

- q) For tension piles designed to resist the uplift forces or end bearing piles installed from ground level until deep bedrock, the reinforcement should normally be carried down for the full length. According to BS 8004 : 1986, Section 7.4.5.3.2
- r) The longitudinal reinforcement should extend at least 1.00 m below the bottom of casing so that movement of the reinforcement during extraction of casing is minimized. BS 8004 : 1986, Section 7.4.5.4.5
- s) A minimum additional allowance of 40 mm should be added to concrete cover recommended in Table 3.4 of BS 8110, Part 1: 1997.
- t) Cover spacers may be of pre-formed plastic to be used for the pile. The spacers should be threaded to lateral stirrups and should be spaced of not more than 2.0 m with minimum of three to be placed in each row. One set should be fixed at the pile cut-off level and one at approximately 1.0 meter from the toe of the cage.

Fig. (1.37) shows the method statement for continuous flight auger piling as well as the drilled bored piles.

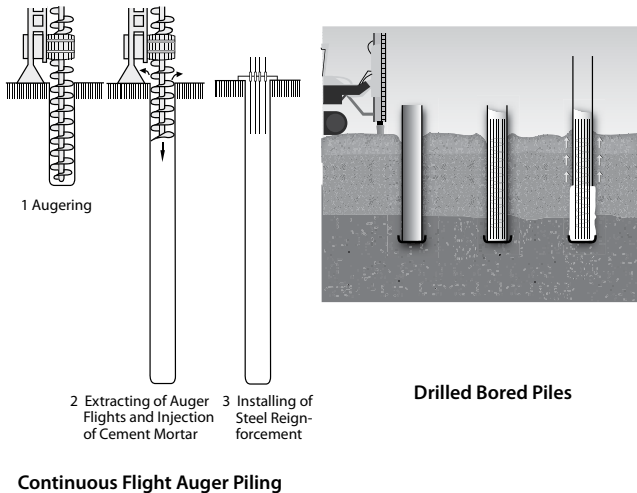


Fig. (1.37): Method Statement for Different Types of Bored Piles

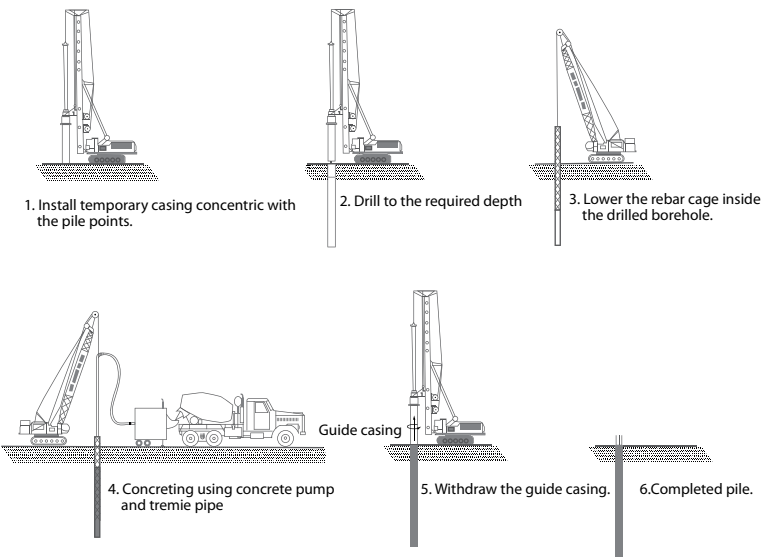


Fig. (1.38): Method Statement for Drilled Bored Piles

1.6.2 POINTS TO BE CHECKED DURING CONSTRUCTION, FIGS. (1.38 & 1.39)

- a) If bentonite slurry is used, the density should be less than 1.10 g/mL. The viscosity as measured by the Marsh Cone should be within a range of 30 to 90 seconds, and the 10 min. gel strength to be in the range of 1.4 N/m² to 10 N/m². The pH value should be maintained within a range of 9.5 to 12. BS8004: 1986, Section 6.5.3.8.1.
- b) The geophysical properties of the bentonite slurry should be re-established prior to the commencement of concreting operation. A submersible and circulation pumping system or air lifting system may be utilized for this purpose.
- c) If extensive bentonite slurry loss occurs during drilling, the drilling will be stopped immediately. The bore will be backfilled with