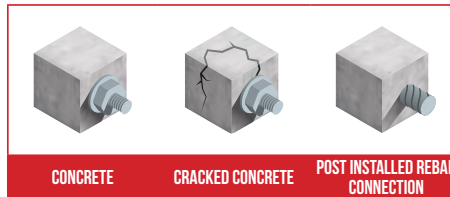


VINYLESTER CHEMICAL RESIN WINTER CONDITIONS



FEATURES

Vinylester styrene-free resin

Used with :

- M8 to M30 zinc-plated and A4-70 stainless steel threaded rod.
- Ø8 to Ø32 reinforcing bars
- Ø8 - Ø25 rebar connection

Advantages :

- Safe storage and use in temperatures down to -20°C
- ETA x 2 : Option 1 and Rebar
- M8 to M30 threaded rod and Ø8 to Ø32 reinforcing bars in cracked/non cracked concrete.
- Rebar connection (Ø8-Ø25)

- Very high mechanical resistance, including in aggressive atmospheres.
- Can be used under seismic conditions (C1 performance) for threaded rods (M8 - M30) and reinforcing bars (Ø8 - Ø32)
- Can be set into flooded holes (except sea water) : M8 to M16, rebar Ø8 to Ø16
- Fire resistant (F180)
- Low odour
- Temperature range :
 - From - 40°C to +80 °C for rebar connection
 - From - 40°C to +120 °C for threaded rod

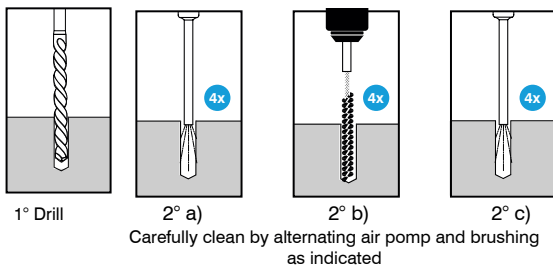
APPLICATION EXAMPLES

- Railings, Anchoring scaffolding
- Metal gantries, Hollow block
- Bracket anchors, Joist end plates

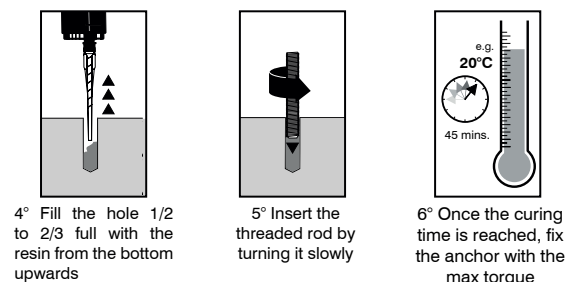


INSTALLATION

Concrete & solid brick



3° Attach the mixing nozzle to the cartridge. Before filling the hole, extrude first 5-10 cm out of the hole until the colour becomes evenly grey



CURING TIME

Concrete temperature	-20°C	-15°C	-10°C	-5°C	0°C	+5°C	+10°C
Maximum working time	1h15	55min	35min	20min	10min	6min	6min
Minimum Curing time on dry support	24h	16h	10h	5h	2h30	1h20	1h
Minimum Curing time on wet support	48h	32h	20h	10h	5h	2h40	2h

Cartridge temperature must be between -20° C and +10° C

THREADED RODS AND REINFORCING BAR RESIN : INSTALLATION DATAS

Concrete according to
ETA 10/0262



		M8	M10	M12	M16	M20	M24	M27	M30
Ø drill size (mm)	d_{cut}	10	12	14	18	24	28	32	35
Standard anchor depth (mm)	$h_{ef, mini}$	60	60	70	80	90	96	108	120
	$h_{ef, Standard}$	80	90	110	125	170	210	250	270
	$h_{ef, Maxi}$	160	200	240	320	400	480	540	600
Torque setting (N.m)	T_{Inst}	10	20	40	80	120	160	180	200

C_{min} : Minimum edge distance S_{min} : Minimum spacing
 C_{min} DISTANCE AUX BORDS MINI (mm) S_{min} ENTRAXE MINI (mm)

	M8	M10	M12	M16	M20	M24	M27	M30
S_{min}	40	50	60	80	100	120	135	150
C_{min}	40	50	60	80	100	120	135	150

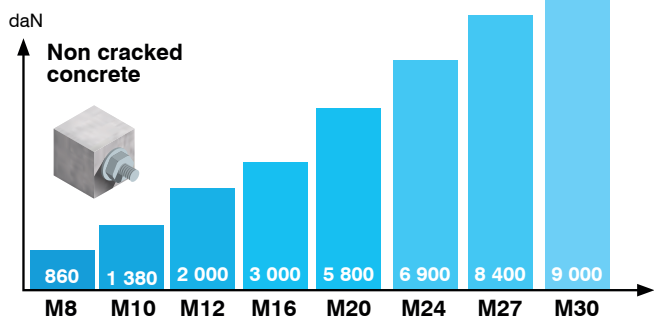
C_{min} MINIMUM EDGE DISTANCE (mm) S_{min} MINIMUM SPACING (mm)

	M8	M10	M12	M16	M20	M24	M27	M30
S_{min}	40	50	60	80	100	120	135	150
C_{min}	40	50	60	80	100	120	135	150

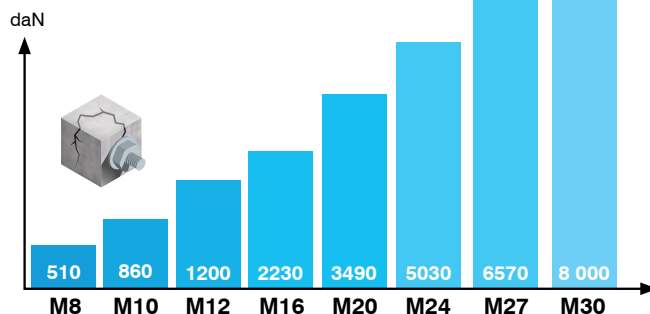
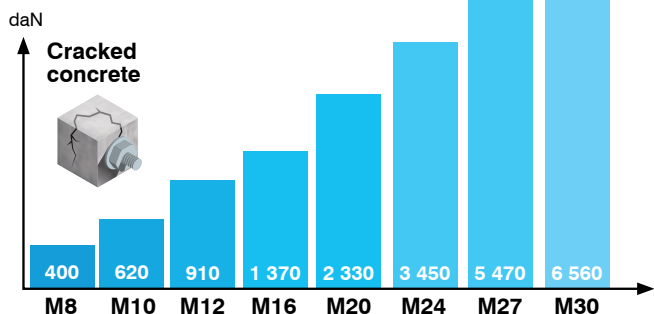
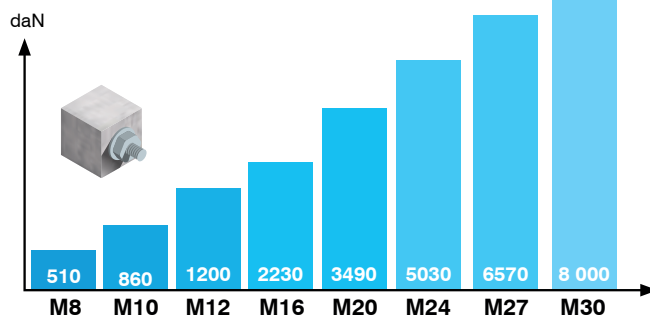
THREADED RODS AND REINFORCING BAR RESIN : RECOMMENDED LOADS

- Loads are calculated from characteristic values published in the ETA on which partial safety factors from the ETAG001 and a partial action f coefficient $\gamma_f=1.4$ are applied.
- Values are given for standard anchor depths, in C20/25 wet or dry concrete, for 1 temperature range (24°C/40°C) with 5.8 zinc plated steel threaded rod.

TENSILE LOADS



SHEAR LOADS



REBAR CONNECTION : INSTALLATION DATA AND RECOMMENDED LOADS

Data for HA H500B rebar connection, for spacing > 7 Ø and without edge influence with $\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 1$

Concrete according to
ETA 10/0256

		Ø8	Ø10	Ø12	Ø16	Ø20	Ø25
Ø drill size (mm)	d_{cut}	12	14	16	20	25	30
Minimum anchor length (mm)	$l_{db, mini}$	170	213	255	340	425	532
Standard anchor depth (mm)	$l_{db, std}$	270	340	410	550	690	860

