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ThermoWood Cladding Installation Guide

ThermoWood cladding products are 100% natural solid materials having their own unique features, including no chemicals with proven quality in all weather conditions. The benefits being that once they have been through the Thermal Modification process, they become very stable with only a 7% moisture content and have Class 1 Durability.

Safety First: Before starting work always make sure you have the correct safety equipment for the task at hand. This includes (helmet, gloves, safety glasses, protective footwear, etc.)

*Please remember that this is a guide and every project and the environment that its constructed in will be different so please take this into consideration with all aspects of your build.

There are 3 tips we would recommend considering before starting your installation:

1. Choosing Charred Cladding

Always remember that a Charred & Blistered surface will always be a more delicate surface than un-charred timber, if exposed to being knocked or brushed against. Not an issue in normal external cladding environments and with our ThermoChar® products we always apply a QFlex® sealer, which is a flexible UV class 0 fire rated sealer. But if being considered for use indoors then we will need to know, so that we can apply the appropriate indoor sealer to help protect it.

2. Vertical or Horizontal Cladding

The general rule on orientation is if you want to emphasis the height of a particular part of your building i.e. like a Gable end for example then run the boards vertically as the long lines of the boards will do this. So naturally, Horizontal boards will soften the height of a building. There are no rules to say you cannot do both, it just needs to be thought about how the building will benefit aesthetically.

3. Different Cladding board widths.

The old traditional method of cladding UK buildings has been running horizontal boards that are all the same width. This doesn't have to be the case if you are using stable profiled hardwood or softwood. Breaking up the look by alternating 2 or 3 board widths in the same profile as a 40mm, 90mm and 130mm adds a lot more visual interest and at the end of the day you will have something that is bespoke, unique to your property and adds real value. Instead of having the same as 'John Smith' down the road. No offense to any John Smiths out there.

1. Preparation before installing the timber cladding:

The structure of the building will need to be covered with a suitable breather membrane that is water resistant and controls the moisture level changes between the building and the exterior climate. Tyvek along with other companies provide various membranes to suit different applications.
Once this has been tacked onto the building making sure that the membrane joints are overlapping and have been taped up. You will then be ready to install the cladding battens.

2. Cladding Battens:

The minimum batten thickness should be 25mm x 38mm wide. This ensures that there is a sensible air gap between the breather membrane and the back of the cladding board.
The quality of these battens is important as these are responsible for holding your cladding in place no matter what the UK weather throws at it. We would recommend using the pressure treated Blue British Standard graded battens as they have fewer knots and the knots that are visible are small tight knots and not dead knots.

3. Batten spacing:

Typically, these will be screwed to the substrate at 400mm centres and run at right angles to the direction of the cladding boards. e.g. Horizontal cladding fixes to vertical battens and vertical cladding fixes to horizontal battens. In the case of the latter, horizontal battens will tend to trap moisture running down the membrane and eventually affect the longevity of the battens. So, if you decide to run the cladding vertically and many projects do then you would first set a vertical batten generally at 600mm centres, followed by the horizontal batten at 400mm centres.
This will give you a cavity gap of 50mm. Also remember to run the battens around the perimeter of the window and door openings as these will be used to fit the closure boards (Reveal) to these.

4. Treat cut ends of boards.

When cutting and fitting the boards always wax seal the cut ends. This is to control and slow down moisture uptake and loss which happens quicker through the ends and can result in what is known as end-grain checking/cracking. This can happen on all softwood and hardwood timbers. The sealer virtually eliminates this from occurring.

5. Install the Cladding

Where possible always allow the cladding boards to acclimatize to their surroundings in terms of moisture levels. I.e. Keep a cover on the top of the pack of boards but leave the sides and ends exposed. In the case of ThermoWood, these boards only have a moisture content of 7% compared to standard timber like cedar and larch being closer to 18%.
This means they will not contract any further but may have minimal expansion depending on the time of year they are being installed. Therefore, we would always advise leaving a gap of 1 to 2mm between each board just in case. Use a plastic window packer strip at the ends of the boards as a rough guide before fixing and removing the packer.
First set your Cill trim board that deflects the rain away from the building. This needs to be fitted along the bottom of the building at your desired height. Make sure this runs straight and level. Then start fixing your horizontal cladding above this working up the building or if running vertical then at a suitable start point.
Generally, if you are right-handed, then start on the left side of the building working your way to the right.
A useful tip would be to work out before fixing where the boards will hit an opening that you will be cladding around. Ideally you want a full width board to finish next to the opening instead of a thin ripped down piece. One way to help get around this would be to use a couple of different widths of cladding that you could lay in a random or fixed pattern. This also adds a level of interest to the cladding detail.

6. Finishing detail

Apart from the Cill trim that can be used above doors and window openings. The external corners will need protecting and finishing neatly. External corner trim in the same cladding material will help weather seal these corners and add a degree of protection at lower levels should they get knocked.
An alternative option can also be to use Aluminium corner trim that is powder coated in a Ral colour that matches your window frames or doors which helps to tie in the other parts of your build and will obviously be more robust.

7. Fixings

We always advise using stainless screws positioned, if appropriate, through the crease in the profile at an angle back toward the board rather than through the face of the board. This helps to reduce their visibility and they do not need to be positioned as accurately as you would need to on the front face.
Some fitters use stainless nails / finishing pins with an air gun, with a secondary bead of flexible silicone on the batten prior to fixing. Doing this through the face of the board can look unsightly and damage the timber surface and in the case of ThermoWood boards due to being possibly hardwood and slightly more brittle may split the board if fixed near the edges. We would advise pre-drilling to avoid this. We would not advise using any galvanized nails or pins. Stick to using stainless to prevent any possible reaction and staining with your chosen material.