

NEW ZEALAND'S PREMIUM STRUCTURAL GLULAMINATED TIMBER MANUFACTURER

INNOVATIVE PRODUCTS TO STRENGTHEN YOUR PROJECT

Techlam NZ is a leading innovator and manufacturer of engineered laminated timber solutions, dedicated to delivering exceptional quality and sustainable products for a wide range of construction and architectural projects.

Over the past 30+ years, Techlam has grown to meet the evolving needs of architects and structural designers while maintaining the family values and integrity upon which it was founded.

We prioritise operational excellence, utilise a stringent Quality Management system, and continuously develop our staff's skills to ensure rapid and precise responses to market demands. With a firm commitment to sustainability and precision engineering, we transform natural resources into functional and aesthetic masterpieces.

Our design solutions are showcased throughout New Zealand, the South Pacific, and Australia, where we export timber products and oversee project installations. Many of our projects have been winners and finalists in various industry awards - including the New Zealand Timber Design Awards.

Techlam proudly operates from Levin and is 100% New Zealand-owned and operated.

KEY PROJECTS AND PORTFOLIO

Explore projects that showcase Techlam NZ's expertise by successfully applying our products, prefabrication, and CNC machining to real-world scenarios. Find out more on our website or by scanning the QR code.

Our collaborations with architects, builders, and developers all reinforce our credibility and industry relationships.







OUR CAPABILITIES

DESIGN AND ENGINEERING SUPPORT

Our team of designers, detailers, and structural engineers offer comprehensive technical support, collaborating closely with clients to ensure a seamless design process. We focus on manufacturability, buildability, and efficiency to respect client requirements and budgets, minimising project surprises.

CUSTOM DESIGN SOLUTIONS

Our experienced engineering and design team collaborates closely with clients to develop tailored timber solutions that align with architectural visions and structural requirements, ensuring every project stands out in form and function.

MANUFACTURING CAPACITY

Our flexible lamination process allows us to produce glulam in various sizes, from 45mm x 45mm up to 2,000mm x 270mm x 36m and beyond, including custom and complex curved shapes. Our processing capacity is one of the largest in New Zealand, with a specialised 4-side planer that can machine 2,050 x 300mm section sizes in a single pass.

As New Zealand's largest structural glulaminated timber facility, Techlam possesses the expertise to address any engineered timber challenge.

PRECISION CNC MACHINING

Equipped with modern CNC machinery, Techlam NZ offers precise and intricate cutting, shaping, and drilling capabilities. This technology ensures components are manufactured to exact specifications, enhancing each project's structural integrity and aesthetic quality. A recent upgrade of our CNC processing line enables 6-axis CNC prefabrication of members 1,200mm wide by 500mm thick and unlimited length.

PREFABRICATION EXPERTISE

Our state-of-the-art prefabrication facilities allow for the creation of precise, high-quality timber components that can be rapidly assembled on-site. This process reduces construction time, minimises waste, and ensures superior accuracy in complex builds.

CONNECTION DETAILING

Leveraging state-of-the-art CNC processing lines and skilled craftsmen, we ensure 100% accuracy in pre-machined components. We offer pre-fitted structural timber connections, significantly reducing site preparation time and eliminating the need for on-site cutting or epoxying. Our comprehensive packages include ready-to-assemble timber beams, bolted steel brackets, and epoxy fixed rods, enhancing installation speed and cost-efficiency for clients.





SUSTAINABILITY AND ENVIRONMENTAL RESPONSIBILITY.

Committed to sustainable practices, Techlam NZ sources timber from responsibly managed forests and employs eco-friendly processes to minimise environmental impact while maintaining the highest quality standards. We respect the environment and the well-being of the earth.

Our wastage programme ensures all by-products and adhesives are disposed of without impact on the environment, and where possible, any off-cut timber is carefully converted into energy for heating. We are working on a sustainable manufacturing project to reduce waste by 25% by turning it into value-added products.

Techlam is certified by the Forest Stewardship Council® (FSC®), an international organisation that

promotes responsible management of the world's forests. Certification is given to businesses in the timber industry that operate in an environmentally, economically and socially responsible way.

INDUSTRY CERTIFICATION

- AS/NZS 1328:1998, Glued Laminated Structural Timber Licence No. 2929
- AS 5068, Timber Finger Joints in Structural Products Licence No. 2930
- FSC® Chain of Custody Certification No. SGSHK-COC-510001 – FSC-C130502
- New Zealand Made Licence No. 806740
- Environmental Product Declaration Registration No. S-P-00997





WORKING WITH US

To ensure a successful relationship, we endeavour to work to the framework set out below. We do understand that not all projects will follow this exact format, but we believe that this framework can assist with clarifying the different processes and responsibilities throughout your project.



PRELIMINARY DESIGN

At the early evaluation stage of a project, basic drawings in any format are suitable for us to evaluate and provide guidance on likely member sizes and project cost indication. Where a preliminary design is required from our design team and/or our engineers to establish the scope of the project, we will always provide a quotation prior to proceeding.



FULL STRUCTURAL DESIGN AND SPECIFICATION

Once we have your agreement, we proceed with full structural design and specification. Depending on the scope, this document will include relevant producer statements along with full plans and specifications for presentation to council.



SHOP DRAWINGS

As with other factory-manufactured components, prior to manufacture, fully dimensioned workshop drawings of the components must be created, including the location of all slots, pre-drilling and penetrations as required. Techlam require full client approval and sign off of these drawings, including sign off by the project architect or engineer.



FINAL PROPOSAL

Upon completion of the full design, our QS team will a detailed Schedule of Quantities, and dependant on scope, a fixed price proposal. Once we have your approval, we will then schedule the project for production.



MANUFACTURE AND DELIVERY

Techlam proceeds with the manufacture of the product, along with any required detailing set out in the specification document. We will provide indicative lead times for delivery, dependant on workload at the time of acceptance. Accurate lead times can only be established upon approval of drawings and we will work with you to ensure satisfactory delivery times.



TECHLAM PRODUCT TECHNICAL SPECIFICATIONS

Techlam provides Product Assurance Supplier Statements (pass™) for specifiers to include in their specification. These statements can also assist with the acceptance of consents.





FLOCK HILL HOMESTEAD

SOUTHERN ALPS

Location: Craigieburn Valley Client: Inovo Projects Ltd Architect: Warren & Mahoney Builder: Hoogervorst Builders

Timber Merchant: Placemakers Riccarton

Products Used: Rafter Beams

Date: 2021

OUR CHALLENGE

Architects Warren & Mahoney were briefed design a homestead that celebrates the unique landscape of Kura Tawhiti (Castle Hill), a place revered by the Ngāi Tahu people and known for its dramatic limestone rock formations.

The design references early habitation of the land through the area's distinct rock formations used as muse, with limestone cladding around the fireplaces and on selected walls, and ran exposed timber beams along its pitched roof to reflect the dense woods that cover the surrounding hills.

OUR SOLUTION

Techlam were proud to work with Placemakers Riccarton and Hoogervorst Builders to supply the full glulam roof structure. Over 60m³ of highly visual, bandsawn glulaminated timber, manufactured from New Zealand pine was produced at our plant in Levin and shipped to the site.

The exposed timber roof structure provides a softness and living element to the otherwise 'utilitarian' lodge, with concrete and limestone throughout. It gives the building a sense of biophilia and connection throughout. A modern, simple, and intentional design that is well thought through, to provide the luxury experience.

This structure is up for both an NZIA 2023 Architecture Award and has been shortlisted for the World Architecture Festival Awards - Future Projects House.





WELLINGTON INTERNATIONAL AIRPORT

TERMINAL SOUTH EXTENSION

Location: Wellington

Client: WIAL

Architect: Warren and Mahoney **Structural Engineer:** BECA **Builder:** Hawkins Group

Products Used: Curved Glulam 'X' Columns

and Decorative Ceiling Beams

Date: 2016

OUR CHALLENGE

Techlam got involved at the tender stage of the project liaising with Wellington International Airport, head contractor Hawkins Construction and architects Warren and Mahoney to devise the best way to produce this complex element of the project along with the ceiling beams.

"Techlam NZ was commissioned to manufacture the large columns that support the structure to the South West Pier. Running along the length of the extension the X columns not only look good great but are also an important structural element," says Brett Hamilton, General Manager of Techlam NZ.

OUR SOLUTION

The stunning curved Glulam X columns are arguably one of the most striking features of the Wellington International Airport terminal south extension. The decision was made to manufacture and fully assemble the curved glulam columns at Techlam NZ's manufacturing plant.

"This ensured a controlled environment so each joint was exact and could then be transported to site using specialist transport fully finished and assembled. We had to ensure everything was very precise. Because the columns were both an aesthetic and structural element there was very little room for tolerance," explains Brett.

Made from Radiata pine the columns and beams had to be treated to H 1.2 standards, which meant careful selection of timber to ensure the timber didn't show any form of pigment staining in its finished form. Brett says manufacturing the columns was complex and required a lot of handcrafting to get right. "Due to precise tolerances as well as the expertise of the Hawkins team, installation time was kept to a minimum, just 20 minutes to install each X column."





ST KENTIGERN EARLY LEARNING CENTRE

AUCKLAND

Location: Remuera
Client: St Kentigern School
Architect: Smith Architects

Structural Engineer: Markplan Consulting

Builder: Aspec Construction

Products Used: Prefabricated Glulaminated Visual Beams,

Glulaminated Fascia

Date: 2022

OUR CHALLENGE

Smith Architects purpose designed a highly bespoke early childhood centre to inspire children and develop their confidence and humility through a sense of community. New Zealand timbers were specified throughout. Connections had to be exact to ensure efficient assembly, plus allowance was required for fire sprinklers through the 168 unique timber roof beams.

OUR SOLUTION

Techlam rose to the challenge, delivering a simple and seamless 2-day installation process on-site. The natural timber throughout is highly visual, adding a biophilic element to the design, drawing focus to the central courtyard and blurring the line between indoors and out. An absolutely stunning project by Smith Architects realised through a highly collaborative approach.





HORNBY CLUB

CANTERBURY

Location: Hornby, Christchuch **Architect:** R M Designs

Structural Engineer: ENGCO Consulting Engineers

Builder: Contract Construction

Products Used: Prefabricated Truss. Portal Frames & Purlins

Date: 2020

OUR CHALLENGE

This project was a perfect example of prefabrication.

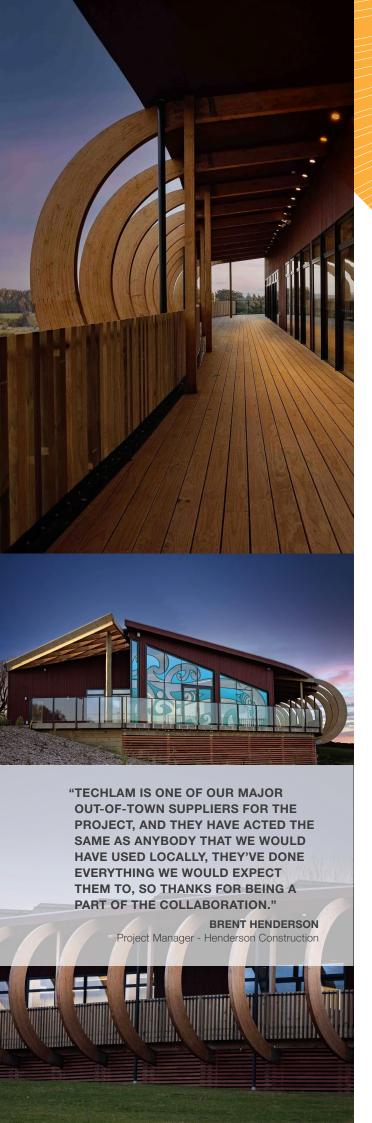
Techlam were excited to be involved right from the very inception, and worked closely with the engineers and architects to provide the best solutions possible. This project involved detailed hidden connections and highly visual glulam members, and incorporated other engineered timber products throughout the structure.

OUR SOLUTION

This completed project is truly stunning.

With a fully prefabricated truss, purlins & portal frames by Techlam, and prefab CLT elements by XLam the Hornby Working Mens club came to life. Collaboration with all stakeholders throughout this project is what made it a success. All teams worked hard to complete this project to the schedule. Prefabrication made this possible with an efficient & seamless process.





MURIHIKU MARAE

SOUTHLAND

Location: Invercargill

Client: Waihōpai Rūnaka

Architect: Boon Team Architects

Structural Engineer: Beca Structural Engineers

Builder: Henderson Construction

Products Used: Glulam Portals, Curved Beams

Date: 2023

OUR CHALLENGE

Techlam worked with Henderson Construction right from the beginning to ensure a coordinated modelling and delivery process was achieved.

Sustainability was the key focus of the project. All timber was FSC certified, and the site had strict rules on materials and wastage.

Government funding for the project specified firm completion dates, and the sketchy supply environment at the time added an extra layer of challenges to the mix. So more than ever, working closely with the construction and design teams was vital to ensure we would deliver the project on time.

OUR SOLUTION

Techlam collaborated closely with Beca, the engineers, as the modelling was complex and many of the parts of the structure didn't fit together. We reviewed their modelling and helped them fine tune and refine the designs to make them work. Techlam advised pre-start meetings with Henderson Construction to rehearse the construction sequencing – the best way to lift and stand the portals, how and where to erect the structure. Henderson had experienced big supply issues with steel and other suppliers, so we flexed and adapted our manufacturing schedule to suit the changing game plan.

Techlam's team is a mix of diverse cultural backgrounds which helps us understand and embrace different cultural perspectives, ultimately adding value and meaning to the mahi we do.





FIJI MARRIOTT RESORT

MOMI BAY

Location: Savusavu Road, Momi Bay, Nadi, Fiji Client: Marriott® International Hotels & Resorts Architect: Buchan Group/CArch Studio Architects

Structural Engineer: HLK Jacob

Builder: Fletcher Construction – South Pacific

Products Used: Curved Techlam 'Tusk' Beams, Columns

Date: 2017

OUR CHALLENGE

In November 2014, Fletcher Building was named as a construction partner in the redevelopment of Bridgecorp's ill-fated Momi Bay resort – a contract worth approximately NZD \$130 million after the project was officially restarted by the country's Prime Minister, Commodore Frank Bainimarama.

FCC were appointed by the client, Fiji National Provident Fund to undertake remediation works and complete the 250-room hotel on Fiji's main island Viti Levu in late 2014. Situated between Fiji's two most popular resort areas, Denarau and the Coral Coast, Momi Bay offers luxury hotel style accommodation.

Techlam NZ became involved shortly after Fletchers appointment and it soon became obvious that there was a lot of work to be done.

OUR SOLUTION

The resort was in a less than half finished state.

Techlam had to identify which parts of the structure had to be replaced, which parts could be kept and reinstated, and obviously the remainder that had never been manufactured.

Techlam worked closely with FCC-SP over many months coordinating the glulam members and arranging shipment. Some of the main tusks weighed several tonnes each and freight from NZ to site had to be managed carefully.

The finished resort looks stunning and includes three restaurants, two swimming pools, fitness and recreation centres, gift shops, tennis courts and a spa with eight treatment rooms, 114 freestanding bures and 136 standard rooms. 22 of the bures are overwater – the first man made lagoon based resort in Fiji. The resort created over 500 local jobs.





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OUR CORE VALUES

Honour our commitments

By embracing integrity, we hold ourselves accountable to our customers, partners and our team.

Laminated Teamwork

Everyone runs, carries, and passes the ball – we all share the goal.

Thrive On Challenges

The experience of a journey using structural solutions with innovation at its best.

Mutual Respect

Interest, care, and support for all.

Techlam Momentum

A culture of continuous improvement to build a better future for everyone.



