

Your partner in building solutions



## INSTALLATION GUIDE

  
**VentClad**

**EXPRESSED  
JOINTS**



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TE-SY-VE-Install 110919

## General remarks on VentClad Expressed Joint

- This installation guide is to be used in conjunction with:
  - PBS **Ventclad Expressed Joint** QA Sheet
  - PBS **Ventclad Expressed Joint** specifications
  - PBS **Ventclad Expressed Joint** Order List
  - Architects' specific details
  - PBS Corporate Folder
  - PBS **Eterpan Base** as Rigid Air Barrier Installation Guide and details
  - PBS Eterpan Bracing Manual
  
- The methods selected for this guide are based on experience from sites & have proven to give the best results. The sequence of the work steps as well as their implementation may vary more or less due to different building situations.
  
- Further details are available in the PBS folder or from the website

[www.pbs.co.nz](http://www.pbs.co.nz)

## Step 1: Air Barrier Options

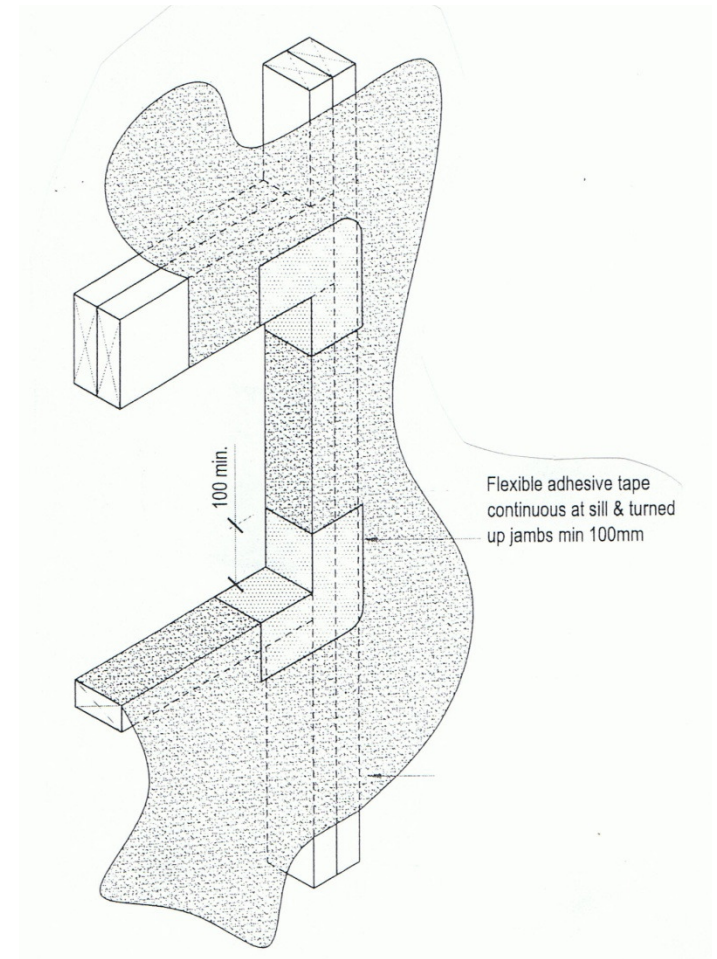
- Building wrap may be used as a non rigid air barrier where the ULS is up to  $\pm 1550$  Pa.
- Where wind pressures exceed  $\pm 1550$  Pa and are less than  $\pm 6000$  Pa use a rigid air barrier of **Eterpan Base**.
- For more information on Rigid Air Barriers please see the **Eterpan Base as Rigid Air Barrier** installation Guide.

**NOTE:** there is no need for a building wrap with a rigid air barrier although this can be done if required. For more information contact PBS

## Step 1: Air Barrier Options - Building Wrap

Go to the next page when the specifications require a Rigid Air Barrier instead of Building Wrap

- Fix **PBS Tekton** building wrap with staples
- Fix blue band (polyprop tape) vertically between studs at 300mm centres to prevent bridging of the cavity by the wall insulation.
- Tape all laps with **Tekton Seam** tape
- Repair all cuts & tears in building wrap with **Tekton seam** tape
- Fold in around windows ( 4 sides)
- Apply spray adhesive to areas requiring Protecto Tape
- Tape the 4 corners with **Protecto Detail Tape** and the sill of each opening with **Protecto Sill Tape**.

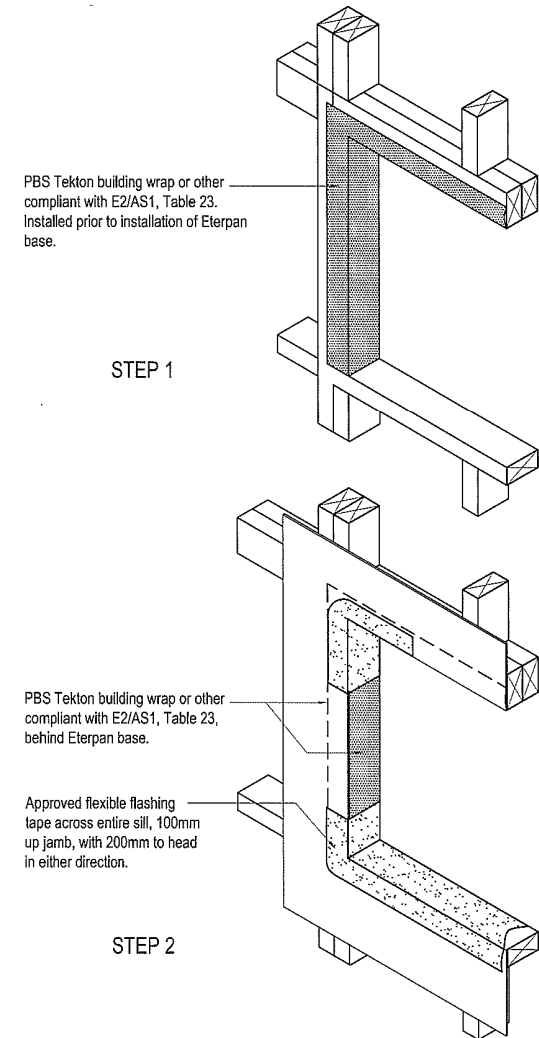


## Step 1: Air Barrier Options - Rigid air barrier

Ignore this step when the specifications call for Building Wrap instead of a Rigid Air Barrier

There are 2 options for the detail at window and door openings: **Option 1**

- Wrap window and door jambs and head with building wrap before fitting **Eterpan Base** as Rigid Air Barrier.
- Fix **Eterpan Base** as Rigid Air Barrier with 40mm stainless steel clouts at 150 centres to all nogs & studs
- Edge distance minimum 15.0mm
- Corner distances minimum 100mm & 50mm
- Prime contact area of **Eterpan Base** as Rigid Air Barrier before fitting tape
- Tape the 4 corners with **Protecto Detail Tape** and the sill of each opening with **Protecto Sill Tape**.

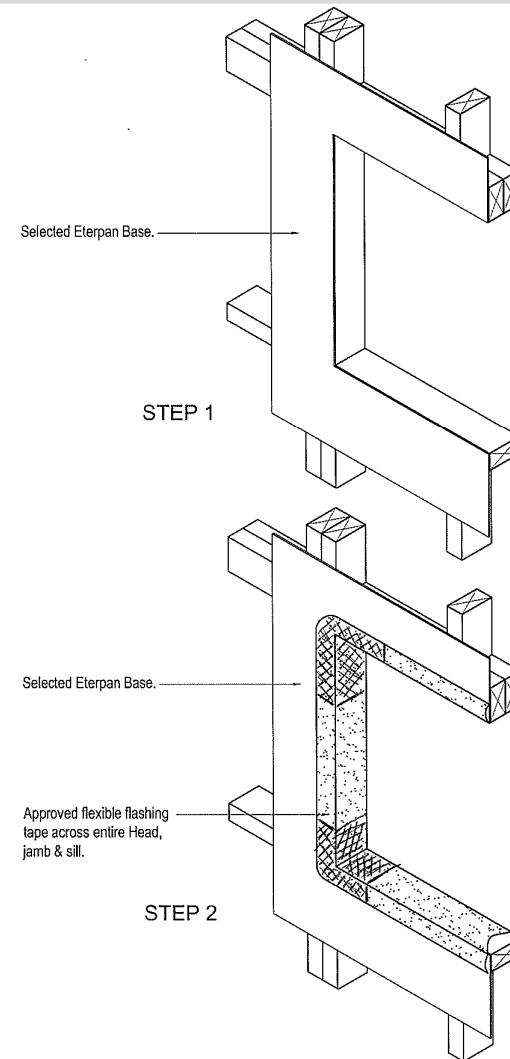


## Step 1: Air Barrier Options - Rigid air barrier

Ignore this step when the specifications call for Building Wrap instead of a Rigid Air Barrier

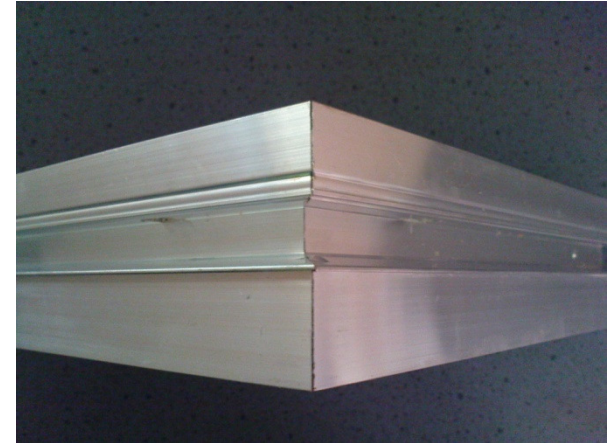
There are 2 options for the detail at window and door openings: **Option 2**

- ❑ Fix **Eterpan Base** as Rigid Air Barrier with 40mm stainless steel clouts at 150 centres to all nogs & studs
- ❑ Edge distance minimum 15.0mm
- ❑ Corner distances minimum 100mm & 50mm
- ❑ Prime contact area of **Eterpan Base** as Rigid Air Barrier before fitting tape
- ❑ Tape the perimeter with Protecto Sill tape and the 4 corners and sill of each opening with Protecto Detail tape.



## Step 2: Corner Profiles

- The bottom sheet starts 50mm below the bottom plate.
- Measure up from this point and install your first welded corner.
- With laser or builders line site through to next corner and install welded corner.
- On this line install the balance of internal or external welded corners around the building.
- Measure up to next horizontal and repeat the process.
- Site fabricated **XHR** mitred corners shall be max. 300mm long in each direction.
- Site fabricated mitre corners shall be bed together with Bostik SAFESEAL sealant.

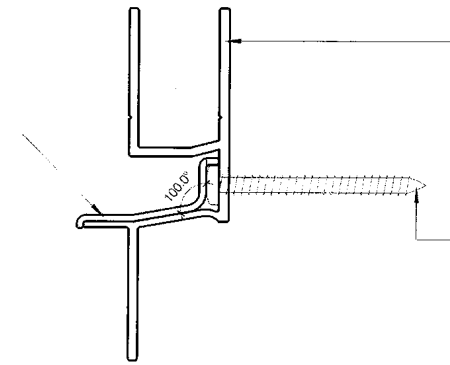


**XEC** external welded corner

**Note** – If no horizontal joints required, ignore next 3 pages.

## Step 3: Horizontal Joint Profile

- ❑ Fit **XHR** rail for horizontal joints refer **XP.RB.AF.3.3.04** with stainless steel 10g x min. 40mm screws @ 250 crs into studs, head lintels and sill plates.
- ❑ Packers up to max. 10mm may be required to pack rails straight and plumb on untrue framing substrate.
- ❑ Screws must protrude through the packers and be sized to penetrate framing structure by 32mm min.
- ❑ Fit **XHR** horizontal rail to window heads **XP.RB.AF.3.4.01** (optional)
- ❑ All joints on an **XHR** rail must be on a stud with a fixing into the end of the rail.
- ❑ Apply 1.6x18mm foam tape to bottom flange of **XHR**. Creates seal between sheet and rail.

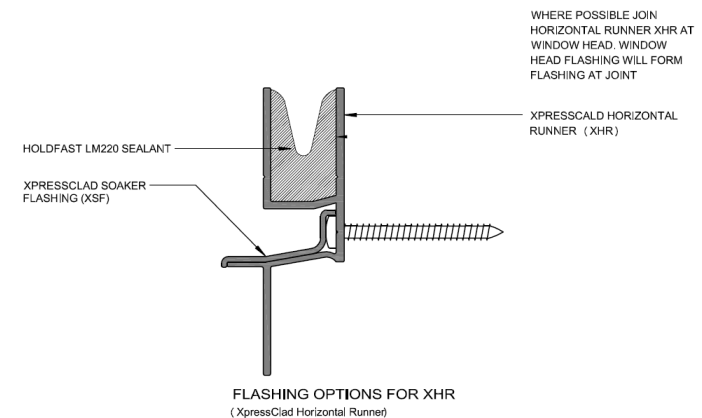
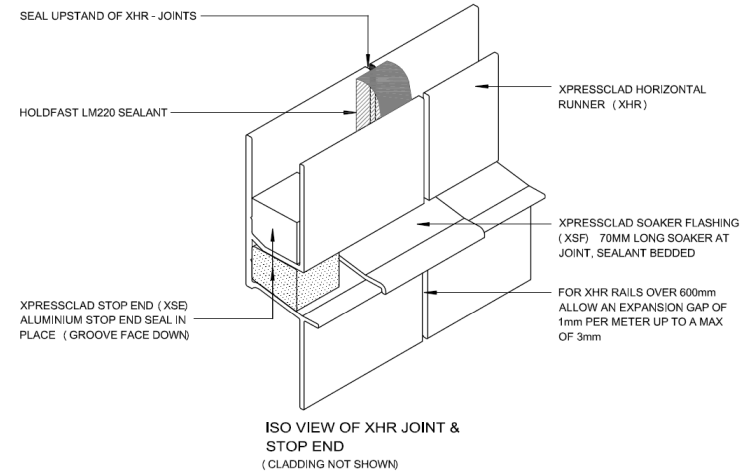


**XHR XpressClad**  
horizontal rail

## Step 4: Sealing Details

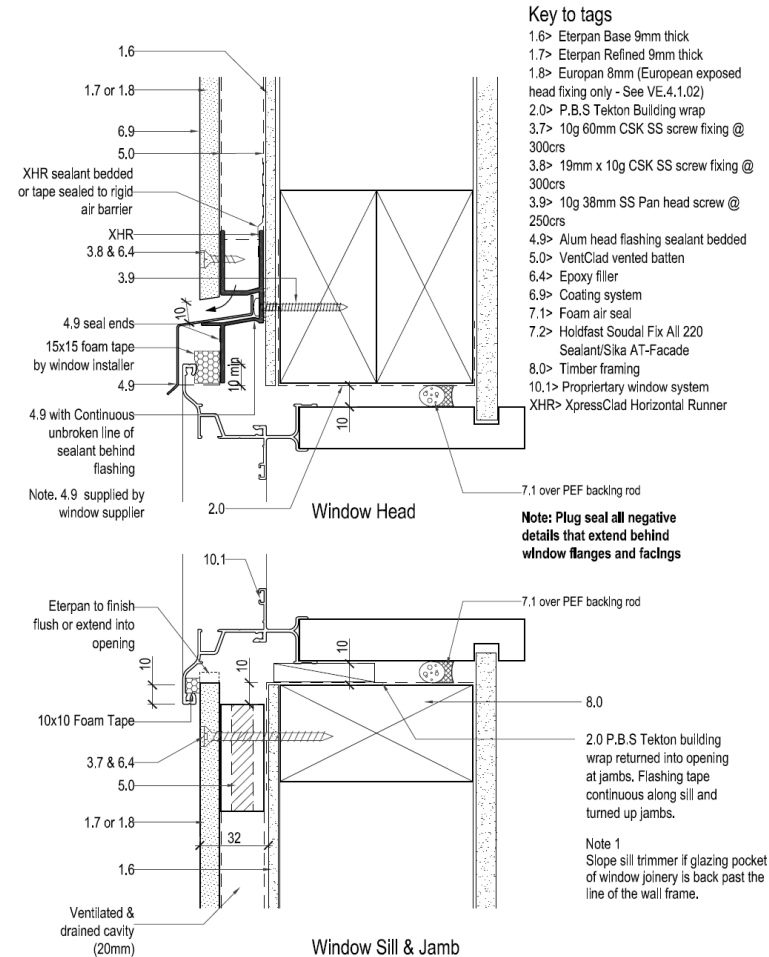
- ❑ Seal in place the **XHR stop ends**. Fit the stop end with the groove face down.
- ❑ Fit and seal external soaker to rail joint with 1mm per meter expansion gap / 3mm per length.
- ❑ Perimeter seal external soaker with **Bostik SAFESEAL** sealant and fix to **XHR** joint.
- ❑ Run a bead of **Bostik SAFESEAL** sealant in the channel of the **XHR** to seal off the expansion joint as per diagram **VE.4.1.03**

NOTE: PLUG SEAL ALL NEGATIVE DETAILS THAT EXTEND BEHIND WINDOW FLANGES AND FACINGS



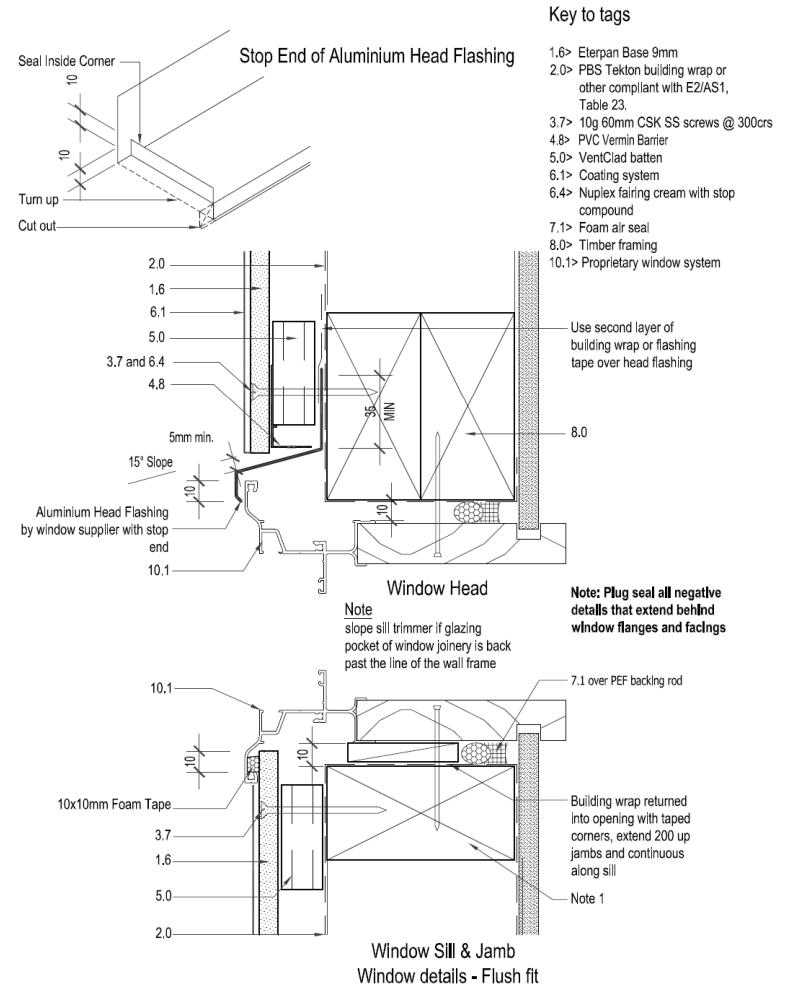
## Step 5: Window and Door Detailing

- ❑ Tape top of **XHR** rail to wrap or rigid air seal on all window heads and inter floor **XHR** rails. Refer **VE.4.3.05.RB** & **VE.4.4.04.RB**
- ❑ Or tape over **head flashing** with second layer of building wrap or flashing tape to rigid air seal or wrap. Refer **VE.4.4.01**



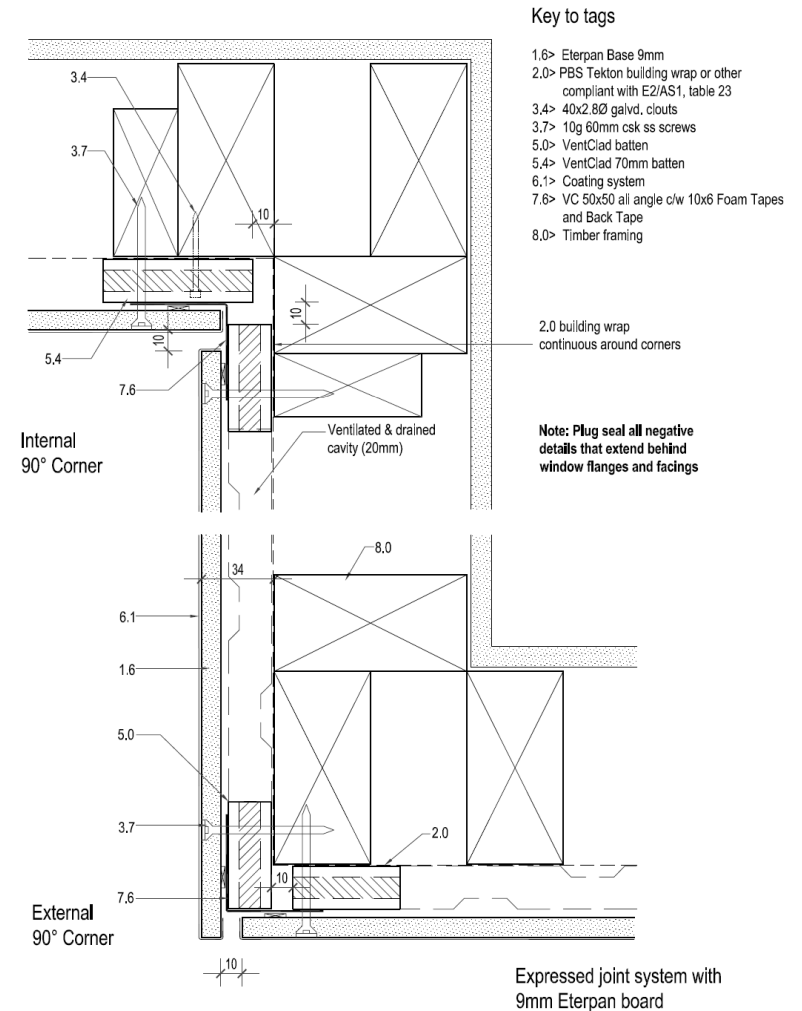
## Step 6: Window Battens

- ❑ Fit window sill and jamb battens 10mm back from sill and jamb line as per **VE.3.2.09**
- ❑ For full height windows or doors fit horizontal batten flush with top of floor or retro fit aluminum angle.
- ❑ Fix **VentClad** battens in place with 40.0mm galvanized clouts.



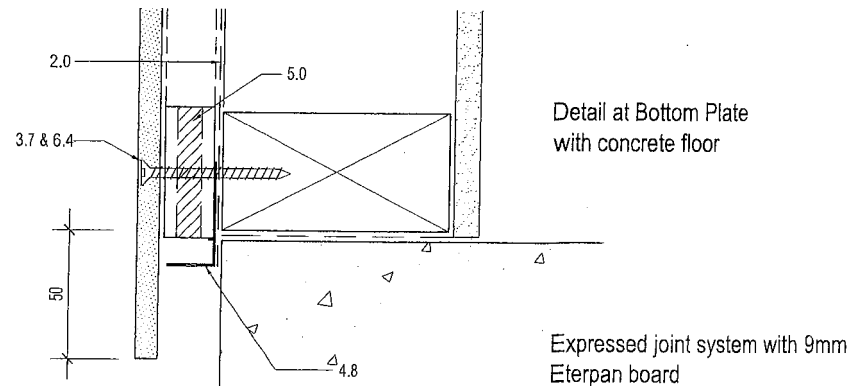
## Step 7: External and Internal Corners

- ❑ Fit **VentClad** battens to external corners as depicted. Ensure 10mm gap between battens.
- ❑ Extend vertical battens 50mm below bottom plate at external corners.
- ❑ Fix battens in place with 40.0mm galvanized clouts.
- ❑ Fit 50x50 aluminium angle to internal and external corner battens with 10x6 foam tapes and back tape as depicted. Tack in place with clouts.



## Step 8: Bottom Rail/Cavity Closure

- ❑ Fix **VentClad** bottom batten to set flush with bottom plate.
- ❑ Fix battens with 40mm galvanized clouts.
- ❑ Fit **VentClad PVC Vermin** flashing to bottom batten, locates on vermin mould ridge.

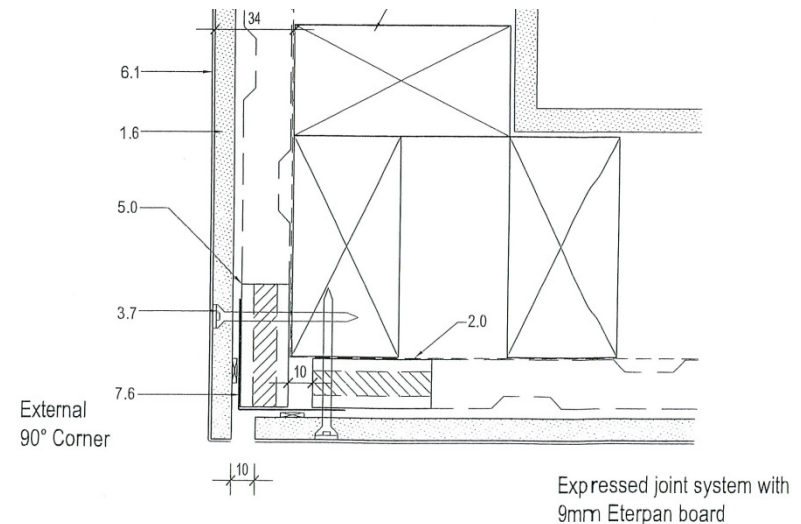
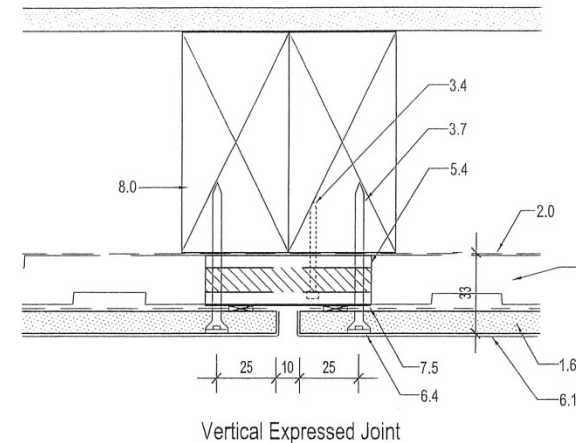


### Step 9: Fit Remainder of Battens

- Fit **VentClad** 50x20mm horizontal battens to noggs, sill, top plate, bottom plate and set 10.0mm below any horizontal protrusion.
- Fit **VentClad** 70 x 20mm to vertical sheet joint locations.
- Fit **VentClad** 50 x 20mm Vertically at all intermediate studs @ max 600ctrs.
- Fix battens with 40.0mm galvanized clouts.
- Horizontals at mid floor detail please refer to specific PBS details. **VE.4.3.04** , **VE.4.3.05.RB**

## Step 10: Install Aluminium Sockets

- ❑ **Vertical Joints** apply PVC tape to back of 70mm aluminum socket or staple a strip of building wrap to the batten as a separator. Tack sockets in place to 70mm batten.
- ❑ Fit 9 x 6mm foam tapes in position to front face of socket approx 20.0mm apart.
- ❑ **Internal/External Corners** apply PVC tape to back of 50 x 50 aluminum angle and tack in place to internal/external corner battens.
- ❑ Fit 9 x 6mm foam tapes in position to front face of aluminum angles as depicted.



### Step 11: Check !

Before fixing **Eterpan Refined** ensure the following;

- check for tears in wrap and repair with **Tekton Seam** tape.
  - check sill & jamb flashing tapes on all window recesses.
  - check for tapes on **XHR** or head flashing for window head and to mid floor joints
  - check for dwang or nog behind joints in **XHR**
  - check for expansion joints on **XHR**
  - check for foam tape to **XHR**
  - check that all external soakers are installed (not over a screw head)
  - check for continuous **VentClad PVC vermin strip**.
  - check that every punching for screws contains a screw
  - check all vertical joints have a foam tapes in place.
- Check paint system. If using acrylic paint system continue, if not prime all six edges of the board to guard against dilatation. For more information consult with the paint manufacturer.

Now cut and fit your sheets.

### Step 12: Fix Sheets

- Cut Eterpan Refined, drill & countersink holes refer **VE.4.1.02**
- Screw fix sheets @ max. 300mm crs with 63mm S/S screws. Screw heads to be 1 – 2mm below sheet surface.
- Make sure Sheets hang below bottom plate by 50mm
- Maintain ground clearances. Bottom of sheets to finish 35mm clear of finished deck surface or 100mm clear of paved surfaces.

### Step 13: Flush Stopping Screw Holes

- Clean & prime screw holes.
- Fill screw holes with Nuplex Epoxy Furring cream and scrape flush with linbide scraper.
- Flush off with Eterstop/PAL external contract filler.
- Sand smooth and finish flush
- Finish Eterpan with selected acrylic paint system.
- Complete Q A sheet to confirm compliance.