

# TENDER ADDENDUM

## REINFORCING

- + 3D BIM MODELING CAPABILITIES
- + ENVIRONMENTAL & SUSTAINABILITY
- + HEALTH & SAFETY
- + QUALITY
- + PAST PROJECTS
- + COMMUNITY INVOLVEMENT & BROADER OUTCOMES
- + OUR WIDER PROJECT OFFERING



## CONTENTS

<b>3D BIM Modelling Capabilities</b>	<b>4</b>
<b>The benefits of a 3D model for your project</b>	<b>5</b>
<b>Why 3D BIM Modelling?</b>	<b>6</b>
<b>Environmental &amp; Sustainability</b>	<b>7</b>
<b>Health &amp; Safety</b>	<b>8</b>
<b>Quality</b>	<b>8</b>
<b>Past Projects</b>	<b>9</b>
<b>Community Engagement &amp; Broader Outcomes</b>	<b>12</b>
<b>Our Wider Project Offering</b>	<b>13</b>

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# Welcome to Steel & Tube's Tender Addendum for Reinforcing

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Steel & Tube is proud to offer our Clients a full range of products and services to meet the requirements of their projects. From the floor under your feet to the roof over your head, and the nuts and bolts in between - we have been building New Zealand from the ground up since 1953.

We are a proud New Zealand company - locally owned by every day New Zealanders - and staffed with passionate kiwis that really care for this country and all we stand for. Our people are our greatest strength - the steel backbone of our company. We're passionate, innovative, capable and proud of what we do.

We have expertise right across the construction industry - and love nothing more than helping our partners to create better projects and build better outcomes. Like the rest of the country we have been through the wringer at times - but we have worked hard to come out stronger and better equipped to create a positive future. Now we are in a great position - and we believe that New Zealand is too.

As a listed company we have strong governance and we're on a sound financial footing. We have an amazing team of people and truly believe that we are stronger when we all work together. We have group of experts with capabilities from brands that you may have known for a long time - all under one roof with a reach right across the country.

Refer to **Appendix G** for a brochure on all the capabilities and products that Steel & Tube can offer clients in addition to the Reinforcing material for this project. Examples of where opportunities could exist include:

- |                           |                             |
|---------------------------|-----------------------------|
| + Steel                   | + Galvanizing               |
| + Roofing & Cladding      | + Pip & Cable Support       |
| + Mesh & Reinforcing      | + Hurricane Rural & Fencing |
| + Stainless and Aluminium | + Fastenings                |
| + ComFlor                 | + Chain & Rigging           |
| + Plate Processing        | + Plumbing & Drainage       |

We would be happy to discuss how leveraging these other items could provide financial benefits to your project.

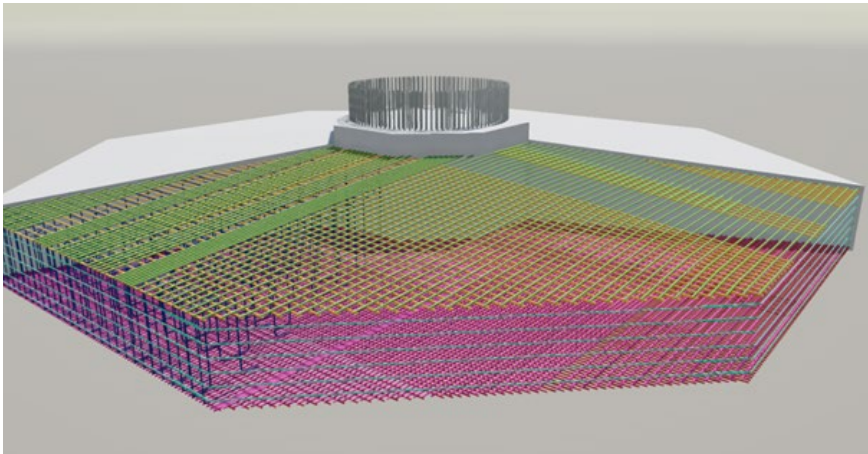
You can view the full Steel & Tube product range at <https://steelandtube.co.nz/products>

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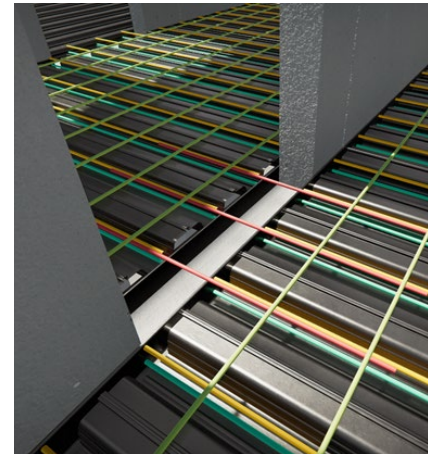
## APPENDIX A

# 3D BIM Modelling Capabilities

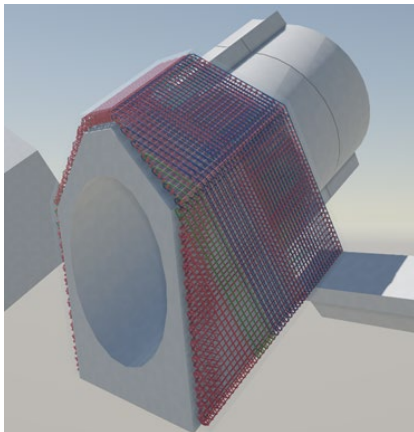
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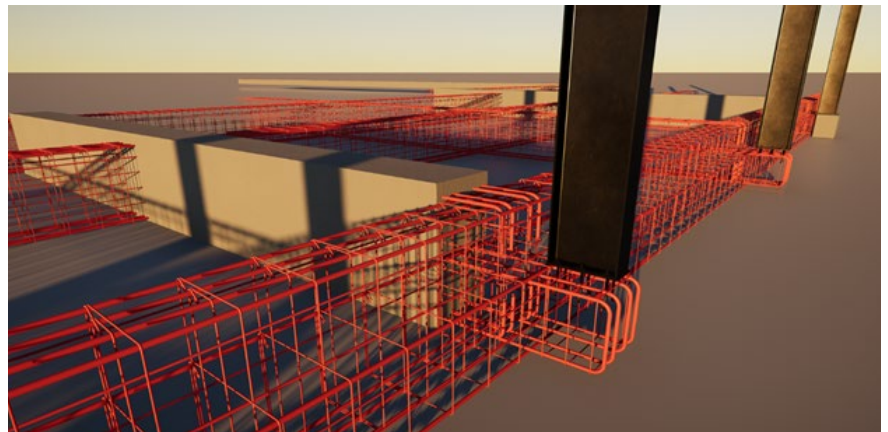
1



2



3



4

**Steel & Tube is leading the way, *utilising 3D modeling* to optimise seismic performance and reduce design errors**

This next generation of 3D model allows our customers to identify clashes, design errors, discover cast-in components/penetrations and services upfront.

We have undertaken a significant revolution on how reinforcing detailing is approached and managed internally. Steel & Tube are now moving towards implementing a full 3D BIM modelling process for the reinforcing detailing, which will add significant value and support to our projects from the estimation phase through to site installation.

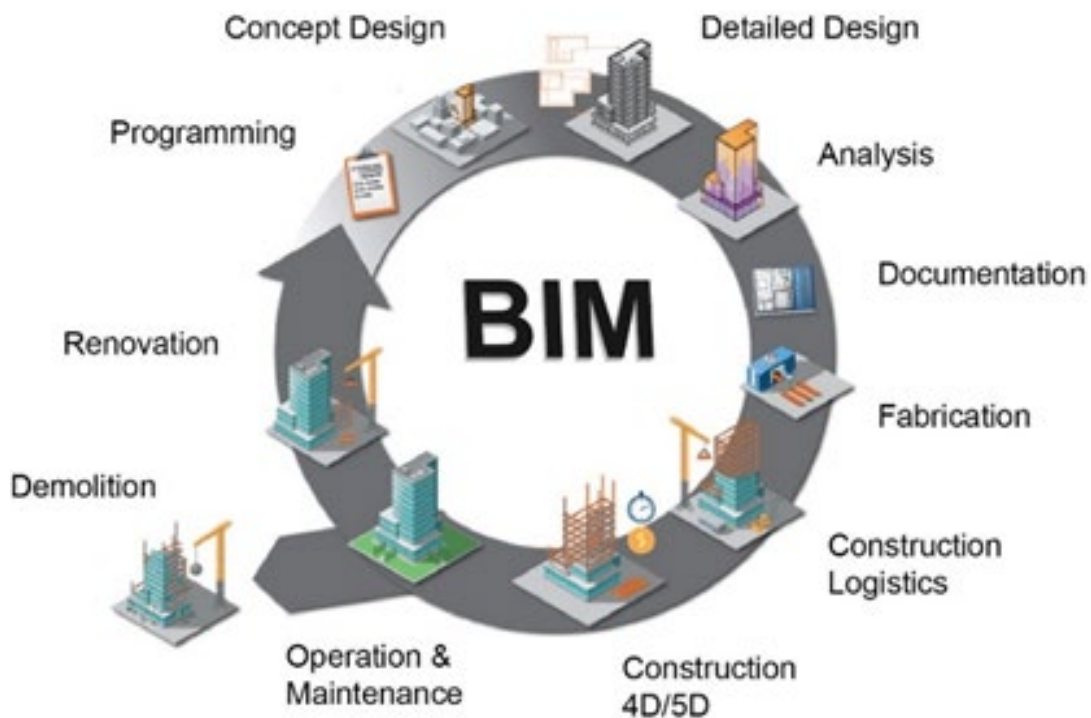
3D BIM modelling will minimize detailing mistakes and clashes at site, reduce the need for urgently ordering replacement bars (which in turn helps to avoid budget overruns) and will assist the important reinforcing trade to keep up with the construction programme.

1. Windfarm foundations, 3D modeled to different land topology for perfect stability on difficult terrain.
2. Clash detection between reinforcing and Steel & Tube's composite steel flooring system (ComFlor).
3. Hydro dam tailrace, a complex reinforcing shape made easy with 3D modeling.
4. Identifying reinforcing prefabrication opportunities using 3D modeling.



# The benefits of a 3D model for your project

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A 3D BIM model will not only provide the standard information usually contained in a drawing but will also create a central internal database containing all the reinforcing information related to the project. It will interface with our production teams and machinery to guarantee the final product 100% matches the 3D model, minimizing human error and maintaining a consistent level of accuracy.

Our ability to seamlessly integrate with other BIM software, to share the 3D model in various formats and the ability to load external models from other disciplines, allow us to run inter-trade clash checks before any of the materials are manufactured, resulting in significant savings in time and cost for the project on site.

Due to its parametric nature, once the 3D model is created it is simple to adjust the geometry based on the “for construction issue” drawing set and having the model updated accordingly without the need to fully remodel the

reinforcing. Complex shapes, curves and challenging reinforcing geometries will no longer be a problem, with 3D visualization simplifying the process and highlighting issues from the start. Early steel detailer involvement and digital modelling is bringing clear cost and time advantages to some of our recent projects. As reinforcing specialists, we can add real value by modelling the steel during developed design. It allows the whole team to front foot issues, improve co-ordination, build-ability and sequencing.

3D modelling allows us to tackle any type of project, from a small private residential job to a multi-storey building or a large highway bridge structure, making it the perfect tool to answer our clients’ needs, maximize our efficiency and deliver projects with consistent confidence.

The generation of a 3D BIM model gives us the capacity to streamline the entire manufacturing process and adds value in many different areas, including:

- + Consultation during the design process with designers/consultants
- + Fast and accurate generation of detail sheets and shop drawings
- + Accurate forecast of final tonnage early on in the process
- + Less errors during fabrication of materials in the workshop
- + Identification of opportunities to prefabricate materials in the workshop and at site
- + Assisting the installation team at site with visualisation of the reinforcing in 3D on a tablet or other device

# Why 3D BIM Modelling?



## During the estimation phase

- Know exactly what material is required and where.

For some of our key projects, the 3D modelling commences early, evolves with the project, and tracks all changes to provide full confidence in the final quantities. This approach includes the ability to model any part of the project down to small details, including accessories and consumables, which provides better control of the project and inventory; generation of preliminary material reports directly from the model; interfacing with aSa estimation and manufacturing software; and the creation of a preliminary 3D.IFC model for information sharing with other disciplines.



## During the detailing phase

- Before construction has started, identify clashes and reduce time consuming plan alterations.

A full model is completed and updated based on “for construction” drawings, with all changes and variations tracked and implemented within the model. Clash checks are performed to avoid issues on site, and dimensional checks are carried out to ensure suitability for transport. The generated model also supports pre-fabrication planning and the creation of the final 3D .IFC model.



## H&S Improvements

- Visualise the best construction method and identify pre-fabrication opportunities.



## During production & prefabrication phases

- Complete traceability from model, to drawing, and then tagged for installation onsite.

The interface between the 3D modelling software and our manufacturing system enables seamless production and management processes. Information from the model is sent directly to CNC machines for manufacturing, while the final 3D .IFC model is distributed to the client, prefabricator, and production team. In addition, GA drawings are created to support the final installation on site for information sharing with other disciplines.

## FAQ

### What's the ideal project type and size?

Any size of project can be undertaken from small foundation slabs, to multi storey units, warehouses, along with infrastructure such as bridges and tunnels.

### What expertise is available through Steel & Tube?

Our detailing and 3D modeling services are available in our main locations: Auckland, Hamilton, Palmerston North, Wellington and Christchurch.





# Environmental & Sustainability

## Strategy

Our focus is on delivering what our customers want, in a profitable manner that has a positive impact on our people, communities and the planet, while continuing to grow our business and deliver value to shareholders.

## Sustainable Steel

Steel is one of the world's most essential and sustainable building products – permanent, forever reusable and the most recycled substance on the planet. On a cradle-to-cradle basis, steel's environmental performance compares favourably to other materials such as concrete and timber. In New Zealand, it is estimated that 85% of steel from demolition sites is returned to steel mills for recycling. Extending the life of a structure enables more value to be extracted from the resources invested to build, operate, and maintain it. Steel's thermal mass properties keep buildings cooler in summer and warmer in winter, reducing the reliance on air conditioning and heating. For many construction applications, steel is the only choice.

However, we are mindful of the greenhouse gas emitted during steel's production. We are closely monitoring new technologies to decarbonise steel but are conscious these are still in the very early stages. In the meantime, we are focusing on initiatives to control our operational emissions, optimise energy consumption and minimise waste. Our investment in technology is an important enabler of our progress towards reducing our carbon footprint. We are also actively looking for sustainability progress with our key vendors.



We have partnered with ESG World to generate a real-time cross-section of our business practices across all Environmental, Social and Governance factors. Our long-term aim is to operate our business in a way that is financially rewarding for our shareholders and positive for our people, our customers and our planet. Adopting ESG World will ensure that our stakeholders can easily and objectively review our sustainability performance.

Please click the following link to access our Steel & Tube ESG Profile: [Steel & Tube ESG Profile](#)

## Resources

**Sustainability Policy - June 2023** [view document](#)

**Environmental Policy** [view document](#)

**SCNZ Chartered Bolt Importer** [view document](#)

**SCNZ Chartered Distributor** [view document](#)

**SSC Cert Gold Steel & Tube** [view document](#)

**Modern Slavery Policy June 2023** [view document](#)

**Eco Choice NZ Steel-EC-41-Certificate-May-26** [view document](#)

**Eco Choice NZ Steel-EC-57-Certificate-May-26** [view document](#)

All documents can be found at [www.steelandtube.co.nz/sustainability](http://www.steelandtube.co.nz/sustainability)



## APPENDIX C

# Health & Safety

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Zero Harm is of critical importance to Steel & Tube and as a company we firmly believe that accidents are preventable. Steel & Tube have an overriding commitment to creating a safe and healthy workplace, as well as encouraging environmental responsibility and supporting sustainable developments within our company and our clients' projects.

At the end of a long, hard work day it is our goal to ensure that all our staff

return to their families safely. As such our team is focused on providing our Clients with service that meets OH&S (Work Wise) legislative requirements and industry best practice for safe project execution.

Our dedication and philosophy to Health & Safety is applied to all our projects and as such our clients can be confident that the reinforcing trade is safe in the capable hands of a company that prioritises Health and Safety above

anything else.

Apart from the specifics mentioned above, please refer to the [Health & Safety section](#) at our website for a full overview detailing our H&S journey.

Please also find links to the following documents at our website

- + **Sitewise Certificate**
- + **ACC Certificate**

## APPENDIX D

# Quality

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Steel & Tube has an effective Quality Management System (QMS) in place which is used to manage the quality of the supplied products or services to the agreed standard with our Clients.

The Quality Management System used by Steel & Tube is designed to specifically meet the objectives of our clients. The system is flexible, focused, easy to use and encourages innovation. Our approach to quality is to intensively manage key areas of risk. Steel & Tube places high emphasis on ensuring quality is pro-actively managed in a manner that simplifies the process for all the stakeholders. Examples include:

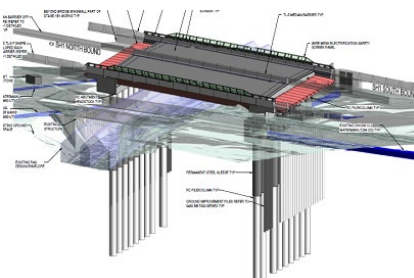
- + **The manufacturing process from raw material supply to delivery of finished goods on site.**
- + **The process for inspection during prefabrication and installation.**
- + **Steel & Tube uses the Procore software tool to digitise the QA process to eliminate wasted time manually recording and uploading QA paperwork.**



Apart from the specifics mentioned above, please refer to the [Quality section of our website](#) for a full overview detailing our commitment to quality.

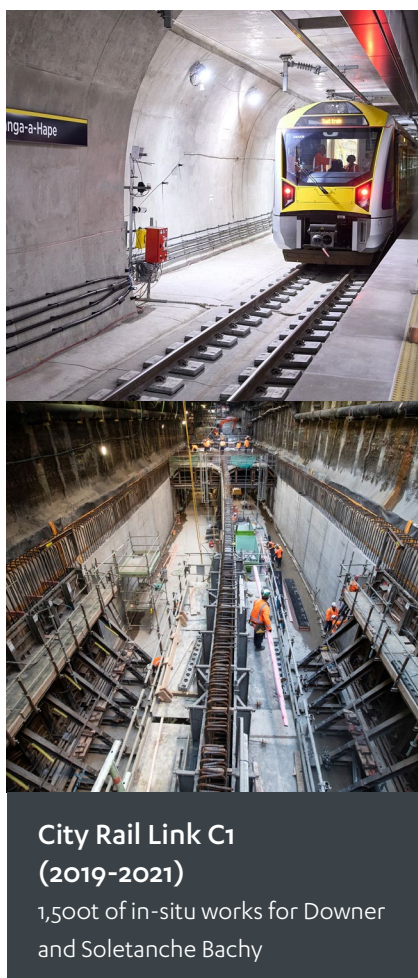
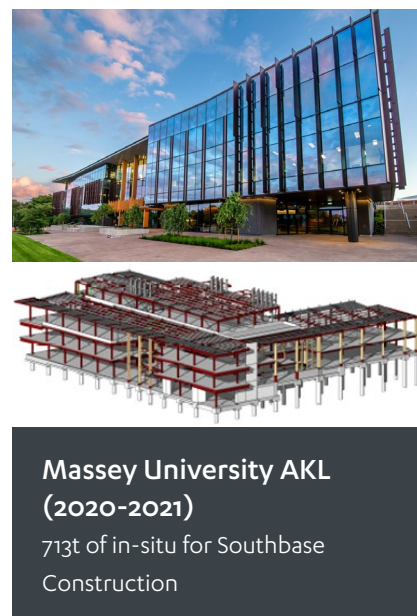


## Past Projects





# Past Projects





# Past Projects



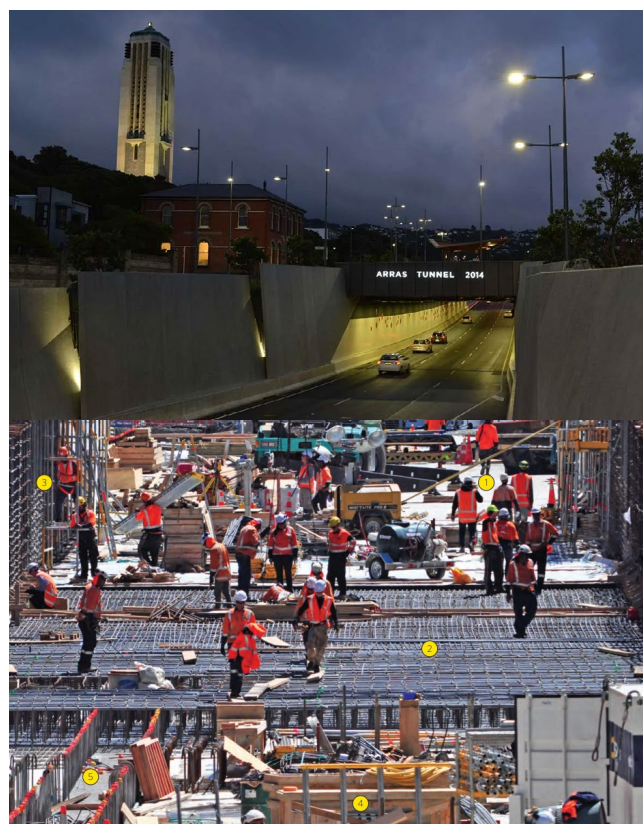
## Napier Wharf 6 (2020-2022)

1,900t of piles (400 piles) and 3,100t in-situ deck works for HEB. [Read more about this project](#)



## Central Interceptor, Mangere (2020-2021)

1,500t of in-situ and prefabrication segments for Chella Abergeldie joint venture



## Arras Tunnel - Wellington (2014-2015)

2,000t of pile cages, raft slabs, and in-situ walls for HEB

## APPENDIX F

# Community Engagement & Broader Outcomes

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**Actively supporting the communities where we live and work is important to Steel & Tube, our people, and our shareholders**

## Sustainability

There is a strong focus on reducing and eliminating waste going to landfill by recycling materials such as paper, printer cartridges, steel offcuts, and timber. All products shipped from our factories are bundled and tagged into maximum 2.5-ton bundles placed on dunnage. If the components are small, they are placed in reusable containers or bags and secured to truck decks with reusable ties that remain with the truck. Any reinforcing left over after a project is sent for recycling or repurposed for another project. In addition to the specifics above, we can also provide a full overview of sustainability outcomes, or visit our [ESG Profile](#).

## Social Outcomes

Our support includes donations made to a myriad of worthy causes including the Common Unity Project Aotearoa, Koru Care Charitable Trust, Ronald McDonald House, the Westpac Rescue helicopter, and Burns Support. We also take a hands on approach in local communities to raise both funds and awareness for organisations that make a real difference to people's lives, and is key for the business and many of our staff.

## Steel & Tube's Te Ao Māori Advisory Group



KAAPUIA

Kaapuia is an employee led Te ao Māori advisory group formed to enrich and enhance a deeper understanding of Māori principles and values into our organisation while supporting events, workshop training and other initiatives creating an environment where Māori employees can learn and grow. By strengthening Tikanga in our business we can strengthen our connection with customers and our communities.

### Mahi Tahi | Creating Partnerships

Kaapuia aims to engage and connect with all businesses, local iwi, hapū, marae, government departments, and local bodies to ensure we have a diverse alignment and undertaking of commercial business through tikanga. This practice, commonly known as supplier diversity and development, is a dynamic and evolving discipline and one Kaapuia looks to tackle head first with the support of the Steel & Tube group. We are confident that we can provide procurement of products and supplier diversity to the Aotearoa construction market.

### Initiatives & Events we support

- + Hāpai Tūhono – Pathways for young students through cadetships
- + Te Puni Kōkiri Internships – Māori Employees
- + The Rising Foundation, Tāmaki-Makaurau – Training for promising prospects
- + Māori Talent and Identification plan
- + Te Wiki O te Reo Māori – Māori Language Week Celebrations
- + Ngāruawāhia Waka Ama Regatta at Tūrangawaewae
- + Matariki Shared lunch nationwide
- + Te Ropu Marutau o Aotearoa – Māori Health and Safety Symposium
- + Te Reo 1-on-1 lunch and learn pilot sessions

For further information contact [kaapuia@steelandtube.co.nz](mailto:kaapuia@steelandtube.co.nz) or 027 2894 079



# Our Wider Project Offering

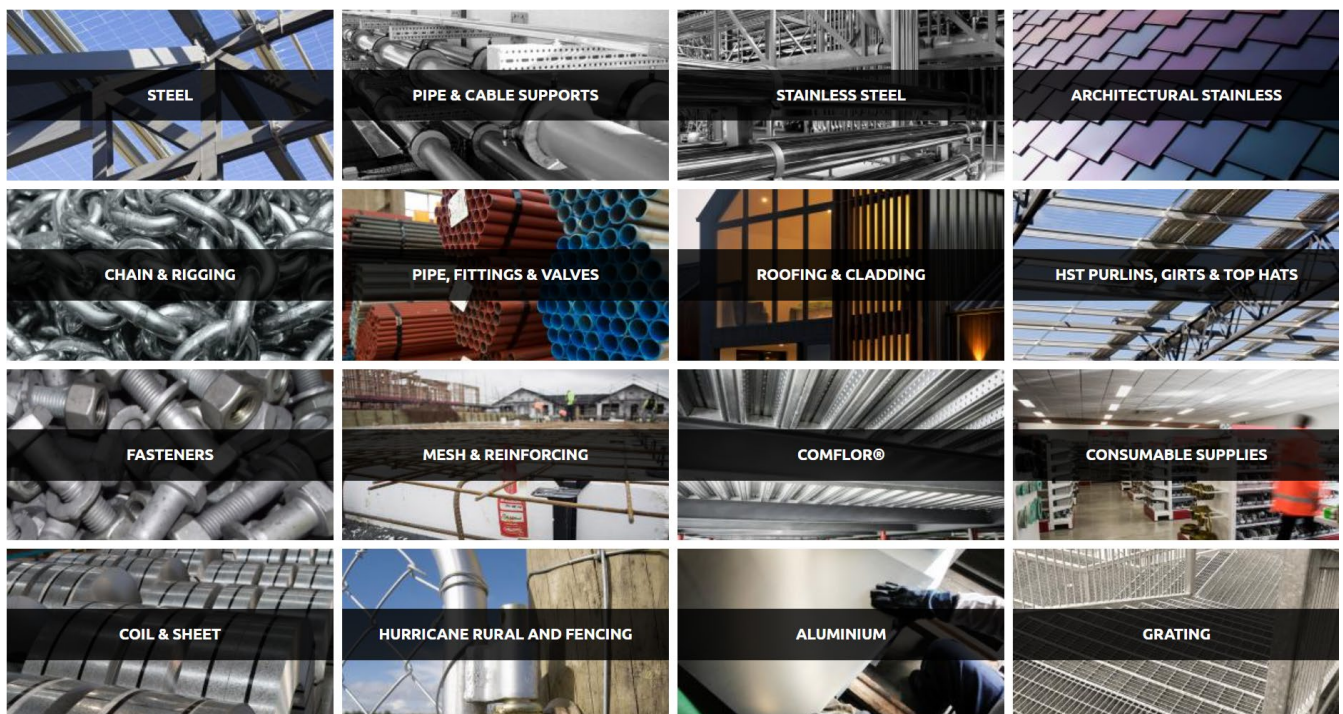
## Our mission:

## To make life easier for our customers

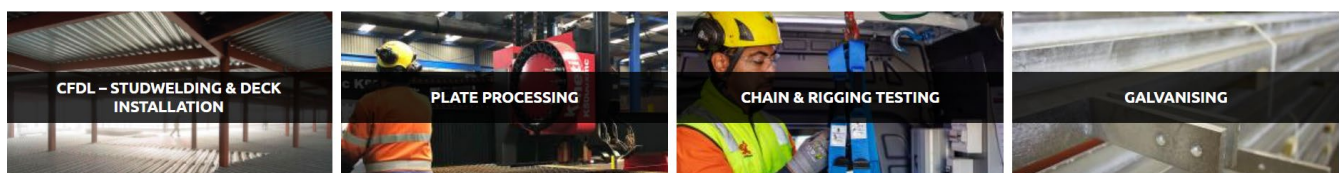
Steel & Tube is one of New Zealand's leading distributors and processors of metal and related products. We offer New Zealand's most comprehensive range of steel products, services and solutions.

We source, process and distribute steel and metal products including fastenings, fire reticulation products, chain and rigging, stainless steel, aluminium, engineering steels, steel coil, and much more. Paired with our nationwide network, Steel & Tube is well positioned to provide your project with all steel and allied products.

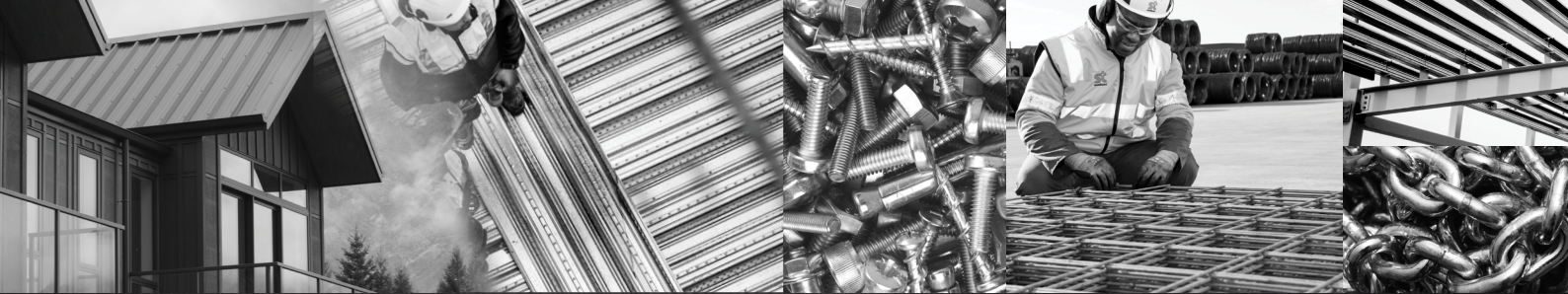
### PRODUCTS



### SERVICES







# NATIONWIDE STEEL SOLUTIONS

Steel & Tube offers a comprehensive range of steel related products and services through a nationwide distribution and processing network, so no matter where you are in the country we can deliver product to you.

As experts in our field, we pride ourselves in being able to offer a consistent end-to-end customer experience, advising, sourcing and supplying customers with their steel requirements. And underlying everything we do, is our continued commitment to quality.



Steel	0800 478 335	Roofing & Cladding	0800 427 663
Aluminium		HST Purlins & Top Hats	0800 278 754
Mesh & Reinforcing		Reticulation, Pipe & Cable Supports	0800 474 735
Coil & Sheet		Chain & Rigging	0800 100 260
Plate Processing	0800 426 787	Hurricane Rural & Fencing	0800 800 947
Stainless Steel		ComFlor (CFDL)	0508 332 546
Architectural Stainless		Galvanizing	0800 508 506
Fortress Fasteners	0800 425 262	Grating	0800 425 848
Consumable Supplies		Sandblasting	07 849 1332

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