



# CONTINUOUS FLIGHT AUGER (CFA) PILES



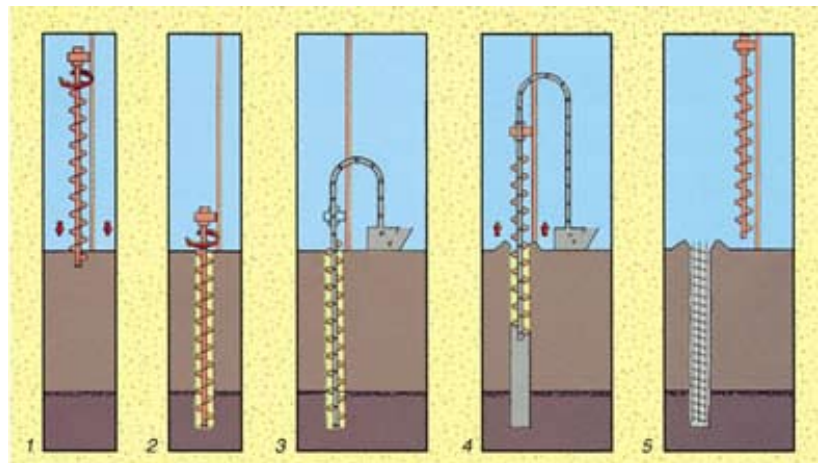
## CONTINUOUS FLIGHT AUGER (CFA) PILES

The CFA Pile is a non-displacement pile used where fast vibration free installation is required in difficult ground conditions. The drilling process is suitable for penetrating dense layers and is unaffected by ground water or collapsing soil conditions.

The pile is formed by first drilling into the ground with a continuous flight auger.

Cement-sand grout or concrete is then injected under pressure through the auger's hollow stem as it is being withdrawn.

The grout or concrete pressure is maintained during the auger withdrawal so that it assists the extraction as well as exerting a lateral pressure on the surrounding soils. On completion of this operation, a reinforcing cage is placed into the fluid column of grout or concrete.



## LOAD CAPACITY

CFA Piles are most suited for use in sands with load capacity developed in both adhesion and end bearing. The design resistance may be calculated using conventional static pile design theory with design parameters relevant to non-displacement piles.

The pile founding depths should be predetermined before installation from a site investigation report.

This pile type is also suited for use in rock with available equipment able to form sockets in weak to medium strong rocks. CFA piles are not normally viable in lower strength clays, unless a suitable end-bearing layer is available to found in.