Quick Panel
Vertical Installation Guide

v1 • AUS

NewTechWood®

Content

Installation

Supplements

Important Note

Read All Sections Before You Start

For the latest information, please visit our website @www.newtechwood.com.au

Prior to installing any composite cladding system, it is recommended that you check with local building codes for any special requirements or restrictions. The diagrams and instructions outlined in this guide are for illustration purposes only and are not meant or implied to replace a licensed professional. Any construction or use of NewTechWood products must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction and use of this product.

Safety

When dealing with any type of construction project, it is necessary to wear appropriate safety equipment to avoid any risk of injuries. NewTechWood recommends but is not limited to the following safety equipment when handling, cutting, and installing NewTechWood products: gloves, respiratory protection, long sleeves, pants, shoes and safety glasses.

Tools

Standard woodworking tools may be used. It is recommended that all blades have a carbide tip. Standard stainless steel or acceptable coated screws are recommended.

Environment

A clean, smooth, flat, and strong surface is needed for the proper installation of NewTechWood products. Always check with local building codes before installing any type of product. If installation does not occur immediately, NewTechWood products need to be put on a flat surface at all times. It should NEVER be put on a surface that is NOT flat.

Planning

Plan a layout for your siding before starting it to ensure the best possible looking siding for your project. Building codes and zoning ordinances generally apply to permanent structures, meaning anything that is anchored to the ground or attached to the house. So nearly every kind of siding requires permits and inspections from a local building department. We recommend drawing out a site plan of your proposed project that you intend to do to minimize errors and make your perfect siding.

Pressure wash on a scrap piece of composite material before using a pressure washer on the cladding board to make sure that your pressure setting will not damage the capped layer.

Construction

NewTechWood is NOT intended for use as columns, supporting posts, beams, stringers, support against a force , or other primary load-bearing members. NewTechWood must be supported by a code-compliant substructure. While NewTechWood products are great for retrofits, NewTechWood's products CANNOT be installed on existing cladding boards.

Ventilation

NewTechWood products CANNOT be directly installed onto a flat surface. It must be installed onto a substructure, so there is adequate and unobstructed air flow under the cladding to prevent excessive water absorption. A minimum of 25 mm of continuous net free area under the cladding surface is required for adequate ventilation on all cladding, so air can circulate between adjacent members to promote drainage and drying.

Heat and Fire

Excessive heat on the surface of NewTechWood's products from external sources such as but not limited to fire or reflection of focusing sunlight from some optical objects can potentially harm NewTechWood products. This extreme elevation of surface temperatures, which exceeds that of normal exposure, can possibly cause NewTechWood products to melt, sag, warp, discolor, increase expansion /contraction, and accelerate weathering.

Fasteners

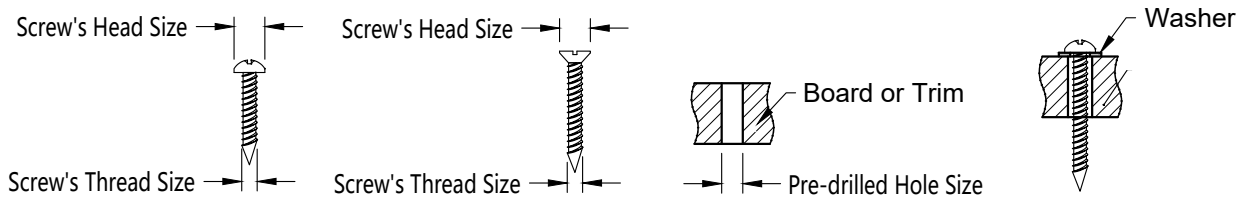
When fastening NewTechWood's products all screws that are face fastened should always be driven in at a 90-degree angle to the cladding surface. Toe screwing is not recommended for NewTechWood products. An extra batten should be added if a 90-degree angle is not achievable. All fasteners should be on their own independent battens. When two board-ends meet each other there must be a sister batten. The end of each board must sit on its own batten.

Use white chalk, straight boards, or string lines as templates for straight lines. NEVER USE COLORED CHALK. COLORED chalk can permanently stain NewTechWood's products and is strongly discouraged.

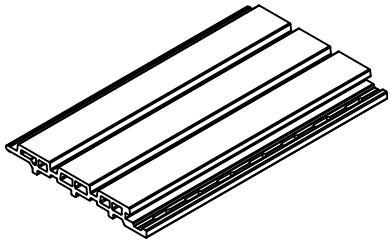
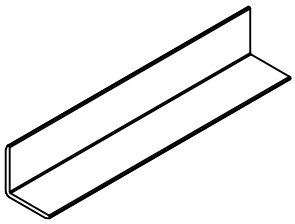
When selecting proper fasteners for your project, it is essential to choose those specifically engineered for composite material, as they are designed to provide the best performance and appearance for NewTechWood products. For most installations, we recommend using stainless steel screws to ensure durability and corrosion resistance. In specific scenarios, such as face-fixing the last board, composite decking screws with color-matched heads may be used to blend seamlessly with the material. For a cleaner, more professional finish, ensure screws are installed flush with the surface and avoid over-tightening. Using screws not recommended for composite material may damage or compromise the integrity of the cladding. For guidance, refer to page 7 for a list of recommended fasteners tailored to your substrate.

Pre-drill

When face-fixing, it is recommended to pre-drill the holes slightly larger on the profiles and the trims to allow for expansion and contraction response to temperature change, as shown in below diagram.
The predrilled hole size should be larger than the screw thread size, from1.5mm to 2mm. Moreover, the predrilled hole size should also be smaller than the screw head size, at least 2mm. A washer can be applied if the pre-drilled hole size is smaller than the screw head size below 2mm.

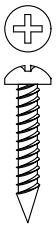


Cladding Parts

Code no.	Description	Diagram
UH122R	Quick Panel Board	
US154R	L-Trim, used on the outermost edges and the outside corners	

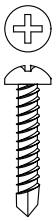
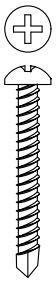
Cladding Screws
(For Wood Battens)

The table below shows the screws recommended to use for the installation, but not included.

Code no.	Description	Diagram
#8 x 25 SS304 Phillips Recess Pan Head Self-tapping	Used when fixing the board onto the batten (Screws not included, sourced / supplier by builder/installer)	
CS #8 x 50 SS304 (Colour Head Composite Screw)	Used when face-fixing the board and the L Trim (US154) onto the batten (Screws supplied by NTW)	

Cladding Screws
(For Metal Battens)

The table below shows the screws recommended to use for the installation, but not included.

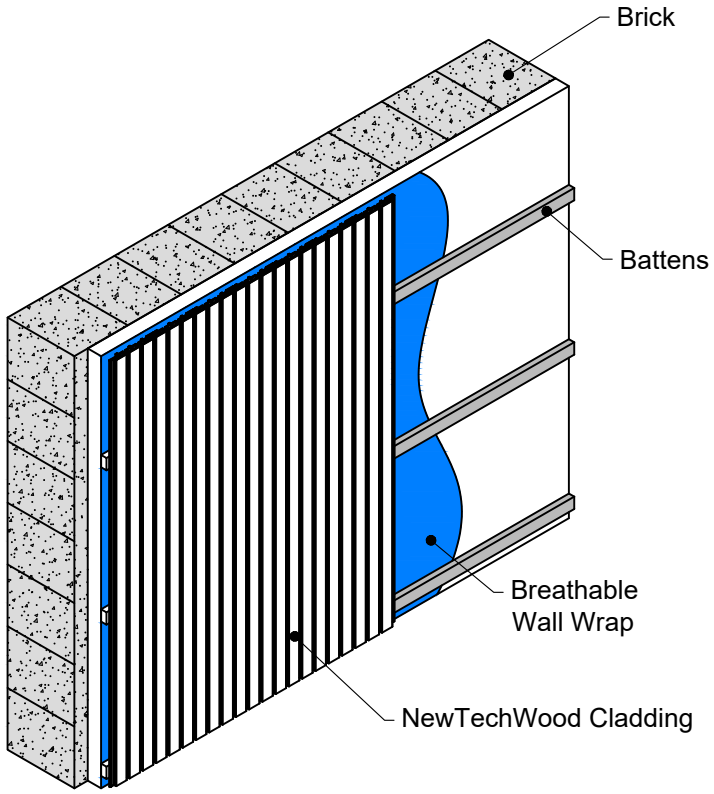
Code no.	Description	Diagram
#8 x 25 SS410 Phillips Recess Pan Head Self-drilling	Used when fixing the board onto the batten (Screws not included, sourced / supplier by builder/installer)	
#8 x 35 SS410 Phillips Recess Pan Head Self-drilling	Used when face-fixing the board onto the batten (Screws not included, sourced / supplier by builder/installer)	

* Note: All screws are based on our recommendation and if the installation requires something different than what is shown, a professional should be consulted before installing. The following installation guide will use the above screw sizes.

Under Construction

We recommend using aluminum or pressure treated wood for the under-construction backing system. Each cladding board must be supported by a solid surface or battens, spaced no more than 500 mm apart, center to center.

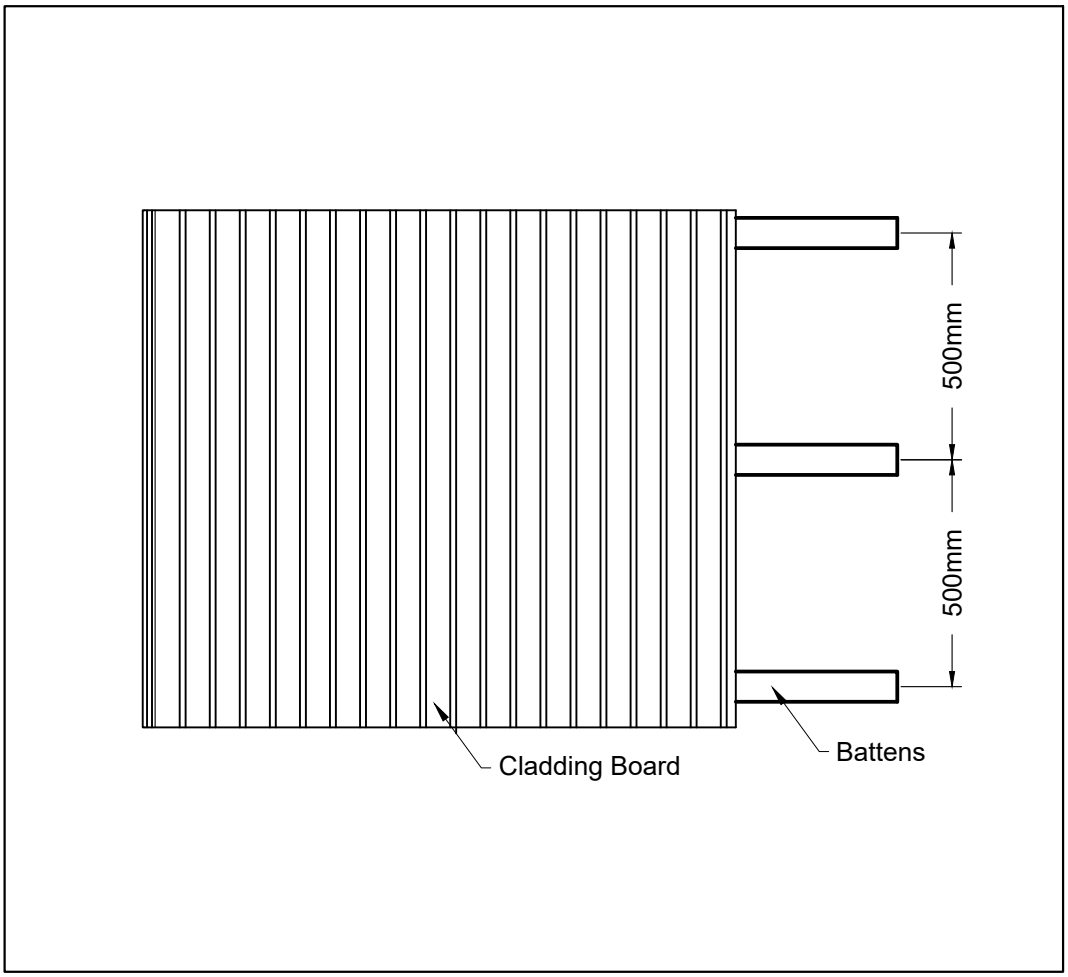
Extra attention is required to ensure adequate backing is provided around obstacles such as windows, fascia, soffit, gutters, ventilation points, and other structural features. below is an example of the typical layers involved in a standard installation; however, a licensed professional should always be consulted to ensure proper techniques and compliance with building codes.



Battens Installation

A building professional should be consulted regarding vapor barrier and insulation for your project. Where a wall wrap is to be used, it should be a breathable type and must be positioned behind the battens. The battens need to have a minimum thickness of 25 mm.

Battens should be attached with screws at a maximum of 500 mm on center for the vertical cladding installation. All battens need to be flat and level against the wall surface, use shims if necessary.



Expansion and Contraction Values

NewTechWood cladding boards will expand and contract with changes in temperature. Expansion and contraction are most significant where extreme temperature changes occur. Fastening the cladding boards according to the gapping requirements noted in the following table accommodates for this movement.

Installation Temperature (°C)	Length (Meters) 1	2.44	2.7	3	3.66	4	4.88	5.4	Gap (mm)
0	1.4	3.4	3.9	4.2	5.1	5.6	6.8	7.6	
5	1.2	2.9	3.4	3.6	4.4	4.8	5.9	6.5	
10	1.0	2.4	2.8	3.0	3.7	4.0	4.9	5.4	
15	0.8	2.0	2.2	2.4	2.9	3.2	3.9	4.3	
20	0.6	1.5	1.7	1.8	2.2	2.4	2.9	3.2	
25	0.4	1.0	1.1	1.2	1.5	1.6	2.0	2.2	
30	0.2	0.5	0.6	0.6	0.7	0.8	1.0	1.1	

Installation Procedure

Step 1: Framing
- Measure and Chalk lines for the battens
- Install the battens

Step 2: First cladding board installation

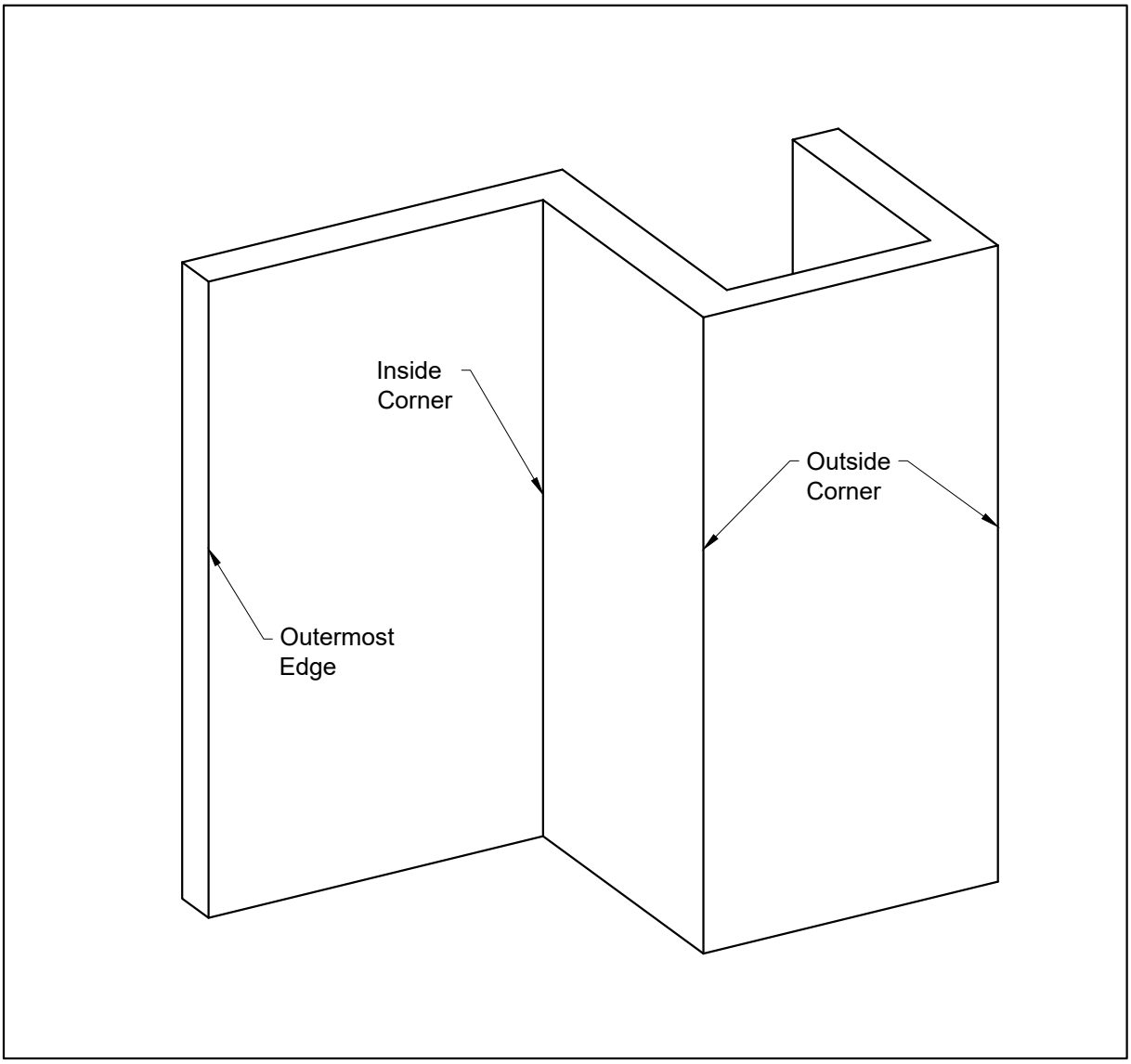
Step 3: Install the next cladding boards

Step 4: Install the last cladding board

Step 5: Install the Trims

Step 1: Framing

The frame needs to be level before installing the cladding boards. The diagram below shows the wall replicating different scenarios potentially occurring when installing the cladding boards.



1.1 Measure and chalk lines for the battens according to the span data specified on *Page 9*, as shown in the *Diagram 1.1*

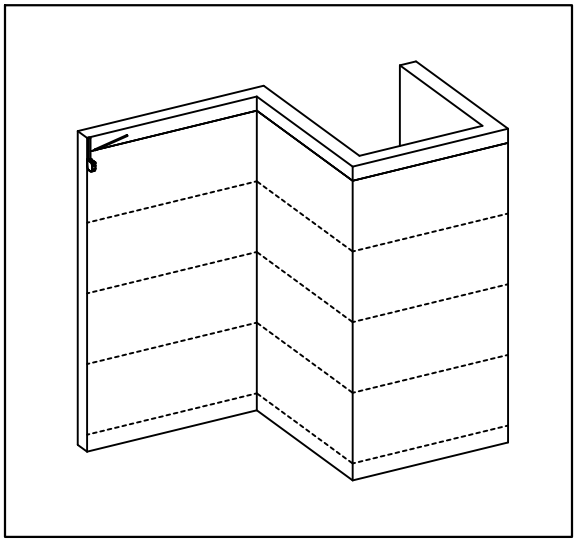


Diagram 1.1

Note:

1. For this illustration, we are using wood battens. Please refer to *Page 7* for recommended screws when using aluminum battens.

2. A 500 mm span is required between battens for the vertical installation to keep cladding boards from bowing as noted on *Page 9*.

1.2 Attach the battens to the walls with screws every 500 mm, as shown in the *Diagram 1.2*

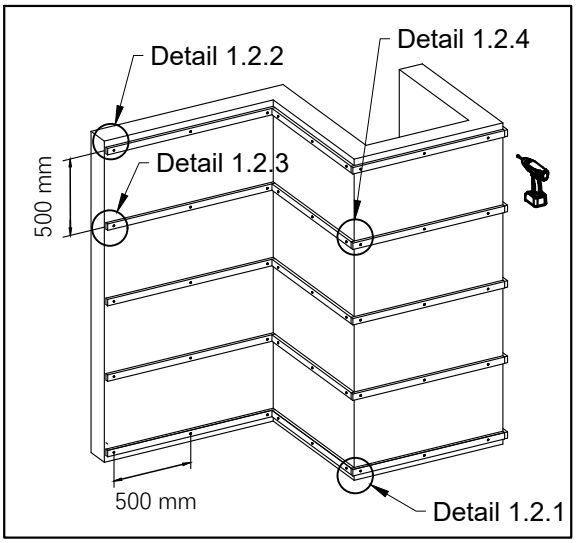
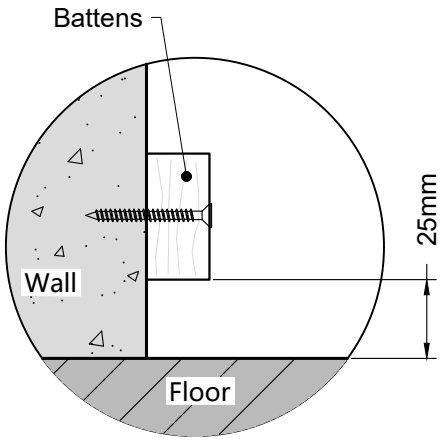


Diagram 1.2

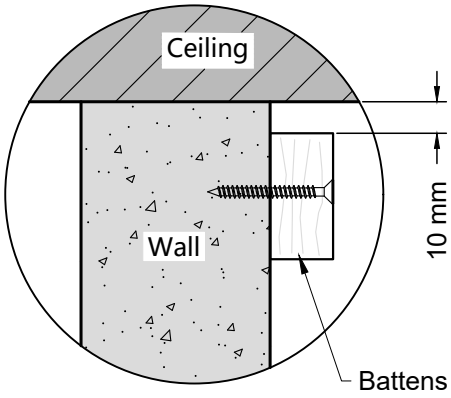
Note:

1. Allow for a minimum of 25 mm gap between the battens and floor, as shown in the *Detail 1.2.1*



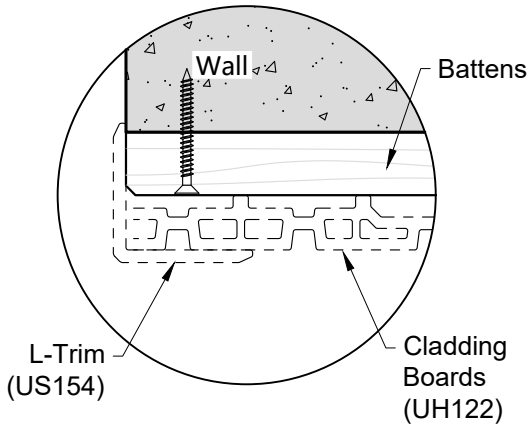
Detail 1.2.1

2. Allow for a minimum of 10 mm gap between ceiling and the battens, as shown in *Detail 1.2.2*



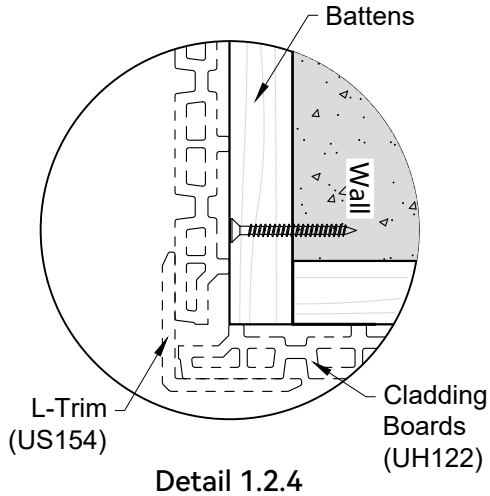
Detail 1.2.2

3. For the Outermost Edge, please install according to *Detail 1.2.3*



Detail 1.2.3

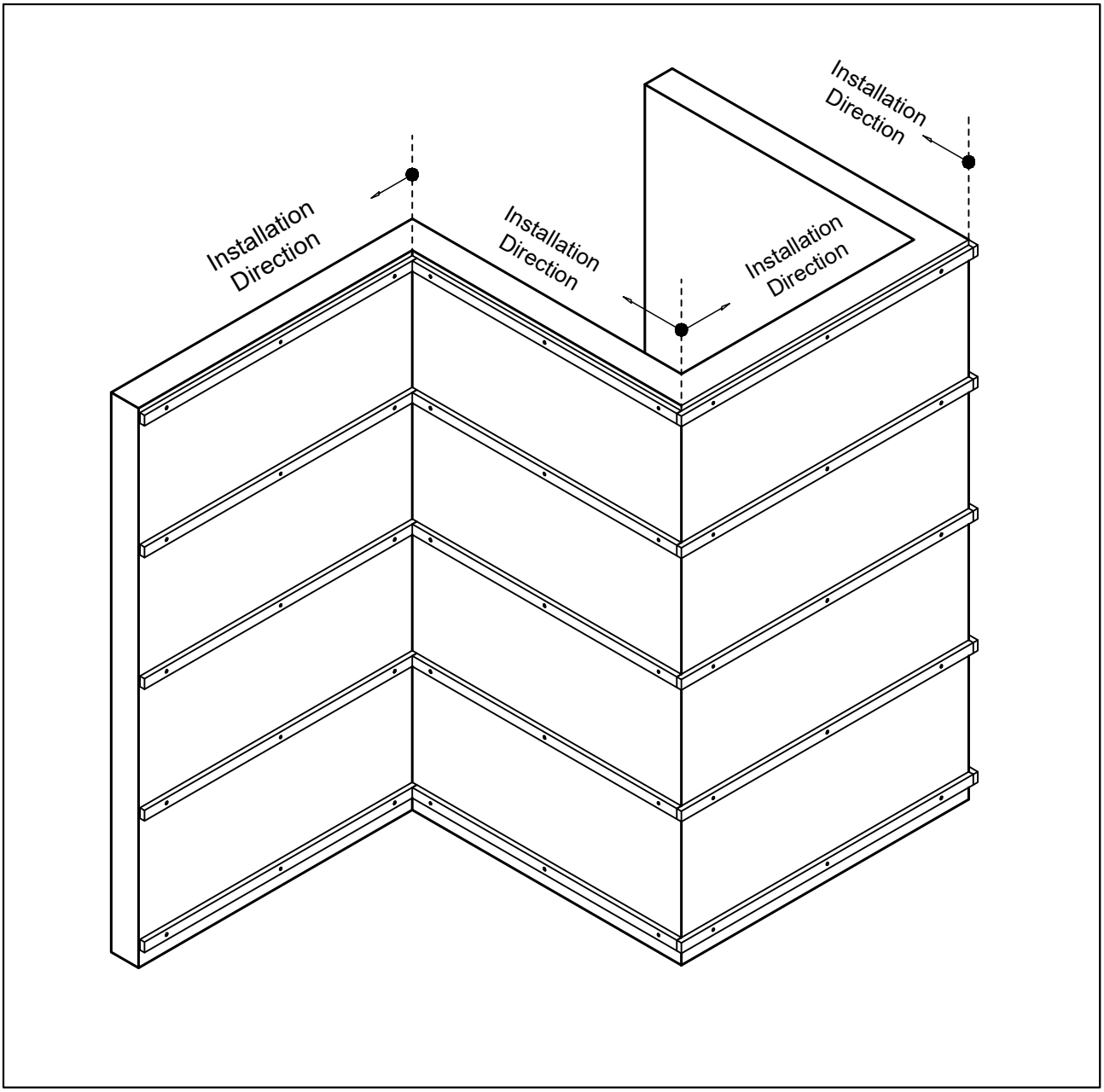
4. For the Outside Corner, please install according to *Detail 1.2.4*



Detail 1.2.4

Step 2: First Cladding Board installation

Start the installation with the direction, as shown in the below diagram



Note:

It is recommended to start the cladding installation from the outside corner.

2.1 Install the first cladding board at the Outside Corner, as shown in *Diagram 2.1*

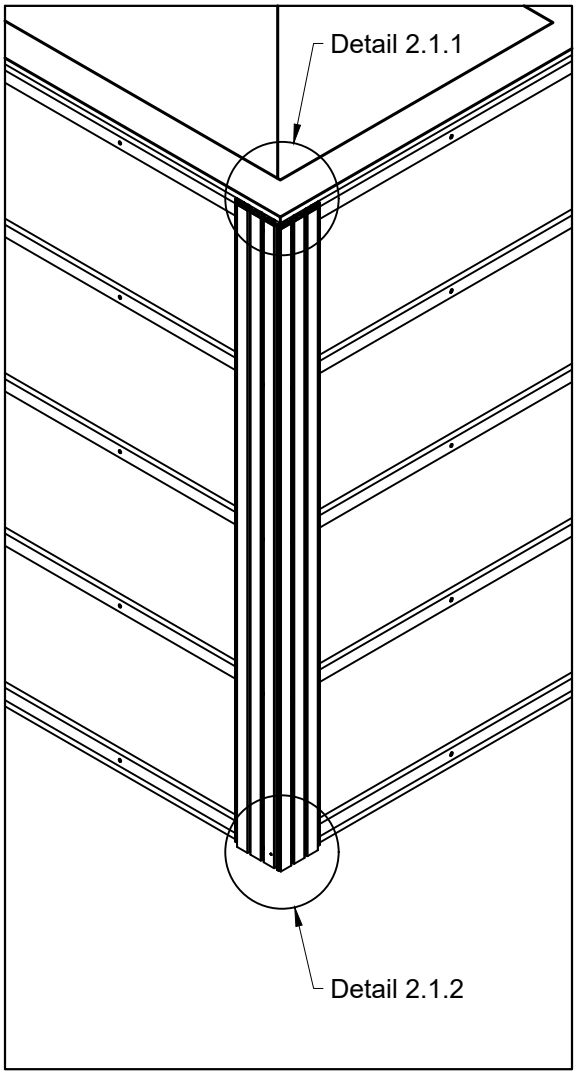
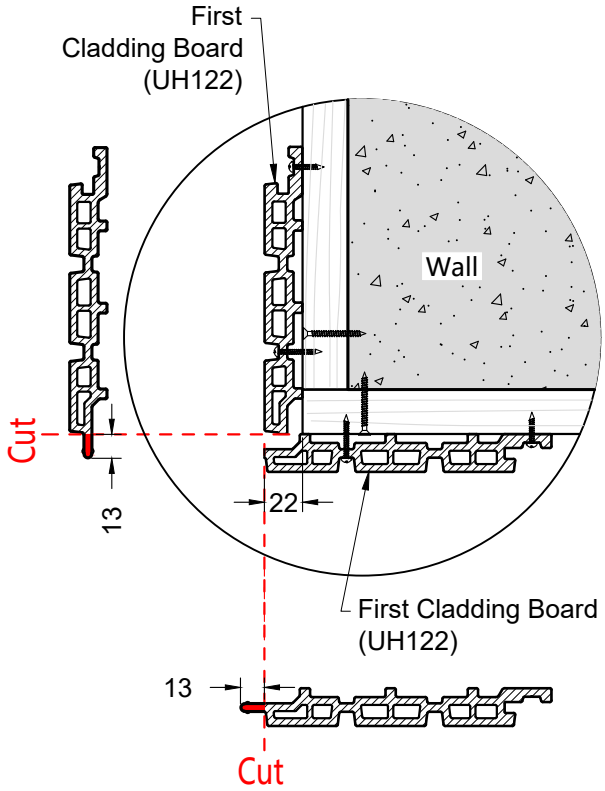
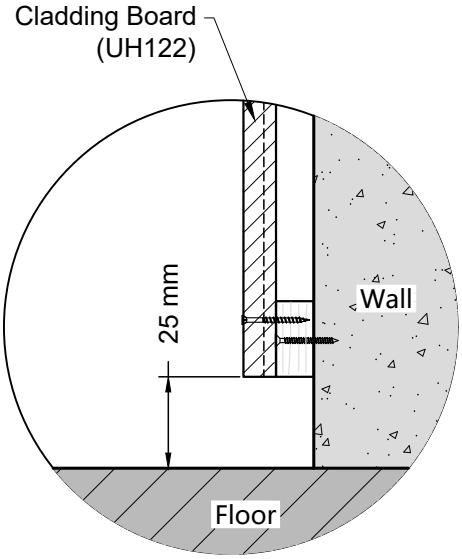


Diagram 2.1



Detail 2.1.1



Detail 2.1.2

2.2 Install the first cladding board at the Inside Corner, as shown in *Diagram 2.2*

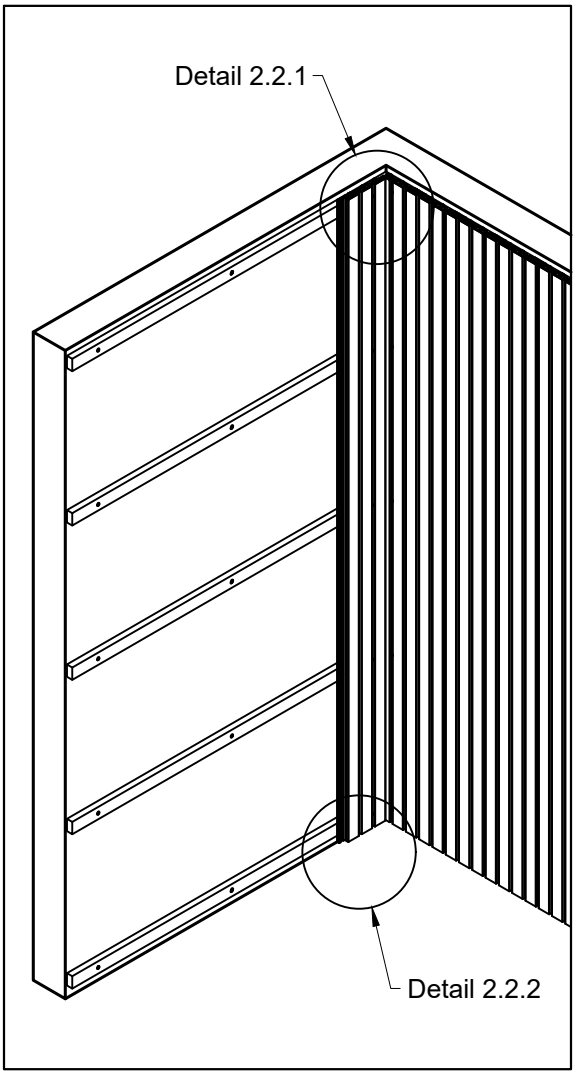
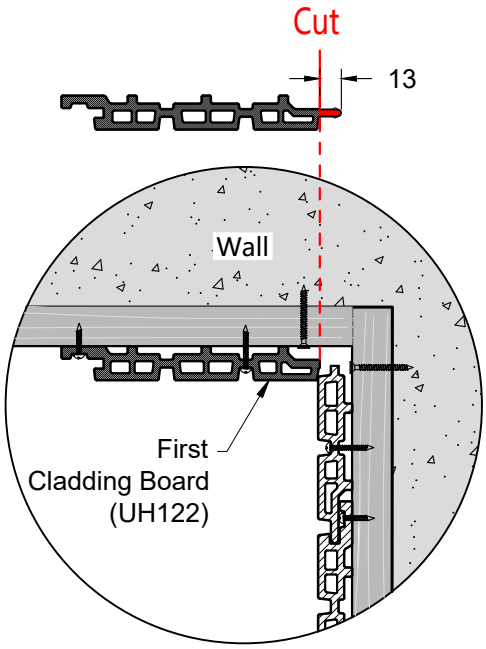
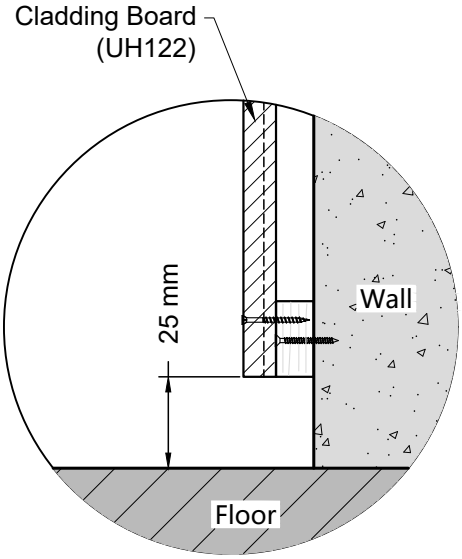


Diagram 2.2



Detail 2.2.1



Detail 2.2.2

Step 3: Install the next Cladding Boards

3.1 Insert the tongue part into the groove of the previous fixed cladding board, as shown in *Diagram 3.1*

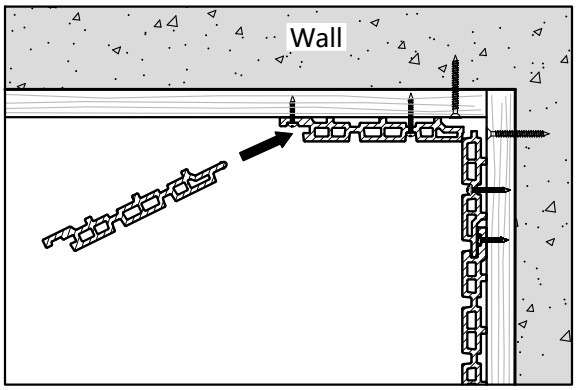


Diagram 3.1

3.2 Force to push the cladding board towards the previous fixed cladding board, as shown in *Diagram 3.2*

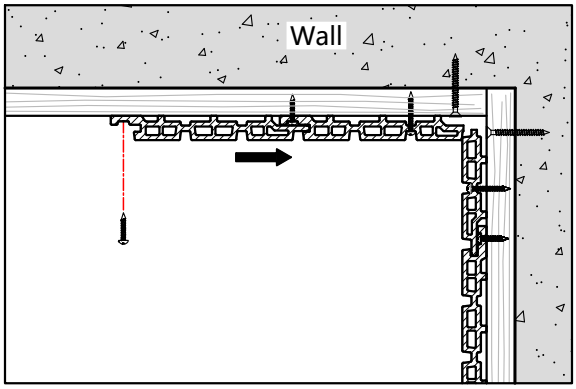


Diagram 3.2

3.3 Secure the cladding board onto the batten with screws, as show in *Diagram 3.3*

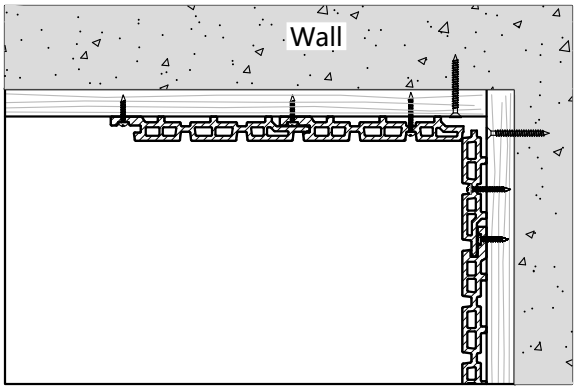


Diagram 3.3

Step 4: Install the last Cladding Board

4.1 Install the last cladding board at the *Inside Corner*, as shown in *Diagram 4.1*

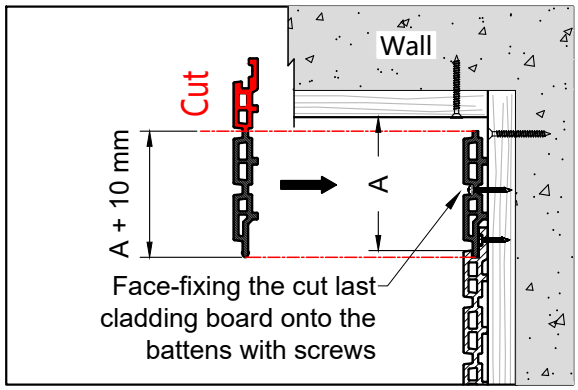


Diagram 4.1

4.2 Install the last cladding board at the *Outside Corner*, as shown in *Diagram 4.2*

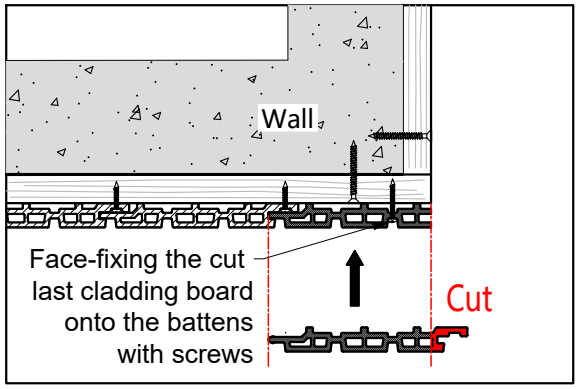


Diagram 4.2

4.3 Install the last cladding board at the *Outermost Edge*, as shown in *Diagram 4.3*

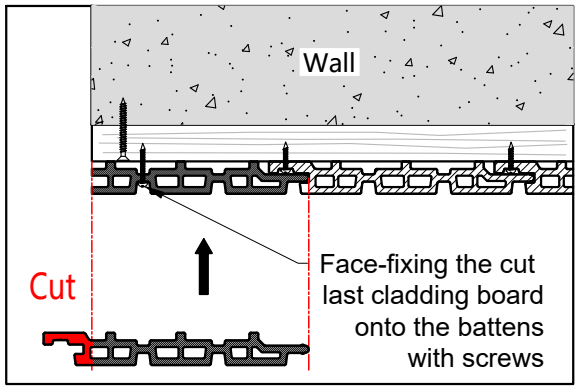


Diagram 4.3

Step 5: Install the Trims

5.1 Install the Trims at the *Outside Corner*, as shown in *Diagram 5.1*

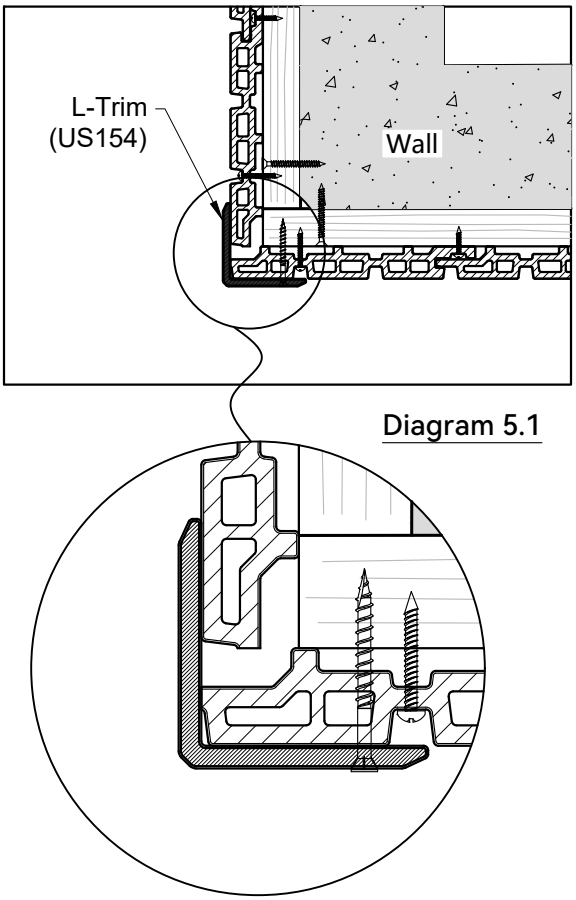


Diagram 5.1

5.2 Install the Trims at the *Outermost Edge*, as shown in *Diagram 5.2*

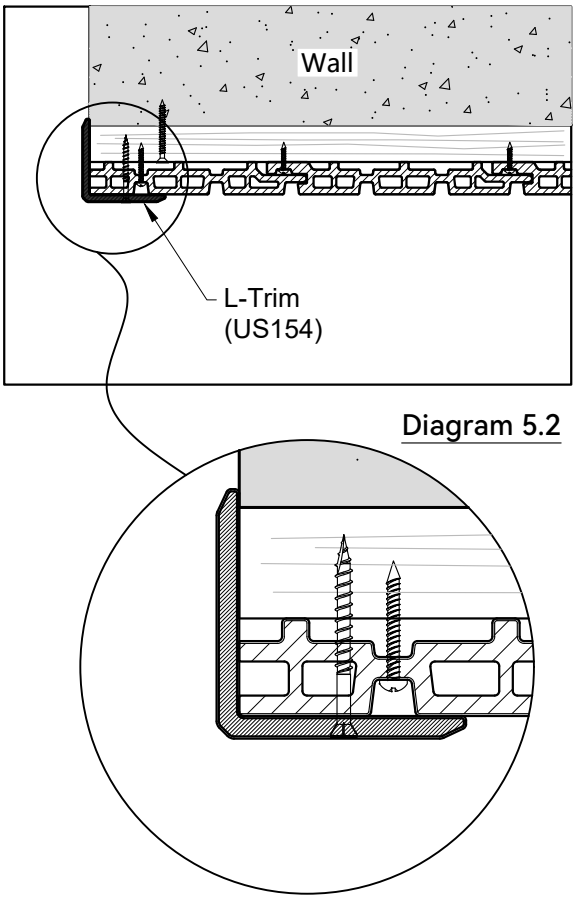
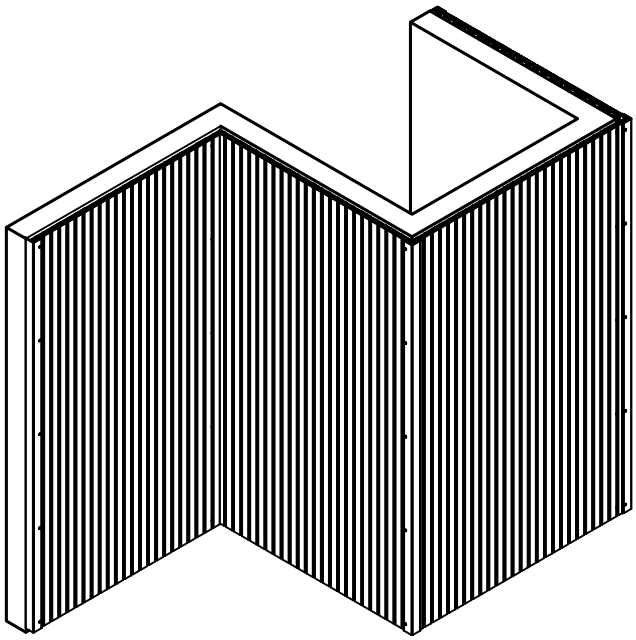
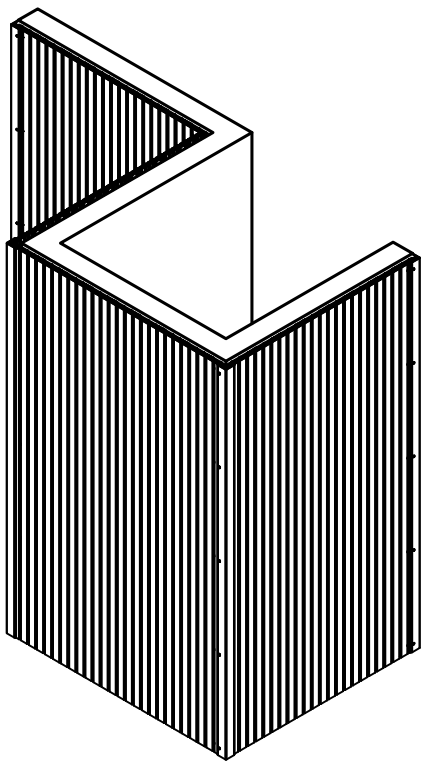
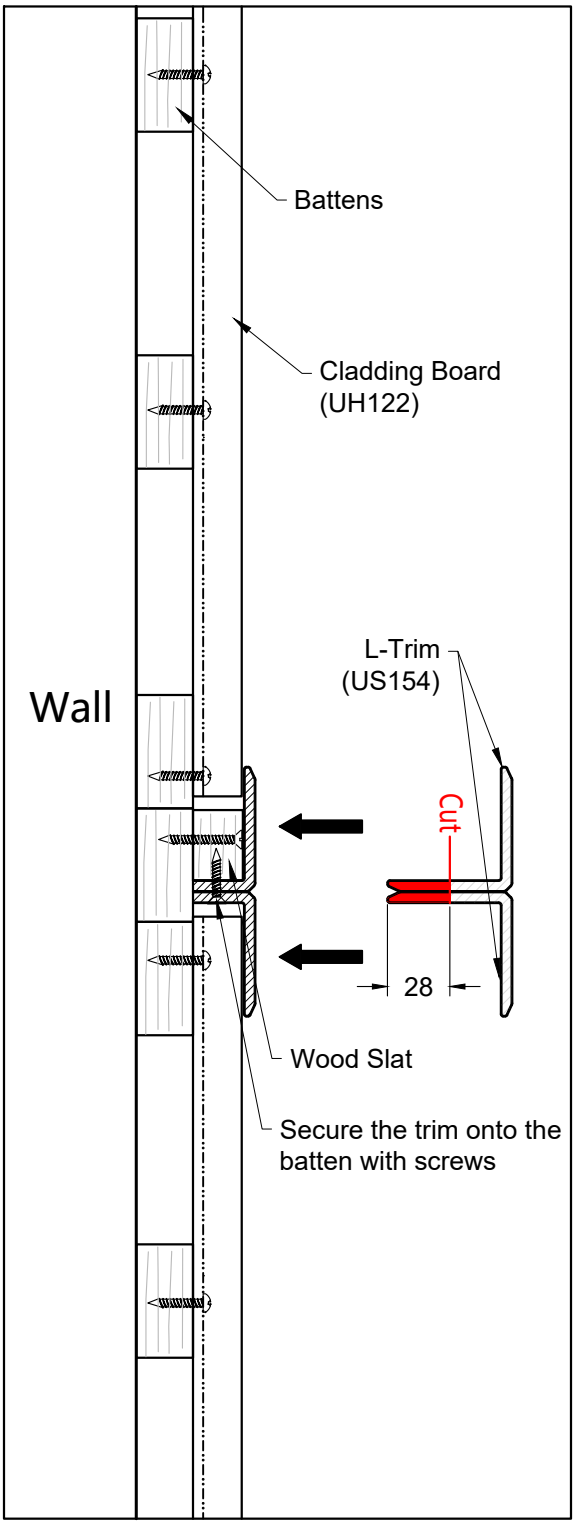


Diagram 5.2





Supplements: Butt Joint Installation



Quick Panel
Vertical Installation Guide

v1 • AUS

For the latest version of this installation guide, visit us online @www.newtechwood.com.au

Urban Direct Wholesale Pty Ltd
24 Tichborne Street
Cockburn Central WA 6164
Western Australia
Email: enquiries@urbandirectwholesale.com.au