

# What to Know About Wood

## Wood Characteristics

In general, wood displays all the characteristics and properties described below. Most of these are formed during the period of growth. A lot of the characteristics are species-specific, while others are formed as a result of the surrounding environment.

Below is a list of some typical characteristics and properties of pressure-treated pine to help understand the development of wood – even after felling and processing has taken place. Since these characteristics and properties are naturally occurring, they can not be the cause of complaint.



### Cracks and Deformations

Wood will expand when the weather is wet and humid, and shrink when it's dry and sunny. As a natural consequence hereof, cracks and deformations will form in the processed wood. Shrinkage cracks are more likely to form in round wood (palisades). The cracks will not affect the stability or durability of the wood, and in some cases, will disappear once weather conditions change.



### Play of Colours

Wood is a living material. Because of the individual shape, colour and texture of each piece of wood, a naturally occurring play of colours will appear in the wood. Variations in the density of the wood cause pigments from pressure-treatment to not be absorbed in a uniform fashion. As a result, a different colour intensity will form upon pressure-treatment. It is normal for this to be evened out over time due to weathering.



### Rough Surface

Even when taking the greatest care while processing the wood, rough surfaces and planing marks cannot be entirely avoided. These are especially likely to occur when knots and wood fibres are caught in the opposite direction when planing. A rough surface can be made smooth with fine-grained sandpaper.



### Knots

Knots are a natural part of the look of the wood and vary in number and size. Despite meticulous quality control, knots can sometimes fall out of the wood, particularly if the weather is dry. This will not affect the stability or durability of the wood.



### Heartwood

The narrow middle line of the log consists mainly of thin-walled cells that die shortly after formation, meaning that the heartwood consists of dead air-filled cells. During processing, the heartwood may become entirely or partly visible. This is a natural part of the look of the wood.



### Resin

The occurrence of resin is normal and in fact, unavoidable on the surface of coniferous wood. Resin may also form several months after processing, and therefore, this does not constitute a flaw, but is a naturally occurring property of the wood. Fresh resin can be removed with turpentine. If the resin is already weathered, it can be removed with a spatula.



### Mould and Mildew

Mould and mildew may form if the wood is wet or if treated wood is not adequately ventilated during warm weather. Common causes include storage in closed rooms, and covering the wood without adequate ventilation. Fortunately, the spores will only be found on the surface of the wood. They will not damage the wood or affect its stability, and they can be removed with sodium benzoate. In extreme cases, chlorinated detergents may be used.



### Green Spots / Wood Impregnation

Small green spots may appear on the surface of the wood. These are harmless salt crystals that form when the impregnation compound combines with resin, but they will eventually disappear. Please note: when dipping wood, efflorescence does not occur, therefore, occurrence of salt crystals on the surface may be regarded as a sign of the quality of the pressure treatment.



### Expansion / Shrinkage – Dimensional Variation

The dimensions of wood may change due to moisture absorption and drying – up to 0.3 per cent in length and up to 9 per cent in height and width. During pressure treatment, a high level of moisture is added to the wood. Depending on the weather – i.e. rainy or sunny conditions – the moisture will evaporate at different speeds. This is colloquially known as the wood “working”. It can be concluded then, that tolerances due to dimensional variations when working with lumber, are natural and not a flaw.

### Cleaning of Pressure-Treated Wood

Pressure-treated wood is to be cleaned with a garden hose or a high-pressure washer with a mild jet nozzle and clean water. Warning! Depending on the force of jet, this can cause damage to the surface. For refractory stains, we recommend a soft brush and hot soapy water.



## Our Recommendations

The wood is adequately protected by the pressure treatment. You may either let it grey over time or treat it with a treatment compound. Remember! The wood must be dry before starting the treatment process. To minimise mould growth, we recommend that the wood is stored in a well-ventilated environment and, if possible, sticker-stacked. The wood must not be stored in an airtight room.