Pineclad & Pineclad TMT
Horizontal Weatherboard Cladding System

INSTALLATION GUIDE

Version 2.1 May 2024

1. INTRODUCTION

1.1 Purpose

This Installation Guide applies to:

- The Pineclad and Pineclad TMT Bevelback and Rebated Bevelback Weatherboard Cladding System, and
- The Pineclad and Pineclad TMT Rusticated Weatherboard Cladding System.

1.2 Important Documents

This Guide is intended for use by a skilled builder.

Where RBW obligations exist, it is the responsibility of the builder to ensure that these can be met.

When installing the cladding refer to:

- Current **CodeMark™ Certificate of Conformity** for Pineclad and Pineclad TMT – Horizontal Weatherboard External Cladding System**.**
- The relevant Specification Guide.
- The relevant Hume Pine details.
- Acceptable Solution E2/AS1.

1.3 For More Help

Technical assistance is available at **www.humepine.nz**

While all reasonable efforts have been made to ensure the accuracy of information provided, this guide is a guide only. It may be subject to change.

1.4 For Our Warranty

Refer to **www.humepine.nz**

CodeMark
CMNZ30105

2. PREPARATION

2.1 Health & Safety

Take all necessary steps to ensure your safety and the safety of others:

- Ensure adequate ventilation or mechanical dust extraction when cutting or drilling.
- Ensure the timber is well supported when cutting and nailing.
- Wear appropriate safety equipment, clothing and footwear.
- Use all tools in accordance with relevant instruction manuals.
- Plan and monitor a safe approach for working at height; select and use the right equipment.
- Clear the work area of any obstruction before work starts.

For further information refer to:

- WorkSafe. [July 2018] *Small Construction Sites, the Absolutely Essential Health and Safety Toolkit.*
- WorkSafe. [December 2016] *Health and Safety at Work, Quick Reference Guide.*

These documents are available at **www.worksafe.govt.nz**

2.2 Handling & Storage

Handling

Care must be taken during loading, unloading, and transporting the materials to prevent pre-installation damage.

Hume Pine recommends unloading the weatherboards by hand. If they are to be unloaded mechanically then the boards must be supported to avoid excessive bending or sagging. As a minimum, the support required is two well-spaced load points.

Always carry profile components on their edge and never lean against any horizontal surface to avoid any bending.

Storage

Storage is critical. Failure to follow these requirements could result in the system, when installed, failing in performance or appearance.

Pineclad and Pineclad TMT materials must be stored in a dry and well-ventilated environment, out of direct sunlight.

The materials must be stacked on a flat, dry surface, laid flat on timber dunnage that is positioned no more than 1m apart and at least 150mm off the ground, with plastic underneath the bearers. The plastic on the ground will ensure that the materials do not absorb ground moisture. If time delays are expected, separate the profiles and fillet between the layers to ensure air is able to circulate.

Cover with a tarpaulin to ensure that the materials remain dry. If product is to be stored for a prolonged period (more than 14 days), it must be stored inside.

3. INSTALLATION

Step 1: Check Building Consent Documentation

Ensure the building consent documentation is on-site and digital access to Hume Pine details is available. These details can be accessed for the Hume Pine website **www.humepine.nz**

Complete the Hume Pine Minor Variation Form if another cladding brand has been consented.

Step 2: Check Framing Substrate

Ensure:

- Substrate is straight and true and within framing tolerances as described in NZS 3604:2011 section 2, Table 2.1 or NASH Design Standard Part Two: 2019, section 2.5.
- Studs are at a maximum of 600mm centres.
- Nogs and dwangs fitted flush between studs at maximum 800mm centres.
- A line of nogs or dwangs are installed below the soffit drop for top edge fixings where there are eaves.

Ensure moisture content of timber framing is < 18 %.

Step 3: Check Building Underlay

If underlay (flexible or rigid) and flashing tape brands are not specified in the building consent, ensure that it is fit for purpose. If a different brand, from that specified is to be used, ensure a minor variation is lodged.

Ensure underlay and flashing tapes are installed in accordance with supplier's instructions.

Step 4: Fit Joinery

Ensure all joinery is fitted in accordance with the building consent (if applicable) and the supplier's instructions.

Step 5: Install Flashings

Note: Where Pineclad TMT Shou Sugi Ban is to be installed, the flashings will need to account for the thicker profile (21mm).

Ensure installation of all:

- Flashings including pipe, flue, wall vent penetrations, back flashings, window head, sill & jamb.
- Air seals to holes, penetrations, and voids. Use a backing rod to suit the gap and sealant. Trim excess sealant.

Step 6: Create Cavity

Where the cladding is to be installed over a cavity, the following components are required:

- Hume Pine H3.1 timber battens (solid).
- Cavity closers supplied by others.

Note: where Pineclad TMT Shou Sugi Ban is to be installed the batten fixings will need to account for the thicker profile (21mm).

Step 6: (Cont'd)

Create Cavity (Cont'd)

Install Battens (Timber Framing)

Fix battens to studs at 300mm centres, staggered 12mm either side of the centre line.

Ensure fixings are embedded into the framing a minimum of 30mm.

Fixings to be used:

- Power driven 65mm x 2.8mm hot dipped galvanised nails, or;
- Power driven 65mm x 2.8mm s/steel annular grooved nails.

Where cladding is fixed with s/steel, battens to be fixed with s/steel.

Install Battens (Lightweight Steel Framing)

Ensure a thermal break and PVC bond break between any flashing and batten have been installed.

Fix battens at a maximum 1200mm centres with:

- 10g x 65mm galvanised or s/steel SDS screws, or;
- 10g x 55 or 65mm galvanised or s/steel wing screws

Where cladding is fixed with s/steel, battens to be fixed with s/steel.

Install Cavity Closers

Install cavity closer in accordance with supplier's requirements.

Cavity closers must be installed continuously around bottom of cavity, top of joinery units and midfloor junctions.

Step 7:

Board Set Out, Preparation & Cutting

Check Hume Pine Cladding Components

Confirm that all timber cladding components have been supplied by Hume Pine. Failure to use only Hume Pine products may result in a poorer quality cladding system.

Remove any dirt or dust that may have accumulated on the products.

Check that the moisture content of the Hume Pine cladding components is ≤ 16%. Allow to dry if necessary.

The components must not be installed unless that moisture content is ≤ 16%.

Set Out Boards

Use a storey rod or laser level to set out the most practical layout for the boards. This will ensure alignment with a mid-floor window head and other critical horizontal junctions.

Ensure all scarf or soaker-protected board junctions will be over a stud and are not on drip lines. e.g. Under window edges.

Cut Boards

Cut boards as required.

IMPORTANT: All surfaces must be undercoated or primed. Check cut ends, drilled holes and any areas where the factory applied coating may have been damaged or removed.

Use the following:

- Acrylic primer or undercoat, or;
- Oil or stain as selected by customer.

Step 7:
(Cont'd)

Board Set Out, Preparation & Cutting (Cont'd)

Fixing Type & Method

Hume Pine recommend the use of hand nailing or ECKO fixings. However, power driven nail options are included. If power driven nails are use, ensure that nails are not overdriven and that they are angled as required.

Note: Where Pineclad TMT Shou Sugi Ban is to be installed, the fixing will need to account for the thicker profile (21mm).

Fixing to Timber Framing (Cavity)

For **Pineclad Systems** use:

- ECKO Jolt Head Screws T-Rex17®, 8G x 75mm, S/Steel or galvanised.
- Hand driven nails, 75mm x 3.15mm, hot dipped galvanised nails (smooth), or s/steel (annular grooved).

Where power driven nails are preferred:

- Paslode® Joltfast® 75mm x 3.06mm round head, ring shanked nails s/steel or galvanised.

For **Pineclad TMT Systems** use:

- ECKO Jolt Head Screws T-Rex17®, 8G x 75 or 90mm, S/Steel, or;
- Rose head nails, 75 or 90mm x 3.15mm s/steel (annular grooved).

Where power driven nails are preferred:

- Paslode® Joltfast® 75mm x 3.06mm round head, ring shanked nails s/steel.

Note: Ensure battens and cladding are fixed with the same materials. Do not mix s/steel fixings with galvanised.

Fixing to Timber Framing (Direct)

For **Pineclad Systems** use:

- ECKO Jolt Head Screws T-Rex17® 8G x 75mm S/Steel or galvanised,
- Hand driven nails - 75mm x 3.15mm hot dipped galvanised nails (smooth) or s/steel (annular grooved).

Where power driven nails are preferred:

- Paslode® Joltfast® 75mm x 3.06mm s/steel or galvanised.

For **Pineclad TMT Systems** use:

- ECKO Jolt Head Screws T-Rex17® 8G x 75 or 90mm S/Steel, or;
- Rose head nails - 75 or 90mm x 3.15mm s/steel (annular grooved).

Where power driven nails are preferred:

- Paslode® Joltfast® 75mm x 3.06mm s/steel.

Note: Ensure battens and cladding are fixed with the same materials. Do not mix s/steel fixings with galvanised.

Step 7: (Cont'd)

Fixing Type & Method (Cont'd)

Fixing to Timber Lightweight Steel Framing (Cavity)

For **Pineclad Systems** use:

- ECKO Jolt Head Screws galvanised or s/steel SDS screws Steelzips 10g x 65mm, or;
- 10g x 55 or 65mm galvanised or s/steel wing screws.

For **Pineclad TMT Systems** use:

- ECKO Jolt Head Screws s/steel SDS screws Steelzips 10g x 65mm, or;
- 10g x 55 or 65mm S/Steel wing screws.

Note: Ensure battens and cladding are fixed with the same materials. Do not mix s/steel fixings with galvanised.

Fixing to Timber Lightweight Steel Framing (Direct)

For **Pineclad Systems** use:

- ECKO Jolt Head Screws galvanised or s/steel SDS screws Steelzips 10g x 65mm, or;
- 10g x 55 or 65mm galvanised or s/steel wing screws.

For **Pineclad TMT Systems** use:

- ECKO Jolt Head Screws s/steel SDS screws Steelzips 10g x 65mm, or;
- 10g x 55 or 65mm S/Steel wing screws.

Note: Ensure battens and cladding are fixed with the same materials. Do not mix s/steel fixings with galvanised.

Step 8: Fix Boards

Predrill Nail Holes

For hand driven nails, predrill nail holes to a diameter 1mm less than the nail gauge. Pay special attention to the areas around joins and the end of boards.

Fix Boards – General

Start fixing boards near the middle and work outwards towards the ends.

Use only one fixing per board per stud to allow for movement.

Allow 1 – 2mm between boards at board junctions for movement.

Nail at an upward angle to prevent water movement down the nail into the wall space.

All nails must be punched to a depth of 2 – 3mm.

Fill the holes immediately with an exterior grade filler. This is important to prevent moisture damage prior to coating the system.

For Bevelback Weatherboards:

- Align weather grooves.
- Fix the board 10mm above the lap with the lower board, nails must not penetrate the lap of the lower board.

For Rusticated & Rebated Bevelback Weatherboards:

- Fix the board 10mm above the lap with the lower board, nails must not penetrate the lap of the lower board.
- Allow a minimum 2mm gap between the boards at the rebate to allow for seasonal movement.

Step 8: (Cont'd)

Fix Boards Around Joinery

Allow 19mm – 20mm clearance from the face of the cavity batten and the back face of the joinery facing.

Ensure weatherboard edge has a minimum of 10mm cover behind the window facing.

Install a compressed foam air seal, foam plugs or scribers between the board and window facing.

Fix Boards Around Penetrations

Allow 5mm – 6mm clearance around all penetrations.

Install a bead of flexible structural sealant between cut edges and the penetration.

Install an over flashing where possible to protect the sealant.

Step 9: Apply Coating

Finish Pineclad with a primer undercoat and two topcoats of high-grade acrylic.

Finish Pineclad TMT with:

- A primer undercoat and two topcoats of high-grade acrylic.
- Top coat of stain.
- Additional coating of oil.

Apply coating systems in accordance with the paint manufacturer's instructions and the requirements of AS/NZS 2311:2017.

For the Pineclad system the paint system must have a Light Reflective Value (LRV) of greater than 45%.

Completion

Confirm all components are installed correctly and in accordance with Hume Pine details.

Provide the Hume Pine Care and Maintenance to the building owner.

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