# techTALK

Techlam Newsletter // Spring 2016

ISSUE 01

# Welcome

to the first edition of our Techlam newsletter. Each quarter we'll be bringing you news, view and what's happening here at Techlam and out there with our customers.

In this issue we introduce you to our new production manager Greg Dunford, get up close and personal with Sprucelam, and share the latest footage from our work at Wellington airport.

## We recently welcomed Greg Dunford to the Techlam team.

Greg joins us as production manager following 27 years in general engineering management.

Greg brings to Techlam a solid understanding of continuous improvement and lean manufacturing principles so he's hit the ground running joining our lean journey towards becoming Australasia's leading manufacturer of engineered timber products.

There are a couple of sayings Greg likes to share with his team.

The first is: "Safety First. I believe that it is everyone's right to leave work in the same condition that they arrived in."

The second is: "As soon as you see a mistake and don't fix it, it becomes your mistake."

sprucelam® with Kingfisher Spruce™

## Techlam's NEW range of Spruce Glulam is soon to be released.

Being industry experts in structural laminated timber for over 20 years, We saw an obvious gap in the New Zealand market for an aesthetically pleasing, high strength laminated interior product.

There had to be a superior alternative. It had to be a better visual grade, have superior structural properties to Radiata Pine, meet or exceed all appropriate NZ Standards, be more dimensionally stable, be price competitive and be environmentally certified.

We partnered with ATS Timber in Levin, and created a unique high grade product manufactured from their imported Kingfisher Spruce range. We hold exclusive rights to this product for lamination and after several months of R&D we are excited what this new and innovative product will bring to our client base.

The full range will be available by the end of 2016

# Some of our recent projects.

## // Waimahunga Track, Whangarei

A challenging design to construct when two large beams were required for replacement bridges on the Waimahunga Track in Whangarei, one 24m long, and the other 21m.

### So how did we do it?

By three separate sections laminated together. A 225mm thick base was tapered into a centre web of 135mm thick and had a curved profile to the top edge.

A 540mm wide x 135 thick flange was then laminated and screwed to the top of the beam to complete the structural member.

Every piece of the laminated timber was treated to H5 for this project, including the baluster posts and handrails.

**Techlam recently manufactured two 34-metre long beams for an upcoming pedestrian and cycle bridge. Sister company Edifice Contracts, designed the bridge. The two long beams pushed Techlam to its limits.**

*Techlam production manager Greg Dunford on the near-complete pedestrian and cycle bridge.*

The bridge is 52m long, and will be transported from Levin in two lengths.

It also carries water and power services underneath it.

Production manager Greg Dunford said the company was more used to constructing 22-24m long beams, and the longest it had created before this project was 28m.

Staff needed to create the necessary room on either side of the planing machine to put the beam through. The machine was moved about two metres from its original position, but the length of the electrical cables meant it could not be moved further.

With the beam sticking out the factory door at one end, there was about 50 millimetres between the beam and the factory wall as it came out the other.

Techlam have constructed four beams for the bridge in total, two of which were 18m beams, along with the handrails and balustrades. Combined, the beams weigh about six tonnes, and with all the bridge components, about 10t.

Starting with designs, the project has taken about a year to complete. Manufacturing the beams, handrails and balustrades has taken about two months, and involved all 22 of Techlam's production team at some stage.

The design is based on the German Trogbrücke, or trough bridge, where the deck is arranged between the vertical beams rather than on them.

The shorter length has a camber of about 500m, to account for the embankment the bridge rises onto, and will also be cantilevered off the existing road bridge.

Techlam are also working on several other projects, including a roof for a Samoan church and Tuvalu's new airport.

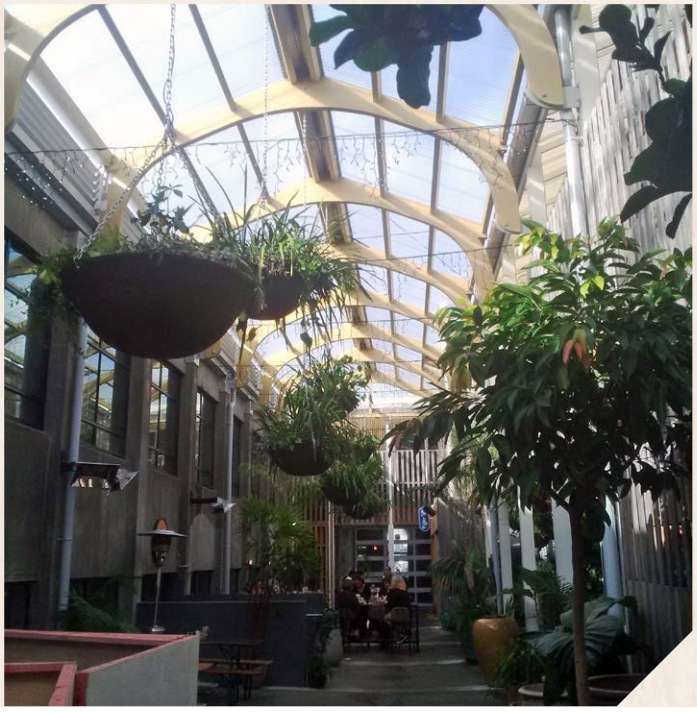
"Every day we aim to come up with the latest solutions and work smarter to help us achieve our mission of delivering exceptional service and consistent quality to our customers and partners."

*Brett Hamilton ~ General Manager of Techlam NZ*

# // White Hart Hotel, New Plymouth

We worked closely with Timberco and Cleland's Construction on this high profile project to supply the laminated portals.

The portals were complex to manufacture, with the radius being tight enough to need to laminate 10mm laminations. The portals were shaped to the design specifications before being pre-drilled, notched and sanded. All purlin connection points where routered out ready to minimise time spent on site.



# // DIY Marae

Recently we supplied television production company Screentime with laminated timber for its series DIY Marae.

The programme sent a team to maraes around New Zealand, renovating them on a budget and within a specified time frame.

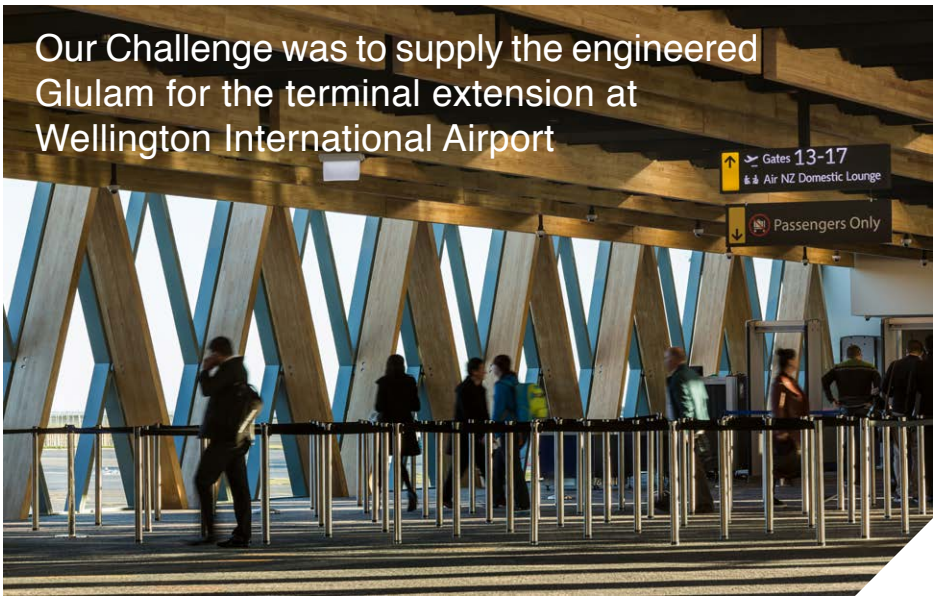
We donated our products free of charge, just one of the good causes Techlam gets involved with each year.


"... Of course it's expensive. It doesn't grow on trees you know!"

"Overall, we are pleased with end product and despite a couple of issues part way through the project, the results are excellent and something that the whole Techlam team can be proud of."

*Steve Kemp ~ BECA, Structural Engineers*

# // Wellington International Airport Terminal




## The stunning curved Glulam X columns are arguably one of the most striking features of the Wellington International Airport terminal south extension.

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

Techlam NZ got involved at the tender stage of the project liaising with client Wellington International Airport, head contractor Hawkins Construction and architects Warren and Mahoney to devise the best way to produce this complex element of the project along with the ceiling beams. The decision was made to fully assemble the curved glulam columns at Techlam NZ's manufacturing plant, which offers 6000 m² of production area making it New Zealand's largest structural Glulaminated timber manufacturing facility.

## Our new automated Howial compact finger jointer and grading saw has arrived from Europe.

It has been set up in a temporary location outside the production area for tests and trials before being moved into production. We have had some teething issues but, all going well we should have it up and running in 8-10 weeks,

We estimate the new jointer will increase our throughput by up to 30% initially and potentially up to a 50% over the next 12-18 months.

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timber redefined

structural laminated timber products

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