

# Lockwood Commercial Building our reputation since 1951



### Lockwood - Who We Are

Whether building a new home or a new commercial building, it's important to choose a trustworthy and reputable building company to partner with. That's why so many clients worldwide choose Lockwood and why we are consistently voted one of New Zealand's Most Trusted Home Building Brands.

Lockwood Group Limited, was founded in 1951 with the idea of utilising New Zealand Radiata Pine in an innovative and distinctive engineered building system.

Originally developed and patented by Dutch-born architect and engineer, Jo La Grouw Snr, as a residential construction alternative for the New Zealand domestic market, Lockwood still enjoys an unsurpassed reputation as a provider of premium quality timber homes and buildings and has become an iconic name in the industry.

The precisely machined components that form our homes and buildings are manufactured in Rotorua, New Zealand at our production facilities, to exacting standards. Our team of skilled craftsmen are committed to consistent quality and production standards, with a deep sense of pride in this family owned business and to the final outcome of a safe, secure and quality living experience for our valued clients.

The Lockwood Building System has gone on to prove its adaptability and performance credentials in a wide range of Residential and Commercial buildings around the globe.

From the simplest to the most contemporary architectural applications, the system offers high design flexibility. Lockwood's internationally acknowledged expertise in the design and fabrication of laminated timber beams and other specialised building components, adds further depth to the system's unique design flexibility.

Lockwood creates naturally superior solid timber homes and buildings - for the good of the families that live in them, communities that study, worship, meet, celebrate or convalesce in them; and for the good of our environment.



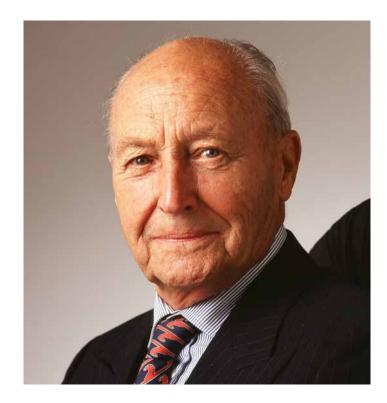
ABOVE / LEFT: Lockwood Group Ltd, Visitor Centre and main office , Rotorua, New Zealand.

In 1951 Jo La Grouw Senior pioneered a unique engineering innovation that revolutionised the New Zealand Building industry.

Since then we've worked closely with home and business owners to evolve our designs to anticipate their needs - continually refining and improving our ability to deliver their dreams.

We are now one of the largest privately owned solid wood construction companies in New Zealand and our brand values are as relevant today as they were 60 years ago.

TOP RIGHT: Jo La Grouw Snr. BELOW L-R: Jo's son, Joe La Grouw, current CEO, and Grandson, Andrew La Grouw, Sales Director, proudly following the family tradition.









#### Our production facilities, the heart of Lockwood - Rotorua, NZ





# Lock+Wood Our System

All components for your Lockwood building are manufactured in our production facilities to fit your design plans.

In our unique and exclusive building system, solid laminated timber planks and patented aluminium profiles are locked together - rather than nailed - to create strong and versatile structures. All structural timber in a Lockwood is kiln dried and H3.1 treated with mouldicide and water repellent wax added for even greater protection.



#### 107Mm Exterior Board

Our exterior wall board eliminates the opportunity for heat loss due to thermal conductivity with insulation sandwiched between solid timber. The 107mm insulated wall has been rated with an R-value of 2.1

Extruded aluminium sheathing is machine pressed to the exterior board in your choice of colour. Coated with a coloured polyester resin, this provides a superior, longerlasting finish and means buildings don't need frequent painting.

#### Patented X-Profile

In our unique system, aluminium X-Profiles lock together our solid wood walls and joinery to create strong, secure structures. Homes using this system can be built quickly and efficiently even on steep and challenging sites. And because all components come directly to your site from our factory, there's no time lost waiting for delivery from various suppliers.

#### Standing Strong

Vertical steel tie rods within the Lockwood walls provide lateral bracing and the strength to withstand extreme weather conditions and earthquakes.



#### Passive Ventilation

With our unique construction system, passive air flows over the top of the integrated joinery frames, so your building breathes and feels fresh. This ensures a drier, healthier environment.



#### Integrated Joinery

Custom made joinery is integrated into the Lockwood structural system for extra strength and to ensure a leak free living environment.



Our production facilities, the heart of Lockwood - Rotorua, NZ



# System Applications

The Lockwood Building System has been successfully and cost-effectively used in New Zealand and 30 countries around the globe. The flexibility of our unique building system is perfect for both residential housing and commercial applications.

Lockwood have designed and built;

- Family homes
- Apartments
- Shopping Centres
- Schools and Kindergartens
- Community Halls
- 🗱 Churches
- Lodges, Motels and Chalets
- Function / Visitor Centres
- Restaurants
- Music Rooms

ABOVE: An example of a light commercial project where the clients requested a function room to compliment their public gardens and butterfly house. RIGHT: Seasider Show Home, Tauranga New Zealand.



# System Durability

The Lockwood System combines exceptional quality materials and meticulous engineering standards in a construction process that delivers durability and performance.

With this depth and breadth of products and services, Lockwood is able to comprehensively meet the demands of supplying a quality product to suit your requirements whether your project is commercial or residential.

Depending on application and client needs, the Lockwood package can be limited to the key building system components, or extended to include a complete range of supplementary materials including everything from kitchen to electrical systems, plumbing fitments, light fittings, floor coverings, window treatments and appliances.

All Lockwood supplied components are packed in a quality-assured process, designed to maximise on site efficiencies and minimise construction time.

Lockwood technical personnel are on call when and as required to provide factory-based or on-site technical support and after sales service to all our valued Lockwood clients.



Great design is the foundation of our business Ruapehu Show Home - Wellington, New Zealand

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# **Commercial Case Studies**



#### Te Whau Lodge - Waiheke Island

When these clients decided to build an idyllic island retreat for couples and business executives, they wanted to capture the natural tranquility of the location and yet offer a sophisticated luxury that would be difficult to leave.

Te Whau Lodge is set in six hectares on the exquisite Waiheke Island less than an hour from the bustle of Auckland, overlooking Rangitoto Island and the beautiful Waitemata Harbour. The Lodge was built to blend with the landscape of picturesque surroundings and in tune with the striking architecture of New Zealand's natural beauty. Lockwood was a perfect choice when considering the difficulties of the location. Reflecting the appeal of a ridge-top setting, it provides a majestic haven for those in search of solitude.

Four themed guest suites make use of private balconies offering a blissful setting to enjoy magnificent sunsets over Auckland city. A stunning clerestory roof-line heightens the ambiance created by the changing light of day and large French doors in the lounge open spaces to the outdoors.







Where great design meets structural integrity Te Whau Lodge - Waiheke Island, New Zealand

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#### West Lynn Garden Centre - Auckland

West Lynn Garden and Butterfly House is a public garden covering 4.5 acres in the heart of Auckland, created and run by volunteers. It was formed in 1981 on land originally owned by the Eden Garden Society.

The West Lynn Garden Society is now an independent organisation of people all sharing a love of gardening. Members and volunteers commit to creating and maintaining a wondrous place of beauty and peace for all who visit.

It stands to reason that such verdant and picturesque surrounds demand an equally beautiful building. One full of natural light, lofty volumetric spaces - one which celebrates natural and engineered timber structures. A place with a welcoming heart where happy celebrations take place, families can spend quality time together and communities can connect. And, that's exactly what they built.

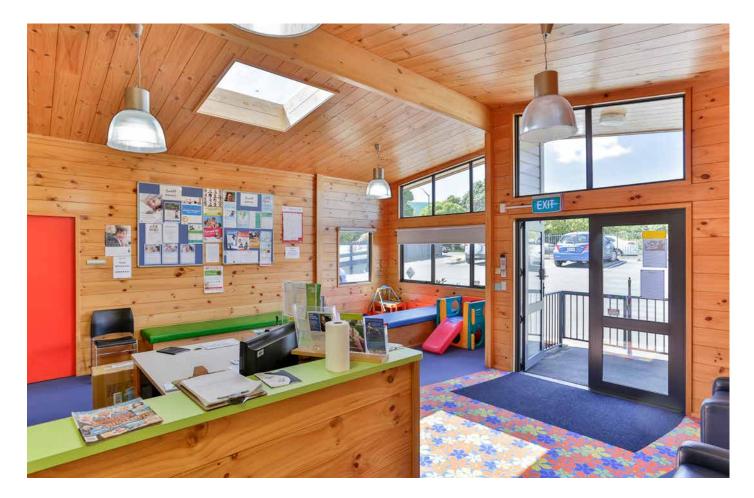
This Lockwood function room has proven to be very popular with locals and visitors. Relaxed flow from indoors out into the gardens, coupled with wide eaves, high gabled windows and generous skylights bathe this venue in light. This has been achieved while meeting all requirements for commercial buildings and public spaces yet still delivering a welcoming ambiance.





#### Plunket - Childrens Health Serivces Provider

This light commercial building was designed and built for children's health services provider, Plunket Porirua. The Lockwood walls are perfect for this purpose as the solid wood stands up well to all the bumps and knocks and provides a safe and healthy play environment for the children.





#### Pukaha Mount Bruce Wildlife Centre



Pukaha Mount Bruce has been part of New Zealand's Conservation story since the 1950's. In 1983, the visitor centre was built and opened to the public. It contains a café, retail shop, gallery and offices.

It is now a National Wildlife Centre dedicated to Conservation Breeding programmes that contribute native wildlife, flora and fauna back into New Zealand's unique Eco-system. The facility caters for 7 interactive talks a day about these breeding programmes and unique wildlife displays. Community education programmes, school holiday programmes and special events are hosted throughout the year.

Perhaps its biggest claim to fame is that it is the home of world famous, Manukura, a rare white kiwi that was born at Pukaha and who attracts many visitors.

ABOVE AND LEFT: Puakaka Mt Bruce Wildlife centre, built in 1983 and still an impressive light commercial building offering a warm ambiance and a robust solution for continuous public use. The Centre is open 364 days a year.



Custom designs for commercial applications. West Lynn Garden Centre - Auckland

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#### Sea Change Villas - Rarotonga

Lockwood built three boutique villas in Rarotonga. It was important for his client to have a quick on site build time and to maintain the peace and tranquility of the setting with minimal guest disturbance. The Lockwood building system with its use of X locking profiles rather than nails provided a relatively quiet build which met the client's brief.

These additional villas needed to be strong enough to withstand extreme weather conditions as experienced in the Pacific.







Nuanua Kindergarten - Porirua



#### Nuanua Kindergarten - Porirua

The Nuanua Kindergarten in Cannons Creek area in Porirua is a not-for-profit community based kindergarten that nurses Tokelauan and Samoan languages and culture. Lockwood solid timber interiors work particularly well as does the powder coated aluminium cladding on the exterior, all creating a low maintenance environment allowing the teachers and children to focus on nurture, education and playtime.





# **Building Remotely**

The physical characteristics of Lockwood components and structures means that, subject to design and size, they are ideally suited to remote locations and can easily be transported to site. Project sites can be prepared whilst the Lockwood building components are being manufactured with delivery timed to meet pre-determined objectives.





# Production And Construction Efficiency

Lockwood Building System components are precision manufactured in a controlled factory environment without susceptibility to inclement weather or other site environmental risks. They are then carefully packaged and delivered to site.

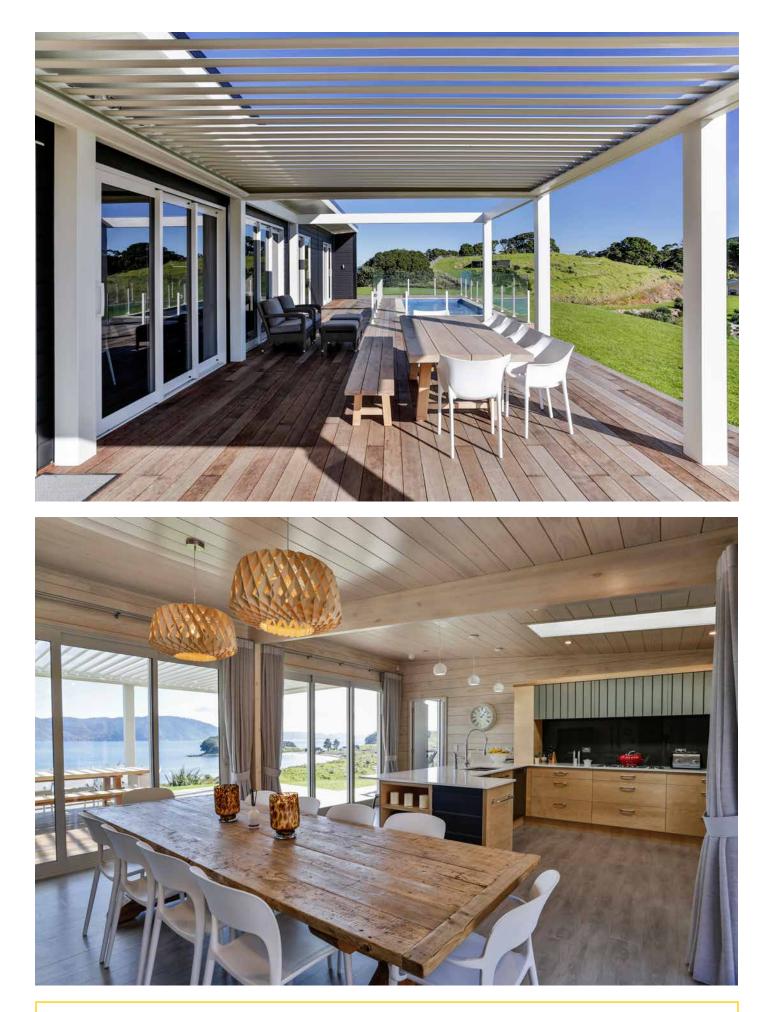
Once the components arrive on site, assembly and erection can start immediately.

The build can be carried out by a minimum number of trained personnel, who are able to combine a broad range of construction skills with specialist Lockwood building techniques. This ensures optimum quality control along with speed and efficiency of completion.

As a simple example, a 2 man specialist team can erect a typical house-sized building of 120m<sup>2</sup> from floor to roof on in as little as 2-3 weeks, with minimum additional involvement required from other trades and suppliers.

ABOVE: A Latter Day Saints church built in Houma Vava'u, Tonga. This is one of many LDS churches built around the world, many in remote islands in the Pacific.





ABOVE & LEFT: A home built on a remote island off New Zealand. All materials for this build had to be delivered by boat and in some cases helicoptered in. Strict environmental rules meant no plastic or waste materials were allowed to stay on site and had to be removed daily. This home is totally off-grid.



### Earthquake Stability

A standard Lockwood building, subjected to 22 simulated earthquakes up to 7.0 on the Richter scale over six weeks of laboratory testing, came through completely undamaged, with windows opening freely and all glass remaining intact.

Testing also showed exterior walls can withstand more than 12 tonnes of sideways pressure from winds and earthquakes. Recent proof of this came from the Lockwood homes in Christchurch and Kaikoura, which lived up to their unshakable reputation, with almost no structural damage being reported.

Lockwood buildings are strong and designed to withstand earthquakes, cyclones and powerful winds, with beams, stiffeners, posts and exterior walls laminated for structural strength, avoiding distortion or movement.

Historically Lockwood buildings have proven their performance in extreme weather conditions – winds in excess of 270km per hour, blazing heat, freezing cold, torrential rain – and they have continued to be comfortable and secure throughout.

This reputation for designing and constructing earthquake and cycloneresistant buildings has helped Lockwood to develop exports in Japan, Australia, the Pacific Islands and the Middle East.



ABOVE: Madrid show home, Christchurch, New Zealand. RIGHT: We only use sustainably sourced timber in our solid timber homes and buildings.

# Environmentally Friendly

Lockwood buildings are constructed from plantation-grown, sustainable, solid wood, which is a natural, renewable, biodegradable product.

Wood is our Earth's most renewable raw material and using it is vital in the fight against climate change. The more solid plantation wood we use, the more carbon that is stored. The more trees that are grown, the more oxygen is released into the atmosphere, and the better off our entire world will be.

Solid wood requires little fossil fuel to manufacture. It has the lowest

energy consumption and lowest CO2 emissions of any commonly used building material – making it kinder to our planet.

Solid wood has high insulation and thermal mass, meaning less energy is needed to heat, cool and ventilate it which, for you, means lower power bills. It also acts as a passive dehumidifier at night and as a humidifier during the daytime – improving your comfort and health and actively helping to maintain your comfort.





Our buildings influence the way people live. Client Holiday Home - Wellington, New Zealand







# Lifemark Accreditation

Lifemark<sup>®</sup> is an independent certification system based on the design standards of accessibility, adaptability, usability, safety and lifetime value. Lifemark<sup>®</sup> rated homes are designed to be usable and safe for people of all ages and stages. They are easy to live in – for a lifetime.

A new home design is rated against the Lifemark<sup>®</sup> Standards and awarded points based on how adaptable, safe and usable the home is. The better the rating (3, 4 or 5 Stars), the more it will suit your family's needs throughout life as they change. Lockwood is a Lifemark<sup>®</sup> Accredited Partner and we have already designed a number of plans that have been awarded 5 star Lifemark<sup>®</sup> Certification. We can also design a custom solution for your needs and have it certified under Lifemark<sup>®</sup> once the design has been finalised.



ABOVE: Ruapehu show home Thailand. RIGHT: Pre-cut supervisor, Luke Mullins, conducts quality control checks.



### **Consistent Standards**

Independent annual audits ensure Lockwood manufacturing processes and procedures meet Australian and New Zealand standards, so consumers can be assured of the performance and quality of our products. Lockwood structures are capable of meeting the most stringent building standards and codes anywhere in the world. While individual designs and application certifications are always specific, Lockwood's consulting engineers are conversant with all code requirements.





#### **Codemark Certification**

CodeMark Certification provides an easily-understood and robust way to show that a building product or system meets the requirements of the New Zealand Building Code.

Lockwood has CodeMark certification for our complete wall system. In order to obtain this, we had to provide robust historic and current evidence to show that our system complied with stringent NZ Building Codes. Quarterly and Annual audits ensure this standard is maintained.



# Accreditations & Affiliations

Lockwood belongs to the The New Zealand Pine Manufacturers Association (Pine Manufacturers) and The SolidWood Group.





And Lockwood products are accredited by Standards NZ and Codemark







# Contact Us

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Celebrating structure with bold design Halliwell Client Home - Hawkes Bay 4 -10



# LOCKWOOD Designed for good



www.lockwood.co.nz