

TERRADRIVE PRODUCT PORTFOLIO

PRECAST HOUSE FOUNDATION



PRECAST CONCRETE PILING



LOW VIBRATION PILING



RESTRICTED ACCESS PILING



STEEL BEARING PILES



TERRADRIVE

PILING AND FOUNDATIONS LTD.

Driven Piles

A more cost effective and versatile piling solution





Driven Piles provide a choice of materials - they can be; Concrete, Steel, Timber, Composite

Driven piles are a total engineering solution.

The design, installation and quality assurance that is part of each driven pile combine to eliminate guesswork and produce a known, reliable and cost effective product that can accommodate a wide variety of subsurface conditions.

Their quality is consistent from the first pile to the last and can be seen and verified prior to installation. Driven piles maintain their shape during installation. They do not bulge in soft soil conditions and are typically not susceptible to damage from the installation of subsequent piles.

Pile capacity is easily verified by either static or dynamic pile testing. Capacity per pile or pile length can be easily optimised to provide exactly the required capacity (including safety factors) to minimise foundation costs. Testing also eliminates the uncertainty of bearing capacity estimates based on static analysis. There is no need to be overly conservative and thus wasteful to protect against failure

DRIVEN PILES ARE ADAPTABLE

Driven piles adapt well to unique site conditions and restrictions. They are ideally suited for marine and other near shore applications. There are no special casings required and there are no delays related to the curing of concrete. Piles driven through water can be used immediately. To minimise disturbance in wetlands or allow work over water, driven piles can be used to construct temporary trestles. Piles installed to meet any temporary construction need can be extracted when the need is ended. Non-displacement pile sections (e.g. H piles) can be utilised to minimise vibration effects on nearby existing structures. In corrosive environments, coatings and/or additives can be used to mitigate the effects of corrosion thereby lengthening the service life of a structure. Coatings can also be used to mitigate the effects of negative skin friction.

DRIVEN PILES ARE ENVIRONMENTALLY FRIENDLY

Driven pile installations usually produce no spoils for removal and therefore no exposure to, or costly disposal of, potentially hazardous or contaminated materials. The site is left clean and ready for the next construction activity.

Driven piles easily adapt to variable site conditions to achieve uniform minimum capacity with high reliability, thus eliminating uncertainty due to site variability.

DRIVEN PILES ARE COST EFFECTIVE

Driven piles are usually the most cost effective deep foundation solution. There are no hidden extra costs or added expenses for site clean-up.

DRIVEN PILES ARE VERSATILE

Driven piles are installed to accommodate compression, tension or lateral loads. Piles can be selected to meet the specific needs of the structure, site conditions and budget. You can select from a variety of materials and shapes that best meet your needs.

DRIVEN PILES IMPROVE GROUND CONDITIONS

Driven piles displace and compact the soil. Other deep foundation options can require the removal of soil and cause subsidence, which can undermine the support of adjacent structures and cause excessive deformations, both of which can result in structural problems. Groups of driven production piles densify the soil, improving the capacity of previously driven piles. In groups, driven production piles usually have a higher capacity than the test pile while drilled production piles often have a lower capacity than the test pile. Thus, driven piles generally have higher capacities than other pile types of the same diameter and length.

DRIVEN PILES ARE SELF PROVING

Driven piles are usually installed to established criteria (e.g., minimum blow count per unit penetration, sometimes with a minimum penetration). Because they are normally driven to a blow count to assure the desired minimum capacity, pile lengths may vary when subsurface conditions are not uniform.