

Managing earthquake-prone buildings

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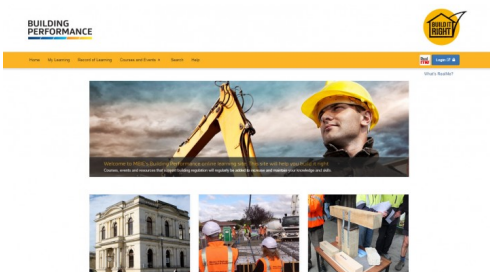
A new national system for managing earthquake-prone buildings in New Zealand came into effect on 1 July 2017. The new system affects owners of earthquake-prone buildings, territorial authorities (local councils), engineers, other building professionals and building users.



Video: Introducing the system for managing earthquake-prone buildings

Watch a short video overview of how the system works.

Go to the video (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/video-epb-system/>)



Online learning: Earthquake-prone buildings

Check out the earthquake-prone buildings courses on our online learning site.

Go to the site
(<https://learning.building.govt.nz/course/index.php?categoryid=9>)

New system for managing earthquake-prone buildings

New Zealand is extremely prone to seismic activity and ensuring the safety of people is paramount. Buildings need to be safe for occupants and users.

The Building (Earthquake-prone Buildings) Amendment Act 2016 introduced major changes to the way earthquake-prone buildings are identified and managed under the Building Act. It uses knowledge learned from past earthquakes in New Zealand and overseas.

The system is consistent across the country and focuses on the most vulnerable buildings in terms of people's safety.

It categorises New Zealand into three seismic risk areas and sets time frames for identifying and taking action to strengthen or remove earthquake-prone buildings.

It provides more information for people using buildings such as nationally consistent EPB notices with ratings for earthquake-prone buildings and a public earthquake-prone buildings register (the EPB register).

- [How the system works](https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/how-the-system-works/) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/how-the-system-works/>) outlines the system for managing earthquake-prone buildings in more detail.
- [What this means for you](https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/what-earthquake-prone-buildings-system-means-for-you/) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/what-earthquake-prone-buildings-system-means-for-you/>) has information for territorial authorities, building professionals, building owners, building users and the public.
- [Earthquake-prone building resources](https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/resources/) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/resources/>) contains links to the relevant legislation, regulations, the methodology to identify earthquake-prone buildings, guidance documents and information sheets
- [Register of earthquake-prone buildings](https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/epb-register/) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/epb-register/>) contains information about buildings determined to be earthquake prone.

Related information

[General information on building safety in earthquakes](https://www.building.govt.nz/managing-buildings/building-safety-in-earthquakes/) (<https://www.building.govt.nz/managing-buildings/building-safety-in-earthquakes/>) has information on building owner responsibilities for keeping their buildings safe in earthquakes.

[Post-emergency building assessment](https://www.building.govt.nz/managing-buildings/post-emergency-building-assessment/) (<https://www.building.govt.nz/managing-buildings/post-emergency-building-assessment/>) has information on managing a building following a major event.

[Worksafe's position statement on dealing with earthquake-related hazards](http://www.worksafe.govt.nz/worksafe/information-guidance/all-guidance-items/position-statements/position-statement-dealing-with-earthquake-related-hazards) (<http://www.worksafe.govt.nz/worksafe/information-guidance/all-guidance-items/position-statements/position-statement-dealing-with-earthquake-related-hazards>) is available on the Worksafe website.

What earthquake prone means

A building, or part of a building, is earthquake prone if it will have its ultimate capacity exceeded in a moderate earthquake, and if it were to collapse, would do so in a way that is likely to cause injury or death to persons in or near the building or on any other property, or damage to any other property.

Territorial authorities determine if a building or part of a building is earthquake prone using the EPB methodology, a document which sets out how territorial authorities identify potentially earthquake-prone buildings, how engineers undertake engineering assessments, and how territorial authorities determine whether a building or part is earthquake prone, and if it is, its [earthquake rating](https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/what-earthquake-prone-buildings-system-means-for-you/territorial-authorities-earthquake-prone-buildings/#jumpto-determining-if-a-building-is-earthquake-prone-and-assigning-an-earthquake-rating) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/what-earthquake-prone-buildings-system-means-for-you/territorial-authorities-earthquake-prone-buildings/#jumpto-determining-if-a-building-is-earthquake-prone-and-assigning-an-earthquake-rating>) (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/what-earthquake-prone-buildings-system-means-for-you/territorial-authorities-earthquake-prone-buildings/#jumpto-determining-if-a-building-is-earthquake-prone-and-assigning-a-rating>).

[The methodology to identify earthquake-prone buildings](https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/methodology-identify-earthquake-prone-buildings/) (<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/methodology-identify-earthquake-prone-buildings/>) has more information.

[The Building Act 2004](http://www.legislation.govt.nz/act/public/2004/0072/latest/whole.html) (<http://www.legislation.govt.nz/act/public/2004/0072/latest/whole.html>) is available on the Legislation website.

[Building \(Specified Systems, Change the Use, and Earthquake-prone Buildings\) Regulations 2005](http://www.legislation.govt.nz/regulation/public/2005/0032/latest/DLM313966.html) (<http://www.legislation.govt.nz/regulation/public/2005/0032/latest/DLM313966.html>) is available on the Legislation website.

Why buildings are managed for earthquake risk

Experience from Christchurch and overseas has shown that the failure of earthquake-prone buildings, or parts, can endanger lives. Thirty-nine people lost their lives when unreinforced masonry buildings failed during the Christchurch earthquake on 22 February 2011. Earthquake risk reduction is a priority in New Zealand.

New Zealand has had a progressive approach to improving standards for new buildings and earthquake-resistant design since design standards for buildings were first introduced into New Zealand in 1935, following the Napier earthquake.

Advancements in the knowledge of seismicity, material properties and the response of buildings in earthquake shaking has resulted in progressive refinements to requirements for the design and detail of buildings.

The system introduced on 1 July 2017 provides leadership and direction on how to manage the risks to public safety posed by existing buildings, including those constructed prior to the introduction of certain design standards.



New Zealand Government

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