

When your reputation and the long- term value of the build are at stake, it's important to choose carefully.

We know you want the certainty of knowing you're working with the best quality products for your new build or renovation project – products that are safe and proudly New Zealand-made.

Sometimes that can be tricky. Many imported, un-proven alternatives are now available in New Zealand, which is not ideal. New Zealand needs to protect our own timber products and timber manufacturing industry.

At last, KLC, a New Zealand family-owned business with substantial investment in manufacturing, has introduced a safe, environmentally friendly, sustainable treated exterior cladding range. KLC is one of New Zealand's largest and most innovative timber treatment and re-manufacturing operations producing weatherboards, fascia and dressed boards.

They recognised the benefits of offering a safer product and have gone the extra mile to bring their Generation 2 NZ Timber Cladding Systems to the construction industry.

The company introduced Koppers Performance Chemicals MicroPro® water-based treatment 7 years ago, which utilises micronised copper compounds. Koppers MicroPro® Wood Treatment Technology was recently awarded independently-certified environmental credentials for Green Building (Global GreenTag and GreenRate™ Product Health Declaration), Low VOC emissions (GreenGuard Children and Schools) and is an Environmentally Preferable Product (SCS life cycle certified).

The Global GreenTag GreenRate $^{\text{\tiny M}}$ is one of the world's most robust, trusted and widely recognised ecolabels. The Global GreenTag



certification also includes the Product Health Declaration which conveys it is safe for human health (and eco-systems) and can be used with absolute peace of mind in workplace and residential building projects, reducing risk for building, design, and procurement professionals while supporting the user and occupants' health and well-being.

KLC's engineer, David Lewis says, from a production point of view, MicroPro® creates a more stable substrate. "Other treatments are left to evaporate out of the timber. Residues are left behind which can cause issues down the line when it comes to painting. Also, there's no odour and very low level toxicity in MicroPro®. It's a lot more pleasant to work with as a manufacturer and as a builder."

He adds that having environmental certification creates a big advantage over CCA. "With more environmentally friendly chemicals than other treatment processes on the market, you know it's safe. MicroPro® does not contain any chromium or arsenic which makes it compatible with aluminium joinery and hot dip galvanised nails so it won't corrode the fixings, whereas CCA can."

And it's obvious, he says, using NZ Radiata rather than imported pine is good for the country. "We like to buy product that is made or grown and manufactured locally. By using our own natural resources, we're creating employment for New Zealand."

You absolutely know MicroPro® will satisfy New Zealand Building Standard Regulations and give your valued customers the protection and security of a lifetime of performance.

KLC's Generation 2 H3.2 MicroPro® treated timber weatherboard cladding system is vastly superior to other products available. MicroPro® has a 50 year treatment warranty from an internationally renowned preservative supplier, more than double other cladding treatments. Other timber cladding treatment systems are mostly H3.1 with 15-25 year warranties.

KLC has researched extensively and worked hard to find an alternative wood treatment to meet the industry standard. This is an advanced product environmentally.

Builder, Anthony Robinson of Sensation Homes switched to KLC's Generation 2's H3.2 timber weatherboard 4 years ago.

"From a company point of view, moving to a higher grade of timber with better quality treatment gives us greater durability and reduces the company liability. We wouldn't use any other product.

"We consider it good marketing that shows our customers we're committed to quality products. It's good for our branding.





"We've been really happy with the company. Their service is excellent. And if there are ever any issues, which is rare, they deal with them properly and quickly. They give great backup. That's really important when you've built around 80 homes with the board."

Koppers MicroPro® Wood Treatment Technology is a water-borne copper-based preservative that is **not** (CCA) chromium or arsenic based, applied to the wood using a high-pressure treatment process designed to coat and fully penetrate/permeate the wood unlike other H3.1 treatments that provide an 'envelope' that can breakdown after cutting, nailing, boring etc. The MicroPro® Wood Treatment Technology protects from termites, borer and fungal decay with a NZ Hazard Class rating of H3.2.

Compared to other treatments, MicroPro® treatment offers reduced corrosivity, allowing the use of hot dipped galvanised fasteners to meet building code requirements.

KLC's Generation 2 H3.2 products have a dual coat, superior oil-based primer providing good water resistance ready for your top coat application.

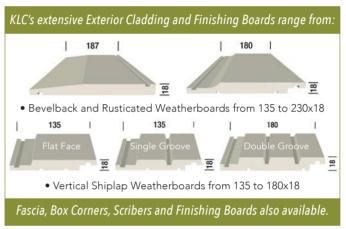
MicroPro® treated products from KLC are 100% NZ Radiata pine sourced from FSC sustainable, plantation grown forests. Weatherboards are manufactured to a standard length of 6.3 metres long, assuring less wastage.

KLC's Generation 2 H3.2 exterior claddings and profiles are also formaldehyde-free with no odour and eco-friendly. Low volatile organic compounds are used in the treatment and glue manufacturing process.

A warranty for generations to come

For your new build or renovation project - products that are safe and proudly New Zealand-made, make sure you specify KLC's Generation 2 NZ Timber Cladding Systems.





*These environmental accreditations are:

EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

Global GreenTag GreenRate[™] Level A, declared by the certification body as 'Fit-for-Purpose' and confirmed for Green Building compliance. The addition of GreenTag™ Product Health Declaration, declaring it's safe for human health (and ecosystems), UL Greenguard Children and Schools' and NGBS Home Innovation, the only residential green building rating system approved by ANSI as an American National Standard.

MicroPro® is a registered trademark of Koppers Inc. and its subsidiaries.

Links for more information on the KLC website - www.klc.co.nz Check out KLC's "GENLAM" brand for your next fence project using Micropro® H3.2 and H4 components.



















KLC'S TIMBER WEATHERBOARD SITE STORAGE SMARTS

Whether it's hot and dry or cold and wet, seasonal climatic changes affect the moisture content of timber.

Before, during and after it's in place, your timber continues to absorb or lose moisture until it reaches the same level as the surrounding environment. While storing timber weatherboards on the building site, issues can arise such as, swelling, cracking, splits at the end of the boards and face contamination just to name a few.

Obviously, this is not ideal, and in the worst-case scenario can lead to costly delays on construction projects until that moisture content returns to the manufacturer's acceptable level. It is imperative to look after timber to keep the board appearance in pristine condition. So, builders must know how to store their timber correctly to keep it safe and dry throughout the summer and winter.

To help builders achieve maximum and continual performance from their kiln-dried Generation 2 NZ timber cladding product, KLC has put together some key facts around site storage, installation and painting.

Generation 2 H3.2 products are treated with a revolutionary waterbased micronised copper timber treatment technology called MicroPro® which provides protection from termites, borers and fungal decay. The MicroPro® treated timber is then kiln-dried to a pre-determined moisture content and profiled to various weatherboard, fascia, finishing boards and D4S profiles. But it will still absorb moisture in a damp environment and release it in a dry environment.

Firstly, KLC advises that all products must be dry prior to installation and ideally stored in a dry closed in building, on a flat surface raised off dry ground on 150mm bearers spaced a metre apart. However, if the timber is delivered and awaiting relocating indoors, it's crucial there is a moisture barrier or ground sheet under the stack and a secondary waterproof cover on top, covering the edges to the base of the packet. Good air circulation lets the product breathe maintaining the optimum condition.

The product must be kept out of direct sunlight and protected from both rain and ground moisture uptake.

Chrissie Atkinson, New Zealand marketing manager of KLC explains: "It's not just the building timber itself that's affected by the weather. All framing, nogs and cavity battens that come into contact with the cladding or fascia timber must be dry prior to installation. The underside of the weatherboard is vulnerable to water ingress if the moisture content exceeds 15%. Weatherboards must be checked prior to installation and painting using a moisture meter (probe or plate (face) moisture reader) and should not be installed until the board has returned to the original dimensions following a period of drying time."

As wood is hydroscopic and the oil based primer coating does not prevent moisture uptake, it is important to keep the product dry until it is installed. Product exposed to high moisture uptake will swell temporarily but return to the original dimensions following a drying period. It is important to check the product dimensions are the same as the profile standard before installing.

Should the Generation 2 H3.2 products absorb moisture prior to installation and swell, it's not the end of the world, says NZ Sales Manager Trevor Attwood. "The swelling disappears when the timber returns to its original moisture content. However, if the boards do become wet, check the profile dimensions. If they are larger than the specification, leave them to regain their correct profile before installing."

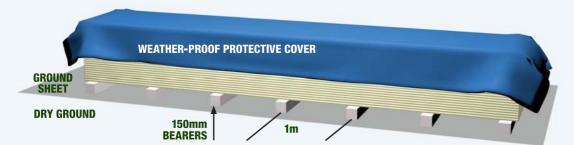
The key to maximising weatherboard performance is to ensure the boards are installed and painted while meeting the manufacturer's approved moisture content. This way you will achieve the best performance of your timber weatherboard product for generations to come.

Kevin Lewis

Managing Director

Generation 2 NZ Timber Cladding Systems







KEEP IT DRY & PROTECTED

FROM THE ELEMENTS