



# CLADDING RANGE INSTALLATION GUIDE

CX Castellated

1300 366 938 www.permacomposites.com

# **GENERAL GUIDELINES AND PRECAUTIONS**

With correct installation, PermaTimber® CX Castellated Cladding will provide years of enjoyment. Please ensure you read these instructions thoroughly prior to and during installation, failure to adhere to the installation guidelines will void your warranty.

PermaTimber<sup>®</sup> contains natural timber elements, and as you would be aware timber has different natural appearances. To ensure PermaTimber<sup>®</sup> does look like timber, it may also experience natural variations in each board, and in some instances slight variations in colour, tone and grain.

The customer / installer is responsible for inspecting each board for colour, finish, size and other issues prior to installation. If you have a large project please ensure all materials are ordered together, this guarantees that all materials are from the same batch.

PermaComposites<sup>®</sup> warranty information can be found at:

https://www.permacomposites.com/warranty/



IMPORTANT NOTES: Failure to adhere to the following will void your warranty.

✓ PermaTimber<sup>®</sup> CX Castellated Cladding must be installed in accordance with applicable building standards,regulations and PermaTimber<sup>®</sup> installation guidelines.

 $\checkmark$  Boards are never to be butt joined.

 $\checkmark\,$  Allowance for vertical and horizontal expansion must be complied with.

 $\checkmark$  Expansion trims must always be used. All boards and trims must also start and stop on the centre of a batten or stud.

✓ PermaTimber® CX Castellated Cladding must be supported by a BCA compliant structure. It is not intended for use as columns, support posts, beams, joist stringers or any other primary load-bearing members.

✓ It is the responsibility of the designer / specifier to ensure that all components comply with the requirements of relevant standards and the BCA.

 $\checkmark$  A waterproof membrane / system is to be installed in accordance with BCA requirements.

 $\checkmark$  There must be ventilation / drainage at the base of the wall and as required.

✓ Internal walls must be straight and flush prior to installation. Allowance must be made for studs or battens in window reveal sizing.

 $\checkmark$  Failure to use galvanised screws or equivalent will void your warranty.

 $\checkmark$  Failure to provide adequate thermal expansion and contraction spacing in accordance with these guidelines will void your warranty.

You can download the guide by scanning the QR Code or visiting www.permacomposites.com/ brochure-installation-guide-library/





PermaTimber® CX Castellated Cladding may be fixed directly to framework, however, preparations are crucial for an easy installation if battens are being used.

#### WATERPROOFING

Please ensure that a waterproof breathable or Vapour Permeable Barrier is installed over the studs or frame, keeping all overlaps pointing downwards with tape on all joins.

#### STEEL SUBFRAME: THERMAL BREAK

The Building Code of Australia states that both residential and commercial buildings must have a thermal break, consisting of a material with an R-Value of not less than 0.2, installed between the external cladding and any metal frame.

#### **EXPANSION GAPS**

Thanks to its special combination of recycled materials, PermaTimber® CX Castellated Cladding will expand or contract along its width by 1mm per panel and along its length by up to 2mm per lineal metre over a 40 degree Celsius temperature change. Care must be taken to allow for this expansion and contraction. Installation in temperatures below 16°c and above 35°c is not recommended. If the cladding is being installed in areas exposed to direct sun it is recommended that an expansion joint be used every 5 metres to confirm the necessary clearance (see page 5).

#### FRAMING AND BATTENING

Battens should be no less than 70 x 22mm. H3 Treated Timber is recommended or metal, spaced at either 450mm or 600mm spans (centre to centre).

Please Note: The span should never exceed 600mm. Fixing the CX Castellated Cladding at a span in excess of 600mm centre to centre will void your warranty.

Appropriate framing or battening for all trims (around doors & windows) is required. Ensure all frames or battens are flat across the surface (using packers where appropriate).

#### CX CASTELLATION TRIMS

When installing around internal / external corners please use the Aluminium Double Click Corner Trim (Black). Alternatively, the CX Castellated Trims can be used with a face fix screw and/or cap system.

#### FIXING

Holes to mount the CX Castellated Cladding are to be drilled at batten centres. It is important that this hole is a clearance hole with a diameter of 5mm. This allows for local expansion and contraction of the board.

Failure to drill a clearance hole will void your warranty. Each board and trim accessory must always finish on a batten.

The ends of the boards and trim accessories must never be left unfixed.CX Castellated Boards and Trims must be pre-drilled before fixing with screws.

#### SCREW REQUIREMENTS

For fixing boards, a minimum 8g x 30mm Galvanized Screw is recommended.

Product	Sub-Frame	Min Galvanised Screw Size
Boards	Timber	8g x 30mm
Trims	Timber	8g x 30mm



# FIRST & LAST CX CASTELLATED BOARD

#### HORIZONTAL INSTALLATION

To install PermaTimber® CX Castellated Cladding horizontally complete the following steps...

1. Ensure you have installed a waterproof membrane in accordance with BCA requirements.

2. Depending on personal preference and the application, the tongue can be left on or cutoff.

3. Fix the cladding to the subframe through the gap in between the first and second rib on the tongue side.

4. Use the PermaTimber® Snap Cap system to conceal the screw or leave as a face-fix screw. Alternatively, use a colour match screw.

5. Ensure the spacer is used as recommended on the following page.

#### **VERTICAL INSTALLATION**

To install PermaTimber® CX Castellated Cladding vertically complete the following steps...

1. Ensure you have installed a waterproof membrane in accordance with BCA requirements.

2. Depending on personal preference and the application, the tongue can be left on or cut off.

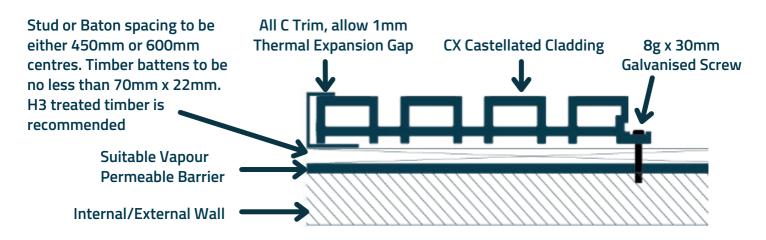
3. PermaTimber® CX Castellated Cladding must be started at a corner, external wall or against another cladded wall.

4. Fix the cladding to the subframe through the gap in between the first and second rib on the tongue side.

5. Use the PermaTimber® Snap Cap system to conceal the screw or leave as a face-fix screw. Alternatively, use a colour match screw.

6. Ensure the spacer is used as recommended on the following page.

Please Note: CX Castellated Boards and Trims must be pre-drilled oversize (5mm for 8g screw) before fixing with screws.



Please note: if the bottom of the Cladding is exposed you will be required to install the PermaTimber® Aluminium Bottom Trim, refer to Page 8 for more information.



# **SECOND & SUBSEQUENT CX CASTELLATED BOARD**

When installing the second and subsequent CX Castellated Boards, complete the following steps...

1.Slot the CX Castellated Board into position.

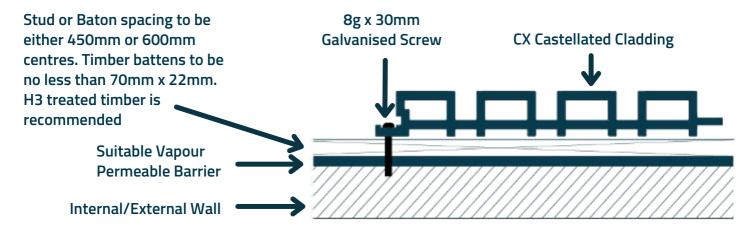
2.Before fixing an adjoining panel, ensure a 15mm spacer or equivalent is placed in the gap between the panels to ensure that a 1mm thermal expansion gap is maintained between the previous and next panel.

3.Fix the CX Castellated Board through the tongue section of the board using a 8g x 30mm galvanised screw and 5mm hole. Ensure you use the appropriate torque settings so that the board is not over tightened, as this will restrict expansion and contraction.

4.Ensure the CX Castellated Board is secure and remove 15mm spacer.

5.Repeat the process, checking the levels as you progress board by board (slight adjustments maybe required).

Please Note: CX Castellated Boards and Trims must be pre-drilled before fixing with screws.



Please Note: CX Castellated Boards must be drilled and fixed with the use of a 15mm spacer to create a 1mm thermal expansion gap between panels.



A piece of wood sized to 15mm width can be used as an alternative to a spacer.

#### **DOUBLE CLICK CORNER TRIM & SLEEK INTERMAL/EXTERNAL CORNER TRIM**

If using the Double Click Corner Trim, the internal piece of the trim should be installed first, followed by the cladding. Finish by installing the external piece of the trim after the cladding.

The boards should sit between the recess provided, ensuring suitable gaps for expansion and con-traction have been left (refer to the Gapping Requirements on Page 3). DO NOT butt cladding boards up tight directly into trims.

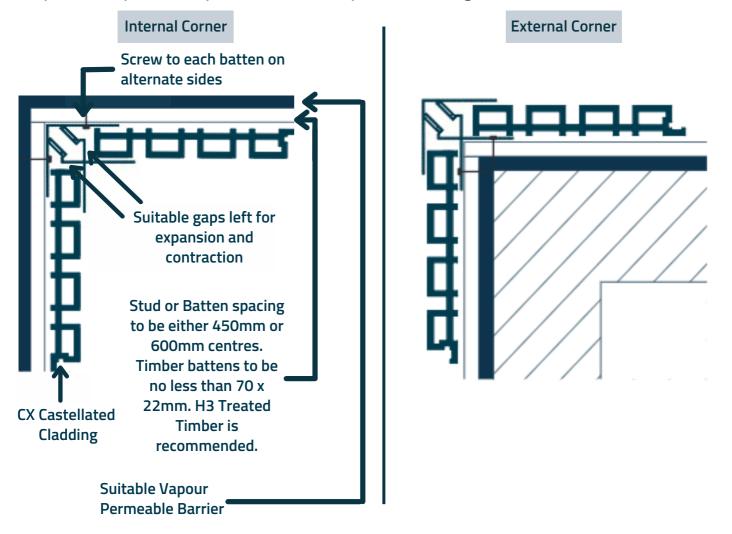
#### Installing the Double Click Corner Trim:

PermaTimber<sup>®</sup> Double Click Corner Trim is a powder coated black, two piece trim which can be used universally for both external and internal corners.

If installing vertically, you will be required to remove the CX Castellated Cladding board tongue so it fits into the corner.

Install the inner piece of the trim first and fix with a screw, then install CX Castellated Cladding and click on the face corner piece to complete the corner.

Please Note: CX Castellated Boards and Trims must be pre-drilled before fixing with screws. A grub screw may also be required to stop the external corner piece from sliding down.





# SLEEK EXPANSION TRIM

PermaTimber® Sleek Expansion Trim is only required for horizontal and vertical installation.

First, using a saw, cut the PermaTimber® Sleek Trim...



Place Sleek Expansion trim in position & mark on frame / battens to see where the cladding boards will finish.

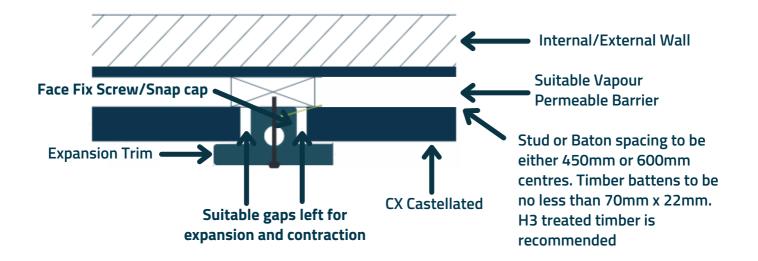
Note: Trim should be installed after the CX Castellated Cladding. Ensure that sufficient gaps have been allowed.

CX Castellated Cladding should sit in-between the recess provided, ensuring suitable gaps for expansion & contraction have been left. (Refer to the Gapping Requirements on Page 3). DO NOT butt boards up tight directly into trims.

Please Note: CX Castellated Boards and Trims must be pre-drilled before fixing with screws.

#### Installing the Sleek Expansion Trim:

- 1.Place trim in place
- 2.Pre-drill with 5mm hole through entire thickness of trim.
- 3.Fix Expansion Trim into position ensuring it is level.





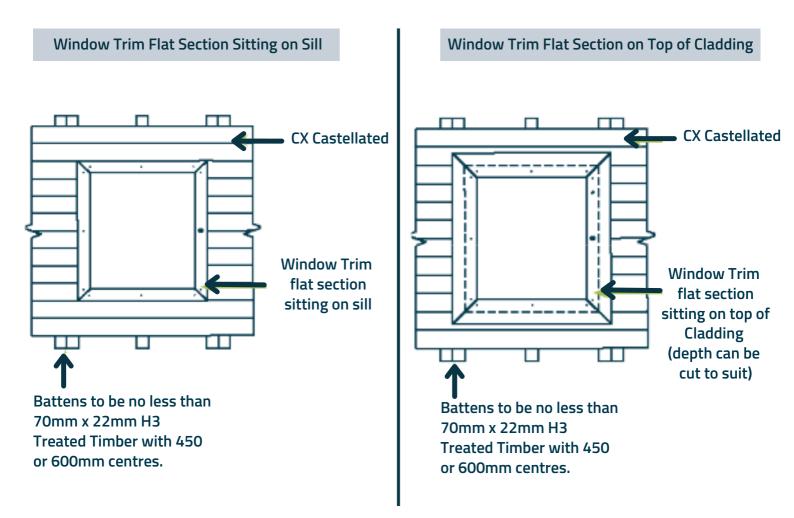
#### **TOP WINDOW & DOOR TRIM**

Top/Window & Door Trim can be cut down to suit depending on the recess of the window or door frame. Place trim in position mark & cut where appropriate.

When installing the Top/Window & Door Trim mitring is acceptable.

Fix Window Trim with a face fix screw or by using the Snap Cap system.

Please Note: CX Castellated Boards and Trims must be pre-drilled before fixing with screws.



### **ALUMINIUM BOTTOM TRIM**

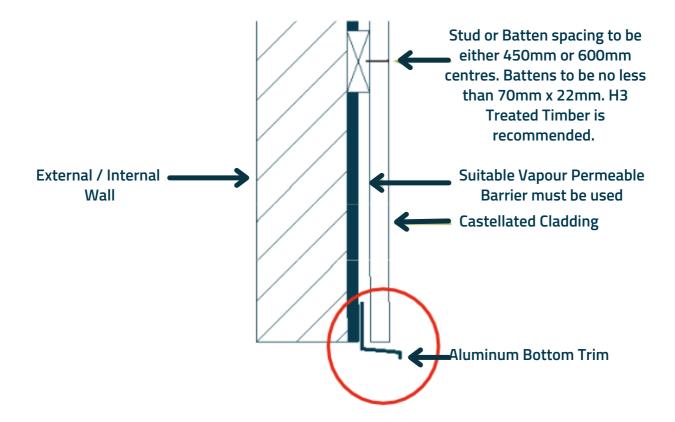
When installing vertically, you may also be required to use the PermaTimber® Aluminium Bottom Trim.

Please Note: When battening, please allow for batten thickness in window / door reveals, as the Cladding will need to fit into the Aluminium window / door reveal.

Soffit / Facade Junction Detail.

Fix Aluminium Bottom Trim to support wall / batten prior to installation of cladding. Aluminium Bottom Trim does not come far out enough to work with CX Castellated Cladding.

Please Note: CX Castellated Boards and Trims must be pre-drilled before fixing with screws.







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