

Supplementary guidance to the Residential guidance

Use this supplementary guidance in conjunction with Repairing and rebuilding houses affected by the Canterbury earthquakes (the Residential guidance).



Repairing and rebuilding houses affected by the Canterbury earthquakes

This comprehensive guidance will help the repair and rebuild of residential Canterbury.

Repairing and rebuilding houses affected by the Canterbury earthquakes (<https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/repairing-and-rebuilding-houses-affected-by-the-canterbury-earthquakes/>)

In this section

[Assessment of foundation solutions for residential technical category 3 properties – worked examples](#)

Foundation assessment worked examples to accompany updated Canterbury residential guidance Section 15.3 & Appendix C4.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/assessment-of-foundation-solutions-for-residential-technical-category-3-properties-worked-examples/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/assessment-of-foundation-solutions-for-residential-technical-category-3-properties-worked-examples/)

[Pile design options for shallow depths of liquefaction](#)

Explanation of simplified procedure for assessing kinematic pile strains in Canterbury's TC3 sites.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/pile-design-for-shallow-depths-of-liquefaction/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/pile-design-for-shallow-depths-of-liquefaction/)

[Christchurch ground improvement trials](#)

Results of research to find ways to strengthen land prone to liquefaction.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/christchurch-ground-improvement-trials/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/christchurch-ground-improvement-trials/)

[Building in Port Hills' toe slump areas of mass movement \(classes II and III\)](#)

Understand toe slumping, its implications and related design recommendations.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/building-in-port-hills-toe-slump-areas-of-mass-movement-classes-ii-and-iii/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/building-in-port-hills-toe-slump-areas-of-mass-movement-classes-ii-and-iii/)

[Building in Port Hills' toe slump areas of mass movement \(classes II and III\) - FAQs](#)

Further guidance (Q&As) on toe slumping, its implications and related design recommendations.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/building-in-port-hills-toe-slump-areas-of-mass-movement-classes-ii-and-iii-faqs/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/building-in-port-hills-toe-slump-areas-of-mass-movement-classes-ii-and-iii-faqs/)

Seismic design of retaining structures for residential sites in greater Christchurch

Guidelines to design residential retaining walls to resist seismic loading.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/seismic-design-of-retaining-structures/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/seismic-design-of-retaining-structures/)

Design of cantilever pole retaining walls to resist earthquake loading

Worked example supporting guidance on seismic design of residential retaining structures.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-cantilever-pole-retaining-walls/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-cantilever-pole-retaining-walls/)

Concrete cantilever retaining walls to resist earthquake loading for residential

Worked example of a free-standing cantilever wall to resist earthquake loading for residential sites.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-concrete-cantilever-retaining-walls/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-concrete-cantilever-retaining-walls/)

Design of concrete crib retaining walls to resist earthquake loading

Worked example supporting guidance on seismic design of residential retaining structures.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-concrete-crib-retaining-walls/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-concrete-crib-retaining-walls/)

Design of a tied-back retaining wall to resist earthquake loading

Worked example to accompany guidance on seismic design of retaining structures for residential sites.

[\(https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-a-tied-back-retaining-wall/\)](https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/supplementary-guidance/design-of-a-tied-back-retaining-wall/)
