

# STRUCTURAL STEEL

## ⇒ INDUSTRY UPDATE



## Market update - 47% spare capacity

### The four 'Cs' – the steel advantage

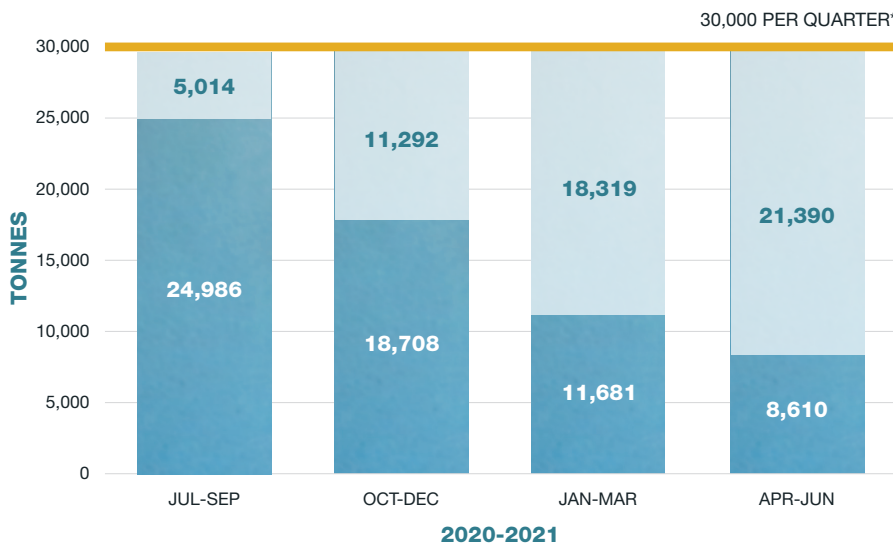
**CAPACITY:** The New Zealand structural steel industry is well equipped to cope with a spike in construction demand brought on by the Government's aim to fire up the industry to support New Zealand's economic recovery in response to COVID-19. The industry has proven capacity to deliver on all projects – there is no need for procurers to go offshore to satisfy demand.

SCNZ's latest quarterly fabricator forward-workload survey indicates there is significant spare industry capacity for the year ending June 2020 – estimated at 47 per cent, based on a current estimated total capacity of 120,000 tonnes per annum.

In 2019 the construction sector experienced an unprecedented peak of activity, which our industry managed well. In the past 12 months the New Zealand structural steel sector turned approximately 100,000 tonnes of structural steel into buildings and bridges through its network of steel distributors, fabricators and erectors. Crucially, our structural steel industry is highly collaborative, with fabricators partnering with each other nationwide to ensure a project is delivered to a high standard, on time and on budget.

### SCNZ Estimated Fabrication Tonnages (per quarter)

SCNZ steel constructors identified approximately 40 projects that have been cancelled due to COVID-19. These range from residential to large commercial projects and represent approximately 10.5 per cent of industry annual volume. Similarly, close to 100 projects have been delayed or deferred, representing approximately 6.4 per cent of the industry's annual volume.



**95.91%**

Estimated industry delivery performance against agreed programme

- Spare Capacity
- Committed Tonnage
- Industry Capacity

\*30,000 tonnes per quarter could be increased through multi-sharing to meet demand

**COMPETITIVE:** Structural steel is a cost-effective building solution. Investment in fabrication technology and workshops, and the modern approach of simple bolted connections, has improved productivity in New Zealand's structural steel industry. Overall construction programmes for multi-level commercial projects using structural steel are generally 10-15 per cent shorter compared to other materials, thanks to the efficiency of off-site manufacturing and fabrication, and 'just in time' deliveries. And because steel is light weight, foundations can be less substantial and cheaper. It's also similar in cost to concrete and lower than timber.

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**CAPABILITY:** The procurement strategy has a massive role to play in the outcome of any construction project. Depending on the approach, it can drive budgets up or down, and cut or add weeks to delivery programmes. This is where the Early Contractor Involvement (ECI) procurement model can add significant value to any project. SCNZ is a strong advocate for the ECI approach in New Zealand. In our experience, ECI delivers projects that carry much less risk, enjoy fewer variations and are typically much better planned.

From the get-go, the ECI approach allows New Zealand fabricators to add real value by collaborating on the design with the structural engineer, architect and quantity surveyor. As a team, they explore buildability, timeframes and risk to achieve the best outcome for the project. It sits in stark contrast to the traditional tender process, which simply doesn't capture the deep knowledge of the specialist subcontractors and, too often, discussions on risk allocation are reserved until final pre-let negotiations.

**COMPLIANCE:** Quality and compliance are crucial to the health of New Zealand's local construction industry and are at the core of SCNZ activities. This focus and assurance are vital at a time when we cannot rely on the quality and compliance of imported product from low-cost economies.

SCNZ's industry-led quality scheme, Steel Fabrication Certification (SFC), remains a cornerstone of the industry's quality and compliance activities. Launched in 2014, the scheme ensures that participating structural steel contractors have appropriate personnel and quality management systems in place representing international best practice. 88 per cent of the sector's annual output is now delivered by SFC-qualified fabricators.

The Structural Steel Distributor Charter, SCNZ's new quality assurance initiative, complements SFC. The Charter ensures that structural steel supplied to the local steel construction sector is sourced using best-practice procurement; it represents a mark of excellence for structural steel distributors in New Zealand. All six SCNZ Distributor members have been independently audited to satisfy the requirements of the Charter.

## Industry who's who

**MANUFACTURERS** (steel mills) produce structural steel products, including hot-rolled elements (I beams and columns, channels, plate and angles) and hollow sections (circular, rectangular and square).

**MERCHANTS / DISTRIBUTORS** import steel for use in the construction industry. Such companies have extensive warehousing facilities to carry a large inventory required to service market needs and provide limited preprocessing of structural material prior to fabrication.

**STRUCTURAL STEEL FABRICATORS** physically prepare the structural steel for a building or bridge through a process of developing detailed drawings (the work of a detailer) based on the construction drawings provided by a structural engineer. They are responsible for material management, cutting, drilling, shop fitting (bolting or welding), painting and galvanising (when required), and shipping.

**ERECTORS** assemble the structural steel members into a structural frame on the project site by bolting and field welding structural steel components together according to the construction documents. In New Zealand the fabricator will typically manage the erection process of their steelwork either through the use their own rigging crews or subcontracted resource.

For more information about who's who in structural steel, visit [scnz.org](http://scnz.org) and [steelfabcert.co.nz](http://steelfabcert.co.nz)

## Key industry facts

In the past two decades demand for structural steel solutions has grown substantially. Today, structural steel's share of the multi-level construction market is more than 50 per cent nationwide. In Christchurch, due to structural steel's strong seismic performance its market share is over 80 per cent - up from virtually nil before the Canterbury earthquakes.

**Market share:** 50 per cent nationally and 80+ per cent in Christchurch

**Annual output:** circa 100,000 tonnes in the past 12 months

**Number of fabricators:** 114 nationwide

**Current annual capacity:** estimated at 120,000 tonnes, which could be increased by multi-shifting to meet demand

**Material certification:** approximately 85 per cent of steel used by New Zealand's structural steel sector is third-party certified

**Employment:** approximately 5,000 workers

**Industry investment:** significant investment in several new state-of-the-art workshops since 2007

**Fabrication certification:** 43 fabricators representing over 89 per cent of the sector's annual output participate in an independent quality assurance scheme, SFC.



**For information about becoming a member, contact:**

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