

AZOTEK™

NEW GENERATION TIMBER TREATMENT FOR PLYWOOD

Utilizing unique solvents and a recovery system to provide organic (carbon based) H3 protection without typical solvent residue problems

The Wood Product

Unless categorically stated otherwise, all references contained within this manual relate to the treatment of New Zealand sourced Radiata pine plywood.

Radiata pine is a traditional exotic species grown worldwide and utilized extensively in housing construction.

Radiata pine products are susceptible to fungal and insect attack if not treated.

The Treatment Process

Juken New Zealand Ltd uses a “state of the art” treatment process and a completely different class of solvent – Methylene Chloride, to deliver precise levels of the protectant Azotek® to achieve effective plywood penetration. This treatment is delivered in a modern solvent infusion vacuum pressure cycle plant.

Methylene Chloride is a solvent with a boiling point much lower than that of water. This means the solvent can flash off out of wood, without any meaningful reduction in moisture content of the wood. The treating process utilises this unique solvent property in order to recover the solvent for re-use once the treating is complete.

The treatment leaves the plywood ready for immediate use and free of any typical post treatment solvent smell and other issues often associated with conventional solvent infusion processes.

As the treating process does not utilize water, the plywood retains its original shape, size and surface finish allowing immediate use after treating and no requirements for further drying.

The Product Azotek®

Azotek® is a protectant combination comprising of two fungicides plus an insecticide to provide protection against a range of decay organisms and insects. The two fungicides are Propiconazole and Tebuconazole. Propiconazole and Tebuconazole are included in a 1:1 ratio, with this combination of actives approved for H3 use under the Australasian plywood treating standard AS/NZS1604.3 and many others.

The insecticide is Permethrin. Permethrin has a long use history and is also approved under the Australia and New Zealand timber treating standards.

A tracer is added to assist with quality control in the treatment plant.

HSE Statement

When used as recommended, plywood treated with Azotek® poses no known health risks or safety hazards.

The organic biocides are biodegradable and of low human toxicity.

The low, minimum of 0.08% loadings, make these treatments significantly safer than many alternative wood protection treatments.



the power of the molecule

Handling & Installation

Plywood products treated with this unique treatment system leave the treatment chamber process dry and ready to use.

No special post treatment products are necessary. Glues, putties, sealants and mastics compatible with untreated Radiata pine plywood will be satisfactory with Azotek® treated plywood.

Always store treated plywood off the ground and covered to protect it from direct sunlight, excess moisture, soil and other elements. If the treated plywood is to be used in an unexposed situation and becomes wet during construction, it must be allowed to dry out before fully enclosing.

Azotek® is not corrosive to nails, screws and normal metal fasteners used in construction industry. All cut edges should be retreated after cutting with a suitable wood preservative.

Always observe safety precautions when cutting, drilling or machining timber. Always avoid inhalation of sawdust by using a disposable dust mask or approved respirator.

Safety glasses should always be worn when operating machinery to cut or modify the plywood in any way.

Always use appropriate gloves when handling plywood.

Exposed skin surfaces should always be washed thoroughly and clothes should be frequently laundered to remove any accumulated treatment chemicals. All sawdust off cuts should be cleaned up and disposed of following construction.

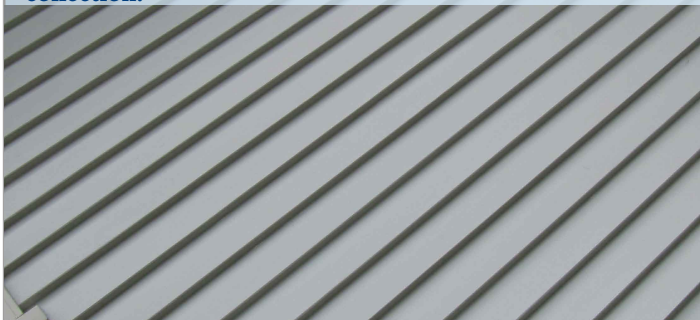
Do not use Azotek® treated products in any situation where the product may come in contact with food i.e. kitchen benches. Likewise do not use treated plywood in the construction of bee hives, animal food bins where chemicals may be ingested and become part of the food chain.

Disposal

Do not burn treated wood waste.

Do not allow sawdust and off-cuts to accumulate where they may be ingested by animals and become part of the food chain.

Dispose of treated off-cuts and residue in normal waste collection.



Azotek® Treated H3 Wood Products 5 / 15 Year Guarantee (Australia & NZ Only)

Zelam Ltd supplies H3 plywood treatment product to Juken New Zealand under the name Azotek.

Azotek is a product registered with the Environmental Risk Management Association (ERMA) of New Zealand.

Zelam offers a 5 year guarantee on plywood products treated with Azotek in situations where adequate cavities do not exist around the treated plywood to drain away excess water and allow rapid drying of the wood if it gets wet. Bracing in a sealed situation with no cavities is an example of this.

Zelam offers a 15 year guarantee on plywood products treated with Azotek where the wood can quickly dry out in cases of wetting while in service. An example is exterior cladding with a good cavity system.

The guarantee is valid from the date of purchase of the treated product and is applicable only to the original purchaser of the treated plywood product. Under this guarantee the owner will be entitled to have a new plywood product or equivalent monetary compensation supplied if the plywood becomes structurally unserviceable within 5 or 15 years (see above) of purchase due to degrade by decay fungi or insect attack. Zelam's liability in respect of a claim under this guarantee is, upon inspection and verification to the reasonable satisfaction of Zelam Ltd, to replace any Azotek treated plywood damaged by insects or rot/decay with substitute plywood treated to the same Hazard class under AS/NZS 1604.3.

Guarantee Terms and Conditions:

This guarantee is offered as an addition to any statutory warranties existing under law. It does not limit or modify any statutory consumer rights or any other rights which by law you may have. Notwithstanding, this guarantee specifically excludes the following:

- Failure by the plywood supplier or treating facility to ensure the treated plywood meets the requirements under AS/NZS 1604.3.
- Damage to plywood by agencies other than rot/decay and termites.
- Damage to untreated timbers or materials.
- Plywood that has been significantly altered (eg surface planing) with the exception of cutting to length and or notching.
- Plywood that is used in a Hazard Class area higher than H3.
- Plywood that has not been installed according to this guide.
- Plywood that has not been continuously coated with a suitable paint system.
- Consequential losses, and/or damages, however caused.
- Plywood used outside of Australia or New Zealand.
- Plywood not used in residential construction.

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