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