

LUNDS JOINERY & LJT STRUCTURAL

2025



A WELL DESIGNED AND CRAFTED SPACE IS A JOY TO BEHOLD

We're passionate about timber and delivering great results. Combining traditional joinery skills with modern modeling and CNC technology, we bring innovative designs to life. With years of experience in offsite construction, we create beautiful timber elements, from reception counters to complex, curved formwork, on time and within budget. Read on to see our work!



CONTACT

 Po Box 128, Timaru 7940

 33a Grants Road
Timaru 7910
New Zealand

 ljt.co.nz

 operations@ljt.co.nz

 03 688 9149

 [@lundsjoinery](https://www.instagram.com/lundsjoinery)

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WINDOWS AND DOORS



UP TO 51% REDUCTION IN HEAT LOSS

Across a code minimum 10m² wall with a 3m² glazed elevation when compared to an aluminium frame

LOCALLY PRODUCED, VERSATILE AND CUSTOMIZABLE

Timber windows are not constrained to a Die profile

LJT can accommodate a wide range of Glazing suites (Double/ Triple Glazing)

Mouldings and profiled sashes possible to suit character builds

COMPLIANT

Manufactured to the Joinery Manufacturers Federation details and tested to NZS 4211

Tagged for compliance before leaving the factory



The information in this Guide is necessarily general and it should not be relied on to make specific project decisions. Each project is unique and will have individual circumstances that need to be considered by appropriate consultants and design specialists – we would be happy to put you in touch with the right people.

While we have endeavoured to ensure the information in this Guide is accurate and up to date, relevant laws, regulations and the Building Code (including NZS 4211) may change. To the maximum extent permitted by law, we disclaim all liability for any errors or omissions in this Guide or any failure to update it.

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EXTERNAL WINDOWS & DOORS



BUILDING DESIGN

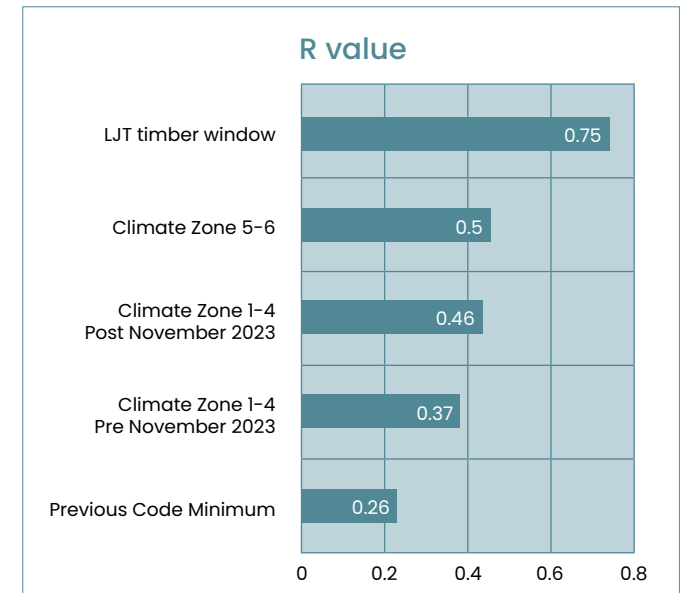
The thermal performance of a building will generally be defined by its weakest link. As an example, a highly insulated wall will make little difference when paired with a suite of poor windows over a large area. The same goes for roof insulation, floors, ventilation, and solar considerations; spending a large amount on one aspect of the design, will not yield significant results unless the remainder of the specification for the building performs to a similar level.

GOOD WINDOWS FIRST

Getting the most out of your new build

LJT have the tools to calculate the specific R value performance for each window -allowing us to work with your designer to achieve the right balance of performance and cost. Windows and doors are a large contributor to the energy consumed by a building. Typically, windows account for 8-10% of the total area of a building's thermal envelope, yet built to code minimum windows can be responsible for up to 40% of the heat loss (BRANZ, 2018).

The simple fact is that the performance of windows built to the minimum of the building code is terrible, and the heat leaking through a well-insulated house with a standard window system is akin to a very well built dam with a hole in it. The good news is that by investing in a relatively small area of your house (~ 10% of the envelope) you can increase the thermal performance dramatically. See the following example:



Note the figures are comparative only - and based on casement windows in the sizes noted. Every window performs differently and LJT can undertake calculations for your specific project to speak to thermal performance.



TIMBER

Timber is an ideal material for manufacturing windows and doors. It is a light, strong, natural, and renewable material. In New Zealand, we are at the forefront of timber construction in a lot of areas, however we lag a long way behind North America and Europe in the volume of specification and construction of timber windows.

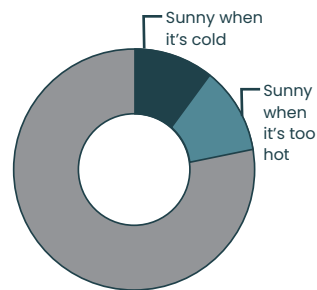
GLASS – LESS, AND BETTER

Insulated glazing units (double and triple glazing) insulate a house by limiting heat transfer via convection, conduction and radiation. Convection and conduction are limited by having a sealed window unit with a thin layer of air that is too thin to allow convection, and by exploiting the low thermal conductivity of air or Argon gas to limit conduction.

However, windows allow the heat of the sun into the house through radiation and provide free thermal energy to its occupants, whether they want it or not. There are 8760 hours in a normal year and approximately 2000 hours of sunshine in the South Island of New Zealand (1600 in Invercargill up to 2500 in Blenheim). Of the sunny days, half of them are in the winter when you need them, and the other half are in the summer when the temperatures are already comfortable or too high. So, in summary the sun is only providing thermal benefit 23% of the time, and half of that is when you don't need it.

For that reason, the design of the windows and selection of glazing of your building is critical. Shading, proportions, and aspects all play into thermal gains. The simple fact is that a wall performs much better than any window suite – so choosing your glazed areas carefully, and keeping them to a modest proportion of the elevation, will lead to far better thermal performance than having large, glazed elevations.

Regardless, the addition of an effective glass coating to your windows will improve your building's performance in the summer and winter, as it will keep the heat where it is – inside in the winter, and outside in the summer. Call us to discuss choosing the right glazing suite for your needs.



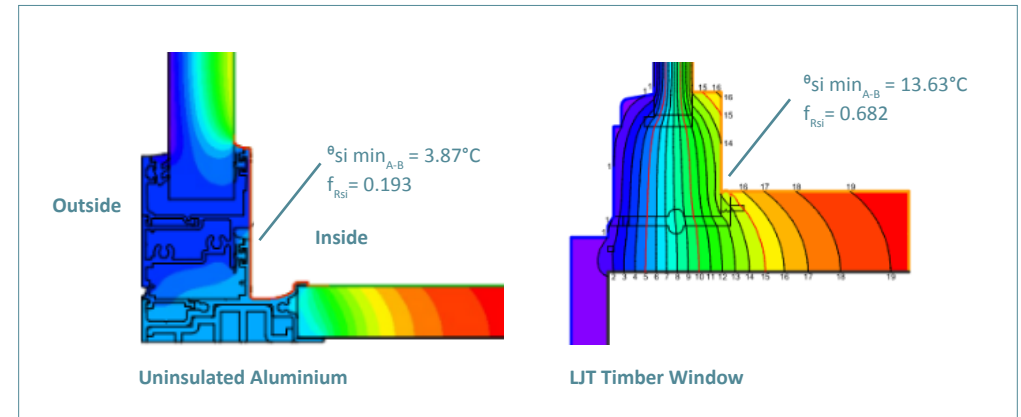
THERMAL BRIDGES

Thermal bridges are a section of a building's envelope which is more conductive to heat, and provides a 'highway' for heat to travel through, undermining the thermal performance of the structure.

To guarantee thermal performance of a building, the insulation to the thermal envelope of a building needs to be as consistent and homogeneous as possible, so that temperatures are relatively even over the internal surfaces. There is a factor used in the design of high performance homes called the fRSI value which quantifies how successfully this has been achieved. fRSI values measure the difference between the outside temperature, the desired internal temperature, and a 'weak' spot in the buildings envelope. Window frames are, in the majority of cases, the weak spot for thermal design. The fRSI value is often identified near the sash or reveal of the window frames.

For reference a value of 1 is perfect – the internal surface of the house and thermal bridge are homogeneous and there is no variation in temperature. A value of one is impossible to obtain for this reason as there are always variations in the buildings envelope. A value of 0 is terrible, where the thermal bridge is at the same temperature as the outside of the house through a very conductive thermal bridge or opening.

Below is a comparison showing the fRSI of a timber window when compared to an Aluminium, code minimum, non-thermally broken window. Note the internal temperatures of the coldest part of the frame are 3.9 degrees celcius for aluminium and 13.63 degrees in the timber example. A low fRSI value is a good indicator of the likelihood of condensation and mold in a home. Higher values significantly mitigate the risk.



An fRSI value of the over 0.65 is considered ideal for most of NZ with an fRSI of greater than 0.7 for only the coldest climates - call us to talk about specific considerations for your new build.

LJT TIMBER WINDOWS

The following is a table showing the different specification levels for an LJT timber window. This is based on double glazed units, of a standard depth, however higher performance can be achieved on a unit by unit basis if required.

Spec Item	Base JMF Profile	Optimal LJT modifications for higher thermal performance
Thermal Performance	R = 0.5 - 0.6	R = 0.6 - 0.8+
Frame Material	H3.2 Treated Pine	Accoya (w/ material guarantee) see Accoya literature
Sash Material	Accoya (w/ material guarantee) see Accoya literature	Accoya (w/ material guarantee) see Accoya literature
Sash Profile	Base JMF Profile	Improved sash and frame sections within compliant JMF details
Glazing	Low E Argon Filled	Higher spec coatings & glazing. Call us.
Coatings	Primed or supplied ready for clear coat	Tanon blocking primer to all timber.

MULTI-LOCK HARDWARE

We have completed a number of jobs with complex multi lock hardware systems to ensure maximum air and water tightness. The benefit of these systems is that they link the opening sash or leaf with the jamb at numerous points along the stile. They lock the seals closed and improve the performance of the door or window significantly, replacing a traditional mortice lock. Each item is different and warrants a different approach so reach out and we will devise a custom solution for your project.

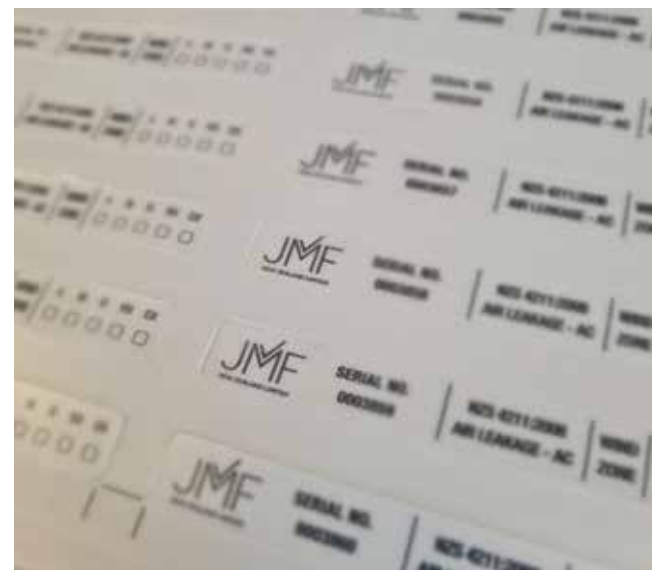
Lift and slide hardware is also an option to replace the draughty, rattly sliders of old, with European hardware which allows the doors to seal much better promoting far better thermal performance.



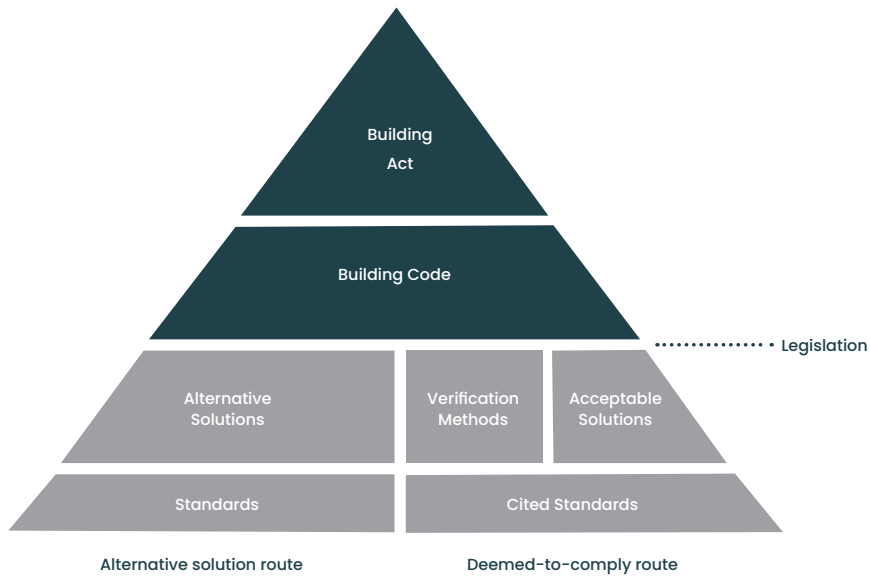
MEETING THE CODE

NZS 4211 (2008) is a performance standard for windows and doors made from any material type. Once a unit is tested to the standards, it gains a rating and subsequently manufactured units to the same design may claim performance up to this rating, provided that they are manufactured to the same set of specifications.

The Joinery Manufacturers Federation of New Zealand has created a set of details which have been tested to confirm compliance. JMF details are a widely understood and recognized suite of details, included in MasterSpec for a lot of projects. By using a JMF suite in your design, you avoid having to go down an alternative solution route by proving compliance through standards and consultants. Windows manufactured to the JMF standards are tagged by certified manufacturers and as such, are an acceptable solution under the building code.



Sample JMF tags demonstrating compliance with NZS 4211



Building Code Hierarchy

In the JMF suite, the seals, angles of the sill, glass bead, and fixing of the IGU into the sash have to be constructed within the tested details. Outside of these critical details, however, there is leeway for design variations. For example, the sash can be deeper, wider, thicker, or have a molding on it.

INSTALLATION

JMF NZ has also tested a series of installation details into various forms of cladding, and as such all construction professionals have easy access to these details to include in their plans for building consent applications and enforcement. The details are available to anyone on the JMF website.

Installation is a key aspect to maintaining an integral building envelope and avoiding leaks. It is important that the project specification, supervision and inspections put emphasis on correctly installing flashings and windows.

JMF installation details are at: jmf.nz/installation-preparation-information

MATERIALS

The thermal conductivity of timber is very low, over 1000 times less conductive than aluminium, which makes it a great material for window joinery.

Timber is a natural material that contains features reflecting the life of the tree before it was harvested. It will always have some colour variation which is part of the appeal in a lot of cases. The look of a set of windows can be standardized to an extent by grouping timber by colour before machining them, as well as applying coatings or stains.

Different timbers have different thermal performance. The thermal performance of timber is derived from the air pockets within the timber's cellular structure which acts like a puffer jacket to create a natural barrier to heat and cold. Denser timbers are often desirable due to their durability and wearability, however they have lower thermal performance because there are fewer air gaps within the timber structure.

The below table itemizes some materials which LJT manufactures windows with and their benefits and disadvantages.



Timber Species	Specific Gravity (Comparative Weight)	Specific Gravity (Comparative Weight)	Durability
Cedar	0.48	0.11	Very stable and lasts well for a naturally occurring timber (unmodified). Cedar is soft and not the best for threshold doors although it can be used if care is taken throughout their life.
Accoya	0.51	0.12	Thermally modified radiata 50 year material guarantee from manufacturer.
Abodo	0.45	0.11/0.12	Abodo is a thermally modified pine product. It is brittle and as soft as cedar but is relatively stable and has good thermal performance. It is often used for claddings due to its durability.
Rosewood	Similar to Oak*	Similar to Oak* 0.18	Very durable – good for sills. Stable enough to be used for sashes.
American White Oak	0.72	0.16	Oak is durable and can be used for frames and sills. It can be used in some cases for sashes, call us to discuss.
H3.2 Radiata	0.54	0.12	Only fixed sashes – not stable enough for an opening sash.



SASHES AND LEAVES

The sashes and leaves of your windows and doors are doing all the work. They are generally warm on one side, cold on the other, as well as having a differential of humidity across them. Sashes and leaves must also meet performance criteria in the form of durability, stability and appearance and as such there are few timber species that are suitable for making them. Opening sashes and frames must remain stable enough to seal, and open and close in a variety of conditions.

FRAMES

As the frame of the window is painted, fixed, protected and generally less prominent than the sashes and leaves it is generally constructed of a cheaper species of timber. H3.2 Pine is often used for frames as it is a cost effective timber which can be machined without compromising the treatment performance of the piece.

H3.1 is listed as an acceptable treatment option in the NZ building code for exterior joinery. However, LJT do not use it as it is an envelope treatment meaning that any rebating or removing of material compromises the performance of the member, painted or not.

SILLS

Threshold sills should be specified of a durable species of wood, as they are a trafficable surface. This may be Jarrah, Kwila, Rosewood or some other hardwood specified by the designer.

DETAILING

One challenge of good thermal detailing is minimizing thermal bridges in the design, while maintaining a reliable water shielding layer, weather resistive barrier, and air control layer. Thermal bridges are materials which have a higher thermal conductivity, and which interrupt the insulation layer, by providing a 'highway' for heat to pass from the inside to the outside. Below is a comparison between two Acceptable Solutions – the standard E2 AS1 detail for aluminium and a Joinery Manufacturers Federation (JMF) detail;

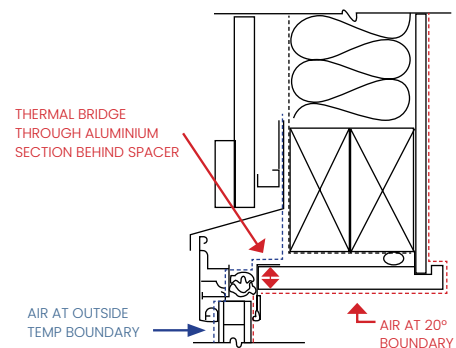


Figure 1 - E2 AS1 Aluminium Window Joinery Detail

Note that in Figure 1- E2 AS1 Aluminium Window Joinery Detail, despite the use of a thermally broken aluminium section, there is a very clear thermal bridge at the reveals as there is a section of aluminium passing from the inside of the building into the cold cavity behind the thermal break.

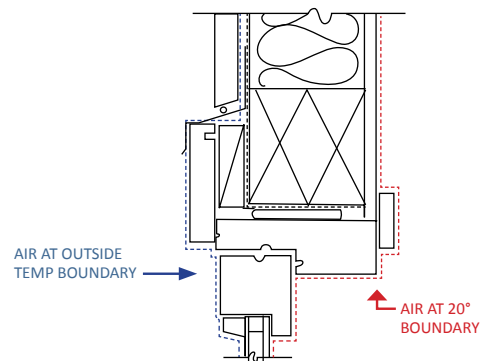


Figure 2 - JMF Head installation detail in standard 90mm thick wall

Figure 2 - JMF Head installation detail in standard 90mm thick wall is an acceptable solution under the building code – note that the Insulated Glass Unit (IGU) is recessed in line with the insulation in the wall, and the narrowest point between the cold air outside and the inside is the IGU at the bottom of the sketch rather than through the sash.



SIZE

The size of the windows influences the complexity, price and the cost of the whole job. Small windows in small apertures can be pre-glazed, arrive on site finished and be installed in the building with a 2 – man lift.

Where windows get slightly larger they are installed in frames without sashes, then the sashes can be installed later. Or – in very large elements they may need to be glazed on site. Generally a window of 1.5m² will be of a weight which is easily handled and can be delivered to site prefinished.

From a glazing perspective, a max size for a glass panel of 2.9 m x 1.8m is possible in most double and triple glazed applications. However, it will weigh over 150kg (double glazed) at that size and site access and constructability considerations need to be built into the design to allow for the glazing to be installed safely.

Size limits for the structure of the windows are heavily driven by the wind zone. For instance, a 2.9 x 1.8m sliding door may be possible in a certain section in a High wind zone, but the same pane and same section would be limited to 2.9 x 1.2 in an Extra High wind zone. LJT has the ability to commission specific engineering design for windows for bespoke projects. In general – industry has developed a comprehensive set of connections up to 2.7m in height, and heights above this require some specific design to achieve.

While sash sizes are limited, mullions and the surrounding structure can be specifically designed to achieve large spans. Contact us for more information about this.



COATINGS

Timber must be protected to promote stability and durability over the life of the window. There are numerous options for coatings including stain, paints and clear coats. Below are some recommendations for each species of timber.

CEDAR

Cedar lasts well compared to other naturally occurring timber species mainly because of its highly resinous constitution. The same resin can affect the performance of water based primers and therefore it is worth seeking specific advice from your paint supplier when maintaining or coating cedar joinery.

Depending on the global supply chain, Western Red Cedar can be hard to source and very expensive. As such for painted application Yellow Cedar is a good option as it has very similar characteristics at a much more favorable price point.

ACCOYA

For painted applications, a durable option is Accoya; it is a modified wood product, where the cell walls of the Radiata timber are modified through accetylation of the full cross section of the timber. The manufacturer of the Accoya timber recommends a specific Tannin blocking primer to avoid issues with paint. When utilized correctly, Accoya carries a 50 year material guarantee from the supplier. LJT are accredited manufacturers of Accoya Joinery and products.

ROSEWOOD

Rosewood is a beautiful timber and often used on items with a clear coat – however, it is important to pick the right paint system as it can turn a greenish shade with some water based paints so, as always, it pays to consult a paint expert before coating.

COLOURS

In very exposed areas it is always safest to coat windows in a white or light colour to minimize the risk of any issues with stability or seals. This is common to all window materials. However, if Dark colors or stains are chosen in areas of high temperature variation, a material such as Accoya is more likely to remain stable.

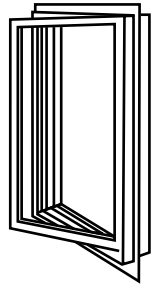
MAINTENANCE

Humidity varies significantly in a well designed house between inside and outside. Therefore if your windows are ordered unfinished or primed, please take care to seal them as soon as possible with a product recommended by your painting professional to ensure that the sashes remain stable. Refinishing and maintaining your chosen coating will extend the life of your window joinery.

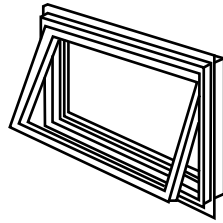
VENTILATION AND AIR INFILTRATION

Picking the right type of window to achieve the thermal performance you want for your building is important. There are two considerations when it comes to the type of window; Ventilation Potential and Air Infiltration performance when closed.

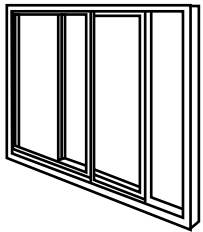
Considering the way a window opens (Casement, Awning, Bi-folding, Double Hung etc..) determines the level of ventilation afforded. In the case of any hinged unit, the amount they open is limited by the hardware, stays, and keeping mechanism.



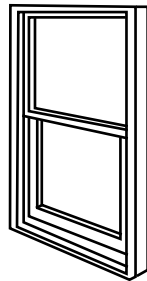
Casement Window



Awning Window



Sliding Window/Door



Double Hung Window

Figure 3 - Outline Sketches of Window Openings

Air infiltration in windows leads to unwanted air changes in the room when the windows are closed. While ventilation is encouraged for cooling: modern, well detailed houses are often well sealed, and require mechanical ventilation to effectively manage the climate inside. For this reason, designing for mechanisms which seal well when closed is a highly effective way of improving the thermal performance of the building.

In general, swung mechanisms are much easier to seal than sliding, this is because of the basic principal that the hardware is able to hold the sash against a compressed seal, rather than having to allow the sash to slide past.



See the following table from WADIC (WADIC.org.au), 2019 showing the substantial difference in air infiltration levels between 4 common opening types of windows when closed.

Fixed pane windows are worth emphasizing – they provide a good seal, and good thermal performance, so consider that not every glazed element needs to open. A fixed pane window in timber can be up to 30% cheaper than one with an opening sash – so consider carefully how the building will be used, and which windows will need to open regularly.

Window / Door type	Ventilation Potential	Comparative Air Infiltration	Comments
Awning	95%	1.74	Awning windows seal well, and can be set up with friction stays to only open a set amount. Can be opened in the rain – and combined easily with fixed panes to provide only the ventilation necessary.
Casement	95%	1.01	Ventilation often varies by safety considerations and stays – however the easiest mechanism to seal well.
Bifold	95%	1.74	Bifolds seal better than sliding mechanisms. There is a need to consider their configuration carefully – reaching handles over benches and considering where the bi-fold will stack when it is open. Free swinging panels are not recommended in windy locations.
Sliding	45%	3.33	While there are some benefits to sliders in that they do not take up any room outside the frame when they are open, sliders generally have at least one fixed pane and cannot be fully opened. The seals for a sliding suite are different, in that the sash must slide past the frame. For this reason they do not offer the same level of air tightness as a swinging mechanism.
Double Hung	45%	2.42	Double hung windows are a more traditional style of window – and are often associated with older style homes.

Table 1 - WADIC 2019 ventilation potential for windows and results of 2009 WERS test results for single and double glazed units

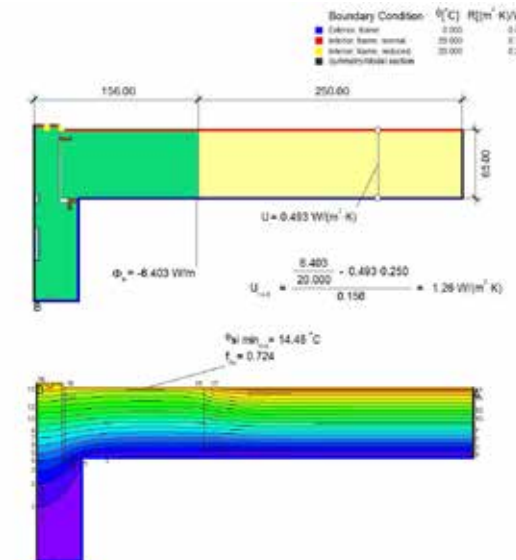
ENTRANCEWAYS



Your front door is the first interaction guests have with your home. When looking for bang for buck, and opportunities to make your home stand out – it is one item you can invest on to make a good first impression.

By choosing timber for your front door, not only does it raise the profile of your entranceway, it also give that satisfying ‘clunk’ rather than a tinny ‘bang’ when shutting it.

LJT can offer a range of options for entranceways, including high thermal performance leaf's, pivots, multi lock hardware, vision panels, and much much more. Our hand-built door leaves can reach R value of 2 ($U = 0.49$) if required.



Check our website or give us a call to discuss options.

CUSTOM FRONT DOOR LEAVES

- Cedar
- Abodo
- Rosewood
- Accoya




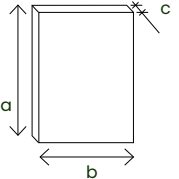
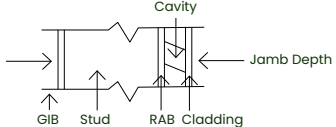
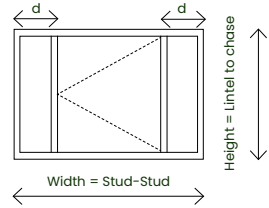

Thermally rated door leaves, custom made to fit within Aluminium Suites, or with their own NZS 4211 compliant frame. LJT can custom make solid timber door leaves including Rigid Air Barriers, and Insulation to achieve superior R ratings. Ratings between 0.6 – 1.5 depending on the thickness of the leaf and the clients' requirements.

See next page for our order form – we are happy to provide pricing based on architectural documents or please photocopy or scan and fill out the order form.



Top: Vertical Cedar T&G pattern
 Left (both): Painted Accoya doors
 Middle: Stained custom cedar pattern
 Bottom: Multi lock high performance hardware

ORDER FORM

Section		  	
A	Client Name:		
	Job Address:		
	Job Name:		
B	Delivery or Pick up (circle one)	Delivery Address: (if different from above)	
	(circle one)	_____	
	Door leaf only (C)	_____	
	Door in frame (D)	_____	
Confirmed dimensions / Site measure required (circle one)			
C	LEAF ONLY (mm)		
	Door leaf height (a): _____ mm		
	Door leaf width (b): _____ mm		
	Door leaf thickness (c): _____ mm		
D	DOOR IN FRAME (mm)		
	Room opening (to framing/floor)		
	Height: _____ mm		
	Width: _____ mm		
	Depth: _____ mm		
	(Depth = front of cladding to inside of GIB)		
	SIDELIGHTS (*looking from outside) (tick)		
	One sidelight left: <input type="checkbox"/>		
	One sidelight right: <input type="checkbox"/>		
	Two sidelights: <input type="checkbox"/>		
Sidelight width: _____ mm (d)			
FRAME (circle one)			
Painted (Accoya) / Rosewood Stained / Accoya Stained			
CLOSING HARDWARE (circle one)			
Multilock or By others			
E	DOOR LEAF		
	Painted (Accoya) / Cedar Stained] (pick one)	
	Rosewood Stained / Accoya Stained] (pick one)	
	Vert T&G / Horiz T&G / Single Pane Glazed] (pick one)	
	Other (please attach picture)] (pick one)	
One coat applied in factory] (pick one)		
All coatings on site] (pick one)		
			

CASE STUDY



WANAKA WINDOWS

This project was special as it was for a very long term client of ours who has always been supportive of the business. She was making alterations to her own home, which had a number of rimu details throughout, and needed some special, bespoke windows to match the existing materials.

We laminated Rosewood, a pacific hardwood, to create the sashes stabilising the timber and mitigating the risk of movement in the hot, dry environment in Wanaka. The Jambs and Sills are specially designed to give more space around the dining area of the house.

KEY PROJECT FEATURES:

Custom Jamb and Sill design to accommodate the existing geometry in this retrofit

Laminated sashes out of Rosewood to stabilise the timber

Custom hinge elements to conceal the hardware to the clients design



CASE STUDY



HILLEND HOUSE

This project was undertaken for an overseas client building their family home in Wanaka. The result is a tribute to the project team and designers, it sits on the site as if it has always been there, with materials that tie to their surroundings.

The timber windows provide a high level of thermal performance, which in Wanaka's alpine environment will work with the thermal mass to create a stable and warm climate for the client and their family for generations to come.



KEY PROJECT FEATURES:

Traditional aesthetic with high thermal performance

fRsi and Uw values calculated for the project in tandem with the project team, Low E, Argon Filled Glazing

All external doors except the garage door included in the supply on this project

In addition the wardrobe, laundry, kitchen, pantry, bunks and bathroom joinery was supplied by LJT with traditional painted shaker style throughout





KEY PROJECT FEATURES:

High thermal performance through the use of double glazing, low e glazing units

Durable materials to last as long as the existing heritage fabric

Custom jambs and sills to match the existing rebates



STAR AND GARTER

The Star and Garter hotel was built as accommodation in the 1860's and has provided a place for travellers to stay for over 150 years. A listed heritage building, the client trusted us to provide replacement timber windows as they undertook a luxury accommodation retrofit on the structure.

LJT worked closely with the client to refine the JMF details so that these new, thermally efficient, Accoya windows, could be accommodated in the existing rebates of the heritage building.





Bespoke internal door sets are often a project in themselves.

LJT simplifies on-site management by providing a complete package, from custom veneer to solid timber, fire doors, and acoustic doors. Our in-house expertise handles coordination and management of all these elements.



INTERNAL DOORS



ORDERING

To help speed up the process of quoting and delivering your external doors and windows – here are some of the things we need to know before we start:

EXTERNAL DOORS & WINDOWS

1. Installation

- What is the wall made of – brick, concrete or timber
- What is the cladding

2. Dimensions

- Jamb depth (the depth from the Gib to the front of the cladding)
- Rough (framed) opening Height and Width – be clear if you have allowed tolerance so we don't double up
- Leaf thickness – default is 65mm

3. What you need from us

- Facings?
- Sill boards?
- Closing Hardware? (Items come with sliding and hinge hardware only by default)

4. Details to match other elements

- Double Jambs
- Ovello or other Sash profiles
- Colonial bars

5. Glass

- Is solar gain an issue
- Are acoustics a concern
- Safety Glass above the code minimum requirements

6. Finish

- Stained or Painted?

7. Fire rating?

INTERNAL DOORS

1. Install details

- What is the wall made of – brick, concrete, timber
- Jamb type – GIB groove or Architrave

2. Dimensions

- Jamb depth (Lining – Lining)
- Rough opening Height and Width
- Leaf thickness

3. Hanging

- Left, right, or pair
- Cavity? – Single, Double
- Barn Sliders
- Soft Closers
- Rebates: I.e. French doors, flush or Astragal Bars
- Additional seals – mohair strips, or Q – seal.

4. Hardware

- Parliament, Concealed or Standard Hinge or Pivot?
- Closing hardware required?
- Material – stainless, brass, painted etc...

5. Materials

- Jamb material – MDF, Pine, or exotic timber
- Door leaf – Solid timber, Solid core or hollow core
- Door profile – if not flush
- Door facings – veneer/ painted/ solid timber

6. Vision panels

7. Coatings

- Unpainted
- Stained
- Primed
- Factory painted

8. Required smoke and fire ratings

- Rating
- Vision panels
- Opening requirements

We can help work through these questions, just give us a call! We also have ordering templates if required



STRUCTURES & SOLID TIMBER



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TIMBER STRUCTURES

Our passion is timber, and we are experts in offsite production of timber elements large and small. For structural elements, it is often beneficial to engage the fabricator during design so that the design team can have input on cost, lead times, durability, supply chain and constructability as they develop through consenting to construction.

Some of the services LJT can offer are:

Early contractor involvement by our director, Jamie – an experienced industry professional and engineer, with a background in timber design.

Design for Manufacture and Assembly – early detailing of a project in a federated model allows for accelerated programs, reduction of waste, and better coordination of trades on site.

Structure only packages – In some cases LJT can provide a package for the offsite structural scope including the mass timber elements, steelwork, and even precast concrete if required.

The benefit being that all structural trades are detailed in one shop drawing model, promoting efficiency and mitigating the risk of coordination issues between the trades.

Timber prefabrication – LJT can shop draw, procure, machine, and deliver for mass timber projects of any scale.

Timber machining – LJT assist a range of contractors with their projects by machining timber elements off site to their specifications.

MASS TIMBER PRODUCTS

There are numerous options in New Zealand for Engineered Wood Products, generally from Pinus Radiata, which provide more homologous mechanical properties. These are summarised below:

PRODUCT	DESCRIPTION	PRO'S AND CON'S
Laminated veneer products	Laminated Veneer Lumber (LVL), and Plywood – Generally – 2mm veneers pressed to create an engineered wood product. Plywood panels generally have each veneer with the grain in an orthogonal direction, whereas LVL has the grain running parallel in most veneers resulting in superior mechanical properties in the longitudinal direction.	<ul style="list-style-type: none"> - Limited to 1.2m depth due to plant restrictions. - Higher strength and stiffness than other Engineered Wood Products - High connection capacity - Treatment can often limit the usefulness of LVL in particular in external applications. - Consistent and straight, stable - Often cost effective compared to other Engineered Wood Products.
Laminated Timber Products	Examples are Glue Laminated Lumber (Glulam), Parallel Laminated Lumber (PLT), Cross Laminated Lumber (CLT) and Nail Laminated Lumber (NLT). Lamelas of sawn lumber are planed, finger jointed, glued and laid up in a press.	<ul style="list-style-type: none"> - Available in large section sizes and various depths - Custom sections, including curves and tapers available - Treatment up to H5 available by treating lamellas before laminating - Stable following lamination process
Sawn Lumber	Bulk sections of timber sawn from natural logs	<ul style="list-style-type: none"> - Often desirable as existing timbers can be re-used - Larger sections of timber take longer to dry - Lower mechanical properties than laminated options due to effects of defects in the timber - Wider range of timber species available - Lower embodied carbon through reprocessing

In addition to the products listed – LJT can produce sub assemblies as components in construction such as the following:

- **Cassette elements.** A box generally produced from a 'sheath' or flange of either plywood or CLT with Glulam or LVL web elements. This differs from a standard framed floor as the flange element can be used to increase the strength and stiffness of the composite element.
- **Trusses.** Much like a pre-nail truss, LJT can produce pre-assembled trusses from sawn timber or EWP's that can be lifted into the building like a steel or precast element – speeding up construction on site.
- **Custom box beams.** Large spans and high stiffnesses can be achieved by custom laminating LVL, Glulam or Plywood into a composite element as an I-beam or Box Beam.



MOISTURE MANAGEMENT

We are prefabricators, and part of the supply chain for timber projects in all areas of the construction industry. Management of timber moisture contents, and water during transport and erection is a substantial consideration in the successful completion of any timber project.

Talk to us early about what we can do as part of our works, to make moisture management easier on site.

Some options may include:

- Protective coatings applied prior to dispatch
- Tapes or wraps on items that will not be enclosed quickly within the envelope
- Consideration of details and designs to ensure end grains in particular are not exposed to water
- Temporary flashings



A NATURAL MATERIAL

Checking, splits, shakes and warping are a result of the geometrical changes of solid timber as it dries. Splits and checks can be mitigated by managed drying of a timber element, and by procuring timber with enough extra length to allow the manufacturer to 'dock' the affected ends of the timber.

It is important to know how shrinkage will occur in the element and detail the connections to avoid restraint from shrinkage. These changes will not necessarily affect the ability of the timber to transmit load, but it is key to work with an expert.

SAWN TIMBER

Utilising timber elements in construction instead of concrete or steel is a desirable architectural choice on a lot of projects, but comes with some specific considerations. There are several advantages to large sawn timber elements as structural members. Some are listed here:

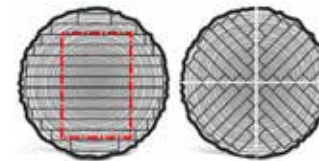
- Naturally durable timber is an attractive alternative to replace or minimise the use of toxic chemical-based biocides for wood protection.
- Replicating, or utilising, existing timber elements may be necessary, i.e. in the case of retrofit or strengthening of an existing building.
- High embodied carbon, resulting in a lower carbon footprint for the build.
- Exposed timber elements in a building visually emphasise the structure, and genesis of the materials used. Utilising native or locally grown timbers in an exposed timber structure speaks to the priorities and drivers behind the project.
- Recycling of existing large sawn timber elements from deconstructed structures presents real advantages both financially and environmentally.

SPECIAL CONSIDERATIONS FOR SAWN TIMBER ELEMENTS

Large sawn hardwood timbers, as well as some New Zealand natives such as Macrocarpa, are often utilized in post and beam construction as well as in truss elements in new builds and retrofits. They require more careful consideration than steel, concrete or even Engineered Wood Products (EWP's) because of the effects of moisture, drying and timber properties.

Talk to us before specifying or purchasing your timber, as there are key considerations to consider to mitigate the risk of checking, warping or cupping as the timber dries such as:

- The method of milling, is the timber flat sawn, or quarter sawn
- The method of drying – is the timber dried, or is it simply seasoned (there is a difference)
- The end use of the timber – and the final moisture content in service (this could be as low as 5% in some locations in NZ)
- The species of the timber – is it inherently stable, or does it require lamination or other mitigations to be able to be utilised for the project in question.



Flat sawn lumber (left) vs quarter sawn lumber (right)





We can usually make anything work – the following is a guide to keep detailing efficient and cost effective, but every job is different, and so considering the supply constraints of the timber (how dry/ how stable/how hard) and the design requirements generally requires us to work with the designers on each project. Here are some high level suggestions of what makes timber connections easy and how we achieve each.



CASE STUDY



**BLUM
FEATURE
WALL**

The Blum showroom in Christchurch is the showcase for the latest in Cabinetry hardware and technology from Blum. The ancillary fit out was provided by LJT including American White Oak fins, balustrades, and stair treads.

The natural timber looks spectacular against the waxed steel and rough sawn board pre-cast panels.

KEY PROJECT FEATURES:

American White Oak feature wall

American White Oak stair and balustrade

Solid timber treads and risers fitted to folded steel flight of stairs

MACROCARPA SWING



This custom-built Macrocarpa swing was constructed by our team to support a disabled access attachment at a rural high school. The school's logo was carved into the beams and traditional joinery was used to support it.



CASE STUDY

FEATURE TRUSSES

The re-development of the 22 Riccarton Road created a new, 900m² hospitality space following significant damage to the Trevinos restaurant in the Christchurch Earthquake.

The modern replacement included 2-storey high precast walls with feature rebates, supported by a lateral load system which included the Tallow Wood roof trusses. This required significant steel connections into these timber elements which had to be concealed, and a high level of accuracy to coordinate with the other trades on site.

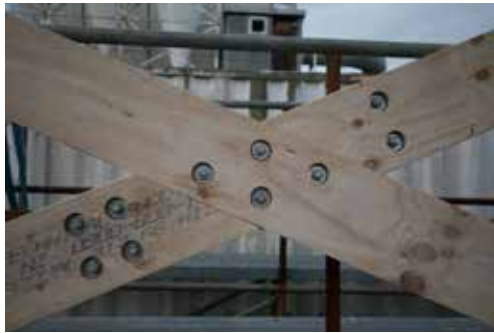
LJT worked in partnership with the timber supplier, main contractor, and structural steel subcontractor to coordinate the geometry and prefabricate the trusses off site. This mitigated a significant program risk to the project, and the trusses were installed without a hitch.

KEY PROJECT FEATURES:

Hardwood trusses formed part of the critical lateral load path for the building

Trusses were a key feature of the design

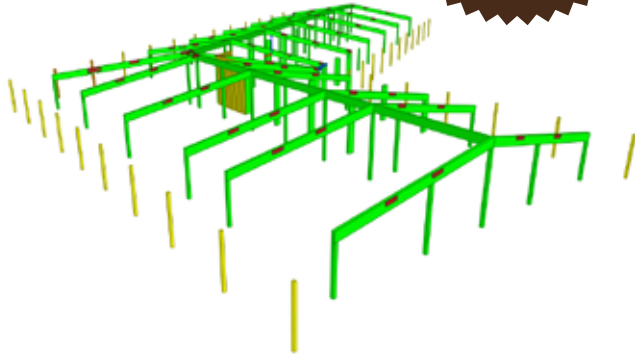
Accelerated program



LINCOLN HIGH PREFAB

Lincoln High School is a project for the Ministry of Education – and undertaken in partnership with Redstag Timber (Timberlab). LJT are the offsite manufacturer for the timber elements which make up the primary structure of the new block.

This project is still underway, with the first delivery of elements in late October, and 4 stages. The elements are as long as 13m and some weighing over a tonne.



ROLLESTON FEATURE HOUSE

This landmark residence is a solid timber craftsman's idea of the perfect home. Complex geometry, exotic timbers, and a feature 'tree' just to top it all off.

LJT provided offsite coordination and prefabrication of the solid timber elements on this project.

KEY PROJECT FEATURES:

Australian hardwood post and beam structure with numerous hidden fixings

Large, open spans achieved through substantial sections sizes, up to 400mm deep

A feature column created by a tree trunk from a tree felled from the same location prior to the build.





RESEARCH AND DEVELOPMENT



LJT supports NZ's leading testing and development facilities, specializing in machining complex connections into mass timber elements for testing and refinement.

TIMARU AIRPORT

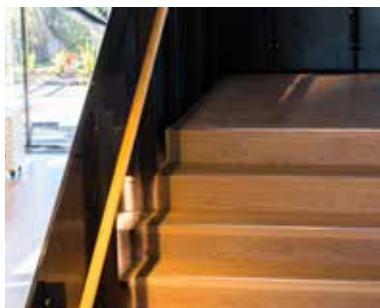
This feature screen machined from solid timber slats is the first thing visitors flying from Timaru Airport see. LJT developed a methodology to CNC the slats individually so that once installed, they met the Architects Brief.





STAIRS

Seen or lined, solid timber or MDF, spiral, geometric or just a simple flight - we can help!





BLUM STAIRS

The Blum showroom in Christchurch is the showcase for the latest in Cabinetry hardware and technology from Blum. The ancillary fit out was provided by LJT including American White Oak fins, balustrades, and stair treads.

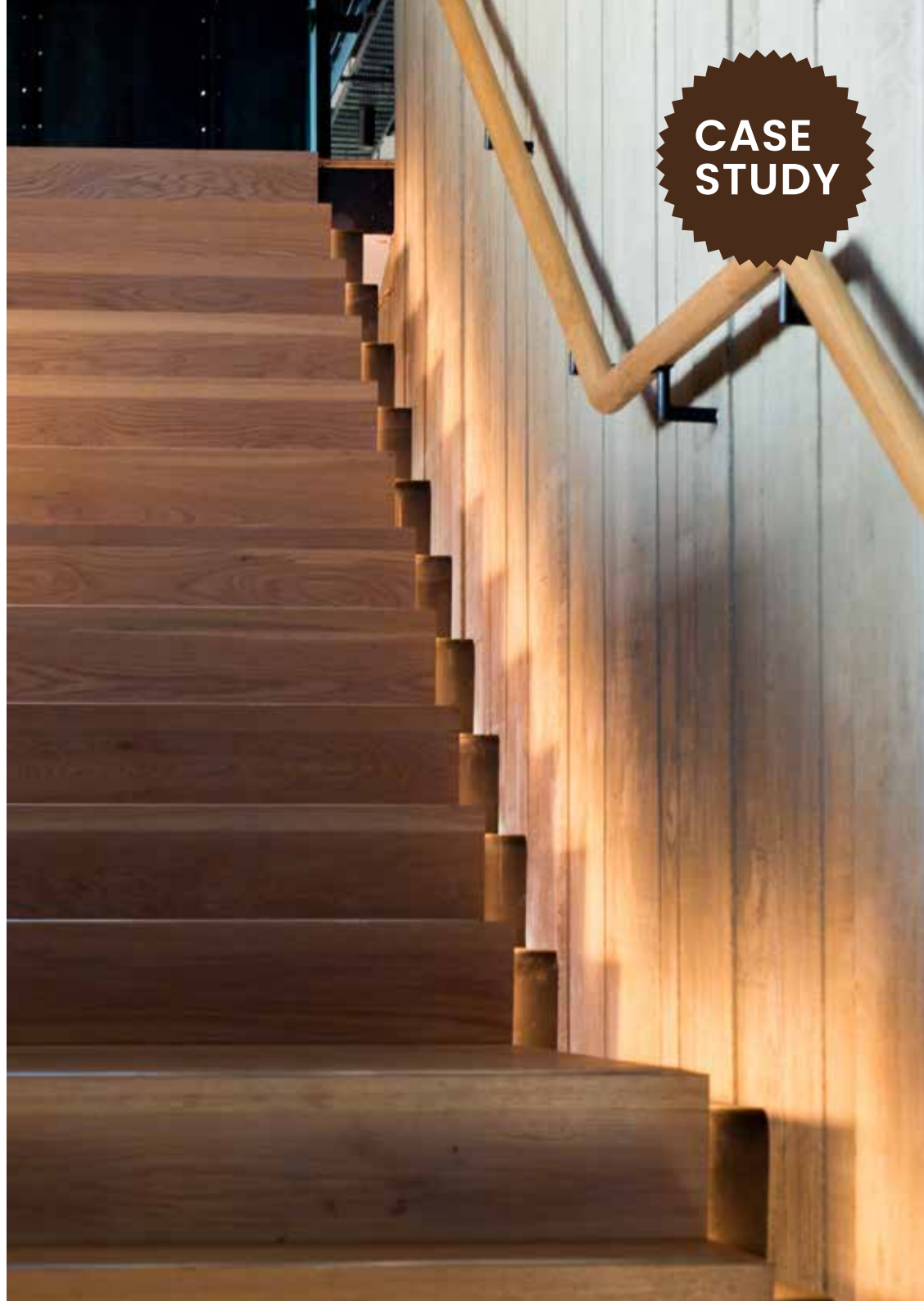
The natural timber looks spectacular against the waxed steel and rough sawn board pre-cast panels.



American White Oak stair and balustrade

Solid timber treads and risers fitted to folded steel flight of stairs

CASE STUDY

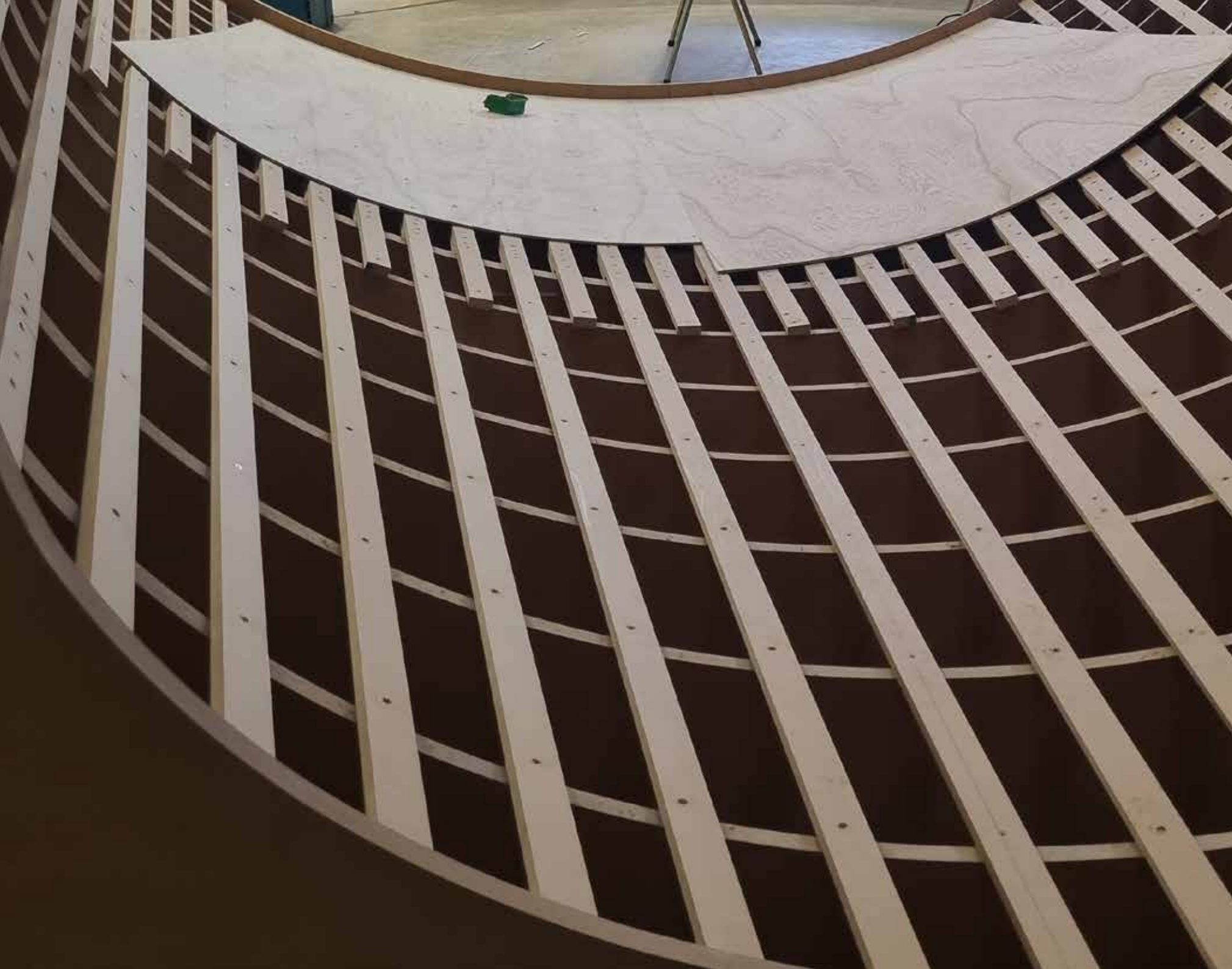


CASE STUDY

TALLOW WOOD AND IRONBARK STRUCTURES

LJT has completed numerous offsite projects using Category 1 Durable Australian Hardwoods. While these timbers offer exceptional durability, strength, and stiffness, they present challenges in stability and workability. We've developed processes to overcome these issues, allowing these beautiful timbers to be used effectively as critical structural elements. Contact us for a copy of our article published in the Timber Design Society journal.





FORMWORK



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FORMWORK

It's not often we do the backroom stuff, the stuff that's not seen. In fact most of our projects include a feature or key element of the design which will be highly scrutinized. One exception is our work creating bespoke formworks for some of NZ's most innovative and ambitious concrete contractors.

We have years and years of experience creating complex formworks for various projects, with one common denominator: they're never seen. We provide the surface, define the geometry, coordinate with the project team, but then our product simply provides the mould which the GRC, Precast or Insitu Concrete, or even fibreglass is cast from.

It's hard won experience, as anyone will know who has tried to strip formwork off something where the methodology has been poorly thought out. But over the years we have learned where to use what materials, and what works and what doesn't. We don't always use timber, some of the options are:

- CNC carved moulds out of plastics, polymers, or MDF
- Cast rubber, fibreglass, or even jigs for steel moulds
- Timber forms out of melamine, ply, MDF or solid timber.

Each material has it's merits, and there are several considerations when designing a methodology and concrete mould:

- Durability, how many pours do you need out of the mould, and what environment will it have to live in during it's useful life
- Scalability, can the mould be altered so that it can be used more than once?
- Loads, how strong does the mould need to be, and how high are the hydrostatic pressures
- Transport – how will you get the mould to site, and do you need to use the mould to support the concrete element during transport too
- Relief – how will you strip the mould. Can we design in a relief? Or do we need to consider another way of removing the formwork.

Talk to us about your project and we can help deliver something exceptional.



IN SITU FORMWORKS

From curved or feature concrete elements, to setting out piles – prefabricated formwork can save weeks on site, as well as allow for the set out and coordination to be undertaken well before the site is established. We have provided all sorts of forms – including for the new Parliamentary Services building in Wellington. Often to create the capping beam forms we need to coordinate the site survey, structural and architectural sets into a GA for approval. We then break the forms down into modules, with the site team, to maximise the constructability of the items, and deliver them to site Just In Time to minimise laydown requirements.

There's lots of tricks to formwork, and opportunities to speed up construction. We can help find the right solution for your project.



PRECAST FORMWORKS

LJT provides prefabricated formworks for some of NZ's leading concrete contractors. Including offsite production of precast formers for Stairs and bespoke shapes. Over the last 15 years we have developed a streamlined process to price and manufacture these elements in the often tight timeframes required of precast operators. We do our own shop drawings, based on your approved documents – simply highlight the formed faces, and let us know if it is a vertical or horizontal cast (i.e. 1 or 2 sided mould) and we can take it from there.





FEATURE COLUMN FORMWORK

The winery feature column project is a unique and challenging joinery item that we worked closely with the GRC supplier and designers to deliver.

The client and architect designed two elliptical, tapering columns to frame the entrance to the new winery building. Due to the finish required, size, and geometry the elements couldn't be economically produced in in-situ concrete, so prefabricated GRC shells were chosen. Each column is 4m high, by 3.5m at the base, tapering down to less than 2m at the top.

We worked closely with the GRC supplier to develop a methodology for forming the two halves. Including ensuring that the two halves could be stripped, and to ensure absolute accuracy at the seam where the two halves were joined. From there, we broke the 3D surface down into component pieces, assembling the bulkheads, stringers, and lining. There were hundreds of tiny challenges along the way, like dealing with the fixing of the lining, to avoid any blemishes in the concrete.

Each form was provided with a set of bulkheads that allowed it to be used in a staged approach, allowing multiple castings and different column heights and terminations to be achieved.



CASE STUDY



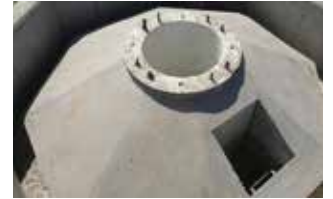
CASE STUDY

LYTTELTON TIMEBALL

The Lyttelton Timeball reconstruction is a significant milestone for Canterbury following the Christchurch Earthquakes. The landmark building stood tall over Lyttelton for 135 years, visible from just about everywhere across town and recognisable by anyone who has spent time in the region. After spending almost 60 years signalling the time to ships in Lyttelton port via the movement of a large steel ball, the building became a historic relic, until its collapse in 2011.

In 2017 Hawkins construction approached C Lund & Son Ltd to assist with the structural work for the project. The client has chosen to reconstruct the Timeball in stages, with this project being the reconstruction of the tower section. C Lund & Son provided methodologies, access, temporary works, concrete work and supply of structural steel for the project.

Due to the detailed nature of the geometry, the formwork for the tower required careful design. The inside of the tower is circular, and the outside of the tower octagonal.



ARTS CENTRE OBSERVATORY

The Arts Centre Observatory was built originally as part of the historic University of Canterbury 'F' Block at the Christchurch University. The Benjamin Mountfort designed building was built in 1896 and housed laboratories, lecture theatres, and importantly the equatorial telescope gifted to the college by James Townsend.

The buildings were damaged in the September 2010 earthquakes, and shoring and stability works were underway in February 2011 when the tower, with the telescope in it, collapsed completely during the 'canterbury earthquake'.

The subsequent restoration project at the Arts Centre saw the reconstruction of the Observatory Tower, and reinstatement of the repaired and restored Townshend Telescope. Reinstating the stone work, while shoehorning in a modern, resilient, concrete structure required real ingenuity.

The support ring for the telescope required a different approach, where the concrete had to replicate the stonework. To make the structure accurate enough, the ring supporting it was precast offsite, using a mould created by LJT. The precast element was then craned into position and levelled to exact tolerances to allow the telescope to operate.





FITOUT & CABINetry



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COMMERCIAL FIT-OUT

LJT originated as a subsidiary of C Lund & Son Ltd, one of the South Island's largest commercial contractors. Under the parent company, "Lunds Joinery," we completed iconic commercial fit-outs. Today, we continue this tradition, serving a select group of loyal clients across the South Island.



RESIDENTIAL FIT-OUT

LJT completes a limited number of large, high end residential joinery packages each year. Our in house laquering capability, and solid timber expertise allows us to deliver on even the most audacious designs.





CASE STUDY

GIBBSTON VALLEY

Our client was developing a new luxury destination, featuring an architecturally designed central lodge and cellar area. They required a 'feature' piece for the bar area in the lodge, which culminated in the development of a dramatic solid oak curved counter bar completed with a high-quality stain finish. The designer wanted "a contemporary look with a traditional feel" – something that felt like it had been there longer than it actually had. The finished product is classy, durable for a commercial setting and will age gracefully.

KEY PROJECT FEATURES

At more than 6.5m long and half a metre high, the bar's curved wooden bench was machined out of solid American white oak in sections using a point to point CNC router

Construction of the 6.5m bar-top also drew on traditional craftsmanship, i.e. shaping, joining and hand finishing

The solid oak bench sat on a curved MDF substructure; finished with textured wallpaper

The service area behind the bar featured cabinetry with oak veneer, with the grain angled for effect

Project featured extensive use of brass inserts and fixtures



CASE STUDY

CLUTHA COMMUNITY CENTRE

The Clutha Community Centre, is a multi-purpose community, business and visitor hub that meets the needs of a southland district. It is a contemporary, flexible structure, including co-working spaces, hot desks, small offices, as well as theatres, information centres and function spaces.

We provided the joinery and adaptable furniture items for the project. The detailing was high quality, with Fluted, curved, oak elements throughout, including in the ottoman units and kitchen areas. In addition, was a very unique, tapered, curved, galvanised steel clad, island in the Business Hub which required close collaboration between our team and a steel fabrication specialist.



KEY PROJECT FEATURES

A curved, tapered, steel clad kitchen island including all doors and drawers

Curved American Oak kitchenette and wall elements

A hexagonal 'stool' storage wall. LJT manufactured a set of hexagonal seating elements with a plywood wall allowing a cubby hole for each one

CASE STUDY



REDROCK LANE

Our client was fitting out their new residential home and wanted a kitchen that referenced the geology of their section, perched high above the city on rocky cliffs. We were really proud of the geometric, edgy joinery that we delivered based on drawings supplied to us. The angular island in the centre of the kitchen posed some real technical challenges with regard to the sub-structure of the cabinetry; however, 3D modelling of each section gave us precise measurements to work with.



GOODHOME PREBBLETON

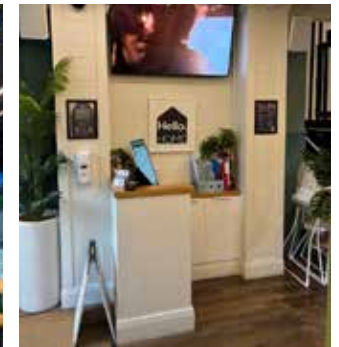
CASE STUDY

This project was an incredibly quick turn around for an established client. The solid timber bar elements, curved oak features, and complex lighting made it a challenging but striking fitout. We worked closely with site trades to complete the tiling and finishing works, and provided substrates and linings to tie into the cabinetry and fitout units.

The end result is a slick, modern feature fitout which retains the aura of a homely, welcoming neighbourhood pub.

KEY PROJECT FEATURES

- Solid Oak countertops
- Curved Oak veneer feature elements
- Painted T&G features with integrated linings installed on side
- Solid timber mouldings, cornices and skirtings
- Cedar clad fireplace surrounds



CASE STUDY

AIRPORTS

LJT have completed numerous airline and airport fit outs across the South Island.





ABOUT US

KEY PEOPLE



JAMIE

As a 5th generation member of the Lund family, Jamie's memories of C. Lund & Son Ltd go back to boyhood when he spent many of his school holidays working in the company's joinery factory and precast facility.

Jamie trained and worked as a civil engineer prior to taking the helm at Lunds Joinery in 2019 and is now focused on ensuring the knowledge held by the factory's long-standing staff is passed on to its younger team members. His experiences as an engineer – from ensuring the on-going safety of New Zealand's aging hydro dams to advising construction companies how to assemble large, complex structures – have given him valuable knowledge of the modern construction environment, where things like 3D drafting and CNC machining are the norm.

Jamie has a real interest in engineered timber products and prefabrication – and the exciting opportunities they present for the construction industry. He enjoys working as a team and loves seeing what can be achieved when people in the industry pool their skills and resources together.



SCOTT

Scott first joined us as a joinery apprentice in 2010 and, after completing it, he went on to become a qualified builder. Our commercial manager lured him back to Lunds in 2018, where he took a seat in our office as a contract manager. Scott oversees Lunds projects from contract to completion. Scott gained valuable hard skills through his trades but enjoys the variety of his current role. He spends his days creating production/CAD drawings, ordering materials, coordinating labour, and organising subcontractors. Now and then, he gets back to a building site to conduct site measurements or help with installs.

When he's not at work, Scott enjoys spending time with his family, listening to music, renovation jobs around the house, and getting away somewhere quiet to go camping.



MARK

Mark knows the joinery trade from the ground up, and is the first port of call for new and existing clients at Lunds.

As our commercial manager, he is responsible for sales, pricing and making sure we deliver exactly what our customers ask for. Mark is a deft hand at estimating the cost of projects; he loves a good spreadsheet and enjoys the challenge of figuring out the scope, volume, materials, and timeline of joinery projects. It helps that he's a trained joiner himself, having first graced our factory floors as a joiner in the 1980s, and that we now have computer programmes that help estimate materials and costs based on drawings.

Mark says one of his more memorable projects as a joiner was helping to refurbish a huge kauri timber feature from the 1800s in Christchurch's former courts buildings.



LIZA

Liza describes herself as "an office manager on steroids," which is fitting, as she oversees accounts, payroll, systems and tender administration. She also has the important job of keeping the Lunds team in check. Liza prides herself on being able to dig into any system or process, whether it's recruitment or financial reporting, and figuring out how to improve it. She says working at Lunds has opened her eyes to the craft of joinery and she is happy to see the company is moving forward and embracing modern technologies without losing its core values of quality and craftsmanship.

An avid learner, Liza alternates business and pleasure with her study, having completed a Bachelor of Business, she has completed a National Certificate of Horticulture, and Certificate of Organic Primary Production, she also runs a local gardening group with 3,000 active online members. Liza is currently on the last module of NZES – Construction Estimating and Surveying course, which has increased her field of knowledge in helping our pricing and production team.

OUR HISTORY

Lunds Joinery has been kicking up sawdust at Grants Road in Timaru for several decades; initially as a part of C Lund & Son Ltd and now as a standalone company.

It all started with Walter Lund, who immigrated to New Zealand from Denmark in 1875. The grandson of a carpenter and shipwright, Walter landed in Napier and travelled south to Canterbury where he went into business as a carpenter and bridge builder.

Ray incorporated the family business as a limited liability company in 1956, deciding on the name C Lund & Son Ltd to build on his father's reputation. His sisters were involved too, particularly Thora Lund who kept the company's books for 60 years. Thora was still working there in the 1960s when Ray's son, Bruce Lund, took the helm alongside Charlie Kenny, a business partner of Ray's who had joined the company after the war and become a shareholder.

Bruce had already been working for the company since his 18th birthday in 1956, when just a dozen staff worked out of the company's original joinery shop in Church Street, Timaru. He remembers a big motor in the roof space, from which the men connected belts made from buffalo hide to various joinery machines. Later on, by the time they'd moved to Grants Road, every item of plant had its own electric motor.

By the late 1960s, the company had 50 staff and multiple cranes. Joiners were still an integral part of the business. Those who worked in the Grants Road factory at the time remember stacks of timber from the West Coast drying out in the open. They used solid rimu to craft furniture, windows and doors and preparing solid timber materials for a lot of state houses. Everything was done by hand.

Bruce's daughter, Joanne Macgregor (nee Lund), and her husband, Andrew Macgregor, took over the family business in 1993, by which time it had grown to about 110 staff. Together they managed some of New Zealand's largest commercial construction projects from the company's Christchurch office.

Meanwhile in Timaru, Jamie is embracing the old with the new when it comes to Lunds Joinery, pairing traditional craftsmanship with commercial workflows to deliver high quality joinery work on time and at scale.

It's a far cry from the days Jamie's great-grandfather and grandfather used to write "cutting lists" for building projects on offcuts of wood, but he's happy to report that some of their old machines are still used for dressing or preparing solid timber now and then.

Images from top right:

Charles Lund

C Lund & Son, workers in Christchurch

Ray Lund (centre)

Jo & Andrew Macgregor, City Mission (centre & centre right)



LJT POLICIES

H&S POLICY

THE 6 P'S

Planning and Preparation Prevents Piss Poor Performance – we plan ahead, invest in the right plant and equipment, and communicate our plan. Less surprises, less work arounds, less rework and most importantly well planned and safe work practices. We are clear about who does what to mitigate the grey where there are overlapping duties.

INVESTMENT

We look for opportunities to improve or reduce risk, whether it be training, or in plant, so that we may become safer and more efficient in our work. We focus on prefabrication, so that as much as possible, work can be done in our purpose built facility, with better control over safety, quality, and program.

COMMUNICATION

We communicate, and are proactive about our work packages so that we may work in with other trades and our clients so that we may all meet our H&S obligations.

We seek feedback and opportunities to improve, from our staff, suppliers, clients and encourage our workers to participate in our Health and Safety processes and systems. We monitor our performance, and seek early identifiers so that we may improve before an incident occurs.

DISCIPLINE

We don't walk past an issue, and we don't avoid a tough conversation. This goes for all of our staff. We don't let egos get in the way of improvement, and we welcome advances that eliminate or reduce risk.

MENTAL HEALTH WORKPLACE POLICY

We promote a supportive and understanding culture where success is celebrated, and improvement is fostered as a team.

We appreciate the effort everyone puts in to meet our goals – and understand the importance of time to switch off. We plan ahead, and work to avoid late surprises to avoid out of hours work and communication.

Provide clearly defined processes for identifying psychosocial risks, for example, but not limited to, excessive stress levels, work demands, increased sick leave, harassment, bullying, and fatigue that impact someone's mental wellbeing.

Work closely with all stakeholders to develop regular initiatives that promote mental wellbeing



ENVIRONMENTAL POLICY

To continually strive to reduce our energy consumption and carbon footprint.

To use materials efficiently and minimise wastage.

To minimise the adverse environmental impact that our business has on the environment.

To comply with all the relevant legislation, consents and regulations.

DRUG & ALCOHOL POLICY

We have a strict policy of maintaining an alcohol and drug free workplace.

We will carry out pre-employment drug and alcohol testing. Only a negative (no drugs or alcohol) test is acceptable. No employment offer will be made to any individual returning a positive drug test.

Bringing alcohol or drugs, other than prescribed, onto work premises may be grounds for instant dismissal.

Working while under the influence of stimulants, alcohol or non-prescribed drugs, stimulants may be grounds for instant dismissal.

Failure to attend, at the request of the employer, testing for non prescribed drugs, simulants or alcohol may be grounds for instant dismissal.

Employees with a current positive drug or alcohol test may, at the employers discretion, result in the employee being given one opportunity to take unpaid leave for six weeks and to return to recommence work after that time with a negative drug or alcohol test. A second positive drug or alcohol test after this period will result in termination of employment. Further testing will be required over the following twenty four month period. Any subsequent positive result in that two year period will result in termination of employment.





OUR PURPOSE

To bring audacious designs to life through beautifully crafted, sustainable solutions.

OUR VALUES

WE ARE DEPENDABLE

- we do what we say we will do.

WE ARE FAMILY

- we all have a part to play, and we have each others back.

WE OWN IT

- we take pride in what we do and embrace progress.

WE VALUE

- merit over bullshit in all our decisions.

WE ARE BRAVE

- we have the hard conversations fairly and early, and are not scared of the difficult stuff.

DISCLAIMER

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- Conduct your own investigation and analysis of the information contained in this Capability Document; and*
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