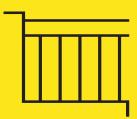
# CONTIGUOUS PILED RETAINING WALL

A contiguous piled wall is formed by installing a row(s) of discrete reinforced piles, commonly utilising CFA techniques, constructed at specific centres, usually the pile diameter plus 150mm. Where there is restricted access, other mini piling techniques may be utilised for pile installation.





### DESCRIPTION

A contiguous piled wall is formed by installing a row(s) of discrete reinforced piles, commonly utilising CFA techniques, constructed at specific centres, usually the pile diameter plus 150mm. Where there is restricted access, other mini piling techniques may be utilised for pile installation.

Contiguous piled walls are suitable for use as embedded retaining walls where the groundwater table is below excavation level, since groundwater is free to flow through the interstices, or gaps, between the pile elements. Permanent works applications are therefore likely to require an additional lining wall or some form of treatment of the ground between the piles to control perched groundwater flow from precipitation, or to mitigate against potential loss of ground from between the piles.

Contiguous piled walls can be adopted to provide solutions to a variety of construction challenges. They are usually adopted where the general site conditions, such as depth of excavation and prevailing ground conditions, prevent the adoption of simpler alternatives.





Residential



Commercial



Infrastructure

## **ADVANTAGES**



Designed in-house



Can be constructed close to adjacent structures



Minimal vibration



Cost effective



Highly adaptable plan geometry to maximise site use

# INSTALLATION

Contiguous piled walls can be adopted to provide solutions to a variety of construction challenges. They are usually adopted where the general site conditions, such as depth of excavation and prevailing ground conditions, prevent the adoption of simpler alternatives.

In addition to providing ground support, contiguous piled walls can be used to carry applied superstructure loads. Where the magnitude of vertical load exceeds the available wall capacity, the wall piles can potentially be constructed to a greater depth than required from consideration of wall stability alone. This additional length of wall pile can be constructed from unreinforced, plain, concrete, subject to the loading being in compression.

The depth of retaining wall piles is based on the rig capabilities, either our CFA or restricted access rigs, and we can construct pile walls up to a diameter of 750mm. A further limiting factor is the length of reinforcement cage which is required to be plunged into the fresh concrete forming the pile, typically up to around 15m - 18m.

### **TECHNIQUE CAPABILITIES**

SPECIFICATION	FROM	ТО
Standard pile size	300mm	750mm
Typical retained height	1.5m	10.0m <sup>*</sup>
Practical depth	4m	18m**
dependant upon temporary and permanent support conditions		



maximum pile reinforcement depth, unreinforced piles length may extend up to 27m

