



TPX Treatment

Water-Based Timber Preservative

V1 Sep 23

Carefully Crafted Timber



Why Use TPX

TPX (Termite Protection Exterior) is a colourless odourless water-based timber treatment containing a well-proven insecticide for enhanced resistance to attack from many wood destroying insects including borers and termites.

TPX treatment is applied to dry timber using a factory-controlled spray process ensuring minimum 2mm penetration into the timber surface. The low uptake process means that the wood has minimal increase in final moisture content and low dimensional change after treatment.

Wood treated with TPX will resist attack from many wood boring insects such as termites and borer in situations where the wood is above ground, exposed to moisture but maintained with a coating or may be uncoated in interior applications. To meet the requirements of AS1604.1 up to Hazard Class H2F for use south of the tropic of Capricorn.

For exterior applications it is important that a base timber of appropriate natural durability class is selected prior to TPX treatment (minimum Class 2 according to EN350-1). Abodo recommends Vulcan thermally modified timber for exterior applications.

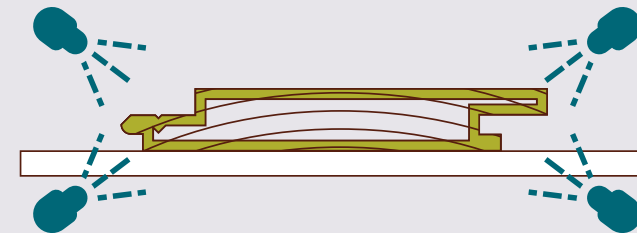
Abodo timbers available with TPX:

- Vulcan thermally modified radiata pine – cladding and panelling only.

Features and benefits:

- Increased resistance against attack by termites and wood destroying insects (subject to warranty conditions).
- Low increase in moisture content and dimensional change after treatment.
- Low VOC water-based treatment – no nasty solvents.
- Cost effective.
- Available with many of Abodo's Vulcan thermally modified range of products.
- 15 year Built to Last limited warranty (select countries only).

The treatment process:





Active Ingredients and Additives

Active ingredients

TPX contains imidacloprid as the active ingredient. Imidacloprid is a synthetic neonicotinoid preservative that is used in both agricultural and veterinary products such as flea treatments for dogs and cats. It has low toxicity to humans and other mammals.

This insecticide has been well-proven over many years for above-ground applications when applied to wood in a controlled manner. It greatly enhances the durability and the lifetime of the timber by preventing attack from boring insects such as borers and termites.

TPX does not protect against fungal decay, so for exterior applications it is important to select a base timber of appropriate natural durability (minimum Class 2 according to EN350-1 is recommended).

Additives

Preservative solution properties are further enhanced with binders and encapsulated actives to ensure stability in service.

Project: Semi Bold – Australia

Product: Vulcan Cladding WB12 138x20 Nero

Testing

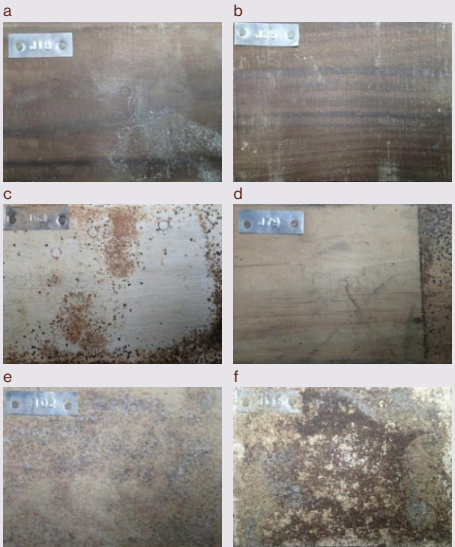
TPX has been field tested termite according to Australasian Wood Preservations Committee (AWPC) and CNS15756 standards.

AWPC – Drum method – *Coptotermes acinaciformis* Northern Territory Australia

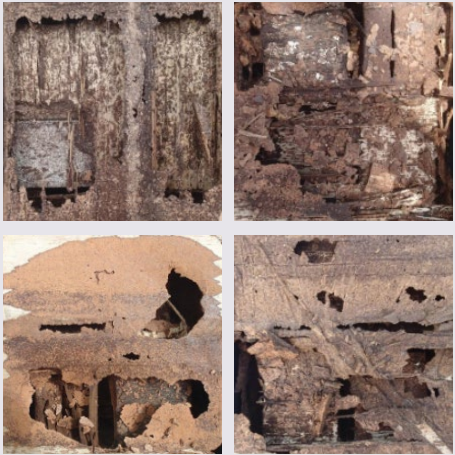
Treatment	Mass Loss	Pass/ Fail
Untreated pine control	75.5%	
TPX treated TMT rad pine leached	0.2%	Pass
Allowable mass loss	<5%	

CNS15756 – *Coptotermes formosanus* Taiwan

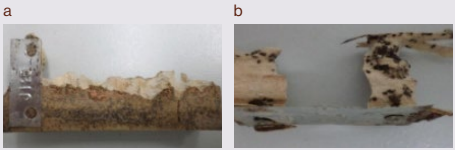
Treatment	Mass Loss	Pass/ Fail
Untreated pine control	25.1%	
TPX treated TMT rad pine	0.7%	Pass
Allowable mass loss	<3%	



Example of termite attack to treated test specimens after exposure to *C. acinaciformis* in a Hazard Class H3 field trial for 38 weeks: a) TMT, uncoated, b) TMT, stained, c) TMT, painted, d) radiata pine, uncoated, e) radiata pine, uncoated, LOSP, and f) radiata pine, painted, LOSP.



Example of attack by *C. acinaciformis* termites to bait-wood and test specimens after 38 weeks' exposure in a Hazard Class H3 field trial.



Examples of the range of termite attack and damage to non-treated radiata pine sapwood control test specimens after exposure to *C. acinaciformis* in a Hazard Class H3 field trial for 38 weeks: a) 86.5% mass loss, and b) 99.3% mass loss. (Mean mass loss for seven test specimens = 95.5%).



Scope of Use

Exterior use

TPX is designed for exterior applications where the back face is protected from the weather eg: cladding, panelling and rainscreens and the timber is maintained with a coating.

Interior use

All applications including lining, screening, exposed beams and battens. Coated or uncoated.

Installation

Product in transit should be packaged in weatherproof timber wrap. Timber should be stored in a dry location, out of the weather, above ground on bearers.

For exterior application wood treated with TPX should be of appropriate natural durability and installed in above ground applications only in accordance with good building practice and codes, paying attention to ensuring suitable ground clearance (minimum 100mm above ground to base of cladding), drainage and ventilation in the finished project. The back face of the timber must not be exposed to the weather and the product must be maintained with a coating.

Projects should be designed approved and installed in accordance with federal, state and local regulation governing construction in your area.

Project: Black Box Luxury Home – Australia

Product: Vulcan Cladding WB12 138x20 Ebony

Use a Cut End Preservative

All timber products should be treated in their final shape and form. Any surface exposed by drilling or cutting must be retreated with a suitable cut end preservative (Tanalised Enseal Clear (or similar) preservative is recommended). Failure to re-treat may negate the value of the preservative and is a requirement of the warranty. Rip sawing, thickening and planing are not permitted unless the timber is subsequently re-treated to the original specification.

Fasteners/Corrosion

TPX does not of itself increase corrosivity, and fasteners should be chosen to suit the environmental conditions and service life in accordance with building standards.

In most exposed circumstances a hot dipped galvanized fastener can be used unless specific corrosive conditions exist eg: salt spray. In general, Abodo recommends stainless steel fixings where the fixing head is visually exposed eg: face fixed cladding. For interior applications zinc coated or bright fixings may be used. Wood treated with TPX may be freely placed in direct contact with other building materials such as claddings, flashings, insulation, wiring and plumbing.

Coatings and Adhesives

Wood treated with TPX in outdoor applications must be maintained with a coating.

Treated wood may be coated with either an alkyd or acrylic primer, plus paint top-coats. The treated wood may also be coated with most clear or semi-transparent coatings.

If you desire to apply a paint, stain, clear water repellent, or other finish to your preservative treated timber, we recommend following the manufacturer's instructions and label of the finishing product. Before you start, we recommend you apply the finishing product to a small exposed test area before finishing the entire project to insure it provides the intended result before proceeding. Always ensure the timber is clean and dry prior to application.

Provided it is sufficiently dry and the surfaces are clean, timber treated with TPX may be glued with most common adhesives. Contact the adhesive manufacturer for specific advice.

Maintenance

Clean timber regularly using low pressure water, broom and mild detergent. High pressure water blasting is not permitted as it may damage the timber surface.

Mould growth can and does occur on the surface of many products, including untreated and treated timber, during prolonged surface exposure to excessive moisture conditions. To remove mould from the treated timber surface, timber should be allowed to dry. Typically, mild household bleach and water solution with brush can be used to remove remaining surface mould.

Handling

Wear recommended personal protective equipment when handling treated wood. See below guidelines and Safety data sheet for the treated wood. For more information visit www.epa.gov.

- Wear a dust mask and goggles when cutting or sanding timber.
- Wear gloves when working with timber.
- All sawdust and construction debris should be cleaned up and disposed of after construction.
- Wash work clothes separately from other household clothing before re-use.
- Preserved timber should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges.
- Do not use preserved timber under circumstances where the preservative may become a component of food, animal feed, or beehives.
- Only preserved timber that is visibly clean and free of surface residue should be used.
- If the timber is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed.

Disposal

Treated wood offcuts are not a hazardous waste and should be disposed of to landfill. Treated wood offcuts should not be burnt in domestic woodfires or barbecues.

- Do not burn preserved timber.
- All sawdust and construction debris should be cleaned up and disposed of after construction.
- Disposal Recommendations: Preserved timber may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with federal, state, and local regulations.
- Do not use preserved timber as mulch.

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