

# Installation Guide

# Siding/Cladding Boards

**Disclaimer:** Consult your local building codes and municipal authorities to ensure your project complies with all statutory requirements and permitting regulations. Technical drawings and schematics regarding the placement of fasteners are provided for illustrative purposes only.

Safety glasses and respiratory protection must be worn at all times when handling **TIMBRA by GWP** products. Activities such as drilling, sawing, sanding, or machining wood products generate airborne wood dust, which may pose health risks. It is mandatory to utilize personal protective equipment (PPE) in strict accordance with the health and safety legislation and occupational standards applicable to your specific geographic location.

## 1.

### **Storage**

Whenever possible, store **TIMBRA by GWP** siding/cladding boards outdoors. The siding/cladding must be kept away from direct sunlight, as UV rays will cause the colour to fade. If stored outside, ensure the boards are elevated at least 150 mm from the ground, stacked evenly, and protected with a waterproof, light-impermeable cover. The cover should be applied primarily to the top surface, ensuring that the sides remain unobstructed to facilitate cross-ventilation and prevent moisture accumulation. **TIMBRA by GWP** siding/cladding must never be left in the rain or exposed to excess moisture when in its original packaging, as it will not dry properly when tightly packaged. If possible, store the boards at the installation site for a few weeks prior to installation to allow them to acclimate to the relative humidity conditions, using a protective cover to prevent moisture damage.

## 2.

### **Building a Proper Support Structure and Avoiding Moisture Damage**

- **IMPORTANT:** Check the boards thoroughly for any manufacturing or moisture defects, as well as transport-related damage, prior to installation. Do not install defective boards.

ONCE INSTALLED, PRODUCTS ARE DEEMED TO HAVE BEEN ACCEPTED IN TERMS OF QUALITY.

Allow for 10 percent wastage when purchasing.

### **Support Structure**

- ✚ **TIMBRA by GWP** siding/cladding should be applied only on adequate structures, both regarding support capacity and design, ensuring no detrimental influence occurs.
- ✚ We recommend ensuring that the dimensional stability of the **TIMBRA by GWP** products used ( $\pm 3$  to  $7\%$ ) befit the climate and installation setup at the installation site.
- ✚ Proper ventilation and rainfall drainage should be ensured to avoid accumulation and undesired accelerated degradation.
- ✚ Ensure that a proper humidity barrier is applied to the substrate surface upon which the installation is to be performed, to avoid undesired absorption of water content.
- ✚ The installation of **TIMBRA by GWP** products should follow the recommendations for materials and fixtures, such as spacing and fastening methods, set by **TIMBRA by GWP** and in accordance with local regulations, for each installation.
- ✚ Always take into consideration that profile geometries can influence how these are suitable to be mounted/applied (see types of orientations in Fig. 01).

## Siding/Cladding Orientation

The orientation of siding/cladding elements has a direct impact on the aesthetics and character of a building's facade. Beyond visual appeal, it also influences how sunlight, rain, and other environmental factors interact with the wood.

Explore the main installation options for **TIMBRA by GWP** thermally modified wood siding/cladding:

### Horizontal Installation

This is the most traditional layout. Boards are installed parallel to the ground, creating a sense of stability and visual width. A versatile choice that complements a wide range of architectural styles as some profiles has a proper horizontal orientation to prevent water accumulation.

### Vertical Installation

Here, boards are installed perpendicular to the ground. This orientation enhances vertical lines, adding elegance and a sense of height. Ideal for projects aiming for a more refined and lightweight appearance, it requires special attention to joint detailing for proper water resistance. Some profiles has a proper vertical orientation to prevent water accumulation. Consult the **TIMBRA by GWP** team for guidance.

### Diagonal or Angled Installation

A bold and distinctive approach. Installing siding/cladding at an angle creates a sense of movement and a dynamic look on the facade. While it delivers a unique aesthetic impact, this orientation requires precise cutting and expert detailing. Some profiles has a proper diagonal orientation to prevent water accumulation.

### Climate Conditions & Functionality

When defining the orientation of **TIMBRA by GWP** thermally modified siding/cladding, consider the architectural style, desired visual effect, and local climate. Some orientations naturally promote water drainage and reduce moisture retention. Consulting with architects and technical professionals is essential to achieve the best balance between visual expression and technical performance.

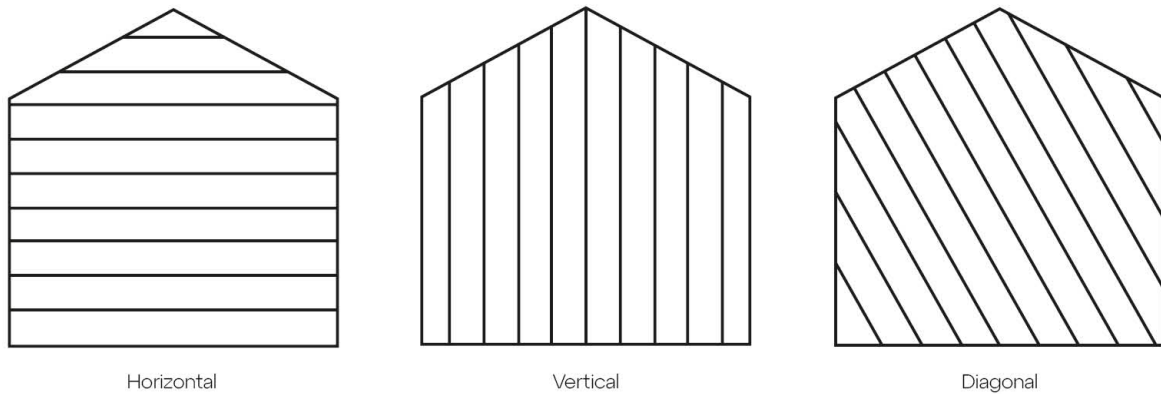


Fig. 01

- ✦ When considering applications of **TIMBRA by GWP** products for siding/cladding, if the installation site rainfall as expected to endure heavy, avoidance of horizontal and diagonal orientations of the boards is recommended.
- ✦ Ensure that the distribution of the support battens is in accordance with the needs and regulations applicable.
- ✦ Proper wood battens support structure should be used for siding/cladding installation (see Fig. 02). Battens should be properly fixed to the underlying wall/structure, being it wood or wood based material, concrete or other. If proprietary support structure solutions are used, ensure proper installation.

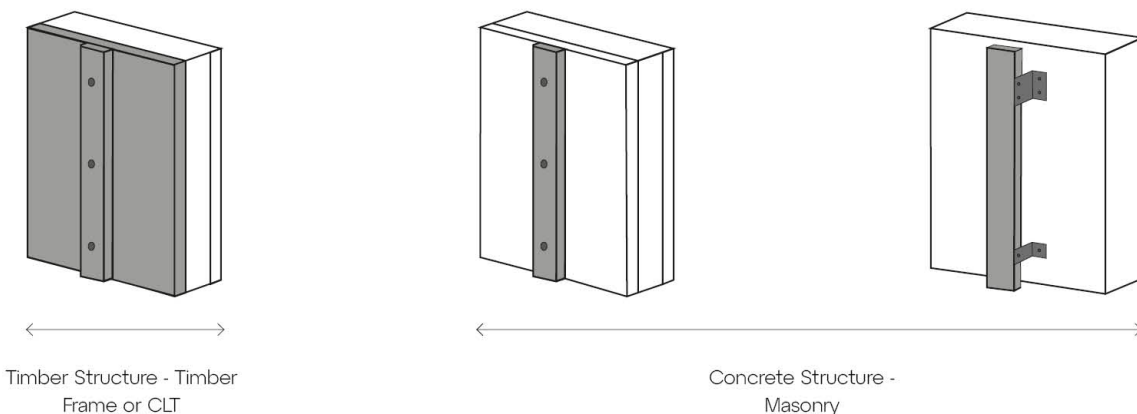


Fig. 02 | Support Structure arrangements

## Orientation of the Installation

### Vertical

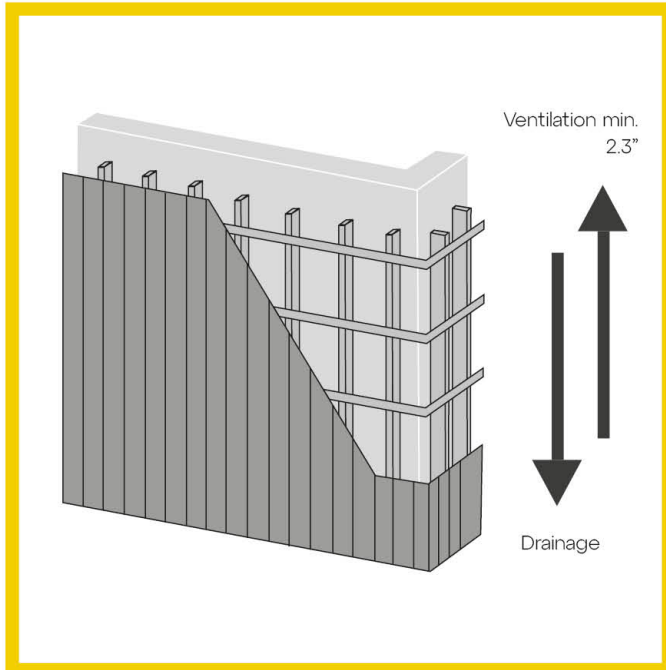


Fig. 03

- Overlaid cross batten arrangement;
- The maximum recommended distances between both the vertical and horizontal wooden battens is 24\";
- The wooden battens should allow for a minimum 1.3\" of ventilation gap;
- The horizontal battens should be applied with a slight angle ( $< 20^\circ$ ) in order to avoid water accumulation.

### Horizontal

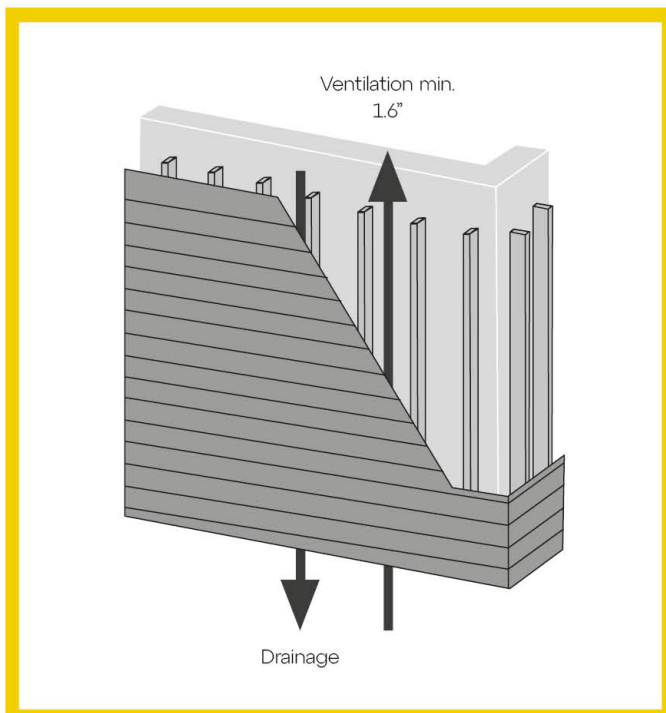


Fig. 04

- Vertical single batten arrangement;
- The wooden overlaid battens should allow for a ventilation gap of at least 2.8\".

## Diagonal

- For the applications for which the wood profiles are to be installed with an inclination, it is recommended that the support structure be dependent on the angle with the horizontal plane.
- For an angle smaller or equal to 45°, a vertical-like support frame can be used, if suitable to the length of the profiles being installed.
- For an angle over 45°, an horizontal-like structure is recommended, if suitable to the length of the profiles being installed.

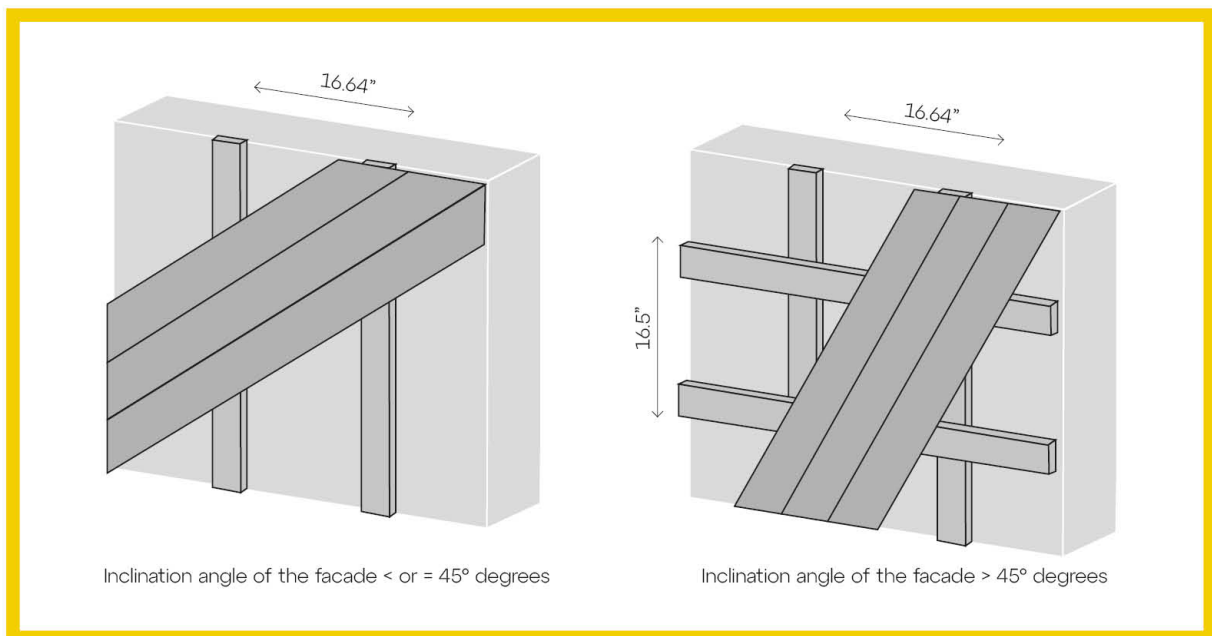


Fig. 05

- When choosing this type of installation one must be mindful of the needs for the dimensional stability of the timber, so to ensure that the inclination and the possible variations do not compromise the integrity of the supports neither the wood profiles themselves.

## Fasteners

Given the natural properties of our products, it is recommended that the fasteners used are made of stainless steel, so as to ensure that no degradation by corrosion occurs. A material class that can be recommended is A2 (EN 1.14301; AISI 304).

## Installation Types and Distances

- ✦ The installation of the profiles should be performed taking into consideration both the type of profile and the desired visibility, or not, of the fasteners applied.
- ✦ The order and placement of the profiles which have non-parallel surfaces should be done taking into account the intended natural flow of rainfall, so as to avoid retention and accumulation.
- ✦ Appropriate spacing in the length of the wood profile should be left between the edge and the nearest batten, so to avoid underived fissures which can occur when fasteners are applied too close to the edge of the profile.

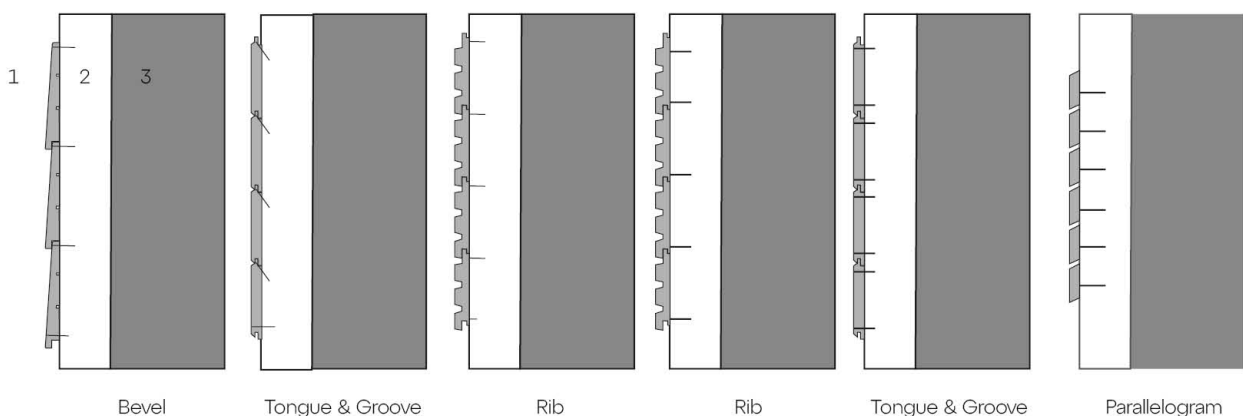


Fig. 06 1 - Wood Profile  
2 - Fixing System  
3 - Support Wall

Be mindful to introduce the fasteners just down to the surface of the profiles, not less, nor deeper than it. See Fig. 07 for visual schematic representation.

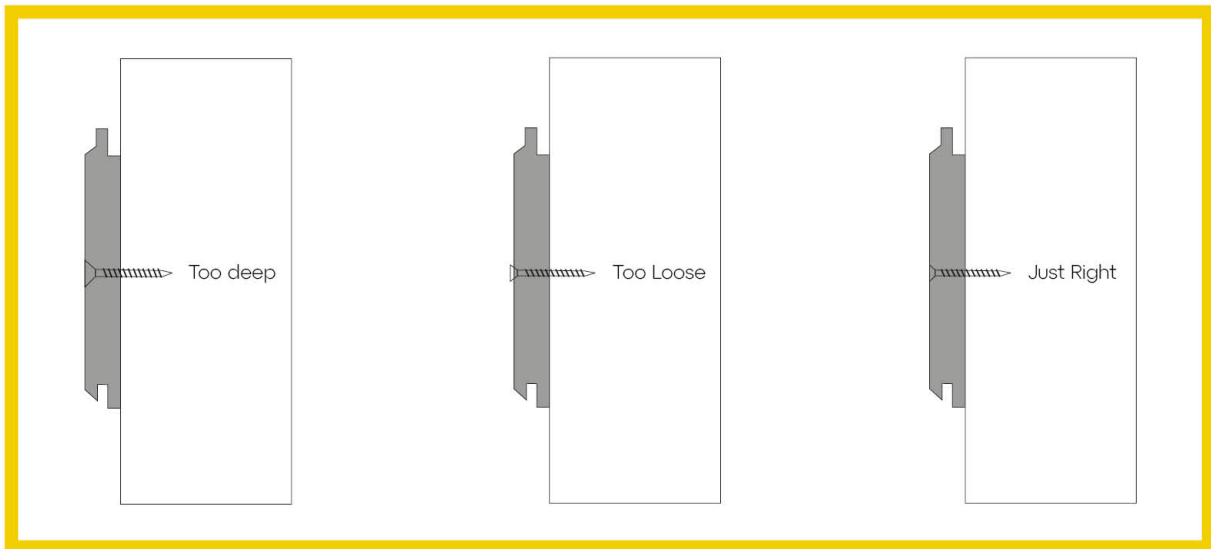


Fig. 07

### 3.

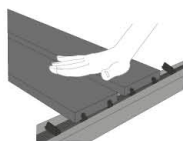
## Installation Click System Powered by GRAD®



TIMBRA by GWP products combine high-quality thermally modified products with the unique Grad® installation system. This hidden fastening solution is designed for quick and easy installation. TIMBRA by GWP boards can be produced with grooves on the underside that perfectly fit Grad® clips or aluminium rails with pre-mounted Grad® clips. As a result, there are no visible screw heads. The boards are simply pressed and clicked.



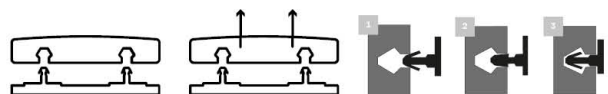
Easy Installation



Just Press and Click



Grad Simple Click



The boards click into place when depressed and it's done.

More Information: [www.grad-system.com](http://www.grad-system.com)