

House Floor Raised and Re-levelled

INDUSTRY

Residential

STRUCTURE

House

PROBLEM

Earthquake remediation

LOCATION

Christchurch, New Zealand

DURATION / YEAR

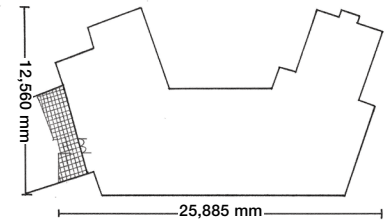
2 days / 2011

TECHNOLOGY

Uretek Slab Lifting

BUSINESS UNIT

Mainmark New Zealand



Summary

This building had just been completed when an earthquake struck. There was subsidence along the 25 lineal metres of its back wall with the drop ranging from 24mm to 100mm. Also affected by the earthquake were areas in the centre of the slab floor.

The building was corrected in just two days by Uretek Deep Injection and this house resisted subsequent seismic shocks, while others around it suffered badly.

Objectives

We were required to re-support and re-level over 40% of the house footings and floor.

Solution

Of typical brick veneer construction and a concrete slab-on-ground floor, the house presented no unusual problems and was corrected with precision by Uretek Slab Lifting.

In just two days the team had the house re-levelled to within 5mm, right across this very wide dwelling.

After the subsequent significant earthquakes which occurred five months later, this site suffered no further

damage in contrast with neighbouring buildings that were badly damaged.

This served to demonstrate the liquefaction mitigation benefits of Uretek.

Above: This 285m² house in Christchurch had been completed just one day before the major earthquake! The major re-leveling took just two days. Multiple injection points and continuous precision laser monitoring and an on-site Operations Unit ensured a fast and efficient result.