



30-year limited warranty

Available with FSC Certification

**Superior durability against rot,
fungal attack and insects**

Long-term termite protection

Resists corrosion to nails and fastenings

A pleasure to work with – real wood

**TECHNICAL
MANUAL**





LIFESPAN





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LIFESPAN® AT A GLANCE

Wood has long been the choice of builders. It is beautiful, versatile and easy to work with. However, wood is also subject to rot, fungal decay and insect attack. With **LIFESPAN®** pressure treated, primed boards, wood now comes with long-lasting durability and low-maintenance peace of mind.

LIFESPAN® is protected with the combination of a pressure treatment using carbon-based biocides to ward off insects and fungal decay, a proprietary water repellency system to maximize dimensional stability and an alkyd-based primer to provide superior durability against the elements. This allows **LIFESPAN®** to be offered with a 30-year limited warranty against fungal decay and insect damage, including termites. Please see warranty details included in this manual.

LIFESPAN® is manufactured in world class manufacturing facilities in the southern hemisphere. Our wood raw materials come only from renewable sources and we utilize leading technology and innovative techniques to maximize the recovery of logs into finished products and minimize waste in our mills.

- 30-Year Limited Substrate Warranty Against Fungal Decay and Insect Damage, including Termites
- Available with FSC Certification
- Non-corrosive to Fasteners
- EPA Registered Carbon-based Pressure Treatment
- Multi-layer Protection Resists Water Uptake
- REAL WOOD!!
- Alkyd Primer Provides Defect-Free Surface
- Suitable for Exterior and Interior Needs

This Manual has been developed to provide information for the use of **LIFESPAN®** in interior and exterior above ground building applications (American Wood Protection Association (AWPA) UC3A (painted)).

FLETCHER WOOD SOLUTIONS

Fletcher Wood Solutions®, headquartered in Annapolis, MD, is a part of the New Zealand Tenon Limited group of companies. It operates pine-manufacturing facilities in Taupo, New Zealand and is the largest manufacturer of defect-free, appearance grade radiata pine products in New Zealand. Fletcher Wood Solutions® distributes its clear boards, mouldings, **LIFESPAN®** treated wood, and lumber to the North American market through its proven and completely integrated supply chain. Its procurement activities enable the end-user to access a variety of complementary products including non-FSC certified **LIFESPAN®**. In addition, Fletcher Wood Solutions® maintains direct access to one of the largest FSC certified pine plantation forests in the world, and its New Zealand manufacturing plants have been certified by the Forest Stewardship Council (FSC SCS-COC-00198).

LIABILITY

Fletcher Wood Solutions® and Tenon® accept neither liability nor responsibility if the information contained in this Manual is incorrectly or inappropriately applied or interpreted, nor if **LIFESPAN®** is used in a manner other than as explicitly set out in this Manual.

Fletcher Wood Solutions® has taken care to ensure that the information contained in this Manual was correct at the time of writing. However, Fletcher Wood Solutions® and Tenon® reserve the right to make changes or improvements to this Manual and to **LIFESPAN®** without prior notice.



SPECIFICATIONS

PRODUCT RANGE

LIFESPAN® products are suitable for a range of interior and exterior above ground building applications. Examples of such products include:

Exterior Woodwork:

- Fascia
- Trim boards: surfaced all sides, eased edges or with one rough-sawn face
- Exterior mouldings (brick mould, lattice, quarter round, etc.)

Siding:

- Available in a range of patterns

Windows:

- Window components (sash, casement sash, jambs) – machined cut stock
- Mouldings: brick mould

Exterior Doors:

- Door frames
- Stiles, rails (especially door bottoms)
- Sill substrate
- Mouldings: brick mould

Interior Woodwork:

- Baseboard
- Crown Backer
- Trim around doors and windows

QUALITY STANDARDS

Material: Finger-jointed, kiln dried, tree farmed, radiata pine

Treatment: Vacsol® Azure is a solvent (white spirits) based, tri-functional wood preservative containing fungicides (propiconazole & tebuconazole), an insecticide/termiticide (permethrin) and a water repellent (WR) system.

Propiconazole	0.55% (m/v) (typically)
Tebuconazole	0.55% (m/v) (typically)
Permethrin	0.35% (m/v) (min.)
Co-solvent	2.0% (m/v) (min.)
Vacsol® WR (1)	3.5% (m/v) (min.)
White spirits	balance
(1) Proprietary water repellent formulation	

Priming: Two coats high-quality alkyd primer applied at 3-4 wet mils. Total dry film build 3-4 mils.

Quality: No material visible defects: pinhole, tear out, etc. allowed prior to last primer coat

Machining: Pitch marks 1/16" maximum

Length Tolerance: -0+1/2"

Width Tolerance: +0-1/32" (+0-0.5mm)

Thickness Tolerance: +0-1/32" (+0-0.5mm)

Moisture Content: 10-15%MC (90% of pieces)

Straightness

Cup: 1/32" in up to and including 4", 1/16" in over 4"

Bow: 2" in 16ft

Crook: 1" in 16ft

Twist: 1" in 16ft



- ▼ 1. Exterior woodwork including fascia, trim boards, exterior mouldings
- ▼ 2. Interior woodwork including trim, crown backer, and baseboard
- ▼ 3. Sidings and claddings
- ▼ 4. Exterior doors including frames, stiles, rails, sill substrate, mouldings
- ▼ 5. Window components and mouldings, casement sash, sash jambs



PRODUCT OVERVIEW – FROM FOREST TO HOME

ENVIRONMENTAL COMMITMENT



All **LIFESPAN**[®] is manufactured with radiata pine from environmentally friendly tree farms. We utilize leading technology and innovative techniques to maximize the recovery of logs into finished products and minimize waste in our mills. For

customers needing even more environmental assurance, our New Zealand processing mills have FSC chain of custody certification (www.fsc.org), demonstrating that the wood they source meets strict environmental, social, and economic standards.

PRESERVATIVE

LIFESPAN[®] has been treated with a solvent-based (non-aqueous), colorless, carbon-based, wood preservative (LOSP-Light Carbon-based Solvent Preservative). Three active ingredients (propiconazole, tebuconazole and permethrin) synergistically provide protection against a wide range of fungi, insects and rot:

- Propiconazole and tebuconazole are EPA registered systemic fungicides, used widely to control mould and mildew in agricultural and horticultural applications. Together, they protect lumber from a wide range of wood destroying fungi.
- Permethrin is an EPA registered insecticide used to protect wood against termites and borers. Permethrin is used in many agricultural, household and pharmaceutical applications.

This combination has been specifically formulated as an EPA registered wood preservative. It can be used to treat wood for use in American Wood Preservers Protection UC3A applications. The chemicals are virtually insoluble in water, remaining permanently in the wood and not leaching into the soil. The LOSP used in **LIFESPAN**[®] is non-corrosive to fasteners, so **LIFESPAN**[®] can be used with regular galvanized fasteners in exterior applications and any fastener type in interior applications.

The LOSP wood preservative, Vacsol[®] Azure, is manufactured and supplied in New Zealand by Arch Wood Protection (NZ) Limited, a wholly owned subsidiary of Arch Chemicals, Inc. of the USA.

PRESSURE TREATMENT

Unlike traditional dip treatments and newer spray-on treatments that only reach outside surfaces, **LIFESPAN**[®] is pressure treated, ensuring that the carbon-based biocide penetrates and protects the entire sapwood substrate with precise quantities of preservative. This process avoids the surface roughness and grain-raising often associated with water-borne preservatives.

During pressure treatment, the wood is also impregnated with waxes and resins, which bond with the wood. These resist moisture uptake, enhancing **LIFESPAN**[®]'s dimensional stability even when exposed to harsh environments of high humidity and precipitation.

After treatment, the solvent is allowed to evaporate sufficiently to permit subsequent priming, packaging and shipping.



PRIMER SYSTEM

LIFESPAN[®]'s factory-applied two-coat alkyd primer system further protects against water infiltration and weathering. The first full primer coat provides deep penetration and high film build to provide water repellence and to limit cracking. The second primer coat acts as an undercoat, providing a smooth, even, defect-free surface, concealing fingerjoints. The primers used in **LIFESPAN**[®] are supplied by trusted paint manufacturers such as PPG Industries.







PERFORMANCE

DURABILITY

LIFESPAN[®] carries a 30-year limited durability warranty against fungal decay (rot) and insect attack (including termites). Details of the warranty can be found on page 12 of this Manual.

DECAY

The preservative system used in **LIFESPAN**[®] has been extensively tested against fungal decay in laboratory tests and field tests around the world in extreme situations. The performance in these trials has provided the confidence to back **LIFESPAN**[®] with a 30-year limited warranty against fungal decay – although in most normal situations a longer service life is expected.

LIFESPAN[®] is treated to an average retention of 0.08%/m total azoles (0.06%/m minimum) as a fungicide together with 0.02%/m permethrin as an insecticide (termicide).

Toxic values for a range of typical decay fungi were determined by laboratory decay tests carried out in accordance with European protocols (EN113) using *Pinus sylvestris* (see table below). The minimum retentions (0.27kg/m³) used in **LIFESPAN**[®] are much higher than the fungal toxic values so determined.

The Mississippi Forest Products Laboratory of Mississippi State University established L-Joint trials (in accordance with AWP Standard E9-97) using Ponderosa pine at both Hilo, Hawaii and Saucier, Mississippi in 1996. L-Joint tests are designed to simulate performance in millwork applications.

These have been inspected yearly and results after six years exposure showed good resistance to decay, at retention levels less than used for **LIFESPAN**[®] (0.27kg/m³ minimum) especially at Hilo, Hawaii, which is a recognized high hazard site for fungal decay.

INSECTS (INCLUDING TERMITES)

The **LIFESPAN**[®] protection system also contains an insecticide, permethrin, which is effective against insects, including termites. The permethrin retention (0.02%/m) used in **LIFESPAN**[®] is approved in both Australia (AS1604) and New Zealand (NZS3640) and has been extensively used for out of ground contact applications.

A recent trial by CSIRO, Australia (*Susceptibility of Envelope-Treated Softwood to Subterranean Termite Damage*, by James W. Creffield. *Forest Products Journal*, December 2004) examined the performance of permethrin, as both an envelope and fully impregnated, against termites. Samples were exposed for 12 months at Gunn Point, Darwin, and Northern Territory, Australia where a species of termite, *Coptotermes acinaciformis*, is prevalent. All specimens showed evidence of contact with termites, indicating activity. The full penetration treatments with 0.02%/m permethrin had a mean rating of 1.2 (radiata pine) with a range of 1-2, and 1.0 (slash pine). Untreated samples had a mean rating of 6.3 with a range of 5-7 (1 being sound; 7 being destroyed [75 to 100% mass loss]).

Further samples were exposed at Beerburum, Queensland where both *C. acinaciformis* and *Schedorhinotermes* spp. occur. Samples were examined after seven months. Samples that were fully treated with 0.02%/m permethrin had no weight loss due to termite attack, whereas untreated controls had a weight loss of 16.2 to 262.5g.

The successful control of termite attack by permethrin in Australia, involving a number of different termite species, provides an assurance that **LIFESPAN**[®] products will also be protected from attack by the Formosan termite, *C. formosanus*.

STABILITY

Dimensional stability is a critical wood property for cladding, joinery and exterior millwork uses.

Radiata pine has naturally low shrinkage, which contributes to its stability. Compared to other North American softwoods, radiata pine has shrinkage comparable to ponderosa pine and lower than hemlock, loblolly pine and Douglas-fir.

The use of finger-jointing further enhances the dimensional stability of **LIFESPAN**[®] products. In addition, the preservative treatment used in **LIFESPAN**[®] contains waxes and resins, which significantly reduce the uptake of liquid water and subsequent swelling of wood. **LIFESPAN**[®] products will show improved stability over untreated products.

Toxic Values (kg/m³) for Propiconazole/Tebuconazole (1:1)

Test fungus	Unaged	Evaporative aged (EN73)	Leached (EN84)
<i>Coniophora puteana</i>	0.010–0.020	0.020–0.030	0.040–0.070
<i>Gloeophyllum trabeum</i>	0.030–0.045	0.030–0.045	0.020–0.030
<i>Poria placenta</i>	0.050–0.070	0.030–0.045	0.040–0.070
<i>Coriolis versicolor</i> *	0.100–0.165	0.210–0.250	>0.180

Wocosen Product Information Sheet, Janssen Pharmaceutica, Plant and Material Protection Division. *Test used on beech wood.

Average Decay Ratings for Coated Ponderosa Pine L-Joints after Six Years Field Exposure

Treatment	L-Joint treatment solution concentration (% active)	L-Joint overall retention at average uptake of 301/m ³ (kg/m ³)	Decay Rating Hilo, Hawaii	Decay Rating Saucier, MS
Untreated			1.9	1.7
Propiconazole/tebuconazole (1:1) Vac-Vac treatment	0.2	0.06	8.7	9.7
	0.4	0.12	8.8	9.8
	0.6	0.18	7.9	10.0
	0.8	0.24	9.7	9.9
Penta, Dip treatment (control)	5.0		8.3	10.0
IBPC, Dip treatment (control)	0.5		6.9	8.9

Decay rating: 10=sound, 0=failure

Other field trials have been established in Australia and New Zealand:

Average Decay Ratings for Treated and Untreated Pine

	Trial Type	Substrate	Condition	Azole Retention %m/m	Score	Sound	Failure	Start	Length of study	Location
A	Decking	Radiata	treated	0.057	9.2	10	0	1995	7 yrs	Rotorua, NZ
			untreated		0.8					
B	Decking	Radiata	treated	0.069	8.4	10	0	1998	5 yrs	Rotorua, NZ
			untreated		5.5					
C	Decking	Radiata	treated	0.069	8.8	10	0	1998	4 yrs	Queensland, Aus Beerburum State Forest
			untreated		3.4					
D	Decking	Radiata	treated	0.069	9	10	0	1998	4 yrs	Queensland, Aus Johnstone Research Sta.
			untreated		1.6					

Standards and Approvals

As a result of these and other tests, the azole preservative system is approved by Standards New Zealand (NZS3640:2003, incorporating Amendments 1, 2, and 3) for exterior above ground painted applications (equivalent to AWPAC UC3A) at a minimum retention of 0.06% total azole content.

The LIFESPAN® preservative system as used meets approvals by the Australian Pesticides & Veterinary Medicines Authority and Standards Australia (AS1604.1:2005, incorporating Amendment 1 2006 – Sawn and Round Timber for H3 Exposure) for use in exterior above ground applications where a minimum retention of 0.06% total azole content also applies, with incorporation of permethrin to meet a minimum Standards requirement of 0.02% total azole content. Such applications are as described in AWPAC Use Category classifications UC3A and UC3B. The system has similar approvals for use in the United Kingdom.



HANDLING AND INSTALLATION

WHERE YOU CAN USE LIFESPAN

LIFESPAN® products are suitable for interior and all exterior above ground use class (American Wood Protection Association UC3A). The 30-year limited warranty against fungal decay and insects is null and void if the **LIFESPAN**® product is used in contact with the ground, is used within 6" of the ground, or is used in conditions of prolonged water entrapment.

LIFESPAN® trim products can be used satisfactorily, and maintain the 30-year limited warranty, in situations where they may abut weather exposed concrete surfaces, such as in door frames, garage door jambs, built up columns, etc. However the area at where the **LIFESPAN**® contacts the concrete is a very high decay hazard risk area, and precautions need to be taken to ensure a long life:

1. All cut surfaces, notches, and bored holes must be liberally brushed or swabbed with a wood preservative. Suitable products containing either 15% or more zinc naphthenate, or 9% or more copper naphthenate include Jasco ZPW Clear Wood Preservative, Jasco Termin-8 Green Wood Preservative, Zin-Tox Formula 202, Woodlife Coppercoat, Wolman End Cut Solution, Cabot's 9800 clear wood preservative and Greens Clear Wood Preservative. Further, it is also recommended that the treated end cut be over-coated with a primer or paint to completely seal the end and avoid any water uptake and swelling.

2. Any cut ends should be placed to allow a 1/4" air gap between the concrete and the bottom end of the **LIFESPAN**® trim, to provide a water and moisture break.

3. Other joints, such as vertical between exterior trim and walls should not collect or direct water inside the structure or trap moisture.

LIFESPAN® products are not designed for and should not be used in structural (load bearing) situations.

NAILING

LIFESPAN® products should be installed in accordance with the normal industry standards. Proper application and nailing practices are essential for maximizing the performance and appearance of **LIFESPAN**® products.

Building construction features that maximize performance of exterior wood products include: wide roof overhang, wide flashing at roof edges, correctly installed flashings around doors, windows and other openings,

effective vapor barriers, adequate eave troughs and downspouts, exhaust fans to remove excessive moisture, and adequate attic insulation and ventilation.

In order to allow for normal seasonal wood movement, nailing should be such that it does not restrict movement – do not nail through overlapping pieces.

Unlike treatments that contain high levels of copper or other metals, the active ingredients in **LIFESPAN**® do not promote the corrosion of nails and fastenings. To fasten **LIFESPAN**® in exterior applications, hot dipped galvanized nails are all that is needed. High tensile aluminum or stainless steel fasteners are also suitable for use with **LIFESPAN**®. To fasten in interior applications, **LIFESPAN**® requires no specialty nails; simply fasten as you would with any other interior wood product.

Hand nailing is recommended so that the factory primer seal will not be broken. If a nail gun is used, the precise adjustment of air pressure is necessary to achieve a flush finish. Alternatively, nails can be countersunk 1/16" and filled with putty to obtain a smooth surface. Pre-drilling near the ends is recommended to avoid any possibility of end splitting.

All nailing should be over studs and total effective penetration into a solid wood base should be at least 1-1/2". Nailing patterns should comply with industry practices (see Exterior Wood in the South – Selection, Applications and Finishes. 1991. US Department of Agriculture, Forest Products Laboratory, General Technical Report, FPL-GTR-69).

TRIMMING, CUTTING AND SEALING REQUIREMENTS

While **LIFESPAN**® is pressure treated throughout the substrate, cross-cutting and any other cutting, notching, etc. of **LIFESPAN**® products may expose wood with a lower concentration of treatment. In order to maximize service life of **LIFESPAN**® products it is important (and a requirement of the **LIFESPAN**® 30-year limited warranty) that all cut surfaces, notches, and bored holes be liberally swabbed with a brush-on or spray wood preservative.

Suitable products containing either 15% or more zinc naphthenate, or 9% or more copper naphthenate include Jasco ZPW Clear Wood Preservative, Jasco Termin-8 Green Wood Preservative, Zin-Tox Formula 202, Woodlife Coppercoat, Wolman End Cut Solution, Cabot's 9800 clear wood preservative and Greens Clear Wood Preservative.

It is recommended to coat exposed end cuts and mitre joints with a good quality exterior wood primer before final painting.

Any alteration of the shape or size of the product by machining (other than as a result of sawing to length or notching as required for fitting or joining) will void the 30-year limited warranty.

GLUING

Timber building products and exterior joinery are not normally glued onsite, but if the occasion should arise any standard wood glue – with the exception of casein containing glues – may be used with **LIFESPAN®** products.

LIFESPAN® is not intended for structural uses. Where impact adhesives are to be used or highly stressed glue joints are to be made (e.g. glue laminated beams), specific advice should be sought from Fletcher Wood Solutions.

PUTTIES, MASTICS, SEALANTS

Putties, mastics and sealers should be compatible with alkyd (oil-based) paints to be suitable for use with **LIFESPAN®**. The relevant manufacturer's advice should be sought, e.g. Sika, Dow, and Master Builders.

PAINTING

For best results, and in line with general industry best practices, **LIFESPAN®** products should be painted as soon as possible after installation. To maintain your 30-year limited warranty, **LIFESPAN®** should be over coated within two months of first installation. **LIFESPAN®**'s smooth, defect free surface results from two coats of manufacturer applied, special purpose primer. Simply fill and prepare the wood for the finish coat using manufacturer's specified instructions (e.g. use exterior filler if used on the outside of a building, spot prime and sand if necessary, clean and remove surface debris). Always follow the paint manufacturer's recommendation for the application and maintenance of paint. For best results, choose a high-quality exterior acrylic/latex or oil-based paint system.

RESIN BLEED

LIFESPAN® is manufactured from radiata pine. As a natural material, it may contain resin as a natural constituent. In hot, sheltered conditions where **LIFESPAN®** has been painted a dark color, resin bleed may occur.

If the above specification is followed, any resin bleed will be minimized. It is recommended that **LIFESPAN®** be painted in light colors. Any subsequent resin bleed may be repaired by sanding back and spot priming with a stain and bleed sealer.

STORAGE

Prior to installation, and pending top coating with paint, **LIFESPAN®** should be protected from direct sunlight, dirt and other elements. **LIFESPAN®** needs to be stored in a dry location, not directly on the ground, preferably on bearers protected with a waterproof cover. However, allow air circulation from beneath to allow the product to acclimatize (**LIFESPAN®** packets are wrapped on four sides and top, leaving the bottom unwrapped). Do not completely seal the bundle.

DISPOSAL

Properly clean up and dispose of all sawdust and off-cuts after construction by ordinary trash collection.

HEALTH AND SAFETY

LIFESPAN® is safe to use and is suitable for both interior and exterior applications. The active ingredients in the LOSP treatment are in total less than 0.1%, significantly lower than most other treatment alternatives. However, even though adverse effects on the user of **LIFESPAN®** products are extremely unlikely, it is not always possible to anticipate an individual's sensitivity to the chemicals used to produce **LIFESPAN®**. It is important, therefore, to take sensible precautions to minimize exposure to these chemicals when working with **LIFESPAN®**. In particular, we recommend that you:

- Do not use **LIFESPAN®** under circumstances where the preservative may contact or become a component of food or animal feed. Examples of such uses would be cutting boards, counter tops, animal bedding, and structures or containers for storing animal feed or human food.
- Do not use **LIFESPAN®** for construction of those portions of beehives that may come into contact with honey.
- Always maintain good woodworking practices, and particularly avoid inhalation of sawdust.
- When sawing, sanding and machining **LIFESPAN®**, always wear a replaceable filter or disposable half face piece respirator. These operations should be performed outdoors to avoid indoor accumulations of airborne sawdust.
- Launder clothing that has had sawdust accumulate on it prior to reuse. Wash work clothes separately from other household clothing.
- When power-sawing and machining, and in areas with high dust levels, wear goggles to protect eyes from flying particles.
- Wear gloves and protective clothing when working with **LIFESPAN®**. After working with **LIFESPAN®**, wash exposed skin areas thoroughly before eating, drinking or using tobacco products. Avoid hand-to-mouth contact with soiled hands.
- Do not burn **LIFESPAN®**, because when burned, the chemicals used in **LIFESPAN®** may become toxic as part of smoke and ash. In particular, **LIFESPAN®** should not be burned in open fires or in stoves, fireplaces or residential boilers. Treated wood may be burned only in commercial or industrial incinerators or boilers in accordance with state and Federal regulations.

LIFESPAN® may emit a solvent odor for a period of time. This is similar to that of oil-based paint and results from the interwoven slip sheeting and containerization process. The slip sheeting protects the wood from blocking but does not allow for minute amounts of solvent to dissipate. The odor will disappear within a few days of airing.





LIFESPAN® TREATED WOOD TRIM COMPONENTS 30-YEAR LIMITED WARRANTY

1. LIMITED WARRANTY.

a. Subject to the definitions, terms and conditions set forth below in this Limited Warranty, Fletcher Wood Solutions® Inc., (“Warrantor”) warrants to each Qualified Owner¹ that each LIFESPAN® treated wood Component² will, when Properly Installed³ in or on a Qualifying Structure⁴, remain free of Damage⁵ resulting from fungal decay or insect attack for a period of 30 years following the Date of Installation⁶ provided that such Component and such Qualifying Structure are Properly Maintained⁷ continuously during such 30-year period.



¹ “Qualified Owner” means with respect to a Component, (a) the original legal owner of the Qualified Structure in which such Component is Properly Installed on the Date of Installation, and (b) each person who takes legal title to such Qualifying Structure prior to the first anniversary of the Date of Installation.

² “Component” means any pre-primed exterior LIFESPAN® fascia, trim boards, mouldings (brick mould, lattice, and quarter round), door frames, sill substrate, and siding; and LIFESPAN® interior baseboards, crown backers, and door and window trim.

³ “Properly Installed” means, with respect to a Component, that such Component has been installed in or on a Qualifying Structure, (a) in accordance with all applicable building codes, (b) more than six (6) inches off the ground, (c) in a manner causing such Component to shed water rapidly, (d) with all cut surfaces, notches, and bored holes being liberally brushed or swabbed with a suitable wood preservative containing at least 15% zinc naphthenate or 9% copper naphthenate (available products include Jasco ZPW Clear Wood Preservative, Jasco Termin-8 Green Wood Preservative, Zin-Tox Formula 202, Woodlife Coppercoat, Wolman End Cut Solution, Cabot’s 9800 clear wood preservative and Greens Clear Wood Preservative) and, after drying, being coated with a Topcoat⁸ prior to installation, and (e) with a Topcoat being properly applied to the entire exposed surface of the Component, within sixty (60) days following installation in such location, in accordance with all specifications and recommendations of the paint manufacturer and in a manner that does not invalidate or limit any warranty with respect to the performance of such Topcoat given by such manufacturer.

⁴ “Qualifying Structure” means a building that is constructed within the continental United States or Canada in accordance with all applicable building codes (and inspected and certified as to such compliance by a local building code official).

⁵ “Damage” means damage to a Component which renders such Component incapable of providing a suitable substrate for priming and painting.

⁶ “Date of Installation” with respect to a Component means the date on which such Component is Properly Installed.

⁷ “Properly Maintained” means, with respect to a Component, that it is maintained in service continuously in accordance with standard building recommendations and practices and without any breach of the primer and Topcoat applied to such Component permitting moisture to come in contact with the wood substrate.

⁸ “Topcoat” means a 100% acrylic paint that is designed for the location (exterior/interior) where the Component is installed and that is covered by a warranty from the manufacturer of such paint of not less than fifteen (15) years.

b. This Limited Warranty DOES NOT apply to or cover:

(i) Damage to any Component that has been rip-sawed, rebated, grooved, re-profiled, planed, or subjected to heavy sanding. Such actions will void this Limited Warranty.

(ii) Damage to any Component that has not been continuously protected from moisture on all surfaces by a Topcoat, in each case applied in accordance with the respective manufacturer’s recommendations and specifications;

(iii) Damage to any Component that has experienced expansion due to absorption of moisture into any part of the wood substrate;

(iv) Damage to any Component that has not been continuously Properly Installed in a Qualifying Structure;

(v) Damage to any Component installed in any structure that has not been Properly Maintained continuously from and after the Date of Installation of such Component;

(vi) Damage covered by any termite bond relating to the Qualifying Structure or any portion thereof or any warranty given by a pest control operator or pre-treatment manufacturer with respect to the Qualifying Structure or any portion thereof (coverage under such bond or warranty must be sought prior to submitting a claim under this Limited Warranty);

(vii) Any Component that has been misused or subject to improper handling, storage, installation, or maintenance, it being expressly understood and agreed that any storage of a Component in an uncovered location prior to installation is improper;

(viii) Damage resulting from any improper or incorrectly performed alteration to the Qualifying Structure made after the original installation of the Component and/or failure of such alteration to meet or exceed all requirements hereunder as applicable to original construction;



(ix) Damage resulting from any acts of God such as lightning, wind storm, hurricane, tornado, hail, flood, or other similar severe weather or similar natural phenomena;

(x) any defect in or failure to perform of the Topcoat; or

(xi) Any cost associated with removal of damaged Components or transport, handling, delivery or installation of the replacement Component(s);

2. EXCLUSION OF WARRANTIES

THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY MADE BY WARRANTOR WITH RESPECT TO COMPONENTS AND EXCLUDES ALL OTHER EXPRESS OR IMPLIED WARRANTIES. WARRANTOR SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY OTHER IMPLIED WARRANTIES OTHERWISE ARISING FROM THE COURSE OF DEALING OR USAGE OF TRADE OR ADVERTISING, EXCEPT TO THE EXTENT SUCH DISCLAIMERS ARE PROHIBITED BY APPLICABLE CONSUMER LAW. NOTHING IN THIS LIMITED WARRANTY IS INTENDED TO CREATE ANY IMPLIED WARRANTIES, EXTEND SAME BEYOND THEIR CUSTOMARY DURATION, OR MAKE WARRANTOR LIABLE FOR ANY IMPLIED WARRANTIES THAT IT WOULD NOT BE LIABLE FOR IF THIS LIMITED WARRANTY HAD NOT BEEN GIVEN.

3. REMEDIES, EXCLUSIONS OF REMEDIES, AND LIMITATION OF LIABILITY

With respect to any Component that fails to conform to the warranties set forth herein, the Qualified Owner's sole and exclusive remedy and Warrantor's sole and exclusive liability will be for remediation or replacement, at Warrantor's option, of such nonconforming Component, and under no circumstances will Warrantor be liable for construction, repair, or other costs related to replacement of any nonconforming Component.

In no event will Warrantor be liable for any incidental, special, indirect, multiple, punitive or consequential damages resulting from any defect in any Component, including but not limited to personal injury, damage to property or lost profits. **Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.**

4. CLAIMS

Any claim that a Component has failed to conform to this Limited Warranty must be submitted to Warrantor in writing within thirty (30) days after discovery of such failure, and before beginning any permanent repairs. The person submitting any such claim assumes

responsibility for a reasonable service and travel charge as billed by Warrantor if inspection of the structure does not reveal that any Component fails to conform to this Limited Warranty. It is the Qualified Owner's responsibility to establish proof of purchase and identification of the Components. The claim must be mailed to:

Fletcher Wood Solutions® Inc.
200 Westgate Circle, Suite 402
Annapolis, MD 21401

The Qualified Owner should retain any records relevant to the foregoing including: building permits, purchase invoices and receipts, details of supplier, quantity purchased and any Component labels or end tags that will validate the claim. Upon reasonable notice, the Qualified Owner must allow Warrantor's agents to enter the property and building on which the Component(s) is installed to inspect such Component(s).

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

For further information, contact: Fletcher Wood Solutions® Inc.

INFORMATION SOURCES

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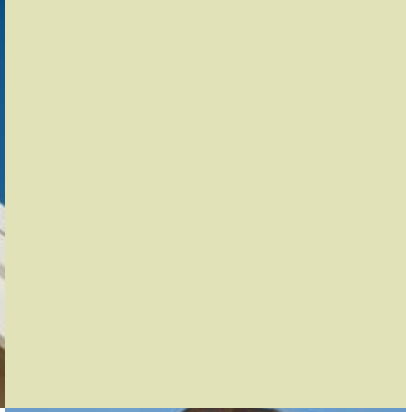
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WOOD SOLUTIONS®

Fletcher Wood Solutions®
A Tenon Company
200 Westgate Circle
Suite 402
Annapolis, MD 21401
1-866-FSC-WOOD
www.lifespanoutdoor.com

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