

A two component chemical anchoring injection system. A formulation derived from vinylester resin with high bond strength, developed principally to anchor threaded rods into concrete. Used widely for medium to high loads in both horizontal and vertical applications.

## CHARACTERISTICS

- Suitable for high loads within standard annulus and embedments.
- Fast working times for early loading in time sensitive applications.
- No styrene allows for use indoors and in enclosed spaces.
- Good durability formulation, resistance to chemicals.
- Approved for studs or rebar in uncracked concrete also Post Installed Rebar
- 10:1 resin available in a variety of cartridge types.
- Fixings in concrete, wood, or other high strength materials.

## APPROVALS / CERTIFICATIONS / TESTING

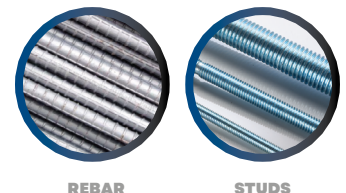
- 22/0328 - ETA EAD 330499-00-0601 Threaded Rods Option 1 cracked.
- 22/0328 - ETA EAD 330499-00-0601 M8-M24 Threaded Rods 8-25mm Rebar Option 7.
- 22/0381 - ETA EAD 330076-00-0804 M6-M12 Hollow Wall / Masonry Installations.
- 19/0102 - ETA EAD 330087-00-0601 - Post-Installed Rebar 8-12mm.
- CE Certified 1404-CPR-TBA - ZAG, Solvenia.
- Fire Approval in ETA
- WRAS Approved for use with Potable drinking water\* approval n o. 1810574
- LEED tested 2009 EQ c4.1 SCAQMD rule 1168 (2005.)
- VOC A+ Rating (Volatile Organic Content)



## PHYSICAL PROPERTIES

- Mixed Colour - Grey
- Density - 1.56 kg/m<sup>3</sup>
- Compressive Strength - 40.7 (MPa) (EN ISO 604)
- Tensile Strength - 7 N/mm<sup>2</sup> (EN ISO 527)
- Flexural Strength - 16.6 N/mm<sup>2</sup> (EN ISO 178)

410ml cartridge



REBAR

STUDS

## TYPICAL TENSILE PERFORMANCE - STANDARD EMBEDMENT DEPTH

Concrete, C20/25, 5.8 Grade Studding						
Size	Recommended Load (kN)		Spacing (Scr,N)	Drill Hole Ø	Fixing Hole Ø	Setting Depth
	Tension (Nrec)	Shear (Vrec)	(mm)	(mm)	(mm)	(mm)
M8	9.07	5.14	160	10	9	80
M10	14.02	8.57	200	12	12	90
M12	19.71	12.00	240	14	14	110
M16	29.92	22.29	320	18	18	125
M20	48.75	34.86	400	22	22	170
M24	69.12	50.29	480	28	26	210
M30	94.25	81.43	560	35	32	280

## TYPICAL PERFORMANCE IN AERATED CONCRETE

Characteristic values of resistance under tension & shear loads for Autoclaved Aerated Concrete. Compressive strength of material  $f_b > 6\text{MPa}$  Temp range  $-40$  to  $+40$  C degree. Vinylester ECO.

Size	Condition	d/d	w/w & w/d	d/d, w/w & w/d
	Hef (mm)	Tension (kN)	Tension (kN)	Shear (kN)
M8	80	2	1.5	5
M10	90	3	2.5	8
M12	100	4	3.5	8
M16	100	5.5	4.5	8

\*Note: The values are valid for steel 5.6 or greater. For steel 4.6 and 4.8 multiply VRk,b by 0,8

## CHARACTERISTIC LOADS FOR HOLLOW MASONRY

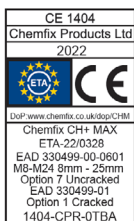
Category c: Hollow Masonry, Doppio UNI (12.12.25) Bulk density class  $\rho=0.9$  kg/dm<sup>3</sup> Minimum compressive strength  $f_b=6.0$  MPa

Size	Installation Parameters					Loads	
	d Anchor Rod Ø d0 Drill Hole Ø (mm)	Sleeve Type	Max. Ø Hole in Fixture $d_{fix}$ (mm)	Drill Depth $h_i$ (mm)	Installation Torque Moment $T_{inst}$	Tension Nrk (kN)	Shear Vrk (kN)
M6	6 / 12	12 x 80	7	85	2	0.75	1.5
M8	8 / 12	12 x 80	9	85	2	0.75	1.5
M10	10 / 16	16 x 85	12	90	2	1.5	1.5
M12	12 / 16	16 x 85	14	90	2	1.5	1.5

## WORKING AND HARDENING TIMES

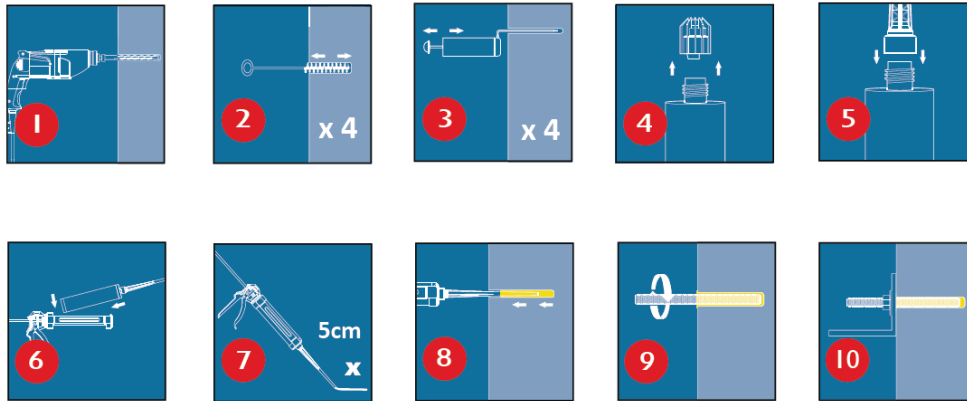
Base Material Temperature	-10°C**	-5°C**	5°C	15°C	25°C	35°C
Gel Working Time	50'	40'	20'	9'	5'	3'
Curing Time Dry Conditions	240'	180'	90'	60'	30'	20'
Curing Time Wet Concrete	x 2	x 2	x 2	x 2	x 2	x 2

## APPROVALS

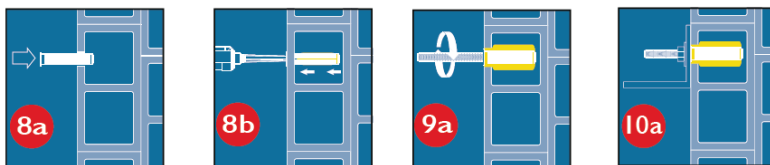


## INSTALLATION

### Solid substrates



### Hollow wall



## STORAGE / SHELF

- This product should be stored between +5°C & +25°C.
- Avoid Direct Sunlight
- The Shelf life of the product is 18 months from the manufacture date.