



LINDSAY & DIXON
LIMITED

CERTIFIED • WOODPRODUCTS • NATURALLY

The Beauty of Southland Beech

Native to New Zealand, steeped in cultural and environmental integrity, sustainably managed and FSC Certified. A quality hardwood timber.

Adding Value to Architecture

Lindsay & Dixon Southland Beech is a sustainably managed, FSC certified native timber grown in western Southland.

Its availability as a building material is a positive outcome of the Waitutu Block Settlement Act 1997.

“The significance of the Act cannot be over estimated. It demonstrates the genuine commitment of both iwi and Government to protect pristine forest for future generations while enabling the property rights of Waitutu Incorporation to derive an income from essentially regenerating beech forests.”

John Southerwood
Chairman, Waitutu Incorporation

Lindsay & Dixon was instrumental in negotiating the 1997 Act which enabled 2100 hectares of virgin Rimu forest, known as the Waitutu Block, to be gifted back to the Crown in exchange for cutting rights over the naturally regenerating Longwood and Rowallan Beech forests in Western Southland. The Waitutu Block was initially awarded to the Waitutu iwi under the South Island Landless Natives Act 1906.

Lindsay & Dixon has a 100 year contractual forestry agreement with the Waitutu Holding Company to sustainably manage and harvest the resource.



This brochure is brought to you by Lindsay & Dixon. We invite you to learn more about the beauty of Southland Beech from its historical roots to its 21st century use in architecture where it brings unique design integrity and richness to all things New Zealand.

Bernie Lagan
Managing Director

Novotel Hotel, Auckland

New Zealand's native forests provided the architectural inspiration for the new 263 room Novotel Hotel adjoining Auckland's international airport terminal.

We talk to lead designer Jonathan Hewlett, Principal, Warren and Mahoney who explains why Southland Beech was chosen to connect with New Zealand's magnificent landscape.

"Our client Tainui Auckland Airport Hotel Limited (TAAH Limited), called for a significant new landmark with an unmistakably 'New Zealand' identity. Auckland Airport is recognised as New Zealand's primary international gateway and the Novotel offers guests their first and/or last experience of New Zealand.

In design terms this suggested the importance of creating an immediate engagement with the landscape.

From the moment guests walked in the door New Zealand's natural beauty had to be tangible.

We had an open mind at the beginning but we quickly learnt that sustainability supported by international certification would be integral to the final material decisions.

We were able to fast track the selection of native timber by virtue of our Wellington colleagues who already had a tremendously positive experience with Lindsay & Dixon and Southland Beech.

What really secured the selection of Southland Beech for this particular client was however its FSC certification. Against all other timber options this was a key difference ensuring integrity regarding the sustainability and milling of a native New Zealand timber.

"An international hotel group with international standing needed the confidence and reassurance that FSC gave. This was a reputational must."

The volume of native timber required was significant. By understanding all facets of the supply chain and building this into the timeframes delivery was a non issue. From the moment the project batch order was received by Lindsay & Dixon we were assured of their commitment to the specifications of the order. Personal

service and follow through in terms of quality control and colour matching was outstanding.

Southland Beech became the continuous and linking design theme throughout the Novotel interior.

Decorative wall panels, door and ceiling veneers and major cabinetry items throughout all guestrooms were all Southland Beech.

The finished result is simply beautiful. It aligns with the clients brief to create an encounter with New Zealand's diverse indigenous natural landscape and international sustainable best practice. Locally sourced internationally certified native timber, that adds a welcoming warmth to the Novotel experience. Guests are ushered into an immediate connection with the landscape that is reinforced in all public spaces.

Reviewing the Southland Beech now, after two years of operation, it looks just as impressive as it did at the opening.

Cultural and Environmental Integrity

The beauty of Southland Beech is intertwined with the history of New Zealand's landless natives, the search for architectural inspiration and our growing respect for buildings that can claim both authenticity as cultural icons and mana for their level of brilliance, craftsmanship and design integrity.

Like no other native timber, Southland Beech has a story that is as current as it is old. It is a story enhanced by time as we continue to appreciate the significance of land ownership and the prosperity of Maori throughout New Zealand.

The Longwood and Rowallan forests comprise seven forestry blocks with a total area of 11582 hectares.

These forests are predominantly Maple Beech (Botanical name *Nothofagus Menziesii*) with small areas of mixed podocarps such as Rimu and Totara.

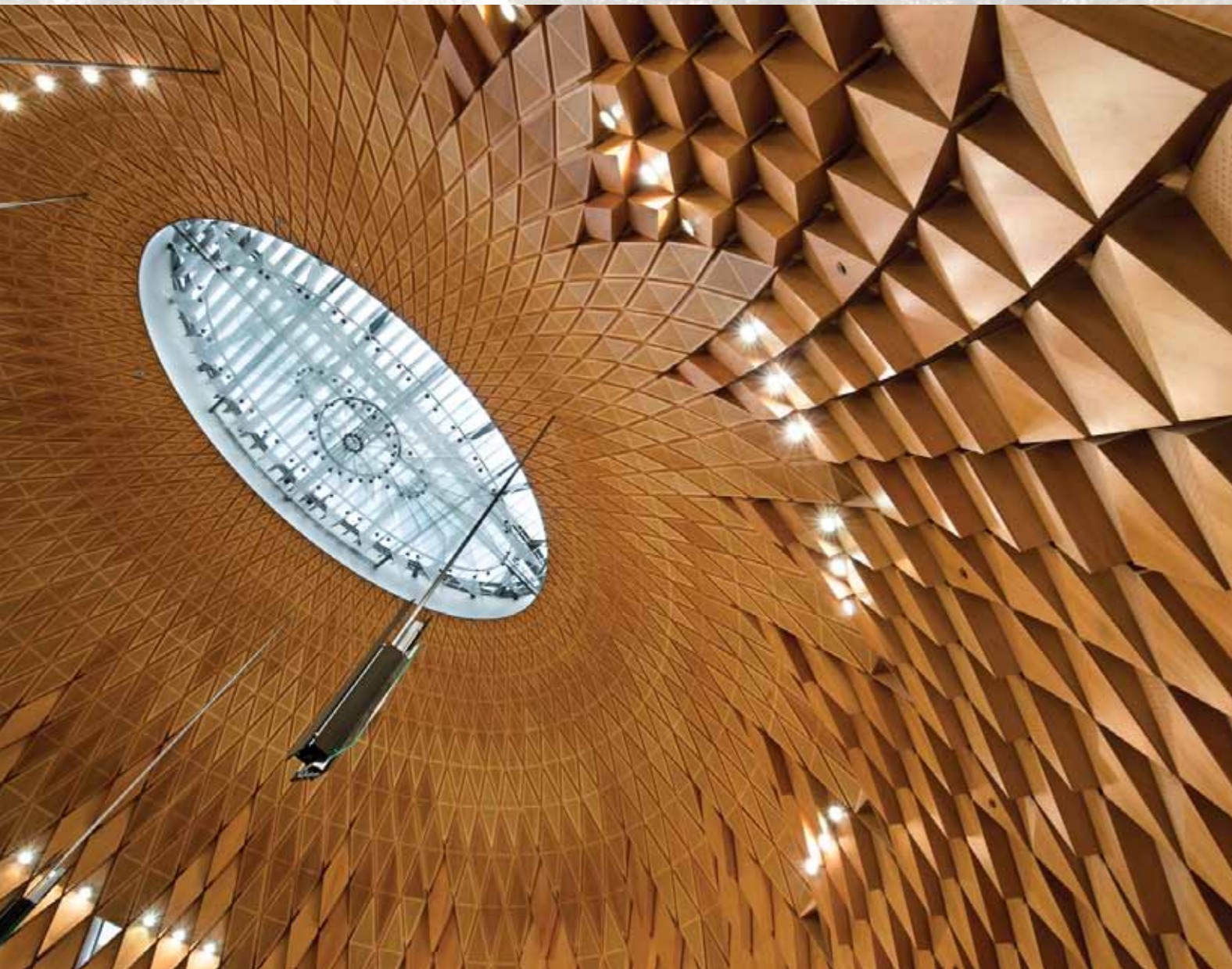
From the total estimated forest stock of 1.32 million cubic metres, Lindsay & Dixon's annual permissible harvest volume is 23628m³ inclusive of all log grades and species. This represents a sustainable yield extraction volume of 1.8%. Very low and conservative by international standards which average 10%.

The entire forestry operations are managed and operated under an approved Ministry of Primary Industries sustainable forestry management plan, license number 4 - 13 - 019, which complies with the Forests Act 1949.

This is complimented by independent third party certification through the Forestry Stewardship Council (FSC) licence code RA-FM/COC-001148. It is believed that this is the first managed native forest in Australasia to achieve this stringent international environmental certification.



The Supreme Beauty of Beech



Supreme Court of New Zealand, Wellington

The award-winning Supreme Court of New Zealand building in Wellington is testimony to the beauty of Southland Beech. Applied as both solid veneer and timber the beech is the single most distinctive feature of the panelled interior of the courtroom and reinforces the tradition of timber in grand spaces.

Lindsay & Dixon worked alongside Warren & Mahoney to ensure the sustainably grown, FSC-certified Southland Beech revealed consistent colour and the all important silky quality under light.

The design of the courtroom was influenced by the acoustic requirements and inspired by the kauri cone. The Southland Beech 'scales' present as a perfect acoustic 'solution' and serve to reinforce both the solemnity and the unique New Zealand identity of the space.

Technical Mastery

Every triangular or diamond-shaped panel was designed to perform a specific acoustic function – out of 2048 panels, only four are identical. First the panels and timber girts (the horizontal plywood framing which the panels are fitted to) were all computer modelled in 3D.

The curvature was fed into a cutting machine to generate a series of very precise horizontal fixing points, then overlaid the diamond shaped panels. Precise cutting sizes were then produced from the 3D model.

When the girt framing went into the building it fitted in exactly the correct position – to within a millimetre – on the three axes. The exact position or centre points of each panel had already been marked on the girts in the factory, so once that framing was complete it was a relatively simple matter to bring the panels onsite and get those perfect as well.

“We’ve used Beech many times on a number of projects, it’s a very popular, favoured material, the Supreme Court however was the first time such a volume of Beech in wall panelling was used.”

Roger Jones
Jones & Sandford Joinery Ltd

With the Southland Beech being New Zealand sourced we were able to get clashings from the same part of the trees that the veneer came from which was great for consistency of colour. As a material it’s quite forgiving to work with. Southland Beech cuts and machines easily and is very even grained – as a manufacturer that’s what we like about it.

We also enjoy the fact that it’s a sustainable timber. That’s important for our clients, particularly this one being a government project and having to come from a sustainably managed forest.

Joinery

The first floor of the Supreme Court building houses the judges’ chambers and the library. Every room has bookshelves integrated with the windows – in fact most of the internal perimeter of the building is floor to ceiling shelving. In every room the joinery, furniture and internal shelving is solid and veneer matched Southland Beech.

Similarly demanding specs applied to the Southland Beech throughout the building in terms of colour consistency, grain matching, quality and grading. All solid timber was tested on delivery, to ensure it had been kiln dried to the right moisture content.

Over 10,000 lineal metres of solid clashings for the job were installed and over 12000m² of timber veneer.

“The Beech was brilliant, it was really easy to work with, being a relatively soft timber and a stable grain with it, it was nice and easy to machine. It’s really easy routing and shaping - no problems at all, and easier than most. We’ve used it for small bits and pieces before but not on this sort of scale.”

Jason McMillan
Ferndale Furniture Wellington

Veneers

An estimated 4,000 sheets of veneer board were used, totalling approximately 12,000m².

A cubic metre of flitch generates about 1000m² of veneer. Each flitch is soaked in hot water at 80 degrees to soften it before being sliced up and dried. It is joined up as a veneer and pressed onto the panel with a cross-linking PVA.

“As a native timber it’s very workable, and as a veneer it would be one of the most stable we produce. We can’t rate it highly enough, it’s excellent. We also use solid Southland Beech on our door jambs. As a timber it has to meet a fire door jamb rating of 600 kgm³ which Beech does.”

Rick Allaway
Interior Timbers (part of the Hallmark Group)



Summing Up

“We’re very happy with the result. We’re happy we chose New Zealand timber, we’re happy we managed to find a way through the process to do it, and it was a great project to work on – very complex but it wasn’t the nightmare that everybody thought it would be.

We enjoy materials where the architect can play with light, form and colour, materials that have a great intrinsic New Zealand story so that architects and designers or New Zealanders can do things that are useful and interesting to us as a culture.

Southland Beech is a beautiful joinery timber.

We’re certainly a fan of Southland Beech. The key is that we now have a sustainable source of a very good and attractive timber with good working properties and everything going for of it, and we should be using more of it.”

Roy Wilson
Warren & Mahoney

CHRISTCHURCH INTERNATIONAL AIRPORT

Air New Zealand Koru Lounge

For Jasmax, the design brief to refurbish and reconfigure the Air New Zealand Koru Lounge at Christchurch International Airport was a project infused with a respect for the brand, and a desire to reinterpret the existing Kiwi bach theme.

Here we talk to Alasdair Hood, Principal at Jasmax.

For the first time in almost a decade, the construction of the lounge provided the opportunity to re-examine and re-define the high quality customer offering. As part of the whole terminal integration, the Koru lounge resides in a new upper floor area; almost double its previous size. The larger floor area allows a range of differently functional spaces; whose characteristics and flexibility are enhanced by natural light and spaciousness. Floor to ceiling windows provide direct line-of-sight to the magnificent Southern Alps.

The refurbishment provided a clear opportunity to drive a strong connection to the landscape, commented Alasdair. Timber was a natural choice as a fresh and timeless material that could lend enormous warmth to the fixtures and fittings while building the relationship with the outdoors.

Alasdair further commented “Sourcing a number of native materials, such as timber, for use in the fit-out, connected strongly to the Koru ideals. To be able to use local timber also allowed us to remain ‘true’ to Air New Zealand’s brand values and the welcoming Koru lounge experience.”

A key focus of the project, for both Jasmax and the client, Air New Zealand, was a dedication to the use of native materials, where possible, and answering to the broader issues of sustainability and authenticity.

Selecting Southland Beech ticked all the boxes. As Alasdair highlighted, Christchurch International Airport is the gateway to the South Island. “The more we learnt about the cultural history of Southland Beech coupled with its FSC certification and its authentic appeal, the more it became integral to the refreshed Koru lounge concept. We decided to

use it selectively but not necessarily sparingly,” explained Alasdair.

Tongue and groove boards were applied horizontally and vertically for interior cabinetry and wall finishes. A formal entranceway was created to mark the start of the Koru lounge experience with a stunning sense of anticipation.

“As the Southland Beech was installed it became clear there was a sense of craftsmanship and refinement in this particular native timber. As far as a commercial lounge that caters for several hundred people per day can ‘feel’ – it feels crafted”, said Alasdair. Tellingly the material also afforded a level of robustness around additional criteria. “It had to patina well and look better with age. An added benefit in terms of the look and feel we wanted to create was that we could actually select the parameters around grain and colour to achieve the consistency we wanted.”

The finished result is a really relaxing but functional Koru lounge that reinforces the Air New Zealand brand, the Koru lounge experience and the beauty of our sustainably managed native Southland Beech.



Operational Base

Tuatapere, Southland, is the heart of Lindsay & Dixon’s operational base.

Tuatapere

Tuatapere is a small rural town in Southland, New Zealand. It is located eight kilometres from the southern coast. The Lindsay & Dixon facility at Tuatapere comprises a log yard, sawmill, kiln drying and manufacturing operation with over 10,000m² of dry storage and distribution warehousing.

The sawmill has a capacity of 36,000m³ of log milling per annum, and has a prime focus and reputation for high grade recovery and sawn timber conversion.

The manufacturing division comprises 4 kiln drying units and the latest Leadermac technology for dressing and moulding; a Grecon Opticut fully computerised saw for precision componentry; a 40 bay laminating press and ancillary plant for the production of brush blanks, broom handles, rod, flooring & panelling.

Marketing and administration offices in Tuatapere and Christchurch compliment the operation.



(left) FSC auditors at work. (right) Southland Beech naturally regenerates.



New Zealand’s longest suspension bridge in the 1890’s



FSC is a global, not-for-profit organization dedicated to the promotion of responsible forest management worldwide.

The ten FSC Principles for responsible forest management require the forest owner or manager to do the following:

Principle 1: Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Principle 2: Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Principle 3: The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

Principle 4: Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.

Principle 5: Forest management operations shall encourage the efficient use of the forest’s multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Principle 6: Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

Principle 7: A management plan - appropriate to the scale and intensity of the operations - shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated.

Principle 8: Monitoring shall be conducted - appropriate to the scale and intensity of forest management - to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Principle 9: Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

Principle 10: Plantations shall be planned and managed in accordance with all FSC Principles and Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world’s needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

Specifying Southland Beech

Lindsay & Dixon markets Southland Beech (*Nothofagus menziesii*) under the names Maple and Cherry Beech.

Southland Beech steam bends easily, is lightweight and easily worked. It is suitable for all interior applications without the need for treatment.



Maple Beech (*Nothofagus Menziesii*)

Traditionally this species has been referred to as Silver Beech in New Zealand. As Lindsay & Dixon's supply is from second crop rotation forest with an average age of 75-80 years, the wood has a very consistent lighter colour, similar in appearance to American Maple. To reflect these characteristics and customer preference, Lindsay & Dixon market this species as Southland Maple Beech.

Maple Beech falls under the general classification of a medium density hardwood. Uniformity of density within and between logs is an outstanding feature of our resource.



Cherry Beech (*Nothofagus Menziesii*)

As the name suggests this is a very attractive pink to red coloured timber and is the same botanical species as Maple Beech. This material is carefully selected, steamed under a pressure vacuum and then kiln dried. This process highlights the attractive grain and enhances the colour of the species and ensures good stability in the end product.

General Description

The Beech species are anatomically similar to American Maple, Cherry, Birch and European Beech. There are also distinct similarities to the highly valued European Pearwood in both timber and veneer. Southland Beech has the desirable properties of fine even texture and characteristics of even wearing, good machining, turning and finishing qualities.

Once fully seasoned, Southland Beech is extremely stable, and less prone to tension wood, split, warp or collapse than other hardwoods. Beech machines well, with minimal sanding needed to achieve a high quality finish, and also stains, polishes, paints and glues well. Naturally resistant to borer, New Zealand beeches also provide an attractive option for consumers seeking a chemical-free environment.

“Beech has a living uniqueness – it’s got some lovely features and when stained all those features come out. It’s all to do with the sanding, the grain raising, how long the timber has been stored – all those things – and there is a bit of an eye to it!”

Roye Haugh
Otago Furniture (founded 1868)

TECHNICAL INFORMATION

Southland Beech

Grades: Dressing A: A premium clear grade recommended for internal joinery, veneer and furniture application.

Factory Grade: A manufacturers grade capable of yielding shorter length Dressing A grade material for joinery and furniture componetry.

Select Appearance / Antique Pinhole

A high feature content with sound tight knots, variable colour and other natural characteristics of good appearance. Recommended for feature flooring, wall panelling and rustic furniture manufacturing.

For information about; physical and mechanical properties, or general specifications for sawn timber – please refer to website www.lindix.co.nz



Sir Paul Reeves Building, Auckland University of Technology (AUT). Architect Jasmax, Auckland.



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The mark of
responsible forestry

