

English



# Installation Guide for Lunawood Facade





# Installation Guideline

## Foreword

This guide is based on premium properties of Lunawood ThermoWood® and the best practices and research in wood construction. The guide is suitable for use as an indicative guide for facade products within the Lunawood Collection. For product specific installation guides please visit [www.lunawood.com](http://www.lunawood.com).

Local building codes regulations and instructions must be followed. Local environmental conditions, especially humidity should be factored into the design considerations. Always contact your own local Lunawood supplier for comprehensive and up-to-date information.

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# 01 Lunawood ThermoWood®

Lunawood ThermoWood® is manufactured using only natural methods—heat and steam—with no chemicals added. This environmentally friendly process enhances the wood's durability, dimensional stability, and resistance to decay, making it ideal for demanding applications such as exterior cladding, decking, and interior panelling.

Fire rating of Lunawood ThermoWood® products varies due to the design of the profile. Lunawood's flat tongue & groove cladding products of pine and spruce with a minimum actual thickness of 17 mm have the fire class D rating.

Lunawood provides its tongue&groove products also fire protected to (EN13501) Euroclass B-s1,d0 or B-s2,d0 depending on the profiles. Lunawood Battens can also be fire protected, but the structure needs to be fire tested on case by case basis.

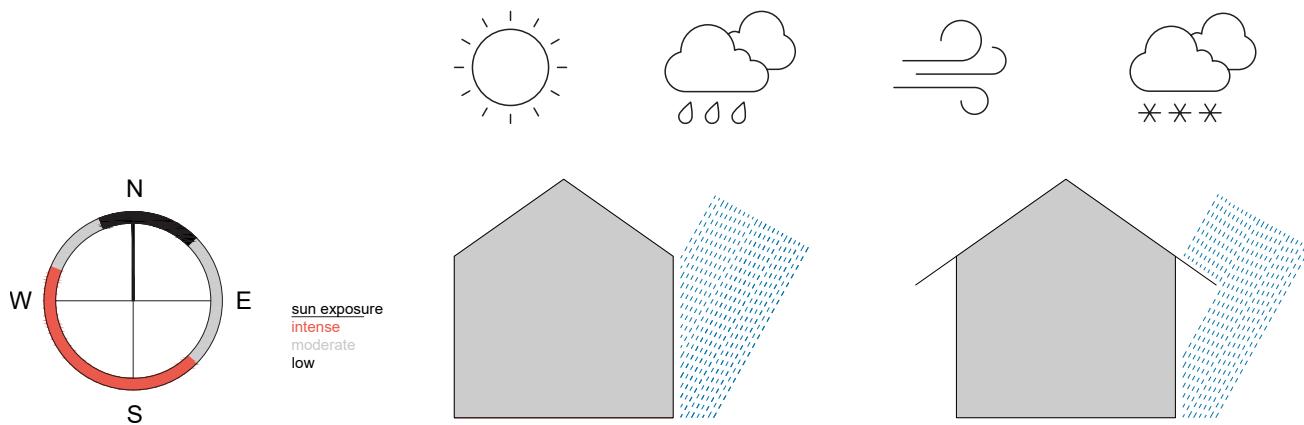
To ensure long-term performance and aesthetics, sealing cut board ends is strongly recommended. This prevents moisture ingress and will help maintain dimensional stability and visual consistency.

To fix Lunawood cladding profiles it is recommended to use self-drilling screws suitable for timber or aluminium, depending on the material chosen for the support battens. Fasteners must be at least of AISI 304 quality (A2 class) austenitic stainless steel as it will prevent corrosion and discolouration, and ensure a secure, long-lasting installation.

## 02 Design considerations

The greying process of Lunawood ThermoWood® is a natural reaction primarily caused by exposure to sunlight and outdoor weather conditions. Ultraviolet (UV) radiation from the sun breaks down the wood's surface lignin, gradually transforming the original warm brown tone into a uniform silver-grey patina. This change is purely visual and does not compromise the wood's performance attributes, such as durability and dimensional stability.

The rate and appearance of greying can vary depending on several environmental factors. Surfaces with greater exposure to direct sunlight—such as those facing south or west—will grey more quickly than shaded or sheltered areas. Certain topographical cladding profiles may interact with this visual process in different ways. Likewise, weather conditions like rain, wind, and temperature fluctuations accelerate the surface aging process by washing away the degraded wood fibers and different cladding profiles will visually interact with these fluctuations in different ways as well. As always, please reach out to your Lunawood representative if product questions arise.



Surface treatment also plays a key role. Untreated Lunawood will begin to grey relatively quickly, often within months. Applying a UV-protective coating can slow this transformation, helping to preserve the original color if desired. However, these treatments must be maintained in accordance with manufacturer guidance.



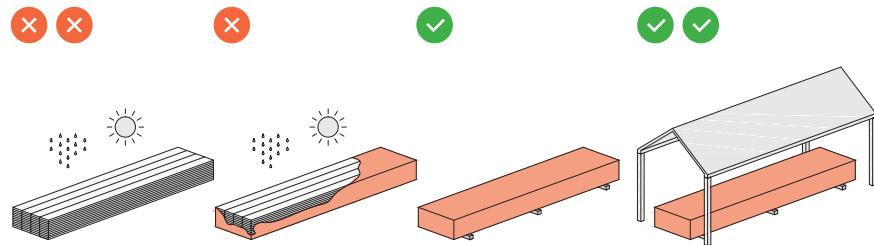
Example of natural weathering in Finland in one year.

Finally, elements such as airborne pollutants, dirt, and poor drainage can lead to uneven greying. Areas where moisture lingers – e.g. near the ground or in corners with limited airflow – may experience accelerated discoloration or patchy results. Despite these factors, the natural silver-grey tone that develops over time is often considered aesthetically pleasant and in harmony with outdoor environments.

## 03 How to store timber on the construction site

To preserve the quality of Lunawood ThermoWood® products, some storage precautions should be taken when material arrives at the construction site:

- Store wood in a flat, ventilated space, protected from sunlight and precipitation. Wood exposed to sunlight may experience a change of color.
- Cover the stored material tightly with UV-protective wraps before and during installation. It is recommended to store Lunawood in its original packaging.
- Lunawood timber packages must be kept ventilated and off the ground. Use dunnage to create an even base that allow airflow below the package.
- Lunawood timber must be placed in a horizontal and dry surface, with a sufficient number of supports to avoid excessive dipping/bending.



## 04 Handle with care

Ensure materials are stored securely on a stable base to prevent deterioration.

Handle and install the product with care to avoid damage from contact with other objects and surfaces.

Tongue and groove profiles must be handled with care to avoid damage during the material unloading and transport. The edges of these type of profiles are delicate points that could be damaged if handled roughly.

# 05 Working with Lunawood ThermoWood®

## PPE

As with any wood, safe working of Lunawood ThermoWood® requires the use of the following personal protective equipment:

- Protective eyewear
- Dust protection with active carbon filter
- Hearing protection when applicable
- Protective gloves when handling material
- Safety footwear
- Head protection when applicable
- Fall protection when applicable



## Planing

When working with Lunawood, set cutter depths as if working with hardwood species. Feed rates should be lower than used for working unmodified wood. Pay attention to feed roll settings and pressure configuration to prevent the risk of cracking the profiles surface.

## Sanding

No additional sanding is required because the surface quality of Lunawood is excellent after planing.

## Sawing

The sawing of Lunawood is easy and does not differ from working with untreated wood.

## Pre-drilling

Pre-drilling screws will be necessary to reduce the risk of longitudinal cracks during installation. Pre-drilling diameter must be  $0,5\varnothing - 0,8\varnothing$  ( $\varnothing$  = screw diameter).

## Screwing

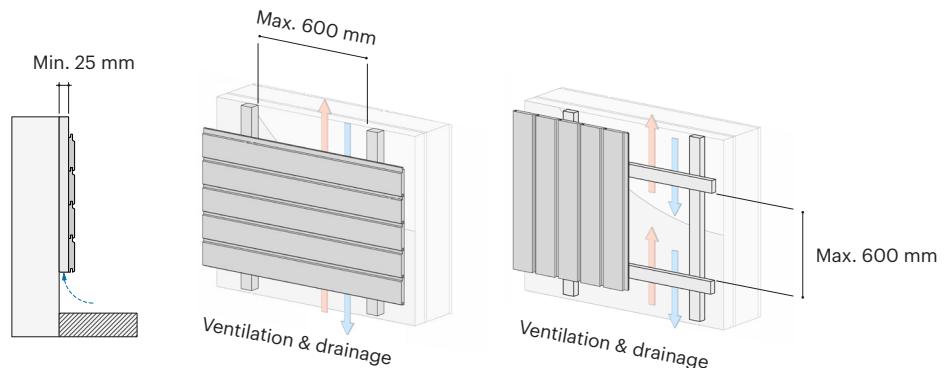
With visible screws fixing system, mount screws to the correct depth. The screw head must be flush with the cladding profile surface in order to prevent splits, surface staining and moisture traps.

# 06 Ventilation and drainage

Once the type of profile has been selected, it is time to decide the support structure design for the facade. In addition to serving as a support, the substructure separates the wood cladding from the support wall, creating a dry and ventilated cavity in order to:

- Facilitate the drainage of the cladding profiles
- Balance the moisture content between inner and outer faces of the cladding
- Guarantee long-term durability of the support wall

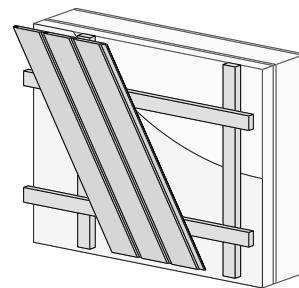
The ventilation cavity should maintain a consistent minimum thickness of 25 mm. It will serve two main purposes: drainage and ventilation. In high humidity climates, we recommend a larger ventilation gap. The cladding support structure (support furring such as durable wood or metal) must always be fixed to the backing wall structure.



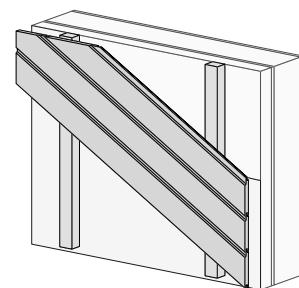
Installing Lunawood cladding in diagonal orientation:

If the cladding profiles form an inclination angle greater than 45° with the horizontal, the installation guidelines are the same as those used in the vertical orientation.

If the inclination angle of the profiles is less than 45° with the horizontal, the installation guidelines are the same as those used in horizontal orientation.



Inclination angle of the facade > 45°

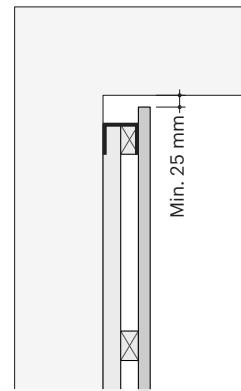


Inclination angle of the facade < 45°

## 07 Ground clearance and air cavity gap

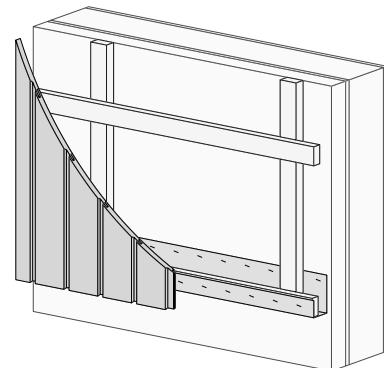
### Top edge facade detail

It is recommended to leave a free opening of at least 25 mm between cladding profiles and eave, roof or any flashing or finishing element to allow cavity ventilation.



### Insect mesh

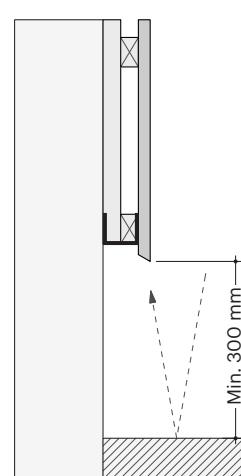
To prevent insects and small rodents from entering the cavity, it is recommended to fit the insect mesh on closed-joint claddings (facades with tongue & groove profiles or facades without gaps between battens).



### Bottom edge facade detail

Leaving at least 300 mm between the bottom edge of the cladding profiles and the ground is recommended.

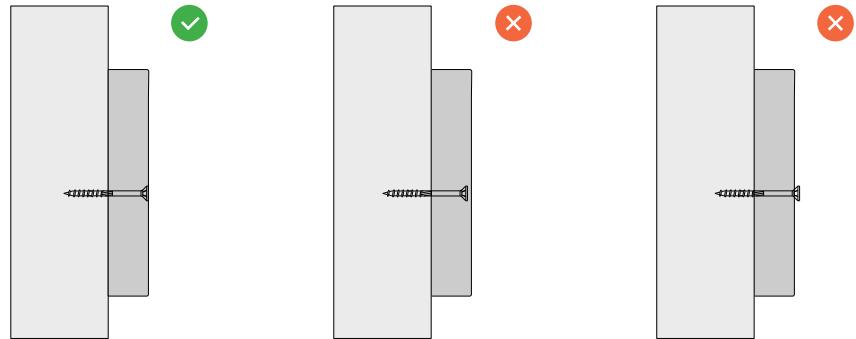
Cutting the bottom edge of the cladding to a 30° angle will allow moisture to drip from the ends of the boards more easily and reduce the risk of moisture retention through surface tension.



## 08.1. Fixing

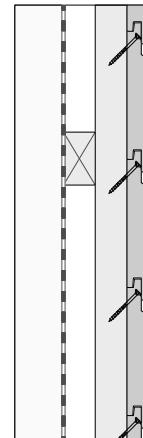
To fix Lunawood cladding profiles, screws must be at least of AISI 304 quality (A2 class) stainless steel.

- Pre-drilling and countersinking screw locations will be key to avoiding cracks during installation. Pre-drilling diameter must be  $0,5\varnothing - 0,8\varnothing$  ( $\varnothing$  = screw diameter). Pre-drilling is required when fixing is  $< 50\text{mm}$  from the end of the board.
- For best results use Luna Solid1 from Lunawood Collection or similar.
- Screw length must be at least 2x the cladding material thickness.
- Fix screws to the correct depth. Heads must be flush with the cladding profile surface in order to prevent splits, surface staining and moisture traps.



Profiles with hidden fixing groove:

- Use one fixing at each cladding/subframe intersection, fixed from the hidden fixing groove
- Fixings should angle towards the center of the board being installed to properly seat the groove edge

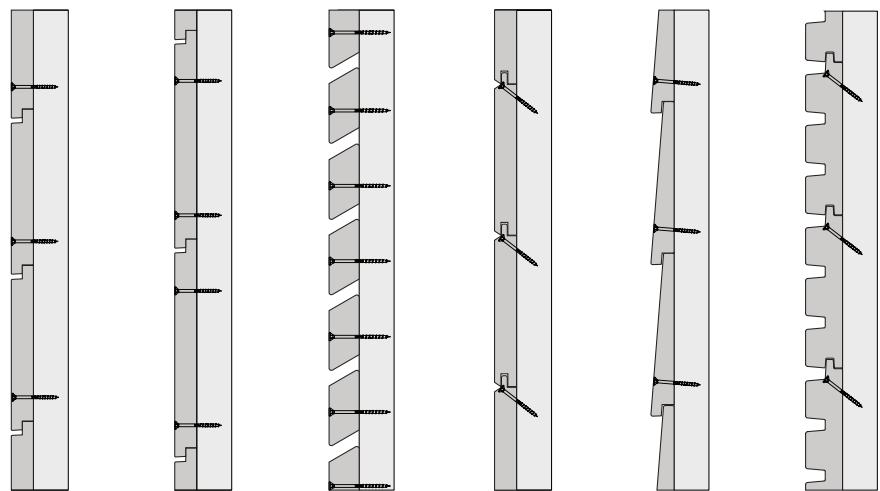


Profiles without hidden fixing groove:

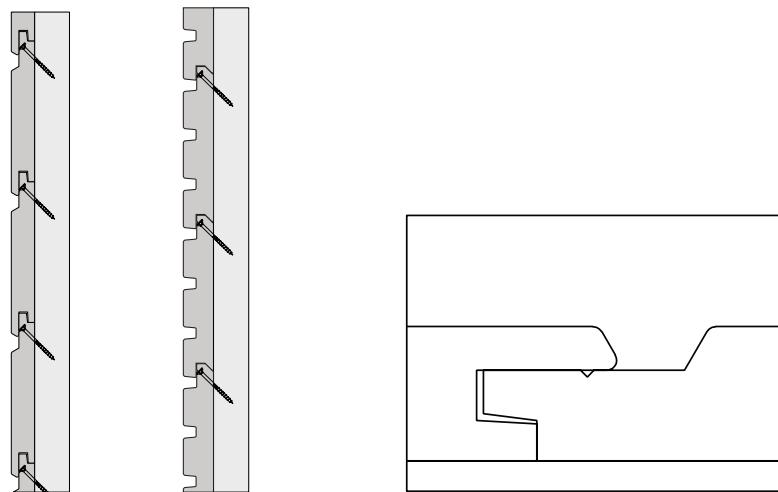
- Use one fixing at each cladding/subframe intersection when the cladding profile is  $\leq 142\text{ mm}$  wide. Use two fixings when the cladding profile is  $> 142\text{ mm}$  wide.

## 08.2. Correct fixing

Lunawood profiles can be fixed as follows.

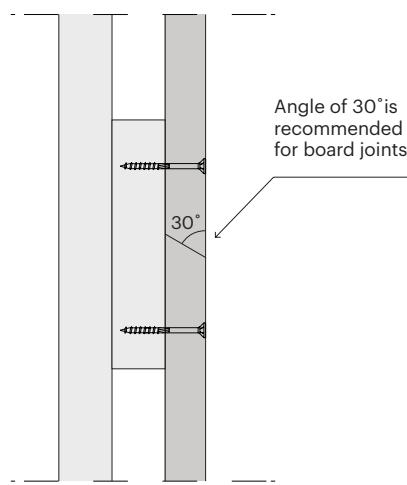


Profiles with HF (Hidden Fixing)

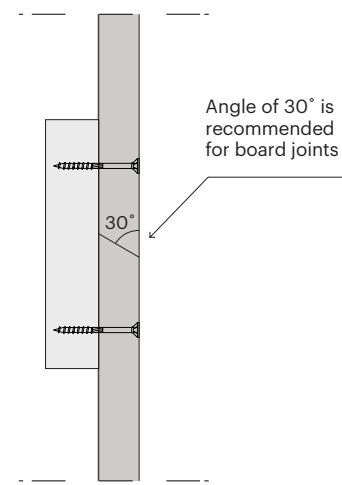


Board extension

Side view of vertical cladding



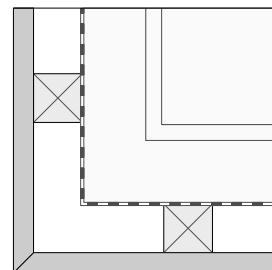
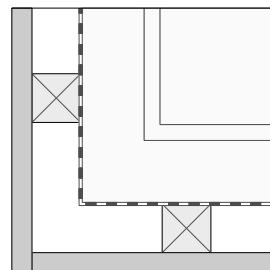
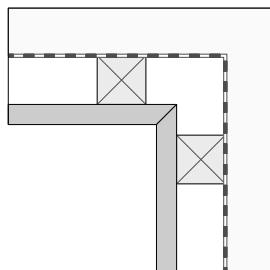
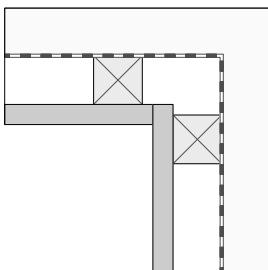
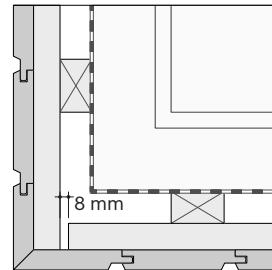
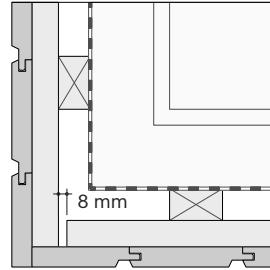
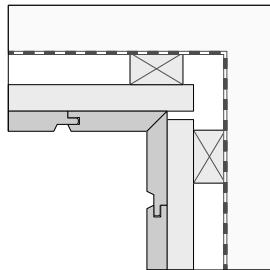
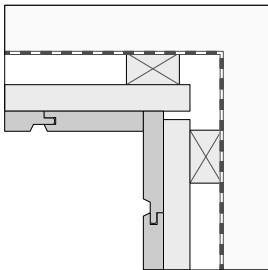
Top view of horizontal cladding



# 09 Design tips

## Corner detailing

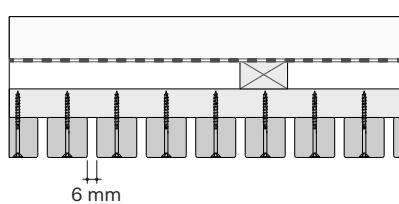
Due to their enhanced technical properties, Lunawood products do not require additional termination accessories at starts, ends and corners, allowing for elegant, modern design moments.



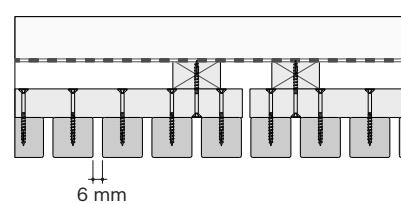
## Batten assemblies

When developing a batten or slat façade, fastener length and position considerations will vary from traditional cladding profiles. Battens should maintain a 6 mm gap to promote drainage and drying. Vertical battens should be installed on horizontal subframe with a top bevel allowing for drainage.

### Visible fixing



### Invisible fixing



# Legal disclaimer

## Lunawood Collection – Facade Installation

### Product characteristics

The facade products within the Lunawood Collection are carefully manufactured and inspected to ensure quality. However, these are natural wood products and are subject to variations in weight, density, color, grain. Wood facade is naturally subject to dimensional changes as the moisture content in the wood fluctuates with humidity in the air. Swelling, shrinkage, surface checking, and other movement of individual pieces are normal occurrences in wood facades. Nevertheless, with Lunawood exterior claddings the swelling and shrinkage are minimal compared to kiln dried Scandinavian Pine or Spruce.

### Before installation

Facade products within the Lunawood Collection should be stored and treated according to Lunawood guidance, see Lunawood technical guideline [www.lunawood.com](http://www.lunawood.com)

An adequate air circulation behind the facade must be ensured in order to have long lasting Lunawood facade.

Use safeguards for personal protection (safety glasses, dust mask and gloves) always when with Lunawood ThermoWood®. We recommend an active carbon filter dust mask when drilling, sawing, sanding, or machining ThermoWood®.

### Installation

Lunawood installation guidance must be followed. Installation of the products constitutes acceptance of their quality even if applicable notification period would otherwise still be running. Local building codes must be consulted when building a facade with facade products within the Lunawood Collection. Facade must be built in accordance with regulatory requirements. Most countries may require building permits.

Drawings and schematics used to show where to place screws are for reference purposes only.

### Maintenance

Like all timber products Lunawood ThermoWood® will go grey upon exposure to UV if left untreated, and in time may show some fine cracks or splits on the surface. In order to preserve and maintain the original appearance apply a surface coating that is suitable for Lunawood ThermoWood®. Consult your local surface treatment manufacturer and see Lunawood General Maintenance Guide for facades on [www.lunawood.com](http://www.lunawood.com)

### Other information

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Every facade is different, and this guide should not be considered to set out how a facade should be constructed in every circumstance. We accept no liability for any loss or injury caused by any reliance placed on this guide.

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