

# STOPDIGGING!

THE GROUND SCREW FOR SOLID FOUNDATIONS

## CONCRETE SLAB FOUNDATIONS IN EXPANSIVE SOILS

New Zealand clay soils are very susceptible to shrinkage and swelling. Shallow foundations within this soil type are prone to significant seasonal movement, causing damage to walls and claddings.

The traditional solution for concrete slab foundations on expansive soils is to provide a strengthened raft foundation or deepen perimeter footings, often up to 900mm deep.

Stopdigging Groundscrews can be used as an alternative to a deepened perimeter footing. The ground screws extend beyond the influence of the shrink-swell zone and support the slab edge in the event of shrinking soil.

### ADVANTAGES/DETAILS

- Ground screws at 1 - 2m centres around perimeter of slab
- No additional reinforcement required around slab perimeter or over the head of the pile;
- The pile head is flush with ground allowing easy compaction of slab sub-base;
- A debonded threaded rod provides fixing between pile and slab and can be installed after the laying of DPM. Minimal penetration / damage to DPM during installation.

StopDigging provide a fully installed groundscrew pile solution, allowing a standard raft slab to be installed by the foundation contractor.

We provide a full structural design package for building consent through our preferred engineers:



[www.amxstructures.co.nz](http://www.amxstructures.co.nz)

SED to determine design loads.  
Geotechnical input for design parameters. PS1 from CPEng.



StopDigging undertake inground static pile testing to confirm load bearing capacity and length of Groundscrew required for site specific ground conditions. This is a formal verification method for Building Code compliance.



StopDigging provide PS3 on completion of installation.  
CPEng to provide PS4

