

CHEMPOXY ANCHOR



TWO COMPONENT HIGH STRENGTH EPOXY GROUT

DESCRIPTION:

Chempoxy Anchor is a two component, 1:1, high-solids, epoxy-based adhesive for use as a high strength, non-shrink anchor grouting material for bolts & re-enforcement bars. **Chempoxy Anchor** meets or exceeds the requirements of ASTM C-881 specification for Type I, II, IV and V, Grade 3, Class B and C.

ADVANTAGES:

- Rapid setting and strength achievement
- No expansion, no shrinkage
- Resistant to corrosion
- Resistant to vibration
- Shorter depth and smaller holes Reduced drilling costs

FUNCTION:

The epoxy resin reacts with hardener to form a quick setting, non-expansive, non shrink system having extremely high strength, abrasion resistance and chemical resistance.

USES:

- **Chempoxy Anchor** is ideal for high speed, high strength anchoring, holding down bolts for machinery, crane rails, railway tracks connected to concrete sleepers etc.
- **Chempoxy Anchor** can be used for rock bed anchors and fixing of marine equipment since it can be used for underwater operations.
- **Chempoxy Anchor** facilitates permanent installation of starter bars, base plates, lower anchors, foundation bolts etc.
- **Chempoxy Anchor** aids in protecting anchored bolts / rods in wet conditions, as in underwater.

METHOD OF APPLICATION:

Hole Preparation:

The holes must be dust free and rough sided in order to realize maximum benefit out of **Chempoxy Anchor**. Rotary drilling with flushing by air or water is recommended. In case of holes drilled on parallel sides, they should be rough to provide sufficient anchorage. When holes are diamond drilled, they have to be under-reamed.

BAR PREPARATION:

All bars or bolts should be degreased and rust flakes are to be removed before use.

MIXING:

Chempoxy Anchor may be easily mixed with a slow speed drill with a mixing paddle or putty knife may be used for mixing. Mix Part A, B thoroughly in a pliable polyethylene beaker or similar to ensure uniform mixing to achieve the right consistency. Part mixing of units is also recommended for small applications. To avoid waste, only mix sufficient material for the work in hand.

STORAGE:

Chempoxy Anchor will retain its properties for at least 12 months when kept in the original packing.

PACKING:

6 Kg Kit (A+B)

SAFETY:

Avoid contact with skin for prolonged period. Any contact with eye, wash immediately with plenty of water.



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DESIGN GUIDE:

		Concrete Compressive Strength= 25 Mpa				Yielding Strength of Steel Bar= 413.68 N/mm ²							
Bar Dia (mm)	Drilled Hole Dia (mm)	Tensile Capacity of Single Anchor far from free edges (KN)											
		150	175	200	225	250	275	300	325	350	375	400	
12	14	108	147	192									
16	18	108	147	192	243	300							
20	22	108	147	192	243	300	363	432	507				
25	27	108	147	192	243	300	363	432	507	588	675	768	
Capacity Reduction factor for group= 0.75				Capacity Reduction factor for Induced Crack= 0.85				Capacity Reduction factor for Near Edge= 0.85					
		Concrete Compressive Strength= 30 Mpa				Yielding Strength of Steel Bar= 413.68 N/mm ²							
Bar Dia (mm)	Drilled Hole Dia (mm)	Tensile Capacity of Single Anchor far from free edges (KN)											
		150	175	200	225	250	275	300	325	350	375	400	
12	14	118	161	210									
16	18	118	161	210	266	329							
20	22	118	161	210	266	329	398	473					
25	27	118	161	210	266	329	398	473	556	644	740		
Capacity Reduction factor for group= 0.75				Capacity Reduction factor for Induced Crack= 0.85				Capacity Reduction factor for Near Edge= 0.85					

PROPERTY	TEST METHOD	RESULTS
Consistency	ASTM C 881	Non-sag/ thixotropic paste & Flow able Grade
Heat deflection	ASTM D 648	136° F (58° C)
Bond strength (moist cure)	ASTM C 882	3,218 psi (2 days) 3,366 psi (14 days)
Water absorption	ASTM D 570	0.110% (24 hrs)
Compressive yield strength	ASTM D 695	5,065 psi (24 hours) 12,650 psi (7 days)
Gel time (75° F)	ASTM C 881	30 min - 60 gram mass 60 min - thin film

