## **TERRADRIVE PRODUCT PORTFOLIO**

PRECAST HOUSE FOUNDATIONS

PRECAST CONCRETE PILING

LOW VIBRATION PILING

**RESTRICTED ACCESS PILING** 

STEEL BEARING PILES



# **Precast Concrete House Foundations**



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Terradrive Piling & Foundations Ltd's Precast House Foundation System is the result of the needs of the house building industry for a solution to the difficulties imposed upon them by spiralling labour rates, acute skills shortage and ever increasing performance demands (both time and economic).

The system combines precast concrete piling, precast concrete pile caps and precast concrete ground beams, manufactured under controlled factory conditions employing the very latest concrete technology, to produce a tailor made house foundation solution.

#### Advantages include;

- Improved Health & Safety,
- Greater speed of construction
- Higher standards of quality and reliability,
- Greater predictability of costs and programme,
- Less disruptions to the construction process (not weather dependent),
- Reduced environmental impact
- (no spoil on site or wasted materials),
- Simpler construction process,
- Reduced reliance on expensive, scarce traditional trades,
- All delivered in one sub-contract package.

### STAGE 1: Piling & Pile Testing

The first stage in the process is the installation of the bearing piles. Precast concrete piles, supplied in 3 available sizes 200 mm sq, 250 mm sq or 300 mm sq, depending on the prevailing ground conditions, are installed to the piling layout drawing. Once the pile driving operations have been completed, a selection of piles is tested in accordance with the clients' specifications.











#### **STAGE 2: Preparing Piles**

Following satisfactory pile testing, and approval of piling by the client, the piles are cut down to the required levels, leaving the reinforcement exposed for incorporation into the pile cap and ground beams. A "blinding matt" is placed around the piles to provide a level base for the pile caps to sit on.

#### **STAGE 3: Placing & Fixing Pile Caps**

The caps are set into position over the reinforcement projecting from the piles. Careful positioning of the pile caps ensures correct orientation to receive the ground beams. The reinforcement from the piles protrudes through the top of the pile cap.

#### **STAGE 4: Positioning Precast Beams**

Once the pile caps are in place, the precast ground beams are set in position. Each ground beam has a specific reference number ensuring correct positioning.

#### **STAGE 5: Fixing Precast Beams**

Prior to final fixing, all ground beams are surveyed to ensure correct positioning within allowable tolerances. Shutters are fixed to the ground beams and concrete is cast into all voids to provide a continuous element.

#### **STAGE 6: Handover**

