Decking board Finished decking board

Ordering
Transportation and storage
Installation
Maintenance

GUIDELINE

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* For quality specifications see the Puidukoda quality specification 'Interior panelling and floorboards AB'







1. Ordering

1.1. Choosing a type of wood

For the construction of a deck, the most durable tree species are pine and Siberian larch. Pine is well suited for decking boards if it is pressure treated. Siberian larch is a very durable tree species, which, due to its high resin content, cannot be pressuretreated. The natural defence properties of Siberian larch ensure its long lifespan. Siberian larch is especially suitable for people who want to build decks from wood with a lifespan equivalent to that of tropical wood. The main factor causing wear is the weather (fluctuations in humidity and temperature), which means that spruce timber is not so well suited for decks, as the impregnation penetrates the wood by only a few millimetres. In the case of pine pressure treated in an autoclave, the preservative penetrates down to the core.

1.2. Finished decking boards. Various possible treatments

Pressure treatment

The pine or spruce decking material must definitely be purchased in pressure-treated form. This extends the life of the material severalfold and also increases the required maintenance interval. Investing in a pressure-treated deck is financially more cost-effective than replacing a decaying deck a few years after its installation. When applying the impregnating agent with a brush, the result is only surface deep and the inside of the wood remains

untreated and therefore decays when exposed to moisture.

Linseed treatment

The autoclave pushes the linseed oil into the material at a temperature of 60 °C. The final result of the treatment is a material with a nut-brown shade that is protected from UV exposure and is water-repellent. Compared with manual oiling, it gives the wood a much higher durability, weather resistance and a longer maintenance interval. The cost per square metre for industrial oiling is cheaper than applying oil with a brush by hand. In addition, all four sides of the board will be evenly oiled. Suitable for spruce, pine and larch.

Glaze paint

It is also possible to order industrially finished Siberian larch decking boards. A special transparent glaze paint is specifically designed to provide weather protection (moisture and UV protection) and innovative shades for Siberian larch decking boards. Although Siberian larch wood in its natural form is also durable (see Chapter 1.1), finished Siberian larch decking boards are even more so. This is a good way to buy a deck in the colour shade of your choice, where all four sides are industrially finished. For more information, contact your dealer or manufacturer.

2. Transportation and storage

2.1. Transport

The production of Puidukoda is packed in packaging meant to be side-loaded with a forklift. This loading method prevents damage to the material during loading and unloading. There is a great risk of damage to the material when loading from the back.

When loading goods with a sling crane, special clamps for wood packaging must be used to prevent the slings from cutting into the corners of the package, deformation of the wood package or breakage of the material. The more frequently goods are lifted and transported before final installation, the higher the risk of transport damage. When unloading material on the construction site,

use either a forklift or crane, since with manual loading onto and off transport, there is a very high risk of damaging the material.

2.2. Storage

All material should be checked when storing at the construction site and it should be ensured that there is no damage that might have occurred during loading, transport or storage.

When using strips, leave a sufficient air gap under the material, preferably ca 150 mm. The material must not be in direct contact with the ground.

3. Installation

3.1. Deck base

The first stage is building the foundation. It is recommended to use foundation blocks (fibo blocks) or concrete posts cast into the ground to build a foundation directly in contact with the ground. Plastic girders may also be used.

The concrete posts should be cast deeper than the freezing point. The foundation must be sufficient to carry the load of the deck itself and the load on the deck.

When building the foundation, the humus layer under the deck has to be removed and replaced with sand or gravel. This can prevent the formation of excessive moisture on the ground and prevent the growth of plants from between the decking boards. We recommend placing geotextile fabric between the new soil and ground to prevent the growth of any plants.

3.2. Decking installation

The second stage is the installation of pressure-treated beams onto the foundation. The beams should be installed at least 20 cm above the ground to prevent excessive moisture condensation from the ground. The spacing of the foundation lines under the beams should be selected according to the dimensions of the beam used. For example, in the case of a 45×95 mm beam, the maximum founda-

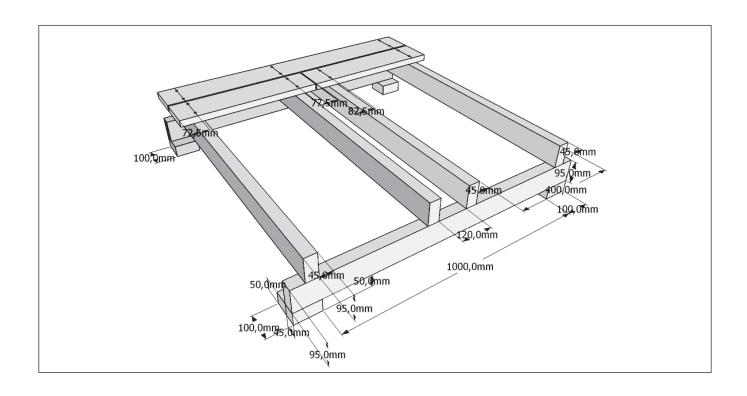
tion post space is 1000 mm and, in the case of a $45 \times 145 \text{ mm}$ beam, the maximum foundation post space is 1200-1500 mm.

The deck frame is installed perpendicular to the beams. The spacing of the deck frame is based on the thickness of the decking boards. For example, for 28×145 mm thick decking boards, the deck frame spacing can be up to 550 mm.

If the decking boarding is installed on the beams without using the deck frame, the foundation post space can be up to 500 mm. When planning to build a deck, consider that a wider framework should be used under jointed boards. This prevents screw points being too close to the edge. The gap between two decking boards should be between 4-7 mm, depending on the width of the board. Joints allow the boards to expand and shrink due to weather changes. Usually, tools which are handy for measuring – chisel, metal square, carpenter pencil – are used to measure it.

Leave a gap of at least 5 mm between jointed boards. This way humidity can evaporate from the ends.

If you want to cover the deck frame from the side using decking boards for example, the lower edge needs to be at least 50 mm from ground to guarantee ventilation under the frame.



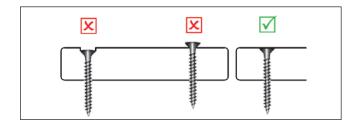
If during the construction process there is a need to saw the material, the cross-cut ends of the material must be treated with the impregnating agent manually. Furthermore, follow the principle – the less you saw, the more beautiful the deck. After installing the linen-oiled decking board, the entire surface must be lightly oiled. In this case, any damage that occurred during installation will be covered.

3.3. Fastening fixtures and fastening

The beams, deck frame and boarding must be secured with fastening fixtures intended for outdoor use. For the deck construction, we recommend stainless steel or corrosion resistant screws. Simple zinc screws rust quickly.

The screws must be fastened at least half the width of the board (V2) from the ends of the board. If you have to fasten closer, holes must be pre-drilled. When pre-drilling, the screws may be fastened at a minimum of 50 mm from the edge.

Due to the higher internal tensions than average, Siberian larch wood requires the use of at least 5-mm-thick stainless steel (A2) screws to prevent the screws from breaking. When installing 21-mm-thick larch decking, we recommend using at least 5×70 mm, and for 28-mm thickness, at least 5×90 mm stainless steel (A2) screws. In an aggressive environment, such as pools with chlorine water or seaside areas, acid proof stainless steel (A4) screws must be used.



4. Maintenance

4.1. First maintenance

Within the first year of use, pressure-treated wooden decks are usually not treated with oil, as they may not have dried sufficiently. They also have a sufficient protective coating without oil.

The first maintenance of a pressure treated decking board is necessary when the sun has slightly bleached the deck surface. Pressure treatment agents and decking oil may not be compatible, and bleaching will help alleviate the conflict. Choose a

dry and warm time for oiling. The minimum temperature for oil treatment is +5 °C. At lower temperatures, the oil dries and absorbs more slowly.

The estimated maintenance interval for Siberian larch is two years, after which the deck should be treated with the same product and colour shade.

Defects due to mechanical damage to the wood must be repaired on a day-to-day basis.

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