

Current P21 bracing test and evaluation procedure

This is the current test and evaluation procedure for determining the capacity of wall bracing elements.

This information was confirmed as current in February 2016. It originally appeared in Codewords newsletters prior to January 2014.

Of interest to Builders, Designers, Engineers

It is the 2010 version of the BRANZ Technical Paper P21. This procedure is referenced in the latest version of NZS 3604 2011 which is, in turn, cited in the latest version of Building Code supporting document B1/AS1 (Amendment 11).

You need to test new bracing elements to the latest test and evaluation procedure when using B1/AS1 (Amendment 11)

When you use the latest version of B1/AS1 and apply it to new wall and subfloor bracing elements, you will need to ensure that these elements are tested and evaluated in accordance with the 2010 version of P21.

You can use existing test results based on NZS 3604:1999 for existing bracing elements

Many existing wall and subfloor bracing elements have ratings that have already been tested and evaluated to the P21 protocol referenced by NZS 3604: 1999. They do not have to be re-tested to the 2010 protocol before they can be used with NZS 3604:2011. This is because the 2010 version of P21 does not make significant changes to the way the bracing capacities of the elements were calculated under the previous version. Instead, it makes minor changes to clarify the test and assessment details.

Constructed details must match tested details

Under both the new and old versions of P21, the most important factor is to ensure that the constructed bracing element details exactly match the tested details.

All guidance related to B1 Structure (<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/>)



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