

GROUT MIX INSTRUCTIONS

FOR CHANCE® HELICAL PULLDOWN MICOPILE

Experience shows that pre-mixed packaged grouts are the best choice for most applications. However, pre-mixed grouts can be expensive, depending on location and local supply. Therefore, using these instructions, it may be possible to mix grout for less cost than buying pre-mix.



The four main ingredients for Helical Pulldown Micropile grout are Portland type I or II cement, microsil aggregate, and water. Retarders, plasticizers, and expansive agents can be added as necessary.

CAUTION: IT IS NOT RECOMMENDED TO MIX YOUR OWN GROUT UNLESS YOU ARE EXPERIENCED AT ACHIEVING PREDICTABLE AND REPEATABLE RESULTS.

There are two basic grout mixes recommended for use with Helical Pulldown Micropiles. Fiber-mesh can be added (1 lb. bag per cubic yard) as a reinforcement that binds the grout together and adds some tensile strength.

CHANCE GROUT MIX “A”

Expansive Microsil Grout for Small Diameter Piles (< 7” diameter)

- a) 94 lbs. Portland Cement Type I, II or Type 10
- b) 15 - 20 lbs. Microsil, silica fume (preferred) or flyash
- c) Super Plasticizer, water reducer - to meet a cone flow rate of 20 - 30 seconds per ASTM C939 cone flow test. This roughly correlates to 5 - 15 ounces of super plasticizer per 94 lb. bag of cement.
- d) Expansion Agent - to provide 2.5% minimum expansion, percent by volume unconfined per ASTM C940.
- e) Two hour working time or pot life at 70° F;
- f) Compressive Strength - 3000 psi at 4 days, 5000 psi at 28 days.
- g) Six month shelf life.

CHANCE GROUT MIX “C”

Neat Cement Grout for Small Diameter Buckling Piles

- a) 94 lbs. Portland cement Type I, II or Type 10.
- b) Fine Sand Aggregate - 50% by volume (optional for 7” or 8” diameter columns)

