

Micropiles are a specific type of pile grouting. Micropiles are soil replacement rather than soil displacement of small diameter piles. Usually, they are drilled and grouted high capacity steel bars acting in compression. Generally 2"-12" in diameter, micropiles are friction rather than end bearing, depending on high adhesion (side friction) to the grouted mass. The bars can be single or multiple corrosion protected.



Micropiles are constructed similar to rock bolts in that an anchor zone is grouted, the bar is tensioned and then fully grouted, locking in pretension and corrosion protection.

Applications

- shoring
- underpinning
- structural support
- foundation augmentation
- earth retention
- building remediation- used as jacking piles

Advantages

- can be installed in limited and low headroom access
- excellent where drilling is difficult
- requires small drilling equipment
- bars can be cut and coupled in as low as 4 ft. head room