

# CPD® NON-SHRINK GROUT PRE-MIX UHP

## DESCRIPTION

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

## WHERE TO USE

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

## BENEFITS

- high strength
- can be placed in different consistencies ranging from plastic to self-leveling
- flowability facilitates placement in confined areas
- no ferrous additives to cause staining
- expansive agents ensure uniform, consistent expansion
- excellent freeze-thaw, salt and sulphate resistance
- does not contain corrosive additives, such as calcium chloride
- resistant to oil and moisture

## LIMITATIONS

- do not use where chemical attack is possible
- protect from freezing
- minimum thickness 25mm (1")
- maximum thickness 150mm (6")
- for thickness over 150mm (6") contact your CPD® Technical Representative

- must not be used as patching compound or topping in unconfined areas
- do not exceed maximum water ratio
- do not place grout where service temperatures exceed 160°C (320°F)
- do not place grout where temperatures are below 4.4°C (40°F) or above 32°C (90°F)

## APPROVALS/CERTIFICATES

- fatigue resistance CPD Non-Shrink Grout Pre-Mix UHP Applus Certificate No. 25/36601016

## PROPERTIES

Compressive Strength (ASTM C942 according to ASTM C1107 of ASTM C109, 50mm/2" cubes confined) @ 21°C (69.8°F)	
Flowable 2.5L/22.7 kg (0.66 US gal/50 lb)	
1 day.....	35 MPa (5,076 psi)
2 days.....	60 MPa (8,702 psi)
3 days.....	75 MPa (10,878 psi)
7 days.....	90 MPa (13,053 psi)
28 days.....	115 MPa (16,679 psi)
Initial Set Time.....	5 hrs
Final Set Time.....	6 hrs
Expansion (ASTM 827) .....	0.3%

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 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. 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 2.5 L of water per 22.7 kg bag of grout (0.66 U.S. gal/50lb). Mix thoroughly and place as soon as possible.

Keep grout agitated in mixer at all times. As the grout sets, cure exposed surfaces with CIPADECK® 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**

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

Flowable – 2.5L water per 22.7kg bag (0.66 U.S. gal/50lb)

**For best results mix thoroughly using a mortar mixer with rubber tipped blades for a minimum of 4.5 minutes after the last bag of grout is added to the mix water.**

If smaller mixes are required, mix mechanically using a heavy-duty drill equipped with a mud mixer blade. Do not exceed 400 to 500 rpm. Follow the same mixing pattern described above. Make sure to always add the powder to water and do not overmix to avoid entrapped air in the mix.

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

#### **COVERAGE**

0.011m<sup>3</sup> (0.39ft<sup>3</sup>) per 22.7 kg (50lb) bag (at the maximum 2.5L (0.66 U.S. gal) water content).

#### **PACKAGING**

22.7 kg (50 lb) multi-wall bag.

#### **STANDARDS**

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

#### **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 Safety Data Sheet for specific instructions. SDS # 195.

#### **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.