

New Zealand Kiln Dried Pine: The Best Choice for Wood Furniture Manufacturers

Introduction:

New Zealand Pine plantations are one of the world's largest environmentally sustainable and certified wood supplies. Annual harvest will increase from present 20million m³ to around 40million m³ in the next 10 or more years.

New Zealand Pine is versatile wood that can be supplied in a range of lumber grades that are highly suited for wood furniture manufacturing. New Zealand pine is an ideal, reliable, sustainable and consistently available raw material for the manufacture of furniture.

Kiln dried lumber that has been dried in sophisticated New Zealand kilns and with specialized schedules is stress free and has consistent and even moisture content .It is able to be ripped, resawn and profiled easily using standard wood processing machinery.

Once profiled and manufactured the surfaces can be stained to a wide range of colours and tones. Stain finishes are consistent and predictable.



Stained New Zealand pine manufactured into a quality furniture piece rolls off the production line.

Lumber Specifications and Grades:

New Zealand pine log sawing patterns separate the lumber firstly into corewood and the outerwood. The outer wood, which is pith free, is selected and then expertly kiln dried for furniture and other appearance uses.

Following drying in specifically designed and operated kilns the pith free outer wood is then graded into selected sorts that are specifically designed to meet customer requirements. LumberLink has a standard range of lumber specifically designed to meet the requirements of furniture uses. These LumberLink grades may either include some knots or be knot free “clear” grades.

Knot Free “Clear” Grades:

Clear grades can be can either be supplied as random length 1.8m and longer or as Cut To Length (CTL) blemish free components

CTL

CTL clears are made in Blanked (S4S) 22mm with widths from 73~ 197mm, most common sizes are 22 x 97 and 22 x 147.

CTL length range from 450mm through to 1500mm.



Clear grades

Long length clear grades are obtained from sawing “pruned” New Zealand pine logs and selecting the outer clear zone portion. Clears are cut into various thicknesses such as 4/4, 5/4, 6/4 and 8/4 in both set widths and random widths. The most common grades are Clear 1,2 and 3 and Moulding and Better Grades.



Knot free clears

Cuttings and Shop Grades

Cuttings and shop grades are designed for re-sawing by the manufacturer both longitudinally and horizontally to recover the clear lengths between the defects and blemishes. This is done to recover furniture and millwork components. The desired width and length of the components will be the criteria used by furniture manufacturers' to determine which grade they will choose. The different grades give a different recovery factor of specific length and width clear components.

The key grading criteria used by the New Zealand pine sawmills is the length and percentage recovery of clear cuttings in a board. The defects (knots, resin and bark pockets, wane, birds eye etc.) are all counted in the waste portion. The grade is determined by reference to the expected recovery of clear components.

Furniture manufacturers purchasing will cross cut between the knots and blemishes to remanufacture clear cut to length furniture components. The size and especially the lengths required of the clear components will determine the grade of lumber which may range from clears through furniture cuttings #1, 2, 3, 4.

The key grading principal is the length and percentage recovery of clear cuttings in a board. The defects (knots resin & bark pockets, wane, birds' eye etc) are all counted in the waste portion so they are unrestricted in size and form. All that counts is the recovery of clear components

The recovery percentage e.g. 70% or 60% or 50% of the length in clear cuttings, and also the length of the cuttings e.g. >1000mm & > 600mm, >200mm or >150mm in length determines if it is a #1, #2,#3 or #4 Furniture cuts grade.



Furniture cuttings #1, 2,3,4

These grades of furniture cuttings are sold as #1 through # 4 cuttings mixed together in each packet of furniture cuts.

Knotty Pine Furniture (PFCOL):

High quality furniture that uses selected parts with intergrown knots (sometimes also called live knots) is a premium wood furniture product. This style can be antiqued or simply surfaced stained but the knots in the wood are part of the design look



Specific lumber grades have been designed around a minimum percentage recovery of furniture cuttings by cross cutting the board in knotty components. The furniture cutting rather than being clear is allowed to have intergrown or useable knots in it. The principal of these knotty grades is recovery of furniture components that have intergrown knots, the minimum length of furniture cutting in 200mm. Cross cutting to remove the larger and non intergrown Cross cutting to remove the larger and not intergrown defects gives the cut to length knotty furniture components, some of these components may well be knot free or clear but some will have smaller intergrown knots that are sound and tight. defects results in the desired lengths of knotty furniture components, some of these components may well be knot free or clear but some will have smaller intergrown knots that are sound and tight.

Knotty Pine Furniture (PFCOL)

Boards are selected that have a minimum of 65% or more recovery of intergrown knot furniture cuttings. Boards may have unusable knots and defects but these are restricted in number.





Cross cutting to remove the larger and not intergrown defects gives the cut to length knotty furniture components, some of these components may well be knot free or clear but some will have smaller intergrown knots that are sound and tight.



Recoveries of intergrown knotty components are higher than in PFCOL.

Packaging and wrapping:

All furniture grade lumber is Kiln dried so it is wrapped with waterproof plastic wrap; Packets are strapped and have attached bearers. Shipment is in 40' high cube containers with packets being stowed two high and two wide in the container so as to maximise container stow.

