PALLISIDE

the **smart choice** in weatherboards

PALLISIDE DRAINED CAVITY INSTALLATION GUIDE

may 2015

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CAD details, which support the information contained in this document, are available to be downloaded from the Palliside website **(www.palliside.co.nz/CAD).**
A table listing these details can also be found under Section 3 of the Palliside Technical Guide. Refer to the back of this document for Dynex Extrusions Ltd contact details.

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INSTALLATION PREPARATION AND OVERVIEW

1.

1.1 Storage and Handling

Weatherboards must be laid flat in their original packaging (or otherwise covered) on bearers at 600mm centres. Do not lay other materials on top. Incorrect storage technique can result in buckling or distortion.

Weatherboards come in packs of four lengths. To remove weatherboards from the pack, cut through the full length of sleeve (outside boards in pack face inwards) and lift each weatherboard out.

Where possible it is recommended that two people carry out handling and fixing of Palliside.

Note:

When handling Palliside weatherboard and accessories, care should be taken to ensure hands are free from sunscreen residue, which if comes into contact with the board may leave a visible print or mark.

1.2 Temperature

Additional care should be taken when fixing Palliside at temperature extremes.
Where possible installation should be carried out in a temperature range of between 10°C and 25°C.

In colder temperatures, care should also be taken when cutting and nailing the product.
For example, it may be necessary to pre-drill the nail holes in each weatherboard.

1.3 Setting Out

The effective cover height of a Palliside weatherboard is 260mm nominal.[1]

To work out the actual cover height of each course of weatherboard, remove 2 lengths from the packet and place them together measuring from the bottom of the lower board to the base of the second and use this as a guide for board courses. Make up a storey rod using this cover height to use as a guide.

A storey rod can be a length of timber or other material with the cover height for each course of weatherboard marked out on the length. This can be used to work out where the weatherboard will finish at head flashing and soffit height, as well as helping ensure corner alignment is maintained throughout the installation.

1. Weatherboard cover heights do not vary significantly from batch to batch.

1.4 Tools Required

Palliside requires no special tools and can be cut and nailed like timber using a wide variety of standard building equipment including circular saws, jig saws and other power tools.

1.4.1 Cutting

Palliside weatherboards and trims can be cut using any of the following methods:

- **A standard hand saw or tenon saw.**
- **A circular saw or drop saw, using a fine-toothed blade (minimum 20 teeth).**
- **A jigsaw, multitool, or router (when cutting a straight horizontal line when the head flashing falls on part of the board profile, or for cutting utility holes, etc).**

1.4.2 Hole Forming

When cutting or drilling holes for utility pipes, standard hole-forming attachments can be used. Care should be taken not to force the jigsaw or drill too hard or quickly.

1.4.3 At the Base of Openings

Mark the board in place, remove and cut to suit using a jigsaw. An alternative to this is to cut down either side to the score line using a saw, use a utility knife to score along the length of the weatherboard and then snap the section out by hand.

1.4.4 At the Head of Joinery

For best results a router (or jigsaw with a guide) can be used when cutting head flashing detail into the weatherboard. Taper the cut to ensure the back of the board can not be easily seen.

Note:

Surfaces of circular saws must be free from burrs prior to working with Palliside and remember to always adopt standard safety precautions when using power tools to cut Palliside.

1.5 Fixings

Fixings for Palliside (timber frame)			
Type of Fixing	Installation Method Drained Cavity		
	Over Structurally Fixed Battens	Over Non-Structurally Fixed Battens	
Windzone	*Up to and Including VH*	*Up to and Including VH*	*EH and above*
Manual Nailing	The HDG 40mm x 2.5mm Palliside nail must be used (fixed at maximum 600mm centres). The Palliside nail has been specially designed with a smaller (5mm) head. 5 kg boxes of Palliside nails are available as part of the standard range of accessories.	60mm x 2.8mm HDG flat head nails must be used (fixed at maximum 600mm centres). Such nails can be sourced from your preferred Building Merchant.	60mm x 3.15mm **Annular Groove** type HDG flat head nails must be used (fixed at maximum 400mm centres). Such nails can be sourced from your preferred Building Merchant.
Impulse Driven Nails A nailing tool such as a Paslode finishing nailer can be used to fix Palliside weatherboards	Paslode ND50mm SS304 grade brads, or equivalent (2 per stud, skewed, at a maximum spacing of 600mm centres). *(ITW/Paslode product code B20054)*	Paslode ND60mm SS304 grade brads, or equivalent (2 per stud, skewed, at a maximum spacing of 600mm centres). *(ITW/Paslode product code B20054)*	n/a
Screws Palliside may be fixed using screws	8-gauge x 32mm SS304 grade countersunk square drive wood screws or equivalent. *(MSL/Fortness Code SFQX 832)*	8-gauge x 50mm SS304 grade countersunk square drive wood screws or equivalent. *(MSL/Fortress Code SFQX850)*	8-gauge x 65mm SS304 grade countersunk square drive wood screws or equivalent. *(MSL/Fortress Code SFQX865)*
Longer Length Boards For custom made lengths longer than 6.3m	The HDG 40mm x 2.8mm **Annular Groove** nail must be used (fixed at maximum 600mm centres).	The HDG 60mm x 2.8mm **Annular Groove** nail must be used (fixed at maximum 600mm centres).	60mm x 3.15mm **Annular Groove** type HDG flat head nails must be used (fixed at maximum 400mm centres). Such nails can be sourced from your preferred Building Merchant.

1.5.1 Summary on Fixings

1.5.1.1 Use of Standard Palliside Nails Over a Drained Cavity

The standard 40mm x 2.5mm Palliside nail can be used when nailing standard 6.3m length Palliside to a structural batten system on wind zones up to and including VH (refer to Palliside Technical Guide, paragraph 2.12.3).

1.5.1.2 Requirement for Stainless Steel in Sea Spray Zones

Coastal locations can be very corrosive to fasteners, especially locations within distances of up to 500m from the sea including harbours, or 100m from tidal estuaries and sheltered inlets, and otherwise as shown in NZS 3604 Figure 4.2. These coastal locations are defined in NZS 3604 as Zone D. However due to the unique hidden nailing system and anti-capillary groove, there is no requirement to use stainless steel nails when fixing Palliside in Zone D locations as specified in NZS 3604.

The specification of Class 4 fixings in accordance with AS 3566 must be used, or minimum SS304 stainless in the absence of a HDG option.

In these locations, any fixings that are to be exposed and not hidden by the weatherboard interlock; must be a minimum SS316 grade.

1.5.1.3 Microclimatic Conditions

Microclimatic conditions, including geothermal hot spots, industrial contamination and corrosive atmospheres, and contamination from agricultural chemicals or fertilisers can convert mildly corrosive atmosphere into aggressive environments for fasteners. The fixing of Palliside weatherboards in areas subject to microclimatic conditions requires specific design in accordance with NZS 3604 Paragraph 4.2.4.

1.5.1.4 Curved Walls

As covered in the Palliside Technical Guide (paragraph 2.10.2) when Palliside is to be installed to a curved wall, the weatherboard needs to be screwed in place using 8-gauge SS304 grade countersunk square drive screw (MSL/Fortress Code SFQX832) or equivalent.

1.5.1.5 Steel Frames

As steel framed construction is a specific design, the manufacturer of the steel frame should be consulted to ensure any fixing selected is suitable, however as a guide the minimum specification should be a self-drilling Class 4 countersunk square drive screw or equivalent. The screw shall be a minimum 6-gauge and have a minimum head width of 5.5mm. The length of the fixing must cater for the thickness of the cavity batten and any thermal break plus a minimum 10mm penetration through the frame.
Refer to the Palliside website (www.palliside.co.nz/steelframe).

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2. INSTALLATION PROCEDURE

Pre-line Checklist

- Has the correct type of building underlay been selected and installed correctly?
- Has flashing tape been applied to the base of the sill and to all corners of windows and door openings?
- Is the moisture content of the timber 18% or less?
- Is the timber frame straight and studs inline?

2.1 Installation of Cavity Battens

- **All vertical battens must be installed at a maximum 600mm centres.**
- **A continuous horizontal batten is permissible at the soffit only.**
- **Vertical battens on external corners should be offset slightly by 10mm to allow a continuous air gap behind the Palliside corner base flashing.**
- **Horizontal spacers are required to allow Palliside horizontal starting trims to be fixed at the required 300mm centres providing they are:**
    - A maximum 100mm in length.
    - Installed with a minimum slope of 5°.
    - Spaced at least 100mm away from any vertical batten or edge of window opening.

2.1.1 Consideration of Window Head Flashings

Due to the prefinished and modular nature of Palliside, the weatherboard system has been developed and tested using its own 2-part head flashing installed in front of the cavity, not behind (refer CAD detail DC01).

To validate this method the builder/cladding installer must first apply a window head closer flashing over the building underlay, taped in the same way as a conventional head flashing (and as shown in CAD detail DC39).

This method makes the installation of the weatherboard around the head flashing areas achievable particularly when the head flashing cut occurs part way up the board profile or when there is more than one window head along the length.

The head flashing must be installed to ensure that the back of the base piece engages the flexible lip of the window head closer between the cavity batten and itself.

Alternatively, the use of the more conventional aluminium one part head flashing is acceptable (installed to the back of the cavity and taped to the building underlay as shown in CAD detail DC38) though this option may result in additional joiners being needed at the head flashing level to enable the weatherboard to be fitted around the head flashing particularly where there is multiple windows along the length of the weatherboard.

2.1.2 Window Head Closer Flashing

The window head closer flashing is installed at the head of all openings (allowing for the head flashing to be installed in front of the cavity batten rather than behind), but is not required when conventional one part head flashings are to be used.

It needs to be cut and installed a minimum 50mm past the external face of the battens either side of the opening (the layout of battens should take this into consideration).

The back of the cavity closer flashing must be taped to the building underlay and battens installed above the cavity closer. Packers at 300mm centres should be installed to enable the head flashing to be fixed correctly.

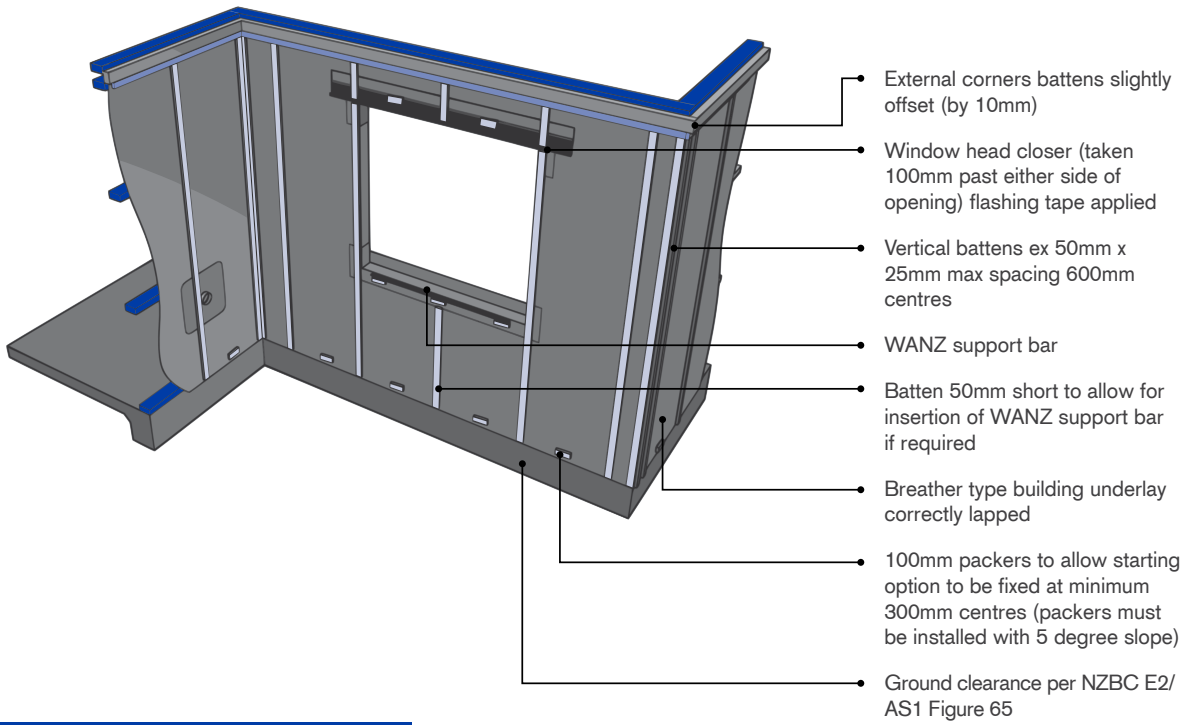


DIAGRAM A – Cavity Batten Layout

Structurally fixed batten equals MSG 8 framing grade H3.1 ex 50mm x 25mm fixed with 60mm x 2.8mm nails at 500mm centres (this allows for standard Palliside nails to be used instead of 60mm x 2.8mm).

2.1.3 WANZ Support Bars

The WANZ Support bar is installed at the base of openings to help improve the support of aluminium joinery.

The support bar is installed ensuring that it is maximum 100mm short of either side of the side of the opening.

2.2 Installation of Base Accessories (Starting Options)

Before the installation of weatherboards and joinery commences, all base accessories need to be fixed in place.

This should occur after the straightening of frame and installation of building underlay (and after the installation of cavity battens).

Base accessories include all starting pieces, all corner base pieces, and the two-part jointer base piece[1].

- **Fix all base accessories at 300mm centres.**
- **Use a chalk line and level to ensure that selected horizontal starting options are fixed level. This is particularly crucial with starter strip.**
- **Starting accessories should also be left slightly short of the selected corner option base pieces and vertical trims, not overlapped.**
- **Mitre trims where required.**

2.2.1 Starter Strip

Palliside starter strip should be installed so there is a minimum 50mm weatherboard overhang in accordance with the requirements of the New Zealand Building Code (refer Diagram B). **Palliside cavity vermin tray** should be attached to the starter strip prior to being installed to the battens. Alternatively, standard cavity base closures may be used instead of the cavity vermin tray.

- **Starter strip can be used when installing Palliside above joinery between brick veneer (refer CAD detail DC31)[2].**
- **This accessory cannot be used when starting with a part board, or along raked areas.**

2.2.2 Cavity Vermin Tray

The cavity vermin tray clips into the base of the starter strip or can be glued to the back of the desired starting option.

The cavity vermin tray meets the requirement of E2/AS1 which requires a minimum opening area of 1000mm^2 per lineal metre of wall and must be installed at the base of the cladding, and in accordance with NZBC Acceptable Solution E2/AS1, where a gap is greater than 4mm wide.

1. If the 2-part jointer option is selected.
2. CAD detail can be found on the Palliside website (www.palliside.co.nz/CAD).

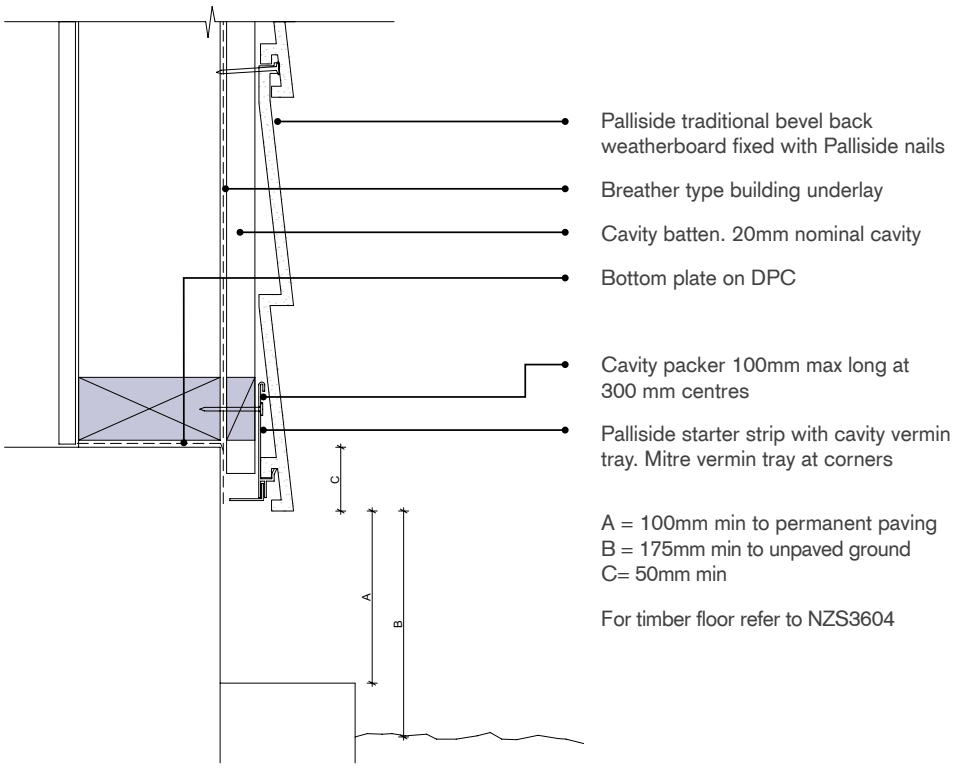


DIAGRAM B – Starter Strip

2.2.3 One Part Channel Trim

When can One Part Channel be used with the Rusticated Profile Weatherboard?

The one part channel can be used as a universal starting option, around the apron of top storeys that contain raked/sloped rooflines and/or different starting heights or as a vertical trim abutting another cladding.

When can One Part Channel be used with the Traditional Profile Weatherboard?

The one part channel can be used as a vertical trim abutting another cladding but is not ideally suited as a starting option for horizontal part board starts and raked/sloped rooflines[3].

When installed on a horizontal, 5mm drain holes must be drilled at maximum 600mm centres.

3. One part channel is suitable for use as an alternative to the Palliside window scriber when installing over a drained cavity. This trim assists with the location of the moulded end plugs installed into the weatherboard gaps.

2.2.4 2-Part Channel

When can 2-Part Channel be used with the Rusticated Profile Weatherboard?

The 2-part channel trim can be used as a universal finishing option for both gable ends and horizontal finishes where the weatherboard does not finish on a scallop, around the apron of top storeys that contain raked/sloped rooflines and/or different starting heights or as a vertical trim abutting another cladding[4].

When can 2-Part Channel be used with the Traditional Profile Weatherboard?

The 2-part channel trim can be used as a universal finishing option for both gable ends (but not horizontal finishes) around the apron of top storeys that contain raked/sloped rooflines and as a vertical trim abutting another cladding[4].

2.3 Corner Options

All base pieces of corner options must be installed **prior** to the installation of the weatherboard and must be fixed at 300mm centres.

It is permissible to join base pieces if required. (When joining a 2 piece option, stagger the base and cap join).

When installing over a drained cavity, vertical battens on corners should be offset slightly to allow airflow behind the base piece.

2.3.1 90° External Corner Soaker Option

When using the Palliside corner soaker option the correct shaped base piece must be installed prior to the installation of weatherboards (refer Diagram C.1).

Once the weatherboards have been installed to one wall, continue on the second wall clipping in place the corner soaker cap pieces (which match the shape of the Palliside board). Ensure that the soakers line up tidily. If there is difficulty fitting these in place or gaps are prevalent to one side, check to ensure that weatherboards are aligned correctly.

No solvent or sealant is required to hold these in place.

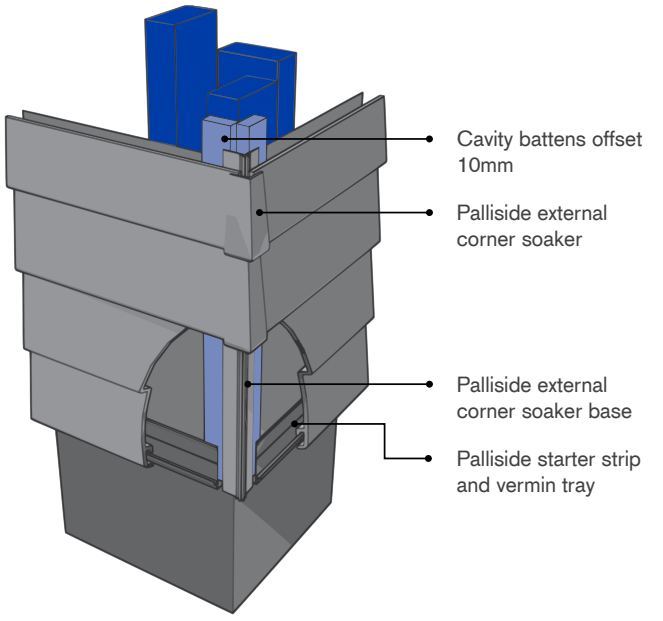


DIAGRAM C.1 – External Corner Soaker

4. Providing that the spine of the flashing is not visible.

2.3.2 90° and 135° Boxed Corners

2-Part Boxed 90° Internal Corner

This 2-part option provides a boxed finish for 90° internal corners.

The female base piece has specially designed location tabs (refer diagram C.2) and must be installed prior to the installation of weatherboards. Once the weatherboards have been installed the male cap piece is pushed in place. This cap features fins to aid the installation of the Palliside moulded end plugs that are inserted into the gaps using solvent cement.

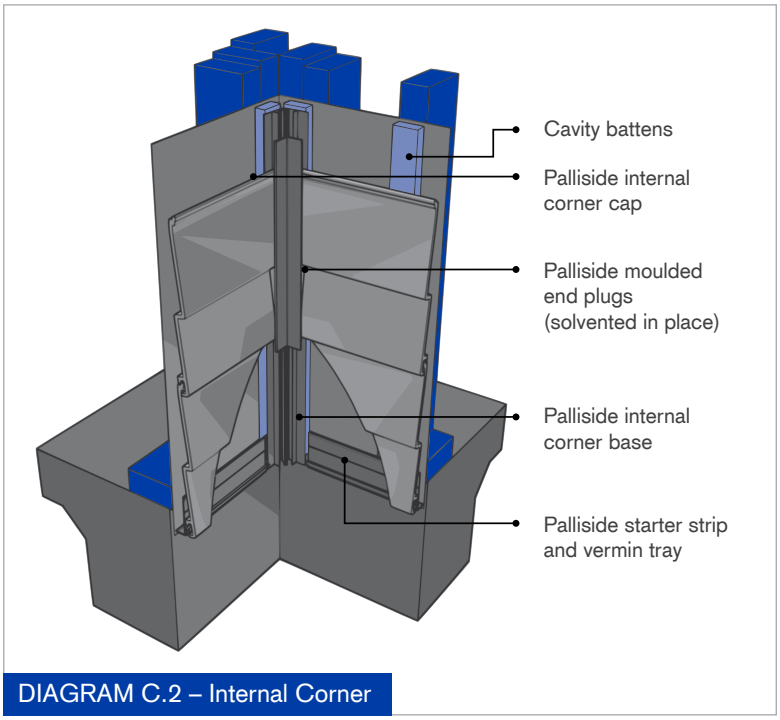


DIAGRAM C.2 – Internal Corner

2-Part Boxed 90° External Corner

When preferred there is an option available for a 90° boxed external corner finish. The female base piece is installed prior to the installation of weatherboards. Once the weatherboards have been installed, the colour matched male cap piece is pushed into place and allowance made for the fitting of Palliside moulded end plugs (refer CAD detail DC07)[5].

2-Part Boxed 135° Corner

The 135° corner can be used for either internal or external corners by reversing the base section, as is commonly required around bay windows. Care should be taken to avoid taking the weatherboards past the clearly marked witness lines of the selected base piece. The cap piece is then fixed in place and allowance made for the Palliside moulded end plugs to be inserted using solvent cement (refer CAD detail DC37)[5].

Note:

Refer 2.9.2 for instructions on using solvent cement.

2.3.3 Non-Standard Corners

A drawing is available showing how to provide custom made back flashings for non standard corners (refer CAD detail DC25)[5].

5. CAD details can be found on the Palliside website (www.palliside.co.nz/CAD).

2.3.4 Timber Boxed Corners

If preferred, timber corner facings may be used to enhance the character of design. A drawing is available demonstrating how to complete this option. A timber scriber can be cut to suit the traditional weatherboard profile or moulded end plugs can be used.

Timber facings should be screwed through the Palliside into the framing behind, sealed and painted to suit (refer CAD detail DC32)[5].

2.4 Jointing Options

2.4.1 Moulded Flat Soakers

Moulded flat soakers that match the shape of the chosen weatherboard profile can be used. When using this option the soakers can be installed off stud, providing that weatherboard joints are staggered (refer Diagram D.1).

When installing weatherboards a 5mm gap must be a left to cover minimal thermal movement. The flat soaker can be inserted later by carefully applying solvent cement to one side of the back of the flat soaker. (Push the soaker in place ensuring that that it engages correctly and that the spine of the soaker is hard against the weatherboard on the solvented side).

There is no base piece required for this option.

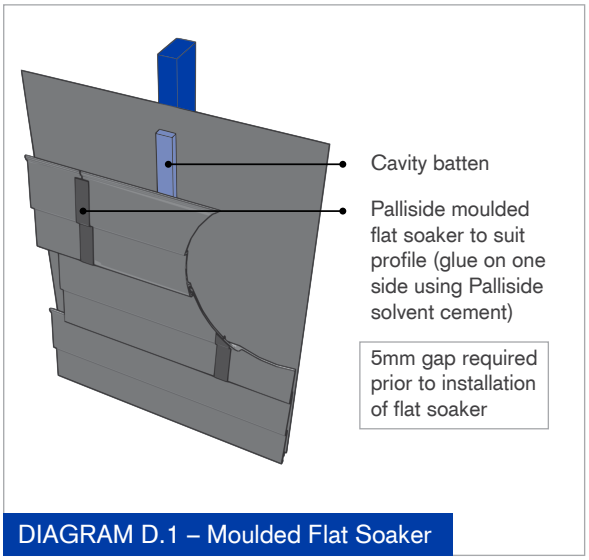


DIAGRAM D.1 – Moulded Flat Soaker

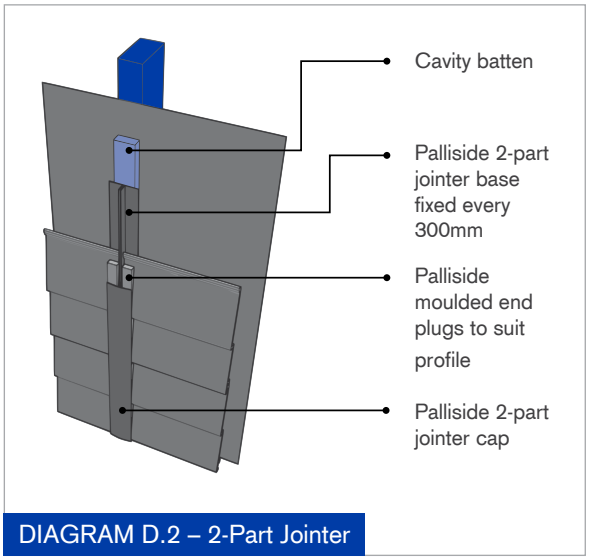


DIAGRAM D.2 – 2-Part Jointer

2.4.2 2-Part Jointer

The female base piece is installed prior to installation of weatherboards and must be fixed in place at maximum 300mm centres. When fixing the weatherboards, leave them 5mm short of the spine of the base piece. The cap is then fixed in place and allowance made for Palliside moulded end plugs to be inserted in place using solvent cement (refer Diagram D.2).

Where possible this jointing option can be strategically placed and covered by a downpipe, however whatever the case the base piece must be install over a stud.

2.5 Installation of Weatherboard

Once starting heights have been confirmed, building underlay correctly lapped and secured, cavity battens installed and base accessories fixed in place, it is time to commence the installation of weatherboards

When nailing Palliside, point the fixing slightly downward (this is to avoid splitting the top of the back part of the weatherboard, which leads to creeping out of level during installation) and nail from one end to the other or from the middle outwards.

Fix at maximum 600mm centres leaving a 5mm[6] gap between weatherboards when joining the boards.

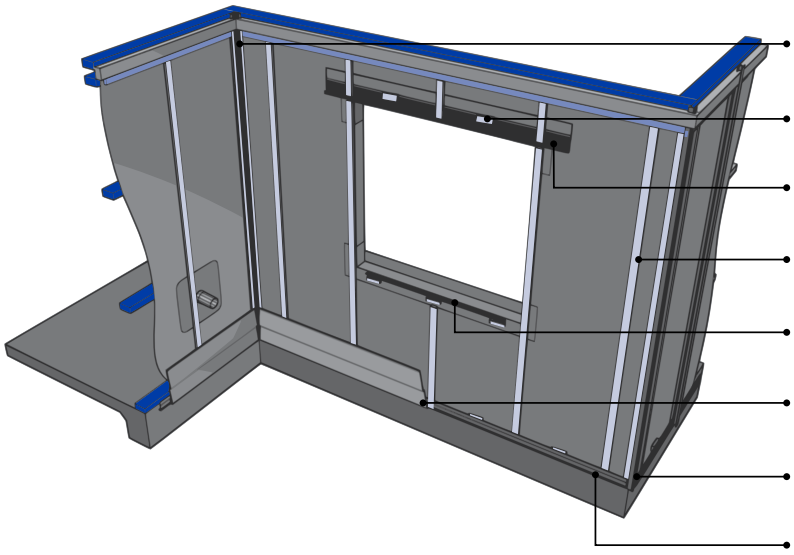


DIAGRAM E – Installation of Weatherboard

6. When using the flat soaker joining option.

Notes:

Ensure Palliside nails, are hit home firmly but not over nailed.

When using brads, use 2 per stud, skewed.

When using screws, ensure that the head of the screw is flush with the fixing groove to ensure the next weatherboard can overlap without interference.

Push into place the next course of boards correctly and continue fixing.

The locking procedure is designed tight to protect from water and dust. If difficulty is experienced interlocking the weatherboards, lay a timber off-cut on the upper edge of the board and gently tap into place with a hammer. Do not hit directly down on top of the weatherboard.

It is advisable to check that the courses of weatherboard remain level using a spirit level and/or storey rod.

2.5.1 Install Weatherboard to Sill Height

Carry out installation of weatherboard as described earlier to the base of the opening, cutting weatherboard around opening to suit (making sure that the cut of the weatherboard is no higher than the sill trimmer plate). Pack out weatherboard at sill trimmer. Fix the cut board at maximum 600mm centres. To ensure that the fixing will be covered place it within 10mm of the top of the cut board. The Palliside window base scriber can also be used to cover these fixings (refer paragraph 2.6.1).

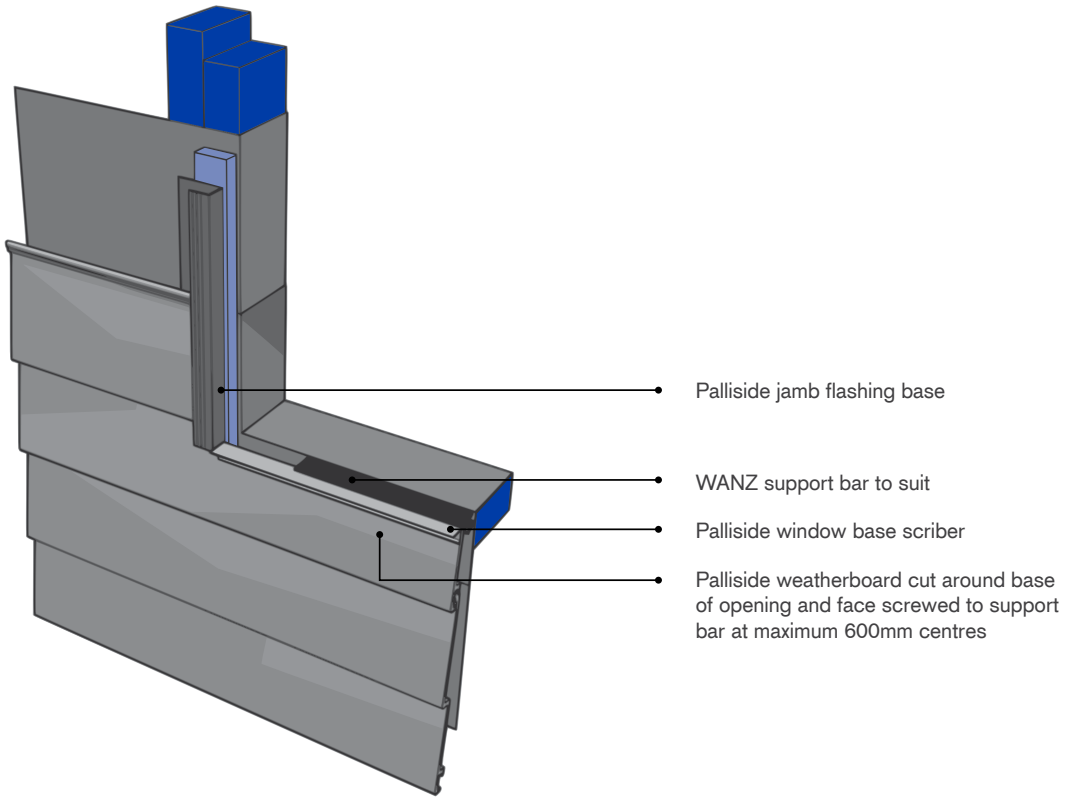


DIAGRAM F – Installation of Weatherboard to Sill Height

2.5.1.1 Packing Out Cut Weatherboards

When starting or finishing on a part board or where a part board finishes below joinery, timber packers should be used to pack out the weatherboard. Board off-cuts (6mm x 2) can often be used for packing out the Rusticated profile (18mm).

Any horizontal cut areas still need to be nailed in place at a maximum 600mm centres. Nail these areas so that the fixing is not visible (eg. covered by the joinery or trim). Fastfix fasteners can be used in some instances, particularly in holding the weatherboard and head flashing in place above windows.

2.5.1.2 Cut Traditional Board Start (Horizontal only)

Due to the tapered nature of the traditional weatherboard profile, starting part way up the face of the weatherboard may make the area unsuitable for using any of the standard starting trims discussed in this document. Therefore particular care needs to be taken with the weatherboard cut.

If desired, the 2-part channel trim can be used by modifying (reducing) the depth of both base and cap (allowing the cap to fit tighter to the base). Due to the modification, solvent cement may be required to glue the cap piece in place. Drain holes still need to be drilled to allow moisture to get out.

2.5.1.3 Installation of Weatherboard Below Doors and Ranch Sliders

Palliside weatherboard must be cut around and continued below doors and ranch sliders. The WANZ support bar also meets the requirement of vermin proofing in this application (refer CAD detail DC44)[7].

2.5.1.4 Use of WANZ Support Bars

When the WANZ support bars are used it is still a requirement to ensure the Palliside board cut is fixed. This can be achieved by using screws to fix the Palliside board cut into the base of the support bar. Packing is still required for this.

2.6 Installation of Window Flashings and Joinery

Ideally windows should not be installed into the openings until the weatherboard has been fixed to the sill height and the jamb base flashings fixed correctly in place.

All aluminium joinery should be compliant with the parameters outlined in the Palliside Technical Guide (paragraph 2.9.1).

2.6.1 Installation at Base of Opening (Sill)

There is no sill tray required when installing Palliside over a drained cavity; however the cut weatherboard below the opening must be fixed to the support bar/packer at maximum 600mm centres before installing joinery.

Depending on the gap in front of the weatherboard at the base of the joinery, some sort of vermin protection may be required.

7. CAD detail can be found on the Palliside website (www.palliside.co.nz/CAD).

2.6.1.1 Using the Palliside Window Base Scriber to Close the Gap Below Joinery

Cut the Palliside window base scriber the width of the opening and trim the front tear off strips as required to ensure that once installed, the gap between the back of the flange and the front lip of the scriber will be less than 5mm. To fix this in place, run a bead of solvent cement across the base of the scriber where it will make contact with the cut board before inserting.

2.6.2 Installation of Jamb Flashing Base and Joinery

The base of the vertical jamb flashing is ideally fixed in place either side of openings prior to the installation of joinery and weatherboards. This flashing is compatible for both Palliside profiles.

Cut the jamb flashing base to match the height of the opening. Fix this flashing in place so that the spine of the jamb flashing is flush against the side of the opening. Repeat this process for both sides. At this point measure the width of the joinery ensuring you will have a minimum flange cover of at least 10mm either side of the opening once the joinery is installed, as outlined in the Palliside Technical Guide (paragraph 2.9.1).

2.6.3 Installation of Joinery

Place joinery into the opening then pack and nail in place ensuring that the joinery is level.

While the joinery does not need to be centred it must be fixed so that:

- **A minimum 7.5mm gap is maintained between the joinery reveal and the opening (to allow for an airseal to be installed).**
- **There is at least 10mm flange cover over the jamb flashing base either side (the line on the face of the jamb flashing base nearest the spine indicates the minimum 10mm cover required) and 8mm at the sill.**
- **Do not remove any of the tear off tabs from the jamb flashing base at this stage.**

2.6.3.1 Windows Close Together

Where two windows closely adjoin each other it may be necessary to tack windows in place and remove at least one while the weatherboard is installed to the head flashing height.

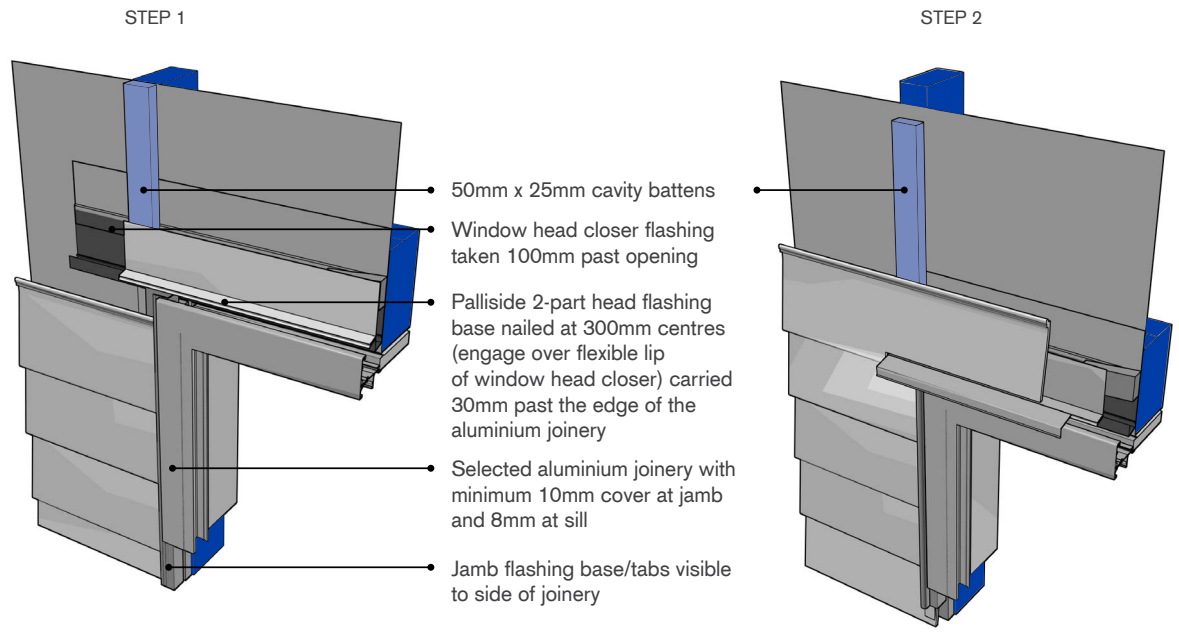


DIAGRAM G – Installation of Head Flashing with Cut Weatherboard Profile

2.6.4 Installation to Head of Window

Continue to install weatherboards either side of the opening up to the head flashing level.

2.6.5 Installation of Head Flashing

Cut the base and cap of 2-part head flashing and cut a minimum 60mm longer than the outside width of the aluminium joinery. Once installed, this will allow for around 18mm either side of the opening beyond the Palliside scriber (refer Diagram G).

Clip together and place the head flashing above the joinery so that the base engages the flexible lip of the cavity closer against the cavity battens behind, while the cap rests on the flange of the aluminium. Centre this in place. Nail through the base of the head flashing at 300mm centres. There is no need to tape the head flashing when it is placed in front of the cavity battens.

- **Where a cut board is used above the head flashing, nail packers (to suit) in place in front of the base piece of the head flashing evenly spaced at maximum 600mm centres.**
- **Apply sealant at either end of the head flashing to form a head flashing stop end.**
- **Remove the head flashing cap and insert cut weatherboard in place.**

2.6.6 Installation of Weatherboard Above Joinery

Measure where the head flashing is going to penetrate the face of the weatherboard. Cut the weatherboard out to suit, taking care to ensure that the horizontal cut for the head flashing is neatly finished and will allow the head flashing to sit tidily.

- Angle the head flashing cut so that the back of the board is not visible once installed.

2.6.6.1 Full Weatherboard Profile Above Joinery

If it works out that a full weatherboard profile can be placed above the head flashing it will be necessary to cut a slot into the weatherboard either side of the opening to allow for the head flashing to be fitted in place (refer Diagram H).

Then trim the nailing groove from a weatherboard off-cut (e.g. taken from the cut around the base of the opening) and nail this across the base of the head flashing, level with the nailing groove either side of the opening. Place the weatherboard in place and continue.

2.6.6.2 Slot to Side of Head Flashing

In instances where the base piece of the head flashing penetrates the cut weatherboard slightly, slope the cross-section of the cut on an angle to allow the base to sit nicely. Use sealant to provide additional protection in these areas.

2.6.6.3 Securing Weatherboard Above Head Flashing in Place

When the head flashing has been cut into the weatherboard profile it is necessary to hold the base of the weatherboard in place above the head flashing using Fastfix Fasteners, unless head flashing has been installed in accordance with paragraph 2.6.6.1.

To achieve this ensure that the weatherboard is correctly packed out and pre-drill 6mm holes at 600mm centres spaced evenly across the face of the opening. Hammer Fastfix fastener in place.

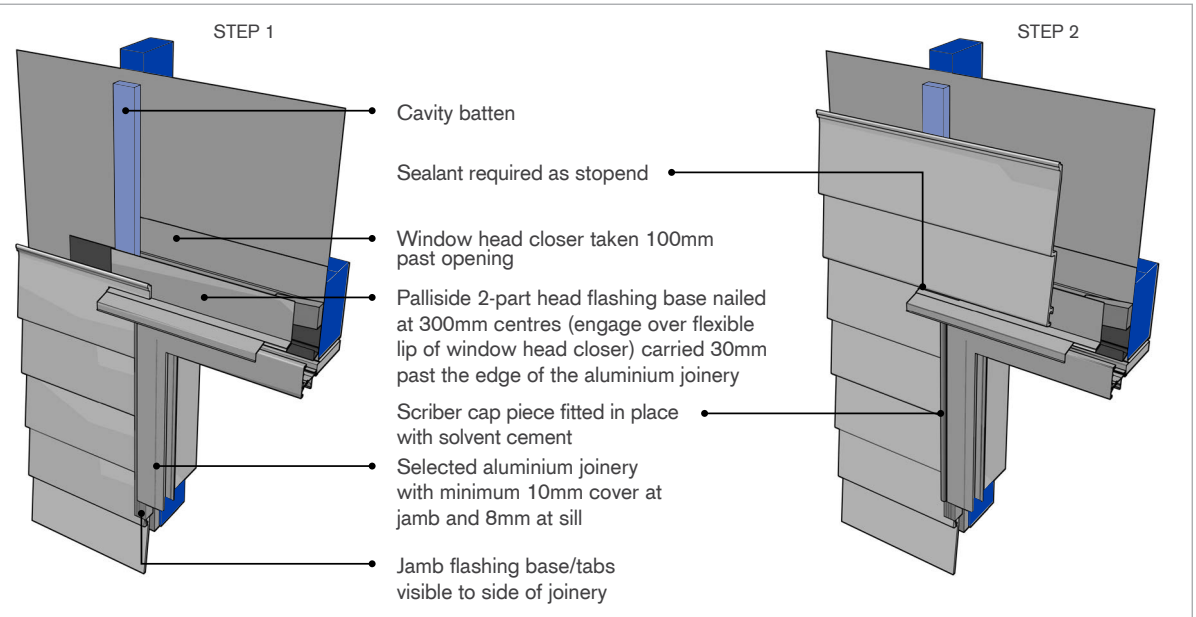


DIAGRAM H – Installation of Head Flashing with Full Weatherboard Profile

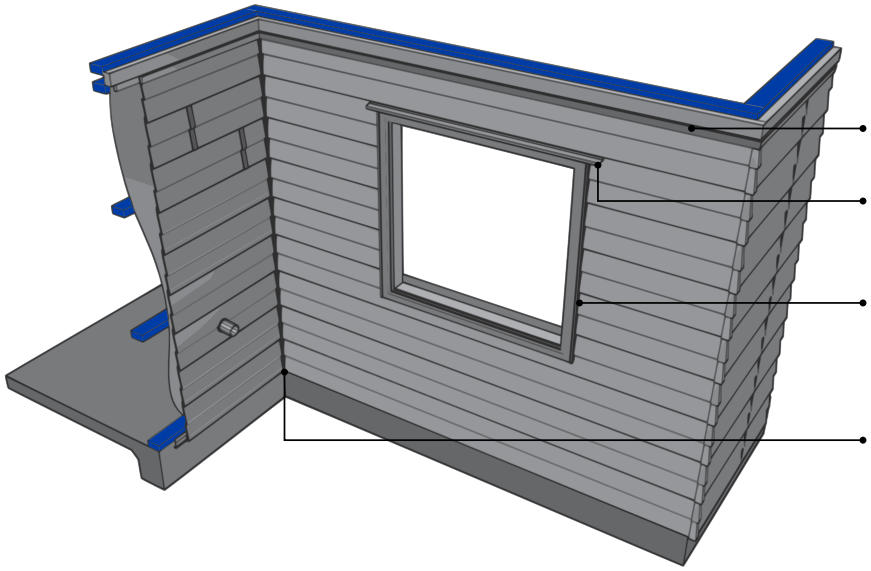


DIAGRAM I – Palliside Installation Above Head Flashing

2.7 Installation to Soffit

Carry out the installation of the weatherboard above the head flashing to soffit.

2.7.1 Soffit Finish

Trim and pack out weatherboard to suit soffit height (particularly horizontal soffit finishes). For best results reduce the spacing of these packers to 300mm centres.

2.7.1.1 Horizontal Soffit Finish

Palliside foam soffit mould is a 40mm x 18mm cornice moulding which can be used as a horizontal finish at soffit line. This trim is available in 3.6m lengths to match the chosen Palliside colour.

This accessory may be either face nailed using 40mm x 2.0mm HDG jolt-heads punched and covered with a dab of matching solvent applied to hide the fixing, or fixed using finishing brads (2 skewed) at 300mm centres.

When installing the Rusticated Profile the 2-part channel trim may also be suitable providing that the weatherboard does not finish in the scallop part of the profile.

2.7.1.2 Reverse Raking Soffit

When finishing Palliside to a reverse raking soffit, a flashing is required at the soffit/cladding junction (refer CAD detail DC22)[8]. This flashing needs to be fitted behind the soffit and in front of the Palliside board, after the Palliside has been installed.

8. CAD detail can be found on the Palliside website (www.palliside.co.nz/CAD).

2.7.1.3 Gable Ends and Rakes

There are a number of ways to finish Palliside at a gable end or along a rake.

2-Part Channel Trim

The base of the 2-part channel needs to be fixed in place prior to the installation of the top weatherboards. Before inserting the cap, insert a continuous strip of Polyethylene Foam (PEF) Rod or Inseal tape placed between the spine of the 2-part channel base and the weatherboard. This option works best with the rusticated weatherboard.

Foam Soffit Mould Option

Finish the Palliside so there is a 20mm gap between the board and the rake or gable end. Into this gap fix a continuous timber H3.1 20mm x 20mm packer ensuring it is supported at maximum 300mm centres and sits in front of the cavity. Nail the Palliside foam soffit mould in place through this at 300mm centres using HDG 40mm x 2.8mm jolt heads (or finishing nails with a minimum Class 4 type finish, 2 per fixing point, skewed). Punch the fixings in and cover with a small dab of colour matched solvent cement. This option is ideal for the traditional weatherboard (refer Diagram J).

- **For best results prepaint the packer in a colour similar to the Palliside before installing.**

H3.1 Timber scriber option

Another option to consider is to use an H3.1 timber mould to cut a finishing scriber. Once the scriber has been prepared and fixed in place through the Palliside, the gaps can be filled with sealant and the scriber painted.

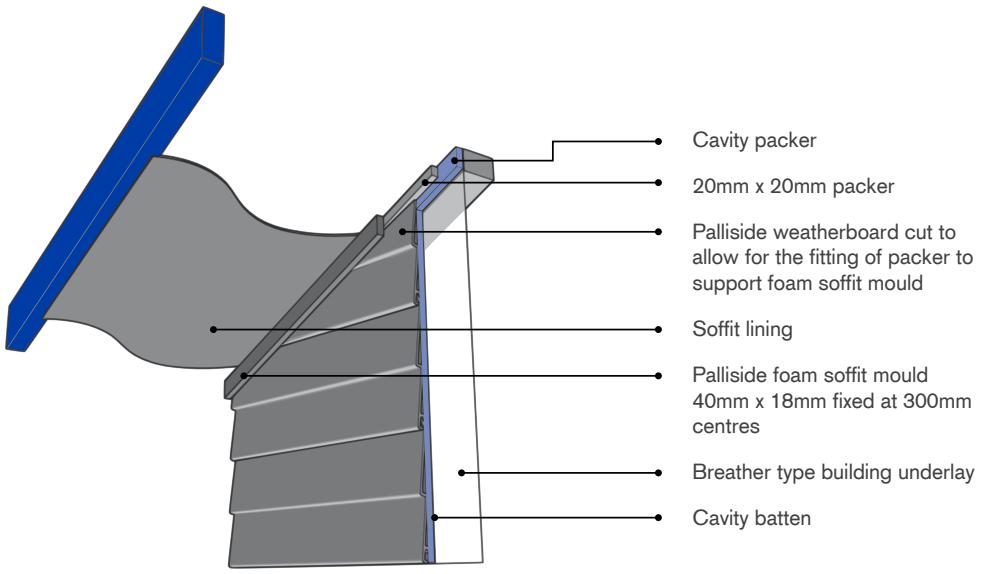


DIAGRAM J – Gable End Finish

2.8 Finishing

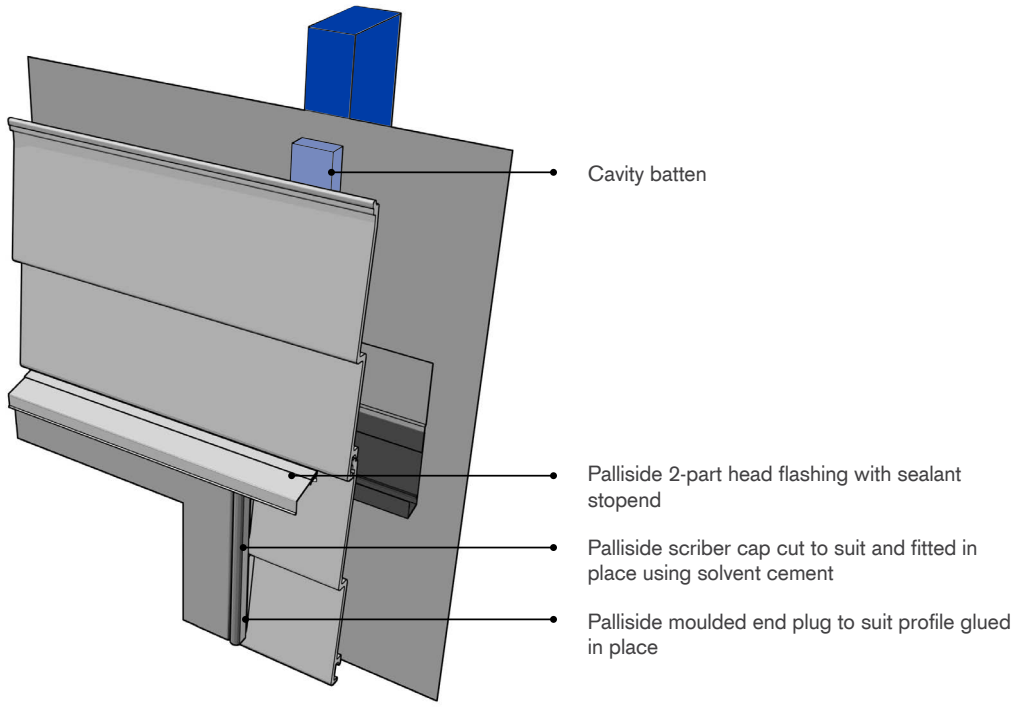


DIAGRAM K – Finishing

2.8.1 Openings

2.8.1.1 Prefit the Scriber Caps

Cut the scriber cap to suit the total height of the window allowing for a 15° taper to the top. This will allow for a tidy finish where the head flashing cap is inserted later.

Fit the scriber cap in place to the side of the window, making sure that the scriber abuts firmly to the side of the aluminium joinery. (It may be necessary to remove one of the tear-offs from the jamb flashing base to allow this to occur). The scriber cap will need to be held in place using solvent cement or sealant (refer paragrah 2.8.1.3).

2.8.1.2 Installation of Head Flashing Cap Piece

Install the cap of the head flashing in place so the front face is resting on the front of the scriber caps.

Apply sealant where the head flashing cap sits on top of the head of the aluminium joinery flange.

2.8.1.3 Sealing Scriber Caps in Place

Once the head flashing cap has been installed, remove the scriber cap and carefully apply a bead of solvent cement (or sealant) to the surface of the scriber where it intersects the base of the jamb flashing and re-insert in place (refer Diagram K).

2.8.1.4 Insertion of End Plugs

Install the Palliside moulded end plugs to the side of the windows by carefully applying solvent cement into the gaps of the weatherboard profile and inserting the end plug in place. The flexible leg located on the inside of the cap piece is designed to assist locating the end plugs flush with the outside of the scriber (refer Diagram K).

2.9 Continue the Installation Process on Remaining Walls

If the 90° external corner soaker option has been selected, Palliside corner soakers can be pushed (clipped) in place (using the rubber handle of a hammer or rubber mallet) after the installation of each course of boards. This helps keep track of board profile alignment.

2.9.1 Finishing of Corners and Trims

All other finishing trims including boxed corner caps, internal corner caps and flat soakers can be applied during the weatherboard installation process or later at the completion of the installation if preferred. End plugs can then be applied where applicable with solvent cement.

2.9.2 Solvent Cement and Sealant

Solvent cement is used for fixing Palliside end plugs and flat soakers in place.

- **When using solvent cement, care should be taken to avoid any solvent being placed on the parts of extruded uPVC accessories that are visible such as the caps of boxed corners and channel trims (this can lead to dimpling).**
- **Excess solvent should be removed straight away by using a damp rag. Do not wait for solvent to dry before doing this.**
- **Be aware that Palliside solvent cement takes time to adhere therefore apply solvent and wait approximately 2 minutes before installing end plugs or flat soakers.**
- **Apply solvent to gap where end plug is to be placed; do not apply solvent to the end plug itself.**
- **Apply solvent to one side of the flat soaker and push in place wiping away excess solvent.**

A range of MS based sealants matching the Palliside colours is available. These and other neutral cured or MS based sealants can be applied to Palliside in the following scenarios:

- **To form a flashing stop-end above joinery.**
- **Around the area where the head flashing penetrates the weatherboard to the sides of joinery.**
- **Installation of the jamb flashing scriber caps.**
- **Finishing around penetrations such as pipes, etc.**

Note:

The use of solvent cement or sealant should not substitute the use of sound weathertightness principles and/or tidy finishing.

2.9.3 Downpipes in matching Palliside Colours

80mm Round uPVC Downpipes ar available in colours to match Palliside, along with 95° bends and clips. These can be ordered with the rest of the Palliside components.

2.9.4 Installation of Airseals

As specified in the Palliside Technical Guide, paragraph 2.8.3, Windows, doors and other penetration openings shall be fitted with flexible air seals (that comply with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.6).

2.9.5 Specific Details

A range of CAD details are available for access from the product website (www.palliside.co.nz/CAD)

These include:

2.9.5.1 Pipe Penetrations

Ensure pipe penetrations are flashed correctly as shown in the CAD detail. Pipe flanges and/or sealant should be applied where required to provide additional protection (refer CAD detail DC20).

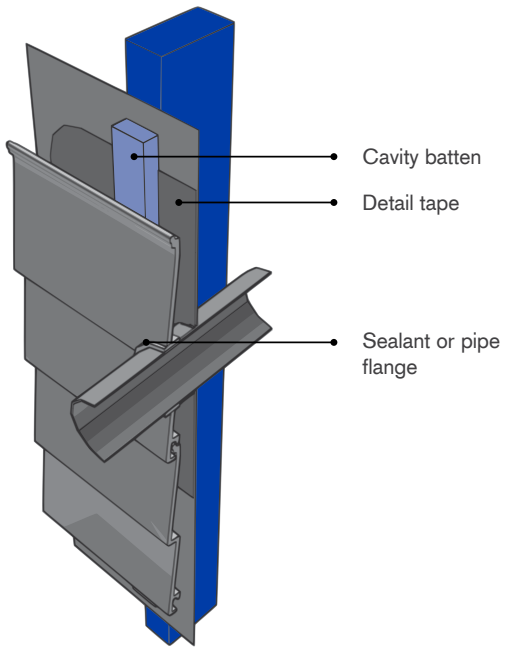


DIAGRAM M – Pipe Penetrations

2.9.5.2 Boxed Timber Corners, Timber Facings and Planted Timber Sills

Details are available covering the installation of timber corners and facings and may help add additional character to the home.

Facings are screwed in place through the Palliside weatherboards and may be finished using moulded Palliside end plugs to suit the chosen weatherboard or a traditional timber scriber. Once gaps have been filled/sealed, these can be painted either to match the Palliside or in a colour to suit (refer CAD details DC32-DC35).

2.9.5.3 Meter-box Head, Sill, and Jamb

Ensure that the installation of the meter-box is carried out in accordance with the appropriate details (refer CAD details DC13-15).

2.9.5.4 Non-Standard Corners and Customised Flashings

This detail covers the custom flashing of non-standard corners (refer CAD detail DC25).

2.9.5.5 Cladding Junction Details

When installing Palliside weatherboards in combination with brick veneer a range of junction details (internal corner, external corner, brick sill, inter-storey and vertical joint) are available. There is also a selection of common junctions available when finishing Palliside to profiled metal, proprietary plaster or plywood. In all instances we recommend you check with the supplier/producer of the other cladding to ensure they are happy with the method of transition chosen. These details provide a suggestive means of flashing between these claddings. Other methods may be considered and chosen providing that they demonstrate sound weathertightness principles. If in doubt speak with the designer, consult your local BCA or phone Dynex Extrusions Limited for guidance (refer CAD details DC25-30 and DC48-56).

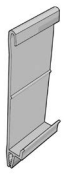
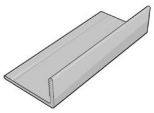
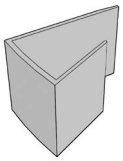
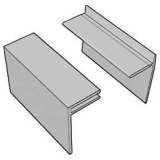
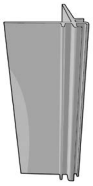
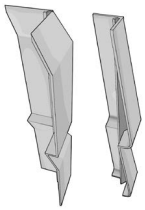
2.9.5.6 Palliside Installed above Joinery Between Brick

This detail sets out the method of installing Palliside weatherboard above joinery between brick veneer (refer CAD detail DC31).

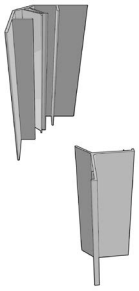
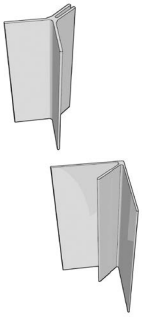
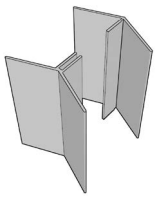
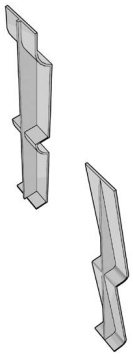
2.9.5.7 Drained Cavity Inter-Storey Junction

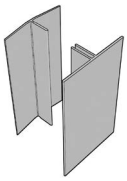
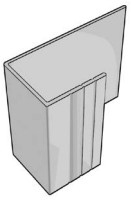
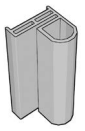
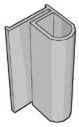
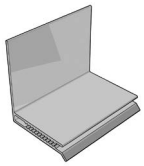
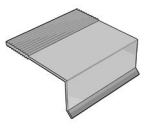
Refer to the Palliside Technical Guide, paragraph 2.12.6, to see whether there is a requirement for this junction (refer CAD detail DC42).

3. COMPONENT SELECTION GUIDE

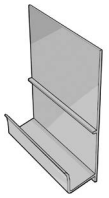
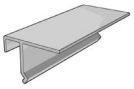
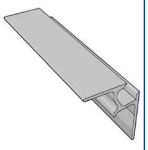
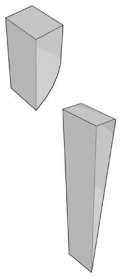
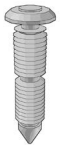
Item and Item Code	Picture	Length	Description	Installation of Base Piece	Installation of Cap Piece	Comments and references
STARTING TRIMS (refer paragraph 2.1)						
Starter strip MVSWHT3.6		3.6m	Required when installing a full board at the base of the application. Not required to be colour matched due to it being a non-visual base accessory.	Prior to installation of weatherboard.	n/a	Diagram B Paragraph 2.2.1
Cavity Vermin Tray MVCVT3.6		3.6m	Required when installing Palliside over drained cavity. Not required to be colour matched due to it generally being a non-visual base accessory.	Prior to installation of weatherboard.	n/a	Diagram B Paragraph 2.2.2
One Part Channel Trim Insert Colour MVCH__3.6		3.6m	Also referred to, as 'J' mould is available in colours to match selected Palliside weatherboard.	Prior to installation of weatherboard.	n/a	Paragraph 2.2.3
2-Part Channel Trim Insert Colour MV2CH__3.6		3.6m	2-part channel trim is available in colours to match selected Palliside weatherboard.	Prior to installation of weatherboard.	After weatherboard has been installed.	Paragraphs 2.2.4 and 2.7.1.3
Vent Strip 61917WHT3		3.0m	For use along rakes and and areas requiring vermin proofing.	Install before cavity battens.	n/a	Paragraph 2.2.1
CORNER OPTIONS (refer paragraph 2.3)						
External 90° Corner Soaker Option MVCB2.7 (Base)		2.7m	The corner soaker base can only be used in conjunction with the corner soakers and is not required to be colour matched due to it being a non-visual base accessory.	Prior to installation of weatherboard.	n/a	Diagram C.1 Paragraph 2.3.1
Insert Colour MVSC__ Rusticated or Traditional Insert Colour MVSCTRAD_		per unit	Moulded corner soakers come in double profile and are available in a colour and shape to match the weatherboards.	n/a	During installation of weatherboard to 2nd wall.	Diagram C.1 Paragraph 2.3.1

Colour Codes: CAL = Calico, RST = Riverstone, SAN = Sandstone, SLT = Slate, TEA = Tea, WH = White.

Item and Item Code	Picture	Length	Description	Installation of Base Piece	Installation of Cap Piece	Comments and references
CORNER OPTIONS (refer paragraph 2.3)						
Boxed 90° Internal Corner MVIBWHT3 (Base) Insert Colour MVIC__3 (Cap)		3.0m	This option provides a boxed corner finish for 90° internal corners. Only the Male cap piece is required to be colour matched as the base piece is non-visual.	Prior to installation of weatherboard.	After weatherboard has been installed.	Diagram C.2 Paragraph 2.3.2 (End plugs required)
Boxed 90° External Corner Insert Colour MVIE__3.6 (Nb. Female base is not colour matched)		3.6m	This option provides a boxed external corner finish for 90° external corners only. Each unit comprising a female base piece (in white only) and a male cap piece matching the selected Palliside colour. This corner can not be reversed.	Prior to installation of weatherboard.	After weatherboard has been installed.	Paragraph 2.3.2 (End plugs required)
2-Part Boxed 135° Corner Insert Colour MV135__2.7 Reversible to suit both external and internal option		2.7m	The 135° corner can be used for either internal or external corners by reversing the base section, as is commonly required around bay windows, and is available to match the selected Palliside colour.	Prior to installation of weatherboard.	After weatherboard has been installed.	Paragraph 2.3.2 (End plugs required)
JOINTING OPTIONS (refer paragraph 2.4)						
Moulded Flat Soaker Insert Colour MVSF__ Rusticated or Traditional Insert Colour MVSFTRAD_		per unit	Moulded flat soakers come in double profile and are available in a colour and shape to match the weatherboards. One side of the soaker is adhered using solvent cement.	n/a	During or after weatherboard has been installed.	Diagram D.1 Paragraph 2.4.1 Soakers can be joined between stud providing they are staggered.

Item and Item Code	Picture	Length	Description	Installation of Base Piece	Installation of Cap Piece	Comments and references
JOINTING OPTIONS (refer paragraph 2.4)						
2-Part Jointer Insert Colour MVJ__2.7 Base and Cap		2.7m	Vertical joints on stud can be made using the 2-part jointer that is available in colours to match selected Palliside weatherboard.	Prior to installation of weatherboard	After weatherboard has been installed.	Diagram D.2 Paragraph 2.4.2 Base must be fixed on stud (End plugs required)
WINDOW ACCESSORIES (refer paragraph 2.6)						
Window Jamb Flashing Base MVWJFB3.6		3.6m	The base of the vertical jamb flashing is fixed in place either side of openings prior to the installation of joinery and weatherboards. The jamb flashing is not required to be colour matched due to it being a non-visual base accessory. This flashing is compatible for both Palliside profiles.		n/a	Diagram F Paragraph 2.6.2
Window Scriber Cap Insert Colour MVWSCR_3.6 Rusticated or Traditional Insert Colour MVWSCRTRD_3.6	 	3.6m	The scriber cap is inserted into the jamb flashing base and available to match the selected Palliside colour. There is a different cap required to match each profile thickness and Palliside end plugs are still required to complete the installation.	n/a	After weatherboard windows and head flashing have been installed.	Diagram K Paragraphs 2.8.1.1 and 2.8.1.3 (End plugs required)
2-Part Head Flashing Insert Colour MV2Z_3.8B (uPVC Base) Insert Colour MV2ZAL_3.8 (Aluminum cap)	 	3.8m	The Palliside 2-part head flashing is designed to improve the ease of installation of the weatherboard above joinery and is available in matching Palliside colours. The base piece is uPVC. The cap piece is aluminium (powdercoated to the match the weatherboard colour).	Prior to the installation of the weatherboard above the inserted joinery.	Once the weatherboard above the opening has been installed and the scriber caps have been inserted in place.	Diagrams G, H and K Paragraphs 2.6.5 and 2.8.1.2 (must be used with Window Head Closer)

Colour Codes: CAL = Calico, RST = Riverstone, SAN = Sandstone, SLT = Slate, TEA = Tea, WH = White.

Item and Item Code	Picture	Length	Description	Installation of Base Piece	Installation of Cap Piece	Comments and references
WINDOW ACCESSORIES (refer paragraph 2.6)						
Window Head Closer 61545WHT3		3.0m	For use at the head flashing level for cavity installation only. Comes in white as not required to be colour matched.	Installed at the head of the joinery prior to the instaltion of cavity batten.	n/a	Diagrams A, G and H Paragraphs 2.1.2 and 2.6.5
Window Base Scriber MVWCBFWHT3.6		3.6m	For use to close the gap at the base of windows to less than 5mm.	Installed onto the cut part of the board, covered once the joinery is installed.	n/a	Diagram F Paragraph 2.6.1.1
WANZ Support Bar Supplied by the window fabricator		3.6m	Aluminium support bars are for use at base of opening to support joinery.	Fixed in place prior to the installation of joinery.	n/a	Diagram A Paragraph 2.1.3 and 2.5.1.4
FINISHING TRIMS (refer paragraph 2.8)						
Moulded End Plugs Insert Colour MVEP_ Rusticated or Traditional Insert Colour MVEPTRAD_		Per Unit	Palliside end plugs are available in both rusticated and traditional profiles to match selected Palliside colours.	n/a	Insert in to profile gaps with solvent cement after weatherboard joinery and all vertical trim caps have been installed.	Diagram K Paragraphs 2.8.1.4 and 2.9.1
Fastfix Fastener Insert Colour		50 Per Pack	Palliside fastfix fasteners are mainly used to hold a cut weatherboard above the head flashing in place and come in colours to match selected Palliside weatherboard.	n/a	Once weatherboard above joinery has been fixed in place.	Paragraph 2.6.6.3
Foam Soffit Mould Insert Colour FMBC8_3.6		3.6m	Palliside foam soffit mould is a 40mm x 18mm cornice moulding which can be used as a horizontal finish at soffit line. This trim is available to match the chosen Palliside colour.	n/a	Once top weatherboard has been installed.	Diagram I Paragraph 2.7.1.3

FINISHING TRIMS (refer paragraph 2.8)						
Item and Item Code	Picture	Length	Description	Installation of Base Piece	Installation of Cap Piece	Comments and references
Solvent Cement Insert Colour MCS_		180gm Tube	Available in matching Palliside colours to cement in place end plugs and flat soakers.	n/a	n/a	Paragraph 2.9.2
Palliside Nails PSIDENAILS		5kg Box	Palliside 40mm x 2.5mm nail.	n/a	n/a	
Sealant Insert Colour MSMSS_		375ml Canister	Available in matching Palliside colours for finishing around head flashing and other areas requiring attention to detail.	n/a	n/a	Paragraph 2.9.2
COLOURED DOWNPIPES (80mm Round)						
80mm Round Downpipe Insert Colour RP80_3		3.0m	Coloured downpipes are availableas part of the Palliside weatherboard system in matching colours (except white).	n/a	n/a	Paragraph 2.9.3
Downpipe Bend 95° Insert Colour RB280_		Per Unit	Coloured downpipe bends are availableas part of the Palliside weatherboard system in matching colours (except white).	n/a	n/a	Paragraph 2.9.3
Downpipe Clip Insert Colour RC80_		Per Unit	Coloured downpipes clips are availableas part of the Palliside weatherboard system in matching colours (except white).	n/a	n/a	Paragraph 2.9.3

Colour Codes: CAL = Calico, RST = Riverstone, SAN = Sandstone, SLT = Slate, TEA = Tea, WH = White.

Contact Details

For further information visit the website **(www.palliside.co.nz)** or alternatively contact:

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