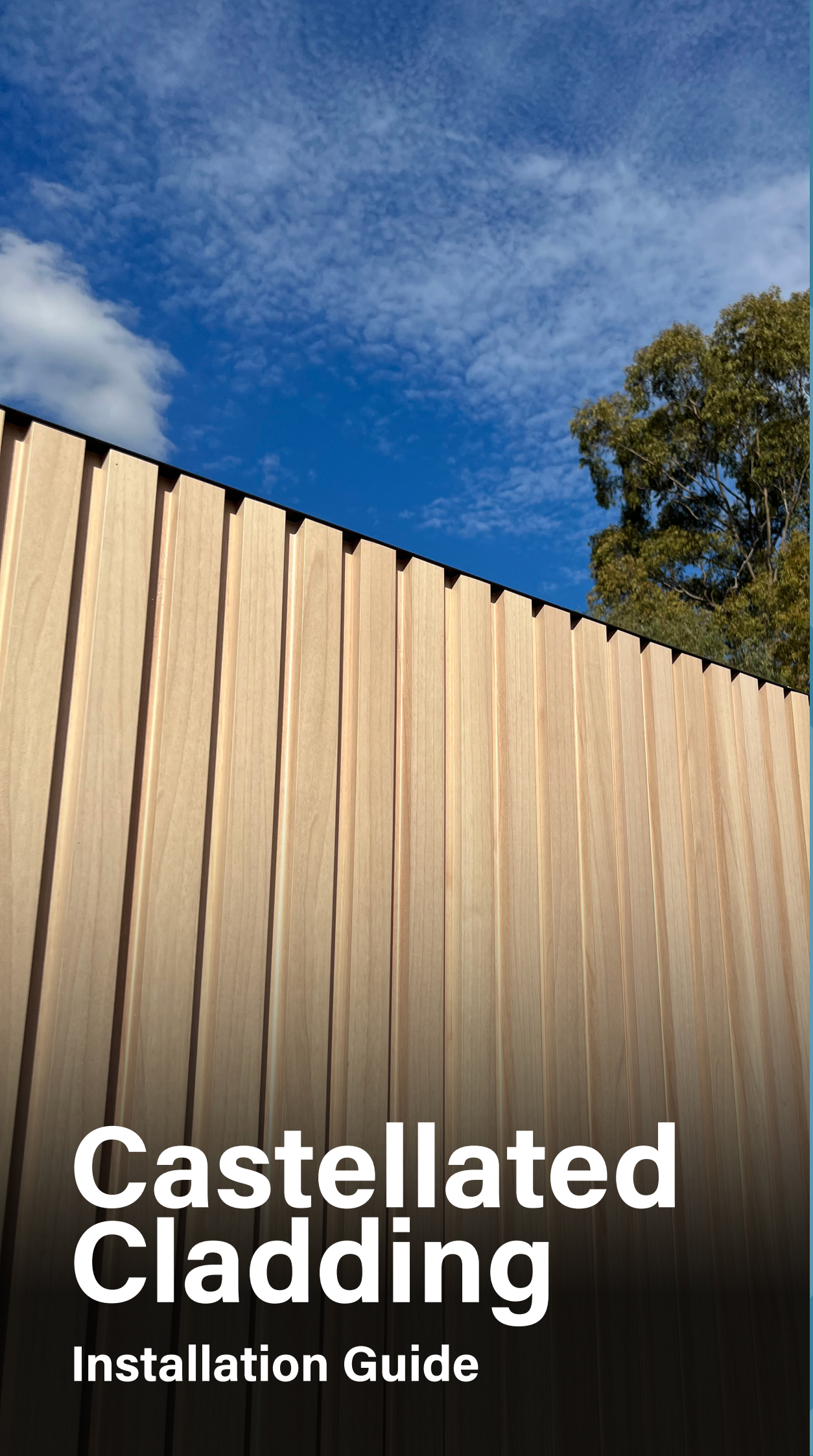


Castellated Cladding

Installation Guide

Introduction

Performance

As part of DECO's commitment to compliant building products, the DecoClad systems have been designed to meet Australia's stringent building standards. The DecoClad range has been tested to and passed the following standards.

Certifications

All testing has been done using the detail provided in this installation guide and in order to claim the performances set out here within, the detail in this guide must be followed.

Description/Standard

- Combustibility test for materials - AS1530.1/CSIRO
- Determination of ignitability, flame propagation, heat release and smoke release - AS/NZ1530.3/CSIRO
- Heat and smoke release rates for materials - AS3837/CSIRO
- Resistance to wind pressures and cyclone regions - AS4040.3/AZUMA DESIGN

DecoClad is also compliant with the NCC Non-Combustible building elements. (NCC 2022 VOL.1 - C2D10 (6)(e) Non-Combustible building

Suggested Installation Tools

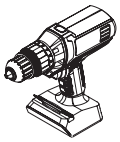
Screws/Rivets

Metal – Colour matched pop rivets or self drilling TEK screws.

Wood – Self Drilling Timber Screws

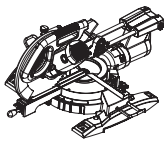
Sealant/Adhesive

Deco recommends the use of high quality sealant and adhesives.



Impact Driver

A high-quality Impact Driver with an appropriate driver bit is recommended for fixing all extrusions to the building structure.



Mitre Saw

A high-quality Mitre Saw equipped with an aluminium cutting blade is recommended for cutting the boards to length and trimming the board ends.

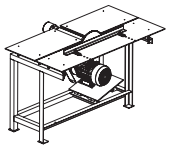


Table Saw

A high-quality Table Saw is recommended for ripping the final (top) board to the correct dimension for finishing of the installation.

Preparation

DecoClad Boards

All DecoClad boards and accessories are supplied in 6.5m lengths. As part of the manufacturing process, the first 10mm of both ends of the extrusion are taped and not imaged, therefore each board will need to be trimmed by 15mm on each end to remove the tape and provide a clean finish. After the removal of each end, the useable length of each length is 6.47m. Accessories are available for two distinct finish options, "Classic Installation" and "Flushline Installation".

Framing

All framing should be constructed from steel or timber according to the requirements of the NCC and relevant standards to ensure resistance to wind loads, with studs positioned at maximum 600mm centres. For Non-Cyclonic vertical applications ensure that the wall is battened out or has studs at 600 centres; in Cyclonic applications studs should be installed at 450 centres. When using a Joining Connector for "Classic Installations", or a Flushline Tee section for "Flushline Installations", ensure that a stud, batten or noggin is installed behind the connector.

Fixing Application Requirements

When fixing DecoClad to the wall, fixings should be used every 450mm for cyclonic applications or every 600mm for non-cyclonic applications. 30mm x 10G Self Tapping Panhead or Button Head screws (galvanised or stainless steel) shall be used in all circumstances .

Sarking/Building Wrap

To ensure a waterproof application, a sarking or building wrap layer should be installed first to prevent any water penetrating the building. Care should be taken to ensure that all penetrations are carefully sealed to ensure water does not penetrate the building wrap or sarking.

Handle With Caution

WARNING - When handling DecoClad care should be taken and appropriate Personal Protective Equipment should be worn at all times. Failure to do so risks potential serious injury, disablement or death. When processing Cladding Boards or Accessories, care should be taken to ensure that the work space is clean and free from dust, sawdust, metal fines and/or shavings. Processing of the cladding board in areas with excessive dust, sawdust, metal fines and/or shavings risks potential damage to the finished surface

Castellated Cladding Accessories

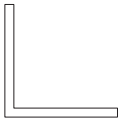
Note: All accessories can be interchanged based on your specific needs, but we recommend using the suggested ones

DC-CL07 - Starter Strip

The Starter Strip is the base profile which starts the connection to the wall. The Starter Strip is required to be attached to the wall at the bottom of horizontal applications, or to one side of vertical applications.

DC-ANG4040 - Flushline 40x40 Angle

For use in "Flushline Installation", the 40mm x 40mm Angle is supplied in any colour from our Super Durable™ Timber Range or any powder coated finish your require . This extrusion is used to cover the ends of the ends of the cladding boards to create a clean finish.



DC-CH3216 - Cover Channel

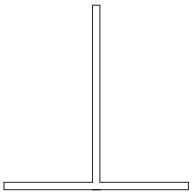
Channel is supplied in PC black or any powder coated finish you require. This extrusion is used to cover the ends of the cladding boards to create a clean finish.

DC-ANG3220 - Flushline 32x20 Angle

Used in vertical applications. Angle is supplied in PC black or any powder coated finish you require. This extrusion is used to cover the top of the cladding boards to stop anything falling into the open top profile and create a clean finish.

DC-T4040 - Flushline Tee 40x40X1.6

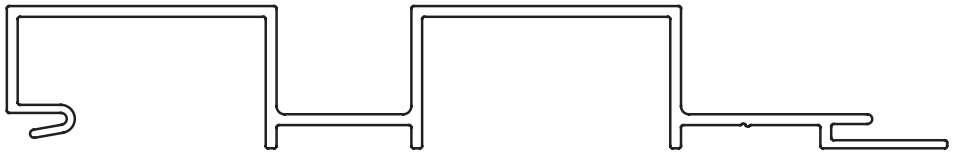
The Flushline Tee section is used in "Flushline Installations" to replace the Joining Connector (DC-CL24) for a minimal look vertical or horizontal seam. Supplied in powder-coated black or other finishes on request.



Castellated Installation Details

Pre Punched Extrusions

In order for DecoClad to achieve the highest levels of performance and to enable a quick and easy install, many of the extrusions come with pre-punched fixing slots. The fixing slots are included in the following profiles:

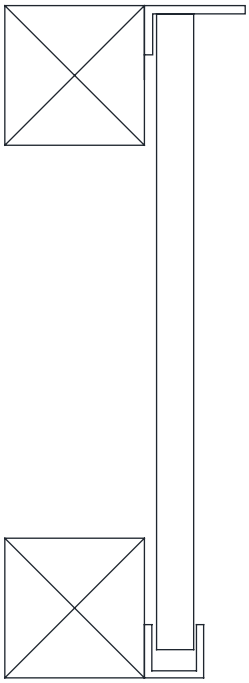


150mm CASTELLATED

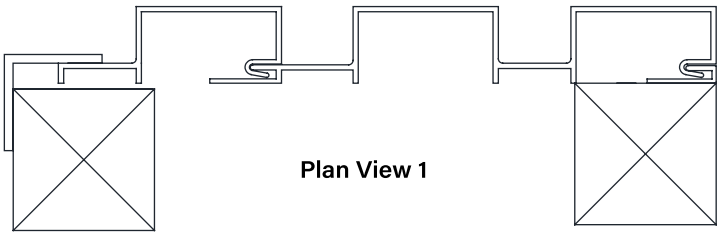
0.975m² Coverage / 6.5m Board

DecoClad Installation Detail - Classic Installation

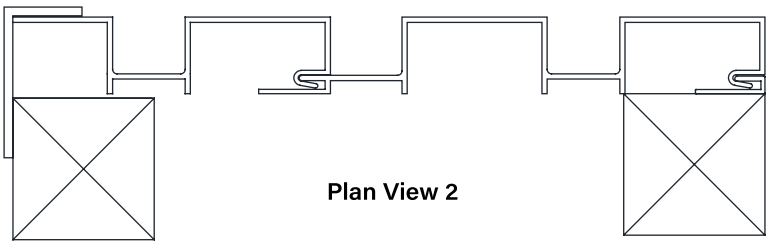
The “Classic Installation” utilises DecoClad accessories in a colour-matched finish. All accessories have been designed with detail in mind and provide a consistent 25mm external face. Corner details utilize adhesives to secure angle in place.



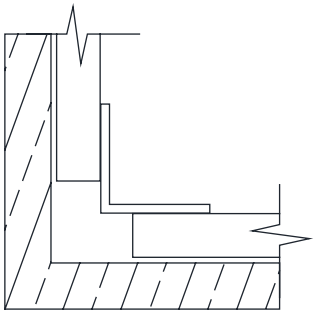
Elevation View



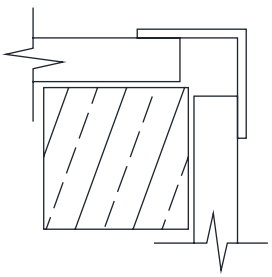
Plan View 1



Plan View 2



Internal
Corner Detail



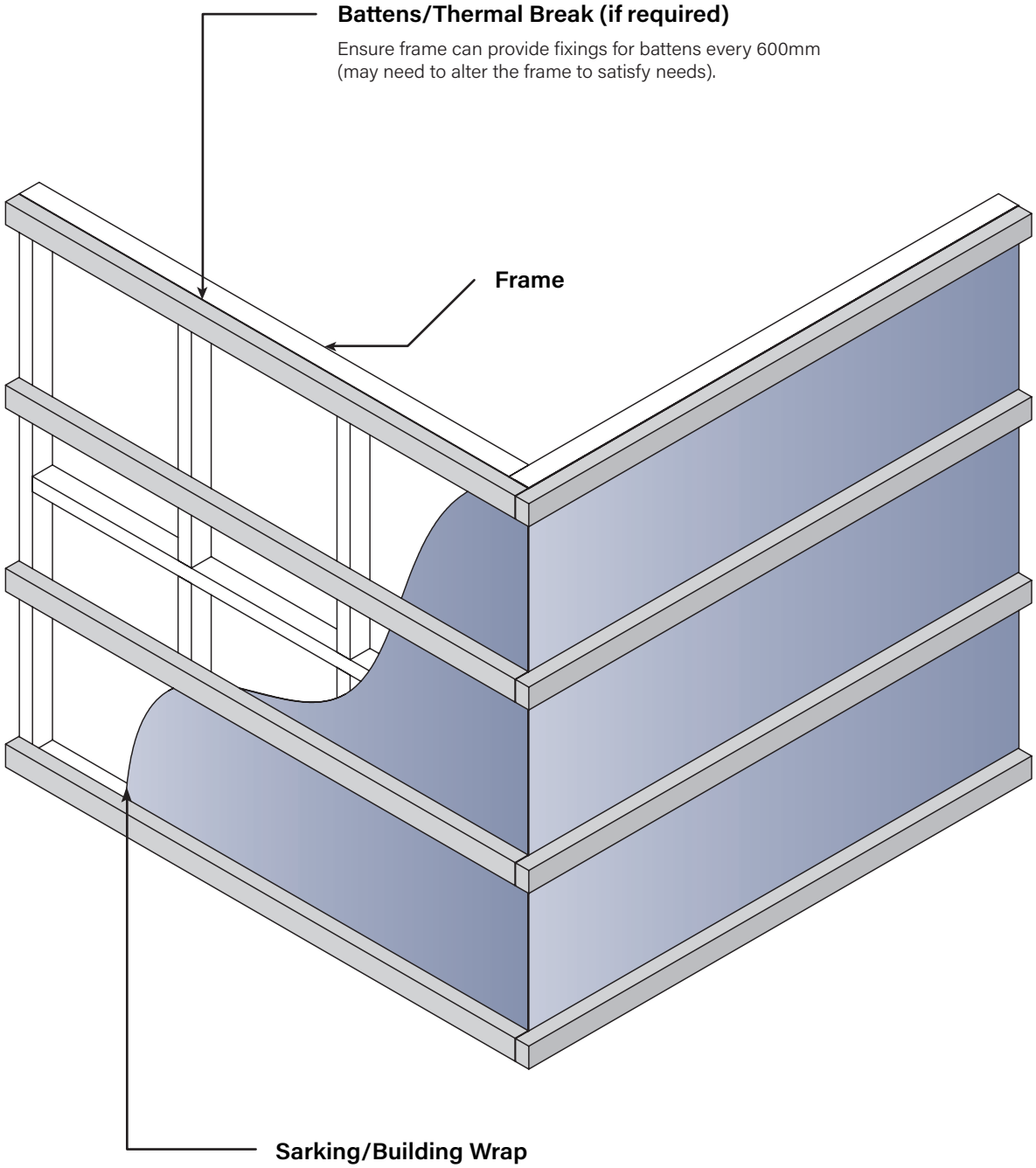
External
Corner Detail

PLEASE NOTE: Stud details are for information only. Framing should be constructed according to the requirements set by the NCC (National Construction Code) and relevant standards.

Vertical Applications

1 Apply Sarking or Building Wrap and Any Additional Battens or Noggins Required

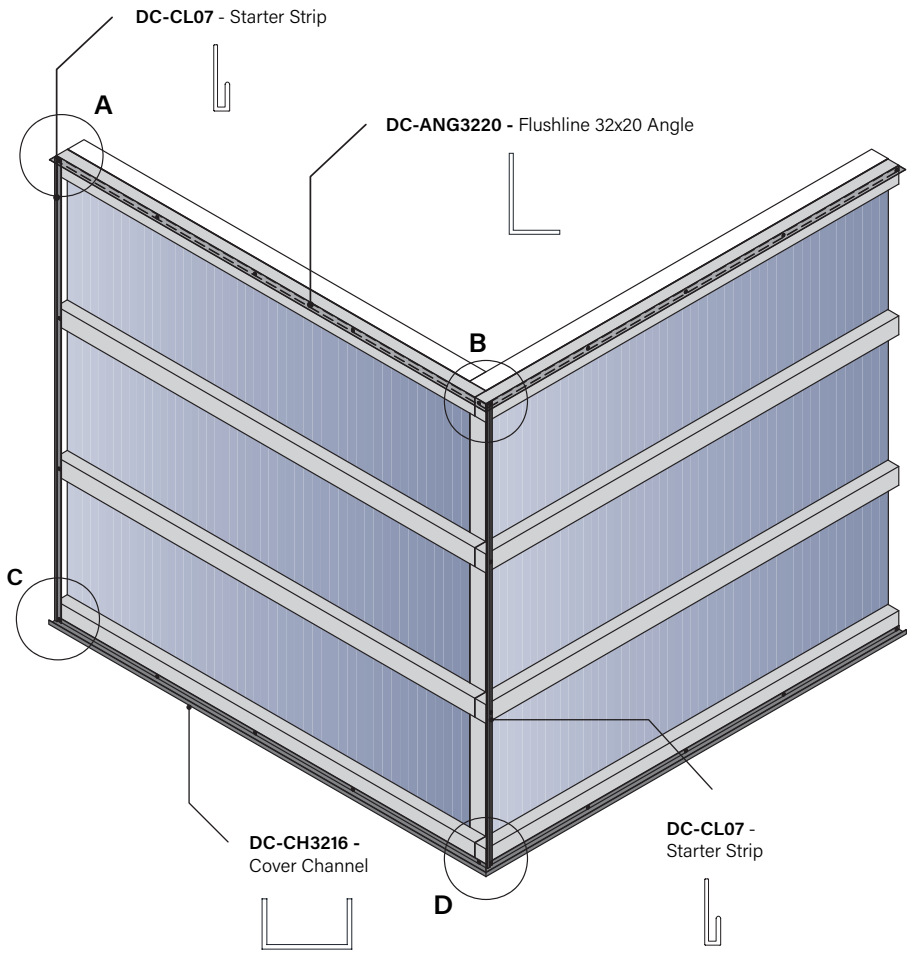
When installing battens for a vertical cladding facade, position the battens horizontally with a spacing of 600mm between centres.

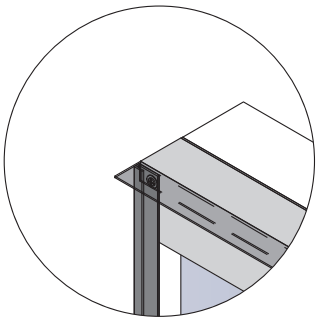


2 Castellated Cladding Setup

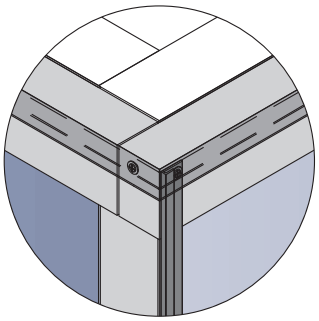
Install cladding accessories including Starter Strips, Channels, Angles, Joining Connectors, Tee Section. When installing ensure all extrusions are fixed at maximum 600mm centres or as required for the applicable wind loads.

NOTE: Deco accessories are designed to be interchangeable, allowing you to customize them to fit your specific needs. The application demonstrated here represents a typical situation.

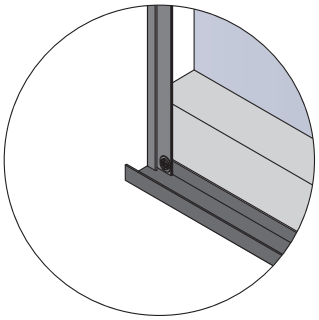




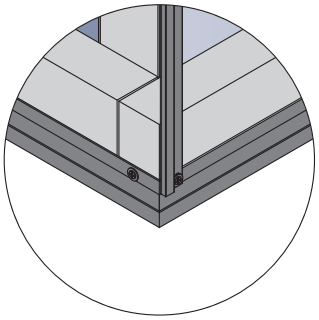
Detail A



Detail B



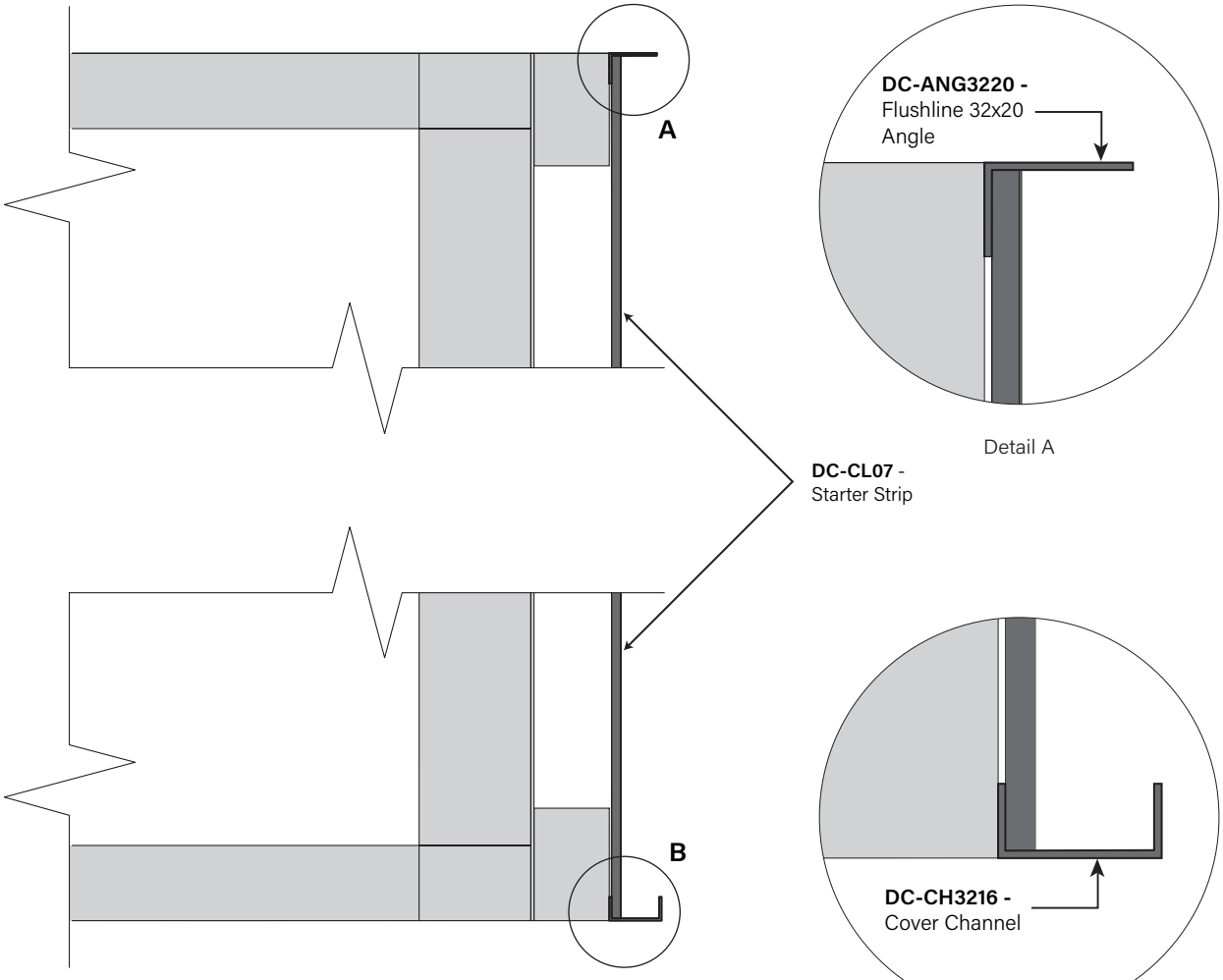
Detail C



Detail D

Castellated Cladding Setup Detail

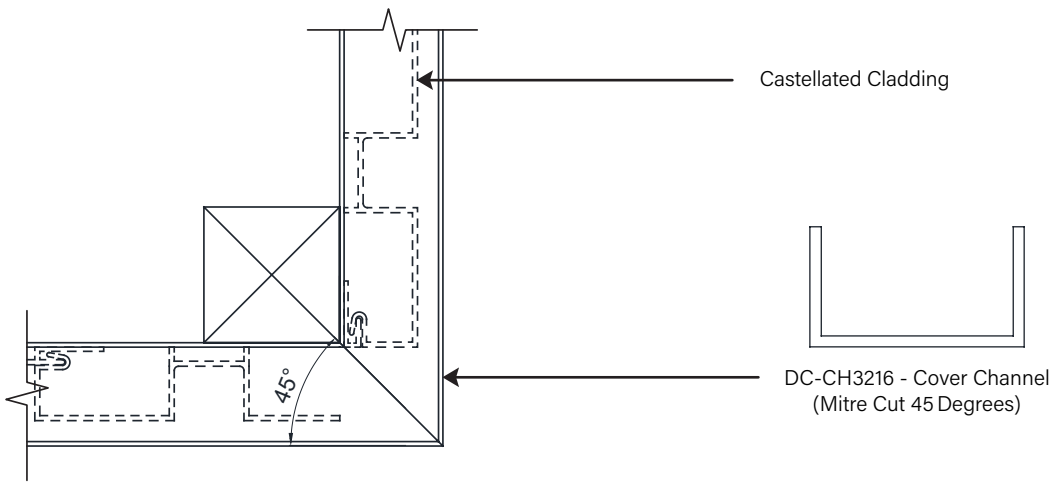
Ensure the starter strip sits on the angle and cover channel for a consistent level when installing the rest of the cladding.



Side View

Mitre Cut Detail

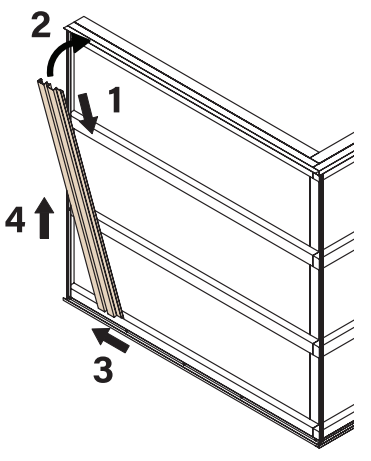
For a seamless look when installing castellated cladding, Deco recommends using a mitre saw to cut channels or angles at 45 degrees to cover the board ends as they wrap around corners.

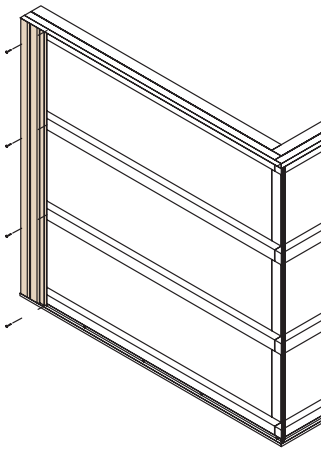


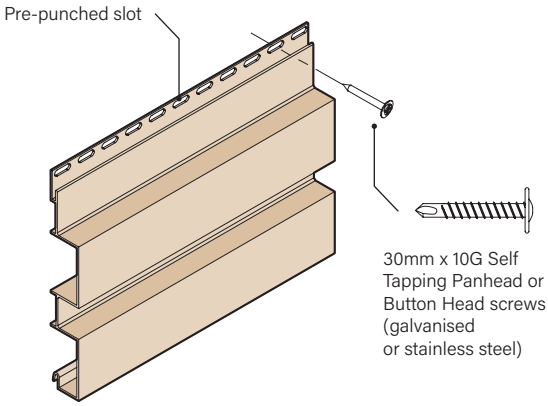
Top View

3 Install First Board

Measure, cut and install first board by positioning lip over the starter strip and fix board using 30mm 10G screws as required for your application. To ensure that the board has the required movement, the fixings are required to be installed through the pre-punched slots. Failure to do so may result in excessive stress and failure of the fixing.



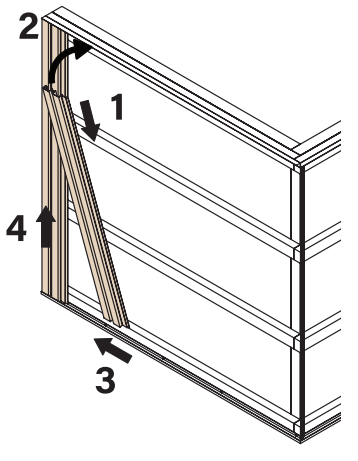


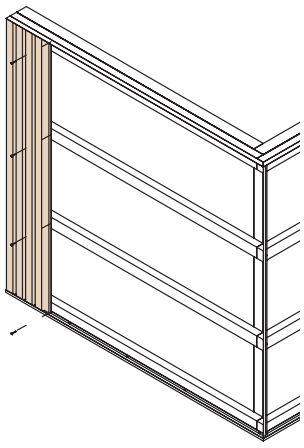


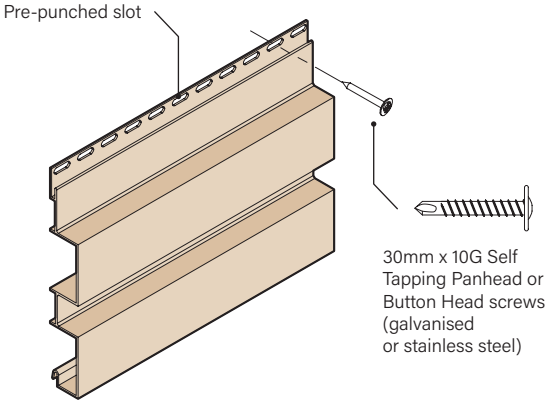
4 Install Next Board and Repeat Until Final Board

Install the next board by positioning lip over the positioning leg on the previous board and fix board using 30mm 10G screws as required for the applicable wind loads. Ensure that the fixings are installed through the pre-punched slots.

TIP: After every 5th board, measure vertically from both ends of the cladding to ensure consistent length. Adjust the angle of the sixth board if needed for levelness, then proceed with fixing each subsequent board to maintain a level surface.

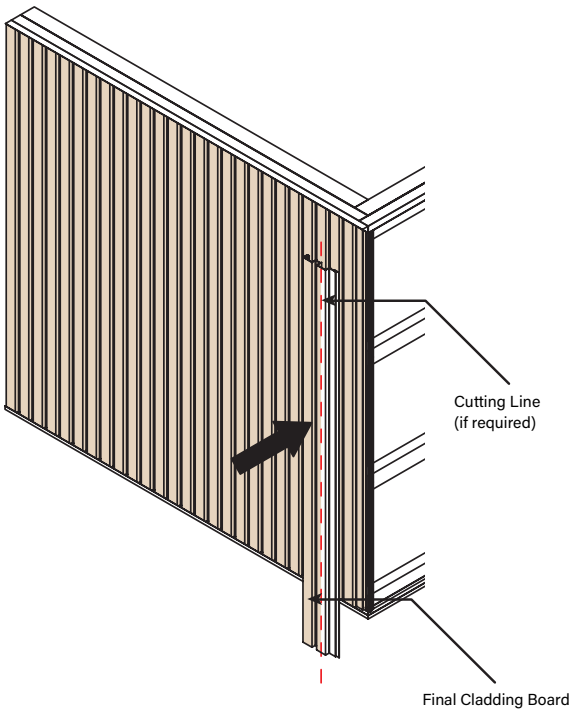


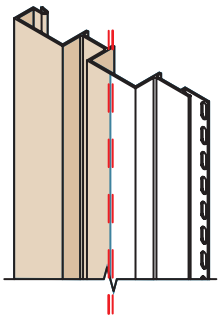


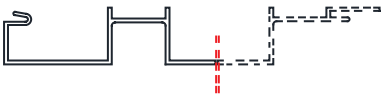


5 Rip and Install Final Board

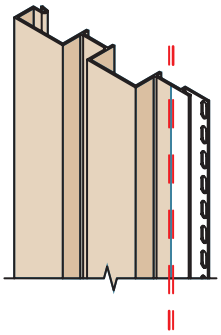
The final cladding board might not be the right fit, so it needs to be ripped with a table saw. Measure the remaining space and cut the board accordingly for a proper fit.







Trim Detail Option 1

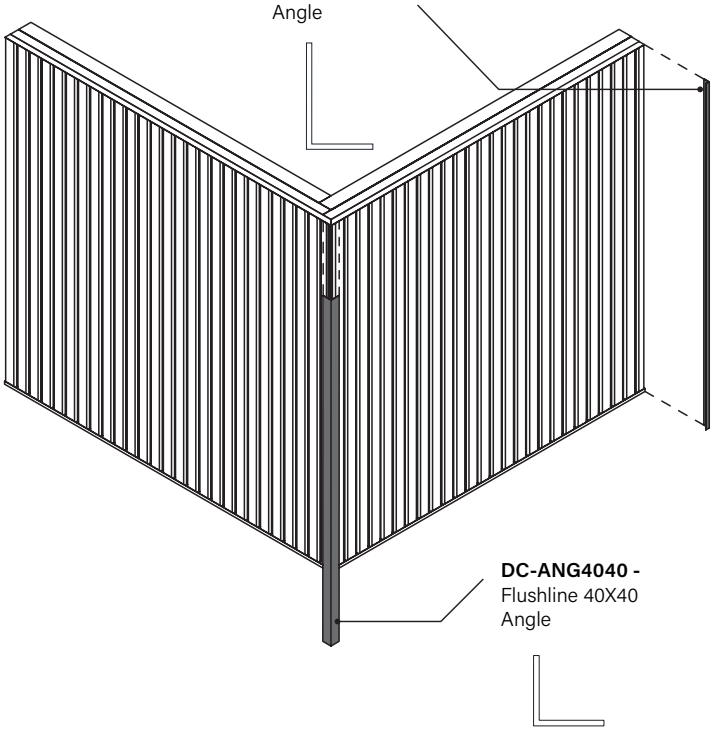


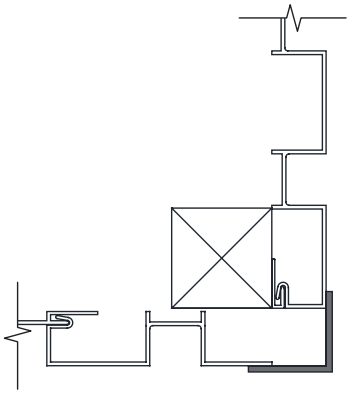
Trim Detail Option 2

Trim Detail

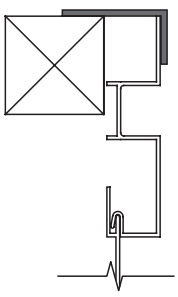
6 Cut and Install Angles

Measure angles based on the distance between the top angle and the bottom channel to ensure full coverage of the cladding face.





External Corner Detail, Flushline
40x40 Angle



Edge Detail, Flushline 32x20 Angle

Top View