



## Draft policy

Steel construction industry policy statement on building product conformance

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# HERA draft policy

## Steel construction industry policy statement on building product conformance

27 April 2016

### Objective

To have a steel construction industry endorsed policy statement on the quality assurance framework for 'critical use' products used in building and construction which can be agreed on and used for advocacy purposes.

# Background to building product conformance issue

Over the past few years there has been a growing body of anecdotal reports by business.

## About the availability and use of Non-Conforming Products (NPC) in the New Zealand market across many product groups including steel.

The March 2016 MBIE and Commerce Commission announcement that some concrete reinforcing steel mesh supplied into the New Zealand construction market didn't comply with standards applicable in New Zealand has put the issue high on the agenda of the building industry stakeholders and also the public.

Our building and construction market has product standards and building codes to cover off on design and fabrication requirements to meet our very specific New Zealand requirements such as seismic conditions, durability and personal safety objectives. While international standards are used where practicable, for many product application AS/NZS standard requirements need to be met which are often different to the country of manufacture and often need additional resources to be made compliant to New Zealand needs.

If not compliant this can have catastrophic effects such as the use of non-compliant reinforcing steel in a seismic frame for multi-storey buildings in a serious earthquake or as has recently happened in the UAE and Australia where non fire retardant compliant Al sandwich panel have contributed to serious fires.

This accumulation of reports of non-conforming product has coincided with our Free Trade agenda playing out, the rapid growth of new centres of global production within ASEAN and North Asia, higher levels of building and construction activity in Christchurch and Auckland, lower freight rates, favourable currency cross rates and the drive on housing affordability. And for steel, the slowing down of the Chinese economy whilst capacity increases rage on, has meant a lot of tonnage is looking for placement at very keen pricing.

In Auckland given the strength of the residential building

market, we are starting to see the appearance of new vertically integrated supply chains through to builders where the origin of products in from regional Asia.

Alone providing a quality conformance record to ascertain products comply with requirements adds considerable cost which non-conforming products may not have. Local producers conforming to relevant standards and regulations can be at a competitive disadvantage when the price at which competing product is sold reflects lower levels of attention to the quality/compliance record that is required under New Zealand's conformance framework. This may also apply across different local building systems such as timber, steel or concrete construction if different levels of conformance are provided.

Greater emphasis on conformance management at point of sale and increased accountability on product suppliers and builders is in our view required. The product conformance framework, that is collectively made up of the regulators, regulation, codes of practice and standards, does not operate effectively against filtering non-conforming mainstream product.

There is confusion among stakeholders about who has responsibility and the arrangements for recourse when non-conforming product is found. The end result is an uneven playing field. Companies, including importers, manufacturers and fabricators that are playing by the rules are adversely impacted by suppliers of NCP paying scant regard to the standards and requirements set by Government and industry.

# Solution to the problem - demonstrated conformance

## Important parts of building compliance system are firstly a standards-conforming product supply into the New Zealand building industry and secondly a building industry which itself conforms to the standards requirements.

The difficult bit in the conformance process is achieving credible and demonstrated conformance which can be trusted.

New Zealand is not alone with this issue and NZ steel construction industry's view Europe is leading the way in demonstrating conformance.

Using the example of steel products for construction, in Europe all steel for critical applications must come from third party certified suppliers, whom take on a legal responsibility for the conformity of the construction product through a Declaration of Performance (be it a manufacturer, importer or distributor). Renowned international providers of accredited third party certification such as CARES, BSI or TUV are supporting the suppliers and are providing world best practice assurance that products do comply.

In Australasia the independent third party Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) is one of the services providers and in respect to steel used in steel construction over 80% of our hot rolled and fabricated sections coming from ACRS certified sources including Asian steel mills. There are other providers that may be chosen but ACRS does have broad coverage in the steel sector.

When it comes to demonstrated conformance by the building industry itself and taking the NZ steel construction industry again as example; driven by its industry members HERA and SCNZ established the Steel Fabricator Certification (SFC) scheme. The SFC scheme is based on the international best practice standard AS/NZS ISO 3834, a scheme which evolved out of European initiatives.

The SFC scheme has been enthusiastically welcomed by local industry both as a necessity and a business opportunity to demonstrate construction steelwork compliance. Over 75% of the New Zealand constructional steel work capacity has now been covered by the scheme; however participation remains voluntarily for steel fabricators and suppliers and without regulatory influence

there the door will remain wide open for non-conforming products.

Of course not all building work is safety critical and non-critical items are suggested to be excluded from the third party certification scheme requirements proposed here. However products where performance is expected such as the in respect to weather tightness, as illustrated in the leaky homes crisis, or fire performance, as demonstrated in the cladding system failure in Australia, are suggested to be covered by demonstrated conformance via third party certification.

# Recommendation

## All critical building work to have reliable third party product conformance.

**Our recommendation is that all critical building work independent of building material should be required to have reliable third party verification enforced by the MBIE driven regulatory framework.**

As a relevant example for steel construction for Importance Level 3 and 4 steel-framed structures it would mean all steel would have to come via ACRS or other creditable certification provider certified supply chains. For steel fabrication this would have to come via an ISO 3834 or similar accredited schemes certified fabricator such as covered under the SFC scheme.

In terms of achieving this desirable state of building conformance the following detailed recommendations are made:

### For building industry

- To evolve industry sector driven third party product conformance schemes first on a voluntary basis and as a preparation for the schemes becoming mandatory
- To work with the regulator to prepare the frame work for the developed schemes to become mandatory

### For building system regulator (MBIE)

To determine in co-operation with industry what is critical building work which warrants formal third party verification

- To establish in co-operation with industry the frame work of a sector overarching building product conformance system
- Following substantial progress being made, make the sector overarching building product conformance system mandatory
- Enforce mandatory system and ensure that any breaches of conformance be dealt with swiftly and with penalty



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