



# Advice for Canterbury building owners

## Assessing the seismic performance of non-residential and multi-unit residential buildings

June 2012

In the wake of the Canterbury earthquakes building owners need to consider the structural integrity of their buildings, and how their buildings will be used and repaired going forward.

### Detailed Engineering Evaluations required

Over the next three years the Canterbury Earthquake Recovery Authority (CERA) will be asking owners of non-residential and multi-unit residential buildings in greater Christchurch (Christchurch City, Selwyn District and Waimakariri District) to have a Detailed Engineering Evaluation (DEE) prepared for their buildings. Building owners will be required to provide a copy of their DEE to CERA.

The DEE will help you (the building owner) to make informed decisions about the continued use of your buildings. It will provide a starting point for decisions about any repair work required and will ascertain information about the state of your buildings generally.

### You are responsible for the safety of your buildings

You need to make your own decisions about how to manage your buildings (subject to any notices that may be given by the council or CERA). You should not wait for your council or CERA to act before dealing with any structural concerns.

Should strengthening work be found necessary, you should talk to your tenants and put plans in place to carry out this work within a reasonable timeframe.

### You may be legally required to structurally upgrade your building

Under the Building Act you may be required to upgrade your building if it is “dangerous” or “earthquake-prone.” You are also required to upgrade buildings if given a notice by the council or CERA.

- In Canterbury, a building is deemed “dangerous” if there is an imminent risk to the building occupants or any one who may be in the vicinity of the building, or it is at risk of collapsing in a moderate earthquake.
- An “earthquake-prone building” is a structure that is 33 per cent or less of the new building standard (NBS) for earthquake strength design.

**Note:** Even if an undamaged building is earthquake-prone it does not necessarily mean that the building is unsafe and should not be occupied. Building owners need to make their own decisions about how to manage their buildings, with the benefit of expert engineering advice that takes into account the individual circumstances of each building and the risks in each case.

## Five steps to help you make informed decisions about your buildings

- 1. Engage professional advice:** Obtain advice from a qualified Chartered Professional Engineer (structural) with appropriate experience in seismic design and evaluation of existing buildings.

You may also need to engage other professional advisors, such as lawyers, owners of neighbouring buildings, and your tenants. If the property is a unit titled multi-unit residential property then the body corporate will need to be involved.

- 2. Identify specific risks and vulnerabilities:**  
The DEE should identify any structural weakness or vulnerabilities, for example from parapets and chimneys.
- 3. Consider earthquake consequences:**  
The consequences of damage to some buildings is greater (e.g. a hospital, school or emergency facility).
- 4. Understand your options:** Consider the engineering/construction options for mitigating the risks.
- 5. Decide what action to take:** Choose option that best mitigates risk, is cost effective and provides least disruption to tenants, users, and neighbours.



For more information visit the Department of Building and Housing's website [www.dbh.govt.nz](http://www.dbh.govt.nz) or seek advice from a Chartered Professional Engineer.