

GENERAL DESCRIPTION

DDM's are installed using hydraulic powered rotary equipment and are turned into the ground while crowd or downward pressure is exerted on the steel core and a continuous flow of grout is provided to the top of the pile. A reverse flighting welded to the steel shaft draws the grout into the annulus created by a displacement head located near the tip of the steel core.

INSTALLATION SEQUENCE

1. Attach the hydraulic drive head to the DDM lead section and align pile tip at specified pile location.
2. Advanced the lead section 12 in. below ground and lift up, removing soil, to create a grout reservoir.
3. As the lead section advances beyond the grout reservoir, commence grout flow. Monitor and record grout take during entire installation of each pile.
4. Grout shall flow continuously to fill the annulus created by the DDM displacement head. Maintain grout level between ground level and -24 in. throughout installation.
5. Where extensions are required, stop the drive head and remove from lead section.
6. Attach the hydraulic drive head to a DDM extension section.
7. Attach the extension section to the lead section with specified hardware and continue installation. Add extensions as required to reach design depth.
8. If dense soils or obstructions are encountered and the pile will not advance, reverse the pile 24 in. and advance again. Repeat 3 – 5 times while measuring how much the pile advances each time. Do not exceed maximum specified torque of the shaft. If the pile will not advance, then pre-auguring may be required to reach design depth. Consult with Ideal to determine if the pile can be terminated in dense layers above design depth.
9. If the pile top is terminated above the pile cut-off elevation, cut the steel core using an appropriate method such as a portable band saw or torch.
10. Upon completion of pile installation, finish grouting to ensure that the grout level is brought to the top of pile (inside and outside of the steel core).
11. Install the specified pile cap (or rebar) before grout sets. Bolt on caps may be installed at a later date if required.
12. Document installation torque every 5' during installation and at pile termination. Pile capacity is not determined by installation torque and data is used as reference only.

GROUT TAKE APPROXIMATIONS

This calculation was made using recommended grout mix of 1- 94lb. bag of type 1 or 2 Portland cement to 5 gallons of potable water. A colloidal mixer shall be used.

- STELCOR 1100 - 3.5 lineal ft. per bag
- STELCOR 1200 - 3 lineal ft. per bag
- STELCOR 1400 - 2.6 lineal ft. per bag
- STELCOR 1600 - 1.7 lineal ft. per bag