

Product Description

ITWPRC 100 NON-SHRINK CEMENT GROUT is a high performance, non-shrink, precision grout that meets or exceeds all requirements of the Corps of Engineers CRD C-621 and ASTM C-1107. It is designed for a wide range of consistencies from damp pack to high fluidity, meeting the most demanding job conditions.

Use & Benefits

ITWPRC 100 NON-SHRINK CEMENT GROUT is recommended for grouting of anchor bolts, baseplates, structural steel and pre-cast columns, dowels, etc. which require non-shrink, high tolerance, high strength performance. It is flowable for easy placement, adheres well to concrete or steel, and exhibits good impact and vibration characteristics.

Design Considerations

Pre-washed graded 3/8" pea gravel may be used in applications thicker than 2". In depths from 2" to 5", add 25% of the 3/8" pea gravel by weight. For depths 5" and deeper, add 50% 3/8" pea gravel by wt. When grouting in hot weather, provide shade around the area to be grouted. Use cool mixing water and protect the grout from the sun for up to 48 hours.

When grouting in cold weather, raise the temperature of the area to be grouted. Preheat the mixing water and cover the grout to retain warmth. **DO NOT** place at temperatures below 40°F or if the temperature is expected to fall below 40°F within the next 24 hour period.

ITWPRC 100 NON-SHRINK CEMENT GROUT should be kept in a shaded, dry area. At no time should the packaged material be exposed to moisture.

Application Instructions

Remove all dirt, oil or loose foreign material from any steel surface to come in contact with CHOCKCRETE. Concrete surfaces must be sound and roughened to insure proper bonding. Concrete surfaces should be saturated for a minimum of 4 hours but preferably for 24 hours prior to placing the grout. Remove all excess water from the foundation prior to placing ITWPRC 100 NON-SHRINK CEMENT GROUT.

Build the forms at least 1" higher than the bottom of the item being grouted.

A portable mortar mixer should be used when mixing the grout. Start with the minimum water requirements. **ADD WATER TO MIXER FIRST**, then slowly add powder. Add additional water as required for desired consistency. Water requirements per 50 lb. bag are:

<u>Plastic</u>	<u>Flowable</u>	<u>Fluid</u>
6.80 to 7.00 pints water	7 to 8 pints water	8.00 to 9.25 pints water
0.85 to 0.88 gal.	0.88 to 0.94 gal	1.00 to 1.19 gal.
7.05 to 7.30 lbs.	7.30 to 7.80 lbs.	8.33 to 9.50 lbs.
3.18 to 3.29 liters	3.29 to 3.79 liters	3.79 to 4.40 liters

CAUTION: DO NOT OVER WATER. Adding more water than recommended can cause bleeding, separation and a reduction of ultimate strength. **DO NOT** re-temper or add additional cement, sand or admixtures without first contacting ITW Polymer Technologies.

The grout should be placed continuously by pouring from one side to the other to avoid air entrapment. Cover with clean wet rags and keep moist until final set.

ITW POLYMER TECHNOLOGIES

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ITW Polymer Technologies
Registered to ISO 9001:2000
File No. A3790



ITW Performance Polymers Europe
ISO 9001:2000
Q 05-020

Physical Properties

	(psi)	Plastic Flowable Fluid			
COMPRESSIVE STRENGTH:	3 days	5,900	5,400	4,800	ASTM C-109
	7 days	8,900	7,700	6,200	
	28 days	11,500	8,400	7,700	
STATIC MODULUS OF ELASTICITY:	3 days	2.64 x 10 ⁶ psi			ASTM C-469
	7 days	2.79 x 10 ⁶ psi			
	28 days	3.00 x 10 ⁶ psi			
		Plastic Flowable Fluid			
EXPANSION PERCENTAGE:	3 days	0.07%	0.03%	0.02%	CRD D-621
	14 days	0.07%	0.03%	0.02%	
	28 days	0.07%	0.03%	0.02%	
COEFFICIENT OF THERMAL EXPANSION:		4.76 x 10 ⁻⁶ in/in °F			ASTM C-531
FLEXURAL STRENGTH:	3 days	1,055 psi			ASTM C-78
	7 days	1,230 psi			
	28 days	1,430 psi			
SPLITTING TENSILE STRENGTH:	3 days	550 psi			ASTM D-496
	7 days	680 psi			
	28 days	750 psi			
STRENGTH OF ANCHORS:		<u>Tensile Strength</u>	<u>Shear Strength</u>		
1-1/4" dia. bolt in a 2-1/2" dia. hole with 9" embedment		53,200 lbs.	24,300 lbs.		ASTM E-488
1/2" dia. bolt in a 1-1/8" dia. hole with 4" embedment		7,100 lbs.	2,000 lbs.		

Product Information

UNIT PACKAGING:	Individual Bags - Super Sack				
UNIT WEIGHT:	22.7 kg (50 lbs.) Bags; 1,361 kg (3,000 lb) Super Sack				
UNIT YIELD:	Plastic Flowable Fluid				
	Approx.	0.43 ft. ³	0.44 ft. ³	0.45 ft. ³	
APPLICATION TEMPERATURE:	45°F Minimum - 90°F Maximum				
		Plastic Flowable Fluid			
SET TIME (approximate):	Initial:	3.5 hrs	4 hrs	3.6 hrs	ASTM C-266
	Final:	4.75 hrs	4.8 hrs	4.75 hrs	
SHELF LIFE:	1 year in dry, shaded storage				
CLEAN UP:	Water				

Date

06/2006

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Warranty Claims: If any product fails to meet the above, ITW Polymer Technologies will, at its option, either replace the product or refund the purchase price. ITW Polymer Technologies will have no other liability for breach of warranty, negligence, or otherwise. All warranty claims must be made in writing within one year of the date of shipment. No other claims will be considered.

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