

ORGANOWOOD®

DECKING & CONSTRUCTION
ECO FRIENDLY WOOD



WHAT IS ORGANOWOOD®?

OrganoWood® is environmentally classified wood modified with silicon that gives a long life and a beautiful silver grey hue. The patented technology give the timber rot protection, creates a water repellent surface and improves the flame protection.

OrganoWood® withstands harsh environments and takes on a beautiful silver grey hue when exposed to the weather and wind. The timber is available as decking and construction timber as well as facade panels with a wide range of profiles.

Home owners, architects, builders and municipalities, to name but a few, are all attracted by the environmental profile and silver grey hue of OrganoWood®.



Patented technology



Sustainable



Eco Friendly



Swedish Innovation



Silvergrey

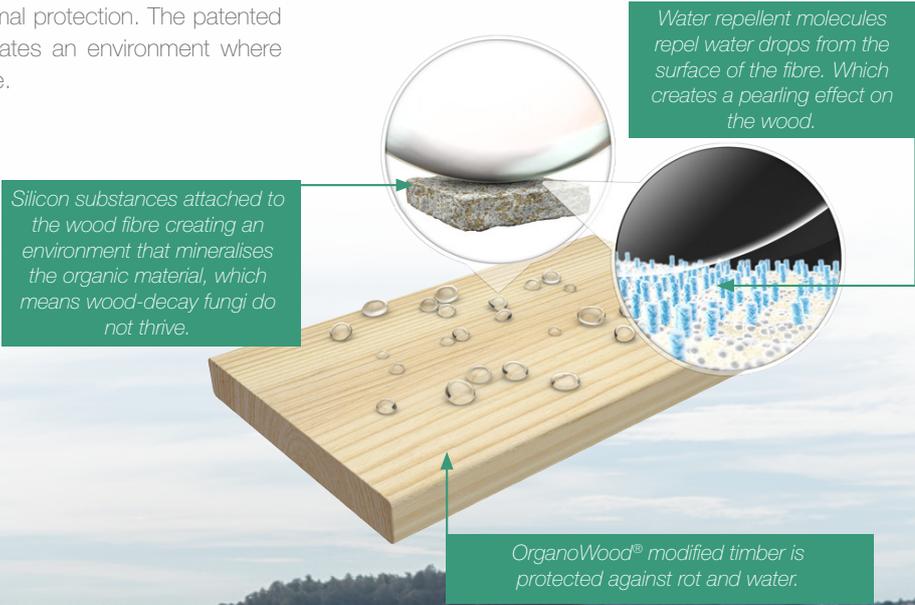


DISCOVER THE UNIQUE ORGANOWOOD® TECHNOLOGY

The process has been developed with inspiration from the natural fossilization process where minerals penetrate and mineralise organic materials. OrganoWood® is a patented Swedish innovation developed and produced in Sweden.

OrganoWood's technology is based on scientific breakthroughs in methods for modifying biofibres. Using the technology, silicon substances are bound to the wood fibres under high pressure. Penetration of the liquid occurs in the sapwood to create optimal protection. The patented modification of the timber creates an environment where wood-decay fungi do not thrive.

Plus treated OrganoWood® modified timber is dirt and water repellent, which gives better form stability, reduced risk of surface growth and a surface that is easier to clean.



FACTS ABOUT WOOD

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.

Pine swells/shrinks approx. 1% at 4% moisture ratio change. Therefore ensure that there is an air gap during installation.

ORGANOWOOD® APPLICATION AREAS

WHAT?

- » Patios
- » Facades
- » Jetties
- » Outdoor areas
- » Bridges
- » Garden furniture
- » Timber decking
- » Fencing
- » Pergola
- » Walkways
- » Noise planks
- » Constructions
- » Roof terraces

WHERE?

- » Houses
- » Balconies
- » Gardens
- » Apartment blocks
- » Schools/ preschools
- » Public environments
- » Parks/playgrounds
- » Nature reserves
- » Commercial environments

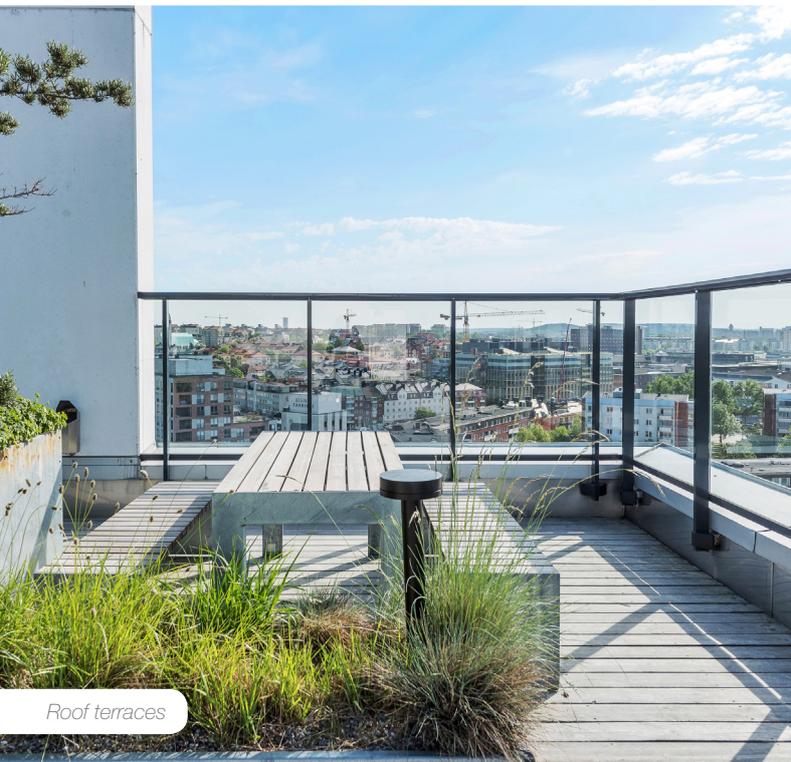




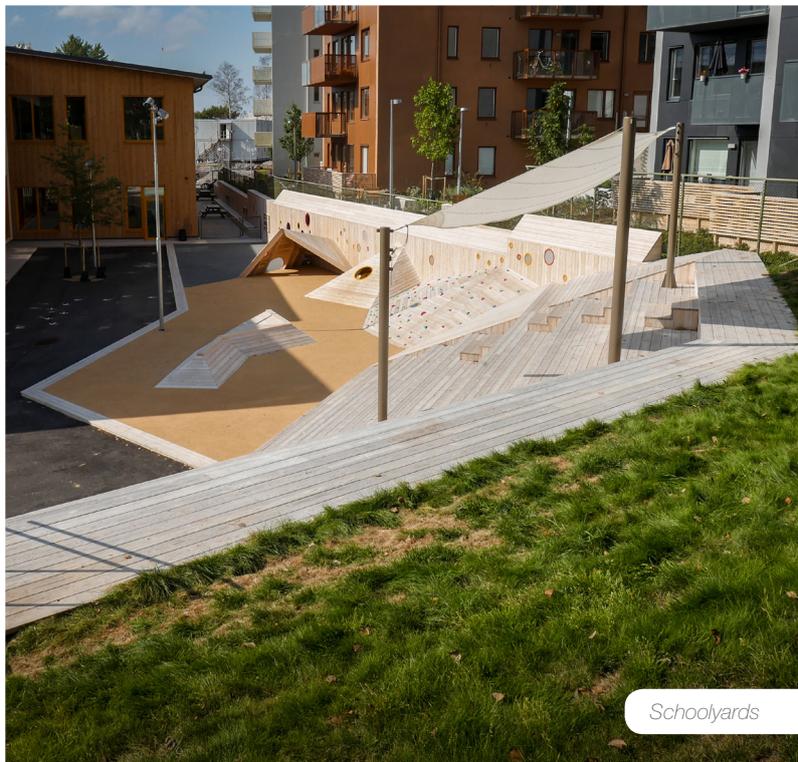
Jetties



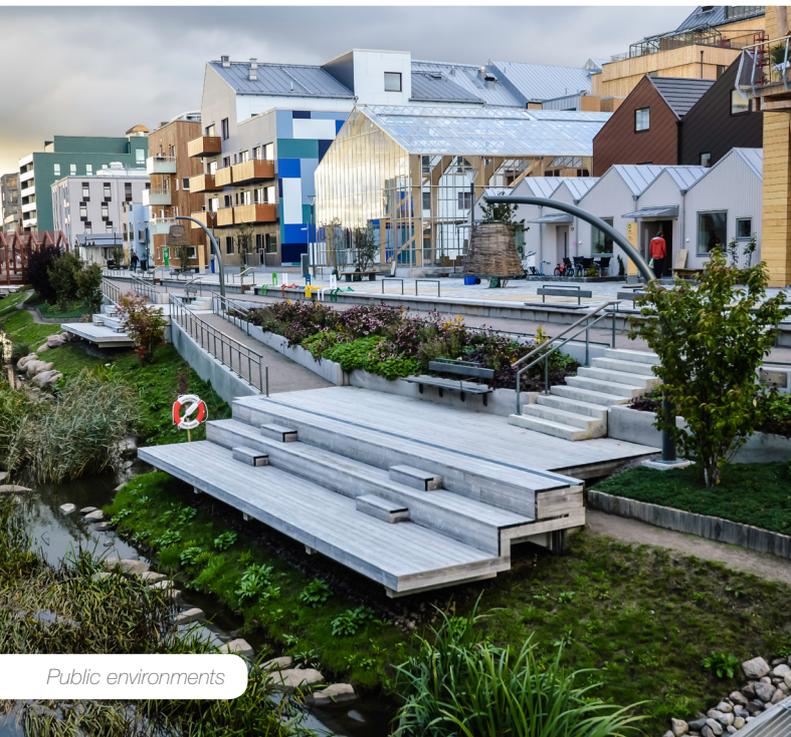
Patios



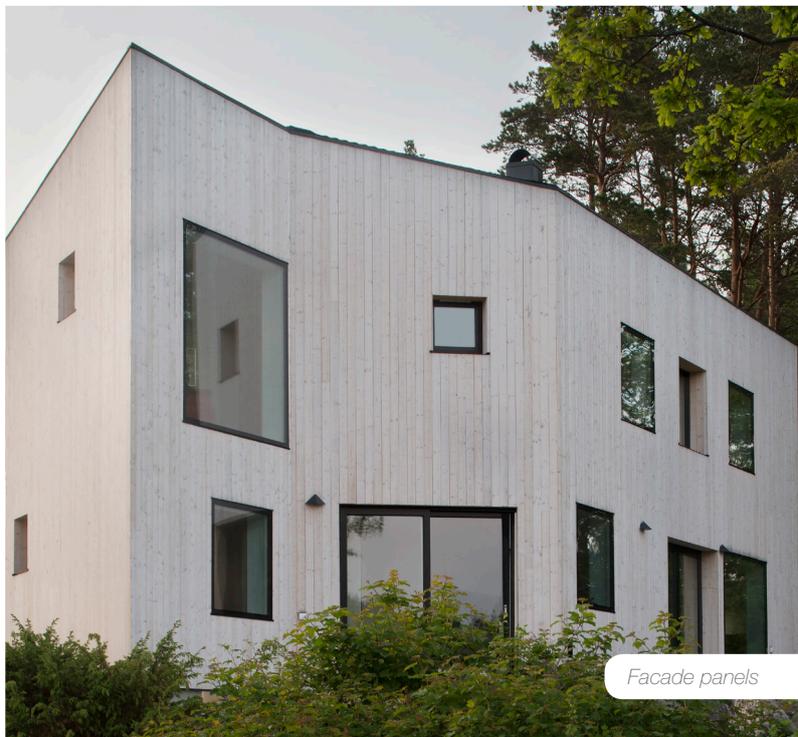
Roof terraces



Schoolyards



Public environments



Facade panels

ENVIRONMENTALLY CLASSIFIED TIMBER

OrganoWood®-modified timber has been developed to withstand harsh environments without the use of toxic impregnation substances. All substances in the products from OrganoWood® are non-toxic and 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).

OrganoWood's wood preservative products were the first wood preservative products in Sweden to be awarded the Swedish Society for Nature Conservation's (SSNC) eco-label "Good Environmental Choice".

OrganoWood® modified timber is assessed by SundaHus and recommended by Byggarubedömningen and BASTA. The products are also registered in the Nordic Swan's house product portal and can be used in Nordic Swan Ecolabelled projects.

The technology used during the production of OrganoWood® was, among others, chosen as Sweden's best Environmental Innovation 2008 and was awarded Nordberg's "Hottest material news" 2014. The Group was elected "Climate Solver" by the World Wide Fund for Nature WWF 2010 and as a "Sustainia 100 company" 2015.



QUALITY AND SUSTAINABILITY

Sustainability

2013 an independent study was launched of different types of decking material and surface treatments by RISE and the Highways department in Malmö Stad. The aim was to compare performance by studying, among others, attack by microorganisms, crack formation and material deformation. The test indicates good sustainability in exposed environments.

Rot protection

Timber from OrganoWood® has well-documented rot protection, tested in the Rot protection test SS-EN 113. For natural sustainability according to SS-EN 350, OrganoWood® received class 1 i.e. highest sustainability. OrganoWood® has a 10-year rot protection warranty (see the warranty certificate).

Solar reflectance Index (SRI)

The so-called "Cool Roof" technology strives for a high SRI value, to keep heat transfer to buildings low and with that save costs related to cooling requirements. In addition it reduces the risk of creating urban heat islands. Light reflection and storage capacity are weighed together to a value on a scale 0-100. OrganoWood® received in the RISE (SP) test ASTM E1980-11 an SRI of 82.4 which is a very good value.

Certificate

All timber from OrganoWood® is FSC® (FSC-C120532) or PEFC certified.



Intertek



ORGANOWOOD® DECKING TIMBER

ORGANOWOOD® BASIC

The pine raw material for OrganoWood® Basic modified decking timber comes from the best pine district in southern Sweden. Wood raw material from southern Sweden is characterized by its relatively quick growth, the decking therefore shows a greater variation of knots and a slightly smaller proportion of heartwood compared with raw material from the north.



DECKING

Dimensions (mm)

22 x 95
28 x 120

ORGANOWOOD® SELECT

The pine raw material for OrganoWood® Select modified decking timber comes from the best pine districts in the north of Sweden. The wood raw material from this district is characterised by its relatively high proportion of heartwood and that the knots are smaller and rounder in shape.



DECKING

Dimensions (mm)

28 x 120
28 x 145
34 x 145

ORGANOWOOD® SELECT PLUS

The pine raw material for OrganoWood® Plus modified decking timber comes from the north of Sweden and is an OrganoWood® sorting of raw material that creates a perception of a smoother and calmer appearance when compared to OrganoWood® Select. The timber has also been plus treated with OrganoWood® 02. Repellent. Dirt and water repellent, which gives greater form stability, reduced risk of surface growth and a surface that is easier to clean.



DECKING

Dimensions (mm)

28 x 120
34 x 145

NEW!

ORGANOWOOD® MAGNUM PLUS

New for this year is Magnum Plus which is a heavier decking timber. The pine raw material for OrganoWood® Magnum Plus modified decking timber comes from the best pine district in central and northern Sweden. The timber has also been plus treated with OrganoWood® 02. Repellent. Dirt and water repellent, which gives greater form stability, reduced risk of surface growth and a surface that is easier to clean. 45 mm thick decking in two widths.



DECKING

Dimensions (mm)

45 x 145
45 x 170



ORGANOWOOD® CONSTRUCTION TIMBER

OrganoWood® construction timber is used for indoor and outdoor structures above ground. The rot protection has been tested by RISE (SP) in the European test EN 113. Studs are ideally used during the construction of timber decking together with OrganoWood® Decking.

ORGANOWOOD® STUDS

Dimensions (mm)

- 45 x 45
- 45 x 70
- 45 x 95
- 45 x 120, C24
- 45 x 145, C24
- 45 x 170, C24
- 45 x 195, C24
- 45 x 220, C24



ORGANOWOOD® BATTEN

Dimensions (mm)

28 x 45



GROOVED DECKING

Dimensions (mm)

28 x 120



ORGANOWOOD® HANDRAILS

Dimensions (mm)

34 x 145



ORGANOWOOD® POSTS

Dimensions (mm)

70 x 70
95 x 95



INSTALLATION INSTRUCTION FOR ORGANOWOOD® DECKING

To remember before starting

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

- » Store the timber covered and well ventilated before installation.
- » When building with timber you must, as far as possible, avoid moisture traps, i.e. build so that the wood can always dry.
- » Always use an air gap between the boards of at least 7 mm for a width of 120 mm, at least 9 mm for a width of 145 mm and at least 11 mm for a width of 170 mm. Variations in the wood's moisture ratio (season variation) can affect the decking's actual dimensions, always check the width of the wood prior to installation to adapt the width of the air gap.
- » Use quality stainless steel screws in grade A2 or A4, or surface treated screws in quality C4.
- » When cutting, making holes and other minor processing of the timber, treat the surfaces with OrganoWood® 01. Protection and OrganoWood® 02. Repellent to ensure rot protection remains optimal.
- » The floor structure under the decking for 22 mm thick decking should have a maximum cc-spacing of 40 cm. For 28 mm and 34 mm thick decking the cc-spacing should be 60 cm.
- » OrganoWood® modified decking timber must not be painted over.
- » The decking should have a distance of at least 30 mm to the ground in order to avoid the moisture problem in the wood.
- » We recommend, in terms of the structure, that the floor is ventilated from below to minimise problems with buckling.
- » When soiled or unwanted superficial growth, wash the decking with OrganoWood® 03. Cleaner. After washing, it is recommended that the decking is treated with OrganoWood® 02.
- » We recommend surface treatment with OrganoWood® 02. Repellent every other to every third year or as required. You can test yourself and see when it is time to treat the decking. - Pour a little water on the decking, if the wood absorbs the water you need to surface treat with OrganoWood® 02. Repellent. If the water remains on the surface there is still some water repellent properties present, and the decking does not need to be treated.
- » Minimise streaking by drying, polishing or sanding. Or just let the weather and wind bleach them.



ORGANOWOOD® CLADDING PLUS

OrganoWood® Cladding Plus is an environmentally classified timber with properties over and above the ordinary. A natural coloured timber which, without additives either biocides or toxic heavy metals, has a high resistance to rot attack and improved form stability. OrganoWood® modified cladding has also been plus treated with OrganoWood® 02. Repellent: Dirt and water repellent, which makes the cladding timber water repellent.

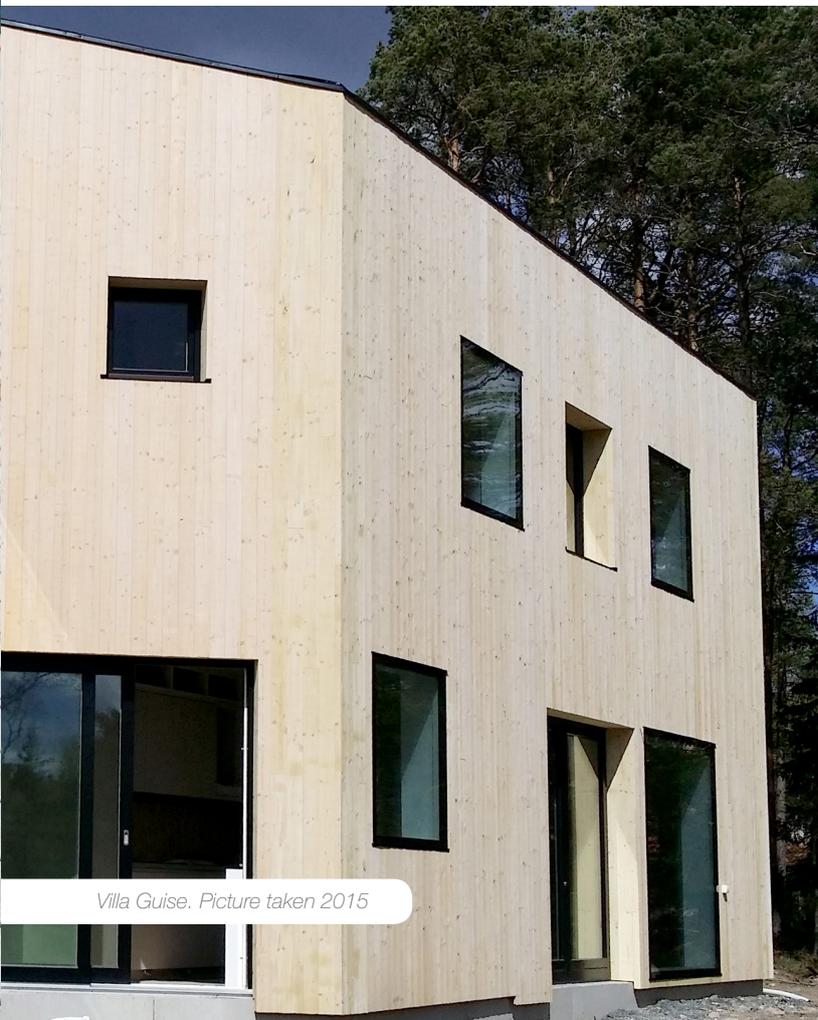


WOODS AND TREATMENT

SPRUCE

The cladding timber is initially naturally coloured and over time takes on a beautiful silver grey shade. The timber is carefully selected from high quality Swedish spruce from the best districts. For comprehensive profile information see the cladding brochure or visit www.organowood.com.

For detailed information read the brochure for OrganoWood® Cladding Plus or visit www.organowood.com.



Villa Guise. Picture taken 2015



Villa Guise. Picture taken 2016

MAINTENANCE AND SURFACE TREATMENT

OrganoWood® modified timber is naturally coloured and over time takes on a beautiful silver grey hue. We recommend surface treatment only using OrganoWood® 02. Repellent. Wood is a living material and requires more or less maintenance depending on the weather, wind and wear.

OrganoWood has developed three products which together create a complete wood preservative system. The products can be used just as well on OrganoWood® modified timber as on other timber, for example, traditional pressure impregnated wood, cedar, larch, etc. When using the OrganoWood wood preservative system on wood outdoors the wood takes on a harder, smoother surface and a beautiful silver grey hue.

OrganoWood® 01. Protection: Flame and rot protection is a water based wood preservative product that consists of silicon minerals and natural plant substances. The product can be used for surface treatment of virtually all untreated and pressure impregnated timber with few exceptions. The treated timber receives protection against rot attack and adds flame protective properties. The product should be used on OrganoWood® modified timber and on other untreated or treated wood where increased rot and flame protection are desired. The product is eco-labelled with the Swedish Society for Nature Conservation's "Good Environmental Choice".

OrganoWood® 02. Repellent: Dirt and water repellent used as final treatment in OrganoWood's wood preservative system and as maintenance treatment of OrganoWood's modified timber. The product gives the wood water and dirt repellent characteristics, reduced risk of surface growth and a surface that is easier to clean.

OrganoWood® 03. Cleaner is used to clean before treatment with the products in the wood preservative system, and for period maintenance. The product is eco-labelled with the Swedish Society for Nature Conservation's "Good Environmental Choice".



ORGANOWOOD®

OrganoWood AB, Linjalvägen 9-11, SE-187 66 Täby, Sweden
+46 (0)8-674 00 80, info@organowood.com www.organowood.com