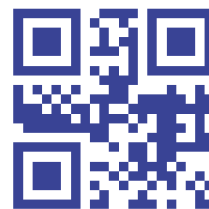


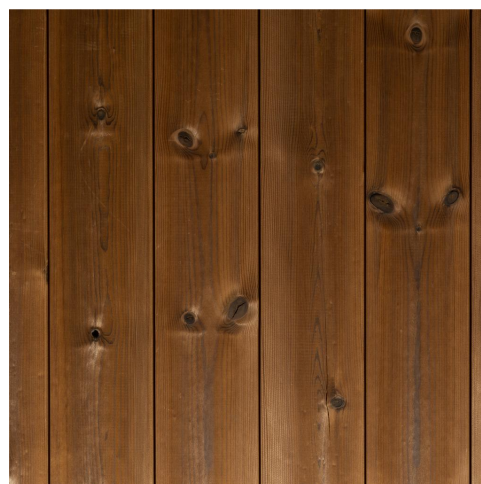
PANEL

THERMO PINE 15x138 STS4

5111



lauta.fi/5111



Quick info

Hintataso

Käyttövalmius Käsittelemätön

Käyttökohteet

Product description

Pikatiedot

	– keskihintainen puulaji valikoimassamme.
	Käsitlemätön – tuote lähtee tehtaalta puuvalmiina. Voit pintakäsitellä sen tai jättää luonnolliseksi.
	Saunat – soveltuu sellaisenaan.
	Kuivat sisätilat – soveltuu, pintakäsittelyä suositellaan.
	Märkätilojen kattopinnat – soveltuu, pintakäsittelyä suositellaan.
	Märkätilojen seinäpinnat – soveltuu, pintakäsittelyä suositellaan.

Merkinnät perustuvat [puulajien soveltuvuustaulukkoon](#).

Wooden paneling brings warmth to any room

Wooden paneling makes a room feel warm and natural. On the ceiling, it pulls the look of the room together, and on a wall, it adds character and depth. The profile and width you choose decide whether the surface looks calm and simple or rhythmic and striking.

A surface that suits you

You can leave the panels in their natural wood color or treat them in a color of your choice. A semi-transparent treatment lets the grain show through, while opaque paint gives the surface an even color. You can also order the panels factory-treated, so they're ready to install right away and the tongues and grooves are treated too.

Also suitable for saunas

In addition to dry indoor spaces, this panel is suitable for saunas. In a sauna, wood is put to the test as temperature and humidity change quickly, so it's best to choose a resin-free species, such as aspen, alder or thermally modified wood. You can order the panels with factory-applied sauna protection treatment, which protects the wood from moisture and dirt and makes cleaning easier.

- ✓ Finnish wood, responsibly manufactured
- ✓ Beautiful grain pattern, rich brown surface
- ✓ Excellent choice for sauna or terrace
- ✓ Very low moisture movement
- ✓ PEFC-certified

Our product uses thermally treated pine, which has a beautiful brown, hardwood-like surface. Thermal pine adds natural beauty and durability to interiors and outdoor spaces. Its excellent heat insulation, moisture resistance, and ease of maintenance make it a natural choice for sauna benches, interior paneling, terraces, and garden construction. Carefully selected raw materials from Finland's best-growing areas and an eco-friendly treatment process using high temperature and steam ensure that our thermal pine products are responsibly produced, safe, environmentally friendly, and PEFC-certified.

Made-to-Order Product

A made-to-order product is a good choice for larger projects that require a specific profile in a specific wood species. It is a suitable option when procurement can be planned well in advance of the actual need.

Made-to-order products are manufactured to the customer's requirements, so every order is unique. Delivery time and final price depend on several factors, which are always considered separately when preparing a quotation.

You will receive an exact quotation and delivery estimate once the order details have been confirmed. The more detailed the information on the product, quantity and desired specification we receive at the outset, the faster we can process your order.

Please note, however, that the precision of material and profile requirements affects the manufacturability of the product. The more detailed the requirements, the more limited the production options may be. Feasibility is also assessed based on the availability of raw material.

Delivery Time

Delivery time is particularly affected by the availability of raw material. Raw material availability varies by wood species and grade. Larger order volumes also require more preparation and production time so

that the order can be scheduled into production. Multi-stage processing of the product, such as planing, end-matching and surface treatment, affects the delivery time and requires a longer production time.

The estimated delivery time indicates when the goods will be ready for shipment or collection from our warehouse. We confirm an individual delivery time for each order. Below are examples of typical delivery times for different cases.

Products with a delivery time from 2–4 weeks

This delivery time is possible when the raw material is available and a production run for a corresponding product is scheduled soon, allowing the order to be combined with that run. Otherwise, the delivery time is at least 4 weeks. The estimate does not take production queue congestion into account and is intended as a guideline only.

- Surface treatment
- Standard stock profile
- Minor modifications to a standard stock profile, e.g. width or thickness

Standard stock profile = A product identical in dimensions and shape, for example in another wood species

Products with a delivery time assessed case by case

- Standard stock profile with no raw material in stock
- Special profile with no raw material in stock

Both of the above cases are only possible for large projects, with a delivery time of at least 2 months

Restrictions

The order quantity must be at least as stated below.

- 500m for a stock product to be surface treated
- 1000m for a standard stock profile
- 2000m for a standard stock profile with minor modifications
- One bundle of sawn timber (approx. 4m³) if the order is not a standard stock profile
- Multiples of sawn timber bundles (approx. 4m³) (1,2,3,...) when the raw material is not in stock.

Thickness

- Product thickness can range between 12-45mm.

Width

- Product width can range between 40-200mm.

Length

- Timber lengths range between 1.8-6.0m. We aim to meet length requests wherever possible, but unfortunately this is not always possible.

Waste Allowance

To avoid a costly supplementary order, include a sufficient waste allowance in your order. The costs of a small supplementary order can be at least 5x those of the original. Any supplementary order takes at least as long to produce as the original order, and its price is quoted as a separate delivery.

Ordered and Delivered Quantity

A tolerance of ± 10 percent is permitted in the delivered quantity of timber compared with the quantity stated in the order confirmation. This means that the delivered quantity may be up to 10 percent less or more than the quantity ordered. As timber is a natural material, its properties are subject to natural variation. For this reason, the amount of waste generated in production cannot be predicted entirely accurately. The final quantity therefore cannot be predicted in advance; it is determined during manufacturing and rarely matches the ordered quantity exactly.

Introduction

- ✓ Made from Finnish wood, responsibly produced
- ✓ Beautiful grain pattern with a rich brown surface
- ✓ Excellent choice for saunas or terraces
- ✓ Minimal moisture movement
- ✓ PEFC-certified

Product information

Product information

Tuotenimi	LÄMPÖMÄNTYPANEELI 15x138 STS4
Tuotenumero	5111
Alkuperämaa	Suomi
Saatavuus	Ole yhteydessä myyntiin
CN-koodi	CN 4407 1100 Pine

Product measurements

Vahvuus (mm)	15
Leveys (mm)	140
Paino (kg/myyntiyksikkö)	0,819
Neliömenekki (m/m²)	7,692
Hyötyleveys (mm)	130
Pakkauskoko (kpl/pkt)	4

Product features

Puulaji	Mänty lämpökäsitelty
Pintakäsittely	Ei käsitelty
Päätyponttaus	Ei
Piilokiinnityspontti	Ei
Palokäyttäytyminen	D-s2, d0

Sustainability

Hiilijalanjälki (CO2e kg/jm)	0,98
Hiilikädenjälki (CO2e kg/jm)	-1,39
CE-merkintä	Ei

Minimum order size

Please note that we deliver our products in bundles. Bundle size is indicated together with stock information on top right corner.

Surface treatment

Surface treatment brings out the best in wood

The right surface treatment finishes the wood for exactly the purpose it's meant for. It protects the wood, extends its life cycle and gives it a color that suits the look of your home or building.

Not all wood needs treatment, but surface treatment lets you highlight different qualities of the wood. When the wood is treated during manufacturing, it's ready to install right away. This makes tight construction and renovation schedules easier to manage.

Why choose industrial surface treatment?

We paint and treat the wood on our own industrial paintline right after planing. At that point, the wood surface is open and the paint or treatment soaks in effectively. The temperature and humidity on our paintline stay constant, so the paint spreads evenly and dries properly. The result lasts longer than paint applied on site at the mercy of the weather.

- **You save time.** Industrially treated wood is ready to install, so there's no need to wait for good painting weather on site.
- **You get an even finish.** In controlled conditions, every board and panel receives the same treatment.
- **The wood is protected during construction.** The surface treatment protects the wood from rain and sunlight from the moment it's installed.
- **The tongues, grooves and edges are treated too.** Wood moves with humidity and shrinks during the dry season. When the wood is treated before installation, no untreated stripes show at the joints.

Surface treatment options

The right surface treatment depends on how the wood will be used and the look you're after.

- **Opaque paint** covers the grain of the wood and gives the surface an even, finished color. Outdoors, opaque paint protects the wood for a long time. For a paneled ceiling, choose a matte paint that evens out small irregularities.
- **Semi-transparent treatment** gives the wood a color tone while letting its natural grain show through. A semi-transparent product can be tinted or clear.

- **Sauna protection treatment** helps wooden sauna surfaces withstand high temperatures and humidity. It also makes the surface easier to keep clean.
- **Fire-retardant treatment** gives the wood surface a fire classification of B-s1, d0. This is the highest class available for wood construction products, so fire-retardant wood can also be used in buildings with strict fire safety requirements.

Good to know: Light-colored wood darkens and yellows when exposed to light. To keep a light color, choose a white-pigmented or UV-protected, non-yellowing product.

Good to know about wood species

Wood species differ from one another, and the need for treatment depends on both the species and how the wood is used.

- **Spruce** always needs a protective surface treatment outdoors. Spruce cladding is painted with either semi-transparent or opaque paint.
- **Douglas fir and larch** are naturally rot-resistant and dense, so they don't need surface treatment outdoors. Left untreated, they turn a beautiful silvery gray over time.
- **Thermally modified wood** has excellent dimensional stability thanks to thermal modification.
- **For wood used in saunas**, we recommend sauna protection treatment regardless of the species.

If you treat the wood yourself

You can treat wood used indoors by painting, oiling, waxing or lacquering it. Always choose a product that suits the use, and follow the manufacturer's instructions. Sauna benches are treated with paraffin oil or sauna wax, as described in more detail in the bench care instructions.

Treat new wood before fastening it. When you treat panels and boards before installation, the tongues, grooves, edges and ends get treated too. This way, no untreated stripes show at the joints when the wood shrinks during the dry season.

Preparation

1. **Clean the surface** of dust, grease and dirt. Wash previously treated surfaces with a paint cleaner.
2. **Remove any flaking old paint** and sand glossy surfaces matte. Finish with fine 120–180 grit sandpaper, and remove the sanding dust carefully.

3. **Treat the knots.** If the wood has a lot of knots, brush them with knot sealer or use a paint that prevents bleed-through. This keeps resin and the dark color of the knots from showing through the paint.
4. **Do a test treatment.** If the surface has previously been oiled or waxed, first check that the new treatment adheres on a small area.

Treatment

- **Apply two coats.** New, untreated wood is usually treated twice. Let the first coat dry according to the manufacturer's instructions before applying the next.
- **Treat one panel or board at a time along its full length.** This prevents lap marks and visible joins.
- **Mind the conditions.** Treat when the air, surface and product temperature is above +5 °C and the relative humidity is below 80%. Good ventilation speeds up drying.
- **Let the surface cure undisturbed.** A painted surface usually reaches its final durability in 3–4 weeks. Handle it with care until then.

Responsibly treated

We use water-based paints and treatments from well-known manufacturers. Water-based products contain fewer solvents than solvent-based ones, so they put less strain on the environment and indoor air.

DID YOU KNOW? Because we want to operate as sustainably as possible, each batch we treat must be at least 500 meters. This way, we don't waste raw materials, and our operations stay efficient.

Ask us more

We have long experience in wood surface treatment, and we're happy to help you find the right treatment for your project. Contact our sales team to learn more about the options.

Installation and storage

Installing panels

Wooden panels bring warmth and atmosphere to any room. These instructions cover installing panels in all indoor spaces. If the panel is also suitable for saunas and you're installing it in one, also follow the additional sauna instructions after these instructions.

The color of the wood changes over time due to light and changes in humidity. Dark thermally modified wood becomes lighter, and light wood becomes darker.

Storage and acclimatization

- **Let the panels acclimatize.** Bring the panels into the room where they will be installed 1–2 weeks before installation. The room temperature should be about +20 °C and the relative humidity 40–60%.
- **Store the panels correctly.** Store the panels horizontally in their unopened small packs, at least 30 mm off the ground. Open the packs just before installation.
- **Keep conditions stable.** During storage, the humidity must not rise above the normal level for the room where the panels will be used, and the temperature must be higher than outdoors.

Good to know: Wet work, such as leveling and tiling, raises the humidity in a room significantly. Panels stored in the same room will swell. A construction heater, on the other hand, dries the air and makes the wood shrink, and a rapid drop in humidity can cause the wood to crack. If the packs have been stored in a tight bundle, the packs in the middle and on the outside of the bundle may have different moisture levels. That's why it's a good idea to break up the bundle and let the small packs acclimatize unopened.

Before installation

- **Allow for waste.** Order about 10% more panels than the calculated quantity.
- **Allow extra length for cutting.** The stated product length is not an exact measurement, so choose panels that are at least 5 cm longer than you need.
- **Plan the direction and joints.** Decide in advance which way the panels will run and where any joints will go.
- **Sort the panels.** Sort the panels by color or knots so that you can spread them evenly across the whole surface.

Battens

The panels are installed on battens, which always run across the panels.

- **Ceiling:** Install the battens at right angles to the direction of the panels.
- **Horizontal paneling on walls:** Install the battens vertically.
- **Vertical paneling on walls:** Install the battens horizontally.

Make sure the battens are straight. On a ceiling, even small irregularities are easy to see, so check that the battens are straight with care, for example with a line laser or a long straightedge. Choose the batten spacing to suit the project, but no more than 600 mm.

Paneling a ceiling

- **Choose the direction according to the light.** When the panels run away from the window wall, in the direction of the light, joints and small irregularities are less visible.
- **Plan lighting and electrical work in advance.** Mark the positions of light fixtures and wiring before paneling so that they end up in the right places and not where the battens are. Electrical work must only be done by a qualified electrician.
- **Start on a straight line.** Check the line of the first panel carefully, as it determines how straight the whole ceiling will be.
- **Work in pairs.** Long panels are easier to install on a ceiling when one person holds them up and the other fastens them. You can also use a ceiling prop.

Install the panels

1. **Leave room for movement.** Wood moves with changes in humidity, so leave a gap of about 10 mm between the panel and the wall. The gap will be hidden behind the ceiling molding or baseboard.
2. **Panel several walls at the same time.** When paneling several walls horizontally, work on all the walls at once, one row at a time. This lines up the panels precisely at the corners.
3. **Make sure the tongues and grooves are fully engaged** before fastening.
4. **Check the cover width.** Measure at regular intervals to make sure the cover width of the panels stays as planned.
5. **Treat the cut ends** with the same product as the rest of the panel.

Fastening

You can fasten the panels with nails or staples. The fastening method depends on the panel profile and whether you want the fasteners to be hidden.

- **Face fastening:** We recommend fastening the panels straight through the face of the panel. This is the easiest and most reliable method.
- **Panels with a hidden-nail profile:** Fasten the panels through the groove. This keeps the fasteners hidden.
- **Hidden fastening on other panels:** You can also fasten the panels through the tongue so that the fastener is hidden. In this case, the last panel must be ripped to the right width and fastened through the face, so its fasteners remain visible. On walls with horizontal paneling, you have to start from the bottom.

Thermally modified panels: Use stainless steel fasteners and fasten the panels with a nailer. Avoid nailing by hand, so the hammer doesn't leave marks and the panel doesn't crack.

Protect the panel surface when nailing. Use a protective tip on your nailer so that the fastening points are free of dents and marks.

If you're unsure about any step, ask a professional installer for help.

Surface treatment

If the panels are not factory-treated, treat them with a product suited to the room where they're installed. The treatment finishes the surface and protects the wood.

When installing panels in a sauna

In a sauna, panels are put to the test as temperature and humidity change quickly. Follow these instructions in addition to the general instructions. Where the two differ, follow these instructions in a sauna.

Choose a wood species suitable for saunas

- **Spruce, aspen and alder:** Light wood species are an excellent choice for saunas. Aspen, for example, is resin-free and conducts heat slowly, so the surface doesn't get too hot.
- **Thermally modified wood species:** Thermal modification gives the wood excellent dimensional stability and a beautiful dark color.

- **Pine:** Untreated pine is not a good choice for saunas, as resin seeps out of it when the surface heats up. Thermally modified pine works well in saunas, as thermal modification removes the resin from the wood.

Ensure ventilation

A ventilation gap is needed between the panels and the vapor barrier. Leave a small gap at the bottom of the wall, and leave out trim where the wall meets the ceiling, so that air can circulate behind the panels.

Installing in a sauna

- **Leave more room for movement.** Wood moves more in a sauna, so leave a gap of about 15 mm between the panel and the adjoining wall.
- **Install horizontal panels with the tongue facing up.** This keeps moisture out of the groove.
- **Use stainless steel fasteners.** In a sauna, the fasteners must always be stainless steel, whatever the wood species.

Treat the panels before use

If the panels don't have factory-applied sauna protection treatment, treat them before using the sauna for the first time. Treat the cut ends with the same product.

- **Spruce, aspen and alder:** sauna protection treatment or paraffin oil. Sauna protection treatment also lets you add a color tone to the panels.
- **Thermally modified wood species:** paraffin oil

Maintenance and care

Caring for panels

Proper cleaning keeps surfaces in good condition and looking beautiful. If the panels are in a sauna, also follow the additional sauna instructions after these instructions.

- **Remove dust regularly** with a soft brush, a vacuum cleaner or a dry cloth.
- **Wipe dirty spots** with a damp cloth and a neutral detergent. Avoid using a lot of water or strong detergents.
- **Maintain the surface in good time.** The maintenance interval for the surface treatment depends on the product and where it's installed. When the surface starts to wear, maintain it so that the wood isn't damaged when its protective treatment wears off.

Maintenance treatment

1. Wash the surface with a paint cleaner.
2. If needed, sand the surface lightly to a matt finish and remove the sanding dust.
3. Treat the surface again. One new coat is usually enough.

Changing the color

Changing the color of your panels is more demanding than a regular maintenance treatment. The new color needs to cover the old one evenly and adhere well to the previous surface.

1. **Wash the surface thoroughly** with a paint cleaner and let it dry.
2. **Sand the surface to a matt finish** and remove the sanding dust. Sanding improves the adhesion of the new treatment, especially on varnished and glossy surfaces.
3. **Prime if needed.** A primer evens out color differences and prevents knots and dark spots from bleeding through, especially when you change from a dark color to a light one.
4. **Be prepared to apply several coats.** The bigger the difference between the old and new color, the more coats you'll need.

Consider the previous treatment:

-

Oiled or waxed surface: Paint may not adhere to an oiled or waxed surface. Do a test patch on a small area first.

- **From opaque to semi-transparent:** A semi-transparent treatment doesn't cover old paint, so the old paint layer would have to be removed completely. In practice, this is laborious, and choosing a new opaque color is often the easier option.
- **Darkened or yellowed surface:** The surface looks fresh again when you paint it a light color. A heavily darkened surface needs a primer and several coats.

When panels are in a sauna

Sauna panels stay beautiful and fresh for years when you dry the sauna after every use and clean the surfaces regularly. Follow these instructions in addition to the general instructions. Where the two differ, follow these instructions in a sauna.

Care during use

- **Heat the sauna properly before use.** A well-heated sauna dries faster and lasts longer.
- **Throw water only on the heater stones.** Avoid wetting the walls and ceiling.

After using the sauna

- **Dry the sauna.** Leave an electric heater on for at least 30 minutes after use so that the wooden structures dry out. If you have a wood-burning heater, add a few more logs as you leave. Keep the door and window closed, the exhaust vent open and the mechanical ventilation on, so that moisture leaves through the ventilation system.
- **Don't dry textiles in the sauna.** Towels and laundry left in the sauna add moisture and are a fire risk. Never dry laundry on top of the sauna heater.

Washing

Wash sauna panels 1–4 times a year, depending on how often you use the sauna. Wooden surfaces don't like too much water, so don't rinse the walls after every use.

1. **Warm the sauna slightly before washing.** A little heat loosens dirt and speeds up drying. Don't wash a hot sauna, however, or the detergent will dry on the surface.
- 2.

Use a sauna detergent. Choose a mild detergent designed for wooden sauna surfaces. Avoid chlorine-based and disinfecting products. Chlorine evaporates even at low temperatures and is harmful to health, and strong products can bleach and damage the wood surface.

3. **Wash with a soft brush** along the grain of the wood. A hard brush raises the grain and leaves the surface rough.
4. **Rinse thoroughly** with clean water. Never use a pressure washer.
5. **Let the sauna dry properly.** Make sure there is good ventilation, but avoid drying the wood too quickly so that it doesn't crack.

Maintaining the surface treatment in a sauna

Renew the treatment of sauna panels as needed, preferably once a year. In a sauna, use only treatment products designed for saunas, including when you change the color of the panels.

- **Spruce, aspen and alder:** sauna protection treatment or paraffin oil
- **Thermally modified wood species:** paraffin oil

Before treatment: Wash the panels and let them dry properly. Protect the floor, for example with plastic sheeting, as treatment products soak easily into tile joints.

Retreatment with sauna protection treatment

Retreating panels that have been treated with sauna protection treatment requires care. Each new treatment adds to the film on the surface, and a film that is too thick can't withstand the high temperatures of a sauna.

1. Clean the surface of dirt and dust.
2. Sand off a generous amount of the old treatment so that the film thickness stays moderate.
3. Remove the sanding dust thoroughly before applying the new treatment.
4. Apply one thin coat. One coat is usually enough for sauna panel surfaces.

Always follow the treatment product manufacturer's instructions.

Also remember

- Follow the sauna heater manufacturer's instructions and never exceed the maximum permitted temperature. Excessive heat can warp the wood and cause a fire hazard.

- Wooden surfaces darken naturally over time, fastest near the heater and in the areas hit by hot steam.
- Thermally modified wood may give off its characteristic scent when the sauna is heated. The scent fades over time.

Design

For many Finns, the home sauna is a favorite place, but it demands a lot from interior materials. Temperatures can rise above 100°C, and the high humidity means that ceiling and wall panels, for example, are under heavy stress.

Lauta.fi's versatile **Tuuli Sauna** product family is designed to withstand the sauna's changing and challenging conditions. With Tuuli Sauna products, a sauna can be decorated in a stylish, timeless, or modern way—either in harmony with the rest of the home or as a distinct and unique space. They allow the home's interior theme to continue into the sauna, or for the sauna to stand out as a completely different environment.

The range includes ceiling and wall panels, bench boards, bench facings, and bench frame posts—all of which greatly influence sauna atmosphere. It also offers finishing products such as cover, edge, shadow, corner, and ceiling mouldings, as well as boards and slats. This diverse and adaptable product family brings both ambience and durability to the sauna, enabling practical and safe solutions for tricky design spots.

While Tuuli Sauna is optimized for sauna conditions, its products are also suitable for other interior uses. Its panels, boards, and slats can be used in single-family homes, apartments, and other living spaces, making it possible to create a completely unified interior style throughout the home. Tuuli Sauna products are also used in offices, customer spaces, and public buildings. Design options are further expanded by their compatibility with the **Tuuli Indoor** product range for general interiors, which matches perfectly in style—though Tuuli Indoor products are not suitable for sauna use due to heat and humidity.

The extensive Tuuli Sauna range features many wood species, including giant thuja, thermo radiata pine, thermo alder, black alder, thermo aspen, aspen, thermo pine, and spruce. The natural individuality of wood—such as varying knot patterns—makes each product unique.

While interiors often feature materials like plastic, concrete, glass, or metal, Lauta.fi's Tuuli Sauna products are **natural and eco-friendly wood**. They are engineered for strength and usability on par with other materials, while tolerating sauna heat and moisture exceptionally well.

Sample pieces

Lauta.fi delivers product sample pieces to both consumer customers and professionals, such as architects, interior architects and designers, construction industry and procurement professionals.

If you are interested in ordering one or more sample pieces, please contact our sales department via email lauta@lauta.fi or phone [+358 3 3123 6000](tel:+358331236000) (On weekdays 8-16).