# **NSH NORDIC – What to Know About Wood**

# Wood Characteristics

Wood has, in general, all of the properties and characteristics, described below. Most of the properties are being formed during the growth/ growth process of a tree. Many of the properties are specific for the tree species in question, while other are formed as a result of the surroundings and the environment. Below is a list of typical properties and characteristics of pressure-impregnated pine wood in order to help you understand how the pine wood evolves – even after it gets felled and processed. The following characteristics and characteristics are not eligible for complaint as they are considered naturally occurring.



# **Cracks and Deformations**

Wood will expand, when the weather is wet and humid, and shrink when it is dry and sunny. This results in cracks and deformations in the processed wood. Shrinkage cracks are more likely to occur in round-shaped wood (e.g. palisades). The cracks will not affect the stability or durability of the wood, and, in some cases, will disappear once the weather conditions change.

# Play of Colours

Wood is a living material. And because of its individual shape, color and texture, a naturally occurring play of colors will appear in the wood. Because the color pigments in the pressure impregnation do not absorb evenly, a different color density is being created, which is normally evened out over time due to the weather.





#### Knots

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

## Heartwood

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





## Resin

The occurrence of resin is normal, and in fact, unavoidable on the surface of conifer wood. Resin may also appear several months after processing, and is thus not a flaw, but rather 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

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







Small green spots may appear on the surface of the wood. These are harmless salt crystals that occur when the impregnation liquid reacts with resin. These will disappear over time. Please note: dipping impregnation does not result in salt efflorescence. Thus, salt crystals on the surface are to be considered as a sign of a thorough pressure-impregnation.

## Expansion / Shrinkage – Dimensional Variation

Wood changes 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-impregnation, a high level of moisture is added to the wood. Depending on the weather, e.g. rainy or sunny conditions, the humidity will evaporate at different speeds. Popularly speaking, "the wood works". Tolerances in timber are natural and not a flaw.

## Cleaning of Pressure-Treated Wood

You can clean your pressure-impregnated wood with a garden hose or a high-pressure cleaner with a mild jet nozzle and clean water. Warning! Depending on the water jet, the surface can be damaged. For cleaning stubborn stains, please use a soft brush and warm soapy water.

## **Our Recommendations**

The wood is adequately protected by the pressure-impregnation. You can either let it grey over time, or treat it with wood protection. Remember! The wood is to be dry before starting the treatment process. To minimize the mold 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.