

# STEEL FUTURES

→ OCTOBER 2017

## STEEL AGENDA 2017 – IT'S A WRAP!

Christchurch put on a fantastic spring display for the 60-plus SCNZ members who converged on the Garden City in mid-September for [Steel Agenda](#), SCNZ's annual AGM and conference.

The social programme kicked off with a go-karting competition. Whilst all the participants had a great time, the competition was hotly contested, with bragging rights up for grabs. Brad Stark from Steltech was awarded the coveted title of "Best SCNZ driver"!

The afternoon line-up featured a series of instructive and compelling presentations.

The focus of SCNZ Manager Darren O'Riley's inaugural address was SCNZ's strategic five-year plan, which was developed following in-depth consultation with a broad industry cross section. The strategic plan is a roadmap that neatly ties technical, industry and promotional activity together, and encourages a proactive approach to advancing the industry. Darren said, this plan provides a clear direction, ensures we remain future focused, and positions the industry well to maximise opportunities and manage risks going forward.



*Darren O'Riley, SCNZ Manager, speaking at Steel Agenda 2017*

SCNZ Chairperson Bob Hawley of Red Steel observed that the current building boom presents both opportunities and challenges for structural steel and the wider construction industry. He said that the fast-paced landscape allows our industry to demonstrate how progressive we are. And New Zealand's steel construction industry has a fantastic story to tell – our significant investment in state-of-the-art plants and technology has boosted quality, capacity and efficiency. SCNZ's latest market update shows we have 47 percent of spare capacity and an estimated industry delivery performance against agreed programme of 92.87 percent. Our challenge is to clearly distinguish our industry's offer, and be heard above the noise of imported steelwork and the rhetoric of rival materials.

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Bob then introduced D&H Steel's Wayne Carson as his successor to the role of SCNZ Chairperson. Wayne voiced the Executive Council's continued commitment to promoting the local industry and structural steel as a solution. Importantly, there will be a new focus on establishing a clear and compelling identity for the organisation.

Sean Gardiner from Calibre Group then provided an engineer's perspective of the Christchurch rebuild using the Pacific Tower as a case study. Completed in 2009, the complex building structure features multiple steel-braced frames. During the earthquakes, the building performed exactly as intended – damage was confined to the active links, of which there were 126 in the building. It meant the bracing, foundations, columns and diaphragms were protected from damage. Sean discussed the testing process required to establish the extent of damage to the links, which included in-situ hardness testing. Interestingly, it was found that steels supplied from countries other than New Zealand and Australia may not have been subject to the same toughness requirements. As a result, there is now increased scrutiny of offshore steel supply, fabrication, testing and certification, and an increasing uptake of low-damage seismic-resisting technologies.

Alistair Fussell's presentation, entitled *Lifting the Bar*, focused on initiatives to improve the supply of structural steelwork. He noted that specifiers, builders and developers have a choice of structural building systems. To preserve structural steel's strong market share depends on both maintaining confidence in the supply chain, and simplifying requirements to demonstrate compliance of steel products and fabricated steelwork. SCNZ has a number of ongoing initiatives designed to strengthen the structural steelwork supply chain, including standards development, education presentations, industry working groups and quality assurance programmes such as SFC and the Steel Distributors Charter. Importantly, Alistair pointed out that industry support of the material supply improvement initiatives is vital – he urged SCNZ members to secure a copy of the new AS/NZS 5131 standard and to start preparing to implement it in their businesses. In closing, he commended the industry for making significant progress in steelwork supply, scoring it 7½ out of 10, but said it needs to work hard for the final 25 percent that could otherwise undermine all the good work to date.



*Dale Williams, former mayor of Otorohanga and advocate for youth employment*

Dale Williams, former mayor of Otorohanga and advocate for youth employment, was the afternoon's inspirational speaker. He said that young people are the solution to the growing skills shortage. To grow, meet demand and be sustainable, industry must have a youth-to-work strategy and a strong trade-focused offering. Dale encouraged SCNZ members to actively engage with local schools and community to develop bold and creative initiatives to work with young talent.

Following Steel Agenda, delegates travelled to the Addington Raceway to join the Metals NZ Plenary session. The Mayor of Christchurch, Lianne Dalziel, shared an overview of the Christchurch rebuild, followed by a very detailed presentation by economic commentator Rod Oram. After the speakers came networking drinks and the gala dinner where SCNZ awards for Apprentice of the Year and Excellence in Steel were presented.

**Thank you to everyone who attended and to the SCNZ staff who worked tirelessly to make this event such a success. If you have any questions or feedback, please email [Darren O'Riley at \[darren.o'riley@scnz.org\]\(mailto:darren.o'riley@scnz.org\)](mailto:darren.o'riley@scnz.org) or call 09 263 5635.**

# CANADA STREET BRIDGE WOWS AT EXCELLENCE IN STEEL AWARDS

PFS Engineering was named Supreme Winner at the recent biennial [Excellence in Steel Awards 2017](#) for the landmark Canada Street Bridge, the only curved triangular orthotropic bridge in the world.

SCNZ's Excellence in Steel Awards showcase the exceptional design and execution possible when steel is used as the principle construction material in buildings and infrastructure projects. With a focus on steel structures built by New Zealand steel constructors using locally fabricated steelwork, the Awards identify projects that demonstrate best practice, outstanding teamwork, application of sustainability principles, great safety management and innovation.



*Graham McKelvey, PFS Engineering, receiving the Overall Supreme Winner award from Bob Hawley, SCNZ Chair*

There are four award categories, which relate to the steel contract value, and this year there was also an Overall Supreme Winner.

The Canada Street Bridge, winner of the over \$3 million category, features sinuous, elegant and simple aesthetic that belies the technical complexity in its design, fabrication and construction.

Runners up for the Overall Supreme Award were: Bishop Selwyn Chapel, winner of the Under \$500k category; Sky City Atrium Fit Out, winner of the \$500k to \$1.5m category; and Mason Brothers, winner of the \$1.5m to \$3m category.

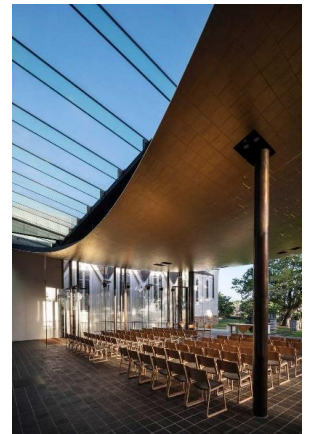
## **Under \$500K Category Winner**

**Company:** D&H Steel Construction

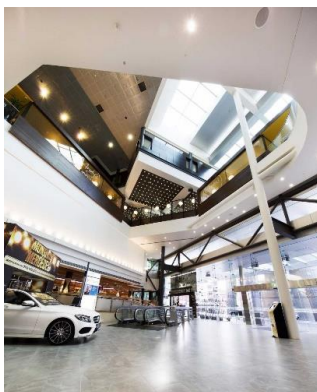
**For:** Bishop Selwyn Chapel

The judges remarked that: "The innovative use of structural steel is intrinsic to the outstanding design of the Bishop Selwyn Chapel - an elegant, gravity defying structure. The services have been cleverly integrated into the building fabric to create a very slim structure."

"The Chapel harnessed the material's benefits: steel's light weight enabled large spans; and steel's speed of erection meant the steelwork was swiftly constructed on site and lifted into position in one go."



*Bishop Selwyn Chapel*



*Sky City Atrium*

## **\$500K to \$1.5m Category**

**Company:** D&H Steel Construction

**For:** Sky City Atrium Fit-Out

The fit out of the Sky City Atrium stood out for the judges for its: "Clever reconfiguration of an existing space, which was made possible with the use of structural steel."

"Contributing factors to the project's success included the considerable up-front planning involved and having a smart fabricator on the team whose early input made the complex structure easier to build."



### **\$1.5m to \$3.0m Category Winner**



**Company:** D&H Steel Construction  
**For:** Mason Bros

The judges felt the Mason Bros development to be: “A skilful and sympathetic adaptation and retention of a heritage building. Technology played a pivotal role, including image scanning to create a precision 3D model of the existing building.”

“The project highlights structural steel’s impressive sustainability credentials – the existing primary steel structure was reused, which also allowed the facades to be retained.”

### **Over \$3.0m Category Winner**

**Company:** PFS Engineering  
**For:** Canada Street Bridge

The well thought through project ticked multiple boxes for the judges, including its speed of construction, cost effectiveness and minimal impact on the environment.



*Canada Street Bridge*

### **Supreme Overall Winner**

**Company:** PFS Engineering  
**For:** Canada Street Bridge

The judges were blown away with the execution and delivery of this complex and striking structure, and said: “The iconic Canada Street Bridge is a fantastic reflection of the versatility of steel in building and infrastructure projects, and illustrates the skill and expertise that we have in New Zealand to produce a project of this high calibre. The Canada Street Bridge does the industry proud.”



*Canada Street Bridge*

**Once again huge congratulations to all our winners and many thanks to the judges and to all the people who took the time to tell us about their innovative projects.**

Please keep an eye out for information about our next Excellence in Steel Awards, which is taking place next year!

## **CONGRATULATIONS TO OUR 2017 APPRENTICE OF THE YEAR**

Simon Jackson of Lower Hutt-based steel fabricator MJH Engineering was named [SCNZ Apprentice of the Year](#) when the award, sponsored by Weldwell, was announced at the Industry Awards Gala Dinner on 15 September.

Simon was presented with a trophy, certificate and \$1,000 in front of over 220 guests. Runner up Bronson Pine of John Jones Steel received a highly-commended certificate and \$500.



(L-R) Bronson Pine – John Jones Steel (Runner Up); Glen Meyrick – Weldwell NZ; Bob Hawley – SCNZ Chair; Simon Jackson – MJH Engineering (Winner)

The SCNZ Apprentice of the Year Award celebrates people whose skills, drive and willingness to learn and work hard has helped them to achieve outstanding outcomes. It recognises well-rounded apprentices who demonstrate not only talent in steel fabrication but who display traits important to the industry – commitment, innovation and ability.

The finalists were assessed on a written entry submission, a practical exercise at MIT and face to face interviews with the judges.

The judges said that both Simon and Bronson were of the highest calibre and demonstrated excellent attitude and aptitude that should make our industry, their companies and

their families proud. They continued: “It says a lot that they helped each other out during the practical exercise. We found it very difficult to choose between the two finalists and both should be congratulated on their efforts.”

The Award is part of SCNZ’s work to promote careers and training in the structural steel sector.

**Many thanks to the judges for their time and effort; Tony Kerr from MIT for conducting the practical exercise and Grayson Engineering for supplying the steel; Alister Varcoe from Red Steel for help with the judging criteria; Competenz for being our industry training partner and Weldwell for sponsoring the award.**

## 2017-18 SCNZ EXECUTIVE COUNCIL ELECTED

Many thanks to the current SCNZ Executive Council for their service over the past year, particularly Peter Donohue (Steel & Tube Holding Ltd) for his excellent and outstanding contribution to the Executive Council. Peter has completed his maximum tenure and is required to stand down. His insight and input will be missed.

In addition, huge thanks to Bob Hawley and Dave Hardy for their valued contributions to SCNZ as Chairperson and Vice-Chairperson over the past year.

We welcome Troydon Lill and Wayne Wheeler who were elected as new members of the SCNZ Executive Council at our recent elections.

The SCNZ Executive Council for 2017-2018 is:

Associate:	Mike Klemick (Dimond, Auckland)
Professional:	Scott Miller (Silvester Clark, Wellington)
Steel Constructor:	Bob Hawley (Red Steel, Napier – Central Region) Wayne Carson (D&H Steel Construction, Auckland – Northern Region) Frank van Schaijik (John Jones Steel, Christchurch – Southern Region)
Steel Distributor:	Troydon Lill (Vulcan Steel, Christchurch) Wayne Wheeler (Steel & Tube, Auckland)
Steel Producer:	Craig Taylor (OneSteel NZ Ltd, Auckland) Nigel Bradley (New Zealand Steel, Auckland)
Ex-officio:	Stephen Hicks (HERA, Auckland)



Wayne Carson,  
SCNZ Chairperson



Wayne Wheeler,  
SCNZ Vice-Chairperson

Congratulations to Wayne Carson (Steel Constructor: D&H Steel Construction, Auckland) and Wayne Wheeler (Steel Distributor: Steel & Tube Holding Ltd, Auckland) who were elected at the SCNZ AGM on 15 September to the positions of Chairperson and Vice-Chairperson respectively by the Council elect.

For more information about SCNZ's Executive Council, please visit the [SCNZ website](http://www.scnz.org).

# HAVE YOUR SAY - IMPORTANT CHANGES FOR THE STEEL INDUSTRY

## MBIE CONSULTATION: BUILDING CODE VERIFICATION METHOD B1/VM1 UPDATE AND PROPOSED LOOP BAR BAN 2017

The **Ministry of Business, Innovation and Employment (MBIE)** is proposing to:

- Update Verification Method for B1 Structure (B1/VM1) to cite the latest version of NZS 3101:2006 Concrete Structures Standard: Part 1 – The Design of Concrete Structures (i.e. Amendment 3).
- Update Verification Method for B1 Structure (B1/VM1) to replace sections of NZS 3404.1:1997 Steel Structures Standard to reflect current practice for steel fabrication and construction.
- Ban the use of the loop bar (also known as ‘pigtail’) connection detail associated with the support of precast concrete flange-hung double-tee flooring units.

The proposed amendments are part of MBIE’s response to the investigation into the performance of Statistics House in the 14 November 2016 Hurunui/Kaikōura earthquakes and recommendations from the Canterbury Earthquakes Royal Commission.

Modifications to the referencing of NZS 3404.1:1997 are not related to the Statistics House investigation, but are a timely update that will ensure B1/VM1 remains relevant to the steel industry.

### Significant changes for the steel industry include:

- AS/NZS 5131 will replace NZS 3404.1 as the cited standard for fabrication and erection of structural steelwork. 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.
- The inclusion of the latest AS/NZS structural steel material and welding standards.
- The inclusion of a European standard for high strength structural bolts.

The Ministry of Business, Innovation and Employment (MBIE) has released a Consultation document on the proposals. **The deadline for written comments is 5pm on Monday 20 November 2017.**

Click [here](#) to view the Statement of Proposal and for information on how to submit your comments.

Should members have any queries on the proposed changes, please contact Kevin Cowie, Senior Structural Engineer (Technical). Email: [kevin.cowie@scnz.org](mailto:kevin.cowie@scnz.org) or phone: 09 262 6685.

## DRAFT DZ TS 3404 STEEL CORROSION TECHNICAL SPECIFICATION: OPEN FOR PUBLIC COMMENT

Standards New Zealand has made the draft DZ TS 3404 Steel Corrosion Technical Specification available for public comment for four weeks.

This is a technical specification on the corrosion protection of structural steelwork exposed to the New Zealand atmospheric and non-atmospheric environments, which SCNZ initiated and has co-funded with HERA.

It has been prepared for use by asset owners, designers (engineers and architects), contractors, specifiers of corrosion protection systems, and the surface coating industry.

The specification is intended to be used to satisfy the requirements of the NZ Building Code Clause B2, and the New Zealand Transport Agency Bridge manual. It is also to be used in conjunction with AS/NZS 2312:2014 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings; AS/NZS 5131:2016 Structural steelwork – Fabrication and erection; and AS/NZS 5100.6:2017 Bridge design – Part 6: Steel and composite construction; as well as NZ Transport Agency Protective Coatings for Steel Bridges.

It supersedes in part NZS 3404.1:2009 Steel structures standard – Part 1: materials, fabrication and construction, specifically Chapter 5 Corrosion Protection which is also being replaced by AS/NZS 5131 and AS/NZS 5100.6.

**You can view or download the draft technical specification and submit comments on the Standards New Zealand [website](https://standards.newzealand.govt.nz/).**

**The closing date for comments is 16 October.** All comments submitted during this period will be reviewed by the development committee before the technical specification is balloted on.

**For more information, please contact Zahid Hamid, Structural Engineer (email: [zahid.hamid@scnz.org](mailto:zahid.hamid@scnz.org) or phone: 09 262 6681).**

## ORDER YOUR CUSTOMISED SFC BROCHURE TODAY

In the July newsletter, we highlighted the new [Steel Fabrication Certification for NZ Specifiers](#) brochure, which can be customised for SFC certified fabricators to include their own logo, category number and contact details.

We have received positive feedback on this opportunity and many enquiries from fabricators who are keen to order their customised version.

On the advice of our printer, to achieve the best quality and most cost-effective product, we are now going with 250gsm gloss art paper as opposed to 200gsm satin gloss but will hold the print costs at the previously quoted amounts.



*Customised version of the Steel Fabrication Certification for NZ Specifiers brochure*

However, we have also been advised there will be a **small one-off charge of \$160 plus GST to each fabricator for the individual artwork**. SCNZ will invoice you once the printing is completed and the brochures have been delivered to you.

In addition, there is also an option for you to supply your own photo for the front cover of the brochure. This option is only available for a minimum print run of 2000 or 3000 brochures and is subject to an additional one-off charge of \$500 plus GST. This option is subject to the **following conditions**:

- The photo/image must be high resolution and a quality composition;
- The photo/image is subject to approval by SCNZ;
- The photo/image must be of your business or a project that you have undertaken.

Upon ordering your customised version of this brochure, you will need to:

- ✓ Supply your company logo in high resolution;
- ✓ Confirm your contact details;
- ✓ Supply a photo/image for the cover in high resolution (optional).

Printing must be done via SCNZ to ensure consistency of quality and you will have the opportunity to sign off a final draft before it goes to print. An order form, outlining the full breakdown of print costs (including delivery), is available [here](#).



To order your customised brochure, please complete the [order form](#) and send to Rebecca Symonds, SCNZ Administration and Marketing Officer (email: [rebecca.symonds@scnz.org](mailto:rebecca.symonds@scnz.org) or phone: 09 263 5638).

## FIRST SCNZ FABRICATOR BENCHMARKING SURVEY



Earlier this year, SCNZ undertook its first Fabricator Benchmarking Survey, which covered industry pay rates. The resulting national averages were sent back to participants in August.

The number of participants exceeded expectations and SCNZ has received excellent feedback on the benefits of taking part as well as requests for other key performance measures to be included.

Darren O'Riley, SCNZ Manager, will invite discussion on what other measures to include in future surveys at forthcoming Regional Fabricator Forums –

[watch this space](#) for more details.

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

## SPARE CAPACITY TREND SET TO CONTINUE INTO 2018

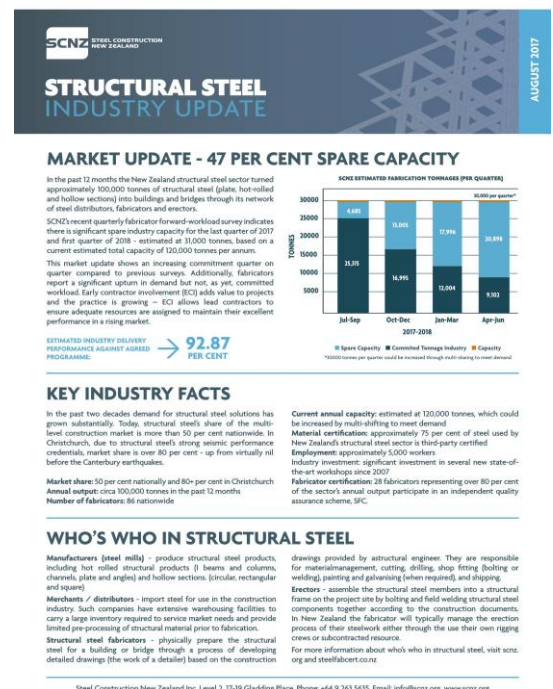
SCNZ's recent quarterly fabricator forward-workload survey indicates that there is significant spare industry capacity for the last quarter of 2017 and first quarter of 2018 – estimated at 31,000 tonnes, based on a current estimated total capacity of 120,000 tonnes per annum.

This market update shows an increasing commitment quarter on quarter compared to previous surveys; and an estimated industry delivery performance against agreed programme of 92.87 percent. Additionally, fabricators report a significant upturn in demand but not, as yet, committed workload.

The practice of early contractor involvement (ECI), which adds value to projects, is also growing. ECI allows lead contractors to ensure adequate resources are assigned to maintain their excellent performance in a rising market.

This regular report contains solid data on industry capacity, lead times, market share etc, and is a key tool in SCNZ's drive to convince the market that our industry has the capacity to satisfy demand.

Please take a moment to look at the latest [Structural Steel Industry Snapshot](#) 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's fourth Structural Steel Industry Snapshot



## NEW INDUSTRY CASE STUDY

SCNZ has published a new case study, illustrating how structural steel can fit perfectly with the desire to incorporate buckling restrained braces as the main lateral-resisting system for a building.

The \$216 million Rutherford Regional Science and Innovation Centre (RRSIC) will be the cornerstone of the University of Canterbury's Science Precinct. The state-of-the-art facilities will be a focal point for the University's science and innovation network and will foster collaborative teaching, learning and research.

The RRSIC project is two buildings, the first of which is being built by Fletcher Construction and is a 25,000m<sup>2</sup> seismically engineered steel structure that includes specialist teaching and research laboratories for physics, astronomy, chemistry, geology, geography and biological sciences.

The development is part of a \$1.2 billion capital works programme that is progressively transforming the University campus with state-of-the-art teaching, learning and research facilities. A further \$1.2 billion in developments out to 2045 has been identified in a recently released Campus Master Plan.

The design team describes the first building of the RRSIC project as a "collegial effort". The team's attitude was to solve issues together, which was central to overcoming the many challenges the job threw at them.

**This case study is available in the Media Centre of our website. Please click [here](#) to view this case study.**



SCNZ's RRSIC Case Study

## CREDITWORKS SPECIAL OFFER FOR SCNZ MEMBERS



Those of you who attended the July Regional Fabricator Forums will be aware of CreditWorks and the offer currently being extended to SCNZ members.

CreditWorks Data Solutions Limited (CDSL) is the largest positive data commercial credit reporting service in New Zealand providing credit reporting and debtor monitoring services to companies that provide credit to their clients.

CreditWorks is the only credit reporting bureau that provides positive data credit reports to this extent. Through their comprehensive credit information database, debt exposure and payment trends can be profiled and viewed, enabling businesses to make informed credit decisions, and monitor accounts on an ongoing basis.

The database is "live" and data is uploaded regularly from clients and from other sources such as Companies Office, ensuring the status of the debtor is always accurate and up to date, whilst preserving the anonymity of the supplier(s) of the data. Over 350 customers regularly contribute debtor data and the database is used by over 3000 companies for enquiry purposes.

**The company is offering a preferential pricing structure to SCNZ for the next 30 days, which it is undertaking to hold for at least 24 months.**

As well as access to its comprehensive database, CDSL provides a large range of services, including monitoring tools which will alert the supplier to changes in a customer's status. The service can also

provide companies with individually styled Reporting Suites, providing information tailored specifically for their own customer base.

**An article highlighting the importance of employing good credit management practices is available [here](#).**

Alan Johnston, General Manager of CDSL, says “Best regards to everyone we met at the recent regional forums. We had some interesting discussions with attendees and there was a genuine interest in the state of the construction market, and how CreditWorks can help protect your debt and mitigate risk in these volatile times.”

“If anyone would like more information, or would just like to have a chat about any credit concerns you may have, please do not hesitate to give me a call or drop me a line. We’re only too happy to assist if we can.”

**For more information, please visit [www.creditworks.co.nz](http://www.creditworks.co.nz) or contact Alan Johnston from CDSL directly. Email: [alan.johnston@creditworks.co.nz](mailto:alan.johnston@creditworks.co.nz) or phone 09 520 8133.**

## **BE PART OF NZ’S PREMIER CONSTRUCTION HEALTH & SAFETY CELEBRATION**

Tickets are now on sale for one of the biggest industry events of the year, the Site Safe Evening of Celebration, which will be held on Wednesday 8 November at Alexandra Park in Auckland.



This event acknowledges health and safety success in the construction industry, announcing the winners of the Construction Health and Safety Awards and recognising the graduates of the Certificate in Construction Site Safety.

The event will include a live comedy set, buffet dinner and drinks, and the chance to celebrate with likeminded people in the industry.

**Tickets can be purchased online [here](#). Visit [www.sitesafe.org.nz](http://www.sitesafe.org.nz) for more information on this year’s event.**



*The Site Safety Evening of Celebration*

## **NEW SCNZ MEMBERS**

SCNZ welcomed four new members during the first quarter ending September 2017.

### **Affiliate (General)**

Konnect Fasteners, Auckland  
Allfast Solutions Auckland Ltd, Auckland  
Allfast Solutions (Waikato) Ltd, Hamilton

### **Professional (Engineer)**

Quoin Structural Consultants, Christchurch