

# STEEL FUTURES

➔ DECEMBER 2017

## SCNZ CHRISTMAS MESSAGES AND HOLIDAY CLOSURE DATES

“As we celebrate the holiday season and the coming new year with our families and friends, it is worth reflecting on the year past and setting the scene for the year ahead.

There is no doubt that imported fabricated steel remains a threat to our businesses. Events of the last year have highlighted the high risks imported steel puts on projects; but also the benefits a reliable local supply chain and the credibility Steel Fabrication Certification (SFC) scheme certified fabricators can bring. I implore all our fabricator members to lead by example and support us in driving industry engagement with the SFC scheme to ensure the highest standards for our customers.

As we have also seen a change in Government, we are in the midst of planning a coordinated approach to the new Ministers and Ministries to promote our industry and ensure they are well aware of our needs and issues.

I anticipate that 2018 will be another busy and fruitful year for SCNZ as we implement new strategies and continue our important advocacy work; and we look forward to the challenge with anticipation.

On a personal note, it is a privilege to serve you as Chairman and I look forward to seeing you all in the New Year. Until then, on behalf of the SCNZ Executive Council, I hope you all have a very safe and happy festive season.”

**Wayne Carson**  
SCNZ Chairman



*SCNZ Executive Council meeting hosted by Calder Stewart at their state-of-the-art workshop in Milton*

### Also in this issue:

- [Make SFC Your New Year's Resolution](#)
- [SCNZ 2018 Excellence in Steel Construction Awards](#)
- [Be an Ambassador for Structural Steel](#)
- [Structural Steel Industry Update: November 2017](#)
- [SCNZ AS/NZS 5131 Workshops](#)
- [SCNZ Fabricator Guidance on Warranties and Guarantees](#)
- [Reconstructing Christchurch: A Seismic Shift in Building Structural Systems](#)
- [Leading Engineering Consultant Recommends SFC Accredited NZ Fabricators](#)
- [STESSA '18: Special Rate for SCNZ Members](#)
- [SCNZ Tutors Victoria University Architectural Students](#)

# Merry CHRISTMAS AND A HAPPY New Year

“As 2017 draws to a close, the team at SCNZ would like to take this opportunity to thank you for your continued support.

The Building and Construction Industry remains busy, and this brings unique challenges. After visiting many of you this year, I know that the Christmas holiday will be a welcome break for most, giving us valuable time to spend with our families and to recharge our batteries.

2018 will bring new opportunities and challenges for our industry and for SCNZ in particular. Our strategic and communications plans are now in place and many actions are well underway as a result, which will bear fruit in the coming months.

Also during 2018 AS/NZS 5131 Structural Steelwork – Fabrication and Erection, will be cited and it is our plan to promote this new Standard and to educate industry and specifiers on its implications.

SFC remains a key focus for SCNZ and we urge those of you who are yet to embark on this journey to include a plan to start the process in your planning for 2018.

I would like to take this opportunity to recognise and thank those who serve on the SCNZ Executive and those who are involved in other aspects of SCNZ’s work, for giving up their time during what has been a hectic year to represent our industry.

It has been a privilege and a pleasure to be part of the SCNZ team and to get to know so many of you. I look forward to strengthening those relationships in the coming months. In the meantime, on behalf of SCNZ, I wish you and yours a Merry Christmas, a Happy New Year and a restful break – see you all in 2018!”

**Please note the SCNZ office will close Friday 22 December and will reopen on Monday 8 January.**

**Darren O’Riley  
SCNZ Manager**

*“Strengthening Kiwi. Steeling the Future”*

## MAKE SFC YOUR NEW YEAR’S RESOLUTION

The [Steel Fabricator Certification \(SFC\) Scheme](#) continues to be a major focus for SCNZ.

Over a third of our fabricators are now certified, representing approximately 80% of industry volume, and several engineering practices are specifying SFC as a requirement in their specifications.

**There is now less than three years for the remaining (approximately fifty) fabricator members to obtain SFC.**

We are strongly urging these companies to commit to gaining SFC in 2018 as HERA Certification will not be able to certify large numbers in the last few months of the three-year period. So, if fabricators leave it too late to start the process, they run the risk of missing the deadline.



Please remember you can apply to be certified to the less demanding Construction Category 2 (CC2) of AS/NZS 5131 which is reflective of the work on smaller non-critical projects; and that AS/NZ 5131 is likely to be cited in the first six months of 2018.

**Contact us now to have an informal discussion about becoming certified.**

For more information on the SFC scheme, please contact:

Darren O'Riley (email: [darren.o'riley@scnz.org](mailto:darren.o'riley@scnz.org) or phone: 09 262 6684) or

Michail Karpenko (email: [michail.karpenko@hera.org.nz](mailto:michail.karpenko@hera.org.nz) or phone 09 262 4849).

## **SCNZ 2018 EXCELLENCE IN STEEL CONSTRUCTION AWARDS**



SCNZ is thrilled to announce the launch of the 2018 Excellence in Steel Construction Awards featuring an updated format, revised categories and exciting new opportunities.

Following the success of the 2017 awards, the Excellence in Steel Construction Awards will now be made every year. The objective is to celebrate New Zealand's excellence in the field of steel construction by identifying projects that demonstrate efficiency, cost effectiveness, application of sustainability principles, aesthetics, best practice, outstanding teamwork, great safety management, and innovation.

**The new format is designed to allow easier initial entry without lowering standards. The first phase of entry should not take longer than 30 minutes to complete as it just requires a brief overview of the project, drawings and photos.**

Preliminary judging on the initial entries submitted by 1 July 2018 will select finalists for each category. Each finalist will then be asked to submit further information similar to the previous years' entry forms.

The Awards will be presented at the SCNZ Gala Dinner at Steel Agenda. In addition to each category winner and the overall supreme winner, each finalist will be acknowledged at the presentation and will receive an award, plus complimentary tickets to the Gala Dinner.

SCNZ Manager, Darren O'Riley, comments: "It is important that as an industry we promote the wonderful projects we undertake and demonstrate to the wider public how our industry contributes to producing aesthetically pleasing, iconic and safe structures."

**The SCNZ 2018 Awards for Excellence in Steel are rewardingly hard to win but quick and easy to enter. So what are you waiting for?**

Click [here](#) for more information on the 2018 Awards for Excellence in Steel Construction; including the low-down on the brand new "stand-alone residential home category"; and to submit your preliminary entry.

# BE AN AMBASSADOR FOR STRUCTURAL STEEL

SCNZ has been investigating better methods for distributing the many publications and industry updates that we generate each year, to enable our messages to be shared with a broader audience.

We recognise that whilst our publications are well received by our members, they are not widely distributed beyond our membership.

To tackle this shortcoming and to extend the reach of our key materials, we need you to help build our profile by becoming an ambassador for the industry in two simple ways:

- Use [LinkedIn](#)

Maintaining an active and up-to-date LinkedIn profile is important. Not only does it offer a valuable opportunity to engage with your industry peers, but the collective use of LinkedIn by our members will help to enhance SCNZ's reputation and build rapport with the wider structural steel construction industry.

We have produced a handy guide to using this business networking tool which covers SCNZ material, posting your own content and building your online profile, which is available [here](#).

- Display copies of our publications in your reception and distribute them to your own customers

We are investigating the feasibility of providing brochures stands for you to display our publications.

If you are interested in having an SCNZ stand, please contact Rebecca Symonds, Marketing Administrator (email: <mailto:rebecca.symonds@scnz.org> or phone: 09 262 6682).

## STRUCTURAL STEEL INDUSTRY UPDATE: NOVEMBER 2017

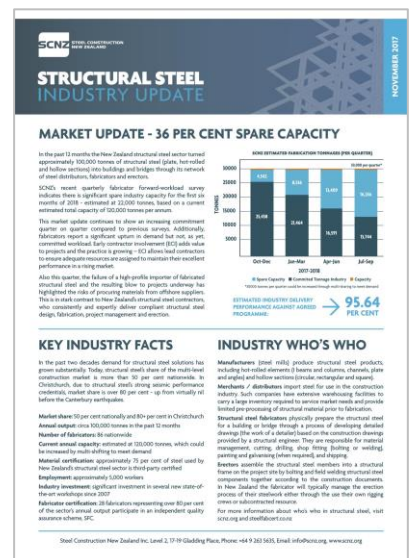
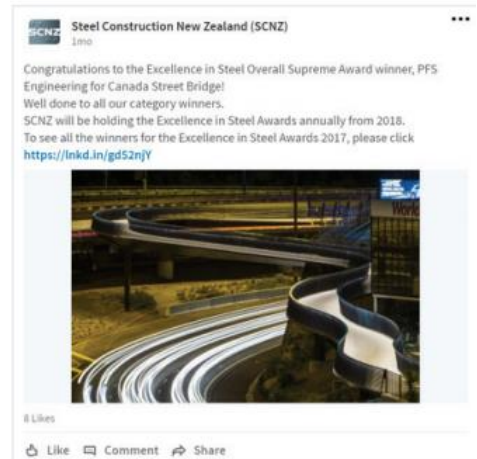
Our latest [market update](#) demonstrates that the industry still has reasonable capacity going into 2018, albeit less than indicated in previous surveys.

SCNZ's quarterly fabricator forward-workload survey indicates that the spare industry capacity for the first six months of 2018 is around 22,000 tonnes based on a current estimated total capacity of 120,000 tonnes per annum.

Significantly our estimated industry delivery performance against agreed programme remains high at 95.64%.

It is important that we get these messages out in the marketplace as often the reason main contractors have given for considering an importer of fabricated structural steel is that there is no spare capacity, which is not the case.

This market update continues to show an increasing commitment quarter on quarter compared to previous surveys. Additionally, fabricators report a significant upturn in demand but not, as yet, committed workload.



SCNZ's fifth Structural Steel Industry Update

The failure of a high-profile importer of fabricated structural steel this quarter and the resulting blow to projects underway has highlighted the risks of procuring materials from offshore suppliers.

**Please take a moment to look at the latest [Structural Steel Industry Update](#) and share it with your networks: include a link on your website, post on your LinkedIn profile, and refer to it in any direct communications you have with your customers, industry contacts and local MPS.**

## SCNZ AS/NZS 5131 WORKSHOPS

SCNZ recently held workshops on AS/NZS 5131 (Fabrication and Erection of Structural Steel) in Auckland, Christchurch and Palmerston.



HERA's Michail Karpenko

The introduction of AS/NZS 5131 as the proposed cited standard for fabrication and erection of structural steelwork is a significant change for the structural steel industry. The new Structural Steelwork Fabrication and Erection Standard, AS/NZS 5131 defines good practice for fabrication and erection of structural steelwork for projects in New Zealand; and provides the basis for the Steel Fabricators Scheme (SFC) which was jointly introduced by HERA and SCNZ in 2014.

[HERA's](#) Michail Karpenko gave a detailed overview of the standard at the workshops and capably answered members' questions.

**Although the workshops were well attended it is important that members who were unable to attend have an understanding of this standard before it is cited next year.**

SCNZ is planning to hold more AS/NZS 5131 workshops and a roadshow in 2018.

**Watch this space for more information early next year including the New Zealand Structural Steelwork Specification in Compliance with AS/NZS 5131.**

## SCNZ FABRICATOR GUIDANCE ON WARRANTIES AND GUARANTEES

We are advising all our fabricator members to familiarise themselves with SCNZ's *Guidance Note on Warranties and Guarantees* in light of continuing reports of confusion in the marketplace.

The Guidance Note was issued in April 2016, in response to the burgeoning risk of fabricator members increasingly being asked to provide warranties and/or guarantees and/or continuity guarantees when entering into contracts.

Although contractors often use the terms "warranty" and "guarantee" interchangeably, there are different legal meanings and derivations of each. Ultimately both warranties and guarantees create obligations that are enforceable and which can result in claims for damages against the person giving the obligation.

The standard form construction contract NZS3910:2014 introduced a new 13<sup>th</sup> Schedule which is a form of warranty between the Principal and a subcontractor. In addition, the collapse of Mainzeal has seen Principals requesting onerous continuity guaranteed from subcontractors.

SCNZ's Guidance Note covers warranties, collateral warranties, guarantees and continuity guarantees; as well as specific warranties relating to coating and paint, steel material and workmanship. It also includes example 'general tender tags' that can be adapted to suit a particular contract if you are

concerned that documents have insufficient information about the warranties or guarantees that you are being asked to provide; and 'specific tender tags' that can be adapted if you are concerned that the warranties being requested are unreasonable.

If you are in any doubt about the significance or implications of the warranties or guarantees you are being asked to sign, then you should seek professional advice.

**SCNZ fabricator members can access the *Guidance Note for SCNZ Fabricator Members on Warranties and Guarantees* by clicking [here](#) and logging into the SCNZ website.**

For further information, please contact Darren O'Riley, SCNZ Manager, at [darren.o'riley@scnz.org](mailto:darren.o'riley@scnz.org) or 09 262 6684.

## **RECONSTRUCTING CHRISTCHURCH: A SEISMIC SHIFT IN BUILDING STRUCTURAL SYSTEMS**

SCNZ has made a valuable contribution to a new report on the factors underpinning decisions made in the rebuild of Christchurch after the Canterbury Earthquakes.

The extensive report is entitled "RECONSTRUCTING CHRISTCHURCH: A Seismic Shift in Building Structural Systems" and is the result of a collaboration between international experts Dr Michael Bruneau, University of Buffalo, and Dr Greg MacRae, University of Canterbury.

After the 2010-2011 Canterbury earthquake, much of the Christchurch Central Business District (CBD) was demolished, and a new city has emerged in its place.

From a structural engineering perspective, to date, the new "heart" of Christchurch is quite different from the old one. Where reinforced concrete buildings once dominated the urban landscape, the emerging Christchurch has a variety of structural forms, an extensive amount of steel structures, and a number of structural systems introduced to make the new buildings of Christchurch more seismically resilient.

The report describes a study conducted to quantify the extent to which various types of structural systems have been used in new buildings constructed by early 2017; and to identify some of the drivers that have influenced decisions about the selection of structural material and specific structural systems. The study involved a series of interviews with the structural designers of up to 60% of the post-earthquake buildings constructed to date in Christchurch's CBD.



*PWC Centre, Christchurch*

Dr Greg MacRae comments: "We would like to extend our thanks to SCNZ's Kevin Cowie for his valuable input into this report, which we hope will provide insights into some of the mechanisms that can dictate structural engineering decisions during the post-earthquake reconstruction of a modern city.

"The Christchurch experience may be unique today, but it could repeat itself in other similarly developed cities worldwide after future devastating earthquakes."

**The report is available to download from the [Quake Centre website](#).**

## LEADING ENGINEERING CONSULTANT RECOMMENDS SFC ACCREDITED NZ FABRICATORS

Vijay Patel, Beca's Senior Associate – Structural Engineering, presented an excellent paper on the issues and considerations associated with imported structural steel at the recent [SESOC 2017](#) Conference in Wellington.



*Vijay Patel  
Beca Senior Associate –  
Structural Engineering*

**SCNZ members can access the paper “Imported Structural Steel Issues & Considerations” in the Resources section of the SCNZ website by clicking [here](#) and logging in.**

The paper gives an overview of the lessons learnt by Beca from being involved with New Zealand-based projects where imported structural steel has been used or considered for either material supply and/or fabricated sections.

In his presentation, Vijay highlighted a particular project where the contractor needed to address many issues before Beca could have confidence that the quality was reasonable, which resulted in considerable additional time and cost being incurred by Beca and the other project participants.

**Based on the experience gained from this project and other similar projects, Beca is considering stipulating a requirement for future steel structure designs and specifications that all fabricators should be New Zealand-based and accredited to the SCNZ/HERA Steel Fabricator Certification (SFC) scheme.**

Vijay's paper compliments a paper that SCNZ Senior Engineer, Kevin Cowie, also presented at SESOC 2017. In his presentation, Kevin provided an overview of updates of several joint Australia/New Zealand standards development projects covering: Fasteners, Structural Steels, Fabrication and Erection, Composite Structures and Bridge Design – Steel and Concrete. In addition, Kevin covered industry compliance initiatives that will complement the fabrication and erection provisions in the Steel Structures Standard.

## STESSA '18: SPECIAL RATE FOR SCNZ MEMBERS

As part of the Organising Committee, SCNZ is pleased to invite you to attend the **9th International Conference on the Behaviour of Steel Structures in Seismic Areas, 14 - 17 February 2018** - being held at the University of Canterbury, Christchurch.

Sponsored by SCNZ, STESSA '18 is the international specialty conference focused on the seismic design of steel structures.

Over 100 papers will be presented at the conference, which will enable researchers and practitioners to present and assess the results from recent research on minimization of the earthquake damage, on seismic retrofit, and on the collapse behaviour of steel structures.

Keynote speakers for 2018 have been confirmed as:

- Professor Guo-Qiang Li, Tongji University
- Professor Charles Clifton, University of Auckland
- Mr Stephen Hogg, Aurecon Christchurch
- Professor Robert Tremblay, Ecole Polytechnique of Montreal
- Raffaele Landolfo, University of Naples “Federico II” Naples
- Professor Toru Takeuchi, Tokyo Institute of Technology

The main mission of STESSA conferences is to provide an opportunity for researchers and engineers to share their research, technology and expertise with their peers at an international forum.

Click [here](#) for further information on STESSA '18. If you are a SCNZ Member and wish to register to attend STESSA, please email [rebecca.symonds@scnz.org](mailto:rebecca.symonds@scnz.org) and she will advise you the great discounted rate and organise your registration!

## SCNZ TUTORS VICTORIA UNIVERSITY ARCHITECTURAL STUDENTS

SCNZ Structural Engineer, Zahid Hamid, recently returned to [Victoria University](#) to help more undergraduate architectural students develop structural models for their third-year design project.

The students have been tasked with creating a new complex for the New Zealand School of Music (NZSM). The design project challenges the students with bringing two sites together into one coherent architectural concept. The new complex will facilitate the School working towards its vision, meet its spatial requirement and house an institution promoting excellence in research, teaching, practice and performance.



SCNZ Structural Engineer, Zahid Hamid (left), with Victoria University architectural students

The project must be designed in steel or timber, but most students use steel due to the long spans involved and the desire to avoid bulky cross-sections.

Zahid comments: "My role was to tutor the students and help them resolve their structures in ways that integrate with and support their architectural design concepts. It was a great pleasure to work with such enthusiastic and innovative young people; and to demonstrate the many inherent features that structural steel boasts which make it an excellent construction solution."

Andrew Charleson, Associate Professor – School of Architecture, Victoria University of Wellington, says: "This project presents a number of challenges and complexities. We really appreciate SCNZ's input as we recognise how important it is for our students to have experience of working with structural steel and to have contacts to turn to for advice and guidance when they are working in the industry."

## NEW SCNZ MEMBERS

SCNZ welcomed five new members during the second quarter ending December 2017.

### Affiliate (General)

BSI New Zealand Ltd, Auckland

### Associate (Steel Detailer)

Drafting Projekts Ltd, Auckland

### Professional (Engineer)

Alas Engineering, Christchurch  
Lynar Consulting, New South Wales  
Net Ltd (Structex), Christchurch

## UPCOMING EVENTS

2 February	AS/NZS 5131 Workshop, Tauranga	15 March	Central Fabricator Forum, Red Steel
14-17 February	STESSA '18, Christchurch	15 March	SCNZ Executive Meeting
8 March	Southern Fabricator Forum, venue TBC	22 March	Northern Fabricator Forum, Claudelands