

CPD® NON-SHRINK GROUT (PRE-MIX)

DESCRIPTION

CPD® Non-Shrink Grout is a pre-blended, ready-to-use cement base grout containing non-ferrous fluidifiers and anti-shrinkage compounds accurately blended with graded siliceous aggregate and Portland cement. It is pre-blended and requires only the addition of water at the job site.

WHERE TO USE

CPD® Non-Shrink Grout is used for grouting structural steel column base plates, anchor bolts, bridge bearing seats, machinery bases and reinforced masonry walls.

BENEFITS

- \$ can be placed in different consistencies ranging from plastic to self-leveling
- \$ flowability facilitates placement in confined areas
- \$ complete bearing surface contact ensures uniform load distribution
- \$ no ferrous additives to cause staining
- \$ expansive agents ensure uniform, consistent expansion for over one hour
- \$ excellent freeze-thaw resistance, even with pourable consistency
- \$ does not contain corrosive additives, such as calcium chloride
- \$ resistant to oil, some chemicals and moisture

PROPERTIES

Compressive Strength (ASTM C109-77, 2" cubes confined) @ 20° C (68°F)

Flowable*

1 day	40 MPa (5,800 psi)
3 days	51 MPa (7,395 psi)
7 days	60 MPa (8,700 psi)
28 days	64 MPa (9,280 psi)
90 days	74 MPa (10,730 psi)

*150% flow (ASTM C230-90) 4.0L/25kg (1.06 U.S. gal/55lb).

Pull Out Tests

Mix Ratio 4L/25 kg (1.06 U.S. gal/55 lb)
 Test conducted using a 15mm/0.59in (grade 400) for epoxy coated rebar.

<u>Hole Depth</u>	<u>Hole Diameter</u>	<u>Load Failure</u>
125mm (4.89in)	38mm(1.48in)	89.5 kn
190mm (7.41in)	38mm	122.4 kn
250mm (9.75in)	38mm	139.8 kn
Set Time.....6 hours, 10 minutes @ 21°C (70°F) (10 mm/0.39in penetration)		

The above information is representative of actual production runs. Independent test results may vary from the above by approximately ? 10%.

APPLICATION

SURFACE PREPARATION

All surfaces that will be in contact with the grout must be clean and free of grease, oil, standing water, laitance, loose material or any other contaminant that could impair substrate bond. Prior to grouting, foundation concrete should be roughened, cleaned and thoroughly wetted down for 12 hours. Free standing water should be blown clear just prior to grouting using oil free compressed air.

Forms must be rigid and water tight. Construct them with sides one to two inches above the base plate allowing a "head" of grout to flow to the proper level. Vent high points to permit the escape of entrapped air. Grout must be placed from one side only and allowed to flow to opposite form. Use only a minimum amount of water, consistent with flowability required. Do not exceed 4.0 L of water per 25 kg bag of grout (1.06 U.S. gal/55lb). Mix thoroughly and place within an hour of mixing. Keep grout agitated in mixer at all times. As the grout sets, cure exposed surfaces with CPD® Acrylic Cure & Seal or damp burlap. Ideal grouting temperature is 10°C to 25°C (50-77°F).

Cooler temperatures will retard the rate of strength gain in all mixes. Keep surrounding concrete and contact steel above 4.5°C (40°F) for at least 72 hours after completion of grout pour.

MIXING AND PLACING

CPD® Non-Shrink Grout may be pumped or poured in place. In all cases, no foreign materials are to be added without first contacting your CPD® Technical Representative.

The following is to be used as a guide. Always use the minimum water required.

Flowable - 4L water per 25kg bag (1.06 U.S. gal/55lb)

Non Shrink Concrete Mix

50 kg (110 lb) CPD® Non-Shrink Grout

25 kg (55lb) 10mm (3/8") Pea Gravel

7-8 L (1.85-2.1 U.S. gal) water (depending on consistency required)

LIMITATIONS

? do not use in areas of high vibration

? where chemical attack is possible

COVERAGE

0.014m³ (0.47ft³) per 25 kg (55lb) bag (at the maximum 4L (1.06 U.S. gal) water content).

STANDARDS

Formulated to comply with U.S. Corps of Engineers CRD-C621-92 and ASTM C1107-91.

Approved for use on all MTO projects (Ministry of Transportation).

PACKAGING

25 kg. (55 lb) multi-wall bag.

STORAGE

May be stored short term anywhere under tarp on pallets as long as the product is kept dry. Dry heated warehouse storage is recommended for extended storage.

SHELF LIFE

One year from the date of manufacture when stored in original, unopened package and under normal warehouse conditions.

SAFETY PRECAUTIONS

Consult Material Safety Data Sheet (M.S.D.S.) for specific instructions. MSDS # 4.

WARRANTY

The recommendations made and the information herein is based on our own and independent laboratory experience, and is believed to be accurate under controlled conditions. However, no warranty or guarantee of accuracy is made because we cannot cover every possible application of product nor anticipate every variation encountered in weather conditions, job-conditions, methods used and types of surfaces on which the product is applied.

The users shall make their own tests to determine the suitability of such products for any particular purpose.

CPD® makes no warranties with respect to this product, expressed or implied, without limitation, the implied warranties of merchantability or fitness for a particular purpose.

CPD®'s liability shall be limited in all events to supplying sufficient product to re-treat and/or repair the specific area to which CPD® product has been applied. CPD® reserves the right to have the true cause of any difficulty determined by accepted test methods. CPD® shall have no other liability, including liability for incidental, consequential or resultant damages, however caused, whether due to breach of warranty, negligence, or strict liability.

THIS WARRANTY MAY NOT BE MODIFIED OR EXTENDED BY REPRESENTATIVES OF CPD®, ITS DISTRIBUTORS OR DEALERS.