

Technical Bulletin # 479

Product Description

CWC 100 is a high performance, non-shrink, precision grout that meets or exceeds all requirements of the Corps of Engineers CRD C621 and ASTM C1107. It is designed for a wide range of consistencies from damp pack to a high fluidity to meet the most demanding job conditions. It is recommended for grouting of anchor bolts, base plates, structural steel and pre-cast columns, dowels, etc. which require non-shrink, high tolerance and high strength performance. It is flowable for easy placement, adheres well to concrete or steel, and exhibits good impact and vibration characteristics.

Strength of Anchors: (ASTM E-488)

	Tensile Load	Shear Load
1-1/4" dia. bolt 2-1/2" dia. hole 9" embedment	53,200 lbs.	24,300 lbs.
1/2" dia. bolt 1-1/8" dia. hole 4" embedment	7,100 lbs.	2,000 lbs.

Working Temperature: 45°F Minimum
90°F Maximum

Coefficient of Thermal Expansion:
(ASTM C-531) 4.76 x 10⁶ in/in°F

Surface Preparation

Remove all dirt, oil or loose foreign material from any steel surface to come in contact with CWC 100. 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 CWC 100.

Forming

Forms should be at least 1" higher than the bottom of the item being grouted.

Packaging

1 bag CWC 100, 50 lbs. (22.7 kg.)

Mixing Instructions

Plastic
6.80 to 7.00 pints of water
0.85 to 0.88 gal. of water
7.05 to 7.30 lbs. of water
3.18 to 3.29 liters of water

Flowable
7 to 8 pints water of water
0.88 to 0.94 gal. of water
7.30 to 7.80 lbs. of water
3.29 to 3.79 liters of water

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ISO 9001:2008
Q 06420

Fluid
8.00 to 9.25 pints water
1.00 to 1.19 gal. of water
8.33 to 9.50 lbs. of water
3.79 to 4.40 liters of water

Yield	Flowable	Fluid
Plastic		
Approx. 0.43 ft.3	0.44 ft.3	0.45 ft.3

CAUTION: DO NOT OVER WATER. Addition of water other 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 Philadelphia Resins.

Curing: Cover with clean wet rags and keep moist until final set.

Deep Pour Applications: Pre-washed graded 3/8" pea gravel may be used in applications thicker than 2".

2" to 5" - Add 25% 3/8" pea gravel by wt.
5" & deeper - Add 50% 3/8" pea gravel by wt.

Hot Weather Grouting: Provide shade around the area to be grouted. Use cool mixing water and protect the grout from the sun for up to 48 hours.

Cold Weather Grouting: 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.

Storage: CWC 100 should be kept in a shaded, dry area. At no time should the packaged material be exposed to moisture.

Placement: The grout should be placed continuously by pouring from one side to the other to avoid air entrapment.

Technical Information

COLOR:	White Tint Base, Neutral Tint Base
GLOSS:	Flat
VOLUME SOLIDS:	63% (mixed)
VOC:	0.5 lbs./gal. (60 gr./ltr.)
COEFFECIENT OF FRICTION:	Dry - 0.78 Wet - 0.86 (ASTM F609)
COVERAGE:	90sq. ft./gal. Roller 120 sq ft/gal Spray
PACKAGING:	1 gal (3.8 liters) unit containing 1 gal (3.8 liters) slack-filled can resin/aggregate and 1 qt.(.95 liter) can hardener.
APPLICATION TEMPERATURES:	50°F minimum to 130°F maximum (10°C minimum to 53°C maximum) must be 5°F (3°C) above dew point
RELATIVE HUMIDITY:	85% maximum
SERVICEABILITY:	Foot traffic: 24 hrs. @ 72°F (22°C) @ 50% RH Heavy Service: 72 hrs. @ 72°F (22°C) @ 50% RH Full Cure: 7 days @ 72°F (22°C) @ 50% RH

MIXING RATIO: resin to hardener by weight
5.3-1 Neutral Tint Base
6.2-1 White Tint Base

INDUCTION: None

POT LIFE: 1 hrs. @ 72°F (22°C)

FLASH POINT: >200°F (>93°C) PMCC

VISCOSITY: Slurry consistency

CLEAN UP: IMPAX IXT 59 Solvent

SERVICE TEMPERATURE: 200°F (90°C) Dry Heat Resistance

SHELF LIFE: 24 months in closed container stored
@ 50°F to 90°F (10°C TO 32°C)

Date

07/2006

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