

STEEL FUTURES

WHAT'S ON IN 2011?

The appointment of a new SCNZ Manager at the end of 2010 has afforded the opportunity to build on the legacy of the association forged under the leadership of former manager Clark Hyland as the organisation charts its future course in light of the present opportunities and challenges. The current economic climate is very different to that which prevailed at the time the fledgling organization was launched in 2006. A new feature of the steel construction landscape over that period has been the advent of imported fabricated steelwork.

Over the next few months SCNZ will be putting together a market development plan to grow the market share of steel solutions in building and bridge projects and also to promote the benefits of using the local supply chain to procure fabricated steelwork. In parallel with this future planning the organization will focus on the preliminary design service to demonstrate the advantages of steel solutions for specific building and bridge projects. Members will have chance to have input into the marketing plan through focus groups that will be held over the next few months around the country and also through the Marketing, Membership and Communication Standing Committee.

The SCNZ team has hit the ground running in 2011. Structural engineer Kevin Cowie and Manager Alistair Fussell are members of the presentation teams for seminars in February and March. Kevin will be involved with the Bridge Development Group Steel-Concrete Composite Bridge Design seminar in February and Alistair the SCNZ Steel Structures seminars beginning the first week of March.



The SCNZ Team, Kevin Cowie, Alistair Fussell and Rebecca Symonds

The association is also hosting the International Steel Constructors group meeting in New Zealand at the end of March and is part of the organizing committee involved in the planning the inaugural Metals NZ Conference in April. The International Steel Constructors Group meeting is the gathering of the English speaking international steel construction associations (American Institute of Steel Construction, Australian Steel Institute, British Constructional Steelwork Association, Canadian Institute of Steel Construction, Southern African Institute of Steel Construction and Steel Construction New Zealand). The intentions of these meetings are to discuss matters of common interest such as imported fabricated steel work, product compliance, sustainability, marketing, new trends and technology etc.

The bi-annual SCNZ Steel Construction Awards will also be held this year to coincide with the inaugural Metal NZ conference in Wellington.

It is likely Steel Structures Standards development work will also come on the radar this year. There has already been significant progress made on the working drafts for the fire, seismic and composite sections. When published, these updated standards have the potential to benefit the steel construction industry by removing potential barriers to steel solutions and by making available to designer new technologies.

A new exciting initiative this year is the publishing of the annual Steel Focus magazine. This annual publication will showcase the steel construction industry while also being a source of useful structural steel design and construction information. Current

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UPCOMING EVENTS

2011	
15 - 24 Feb	Steel-Concrete Composite Bridge Design Seminars
13 April	SCNZ Regional Get-together, Wellington
14 & 15 April	NZ Metals Industry Conference/SCNZ Awards
1 - 10 March	SCNZ Autumn Steel Structures Seminar Series

WHAT'S ON IN 2011? continued

bi-monthly publications such as the Steel Futures Newsletter and Steel Advisor which feature local construction industry news and short technical articles on aspects of steel design

and construction respectively will continue as will the monthly case studies published in Building Today.

UPCOMING SCNZ STEEL STRUCTURES SEMINARS

Steel Construction New Zealand (SCNZ) will present a one-day seminar for structural engineers who want to stay on top of their game by developing their structural steel design skills.

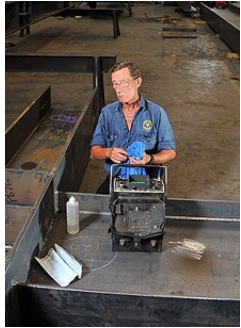
The full day seminar will feature:

New Zealand Steelwork Corrosion Coatings Guide Update

Be informed of the latest guidance on the selection of cost-effective coating systems for steelwork.

Angle Truss Design

Gain an understanding of the salient aspects of angle truss design.



Welding Quality Assurance

Learn what engineers need to know about welding quality assurance for structural applications.

Thermal Mass

Discover how the beneficial effects of thermal mass can be utilised for steel-concrete composite structures to

improve sustainability through reduced building operational energy requirements.

High Strength Holding Down Bolts Do's and Don'ts

The seminars will be presented by SCNZ and HERA engineers with specialist expertise in structural steel design and quality assurance.

Dates:

Wellington, 1 March—Copthorne Oriental Bay

Nelson, 2 March—Fairfield House

Christchurch, 3 March—Crowne Plaza Hotel

North Shore, 7 March – Spencer on Byron Hotel

Taupo, 9 March – Millennium Hotel

Auckland, 10 March – Novotel Ellerslie

See the SCNZ website for more details and a registration form www.scnz.org.



THE POSITIVELY SCNZ REGIONAL DINNER

As a national association, SCNZ draws strength from the support it enjoys in every region of New Zealand where members conduct their business. It has become a tradition before every important meeting or conference for the regional members to get together over dinner with their business associates and the consultants and other professionals to talk informally about projects they have shared and discuss the state of our industry sector in general.

While we enjoy the opportunity to talk shop, we also like to use the occasion to include spouses and partners.

This year the SCNZ Regional Dinner will be held on Wednesday, 13 April 2011, at the Amora Hotel, the new name for the Duxton. Thanks to the generous sponsorship of New Zealand Steel, we have secured the ground floor Amora 1, which has a pre-function lobby for drinks on arrival. And again, thanks to New Zealand Steel, we have been able to cap the buffet banquet at only \$50 per person. All wine, beer and soft-drinks are complimentary.



Plan to be there. Start by making your booking. Business acquaintances who might like to be introduced to SCNZ and become members are also more than welcome. Maybe you'd just like to

say a thank you to a business contact or a colleague. This is your opportunity to be Positively SCNZ in Positively Wellington. It will be a great warm-up for those attending the conference the next day. Dress smart casual; conversation lively; no boring speeches, so spread the word!

***This will be popular and booking is essential.
Only 50 places!***

Registration forms will be emailed and may also be requested from rebecca.symonds@scnz.org.



AMORA HOTEL
WELLINGTON

GOOD REASONS TO ATTEND CONFERENCE!

Have you seen the bigger picture beyond the recession? Can you place your company in that context and lead it to achieve real, measurable gains in productivity? Advice is easy to give but hard to put into practice. Hard maybe, but impossible? Who can speak with the authority of experience?

Metal NZ will hold its inaugural conference in Wellington on Thursday, April 14. The theme, **Driving Productivity and Innovation**, could not be more relevant. There will be keen interest in hearing what the Minister of Economic Development, Honourable Gerry Brownlee, has to say in his opening address.

The New Zealand Institute's latest discussion paper makes it very clear that "A Goal is Not a Strategy", and Dr Rick Boven will tailor this message to the metals industry. Metals NZ, our new pan-industry body that will be launched at the conference, with SCNZ and some member companies already belonging to it.

Competenz's CEO John Blakey will throw light on our perceptions of productivity and suggest changes that can improve our results.

The programme is advancing to its final draft, which you can download from the HERA website at www.metals.org.nz. The good news is that the SCNZ breakout elective session is

finalised. Tony Smale of Forté Management will be talking to us on **Making Money from your Business's Hidden Opportunities**, and Australia's Peter Farley of Farley Production Systems will tell us **How to**

Fabricate in Half the Time. Last but not least, HERA's Dr Stephen Hicks reports on initiatives being taken by the Steel Bridge Development Group.

On top of all this, you have the Metals NZ Awards Dinner in the ballroom of the Amora Hotel, the new name for the five-star Duxton. Great achievements to recognise, great food, and a great band – the Roger Fox Dance Band. Diarise and plan to be there with your spouse or partner and let's be positively SCNZ in Positively Wellington!

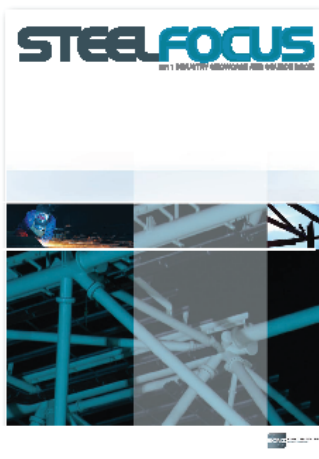


STEEL FOCUS IS ON TRACK

For the past year, SCNZ has been publishing monthly case studies in **Building Today**, reminding our members' market of the advantages in using steel. Right now, **Steel Focus** is being readied to showcase the very best of member projects. When distributed throughout New Zealand's design and construction sector, this annual source book will have an active desk-life of at least a year. It will be packed with information that developers, architects, quantity surveyors and people in Government will find useful when making decisions about construction materials and methods.

The list of contents for **Steel Focus** includes:

- our Members' Directory
- SCNZ's role and membership services
- our Steel Constructors' Capability Matrix
- the advantages of steel construction
- steel in seismic retro-fitting
- what's new in steel
- steel's environmental credentials



- careers in steel
- questions and answers
- strong editorial

The members whose case studies are featured have

supported **Steel Focus** with their own advertising. We're also inviting all members to take advantage of this opportunity by advertising their company in a half-page (\$650) or quarter-page (\$450) profile, or in a strip ad (\$450). These will be made up for free from material supplied. All you need to do is call Rebecca on (09) 262 6682 or email rebecca.symonds@scnz.org.

Just don't miss the boat because we're planning to launch in April!

Steel Focus will show that SCNZ members are

more than just an association of like-minded people. We are one of New Zealand's strong economic assets. So be a part of this and help raise our profile. The worst way to be noticed is to be conspicuously absent.

STEEL CONSTRUCTION IN BUILDING TODAY MAGAZINE

SCNZ is running a steel construction feature with Building Today. In each feature we will be promoting excellence in steel construction. In particular we are looking for projects big or small in which a member company has shown excellence in some or all of the following:

1. Quality management in the workshop and on-site;

2. Technical innovation; 3. Project management; 4. Health and safety practices; 5. Environmental management in the workshop and on-site.

SCNZ will write the article, you just need to tell us what you have been doing. Please contact Rebecca at rebecca.symonds@scnz.org or phone 09 262 6682.

Would you like to become a SCNZ member? For an annual subscription of only \$100 + GST you can enjoy the benefits of belonging to an association dedicated to the advancement of steel construction.

Please tick the box below and fax back to 09 263 5638.

Yes, I would like to become a SCNZ member.

2011 SCNZ AWARDS FOR EXCELLENCE IN STEEL CONSTRUCTION

Steel Construction New Zealand Inc. is pleased to announce its *Excellence in Steel Construction Awards*. The objective is to celebrate New Zealand's excellence in the field of steel construction by identifying projects that demonstrate best practice, outstanding teamwork, application of sustainability principles, great safety management and innovation. The awards will be made every two years.

Focus

This is restricted to steel structures built by SCNZ Steel Constructors using New Zealand-fabricated steelwork. The buildings must have been completed and ready for occupation or use during the period from July 2008 to December 2010. There are four categories:

- Buildings of one or two storeys.
- Buildings of more than two storeys.
- Bridges and infrastructure.
- Special structures.

The Panel of Judges

These will be a panel of independent judges representing steel construction, building, structural engineering and architectural interests and appointed by the SCNZ Council.

Assessment Criteria

Each entry will be assessed against the following criteria:

- Commitment to best practices.
- Interaction between the steel constructor, and the builder and the design consultants.
- Application of sustainable steel construction practices.
- Safety management.
- Innovation in fabrication and construction techniques.

Method

- Any SCNZ member company of the project team may submit an entry, on the appropriate form to the SCNZ

Manager.

- Entries will be assessed by the judging panel whose decision is final.
- No discussion or correspondence regarding their decision will be entered into.

Award

- An engraved trophy will be awarded to the steel constructor winning the premier prize to hold for two years until the next awards are made.
- At the discretion of the judging panel Merit commendations may also be made to other entries.
- Certificates will be awarded to representatives of the winning project teams including the steel constructor, the steel modeller, the builder, the structural engineer, the architect, and the project developer/owner.

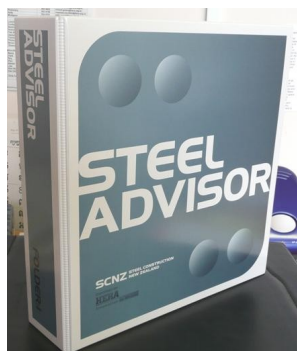
Entry forms for these awards will be emailed and posted to all SCNZ members. It is also available on the SCNZ website. Entries close 28th February.



Winners at the inaugural 2008 SCNZ Awards

STEEL ADVISOR LATEST ISSUE

The latest Steel Advisor contains two articles. The first by HERA Manager Structural Systems, Dr Stephen Hicks, is entitled **Composite floors - Removal of propping and construction loads after concreting**. This article will present design considerations for steel-concrete composite floors with respect to propping removal, together with the level of construction loads that may be reasonably applied after concreting.



The second article prepared by SCNZ Engineers Kevin Cowie and Alistair Fussell, **Heavy Brace Gusset Plate Design**, presents a fully worked example covering the ductile design of a brace/beam/column gusset plate connection. Such connections are typically used in braced steel frames with steel hollow section braces. The Steel Advisors articles are available for subscribers at www.scnz.org/steel-advisor

UPDATED MATERIAL SUPPLY STANDARDS TARGET PRODUCT COMPLIANCE

The suite of joint Australian/ New Zealand material supply standards has been under review for the past few years. To date three out of the four standards have been updated and republished (AS/NZS 3679.1:2010: Structural steel - Hot-rolled bars and sections; AS/NZS 3679.2:2010: Structural steel - Welded I sections and AS/NZS 1163:2009: Cold-formed structural steel hollow sections) with the fourth (AS/NZS 3678 Structural steel - Hot-rolled plates, floorplates and slabs) expected to be published early 2011.

These standards now feature international best practice compliance provisions that will reduce the risk of non-complying structural steel long and plate products being supplied for building and bridge projects. These changes will have implications for the whole supply chain (steel manufacturer, steel merchant, steel fabricators and site engineers). This brief article is intended to inform steel procurers and structural engineers of some of the main changes from the previous revisions of the material supply standards. The main amendments include:

- Specific information on test certificates
- Testing to be performed by a laboratory with third party accreditation from a signatory to the International Laboratories Accreditation Corporation (ILAC) agreement
- Permanent rolled in marks on hot rolled sections such as universal beams and columns. Steel supplied by Australian mills will also contain painted on product identification marks for tube and plate products

Third Party Accredited Test Laboratory

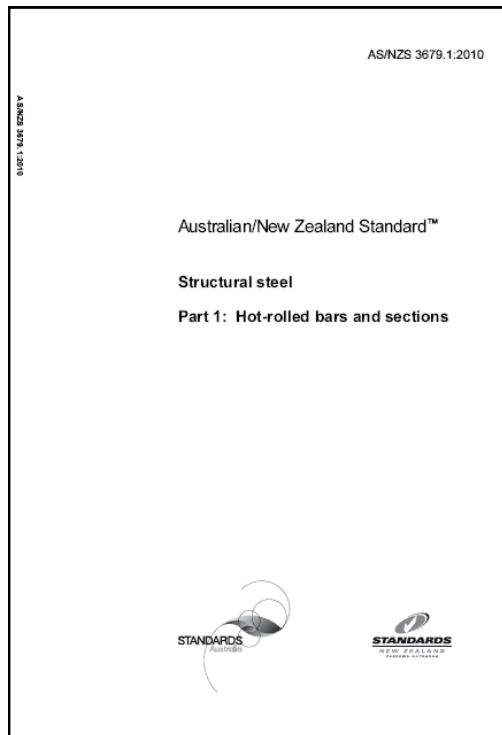
One of the key drivers for introducing third party accreditation of test laboratories was to eliminate fraudulent test certificates. All product testing must be undertaken by test laboratories with third party accreditation from an organization that is a signatory to the International Laboratories Accreditation Corporation's (ILAC) Mutual Recognition Agreement (MRA). ILAC was established to promote the acceptance of technical test and calibration data for exported goods. There are a number of laboratory accreditation organizations worldwide such as IANZ (New Zealand Accreditation Authority) in New Zealand who are signatories to the MRA. The role of these organizations is to assess the technical competency of testing laboratories. The signatories have themselves been peer reviewed and shown to meet ILAC's criteria for competence. A list of signatories to the MRA is available at the ILAC website (www.ilac.org).

Test Certificate Requirements

Grade complying steel must be accompanied by test certificates containing a minimum amount of information

and all in English. This includes, but is not limited to:

- All chemical elements must be listed as a percentage by mass
- The carbon equivalent (prequalified welds may only be used when the steel carbon equivalent complies with the limit specified in the welding standard AS/NZ 1554.1)
- Logo of the third party accreditation body ie IANZ for NZ. (refer to ILAC website to confirm accreditation body is a signatory to MRA).
- Mechanical properties (tensile test – yield; tensile test - strength; % elongation and impact values if low temperature (LO) or seismic (SO) grades of steel are specified.
- Product making process eg basic oxygen-slab cast.



Acceptable steel making practices are prescribed in the standard. The adoption of modern steel making practices ensures high quality fit for purpose steel sections are produced.

- Heat number. The continuous casting process is the process whereby liquid steel is solidified into semifinished steel billets or slabs. Final finishing may involve cold or hot roll forming the billets or slabs to produce various types of sections such as angles, channels or I beams. The chemical composition of the liquid steel held in ladles is determined prior to its introduction into the casting machine. The heat number which is stamped on the steel billets or slabs is used to trace the finished product to the original liquid steel mix of known chemical composition which is noted on the mill certificate.

- Length, bundle, pack or unique identifier to which the test certificate applies

For the remaining test certificate requirements reference should be made to the appropriate standard.

The new product conformance provisions will give greater confidence that grade complying steel products are being supplied. They will however only be effective if steel procurers and structural engineers are diligent in ensuring the appropriate evidence of product conformance is supplied and the test laboratories preparing test certificates are third party accredited to ensure their technical competency. The HERA library has a copy of the latest material supply standards available for loan to HERA and SCNZ members. Company's regularly engaged in procuring steel long and, plate products or engaged in site observation of structural steel construction projects should ideally have a copy of the latest material supply standards in their office.

If steel procurers or structural engineers have any queries on product compliance issues, please call the SCNZ technical help desk (09 263 5636).

METALS NZ LAUNCH AT INDUSTRY EVENT

On the 21st December 2010 the Inaugural General Meeting of Metals New Zealand was held with its rules being adopted and the required signatures for its registration as an incorporated society being collected. The new organisation will be officially launched by a government minister at its first major event, the 2011 Metals Industry Conference to be held on the 14th April in Wellington.

The current Executive, still termed an 'interim' Executive as the final one is intended to be determined when a membership drive has been completed, has put a brief **About Us** statement together to highlight what needs to be known about Metals NZ (see box below). Foundation organisational members have agreed to pay the annual subscription of \$1,000 and are in alphabetical order:

- Casting Technology NZ (CTNZ)
- Galvanising Association New Zealand (GANZ)
- Light Alloys Manufacturing New Zealand (LAMNZ)
- Heavy Engineering Research Association (HERA)
- National Association of Steel-framed Housing (NASH)
- New Zealand Stainless Steel Development Association (NZSSDA)
- Steel Construction New Zealand (SCNZ)

A large corporate membership is expected via Ordinary Corporate membership and Affiliate membership. Ordinary corporate members pay an annual subscription of \$500 and have the right to nominate representative on the Executive.

Examples of Ordinary Corporate Foundation members include NZ Steel and OneSteel. It is expected that significant base funding and also the recruitment of the Executive members will be achieved through this membership category. However the majority of the corporate members will most likely come from the Affiliate Member pathway through free membership of the members of Organisation members as e.g. all HERA or SCNZ members will be entitled to free Affiliate membership.

So what is the business proposition for corporate organisations to join Metals NZ when there does not seem to be any additional individual benefits not already provided through the existing sector organisation such as HERA? Ultimately corporate members will benefit from a strong industry voice being provided by Metals New Zealand and for this to be demonstrated Metals NZ needs wide member representation – i.e. to be successful it will need you the members and with the free affiliate member access option this should not be difficult. Industry members also benefit indirectly through efficiency gains of the participating organisational members as resources will be shared.

You can download a **Metals NZ membership form** from the **Metals NZ website** (www.metals.org.nz) currently being developed.



ABOUT US – METALS NZ

Who are we?

Metals New Zealand (Metals NZ) is an incorporated society serving the needs of New Zealand's metals related industry. Launched in 2011, it consists of Organisation Members made up from metals related industry associations, Ordinary Corporate Members made up from key stakeholder companies and Affiliate Members who are generally the members of the Organisation Members. Its Executive consists largely of leaders of New Zealand's major organisations operating in the metals based sectors. The Executive are nominated by Metals NZ members because they are recognised as 'captains of the industry'. They offer their time to contribute to sector group strategic thinking and believe as leaders they have a responsibility to the industry and need to speak out on its behalf.

The Secretariat for Metals NZ is provided through the NZ Heavy Engineering Research Association (HERA) with the HERA Director Dr. Wolfgang Scholz being the current Secretary.

Our Vision

Metals NZ is a pan-industry sector organisation whose vision is to position the industry to be a prosperous, vibrant, sustainable and socially responsible contributor to the New Zealand economy.

Our Mission

Metals NZ will achieve this vision through advocacy and strategic leadership on issues that affect the entire metals industry.

Our Approach

The Metals NZ Executive believes that through the co-ordinated effort of the many metals industry sector groups the

overall metals industry performance can be improved. Based on objective research, open dialogue and understanding of the interests of each sub-sectors, it is believed that sound industry policies can be developed and promoted. Joint activities such as the Metals Industry Conference, the Sustainable Steel Council and shared administration are delivering significant benefits for members and the industry as a whole.

Metals NZ will limit its activities to matters of specific relevance to the metals industry. It will co-operate with other industry and business development organisations on common issues.

Independence and funding

Metals NZ represents the interest of the NZ metals related industry, however is independent of any specific company or organisation interest. It is currently funded through membership contributions.

Key initiatives

Metals NZ is currently working on the following initiatives:

- Industry position on government policies such as:
 - Research & Development
 - Local industry participation
 - Government position on sector development (currently inequitable)
- Sustainability of metal products
- Threats from imported metal products
- Developing projects of national significance
 - ANZAC Centenary Bridge
 - Marine Energy Centre
 - Geothermal Industry Cluster