

Lifting the Bar – Initiatives to Improve the
Supply of Structural Steelwork

SCNZ Steel Agenda

AGM & Conference

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Outline

1. Industry Context
2. Why lift the bar?
3. Lifting the bar - Areas for improvement
4. Updates
 - i. AS/NZS 5131 Implementation
 - ii. Material Supply
5. Conclusions



Industry Context

- Steel construction in NZ - late 1800's
- NZ Structural steelwork market - circa 100-110k tonne
- Changes in procurement practice – globalisation (complex supply chain - increased compliance risk)
 - Steel sourcing (local supply chain)
 - Fabricated steelwork sourcing
- Risk mitigation
 - +80% of locally fabricated steelwork undertaken by SFC certified fabricators
 - Circa 70% of structural steels for locally fabricated projects third party certified
 - All hot rolled structural long sections (I,H, C)
 - Some small to medium sized structural hollow sections
 - Australasian supplied plate
- Engineers
 - Limited technical expertise for construction monitoring role (metallurgy, conformance assessment, welding)
 - Limited time to spend ensuring conformity of steelwork



Why lift the bar?

1. Confidence – Reduce the risk of non-compliance
2. Ease – Simplify and unify requirements for demonstrating conformity
3. Fairness – Create a level compliance field
4. Differentiation – Create a point of difference with offshore supply chains

Lifting the Bar - Areas for Improvement

Rigor of Conformance Assessment

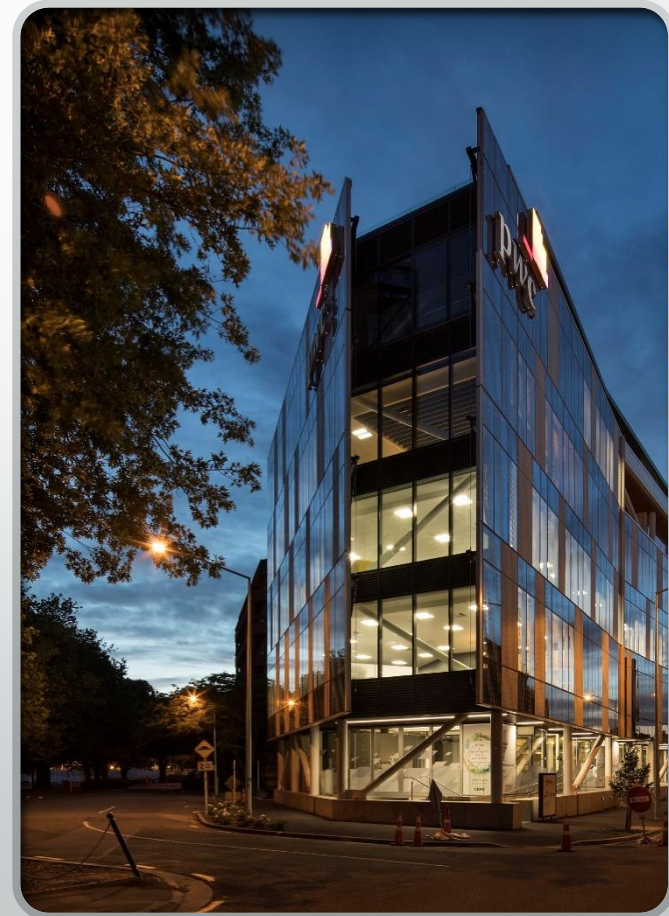
- Structural steels not covered under product certification schemes
 - Plate
 - Structural hollow sections
 - Welded sections
- Fasteners/ anchor bolts (no mandatory product conformance requirements)
- Structural Steelwork
 - Non-certified local Fabrication companies (mandated by 2020 for SCNZ Steel Constructors)

Product Availability

- Sourcing large sizes structural hollow sections

Industry Initiatives - Updates

- AS/NZS **5131** Implementation
- Material Supply
 - Working Groups
 - Steel Importer Charter
 - Guides



Strengthening the structural steelwork supply chain

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graph TD; A[Strengthening the structural steelwork supply chain] --- B[Standards Development]; A --- C[Industry QA Programmes]; A --- D[Education Presentations and Publications]; A --- E[Industry working groups];
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Standards Development

- Fasteners
- Structural steels
- Fabrication and erection

Industry QA Programmes

- Steel Fabrication Certification Scheme
- Steel Importer Charter

Education *Presentations*

- Workshops
- Seminars
 - Office presentation

Publications

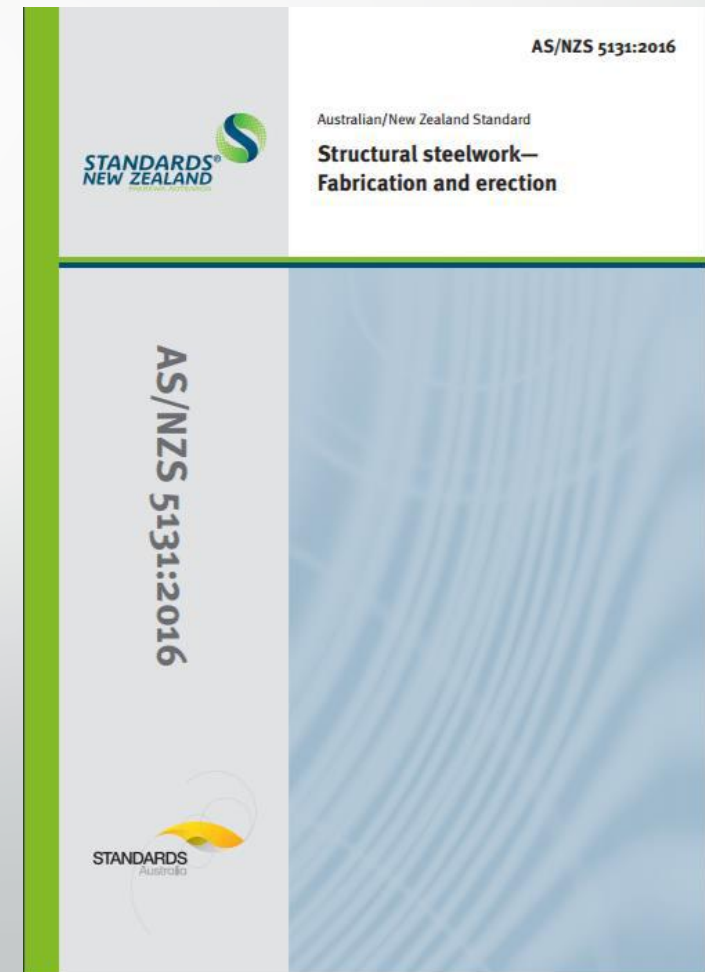
- Articles
- Guides

Industry working groups

- Structural steels
- Fasteners

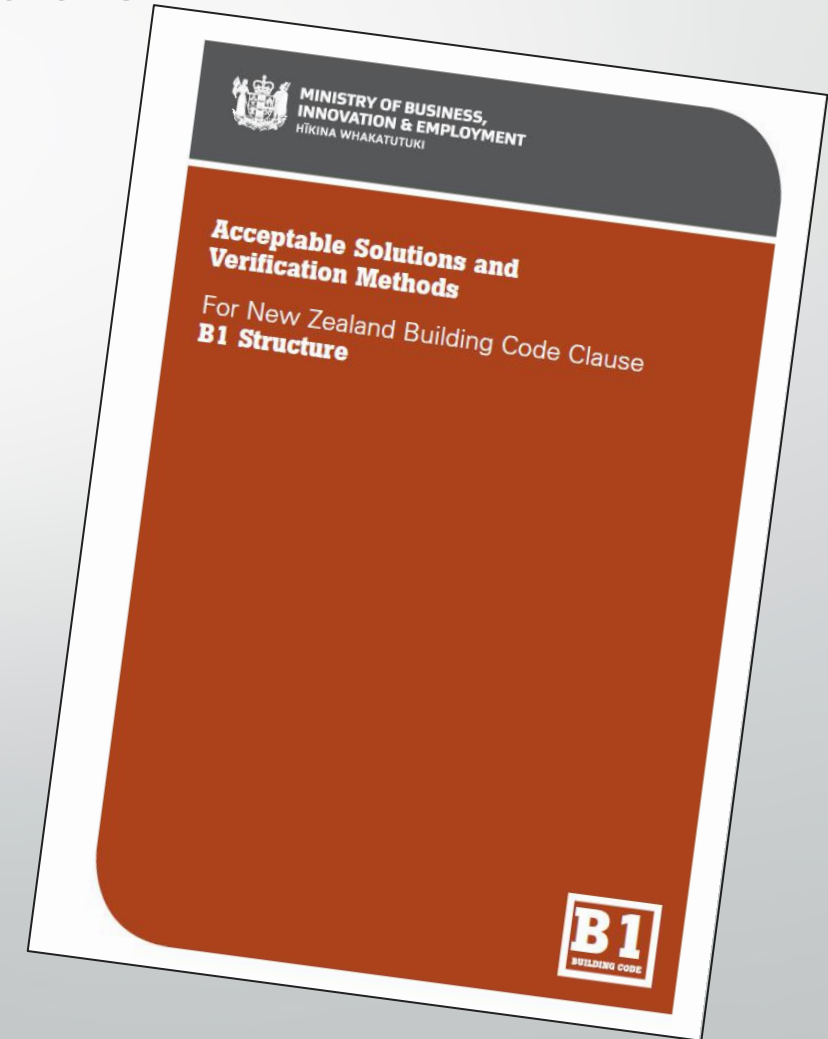
AS/NZS 5131 Implementation

- AS/NZS 5131 published December 2016
- Sets minimum requirements for fabrication and erection
- Key elements
 1. Risk based (4 construction categories)
 2. Technical requirements
 3. Conformance assessment



Time frame for adoption

- Citing in Building Code
 - Revisions to VM/B1 document out for public comment (September 2017)
 - 8 week public comment period
 - Possible citing Q1 2018
- SFC Scheme
 - Existing SFC certified fabricators – 2018 surveillance audits
 - New applications – 1 January 2018



Key Take away Message...

Start now 

preparing 

Industry Preparation

To date:

Engineers

- Seminars
- Office presentations
- Publications

Industry

- Workshops (April)
- SFC audit checklists updated (May)

Future:

1. NZ Steelwork specification

2. Education

Industry

- Q4 workshops (Fabricator forums)
 - Industry feedback on topics
- Production Managers workshop (February 2018)

Engineers

- Seminars
- Office presentations
- Publications

Material Supply

- Industry Material Supply Working Groups
 - Structural steels
 - Fasteners/ anchor bolts
- Steel Importer Charter
- Guides



Material supply working groups

Purpose: To improve the supply of raw materials for structural steelwork

Working Groups

- Structural steels
- Fasteners

Participants: Industry (SCNZ, HERA), Steel Distributors, Fastener Suppliers, Fabricators and Engineers

Progress:

- Structural Steels – First meeting in May
- Fasteners – First meeting held in August



“What if we don’t change at all ...
and something magical just happens?”

Structural Steels - Meeting Outcomes



- Investigate Steel Importer Charter
- Investigate utilizing several international hollow section and plate standards/ specifications
- Develop Guides:
 - New Zealand Structural Steel Procurement Guide
 - Guide to the use of EN, JIS, API steels in conjunction with NZS 3404 and AS/NZS 1554.1

Fasteners – Meeting Outcome



Matters to resolve

- Time frame for adopting new AS/NZS 1252 standard
- Supply standard/ property class
- Interim verification testing requirements

Meeting Outcome

- Sub-group formed to develop practice notes
 - Verification testing of bolts and anchor bolts
 - Supply requirements for EN 14399 bolts
 - Supply requirements for anchor bolts

Steel Importer Charter

- Currently under investigation
- Aim: Promote and reward and good procurement practice
- Time frame:
 - Working currently reviewing Charter document (feed-back by late September)
 - Steel importers invited to participate in Charter Q4 2017
 - Finalise details of Charter Q1 2018



Charter Concept



- Possible audit requirements
 - Supplier due diligence
 - Monitoring of supplier performance
 - Inspection document management
 - Personnel competency
- Requirements included in scope of ISO 9001 audit requirements
- Could in future be recognised under Steel Fabrication Certification scheme
 - Certified Steel Importer

A white report card is placed on a wooden desk. The card has a double-line border and the words "REPORT CARD" printed in a large, bold, serif font. A silver pen is visible on the right side of the card, and the spine of a book is on the left. The background is a light-colored wood grain.

**REPORT
CARD**

Industry Steelwork Supply Report Card

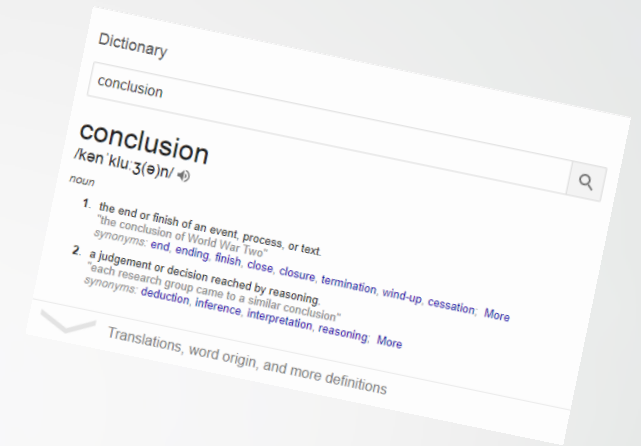
Comments:

- Making good progress
- Could do better in some areas
- Needs to consolidate on work achieved to date

Overall mark: 7.5/10



Conclusions



- Specifiers/ builders/ developers have a choice of structural building systems
- The continued strong market share of structural is dependent on:
 - Maintaining confidence in the supply chain
 - Simplifying and unifying requirements for demonstrating compliance of steel products and fabricated steelwork
- Industry support of the material supply improvement initiatives is vital
- We have made some really progress, we just need to work hard for the final 20% that could undermine all the good work to date

Questions?

