ORGANOWOOD® STUD TIMBER

PRODUCT DATASHEET

The information in this product datasheet includes guidelines for OrganoWood® Stud timber that comes from OrganoWood AB's test result and collected experiences about the product. OrganoWood AB does not take any responsibility for incorrect use of the product. The latest version of this product datasheet is available on OrganoWood AB's website: www.organowood.com.



QUICK FACTS

Product: OrganoWood® Stud timber.

Appearance: Wood coloured pine, ages naturally.

Rot protection: Tested according to SS-EN 84, SS-EN 113 and classified according to EN 350-1.

Flame protection: Bfl-s1 tested according to SS-EN 13501-1.

Form stability: Pine swells/shrinks approx. 1% at 4% moisture ratio change.

Dimensions: 45x45 mm, 45x70 mm, 45x95 mm, 45x120^{C24} mm, 45x145^{C24} mm, 45x170^{C24} mm, 45x195^{C24} mm, 45x220^{C24} mm.

Environment: Contains no substances that are classified as harmful to the environment. Assessment B by SundaHus and recommended by Byggvarubedömningen and BASTA. Registered in the Nordic Swan's house product portal.

Certificate: All OrganoWood® construction timber is FSC® (FSC-C120532) or PEFC certified.

Application areas: Outdoors.

Recycling: As untreated timber.

Warranty: 10-year rot protection warranty according to the warranty certificate.

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PRODUCT

Product description

OrganoWood® Stud timber is an environmentally classified construction timber for outdoor use. A natural coloured construction timber that ages and greys naturally. The timber is silicon impregnated which gives a high resistance to rot attack and first class flame protection (Bfl-s1). The pine raw material for OrganoWood® Stud timber comes from the pine district in southern Sweden.

The raw material is Nordic pine that is modified using the award-winning and patented OrganoClick® technology for the modification of biofibres. The process has been developed with inspiration from the natural fossilization process where minerals penetrate and mineralise organic materials. Using the technology, silicon substances are bound to the wood fibres under high pressure and create an environment where wood-decay fungi do not thrive. Furthermore, the silicon substances are non-combustible, which gives the timber its flame protection. Penetration of the silicon based impregnation liquid occurs in the sapwood to create optimal protection.

OrganoWood®-Stud timber has an even and smooth surface. As the silicon substances bind to the timber through strong binding, the properties remain after long-term use in rainy or damp environments.

Environment and recycling

OrganoWood® Stud timber contains only substances that can be returned to the natural cycle. So the timber does not need to be recycled as environmentally hazardous waste, but can be recycled as untreated timber according to local regulations. All substances in timber are classified as environment-friendly according to the CLP Regulation (EC no. 1272/2008). The timber has also received assessment B by SundaHus and recommended by Byggvarubedömningen and BASTA.

OrganoWood® Stud timber is listed in the Nordic Swan's house product portal and can be used in Nordic Swan Ecolabelled projects.

Application areas

OrganoWood® Stud timber is designed for use outdoors above the ground, for example, patios, jetties, fencing, etc. Studs are ideally used during the construction of timber decking together with OrganoWood® decking.

Tests and classifications

OrganoWood® Stud timber has undergone several authorised third party tests. The timber has been rot protection tested by RISE according to SS-EN 84 and SS-EN 113 and based on these tests has been calculated to durability class 1 against brown rot according to SS-EN 350-1. The timber has been flame protection tested by RISE according to SS-EN 13501-1 and obtained class Bfl-s1. OrganoWood® Stud timber has a solar reflectance index (SRI) of 82.4 which is tested by RISE according to ASTM E1980-11.

Warranty

OrganoWood® Stud timber has a 10-year rot protection warranty according to the warranty certificate issued by OrganoWood AB. The warranty applies to all OrganoWood® Stud timber that is produced by approved manufacturers. The warranty certificate is obtained at the point of purchase.

Carefully read through the installation instructions before installing. A detailed installation instruction is available at www.organowood.com.





FACTS AND MAINTENANCE

- » Pine is a soft wood that has many advantages as it is easy to work with and has a low density. OrganoWood® modified wood is dried to an approximate 18% target moisture ratio, which makes it easier than traditionally treated timber that is used outdoors.
- » OrganoWood® is primarily adapted for modification of pine and spruce. Pine is traditionally used for patios and structures and spruce for panels. These woods contain knots with a structure that can appear differently from instance to instance. As wood moves in relation to the air's moisture ratio and temperature, cracks can occur and the knots fall out during dry periods. Any cracks usually close up when the humidity increases.



- » Timber that is placed outdoors turns grey naturally but the greying process can appear differently during the seasons and depending on the weather conditions. In some cases the greying may initially be perceived as speckled or as dark spots/fields, but this evens out relatively quickly. After about 1 year an OrganoWood® timber that is placed outdoors in direct sunlight already has a grey hue. In shadow this may take longer, but the end result is the same. Wood installed horizontally often has a faster greying process than wood installed vertically.
- » One effect that can occur on all types of timber placed outdoors and ages is so-called furring ("fibre fuzz"). Furring is a natural process in the timber's "cycle" and does not affect the characteristics of the timber. This is a phenomenon that diminishes over time. If superficial fibre fuzz occurs, this can be removed using a terrace brush when the patio is dry and treated with OrganoWood® 02. Repellent: Dirt and water repellent.
- » Maintenance of OrganoWood® is carried out using OrganoWood® 03. Cleaner and surface treatment with OrganoWood® 02. Repellent. This to create a more hydrophobic surface and minimise the risk of growth and the amount of dry cracks.
- » OrganoWood® Stud timber must not be painted.



