ENDURAPLUS™

RADIATA PINE SIDING AND TRIM

30 YEAR WARRANTY I ROT & TERMITE RESISTANT I DOUBLE COAT I PAINT READY

WHAT IS ENDURA PLUS?

The Endura Plus range of Radiata pine siding and trim products are manufactured from sustainable plantation forests. The kiln dried, machined, finger-jointed products are treated in special low pressure wood treatment facility and are based on an eco-friendly organic biocide system. The computer controlled process achieves full penetration of all boards and advanced quality control procedures ensure effective protection levels are consistently achieved.

The organic biocides used in Endura Plus are insoluble in water and fix into the wood cells. Endura Plus is double coated with oil based primers supplied by PPG Industries. The first coat provides a penetrating seal which provides water resistance and limits cracking. The application of the second coat provides further protection and a smooth paint-ready finish.

Endura Plus is recommended only for above ground, free-draining, exterior non-structural applications such as trim boards, sidings, soffit, corner boards, exposed millwork, door and window frames.

Endura Plus wood protection systems are supplied and warranted by world leading Lonza Wood Protection and are supplied with a 30 year transferrable limited warranty against fungal decay, rot and insect attack.

Endura Plus can go unpainted up to one year and still maintain its warranty.

PLANTATION-FARMED FORESTS

All Endura Plus poducts are sourced from well managed plantation forests, sustainably grown in New Zealand, creating superior durability and longevity.

DURABLE

Endura Plus is treated under pressure, achieving total active penetration protection using LOSP (Light Organic Solvent Preservative). The addition of waxes and resins into the formulation enhances its water protection properties. The active ingredients used in the treatment process are insoluble in water and will not be removed through leaching.

PAINT READY FINISH

The machined finish of endura plus is enhanced by a two-coat system, with a performance warranty. Finish your endura plus surface with 2 coats of premium quality 100% acrylic exterior paint to the manufacturer's specification.

TERMITE RESISTANT

One of the active protective ingredien ts in Endura Plus is a Permethrin, food-crop protection product that is proven effective against all known species of termites. This protection level is covered by our warranty.

EASE OF USE

Since it is made of real wood, no special tools, cutting equipment or fixing methods are required, unlike PVC, WPC composites or fiber cement. It is light and easy to handle, cut and drill and does not expand or contract with change in temperature.

ENVIRONMENTALY FRIENDLY AND SAFE

Endura Plus is safe and easy to work with, just follow normal work-place safety and hygiene practices for handling wood products.

DEFECT FREE

Endura Plus is a natural wood product manufactured from kiln-dried timber. All defects are removed prior to finger-jointing, then surfaced for a paint-ready finish.

30 YEAR WARRANTY

A 30-year limited warranty is provided on Endura Plus against termite attack, rot or fungal decay.

NON-CORROSIVE

As the organic treatment does not contain any corrosive heavy metals, it will not cause corrosion to nails and other fasteners.

GREEN BUILDING CREDITS

Endura Plus qualifies for credit points under the following schemes:

- GreenPoint Rated (California)
- LEED for Homes
- NAHB Model Green Home Building Guidelines

INSTALLATION GUIDE

INSTALLING ENDURA PLUS SIDING

Endura Plus recommends horizontal orientation only of Endura Plus™ siding boards. Attach the siding boards to the framing timber through the sheathing as shown in figures1and2.Recommendedstud spacingis
16" (IC). Check code requirements in your area. In any case stud spacing should not exceed 24" for attaching siding.

Use of 1/2"' by 2" vertical battens in line with the studs between the building paper and the cladding is recommended to ensure a good drainage gap for any condensation or water penetration that may form between the siding and the building paper. Nails for attaching Endura Plus siding should penetrate through the cavity battens (if used) and sheathing into studs or sill plate by at least 1-1⁄2" as shown. The siding boards can be attached directly against the building paper if preferred but this increases the risk of condensation or moisture affectingtheboards.

Start from the lowest point ensuring that the bottom board is level and has su fficientclearancefromhorizontal surfaces as shown on Figure 3. Also ensure that any detailing to ensure cavity drainage and prevention of vermin entry (such as a cavity sealing mesh) is completed as per figure1.Ensurethat flashingand detailing around doors, windows and other penetrations meets code requirements (not shown here). With rabbeted siding, leave a 1/8" expansion gap between courses in the concealed overlap as shown in figures 1 and 3. Extended periods of hot, dry weather or periods of high humidity and rain may cause some contrac-tion or expansion respectively in the width of boards.

HANDLING & STORAGE

Endura Plus™ siding provide a dimensionally stable and long lasting external cladding for buildings but attention must be paid to correct storage and handling on the building site to ensure the best outcome.

Store boards in a well-ventilated, weather protected area on a flat surface with bearers so that the boards are at least 3" off the ground or other surface. Recommended bearer spacing about 4' to prevent drooping. Do not store on or over wet ground or freshly poured concrete as these will release water vapour which can increase the moisture content in the boards. Where there is a risk of rain, cover the boards with plastic or other water resistant sheeting.

Inspect boards briefly for any damage and fill and sand any chips, dents or roughened surfaces. If any boards have become wet during storage, set them aside in a dry well-ventilated place and allow moisture content to re-equilibrate to 12% to 14% moisture content. Carry long boards (>16') edge up to minimise risk of damaging an unsupported end.

CORNERS

Endura Plus recommends use of corner trims rather than mitre-cut corners with siding as mitre joined corners require more skill to perform to a high standard and are more susceptible to mois-ture penetration. Recommended detailing is shown in figures 4 and 5 for inside and outside corners respectively. Check for compliance with local codes.

FINISHING AGAINST TRIMS OR TERMINATIONS

Allow a 1/16" longitudinal expan-sion gap between trims or other hard terminations and the ends of siding boards as sown in figure 8. Siding terminations against vertical trim boards or similar should be caulked with a flexible material and flashing used under the termination to ensure the area is resistant to water penetra-tion. Scriber boards matching the siding profile and fitted against the trim boards are recommended to improve water resistance of termi-nations in exposed positions. See suggested detailing in figure 8.

END SEALING

All cuts, holes, rebates and notches must have the freshly exposed cut wood surface re-sealed with a good quality exterior wood primer. This is required for your warranty. Oil alkyd type wood primers are recommended but high quality exterior grade, water based primers are acceptable.

MODIFICATION OF BOARD WIDTH & THICKNESS

Endura Plus recommends use of corner trims rather than mitre-cut corners with siding as mitre joined corners require more skill to perform to a high standard and are more susceptible to moisture penetration.Recom-mended detailing is shown in figures 4 and 5 for inside and outside corners respectively. Check for compliance with local codes. Do not re-profile or rip saw Endura Plus™ siding boards unless absolutely necessary for fitting and installation. An exam-ple may be where reduced width is required in order to fit a board under an eve or window sill. In all cases the freshly exposed edges or areas exposed must be re-sealed with a good quality ex-terior wood primer. If boards are reduced in thickness at specific points (for example - to fit behind external plumbing or similar), the area is to coated with 2 coats of a good quality exterior grade wood primer. This is required for your warranty. Oil alkyd type wood primers are recommended but high quality exterior grade, water based primers are acceptable.

NAILING

Ring shanked, corrosion resistant nails are recommended (such as galvanized steel or stainless steel). Nail length should be suffi-cient to penetrate the underlying stud or frame at least 1-1⁄2" in addition to penetrating the siding, battens and sheathing.

See figure 1. If using flat head nails, drive in until the head is fully flat against the siding. If using round head or concealed head nails, punch the head into the siding about 1/8" and fill the depression with suitable exte-rior filler to prevent moisture penetration. Nail into the siding boards approximately 1" up from the bottom edge so that the nail does not penetrate the top of the board below (figure 1). Nails should penetrate into the studs at least 1-1⁄2 "

JOINTS IN LINE

Ensure that board joints are placed over a stud and use a bevel (45°) cut type overlapping joint as shown in figure 3. Always have a flashing patch under the joint as shown in figure 3 with flashing extending 3" horizontally on each side, at least 1⁄2" above the joint and lapped over the top of the lower course. Stagger butt joints in adjoining courses by 2 stud spacing as shown in figure 2. Skew nail the boards into the stud on each side of the join. Pre-drill nail holes close to the end of a board to minimise risk of splitting the board.

PAINTING

Endura Plus™ siding and mold-ings are supplied with 2 coats of factory applied high quality oil alkyd primer. Finish coats (2 or 3) of suitable exterior grade alkyd or latex type paint are required within 12 months of siding instal-lation. Any areas where the factory applied primer is

removed or damaged during installation should have the affected area recoated with 2 coats of a good quality oil alkyd wood primer.

Clean any dirt, mould or other stains and lightly sand down any roughened surfaces. Apply paint as per the manufacturer's instructions. Maintain and re-apply paint as recommended by the manufacturer.

Lighter colours are preferred for siding paint particularly on west or south facing walls to prevent excessive heat accumulating in the boards which may affect dimensional stability and paint life. A Light Reflectance Value (LRF) factor of greater than 30% is recommended.

BOTTOM EDGE CLEARANCES

The bottom edges of siding boards need to have the certain vertical clearances from horizontal surfaces to prevent excess moisture absorption as follows (see figures 6 and 7);

Raw, unsealed ground including lawn, soil, garden beds et cetera – 6"

Hard, free draining surfaces (concrete, paving, metal or wood deck et cetera) – 2"

Confirm compliance with your local code requirements.

RESIN BLEED

In rare occasions, part of a board may express resin that can lift off and / or discolour the paint. This problem is most likely to be encountered with boards exposed to strong sunlight and / or painted with darker colours that can create elevated temperature in the wood. If this occurs the following steps are recommended.

1. Remove any excess surface resin with a sharp blade, scraper or similar being careful not to score the wood surface.

2. Wipe the affected area with a cloth soaked in turpentine repeatedly and firmly to remove as much resin as possible from the immediate wood surface layers.

3. Apply a hot air gun to the affected area to yield any further mobile resin near the surface while being careful not to scorch the wood surface. Repeat steps 2 and 3 if necessary due to further resin production.

4. Allow the area to rest for 1 to 2 weeks to ensure that no more resin is produced. Repeat steps 1 to 3 if necessary due to further resin production.

5. Sand the affected area including any deteriorated paint and apply 2 coats of good quality oil alky exterior wood primer to the affected area according to the manufacturer's instructions and allow to rest and dry for 1 week.

6. Apply finishing top coats to match other boards.

DISCLAIMER

This information is provided in good faith for general guidance on installing Endura Plus™. However this document and the instructions and recommendations contained therein are not to be used as proof of compliance to building codes. As building codes, building design and site conditions vary widely and continuously, Endura Plus can take no responsibility for the results achieved, or any costs or damages resulting from use of this information howsoever caused. It is the users / owners responsibility to ensure that any building incorporating Endura Plus™ siding meets applicable federal, state of local building code requirements and is suitable for the intended application and location. If there is any conflictwithapplicablebuilding codes and the information provided here then the applicable building code methods or details should prevail.

ENDURA PLUS SIDING PROFILES

Endura Plus siding comes in a range of popular profiles as shown below (not to scale). Check with your dealer for exact dimensions and availability in the different profiles and sizes.

V-GROOVE RUSTIC

BEVEL CHANNEL

COVE

PATTERNS

1 x 6 V-Rustic
1 x 8 V-Rustic
1 x 10 V-Rustic
1 x 10 Cove
1 x 10 Bevel Channel

TRIM BOARDS

1 x 2	1 x 10	2 x 2
1 x 3	1 x 12	2 x 4
1 x 4	5/4 x 4	2 x 6
1 x 6	5/4 x 6	2 x 8
1 x 8		2 x 10
		2 x 12