

Teretek® Re-levels and Re-Supports Subsiding House in Jamisontown

INDUSTRY

Residential

STRUCTURE

House

PROBLEM

Slab subsidence

LOCATION

Jamisontown, NSW,
Australia

DURATION / YEAR

4 hours / October 2017

TECHNOLOGY

Teretek®

BUSINESS UNIT

Mainmark Australia



Summary

A 40-year-old property in Jamisontown, near Penrith, New South Wales, had experienced significant damage as a result of a collapsed stormwater pipe approximately 6m from the south-west corner of the single-storey, brick veneer home. Ingress of water had saturated the clay soil around the dwelling's concrete foundations, causing soil subsidence and building movement.

Structural damage to the home due to the soil subsidence included substantial 10mm-15mm stress cracks in the brick veneer walls with separations along window frames and eve sheets.

Mainmark was contracted to improve the ground-bearing capacity of the subsoil and fill the voids under the footings using its proprietary Teretek® engineered resin injection solution; completing the project in just four hours.

Objectives

The project required Mainmark to provide a non-invasive, time-efficient solution to improve the bearing capacity of the subsoil and raise and re-support the concrete slab, lifting the home back to its original level.

Solution

Mainmark successfully remediated the house by injecting Teretek engineered resin into the soil beneath the concrete strip footing. The controlled force generated by the

expanding resin was able to lift the building back to level while filling any ground voids to further strengthen the underlying soil.

Teretek is a fast and cost-effective two-in-one solution that improves the foundation ground and raises and re-levels a home in a single application. The process is likened to key-hole surgery due to its non-invasive nature, unlike traditional underpinning techniques which can be invasive and expensive.

By re-supporting and re-levelling the home, the Teretek resin also successfully closed visible gaps in the brickwork and between the skirting board and floor.

The project was completed in four hours with minimal inconvenience to the residents. The homeowner commented, "I was extremely happy with the outcome. The Mainmark team was very professional and committed to achieving a good outcome. We definitely got the result we were looking for and the process has minimised the need for any further repairs."



Before and after Teretek® engineered resin being injected