



## OVERVIEW

Clear Grain, like all timber products, will undergo changes when exposed to sunlight, water, mechanical actions and environmental conditions specific to the installation and job site. Here's how to get the best from your wood after installation.

## TYPICAL WEATHERING CHARACTERISTICS

### Seasonal Movement

Radiata pine is a hygroscopic material that reacts to changes in prevailing weather conditions by expanding when moisture levels increase and shrinking when moisture levels decrease. Boards are seasoned during the manufacturing process to a moisture content of approximately 12 per cent – a moisture level typical of most of the east coast of Australia – however seasonal expansion and contraction can be expected in areas where there are large fluctuations in rainfall and humidity. This also applies to interior spaces exposed to high humidities, air conditioning, fireplaces and vented warm air from appliances.

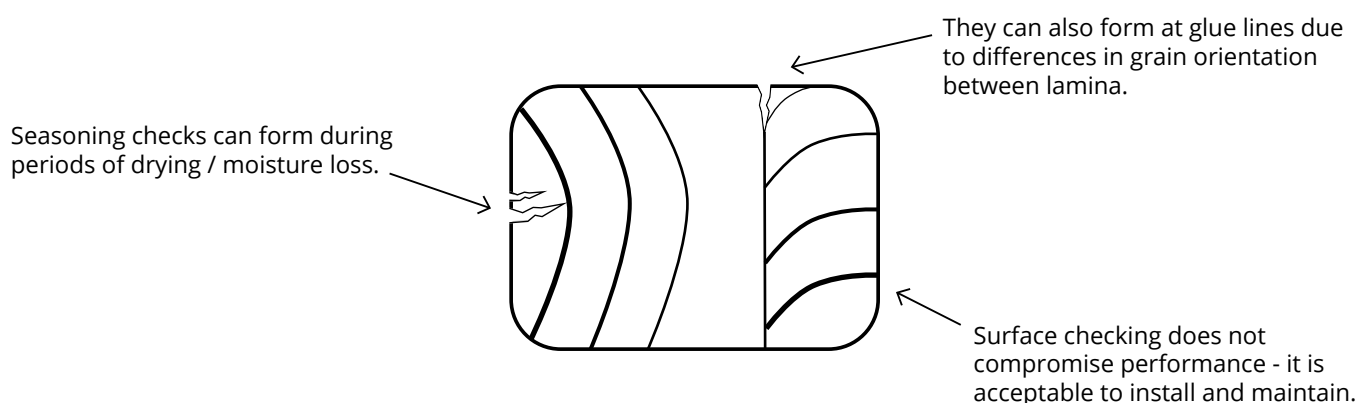
Dimensional changes can be mitigated by acclimatising Clear Grain products to in-service conditions prior to installation, and by designing timber systems so that they discharge water away from horizontal surfaces and end grain. The application and maintenance of protective finishes is also critically important – coatings form a barrier between weather and wood, reducing moisture uptake during wet conditions and moisture loss in dry conditions.

## Surface Checking

Surface checking occurs on exterior timber products when short and repetitive cycles of wetting and drying cause different moisture levels to develop between the surface and inner portion of a section of wood. This disparity in the distribution of moisture causes fibres within the timber to expand or contract at different rates until (1) stresses form and (2) the fibres subsequently separate into small cracks or “checks.”

Checking is typically more common in high-risk, weather exposed applications, and will often occur within a short timeframe of installation due to the thermal shock the timber sustains after being moved from a controlled environment – i.e., a wrapped parcel in a distribution facility – to an open environment subject to rapid changes in sunlight, humidity and ambient air temperature. It is a natural characteristic of Radiata pine and does not compromise the performance of Clear Grain products following installation.

Fibre pull due to small variations in the grain orientation of individual lamina may also develop in the same fashion as surface checking, and is acceptable to install and/or maintain.



## Colour Changes

Exterior timber products that are finished with clear or transparent coatings will undergo colour changes over time through exposure to ultraviolet light that causes colourants in the coating to darken or fade, and wood cellulose to oxidise and form a yellow or grey patina. Colour changes can be managed through the maintenance and reapplication of protective finishes in accordance with the manufacturer’s recommendations.

## Maintenance Guidelines

Exterior products should be cleaned every six to twelve months with a mild detergent and soft bristle brush to remove dirt, pollen, and other contaminants. While cleaning, inspect sealants, flashings, mouldings and fixings and maintain them as needed.

Note that pressure washing has the potential to damage protective coatings and can aggravate surface checking or fibre pull by forcing water deep into the timber substrate. It should generally be avoided.

Protective finishes should be reapplied to interior Clear Grain products in accordance with the coating manufacturer’s recommendations.

Protective finishes should be reapplied to exterior Clear Grain products after 12 months exposure to the weather, or as often as required by the coating manufacturer. Note that oxalic acid-based wood cleaners such as Intergrain® UltraPrep™ Timber Cleaner are safe to apply to weathered pine, and can be used to rejuvenate Clear Grain products prior to the reapplication of finishing coats.

Surface checking and fibre pull can be managed through application of protective finish to the surface and end grain of the timber wherever these characteristics are present.

## SPECIFICATION GUIDE

<b>Trade Name:</b>	Woodhouse Clear Grain™
<b>Species:</b>	Radiata pine (Pinus radiata) clearwood
<b>Origin:</b>	New Zealand
<b>Sustainability:</b>	FSC® mix, CoC No. SGSJK-COC-500007
<b>Carbon Footprint:</b>	-668kg / m <sup>3</sup> (A1 – A3) (WPMA 2019)
<b>Density:</b>	450 - 500kg / m <sup>3</sup> seasoned
<b>Moisture Content:</b>	Kiln dried to approx. 12% (+/- 3%)
<b>Typical Length Mix:</b>	1.8m to 5.4m, supplied in set length packs
<b>Fire Hazard:</b>	Group 3
<b>Treatment Class:</b>	Hazard Class 3 (H3). Also available untreated
<b>Treatment Type:</b>	Light Organic Solvent Preservative (LOSP)
<b>Preservative Number:</b>	064 – Propiconazole + Tebuconazole + Permethrin
<b>Sawing Pattern:</b>	Lamina are quartersawn – wood grain runs longitudinally along each piece of material
<b>Lamination:</b>	Glued with VOC- and formaldehyde-free single component polyurethane adhesive. Approved for Service Class 3 exterior exposed applications
<b>Coating:</b>	Primed with one coat of oil based Intergrain Universal™ Timber Oil. Will accept most oil and water based, penetrating and film forming coating systems
<b>Intended Use:</b>	Preservative treated products are resistant to rot, fungal decay and termite attack and can be installed in exterior, above ground applications at least 150mm from ground level. Untreated products are to be installed in sheltered, interior applications only
<b>Weathering Characteristics:</b>	Will expand and contract with seasonal variations in in-service moisture and humidity levels. Minor surface checking and fibre pull can also be expected in exterior applications
<b>Warranty Period:</b>	15 years against fungal decay and termite attack
<b>Expected Service Life:</b>	30 years or more when correctly installed and maintained



**WOODHOUSE**

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