

# Memo

27 October 2017

To: Mayor, Councillors and Local Board Chairs  
cc: Penny Pirrit, Director Regulatory Services, Ian McCormick, General Manager  
Building Consents  
From: Jason Wang, Manager- Building Consents Capability, Building Consents

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Subject: Implementation Approach - Building (Earthquake-prone Buildings) Amendment Act 2016

## Background

The earthquake-prone buildings provisions of the Building Act 2004 have been amended by the Building (Earthquake-prone Buildings) Amendment Act 2016. The provisions of the Amendment Act came into effect on 1 July 2017 with the new national system for managing earthquake-prone buildings now operative.

This memo provides an update on the introduction of the changes to the earthquake-prone buildings provisions of the Building Act 2004 as a result of the Building (Earthquake-prone Buildings) Amendment Act 2016 as detailed in our memo of 12 May 2017 and the proposed implementation approach.

## Implementation process

A key consideration for the implementation of the new system and methodology is to not re-litigate assessments already completed and impose unnecessary cost on building owners.

Our proposed approach for the transition between systems is:

For buildings already assessed as 'not earthquake-prone':

- No action needed. The Regulations exclude these buildings from being re-assessed under new methodology.

For buildings already assessed as 'earthquake-prone' (approx. 1800):

- Write to building owners advising of change in legislation and giving them the options to:
  - Accept the existing earthquake-prone seismic assessment, or
  - Engage a suitably qualified structural engineer (at their cost) to undertake a new engineering assessment under the new methodology (EPB Methodology) within 12 months.
- If they elect to accept the existing earthquake-prone rating Council will:
  - issue an Earthquake-prone Building Notice which is required to be displayed in a prominent place in the building, and
  - Add the building details to the national register of earthquake-prone buildings

Auckland council's seismic assessments were completed using the Initial Evaluation Procedure (IEP) methodology which inherently provides a conservative assessment of seismic performance.

It is likely that some (5%-10%) of buildings assessed as being earthquake-prone under the new, more detailed, methodology may be reassessed by building owners as being not earthquake-prone.

Given the number of buildings involved, we propose a phased approach to enable us to effectively manage the resulting queries and issues. It is expected to take 12-15 months to issue letters to all owners. We are planning to send the letters by Local Board areas so that where there are clusters of earthquake-prone buildings (e.g. Onehunga, Devonport), all the affected buildings in the same area receive letters (and subsequently new earthquake-prone building notices) at the same time.

Once the earthquake-prone status of a building has been confirmed, an earthquake-prone building notice will be issued. It will be the issuance of the notice that triggers the requirement for the building's details to be added to the national earthquake-prone building register.

The timeframe for strengthening earthquake-prone buildings in Auckland (a low seismic zone) is 35 years from the date the earthquake-prone building notice is issued. However, it is important to bear in mind that there are additional triggers requiring strengthening earlier than the 35 year timeframe – when the building is subject to a change of use or a substantial alteration (where the value of alterations is >25% of the rate-able value of the building).

Timeframe extensions of 10 years for specific heritage buildings and exemptions from strengthening are also possible in accordance with the guidance criteria provided by Ministry of Business, Innovation and Employment (MBIE).

The earthquake prone status of a building or part-building (e.g. individual unit title) will be publically available on the Land Information Memorandum (LIM) as long as the building or part-building remains earthquake-prone.

### **Sequencing by Local Board areas of when letters will be sent to building owners**

1. Puketapapa (Approx. 132)
2. Devonport (Approx. 159)
3. Albert-Eden (Approx. 381)
4. Waitemata (Approx. 795)
5. Orakei (Approx 165)
6. Maungakiekie-Tamaki (Approx.206)
7. Kaipatiki, Henderson-Massey, Whau, Mangere-Otahuhu, Otara-Papatoetoe & Howick (Approx. 213)
8. Rodney, Hibiscus Bays, Upper Harbour, Waitakere Ranges, Manurewa, Papakura, Franklin, Waiheke & Great Barrier (Approx. 98)

The first Local Board area to receive letters, Puketapapa Local Board will have relatively few affected buildings (approx.132) and will be used as a pilot to gauge the volume of queries received. We propose to send out the letters in November 2017. If a high volume of queries are received, the sequencing by Local Board areas may need to be adjusted to be able to manage the volume efficiently.

### **Potential challenges**

Once we start communicating the new legislative requirements to owners of earthquake-prone buildings, we anticipate this will generate some challenges. These include:

- Building owners who advise they had not received prior notification that their building is earthquake-prone. The seismic assessment programme pre-dates the creation of Auckland Council. The legacy councils took different approaches to assessments and notifications and it may be that some owners did not receive the initial notification.
- Building owners who bought earthquake-prone buildings without realising the building is earthquake-prone or the implication of this.
- Building owners with individual titles within one building structure (generally apartment or businesses). Each owner will receive their own Earthquake-prone Building Notice but individually will have little way of addressing the seismic issues of the building. The new assessment methodology requires engineers to assess the seismic strength of a building structure as a whole. It is recommended that multiple owners within a building co-ordinate any seismic assessment or strengthening work.
- Building owners who refuse to display the Earthquake-prone Building Notices in a prominent place on their building (as required by the legislation). There are infringement provisions in the Act for refusing to display the notices, however we would not anticipate utilising these provisions initially but will work with those owners to achieve the desired outcome.

If you have any questions relating to the new legislation or the proposed implementation approach, please contact Jason Wang in the Building Consents department via [jason.wang@aucklandcouncil.govt.nz](mailto:jason.wang@aucklandcouncil.govt.nz) or on 021 781116.

Jason Wang

## Supporting information

### What is an earthquake-prone building?

A building is deemed earthquake-prone if its seismic strength is assessed as being less than 34% of the design standard for new building (%NBS) in the same location.

The assessments take into account a number of factors including age and construction methodology, seismic risk levels, ground conditions, and the building's importance level. For example:

- A building with a seismic rating of 34%NBS in Auckland (low seismic risk) would score much lower if the same building was in Wellington (high seismic risk),
- A building used for a post-disaster function (high importance level) with a seismic rating of 60%NBS would have a higher score if it were used as a retail store (lower importance level).

An earthquake-prone building is not a dangerous building purely because it is deemed earthquake-prone.

### Legislative definitions: Earthquake-prone building:

(1) A building or a part of a building is **earthquake prone** if, having regard to the condition of the building or part and to the ground on which the building is built, and because of the construction of the building or part,—

(a) the building or part will have its ultimate capacity exceeded in a moderate earthquake; and

(b) if the building or part were to collapse, the collapse would be likely to cause—

(i) injury or death to persons in or near the building or on any other property; or

(ii) damage to any other property.

(2) Whether a building or a part of a building is earthquake prone is determined by the territorial authority in whose district the building is situated: see section 133AJ.

(3) For the purpose of subsection (1)(a), **ultimate capacity** and **moderate earthquake** have the meanings given to them by regulations.

### Moderate Earthquake:

For the purposes of section 133AB of the Act (meaning of earthquake-prone building), moderate earthquake means, in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as, the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site if it were designed on the commencement date.

# New Zealand Seismic Risk Zones

