

# EARTHQUAKE DAMAGE ASSESSMENT AND REINSTATEMENT REPORTING FRAMEWORK

Engineering New Zealand recommends that engineers reporting on damage assessments and reinstatement set out their reports using the following framework.

The purpose of this framework is to provide greater consistency in the way engineers report their assessments of earthquake damage and reinstatement methodologies. This helps homeowners and insurers more easily compare reports and identify where their engineers agree and disagree.

Engineering New Zealand recommends that engineers set out their reports using the following headings, and make sure that, at a minimum, they address the points in the explanatory notes for each heading.

## DAMAGE ASSESSMENT AND REINSTATEMENT REPORTING FRAMEWORK

Section	Content	Explanatory notes
1.	<b>Scope of engagement</b>	Reference the standard set out in the policy, as well as the definition of the standard from the instruction. Limitations/disclaimers
2.	<b>Summary of inspections undertaken</b>	Date, scope of inspection and personnel involved
3.	<b>Documentation reviewed</b>	Previous assessments; geotechnical reports
4.	<b>Building and site description</b>	Include age and type of construction; main dwelling and other structures
5.	<b>Geotechnical considerations</b>	Key relevant points from geotechnical reports, e.g. site performance, bearing capacity, SLS settlement, lateral

		stretch status, presence of uncontrolled fill/compressible soils etc.
<b>6.</b>	<b>Summary and discussion of earthquake damage and previous repairs</b>	
<b>6.1</b>	Homeowner comments	Relevant damage observations from the homeowner as well as any information provided by the homeowner about previous repairs, alterations and renovations.
<b>6.2</b>	Earthquake damage to structural elements	Identify current damage, establishing what was caused or exacerbated by the earthquakes, and differentiating from non-earthquake damage, with supporting evidence
<b>6.3</b>	Pre-existing condition of structural elements	
<b>6.4</b>	Previous repairs undertaken	Identify the nature and effectiveness or otherwise of any previous repairs
<b>7.</b>	<b>Reinstatement methodology</b>	
<b>7.1</b>	Definition of required standard applied	
<b>7.2</b>	Recommended remediation	Outlining how the damage attributable to the earthquake is to be remedied (taking into account any previous repairs) in order to meet the required standard
<b>7.3</b>	Further investigations or information required	
<b>7.4</b>	Further engineering design input required	
<b>8.</b>	<b>Summary</b>	Summarising the key findings and recommended remediation approach (options)