SCNZ STEEL CONSTRUCTION NEW ZEALAND

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FACT SHEET
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Guide to Sourcing Compliant Structural Steels

The globalisation of structural steel supply chains for New Zealand building and infrastructure projects means more robust procurement practices are required to demonstrate product conformity than are currently stipulated in the relevant material supply standards and the New Zealand building regulations.

Accordingly, SCNZ has developed the *New Zealand Guide to Sourcing Compliant Structural Steels* in collaboration with HERA. The Guide will simplify the local practice for demonstrating the conformity of structural steels.

The Guide applies a risk-based approach to determine what evidence of conformity is warranted for structural steels. In particular, it identifies if project-specific, third-party testing of any steel is required.

The Guide

The Guide is relevant to all stakeholders engaged in the design, construction and consenting of structural steel buildings and infrastructure projects – engineers, builders, fabricators, steel distributers, and building consent officials and regulators.

It covers the supply of structural steels (long products – universal beams, universal columns, parallel flange channels and structural hollow sections – and plate products) and welded sections for locally and internationally fabricated structural steelwork.

The Guide:

- Discusses the compliance requirements in the latest AS/NZS structural steel product standards
- Explains the different pathways to demonstrate product conformity
- Describes the documented evidence of compliance that should accompany any assessment of conformity by the manufacturer or a qualified third party
- Presents a risk-based conformity assessment pathway selection framework that considers project and supplier risk. The project risk is linked to the construction categories in the new fabrication and erection standard AS/NZS 5131
- Provides worked examples of how the Guide applies to sourcing steels for a fictious warehouse and office project
- Discusses the roles and responsibilities of stakeholders in the structural steel procurement process
- Recommends sampling and test plans for project-specific, third-party testing when such testing is required
- Has been peer reviewed by structural engineers, territorial authorities, conformance assessment bodies, steel distributors and structural steel contractors

About the NZ Structural Steel Industry

The local structural steel sector is a value-adding industry with an annual capacity of circa 110,000 tonnes. Approximately 80 percent of this output is produced by structural steel contractors qualified under the Steel Fabrication Certification (SFC) scheme (www.steelfabcert.co.nz).

This sector consists of over 80 specialist structural steel contractors and general engineering companies that typically manage the whole structural steelwork process from shop drawing to manufacture and completion of the erected structure.

The structural steel used in local projects is sourced by steel distributors from a wide range of sources including Britain, USA, Australia, New Zealand, Japan, Korea, Taiwan and Thailand. More recently, this list has broadened to include China, Malaysia and Indonesia.

All the hot-rolled structural steel mills supplying New Zealand, and some of the plate and structural hollow section manufacturers, have third-party certification for their range of product supplied to AS/NZS structural steel standards.

Worryingly, the practice of sourcing fabricated structural steelwork offshore has grown in the past decade. Initially, it was limited to low-rise industrial projects but in the past few years several major commercial projects have used imported product. The practice introduces substantial risks related to the product's origin.

Implementation

SCNZ is rolling out a programme of training and information documents tailored for engineers, builders, structural steel contractors and distributors to fully explain the Guide and industry's role in its implementation. Visit the SCNZ website for further details.

Specify structural steel, sourced in accordance with the Guide, for New Zealand building and infrastructure projects. For a copy of the Guide, visit the SCNZ website or call SCNZ.

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