

### Installation Guide

In this system the panels are the external water barrier and the membrane is air infiltration barrier and secondary water barrier. All laps in the membrane, flashings and panels must be fitted with this in mind.

Prior to commencement ensure that the surface that the system is being fixed to is free of sharp edges and in the correct plane.

If the membrane is to be fixed before the 40mm batten use the following procedures.

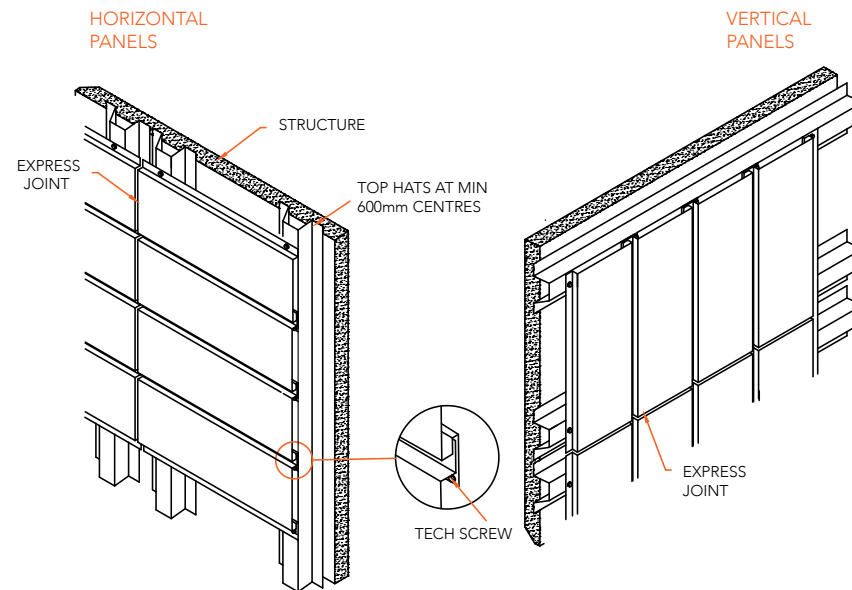


Figure IP ID 001

### Fixing of the membrane

#### (Sisalation with insulation blanket attached)

1. Check that the steel work or concrete is free of any sharp edges or protrusions that may puncture the membrane.
2. The blanket must be a minimum of 453 Sisalation or equivalent with the Sisalation to the outside face.
3. The blanket must be hung and sealed at the top. It must be free of ripples and puckers with holding battens between the 40mm vertical battens securing it to the supporting member. See IP ID 008.
4. All laps in the blanket must be made with 150mm lap sealed with double sided tape between the faces of the foil and taped with sisal tape on the outside face.
5. The perimeter of the membrane (blanket) must be sealed also with premium quality Sisal tape with holding or 40mm battens to secure it. See IP ID 010.
6. Note: - It is essential that attention is paid to ensuring that blanket is air tight, fixed in a way that it won't flap or tear away at the laps or edges.
7. At the bottom of the façade a flashing is required to direct any water from the blanket membrane external of the façade. This will be done in a way as to allow any water to pass between the flashing and the foot mould. See IP ID 009.
8. If any of the membrane is to be fixed horizontally a different fixing procedure is to be followed; see separate instructions.

### Fixing of the Backing Plates

1. The backing plates should be full length where possible and fixed with Tekes with a Neo washer or a 3mm pop rivet at a maximum of 1200mm centers.
2. If pop rivets are used they should be sealed rivets or sealed with silicone.
3. Any laps should be a minimum of 100mm.
4. The top of all backing plates should have a return 10mm fold to prevent water from being blown over the end of the plate. See IP ID 011.
5. Backing plates for Express joints should be 100mm wide overall with 10mm return fold on both sides if the Express joint is 15mm wide. See IP ID 004.

### Fixing of the 40mm Battens

1. The battens should be fixed on both sides of the batten with 10 x 16 x 16 HH Tek screws to the girts through the membrane. See Detail IP ID 002, 003, 004. If an insulation blanket is attached to the Sisalation the screws should be 10 x 16 x 25 HH Tekes.
2. If fixed to a concrete wall the fixing centers of the battens should be a maximum of 1200mm apart.
3. All vertical 40mm battens should be fixed at a maximum of 600mm apart.
4. All battens fixed to support vertical joints, external and internal corners should be positioned so that the return edge of the backing plate is center of the face of the batten. See Detail IP ID 002 and 004. This allows the fastener fixing the panel to be fixed in a location that doesn't penetrate the backing plate.

### Note:

Care should be taken not to puncture the membrane while fixing the 40mm battens. If it is punctured it should be taped on both sides of the puncture.

### Fixing of the Panels

1. The top mould of parapet cap should be fixed first with the female edge downward. See IP ID 008.
2. The panels should have a foam block both ends fixed 25mm inside the stop end of the panel with the center of the foam block center to the 10mm return fold on the side of the backing plate. See Detail IP ID 002, 004, 012.
3. A small corner should be removed off the bottom of the foam block to allow water or condensation to drain out freely. See IP ID 012.
4. This is required on straight panels and internal corners but not on external corners.
5. Measure out a matrix and mark the hat sections for there full length with the width of the panel plus gap so that when the panels are placed in position the bottom edge of the female rib can be lined up to the marks. This will ensure that the panels are fixed parallel with the same gap along the complete face. See IP ID 014.
6. Before installing a panel, a silicone bead must be applied to the back of the male and female edges from the center of the foam block to the edge of the panel. See IP ID 012.
7. The male edge of the panel is then inserted into the female edge leaving a gap that is predetermined, lining up the bottom edge of the panel with the mark on the hat section. See IP ID 012 and 013.

8. Screw the trailing female edge to the hat section with 10 x 16 x 16 wafer Tekes. See IP ID 013.
9. Continue to fix all the panels until the bottom of the façade is reached.
10. When all sections of the façade are complete the foot mould is then fitted with the top vertical edge engaging the female recess on the panel. The predetermined gap between the panels should be maintained between the foot mould and the bottom panel. See IP ID 009.
11. The foot mould must be fitted in a way to allow water to drain between the foot mould and the flashing at the bottom of the membrane. See IP ID 009.
12. If the top of the façade has a fall (not horizontal), cut and fold the panels as in IP ID 015.
13. When the side of a façade finishes against a brick or concrete wall it should be done as per IP ID 010.

### Fixing of Windows and Doorways

1. When fixing the windows & doorways (penetrations) remember that the panels are the waterproof seal and the membrane is the air seal and backup water seal.
2. The membrane must be sealed to the penetrations in a way that it can't over time break away. This may require the fitting of a holding batten. It also must be draining to the outside of the building.
3. The panels over the penetrations must be flashed to the penetration allowing any water that drains from the membrane to escape between the flashing and the top of the penetration 4.
4. IP ID 005, 006, 007 show some typical details to the top, bottom and sides of window penetrations.

Installation Details: External Corner

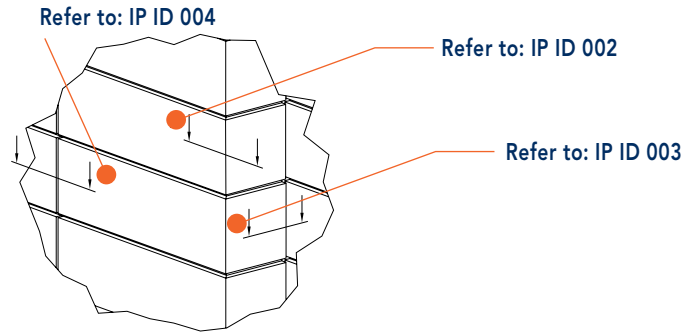
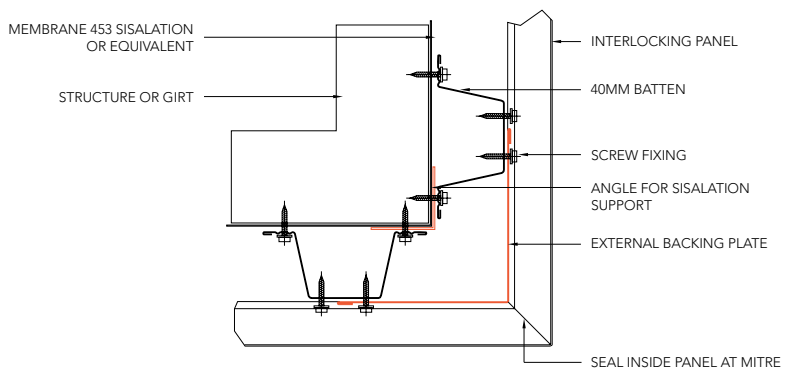


Figure IP ID 002

Installation Details: Internal Corner

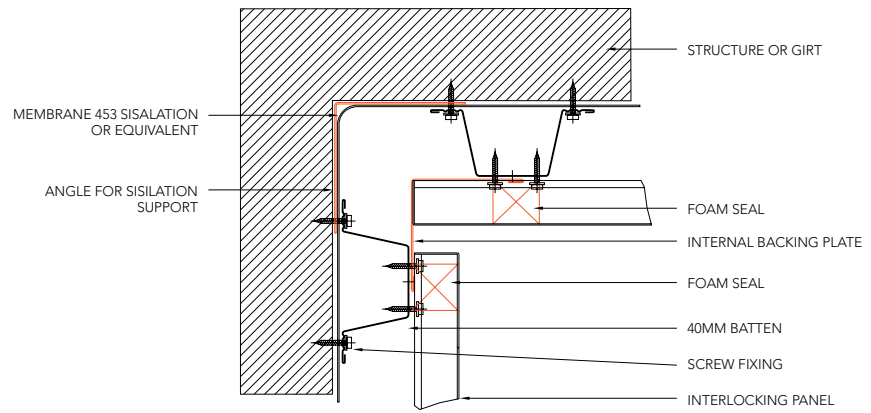


Figure IP ID 003

Installation Details: Express Joint Horizontal

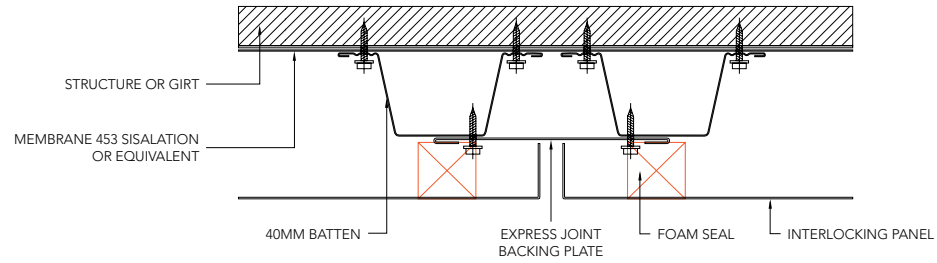


Figure IP ID 004

Installation Details: Window Lintel

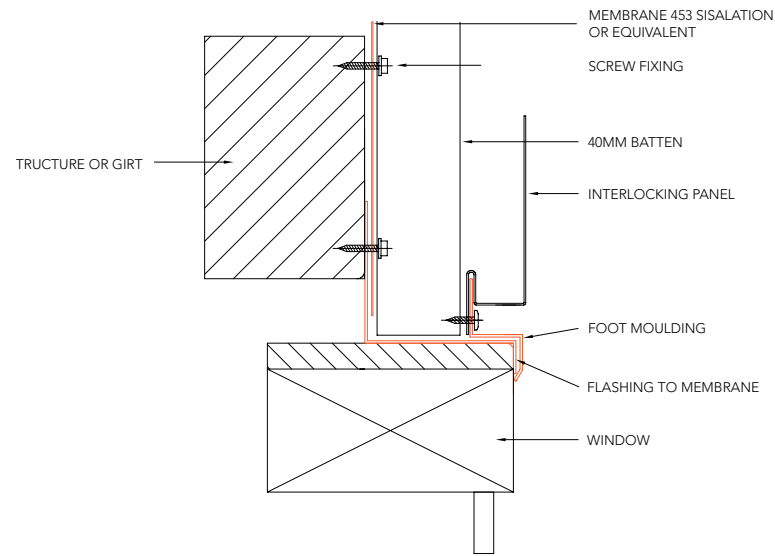
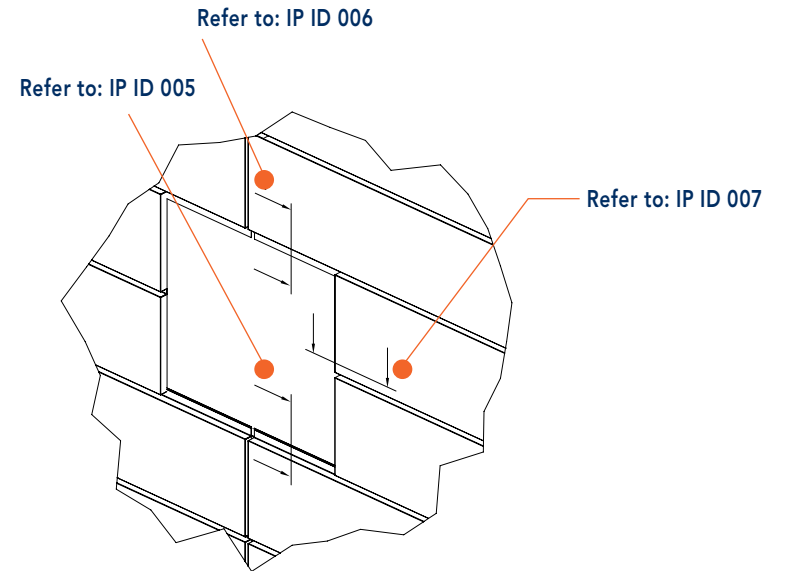


Figure IP ID 005



Installation Details: Window Sill

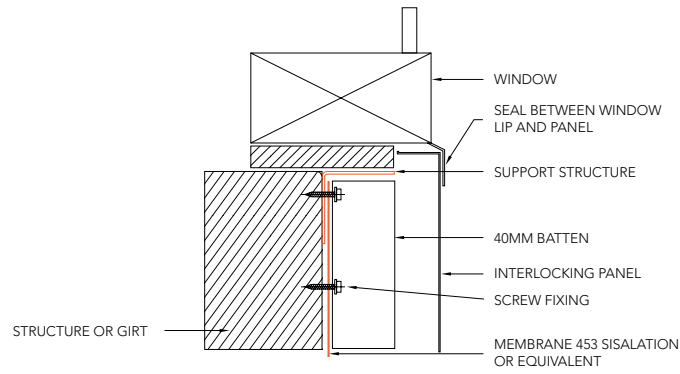


Figure IP ID 006

Installation Details: Window Jamb

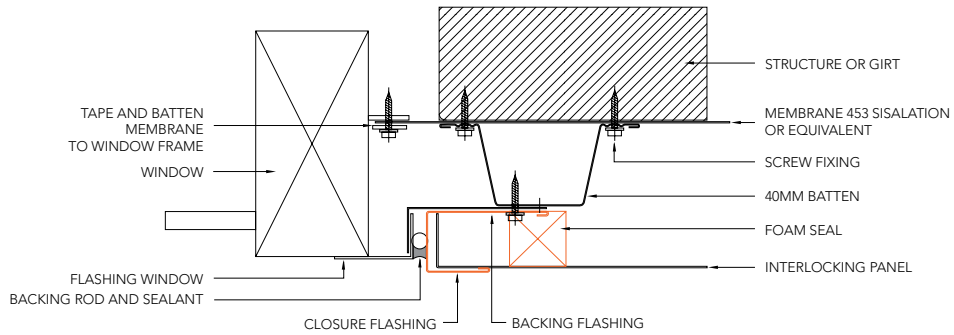


Figure IP ID 007

Installation Details: Top of Facade

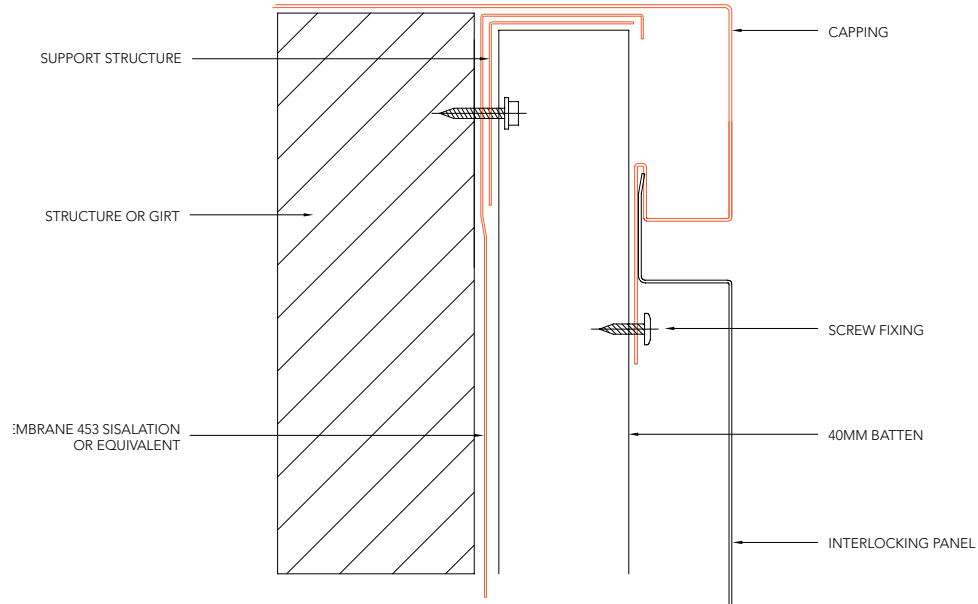


Figure IP ID 008

Installation Details: Bottom of Facade

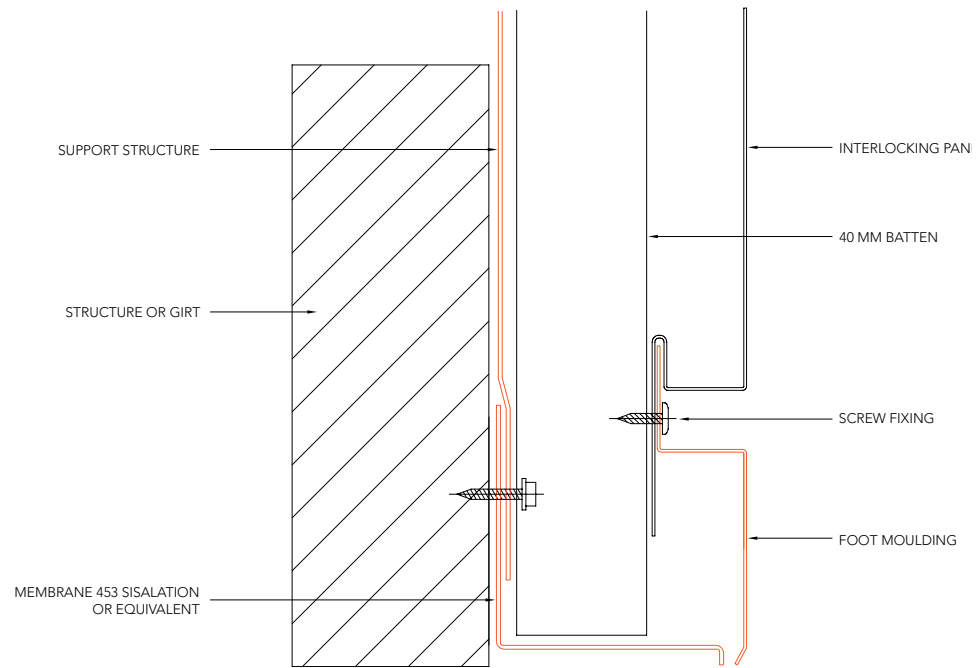


Figure IP ID 009



Installation Details: Side of Facade

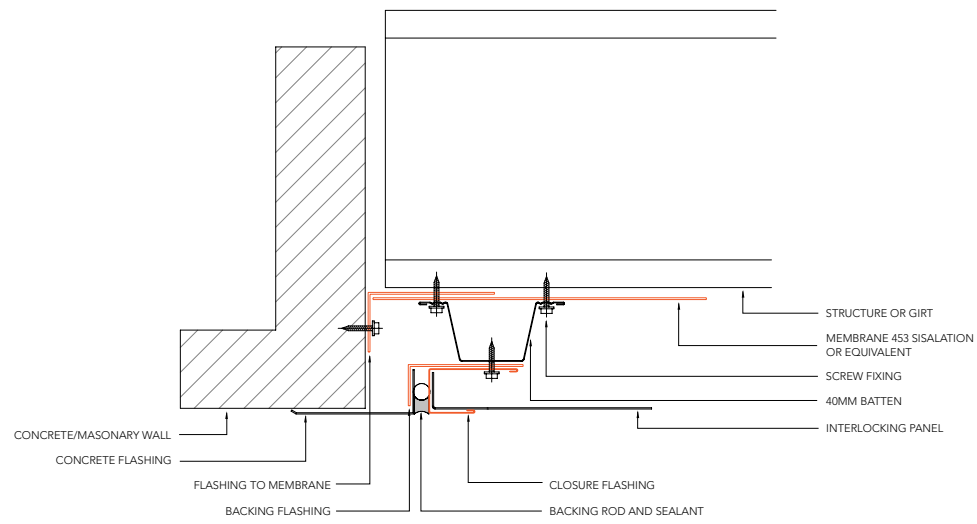
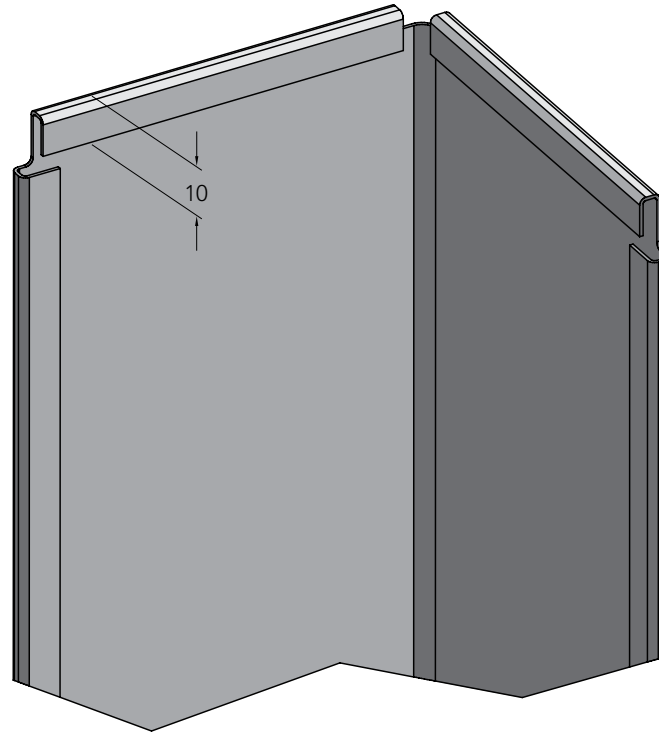


Figure IP ID 010

Installation Details: Backing Plates



FOLD 10MM RETURN AT TOP OF ALL BACKING PLATES

Figure IP ID 011

Installation Details: Foam Seal

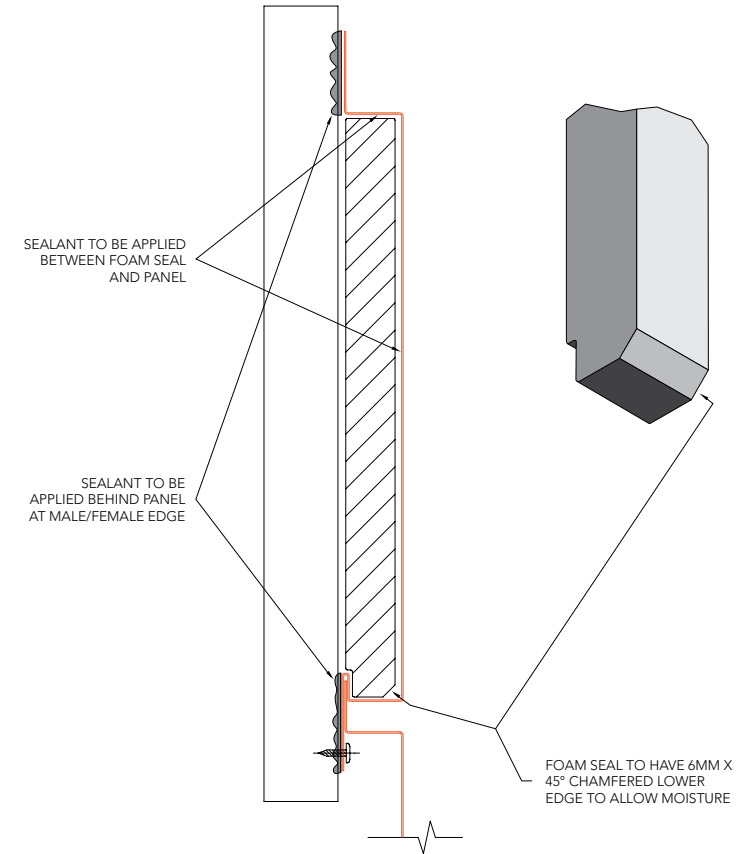


Figure IP ID 012

Installation Details: Typical Panel Section

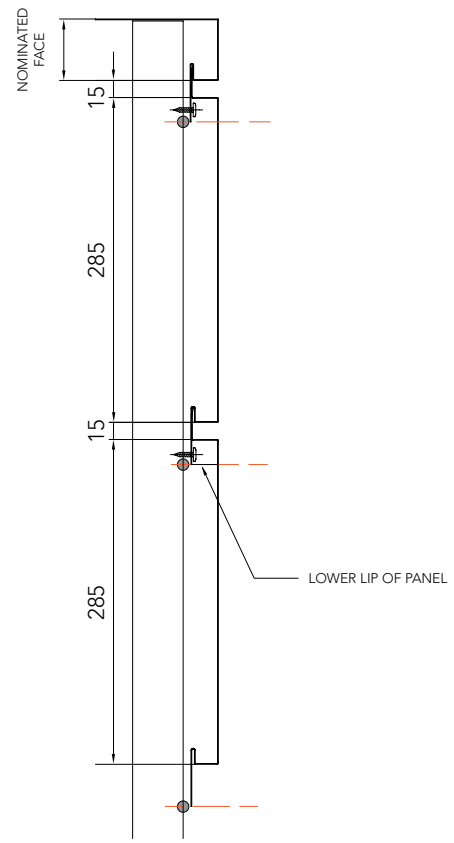


Figure IP ID 013

Installation Details: Panel Marking Matrix

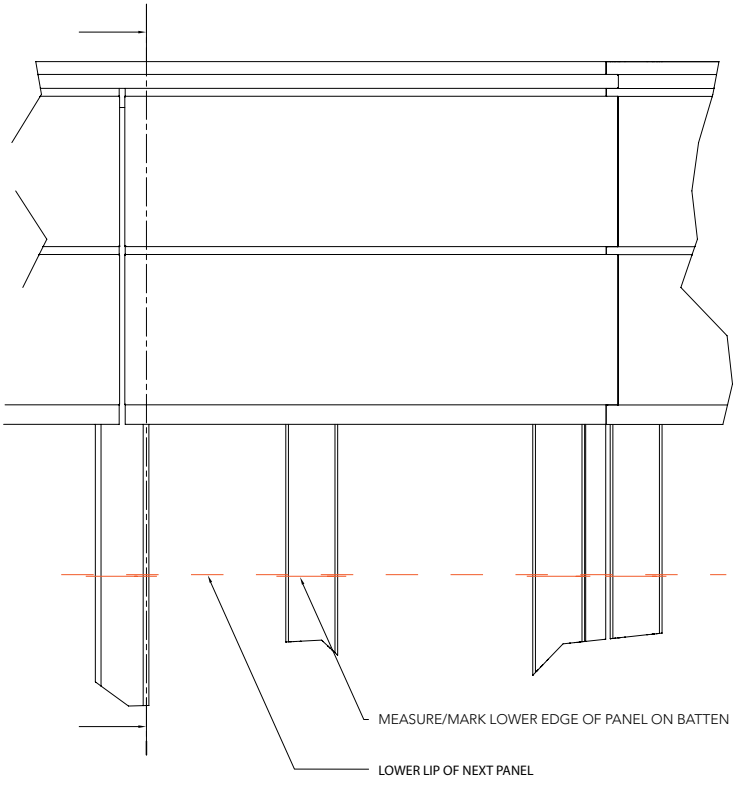


Figure IP ID 014

Installation Details: Pitched Roof

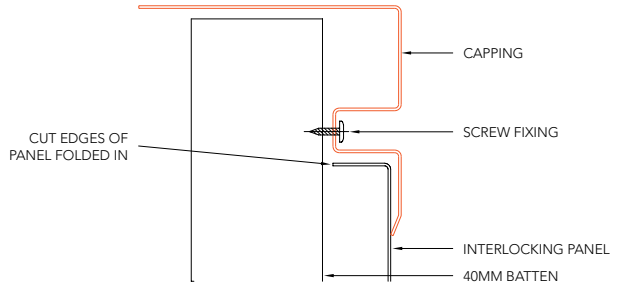
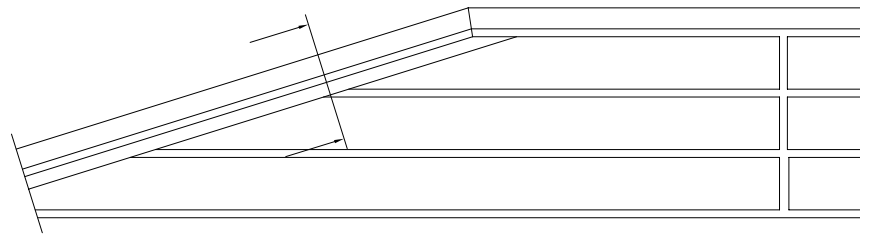


Figure IP ID 015

Installation Details: Panel Marking Matrix

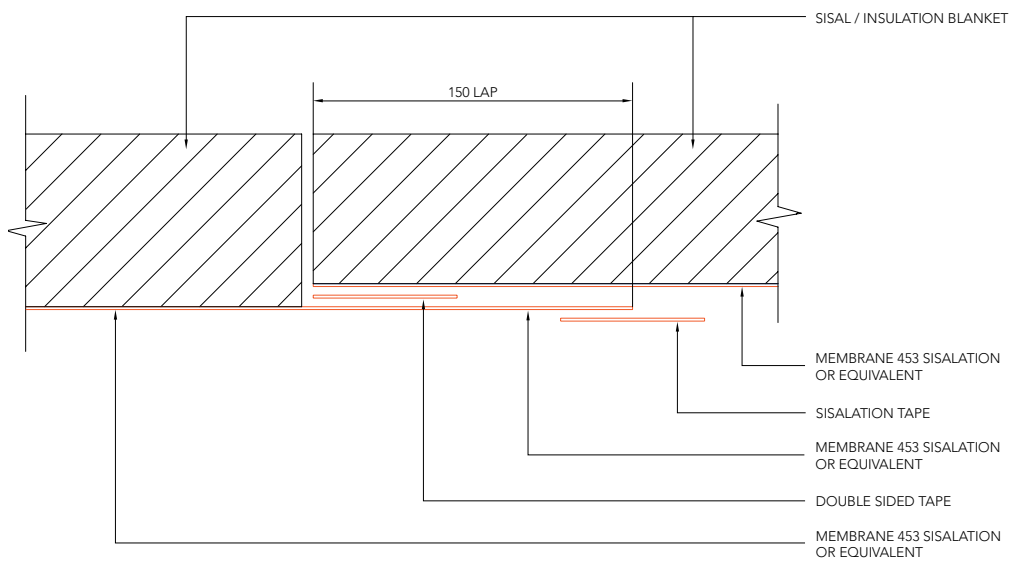


Figure IP ID 016