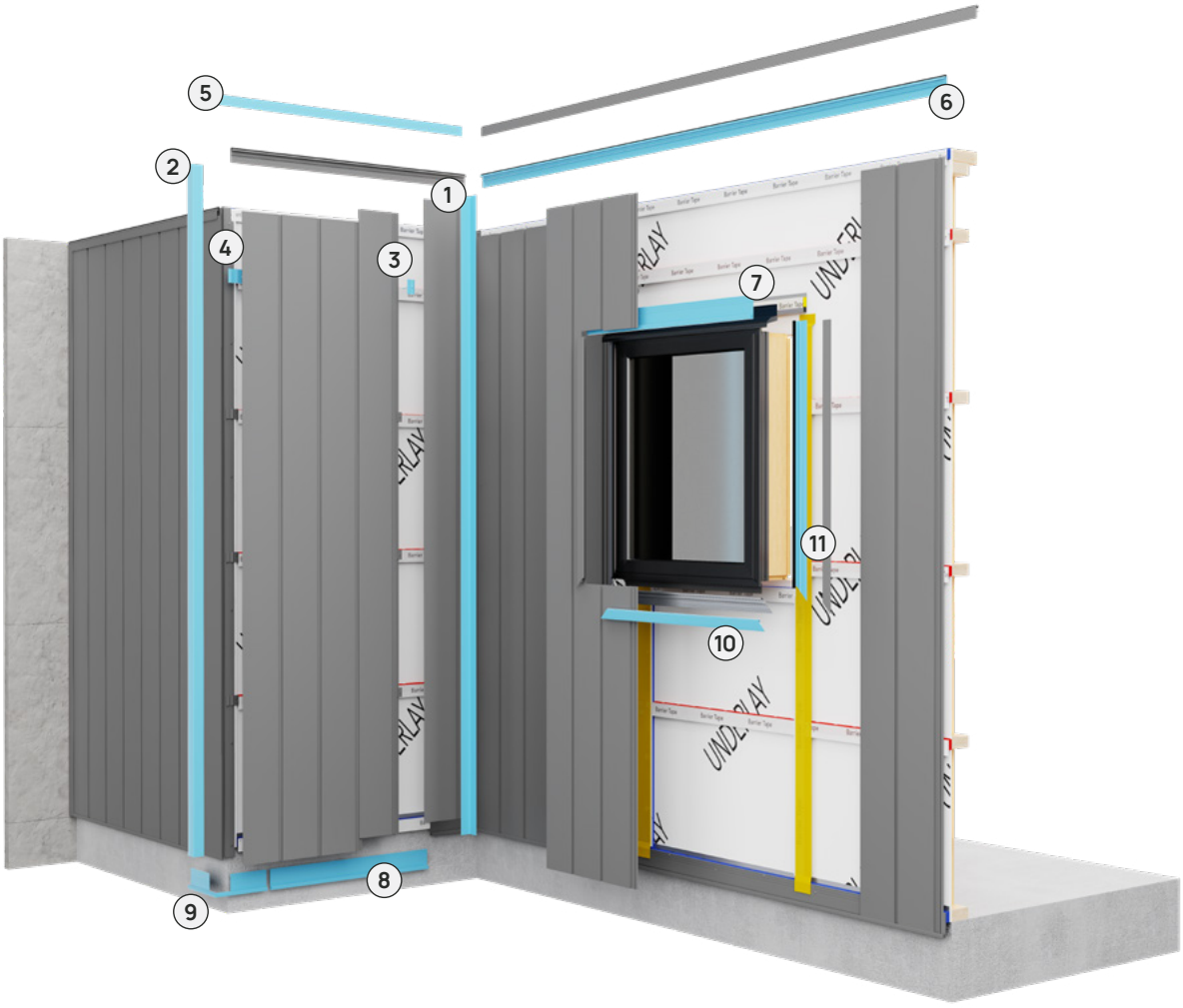
nu-wall CLADDING

Installation Guide

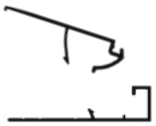
VERTICAL CLADDING



1 Universal Corner Flashing
NC109X

3 Fixing Clip
NC203

5 Termination Cap Flashing
NC248



2 Universal Corner Flashing
NC107X

4 Starter Clip
NC232F

6 Termination Base Flashing
NC247T

7 **8** Base Channel
NC134P

9 Base Channel Pre-fab Corner NC134FAB

10 Jamb Cap Flashing
NC248

11 Jamp Base Flashing
NC247

ACCESSORIES PROVIDED

- Soaker Flashing
- Barrier Tape
- Foam Tape
- Fasteners

Contents

1. About Nu–Wall Cladding

Nu-Wall Cladding is a pre-finished system designed for long-lasting performance, durability, and a clean architectural finish. Made from locally extruded aluminium, it's lightweight, non-combustible, and endlessly recyclable, making it a smart, sustainable choice for modern construction.

Like any quality product, success starts with good planning, careful handling, and following the correct installation methods. With proper set-out, attention to detail and a few key best practices, Nu-Wall goes up smoothly and stays looking sharp — no fuss, no finish coat, just a great-looking wall system that's built to last.

1.1 Product Suitability

VERSATILE

Suitable for residential, commercial and light industrial projects.

SUITS ALL SUBSTRATES

Can be installed over all substrates including timber, steel and masonry. It can be installed over rigid air barriers (RAB) and all building wraps and membranes.

LOW MAINTENANCE

Nu-Wall boards come pre-finished. No painting is required and once installed correctly, is a low-maintenance solution built to last.

HARSH CONDITIONS

Performs well in New Zealand's harsh conditions – including coastal, high-wind, and high-UV environments. Suitable for both new builds and reclads.

2. Pre-Installation

2.1. Estimation Quantities – Layout & Panel Drawings

IN-HOUSE TAKE-OFFS

Our in-house take-offs are based on the dimensions on the plans you have provided. Please ensure you provide the latest version of the plans.

MATERIAL QUANTITIES

The Nu-Wall estimated quantities should provide enough material to complete the cladding installation. You may require more or less product based on site cutting efficiency

PANEL DRAWINGS

Builders and site management need to verify as-built accuracy against Nu-Wall panel drawings provided. If there are dimension changes, please advise.

SITE MEASUREMENTS

Nu-Wall does not perform any site measurements.

Nu-Wall does provide marked-up and individual panel drawings.

2.2. Storage & Handling

Nu-Wall is a pre-finished cladding, so it must be **handled with care at all times.**

You will receive boxes of cladding boards. Separately, you will receive a box of accessory profiles and boxes of screws, tapes and fixings.

You will **use the accessory profiles and fastenings first**. Ensure these boxes are easily accessible.

Ensure your hands are clean and dry when handling and installing Nu-Wall products. If in doubt wear cotton gloves.

If the cladding does exhibit finger print marks **clean the finger prints off before dropping any scaffolding**.

STORAGE

Covered storage is required.

Store packs on a firm, level base off the ground.

Keep packs well-ventilated and fully protected from the weather, direct sunshine and damage.

It's easier to protect the product than to repair or replace it later.

Only remove the protective film immediately prior to cutting a board. This prevents scratch damage.

HANDLING

Ensure you have clean and dry hands.

Always protect the finished surface when handling or cutting.

Double-check your measurements before cutting.

Some Nu-Wall finishes such as anodised require more care when handling boards and ancillaries.

Keep off-cuts in storage – they will be used later for shorter lengths.

We suggest you set up a "cut shop".

Stack all off-cuts vertically in order from shortest to longest.

Always use short off-cuts first.

IMPORTANT DO'S AND DON'TS

- ✓ Avoid exposing the product to sunlight while still wrapped in the protective plastic film.
- ✓ Protect all edges and surfaces from damage.
- ✓ Always carry boards on their edge, not flat – this prevents bending.
- ✓ When cutting, place the finished surface facing up and remove swarf to avoid scratches.
- ✗ Do not allow the packs of Nu-Wall to get wet.
- ✗ Never drag boards across each other when unpacking – you will scratch the boards. Lift boards out cleanly.

2.3. Health & Safety

Always follow safe work practices.

Wear the appropriate personal protective equipment (PPE).

Use common sense and follow standard safety procedures when using access equipment and cutting tools.

Beware of thin aluminum trim cuts snagging the off-cut – finish your cut slowly.

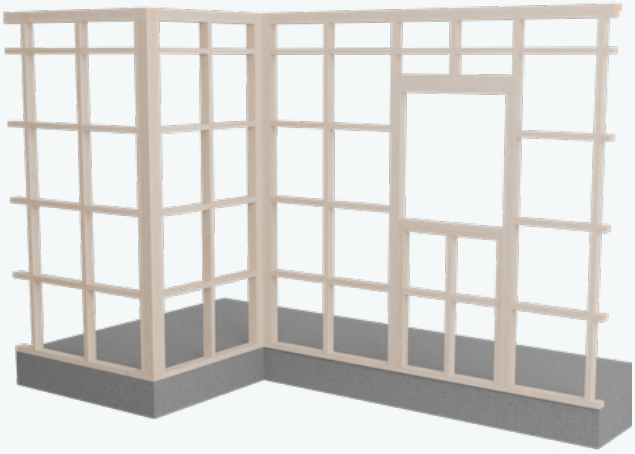
2.4. Materials & Tools

The following should suffice for most situations:

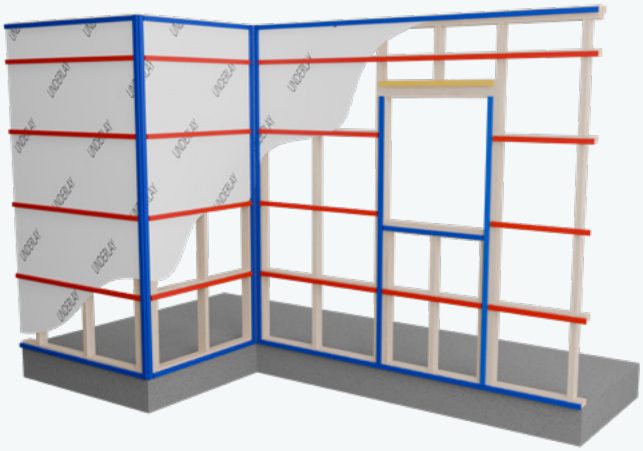
- ◯ Deadshot rubber hammer.
- ◯ Level or dumpy level.
- ◯ Chalk line.
- ◯ Drop saw for cutting profiles to length.
- ◯ Track saw for ripping boards. Ensure all saws are equipped with blades appropriate for cutting aluminum.
- ◯ Cordless Impact Driver with SQ2 and PH2 bits.
- ◯ 15mm wide flat file to clean up ripped edges and notch cut-outs.
- ◯ Countersunk drill bit.
- ◯ Selleys isopropyl alcohol cleaning wipes – never use solvent on powder coated surfaces.
- ◯ Brush and pan for removing aluminum swarf.

3. Preparation

Framing
Section 3.1



Battens
Section 3.2



Joinery
Section 3.3

3.1. Framing

Before installing Nu-Wall Cladding check the wall framing and cavity battens

- ☑ For Nu-Wall to perform correctly, ensure that your **framing and cavity battens are straight/plumb** - especially with top and bottom plate flares as well as internal and external corners base flashing build-ups.
- ☑ Ensure the **structure is complete**, fully braced, and free of misalignments or protrusions that could affect the performance of the cladding.
- ☑ Timber framing must **comply with NZS 3604 for buildings** within its scope.
- ☑ For vertical cladding nogs/dwangs must be **spaced at a maximum of 600mm centres.**

Reference – Scan the QR code at the back to refer to the Nu-Wall Wall Requirements & Seismic Allowances Guide.

NOG / DWANG SPACING

For Vertical Cladding

- Ensure nogs are installed at maximum 600mm centres.
- Add an extra row of nogs 200mm below the top plate (for final cladding fixing point).

Additional Framing Required:

- Around soffits, internal and external corners, vertical joints, and joinery/ door openings. This supports proper fixing of Nu-Wall boards.

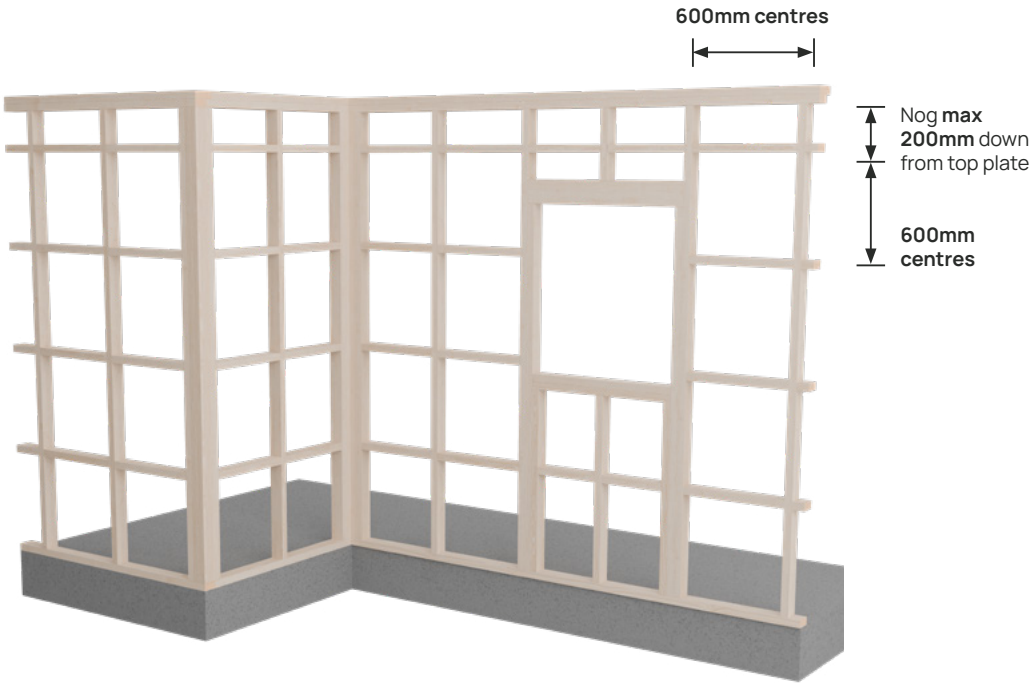


FIGURE 1. TYPICAL FRAMING CONFIGURATION FOR VERTICAL CLADDING

3.2. Cavity Battens

TIMBER CAVITY BATTEN

BATTEN SIZING

Horizontal Battens

- All horizontal timber cavity battens (20mm and 45mm) must be single castellated cavity batten.
- Cavity battens used behind Nu-Wall cladding must have a flat smooth face. You should not install Nu-Wall over a castellated face cavity batten as the Nu-Wall board fixing clips will seat crooked and not fix the boards as designed.

Vertical Battens

- Vertical battens can be solid non-castellated profile.

18mm Single Castellated Battens

- For the straightest cladding installation use 18mm single castellated battens around:
  - Wall edges: 1st stud, last stud, bottom plate, top plate and jamb studs.
  - Corners.
  - Joinery jambs.
- These 18mm thick battens allow for base flashing build-up. All other horizontal battens are 20mm single castellated profile.
- Nu-Wall offers an 18/20 timber batten solution.

NOTES

Gaps

- Leave a 6mm water drainage gap at all junctions where vertical and horizontal battens meet. This is an NZBC requirement.
- Joinery sill battens need to be installed in maximum 500mm lengths with 6mm gap in between to allow water drainage - See Figure 2.

Ripping

- Never pack out timber battens, only plane them down – this is because the Nu-Wall fixing screws pass through the batten into the structural framing behind which will deform a packed-out batten.
- Rip single castellated battens down to 16mm thickness above head flashings to allow for excessive base flashing buildup.

Corners

- External corner vertical battens should be positioned as close to the external corner as possible.
- Internal corner vertical cavity battens should be positioned so that the internal batten corners have 5mm clearance - See Figure 2.
- Nu-Wall offers wider internal corner flashings as an option. These require the vertical cavity battens to be positioned further from the internal corner apex – See internal corner installation section 4.2.

Cavity Closure

- Fit a cavity closure vent strip below the lowest cavity batten.

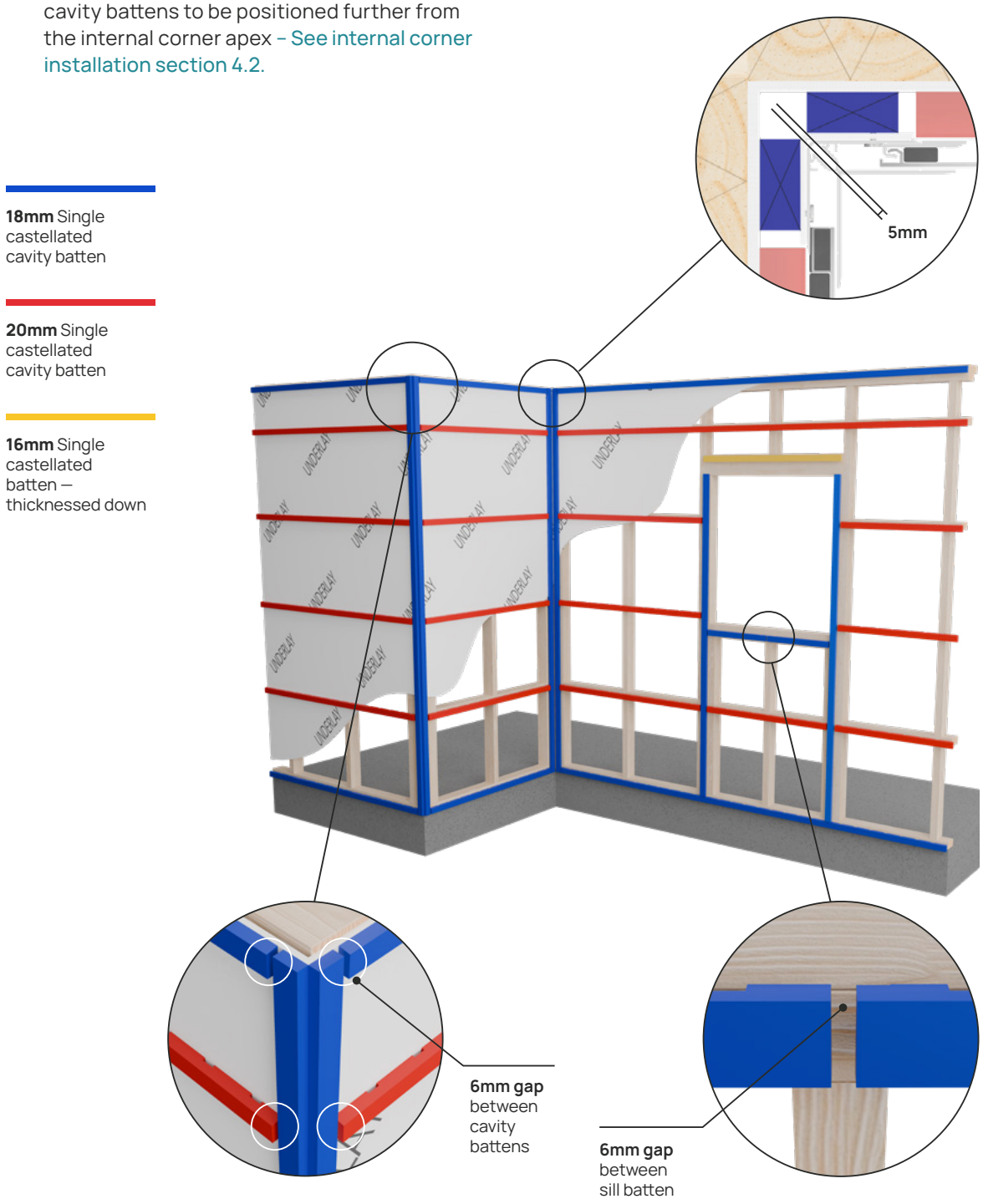


FIGURE 2. TYPICAL CAVITY BATTEN CONFIGURATION FOR VERTICAL CLADDING

TIMBER CAVITY BATTEN BARRIER TAPE

⚠ This **barrier tape is essential** to separate the H3 treated timber from the aluminum cladding and accessories, preventing any reaction or corrosion.

The barrier tape is supplied as part of the Nu-Wall system.

INSTALLATION

Use a stapler to tack the supplied white PVC barrier tape to the face of all timber cavity battens.

FIGURE 3. BARRIER TAPE STAPLED TO H3 TIMBER CAVITY BATTEN

ALUMINIUM – ALIBAT STRUCTURAL CAVITY BATTENS

⚠ **Barrier tape not required** for Alibat cavity battens.

AliBat is a 20mm structural aluminium non-combustible cavity batten.

AliBat does not require a backing structure (nogs/dwangs) being a structurally free-spanning batten up to 600mm.

The Nu-Wall cladding is **fixed to the AliBat only.**

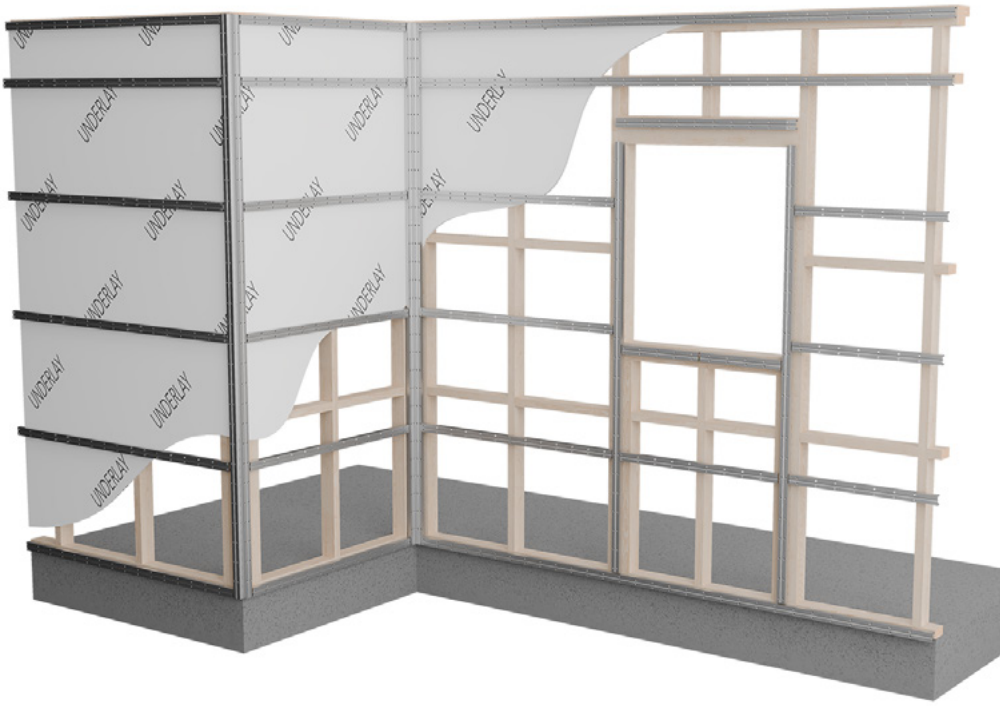


FIGURE 4. TYPICAL ALIBAT CONFIGURATION

FIXING ALIBAT

AliBat has a pair of countersunk holes located every 100mm. This allows fixing to either 400mm or 600mm stud centres for horizontal installation.

AliBat features a V-groove down its centre line. This allows centre line fixing when AliBat is installed vertically down studs.

Do not use the pair of pre-drilled holes for vertical fixing – the fastenings will be too close to the edge of the stud.

Horizontal AliBat

- Fix battens with 2 x 10g SS fastenings at each stud crossing through the pre-formed holes. Fastening type varies based on the structure.

Reference – Scan the QR code at the back to refer to the Alibat Fastening Bulletin resource.

- Fix at maximum 600mm centres – use 2 screws per fixing point.
- Screws must embed at least 30mm into the timber frame.
- When fixing AliBat into concrete, fix with a single M6 concrete screw at maximum 300mm centres.
- When fixing AliBatto green concrete always allow for a separation layer between concrete and aluminium.

Vertical AliBat

- Must be fixed through the groove of the centre of the batten using the supplied 10G SS CSK screws. These holes require pre-drilling.
- Install 1 screw every 300mm, down the centerline of the batten.
- Screws must embed 30mm minimum into the framing.
- When fixing AliBat into concrete, fix with a single countersunk M6 concrete screw at 300mm centres. Always allow for a separation layer between concrete and aluminium.

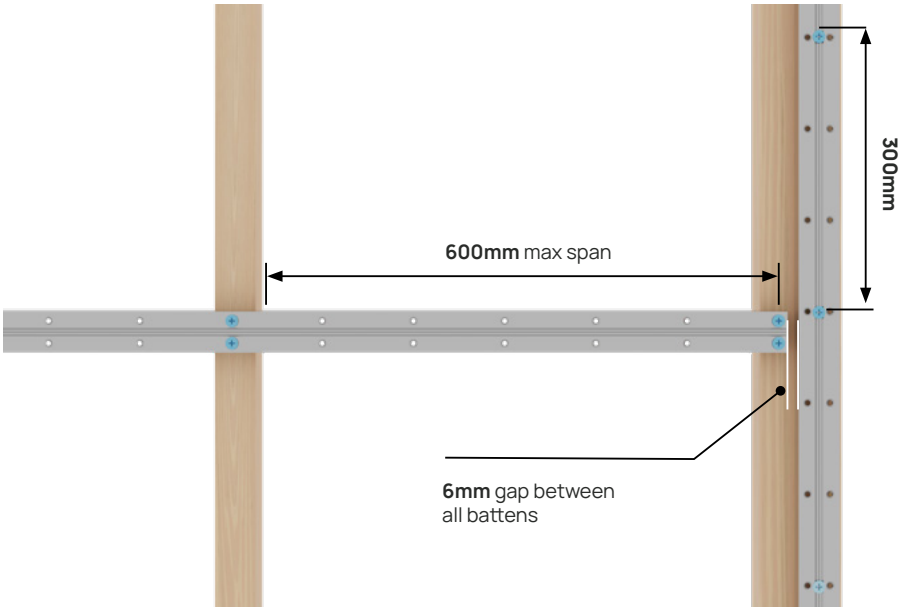


FIGURE 5: ALIBAT ON TIMBER FIXING

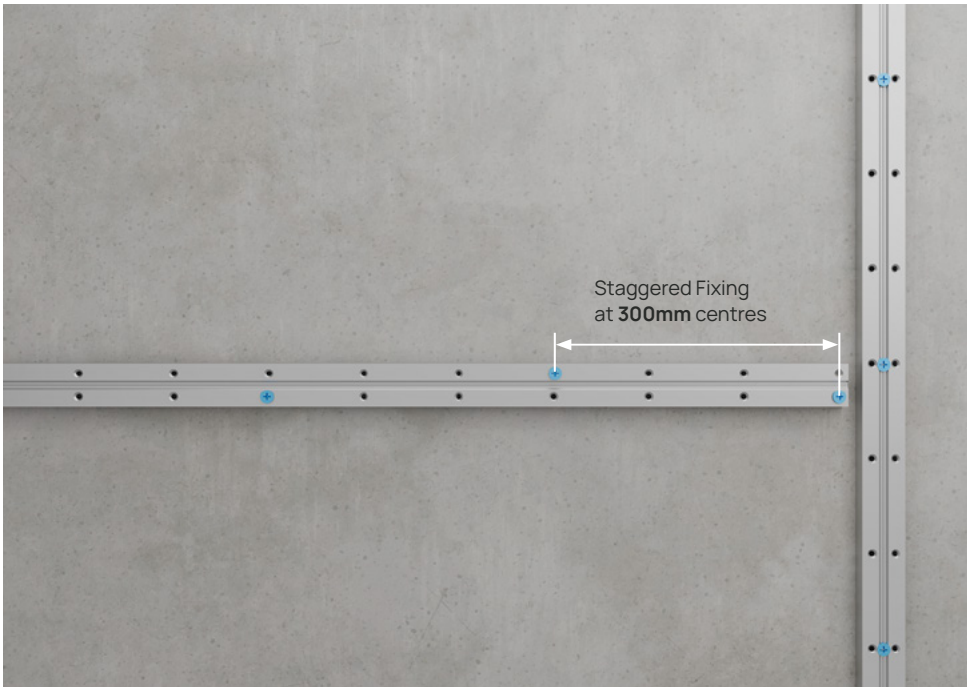


FIGURE 6: ALIBAT ON CONCRETE FIXING

3.3. Joinery

JOINERY SET OUT

The **depth positioning of joinery is critical** for the water-tightness of the Nu-Wall installation. The joinery must be installed relative to the cladding face, not the interior lining.

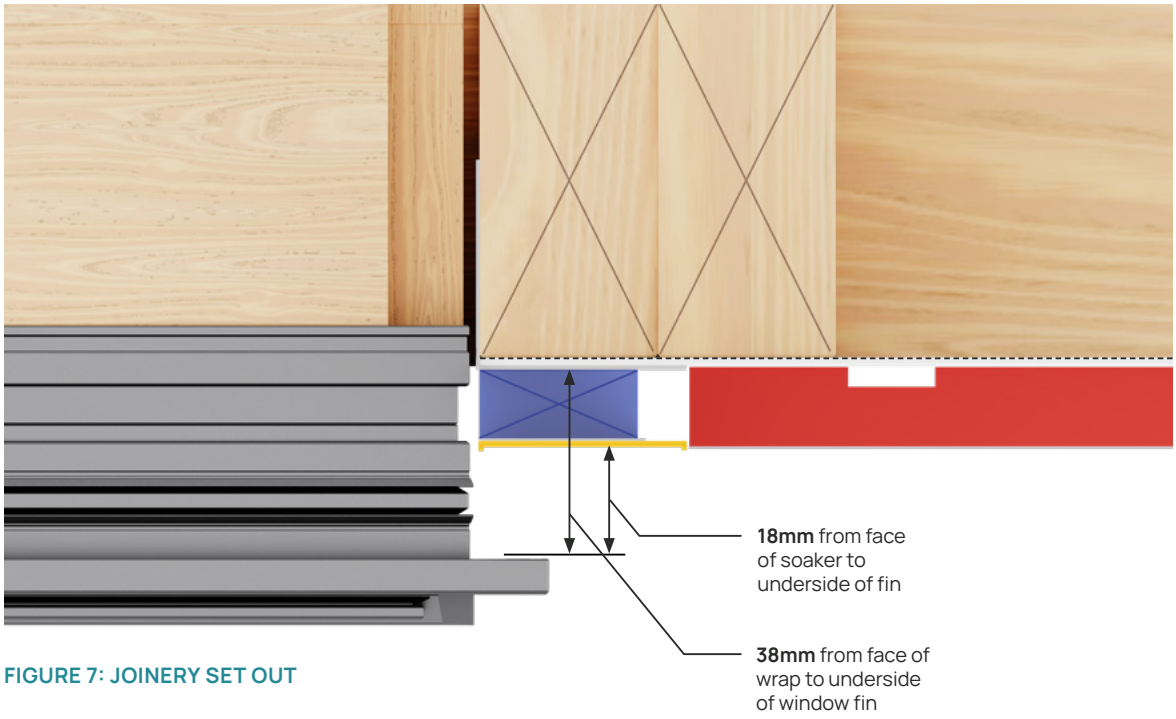


FIGURE 7: JOINERY SET OUT

SET-OUT REQUIREMENT

Allow **18mm** from the face of the soaker to the underside of the joinery fin.

- If the joinery fin clearance is greater than 20mm from soaker face, you will see an excessive gap between the cladding and the joinery fin.
- If the joinery fin clearance is less than 16mm, you will not be able to fit the Jamb Base Flashing (NC247).

HINT

Use an 18mm gauge block when installing to set your joinery fin to soaker face clearance – or a 38mm gauge block off building wrap face.

PVC YELLOW SOAKER

The yellow soaker flashing provides additional water-proofing down the opening jamb and is an **essential component** of the Nu-Wall system.

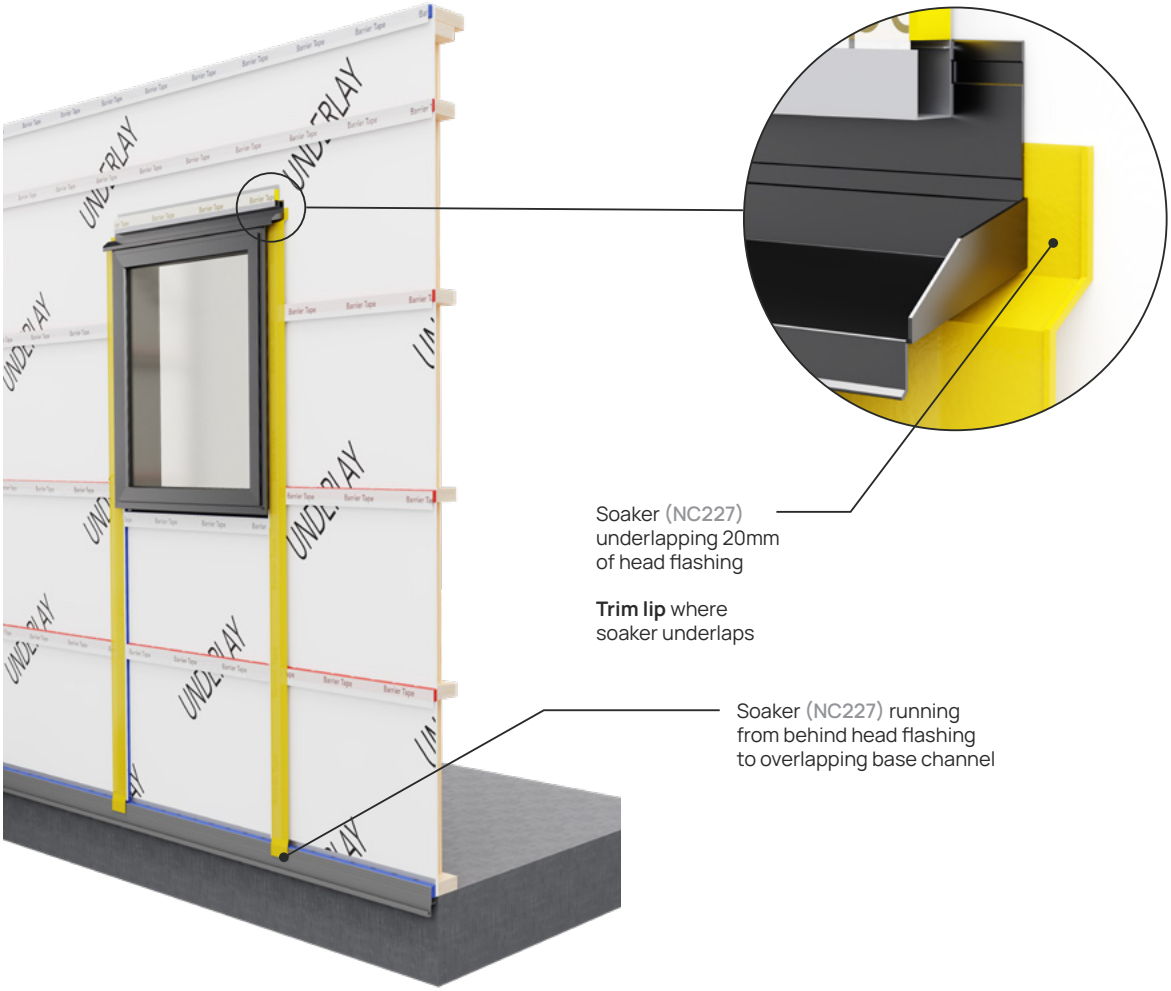


FIGURE 8: SOAKER INSTALLATION

INSTALLATION

1. Fix the supplied yellow soaker using a staple tacker.
2. Start behind the head flashing at building paper level, then run it down the face of the jamb battens and into the base channel.
3. Trim the 3mm edge lip off the soaker where it underlaps the last 20mm of the head flashing to prevent kicking out the head flashing.
4. Ensure the vertical edge of the soaker is installed firmly against the joinery.

HEAD FLASHING PREPARATIONS

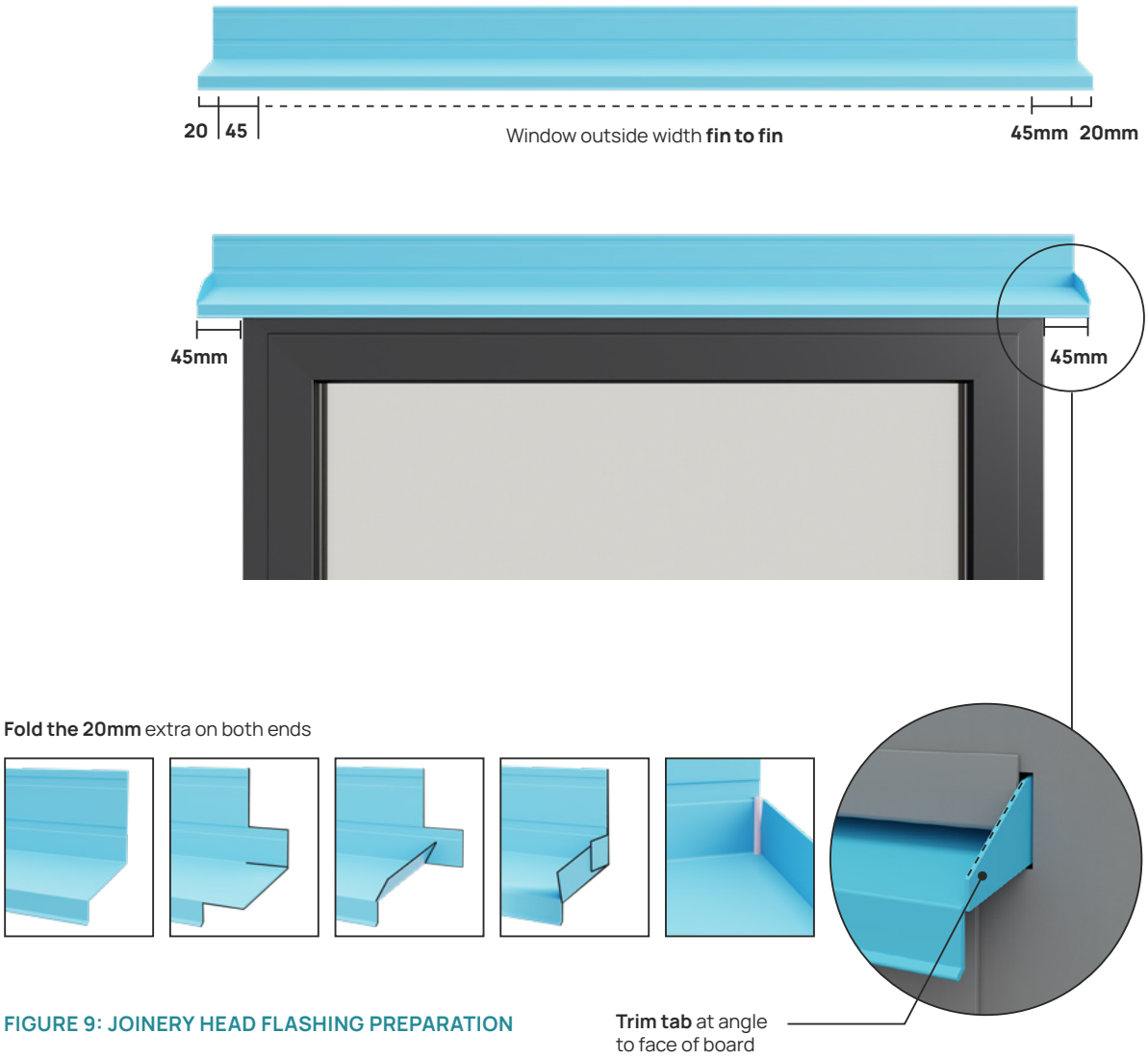


FIGURE 9: JOINERY HEAD FLASHING PREPARATION

HEAD FLASHING LENGTH

Head flashing length **must allow for tabbed end closures** for proper weather protection - See Figure 9 showing optimal dimension.

- **Nu-Wall does not recommend** using plastic stoppers supplied by joinery companies.

Supplied head flashing length should be:

Joinery width + 130mm (45mm overhang each side + 20mm tab material each side).

4. Cladding Installation

The following instructions are arranged in typical order of construction for Nu-Wall cladding.

ORDER OF INSTALLATION

1. Base Flashings – trimmed and fitted

Base Channel
NC134P
NC134Fab

Corners
NC107X
NC109

Around Openings
NC247

End of Wall
NC247T

Top of Wall
NC247T

2. Boards – trimmed and fitted

Boards of Choice

Clips
NC232F
NC230

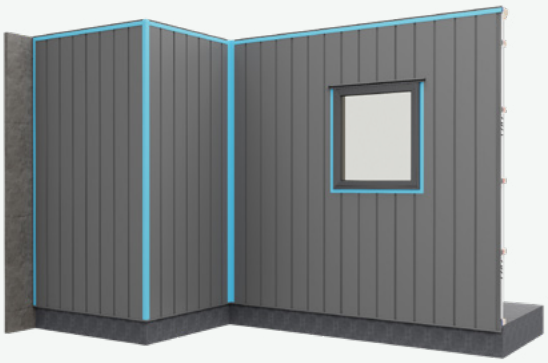
3. Cap Flashings – trimmed and fitted

Corners
NC107X
NC109

Around Openings
NC248

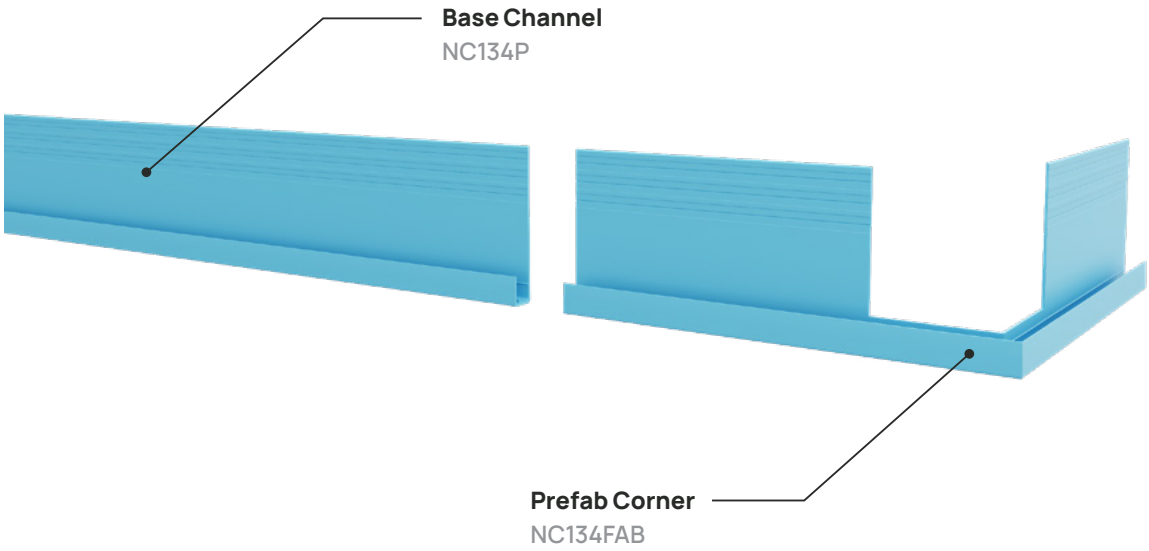
End of Wall
NC248

Top of Wall
NC248



4.1. BASE CHANNEL/PRE-FABRICATED INTERNAL & EXTERNAL CORNERS

COMPONENTS



BEFORE INSTALLATION

☑ **Plan ahead:** If this is your first Nu-Wall installation, select a simple wall with minimal openings as your first "learning" wall.

Determine the starting point for the cladding (this is the lowest point on the wall).

The **base channel must extend at least 50mm** below the bottom plate as required by NZS E2/AS1.

Refer to Architects drawings at all times for exact dimensions of ground clearance required.

INSTALLATION

1. Fit the internal and external Pre-Fabricated Base Channel Corner (NC134FAB).
2. Screw fix the pre-fab base channel corners as it is likely you will be adjusting its position. - See Figure 10.

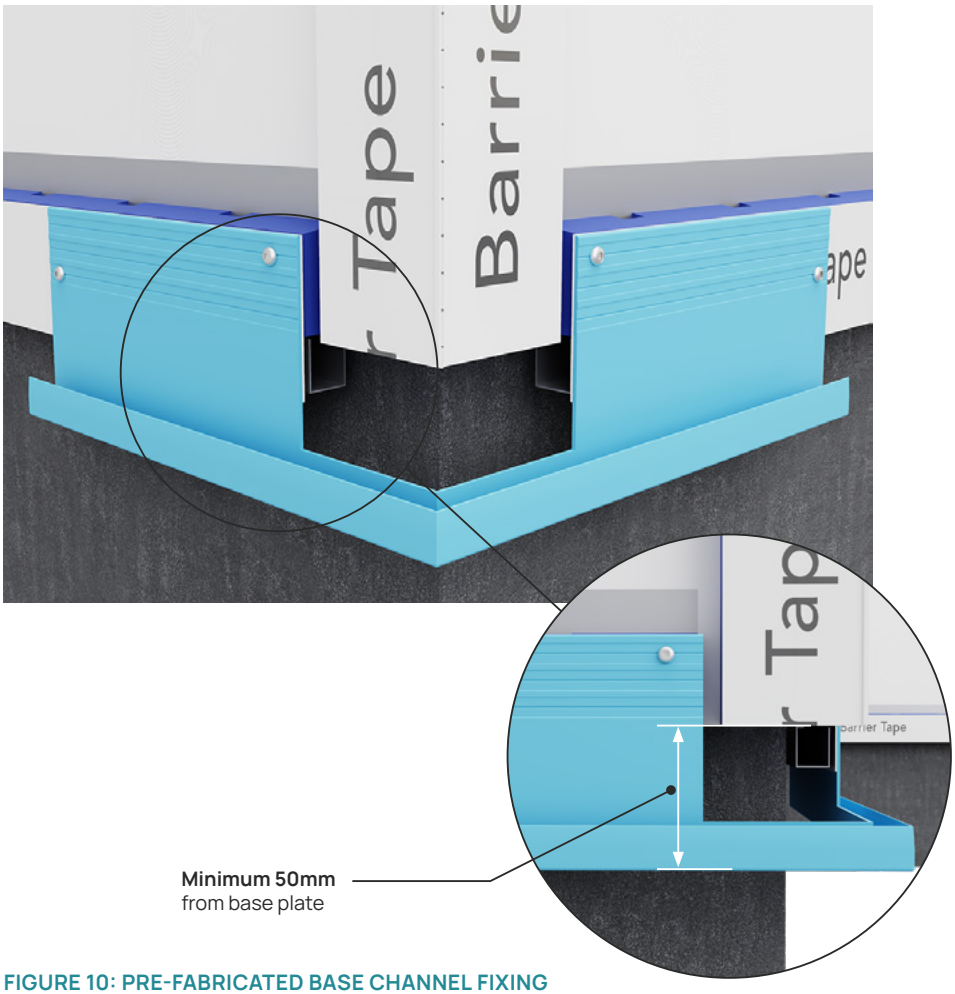


FIGURE 10: PRE-FABRICATED BASE CHANNEL FIXING

3. Cut to length and fix the corner base flashing. Ensure that the apex of the corner flashing is in alignment with the apex of the pre-fab corner. You may need to pack out the corner or pre-fab base channel to align the apex's.
– See section 4.2 on external corner base flashing notch.

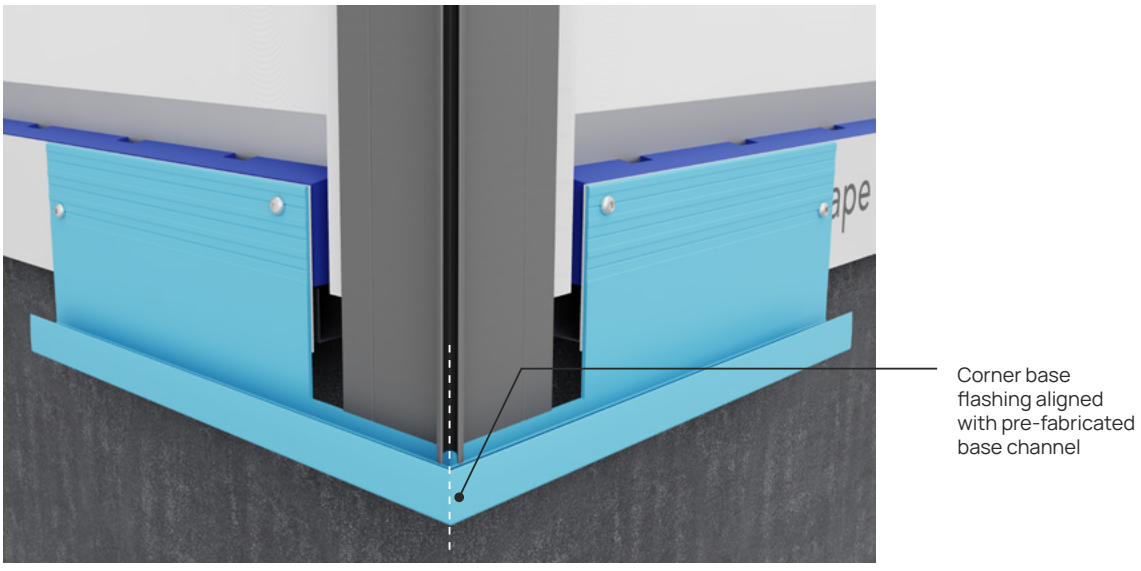


FIGURE 11: ALIGN THE CORNER FLASHING WITH THE BASE CHANNEL CORNER

HINT

Cut a 50mm length of corner cap flashing and dummy fit the cap. When the pre-fab base channel and corner base flashing are correctly aligned, the 50mm cap sample will sit flush and be perfectly aligned with the base channel.

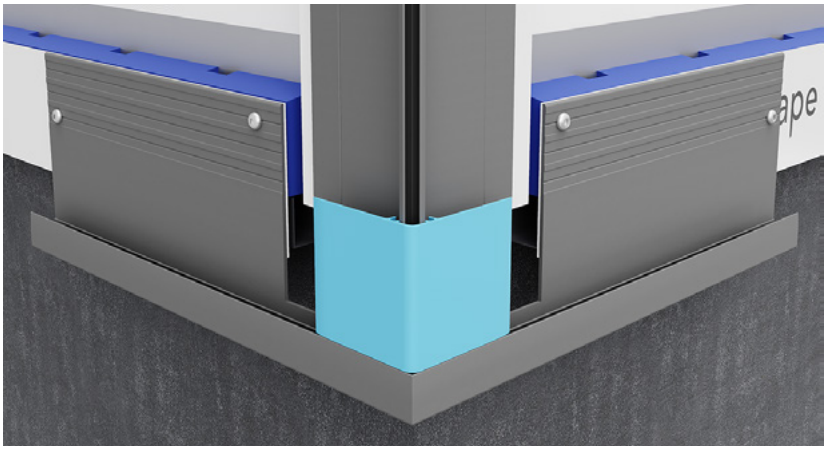


FIGURE 12. DUMMY SECTION CAP FLASHING ALIGNMENT

4. When the pre-fab corners and corner base flashings are installed, trim to length and fix the lengths of Base Channel (NC134P) in between the pre-fab corners.

5. Fix the base channel using nails or screws at 300mm staggered centres.

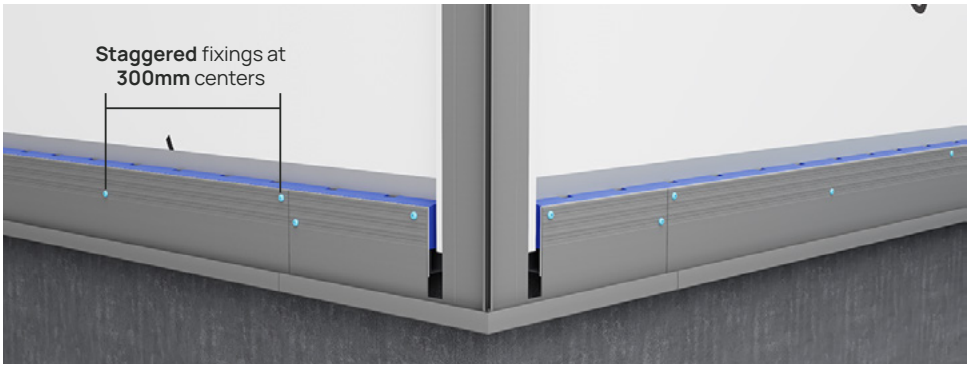


FIGURE 13. BASE CHANNEL FIXING

6. Ensure the top of the base channel aligns with the top surface of the cavity batten. This allows water to escape.

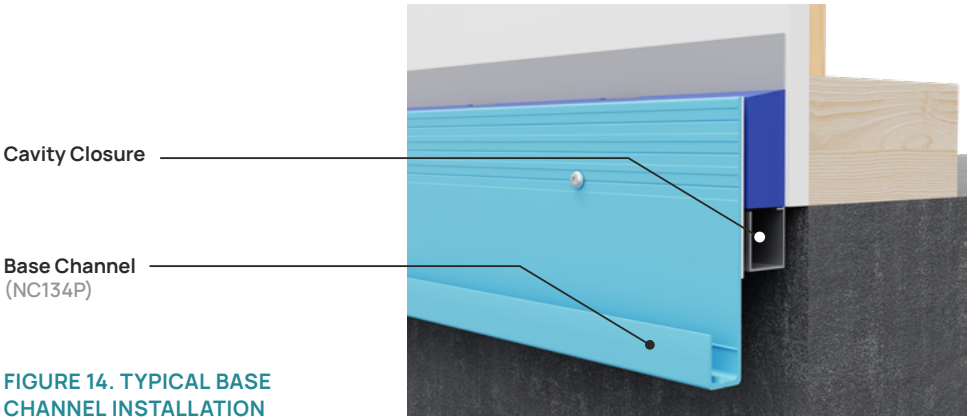


FIGURE 14. TYPICAL BASE CHANNEL INSTALLATION

4.2. EXTERNAL / INTERNAL CORNERS

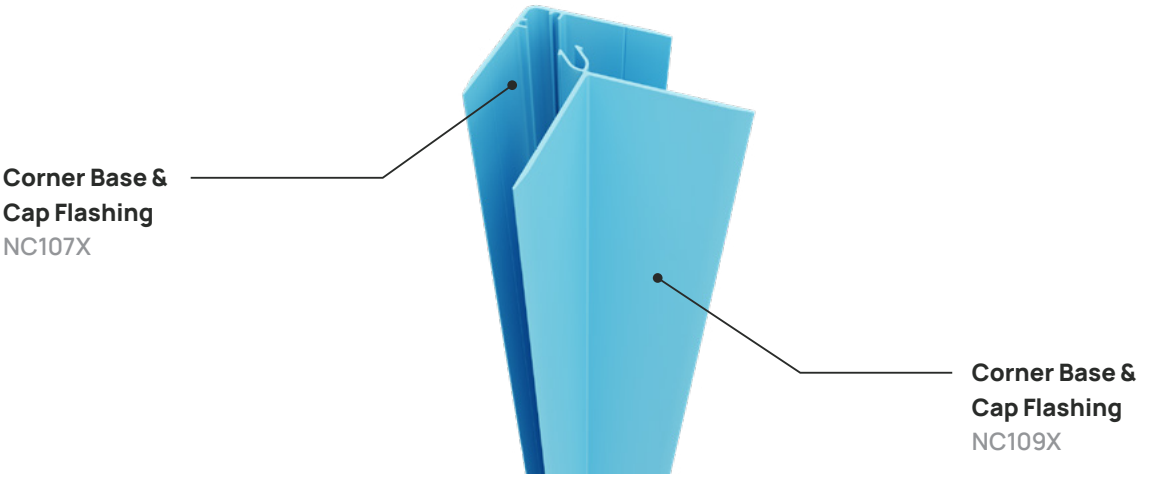
Nu-Wall offers several corner options.
Here we will deal with the two most common corner selections:

1. **The standard 50mm flat corner**
2. **The negative detail corner**

STANDARD 50MM FLAT CORNER

COMPONENTS

Universal for both Internal and External Corners



INFORMATION

The 2-piece Corner Flashing (NC107X / NC109X) is a universal pair that can be used on both external and internal 90-degree corners.

INSTALLATION

EXTERNAL CORNERS **NC107X / NC109X**

1. Trim the Corner Base Flashing (NC109X) to length. Corner base flashings will typically bottom out in the pre-fab base channel corner notch, then extend to the full top of wall – 2mm below soffit.

2. Cut a 15mm deep x 55mm long notch in the top of the external corner base flashing, to accommodate the top of wall base flashing. (Internal corner base flashings do not require a notch). - See figure 15.

HINT

There is a indentation line 15mm in from the edge as a cutting guide.

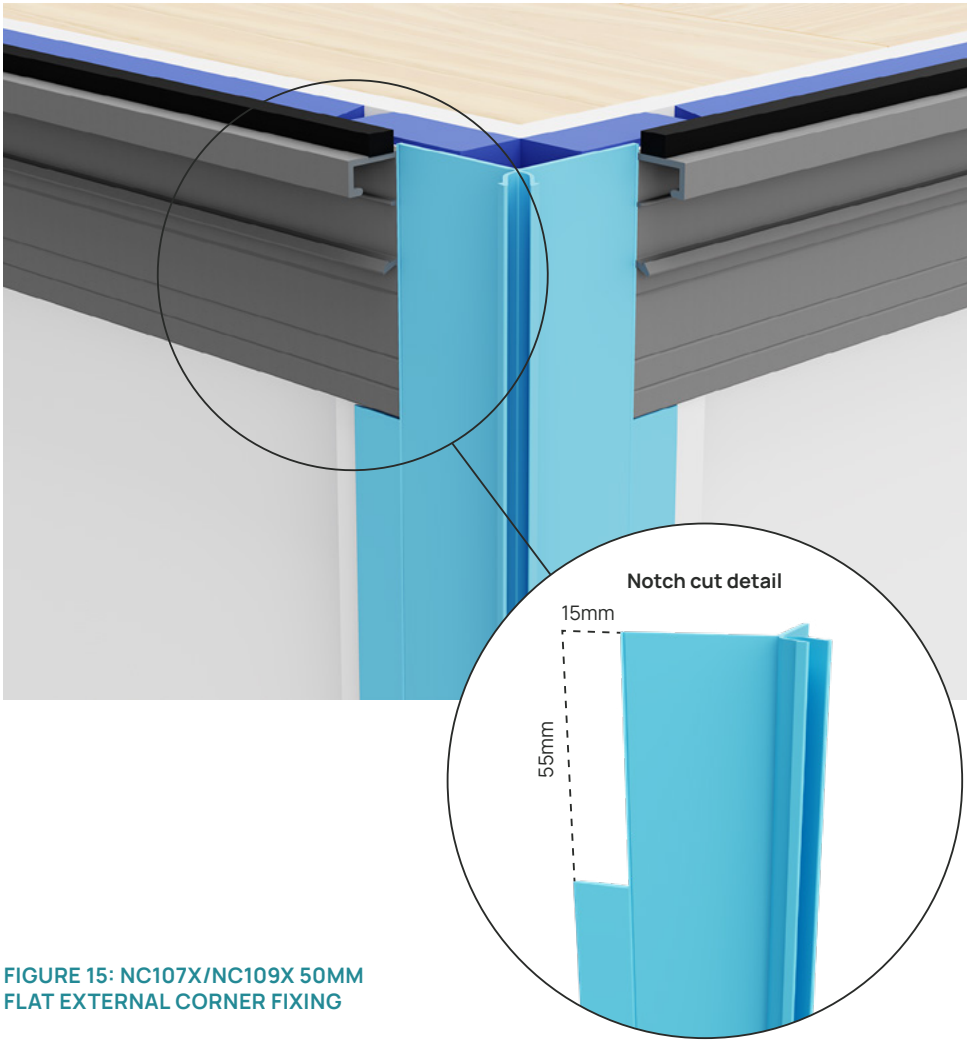


FIGURE 15: NC107X/NC109X 50MM FLAT EXTERNAL CORNER FIXING

3. Fix the Corner Base Flashing (NC109X) both sides using nails or screws at 600mm centres. Screws or nails must penetrate a minimum of 30mm into the structural framing.

4. Nu-Wall cladding boards can now be installed. – See section 4.6 on board installation.

5. Trim the Corner Cap Flashing (NC107X) to length. This will be the length from the top edge of the Base Channel (NC134P) front up-stand up to the underside of the soffit surface – 2mm (thermal expansion allowance).

6. Position the Corner Cap Flashing (NC107X) and engage the "snap together" connection with a gentle tap with a dead shot hammer – or rubber mallet. Ensure the Corner Flashing (NC107X) and Base Channel Corner (NC134FAB) are perfectly aligned with the apex of the corner for a clean, accurate finish – See section 4.1 and figure 12.

INTERNAL CORNER **NC107X / NC109X**

1. Trim the Corner Base Flashing (NC107X) to length and fix in position. Fix the corner base flashing both sides using nails or screws at 600mm centres. Screws or nails must penetrate a minimum of 30mm into the structural framing.

2. Fit the Nu-Wall cladding boards.

NOTE

The final ripped board should finish at least 23mm from the internal corner apex, to ensure sufficient clearance when fitting the cap flashing. - See Figure 16.

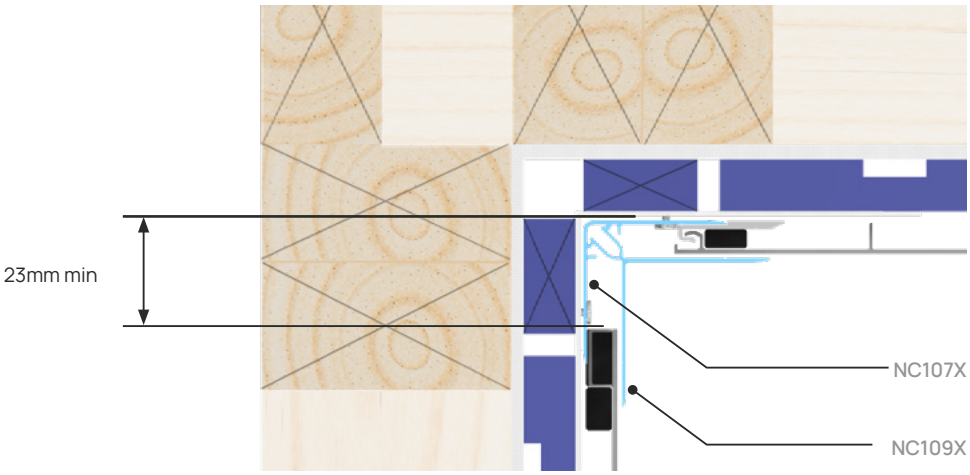


FIGURE 16: INTERNAL CORNER FIXING FIGURE (NC107X / NC109X)

3. Trim to length and fit the Corner Cap Flashing (NC109X). Use a dead shot soft hammer to tap on the cap flashing.

NOTE

This cap can take a little horsepower to engage. Consider cutting a “V-Block” drift to direct the engagement effort to the internal apex.

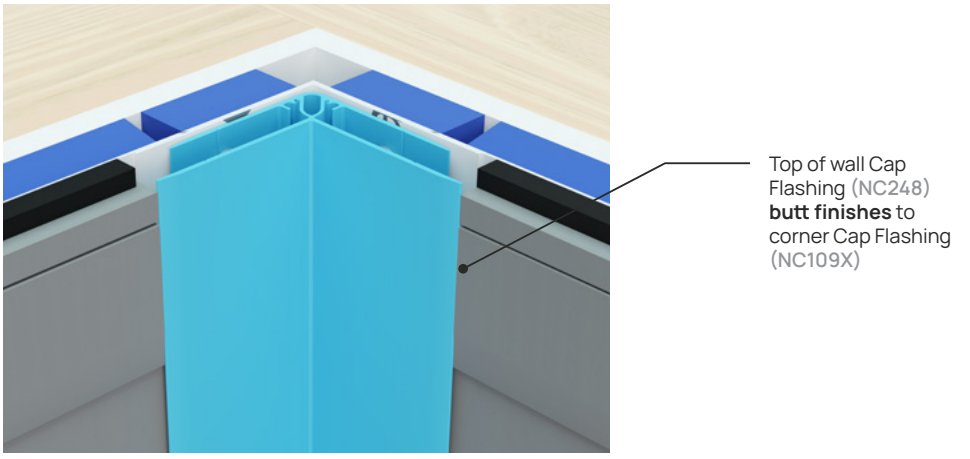
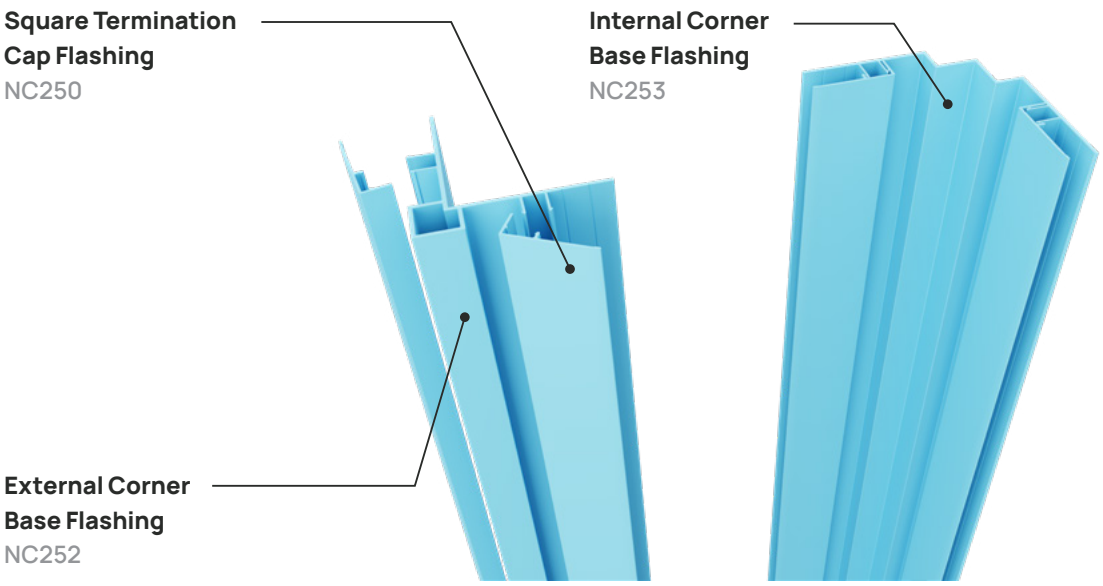


FIGURE 17. INTERNAL CORNER FIXING FIGURE (NC107X / NC109X)

NEGATIVE DETAIL CORNERS

COMPONENTS



INSTALLATION

NEGATIVE EXTERNAL CORNER NC252

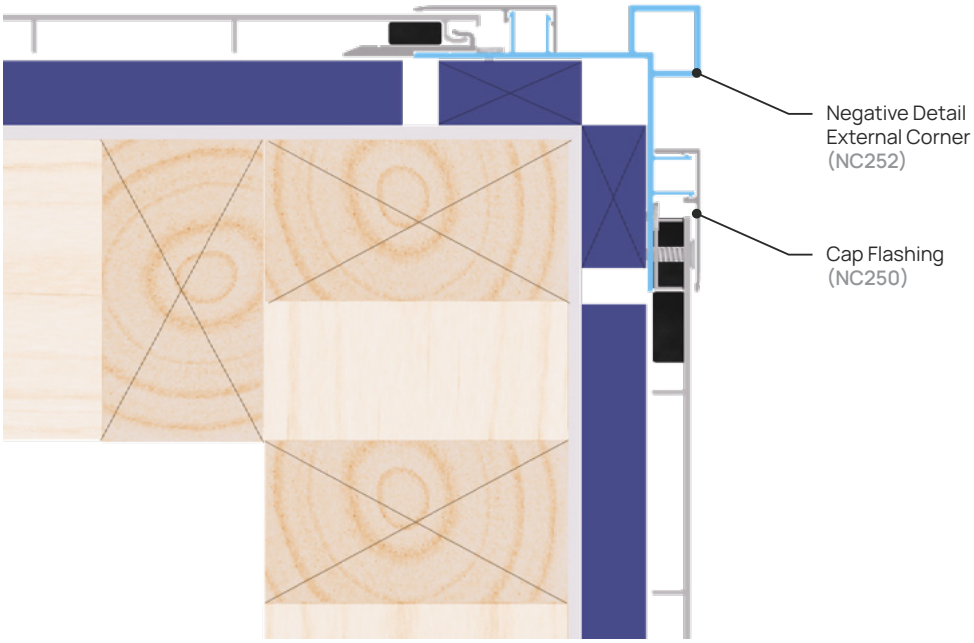


FIGURE 18. NEGATIVE DETAIL EXTERNAL CORNER FIXING

1. Trim to length and fit the External Corner Base Flashing (NC252). It will fit tight into the Pre-Fabricated Base Channel (NC134FAB) and should extend up to the underside of the soffit, allowing 2mm thermal expansion gap.

2. Fix with nails or screws embedded at least 30mm at 600mm maximum fixing centres.

3. Install the boards and then cap the board edge with the square termination Cap Flashing (NC250).

4. Trim the square termination Cap Flashing (NC250) to length and tap into position, ensuring the fastening hooks engage. The required length of the Cap Flashing (NC250) is from the top of the Base Channel (NC134FAB) front up-stand to 2mm below soffit (thermal expansion allowance).

NEGATIVE INTERNAL CORNER NC253

NOTE

The cavity battens for the Negative detail Internal Corner (NC253) should be set back at least 50mm from the apex of the corner. - See figure 19.

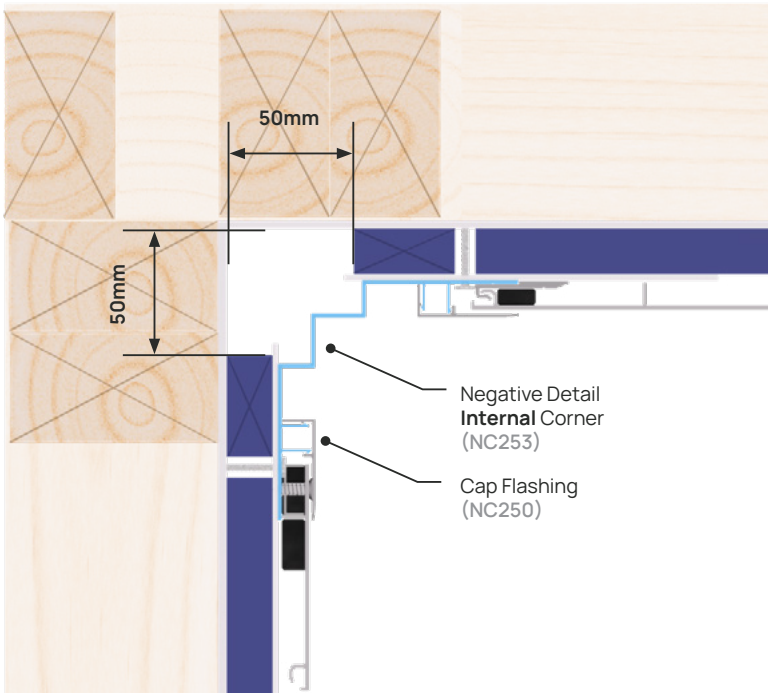


FIGURE 19. NEGATIVE DETAIL INTERNAL CORNER FIXING

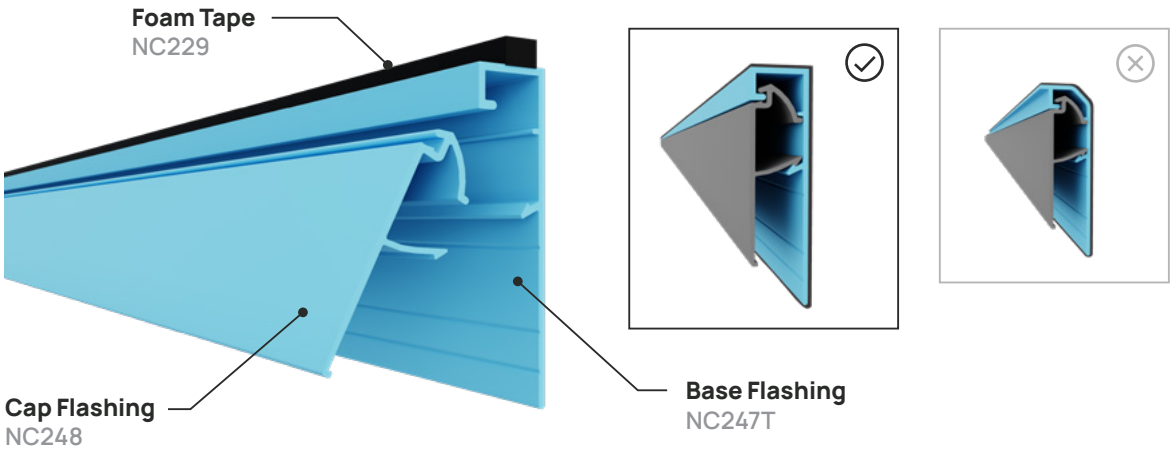
1. Trim to length and fit the Negative Corner Base Flashing (NC253). It will fit tight into the Pre-Fabricated Base Channel and should extend up to the underside of the soffit, allowing 2mm thermal expansion gap.

2. Fix with nails or screws embedded at least 30mm at 600mm maximum fixing centres.

3. Install and fix the boards, then fit Cap Flashings (NC250).

4.3. TOP OF WALL HORIZONTAL TERMINATION

COMPONENTS



BEFORE INSTALLATION

Caution: The termination base flashing is similar in appearance to the joinery base flashing **– don't mix them up.**

"Rotate-in" Termination Flashing assembly (NC247T & NC248) is used to terminate the cladding against the soffit.

The Base Flashing (NC247T) must be trimmed to length so that it square butts against the corner cap flashing. This means a 15mm deep notch must be cut into the External Corner Base Flashing (NC109X). This notch is not required for internal corners. See section 4.2 and figure 15.

HINT

Trim a 50mm long length of corner cap flashing to dummy fit to determine the installed end position of the top of wall Base Flashing (NC247T).

INSTALLATION

1. The Termination Base Flashing (NC247T) will be fitted 2mm down from the soffit face to allow for fitting of the 3mm thick Foam Sealing Tape (NC229).
2. Trim the Termination Base Flashing (NC247T) to length and cut the notch in the external corner Base Flashing (NC109X) – See section 4.2 and figure 15.
3. Either fit 3mm Foam Tape (NC229) to the top edge of the Termination Base Flashing (NC247T), to seal against the soffit, or apply a bead of colour-matched silicone post cladding installation.

4. Fix the Termination Base Flashing (NC247T) using nails or screws at 600mm centres. This flashing runs full length from corner base flashing to opposing corner base flashing.

5. Following installation of the main cladding profiles, the Termination Cap Flashing (NC248) will be trimmed to length and rotated into place.

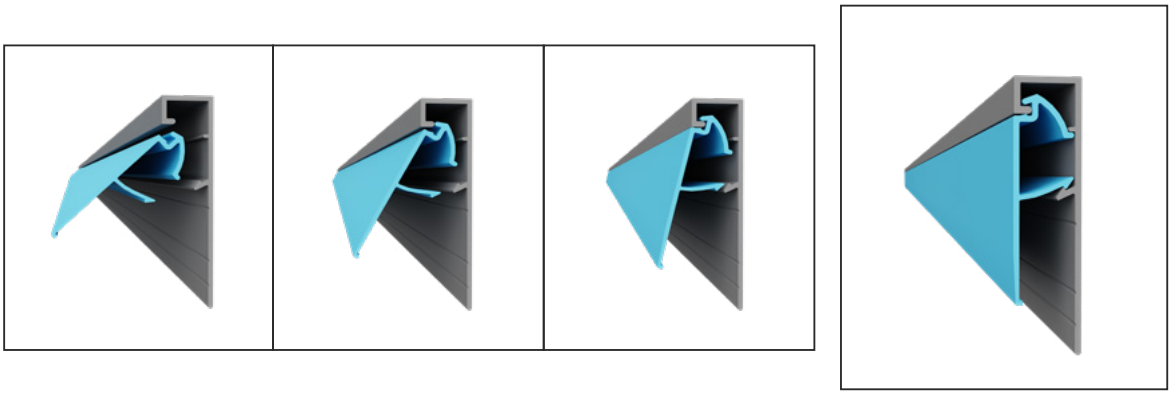


FIGURE 20. "ROTATE-IN" NC247T TERMINATION FLASHING ASSEMBLY

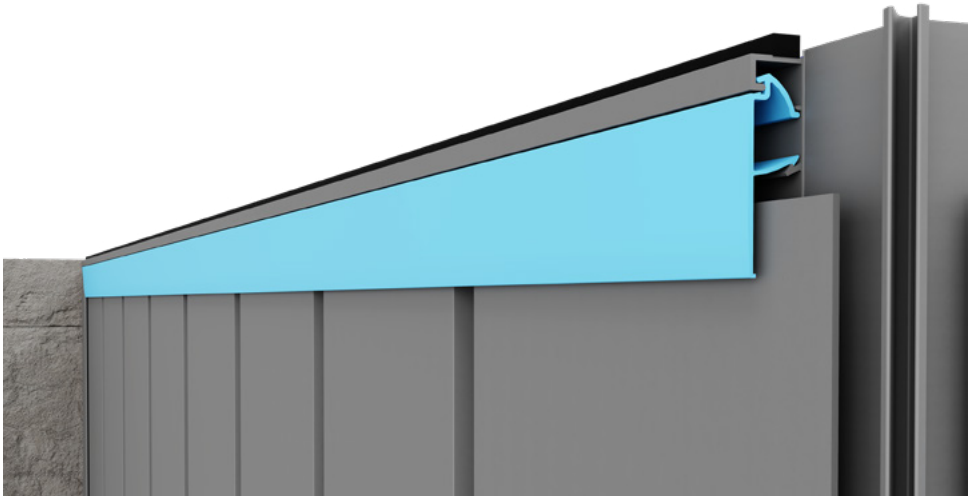
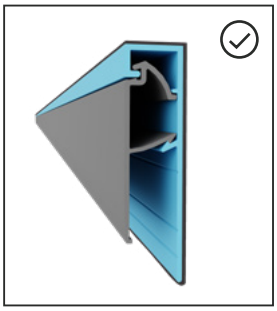
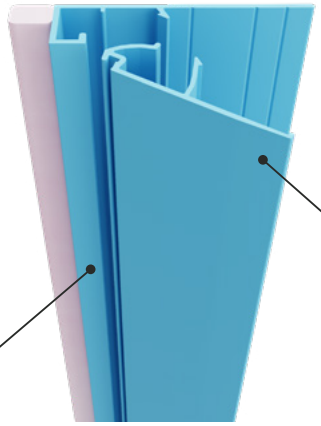


FIGURE 21. TERMINATION FLASHING (NC247T / NC248)

4.4. END OF WALL VERTICAL TERMINATION

COMPONENTS





INSTALLATION

NOTE

When finishing Nu-Wall cladding against other cladding types, the NC247T / NC248 flashing is used for the vertical termination. Typically, there will be a “W-Flashing” or “chased-in flashing” behind the cladding change.

1. Trim the Termination Base Flashing (NC247T) to extend from the base channel to the top of the wall. The Base Channel (NC134P) will need to be notched to allow the flush fitting of the Termination Base Flashing (NC247T).
   The termination Base Flashing (NC247T) should terminate against the base channel front up-stand. – See figure 22.

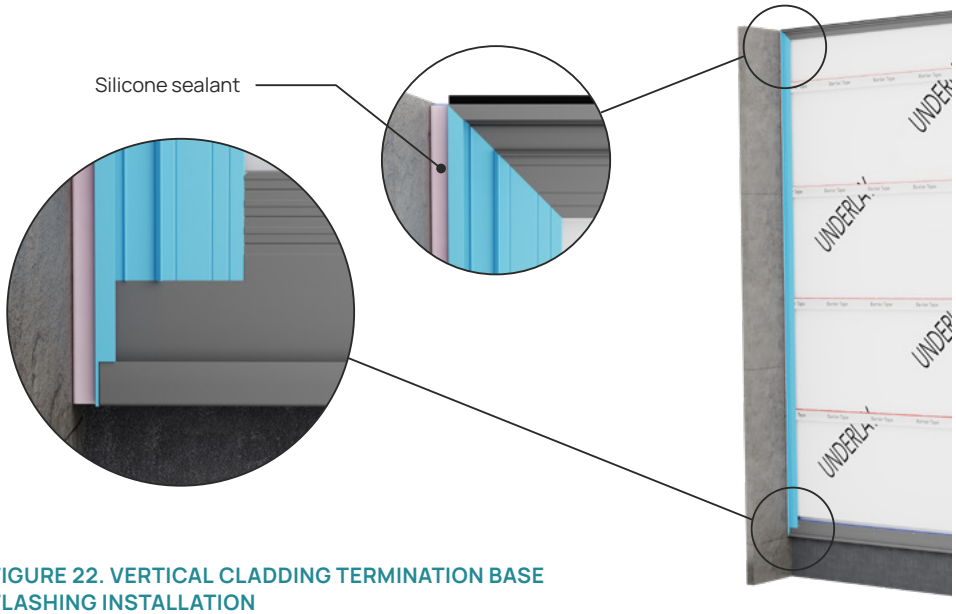


FIGURE 22. VERTICAL CLADDING TERMINATION BASE FLASHING INSTALLATION

HINT

The Termination Cap Flashing (NC248) will require a trim cut to remove the interference when engaging the cap flashing. When you have cut the 45 degree mitre, also cut out 5mm of the hidden latching details using a partial depth drop saw cut.

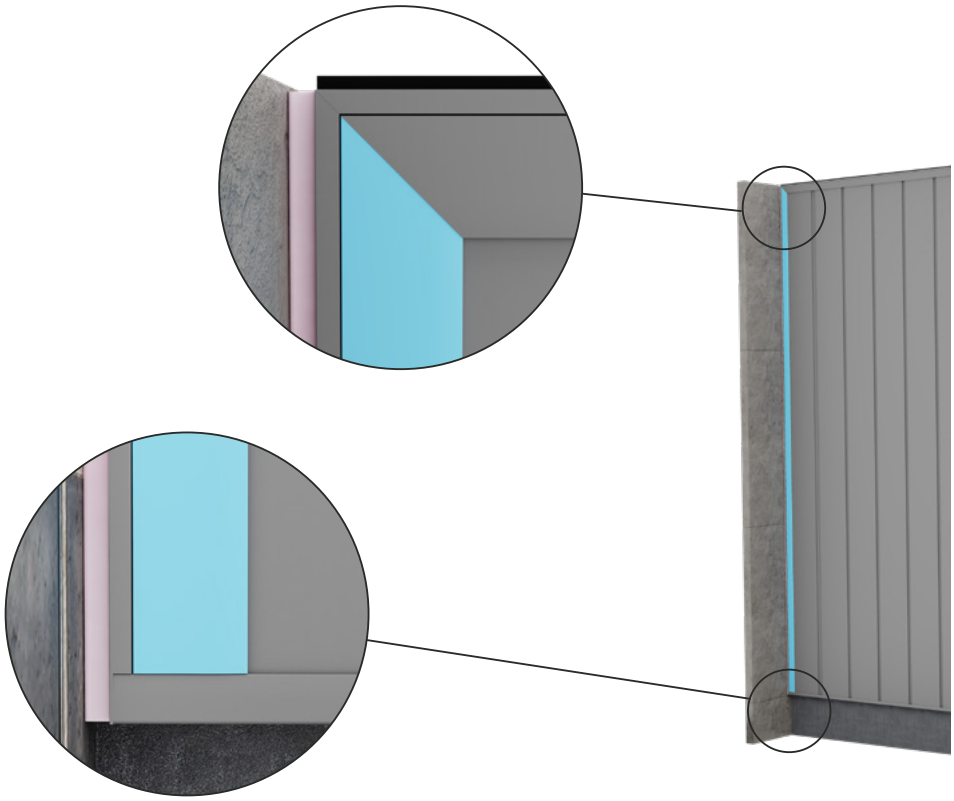
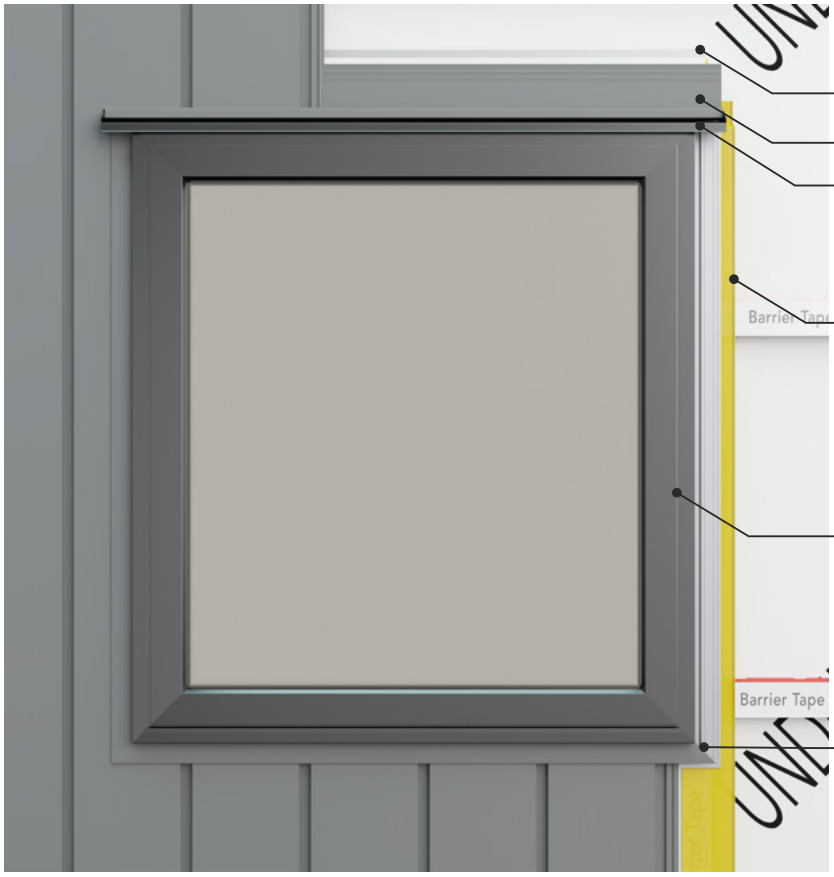


FIGURE 23. VERTICAL CLADDING TERMINATION CAP FLASHING INSTALLATION

4.5. JOINERY FLASHINGS

Before you start, confirm joinery has been installed according to the required Nu-Wall set-out. The battens will all be perfectly in plane and the Yellow Soaker (NC227) installed.
- See Section 3.3.



Cavity Closer

Base Channel (NC134P)

Head Flashing

Yellow Soaker (NC227) continued to finish in base channel

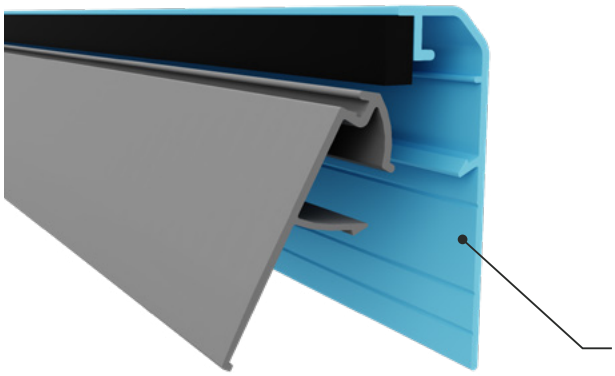
Window

Jamb assembly Base and Cap Flashings (NC247/248)

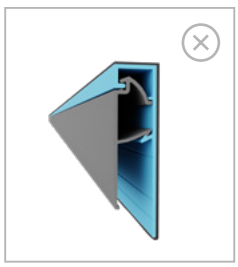
- With 10x5mm Foam Strips (NC246)

JOINERY BASE FLASHING

COMPONENTS



Base Flashing
NC247



INSTALLATION

1. The joinery Jamb Base Flashing (NC247) will be square cut under the head flashing and mitred to the sill flashing.

2. Mitre cut the base flashings at 45° angles to form clean 90° corners where the sill and jamb meet.

NOTE

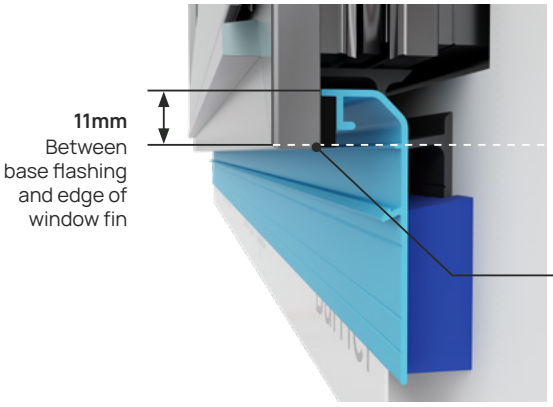
Even though this mitre is not seen, it is important to get it correct as the cap flashings will mimic the base flashing.

HINT

When looking square on to the joinery, the base flashing mitre should perfectly align with the joinery mitre, when fitted correctly.
- See figure 25

FIGURE 25. BASE-FLASHING ALIGNMENT MITRE ALIGNED

3. Trim base flashing length so that the base flashing underlaps the outside edge of the joinery fin by 11mm. - See figure 26.



HINT

The edge of the joinery fin will align with the small 1mm indication nib on the base flashing.

FIGURE 26. NC247 JOINERY BASE-FLASHING ALIGNMENT

4. Apply the supplied 10x5mm Foam Strip (NC246) before installing the base flashing, ensuring the foam is fitted in a straight line.

HINT

Tension the foam tape slightly as you stick it in position.

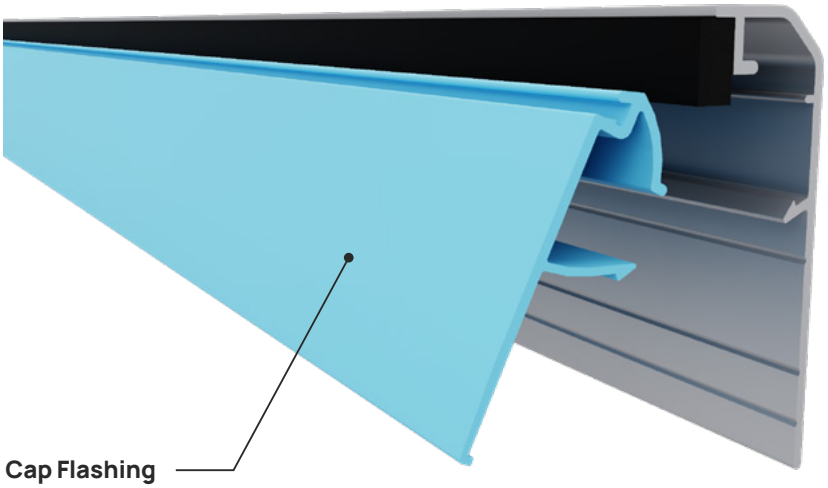
5. Fix the Joinery Base Flashings (NC247) using the supplied 10G screws. Ensure that the mitre is perfect with no step, as the quality of the cap flashing fitment relies on the quality of the base flashing fitment.

HINT

Drilling an oversize fixing hole allows you to finesse the final location of the base flashing. Ensure that the heads of the screws do not interfere with the engagement of the cap flashings.

JOINERY CAP FLASHING

COMPONENTS



INSTALLATION

Joinery Cap Flashings (NC248) are trimmed to length **and fitted after the cladding has been installed.**

1. Fit the sill cap flashing first.

HINT

Remove 5mm of the latching mechanism immediately beside the mitre cut to allow assembly clearance.

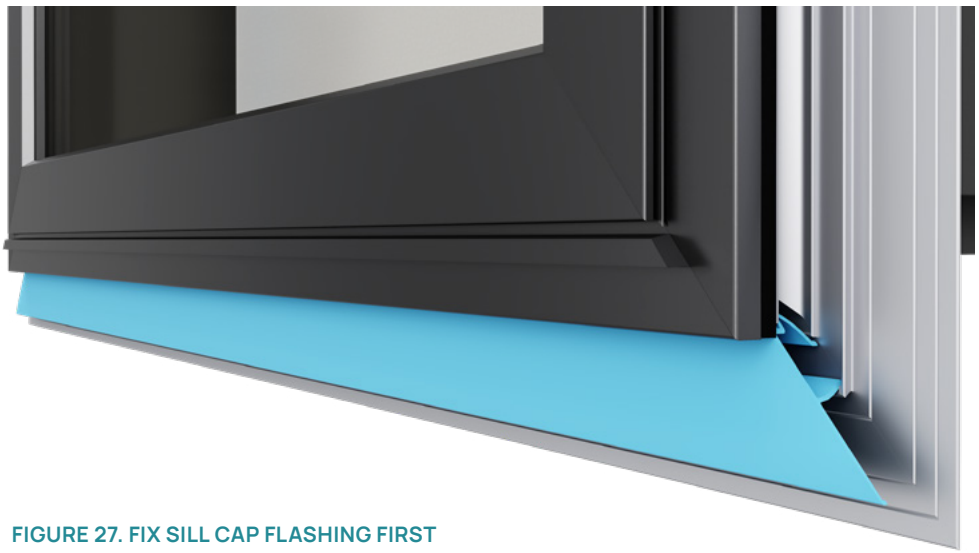


FIGURE 27. FIX SILL CAP FLASHING FIRST

2. Cut the sill cap flashing so that the cap flashing mitre aligns with the joinery mitre.

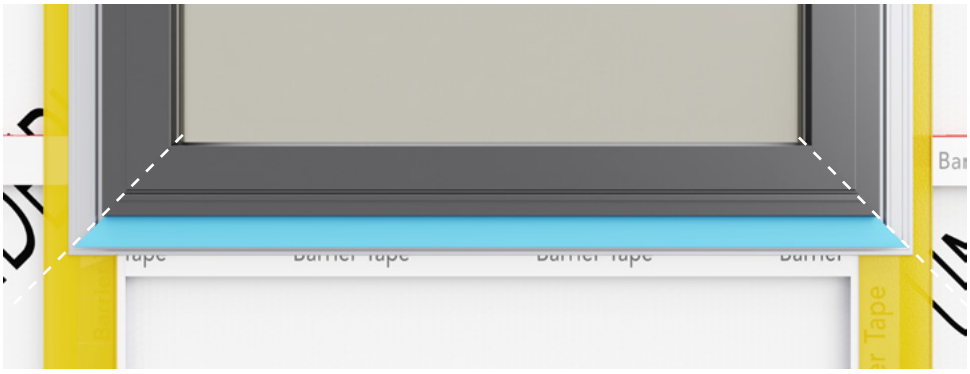


FIGURE 28. ALIGN CAP FLASHING MITRE CUTS WITH JOINERY MITRES

3. Measure from the underside of the head flashing to the outside tip (long point) of the sill cap flashing mitre. Take 2mm off this measurement. This is the outside length of your jamb cap flashing.

FIGURE 29. JAMB CAP FLASHING LENGTH

4. Cut the cap flashing square cut under the head flashing and 45° mitre to match the sill flashing mitre.

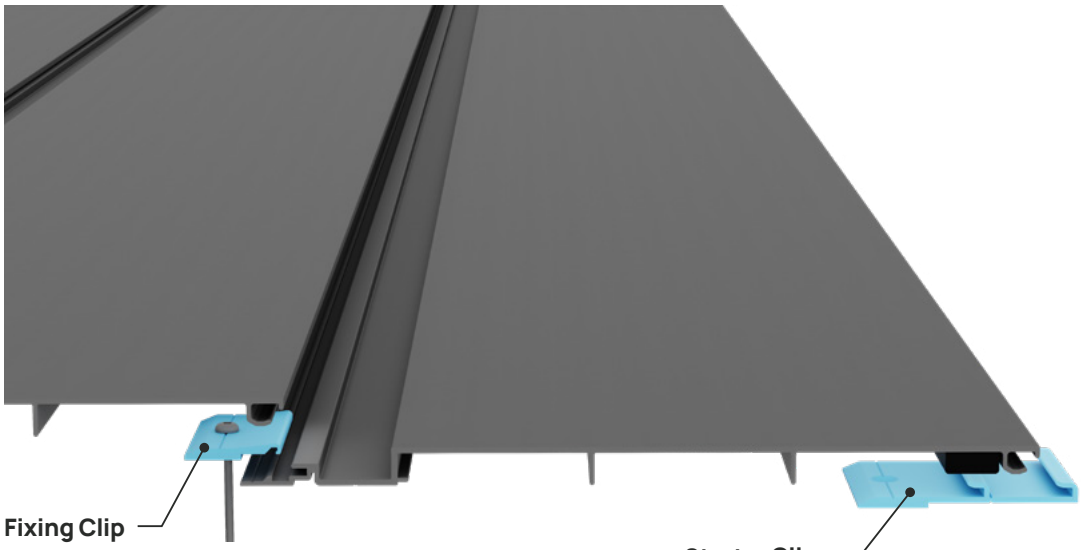
5. Fit the cap flashing.

6. To close the mitre joint, hook a Dogyu (nail puller) bar over the top edge of the jamb flashing and tap it down to provide a tight mitre joint.

4.6. BOARD INSTALLATION

Nu-Wall is installed sequentially.
Take time to plan and set out each wall before starting installation.

COMPONENTS



BEFORE INSTALLATION

☑ **Plan ahead:** If this is your first Nu-Wall installation, consider starting with a simple wall (no openings) at the rear of the building.

Supplied Boards

⚠ The boards will be supplied in a fixed length, typically 6m. Occasionally you may be supplied different board lengths for oversized walls. **Please ensure that the overlength boards are identified and put aside** for the nominated wall.

Reference the supplied Nu-Wall panel drawings to identify any over-height walls.

Supplied flashings

All flashing trims are supplied in 6m lengths. Base flashings can be butt-jointed however visible cap flashings should be one continuous length where possible.

Cut optimisation

- Please always cut long board cuts first. Use offcuts for “shorts”.
- Treat all offcuts with care as you will be using these for “shorts”. We suggest you stack offcuts vertically against a wall from shortest to longest and always use the shortest offcuts first. Don’t stack them on top of each other as they will scratch.

Thermal movement

- Nu-Wall extruded aluminium boards will expand and contract in length due to thermal changes. The Nu-Wall system allows free movement of the boards when installed correctly.
- Nu-Wall boards are fixed with sliding clips that allow thermal expansion. When installing do regularly check freedom of board movement.

Foam Tape

- Fit 15 mm Foam Tape (NC220) to the leading edge of the first board and the trailing edge of the last board on each wall, as well as to any ripped vertical notches at openings.

INSTALLATION

1. FIRST BOARD

1. Fix Starter Clips (NC232F) off at 600mm centres with the first clip being 600mm up from the base channel. Ensure that the checked step in the clip is firmly located against the edge of the corner base flashing.

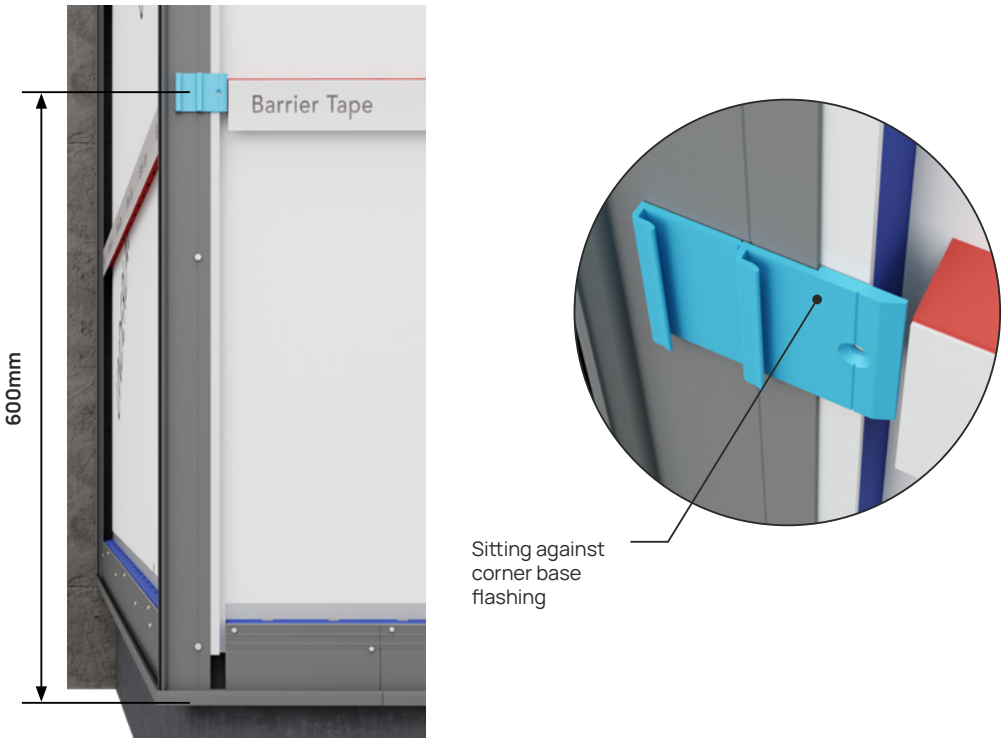
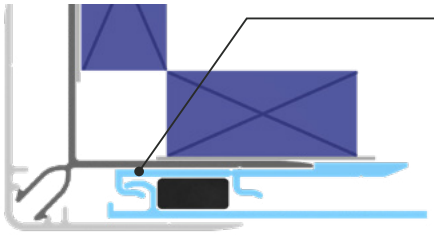


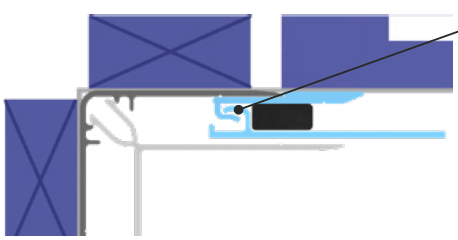
FIGURE 30. FIXING THE STARTER CLIP (NC232F)

2. The Starter Clip (NC232F) has double latch hooks. For external corners fit the full clip and the first board engages into the furthest latch. For internal corners, "snap" off the furthest latch and engage the first board into the closest latch. – See figure 31.

1 EXTERNAL CORNER



2 INTERNAL CORNER



Snap off furthest latch to get shortened clip

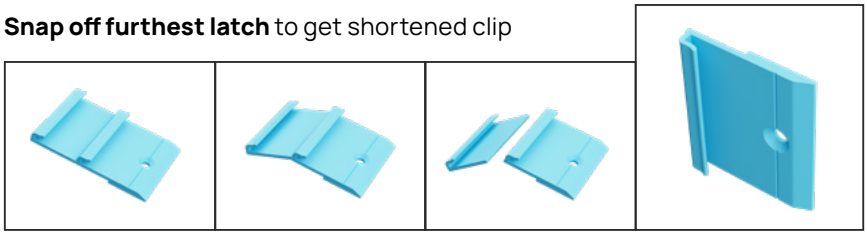


FIGURE 31. STARTER CLIP (NC232F) INTERNAL AND EXTERNAL CORNER

3. Cut the first board to length. The required length is from bottom of the base channel up to 10mm below the top of wall base flashing engagement hook. The resulting clearance (approx. 10mm) is your thermal expansion tolerance. – See figure 32.

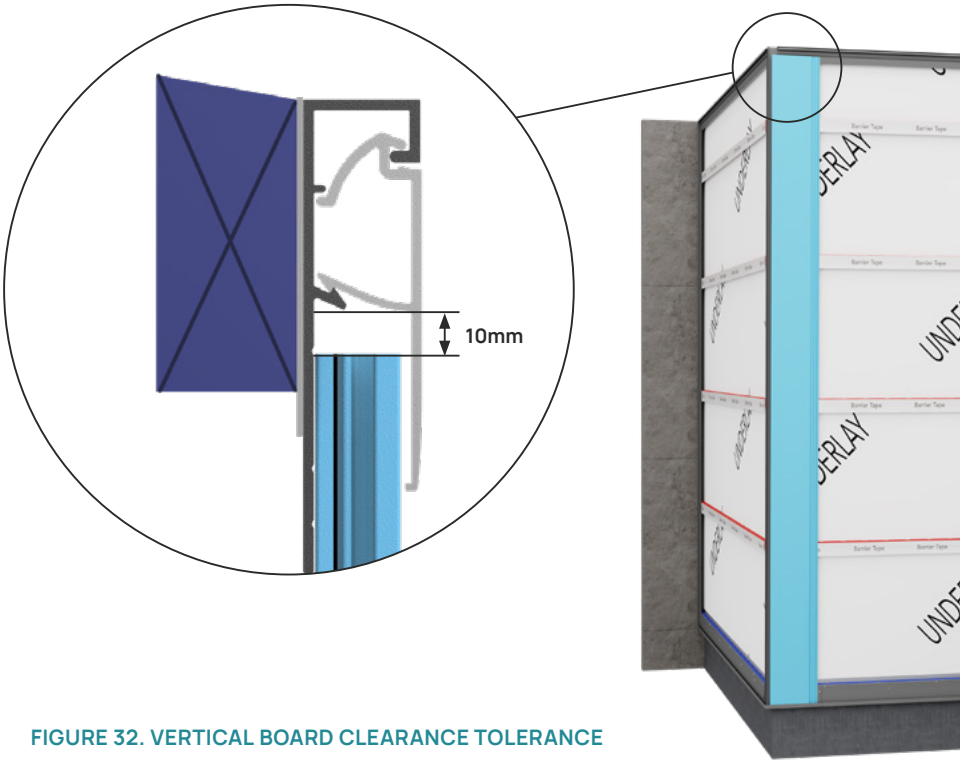


FIGURE 32. VERTICAL BOARD CLEARANCE TOLERANCE

4. Fit 15mm Foam Tape (NC220) full length down the back face leading edge. - See Figure 33.

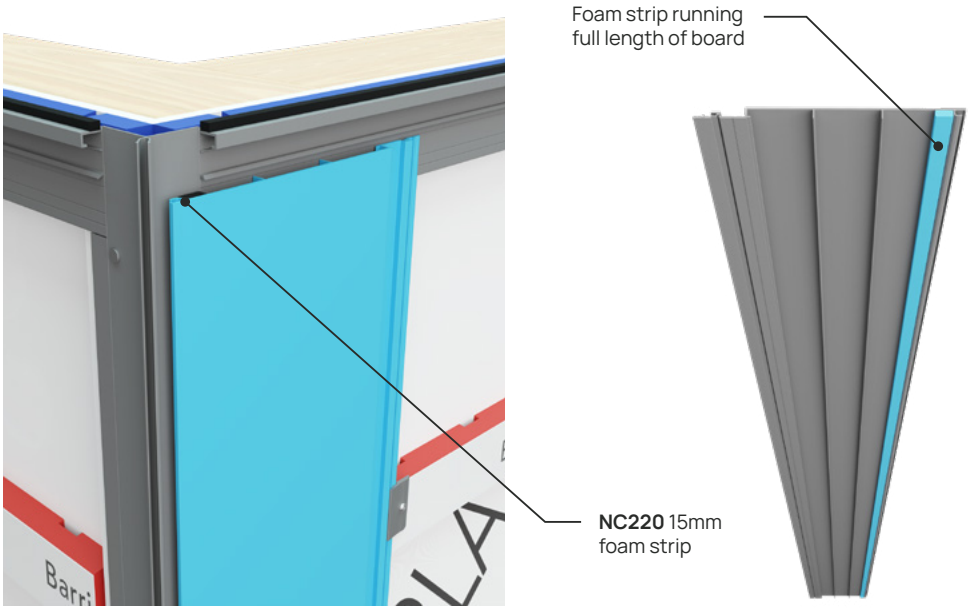


FIGURE 33. LOCATION OF 15MM FOAM STRIP

5. Engage the first board edge with the Starter Clip (NC232F) and slide the board down so that it is fully seated in the Base Channel (NC134P).

6. Fit Fixing Clips (NC203). This clip should be installed with the clip check-out firmly against the edge of the board, with the clip recess centred over the alignment nib on the board underlap.

7. Fastenings will be of a length that provides 30mm minimum of screw embedment into structural framing. To achieve 30mm embedment, the screw may have to pass 20mm of cavity batten and 10mm of RAB.

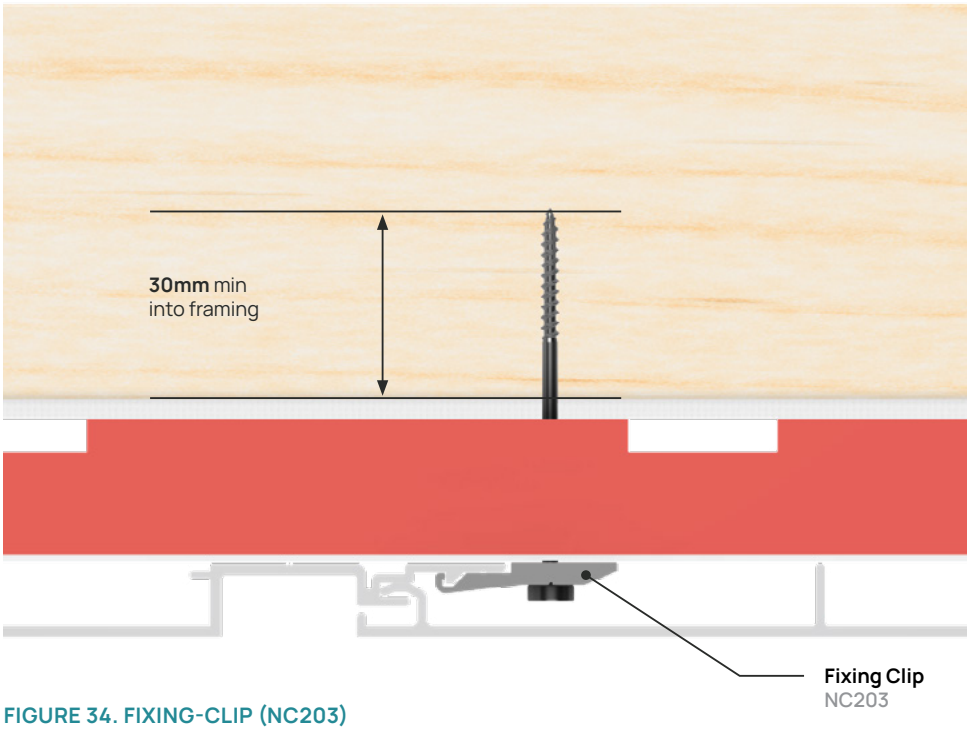


FIGURE 34. FIXING-CLIP (NC203)

2. INSTALL SUBSEQUENT BOARDS

You may be working left to right or right to left, depending on which end you want the final ripped board.

1. Engage each new board with the one beside it for a tight, consistent finish. Periodically check for plumb with a level.

2. The first Fixing Clip (NC203) will be located 600mm above the base channel and the final clip will be located 200mm down from the top plate.

⚠ Do not place a Fixing Clip (NC203) at the top end of the board. This would lock the board and prevent thermal expansion movement.

HINT

Check each board for the ability to move after all fixing clips have been fixed. With some effort, you should be able to slide the board up and down.
When the board is free to move, there should be no thermal movement noise.

3. FINAL RIPPED BOARD

The final board will need to be ripped to width to complete the cladding.

1. Measure the required board width. The ripped edge should allow sufficient edge clearance for the cap flashing to be fitted. This clearance changes depending whether you are terminating into an external corner, internal corner or end of wall termination flashing.

Edge Clearances - See figure 35

The ripped edge of the final board should be:

- 10mm clearance to the external corner Base Flashing (NC109X)
- 30mm clearance to the internal corner Base Flashing (NC107X)
- 5mm clearance to the "hook" on a cladding Termination Flashing (NC247T / NC248).

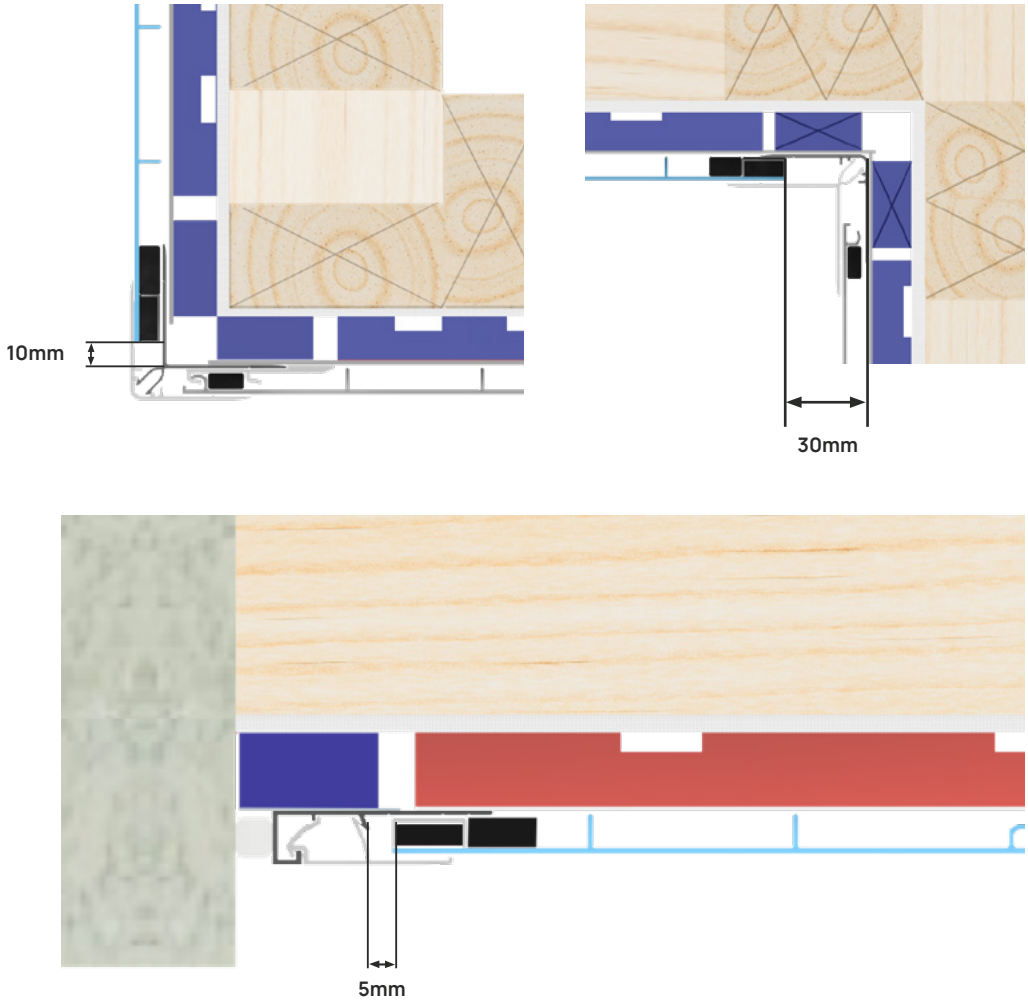


FIGURE 35. RIPPED BOARD CLEARANCES

2. Rip the board using a track saw. Take care not to scratch the powder coated surface which should be facing upwards.

3. Drill countersunk holes centred 10mm from the ripped edge at 600mm centres and direct fix the ripped board using supplied stainless steel countersunk 10g screws.

4. This is the last board so fit the 15mm Foam Tape (NC220) full length down the ripped edge.

5. To prevent the face of the board deflecting under compression when the screws are tightened, you may have to insert a 9mm packer if the countersunk fastenings are not close to a supporting negative feature. In Figure 36, a 25mm length of Negative Detail Filler (NC257) has been used as a packer. You can also rip down a batten to 9mm.

6. The countersunk screws must be flush with the board surface to allow flush fitting of the cap flashing.

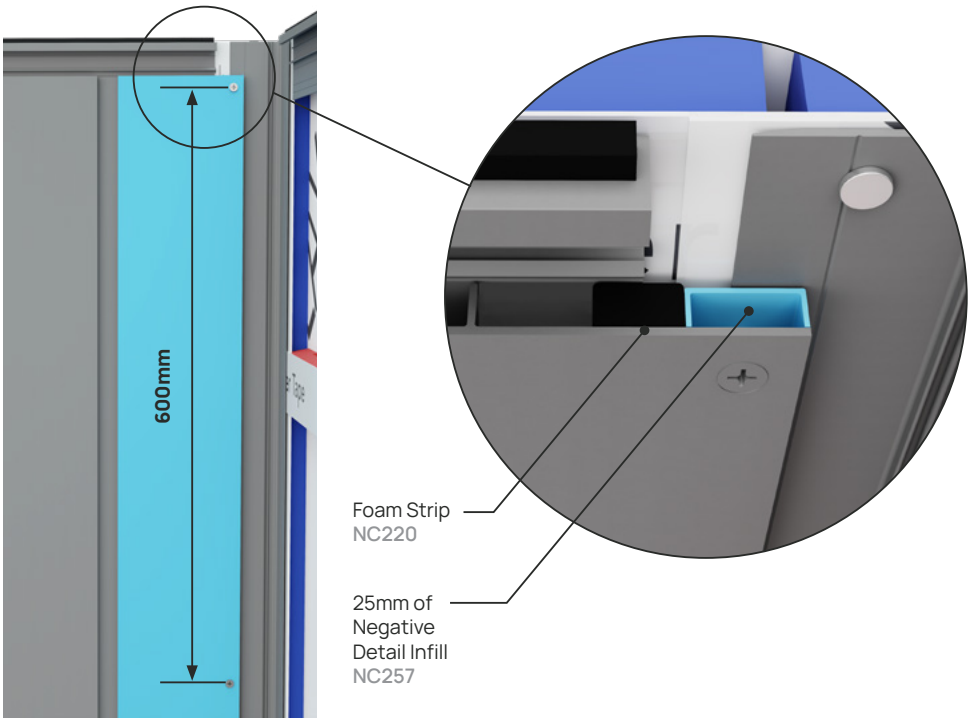


FIGURE 36. RIPPED BOARD FASTENING AND PACKER

CLADDING AROUND JOINERY

BEFORE INSTALLATION

Check all joinery base flashings, head flashings and soaker flashings have been correctly installed.

Check joinery has been installed to the correct depth (18mm underside of joinery fin to face of soaker).

Do not trim and fix the Base Channel (NC134P) above the head flashing until after the first joinery notched board has been installed.

INSTALLATION

1. Install the Nu-Wall boards up to the edge of the joinery.
2. Cut a full-length board then transfer trim measurements for the required joinery notch cut-out. – See figure 37.
    - Typically, semi-install the board into the base channel and transfer height measurements.
    - Allow for a 20mm wide head flashing extension notch.
3. Rip the length cut first using a track saw.
4. Next complete the crosscuts using a drop saw or track saw.

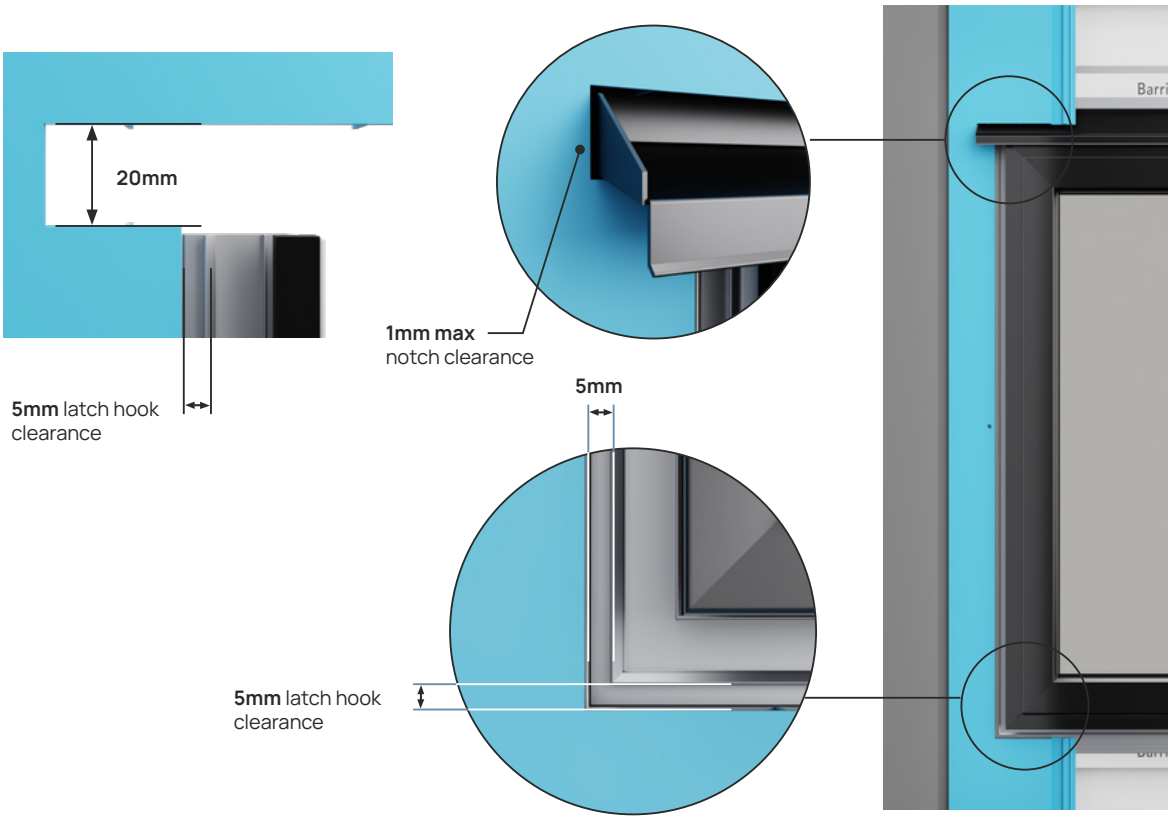


FIGURE 37. VERTICAL BOARD JOINERY NOTCH AND CLEARANCE REQUIREMENTS

5. Remove the head-flashing cut out by wiggling the offcut tab until it snaps, then file the end flat with a file (max 20mm width).

6. Insert the board. You will have to use some "thumb-horsepower" to flex the end of the head flashing into the board's clearance notch, as you push the notched board into position.

7. Fix off the notched board.

8. Trim a length of Base Channel (NC134P) to fit firmly inside the head-flashing tabbed ends and fix the base channel so that it sits with 5mm clearance above the head-flashing.

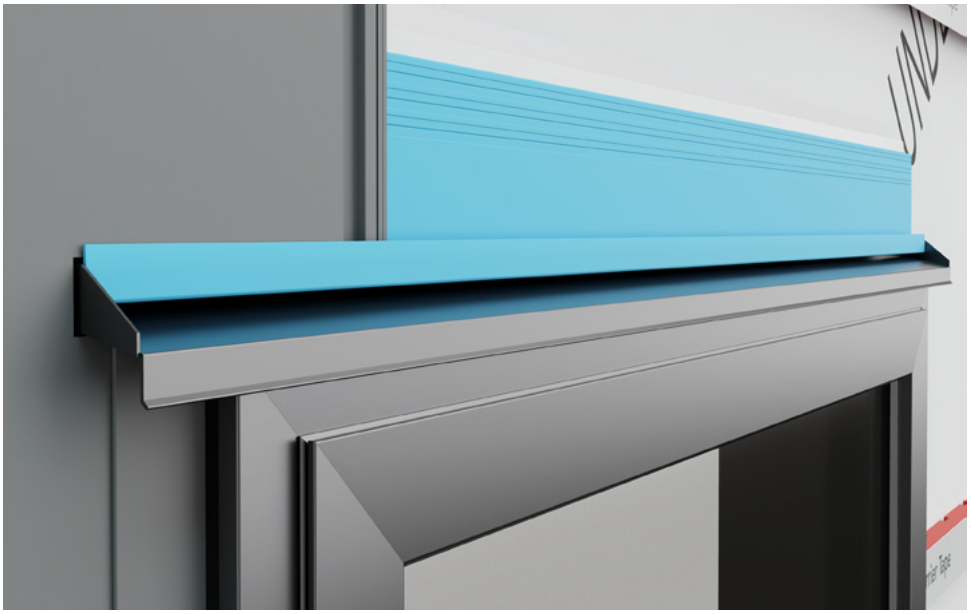


FIGURE 38. BASE CHANNEL FITTED ABOVE HEAD FLASHING - AFTER NOTCHED BOARD HAS BEEN INSTALLED

9. Fit all short length boards under the sill. Stop when you get to the final notched full-length board.

10. Fit all short length boards above the head. Stop when you get to the final notched full-length board.

HINT

Check that the Sill and Head short cut boards remain plumb aligned with each other. Short lengths tend to install tighter than long length boards.

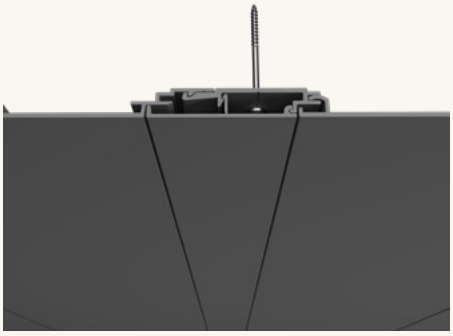
11. Cut a full-length board and transfer all notch trim measurements.

12. Trim notch and fit final notched board.

13. Continue fitting full length boards.

5. Supplementary Details

1. Maintenance Joint



2. Penetrations

3. Inter-Story Junctions

5.1. MAINTENANCE JOINT

FIGURE 39. ABOUT MAINTENANCE JOINT

The Nu-Wall maintenance joint allows the builder to break into a completed Nu-Wall cladding, mid-wall, and then remove boards from that point back towards the cladding origin point.

Two types of Nu-Wall Maintenance Joints:

1. Mono50 Maintenance Joint - Simple flat maintenance joint.
2. E70 Maintenance Joint - Maintenance joints that replicates the Nu-Wall E- Series Negative Detail.

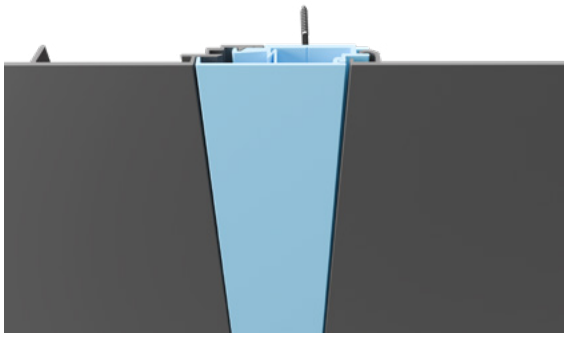


FIGURE 40. MONO50 MAINTENANCE JOINT

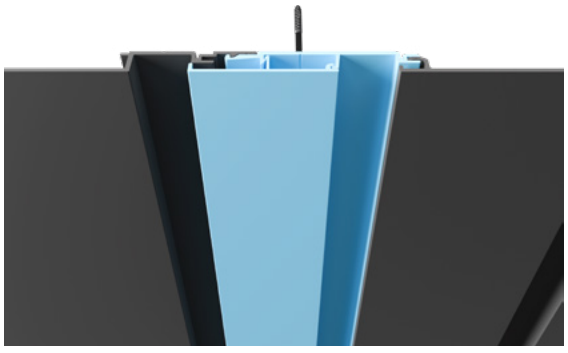


FIGURE 41. E70 MAINTENANCE JOINT

Framing Requirement for vertical cladding:

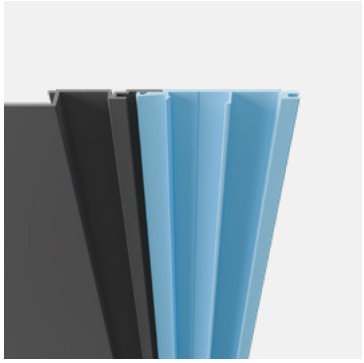
- The Mono50 maintenance joint requires a stud and cavity batten backing to support the maintenance joint base flashing.
- The E70 maintenance joint can free-span between horizontal cavity battens at 600mm centres.

INSTALLATION

STEP 1.

Install Nu-Wall cladding up to the required maintenance joint location.

STEP 2.

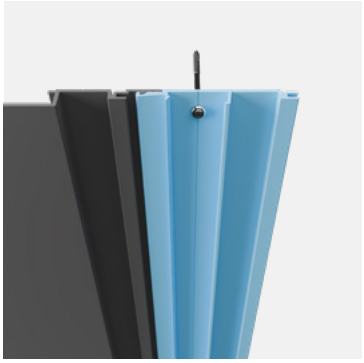


Cut the maintenance joint base flashing to length. It will be exactly the same length as the boards as it seats into the base channel and terminates under the top of wall flashing.

Position the maintenance joint base flashing over the underlap of the previous board.

The maintenance joint also functions as a fixing clip.

STEP 3.



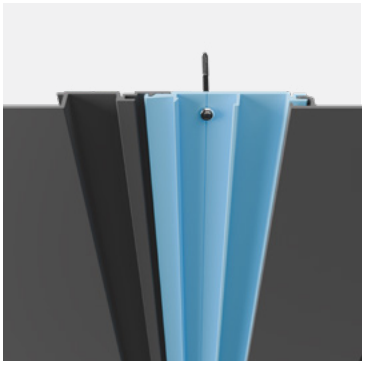
Screw off the maintenance joint base flashing.

- The Mono50 base flashing requires screws at 300mm centres.
- The E70 base flashing requires screws at 600mm centres.

HINT

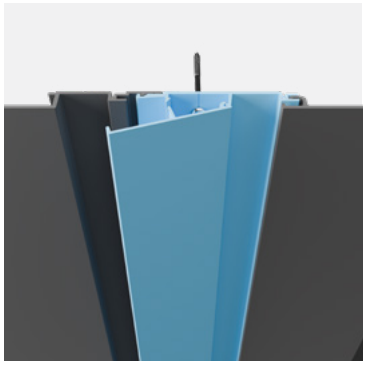
You will need to pre-drill clearance holes through the base flashing.

STEP 4.



Fit the next board firmly into the receptacle in the maintenance joint base and fix that board off.

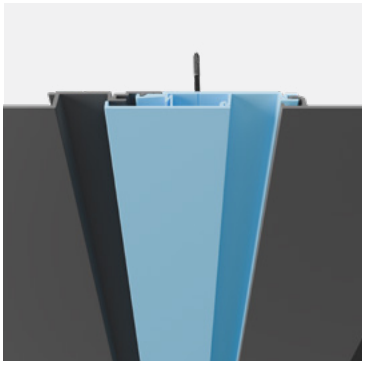
STEP 5.



Cut the cap flashing to length. It will be the same length as the boards.

Engauge the base flashing and cap flashing "rotation joints" just above the base channel upstand. While the rotation joint is engaged, slide the cap down inside the base channel.

STEP 6.



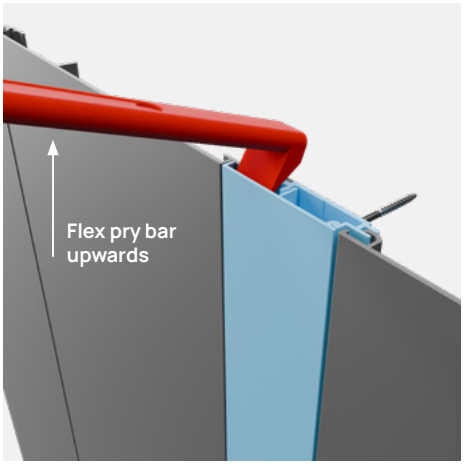
Work your way up the cap flashing, both engaging the rotation joint and tapping off the "barb connection" using a plastic dead-shot mallet.

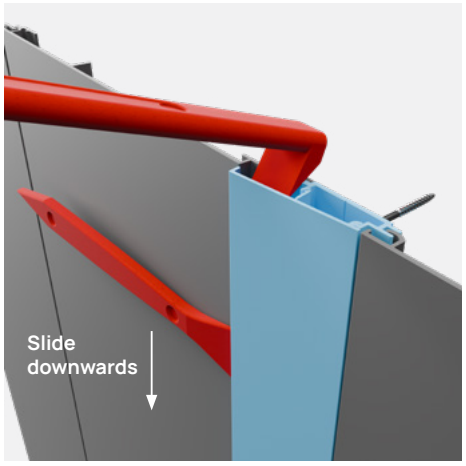
The cap flashing should be flush with the surface of the boards either side, right up to the top of wall flashing.

REMOVAL

Important: To gain access to the framing, simply pry off the cap flashings using a **plastic Nu-Wall pry bar** part of the **Builders Kit.**

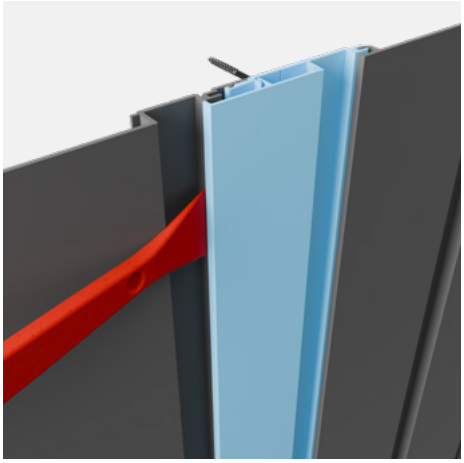
Removing Mono Maintenance Joint

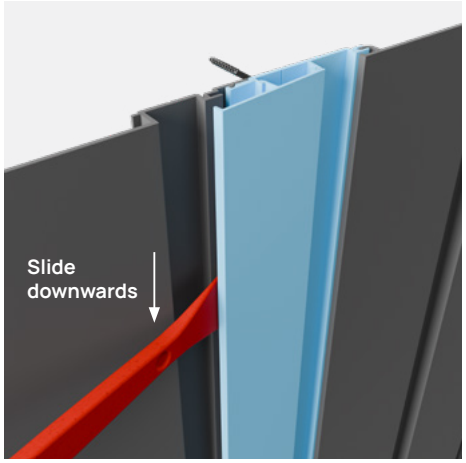




1. Remove the top of wall cap flashing.
2. Insert the **90° pry bar** into the top of the maintenance joint cap flashing and flex the tool upwards until the barb connection releases.
3. Once the barb has pinged free, insert a flat pry tool into the joint line and drag the tool downward releasing the joint as it progresses down.

Removing E-Series Maintenance Joint





1. Start at the top of the wall and tap the pry tool into the joint located inside the negative detail.
2. Once the barb connector has pinged free, slide the pry tool down the joint line which will release the barb connector as it progresses down.

5.2. PENETRATIONS

Overarching fixing principal:
Ensure penetrations do not restrict the Nu-Wall board thermal expansion requirements.

TYPICAL PIPE PENETRATIONS

Different Sealing Requirements

There are four penetration sealing requirements based around the size and location of the penetration:

1. Penetrations up to 80mm diameter positioned through a single flat Nu-Wall board.
2. Penetrations 80-150mm diameter positioned through a single flat Nu-Wall board.
3. Penetrations 80-200mm diameter positioned crossing board joints or negative details.
4. Large penetrations – treated the same as joinery openings.

General Notes

- Use EPDM washers to isolate between the powder-coated board surface and the item being fixed.
- Apply MS sealant sparingly and only in concealed areas (e.g., behind pipe cowls or hood flashings).
- If the hollow-form Nu-Wall cladding is going to be subjected to “crush” then the hollow form of the profile must be packed out. It should be noted that a “crush” fixing, will result in the thermal board movement being restricted.

1 Penetrations up to 80mm diameter positioned through a single flat Nu-Wall board.

No head flashing required.

1. The pipe penetration should be sealed to the building paper using a peel-and-stick pipe boot (e.g., Marshall Trade Seal).
2. Nu-Wall Yellow Soaker (NC227) to be cut tight around the penetration and taped. The yellow soaker should run to the bottom edge of the wall and be installed over cavity batten.
3. Using a hole saw, cut a 5mm clearance hole through the Nu-Wall board.
4. Install the board and carefully apply a wet silicone seal to seal the penetration.
5. If possible, adhere a cover plate.

2 Penetrations 80-150mm diameter positioned through a single flat Nu-Wall board.

No head flashing required.

1. The pipe penetration should be sealed to the building paper using a peel-and-stick pipe boot (e.g. Marshall Trade Seal).
2. A Nu-Wall 250mm wide aluminium soaker is cut tight around the penetration and taped with flexible flashing tape. The soaker is fitted over the cavity battens.
3. Nu-Wall Yellow Soaker (NC227) is then underlapped under the aluminium soaker bottom taper and run to the bottom edge of the wall at cavity batten level. Fix the soaker in place with a tacker.
4. Cut a 5mm clearance hole in the Nu-Wall flat surface board and install the board and carefully apply a wet silicone seal to seal the penetration.
5. If possible, fix a cover flange.

3 Penetrations 80-200mm diameter positioned crossing board joints or negative details.

☑ **Head flashing required.**

1. The pipe penetration should be sealed to the building paper using a peel-and-stick pipe boot (e.g. Marshall Trade Seal).
2. A 35mm tabbed head flashing is fixed and tabbed with 20mm minimum clearance above the penetration. The head flashing length should be 250mm, which matches the aluminium soaker width.
3. A Nu-Wall 250mm wide aluminium soaker is cut tight around the penetration and taped with flexible flashing tape. The soaker is fitted over the cavity battens.
4. Nu-Wall Yellow Soaker (NC227) is then underlapped under the aluminium soaker bottom taper and run to the bottom edge of the wall at cavity batten level. Fix the soaker in place with a tacker.
5. Cut a 5mm clearance hole in the Nu-Wall flat surface board and install the board. Carefully apply a wet silicone seal to seal the penetration.
6. If possible, fix a cover flange.

4 Large Penetrations.

☑ **Head flashing required.**

1. Treat large openings as a joinery opening – See section 4.6. A head flashing will be required to maintain proper weather sealing.
2. Fit Nu-Wall Yellow Soaker (NC227) down both sides (jambs).
3. Square form penetrations should be edge flashed with Nu-Wall Joinery Flashings (NC247 & NC248) as per a standard joinery opening.
4. Round form penetrations should be wet silicone sealed and a cover flange fitted.

LAG BOLT PENETRATION

Lightweight fixtures

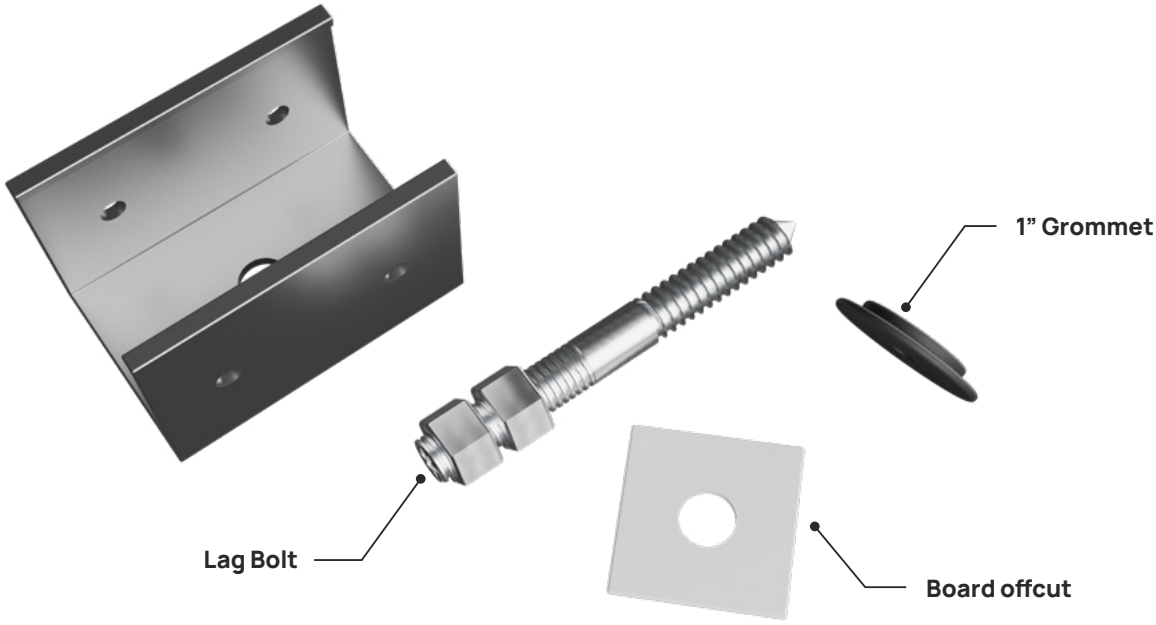
The below can be fixed directly to the boards using short tek screws or rivets;

- Exterior lights.
- Garden hose reels.
- Residential downpipes and gutters.
- Lightweight signage.

Structural or heavy load penetrations

For screens, balustrade and other heavy weight products being fixed over the Nu-Wall, consider using a “Lag Bolt” type fixing that allows the buildings framing to carry the load, without crushing the Nu-Wall.

COMPONENTS



INSTALLATION

Typical Lag Bot Installation through Nu-Wall Boards

1. Drill oversized holes to allow for board movement-typically a 25mm diameter hole. Ensure that there is sufficient frame structure behind the intended fixing point.

Where possible fix through the flat area of the board

- try to avoid fixing through negative/recessed details as these are difficult to seal.
- If you do fix through the negative detail, fit a Nu-Wall Yellow Soaker (NC227) behind the cladding to create a safe water drainage path.

2. Seal holes with 1" diameter (25.4mm is commonly available) glanded rubber grommets for a water-tight, flexible seal.

3. Drill a 6mm hole in the grommet gland and screw in the Lag Bolt (the 25mm grommet will accept Lag bolts 6-18mm diameter.

4. Fit a colour coded washer over the grommet to protect from UV degradation.

5. The exterior feature is then fixed via the engineering bolt half of the Lag-Bolt.
– See figure 42

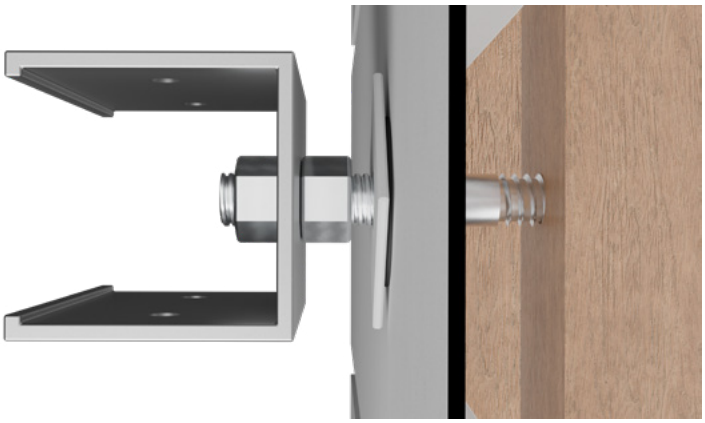
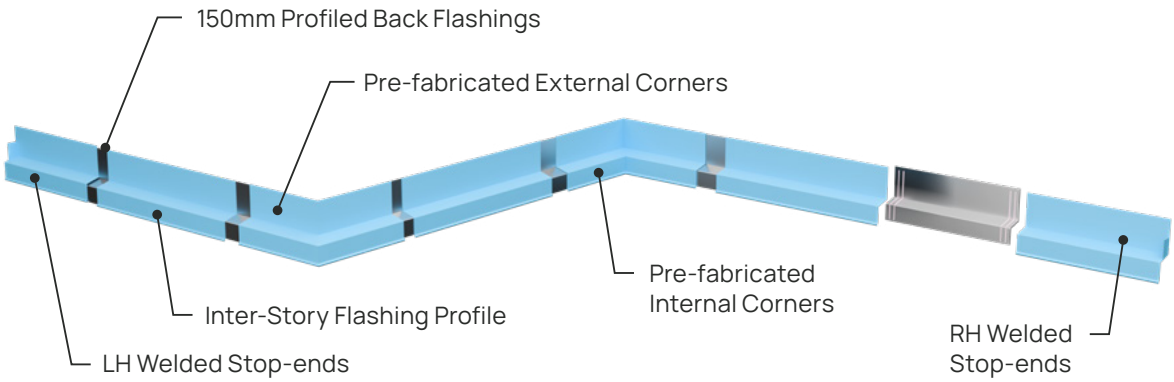


FIGURE 42. LAG BOLT PENETRATION

5.3. INTER–STORY JOINT (ISJ)

Nu-Wall offers Inter-Story Joint (ISJ) components for use on a 20mm cavity only. 45mm cavities would require custom-manufactured components (refer to the Nu-Wall technical team).

COMPONENTS



INSTALLATION

⚠ **Install/position the ISJ in accordance with Architects' details.**
Cladding and flashings below the ISJ must be installed before the ISJ is installed.

Below Inter-Story Joint

1. Install a single nog/dwang and an 18mm cavity batten below the ISJ line to support the fixing of the boards below the down stand of the ISJ – See Figure 43.
2. Install boards
   - Boards finishing under the down stand of the ISJ do not require a Nu-Wall termination flashing.

Inter-Story Joint (ISJ)

1. Install a single nog/dwang line to support fixing of the ISJ flashing upstand.
2. Position the prefabricated corner components to the face of the paper/RAB using gun nails or screws staggered at 300 centres.
3. Using a string line/laser, ensure all comers are installed level and aligned.
4. Install supplied 150mm Profiled back flashings with 2 beads of MS sealant to each joint (4 beads per soaker) – See Figure 43.

5. Butt joint/install remaining long lengths of the ISJ to the corner elements to complete the installation.

6. Apply flashing tape to the ISJ upstand.

Above Inter-Story Joint

1. Install cavity closure.

2. Fix a 18mm single castellated cavity batten to nogs/dwangs above the ISJ to support the fixing of the Nu-Wall base channel.

3. Install base channel and boards as per standard Nu-Wall guidance.
– See section 4.1 and 4.6.

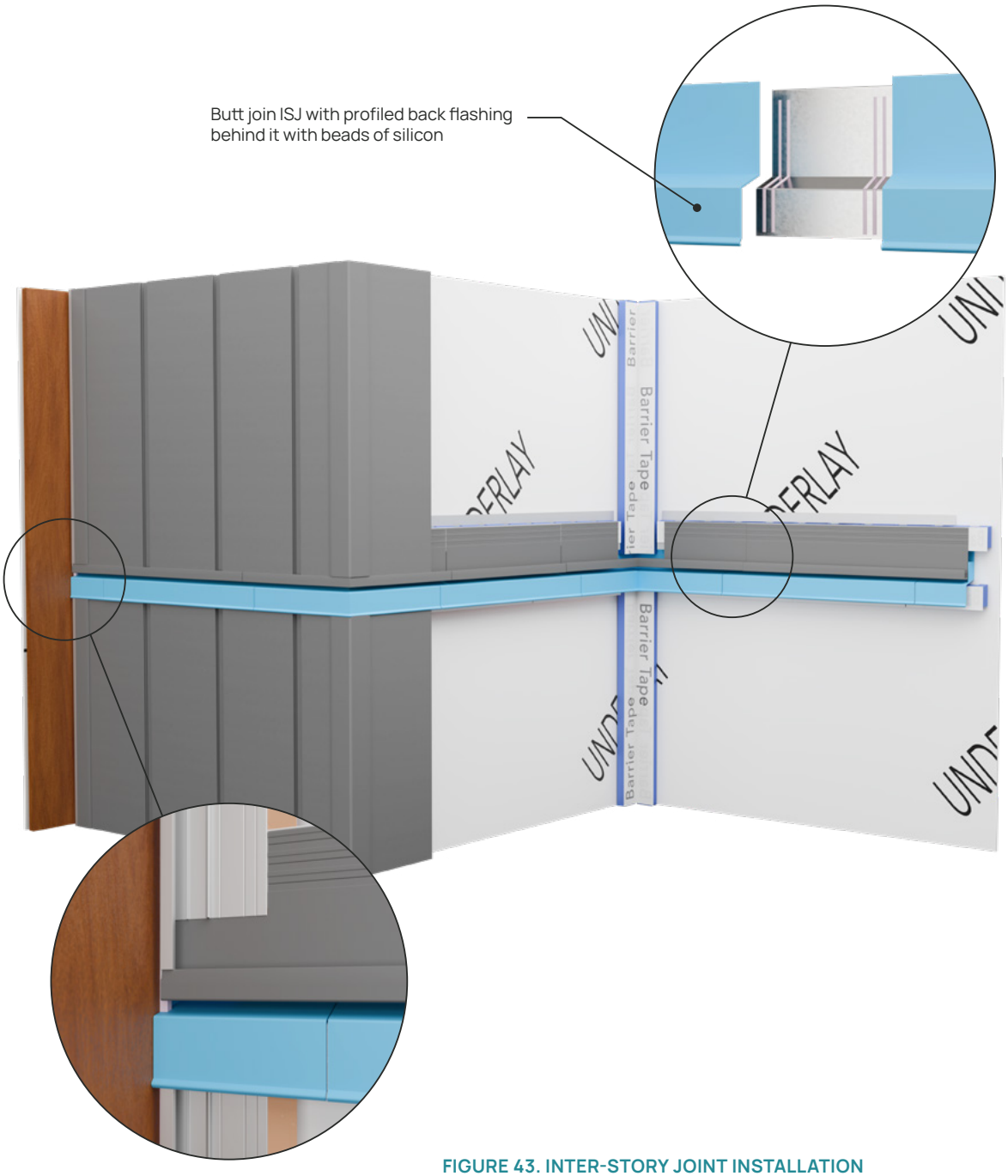


FIGURE 43. INTER-STORY JOINT INSTALLATION

6. Care and Maintenance

Handle with care to maintain the finish.

Remove fingerprints, handling marks, or light scratches using the approved Nu-Wall cleaning method only.

Prior to installation, store the Nu-Wall product in a level, dry location out of direct sunlight.

Do not use solvent-based cleaners, spray paints, or household detergents – these may damage the surface. Selleys Isopropyl based wipes are required for warranty purposes.

Take extra care when removing scaffolding or accessing equipment near completed cladding to avoid accidental damage.

Nu-Wall is a pre-finished aluminium cladding system and does not require painting after installation.

Reference – Scan the QR code to refer to the Nu-Wall Care & Maintenance Guide for proper cleaning and maintenance.

7. Aluminium Recycling

Nu-Wall boards and accessories are made from locally extruded aluminium, a highly sustainable and endlessly recyclable material.

HOW TO RECYCLE

- Recycle responsibly and support sustainable building practices.
- We encourage you to collect all offcuts and scrap aluminium during installation.
- Take them to your local scrap metal dealer – it's good for the environment.

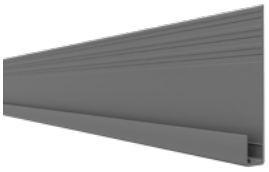
8. Components

Supplied by Nu-Wall

Base Channel

NC134P

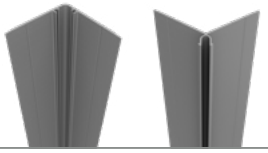
All Nu-Wall base channel sections are supplied with pre-punched ventilation / drainage slots and are specifically used for locating and securing the bottom of the weatherboards where they are installed fixed direct to framing or onto a drained and ventilated cavity.



2 Piece Standard External/Internal Corner Flashing

NC107X NC109X

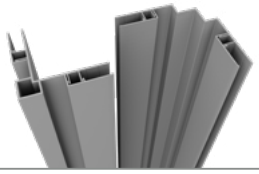
2-piece 90° corner flashings for internal and external corners.



3 Piece Negative External/Internal Corner Flashing

NC252 NC253 NC250

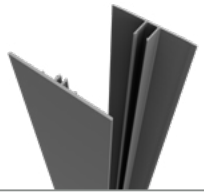
Alternative 3-piece external and internal corner flashing for E-series cladding profiles.



2 Piece Nu-Wall Board Jointer

NC103X NC105X

Extruded aluminium two-piece vertical jointer for jointing lengths of Nu-Wall board.



Universal Starter Clip

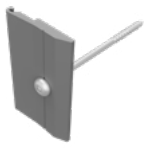
NC232F

Extruded aluminium, pre-drilled to accept a 10g countersunk screw. Installed at 600mm centres, providing a starting locator for vertically installed cladding boards.

Board Fixing Clip

NC203

Extruded aluminium, pre-drilled to accept a 10g pan head screw. Installed at 600mm centres.



Flashings – Inter Story, Custom Angled Corners

Extruded or folded from aluminium and finished to match the Nu-Wall cladding profiles.

Plastic Soaker

NC227

Extruded polythene 100mm wide with 3mm upstands on each edge, to provide secondary protection in the form of a drainage path behind cladding at joinery and door head/jamb and sill/jamb junctions.

2 Piece Joinery Flashing

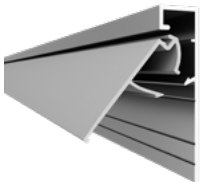
NC247 NC248

Extruded aluminium two-piece flashing to conceal the ends of the boards at jambs and sill of joinery and door trim openings.

2 Piece Termination Flashing

NC247T NC248

Extruded aluminium two-piece flashing terminating at top of wall or end of the Nu-Wall cladding, where it terminated and/or interfaces with other materials.



Foam Tapes

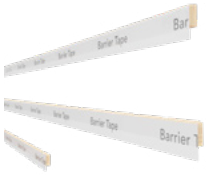
NC229 NC246 NC220A

Self-adhesive, closed-cell PVC foam tapes. Various sizes of tapes are used for specific applications (top of wall, wall termination, joinery jambs).

Cavity Batten Barrier Tape

NC226

60mm wide medium density polyethylene (MDPE) tape supplied in rolls, used as a metal conflict separation layer between CCA treated timber and aluminum cladding.



Timber Cavity Battens (optional)

Minimum 45mm wide x 18mm thick H3.2 single castellated cavity batten system behind wall cladding. 18mm and 20mm single castellated cavity battens available from Nu-Wall.

Nu-Wall Alibat Cavity Battens (optional)

Nu-Wall AliBat, non-combustible extruded aluminium cavity battens manufactured from extruded 6061-T6 aluminium alloy with pre-drilled, countersunk holes for fixing. Supplied in 5.8m lengths.

General Fastenings

Various fasteners to suit Nu-Wall fixings.

Not Supplied by Nu-Wall

Specialty Flashings

Saddles, barge, and parapet flashings (aluminium, colour-matched).

Cavity Closure

For base of cavity.

Head Flashings

Request these are supplied full length so you can trim and tab as required.

Anti Crush Packers

Used behind fixings where required to bridge cavity.

Technical Support

Our Technical team is available to support you at every stage – from specification through to on-site installation. If you require additional assistance, need clarification around detailing, or would like builder training on-site, please get in touch and our team will be happy to help.

Technical Documents

All Technical Documents

CAD Library

3D Install Videos

AliBat Fastening Bulletin

Care & Maintenance Guide

Wall Requirements & Seismic Allowances

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Product specification, purpose or application should be directed to sales@nuwall.co.nz. Nu-Wall Cladding reserves the right to modify products, techniques, equipment and statements to reflect improvements in the manufacture and application of its products. The information contained in this brochure is accurate as at March 2026.

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