

# The efficient alternative to standard pile foundations

With a proven track record of more than forty years in Australia, Rob Voigt thought it was time to bring it to New Zealand.

Screw Pile Solutions – an alternative to traditional piling solutions.

With more than 22 years' experience in the construction industry Screw Pile Solutions founder, Rob Voigt, knows a good system when he sees it.

Screw Pile Solutions are a part of a select few that can say they offer the complete service both supplying and installing their products.

Screw piles or screw piers, as they are often referred to, are the perfect solution for building foundations, ecologically sensitive sites, temporary structures, underpinning and furniture footings- the list goes on.

## How do they work?

Screw piles have been around for years and Rob sees them as an effective solution for both residential and commercial projects.

Once the screw pile locations have been determined by the engineer or builder the piles for a standard house can often be installed in a day.

The engineer will determine what load bearing they need to reach (measured in PSI) and the piles are screwed in to the exact required pressure. This makes the system extremely accurate and not over engineered, saving on materials, time and labour in the long run. Screw piles can be used in conjunction with timber, steel subfloor systems or integrated into a concrete slab.

Screw piles have the distinct advantage over conventional piling systems as they can be easily removed with minimal disturbance to the area they were installed, making them the perfect option for any temporary structures, accommodation or site offices etc.

"We've tested piles in a paddock and in a gravel driveway, the next day we barely noticed that they had been there," Rob says. His team work closely with the engineers, to provide a fast, accurate and cost-effective system that meets or exceeds the NZ Building Code and standards.

Screw piles are even an option for installation of road signage, light poles and footings for sculptures. They again have the advantage over conventional systems as there is no need for excavation, concrete, or large amounts of labour.

Conventional systems can be hazardous operations in public areas. Any system that can reduce potential harm to the general public should be welcomed and that is exactly what Screw Pile Solutions offer.

## Why opt for screw piles

Screw piles offer a less destructive alternative to original drill and pour piles and, if required, can be removed as quickly as they are installed. There is no time spent excavating a huge hole to box and pour a pile, no spoil to remove from site and no over compensating over how deep the piles need to be.

Rob and his team have been trained by their Australian manufacturer who has nearly 40 years combined



experience in the domestic and commercial piling industry. In Australia, the piles have been used in both the building and mining industries.

### No depth restrictions

The piles are drilled in one or two meter extensions - there is no limit to the depth. As the loading of the pile is measured as it is installed, extensions are added on until the required loading, stated by the engineer, is achieved. This depth may vary from pile to pile, but this method ensures they do not go any deeper than required.

### No over engineering

Each individual pile is drilled down to a specific PSI which is calculated from the engineers required loading. As each piles PSI is known at all stages of drilling, we drill to a depth which is determined by the loading requirements. These depths are all dependent on the ground condition in that precise location.

### Minimal concrete

If concrete is to be used at all, it is only used to stabilise the top section of the pile - whether it be in a shallow strip footing or an individual pile cap. This saves time as there is minimal excavation and waiting time for concrete to set.

### Minimal excavation

Piles can be installed in the existing ground contour or a pre-excavated platform. When the piles are installed, there will not be any spoil removal required from the pile locations. Work can be carried out in any conditions

and do not require slurry clean out, submersible pumps, or extra disposal costs due to weather conditions.

### Quick install

No waiting for longer or shorter poles to achieve the required set. No truck and driver to deliver (and take away). Nil pole length wastage.

In a relative cost analysis, one of the greatest factors is the impact of time and manpower: including concrete scheduling, concrete itself, pumps, and associated downtime components.

### Long reach for difficult access

Whether it's a steep bank, an ecologically sensitive site, or there is limited access onto the site, Screw Pile Solutions have equipment with a reach of up to 18m.

If Screw Pile Solutions' "off the shelf" screw piles, top plates and connectors don't suit your needs, then they will work with the manufacturers to come up with a solution. Get in touch with Screw Pile Solutions today to discuss your next project.

Fast, efficient and reliable - trust Screw Pile Solutions.

### Screw Piles the perfect solution for:

- Building foundations – raft slab and conventional
- Ecologically sensitive and hard to reach sites
- Temporary structures
- Underpinning/ foundation correcting
- Tilt slab anchors
- Furniture, lighting and sculpture footings.