

Engineered resin lift

Repairing your concrete foundation

The team

- **Southern Response**
The government-owned company responsible for settling claims by AMI policyholders for Canterbury earthquake damage which occurred before 5 April 2012 (the date AMI was sold to IAG)
- **Arrow International**
The project management company responsible for the building programme for Southern Response customers. Arrow International will engage the engineer, designer and contractor for your repair
- **The Engineer**
Responsible for determining the repair strategy
- **The Designer**
Documents the repair for compliance and quality purposes
- **The Contractor**
The prequalified contractor who will be conducting your repair

Repairing your foundations

House foundations are the base on which your house is built and are one of the factors in a strong, safe home.

All of the different parts of your house, from the framing to the cladding to the foundations, played a part in how well your house performed in the earthquakes.

The Ministry of Business Innovation and Employment (MBIE) has determined what technical category (TC) of land your property is and we know a lot about the different ways TC1, TC2 and TC3 land are likely to behave in another earthquake. The repair and re-leveling methods used for foundations are based on the nature and extent of the damage caused by the earthquakes, as well as the type of foundation your house has. The decisions on what methods to use are based on an individual assessment of your house by an independent engineer and a designer, facilitated by Arrow International.

For foundations with a concrete slab, there are a range of solutions to re-level it. These are a mechanical lift using jacking pads, screw piles or the injection of engineered resin.



REPAIRING YOUR CONCRETE FOUNDATION

THE METHOD



Outside the home.

1a & 1b. Small holes are drilled where the foundations need to be level, this is done both inside and outside the house.



Inside the home.



2. Expanding resin is injected into the ground. The expanding resin compacts any soft soil underground, which lifts the overlying foundation.



3. Technicians are able to control the pressure of the resin injection, allowing the resin to lift the house to level. This re-leveling process is monitored by the technician.



4. This home had sunk out of level on a diagonal from front right to back left and was re-levelled in just a day.

Industry information

With this technique there is minimal interruption. Once the resin has hardened then the job is completed, this can happen in less than 48 hours with little disruption to the household.

Methods for assessing, repairing and re-leveling foundations have been published by the MBIE. For further information on the MBIE guide you can visit their website:

www.dbh.govt.nz/guidance-on-repairs-after-earthquake

Find out more

www.hnzc.co.nz/our-publications/Housing-need-in-Canterbury/Technical-Report-on-the-Results-of-Foundation-Repair-Trials, specifically page 188.

Or visit the Uretek website: www.uretek.co.nz/pages/home.asp

For any other information visit: www.southernresponse.co.nz

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