

Transforming nondurable timber into a lasting investment

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Types of less durable timber

A horizontal wooden plank with a light tan color and a fine, uniform grain pattern, characteristic of rubber wood. The plank is shown with rounded ends and is set against a white background.

Rubber

A horizontal wooden plank with a warm, golden-brown color and a prominent, wavy grain pattern. It features several dark, circular knots, characteristic of pine wood. The plank is shown with rounded ends and is set against a white background.

Pine

A close-up photograph of a wooden plank showing a distinct blue-grey stain, characteristic of wood decay. The stain is concentrated in the lower portion of the plank, following the grain. The upper portion of the plank is a natural light wood color.

Blue Stain

A close-up photograph of a light-colored wooden surface showing signs of insect damage. Several small, circular holes are visible. Two larger, irregular white masses of frass (insect excrement) are present, one near the top center and another near the bottom right. Small dark insects are scattered around the holes.

Insect Attack

A close-up photograph of a piece of wood that has been severely damaged by decay fungus. The wood is dark, almost black, and has a crumbly, fragmented texture. A yellow ruler is visible at the bottom of the image for scale, showing measurements from approximately 14 to 48 centimeters.

Decay Fungus

A close-up photograph of a piece of wood heavily infested with termites. The wood is dark and shows significant structural damage, with large sections missing and the remaining wood appearing hollowed out. Numerous termites are visible, crawling over the surface and through the damaged areas.

Termite Attack

Hazard Class

HAZARD CLASS	EXPOSURE	SPECIFIC SERVICE CONDITIONS	BIOLOGICAL HAZARD
H1	Inside, above ground	Completely protected from the weather and well ventilated, and protected from termites	Lyctid borers
H2**	Inside, above ground	Protected from wetting. Nil leaching	Borers and termites
H3	Outside, above ground	Subject to periodic moderate wetting and leaching	Moderate decay, borers and termites
H4	Outside, in-ground	Subject to severe wetting and leaching	Severe decay, borers and termites
H5	Outside, in-ground contact with or in fresh water	Subject to extreme wetting and leaching and/or where the critical use requires a higher degree of protection	Very severe decay, borers and termites
H6	Marine waters	Subject to prolonged immersion in sea water	Marine wood borers and decay

How can we
increase
durability of
wood?

Dip Diffusion

Pressure Impregnation

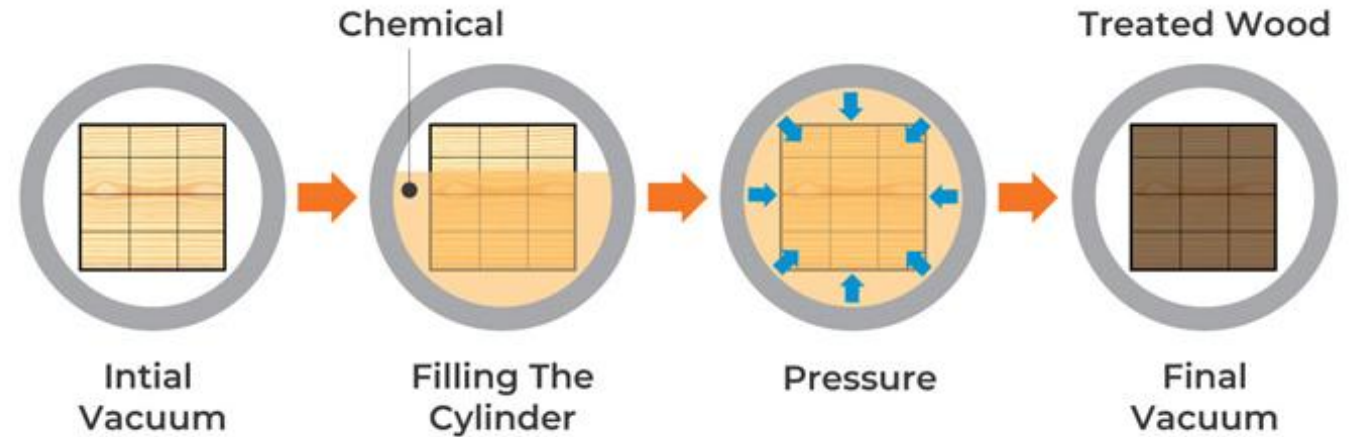


Vacuum Pressure Treatment

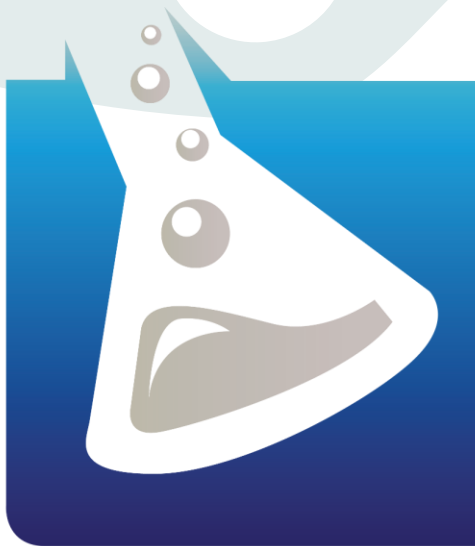
Initial Vacuum at -76Hmg

Pressure held at 200 PSI

Final Vacuum at -76Hmg



Chemical Types



Boron
Boron Borax



CCB
Copper Chrome Boron



ACQ
Alkaline Copper Quaternary

Boron Treatment – H1

Both pressure and Dip Diffusion

Effective against Bores Only

Not suitable for outdoor use

No color change

Commonly used for indoor furniture manufacturing





CCB – Copper Chrome Boron H1–H2

Can only be treated using Pressure Treatment.

Effective against Bores and small amount
Termites.

Leaves a green tint. Not suitable for long
term outdoor use

Leaves a green tint.

Not eco friendly



ACQ – Alkaline Copper Quaternary. H3 – H5



Can only be treated using Pressure Treatment.



Leaves a green tint.



Effective against Bores, Fungus and Termites.



Environmentally Friendly.



Green Building Certified.

Checking Penetration By spot test

Boron test A&B solution



CCB/ACQ Chrome Azurol



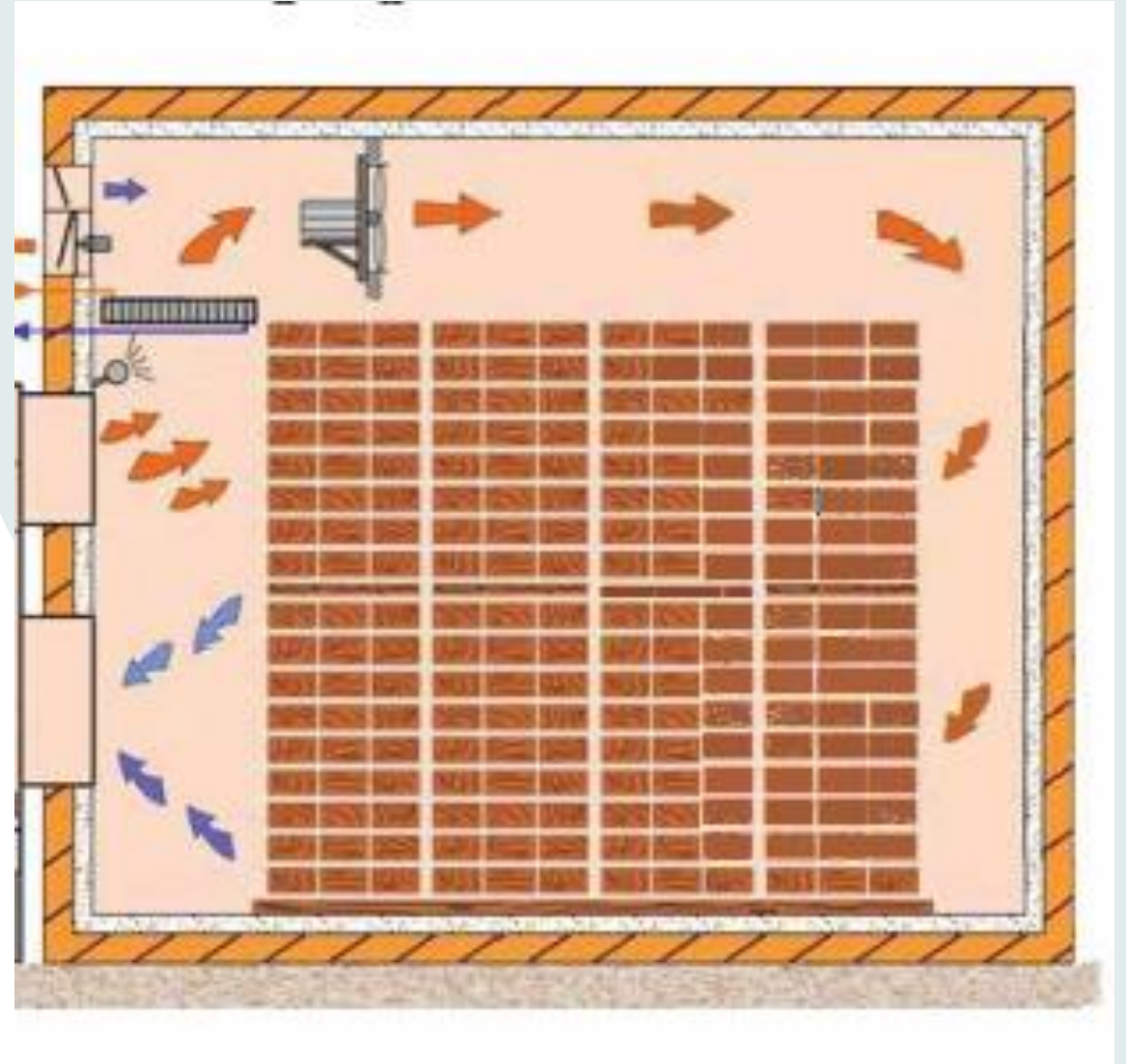


Wood Drying

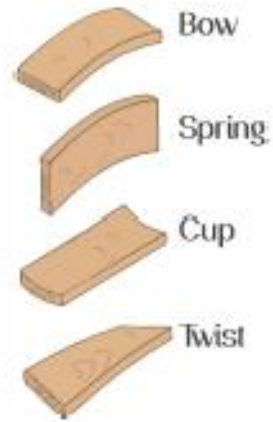
Commonly Practiced Method.

The duration for the process of kiln drying varies with the thickness of the wood and the species.

Duration 8-12 days



Key advantages of drying Wood



Without Kiln Drying



With kiln Drying

To bring down moisture levels to "work-able" range efficiently workable range is a level that will not end in the myriad of problems that can be caused by excess moisture content wood.



Key advantages of treated wood

Cost Efficient

Long Lasting

Availability

Sustainable

Applications of Treated timber



Wood Buildings



The background features a light blue gradient with several large, white, organic shapes that resemble water droplets or bubbles. These shapes are scattered across the frame, with some overlapping. The overall aesthetic is clean and modern.

Treated wood for a sustainable
Future

