

# CHEMFIX ARCTIC

## Arctic RESIN Styrene Free



### • CARTRIDGE SIZES

165ml | 300ml Chubpack or Chubseal® | 410ml  
345ml | 825ml

A two component chemical anchoring injection system.  
A formulation derived from a special resin blend, with high bond strength, developed principally to anchor threaded rods and rebar into concrete.  
Used widely for installations in extremely cold temperature situations.

### • CHARACTERISTICS

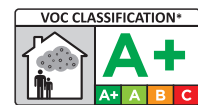
- Cartridge can be extruded at -20°C.
- **European Approval 18/0820 - Option 7 Concrete**
- Fast working times for early loading in time sensitive applications.
- Use in extremely cold environments and fixings holes.
- Good durability formulation, resistance to chemicals.
- Used for studs and rebar.
- 10:1 resin available in a variety of cartridge types.
- Fixings in concrete, hollow substrate, natural stone, wood, or other high strength materials.

### • APPROVALS / CERTIFICATIONS / TESTING

- 19/0820 - ETA - EAD 330499-00-0601 - Concrete M8-M24 Threaded Bars 8-25mm rebars Option 7
- CE Certified 1404-CPR-3332 - ZAG, Slovenia.
- LEED tested 2009 EQ c4.1 SCAQMD rule 1168 (2005.)
- VOC A+ Rating (Volatile Organic Content)

### • PHYSICAL PROPERTIES

- Mixed Colour - Grey
- Density - 1.7 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)



### • TYPICAL TENSILE PERFORMANCE - STANDARD EMBEDMENT DEPTH

Concrete, C20/25, 5.8 Grade Studding						
Size	Recommended Load (kN)		Spacing (S <sub>cr,N</sub> ) (mm)	Drill Hole Ø (mm)	Fixing Hole Ø (mm)	Setting Depth (mm)
	Tension (N <sub>rec</sub> )	Shear (V <sub>rec</sub> )				
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

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### • 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.

Size	Condition :	d/d	w/w & w/d	d/d, w/w & w/d
	H <sub>ef</sub> (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

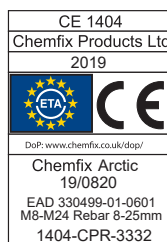
Category c: Hollow Masonry, Doppio UNI (12.12.25) Bulk density class  $p=0.9\text{ kg/dm}^3$  Minimum compressive strength  $f_b=6.0\text{ MPa}$

Size	Installation Parameters					Loads	
	d Anchor Rod Ø d <sub>0</sub> Drill Hole Ø (mm)	Sleeve Type	Max. Ø Hole in Fixture d <sub>fix</sub> (mm)	Drill Depth h <sub>1</sub> (mm)	Installation Torque Moment T <sub>inst</sub>	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

Resin Temperature	-20°C	-10°C	-5°C	0°C	15°C
Gel Working Time	108'	48'	30'	18'	6'
Curing Time Dry Concrete	648'	180'	90'	54'	18'
Curing Time Wet Concrete	x 2	x 2	x 2	x 2	x 2

### • APPROVALS

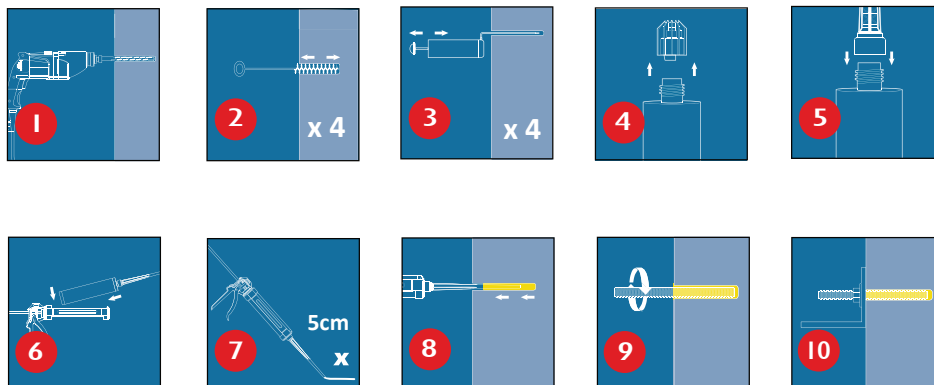


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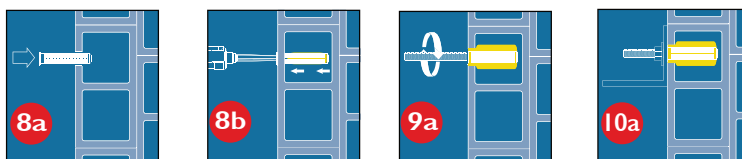
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### • INSTALLATION

Solid substrates



Hollow wall



For further information, refer to the technical data sheet.

### • STORAGE / SHELF

This product should be stored between -20C & +25°C.

Avoid Direct Sunlight

The Shelf life of the product is 18 months from the manufacture date.