



UNI[®] Flexible Air Barrier Installation Instructions



MASON'S
Designed Smart, Built Tough.



**STAY ON TRACK WITH YOUR
BUILD IF CLADDING IS DELAYED**

**90
DAYS**

**TEMPORARY WEATHER
PROTECTION FOR UP TO 90 DAYS**



QUICK & EASY TO INSTALL

UNI[®] is a NZ designed Flexible Air Barrier (FAB[®]). It's unique highly water resistant features allow work to continue on the inside of the building for up to 90 days without waiting for the cladding to be complete.



masons.nz



General Instructions

- Fix with the printed side out.
- Run the wrap horizontally.
- Pull taut over the framing before fixing.
- Only to be fixed with Masons UNI Fasteners either with a gun or hammer or timber battens with ring shanked nails.
- Be lapped not less than 75mm at horizontal joints; Have upper sheets lapped over lower sheets to ensure that direction of laps will allow water to be shed to outside of the wall underlay.
- Be lapped not less than 150mm over studs at vertical joints.
- Extend 50mm below bottom plate or bearer



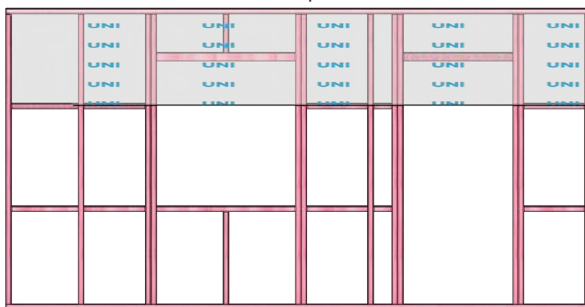
Items Required

- UNI Soffit roll with self adhesive strip
- UNI Seam Tape (60mm)
- UNI Fasteners
- Hammer or Fastener Gun
- 40 BELOW Platinum or Super Sticky Flashing Tape (150mm)
- Cutting Knife
- Compressor 90-100 PSI
- Plastic tape scraper to assist tape adhesion



1

Top Plate



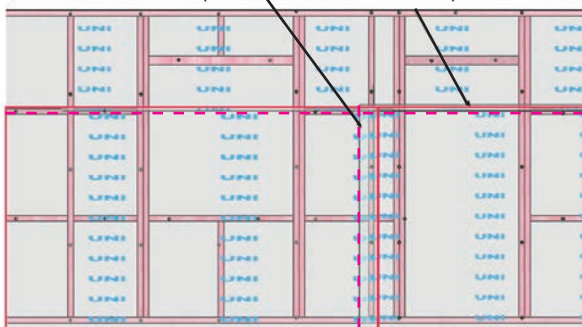
Bottom Plate

- Where required, run a 600mm UNI soffit strip taut along the top face of the top plate. Secure with UNI Fasteners at 600mm centres.
- Remove backing from self adhesive strip on reverse of UNI soffit roll and press in firmly to underlying UNI using a plastic tape scraper or similar tool. Hand /finger pressure alone is not sufficient.
- Or run UNI continuously up to the top of the top plate of stud height and fitting if soffit framing permits.

2

150mm Vertical Overlap

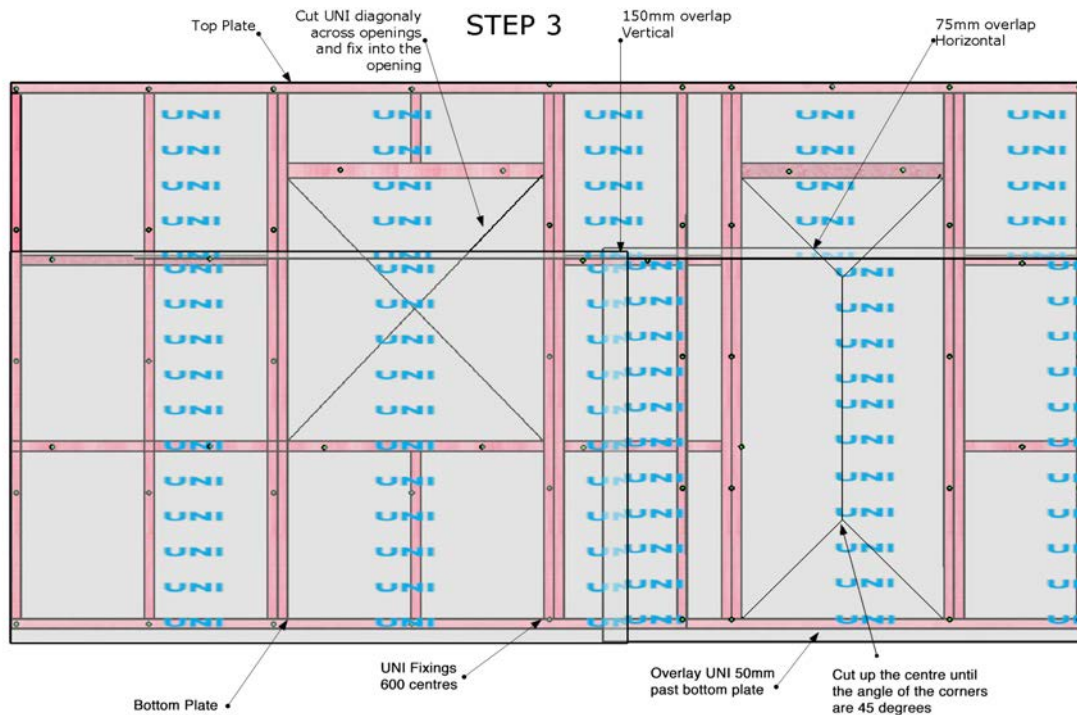
75mm Horizontal Overlap



- Run UNI horizontally extend from the upper-edge of the top plate to the under-side of the bearers or wall plates supporting ground floor joists, or a minimum of **50mm below bottom plates** on concrete slabs.
- Horizontal laps must be no less than 75mm wide and require to be taped off with **Masons UNI Seam Tape or 40 Below Platinum or Flex**.
- Vertical laps must be made over stud framing, be no less than 150 mm wide and must be fully sealed and taped off using **Masons UNI Seam Tape or 40 Below Platinum or Flex pressed in well** with a plastic tape scraper or similar tool.



3



- **UNI Nail & Screw washers** - It is important to secure UNI with Masons UNI 32mm Nail/washer fasteners as they rapidly increase the holding power of UNI over normal 8-10mm staples. For fixing methods see chart. For steel frame use UNI washers with either a Phillips or square drive self-drilling screw.
- **Installing cavity battens** - When installing timber cavity battens using UNI fasteners you must keep the batten nail a minimum of 100mm away from the UNI fastener.
- **Brick Veneer construction** - Masons brick ties have been subjected subjected to a modified E2/VM1 test with UNI therefore Masons brick ties can only be used over the top of UNI
- **Strapping** - When installed taut no strapping should be required. However should bulging occur, UNI must be restrained from bulging into the drained cavity in accordance with E2/AS1. Use UNI Cap nails to fasten wrap strap over the UNI if required.

UNI Wind Zone Fixing Methods

Stud Centres	Fixings on Studs	Min. Nogs Centre	Perimeter Fixing all Around	Wind Capacity	Fixing on Nogs	Fixings
600	Nails at 450mm centres	800	Nails at 300mm centres	Low/Medium	Nails at centre	25mm nails with 32mm washer
450	Nails at 500mm centres	800	Nails at 300mm centres	Low/Medium	Nails at centre	25mm nails with 32mm washer
400	Nails at 450mm centres	800	Nails at 300mm centres	Low/Medium	Nails at centre	25mm nails with 32mm washer
600	Nails at 300mm centres	800	Nails at 300mm centres	High	Nails at centre	25mm nails with 32mm washer
450	Nails at 350mm centres	800	Nails at 300mm centres	High	Nails at centre	25mm nails with 32mm washer
400	Nails at 300mm centres	800	Nails at 300mm centres	High	Nails at centre	25mm nails with 32mm washer
400	Nails at 250mm centres	800	Nails at 300mm centres	Low/Medium High/Very High	Nails at centre	25mm nails with 32mm washer
300	Nails at 300mm centres	800	Nails at 300mm centres	Low/Medium High/Very High	Nails at centre	25mm nails with 32mm washer
300	Nails at 250mm centres	800	Nails at 300mm centres	Low/Medium High/Very High/ Extra High	Nails at centre	25mm nails with 32mm washer
300, 400 450, 600	Battens with Nails at 400mm centres	800	Batten with Nails at 300mm centres	Low/Medium High/Very High/ Extra High	Batten with Nails at 400mm centres (2 nails minimum)	Batten - 20x45 SG8 Nails - 60x2.8 ring shank galvanised



- **Joinery Openings** - The wall underlay should be run over openings and left covered until windows and doors are ready to be installed. Openings are formed in the membrane by cutting diagonal from each corner of the penetration. The flaps of the cut membrane must be folded inside the opening and stapled to the penetration framing. Excess underlay may be cut off flush with the internal face of the wall frame.
- **Penetrations** - Pipe or service penetrations must be sealed with Masons Penetration Seals.
- **Fire** - Uni is not classified as Fire Retardant underlay to NZS 2295 and must therefore be covered with suitable wall lining to any occupied areas.

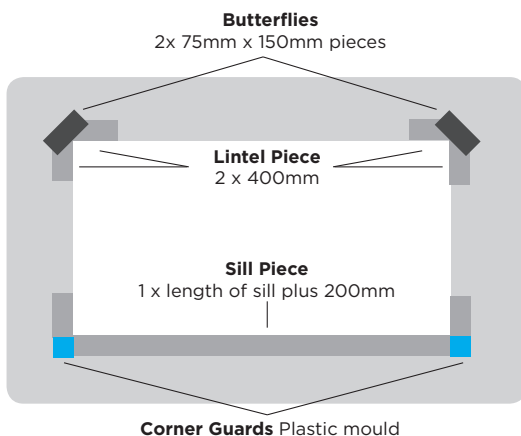
ALL wind zones in accordance with the requirements of Acceptable Solution E2/AS1, Paragraph 9.1.7(e). See supplementary information later in this document

- Alternatively for wind zones Low to High head flashings may be sealed to UNI using UNI Seam Tape 60mm or 40 Below Platinum or Flex pressed in well with a plastic scraper.
- **Temporary weather protection** - All joins must be sealed using Masons UNI Seam Tape or the self adhesive strip on the reverse of UNI soffit roll. 75mm 40 Below Platinum or Flex may also be used. The roof cladding and soffit linings must be installed. The timber wall framing must have a maximum moisture content as specified by the internal lining system at the time of the insulation installation and internal lining application.

Head Flashings

- UNI is to be installed with a second layer over head flashings. This is the preferred and recommend detail for

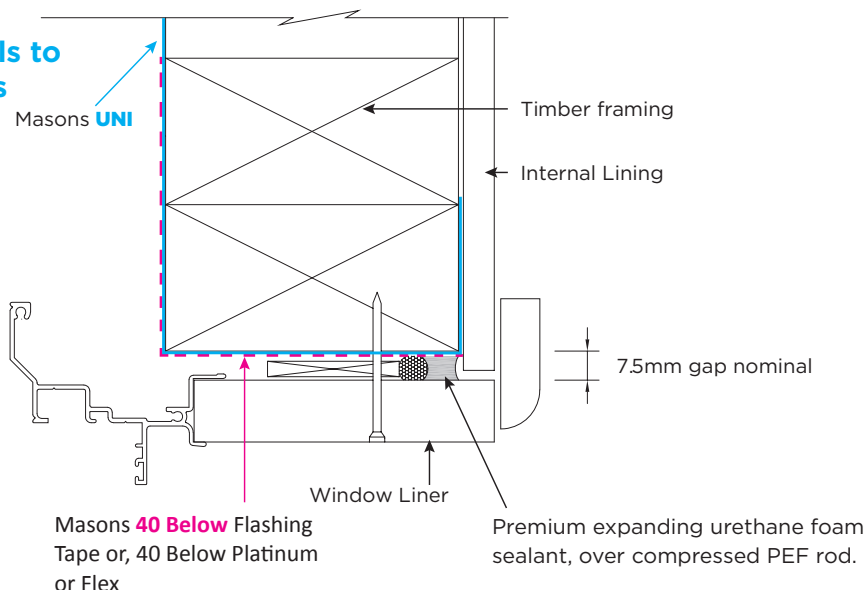
4



- Use Masons 40 Below and Masons UNI Seam Tape with the UNI Flexible Air Barrier.
- Particular attention must be paid to the installation of the sill and jamb tapes around window and door openings to ensure all exposed timber wall framing in the opening is protected.
- Should any lifting of 40 below tape occur staple back using the minimum number of staples required to secure the tape. Do not use Masons UNI Seam Tape to flash window openings, do not staple or penetrate Masons UNI Seam Tape.
- Refer to the 40Below Product installation instructions for more details.
- The Window and door joinery must be installed complete with head flashings and air seals. See detail drawing below.
- Where plastic DPC is installed around joinery as secondary water proofing such as for brick veneer work, fasten the DPC to the frame over the UNI using UNI fasteners.

5

Installing Air Seals to Joinery Openings





UNI/UNI may be fixed to the frame using a combination of UNI cap nails and TIMBER BATTENS.

Timber battens have been tested and developed as a cost effective and robust way to secure UNI to the frames. It is strongest possible method to install the UNI FAB and when used in conjunction with UNI CAP Nails to tack and reinforce the install (horizontal batten) it is efficient and weathertight. The fixing schedule has been developed by a structural engineer.

Plastic vented battens, polystyrene battens and fibre cement battens have not been tested when developing the UNI fixings system and are not covered by either the Codemark or Masons Warranty with regard to early enclosure temporary weather protection for 90 days allowing interior works to continue inside without the cladding in place.

Cavity Battens for Horizontal weather board.

Fix UNI to the frames at the plates and noggs/dwangs using UNI Cap nails. Ensure UNI is pulled tight and level. Avoid fixing cap nails to the studs. The wrap is now tacked to the frames.

Ensure who ever fits the insulation does not over press it into the framing bellying the wrap into the cavity. This may result in a failed cavity inspection. If in doubt restrain the wrap before fitting battens.

Fit solid continuous timber batten vertically to each stud and fix firmly with batten nails at the fixing centres as shown in the UNI/UNI installation Instructions for the relevant wind zone.

Horizontal battens for vertical weather board.

Fix UNI to the frames at the plates and studs using UNI Cap nails. Ensure UNI is pulled tight and level.

Measure and mark where the Horizontal Timber Ventilated Batten will be positioned.

Fit UNI cap nails between the runs of horizontal battens at the correct fixing intervals for the relevant wind zone.

Fit Horizontal Timber Ventilated Batten using batten nails at the correct fixing intervals as shown in the UNI/UNI installation Instructions for the relevant wind zone.

IMPORTANT: Nail only through the solid part of the ventilated timber batten. Any nails fired through the ventilated – checked out part of the batten will not seal against the UNI and will leak.

Avoid using staples - except inside the joinery opening where they will be covered by flashing tape. Any staple must be covered by flashing tape, a cap nail or the solid portion of a nailed-on timber batten.

Warranty

UNI is covered by Masons warranty and will be weathertight when installed correctly with Timber battens per the above over, and as per NZ 3604 - E2 AS1 regarding timber cavity battens.



Repairs & Replacement

It is important that the site foreman checks UNI regularly for damage or tears to UNI. Any damaged areas of UNI Flexible Air Barrier, such as tears, holes or gaps around service penetrations, must be repaired immediately.

Damaged areas can be repaired by covering with new material lapping the damaged area by at least 150 mm and taping using Masons UNI Seam Tape, or by taping small tears using Masons UNI Seam Tape.

Masons UNI is not to be exposed to the weather or ultra-violet light for a total of more than 90 days. After 90 days exposure product should be replaced. Exposure past 90 days will affect warranty. Seek advice from Masons if UNI is going to be exposed past 90 days.

Handling & Storage

Masons UNI whether on or off site should:

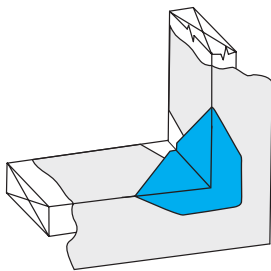
- Be stored on end under a cover, in a clean and dry area
- Do not crush the rolls
- The rolls must be protected from damage
- When fixing the product in windy conditions, care must be taken due to the large sail area created by wide roll widths

View installation video at: masons.nz or scan this code



IMPORTANT: All tapes must be pressed in well onto dry clean wrap with a plastic scraper for best adhesion

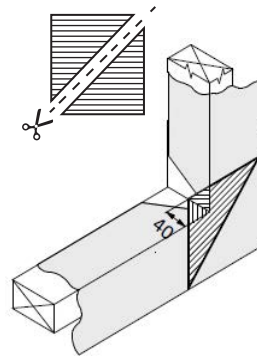
Window Sill Installation Instructions



Preferred Method

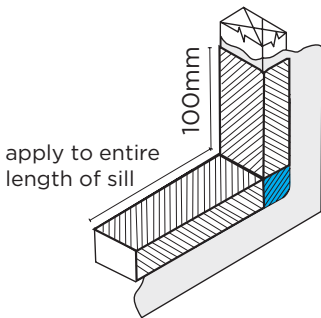
1. Corner Guard *option 1*

Place the *Masons Corner Guard* over the UNI wrap and into the **bottom** corners of the window or door sill, staple to the jamb. With steel frames use double sided tape to attach the *Corner Guard* to the metal.



1. Corner Guard *option 2*

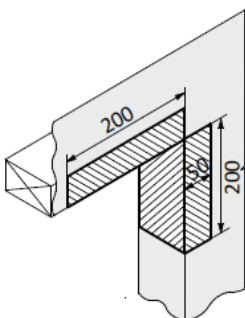
Cut a 150mm square of *Flashing Tape* into two equal triangular pieces. Install these at the **bottom** corners of the frame opening. The triangle needs to reach 40mm in from the extreme end of the window sill. With the remainder overlapping the UNI Wrap.



2. Sill Guard

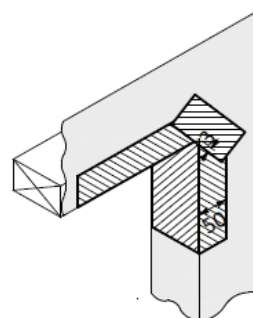
- Install sill tape flush with the interior face of the opening. Apply along entire length of sill, continue up each jamb with a minimum of 100mm
- IMPORTANT:** Press tape firmly into the corner over the Corner Guard first, then fold around onto the frame face.
- Fold remainder *Flashing Tape* against outer face of frame/building. Smooth out all creases & press firmly for good adhesion.

Window Head Installation



1. Lintel Piece

Install Lintel pieces on top corners of opening, 200mm along the lintel and 200mm down the jamb. Slit at each corner & fold onto outer face of building wrap (at least 50mm).



2. Butterflies

To create a seal at corner junction, Install butterflies at 45° across the corner of head/jamb.

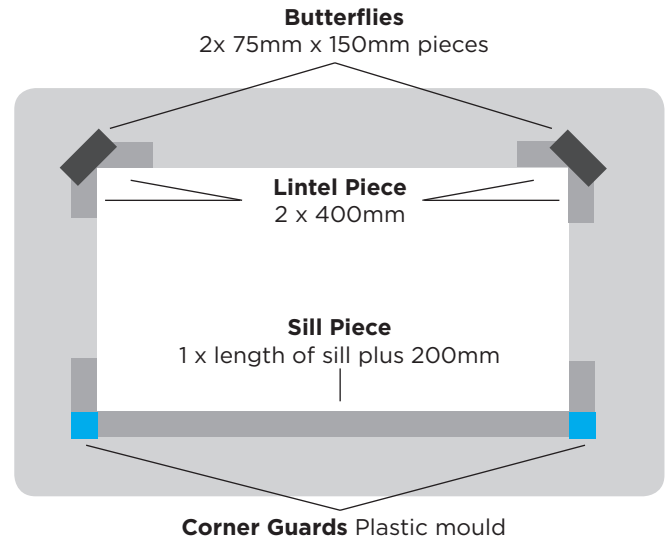


Window Head Flashing Installation

A second layer of UNI over the head flashings per E2/AS 1 is to be installed for all wind zones. Refer to window and cladding details for specific application.

If head flashings are taped to UNI use Masons Seam Tape or Masons 40 Below Platinum or Flex pressed in well with a plastic scraper or similar tool. Only use in Low to High wind zones, Masons UNI Seam Tape 60mm or Masons 40 Below Platinum or Flex must be used. This is not the preferred detail.

To ensure maximum adhesion of the tape, make sure the substrate surface is clean, dry and free from any dust or other contaminants.



UNI Head Flashing Intersection

Cavity construction

1. Fit a second layer of UNI over the primary UNI layer.
2. Run this up over the top plate, ribbon board or under the interstory flashing or other logical vertical 'break' in the cladding, drape the secondary layer of UNI down over the head flashing upstand. Optionally the draped over UNI layer may be sealed to the head flashing up stand with UNI FAB Seam tape, or Masons 40 Below Platinum or Flex. Apply to dry wrap/head flashing - press in well with a plastic scraper. Always ensure water is shed 'shingle fashion' or gavity lapped.
3. Fit the cavity closer above the head flashing upstand.
4. Run the UNI 100-150mm out each side of the joinery jamb. Secure the additional layer of UNI with UNI cap nails to the framing.

This is the preferred detail for all wind zones. Its is mandatory for Very High and Extra High Wind Zones with the UNI FAB system

Fig 1.

Run a second layer of UNI over the primary layer of UNI draped over the headflashing. Stylised detail only.

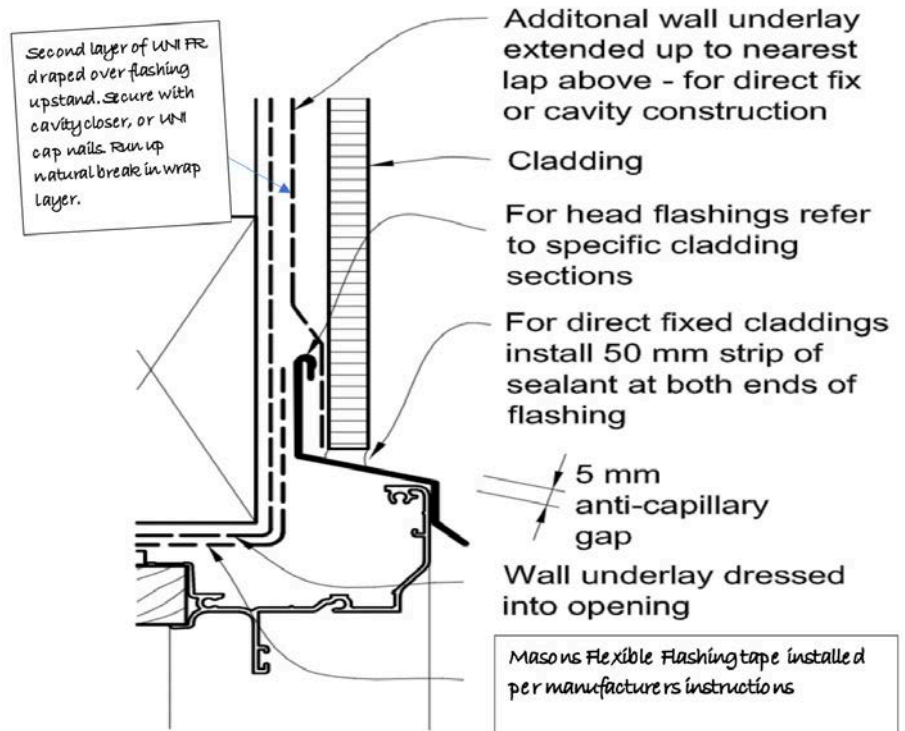
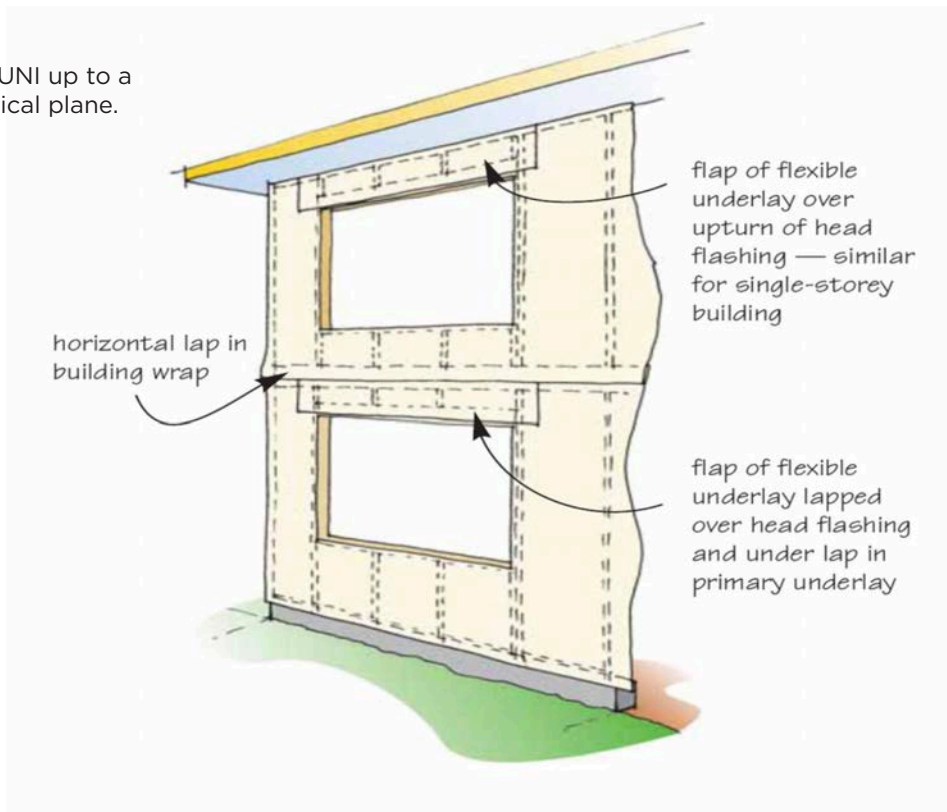




Fig 2.

Run the second flap of UNI up to a logical break in the vertical plane. Stylised detail only.



Alternative detail. Head Flashings taped to UNI FAB with flexible flashing tape. Per E2/AS1

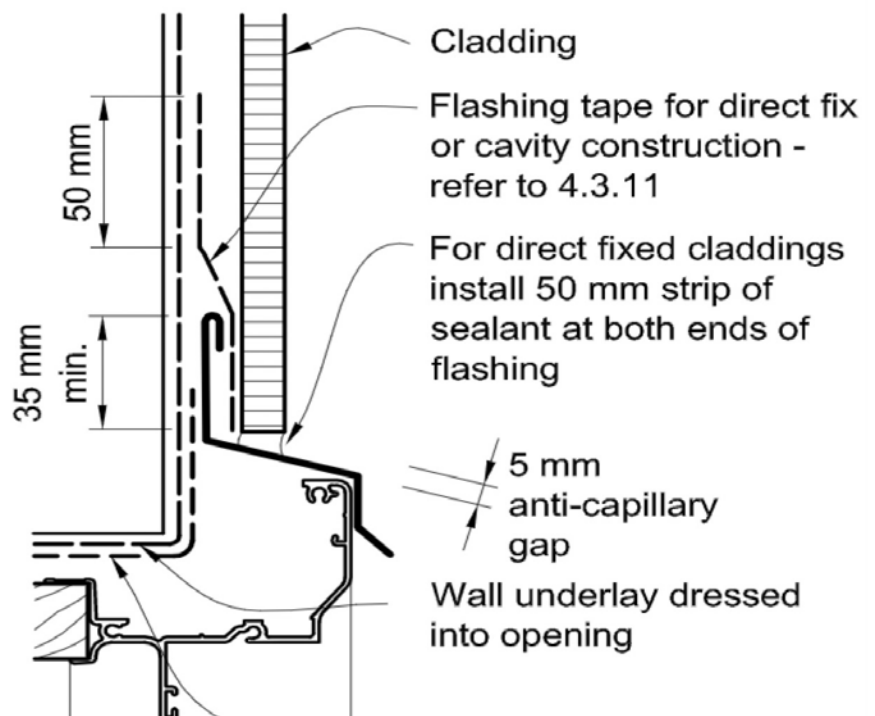
This is not the preferred method for fixing the head flashings with UNI. Not recommended for VHWZ and EHWZ when using as a 90-day temporary weather protection system.

Use Masons UNI FAB Seam and Repair Tape or a 150m section of 40 Below, 40 Below Platinum or Flex. These MUST be applied and pressed in well to dry clean wrap with plastic scraper.



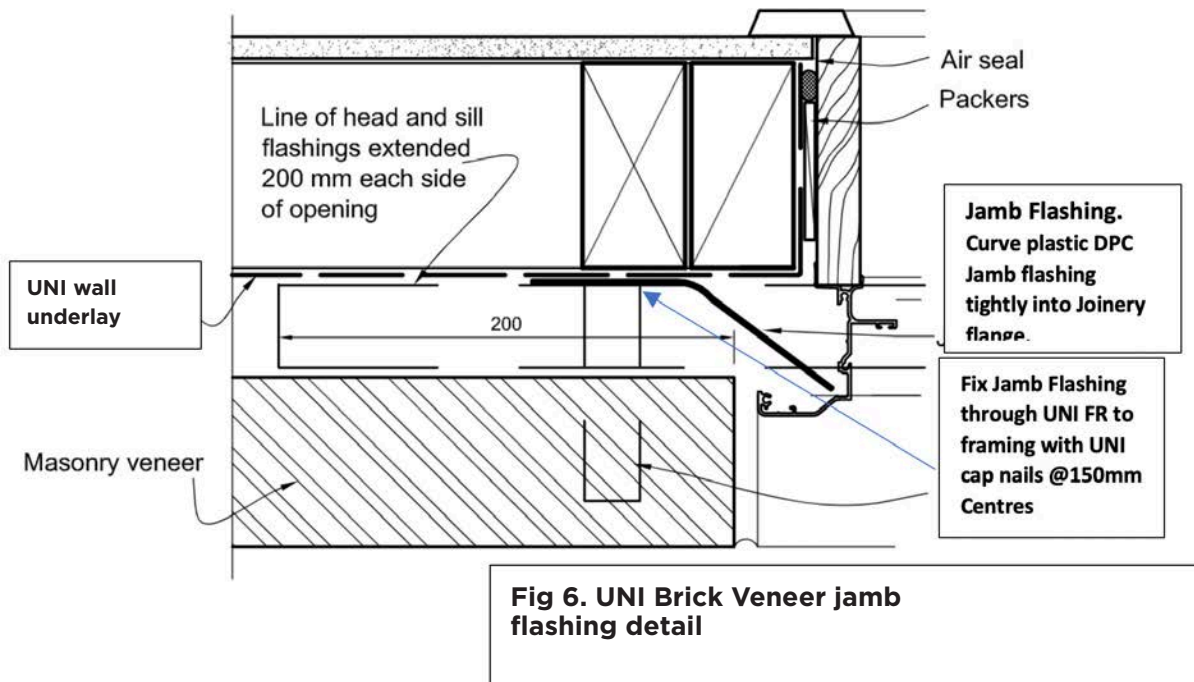
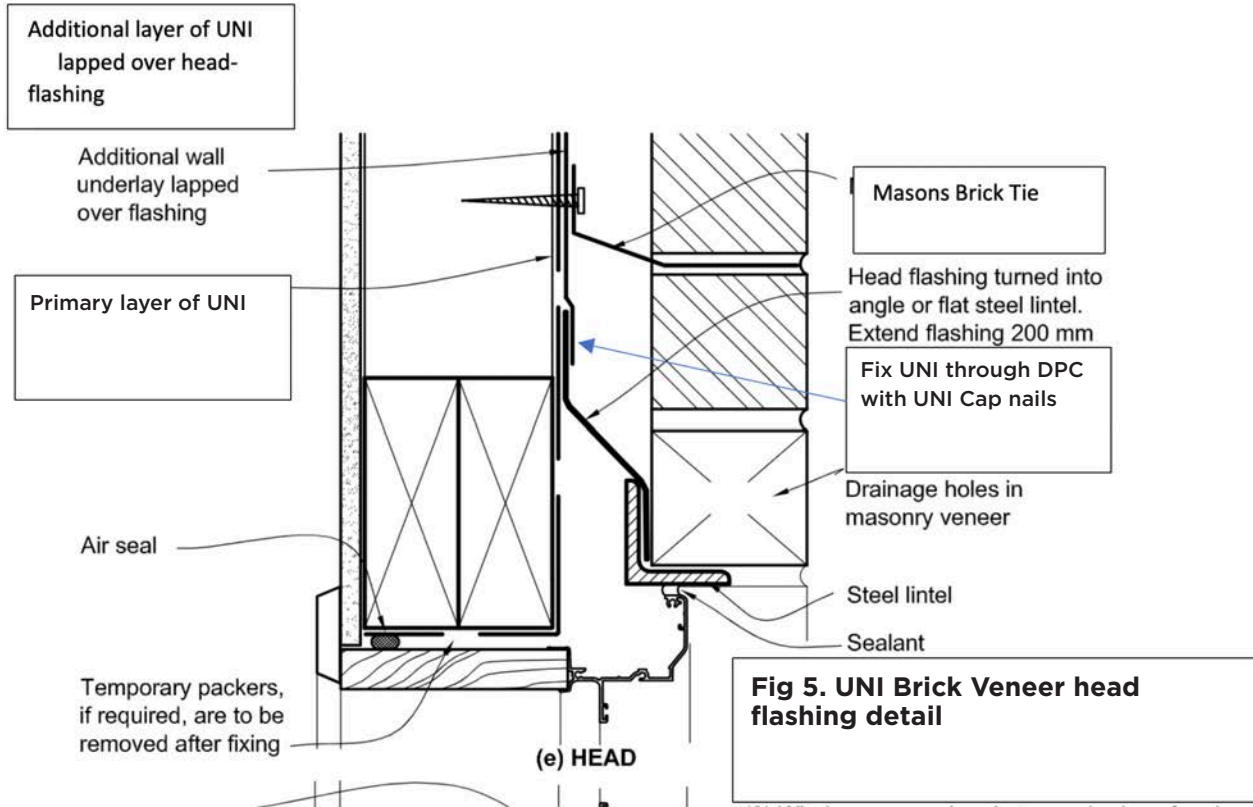
Fig 3.

Flexible flashing tape to seal head flashing to UNI (per E2/AS1) in up to High Wind Zones. Stylised detail only.





Head and Jamb Details for UNI - Brick Veneer. Preferred all wind zones. Mandatory VH & Ex HWZ's





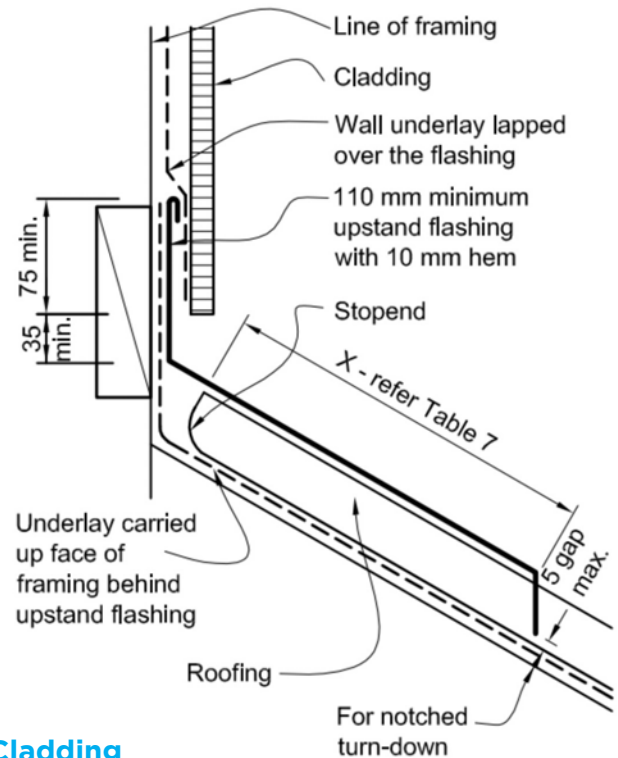
UNI - Apron, Change of Pitch, Inter Story and all Similar Intersections.

1. Drape UNI over the upstand of apron, change of pitch or inter story flashings per E2/AS1
2. If necessary secure the UNI to the flashing upstand with UNI FAB seam tape, Masons 40 below ultra-sticky or 40 Below Platinum or Flex. MUST be applied to dry wrap and metal and pressed in well with a plastic scraper.
3. Fasten UNI to the frame with UNI Cap nails offset from the studs, or cavity closer.

Fig 7 & 8.

Drape UNI over the upstand of the Apron, change of pitch, inter-story and similar flashings.

Representative images only



Temporary Weather Protection for Joinery - No Cladding

Cavity construction.

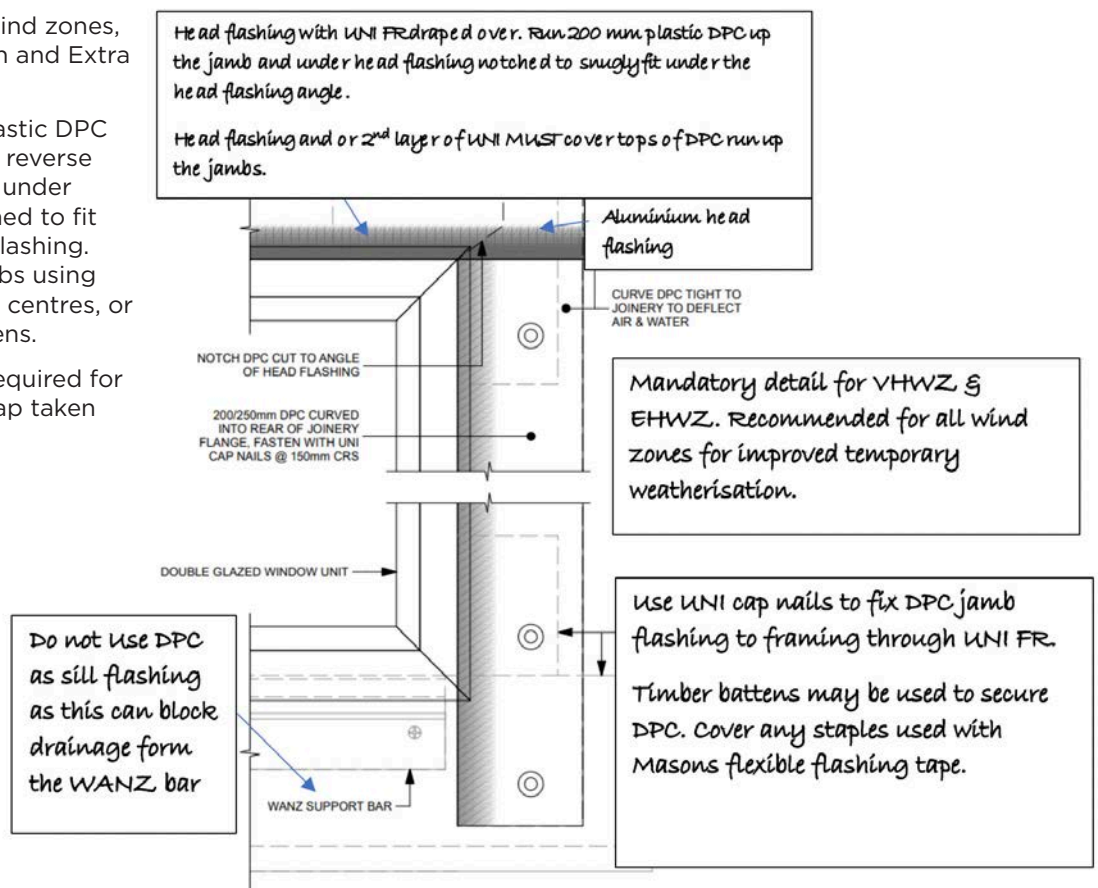
Recommended for all wind zones, mandatory for Very high and Extra high wind zones.

1, Jambs. Fit 200mm plastic DPC curved and fit tightly to reverse of joinery flange run up under the head flashing, notched to fit snugly under the head flashing. Fix to studs next to jambs using UNI Cap nails at 150mm centres, or continuous timber battens.

2, Fit head flashing as required for UNI system with the wrap taken over the head flashing.

Fig 9.

Weather protection for joinery - No cladding in place UNI FAB system, 20mm cavity.





Date: _____

Consent # _____ (If known)

Owner/Applicant: _____

Architect/Engineer: _____

Consent Address: _____

Name of Builder/Installer: _____

- | | |
|---|----------|
| 1. Framing installed as per designer's drawings | YES / NO |
| 2. UNI Flexible Air Barrier installed with all seams and edges sealed against moisture and air ingress as per the UNI Installation Instructions | YES / NO |
| 3. All pipe and service penetrations sealed as per UNI Installation Instructions | YES / NO |
| 4. Are fixing caps nail/washer or screws/washer installed as per UNI Installation Instructions | YES / NO |
| 5. Battens installed as per UNI Installation Instructions | YES / NO |
| 6. All Window and Door flashings and air sealing carried out as per Manufacturers Specifications | YES / NO |
| 7. Has the underlay been exposed to the elements for more than 90 days | YES / NO |
| 8. Any tears or penetrations been repaired as per UNI Installation Instructions | YES / NO |
| 10. Checked regularly during build by site supervisor | YES / NO |

Name of LBP/Builder: _____

Signature of LBP/Builder _____

Comments: _____

