

WESTERN RED CEDAR

GENERAL

Western Red Cedar (*Thuja plicata*) is one of the world's premier commercial timber species. Unique to the Pacific North-West coast of North America, slow growing and naturally durable* above ground, Western Red Cedar has one of the longest life spans of any North American softwood. Its low density gives it an insulation value superior to most other timber species. Attractive in appearance, free of resin, light weight, possessing high dimensional stability, easy to work and finish Western Red Cedar is the preferred choice of timber in a diverse range of interior and exterior applications.

** Durability refers to above ground applications, provided the timber is able to dry after being wet*

DIMENSIONAL STABILITY:

Western Red Cedar is hygroscopic, naturally absorbing and releasing moisture until in equilibrium with the surrounding atmosphere. The species has a very low shrinkage factor, is renowned for its stability and is superior to all other coniferous woods in its resistance to warping, twisting and checking.

<i>Shrinkage of Western Red Cedar</i>						
<i>Direction of Shrinkage</i>	<i>Shrinkage in Percentage</i>					
	<i>From Green (25% or greater MC) to:</i>			<i>From Kiln Dried (15% Ave. MC) to:</i>		
	<i>15%</i>	<i>12%</i>	<i>6%</i>	<i>15%</i>	<i>12%</i>	<i>6%</i>
<i>Radial</i>	<i>0.96</i>	<i>1.2</i>	<i>1.8</i>	<i>0</i>	<i>0.3</i>	<i>1.0</i>
<i>Tangential</i>	<i>2</i>	<i>2.6</i>	<i>3.8</i>	<i>0</i>	<i>0.7</i>	<i>2.1</i>

DECAY RESISTANCE:

One of Western Red Cedar's most valuable characteristics is its well known high resistance to decay. It is one of the most durable* coniferous species for above ground applications and if correctly finished and maintained will provide many years of service life.

THERMAL CONDUCTIVITY:

Western Red Cedar's low density and high proportion of air filled cavities to fibre mass ranks this Species as one of the best thermal insulators among commonly available softwood timbers. It has a co-efficient of thermal conductivity (k value) of 0.11 Watt/ M² °C at 12% MC. Western Red Cedar's insulation properties are superior to many commonly available building materials, including brick, concrete and steel.

FINISHING AND WORKABILITY:

Dry Western Red Cedar will take most surface coatings. Caution should be taken with some water based finishes as they may directly or indirectly, allow the naturally occurring tannins within the timber to solubilise and migrate through the coating. Among the easiest of Softwoods to work the species planes and sands well.

FIXING:

Western Red Cedar has good fastening properties but its natural preservatives have a corrosive effect upon a number of unprotected metals. Fasteners should be corrosion resistant if the timber may be exposed to moisture in service. Commonly available fasteners are silicon bronze, aluminium and stainless steel (Grade 304 and 316).

Refer E2/AS1 Tables 21 and 24 for the correct fastening specification for your application

COMMON USES OF WESTERN RED CEDAR:

Weatherboards	Fascia	Mouldings	Panelling	Sarking
Timber Joinery	Doors	Windows	Gates	Blind Slats
Window Shutters	Hand Rail	Pergolas	Boat Core	Boat Moulds
Spar Moulds	Hot Tubs	Saunas	Outdoor Furniture	Fences
Trellis	Timber Signs	Letterboxes	Decking	

HERMAN PACIFIC WESTERN RED CEDAR GRADES

PREMIUM CLEARS NO1

Premium Clears No.1 ('Hermpac PC1') is the highest 'Clear Wood Grade' of mature Western Red Cedar. A limited range and number of defects are permitted within the grade and docking out of these will vary according to the customers' specific end use. Available in all profiles.

PREMIUM CLEARS NO2

Premium Clears No.2 ('Hermpac PC2') is a second tier 'Clear Wood' grade. A greater percentage of defects are permitted within the grade and docking out of these will vary according to the customers specific end use. As a general rule of thumb an estimated 25% of boards are likely to be of a quality lower than Premium Clears No.1.

CLEAR RECOVERY GRADE:

Clear Recovery Grade ('Hermpac CRG') represents the third tier of 'Clear Wood' grades. A greater percentage of defects are permitted within this grade than Premium Clears No.2, the next higher grade. Cross cut removal of these defects will vary according to the customers' specific end use. As a general rule of thumb an estimated 50% of boards are likely to be of a Premium Clears No1 standard, with the balance containing similar defects to but of an overall larger size than found in Premium Clears No.2.

REMAN:

Reman Grade ('Hermpac Reman') is Herman Pacific lowest 'Clear Wood Grade'. Reman is suitable for Joinery or Industrial re-manufacturers with the ability to to recover usable timber by cross cut and length rip removal of defects separating clear wood

APPEARANCE GRADE:

Appearance grade represents Herman Pacific's highest grade of 'Merch Wood' type products. Milled and selected to the company's specific requirements, 'Appearance' is an imperfect grade, characterised by knots, splits, checks and various other natural and/or mill defects. Available only with a fresh Bandsawn 4 sides finish 'Appearance' provides an attractive, affordable option in large end section timber for speciality applications. Appearance is predominantly used in Pergola construction.

FINGER-JOINT/EDGE GLUED:

Manufactured to exacting standards, Quality Hermpac Western Red Cedar Clear Finger Joint and Clear Edge-Glued/Finger Joint products are typically factory pre-finished with a single coat of oil based primer or a first coat of oil based primer over coated with oil based undercoat for added convenience and performance. Factory grading allows putty fills of minor defects, cut backs of longer lengths for grade improvement and minor surface joint gaps in up to 15% of pieces.

GENERAL

1. In general, a parcel of timber in any grade shall contain a range in quality from the most defective piece permitted in that grade to a piece which just fails to comply with the requirements of the next, higher grade.
2. When timber is visually graded, a reasonable difference of opinion between graders is recognised. However, the provisions of these rules are sufficiently explicit to establish a maximum allowable inclusion of 'Off-Grade' or 'Below Grade' of five percent (5%) in any parcel. This must be regarded as an acceptable, allowable variation.
3. It is advisable for all customers to be familiar with both the requirements of the New Zealand Building Code, those of their local approving authority and the terms under which their Building Consent is granted in regard to profiles, grades and fixing.
4. All grades of Hermpac Western Red Cedar are supplied with professional packaging, including a light protective top sheeting for dressed products.
5. All Western Red Cedar is invoiced by length to 2 decimal places and/or tally metre tally.
6. It should be expected as a natural consequence of drying, that knots (when present) may include seasoning checks or splits.