

House and Garage Lifted and Re-levelled

INDUSTRY

Residential

STRUCTURE

House

PROBLEM

Earthquake remediation

LOCATION

Christchurch, New Zealand

DURATION / YEAR

11 days / 2011

TECHNOLOGY

Uretek Deep Injection
& Uretek Slab Lifting

BUSINESS UNIT

Mainmark New Zealand



Summary

Earthquake caused subsidence of between 10mm and 42mm in various areas of this residential home and garage in Christchurch, which needed to be re-levelled so that the occupants could live safely in the home.

Objectives

The 136m² home and adjoining 60m² garage both needed re-levelling and offered good access to set up operations. The site conditions had soft, sandy silt and soils after the Christchurch earthquake. Good liaison between the homeowner, the insurance company and the consulting engineer was imperative. The objective was to re-level the home and adjoining garage.

Solution

Uretek Deep-Injection was the appropriate method to provide support under 13 piles supporting the house. Uretek Slab-Lifting was used to re-level various parts of the home and garage. Correction took just eleven days.

The buildings were re-levelled to within 15mm tolerances and the homeowner could move back into the home. Faced with the alternatives of either demolition of the home or a lengthy re-build, the homeowner found Mainmark to be a cost-effective and time-efficient solution to remediate the earthquake damage.

Above, top: Mainmark's small setup footprint for the level correction of a 136m² home and 60m² garage. Above, bottom: With no excavation required, the beautiful gardens were entirely undisturbed.