

BC Update 178: Conformance of reinforcing steel mesh

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The Commerce Commission this week asked two companies to stop selling some steel mesh products amid concerns they might not comply with the Australia/New Zealand Standard (AS/NZ 4671:2001).



This Building Controls Update is a periodic news bulletin for the building sector.

These companies both claim their product complies with this Standard as the pathway for achieving Building Code compliance.

The Commission has been investigating these products and initial testing showed the product did not meet the requirements of the Standard. One of the companies has challenged the test results. Further investigation is now underway.

The two products are:

- 147E G500E (147E) steel mesh – supplied by Brilliance Steel Limited, and
- SE615-500STD (SE615) steel mesh – supplied by Euro Corporation Limited

These products have been supplied in New Zealand since 2012. It is believed they have been supplied mainly to the residential market with the use limited to residential floor slabs, driveways and paths.

Whatever the outcome of the Commerce Commission investigation, MBIE analysis has concluded that for houses there are no concerns about life safety and compliance with the Building Code.

Neither of these companies are dominant suppliers of this mesh in New Zealand. Our initial understanding is that their product has not been widely used in commercial or multi-story buildings, if at all. However we're checking this further and if it has been used in these buildings, case-by-case assessments would be needed.

Ductile steel reinforcing mesh is used to help control cracks in concrete floor slabs. It increases the slab's flexibility, improving its performance in a serious earthquake. It's one of a range of factors that contribute to a building's resilience.

In 2011, following the Canterbury earthquakes, the ductility level for mesh in concrete slabs required by the Ministry's Acceptable Solution and Verification Method was increased to a minimum elongation of ten percent. Before then, mesh in concrete slabs generally had an elongation of about two percent.

The Commerce Commission test results of this product so far average around eight per cent. These homes will still be more resilient than the many of thousands of houses built prior to 2011.

While the compliance of these companies' products is in dispute, MBIE advice is that this product should not be used in concrete slabs that haven't yet been poured where the consent requires Grade 500E mesh.



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