

SET TIGHT GROUT

POLYESTER RESIN BASED ANCHORING GROUT

SET TIGHT GROUT is a two part pre-weighed polyester resin based grout. After setting, this grout yields consistent physical properties like compressive strength, shear strength etc and it can be used where the annulus space is between 10 and 40mm. **SET TIGHT GROUT** is fast setting, and it rapidly achieves load bearing and bond strength. **SET TIGHT GROUT - OH** is designed to have thixotropic consistency meant for overhead applications.

PRIMARY APPLICATIONS

- Anchor bolts for foundations.
- Hand rails
- Posts
- Railway tracks
- Reinforcement dowelling for abutments.
- Ground anchors for towers, cranes.

FEATURES / BENEFITS

- Fast and controlled setting time.
- High early strength
- Can be used in under water applications.
- Non-expansive
- Vibration resistant
- Easy to use – economical and fast.
- Excellent adhesion to most building materials.

TECHNICAL PROPERTIES

Gel time at 30°C.	- 40 minutes.
Compressive Strength	
1 day	- 90 MPa
3 days	- 105 MPa
Ultimate	- 110 MPa
Tensile Strength	
Ultimate	- 15 MPa
Adhesion to	
sound concrete	- in excess of tensile strength of concrete.
Chemical resistance	- The cured grout is resistant to fresh and salt water, petrol, oil, grease and most acids Alkalis and solvents.

DIRECTIONS FOR USE

Parameters of anchor design
Strong anchors can be created due to high strength of **SET TIGHT GROUT**. The ultimate strength is determined by strength of substrate, embedment length of resin to bar, type of hole preparation, type and dimension of bar.

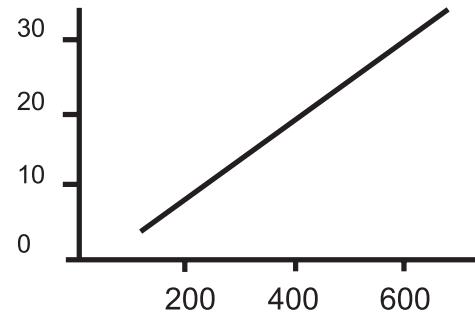
Typical Load attained

Concrete : 20 N/mm² unreinforced

Bar : Deformed rebar to BS 4449

Hole : Air flushed rotary Percussive driller

Load
Tonnes



Bonded length mm

Hole Preparation and formation

Optimum performance of **SET TIGHT GROUT** requires rough sided, dust free holes. Use of rotary percussive drills with air or water flushing is recommended.

Diamond drilled holes should be under reamed unless necessary safety factors are incorporated.

Cast holes should preferably be inverse dovetail configuration. If parallel sided holes are casted they should be roughened to provide adequate keying.

Bar preparation

All bars should be degreased and all flakey rust removed.

Mixing

A complete pack of resin and catalysed filler should be mixed in one operation. Mixing may be carried out manually or mechanically. When a smooth, even consistency is achieved the grout is ready for use and should be placed well within the gel time.

Packs have been designed to produce practical and economic volumes of grout.

INSTALLATION

Using the calculated volume of grout based on Table 1, the grout should be poured steadily into the prepared holes. The anchor bar is then pressed into the hole to the required depth. Slight agitation of the bar will assist in achieving a complete bond. The bar should then be left undisturbed in the required position until the resin has set.

“High Quality Construction Chemicals”

Table 1 - Quantity estimating guide

Table indicates volume of P.E. GROUT in cm³/ 100 mm bond.

Volume of grout for bolt diameter

Hole Diameter	12	16	20	25	32	38	44.5	51
mm	mm	mm	mm	mm	mm	mm	mm	mm
20	25							
25	50	40	25					
32	80	70	60	40				
38		100	100	75	45			
45			150	130	100	70		
51				180	150	120	75	
57				235	200	170	130	80
64				300	280	250	200	160
76					425	400	350	300

Cleaning

Any mixing drums, pumps etc. shall be cleaned with CEMTEC SOLVENT within the pot life of SET TIGHT GROUT.

PRECAUTIONS

Fire Resistance and Creep

At operating temperatures above 40°C the creep of **SET TIGHT GROUT** resin under load may become significant. Resin anchors should not be used where structural load bearing performance has to be maintained in anchors subjected to the fire.

STORAGE

The product should be stored away from high temperatures.

Shelf life of 6 months at 20°C. will be reduced at higher temperatures.

PACKING

SET TIGHT GROUT pack consists of a can of resin and a plastic bag of hardener. Volume of mixed components is 2.5 litres.

The packing of CEMTEC SOLVENT is 20 litre pails.

HEALTH & SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin etc. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Re-seal containers after use. Use in well ventilated areas and avoid inhalation. Vapour from the material are flammable therefore it should not be placed to sources of ignition. Workers should not smoke during application.

QUALITY STATEMENT

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users

The Technical Specification information and recommendation given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.