

Understanding Timber

Wood has a number of outstanding characteristics:

Thermal insulation
Sound insulation
High strength with good elasticity

High resisting force under loads
Easy workability

Knots and the natural grain of wood

Due to the nature of timber, wood grain and the number of visible knots vary. Knots imbedded in the wood are a common feature in timber based products.

Pressure treated wood

Pressure treatment is a process that forces chemical preservatives into the wood. As the timber is placed in a pressure chamber, the preservatives are forced into the wood. The preservatives help protect the wood from all outdoor elements. Green and white spots are common in pressure treated wood and can be brushed off easily.

Resin streaks

During storage and processing, wood changes in volume and thickness. One phenomenon of coniferous wood during this process is the emergence of resin to the surface. This is normal and can be corrected by scraping and careful removal with turpentine.

Mould and blue-stain

Blue-stain mould and discolouration is especially common during warmer periods. Pressure treatment stops the fungal infestation. During storage of freshly pressure-treated timber, there may be some occurrences of mould stain caused by the fungus. These stains are no cause for concern and can be wiped off or left to gradually disappear on their own when exposed to the elements.

Swelling and shrinking

'Wood movement' or 'shakes'

Like many natural materials, the cells in wood contain water. Depending on the humidity in the air, this moisture is gradually released and/or absorbed and results in the changes in volume. This can result in timber shakes (splits). The shakes will expand and retract as moisture reacts with the core timber.

Rough spots

When sawing, planing and milling logs, we do everything we can to avoid damaging the wood. Nevertheless, wood fibres that run opposite to the machining direction sometimes cause rough spots. For example, when crosscutting and rounding over posts, slight fraying is unavoidable.

Colour variations

Each tree is unique. Its shape, colour and wood grain retain their uniqueness after processing. Wood varies in density. Therefore, it does not uniformly absorb the chemical preservatives when pressure treated, resulting in colour variations. Over time, variations in colour will disappear when the wood is exposed to sunlight.

Checking warping

Because of the varying density of wood and its texture, swelling and shrinking as described above does not occur uniformly. This can result in cracks or warping, which do not affect the structural characteristics and strength of the wood.