

 <p>Kaipara ke Orangakū <b>KAIPARA</b> DISTRICT Two Oceans Two Harbours</p>	<b>Title of Policy</b>	Earthquake-prone Buildings		
	<b>Sponsor</b>	General Manager Operations		
	<b>Written By</b>	Policy and Planning Manager	<b>Authorised/Adopted by</b>	Council
	<b>Type of Policy</b>	Regulatory	<b>Date Adopted</b>	26 November 2013
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## 1 Background

Section 131 of the Building Act 2004 requires Territorial Authorities to review its policy on Earthquake-Prone Buildings.

The definition of an Earthquake-Prone Building is set out in Section 122 of the Building Act 2004 and in the related regulations that define moderate earthquake. This definition covers more buildings and requires a higher level of structural performance of buildings than that required by the Building Act 1991.

## 2 Objective

The overall objective of implementing this Policy is to achieve compliance with the Building Act 2004 with respect to earthquake-prone buildings. In particular to state:

- the approach Kaipara District Council will take in performing its functions under the Building Act 2004;
- Kaipara District Council's priorities in performing those functions; and
- how the Policy will apply to heritage buildings.

## 3 Definitions

Meaning of earthquake-prone building (s122 Building Act 2004):

- (1) *A building is earthquake prone for the purposes of this Act if, having regard to its condition and to the ground on which it is built, and because of its construction, the building-*
  - (a) *will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and*
  - (b) *would be likely to collapse causing-*
    - (i) *injury or death to persons in the building or to persons on any other property; or*
    - (ii) *damage to any other property.*
- (2) *Subsection (1) does not apply to a building that is used wholly or mainly for residential purposes unless the building-*
  - (a) *comprises 2 or more storeys; and*
  - (b) *contains 3 or more household units.*

## **4 Policy Statement**

### **4.1 Policy Principles**

Kaipara District Council has noted that provisions of the Building Act in regard to earthquake-prone buildings reflect the Government's broader concerns about risks to people from potentially life threatening situations for the public in buildings and, more particularly, the need to address public safety and protection when earthquakes occur.

Kaipara District Council has also noted that the process for developing an Earthquake-Prone Buildings Policy is flexible to allow each Council to respond accordingly.

### **4.2 Overall Approach**

The approach taken reflects the level of concern which Kaipara District Council has with regard to earthquake-prone buildings. Earthquake-prone buildings are not considered a significant matter for Council and this is for several reasons:

- The whole of Northland is considered to be of low earthquake risk, as confirmed in the 2003 report of the Institute of Geological and Nuclear Sciences Limited: "A review of national hazards information for Whangarei District". ref: 2003/153 at p9.
- There are also very few buildings in Kaipara which would fall within the definition of "earthquake-prone" within the meaning of s122 of the Act, principally because of the nature of their construction. There are very few unreinforced masonry buildings of more than one storey.
- In order to comply with the area's High/Very High Wind Zone hazard rating, buildings will generally have been required to be constructed to withstand at least a moderate earthquake.

It is therefore concluded that earthquake-prone buildings within the Kaipara District pose a low risk and the consequences are modest. For these reasons the Council considers a more passive approach is acceptable.

Council considers it appropriate to limit the scope for remedial work to the time when a building consent is received for work on a building which is likely to be considered earthquake-prone within the meaning of the Act.

However in the interest of public safety, Council will take a more active approach in respect of public buildings which have been identified as earthquake-prone and have been constructed with street-facing parapets or cantilevered verandas. These will be required to undertake remedial work within a given timeframe.

### **4.3 Assessment Criteria**

As a practical guide Kaipara District Council will assess earthquake-prone buildings as those that would not meet or exceed the design criteria for a moderate earthquake as described in the Building (Specified Systems, Change the Use, and Earthquake-Prone Buildings) Regulations 2005. Kaipara District Council will use the NZ Society for Earthquake Engineering (NZSEE) Recommendations as its preferred basis for defining technical requirements and criteria. These Recommendations are

designed to be used in conjunction with AS/NZS 1170 Loadings Standard, NZS 3101 Concrete Structures Standard, NZS 3404 Steel Structures Standard and other materials Standards.

#### **4.4 Interaction Between Earthquake-Prone Buildings Policy and Related Sections of Building Act 2004**

##### **4.4.1 Section 112: Alterations to Existing Building**

This Section applies when a Building Consent application is received for significant upgrading or alteration of a building that is or could be earthquake-prone. Irrespective of the general priorities set by Kaipara District Council for dealing with earthquake-prone buildings, the Council will require the owner to provide a detailed assessment of the earthquake performance of the building. This is to be prepared by a suitably qualified and experienced person to determine whether or not it is earthquake-prone in its existing condition.

The Council will not issue a Building Consent unless it is satisfied that the building is not earthquake-prone and that the building work will not detrimentally affect the building's compliance with the Building Code.

If the building is shown to be earthquake-prone, then the Council will require that the building be strengthened to comply with current government regulations (i.e. 34% of the current Building Standards).

##### **4.4.2 Section 115: Change of Use**

This Section applies when a Building Consent application is received for change of use of a building that is or could be earthquake-prone. Irrespective of the general priorities set by Kaipara District Council for dealing with earthquake-prone buildings, it will be a requirement of the Building Consent that the owner provide a detailed assessment of the earthquake performance of the building. This is to be prepared by a suitably qualified and experienced person to determine whether or not it is an earthquake-prone building in its existing condition.

If the building is shown to be earthquake-prone then the Council will require that the building be strengthened to comply with current government regulations (i.e. 34% of the current Building Standards) whether or not there is a change of use of that building.

#### **4.5 Recording a Building's Earthquake-Prone Buildings Status**

An initial desktop evaluation process will be undertaken, to enable Council to produce a register of all buildings within the District that have been identified as potentially earthquake-prone.

The register will be established on the basis of a risk category or classification of the buildings to enable confirmation of times to carry any strengthening work. The Council will keep a record of the NZSEE grade of all buildings assessed as a result of a Building Consent and this will be added to the appropriate building in the register.

All records for each individual building in terms of a register status will be added to property files, including any timeframe within which any strengthening work is required to be carried out.

#### **4.6 Economic Impact of Policy**

The primary function of the legislation and this Policy is to reduce the risks of buildings causing life-threatening situations.

Implementing this policy may create an economic burden on building owners and, where this does happen, the Council in its discretion may allow an owner more time to achieve compliance. Such provisions will be considered on a case-by-case basis.

With regard to heritage buildings, Council has a fund called 'the Kaipara Heritage Assistance Fund' which has some, albeit limited, funding from which grants could potentially be awarded towards a structural review or structural work. It is to be noted, however, that at the time of adopting this Policy, the Fund has been suspended.

## **5 Priorities and timescales**

Kaipara District Council has prioritised both the identification and the requirement to strengthen or demolish buildings as follows. The order of priorities will be as indicated below:

- 1 Buildings with special post-disaster functions as defined in *AS/NZS 1170.0:2002 Importance Level 4* and Buildings that contain people in crowds or contents of high value to the community as defined in *AS/NZS 1170.0:2002 Importance Level 3* will be identified by June 2014. Owners of identified buildings will be notified and will be given 5 years from the enactment of the relevant legislation to place with Council an assessment by a suitably qualified person as to the extent of remedial work required. Owners will then have a further 15 years to carry out those works identified in the assessment. This timescale is in line with government regulations.
- 2 Buildings defined in *AS/NZS 1170.0:2002* with an *Importance Level* of 1 and 2 will be assessed in line with the same timescale as in 5(1) above.
- 3 Buildings with an Historic Places Trust category I or II classification will be identified in the same priority as above.

Where significant work is required, placing a financial burden on an owner, additional time may be provided for. This will be assessed on a case-by-case basis.

## **6 Heritage Buildings**

### **6.1 Special Considerations and Constraints**

Kaipara District Council believes it is important that its heritage buildings have a good chance of surviving a major earthquake. However, Kaipara District Council does not wish to see the intrinsic heritage values of these buildings unnecessarily affected by structural improvement measures.

Heritage buildings will be assessed in the same way as other potentially earthquake-prone buildings and discussion held with owners and the NZ Historic Places Trust/Heritage New Zealand Pouhere Taonga to identify a mutually acceptable way forward. Special efforts will be made to meet heritage objectives. There will be extensions of up to 10 years from the national timeframe in 5(1) above for strengthening for owners of earthquake-prone category 1 heritage buildings and those on any National Historic Landmarks list.