

Engineers, other building professionals and earthquake-prone buildings

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Engineers will be commissioned by building owners to undertake assessments of potentially earthquake-prone buildings. Engineers and other building professionals will need to advise and assist building owners, who must obtain assessments and complete seismic work on their earthquake-prone buildings within set time frames.

Role of engineers and other building professionals

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

Building professionals engaged by owners of earthquake-prone buildings should check the seismic risk areas and related time frames to best advise their clients.

Suitably qualified engineers will carry out engineering assessments on buildings. The EPB methodology sets out the qualifications required for engineers assessing potentially earthquake prone buildings.

Engineers:

- should be familiar with the EPB methodology as this contains the engineering assessment requirements for buildings identified by territorial authorities as potentially earthquake prone
- must carry out earthquake assessments in accordance with the EPB methodology if these assessments are for earthquake-prone building purposes
- can provide technical support to territorial authorities when required.

Territorial authorities use engineering assessments to help determine whether a building is earthquake prone and, if so, to assign an earthquake rating. New assessments must meet the criteria in the EPB methodology to be accepted by a territorial authority.

The methodology to identify earthquake-prone buildings (<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/methodology-identify-earthquake-prone-buildings/>) (EPB methodology) sets out the engineering qualifications required, the appropriate form of assessment, what engineers are required to do and reporting requirements.

The Seismic Assessment of Existing Buildings (<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/seismic-assessment-existing-buildings/>) sets out the technical methods that must be followed when undertaking seismic assessments.

Seismic risk areas and time frames (<https://www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings/how-the-system-works/#jumpto-seismic-risk-areas-and-time-frames>) has a map of the seismic risk areas and time frames.

A quick guide to the EPB methodology

The EPB methodology contains the following sections that relate to engineering assessments of potentially earthquake-prone buildings:

- the scope for engineering assessments
- qualification requirements; at the minimum the engineering assessment must be overseen and signed off by a Chartered Professional Engineer
- determining the appropriate form of assessment
- technical requirements for the assessment
- considering parts of buildings

- reporting requirements.



New Zealand Government

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