

PDP GROUT

Micropile Grout

The logo for Cook Brand, featuring the word "Cook" in a large, white, serif font with a registered trademark symbol, and the word "BRAND" in a smaller, white, sans-serif font below it. The logo is set against a dark blue background with a white diagonal swoosh.

MANUFACTURER

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DESCRIPTION

PDP GROUT is a blend of Portland cement, micro silica and special additives to create a flowable, pumpable expansive grout for grouting micropiles. The material exhibits excellent flowability with no segregation, but becomes thixotropic when left idle. The grout resumes its fluid characteristics through agitation from the pump, rodding, mild vibration and the turning of the Helix plates, so consolidation is consistent throughout the pile.

MIXING

Mixing is obtained with a paddle or impeller type mixer, either from a hand drill or large stationary mixing vessel. The material can be pumped with piston or rotor stator pumps. Begin mixing by adding the proper amounts of clean, potable water to the mixer and slowly adding the powder while the mixer is running. Mixing time is approx. 3-5 minutes to obtain a smooth, lump free product. The product becomes fluid by shearing the material, which may take a few seconds initially. Care must be taken when measuring water quantities as too much water will greatly decrease end results. The proper mixing ratios are 15 lbs. of water (1.80 gallons) per 60 lb. bag of grout. This can be adjusted up no more than 15% (1 quart).

PLACEMENT

Excavate a round or square hole 1- 1/2 to 2 ft. wide and 1 to 2 ft. deep at each pile location. Place or build a form in hole capable of containing liquid grouts. If excavation is not possible, place form above ground surface. Fill form with mixed grout. Measure and record the level of the grout in the form. Ideally, grout placement would have continuous flow down the column as it is formed with the head of grout not varying (or falling). This is

not practical because the drop in grout level is the usual way to measure the volume of grout used during installation. This should be compared to the theoretical volume required.

PACKAGING

60 lb. Kraft bags. 42 bags per pallet.

LIMITATIONS

Use cold or iced water to extend set time in hot weather, warm water when temperatures are cooler. The material should be placed in temperatures between 35°F and rising and 100°F. Caution: surface temperatures vary while underground temperatures remain constant (approx. 55°F) Adjustments in water and material temperatures should be carefully considered regarding underground vs. surface temperatures. The grout must be kept from freezing for the first 48 hours with insulation, heaters or insulated blankets.

TECHNICAL DATA

Compressive Strength ASTM C-109
2"x2" cubes Restrained
3 days 3360 PSI
7 days 4600 PSI
28 days 8333 PSI
Expansion - + 3%

Open Time - 2 hours @ 75°F
Initial Set - 4 hours @ 75°F
Final Set - 8 hours @ 75°F
Density 123 lbs. / ft³

PRECAUTIONS

Contains Portland cement: avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with plenty of water for 15 minutes. Consult a physician immediately. Keep out of reach of children. Contains free silica - DO NOT breathe dust. May cause delayed lung injury. Follow OSHA safety and health standards for crystalline silica (quartz). See material safety data sheet for detailed information.