

How Piled Walls is produced

Retaining Walls

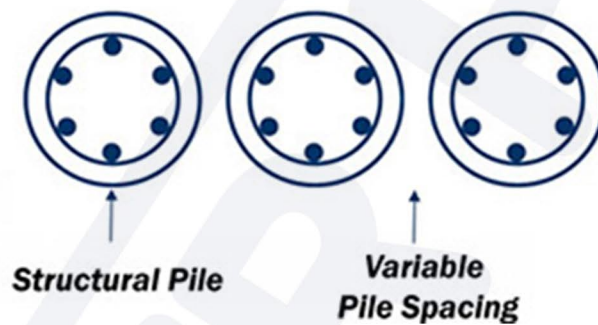
This form of construction leads to a more efficient form of structure. During excavation of the soil, the piles will generally require propping before the permanent floor and/or roof structure are completed.

Because of the form of construction, the exposed piles will be fairly rough in appearance. Thus, in most cases, an inner wall, which may or may not be structural, will be built or some decorative surface applied, e.g. sprayed concrete or cladding. A method of drainage will generally be required between the piles and any inner wall.

Contiguous Bored Piles

Closely spaced Rotary or CFA piles can be used to form a retaining wall (fig 1), perhaps for the construction of a deep basement or a cut and cover tunnel. The piles may be constructed so that they virtually touch each other (contiguous). The gaps between the piles can be grouted to form a watertight retaining wall.

Fig 1.



Secant Piles

This type of construction is in many ways similar to the contiguous bored pile method, except the gap between the primary piles is filled with a secondary 'soft pile' consisting of an unreinforced weak concrete mix constructed to a depth just below the depth of final excavation (fig 2). A sequence of secondary piles are constructed followed by a sequence of primary piles constructed to the full design depth, cutting into the secondary piles and reinforced in the usual manner. This form of construction ensures that water entry into the subsequent excavation is greatly reduced.

Fig 2.

