



Laminata



Fencing Systems

SOLID TIMBER PANEL BOUNDARY FENCE

Introducing a superior, robust fence system that is easily constructed, using prefabricated components for a rock solid, truly 'neighbour friendly' result. Utilising Swiss glue technology, the Cross Laminated Timber (CLT) solid panels that make up the core of this system achieve a 40mm thick fence panel which is able to span the 1.8 metres between the posts. Each panel locates with tongue and groove (TG&V) into the one below so both faces have the identical 'V' grooves creating a seamless TG&V effect on each side. The treated pine is rougher-headed to allow the easy application of stains or it can be left to 'silver off' over time. Perfect for boundary applications around your development.



Adaptable and versatile, the Laminata fencing system can be stepped at street front boundaries without unsightly skew nailed rails. The 140mm wide posts achieve a substantial look to match the solid feel of the Laminata fence panels. The solid Laminata CLT panels 'slot' between the twin 140mm posts for fast assembly on-site. The Bremick screw fixing allows for any bay to be demountable if future access is required to the site.



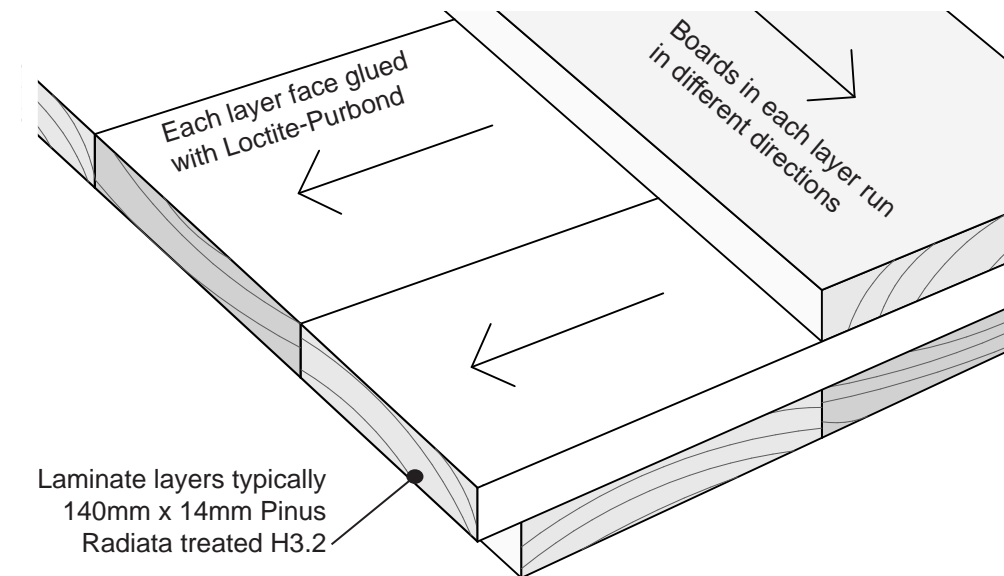
CROSS LAMINATED TIMBER (CLT)

DEFINITION

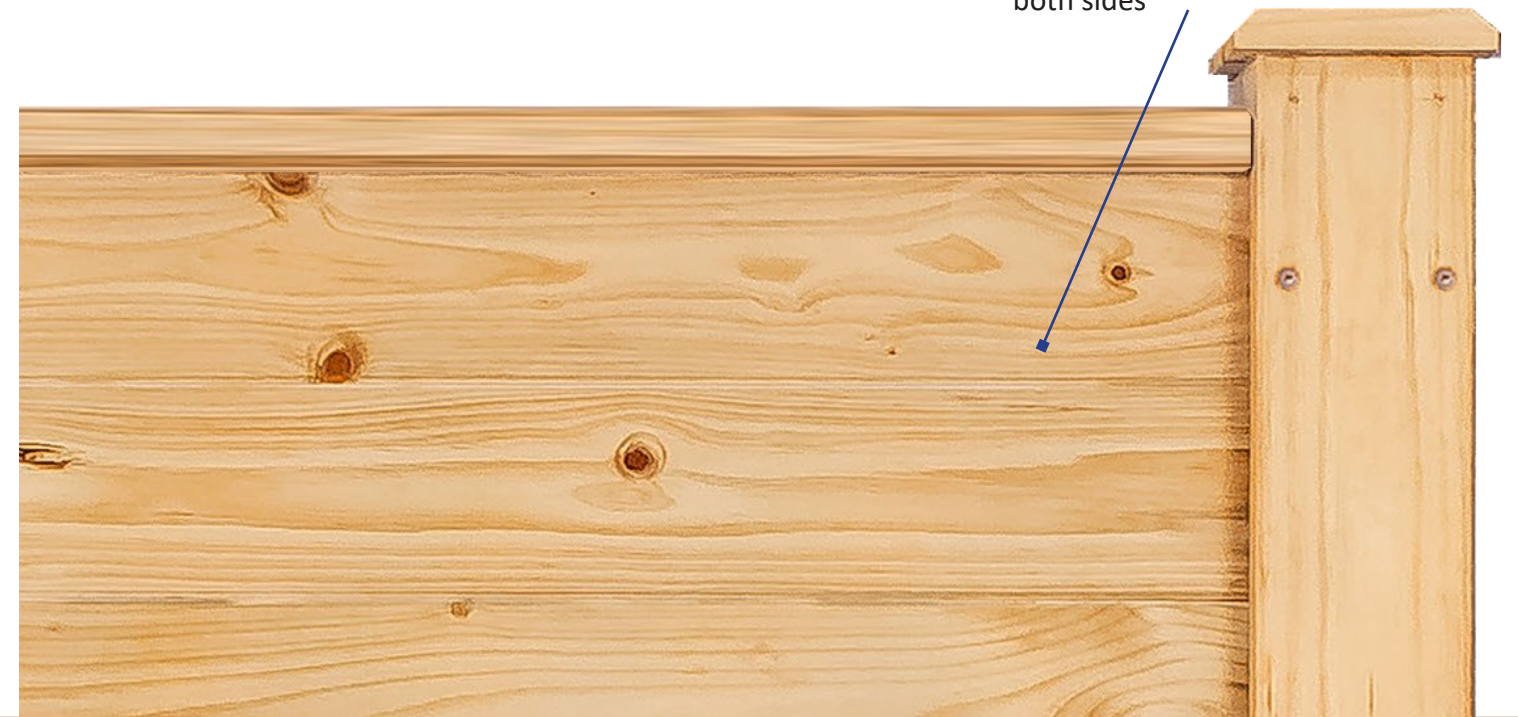
CLT is an innovative wood product that was introduced in the early 1990's in Austria and Germany and has been gaining popularity in residential and commercial applications in Europe. CLT panels consist of several layers of lumber boards stacked crosswise at 90 degrees and glued together on their wide faces. Lumber in the outer layers of the CLT panels are oriented to run parallel to the major span direction to maximise the span capacity.

KEY ADVANTAGES OF CROSS LAMINATING

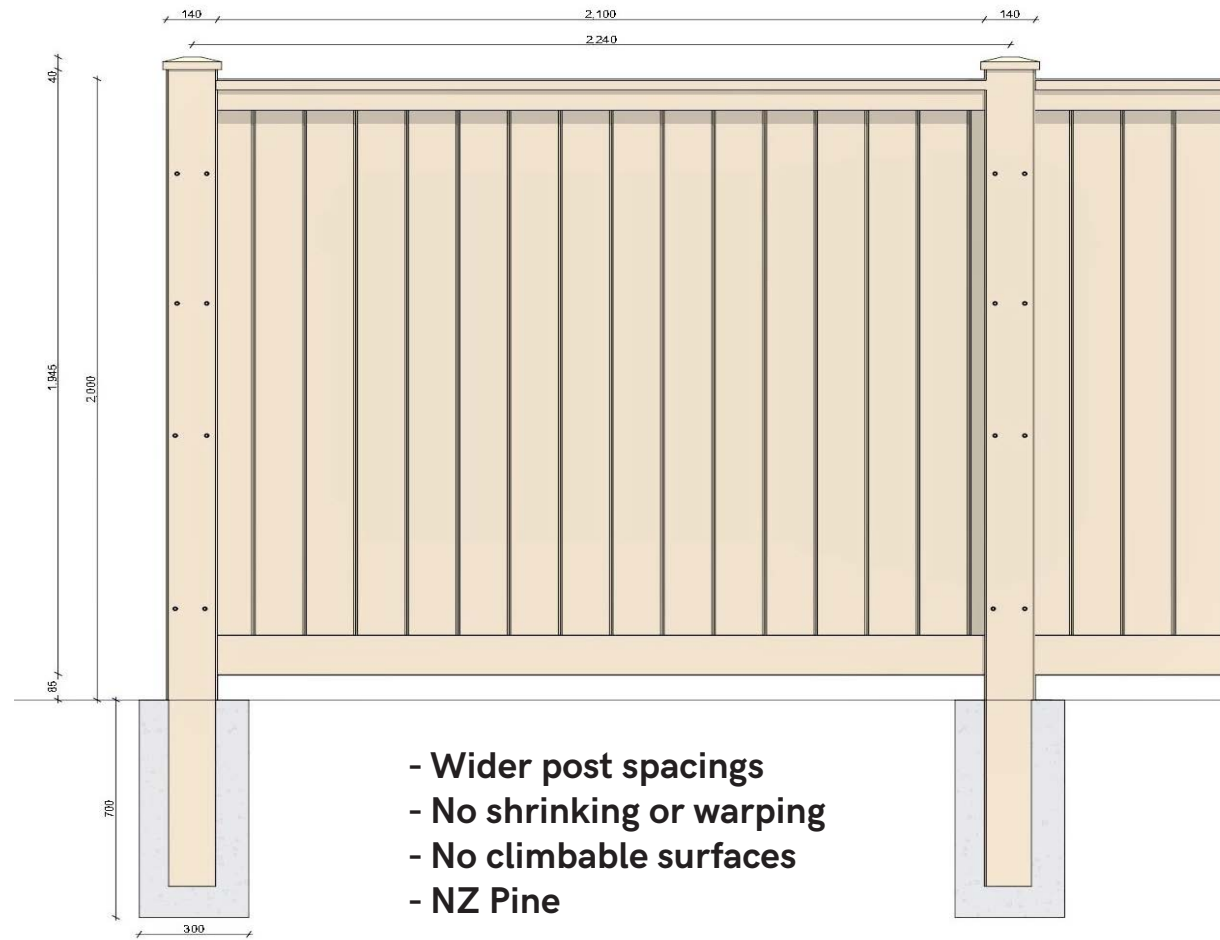
The cross-laminating process provides improved dimensional stability to the product which allows for the prefabrication of panels. Additionally, cross laminating provides relatively high in-plane and out-of-plane strength and stiffness properties, giving it two-way action capabilities similar to a reinforced concrete slab. The 'reinforcement' effect provided by the cross lamination in CLT also considerably increases the splitting resistance of CLT for fixings and connections.



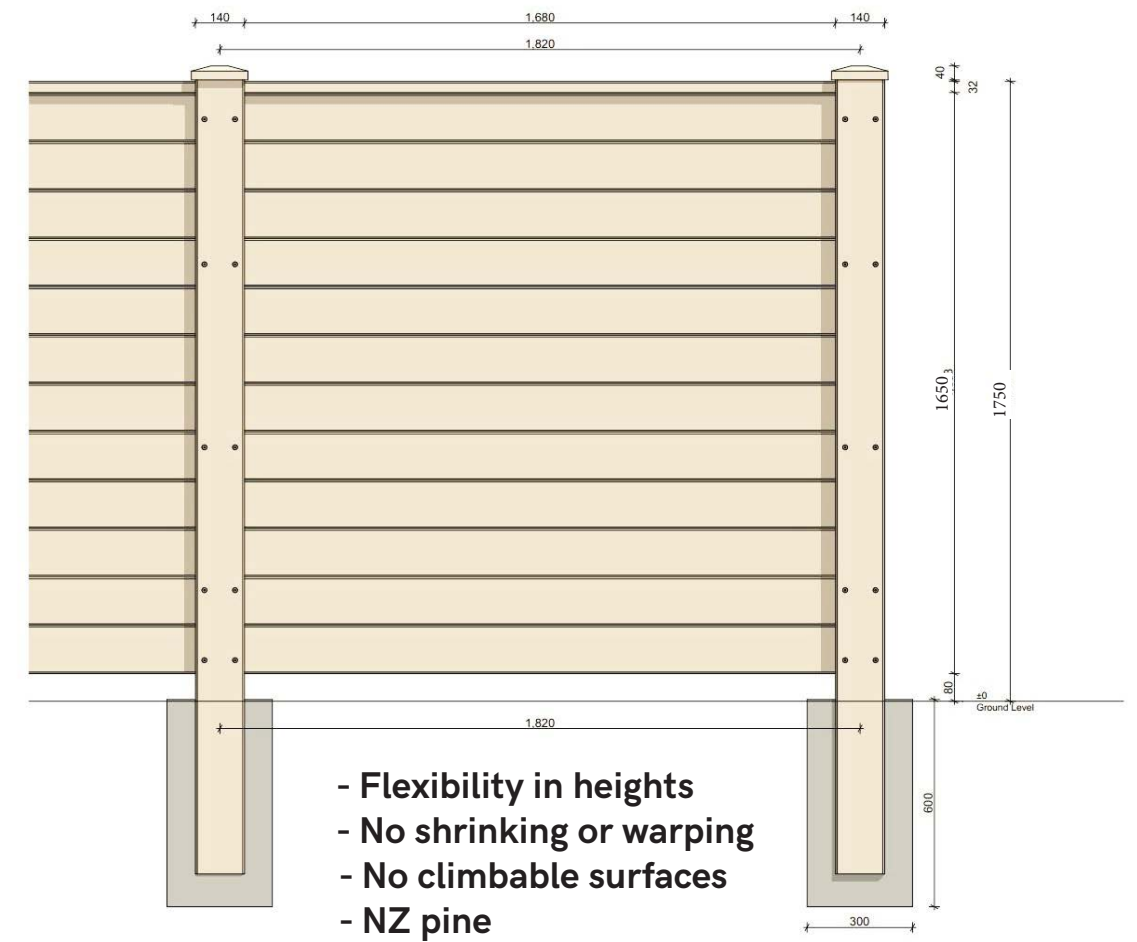
Seamless TG&V appearance both sides



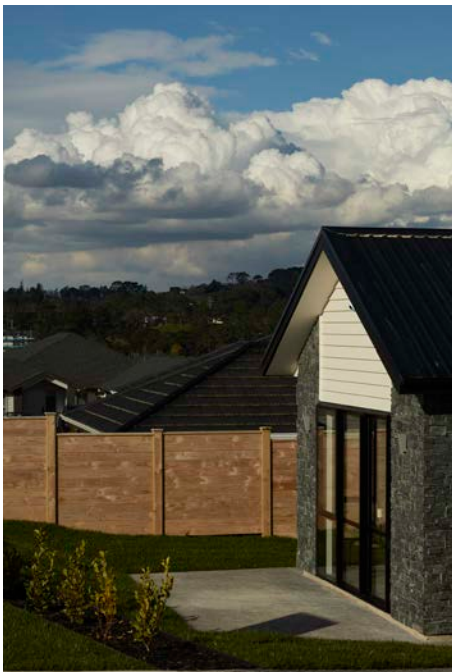
Cavalli - vertical



Helena - horizontal



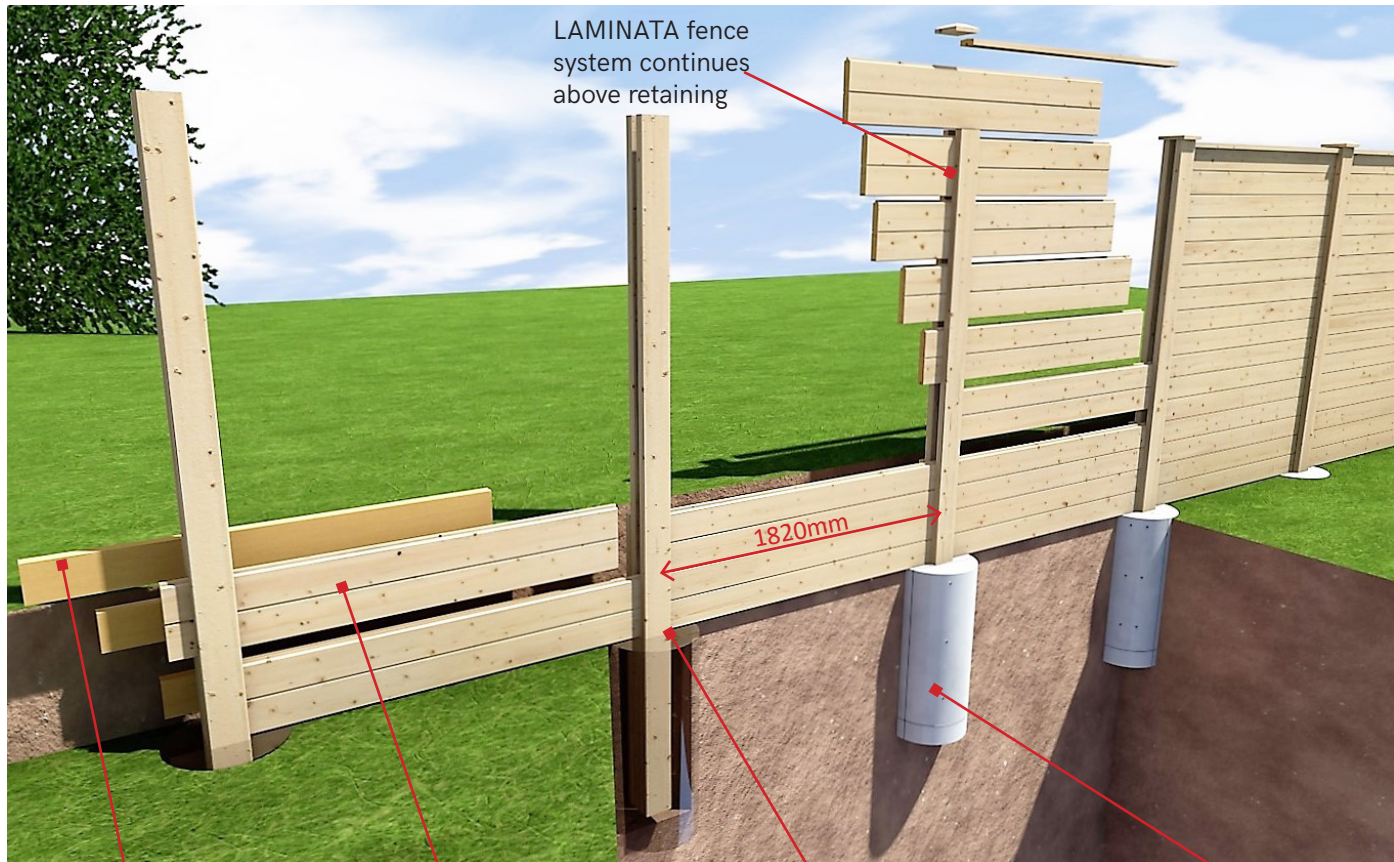
Inspiration



SOLID TIMBER PANEL RETAIN & FENCE

RETAINING UP TO 560mm

Utilising the strength of Cross Laminated Timber (CLT) our robust retain & fence system allows flexibility in ground heights around boundaries or the option of raised garden beds. The 40mm thick CLT panel enables post spacings of the fencing and retaining to be the same resulting in a slimline & seamless combination wall.

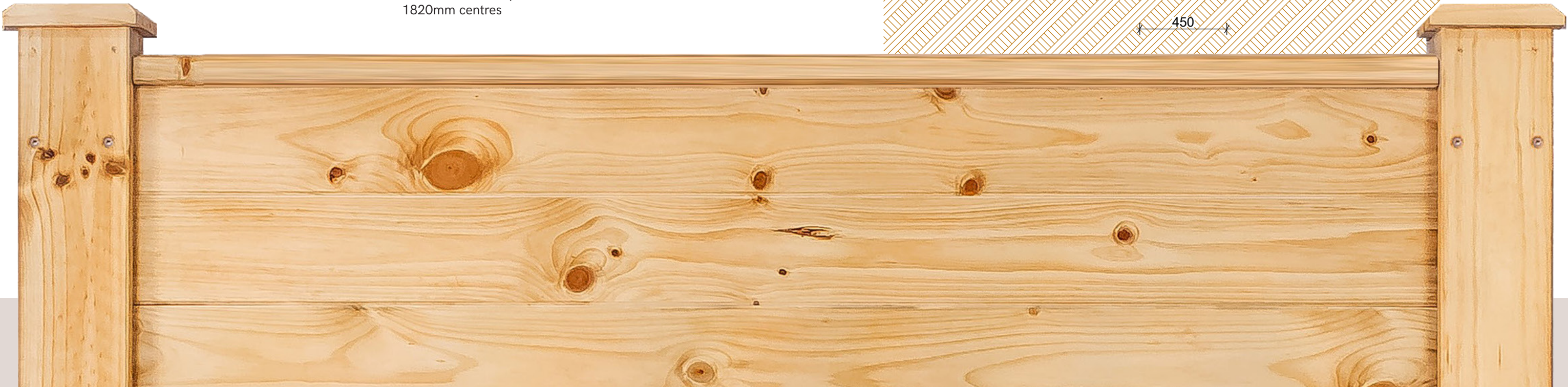
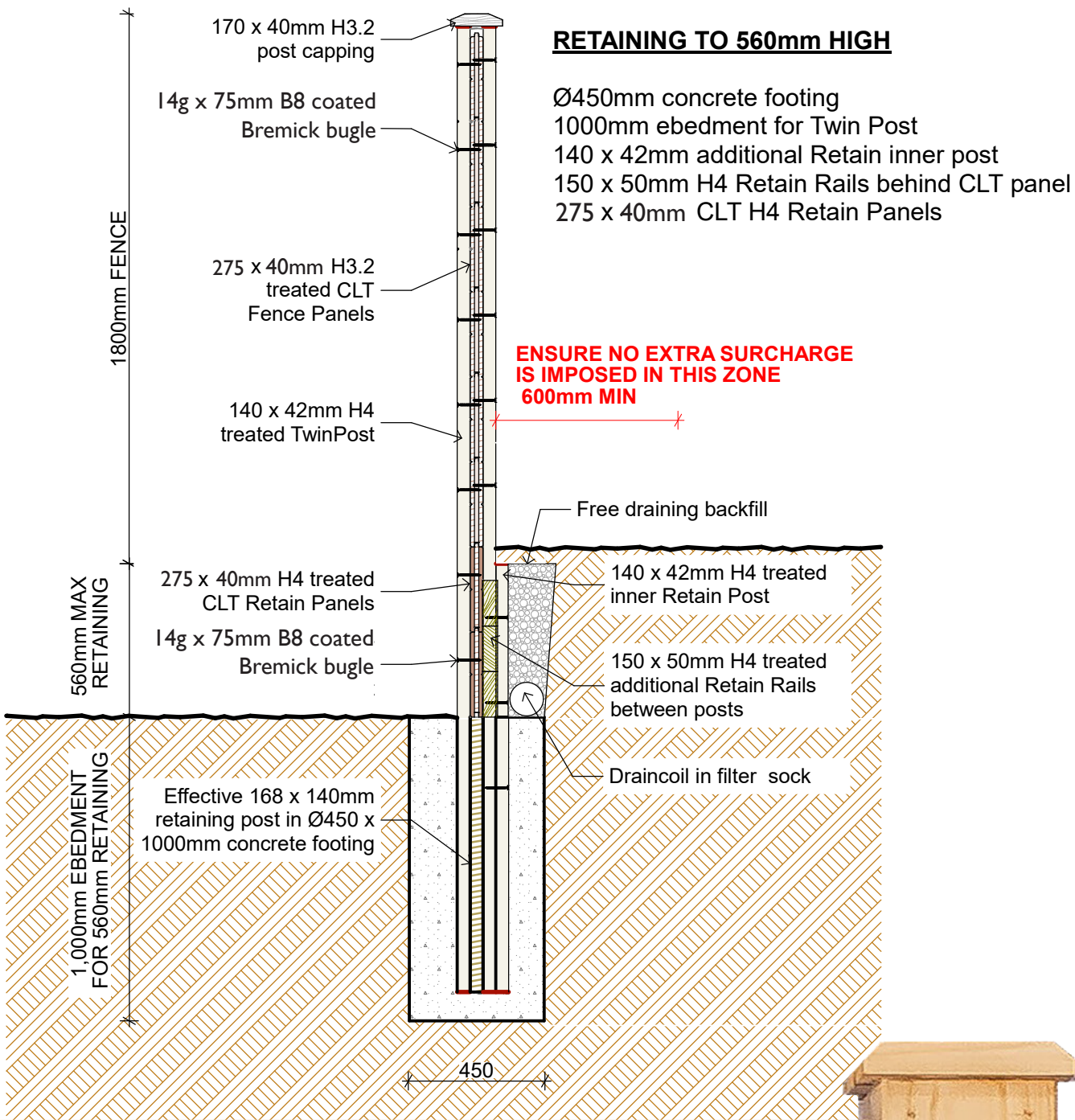


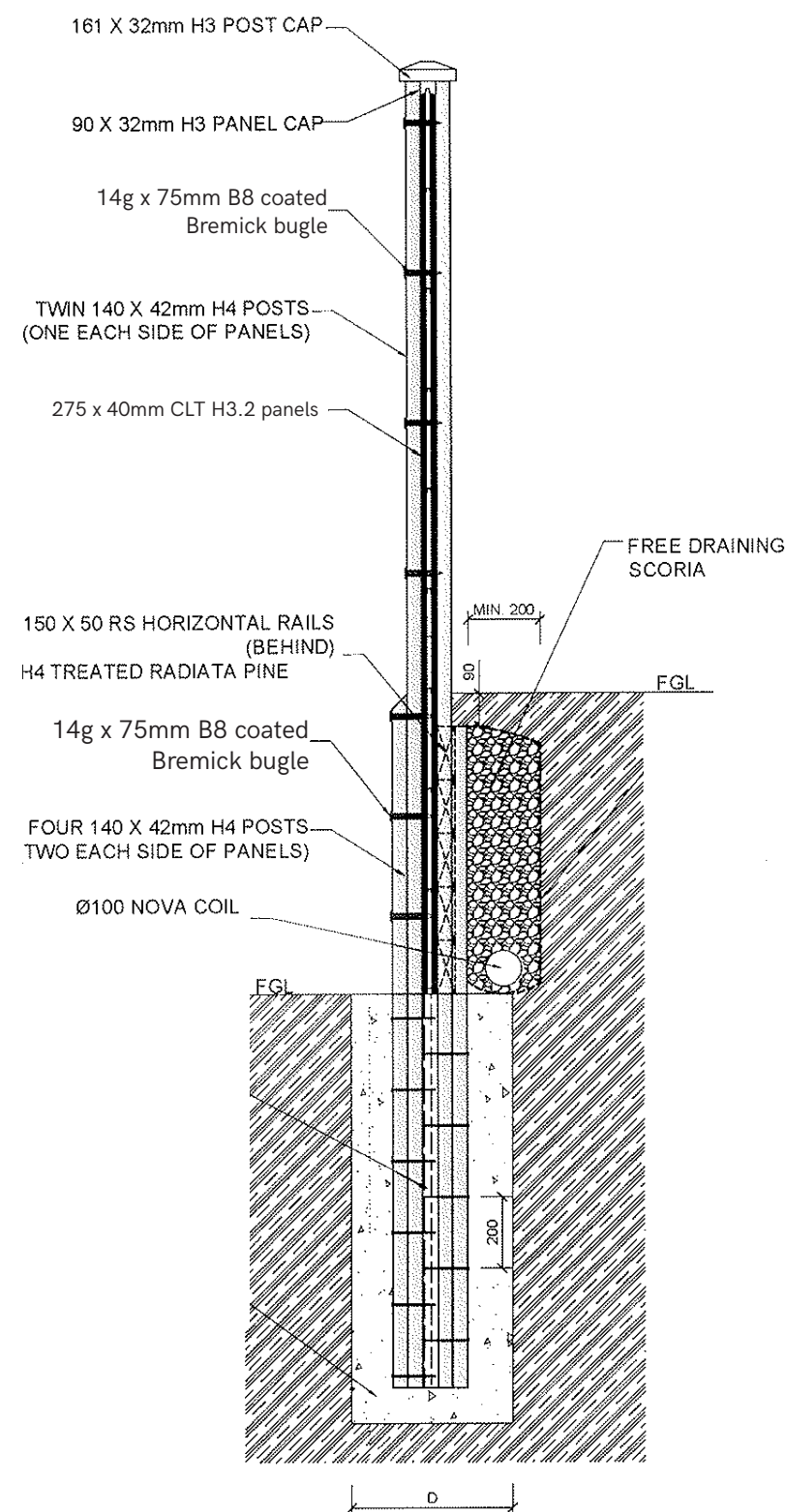
150 x 50mm H4 'hidden' layer of retaining rails

275 x 40mm CLT Retain Panels treated to H4

'Twin Post' + Retain Post system achieves an effective 168 x 140mm H4 post at 1820mm centres

dia 450 x 1000mm deep concrete





An unsightly solution...now solved by a Laminata Fence/Retain system.



An all too common problem that has been addressed on many sites with varied and sometimes regrettable results. The Laminata Retain & Fence system combines the proven prefab fence system of H3 treated CLT panels with a double up of H4 retaining rails below ground. The Laminata Twin Post system is bolstered by additional Retain Posts either side with an overall post depth of 210mm.

Adaptable and versatile, the Laminata fencing system can now provide retaining to allow backfilling for level lawns and gardens. The Laminata Retain & Fence provides a seamless TG&V solid panel finish on both the lower and upper sides, The Laminata 'Twin Posts' are spaced at 1820mm centers.



Our Mill

Mt Pokaka Timber Products Ltd.

Our Kerikeri mill has been in operation since 1991, and with aggressive investment back into the business, we have continued to grow and provide more jobs in the local community. We process in excess of 100,000 cubic metres per annum, and are continually improving recovery percentages to make the most of Northland's valuable pine resource. We are excited to develop value added products under the Laminata brand that will bring real benefits back to Northland.

Sustainability

Locally harvested, renewable resources

Our timber is sourced from sustainable plantation forests and we utilise the residues from saw-milling to provide the heat energy to dry our wood. Being a fast-growing species, Pinus Radiata is more sustainable than hardwoods.

Building with wood is one of the simplest ways to lock in carbon to protect future generations. Laminata systems can save large amounts of CO² compared to concrete and steel fencing systems.



MANUFACTURE



OUR UNIQUE ADVANTAGE

Factory based manufacture of prefabricated building components is widely accepted as the most efficient use of resources in the construction industry. Reduction of waste, manufacturing in a safe controlled environment and fast assembly time for on-site works are just some of the advantages that a Prefab fencing system has over traditional post and rail construction. The Laminata fence system boasts some additional defining efficiencies and installation advantages that are unique to the brand.

FROM LOG TO CLT

Typical CLT manufacturing plants are set up to produce project specific whole wall or floor constructions that require a high grade of softwood for outer layers that are long lengths or finger jointed feed stock to make large spanning panels, several layers thick.

Laminata specialises in high conversion rate from shorter, export grade logs where the different quality required for outer or inner CLT layers can be graded at the resaw line.

The manufacturing of Laminata components is completed on site in our Northland timber processing facility, converting Pinus Radiata logs into sawn timber, which is kiln dried. Dried timber is machined, dimensioned and glued into CLT panels then, surfaced and treated for delivery direct to market.



MANUFACTURE

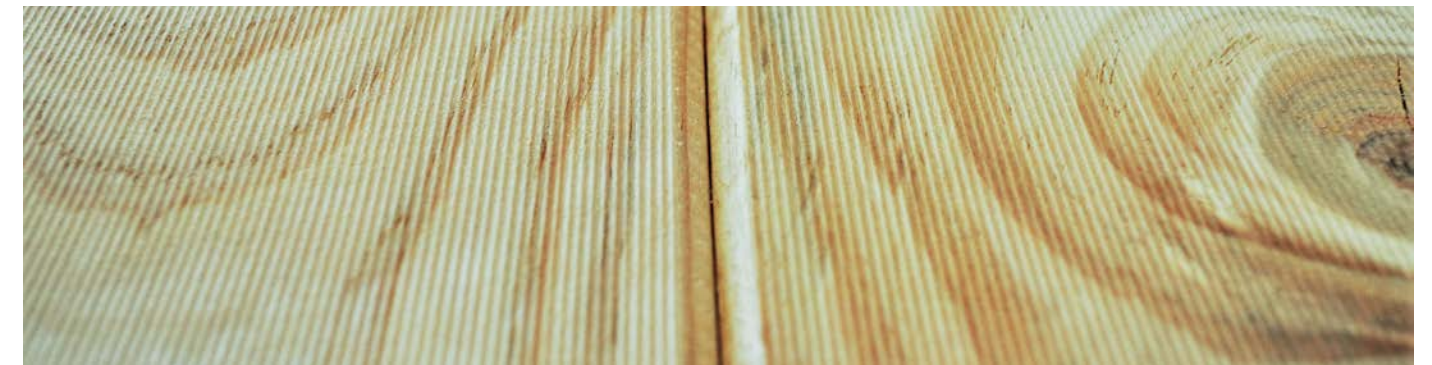
PANEL MANUFACTURE

The Laminata fencing system components are prefabricated in a controlled factory environment with quality assurance throughout the process to ensure consistent quality and dimensional accuracy of all the components.

The factory assembled panels that make up the core of the Laminata fence system are a lamination of three offset layers of 14mm x 140mm pine boards. LOCTITE-PURBOND™ adhesive is applied to the board faces, then the assembly of transverse and longitudinal boards are pressed at controlled high pressure until cured.

FINISH

The Laminata small format CLT fence panels are machined with a rougher-headed surface and 'V' groove for the TG & V effect.



DURABILITY

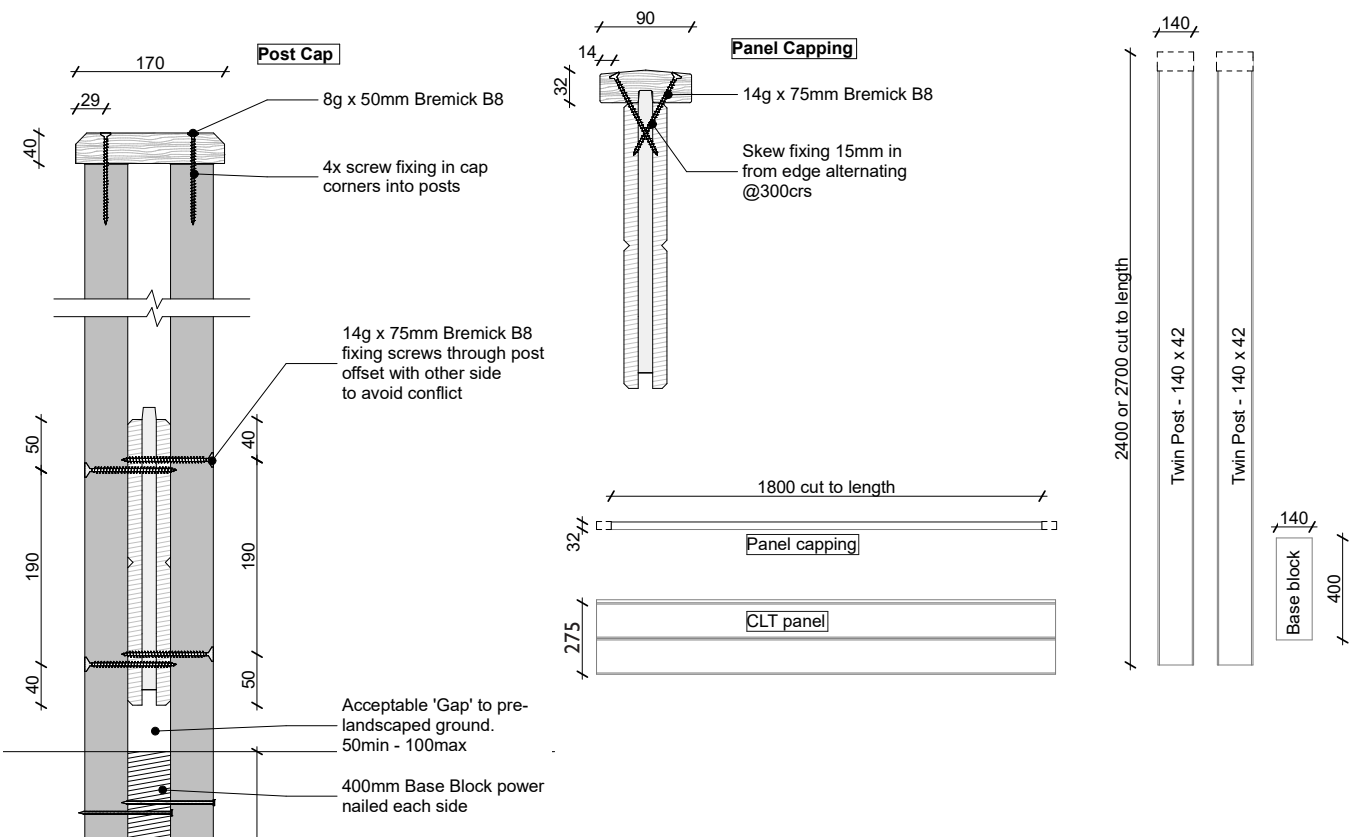
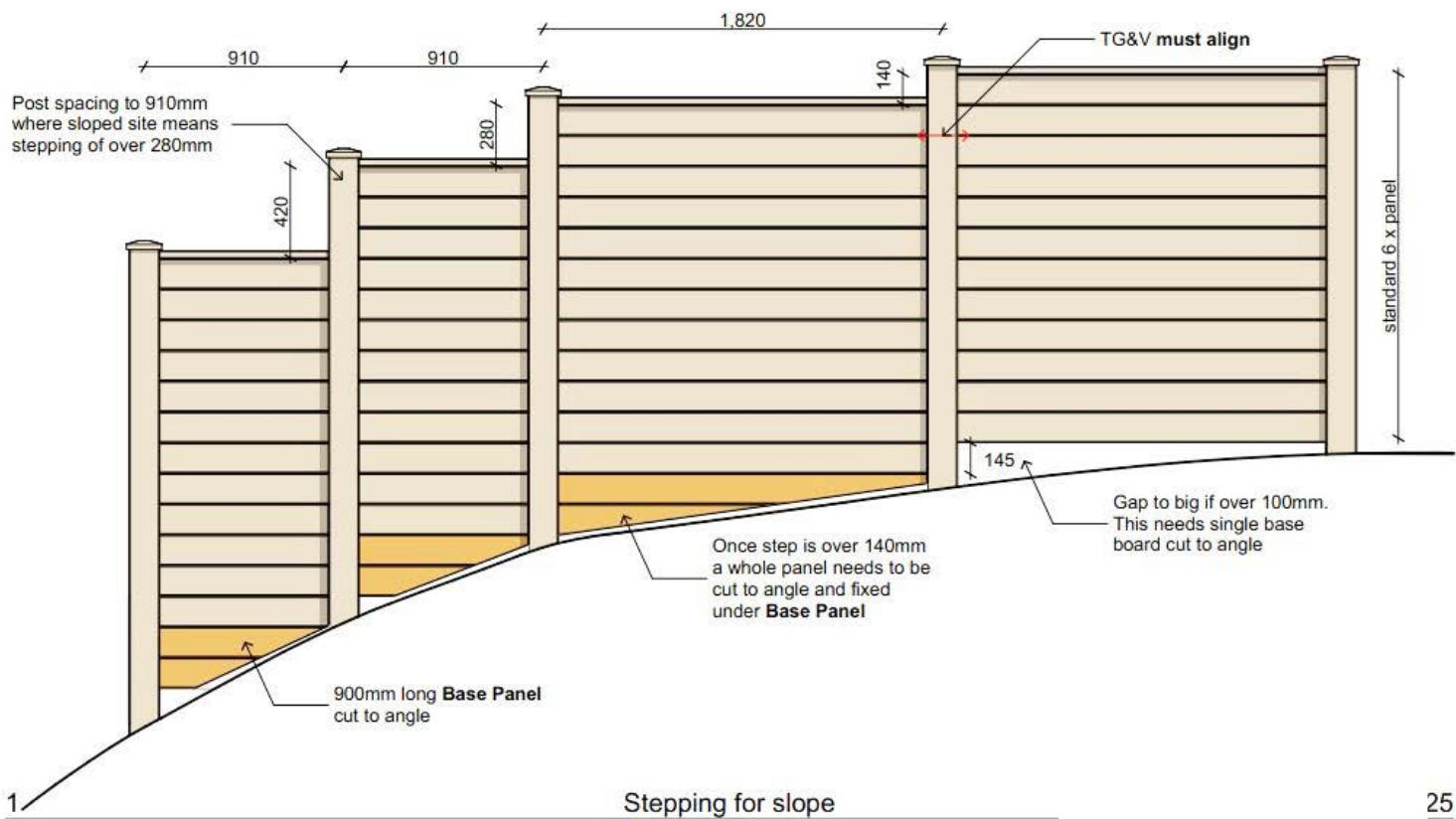
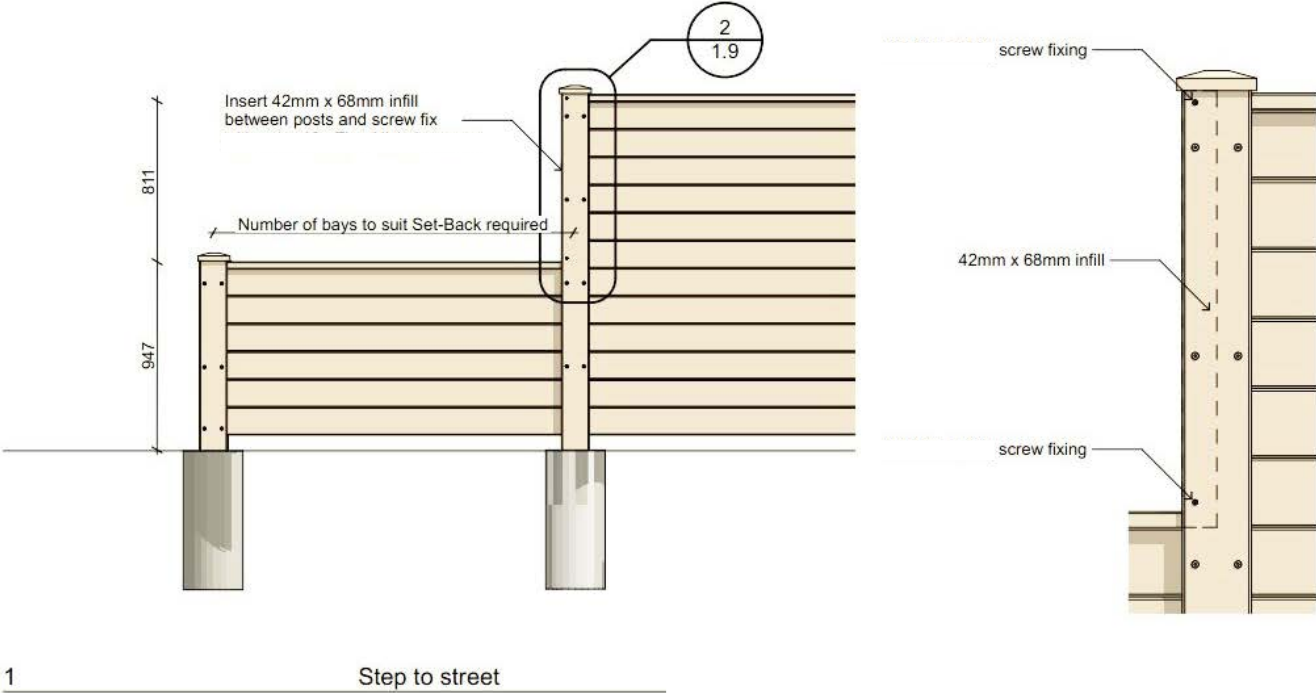
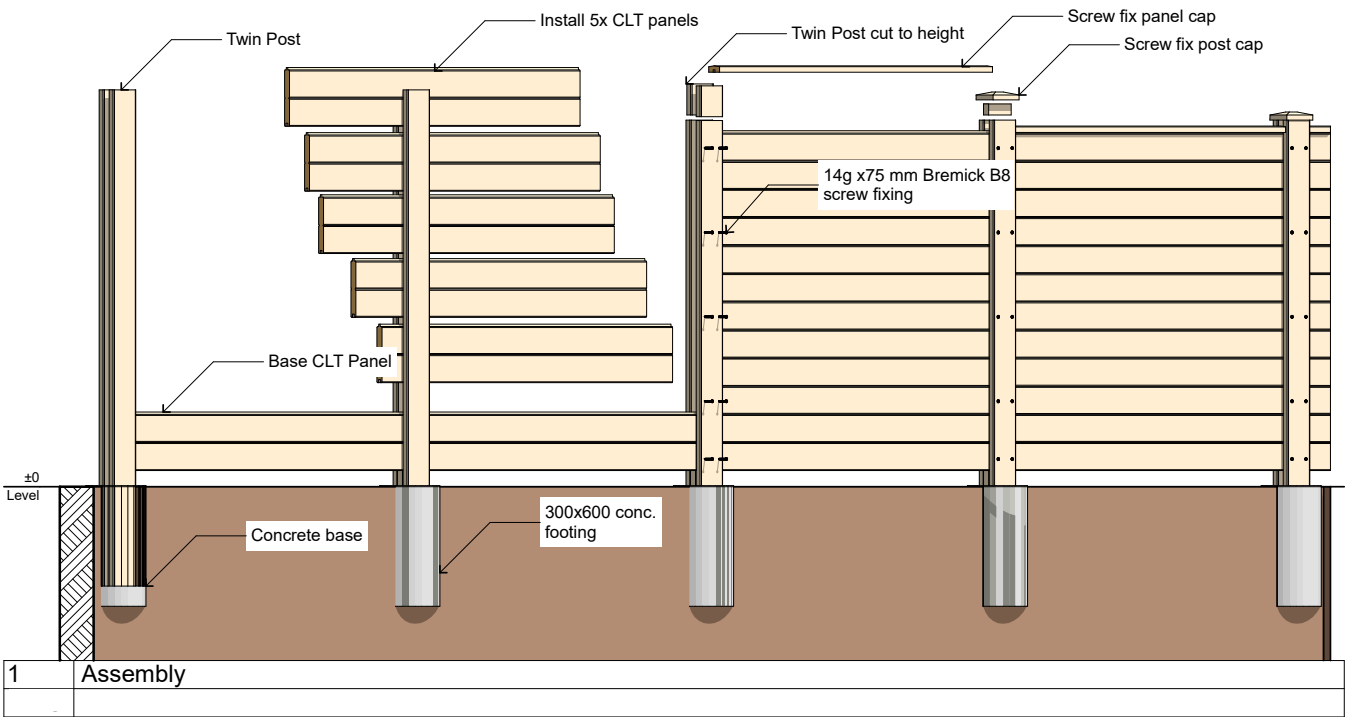
All fence components are pressure treated using CCA. In ground components are treated to H4 (hazard class 4), all above ground components to H3.2 and independently tested in accordance with NZS3640.

The LOCTITE-PURBOND™ adhesive is approved for Service Class 3 and provides assurance of long-term performance, through resistance to hydrolysis, oxidation and thermal or microbial degradation.

ENGINEERING

The Laminata CLT panels have been subjected to vigorous testing and are assessed for their strength and stiffness performance properties are proven.





Lifewood[®] CCA

Properly treated and processed, Lifewood CCA products are proven long lasting & durable.



CCA pressure treated wood will last for decades, even in harsh outdoor exposures.

Hazard Class 3.2

Exposure: Exposed to the weather, above ground, or protected from the weather but with a risk of moisture entrapment

Conditions: Periodic wetting, not in contact with the ground, more critical end uses

Biological Hazard: Decay fungi and borers

Typical Uses: All H3.1 uses, plus structural uses and decking - see NZS3602

Hazard Class 4

Exposure: Exposed to the weather, inground or fresh water

Conditions: Ground contact, or conditions of severe or continuous wetting

Biological Hazard: Decay fungi and borers

Typical Uses: Fence posts, landscaping timbers



Durability statement for LOCTITE-PURBOND Adhesives

LOCTITE-PURBOND adhesives for Engineered Wood Elements

LOCTITE-PURBOND adhesives have ever since been evaluated for the use in all three service classes, mainly considering glulam as target application. Since the introduction of the first commercially available 1C PUR adhesive in 1994 – PURBOND HB 110 – thousands of cubic meters of load-bearing wood elements have been produced using this technology. Therefore, in addition to the many accelerated durability tests specified by the standards, a huge pool of practical experience could be gathered meanwhile.

Compliance to standard durability requirements

LOCTITE-PURBOND adhesive are classified as Typ I adhesive for the use service classes 1, 2 and 3. They are certified according to the relevant standards for use in structural applications. These standards include a range of durability tests or so called *accelerated aging tests*. Such tests are designed to predict the durability and the long-term performance of adhesives.

- EN 301 and EN 302-2, delamination test
- EN 301 and EN 302-1, tension shear test after various climatic treatments
- EN 391, Method A and Method B, delamination test
- EN 14080, Annex C, longterm creep tests under varying climate conditions
- AS/NZS 4364:2010 and AS/NZS 4364:1996, delamination and shear tests after various climatic treatments
- JAS OE-4, delamination test of finger joints (boil-dry and vacuum-pressure)
- JAS Cond B&C, delamination and shear tests

Durability of the LOCTITE-PURBOND glue-line

LOCTITE-PURBOND adhesives are formulated for the most part with high-performance raw materials from Bayer MaterialScience AG. These so called prepolymers are based on polyether polyols and diisocyanatodiphenylmethane and are terminated with moisture reactive isocyanate groups. The adhesives also contain catalysts and other additives. When an adhesive so formulated is applied to wood, it reacts with moisture from the substrate or the ambient air to form a durable and inert polyether-based polyurethane-polyurea system. Once cured, LOCTITE-PURBOND products are resistant to hydrolysis, oxidation and thermal or microbial degradation.

Drills Faster Lasts Longer

Drills faster	8 times harder coating provides 30% faster drills times
Lasts longer	Lasts 4 times longer than conventional Galvanised coatings*
Engineering	Manufactured to suit the unique Australian construction conditions
Quality	Tested to strict quality standards in Bremick's NATA accredited laboratory

*AS3566.2 CL3 Galvanised

"Revolution B8 Coating has been independently tested in very severe marine test sites and certified to AS 3566.2 CL 5.4a (Outdoor Exposure Test)"

Established in 1965, Bremick Fasteners is Australia's largest supplier of Industrial Quality Fastening Products.

A revolution in screw performance!

Laminata

we've got this

BENEFITS

- *CLT panels span between posts for a solid seamless look without nails, palings or rails.*
- *Complies with Pool Safety NZS8500:2006 as non-climbable boundary fencing.*
- *Prefab components are fast to install and reduce waste.*
- *NZ grown and manufactured sustainable wood.*
- *Delivery to the job site direct from the manufacturer.*
- *Built to last with - Excellent strength, stability and durability.*

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