

CPD® CABLE GROUT

DESCRIPTION

CPD® Cable Grout is a neat (aggregate free) fluid non-shrink cementitious grout, containing silica fume and other proprietary ingredients. When mixed as per instructions it is pumpable, non-bleeding and provides high strength with extended working time.

WHERE TO USE

Applications include grouting anchors in tunnel support systems, cable bolting, re-bar grouting and grouting where aggregate filled systems will not flow. CPD® Cable Grout can be used for soil stabilization and for grouting applications with clearances over 6mm (1/4") but under 25mm (1").

BENEFITS

- non-shrink
- cures without bleeding
- excellent pumpability
- non-chloride, non-corrosive
- excellent resistance to freeze, thaw and salt-scaling
- silica fume enhanced

LIMITATIONS:

- do not use where chemical attack is possible
- protect from freezing until after final set
- minimum thickness 6mm (1/4")
- maximum thickness 25mm (1")
- must not be used as patching compound or topping
- do not exceed maximum recommended water ratio
- do not place Cable Grout where service temperatures exceed 160°C (320°F)
- do not place grout where ambient and substrate temperatures are below 5°C (40°F). Must not fall below this temperature at anytime during grouting and curing process

PROPERTIES

Compressive Strength (ASTM C942 according to ASTM C1107 of ASTM C109, 50mm/2" cubes confined) @ 21° C (69.8°F)

Flowable at 6L (1.58 US gal) / 20KG (44 lbs)

1 day.....20MPa (2,900psi)

3 days.....30 MPa (4,350psi)

7 days45 MPa (6,525psi)

28 days.....55 MPa (7,975 psi)

Changes in Height (wet cure)(ASTM C1090) (%)

24 hours.....0.0% shrinkage

28 days.....between 0 and +0.03%

Bleeding and expansion (CSA A 23.2-1B)

Expansion at 3 hrs.....<2.0%

Bleeding at 3 hrs.....0.0%

Flow (ASTM C939 et CSA A 23.2-1B)

Initial after mixing.....22 seconds

30 minutes after mixing.....28 seconds

Time of setting

Initial Set Time.....5 hrs

Final Set Time5.5 hrs

Chloride ion content (ASTM C1152) (kg/m³)

At 7 days.....0.045 (0.0028 lbs/ft³)

Chloride permeability (ASTM C1202) (coulombs)

At 28 days.....1245

The above information is representative of typical values obtained under laboratory conditions. Variations can be expected due to on site conditions and/or other testing methods.

APPLICATION

SURFACE PREPARATION

All surfaces that will be in contact with the cable grout must be clean and free of grease, oil, standing water, laitance, loose material or any other contaminant that could impair bonding. Also, it is recommended that anchor bolts be cleaned with an appropriate solvent which will not affect the bond. Adhere to solvent manufacturers recommendation and guidelines. Prior to grouting, concrete should be roughened, cleaned and thoroughly wetted down.

Leave the concrete saturated but with no free-standing water. Keep grout agitated in mixer at all times. Forms must be rigid and water tight. 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. As the cable grout sets, cure exposed surfaces with Cipadeck Cure and Seal or damp burlap.

Cooler temperatures will retard the rate of strength gain in all mixes. Keep surrounding concrete and contact steel above 5°C (40°F) for at least 72 hours after completion of grouting.

MIXING AND PLACING

CPD® Cable 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.

It is recommended to use a colloidal mixer similar to ChemGrout CG-600 series or other manufacturers of colloidal mixers that develop high shear at a minimum of 1800 to 2500rpm. Mix for three minutes after the addition of all the grout to the water. Place all mixed grout within 60 minutes.

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

Fluid – 6L (1.58 US gal) water per 20kg (44lb) bag
Wet Density 2.04 kg/L (17.02lbs/US gal)

COVERAGE

Yield per 20 kg (44lb) bag
12.8L (3.38 US gal), 0.0128 m³ (0.45 ft³)

PACKAGING

20 kg (44lb) 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 dry, heated warehouse conditions.

SAFETY PRECAUTIONS

Consult Safety Data Sheet for specific instructions. SDS # 258.

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.

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