

Mehdi Malekian
Promat Australia Pty Ltd
198 Harbour Esplanade, Docklands
VIC 3008, Australia
+61 (0) 4 024 16202
Mehdi.malekian@etexgroup.com

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Waterproofing Assessment for Equitone Façade System

As requested, we have reviewed the Equitone wall assemblies and their abilities to fulfil the requirements of the New Zealand Building Code Clause E2, External Moisture. This compliance statement has been produced assuming the product will be utilised in accordance with the manufacture's details, which have also been enclosed within this letter.

Cladding Systems Overview

The Equitone claddings are installed as part of a rainscreen cladding system.

The Equitone range includes ten fibre-reinforced cement panels [tectiva], [lines], [natura], [natura] Pro, [pictura], [lunara], [materia], [textura], [coloura], and [inspira]. These claddings can be installed over timber, masonry, or steel walls. The table below outlines the different Equitone wall assemblies shown in the drawings.

Table 1: Equitone Wall Assemblies

| Equitone with Rigid Air Barrier | Equitone with Pliable Membrane |
|--|---|
| A 35x70mm timber battens or 35mm top hat battens over 6mm fibre cement sheeting and Pro Clima Solitex Extesana Adhero membrane | 35x70mm timber battens or 35mm top hat battens over Pro Clima Solitex Extasana membrane |
| Double layer top hats over 6mm fibre cement sheeting and Pro Clima Solitex Extesana Adhero membrane | Double layer top hats over Pro Clima Solitex Extasana membrane |
| Nvelope NV1 over 6mm fibre cement sheeting and Pro Clima Solitex Extesana Adhero membrane | Nvelope NV1 over Pro Clima Solitex Extasana membrane |
| Nvelope NV3 over 6mm fibre cement sheeting and Pro Clima Solitex Extesana Adhero membrane | Nvelope NV3 over Pro Clima Solitex Extasana membrane |



Compliance Documentation

The following documents for the Equitone façade system were provided and reviewed:

- Equitone façade system details
- E2/VM2 Test Report No. FT-R1040 on 8mm Equitone on 35x70 timber battens and rigid air barrier, by FTNZ Ltd – 24 March 2020
- E2/VM2 Test Report No. FT-R1042 on 8mm Equitone on 35mm top hats cavity battens and rigid air barrier, by FTNZ Ltd – 24 March 2020
- AS/NZS 4284:2008 Air Pressure and Water Penetration Resistance Supplementary Test Report No. FT-R1045 on 8mm Equitone on 35mm top hats cavity battens and rigid air barrier, by FTNZ Ltd – 10 April 2020
- Contega Fiden Exo Technical datasheet version 126077, by Pro Clima – 28 July 2020
- Technical datasheet of Tesa 6110 EPDM gasket series, by Tape Australia Pty Ltd – September 2012

Performance in Relation to NZBC Clause E2

Based on the information below, we believe that the Equitone wall assemblies will fulfill the performance requirements clauses of E2:

- E2.3.2 *“Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to building elements, or both.”*
- E2.3.3 *“Walls, floors, and structural elements in contact with, or in close proximity to, the ground must not absorb or transmit moisture in quantities that could cause undue dampness, damage to building elements, or both.”*
- E2.3.5 *“Concealed spaces and cavities in buildings must be constructed in a way that prevents external moisture being accumulated or transferred and causing condensation, fungal growth, or the degradation of building elements.”*
- E2.3.6 *“Excess moisture present at the completion of construction must be capable of being dissipated without permanent damage to building elements.”*
- E2.3.7 *“Building elements must be constructed in a way that makes due allowance for the following:”*
 - (a) *“the consequences of failure.”*

Assuming the fibre cement sheeting used is a suitable substrate for the membrane to adhere to, the requirements of the New Zealand Building Code E2 – Exterior Moisture and Australia National Construction Code FP1.4 and P2.2.2 share the similar performance requirement to effectively manage exterior water. The Equitone cladding systems will fulfil the performance requirements of both building codes, if built per the relevant details.

Objectives and Functional Requirements

Objectives:

- E2.1 "The objective of this provision is to safeguard people from illness or injury that could result from external moisture entering the building."

Functional Requirement:

- E2.2 "Buildings must be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside."

Principles of Rainscreen Cladding System

The Equitone cladding assembly is a drained and ventilated façade system. It is intended to be installed as part of a rainscreen cladding system where the panels form the outermost water shedding layer. In the completed wall assembly, the weather resistant line is located at the back of the rainscreen cavity provided by a flexible building wrap and/or rigid air barrier. In a system like this, the cladding is the outermost layer and is the first line of defence against water penetration.

Where water bypasses the cladding, the cavity and flexible wall underlay provide the secondary lines of defence against water penetration to a fibre cement sheeting and main structure. Water that moves across the cavity will predominantly drain down towards the cross-cavity flashings which will direct water out and be deflected past the cladding line. These openings that occur at inter-storey junctions helps dry any residual water within the cavity, limiting excessive moisture build up within the structural wall.

Testing / Limitations

Equitone with Rigid Air Barrier

E2/VM2 (BRANZ EM7) testing was carried out to the Equitone cladding on timber and metal top hat battens over 6mm fibre cement sheeting and Pro Clima Solitex Extasana Adhero membrane. This evaluation method provides a means of assessing the weathertightness performance of generic domestic-orientated external wall cladding systems for use on buildings up to 25m in height using a series of tests from AS/NZS 4284:2008. The following table summarizes the results of the tests:

Table 2: Summary of E2/VM2 (EM7) Tests

| E2/VM2 Test (BRANZ EM7) | Results |
|-------------------------|---|
| Preliminary Test | Complies – Static air pressure at +/- 2250 Pa |
| Air Infiltration Test 1 | Complies – Air leakage < 0.3 L/m ² /s at +/- 75 Pa |
| Air Infiltration Test 2 | Complies – Air leakage < 0.6 L/m ² /s at +/- 75 Pa |
| Water Penetration Test | Complies – Static water at 675 Pa Complies – Cyclic water at 338 – 675 Pa Complies – Cyclic water at 450 – 900 Pa Complies – Cyclic water at 675 – 1350 Pa |
| Water Management Test | Complies – Static water at 675 Pa Complies – Cyclic water at 338 – 675 Pa Complies – Cyclic water at 450 – 900 Pa Complies – Cyclic water at 675 – 1350 Pa |
| Wetwall Test | Complies – Static water penetration test at 75 Pa |

AS/NZS 4284:2008 testing was also carried out to the Equitone cladding on metal top hat battens over 6mm fibre cement sheeting and Pro Clima Solitex Extasana Adhero membrane. The following table summarizes the results of the AS/NZS 4284:2008 tests.

Table 3: Summary of AS/NZS 4284:2008 Tests

| AS/NZS 4284:2008 Test | Results |
|--|---|
| Static Air Pressure Testing | Complies at +/- 3.5 kPa, +/- 4.5 kPa, +/- 6.5 kPa, and + 7.22 kPa |
| Static Water Penetration Testing | Complies at +1005 Pa, +1350 Pa, and +1950 Pa |
| Cyclic water penetration test (for SLS of 4.5 kPa) | Stage 1: Complies at 675 – 675 Pa Stage 2: Complies at 900 – 1800 Pa |

Additional testing or project specific engineering would be required for the Equitone claddings where:

- Building height is greater than 25m high
- SLS wind pressures greater than +/-2250 Pa
- Substrate and cladding framing deflections exceed Span/250

Based on the results of the tests and assuming the fibre cement sheeting used is a suitable substrate for the membrane to adhere to, the remaining enclosed details using the Equitone cladding and rigid air barrier system are expected to perform equally.

Equitone with Pliable Membrane

The Equitone cladding systems using the Pro Clima Extasana Solitex membrane is suitable to use on buildings up to 10m high and with SLS and ULS wind pressures of +/-1515 Pa and +/-2500 Pa, respectively.

Additionally, the weathertightness performance of the Pro Clima Extasana Solitex membrane installed over timber framing with Cedral cladding was tested to E2/VM1 and complied. The results should also apply when using the Equitone cladding.

Based on the results of the tests, the remaining enclosed details using the Equitone cladding and Pro Clima Extasana Solitex membrane are expected to perform equally.

Recommendations

- Exterior sealant to be 100% silicone for improved movement capabilities and UV stability
- An alternative expanding foam tape to the Pro Clima Contega Fiden Exo is the Rothoblaas Kompri Band.

Conclusion

This report is an opinion of the probable performance of the Equitone cladding systems to achieve NZBC Clause E2 and AU NCC FP1.4 and P2.2.2. The following should be noted:

- Project wind loading needs to be calculated by qualified structural/façade engineer as per the relevant standards and the calculated wind loads must be within the tested pressures.
- This assessment is limited to the enclosed details and any variations to these details are outside the scope of this certification.
- The fibre cement sheeting used must be a suitable substrate for the membrane to adhere to.
- Any project specific details outside of the reviewed details will need to be designed by a qualified engineer.

Signed:

A handwritten signature in black ink, appearing to read 'SM', is positioned below the 'Signed:' text.

Shawn McIsaac, CP,Eng (NZ, Aus), P.E. (Wa), P,Eng (BC)

Director, Oculus Architectural Engineering Ltd

Appendix A – Equitone Façade System Details



EQUITONE facade system

with

rigid air barrier

&

timber batten construction



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | 70x35mm timber batten |
| Weather (resistive) barrier | Kalsi RigidBacker and pro clima SOLITEX EXTASANA ADHERO® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

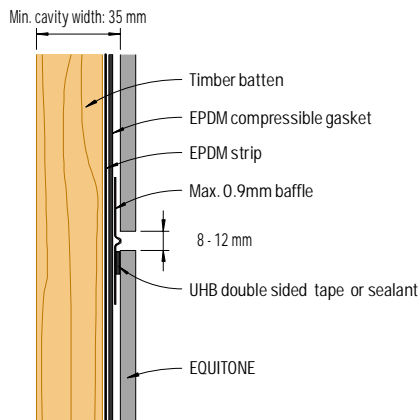


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

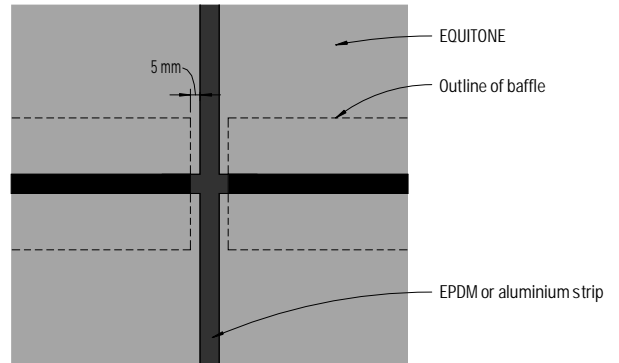


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

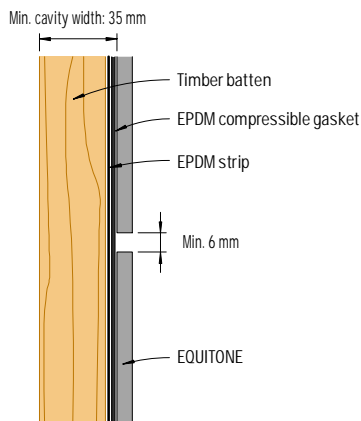


Figure 3: Open horizontal joint

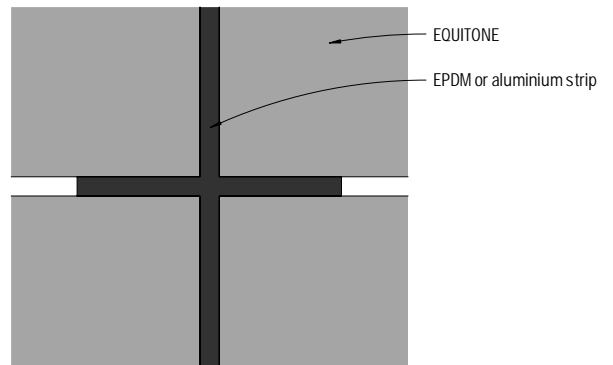


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and the selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame (battens) and weather barrier may be coated black with suitable paint.
- 3) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

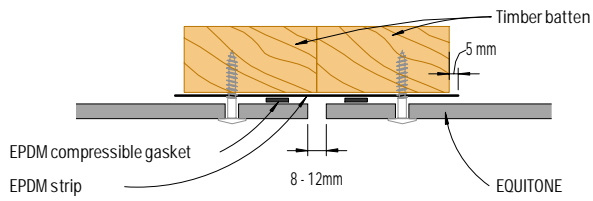


Figure 5: Vertical joint - Detail 1

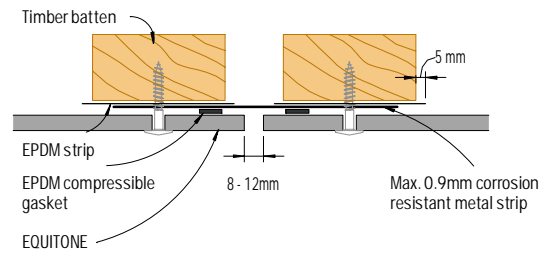


Figure 6: Vertical joint - Detail 2

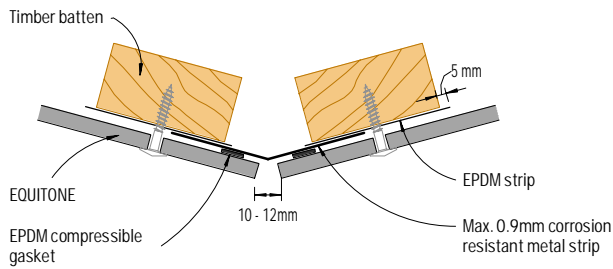


Figure 7: Vertical joint - Detail 3

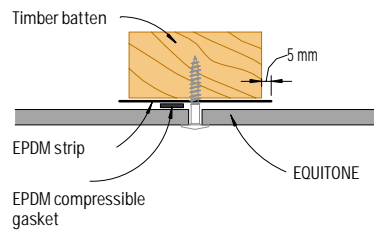


Figure 8: Intermediate panel fixings connection

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) In Figure 6 & 7, the metal strip should be fixed ONLY to one of the battens (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

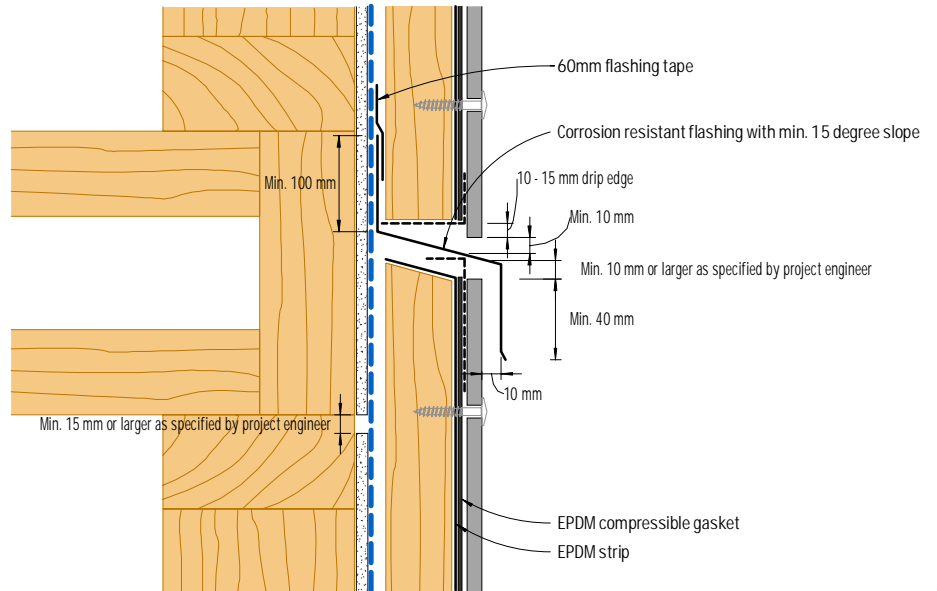


Figure 9: Horizontal control joint

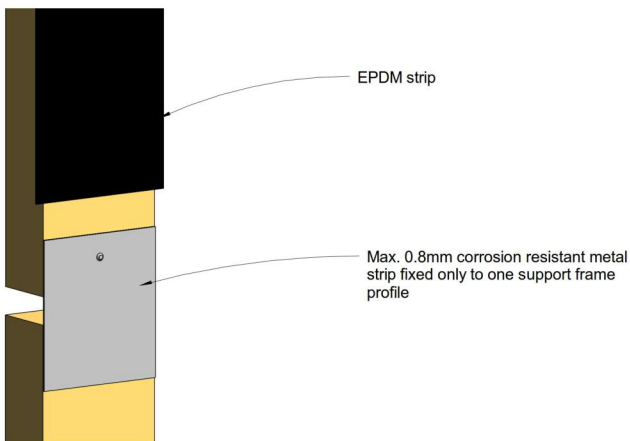


Figure 10: EPDM gasket support over control joint or the like

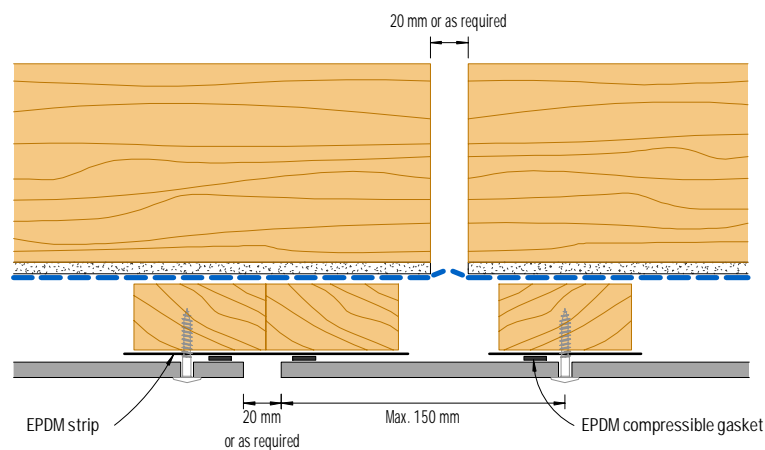


Figure 11: Vertical control joint

Notes

- 1) Support frame (batten) and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

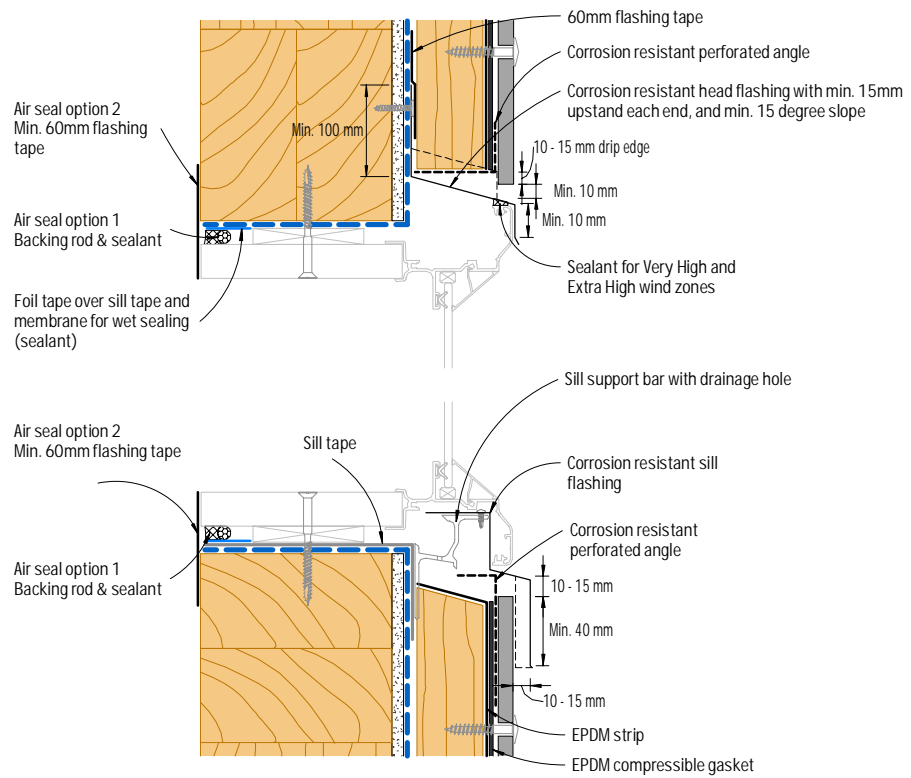


Figure 12: Flush window - Head and sill

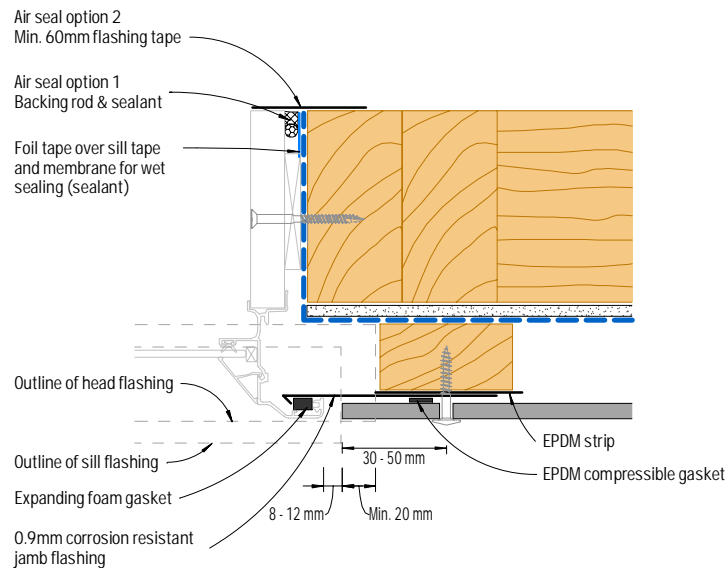


Figure 13: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

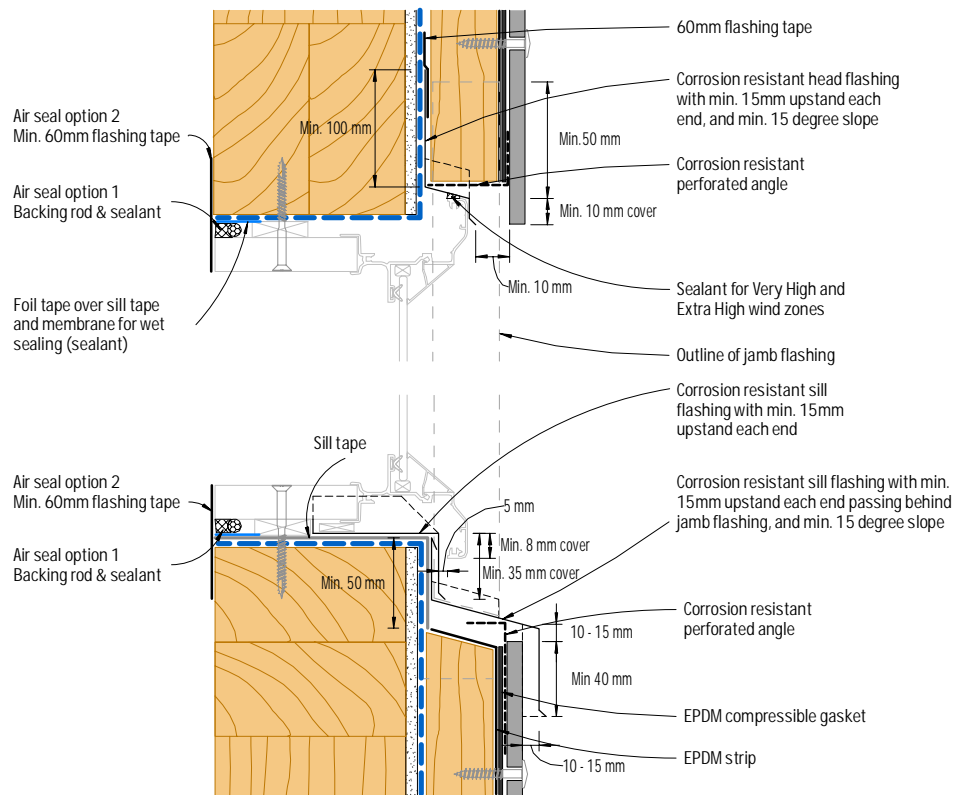


Figure 14: Recessed window - Head and sill

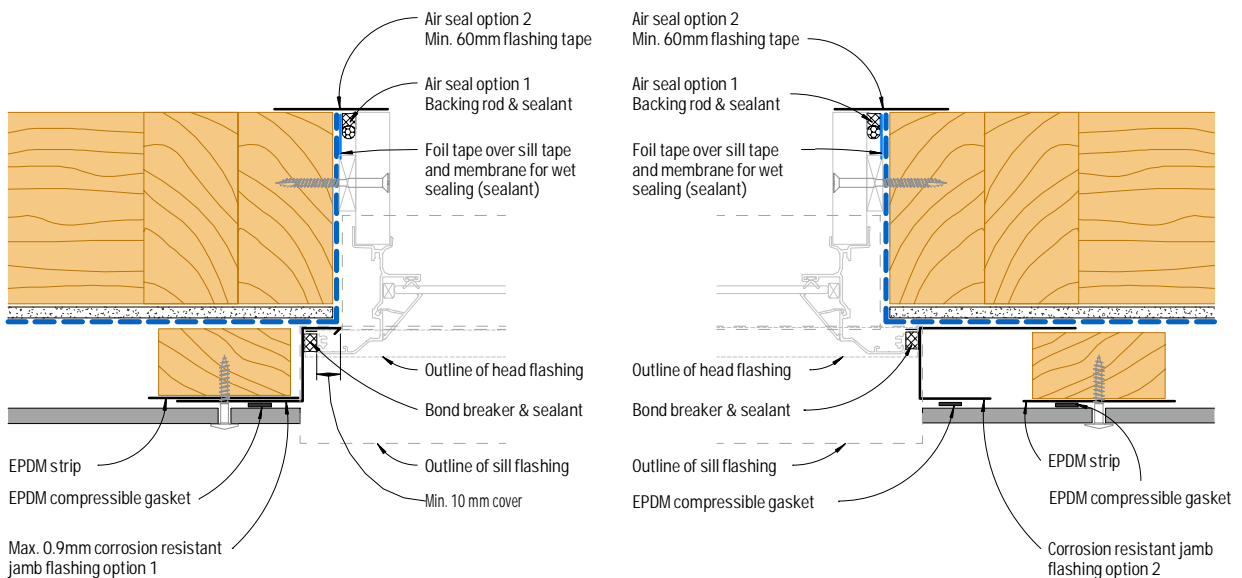


Figure 15: Recessed window jamb - Option 1

Figure 16: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

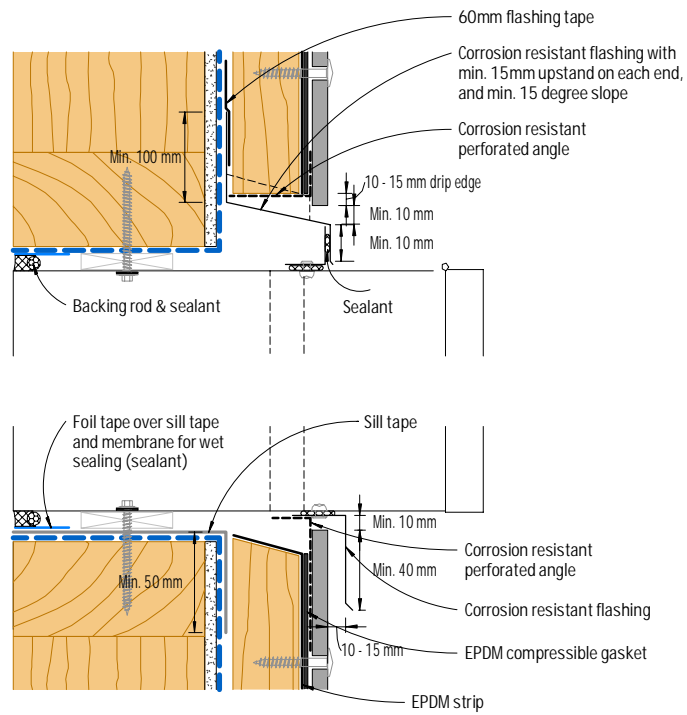


Figure 17: Meter box - Section

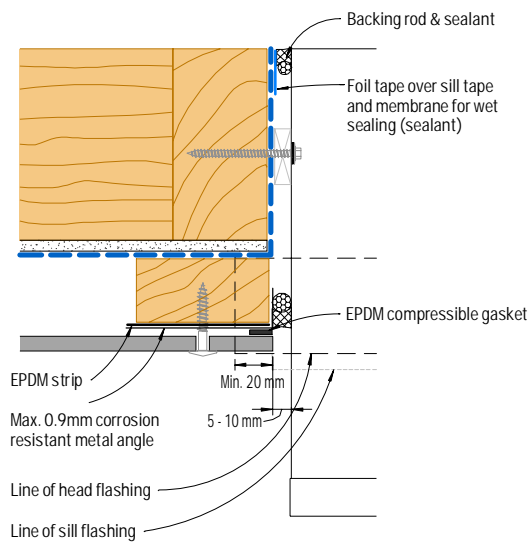


Figure 18: Meter box - Plan view - Detail 1

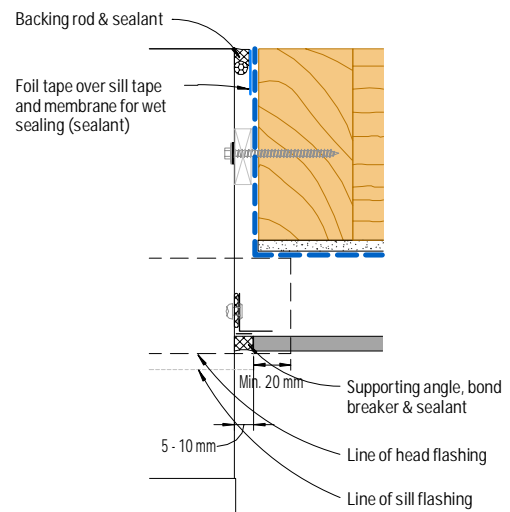


Figure 19: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

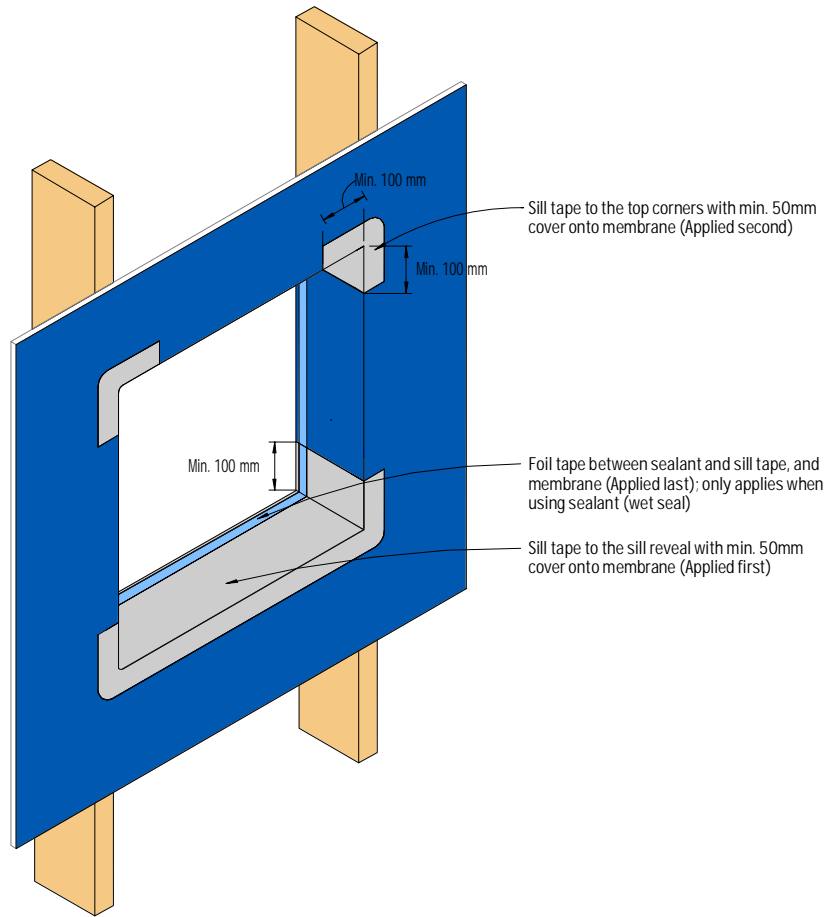


Figure 20: Isometric view of window/meter box opening - Tape application

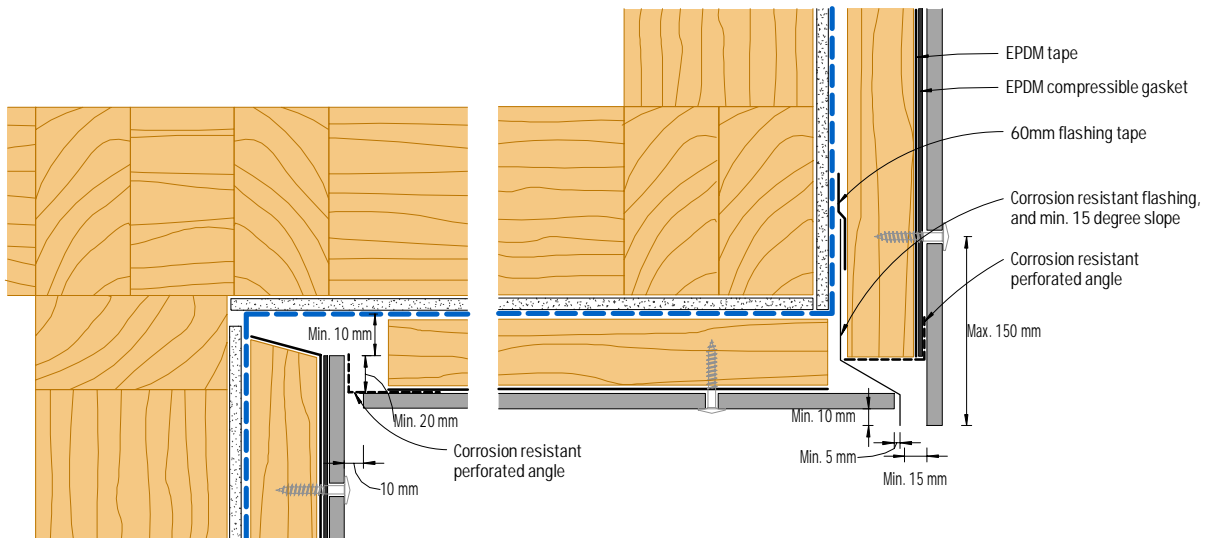


Figure 21: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame (batten) and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

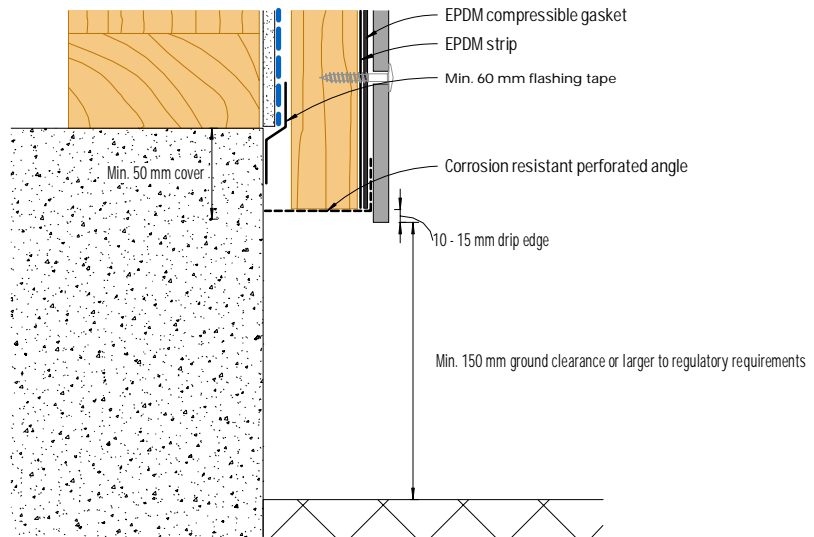


Figure 22: Base detail

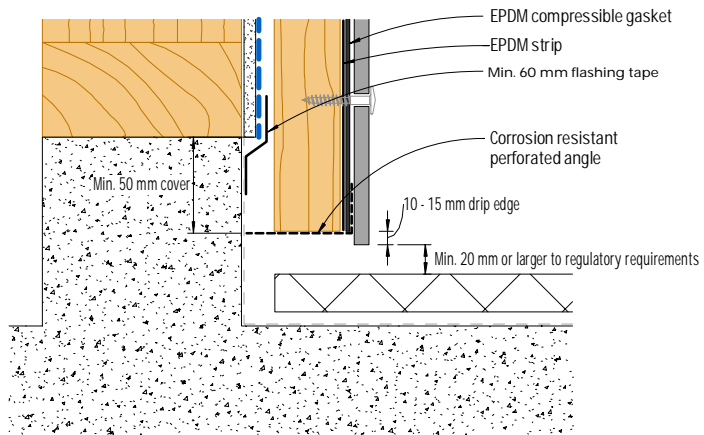


Figure 23: Base detail - Covered area

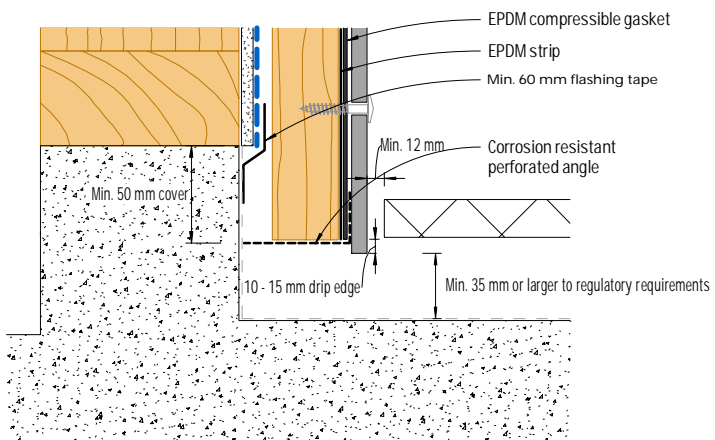


Figure 24: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

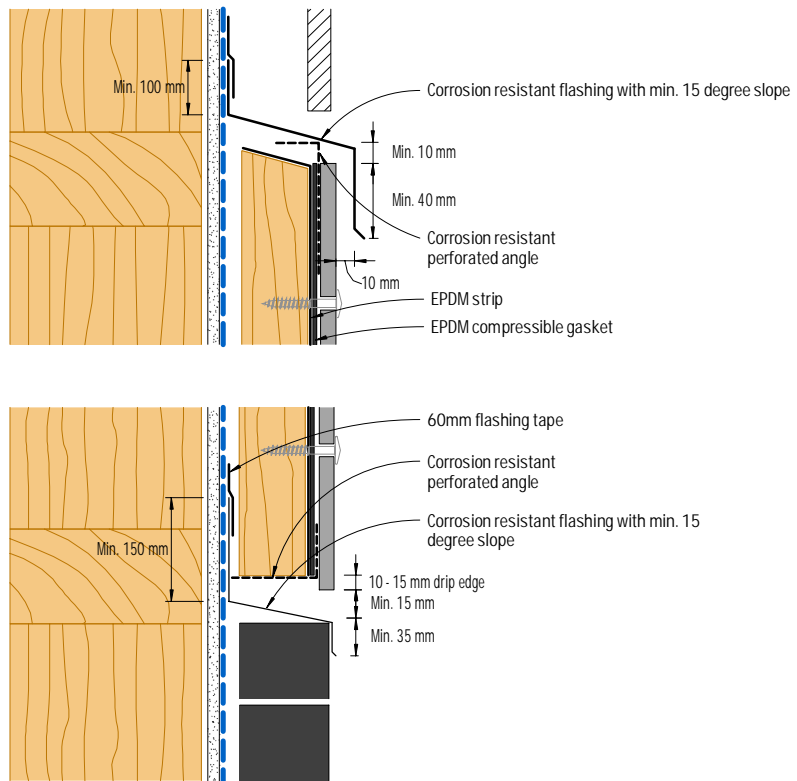


Figure 25: Junction with other materials - flush detail

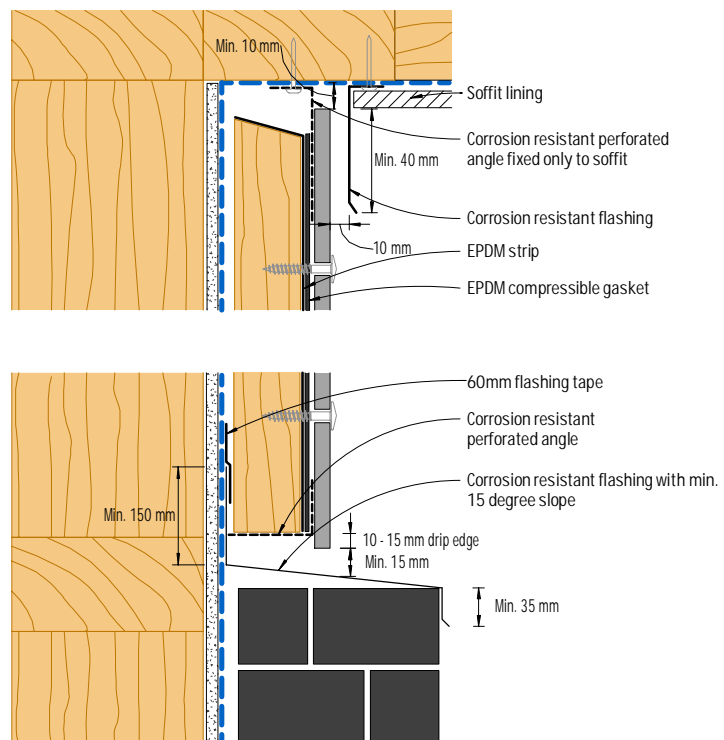


Figure 26: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame (batten)s and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

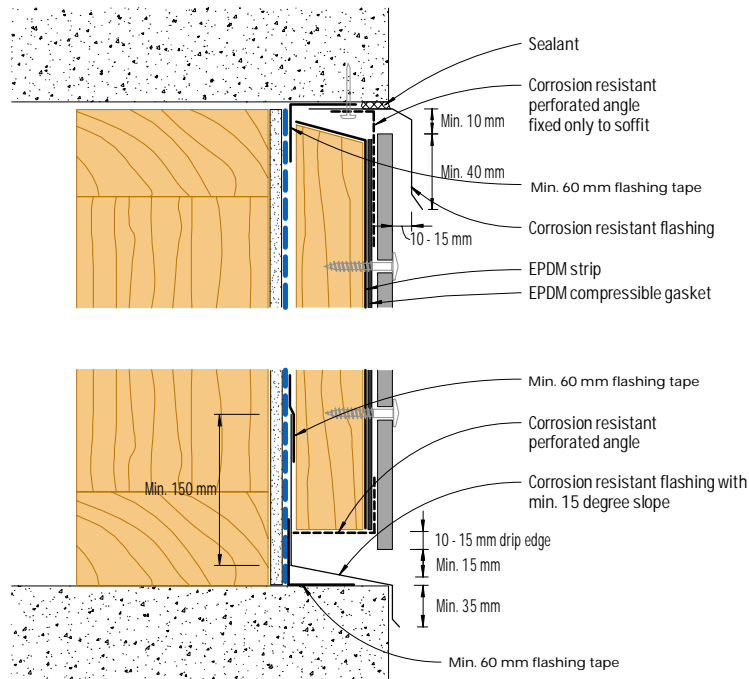


Figure 27: Exposed concrete slab or beam - Cladding flush

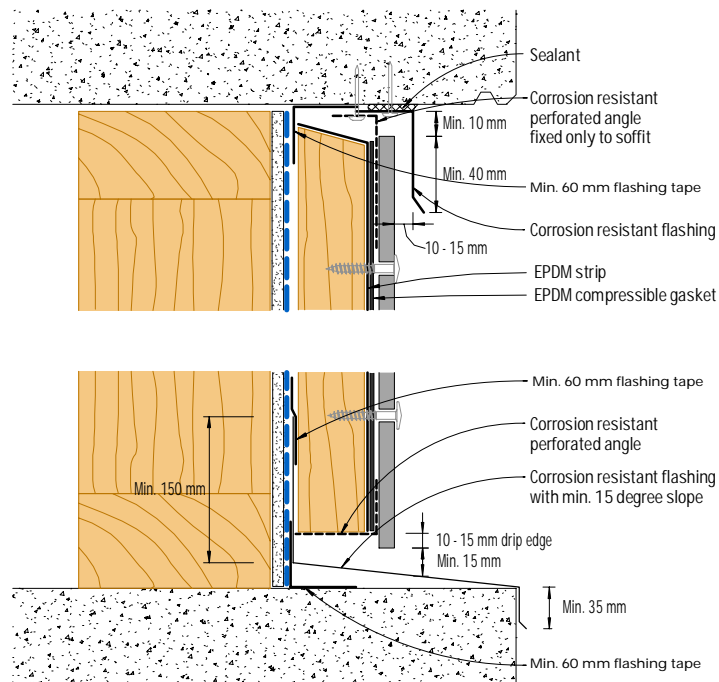


Figure 28: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Support frame (batten)s and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

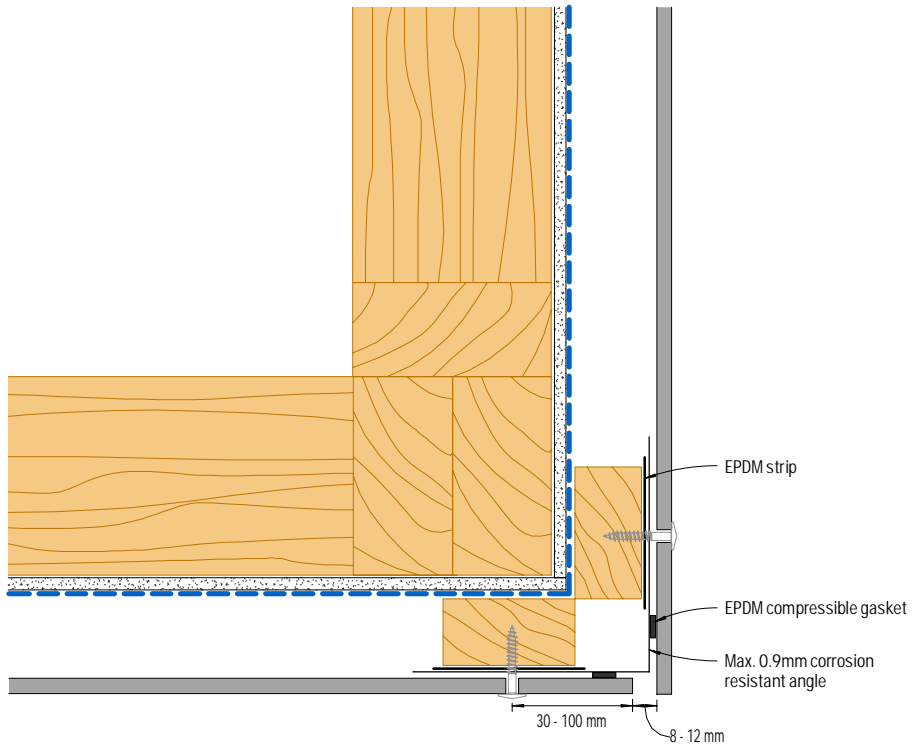


Figure 29: External corner - Detail 1

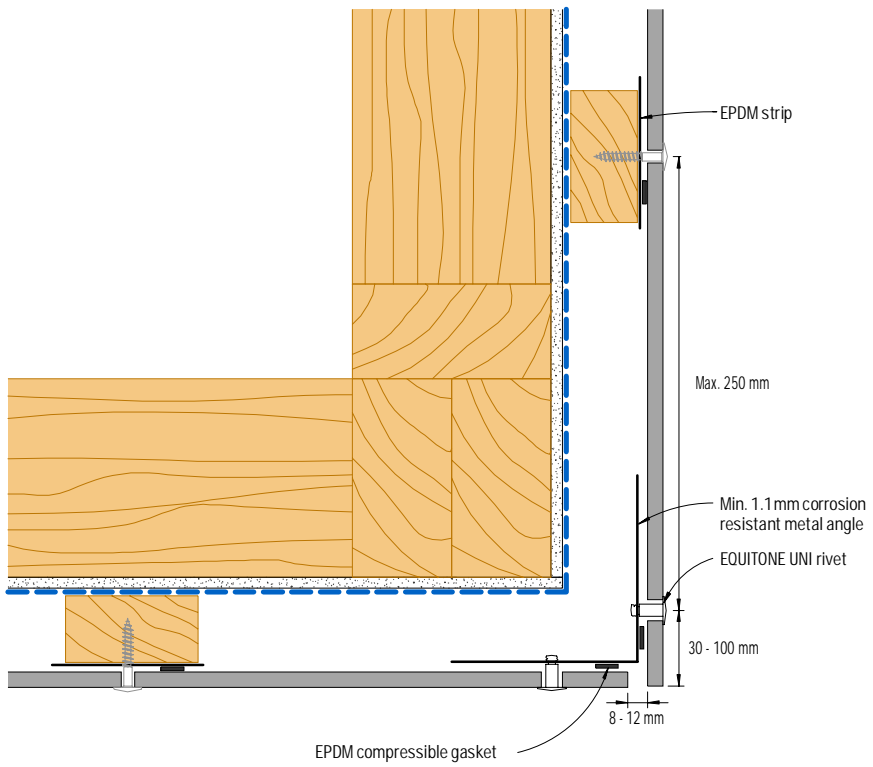


Figure 30: External corner - Detail 2

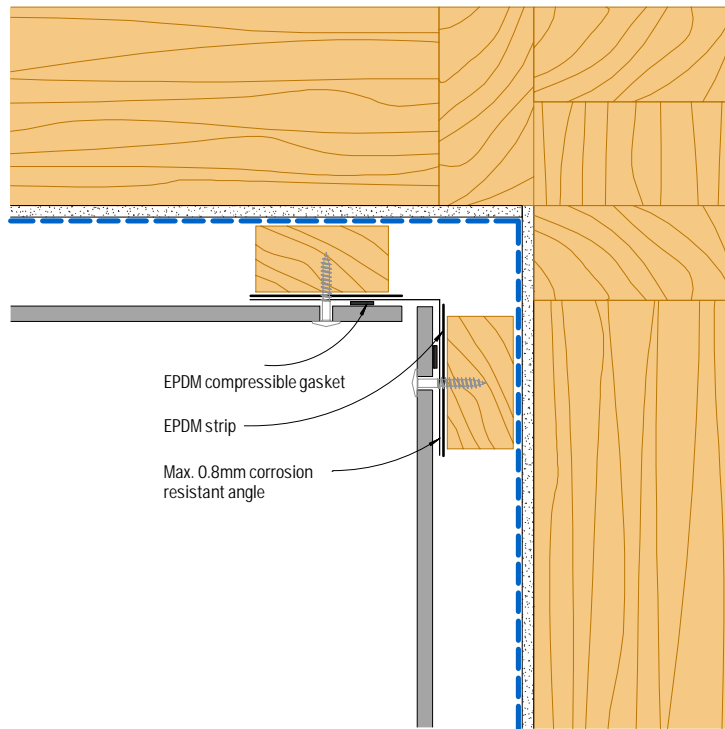


Figure 31: Internal corner

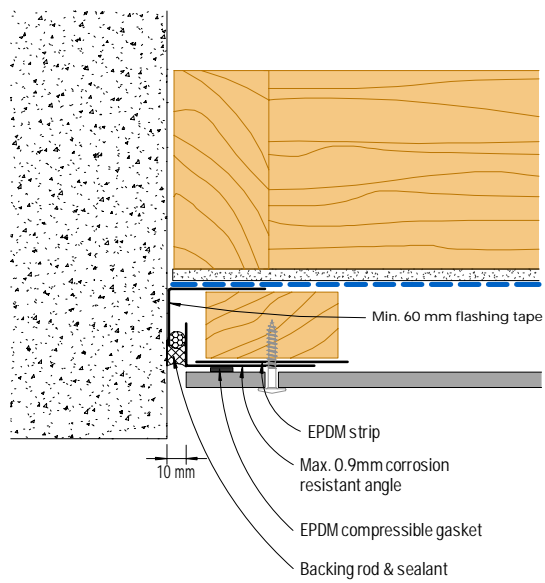


Figure 32: Abutment

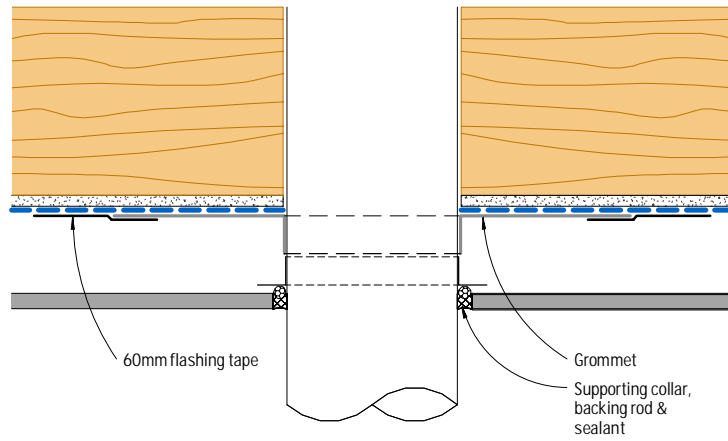


Figure 33: Pipe penetration - Plan view

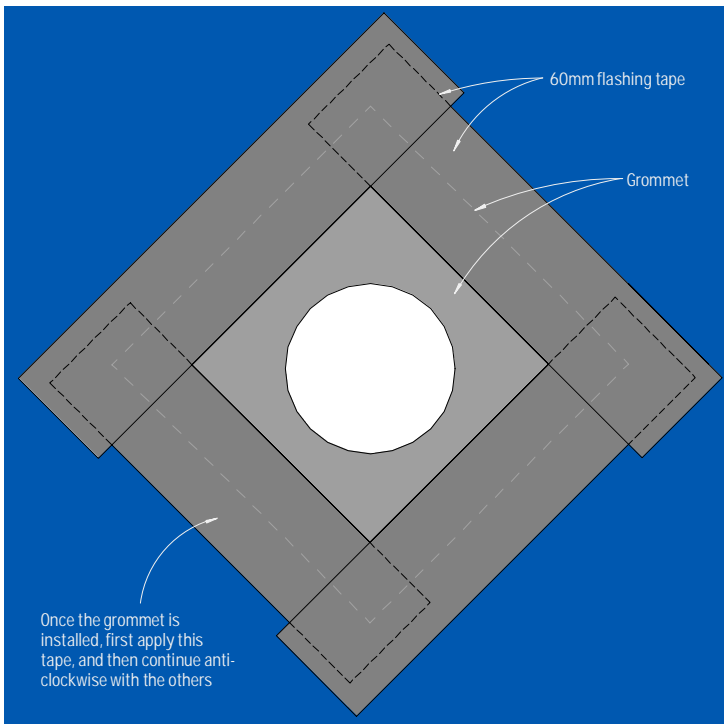


Figure 34: Pipe penetration - Elevation

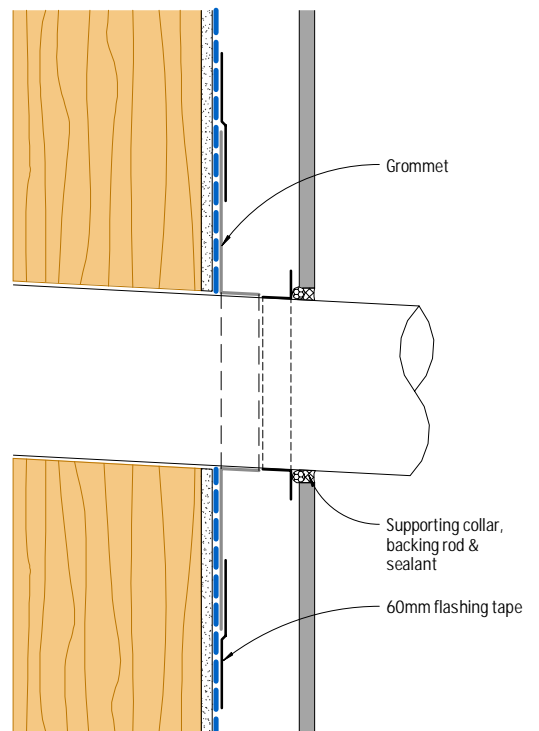


Figure 35: Pipe penetration - Section

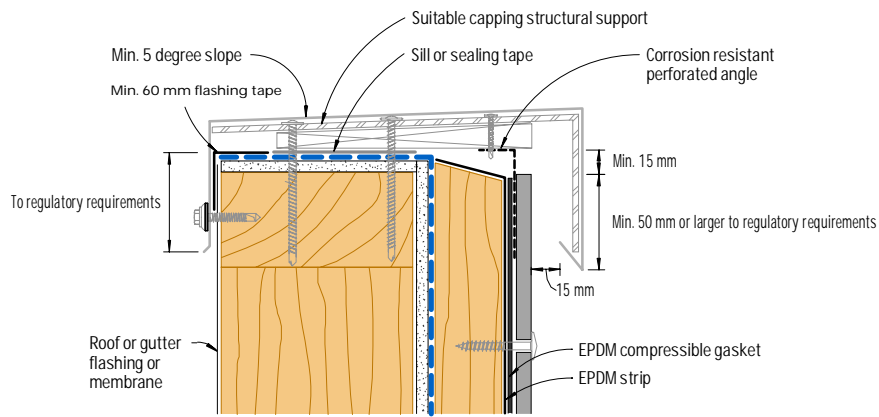


Figure 36: Capping - Detail 1

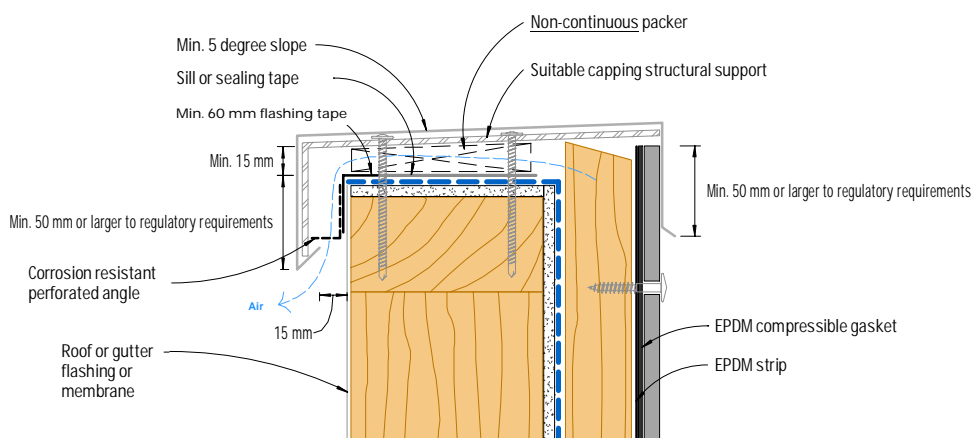


Figure 37: Capping - Detail 2
(Not suitable for EQUITONE [material])

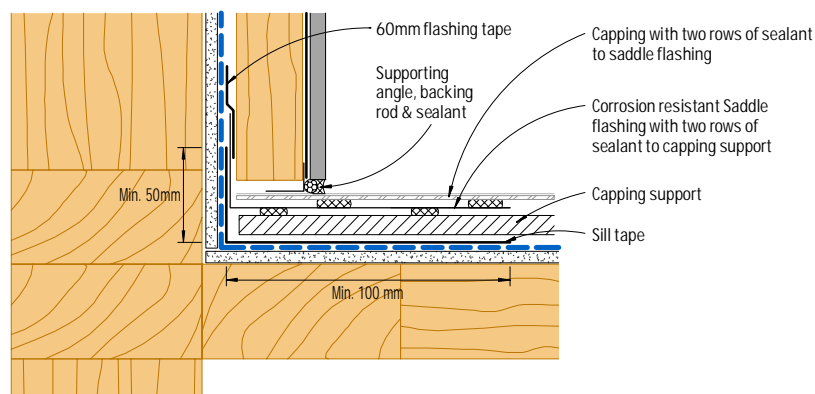


Figure 38: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 36 & 37.

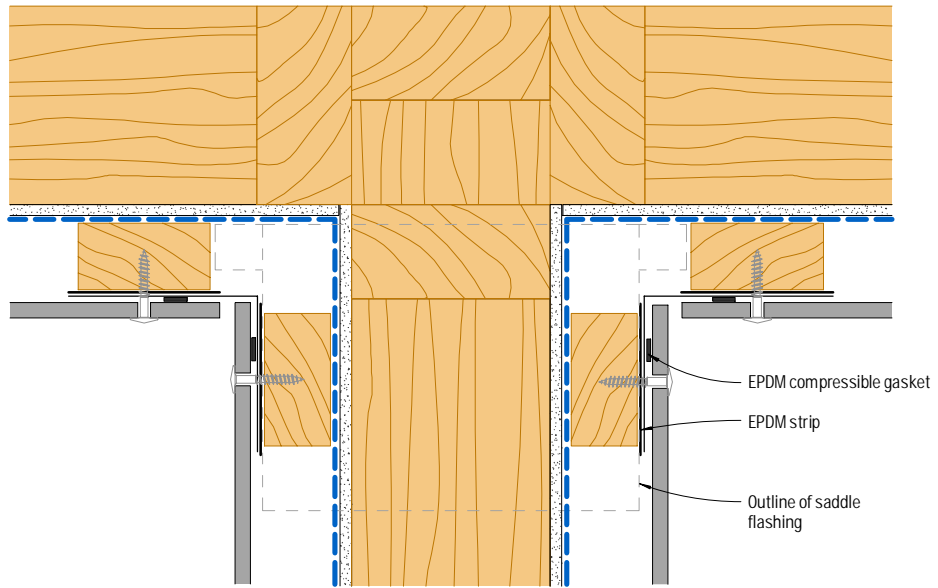


Figure 39: Parapet junction - Plan view

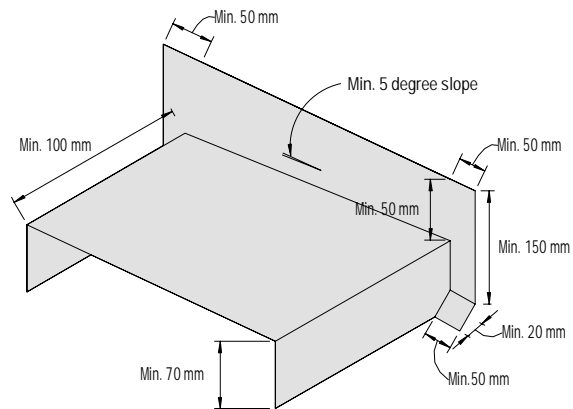


Figure 40: Corrosion resistant saddle flashing

EQUITONE facade system

with

rigid air barrier

&

single layer top hat construction



Components

| | |
|-----------------------------|---|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | Single layer top hat construction <ul style="list-style-type: none">- Vertical intermediate profile: 50x35mm (Min. 1.15mm BMT)- Vertical joint profile: 120x35mm (Min. 1.15mm BMT) |
| Weather (resistive) barrier | Kalsi RigidBacker and pro clima SOLITEX EXTASANA ADHERO® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTONSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

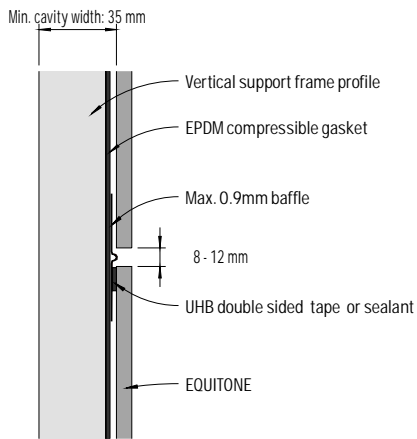


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

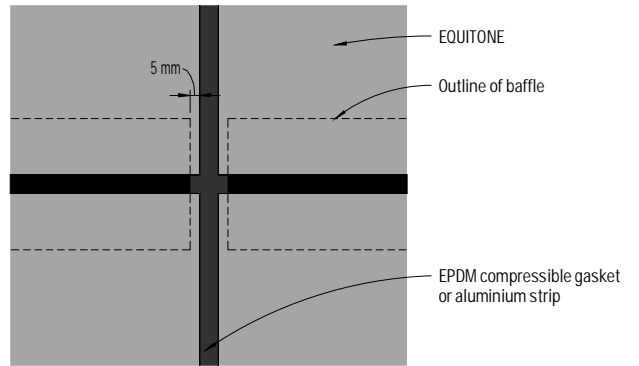


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

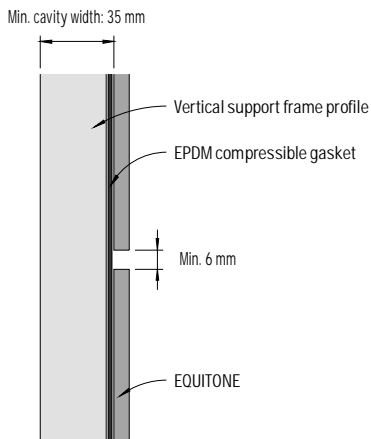


Figure 3: Open horizontal joint

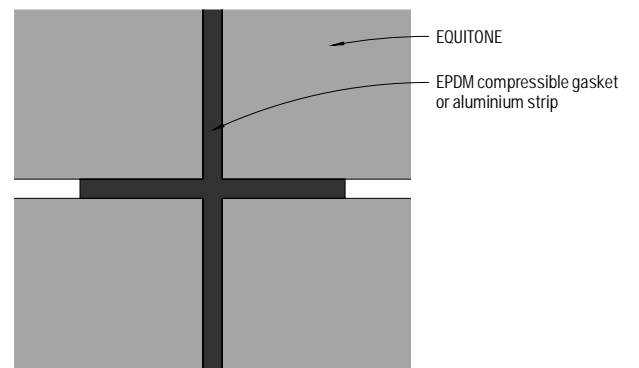


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and the selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame profiles and weather barrier may be coated black with suitable paint.
- 3) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

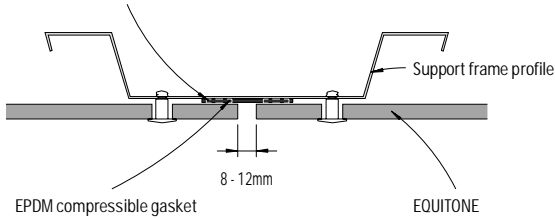


Figure 5: Vertical joint - Detail 1

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

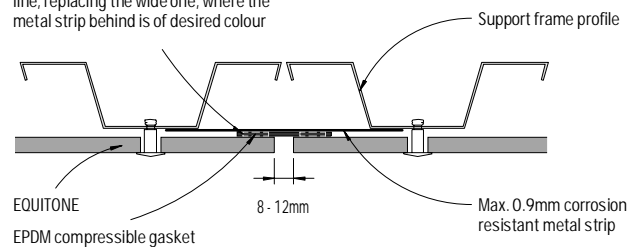


Figure 6: Vertical joint - Detail 2

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

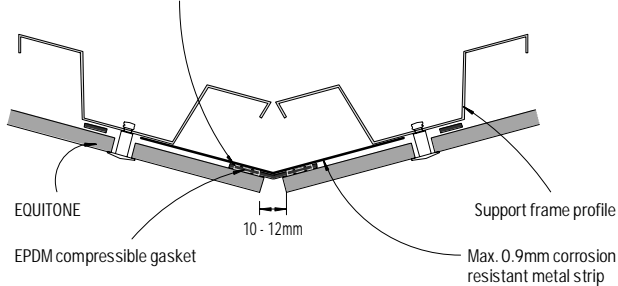


Figure 7: Vertical joint - Detail 3

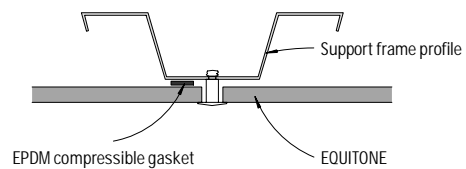


Figure 8: Intermediate panel fixings connection

Notes

1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

2) In Figure 6 & 7, the metal strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

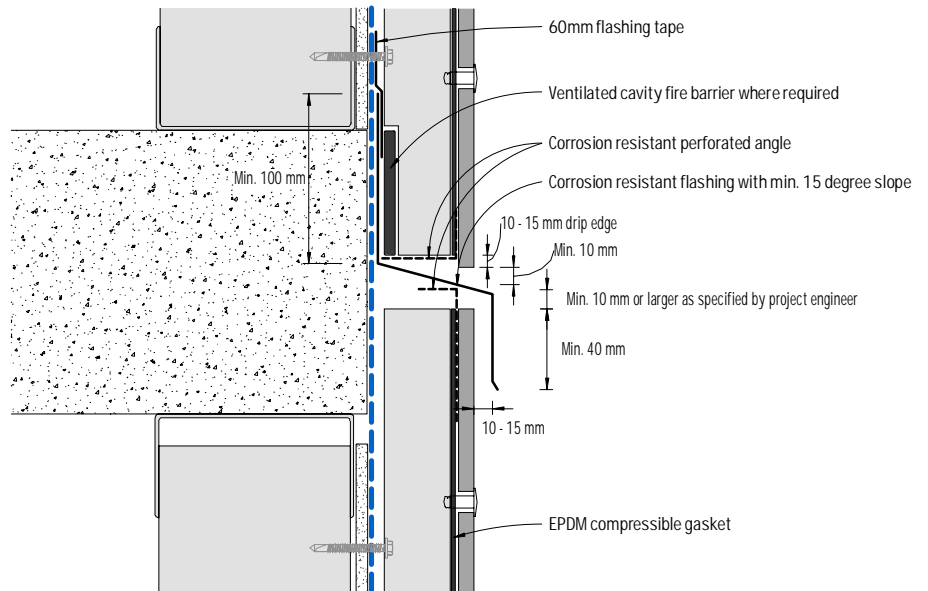


Figure 9: Horizontal control joint

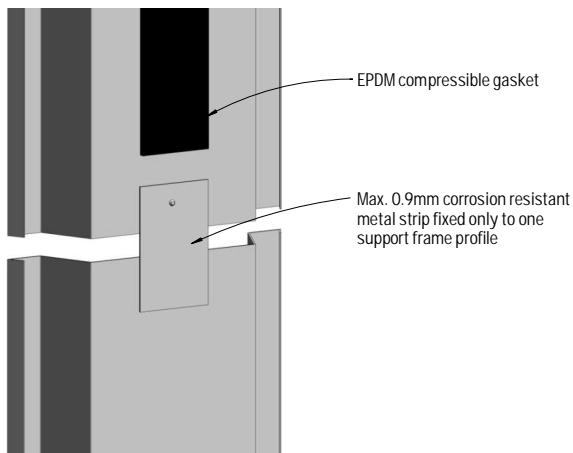


Figure 10: EPDM gasket support over control joint or the like

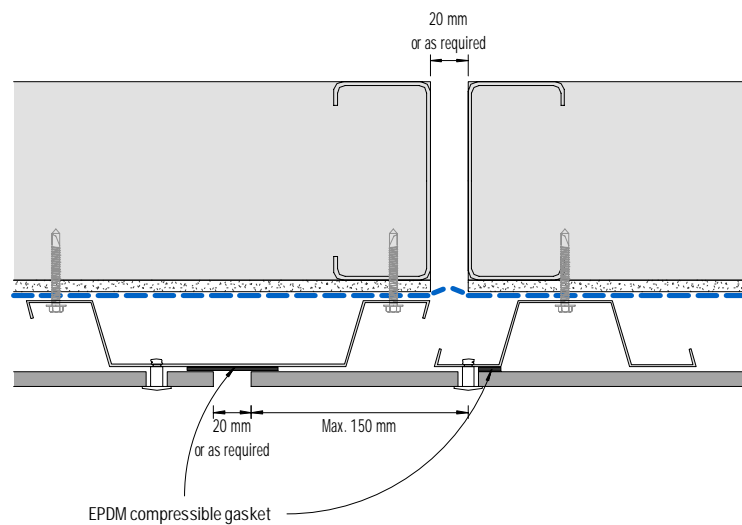


Figure 11: Vertical control joint

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

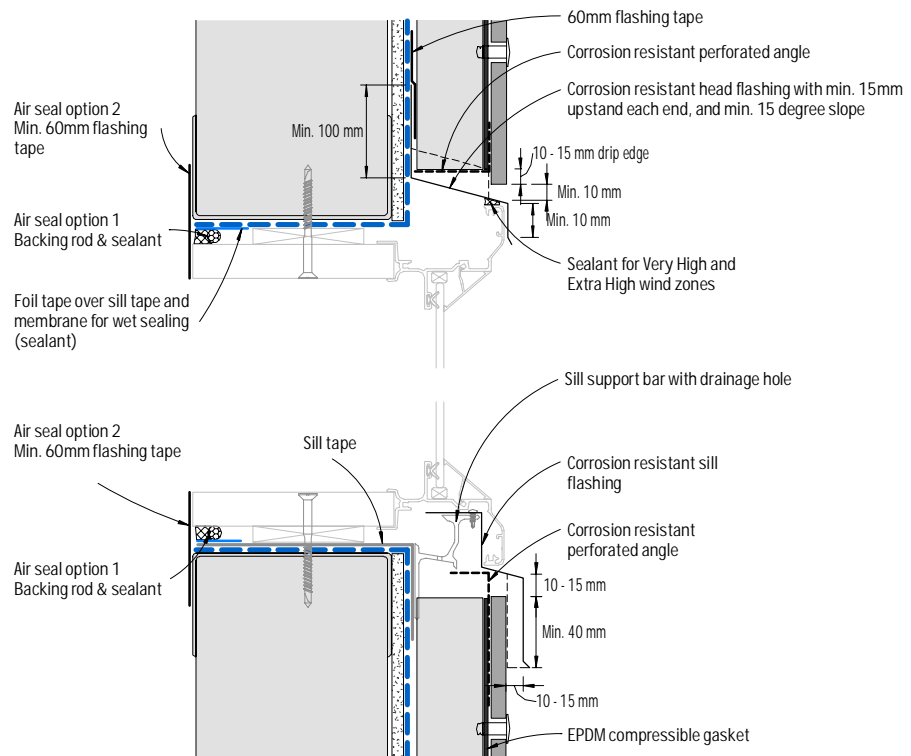


Figure 12: Flush window - Head and sill

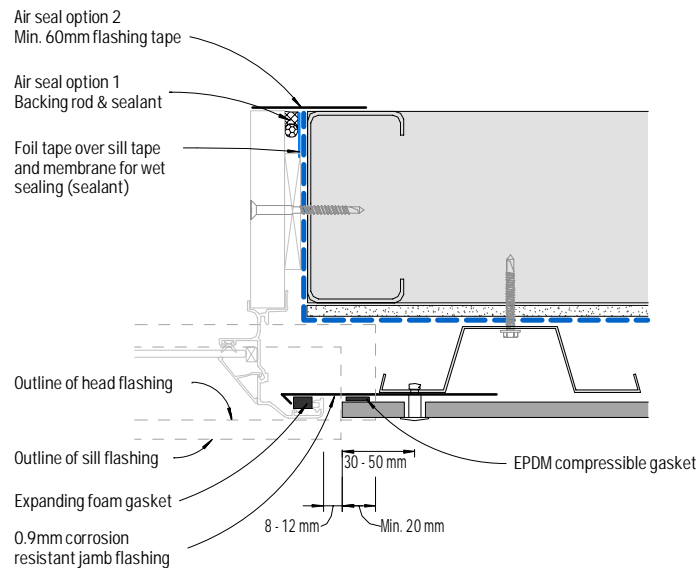


Figure 13: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

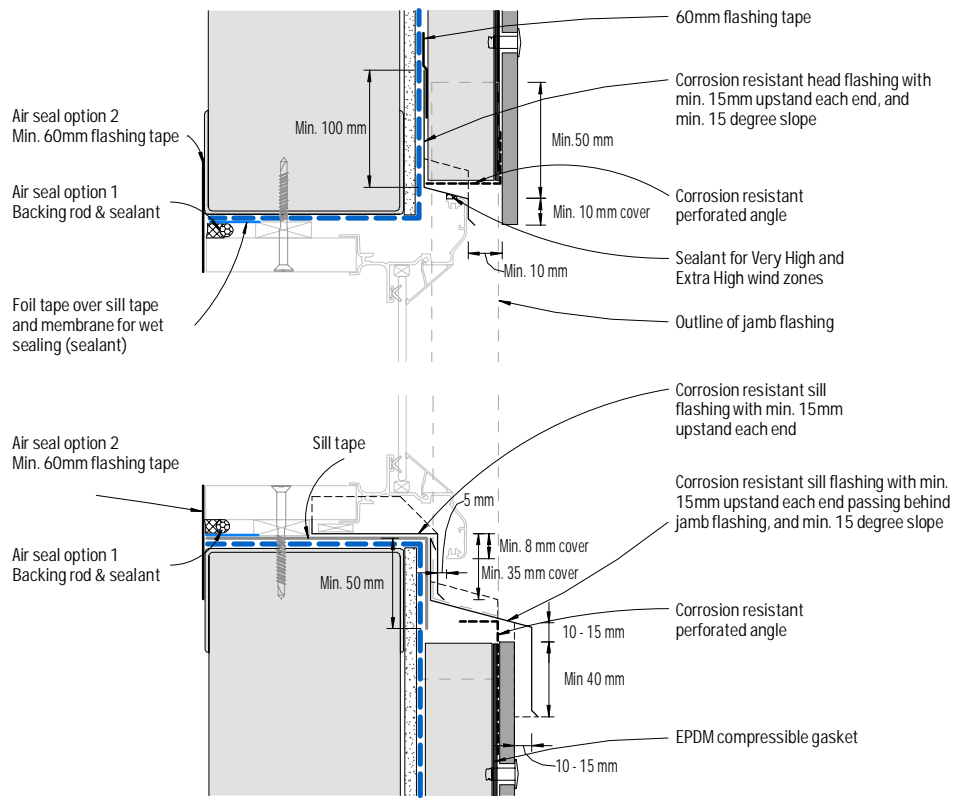


Figure 14: Recessed window - Head and sill

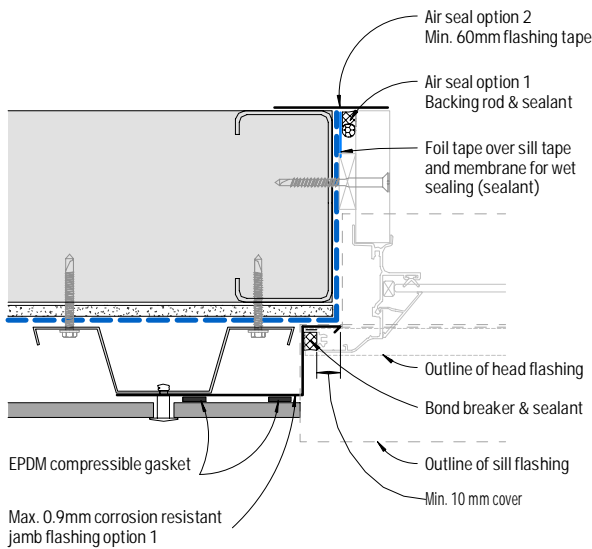


Figure 15: Recessed window jamb - Option 1

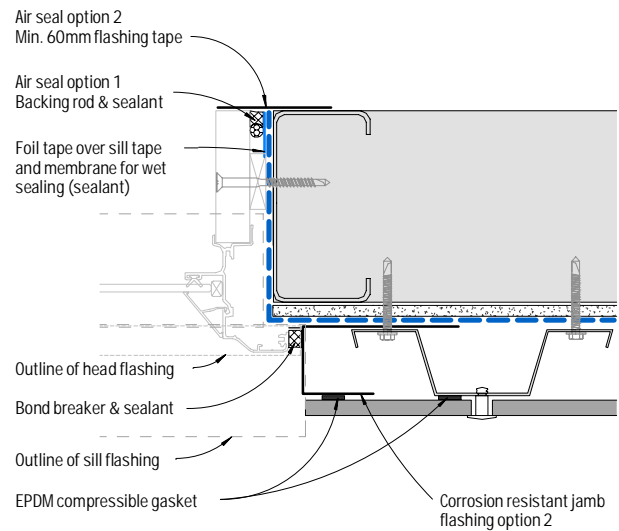


Figure 16: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

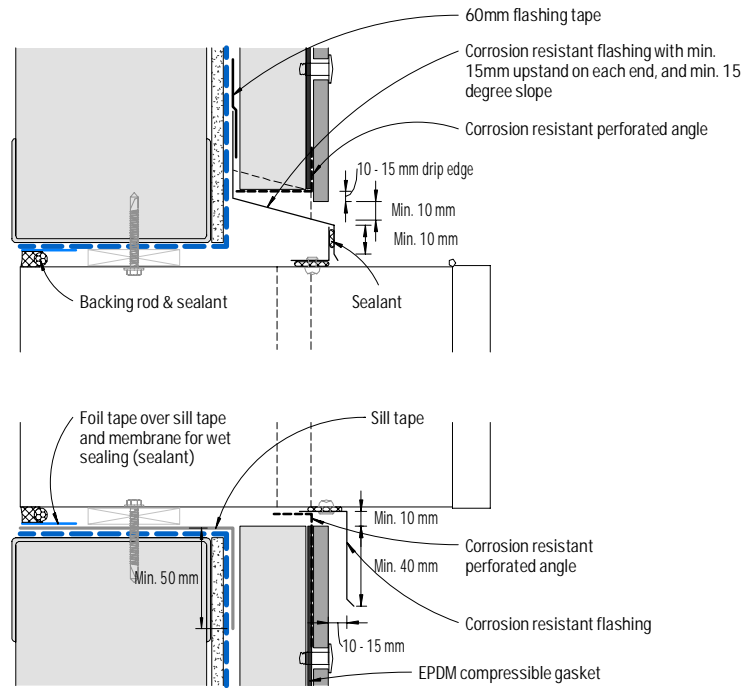


Figure 17: Meter box - Section

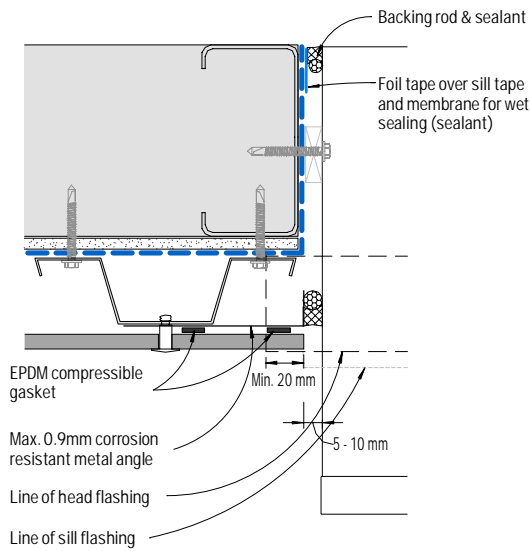


Figure 18: Meter box - Plan view - Detail 1

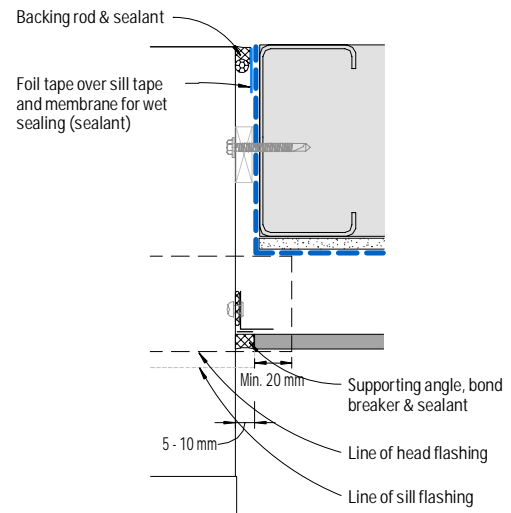


Figure 19: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

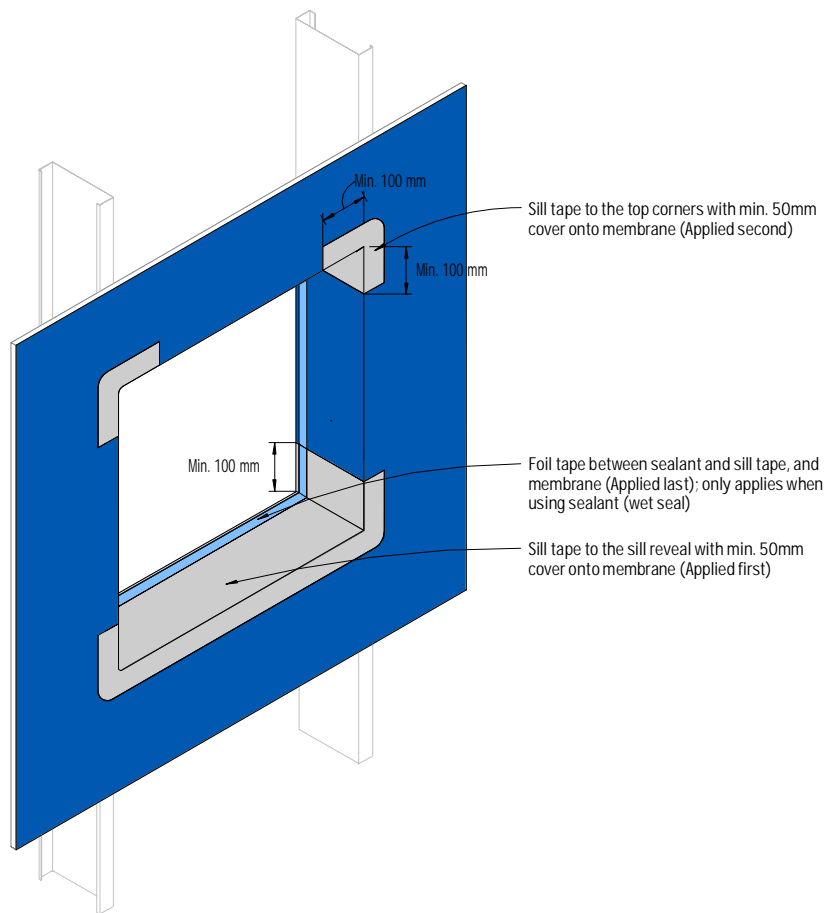


Figure 20: Isometric view of window/meter box opening - Tape application

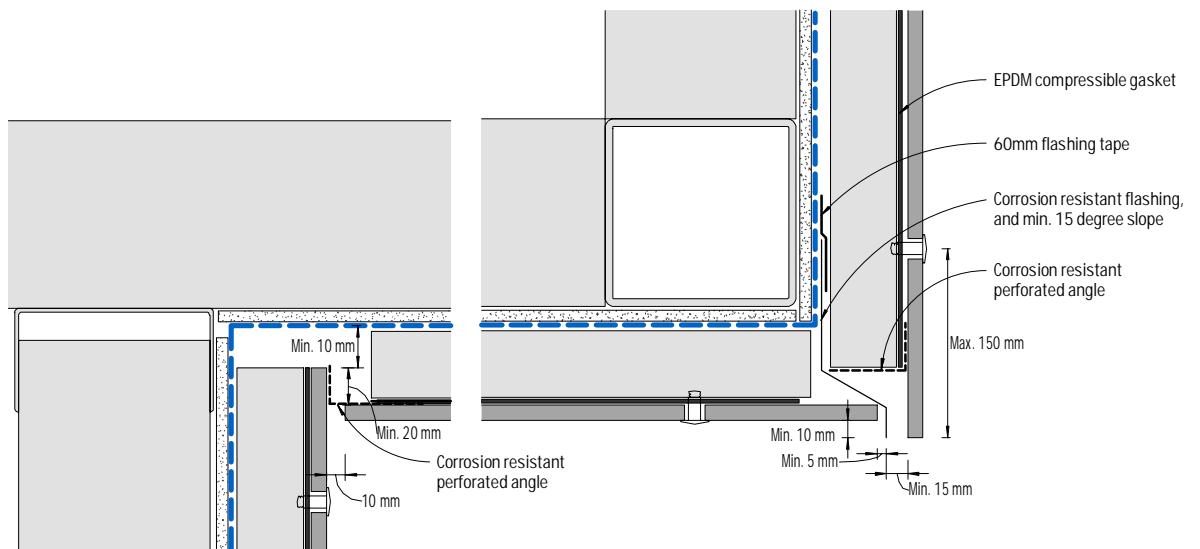


Figure 21: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

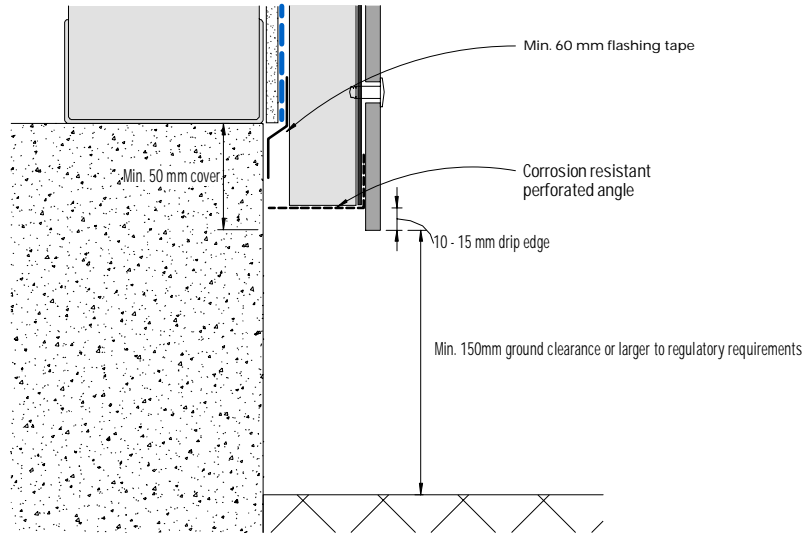


Figure 22: Base detail

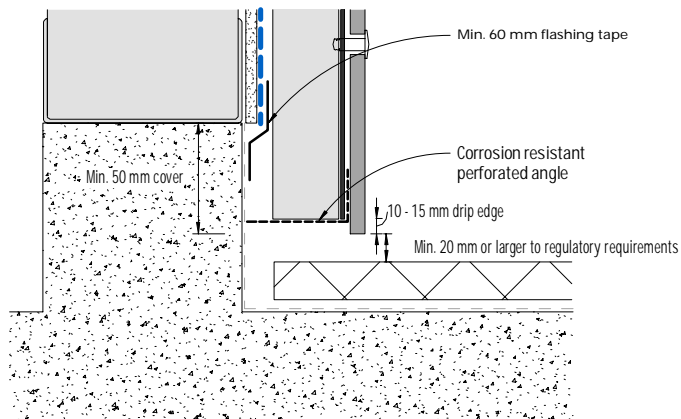


Figure 23: Base detail - Covered area

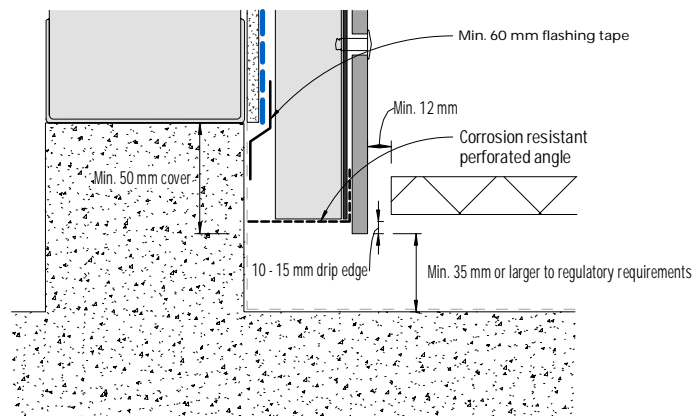


Figure 24: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

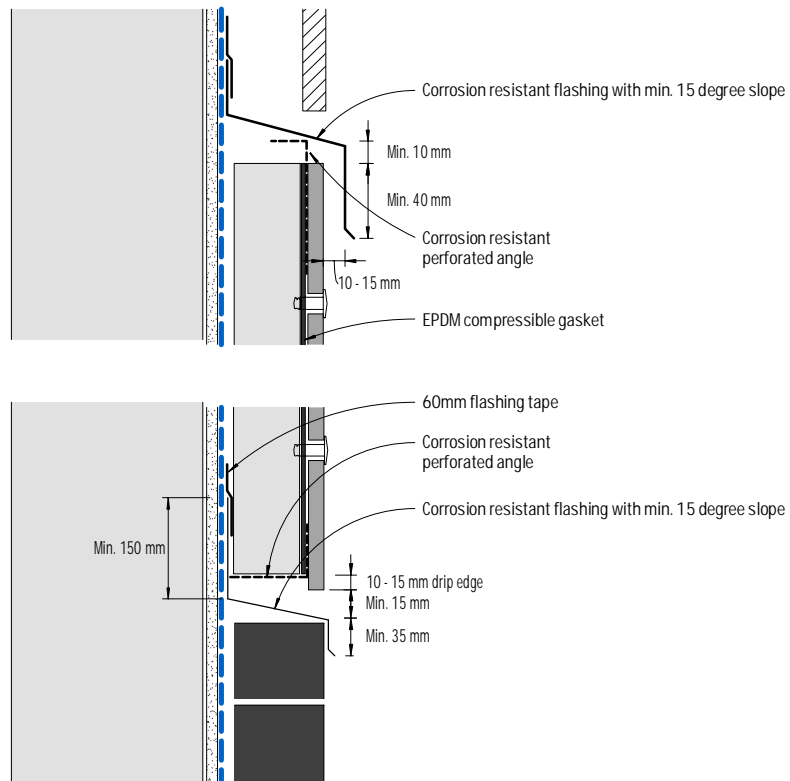


Figure 25: Junction with other materials - flush detail

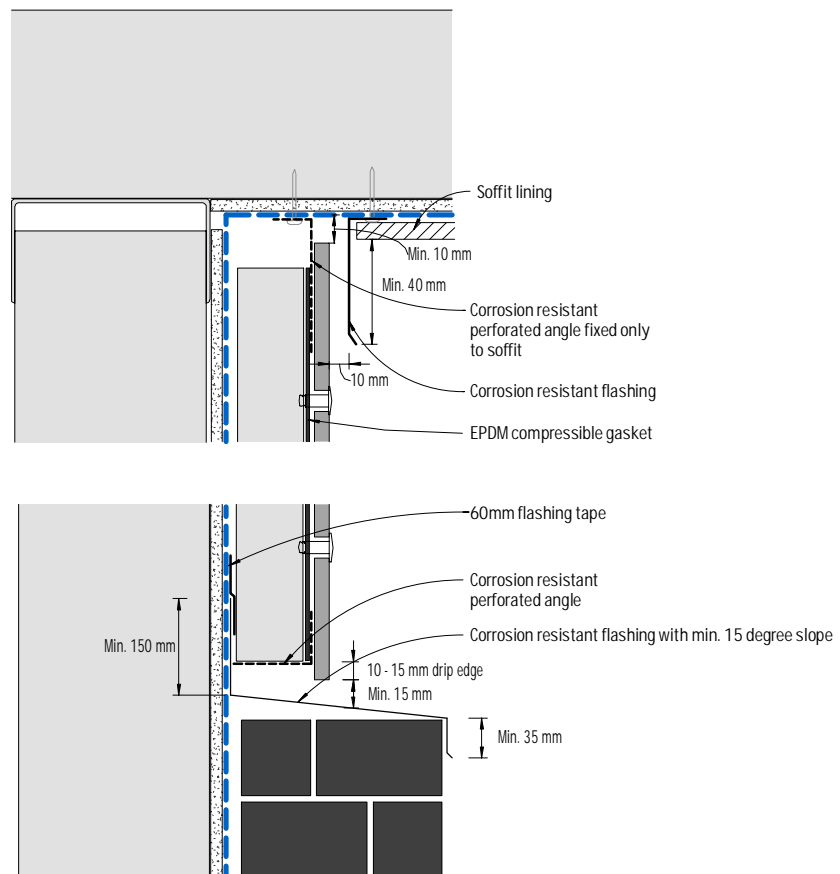


Figure 26: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

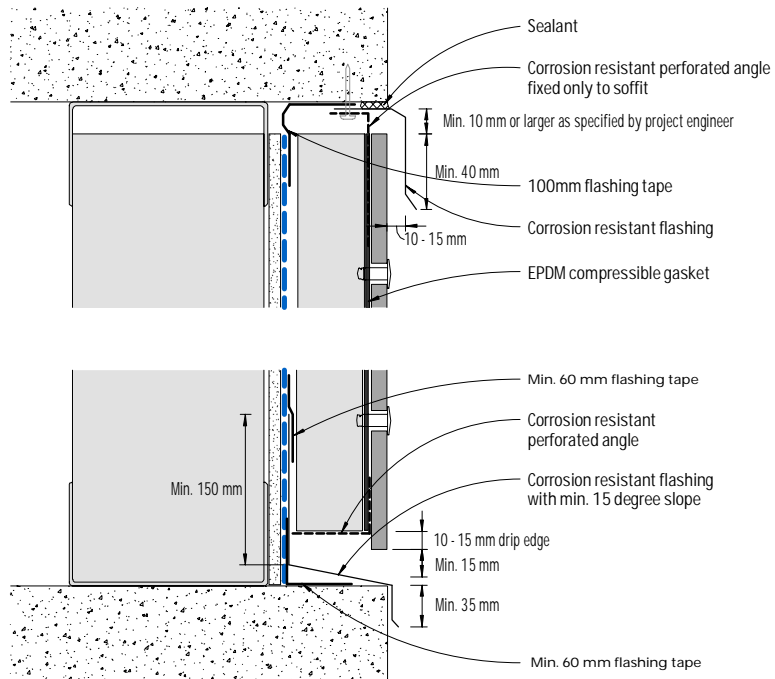


Figure 27: Exposed concrete slab or beam - Cladding flush

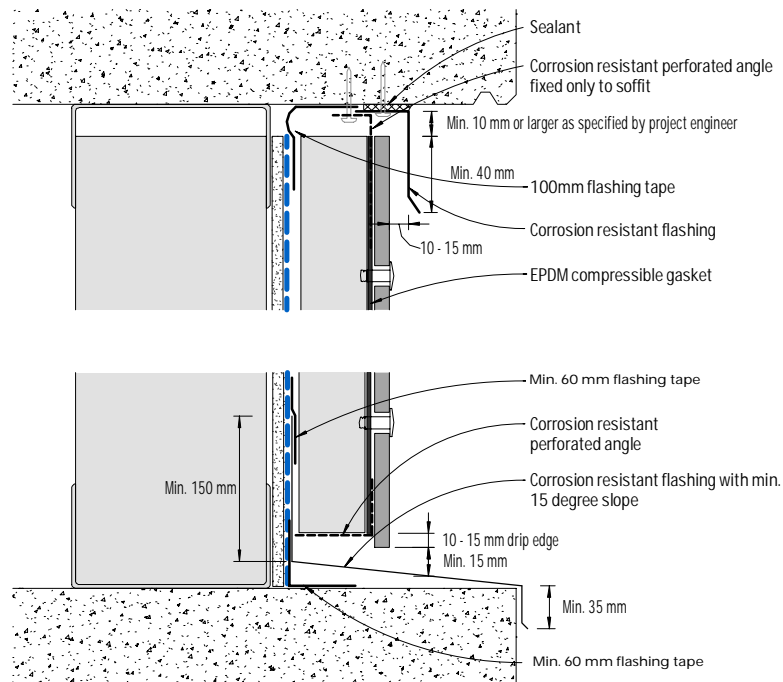


Figure 28: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

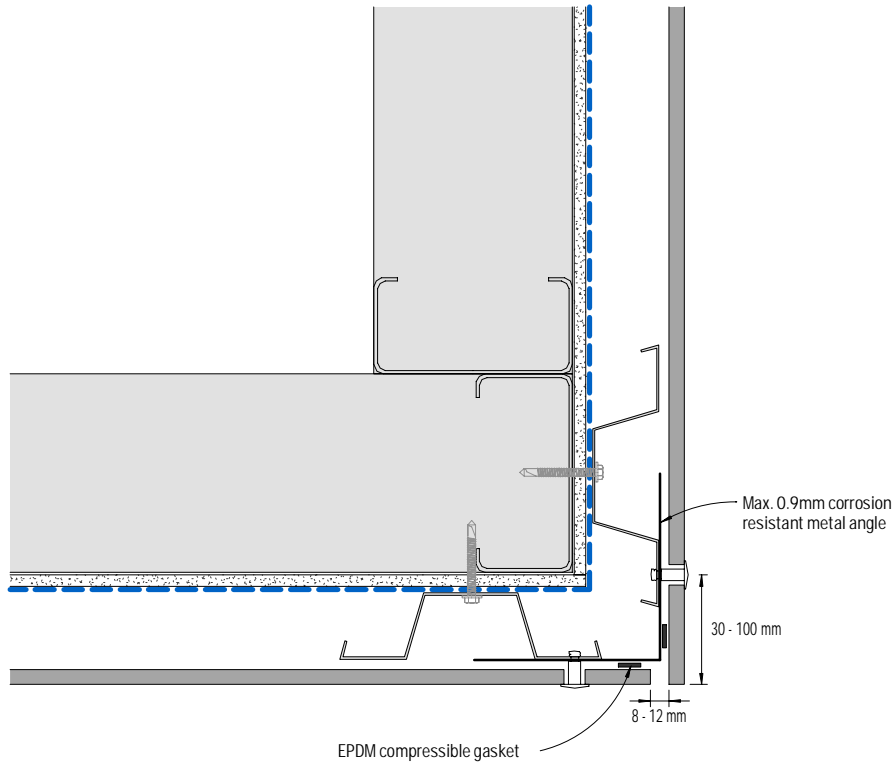


Figure 29: External corner - Detail 1

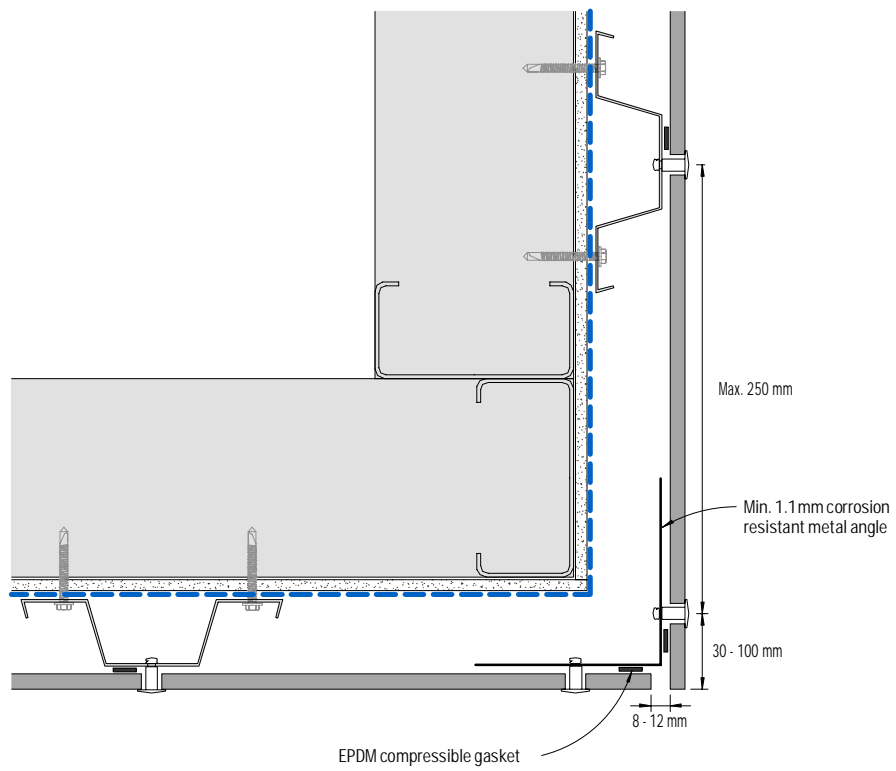


Figure 30: External corner - Detail 2

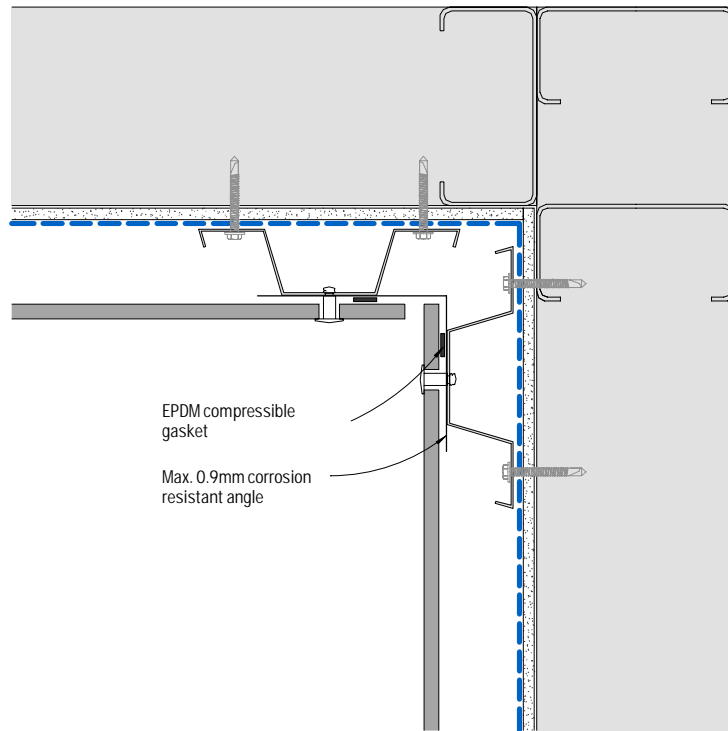


Figure 31: Internal corner

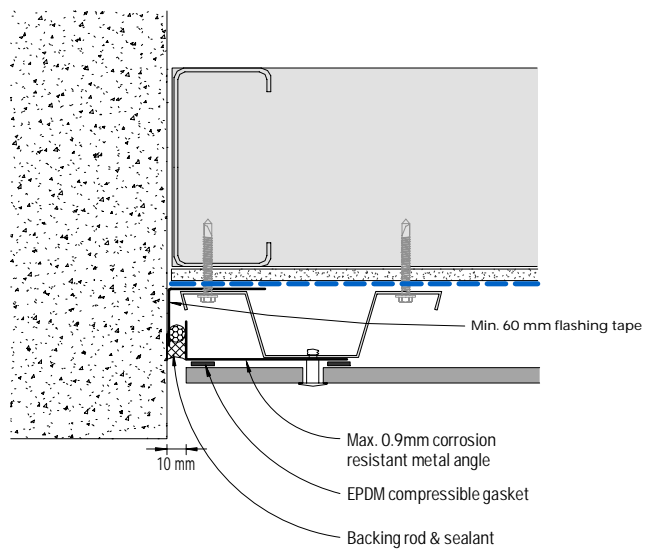


Figure 32: Abutment

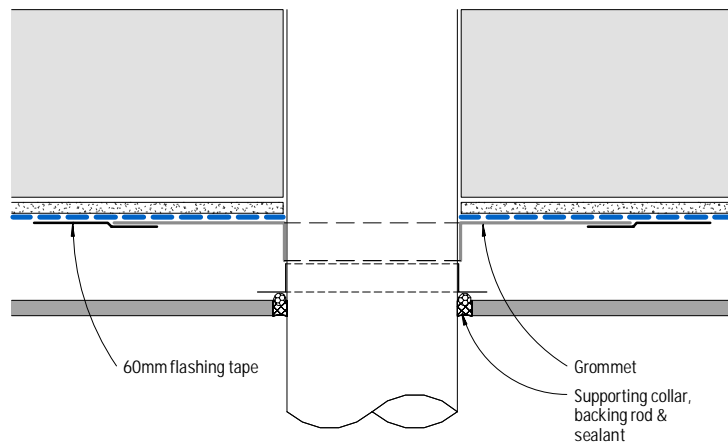


Figure 33: Pipe penetration - Plan view

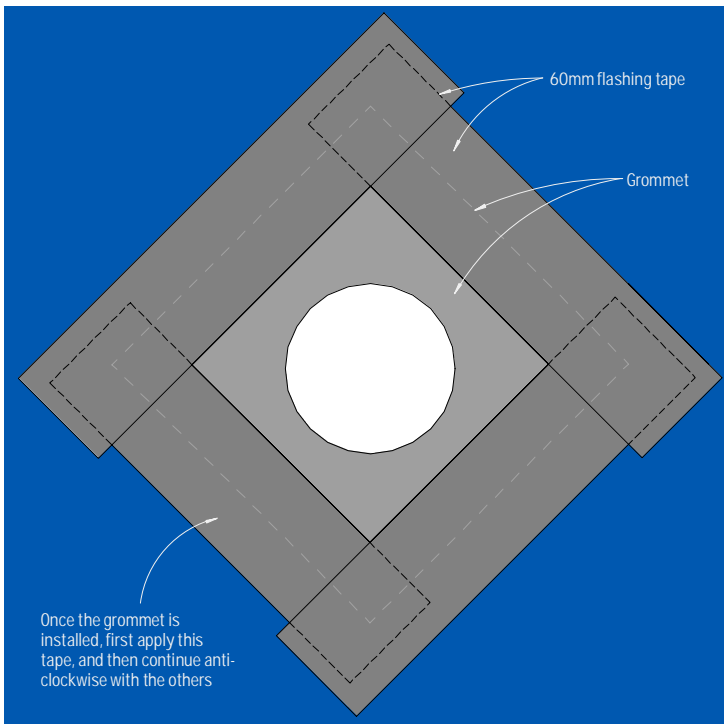


Figure 34: Pipe penetration - Elevation

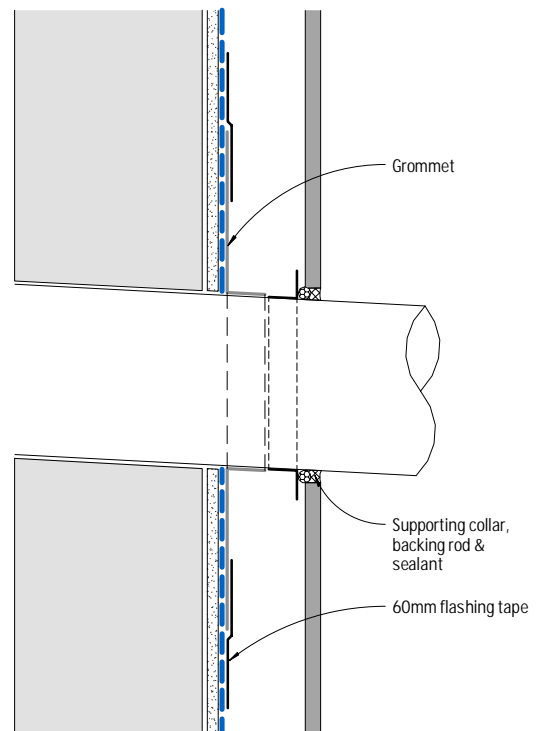


Figure 35: Pipe penetration - Section

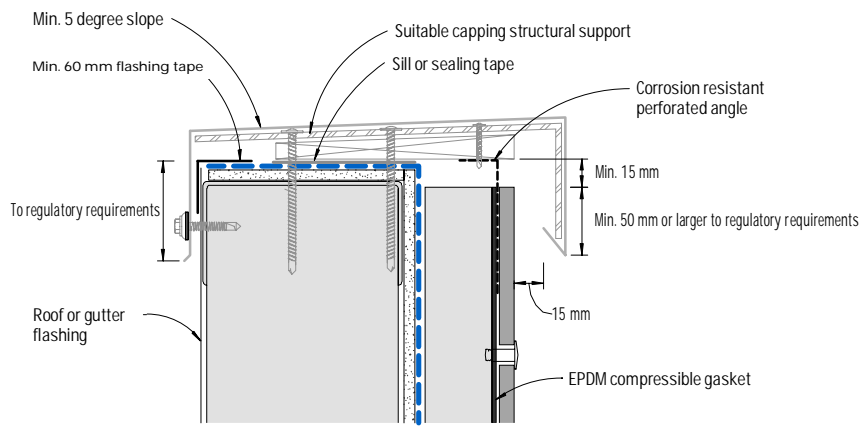


Figure 36: Capping - Detail 1

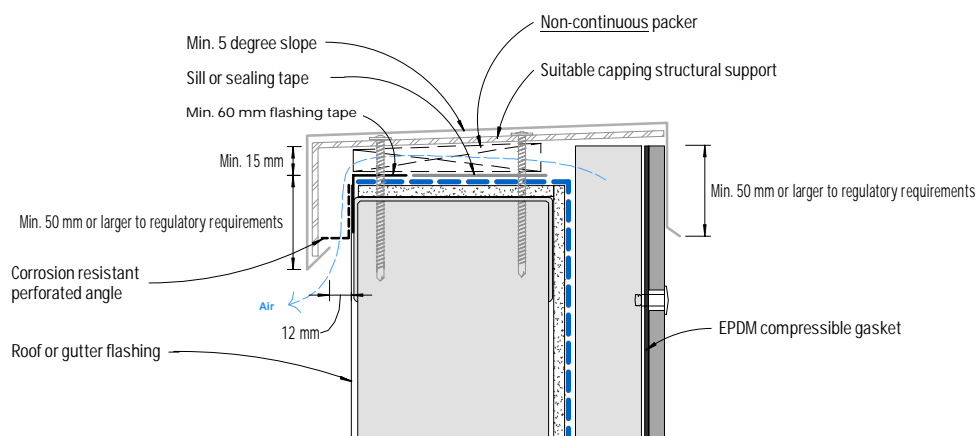


Figure 37: Capping - Detail 2
(Not suitable for EQUITONE [material])

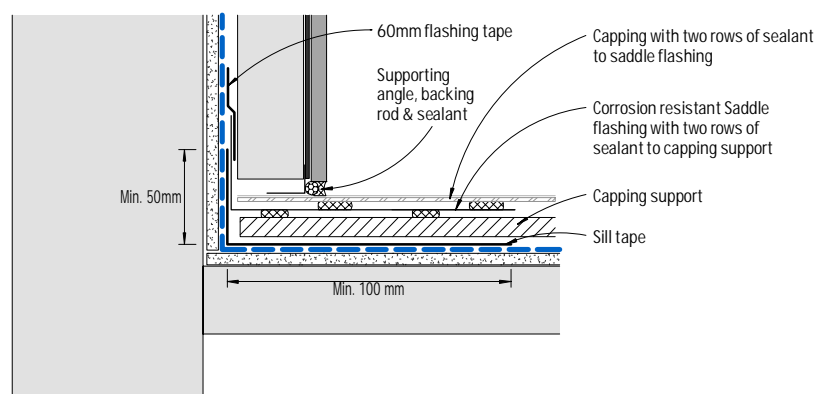


Figure 38: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 36 & 37.

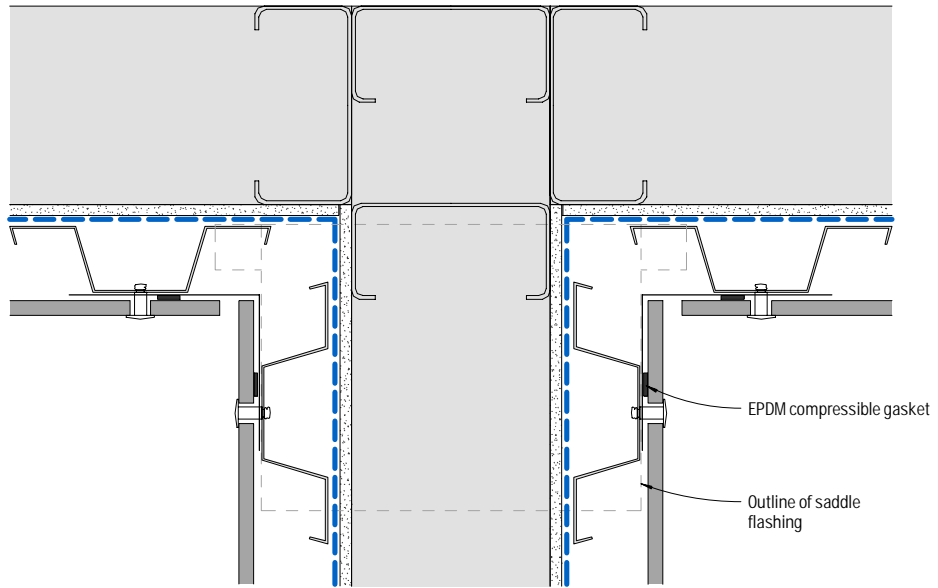


Figure 39: Parapet junction - Plan view

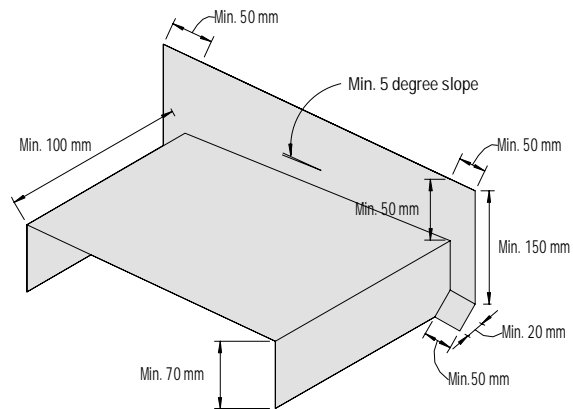


Figure 40: Corrosion resistant saddle flashing

EQUITONE facade system

with

rigid air barrier

&

double layer top hat construction



Components

| | |
|-----------------------------|---|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | Double layer top hat construction <ul style="list-style-type: none">- Horizontal profile: 40x25mm (Min. 1.15mm BMT)- Vertical intermediate profile: 50x35mm (Min. 1.15mm BMT)- Vertical joint profile: 120x35mm (Min. 1.15mm BMT) |
| Weather (resistive) barrier | Kalsi RigidBacker and pro clima SOLITEX EXTASANA ADHERO® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

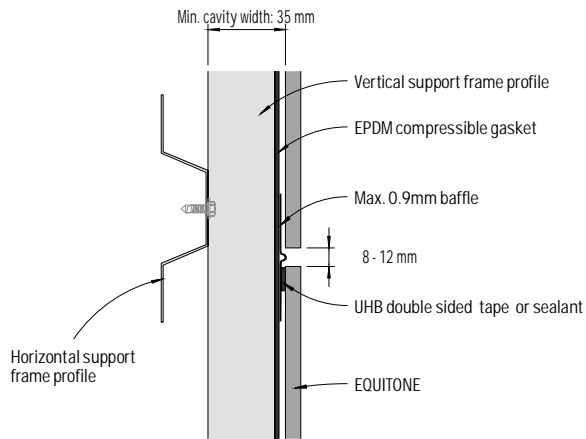


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

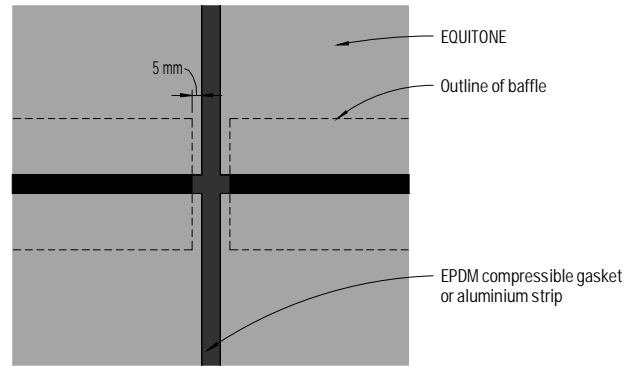


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

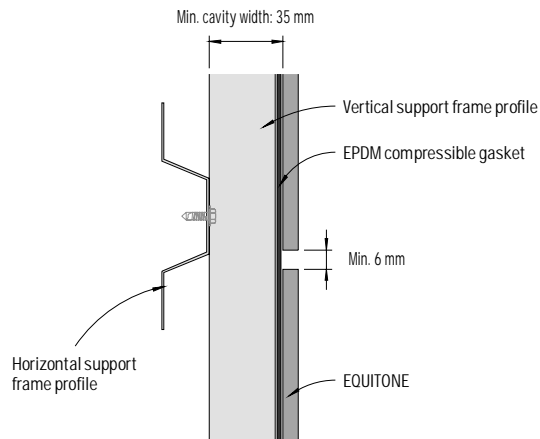


Figure 3: Open horizontal joint

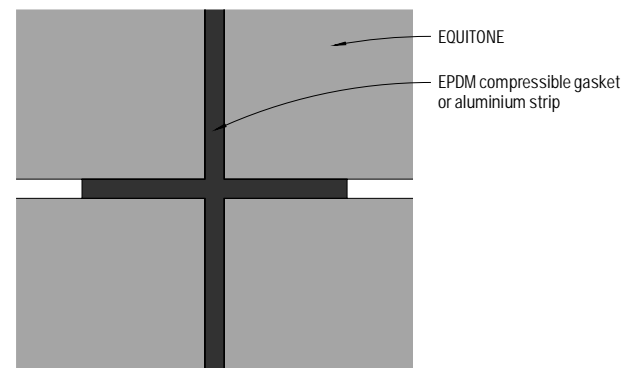


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and the selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame profiles and weather barrier may be coated black with suitable paint.
- 3) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 4) The length of support frame profiles must NOT exceed 3,150mm.

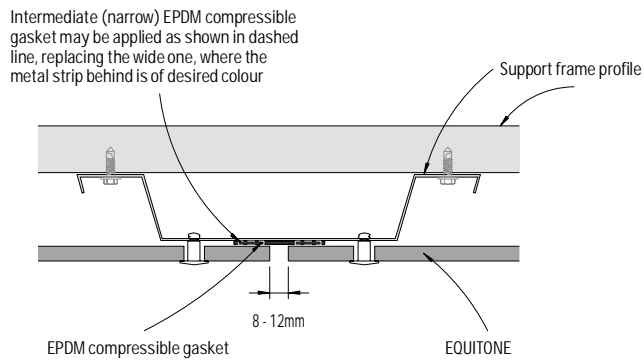


Figure 5: Vertical joint - Detail 1

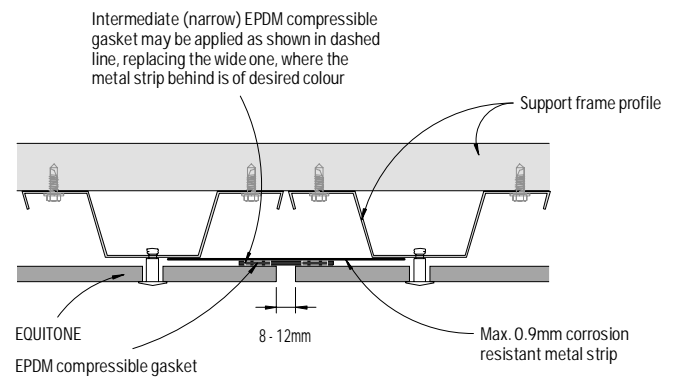


Figure 6: Vertical joint - Detail 2

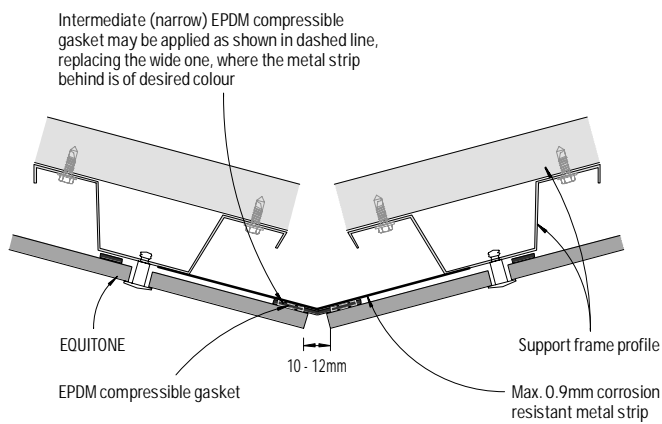


Figure 7: Vertical joint - Detail 3

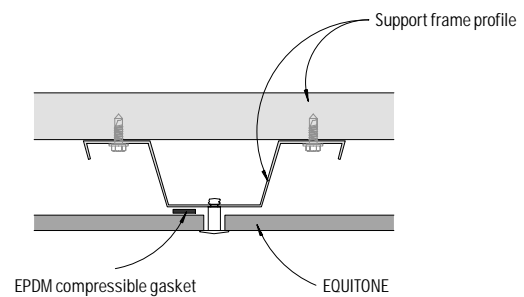


Figure 8: Intermediate panel fixings connection

Notes

1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

2) In Figure 6 & 7, the metal strip should be fixed ONLY to one of the battens (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

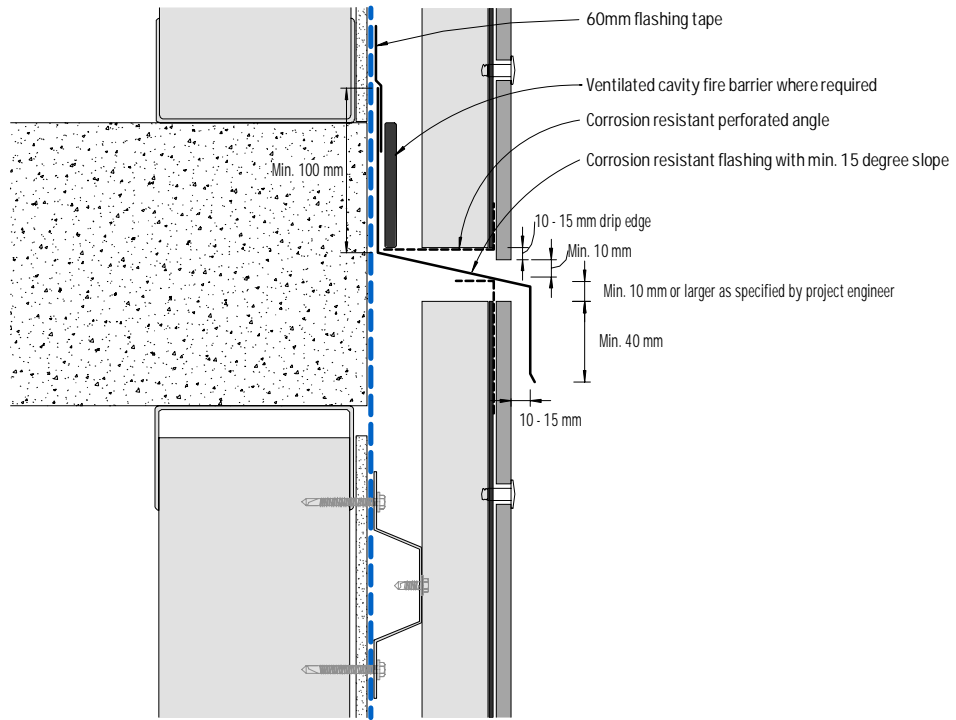


Figure 9: Horizontal control joint

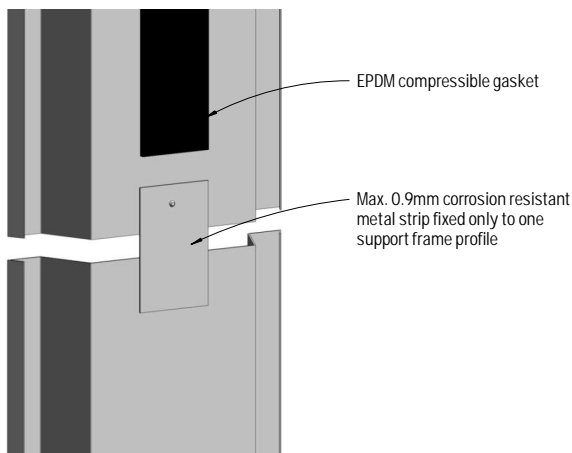


Figure 10: EPDM gasket support over control joint or the like

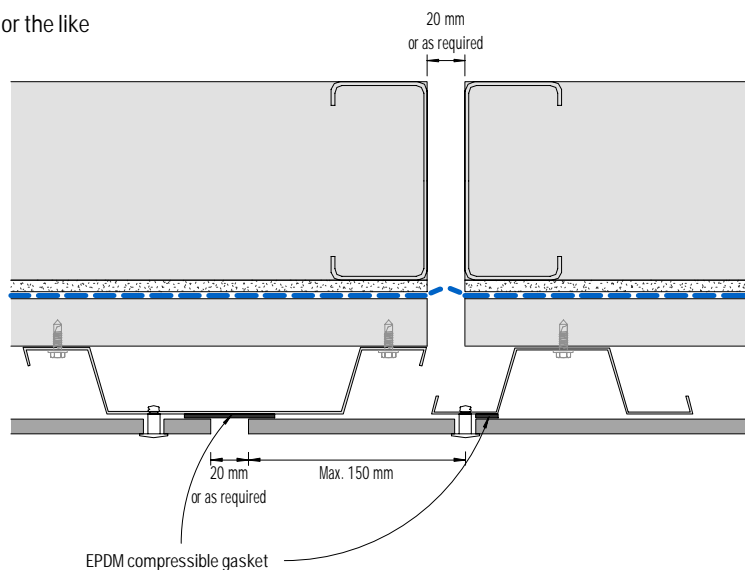


Figure 11: Vertical control joint

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

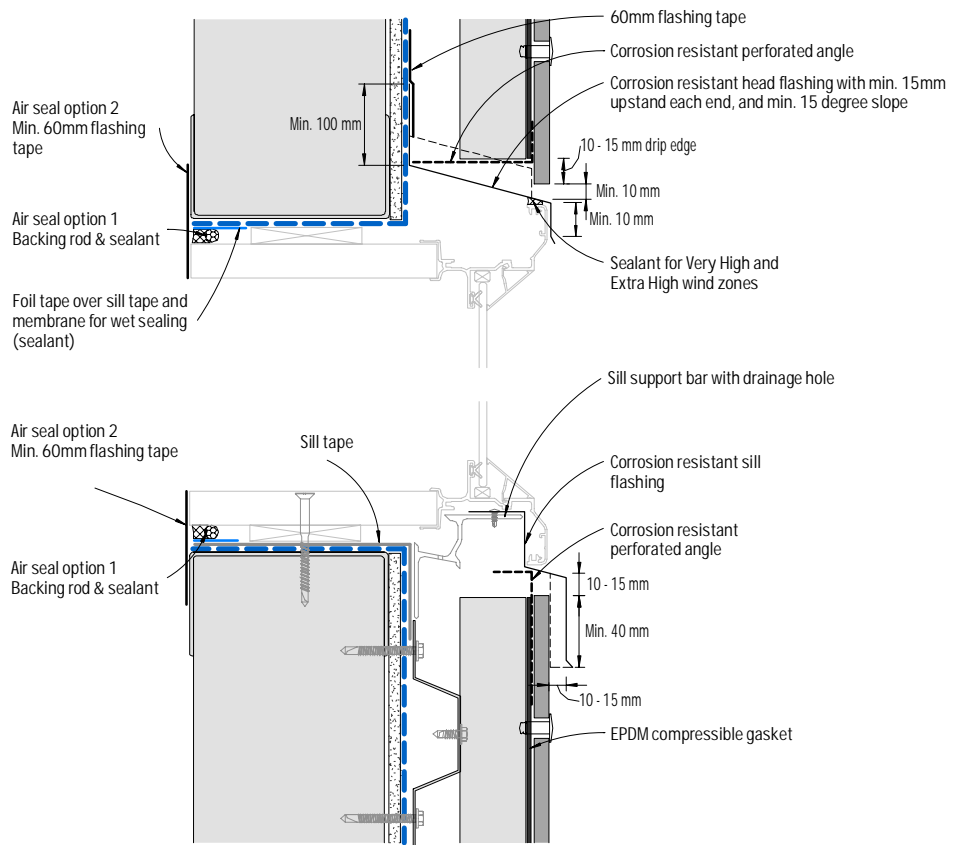


Figure 12: Flush window - Head and sill

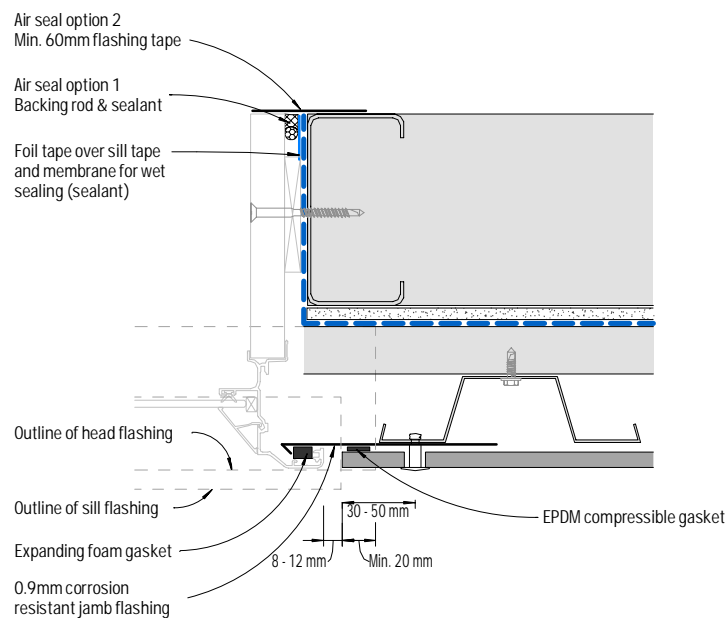


Figure 13: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

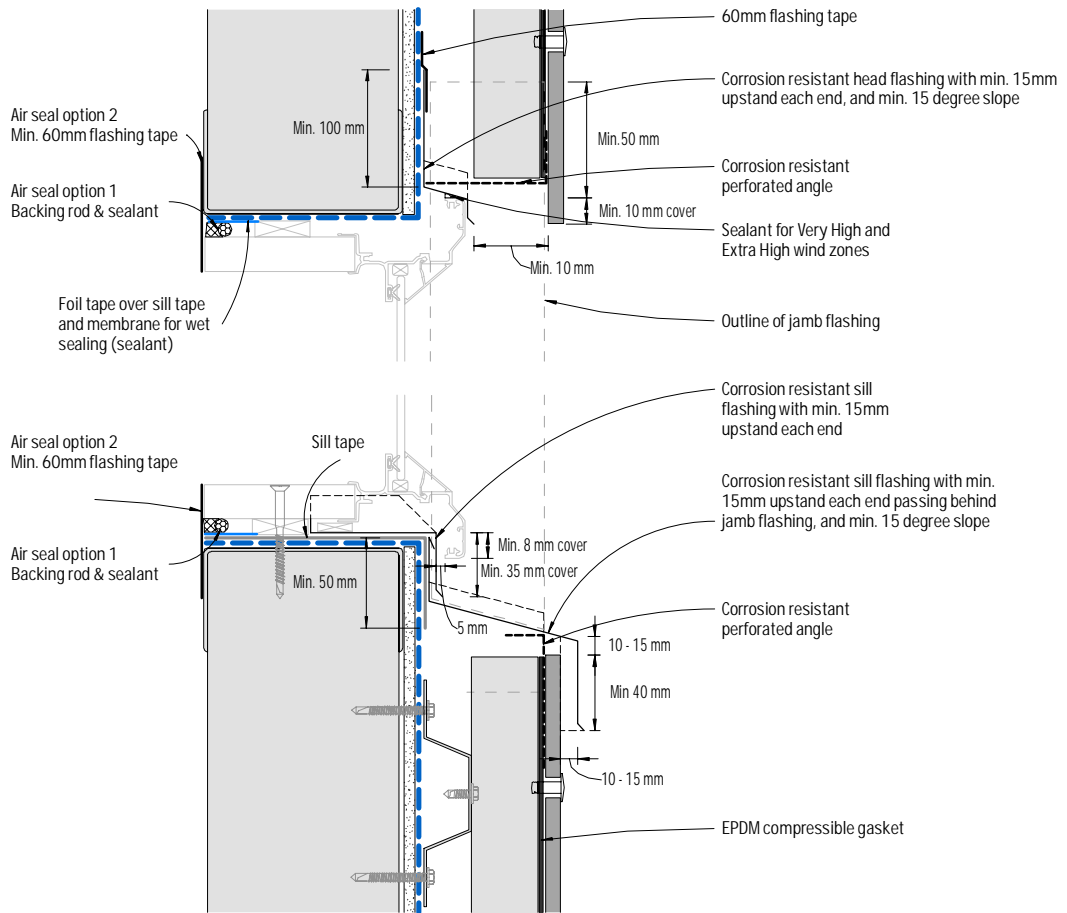


Figure 14: Recessed window - Head and sill

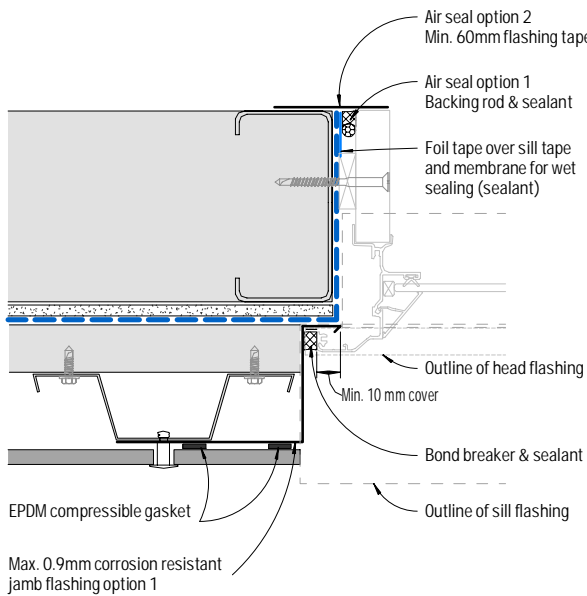


Figure 15: Recessed window jamb - Option 1

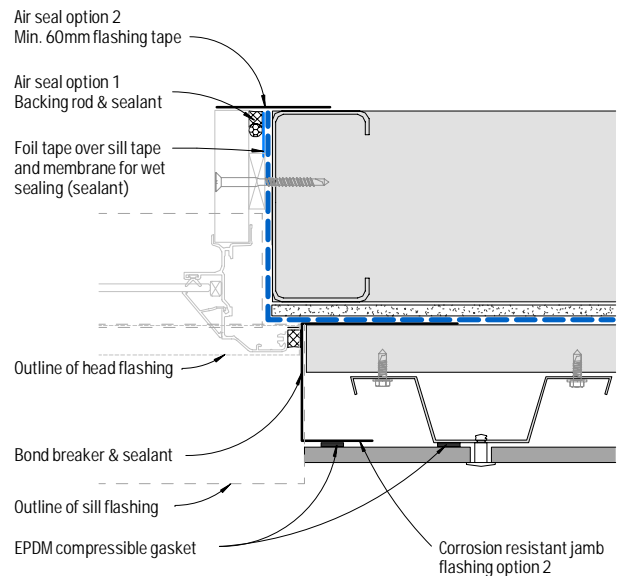


Figure 16: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

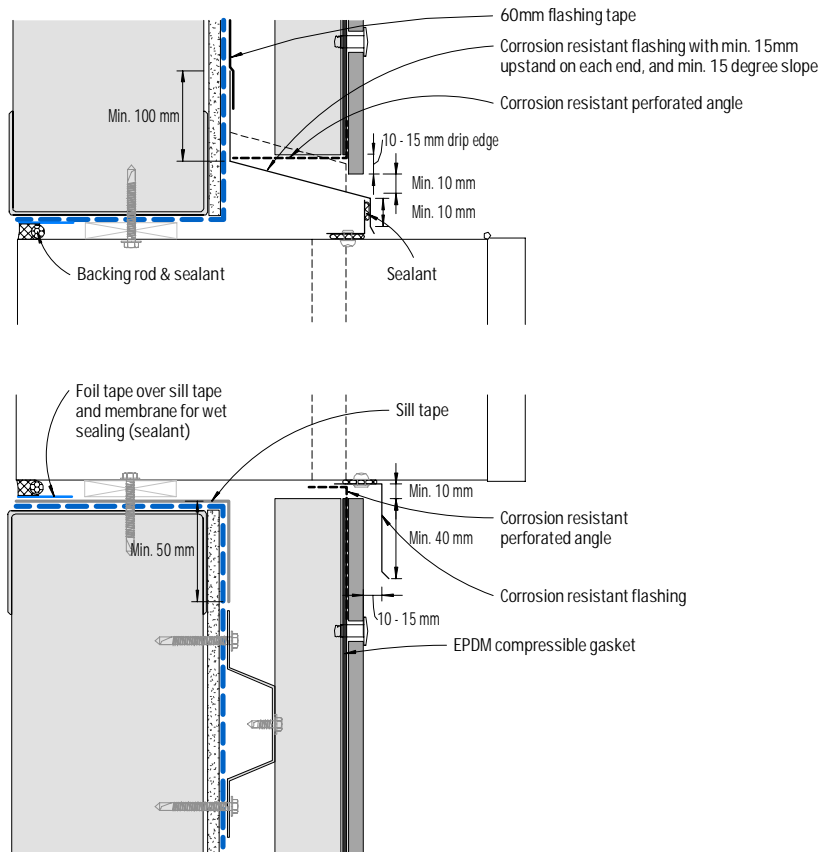


Figure 17: Meter box - Section

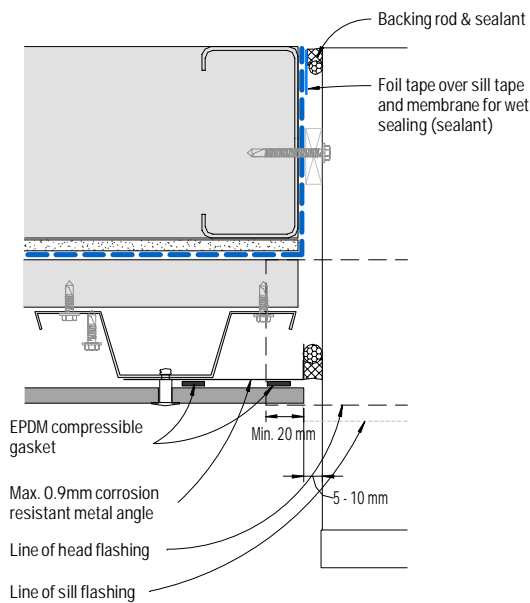


Figure 18: Meter box - Plan view - Detail 1

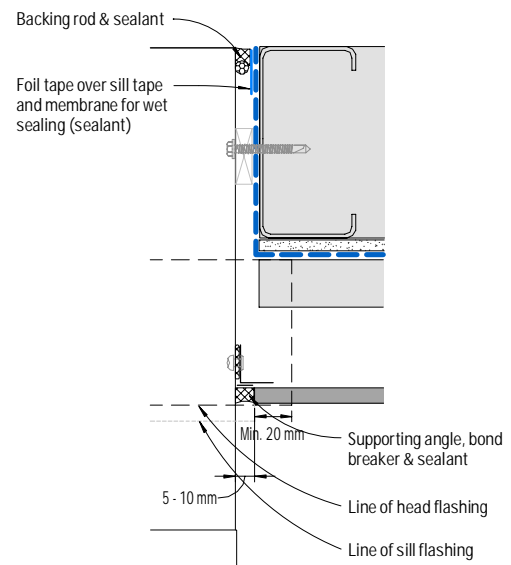


Figure 19: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

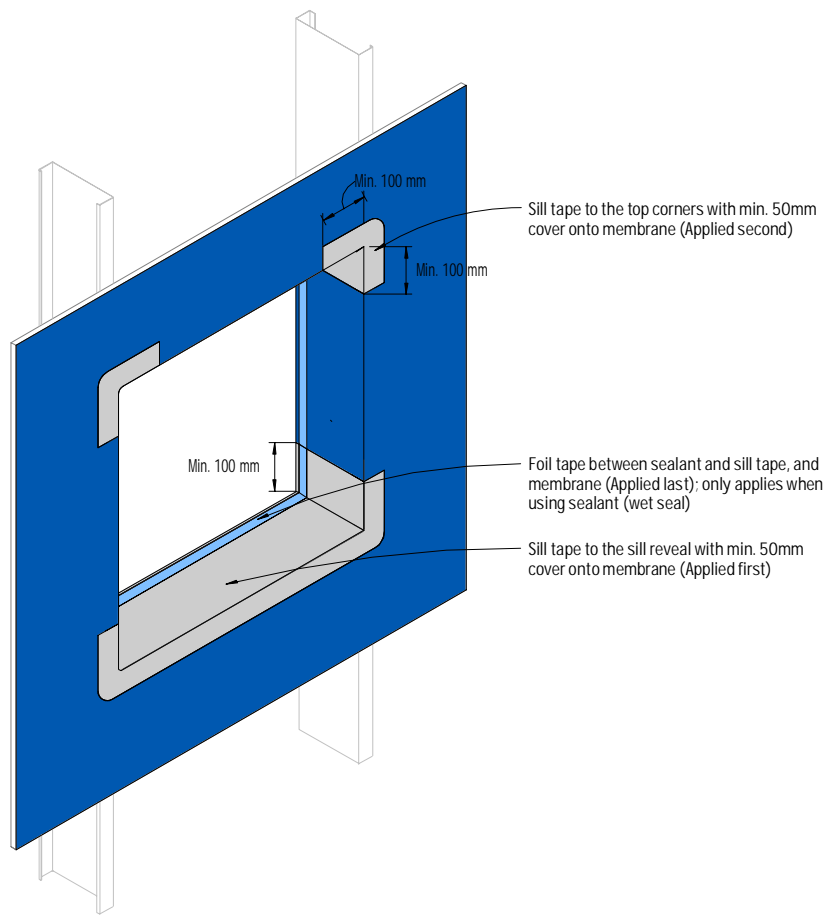


Figure 20: Isometric view of window/meter box opening - Tape application

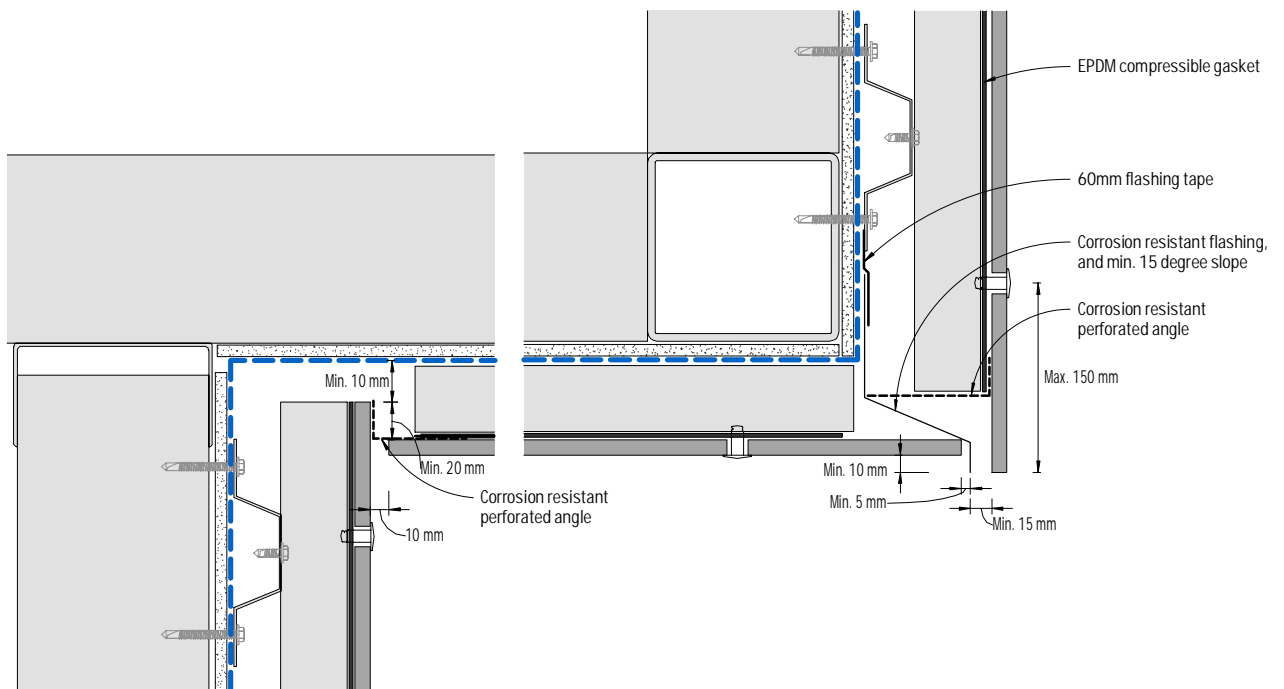


Figure 21: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

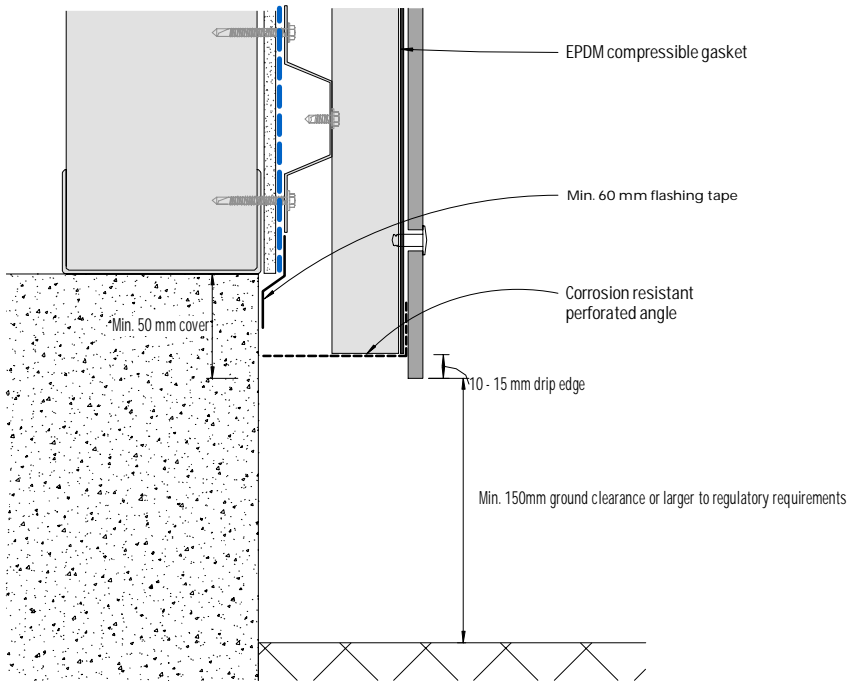


Figure 22: Base detail

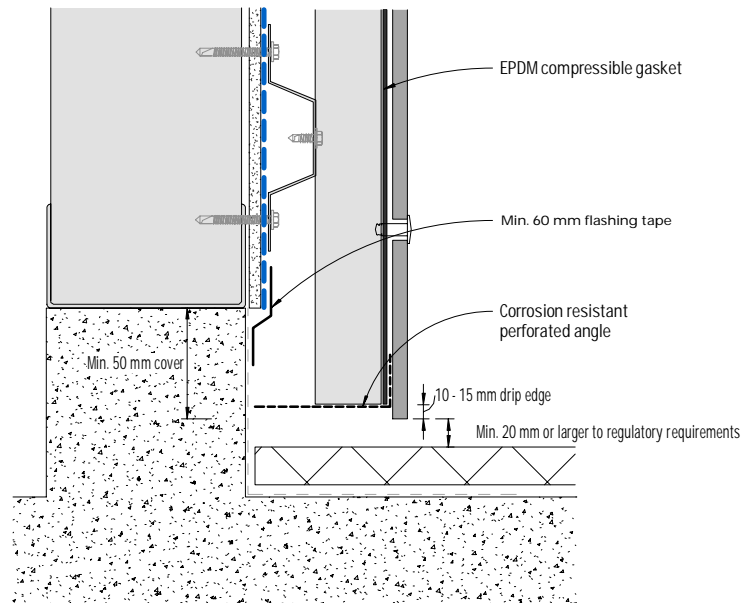


Figure 23: Base detail - Covered area

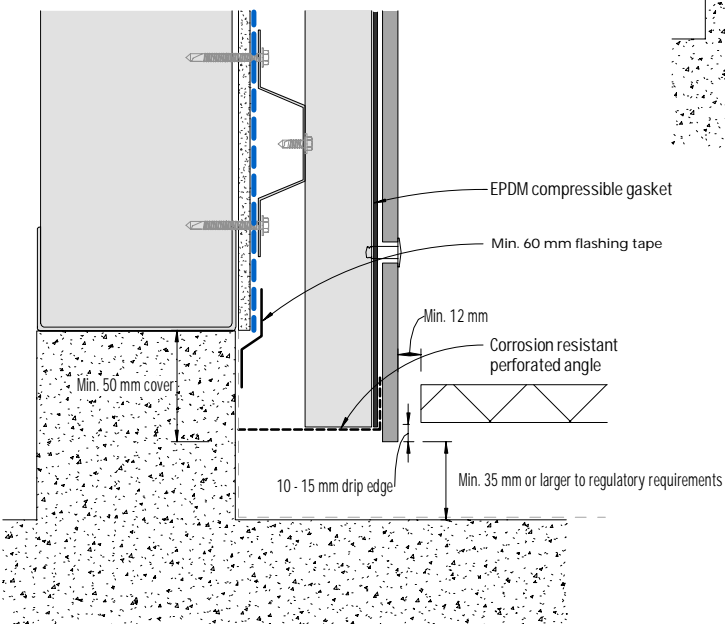


Figure 24: Base detail - Balcony

Notes

- 1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

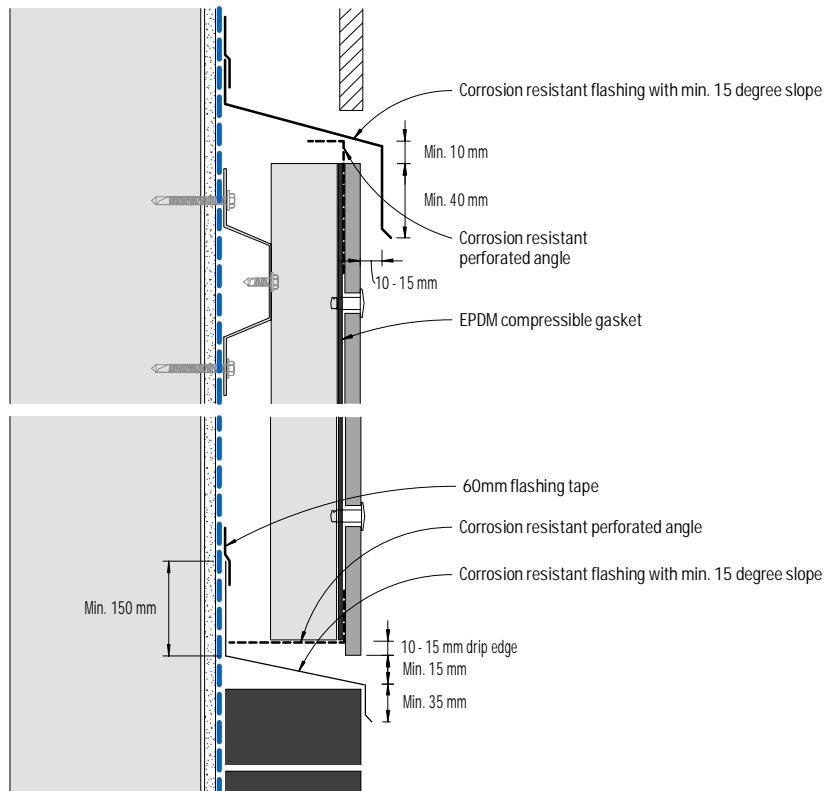


Figure 25: Junction with other materials - flush detail

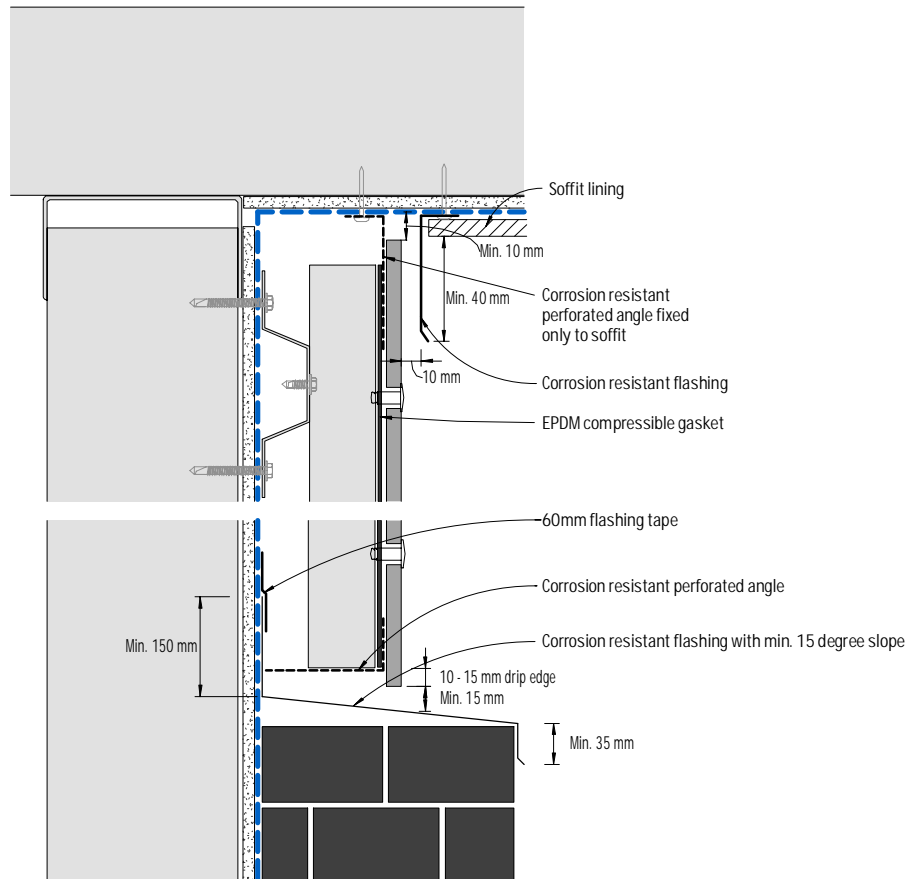


Figure 26: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

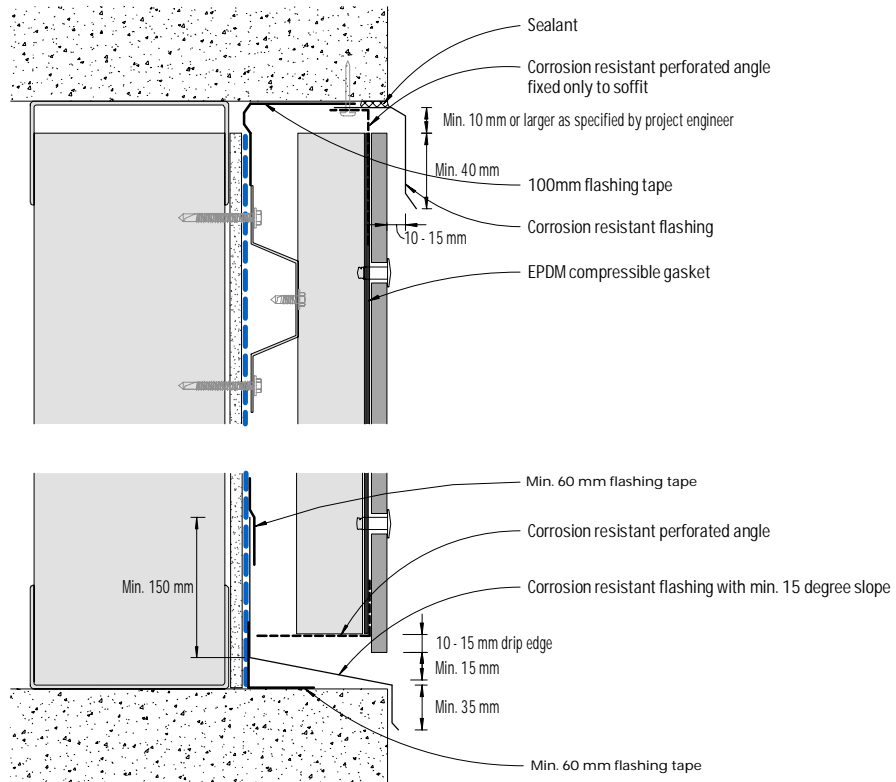


Figure 27: Exposed concrete slab or beam - Cladding flush

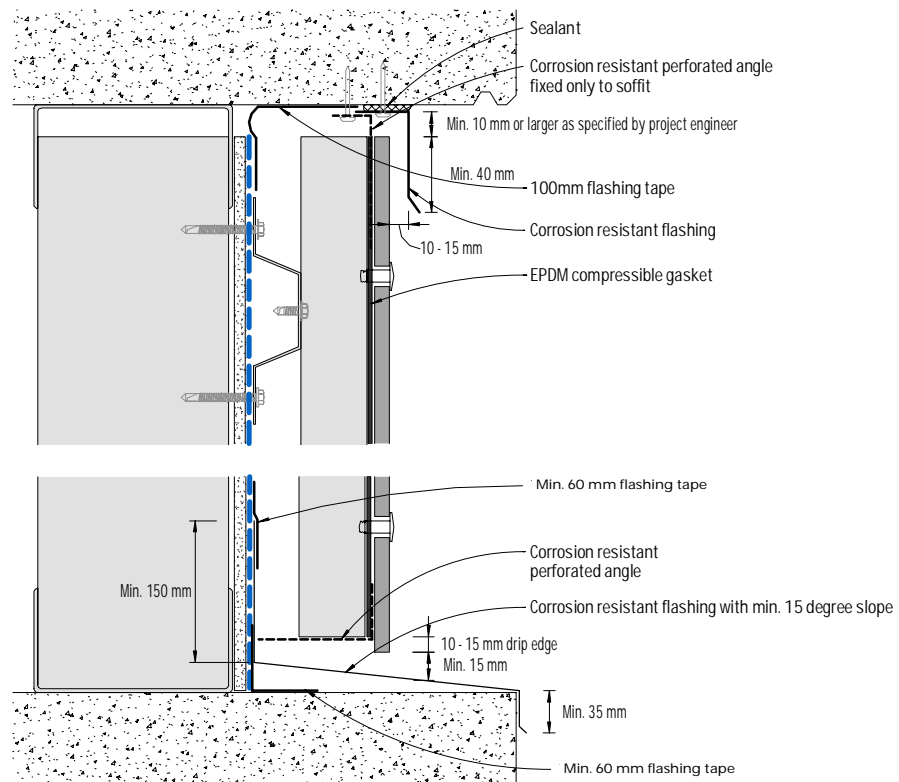


Figure 28: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

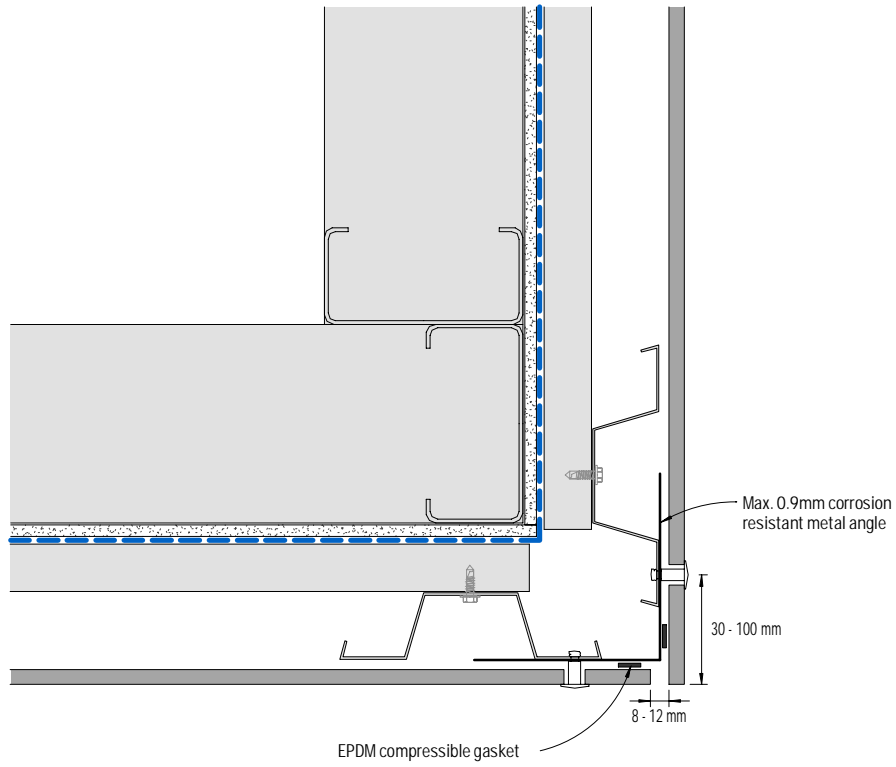


Figure 29: External corner - Detail 1

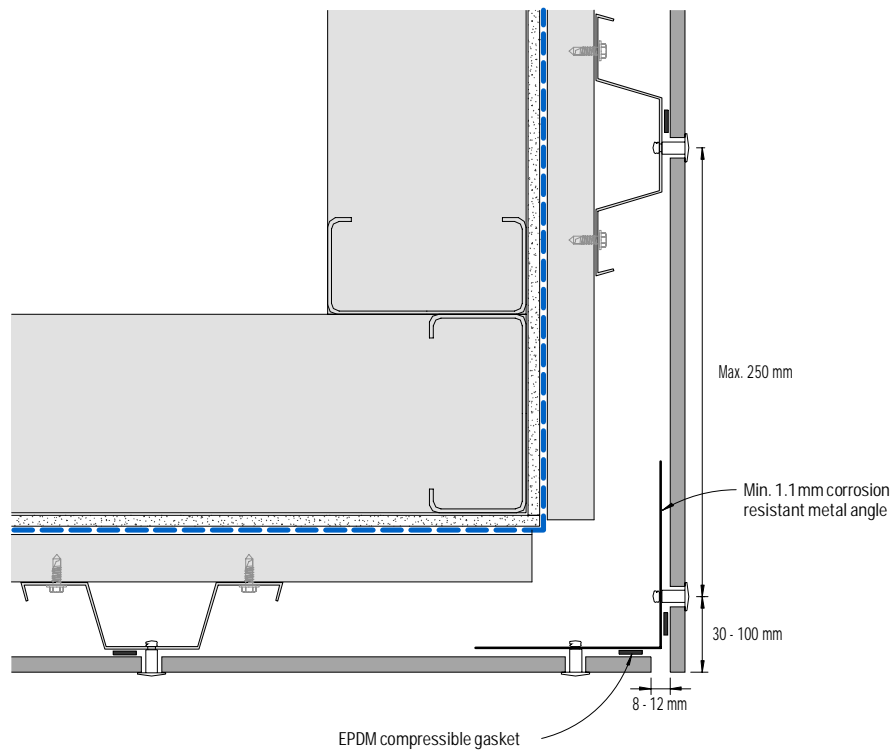


Figure 30: External corner - Detail 2

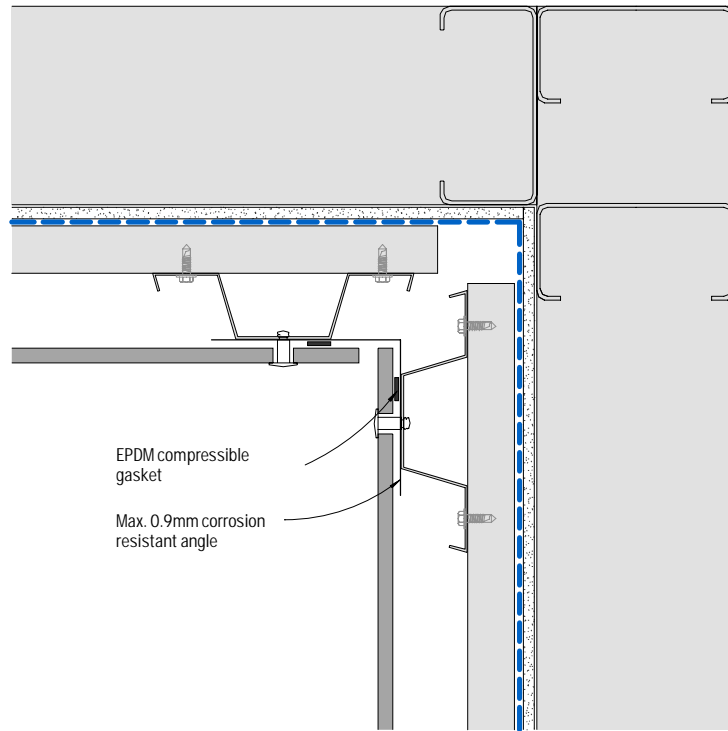


Figure 31: Internal corner

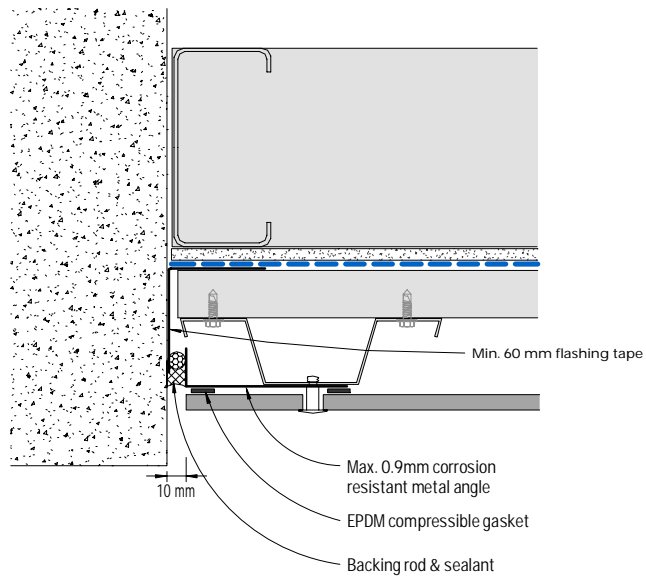


Figure 32: Abutment

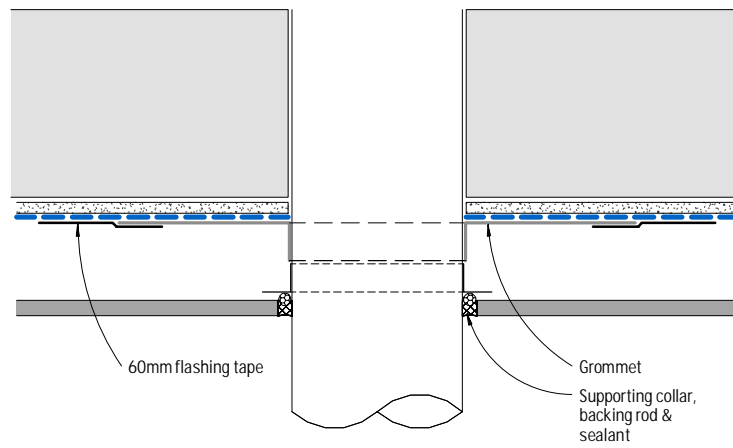


Figure 33: Pipe penetration - Plan view

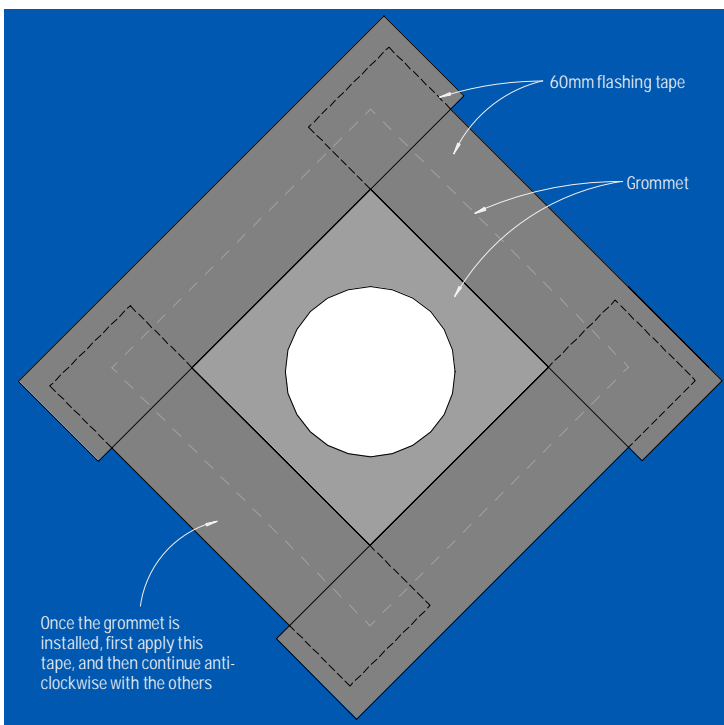


Figure 34: Pipe penetration - Elevation

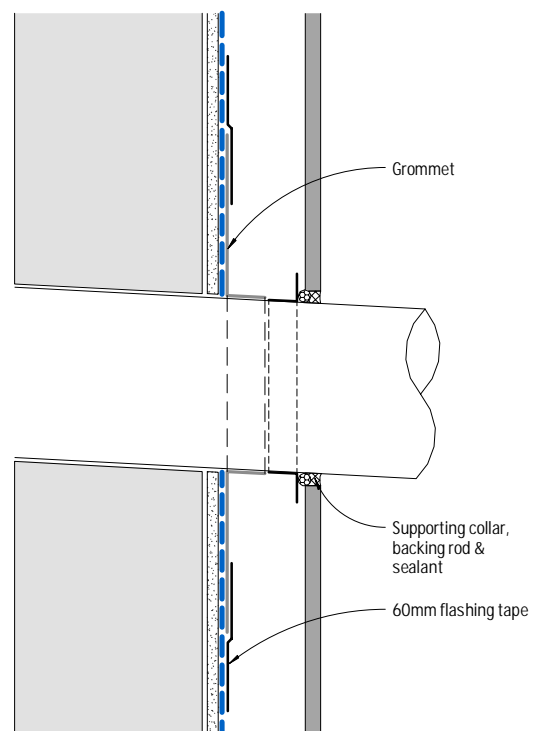


Figure 35: Pipe penetration - Section

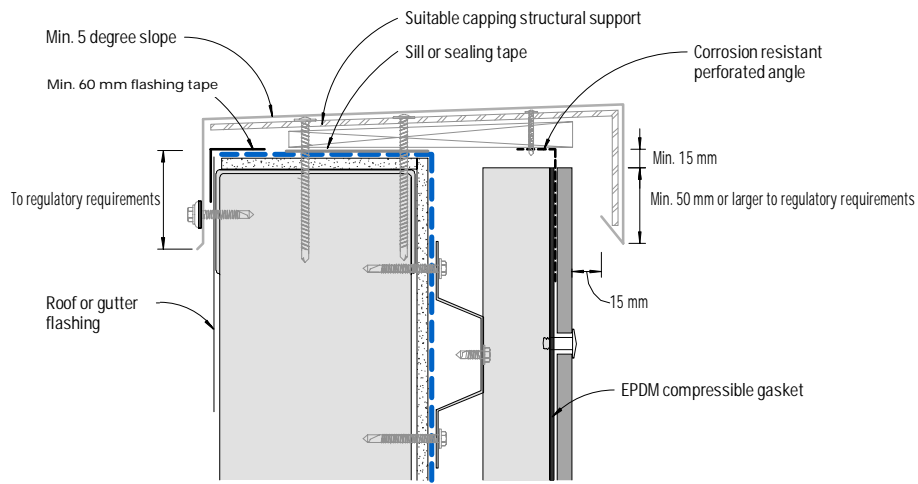


Figure 36: Capping - Detail 1

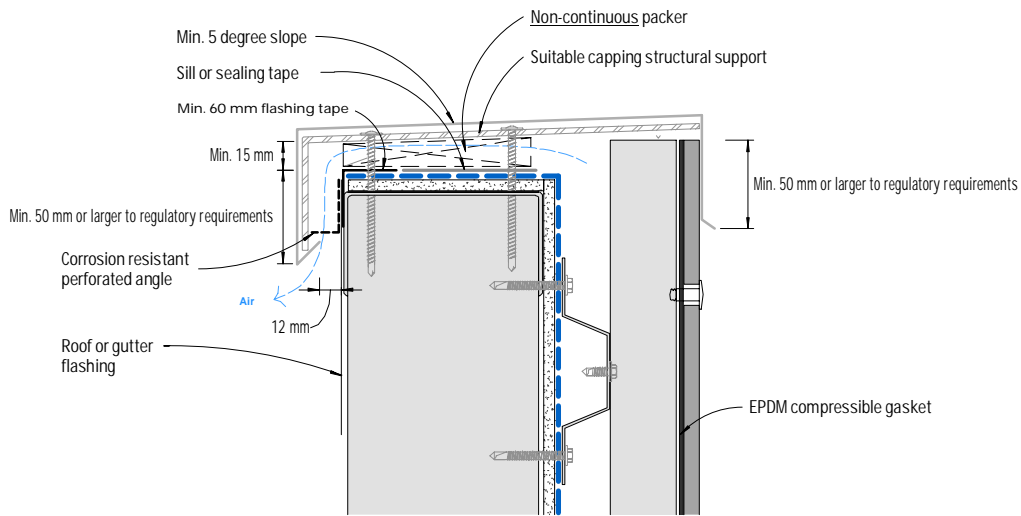


Figure 37: Capping - Detail 2
(Not suitable for EQUITONE [material])

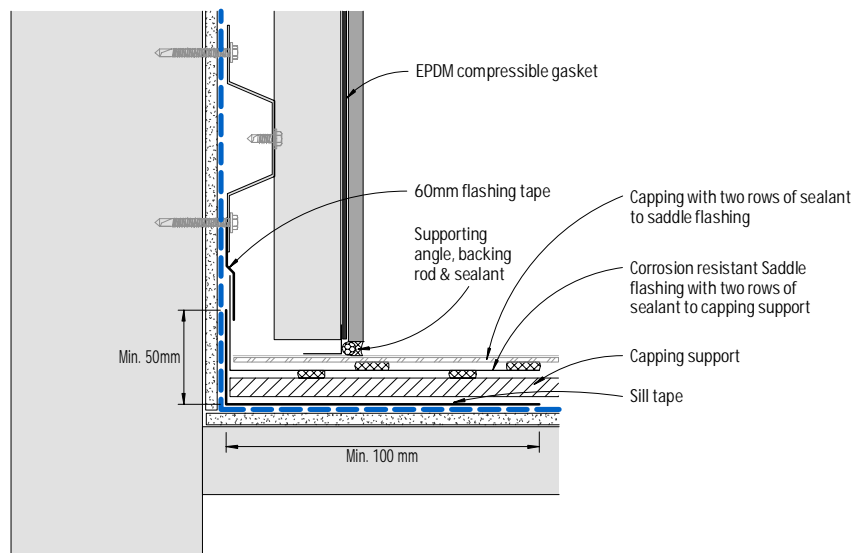


Figure 38: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 36 & 37.

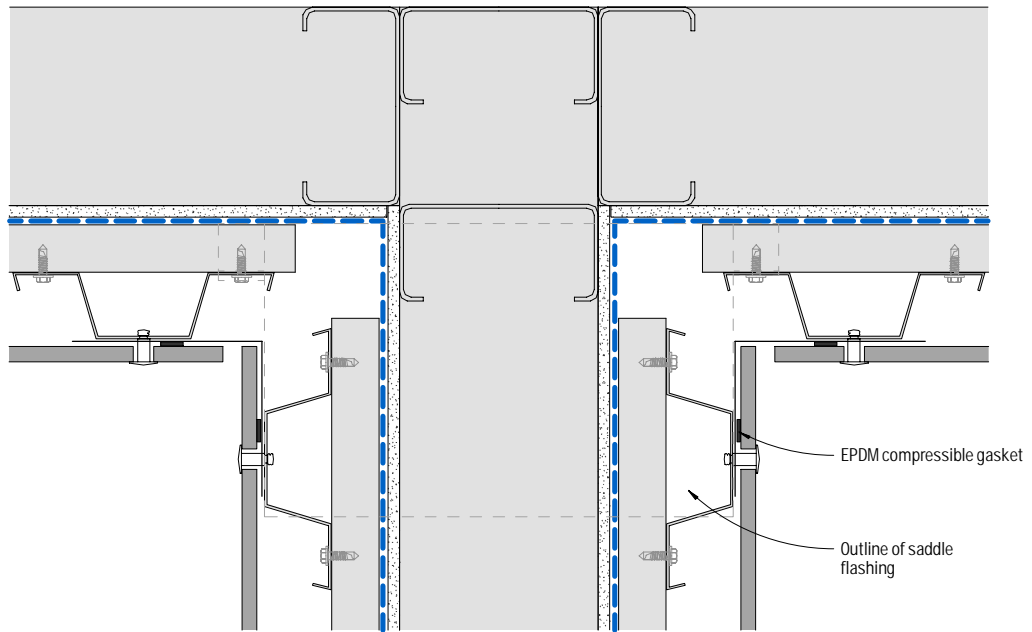


Figure 39: Parapet junction - Plan view

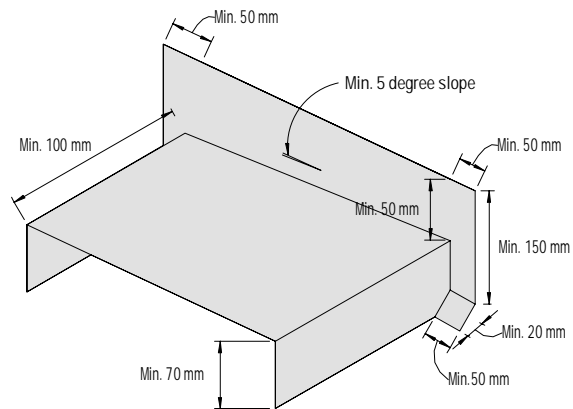


Figure 40: Corrosion resistant saddle flashing

EQUITONE facade system

with

rigid air barrier

&

bracketry construction



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | NVELOPE NV1 aluminium bracketry system |
| Weather (resistive) barrier | Kalsi RigidBacker and pro clima SOLITEX EXTASANA ADHERO® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

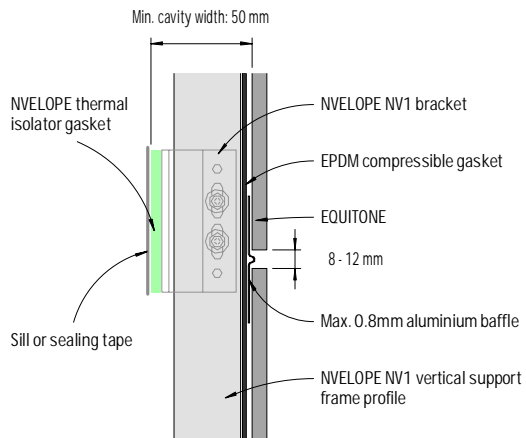


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

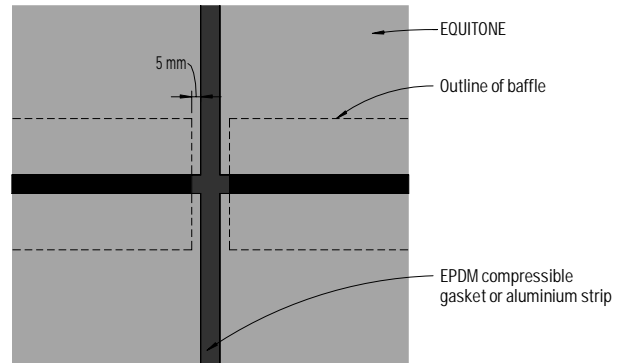


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

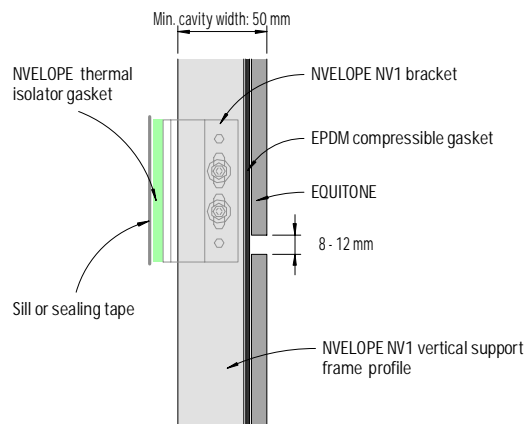


Figure 3: Open horizontal joint

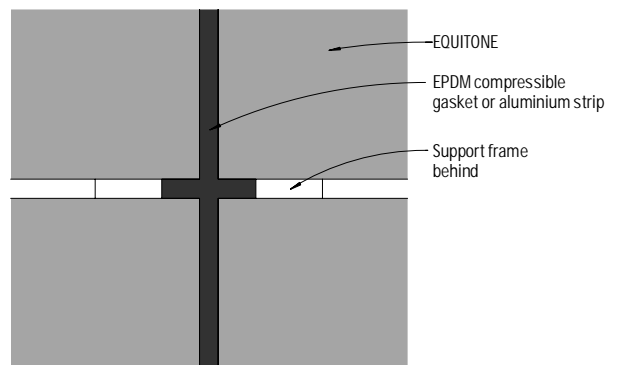


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and the selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame profiles and weather barrier may be coated black with suitable paint.
- 3) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 4) The length of NVELOPE NV3 vertical and horizontal rail, and expressed joint profile must NOT exceed 3,150mm.

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

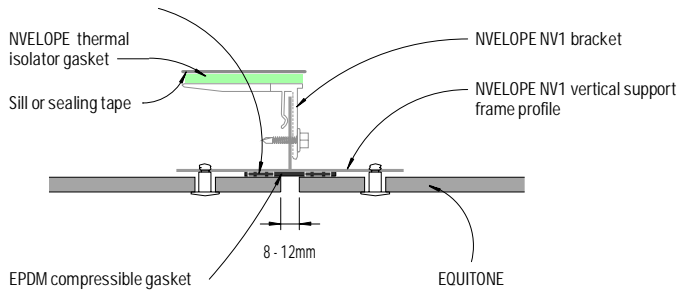


Figure 5: Vertical joint - Detail 1

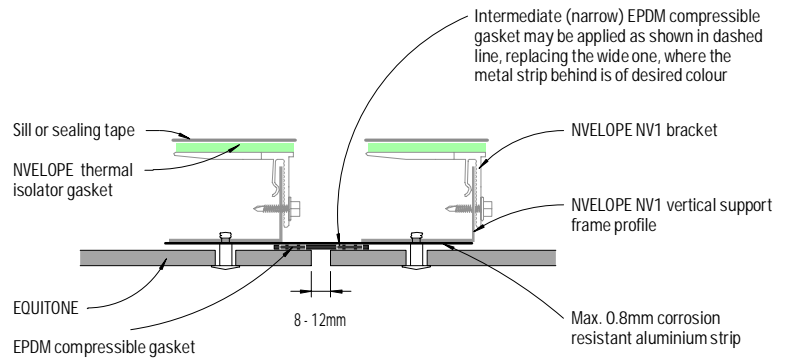


Figure 6: Vertical joint - Detail 2

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

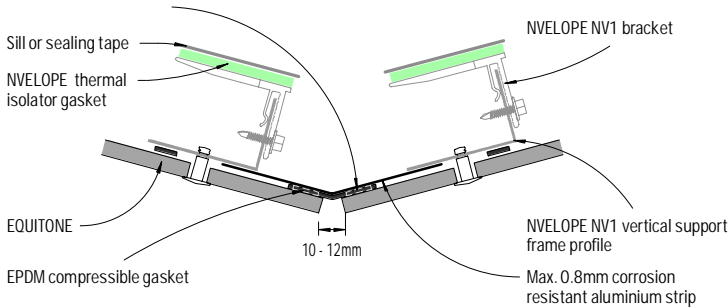


Figure 7: Vertical joint - Detail 3

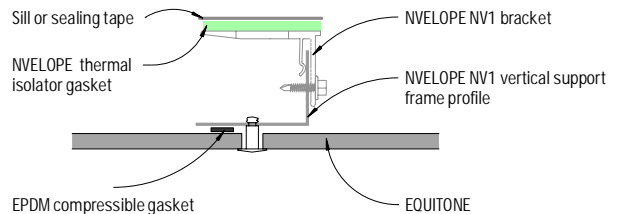


Figure 8: Intermediate panel fixings connection

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 3) In Figure 6 & 7, the aluminium strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.
- 2) EPDM compressible gasket strip is applied away from the panel hole, and usually to one side of the support frame profile as shown in Figure 8.

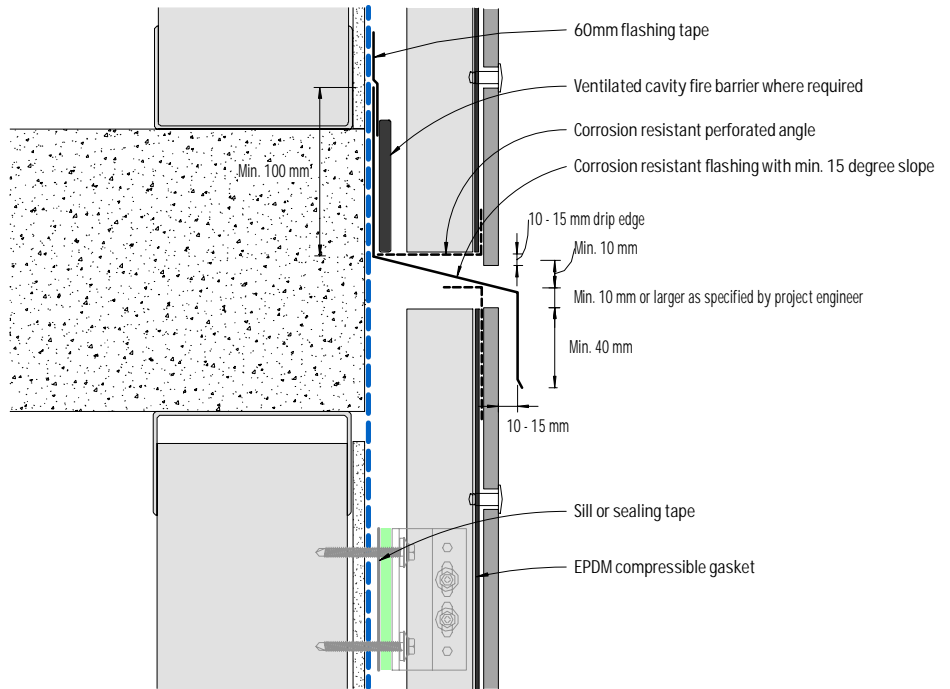


Figure 9: Horizontal control joint

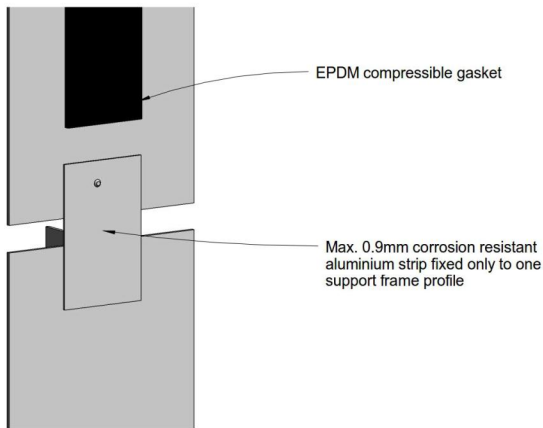


Figure 10: EPDM gasket support over control joint or the like

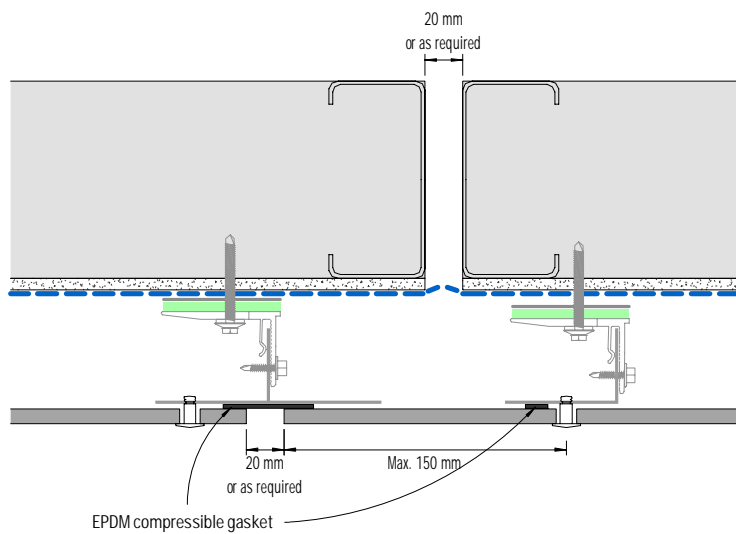


Figure 11: Vertical control joint

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

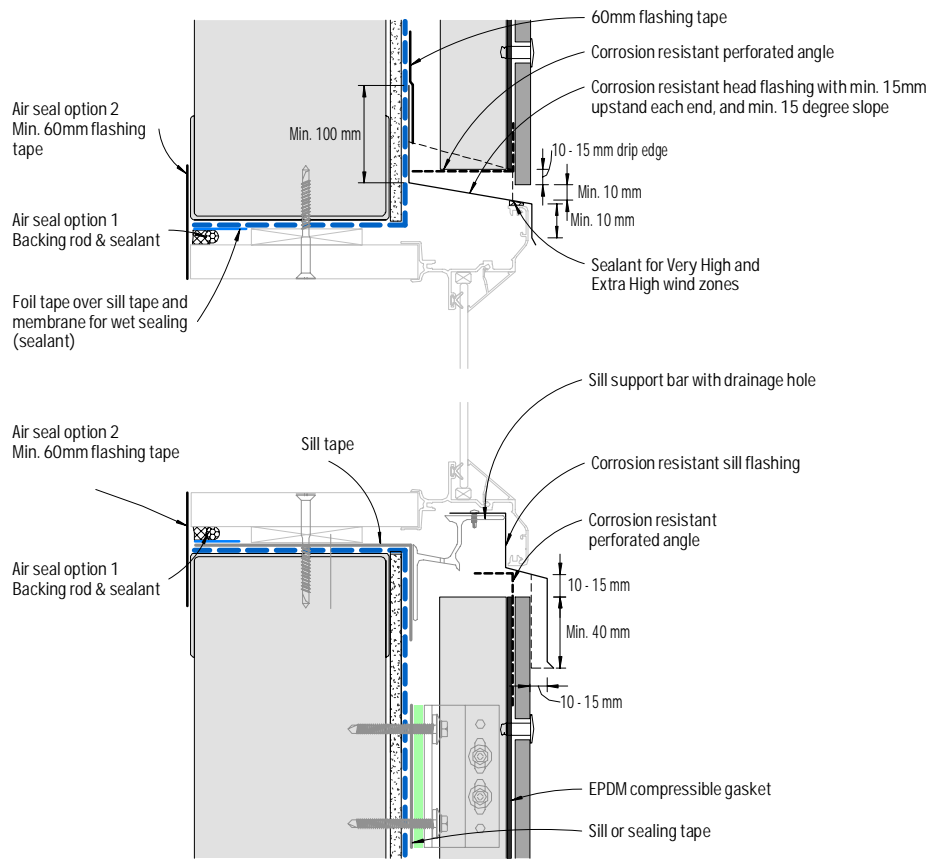


Figure 12: Flush window - Head and sill

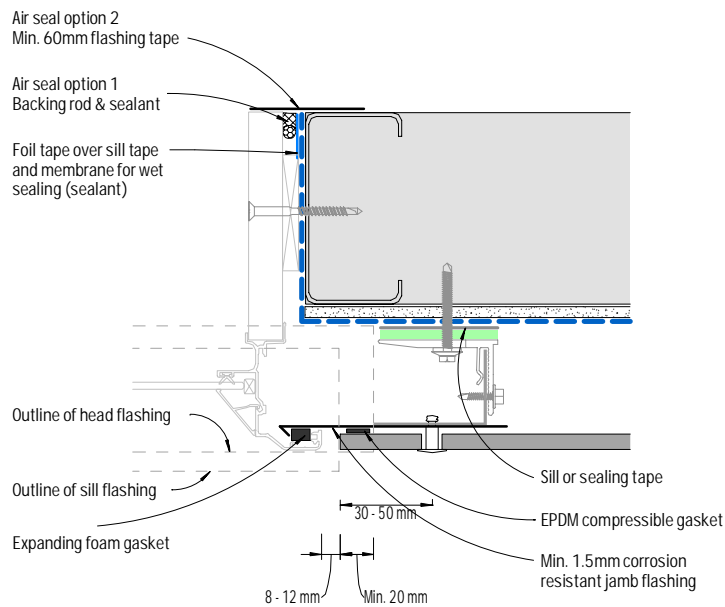


Figure 13: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

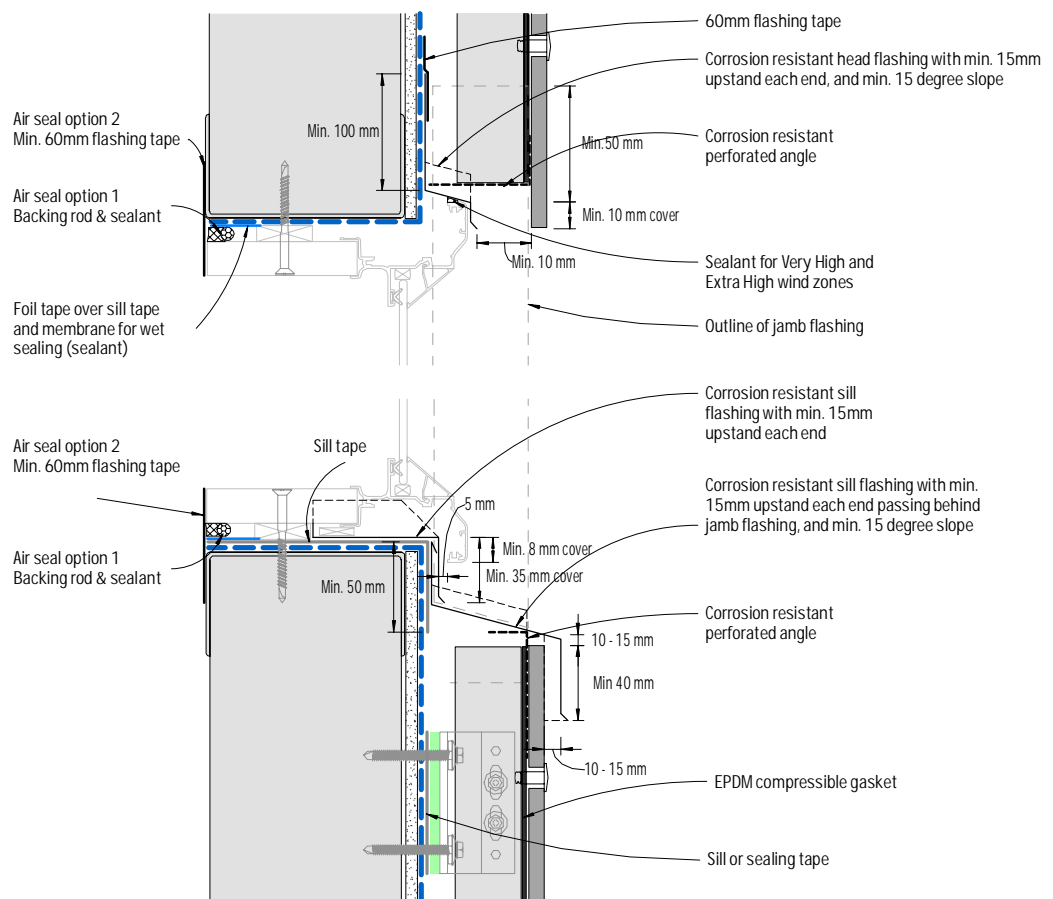


Figure 14: Recessed window - Head and sill

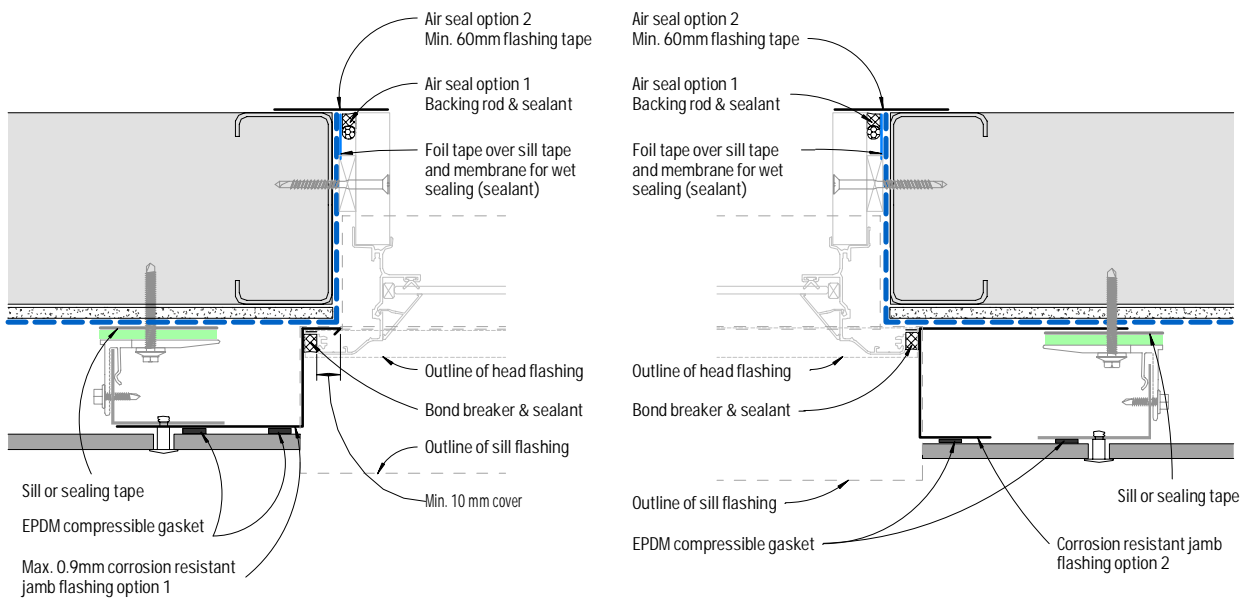


Figure 15: Recessed window jamb - Option 1

Figure 16: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

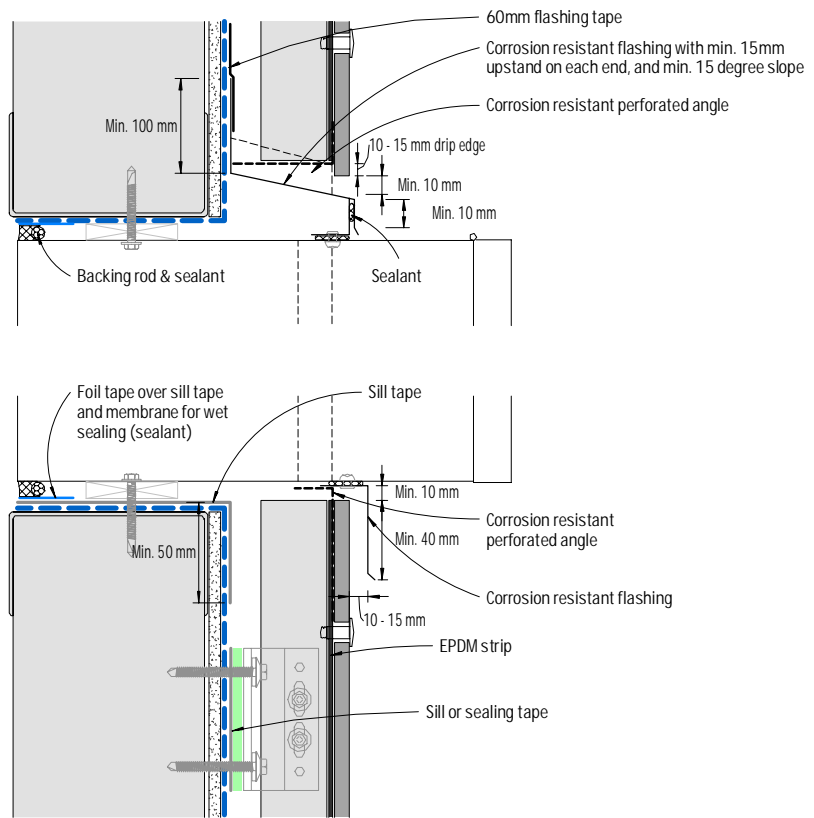


Figure 17: Meter box - Section

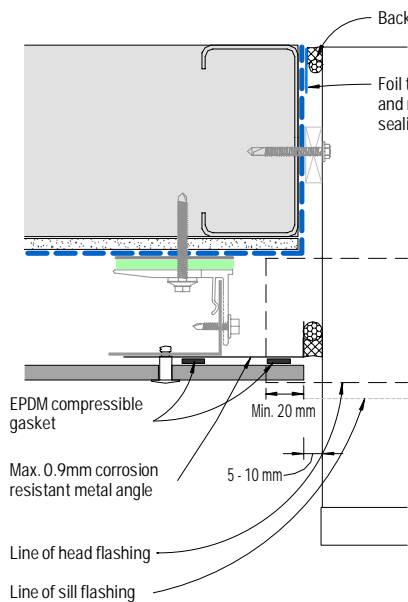


Figure 18: Meter box - Plan view - Detail 1

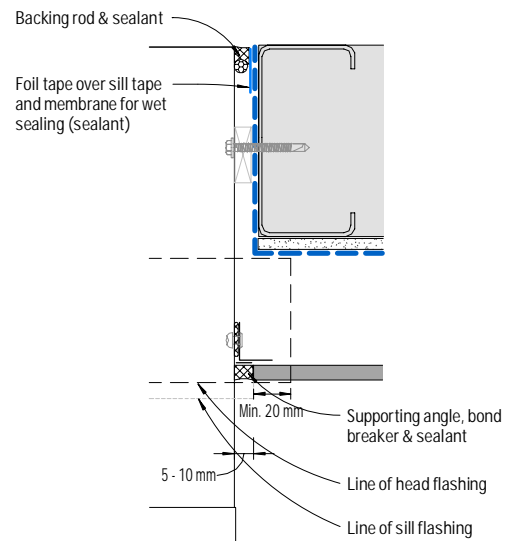


Figure 19: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

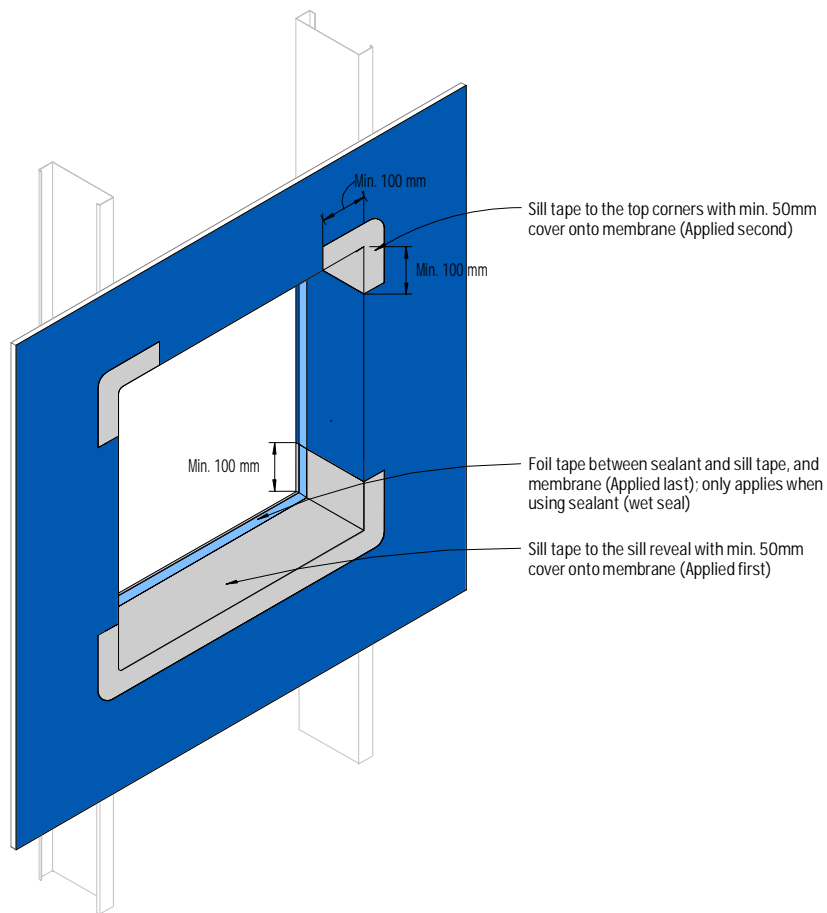


Figure 20: Isometric view of window/meter box opening - Tape application

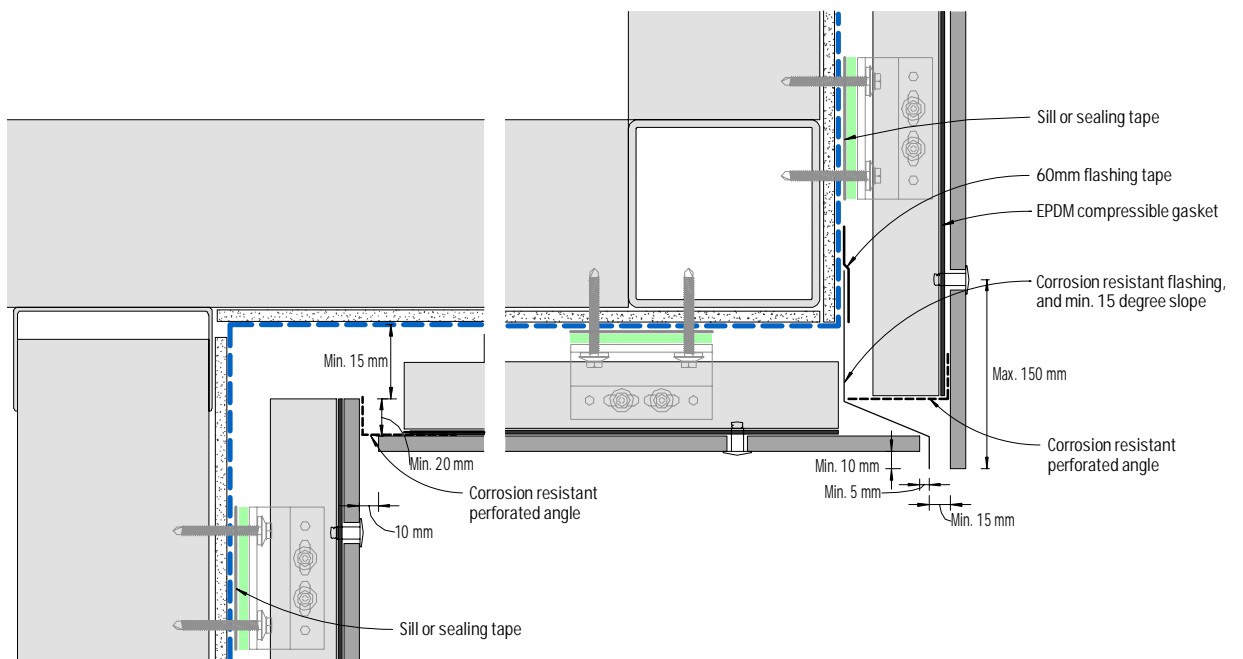


Figure 21: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

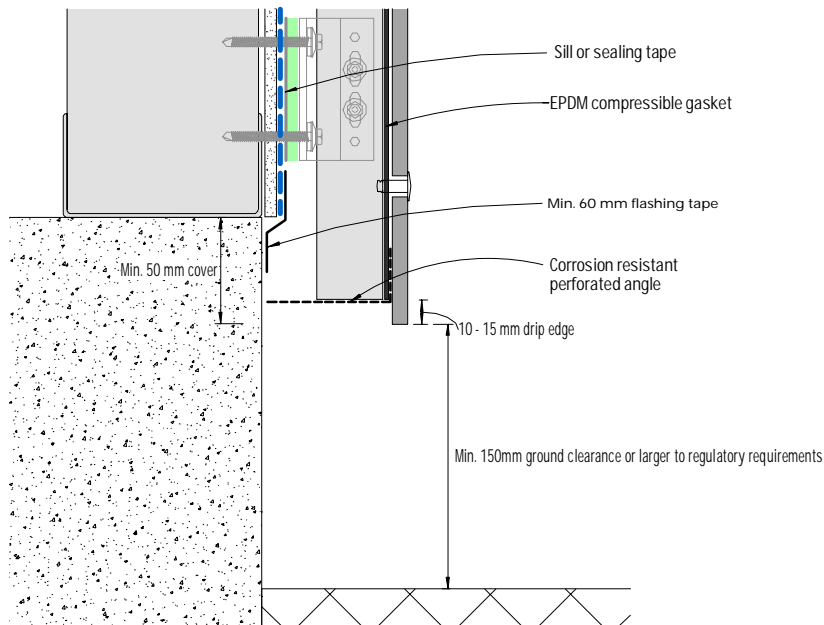


Figure 22: Base detail

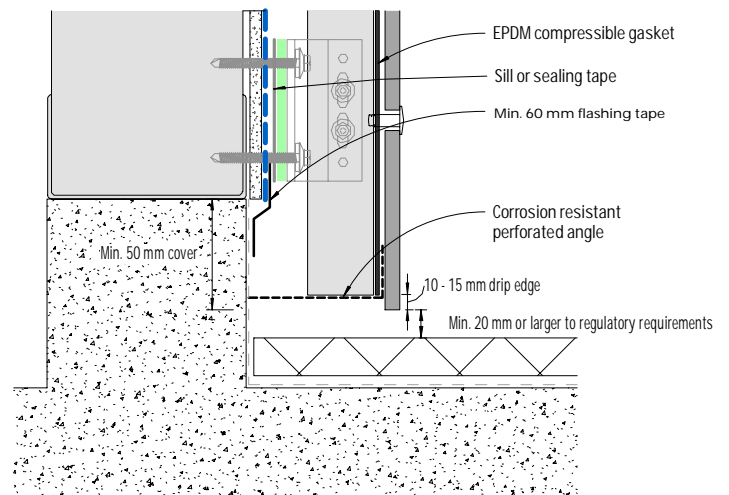


Figure 23: Base detail - Covered area

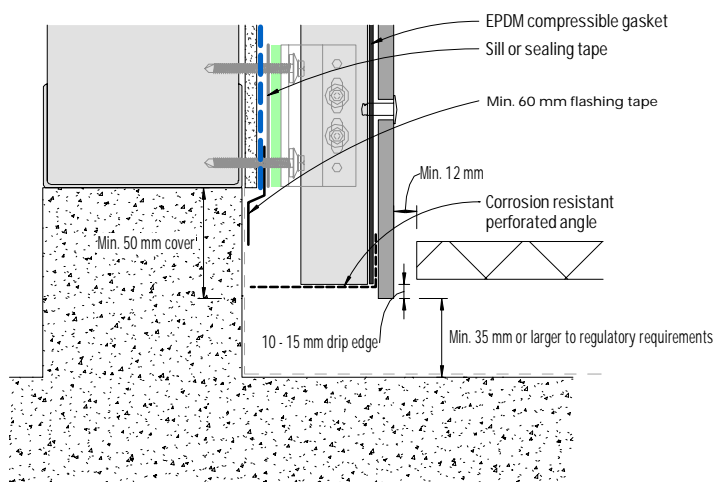


Figure 24: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

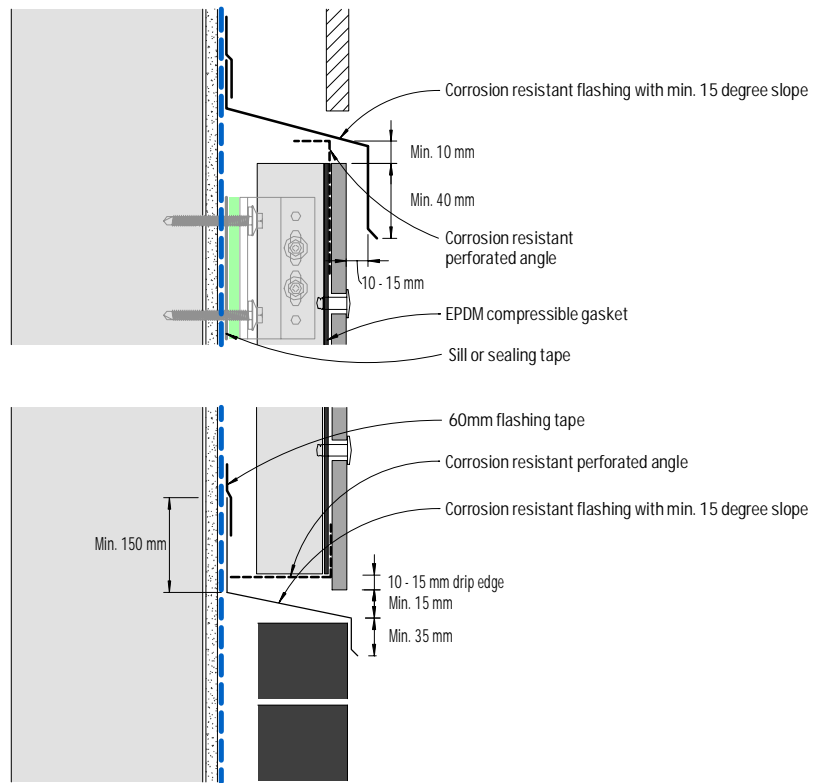


Figure 25: Junction with other materials - flush detail

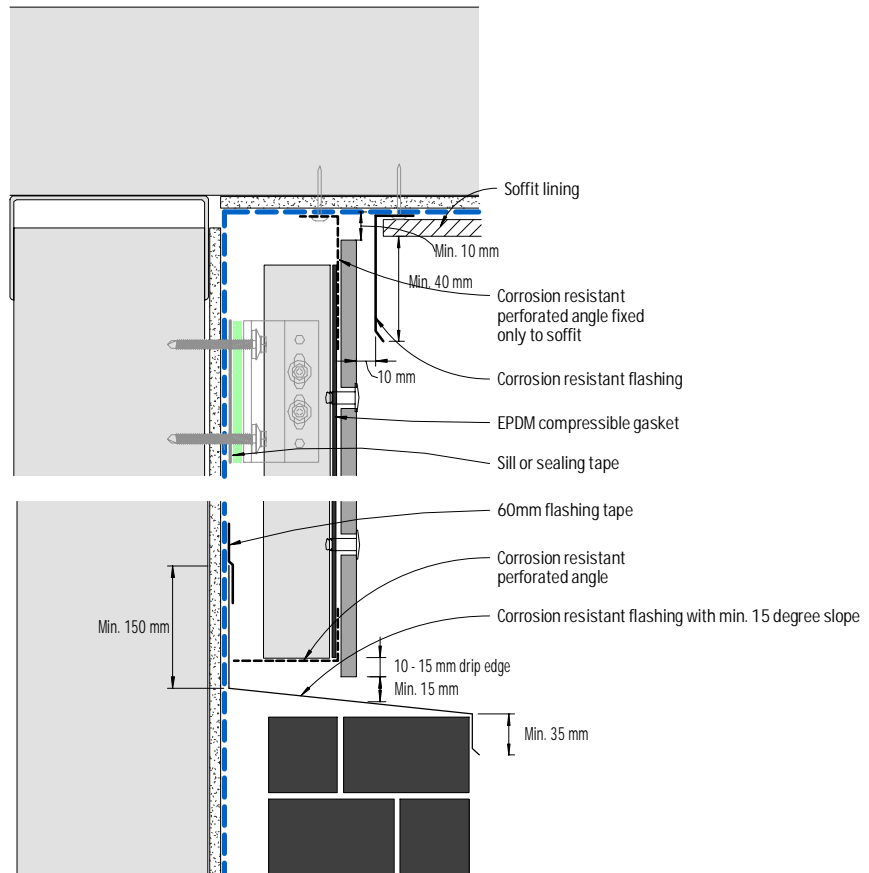


Figure 26: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

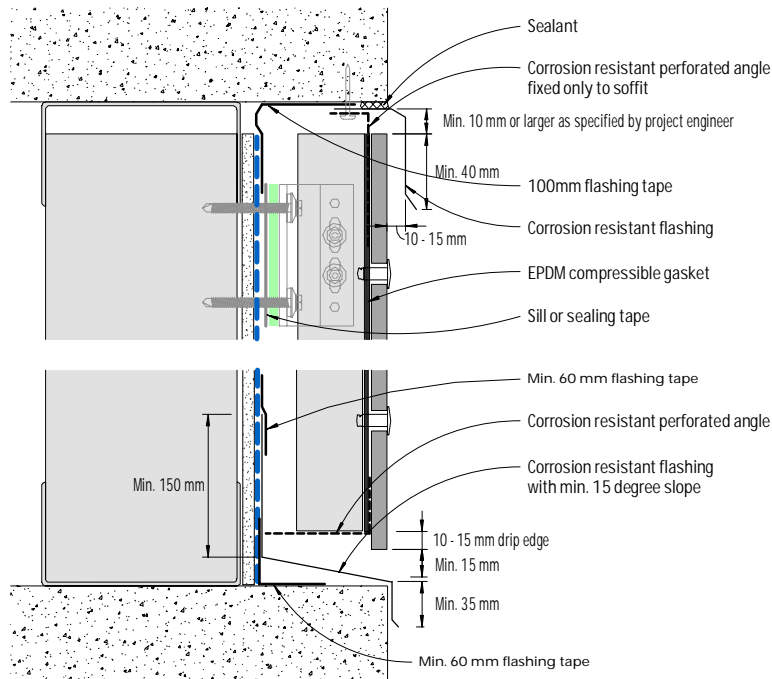


Figure 27: Exposed concrete slab or beam - Cladding flush

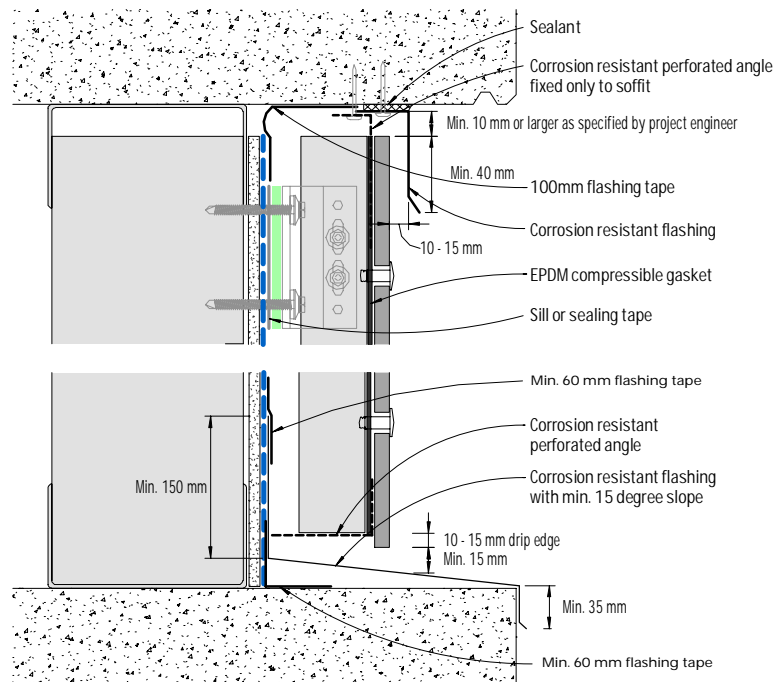


Figure 28: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Refer to Pro Clima's flashing tape application guide for any pre-treatment required on concrete or masonry for the application of the flashing tape onto these substrates.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

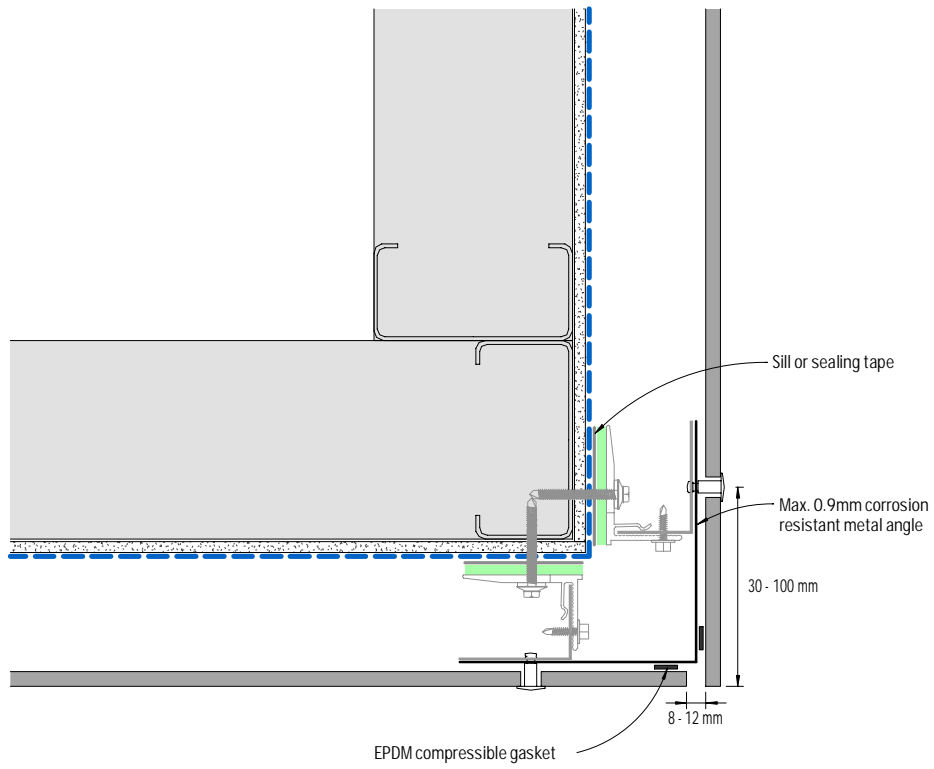


Figure 29: External corner - Detail 1

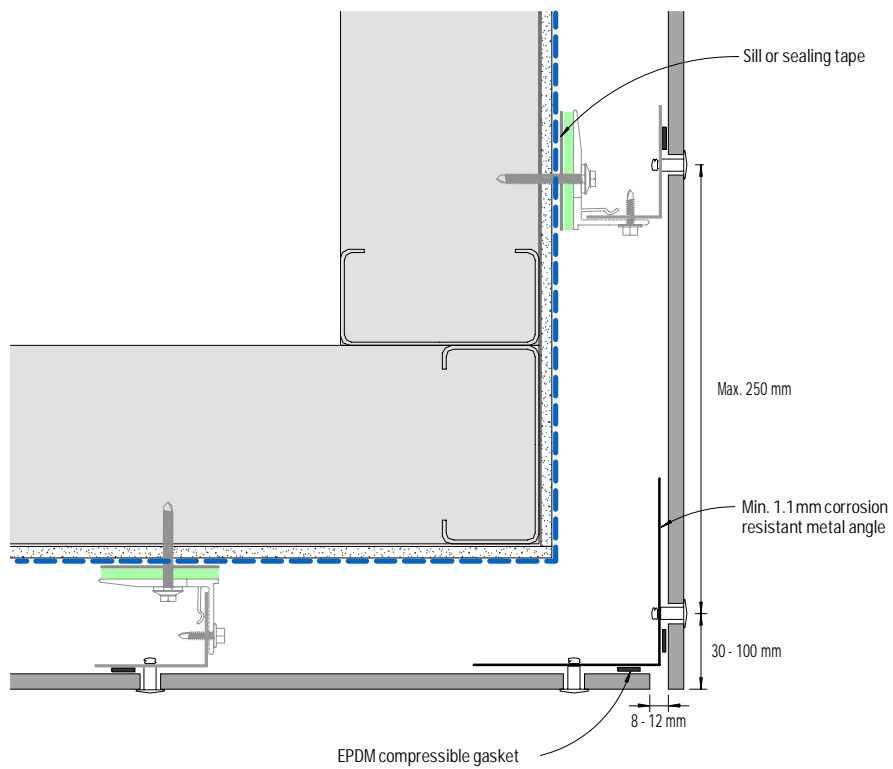


Figure 30: External corner - Detail 2

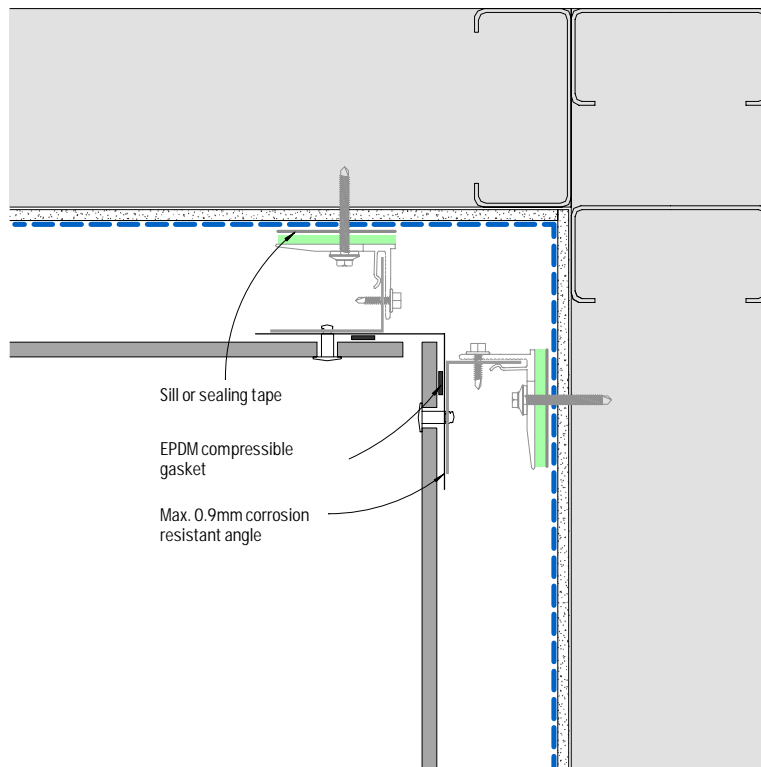


Figure 31: Internal corner

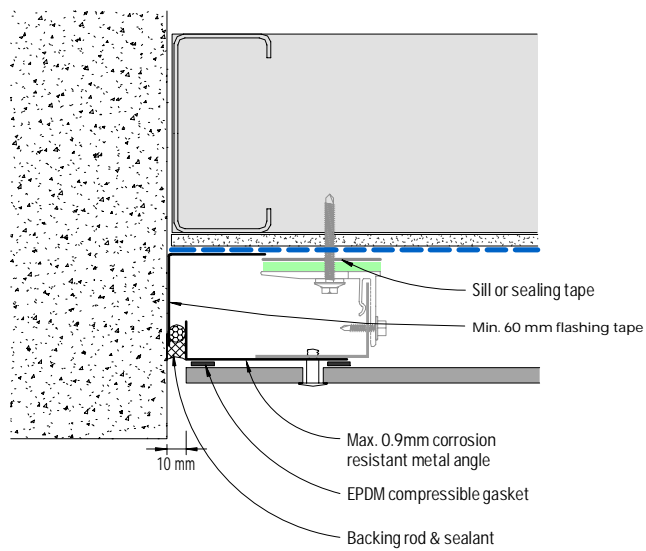


Figure 32: Abutment

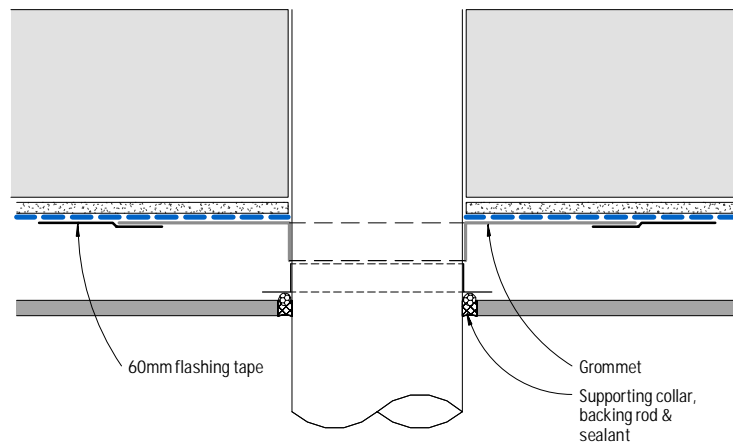


Figure 33: Pipe penetration - Plan view

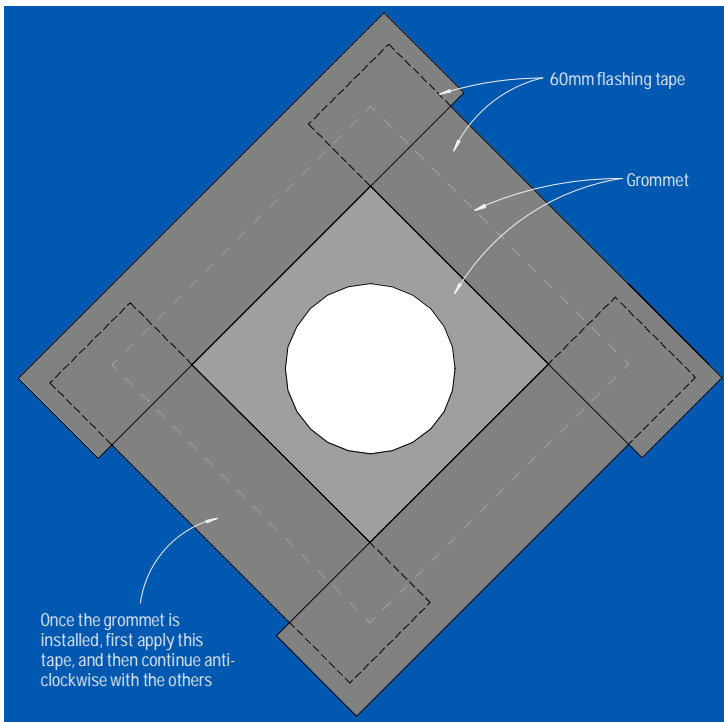


Figure 34: Pipe penetration - Elevation

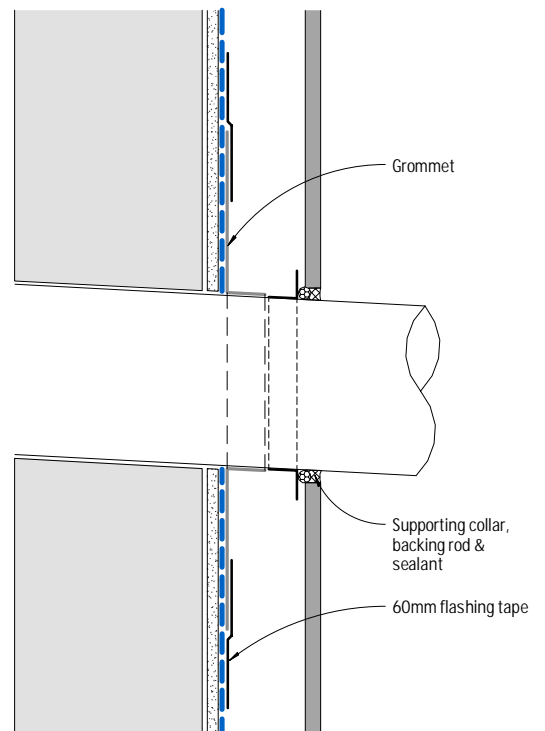


Figure 35: Pipe penetration - Section

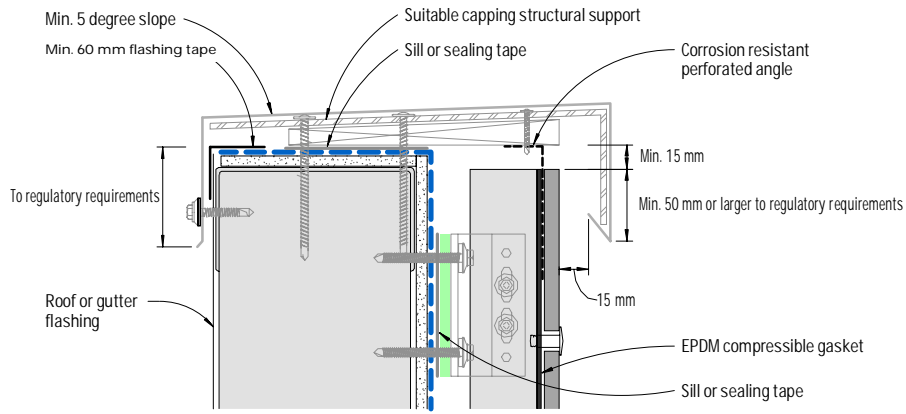


Figure 36: Capping - Detail 1

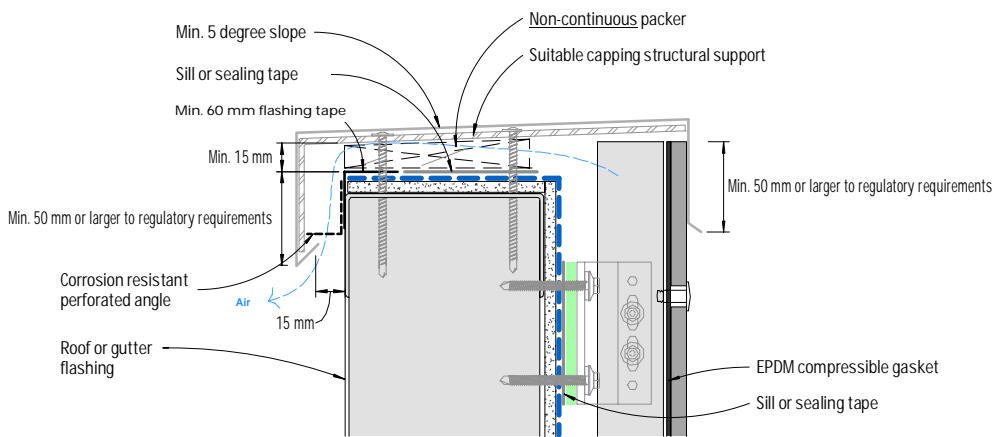


Figure 37: Capping - Detail 2
(Not suitable for EQUITONE [material])

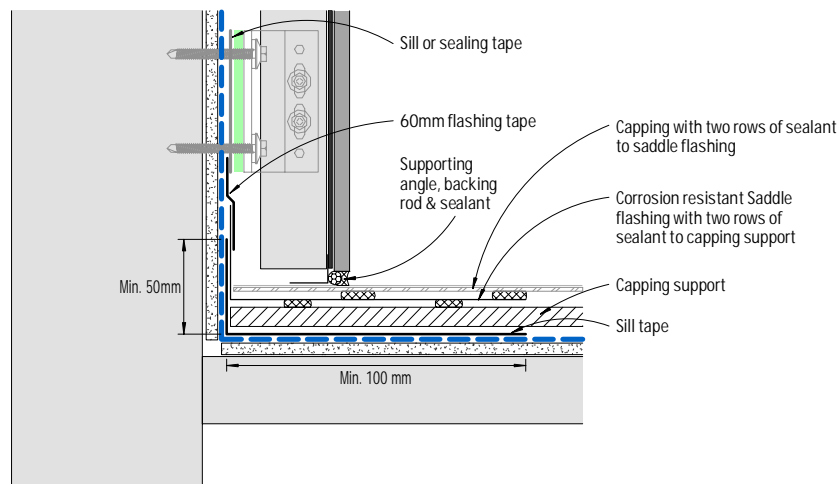


Figure 38: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 36 & 37.

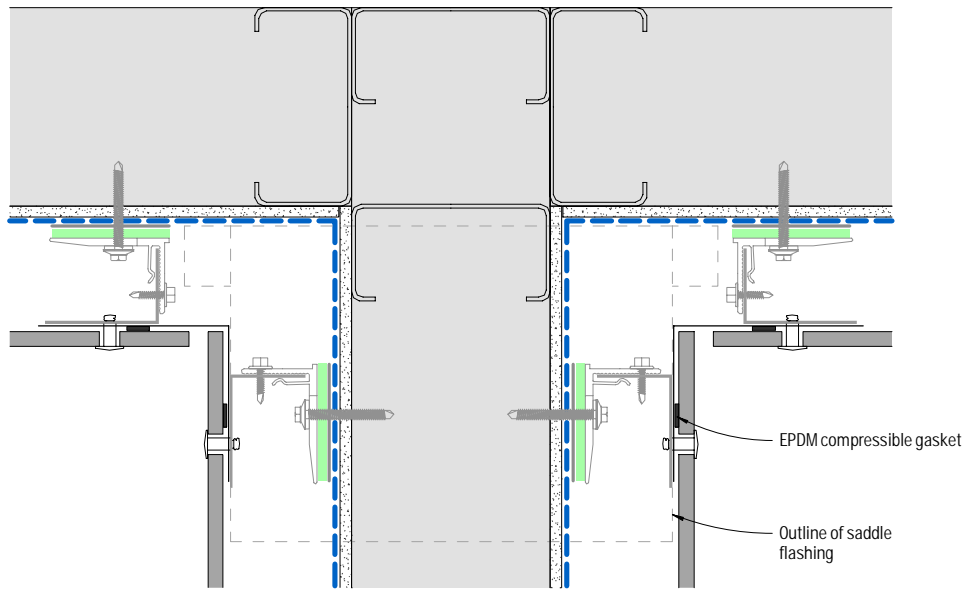


Figure 39: Parapet junction - Plan view

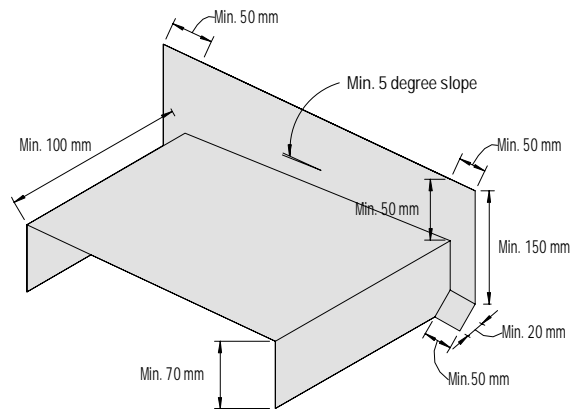


Figure 40: Corrosion resistant saddle flashing

EQUITONE facade system

with

rigid air barrier

&

concealed fixing system



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | NVELOPE NV3 concealed fixing system |
| Weather (resistive) barrier | Kalsi RigidBacker and pro clima SOLITEX EXTASANA ADHERO® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61104 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

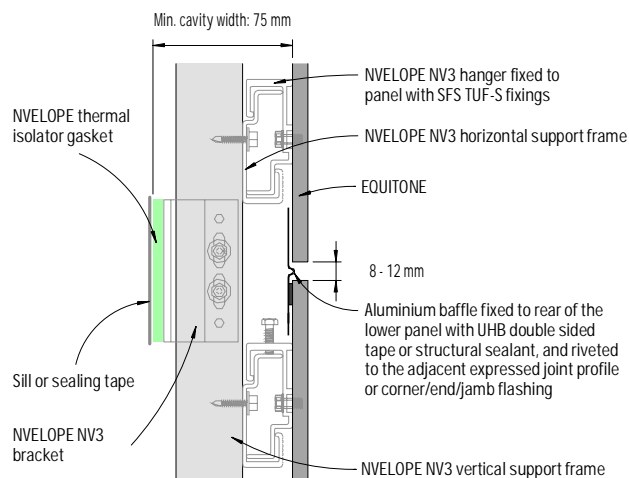


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

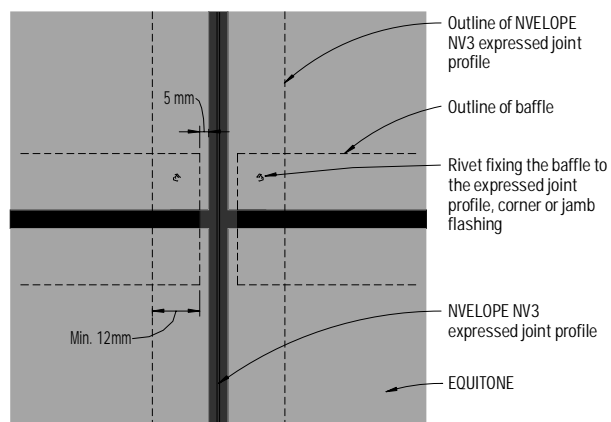


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

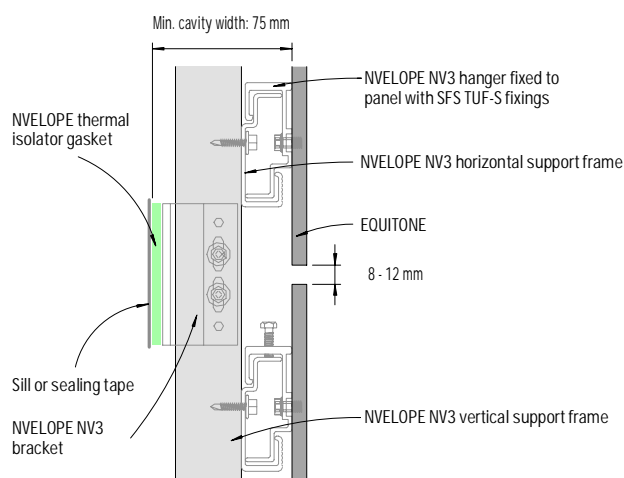


Figure 3: Open horizontal joint

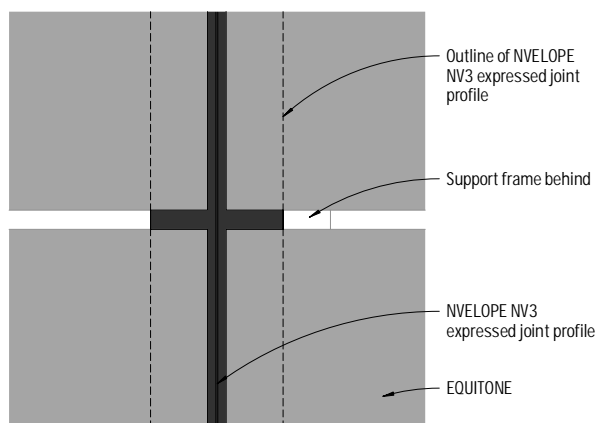


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and the selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame profiles and weather barrier may be coated black with suitable paint.
- 3) The length of NVELOPE NV3 vertical and horizontal rail, and expressed joint profile must NOT exceed 3,150mm.

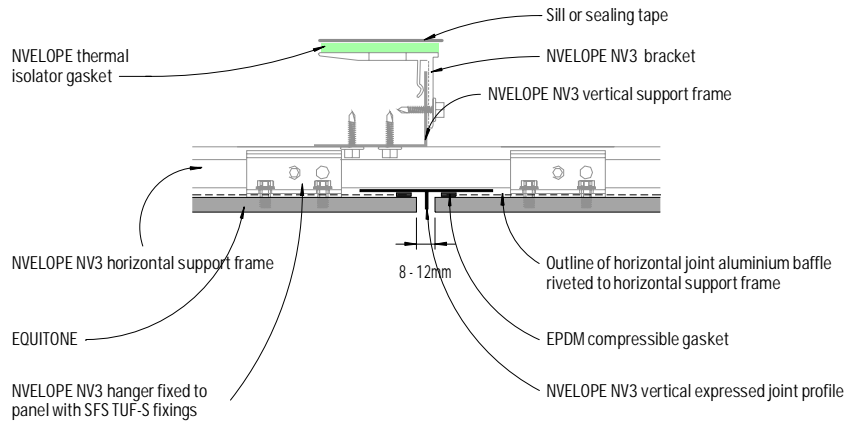


Figure 5: Vertical joint - Detail 1

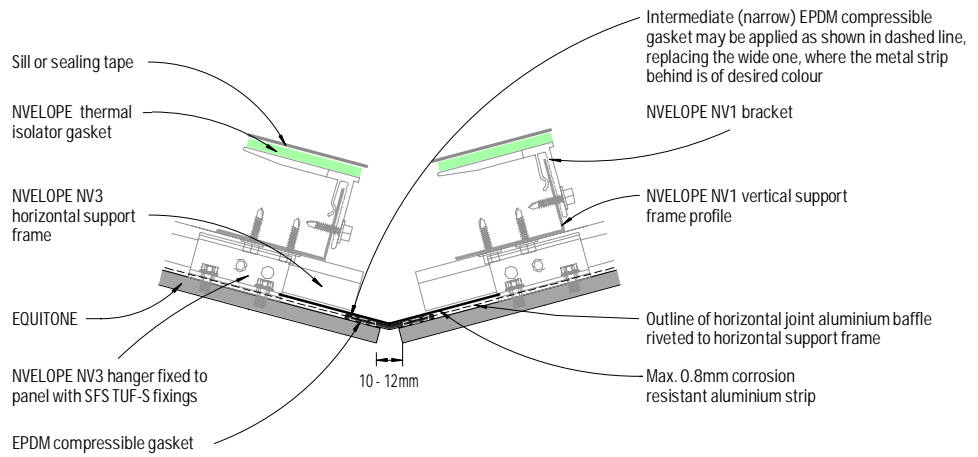


Figure 6: Vertical joint - Detail 2

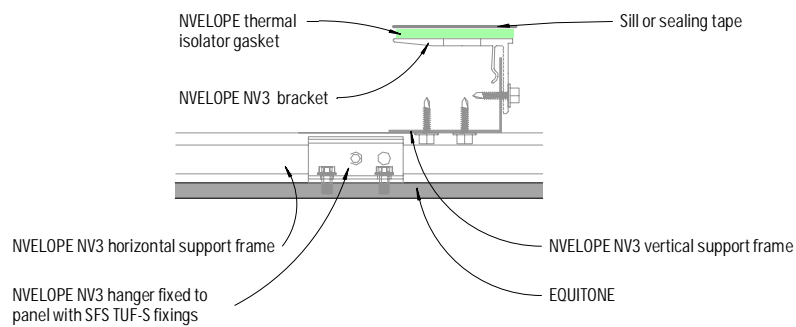


Figure 7: Intermediate panel fixings connection

Notes

- 1) The deflection of NVELOPE NV3 vertical expressed joint profile (as included in Figure 5) and any aluminium strip located at the vertical joint (as included in Figure 6) shall be limited to an extent ensuring the seal along the vertical joint is maintained with respect to project wind loading.
- 2) The aluminium strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

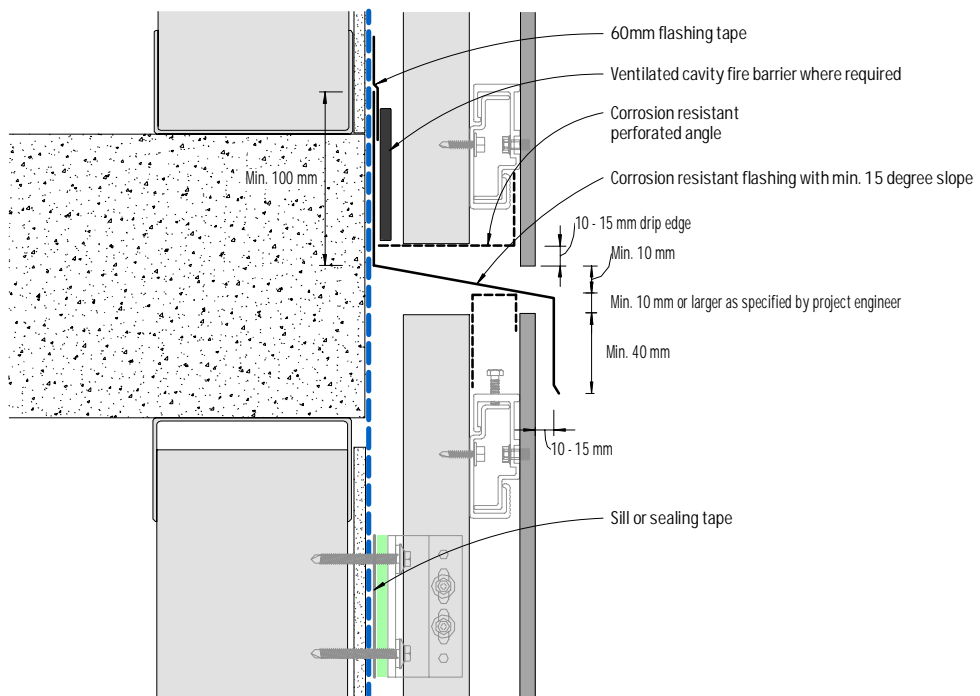


Figure 8: Horizontal control joint

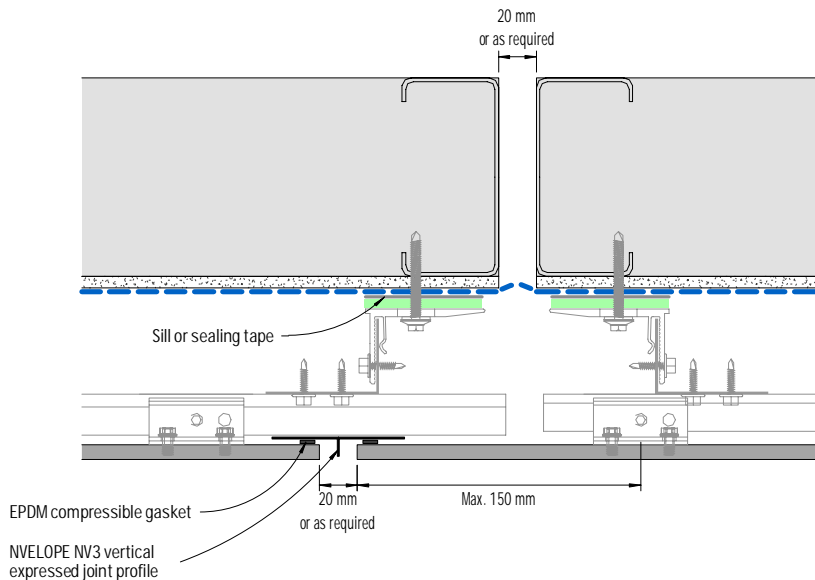


Figure 9: Vertical control joint

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) The deflection of NVELOPE NV3 vertical expressed joint profile shall be limited to an extent ensuring the seal along the vertical joint is maintained with respect to project wind loading.
- 3) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 4) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

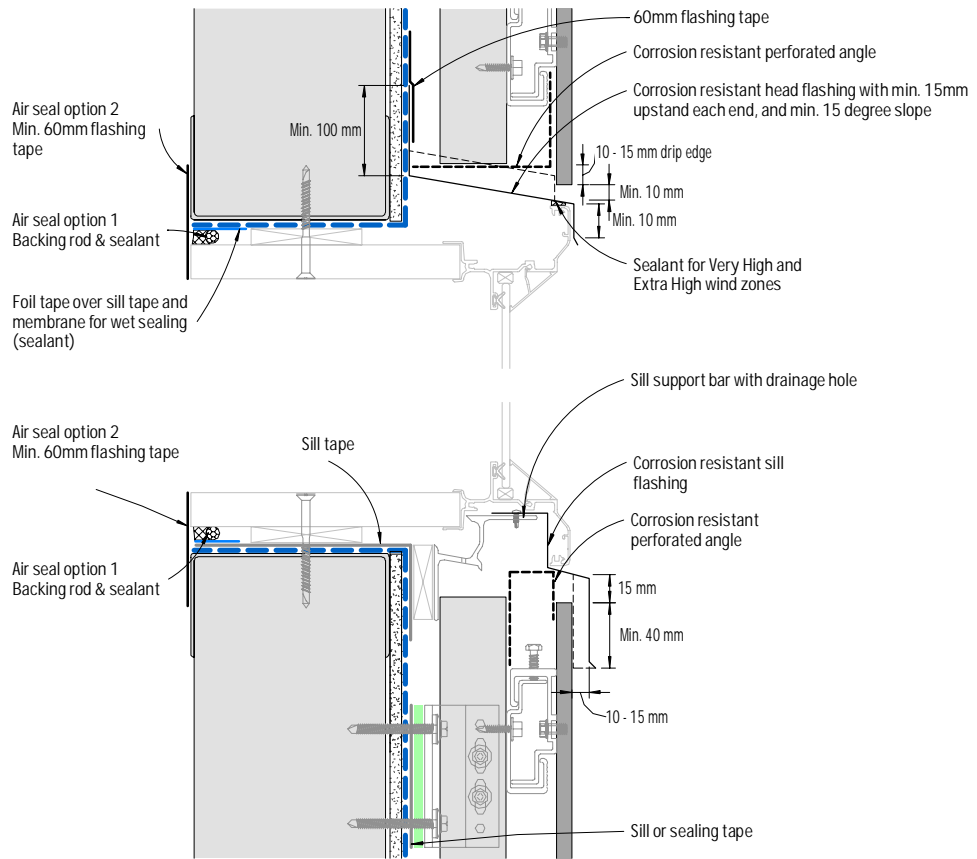


Figure 10: Flush window - Head and sill

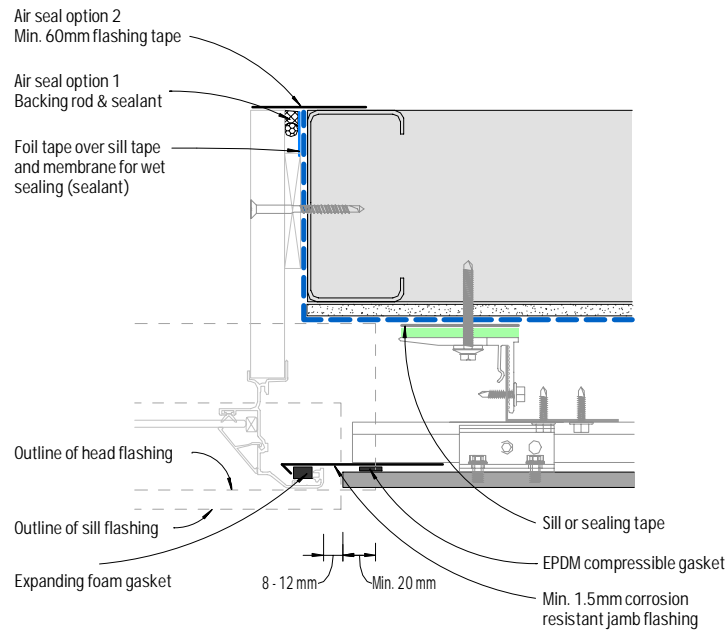


Figure 11: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

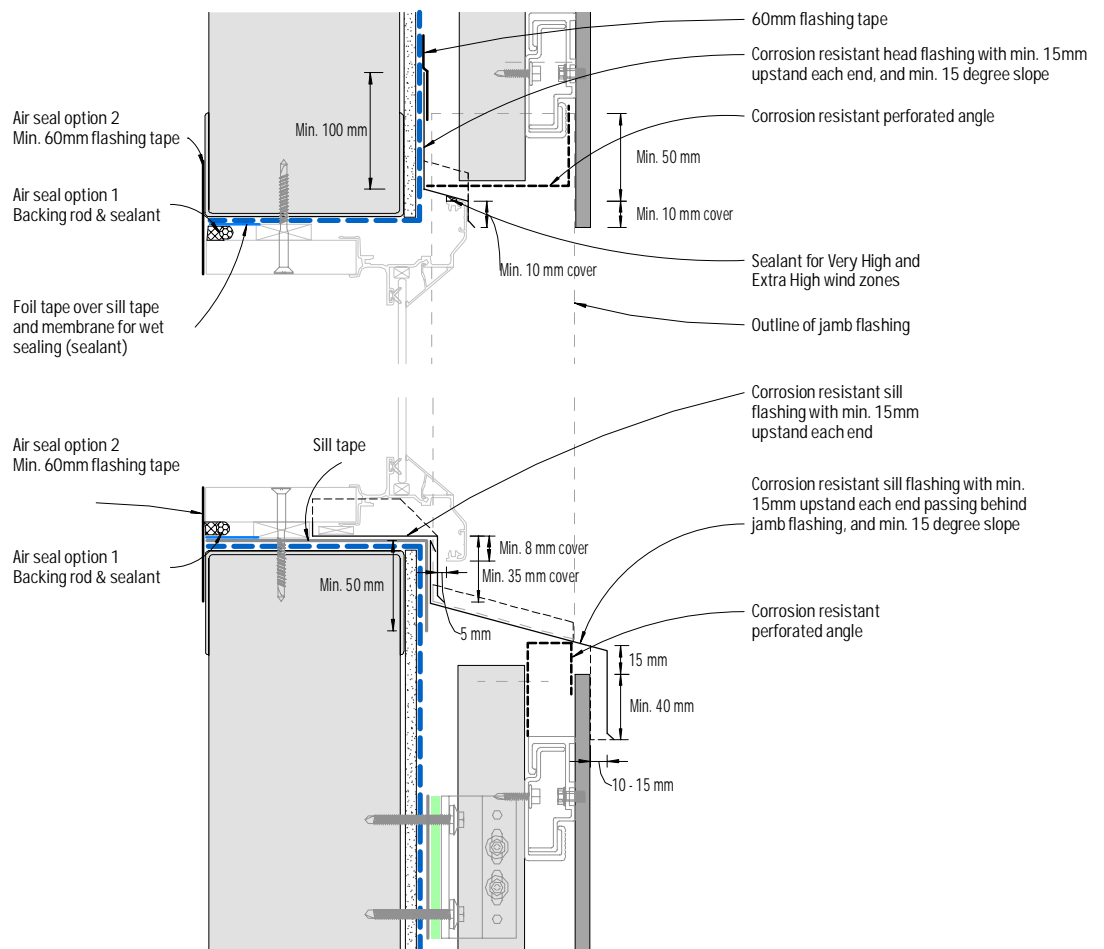


Figure 12: Recessed window - Head and sill

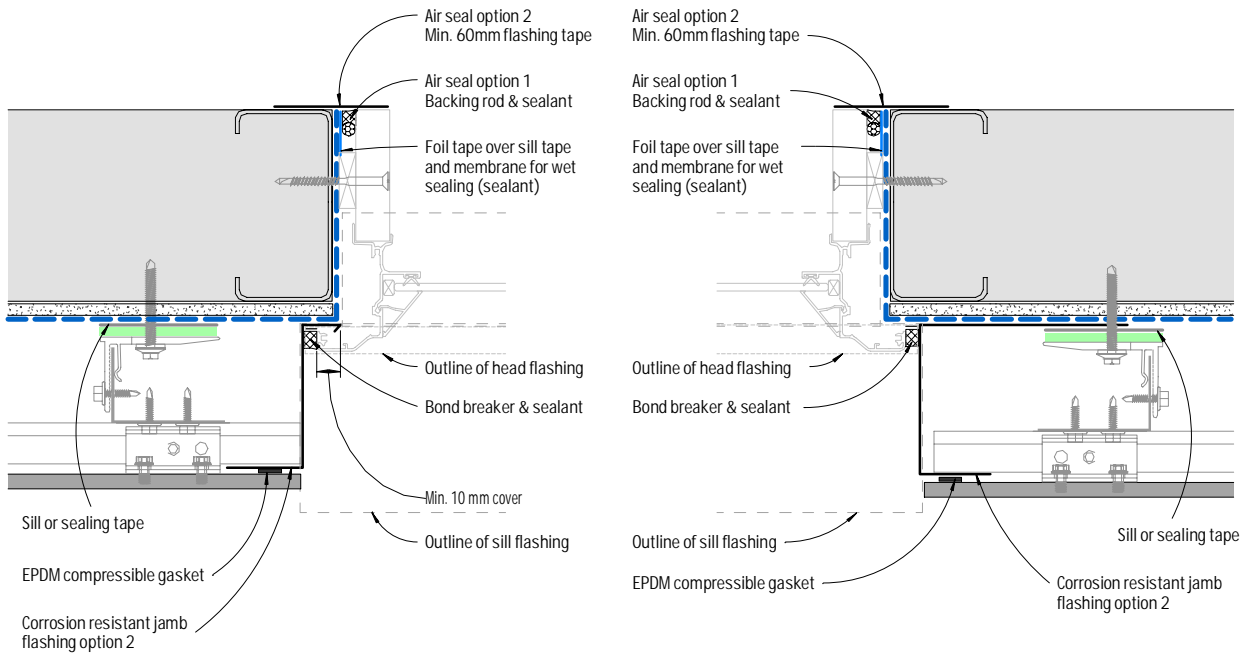


Figure 13: Flush window jamb - Option 1

Figure 14: Flush window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

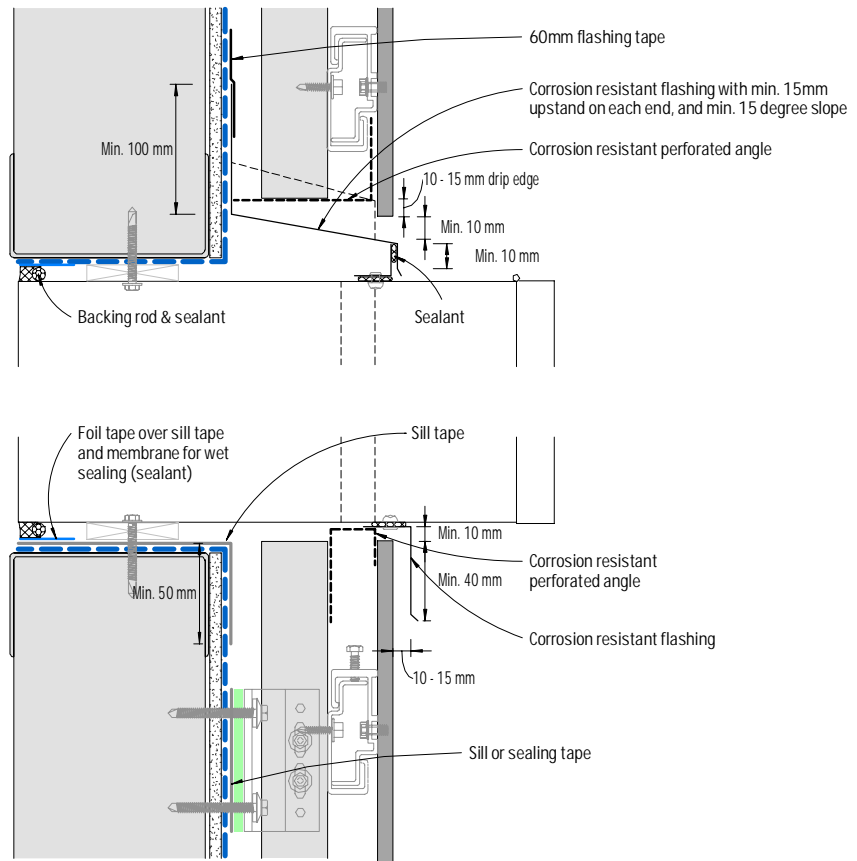


Figure 15: Meter box - Section

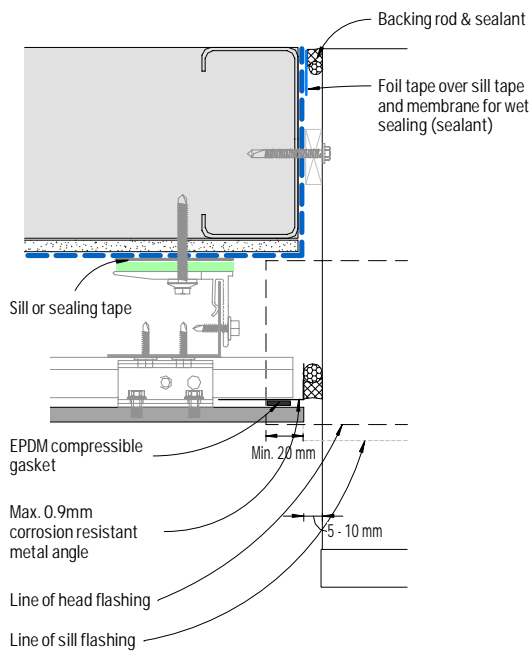


Figure 16: Meter box - Plan view - Detail 1

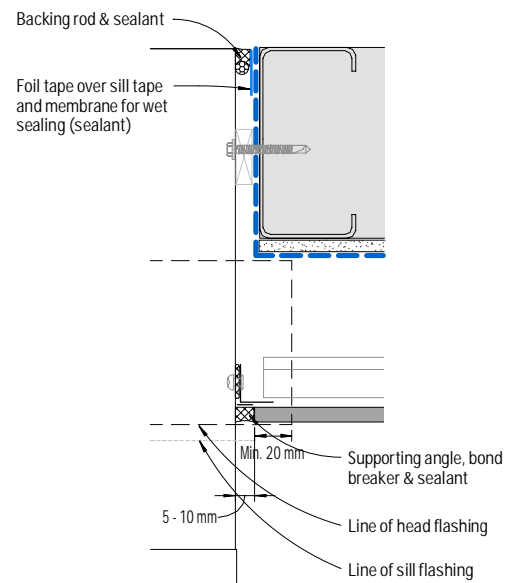


Figure 17: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

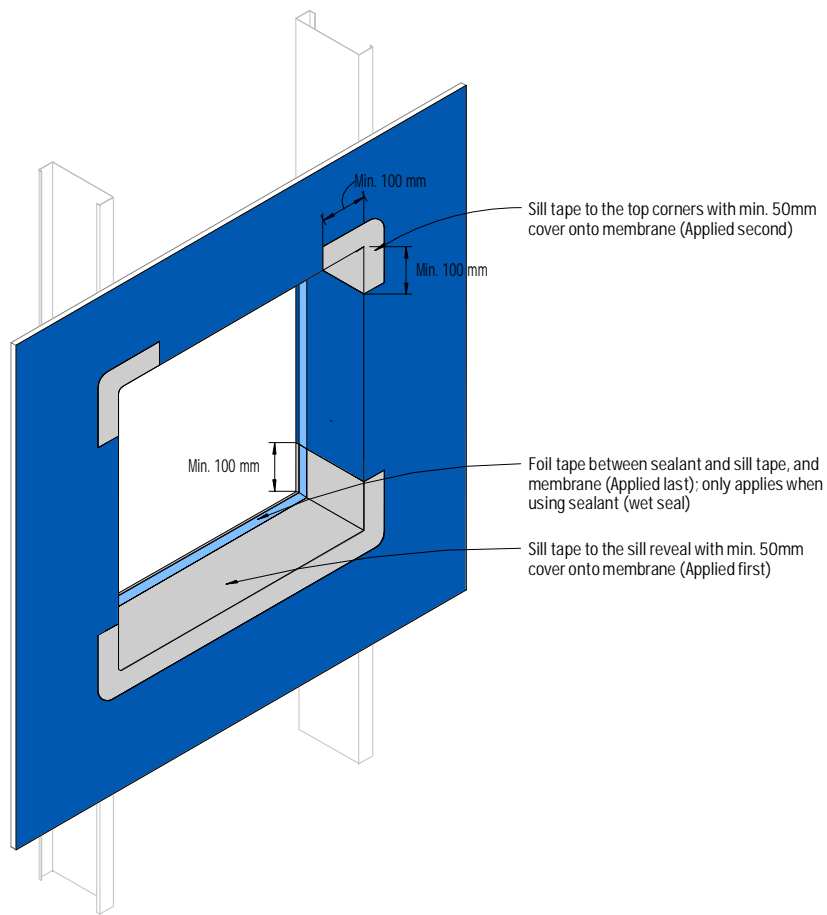


Figure 18: Isometric view of window/meter box opening - Tape application

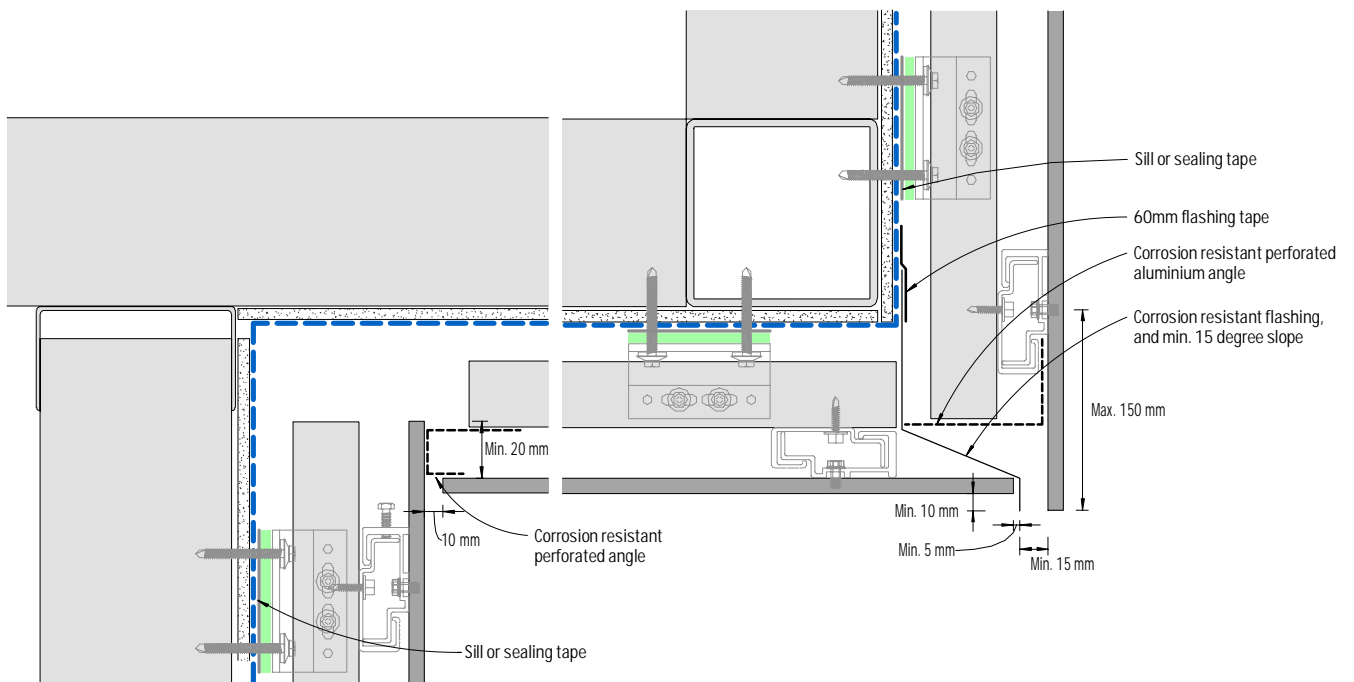


Figure 19: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

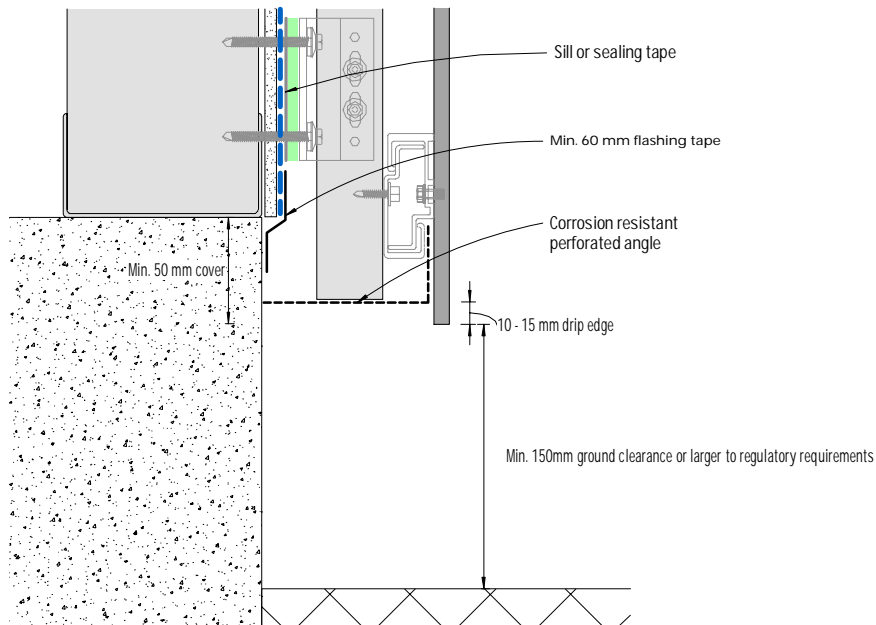


Figure 20: Base detail

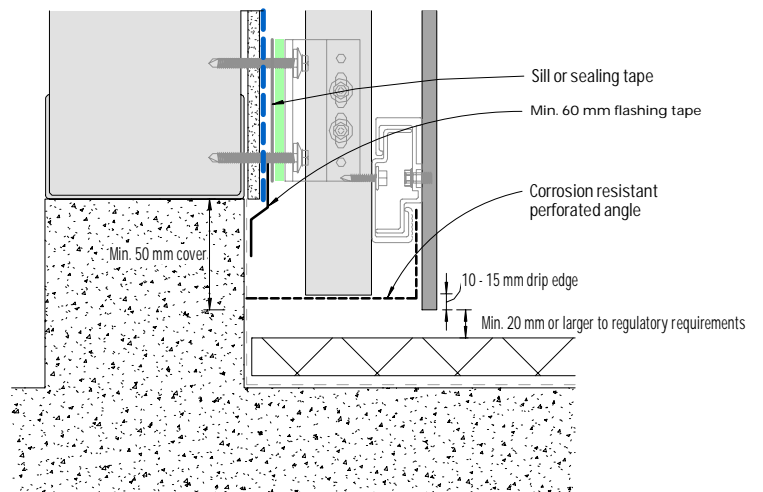


Figure 21: Base detail - Covered area

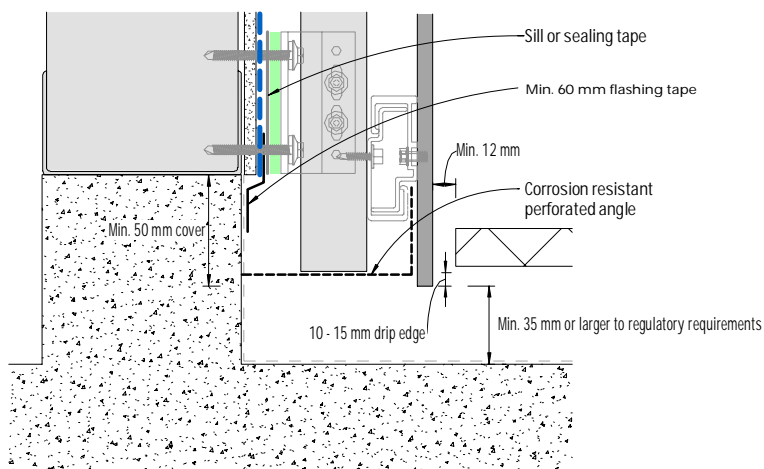


Figure 22: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

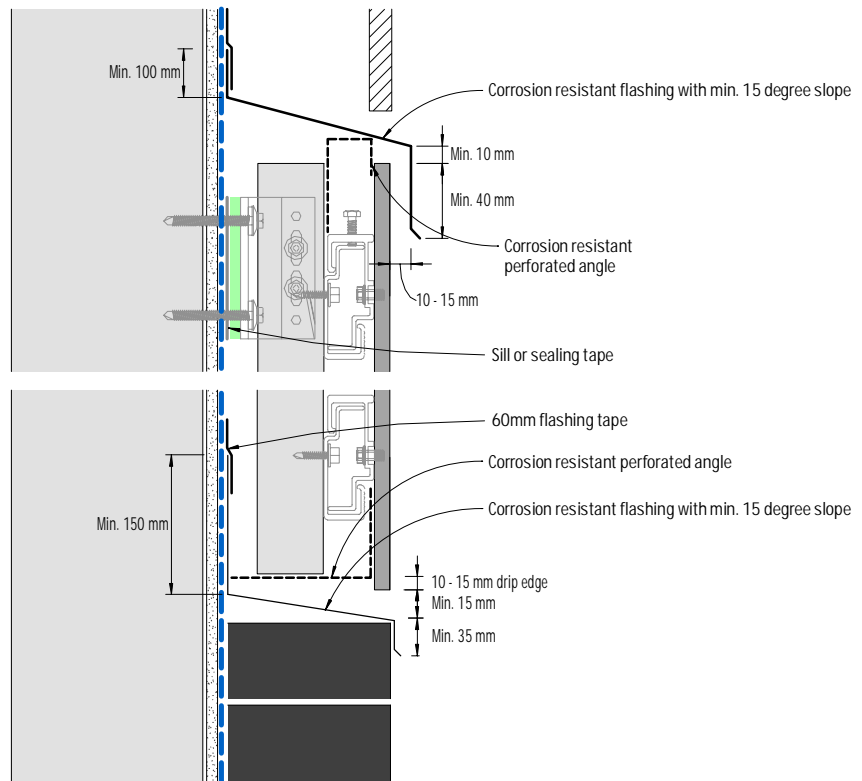


Figure 23: Junction with other materials - flush detail

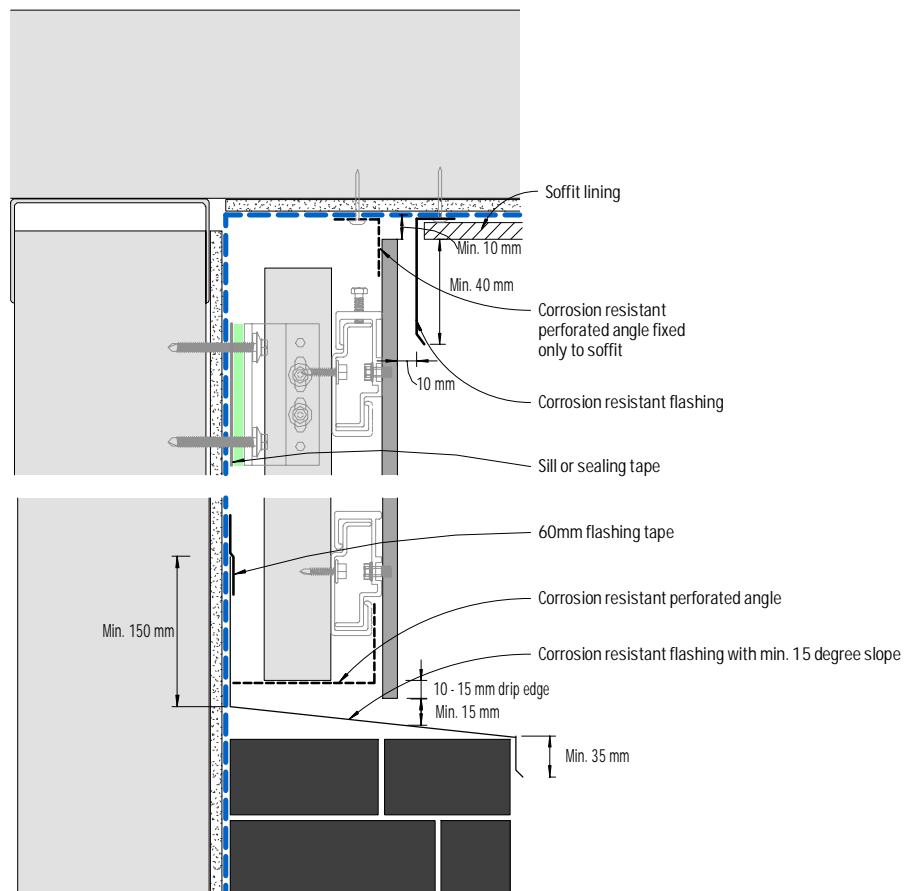


Figure 24: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

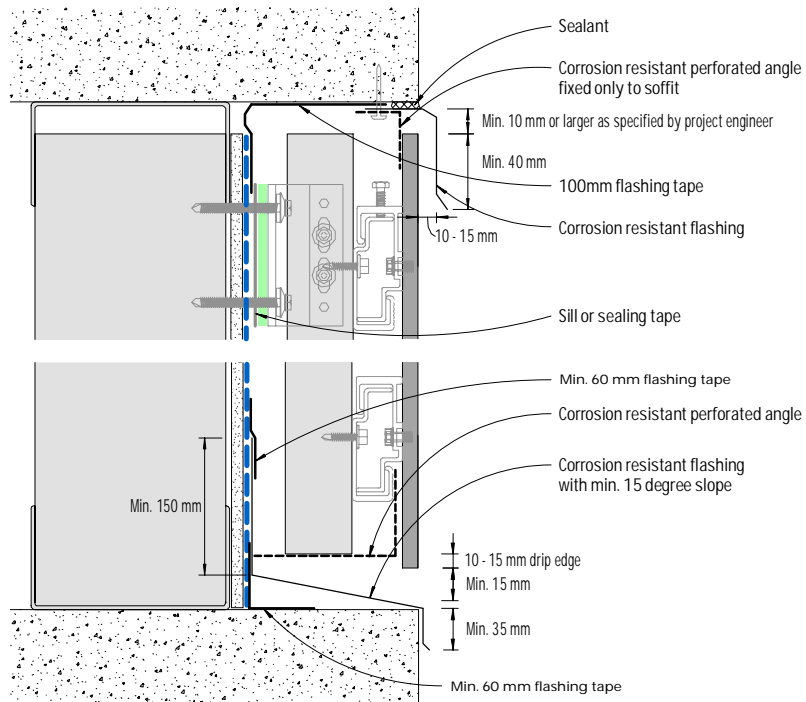


Figure 25: Exposed concrete slab or beam - Cladding flush

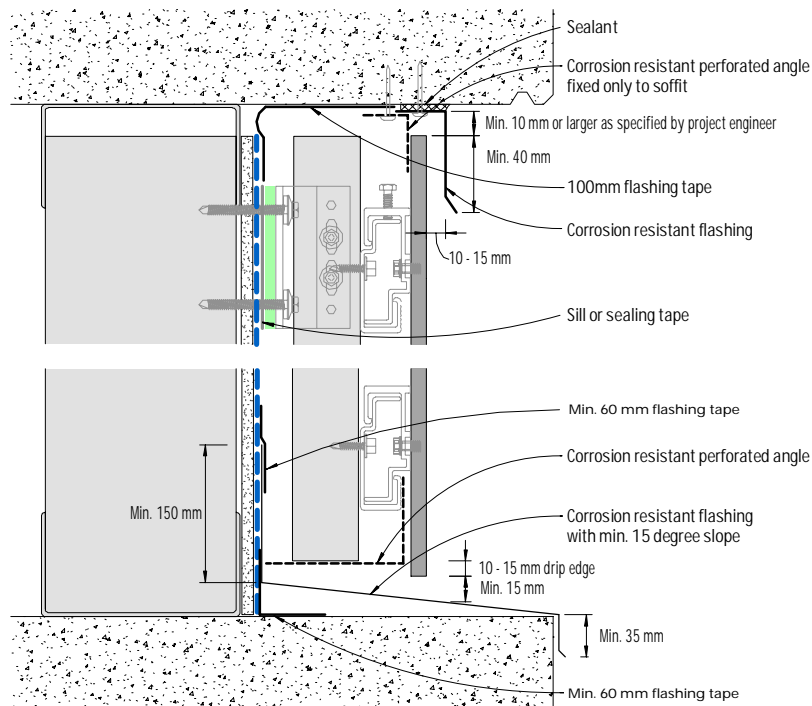


Figure 26: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Refer to Pro Clima's flashing tape application guide for any pre-treatment required on concrete or masonry for the application of the flashing tape onto these substrates.
- 2) Support frame profiles and Kalsi RigidBacker must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

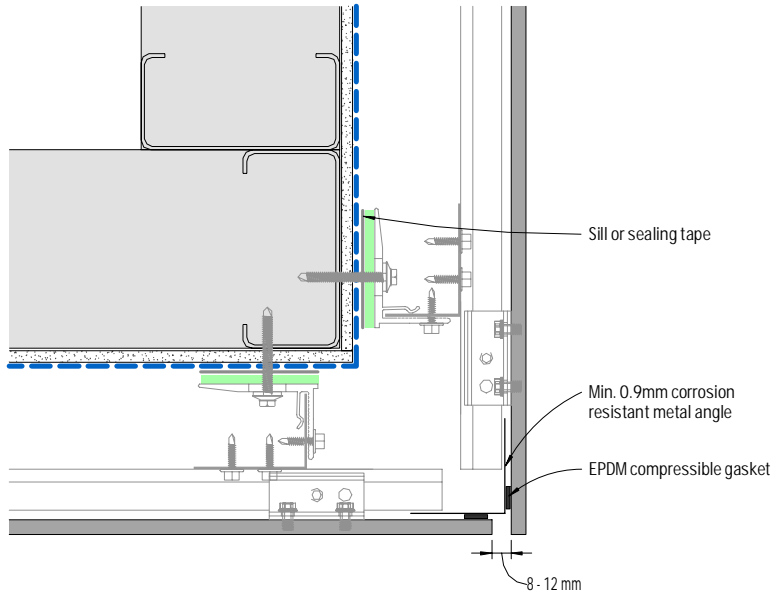


Figure 27: External corner

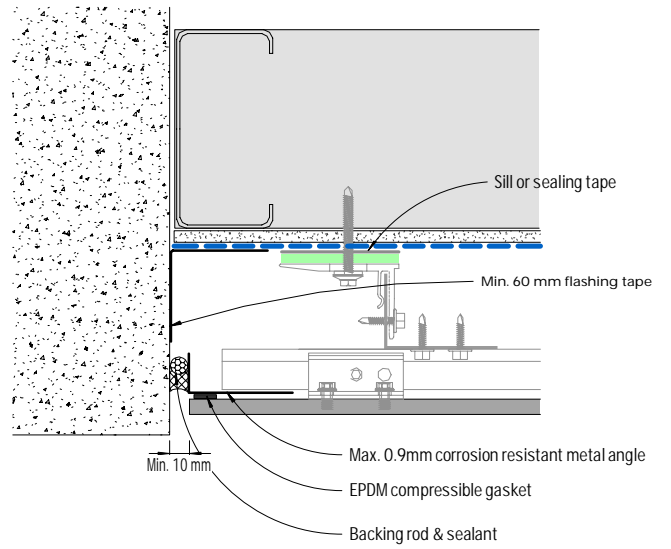


Figure 28: Abutment

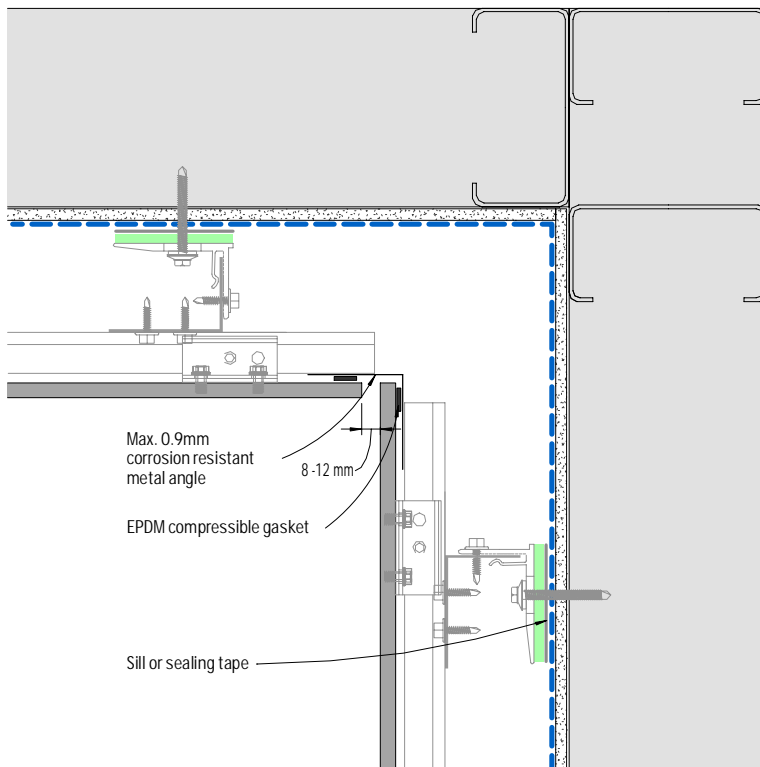


Figure 29: Internal corner

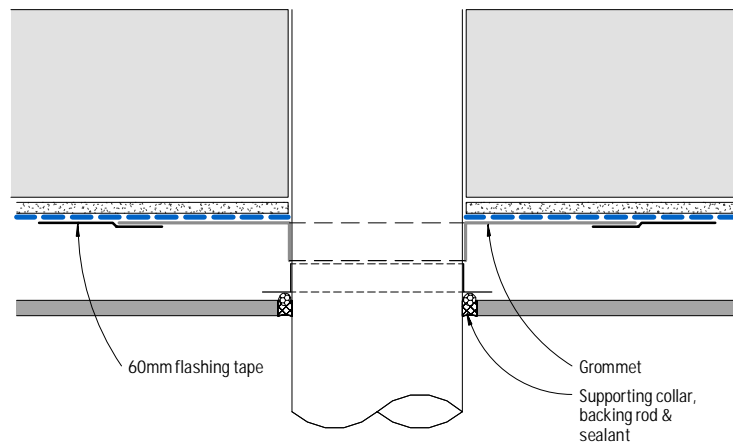


Figure 30: Pipe penetration - Plan view

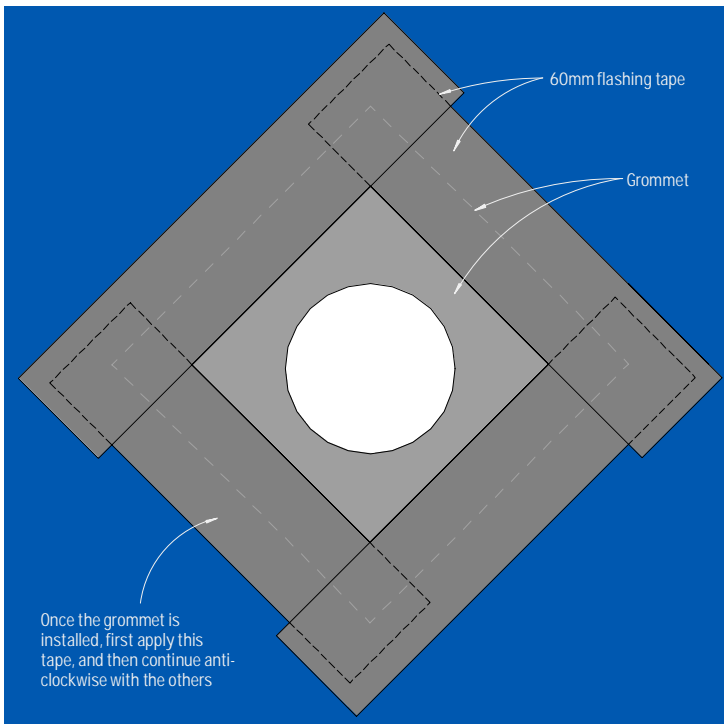


Figure 31: Pipe penetration - Elevation

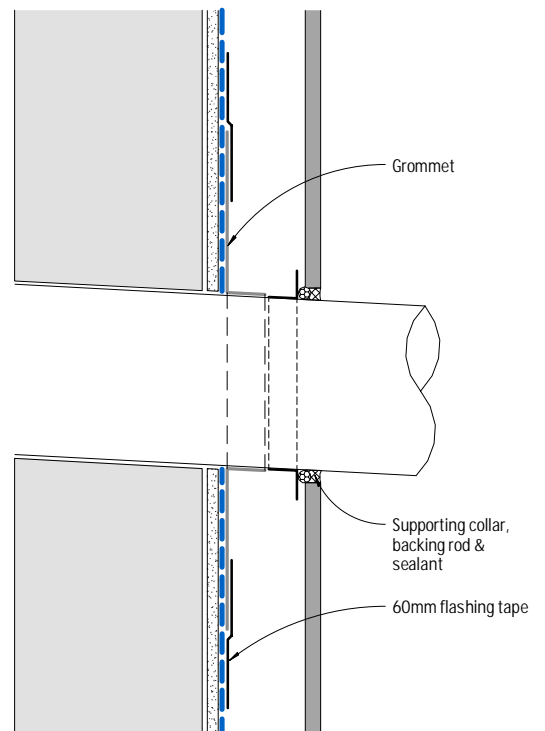


Figure 32: Pipe penetration - Section

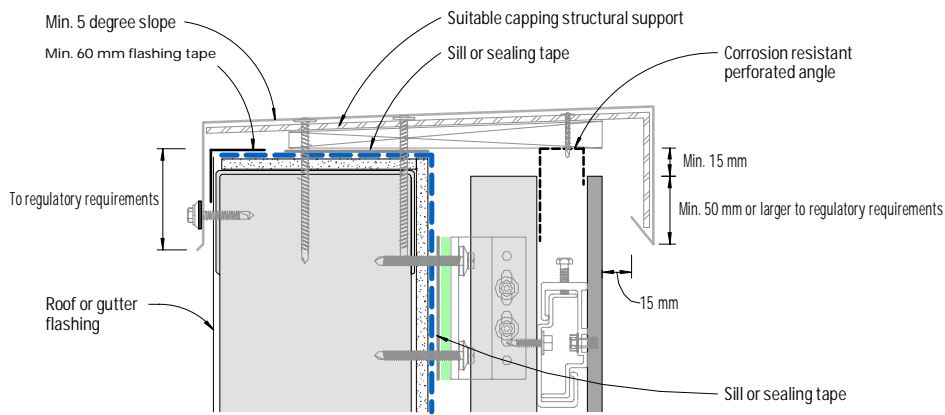


Figure 33: Capping - Detail 1

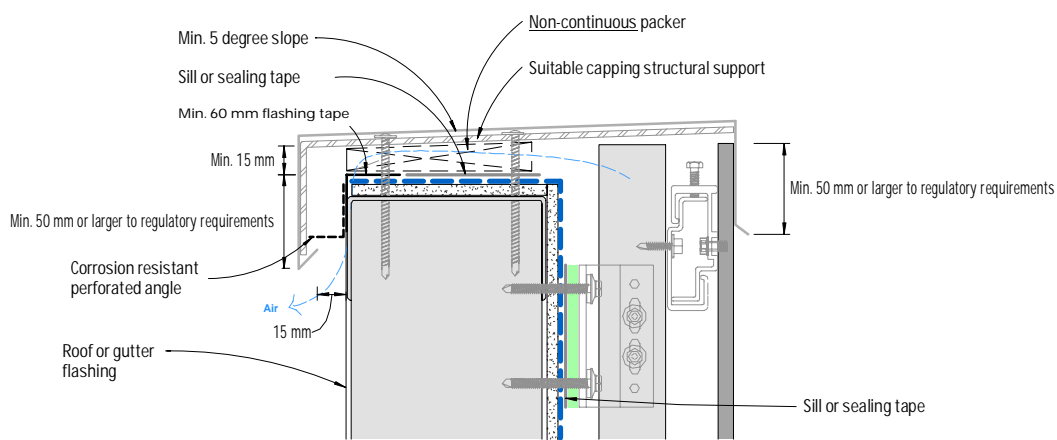


Figure 34: Capping - Detail 2
(Not suitable for EQUITONE [material])

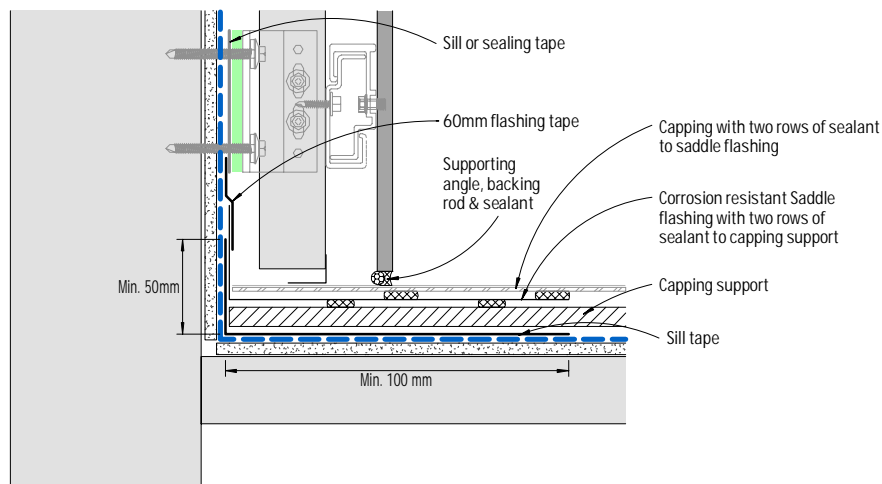


Figure 35: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 33 & 34.

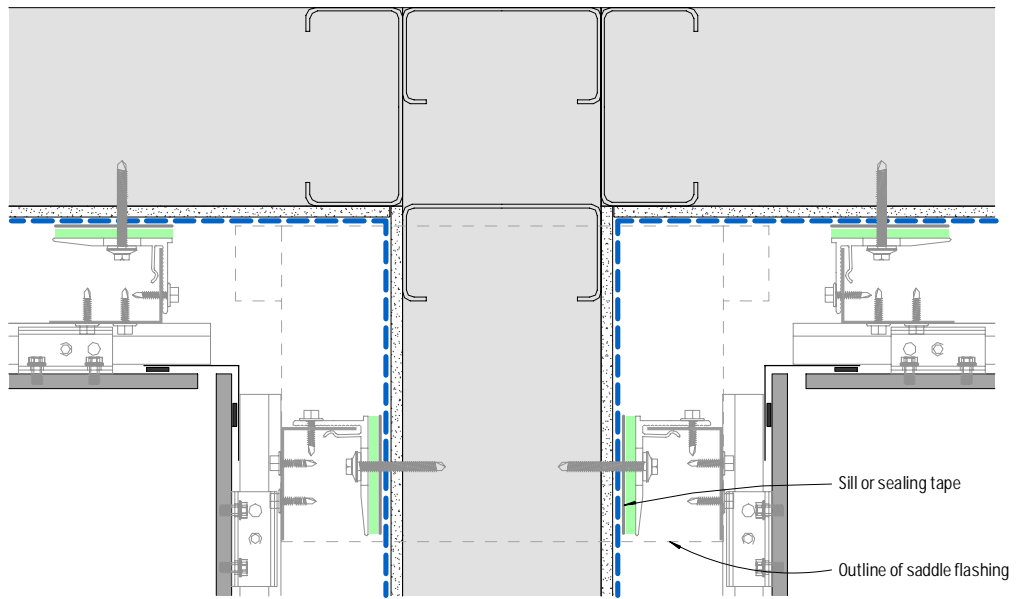


Figure 36: Parapet junction - Plan view

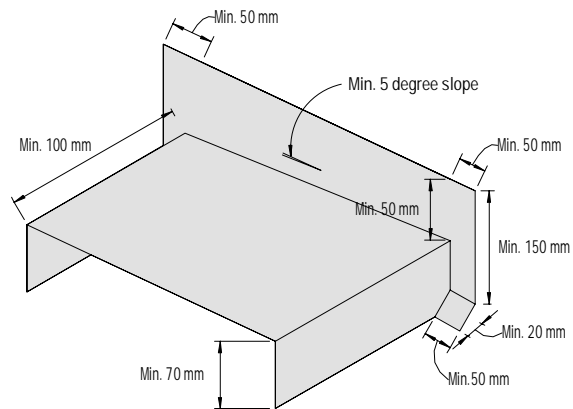


Figure 37: Corrosion resistant saddle flashing

EQUITONE facade system

with

pliable membrane

&

timber batten construction



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | NVELOPE NV1 aluminium bracketry system |
| Weather (resistive) barrier | pro clima SOLITEX EXTASANA® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

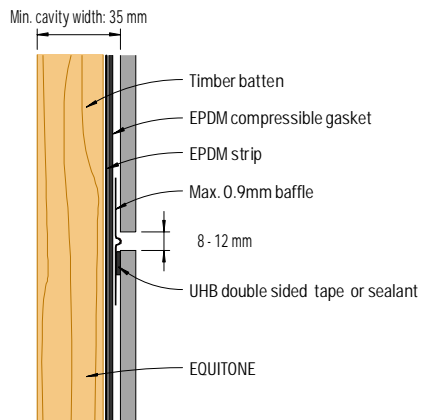


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

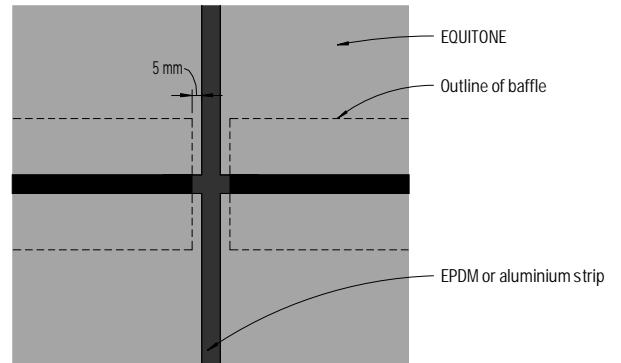


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

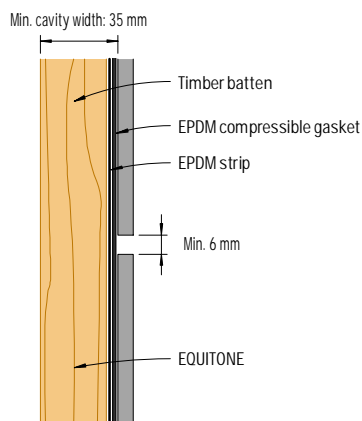


Figure 3: Open horizontal joint

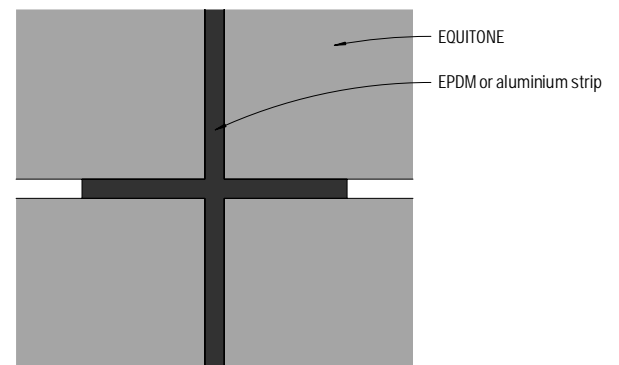


Figure 4: Open horizontal joint junction
with vertical joint - Elevation

Notes

- 1) Horizontal open joint detail (Figure 3 & 4) requires project engineer's evaluation and approval, and selection of appropriate UV resistant weather resistive barrier (membrane).
- 2) In Figure 4, visible part of the support frame (battens) and weather barrier may be coated black with suitable paint.
- 3) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

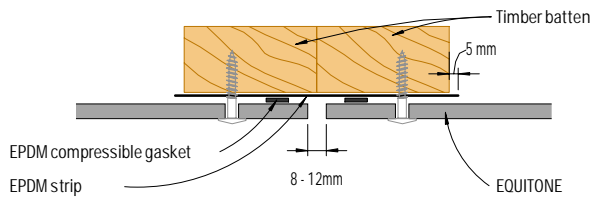


Figure 5: Vertical joint - Detail 1

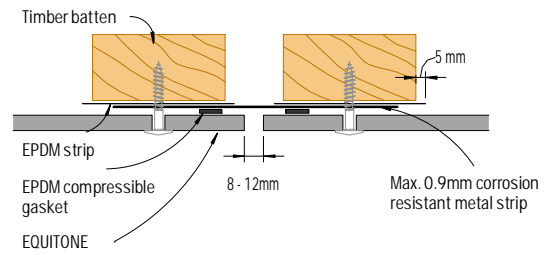


Figure 6: Vertical joint - Detail 2

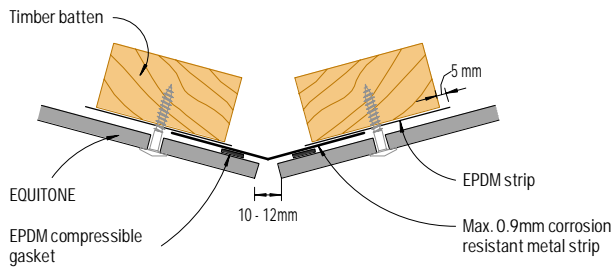


Figure 7: Vertical joint - Detail 3

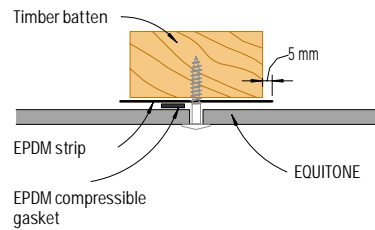


Figure 8: Intermediate panel fixings connection

Notes

1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

2) In Figure 6 & 7, the metal strip should be fixed ONLY to one of the battens (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

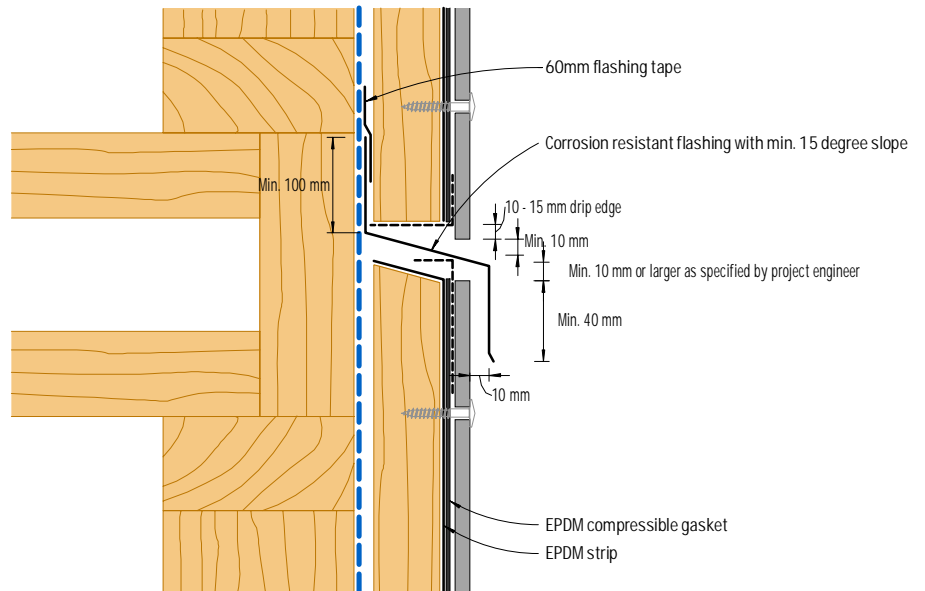


Figure 9: Horizontal control joint - Detail 1

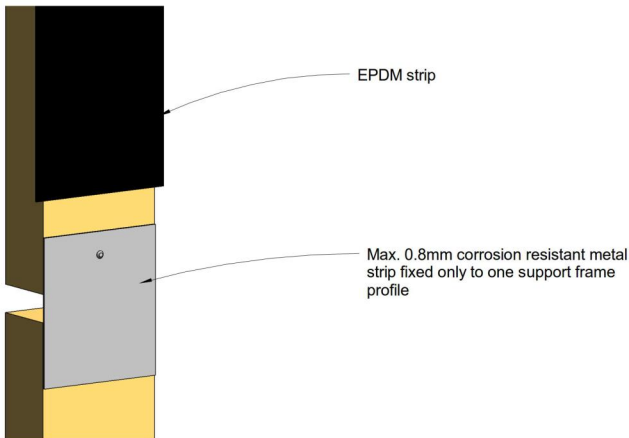


Figure 10: EPDM gasket support over control joint or the like

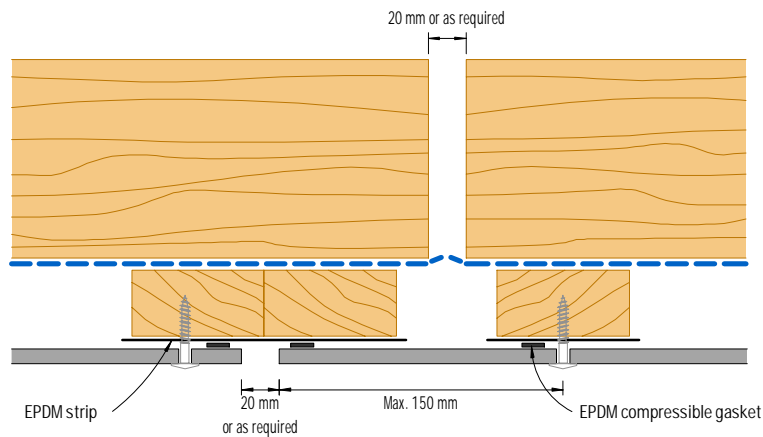


Figure 11: Vertical control joint

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

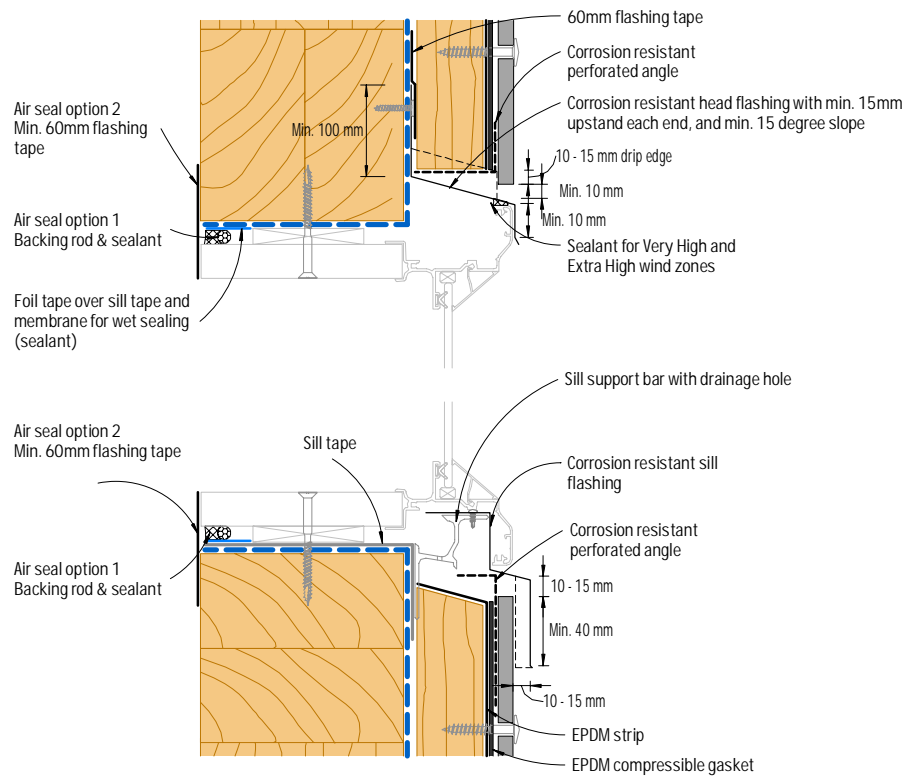


Figure 12: Flush window - Head and sill

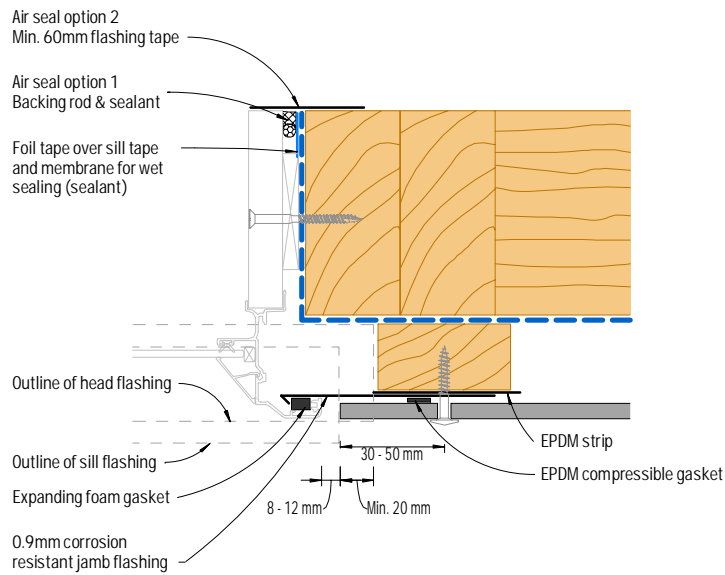


Figure 13: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

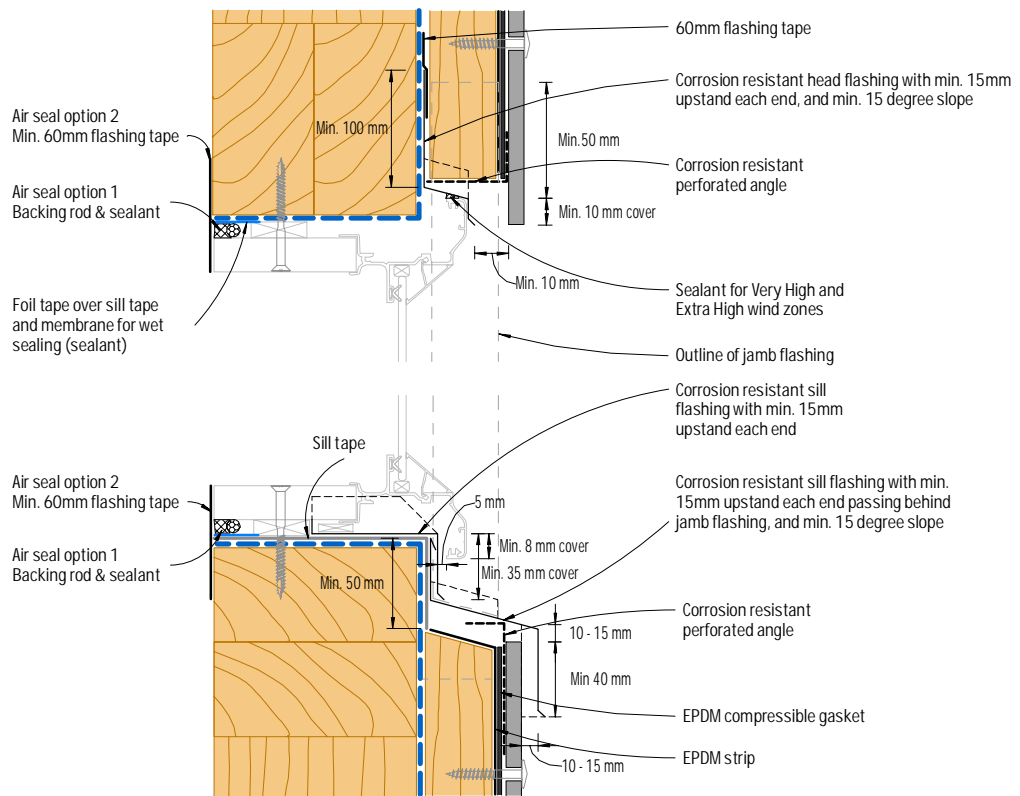


Figure 14: Recessed window - Head and sill

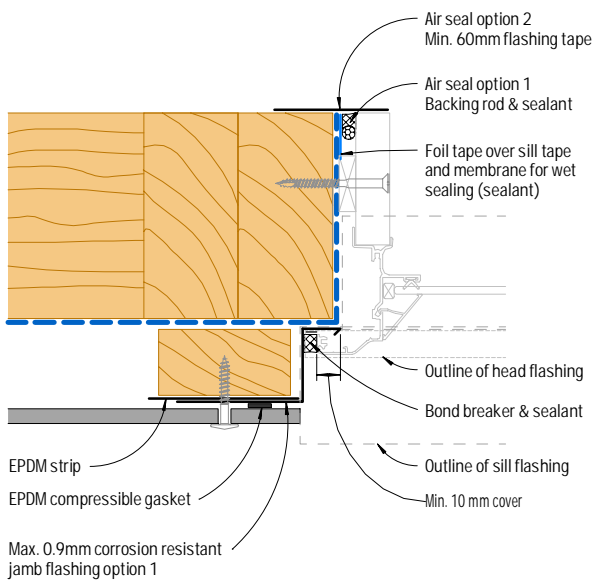


Figure 15: Recessed window jamb - Option 1

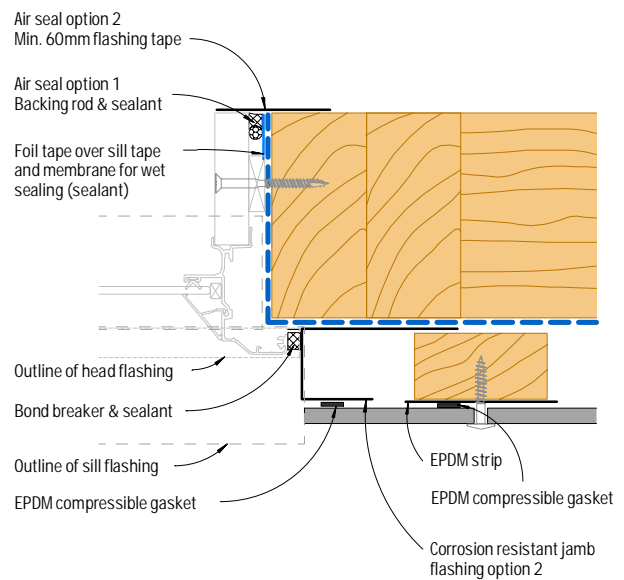


Figure 16: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

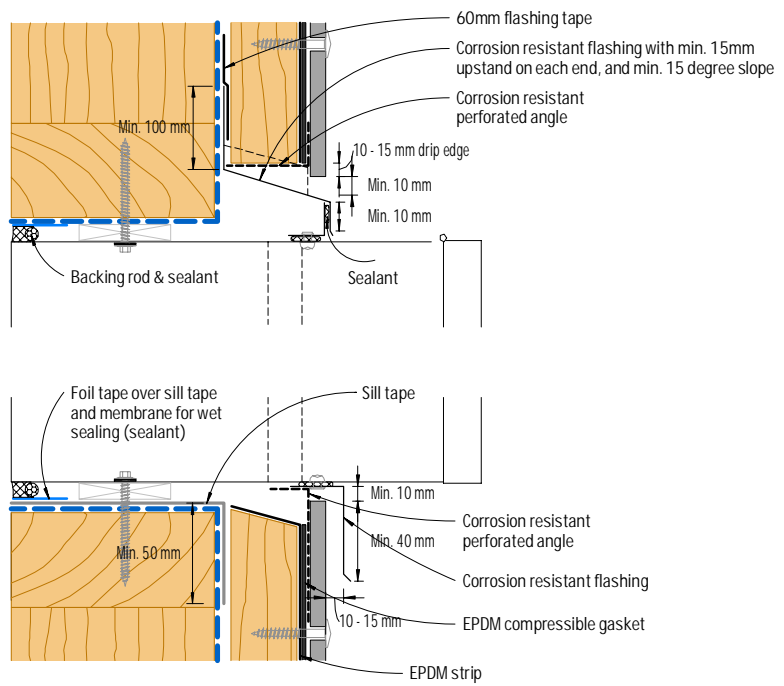


Figure 17: Meter box - Section

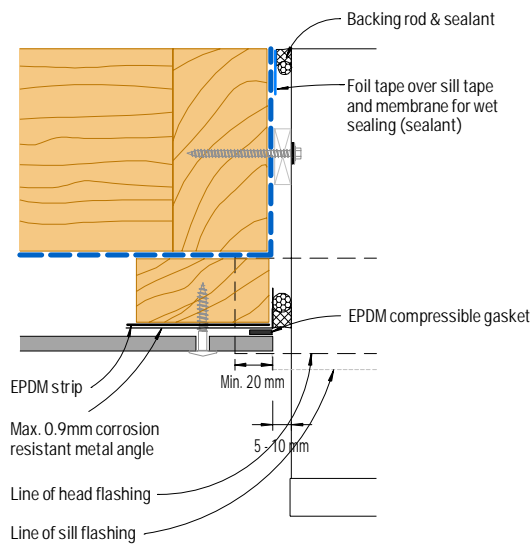


Figure 18: Meter box - Plan view - Detail 1

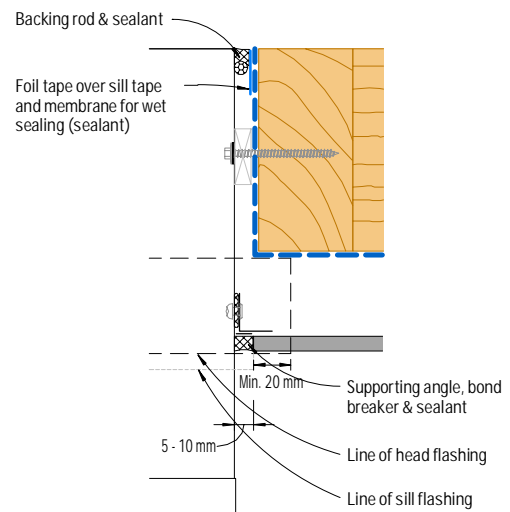


Figure 19: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

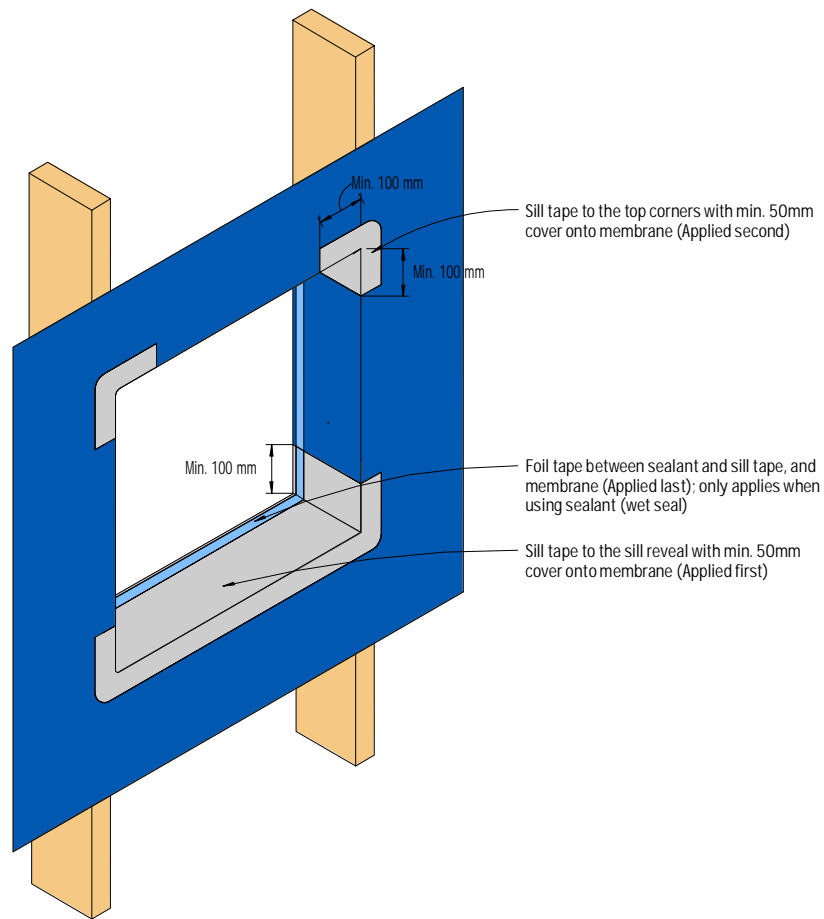


Figure 20: Isometric view of window/meter box opening - Tape application

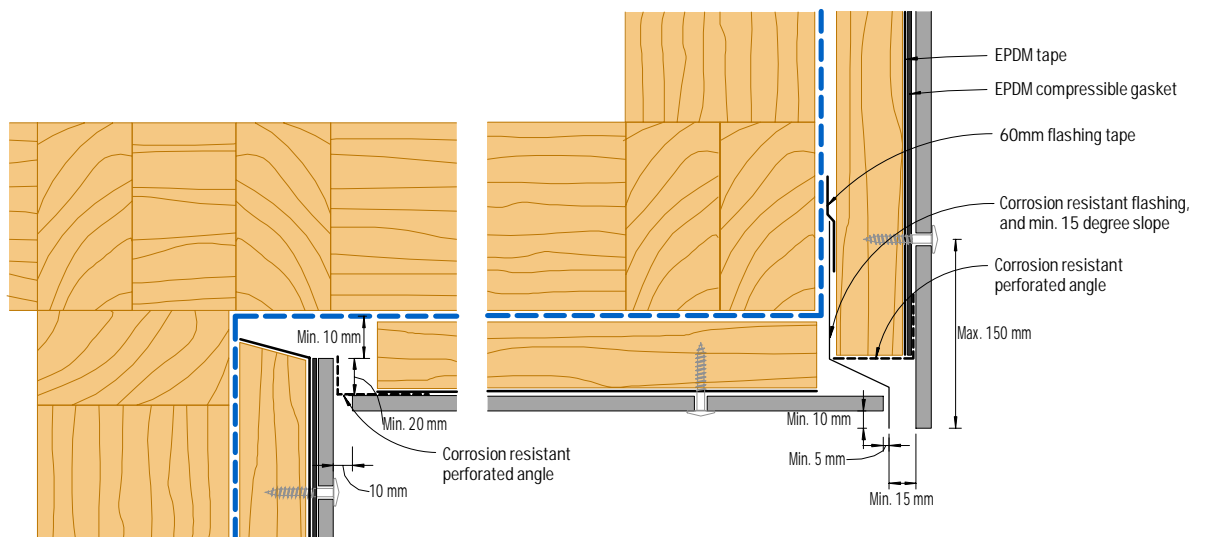


Figure 21: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

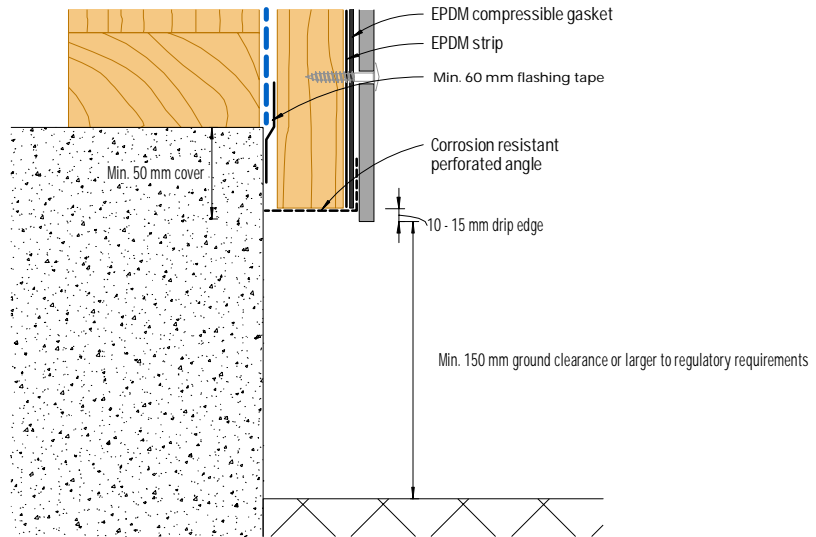


Figure 22: Base detail

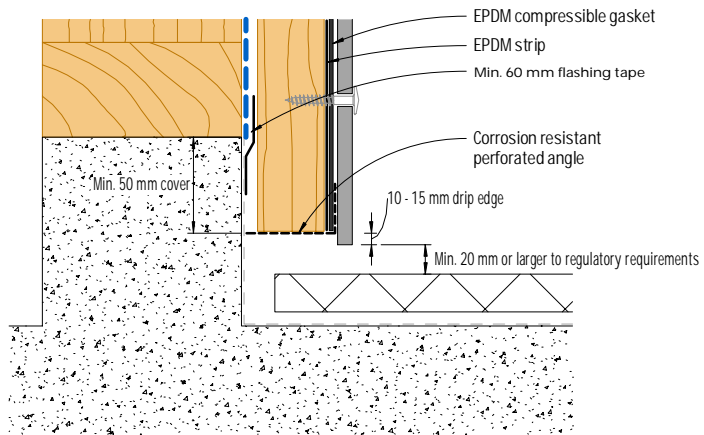


Figure 23: Base detail - Covered area

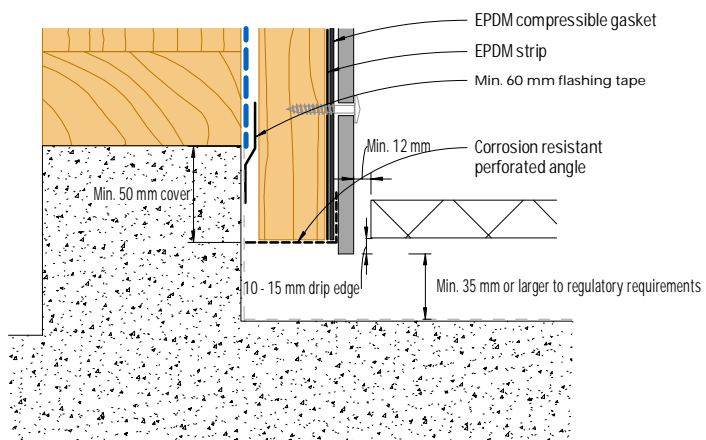


Figure 24: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

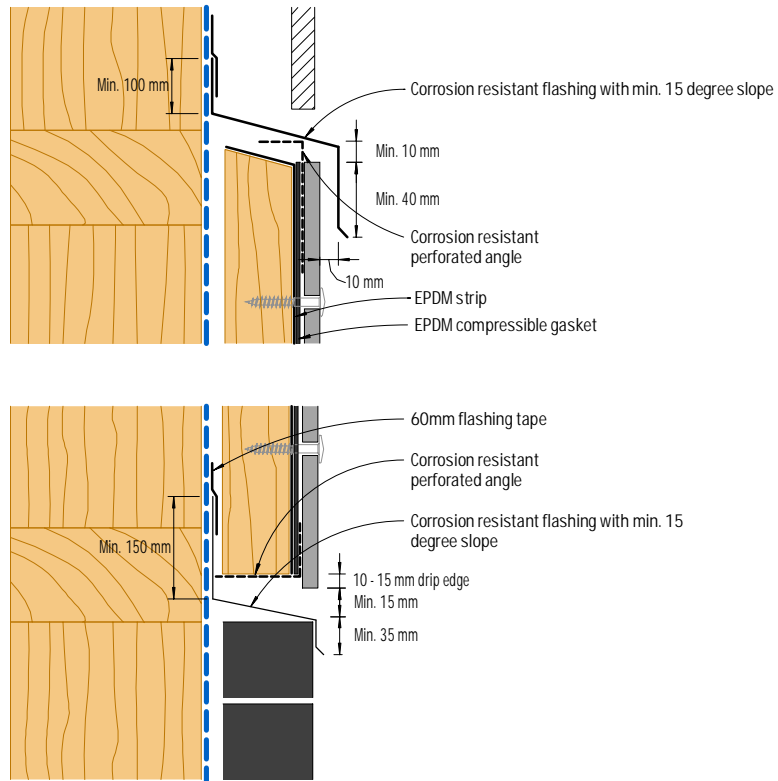


Figure 25: Junction with other materials - flush detail

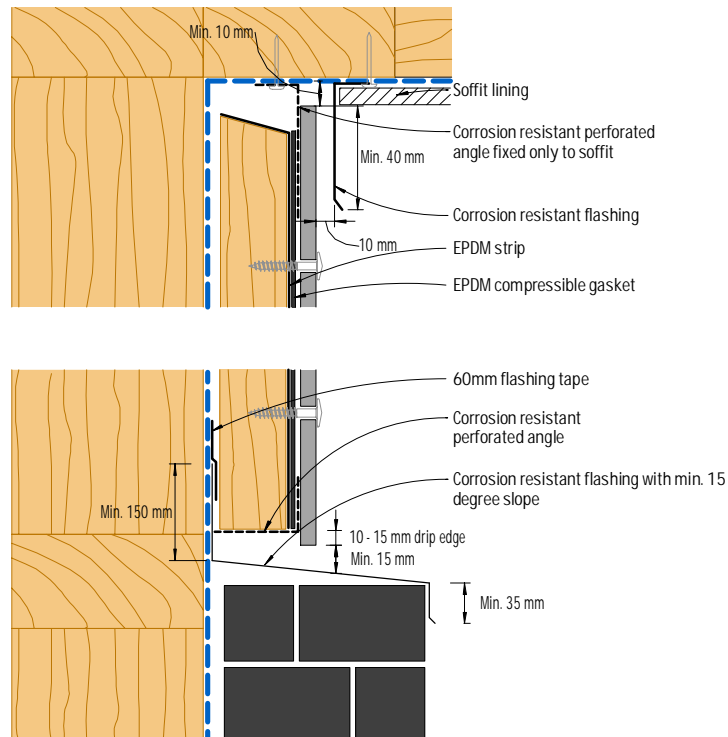


Figure 26: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

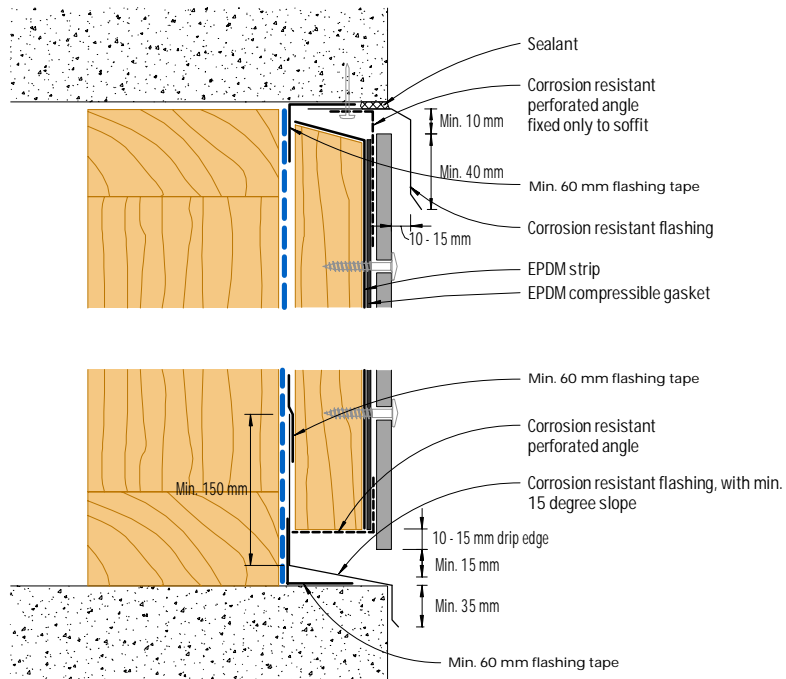


Figure 27: Exposed concrete slab or beam - Cladding flush

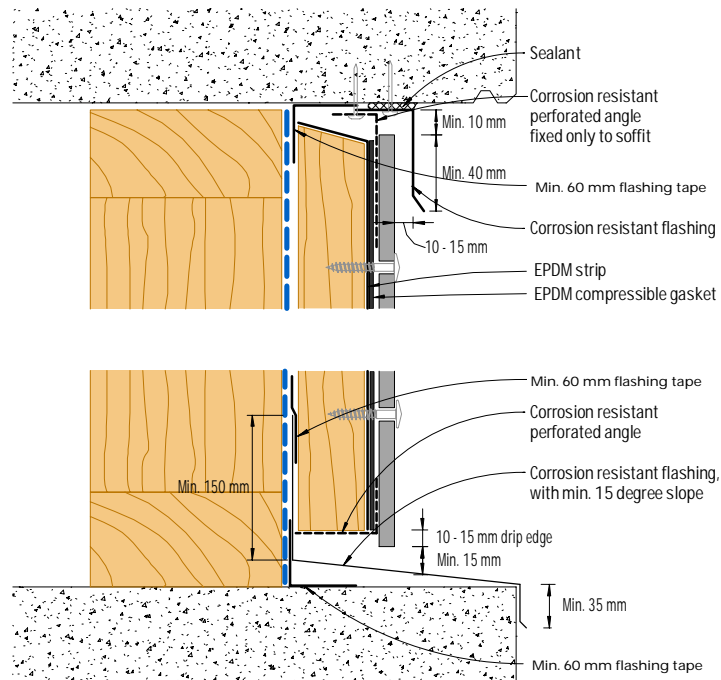


Figure 28: Exposed concrete slab or beam - Cladding recessed

Note

1) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

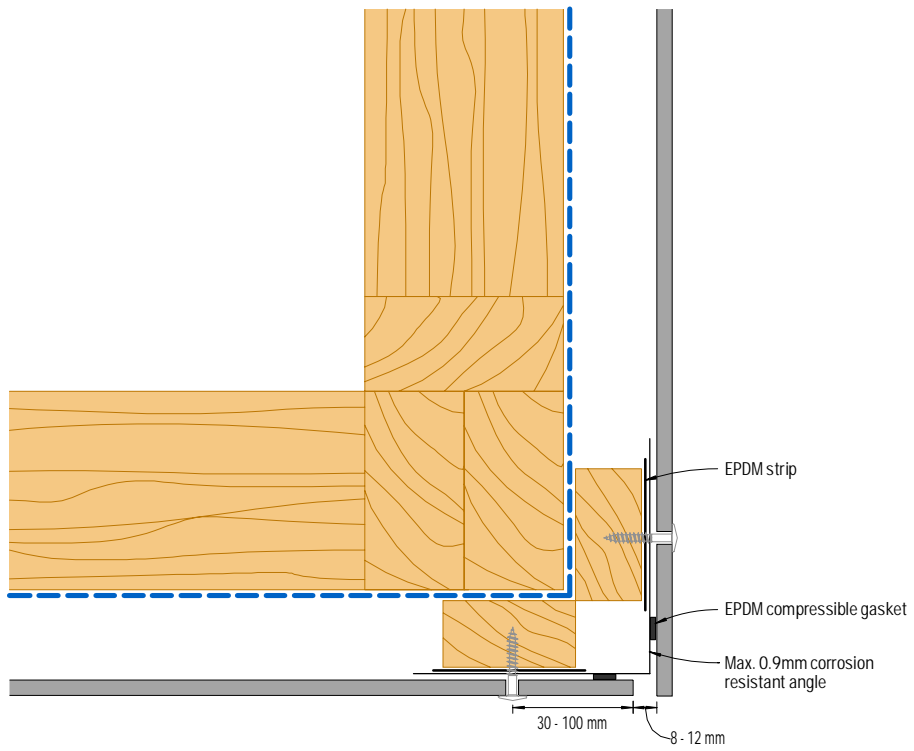


Figure 29: External corner - Detail 1

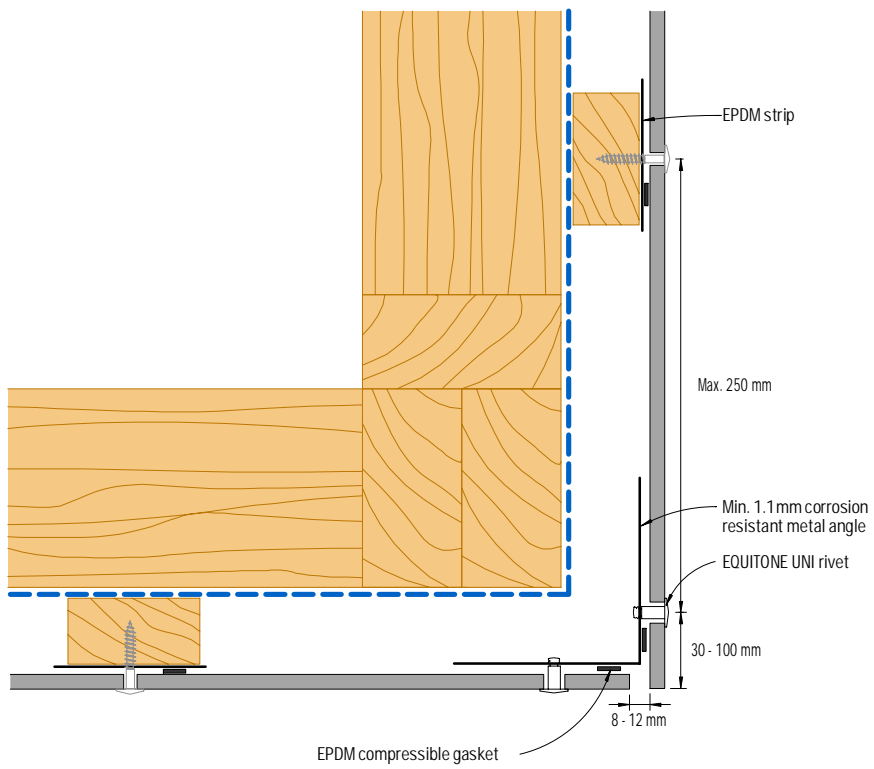


Figure 30: External corner - Detail 2

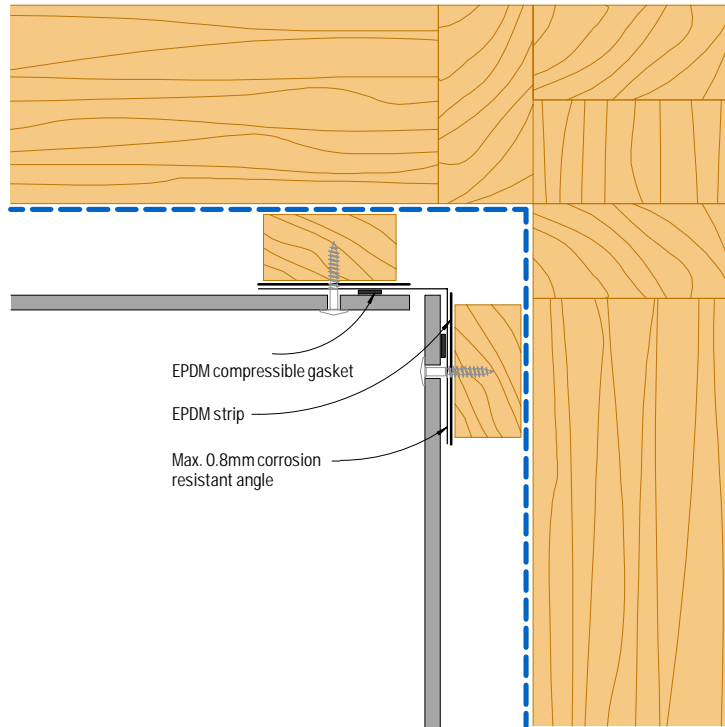


Figure 31: Internal corner

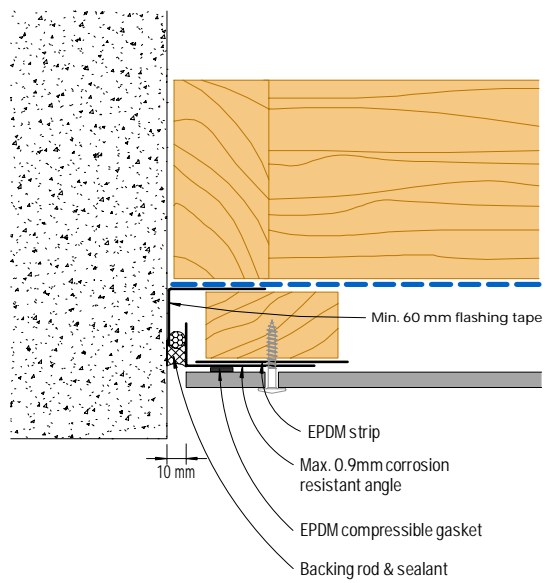


Figure 32: Abutment

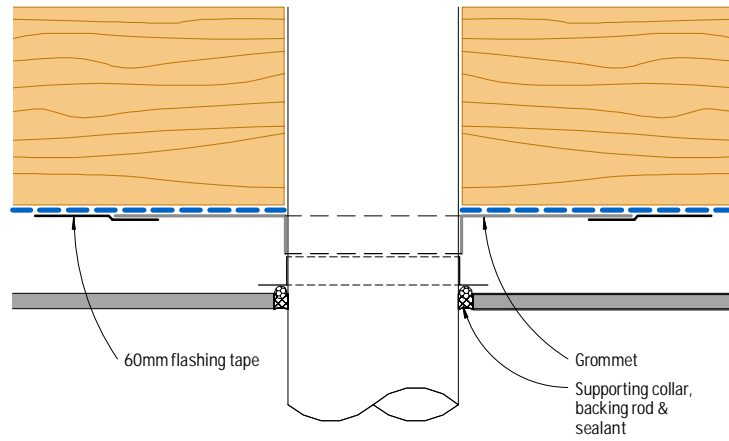


Figure 33: Pipe penetration - Plan view

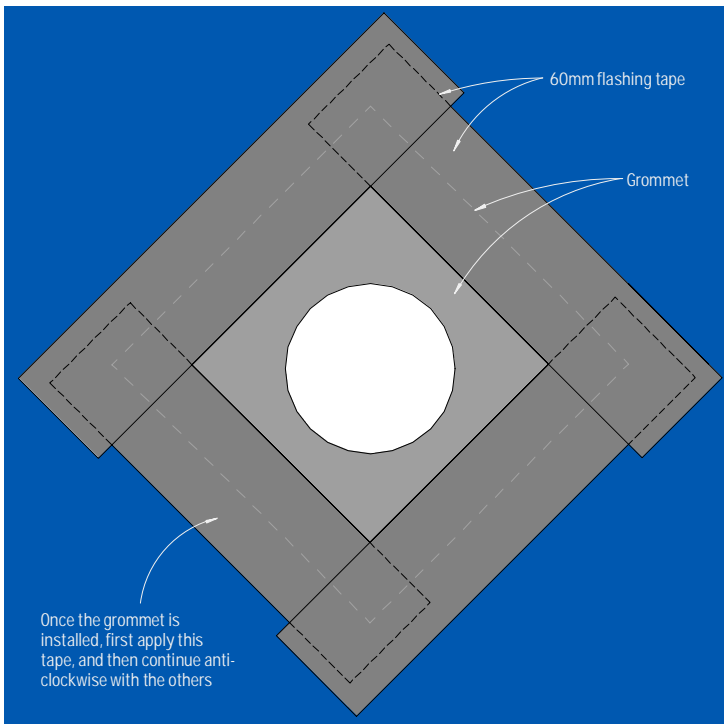


Figure 34: Pipe penetration - Elevation

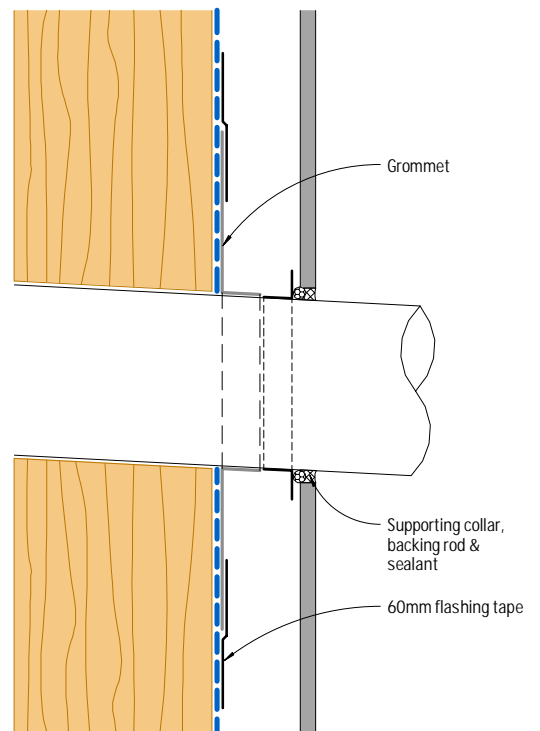


Figure 35: Pipe penetration - Section

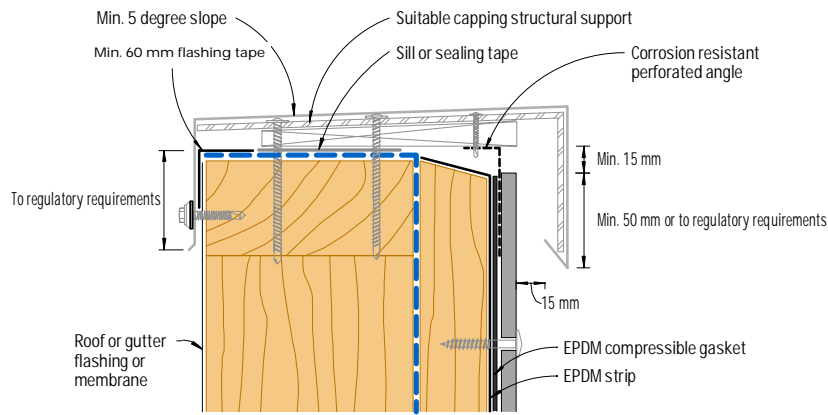


Figure 36: Capping - Detail 1

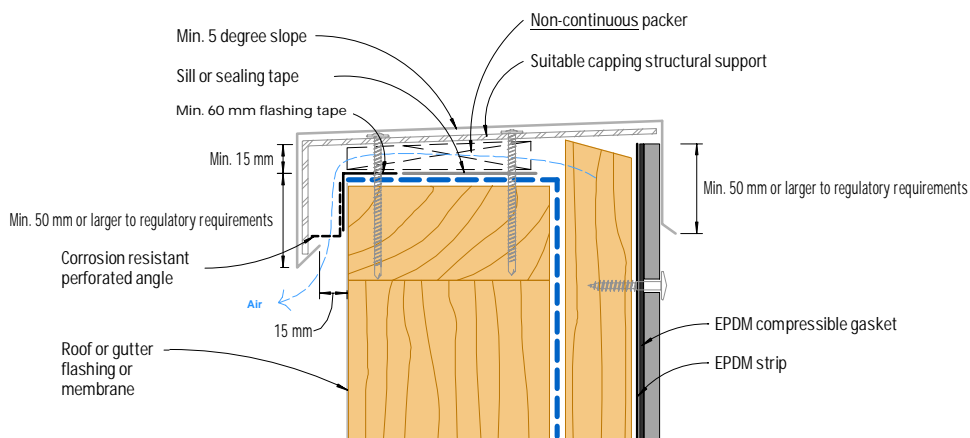


Figure 37: Capping - Detail 2
(Not suitable for EQUITONE [material])

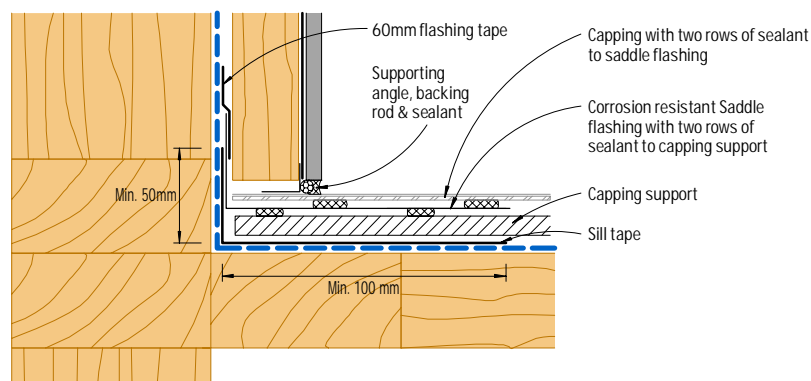


Figure 38: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 36 & 37.

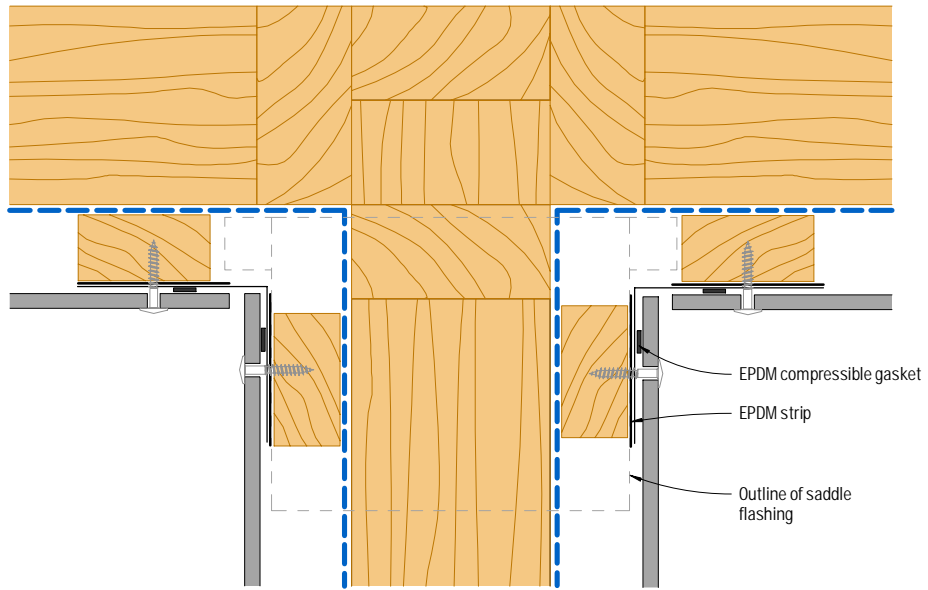


Figure 39: Parapet junction - Plan view

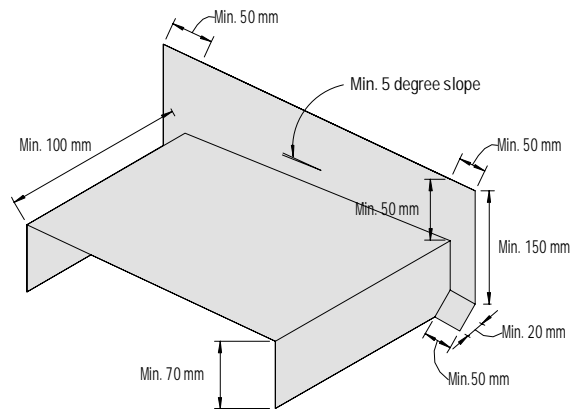


Figure 40: Corrosion resistant saddle flashing

EQUITONE facade system

with

pliable membrane

&

single layer top hat construction



Components

| | |
|-----------------------------|---|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | Single layer top hat construction <ul style="list-style-type: none">- Vertical intermediate profile: 50x35mm (Min. 1.15mm BMT)- Vertical joint profile: 120x35mm (Min. 1.15mm BMT) |
| Weather (resistive) barrier | pro clima SOLITEX EXTASANA® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTONSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

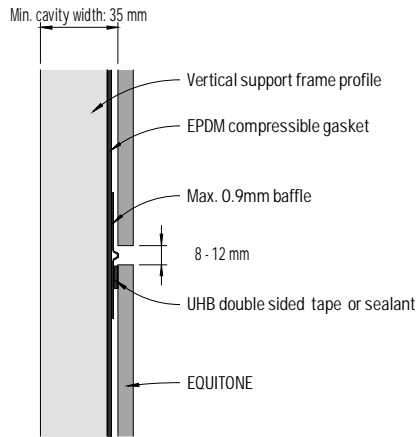


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

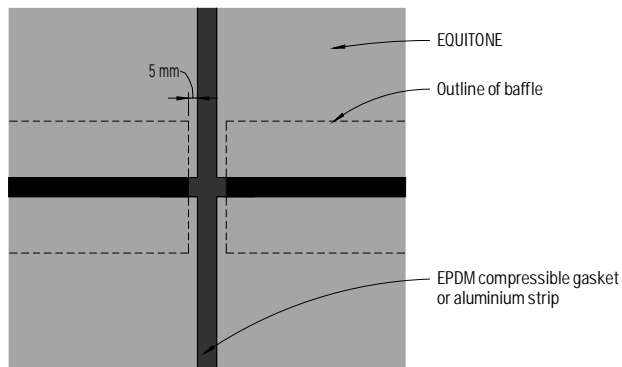


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) EQUITONE [material] requires open horizontal panel joints. Horizontal open joint detail requires project engineer's evaluation and approval, and the selection of appropriate rigid and UV resistant weather resistive barrier (membrane).

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

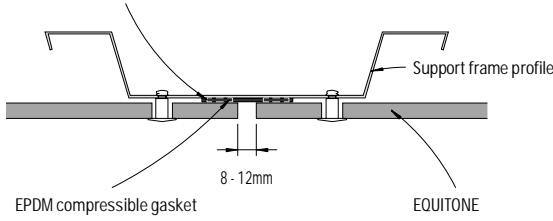


Figure 3: Vertical joint - Detail 1

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

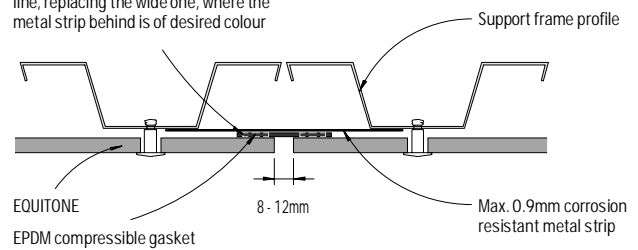


Figure 4: Vertical joint - Detail 2

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

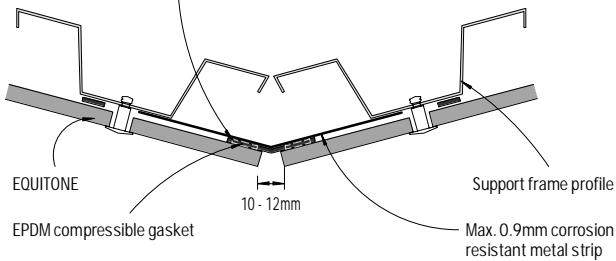


Figure 5: Vertical joint - Detail 3

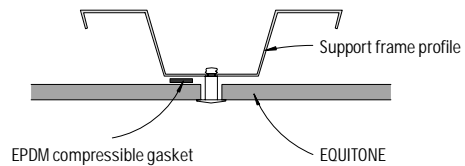


Figure 6: Intermediate panel fixings connection

Notes

1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.

2) In Figure 4 & 5, the metal strip should be fixed ONLY to one of the profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

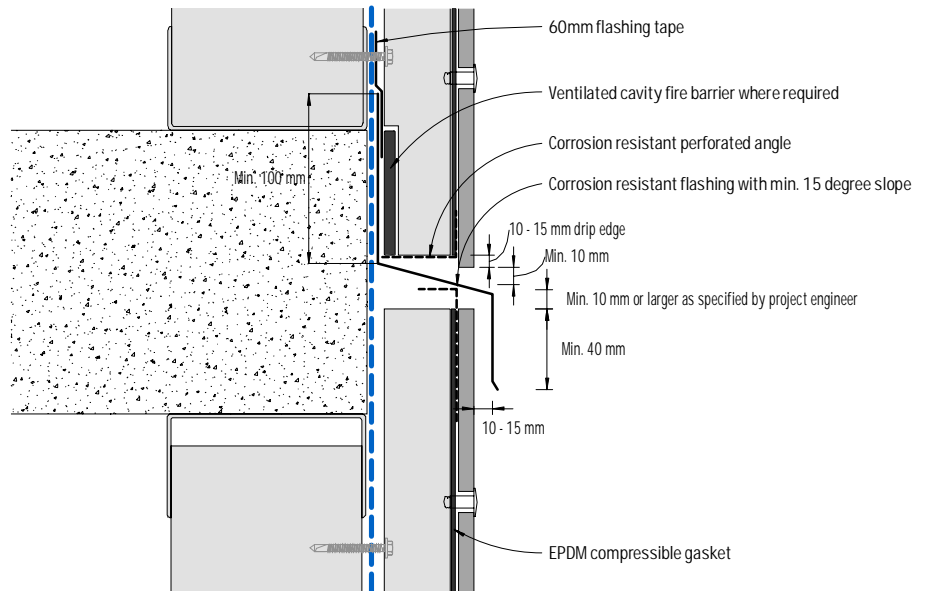


Figure 7: Horizontal control joint

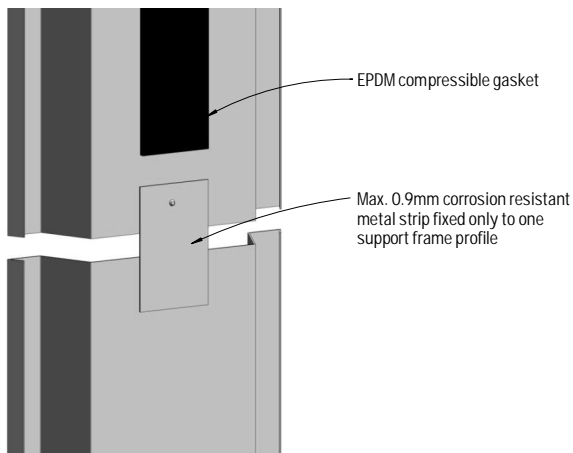


Figure 8: EPDM gasket support over control joint or the like

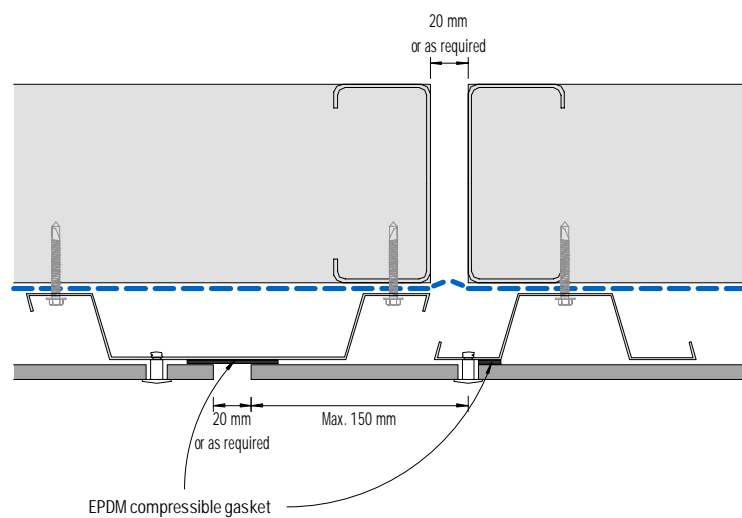


Figure 9: Vertical control joint

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

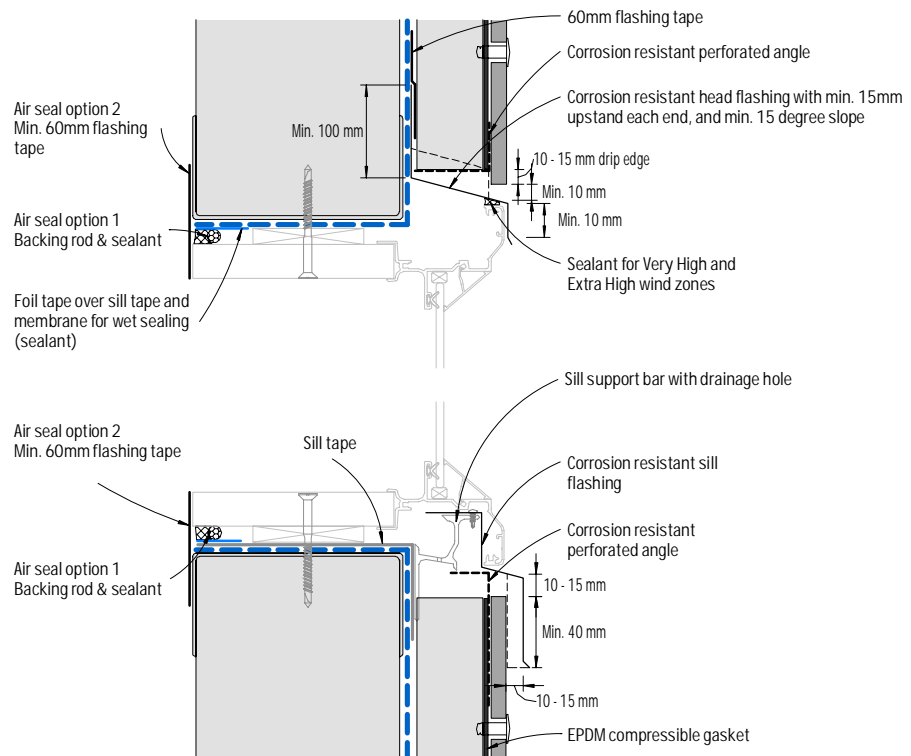


Figure 10: Flush window - Head and sill

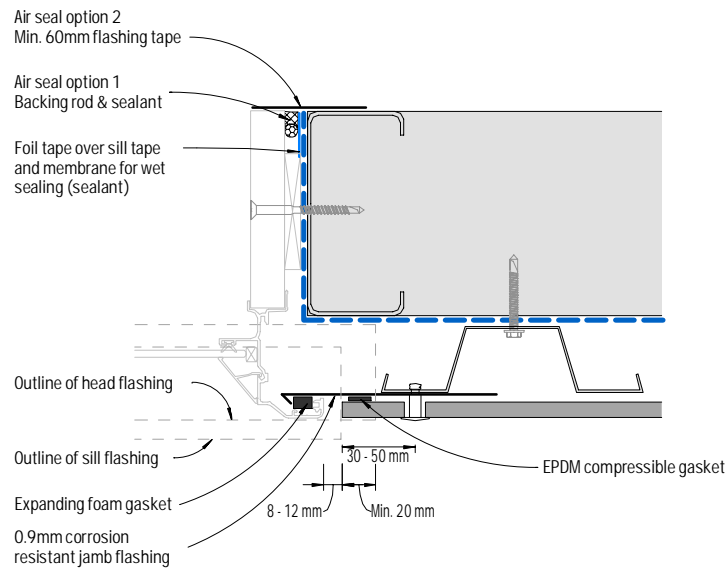


Figure 11: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

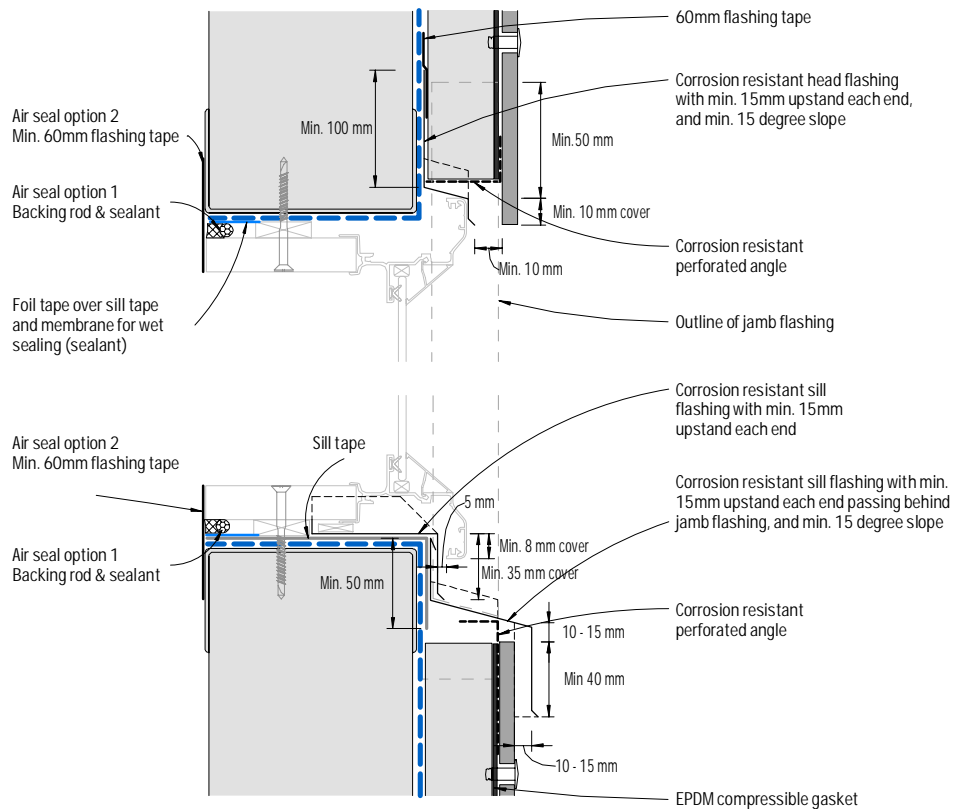


Figure 12: Recessed window - Head and sill

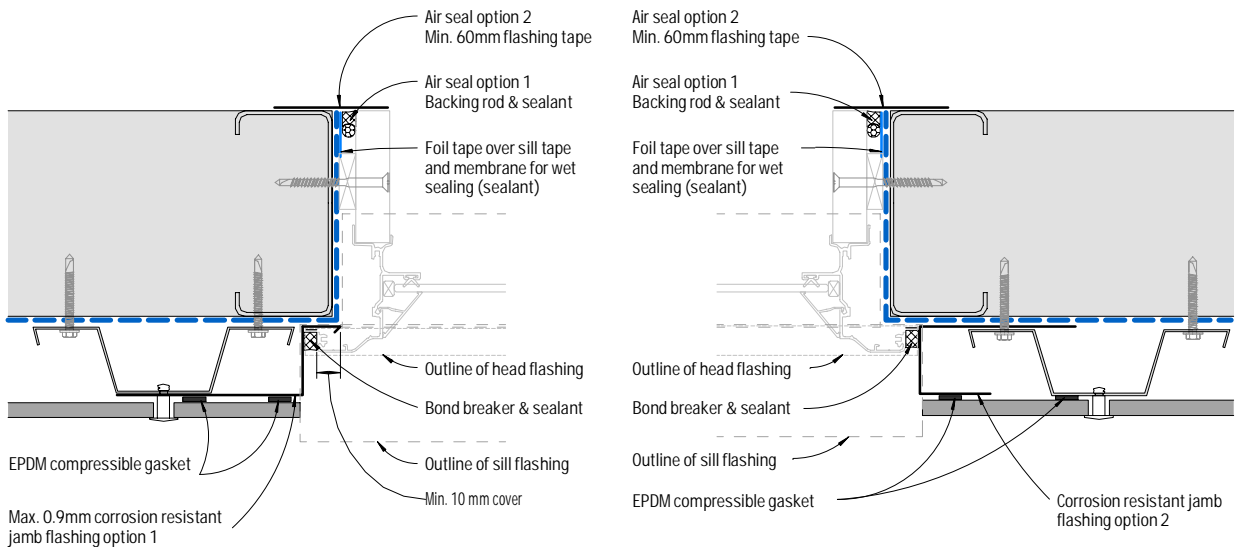


Figure 13: Recessed window jamb - Option 1

Figure 14: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

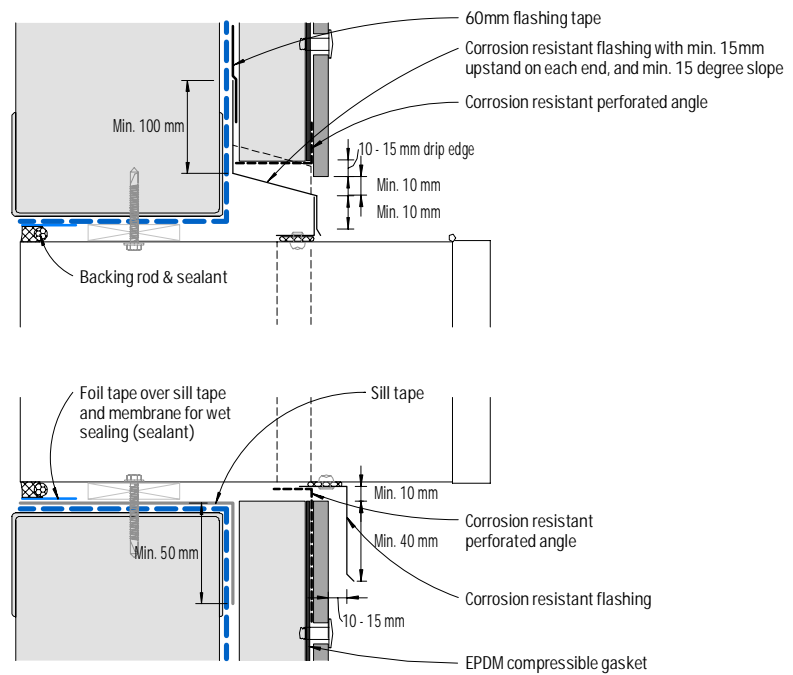


Figure 15: Meter box - Section

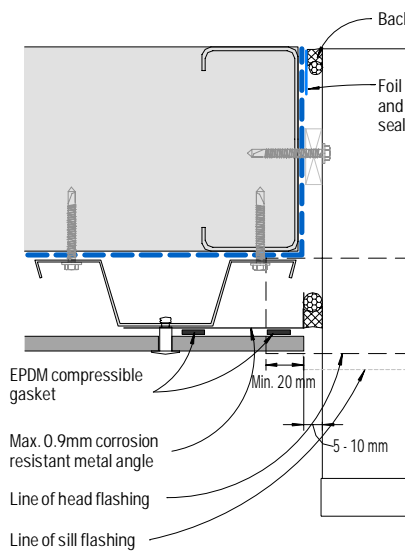


Figure 16: Meter box - Plan view - Detail 1

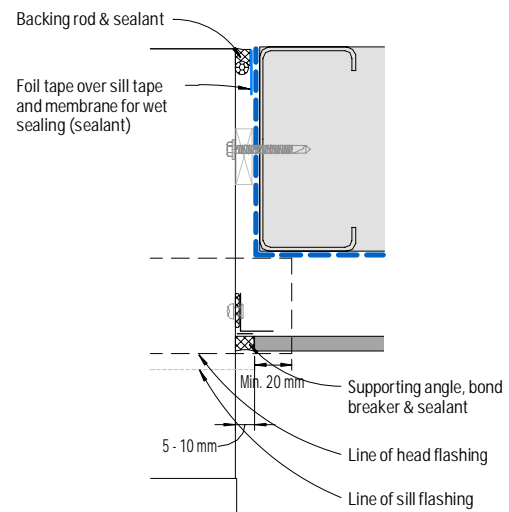


Figure 17: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

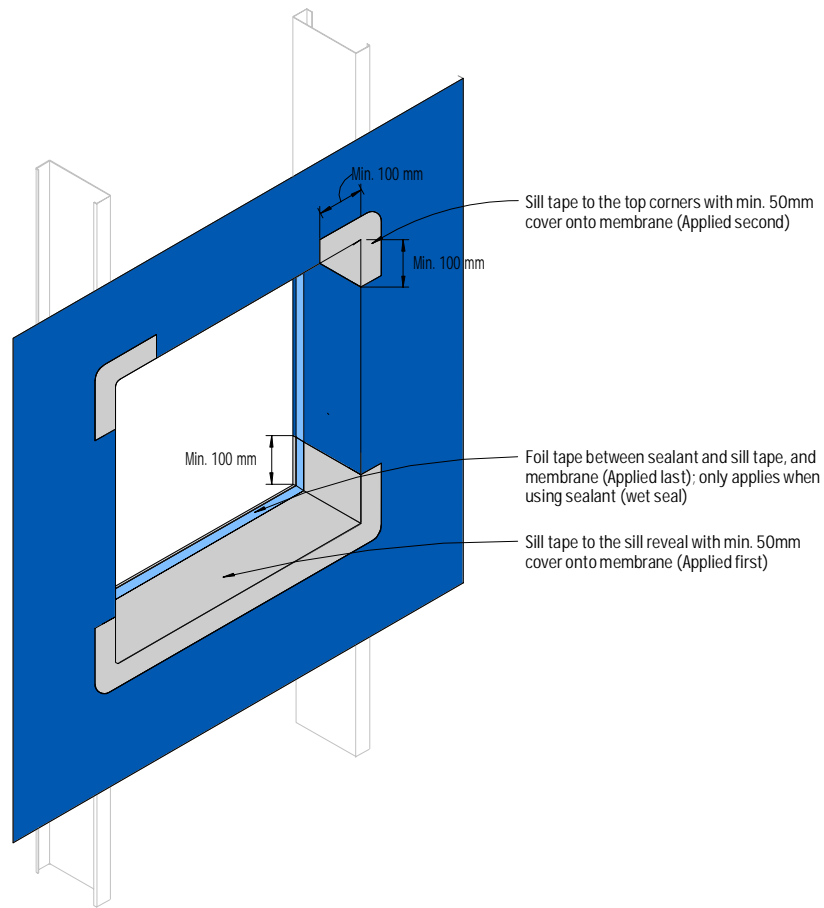


Figure 18: Isometric view of window/meter box opening - Tape application

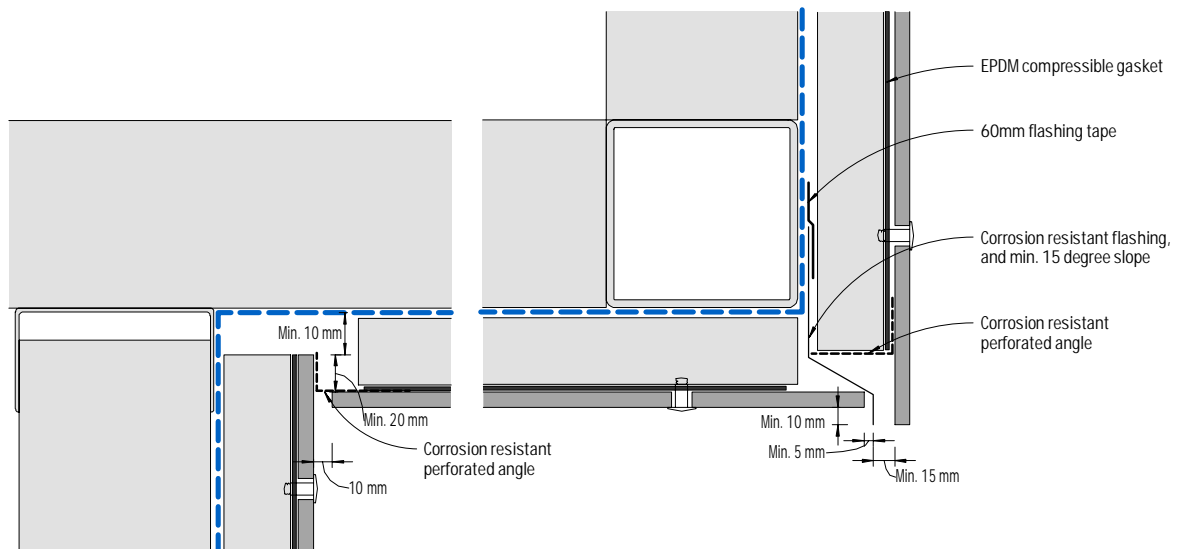


Figure 19: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

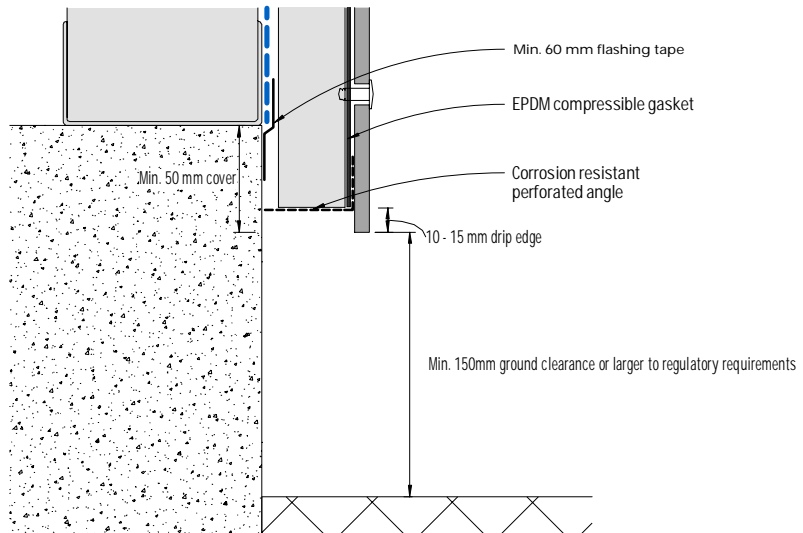


Figure 20: Base detail

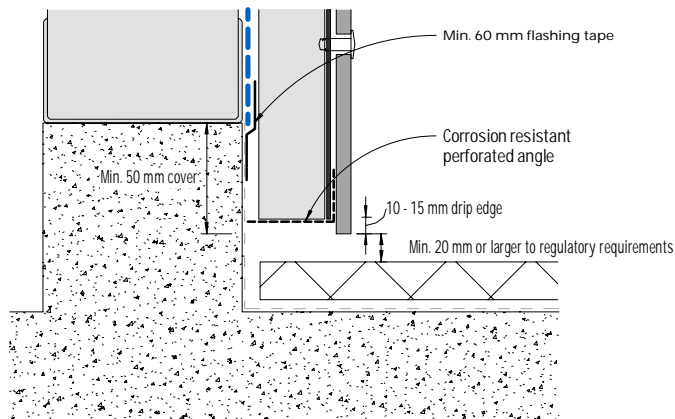


Figure 21: Base detail - Covered area

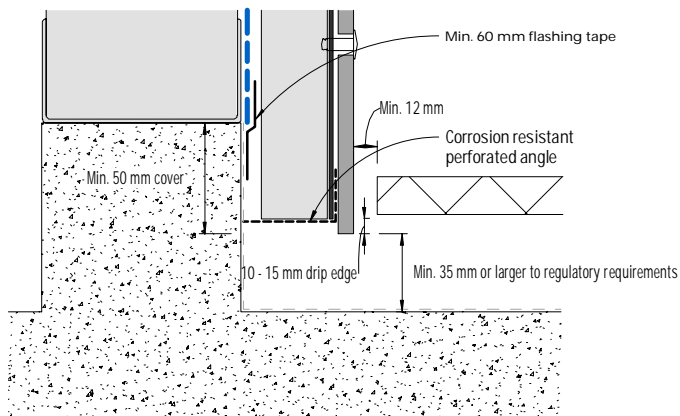


Figure 22: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

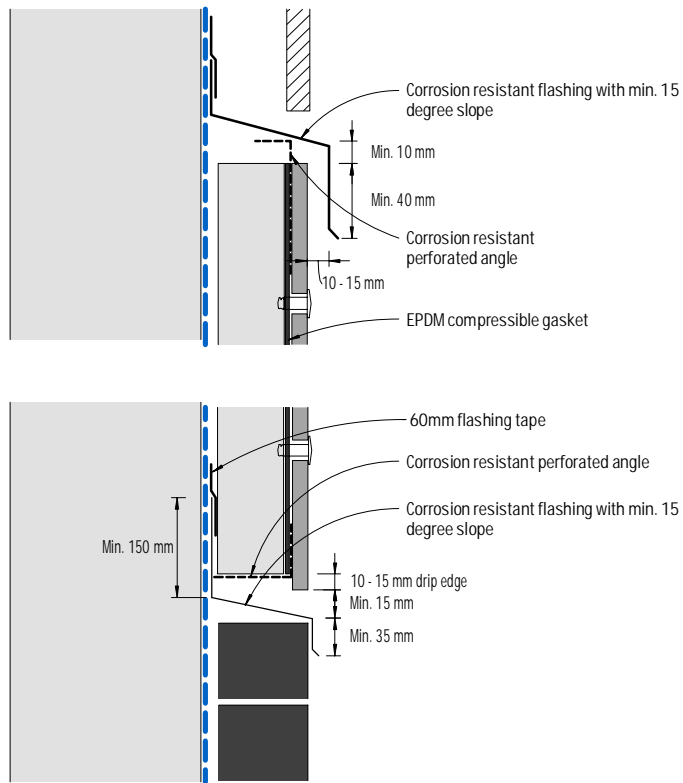


Figure 23: Junction with other materials - flush detail

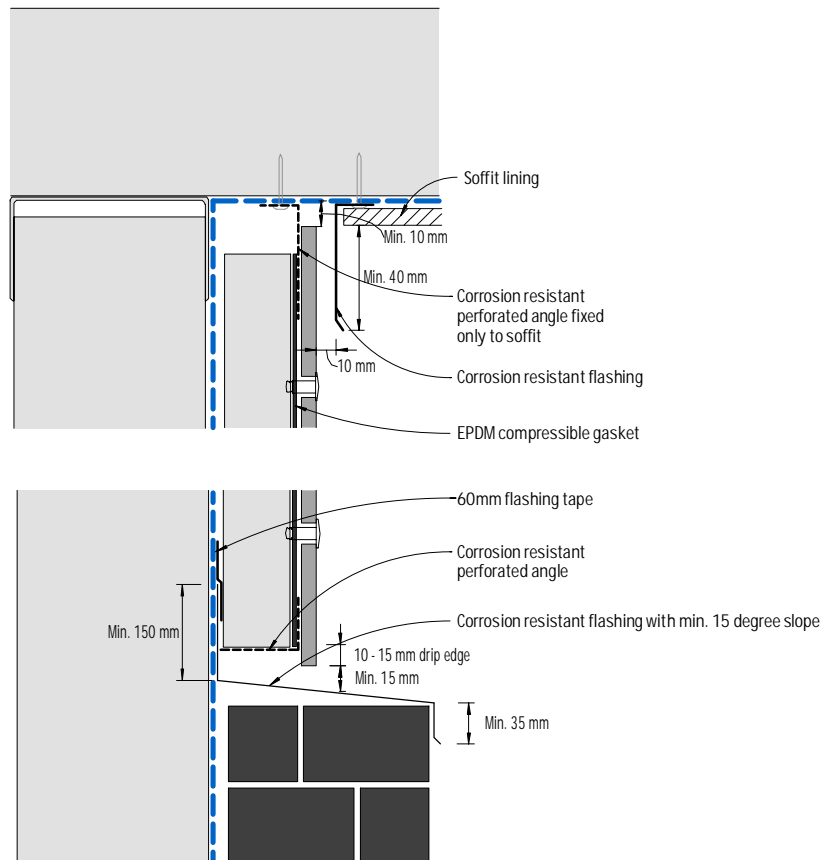


Figure 24: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

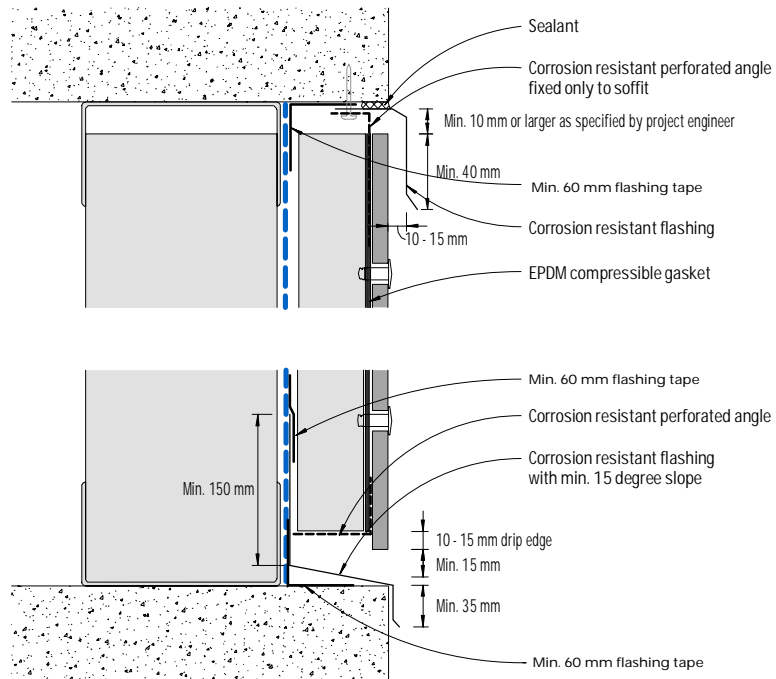


Figure 25: Exposed concrete slab or beam - Cladding flush

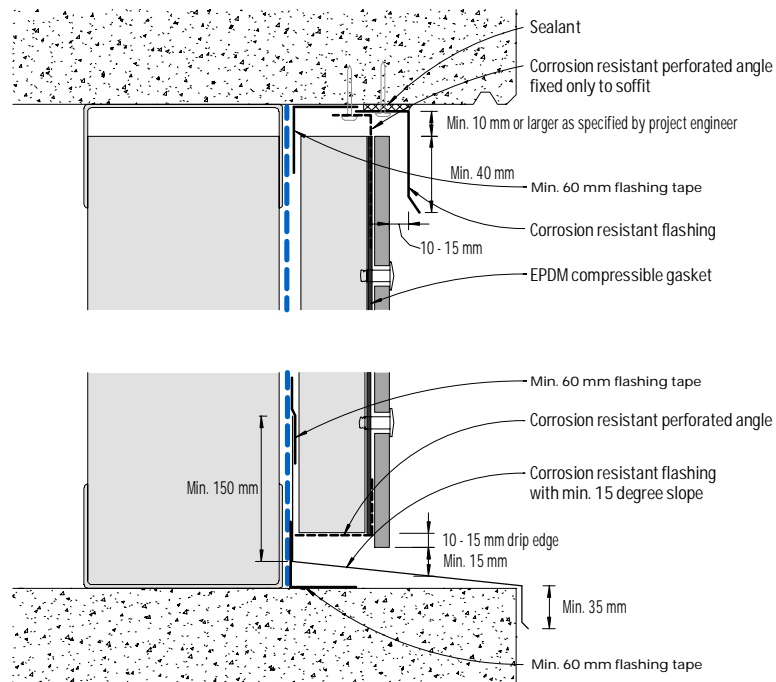


Figure 26: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

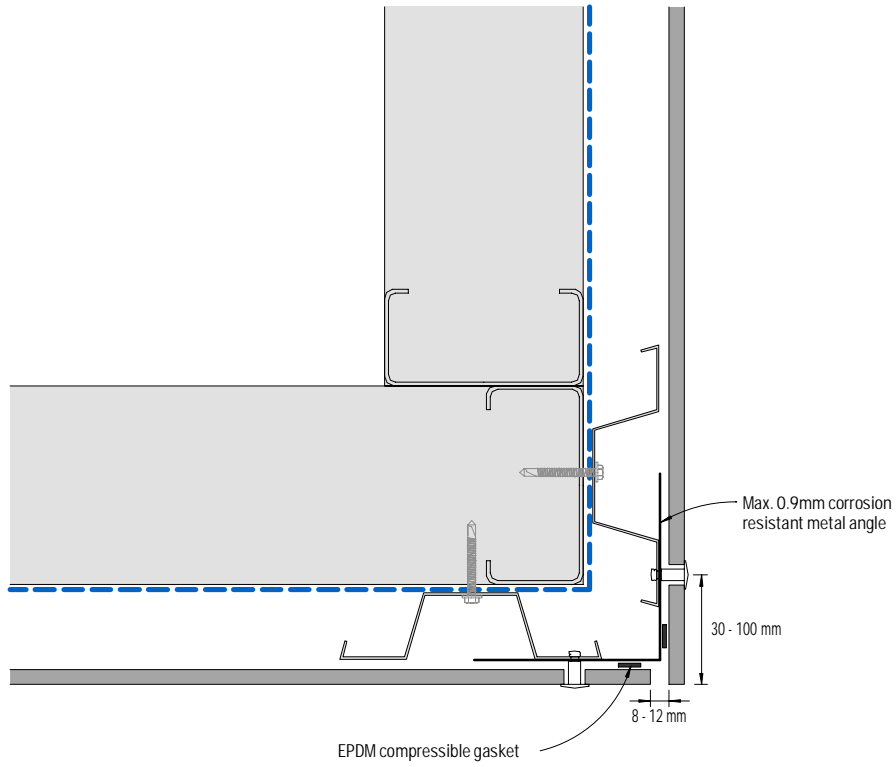


Figure 27: External corner - Detail 1

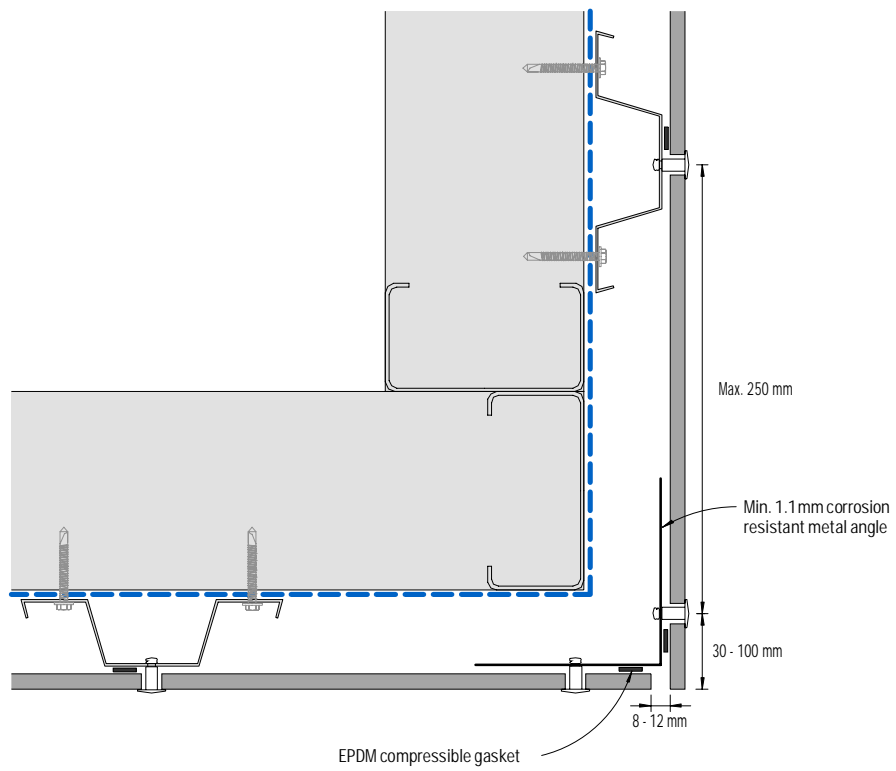


Figure 28: External corner - Detail 2

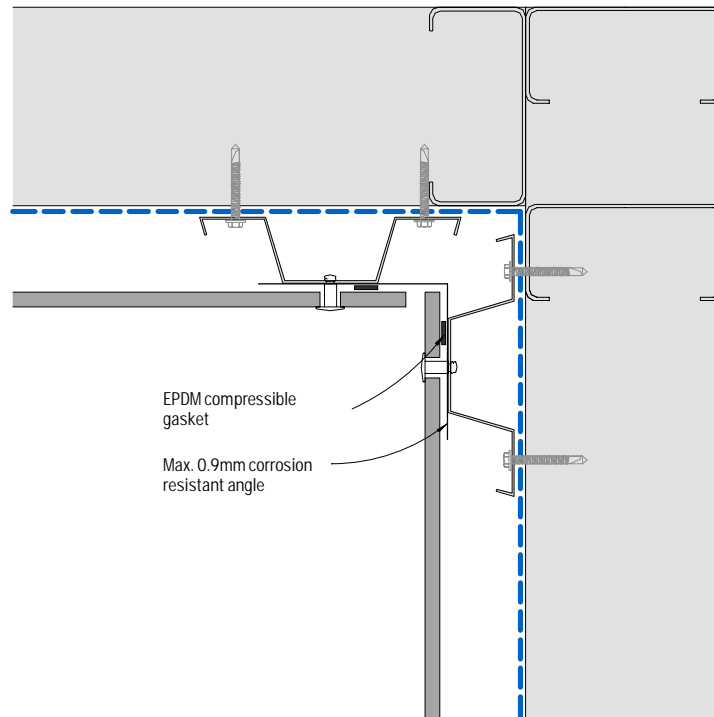


Figure 29: Internal corner

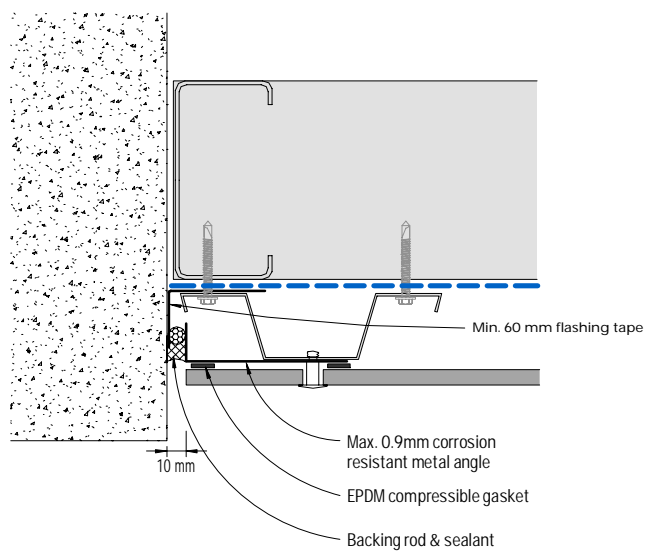


Figure 30: Abutment

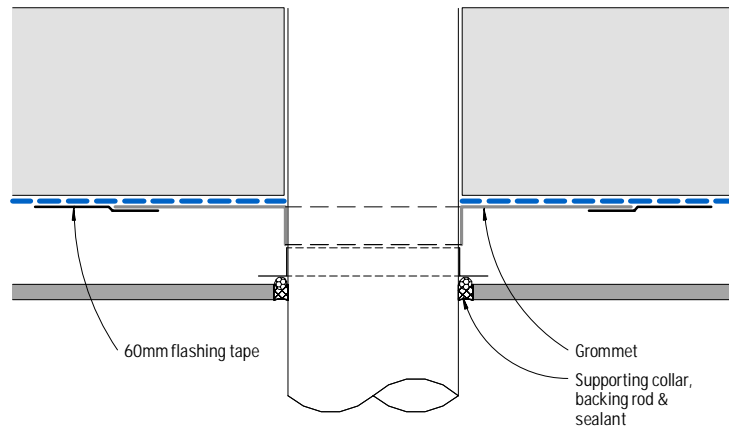


Figure 31: Pipe penetration - Plan view

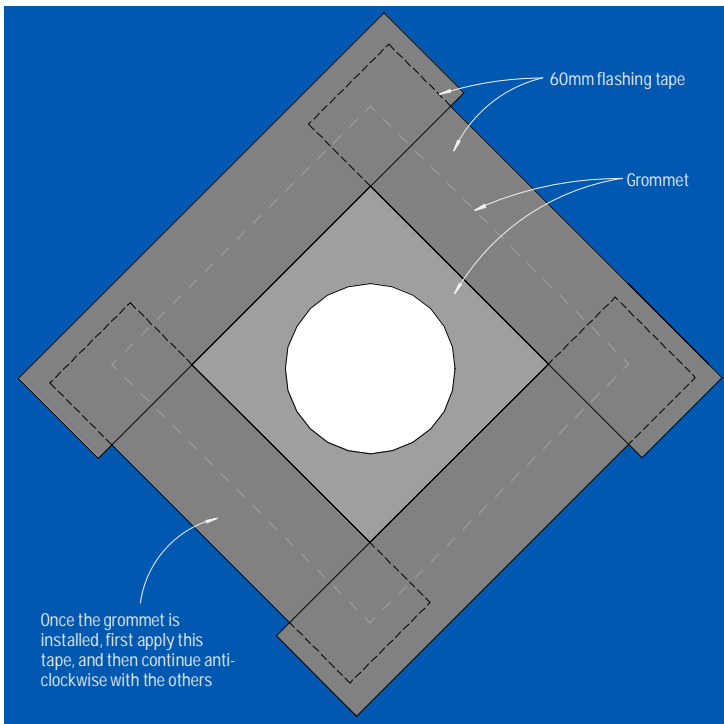


Figure 32: Pipe penetration - Elevation

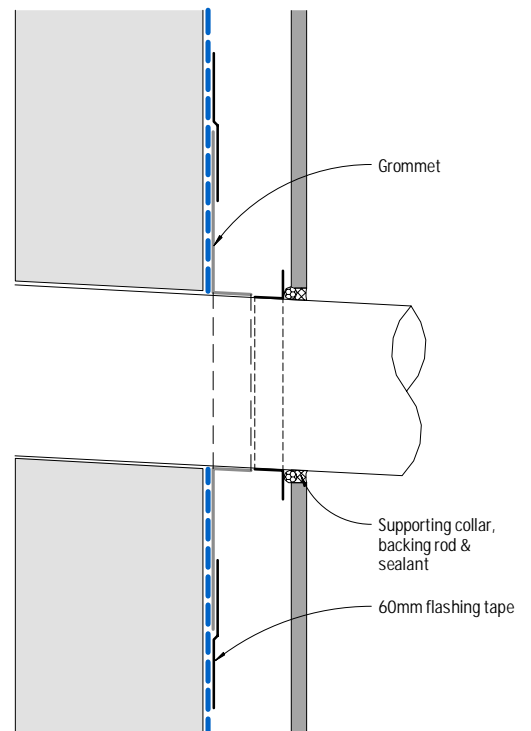


Figure 33: Pipe penetration - Section

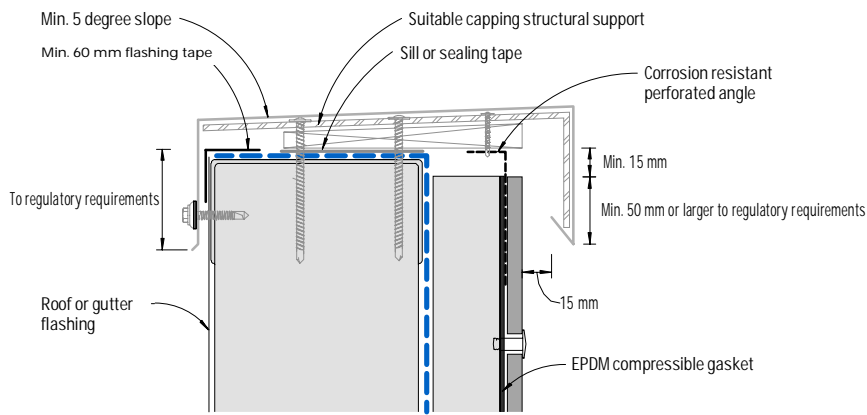


Figure 34: Capping - Detail 1

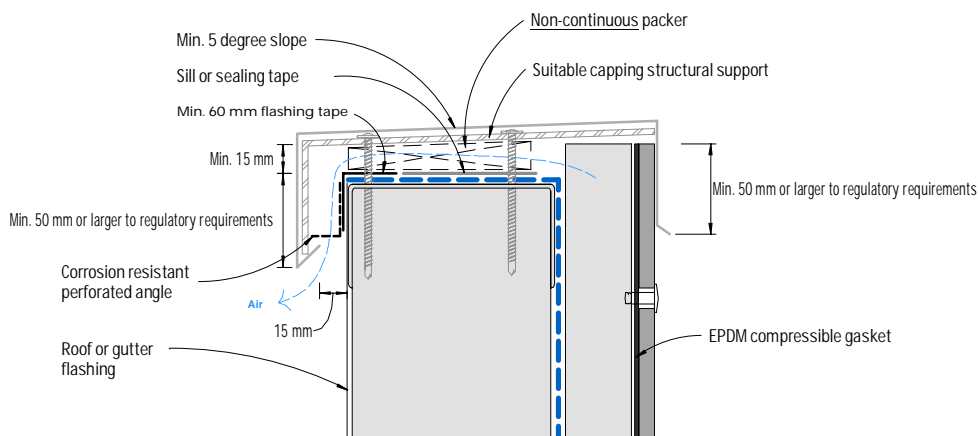


Figure 35: Capping - Detail 2
(Not suitable for EQUITONE [material])

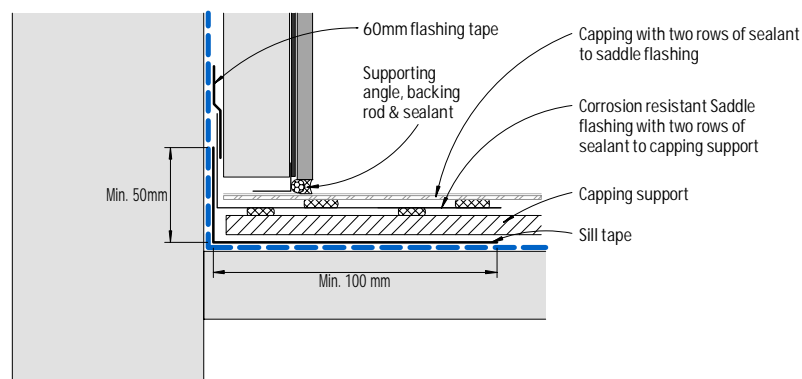


Figure 36: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 34 & 35.

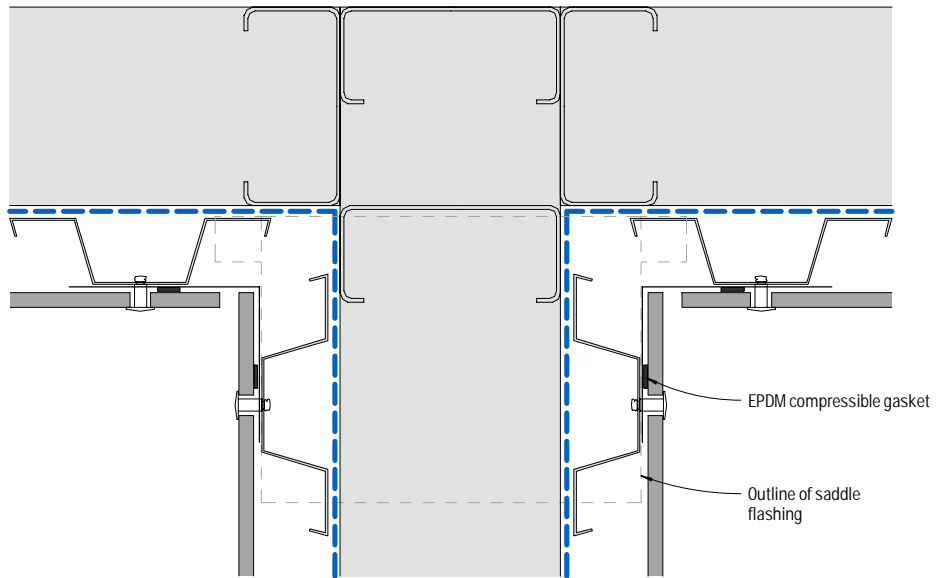


Figure 37: Parapet junction - Plan view

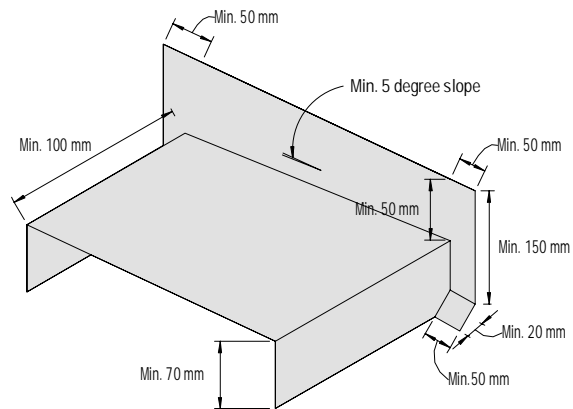


Figure 38: Corrosion resistant saddle flashing

EQUITONE facade system

with

pliable membrane

&

double layer top hat construction



Components

| | |
|-----------------------------|---|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | Double layer top hat construction <ul style="list-style-type: none">- Horizontal profile: 40x25mm (Min. 1.15mm BMT)- Vertical intermediate profile: 50x35mm (Min. 1.15mm BMT)- Vertical joint profile: 120x35mm (Min. 1.15mm BMT) |
| Weather (resistive) barrier | pro clima SOLITEX EXTASANA® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

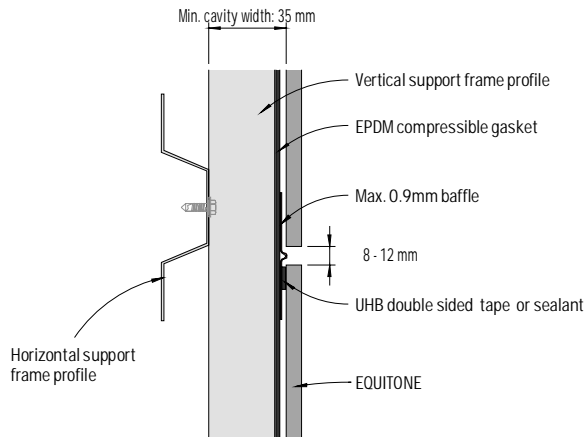


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

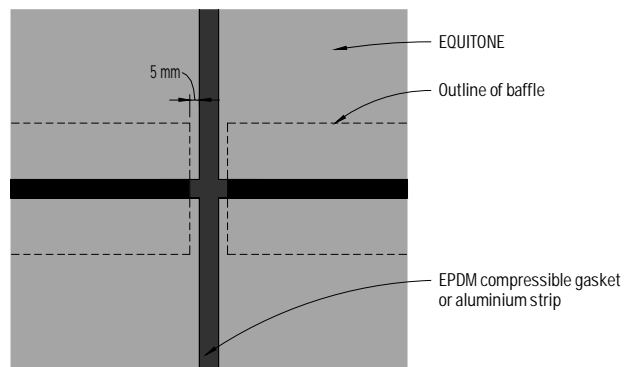


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) EQUITONE [material] requires open horizontal panel joints. Horizontal open joint detail requires project engineer's evaluation and approval, and the selection of appropriate rigid and UV resistant weather resistive barrier (membrane).
- 3) The length of support frame profiles must NOT exceed 3,150mm.

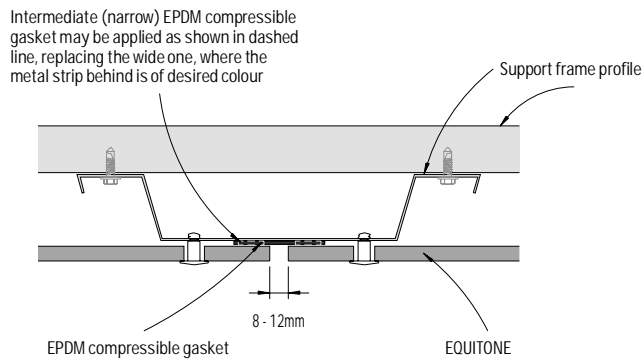


Figure 3: Vertical joint - Detail 1

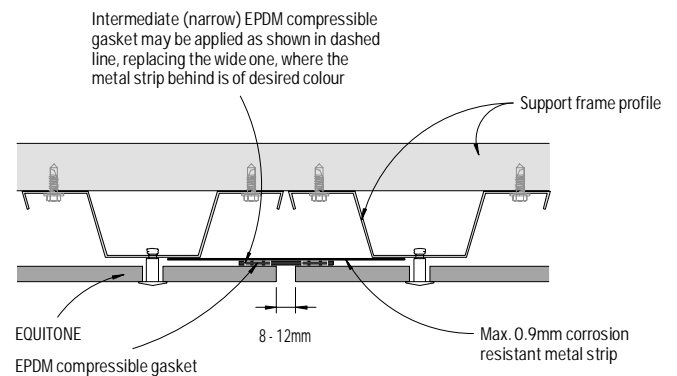


Figure 4: Vertical joint - Detail 2

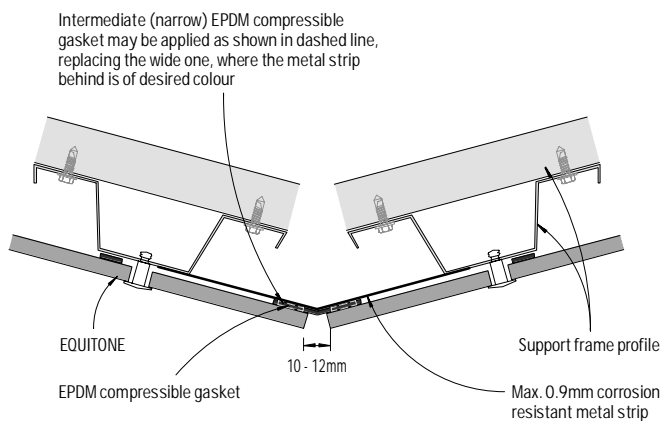


Figure 5: Vertical joint - Detail 3

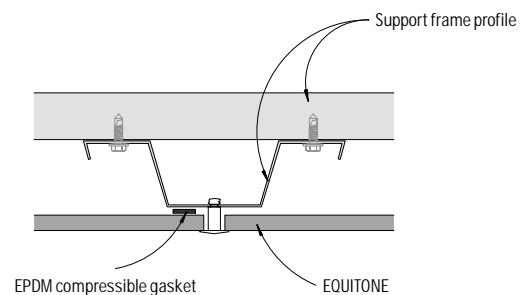


Figure 6: Intermediate panel fixings connection

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) In Figure 4 & 5, the metal strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.

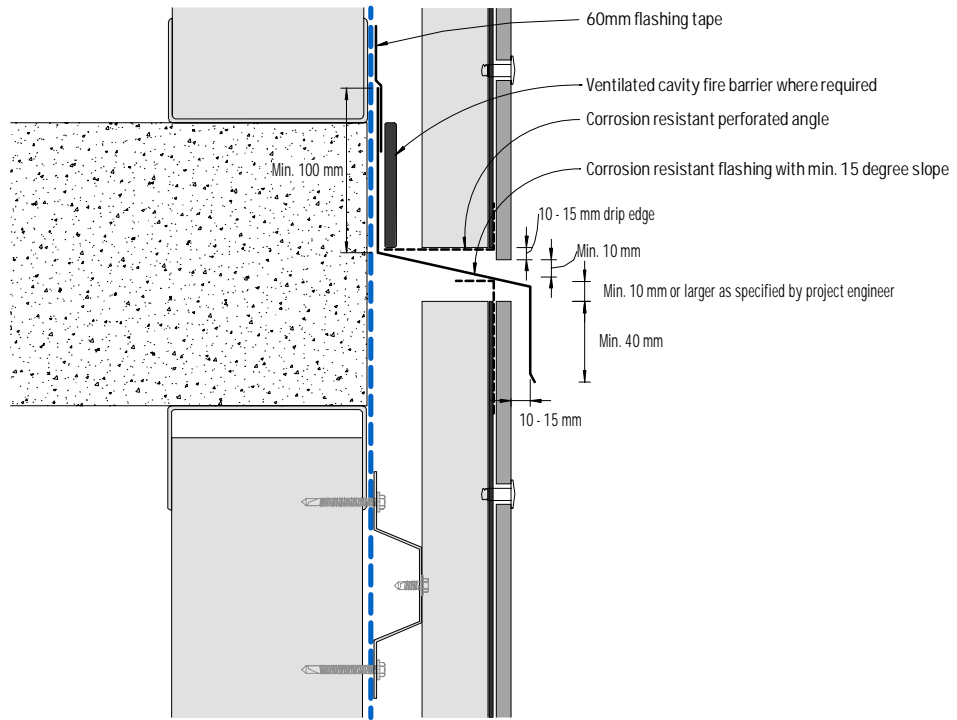


Figure 7: Horizontal control joint

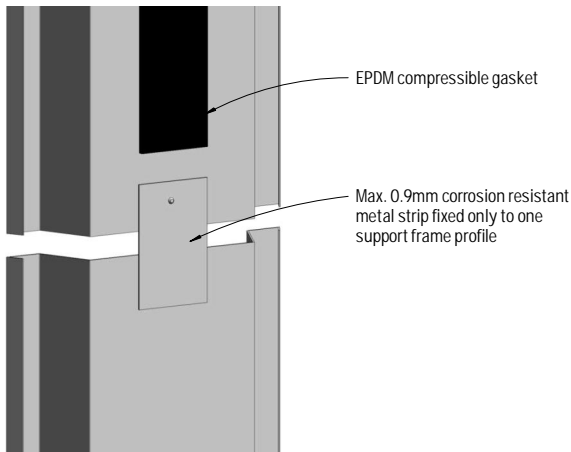


Figure 8: EPDM gasket support over control joint or the like

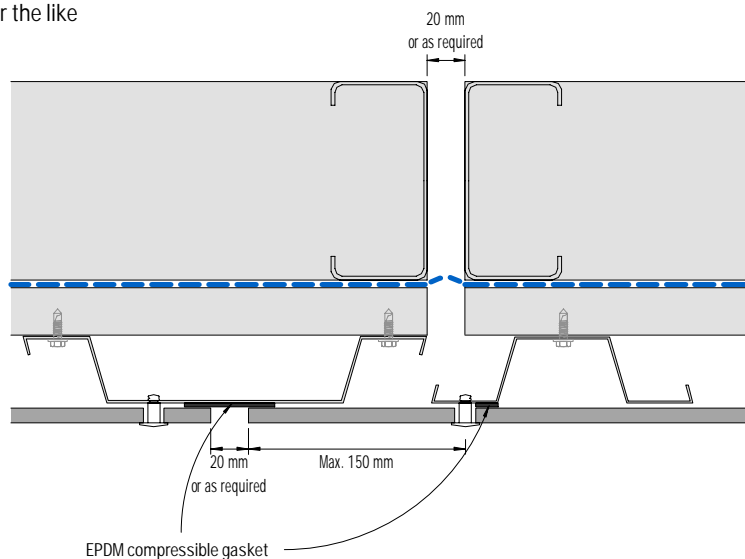


Figure 9: Vertical control joint

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

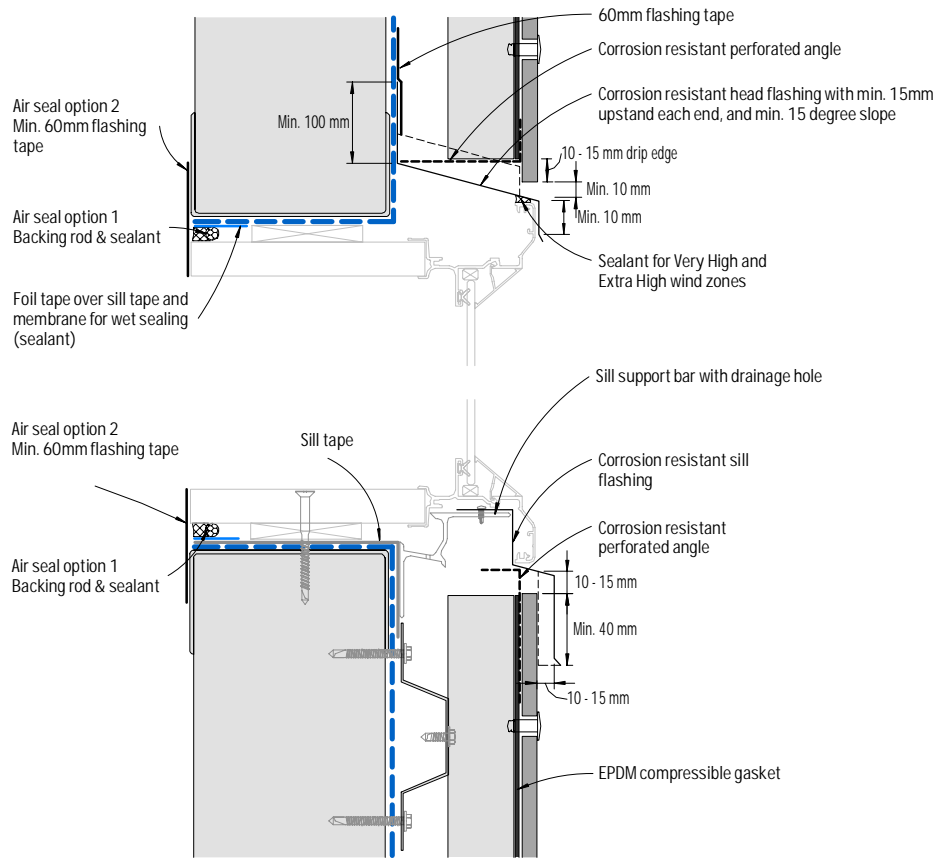


Figure 10: Flush window - Head and sill

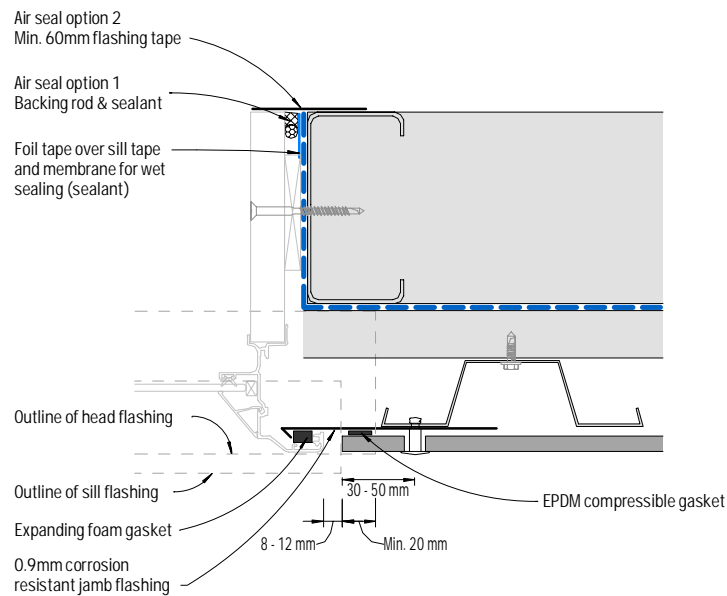


Figure 11: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

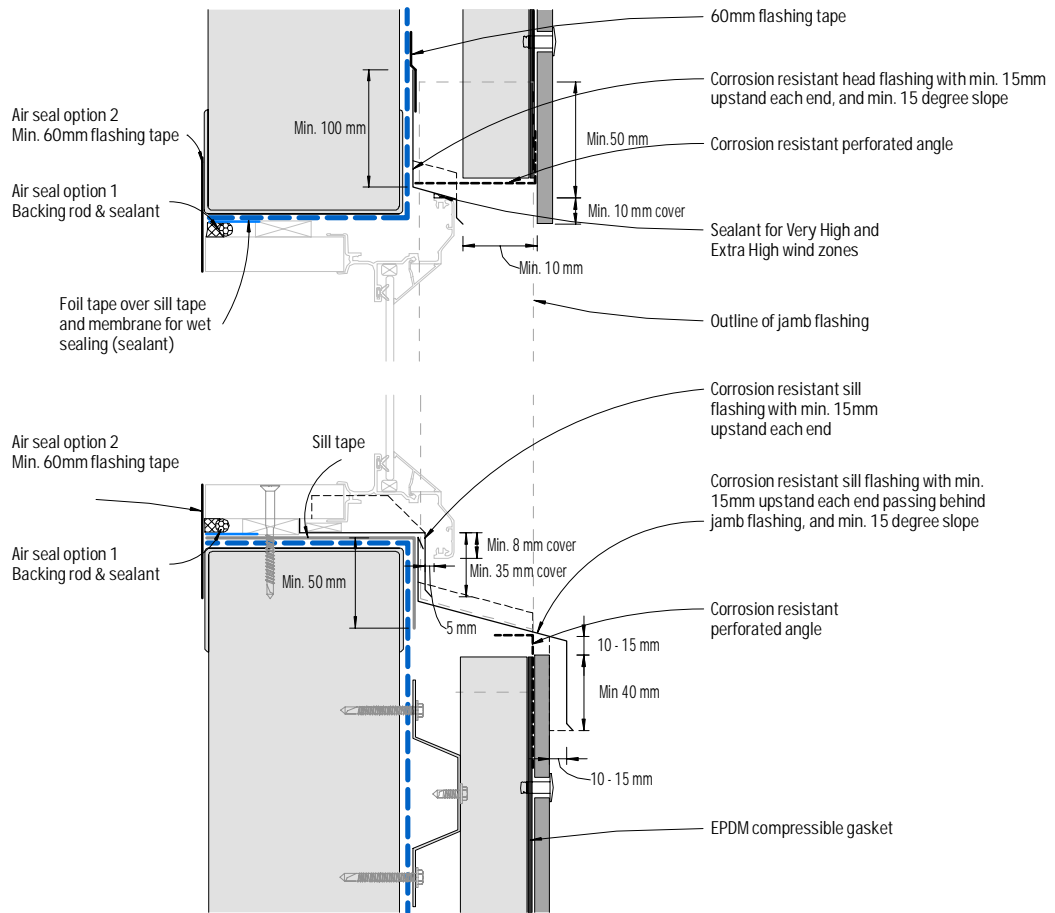


Figure 12: Recessed window - Head and sill

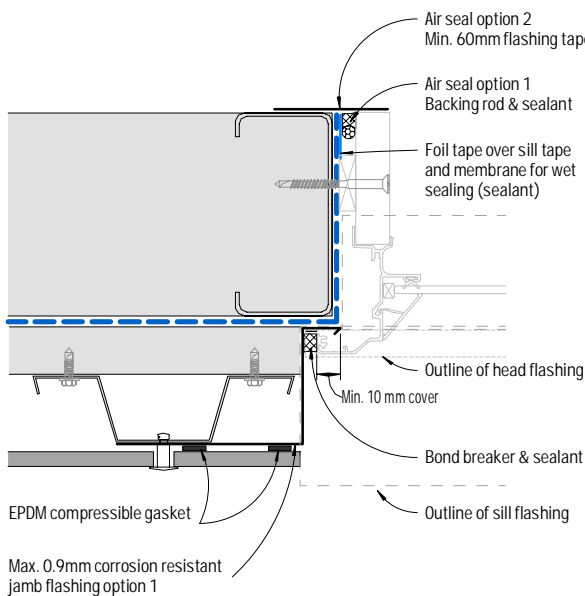


Figure 13: Recessed window jamb - Option 1

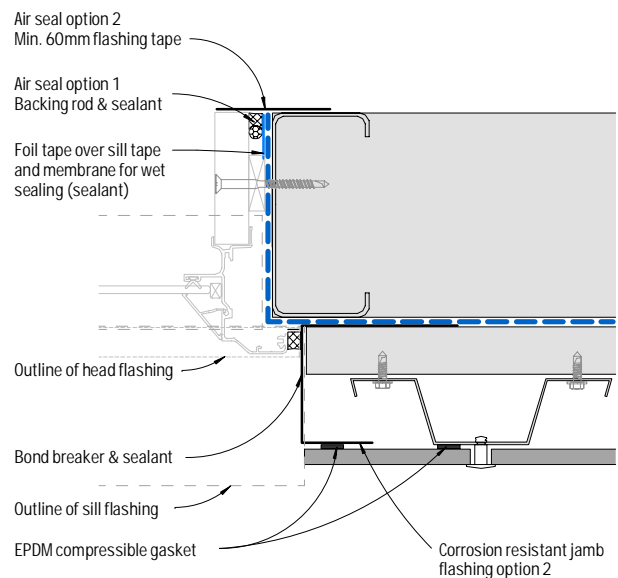


Figure 14: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

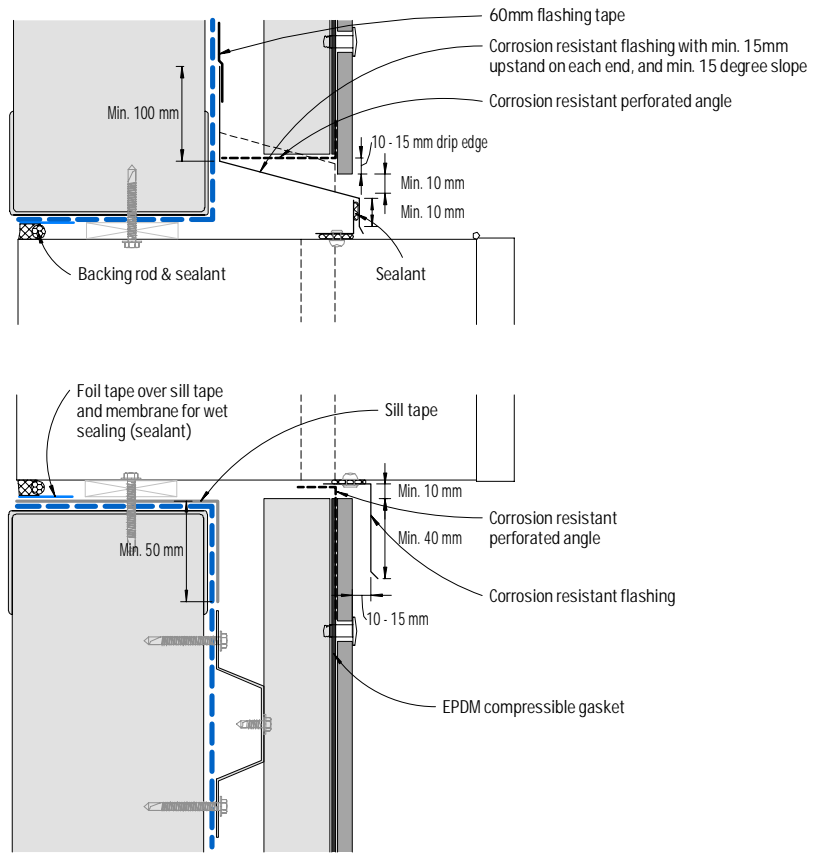


Figure 15: Meter box - Section

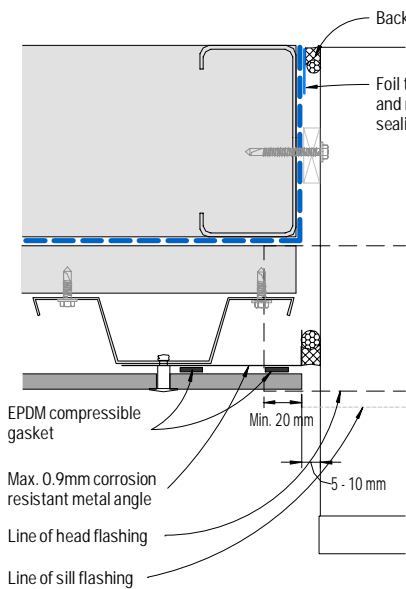


Figure 16: Meter box - Plan view - Detail 1

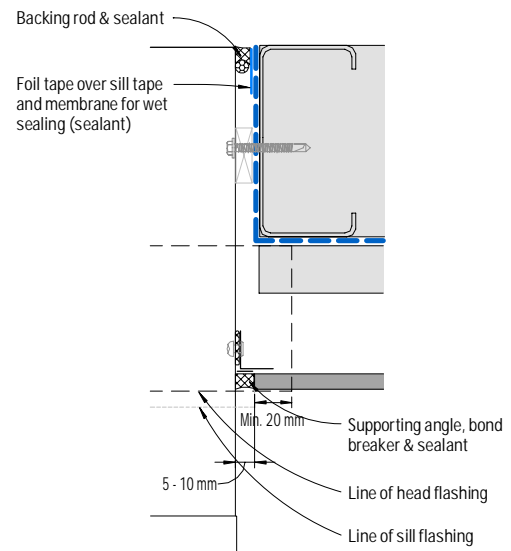


Figure 17: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

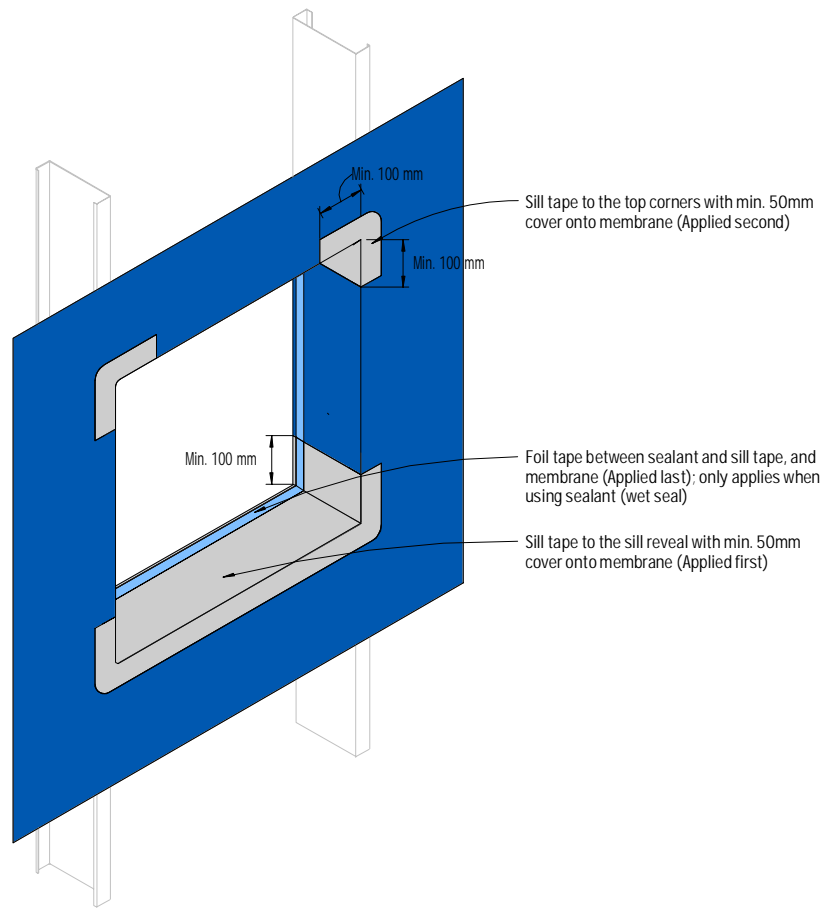


Figure 18: Isometric view of window/meter box opening - Tape application

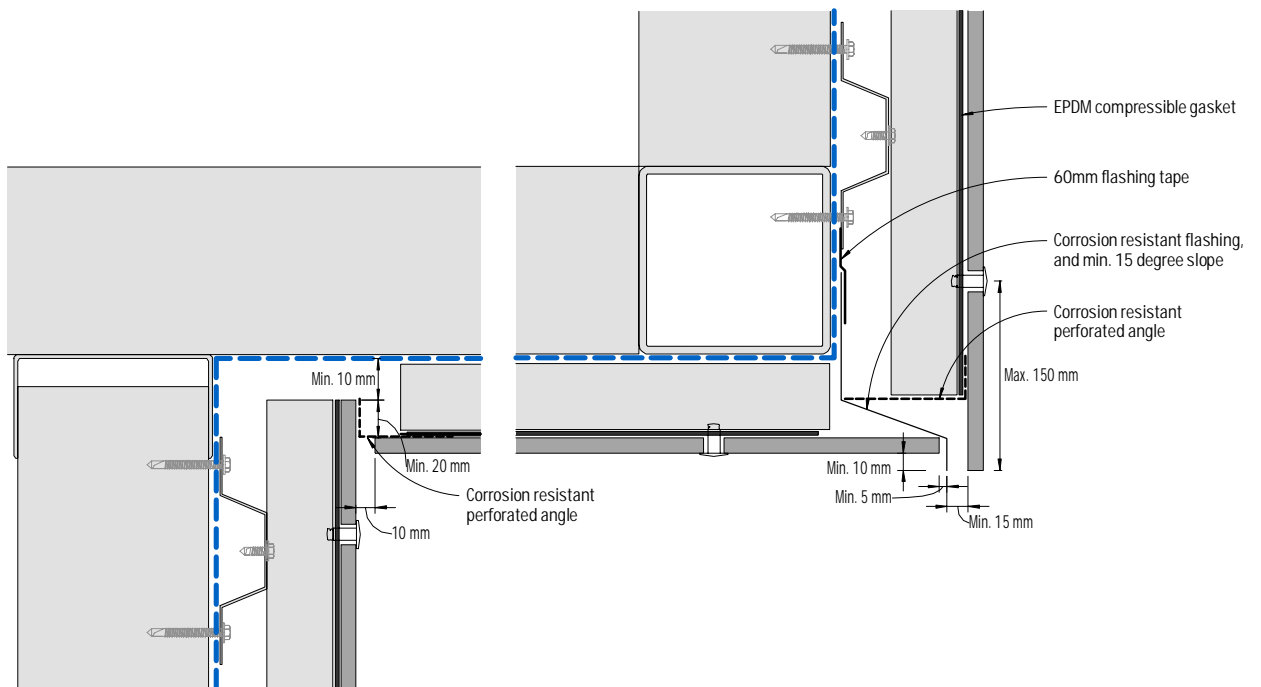


Figure 19: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

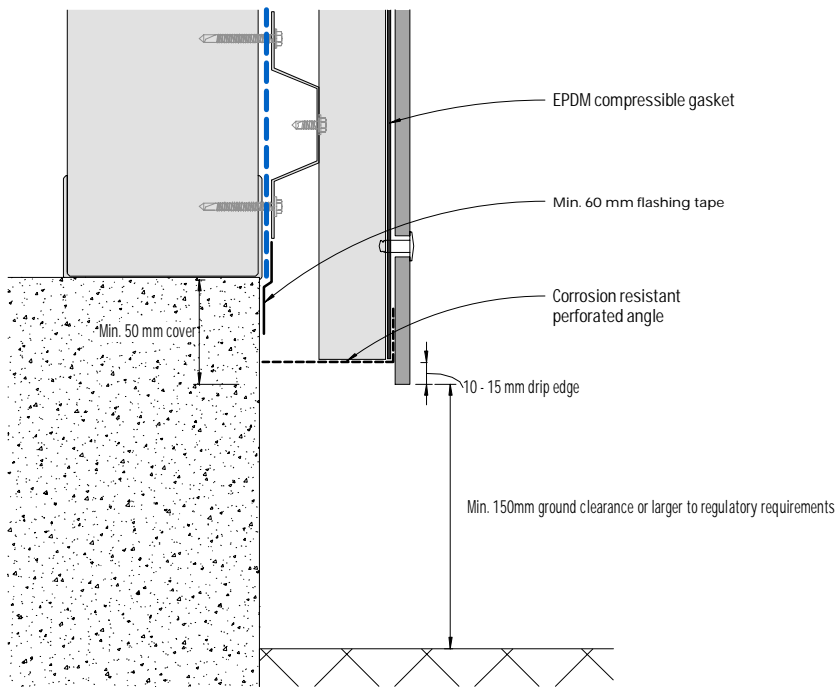


Figure 20: Base detail

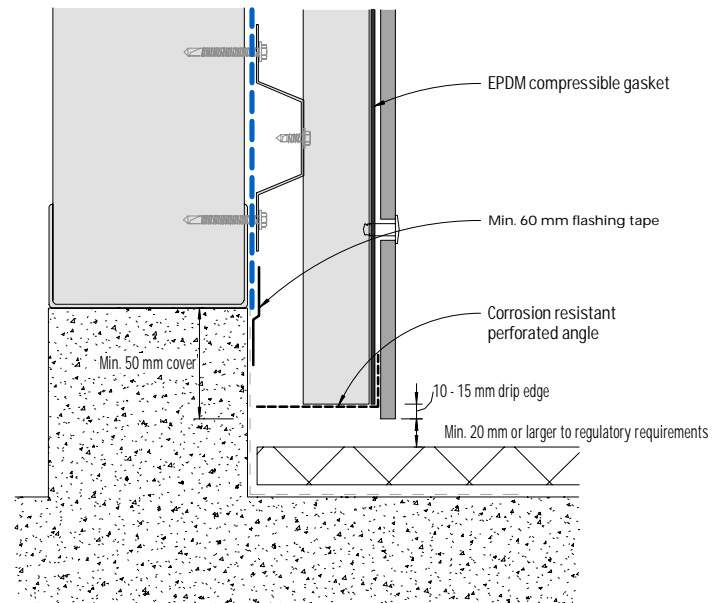


Figure 21: Base detail - Covered area

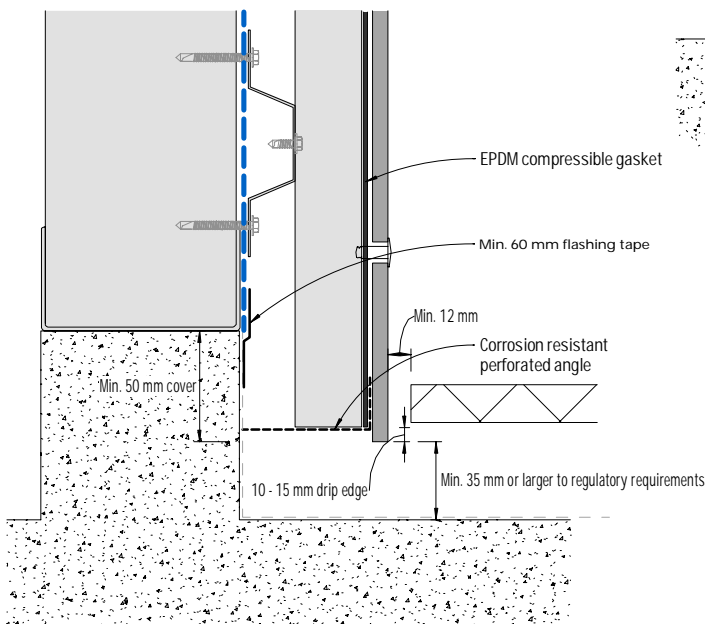


Figure 22: Base detail - Balcony

Notes

- 1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

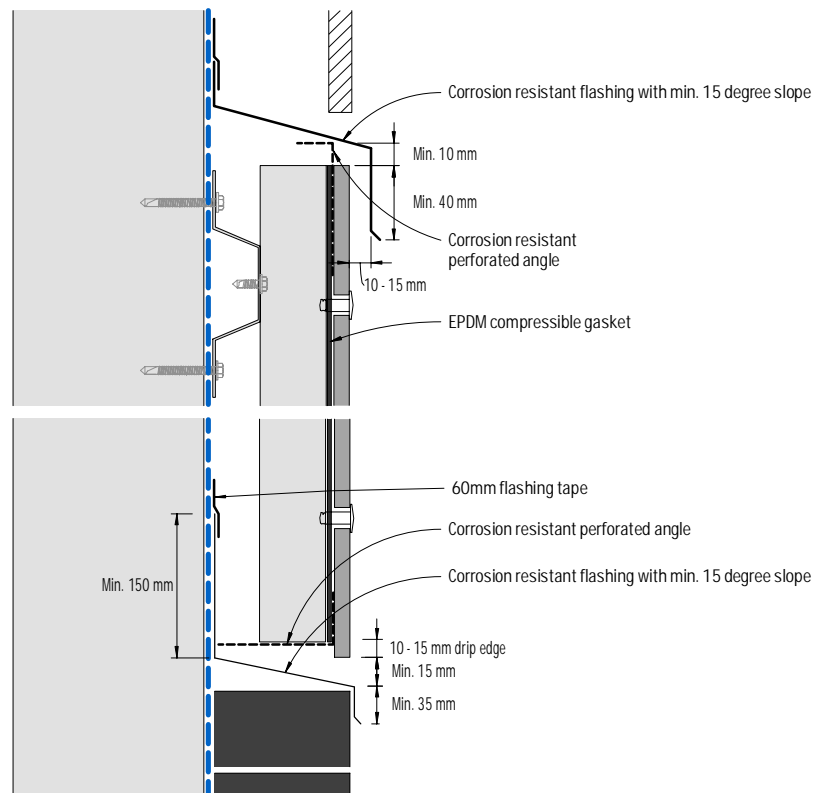


Figure 23: Junction with other materials - flush detail

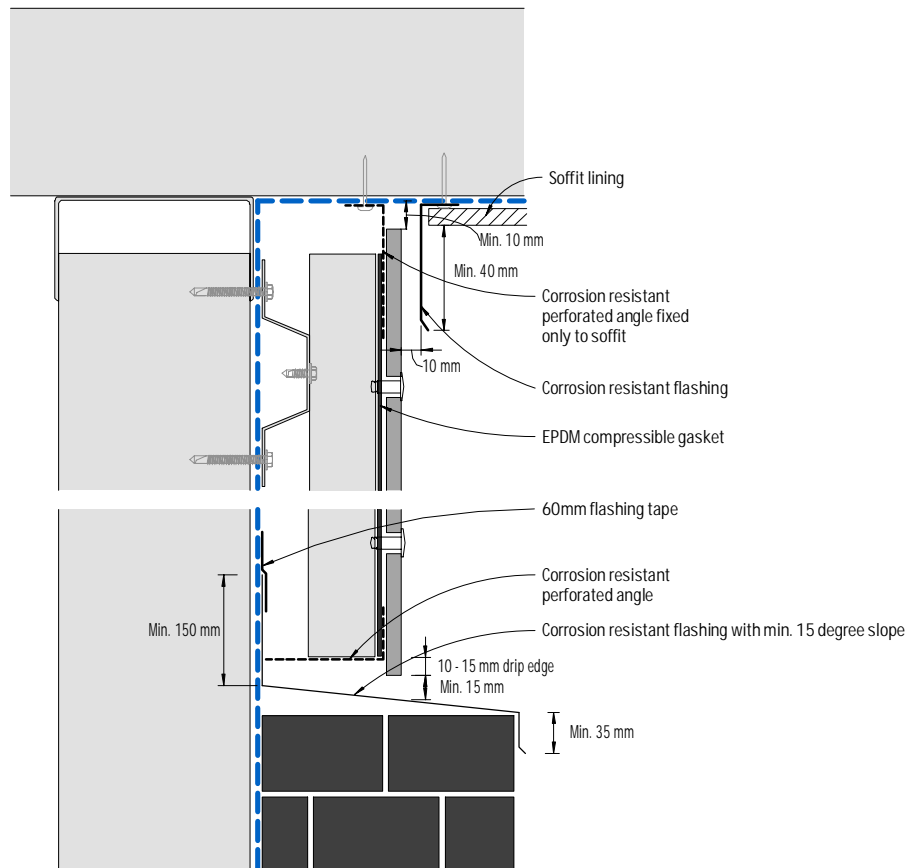


Figure 24: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

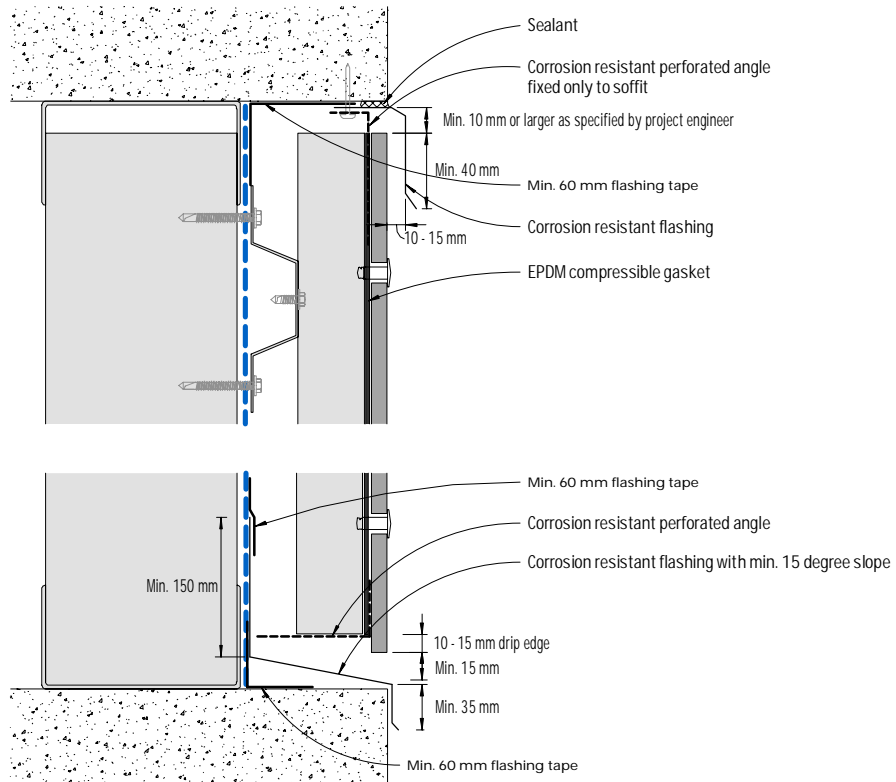


Figure 25: Exposed concrete slab or beam - Cladding flush

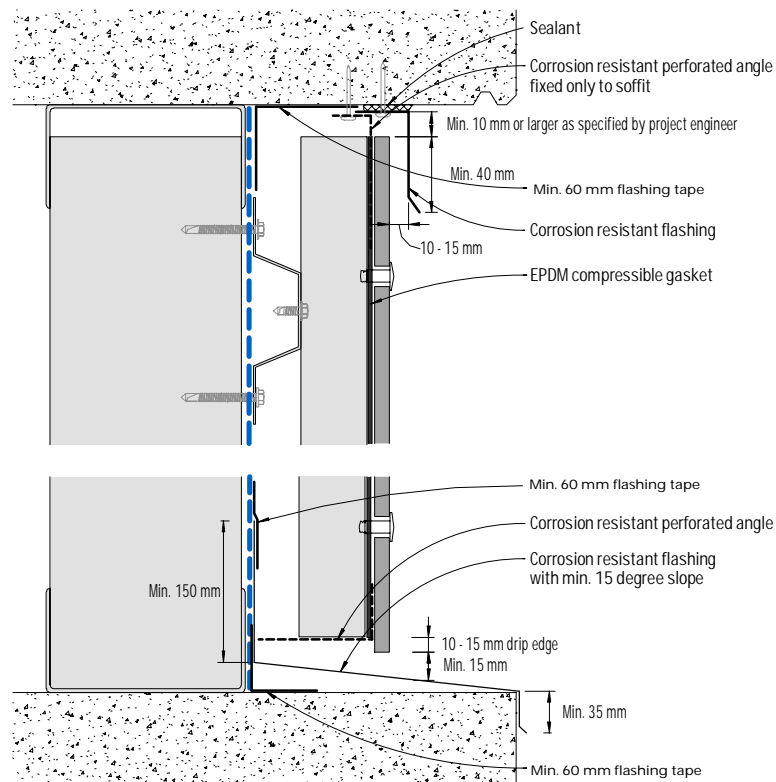


Figure 26: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

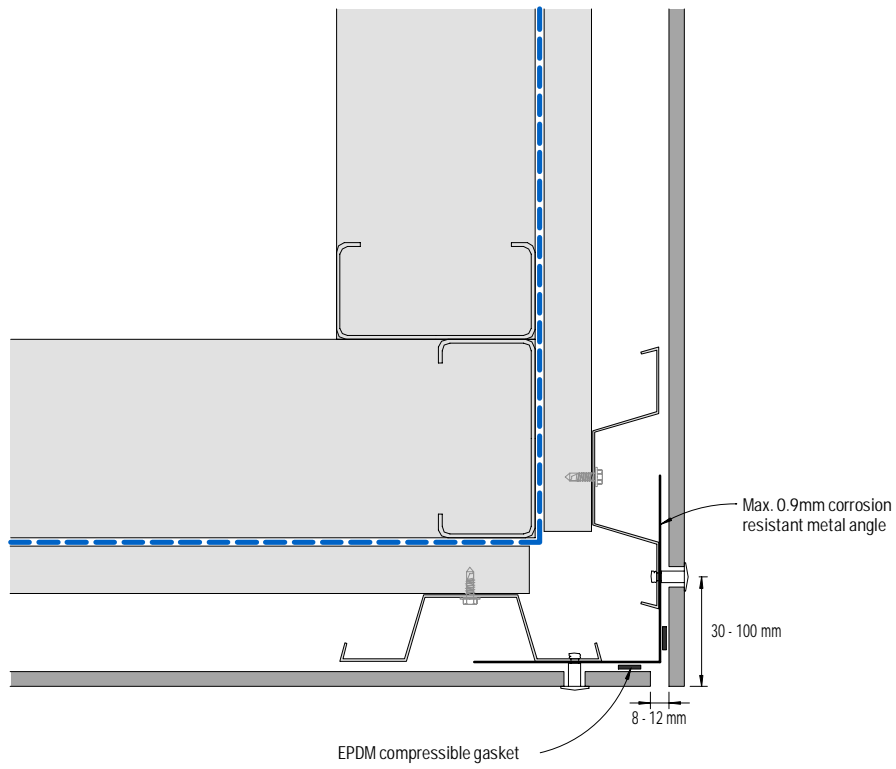


Figure 27: External corner - Detail 1

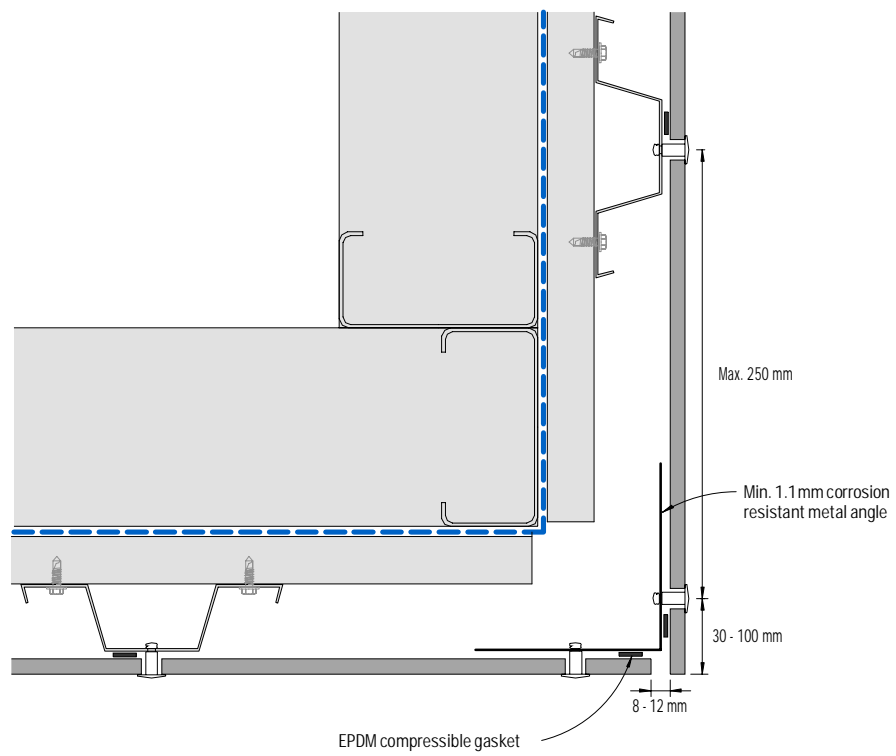


Figure 28: External corner - Detail 2

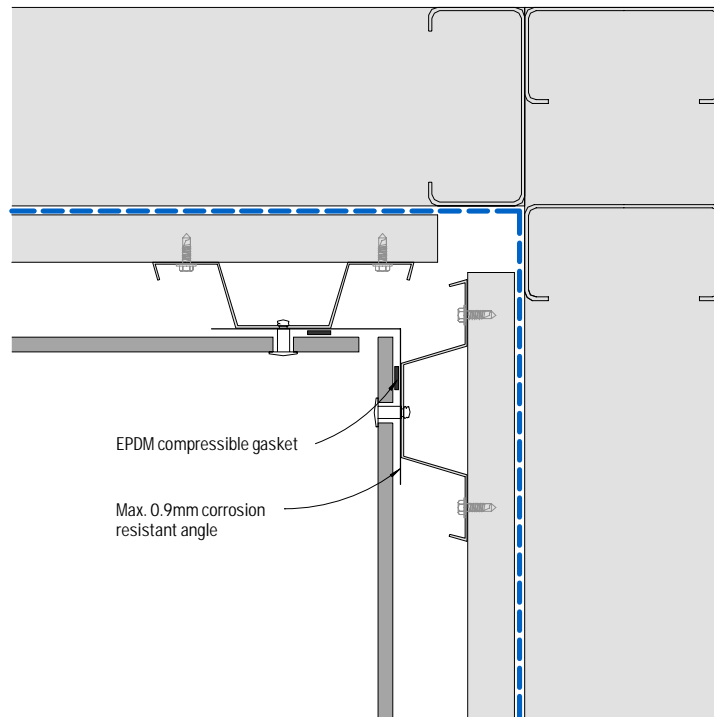


Figure 29: Internal corner

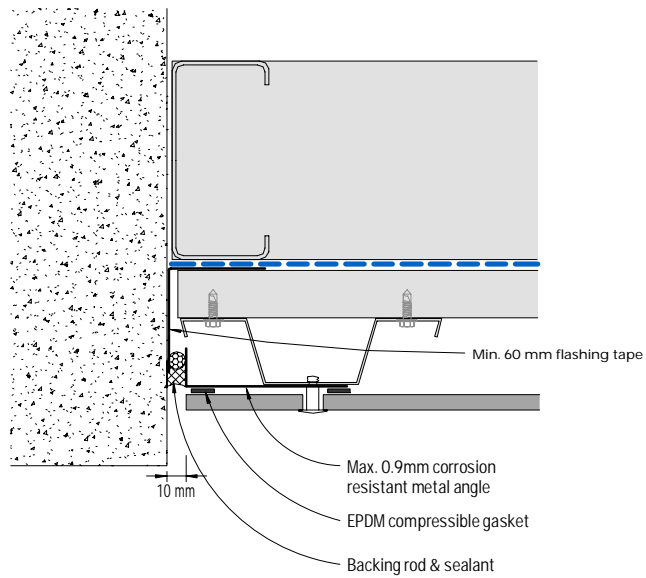


Figure 30: Abutment

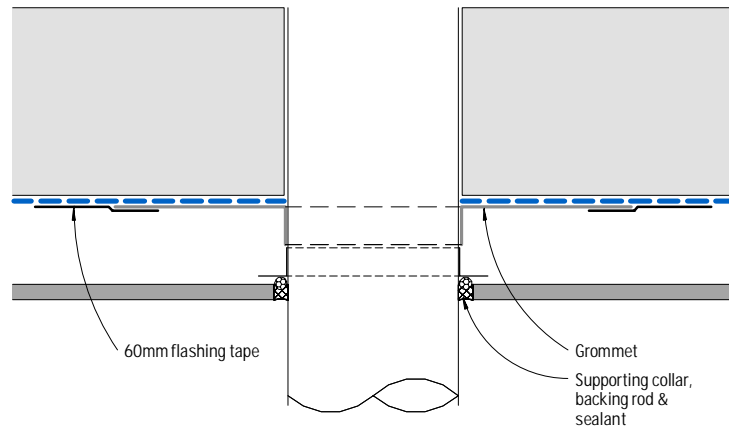


Figure 31: Pipe penetration - Plan view

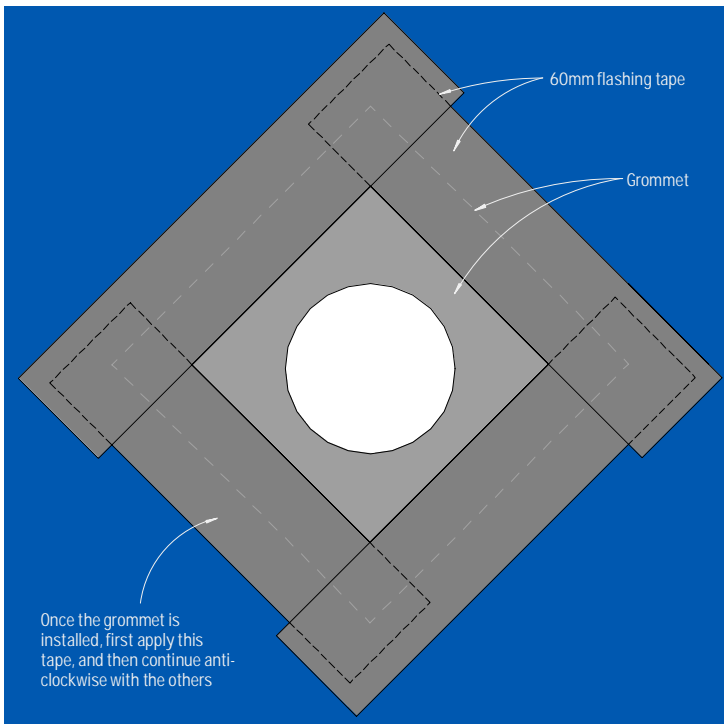


Figure 32: Pipe penetration - Elevation

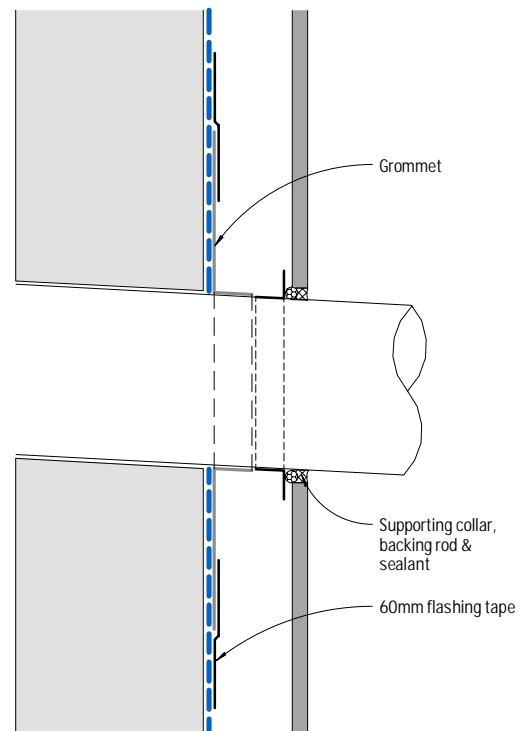


Figure 33: Pipe penetration - Section

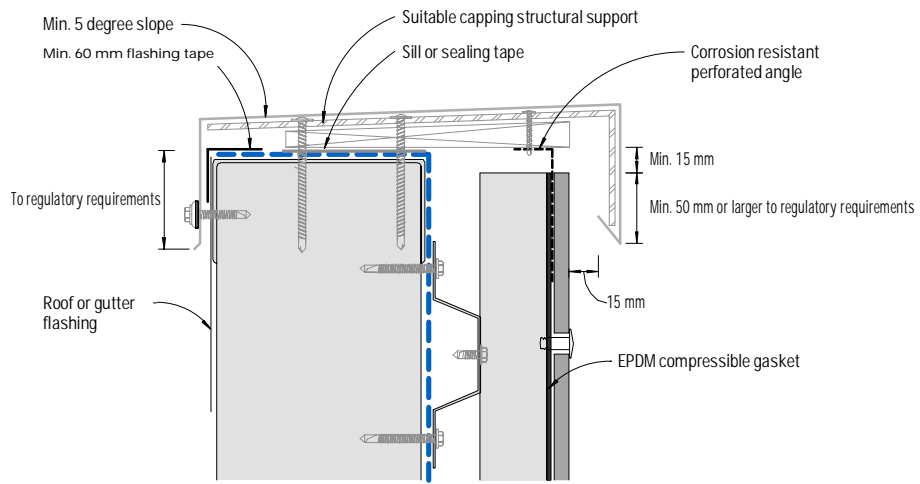


Figure 34: Capping - Detail 1

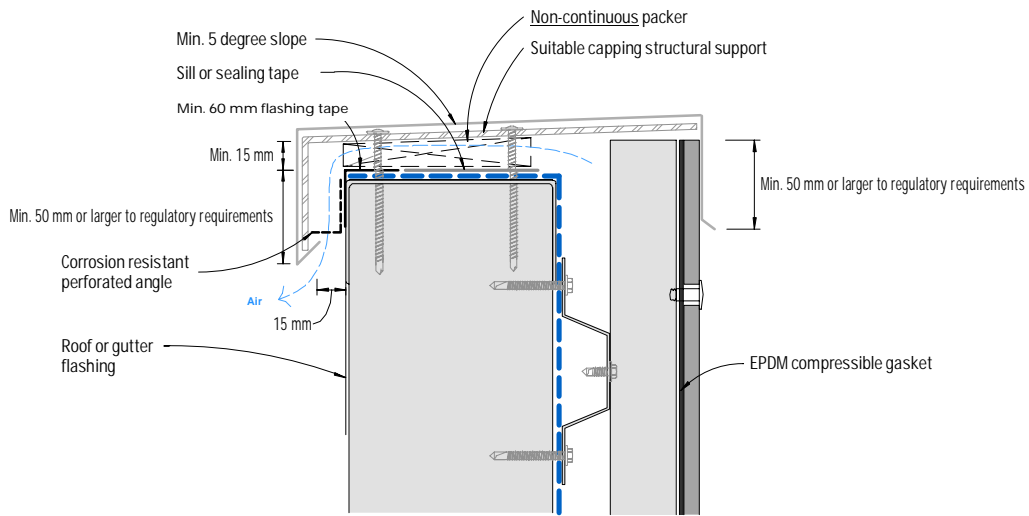


Figure 35: Capping - Detail 2
(Not suitable for EQUITONE [material])

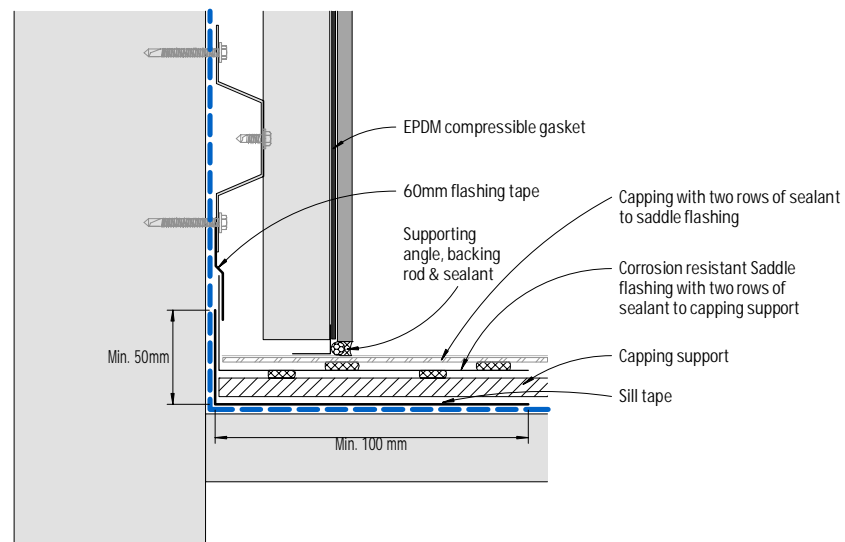


Figure 36: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 34 & 35.

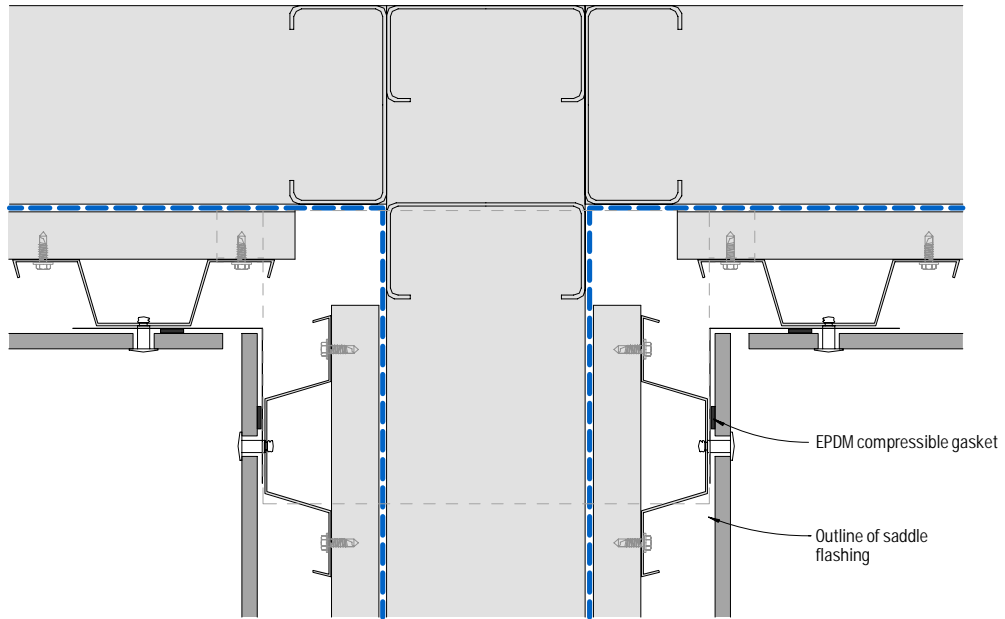


Figure 37: Parapet junction - Plan view

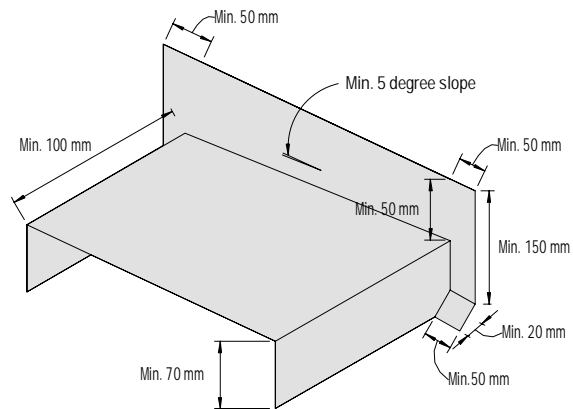


Figure 38: Corrosion resistant saddle flashing

EQUITONE facade system

with

pliable membrane

&

bracketry construction



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | NVELOPE NV1 aluminium bracketry system |
| Weather (resistive) barrier | pro clima SOLITEX EXTASANA® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61102 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

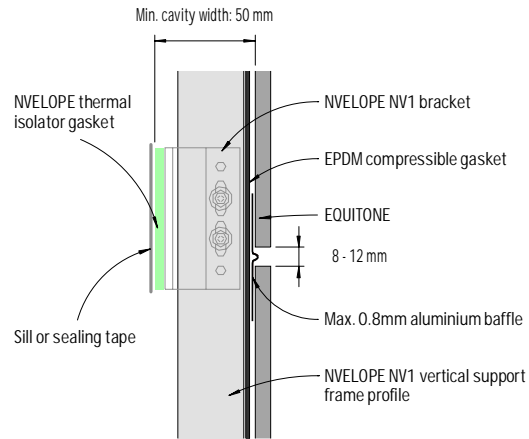


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [materia])

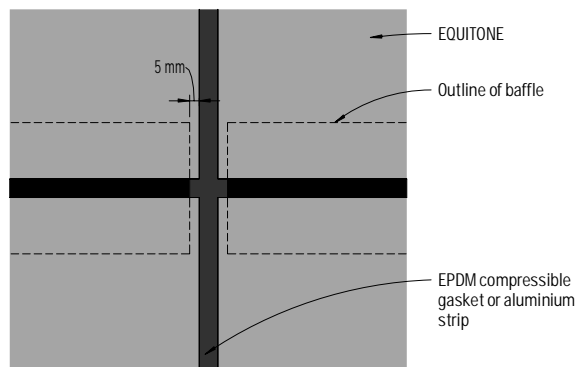


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) EQUITONE [materia] requires open horizontal panel joints. Horizontal open joint detail requires project engineer's evaluation and approval, and the selection of appropriate rigid and UV resistant weather resistive barrier (membrane).

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

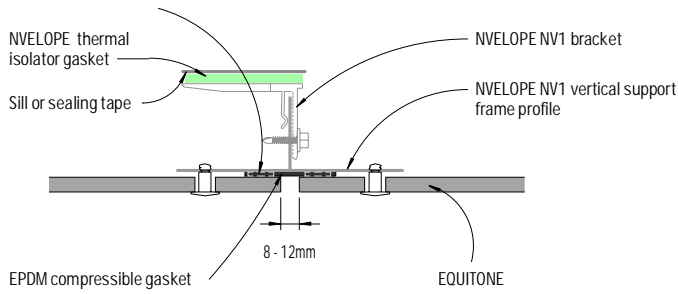


Figure 3: Vertical joint - Detail 1

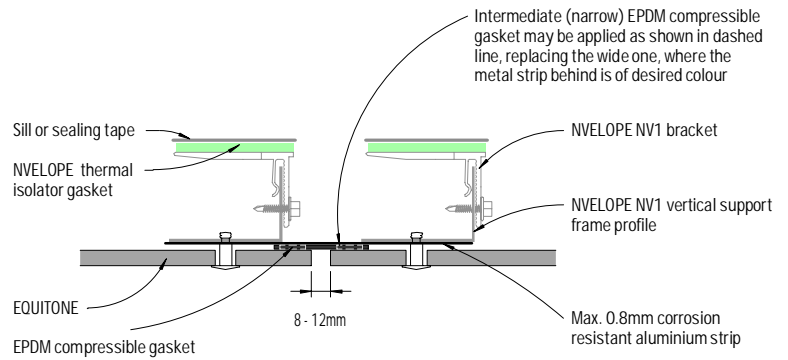


Figure 4: Vertical joint - Detail 2

Intermediate (narrow) EPDM compressible gasket may be applied as shown in dashed line, replacing the wide one, where the metal strip behind is of desired colour

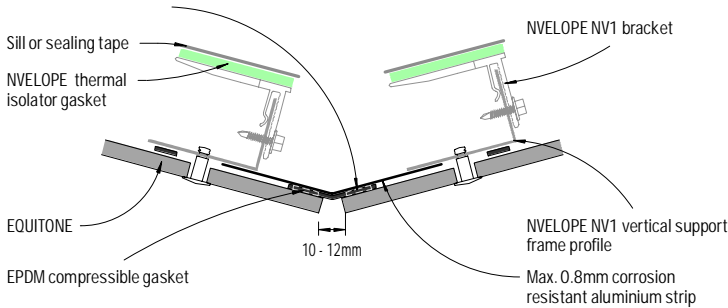


Figure 5: Vertical joint - Detail 3

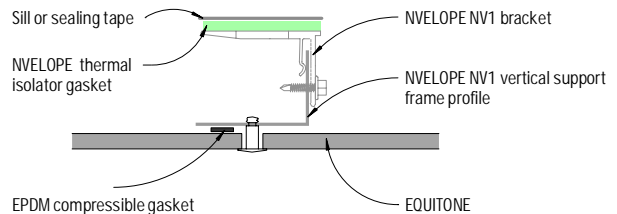


Figure 6: Intermediate panel fixings connection

Notes

- 1) Depending on the project requirements max. 0.9mm (powder) coated aluminium strip may be used in lieu of EPDM strip on vertical joints for higher UV resistance.
- 2) In Figure 4 & 5, the aluminium strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.
- 2) EPDM compressible gasket strip is applied away from the panel hole, and usually to one side of the support frame profile as shown in Figure 6.

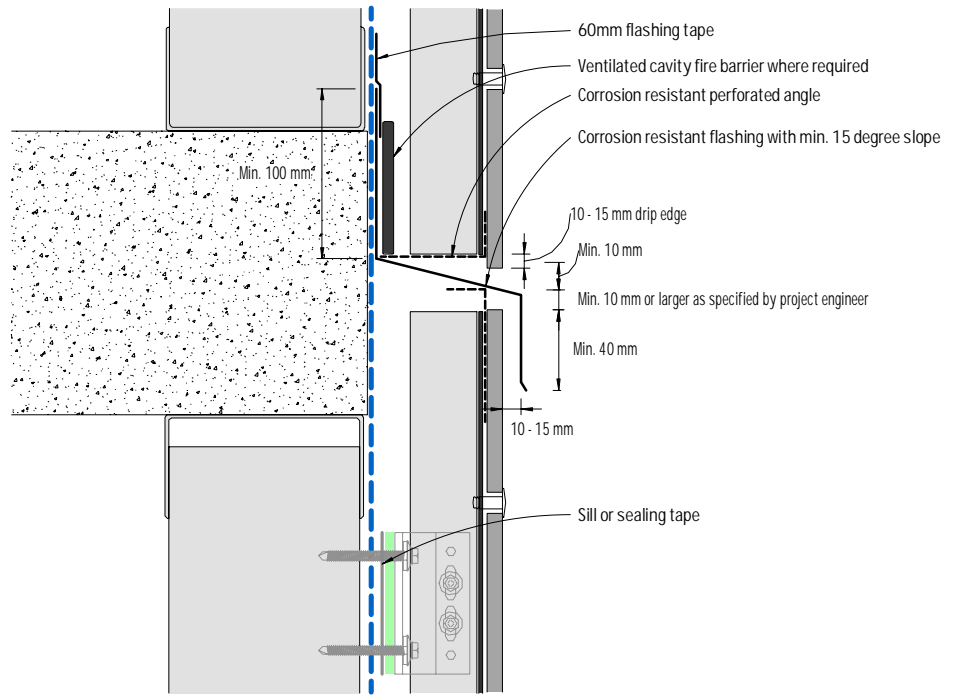


Figure 7: Horizontal control joint

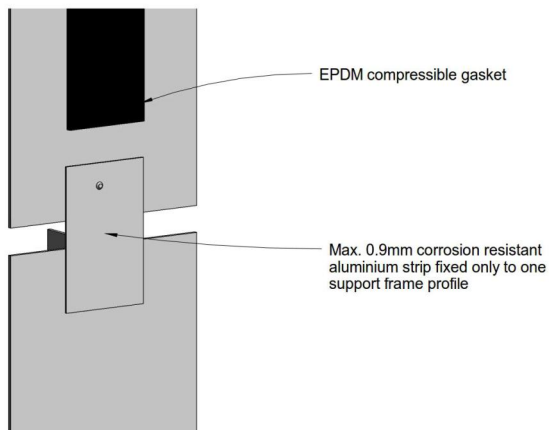


Figure 8: EPDM gasket support over control joint or the like

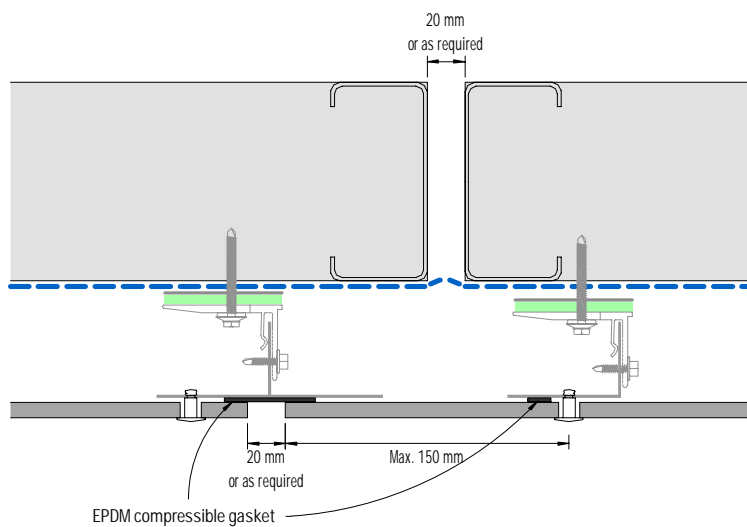


Figure 9: Vertical control joint

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

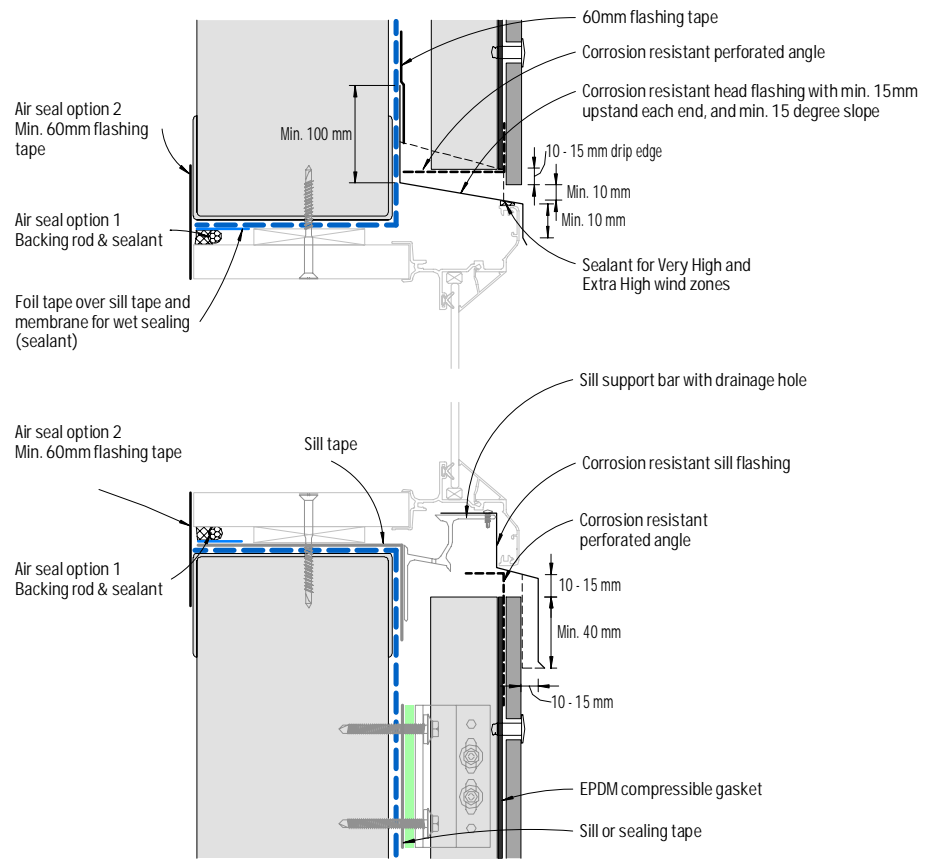


Figure 10: Flush window - Head and sill

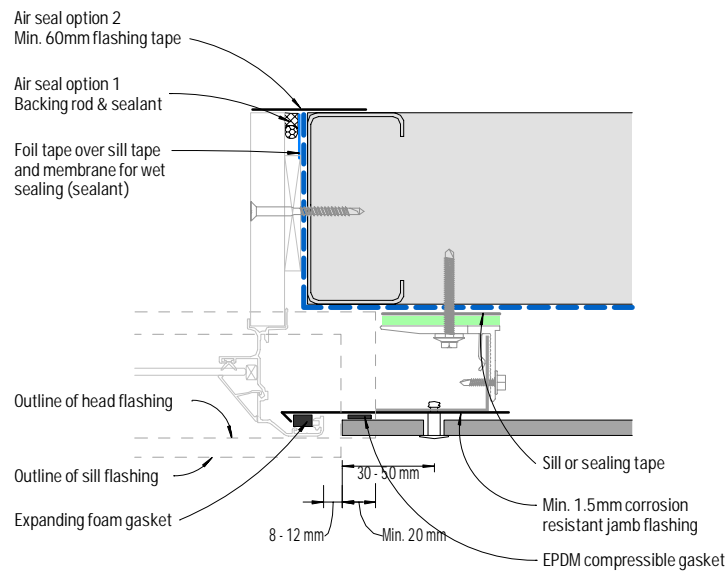


Figure 11: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

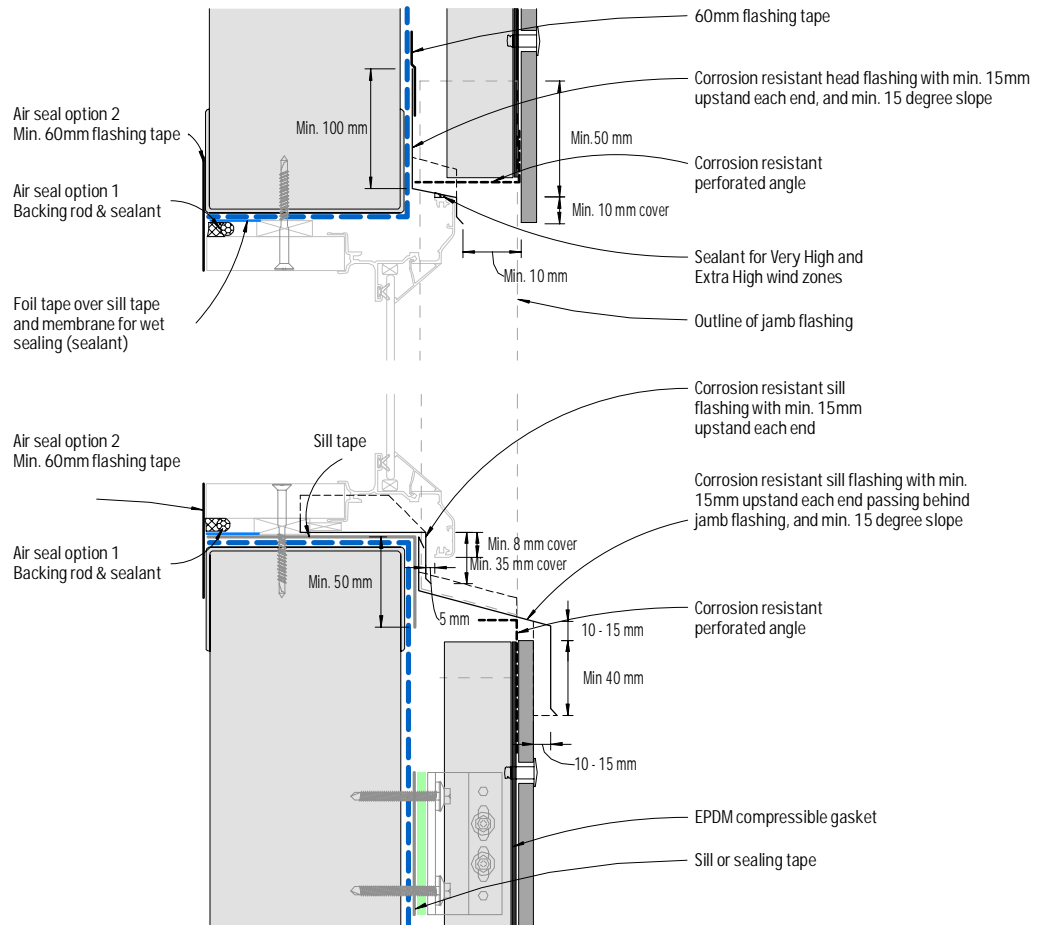


Figure 12: Recessed window - Head and sill

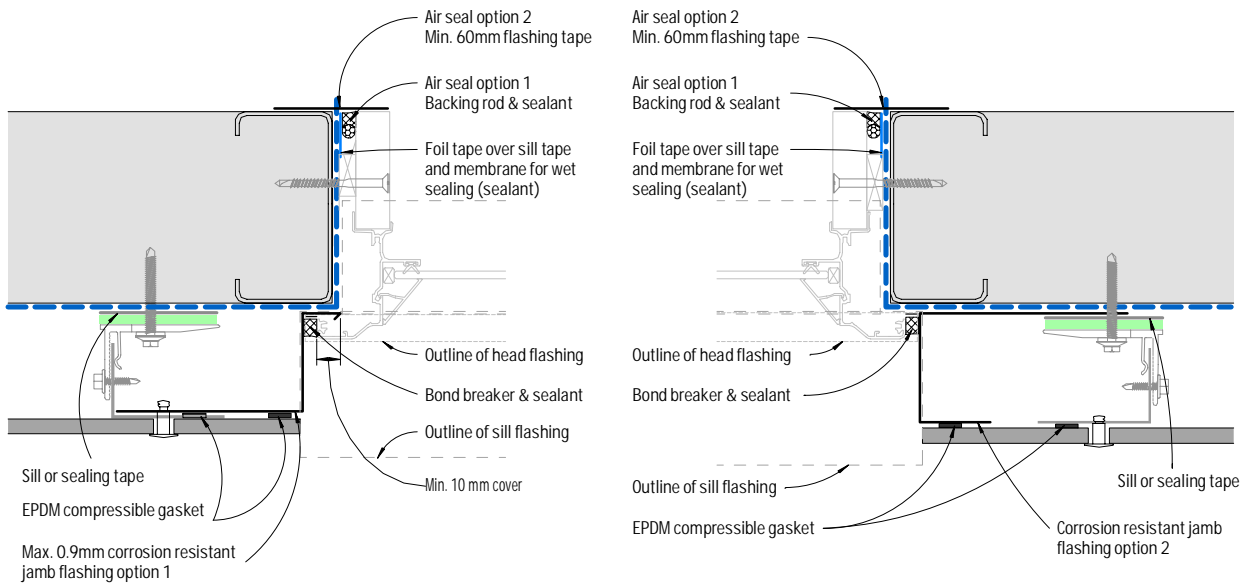


Figure 13: Recessed window jamb - Option 1

Figure 14: Recessed window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

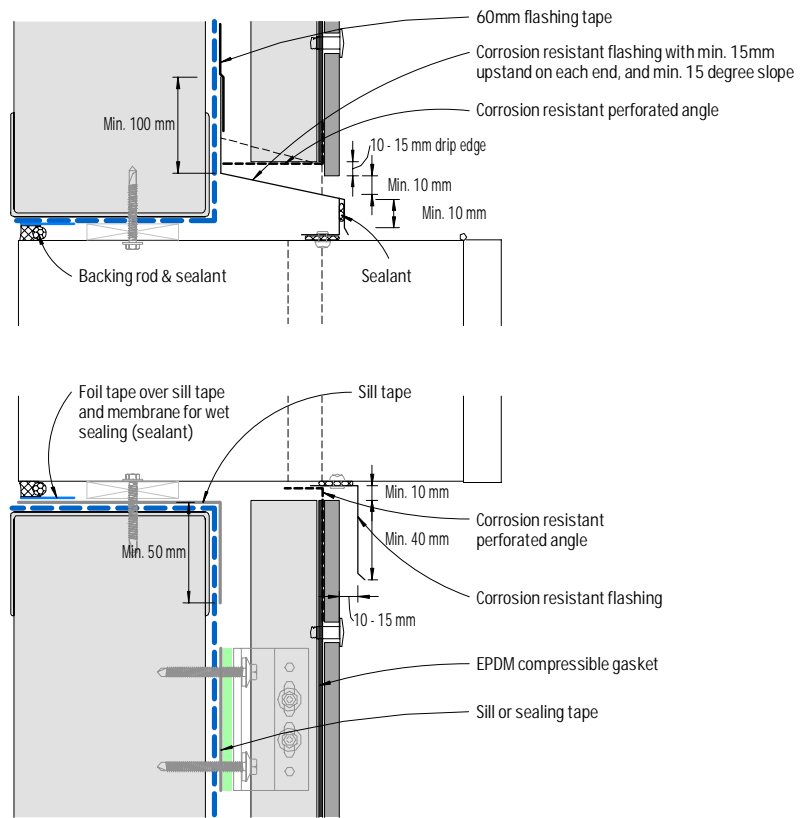


Figure 15: Meter box - Section

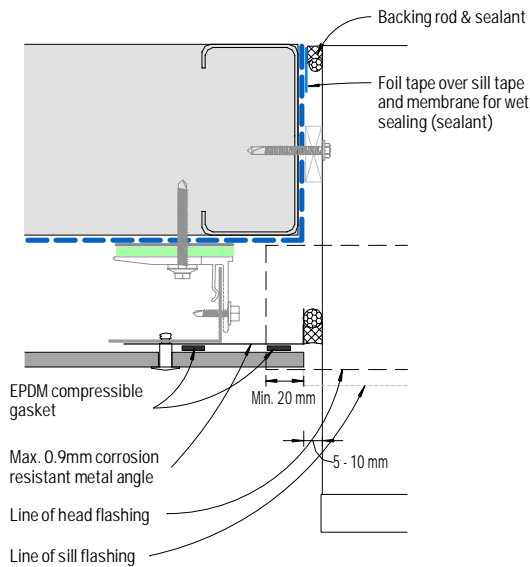


Figure 16: Meter box - Plan view - Detail 1

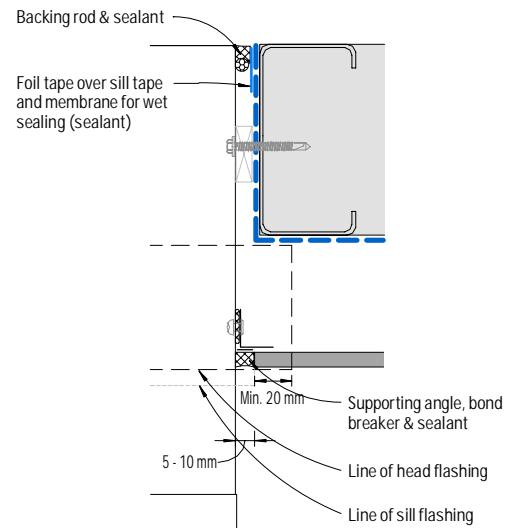


Figure 17: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

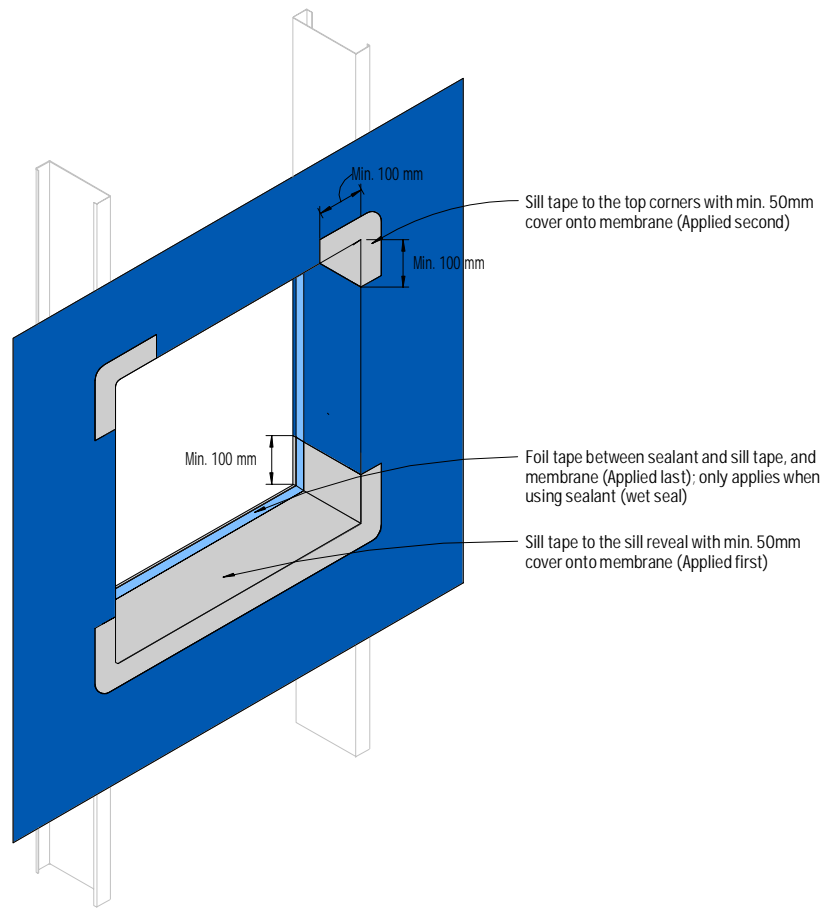


Figure 18: Isometric view of window/meter box opening - Tape application

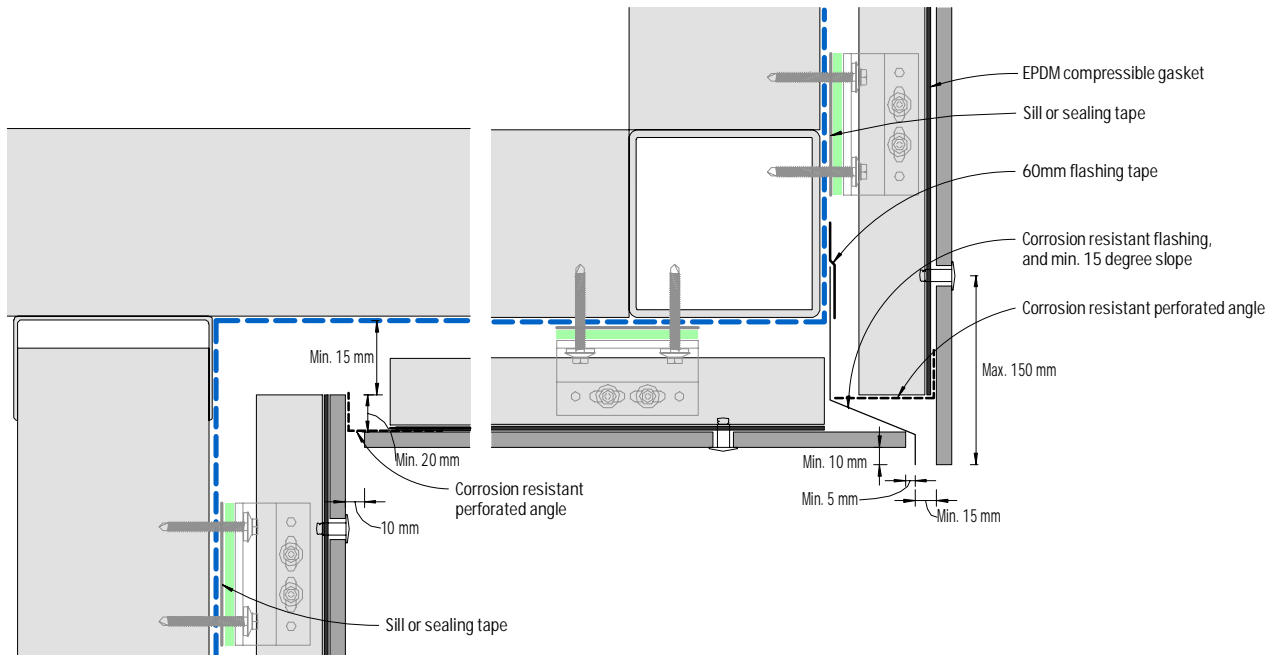


Figure 19: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

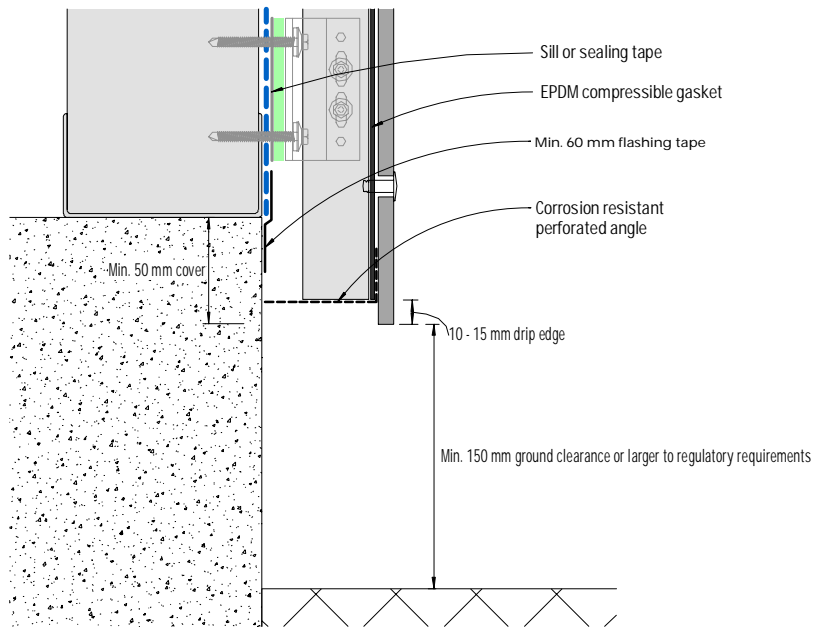


Figure 20: Base detail

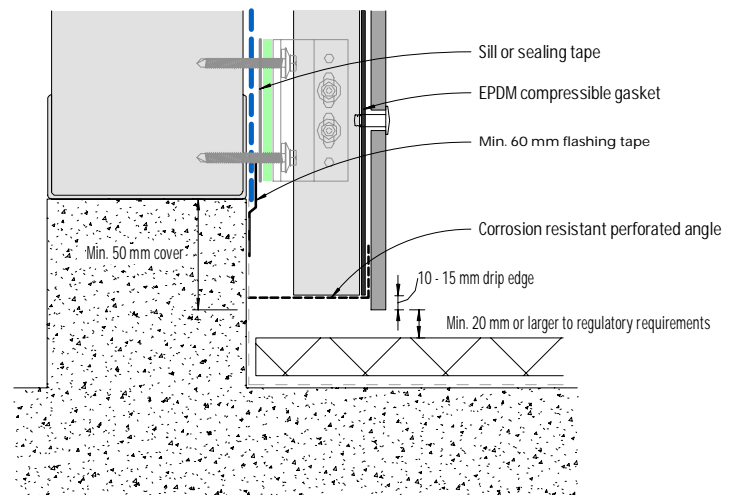


Figure 21: Base detail - Covered area

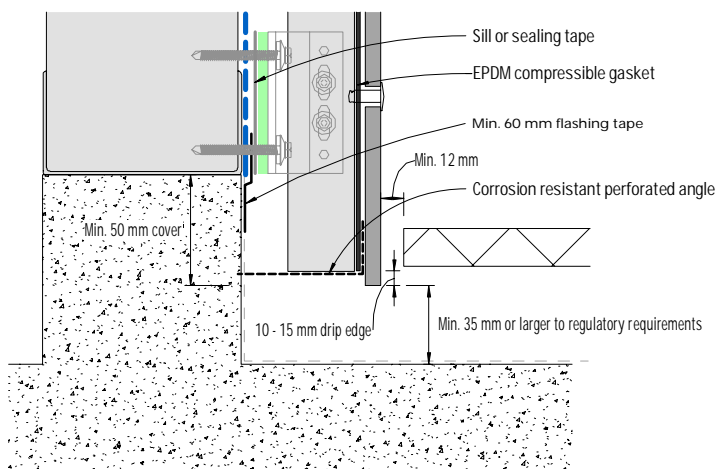


Figure 22: Base detail - Balcony

Notes

1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.

2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

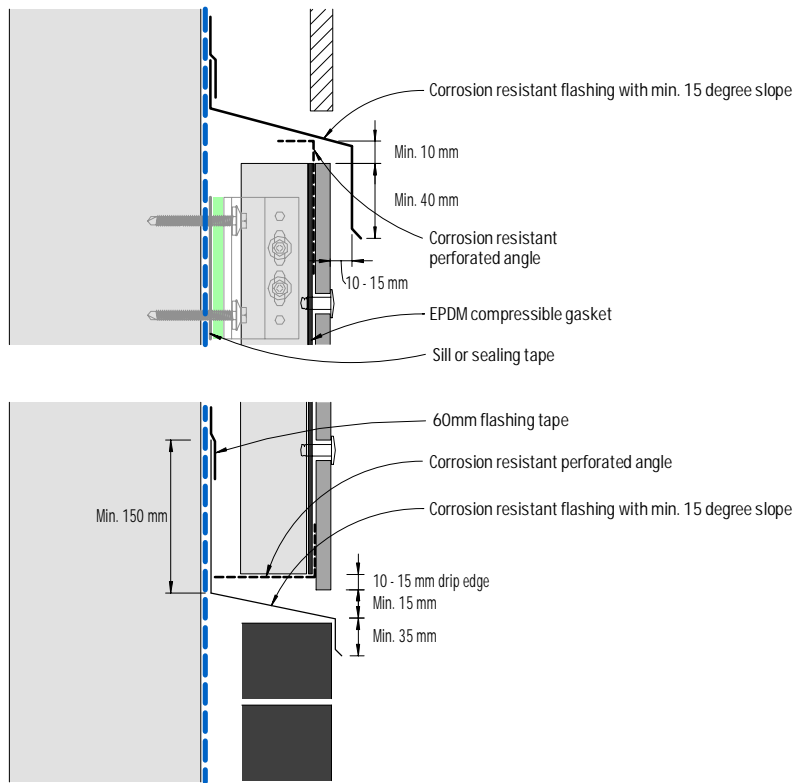


Figure 23: Junction with other materials - flush detail

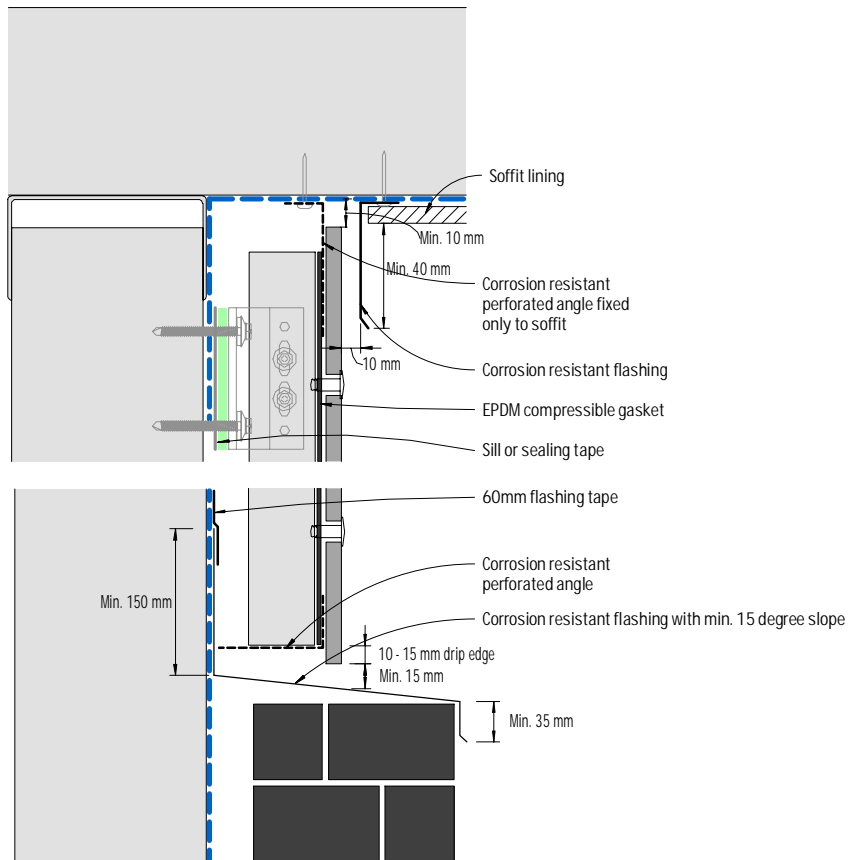


Figure 24: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

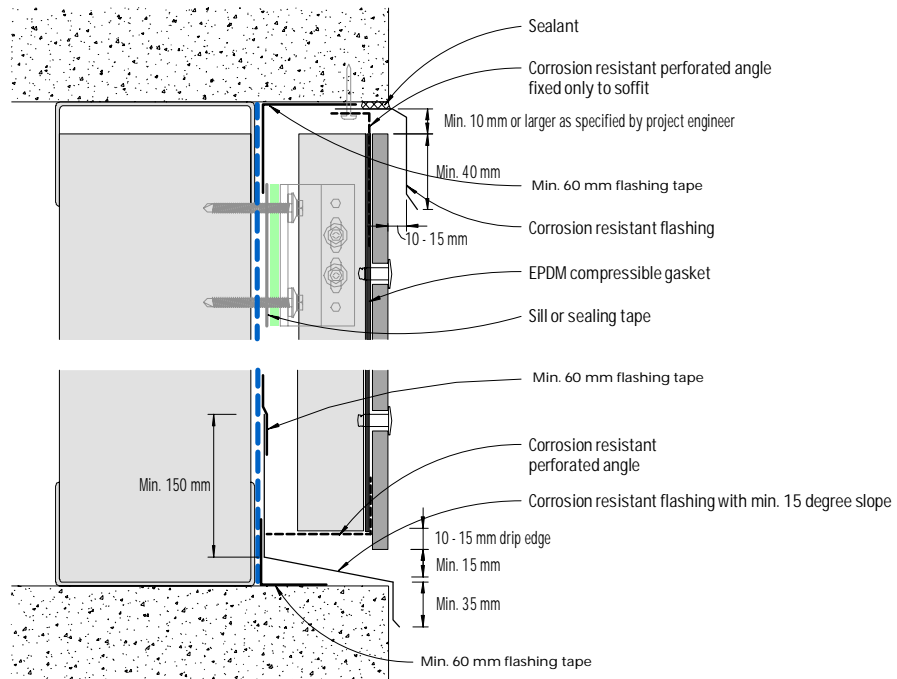


Figure 25: Exposed concrete slab or beam - Cladding flush

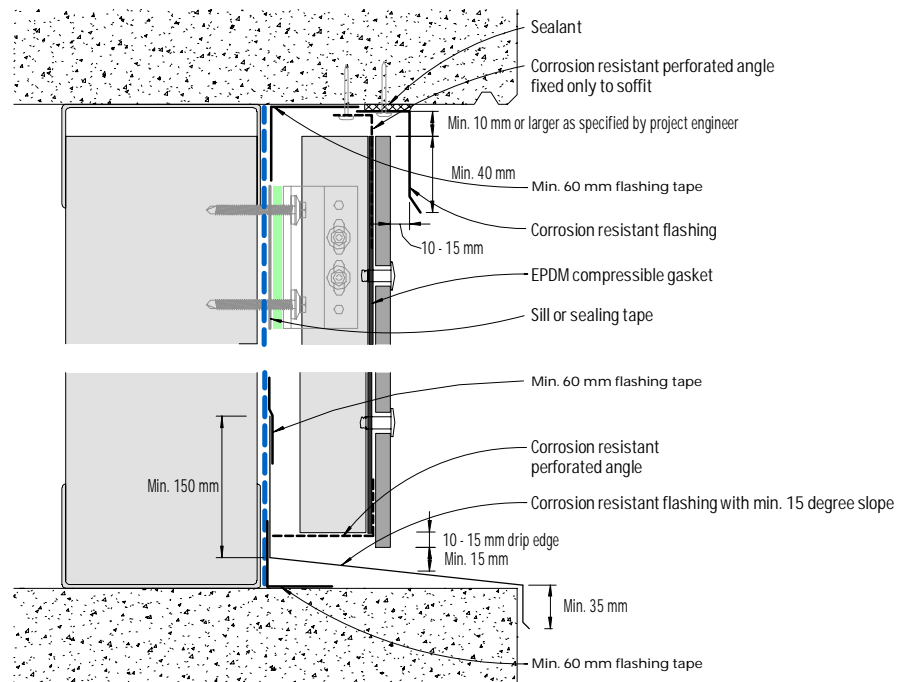


Figure 26: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Refer to Pro Clima's flashing tape application guide for any pre-treatment required on concrete or masonry for the application of the flashing tape onto these substrates.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

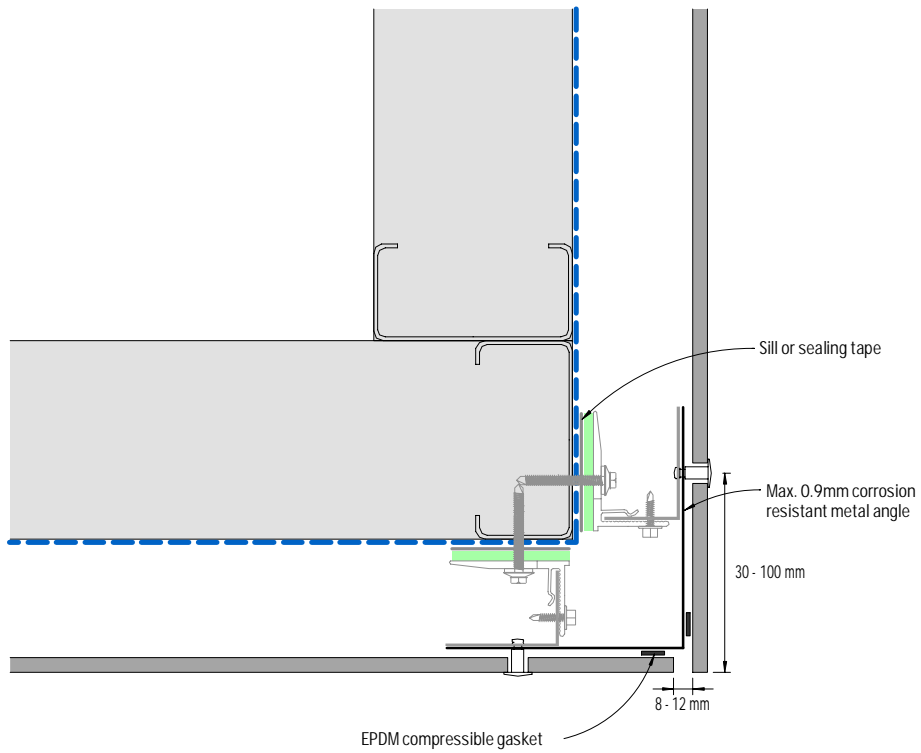


Figure 27: External corner - Detail 1

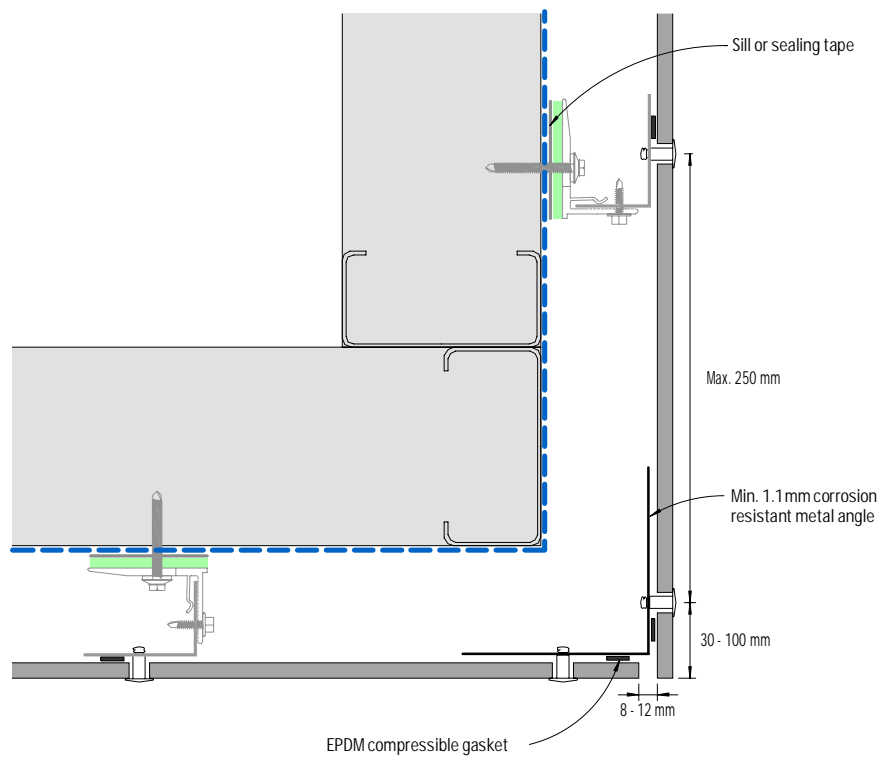


Figure 28: External corner - Detail 2

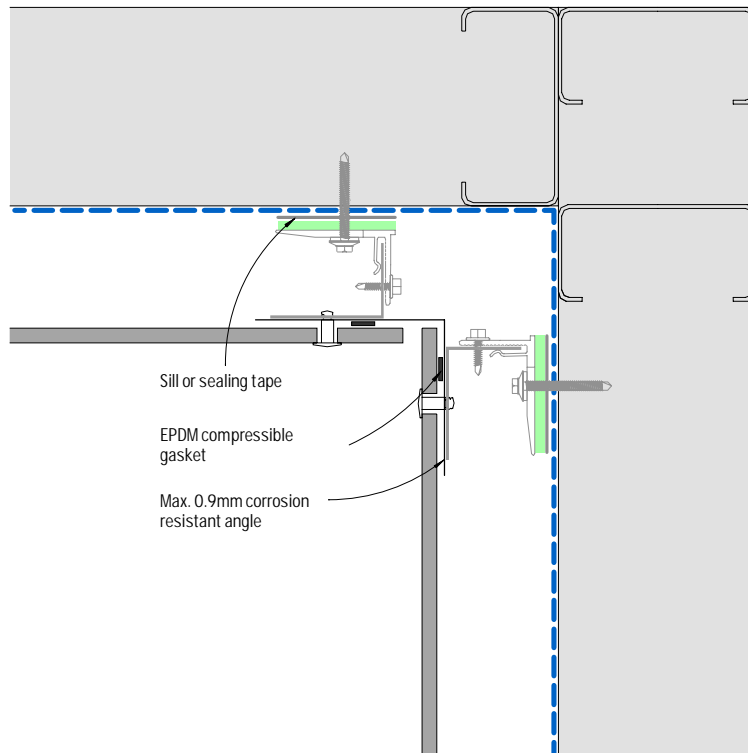


Figure 29: Internal corner

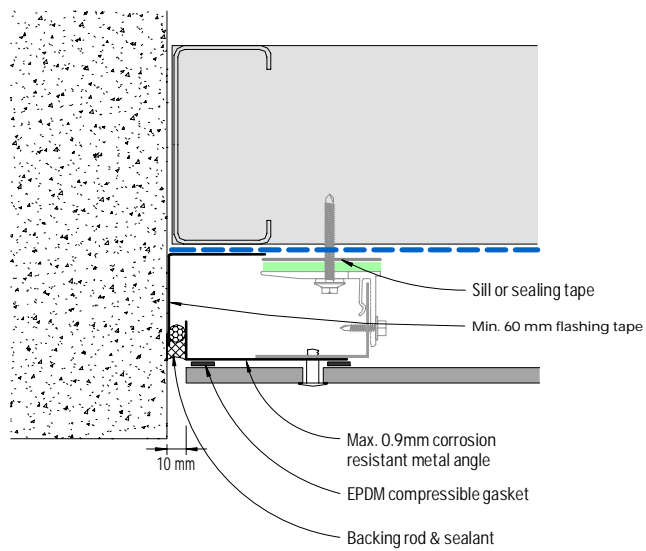


Figure 30: Abutment

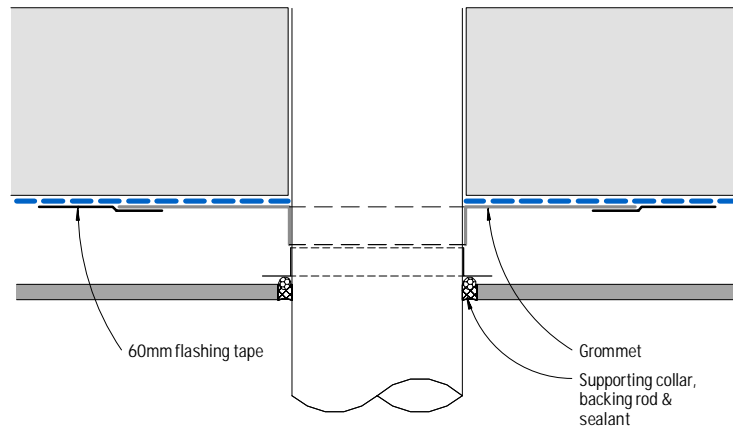


Figure 31: Pipe penetration - Plan view

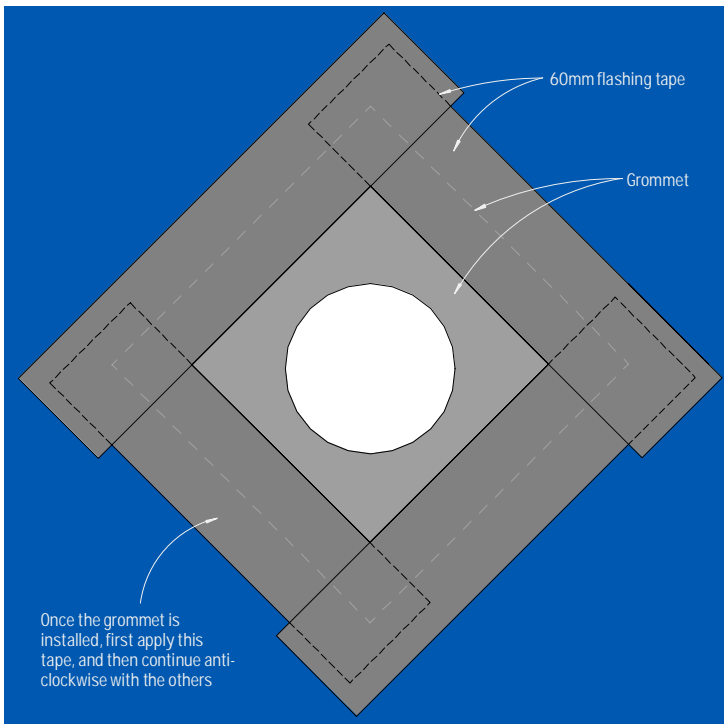


Figure 32: Pipe penetration - Elevation

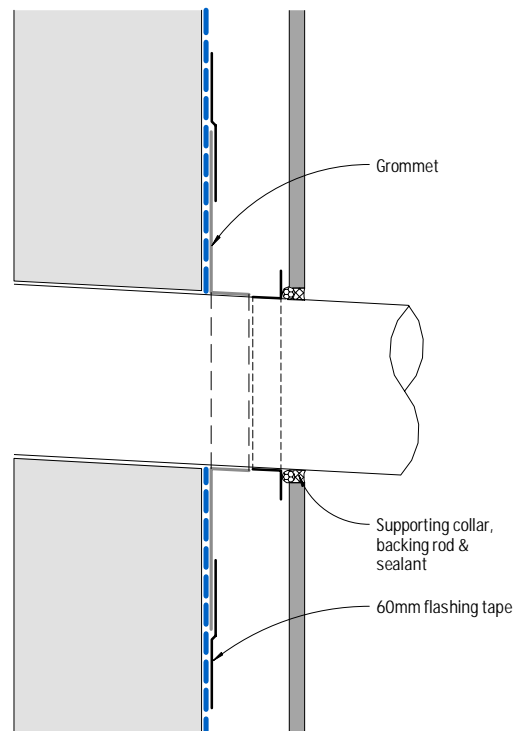


Figure 33: Pipe penetration - Section

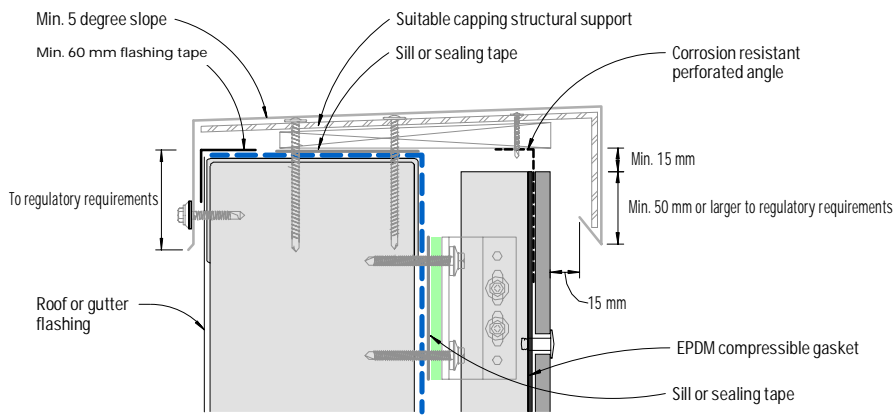


Figure 34: Capping - Detail 1

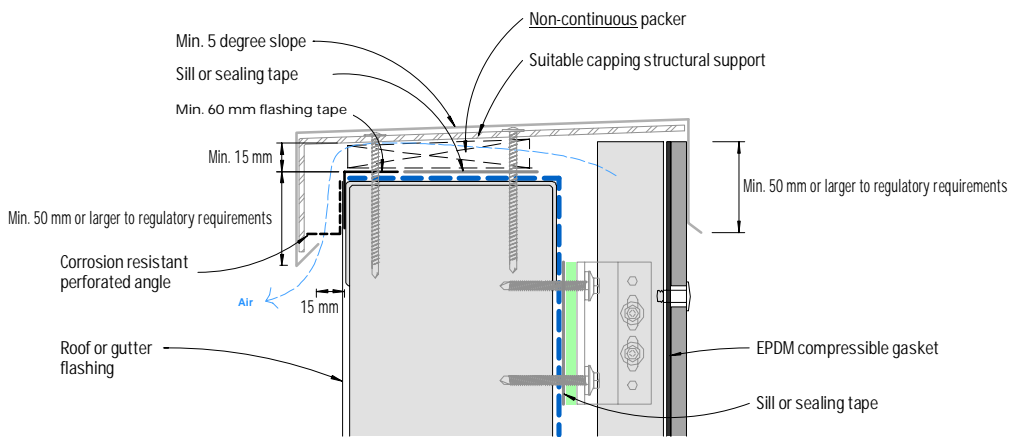


Figure 35: Capping - Detail 2
(Not suitable for EQUITONE [material])

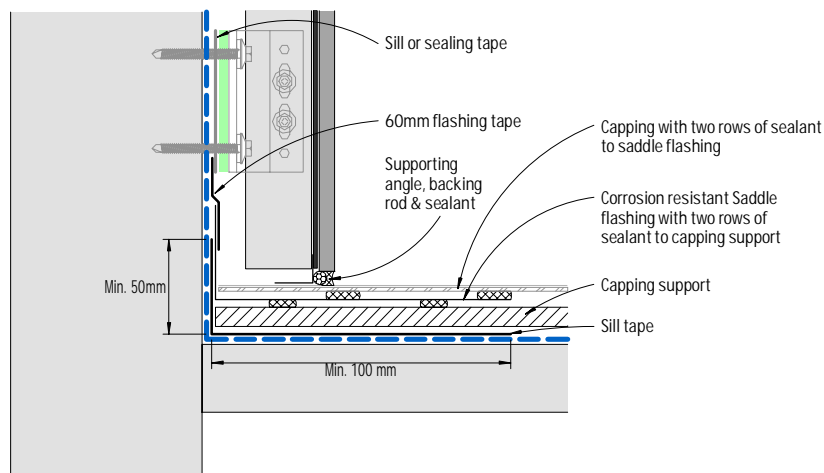


Figure 36: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 34 & 35.

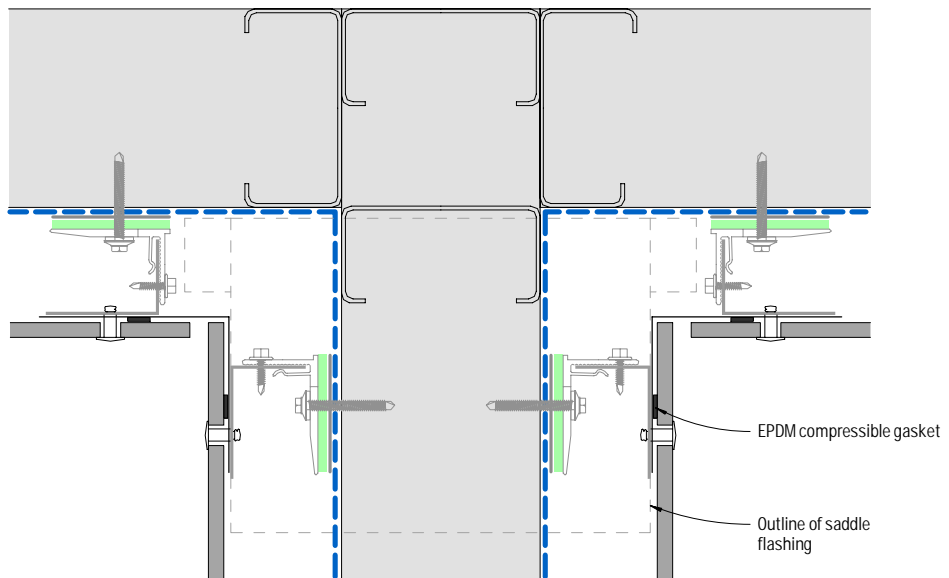


Figure 37: Parapet junction - Plan view

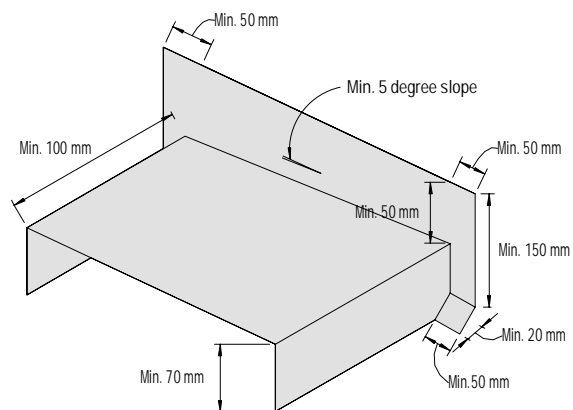


Figure 38: Corrosion resistant saddle flashing

EQUITONE facade system

with

pliable membrane

&

concealed fixing system



Components

| | |
|-----------------------------|--|
| Panel | EQUITONE façade materials |
| Panel fixings | Colour matched UNI Rivet proprietary fixing system for face fixing onto metal support frame |
| Support frame | NVELOPE NV3 concealed fixing system |
| Weather (resistive) barrier | pro clima SOLITEX EXTASANA® |
| Flashing tape | pro clima TESCON EXTORA® |
| Sill tape | pro clima TESCON EXTOSEAL® |
| Foil tape: | pro clima TESCON® ADHISO WS |
| Sealing tape: | pro clima TESCON® NAIDECK mono patch |
| Grommet | pro clima ROFLEX or KAFLEX |
| Expanding foam gasket | pro clima CONTEGA® FIDEN EXO (For minimum required size refer to pro clima's recommendations) |
| EPDM compressible gasket | Tesa 61104 (min. 9mm where a narrow tape is required, and min. 48mm on vertical joints where required) |

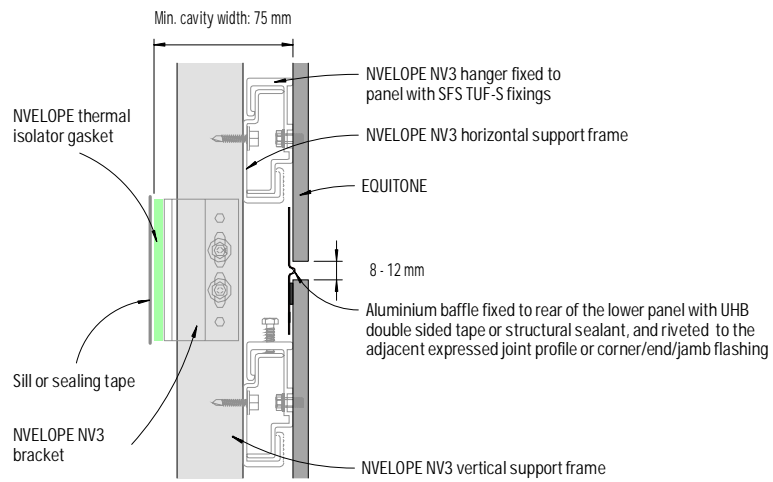


Figure 1: Baffled horizontal joint
(Not suitable for EQUITONE [material])

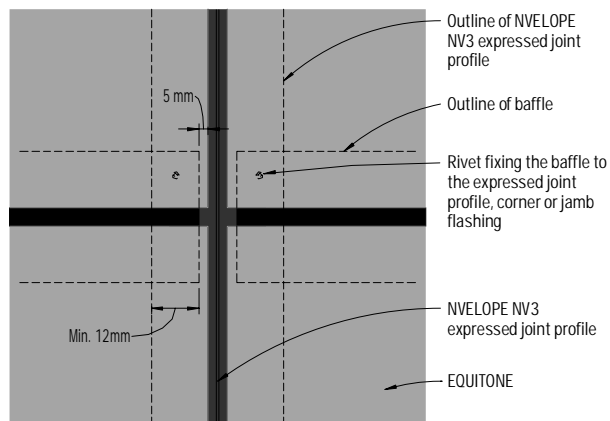


Figure 2: Baffled horizontal joint
junction with vertical joint - Elevation

Notes

- 1) The length of NVELOPE NV3 vertical and horizontal rail, and expressed joint profile must NOT exceed 3,150mm.

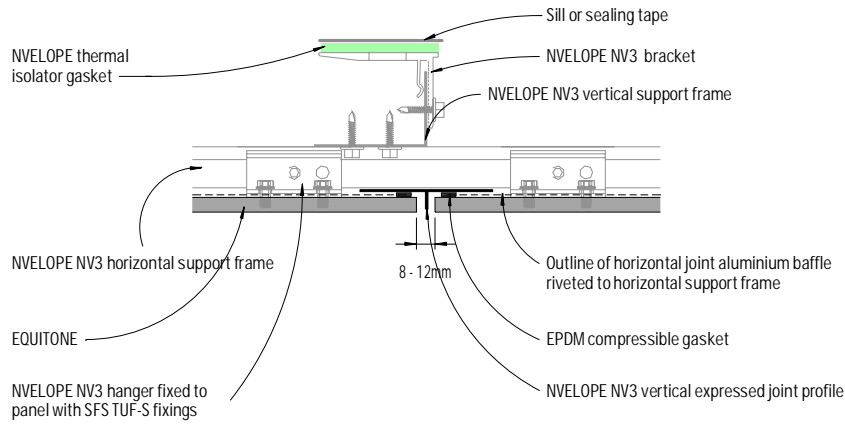


Figure 3: Vertical joint - Detail 1

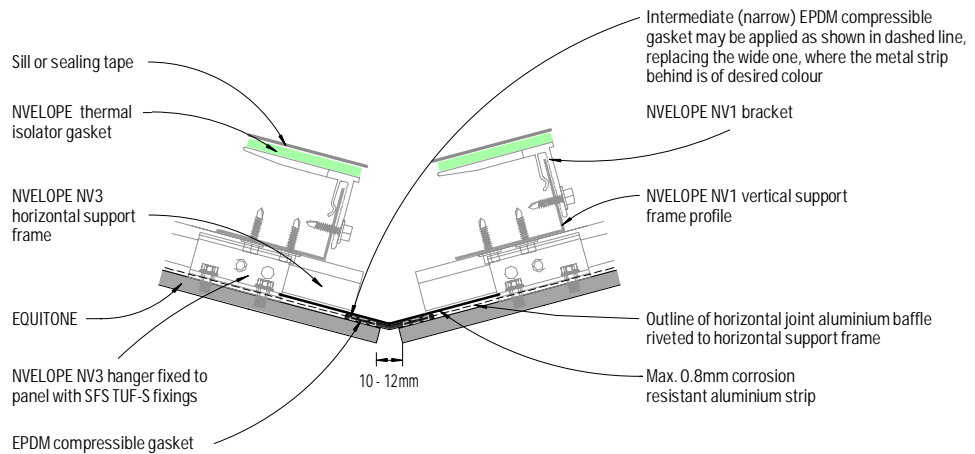


Figure 4: Vertical joint - Detail 2

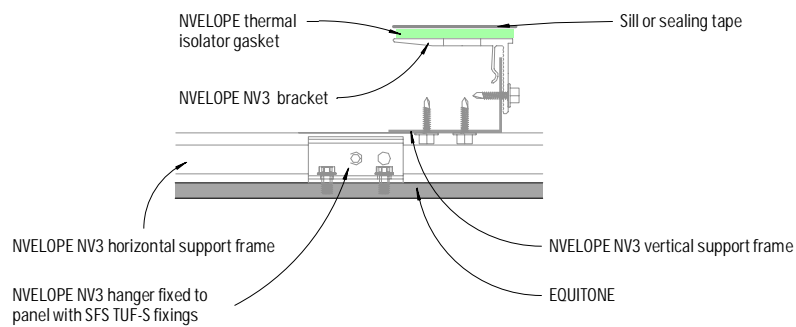


Figure 5: Intermediate panel fixings connection

Notes

- 1) The deflection of NVELOPE NV3 vertical expressed joint profile (as included in Figure 3) and any aluminium strip located at the vertical joint (as included in Figure 4) shall be limited to an extent ensuring the seal along the vertical joint is maintained with respect to project wind loading.
- 2) The aluminium strip should be fixed ONLY to one of the support frame profiles (either left or right) where allowance for horizontal and/or vertical movement of the cladding frame is required.
- 3) For EQUITONE [material] refer to EQUITONE construction details with Kalsi RigidBacker.

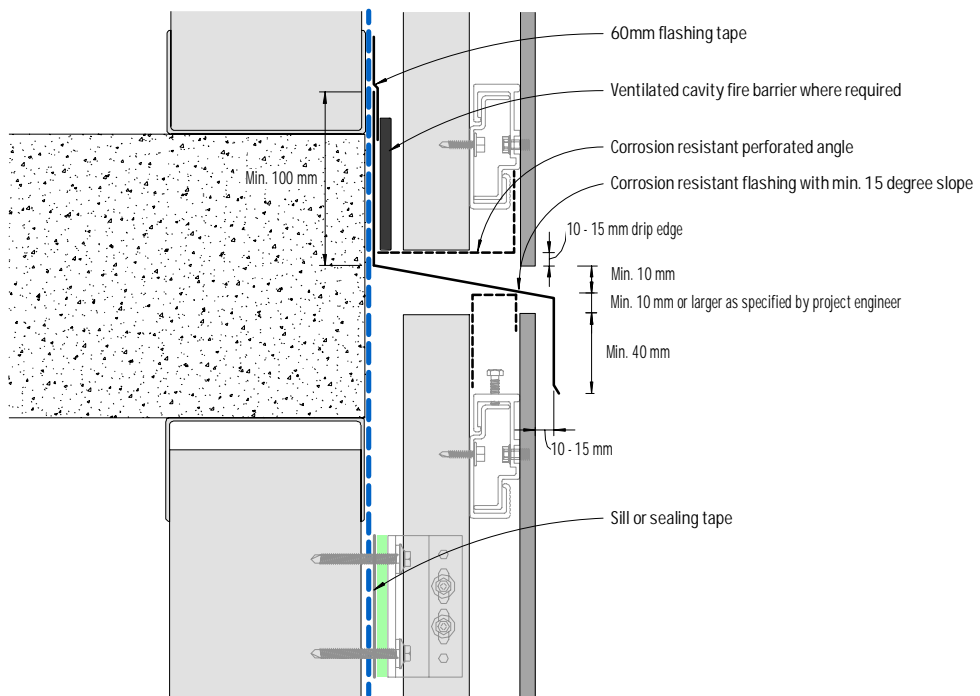


Figure 6: Horizontal control joint

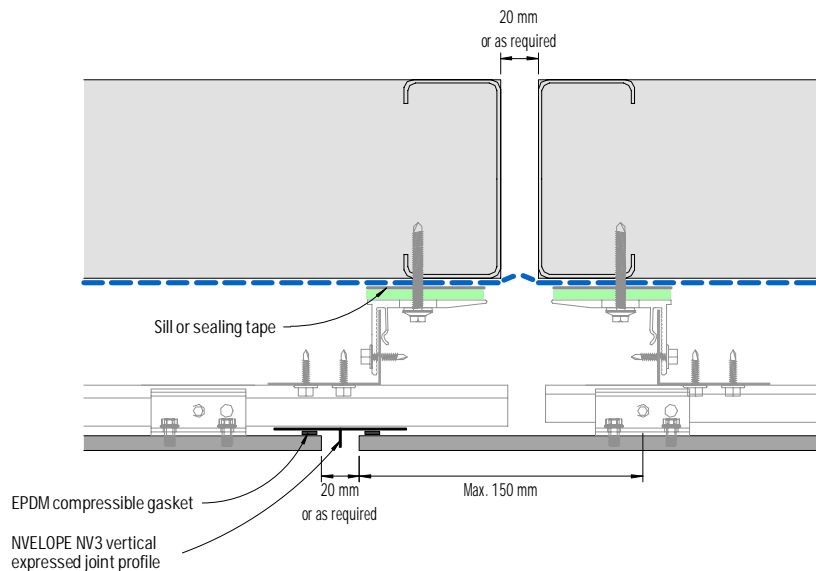


Figure 7: Vertical control joint

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) The deflection of NVELOPE NV3 vertical expressed joint profile shall be limited to an extent ensuring the seal along the vertical joint is maintained with respect to project wind loading.
- 3) Allowance for movement at the location of any control joint must be made in the cladding and its support frame design and installation. Panel must NOT be fixed bridging over any control joint.
- 4) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

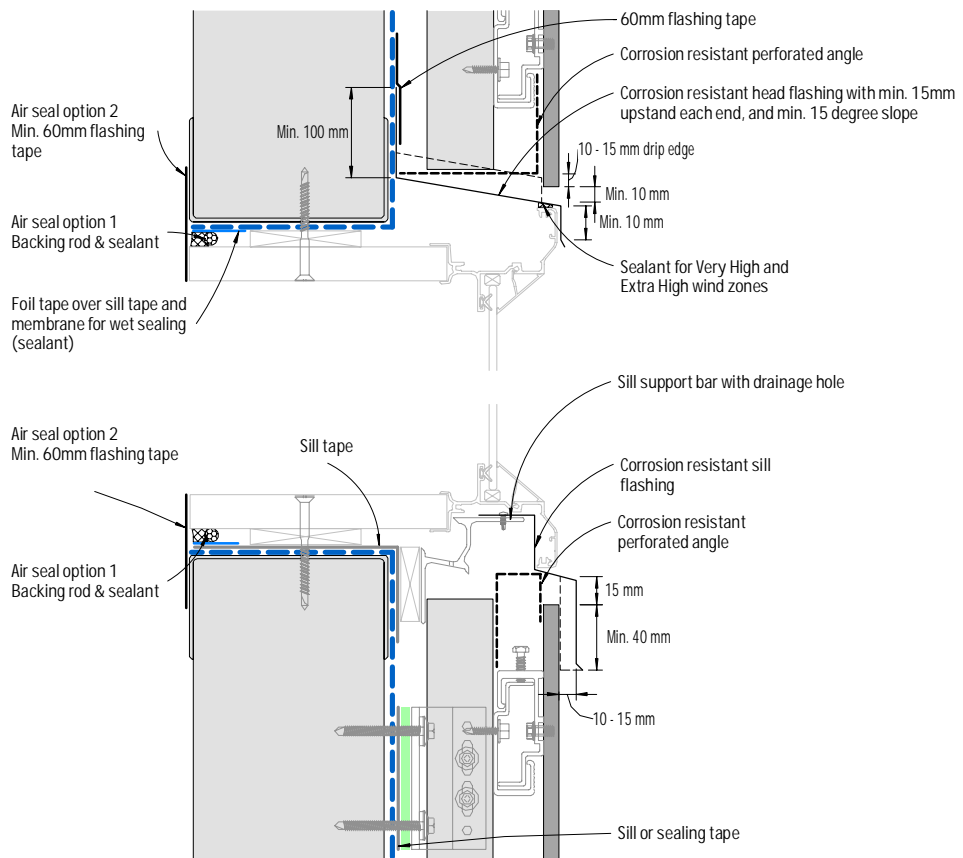


Figure 8: Flush window - Head and sill

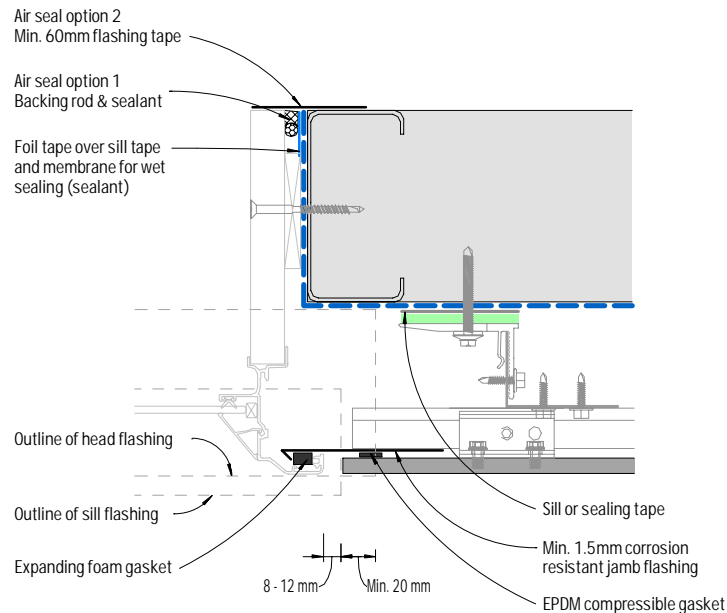


Figure 9: Flush window - Jamb

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

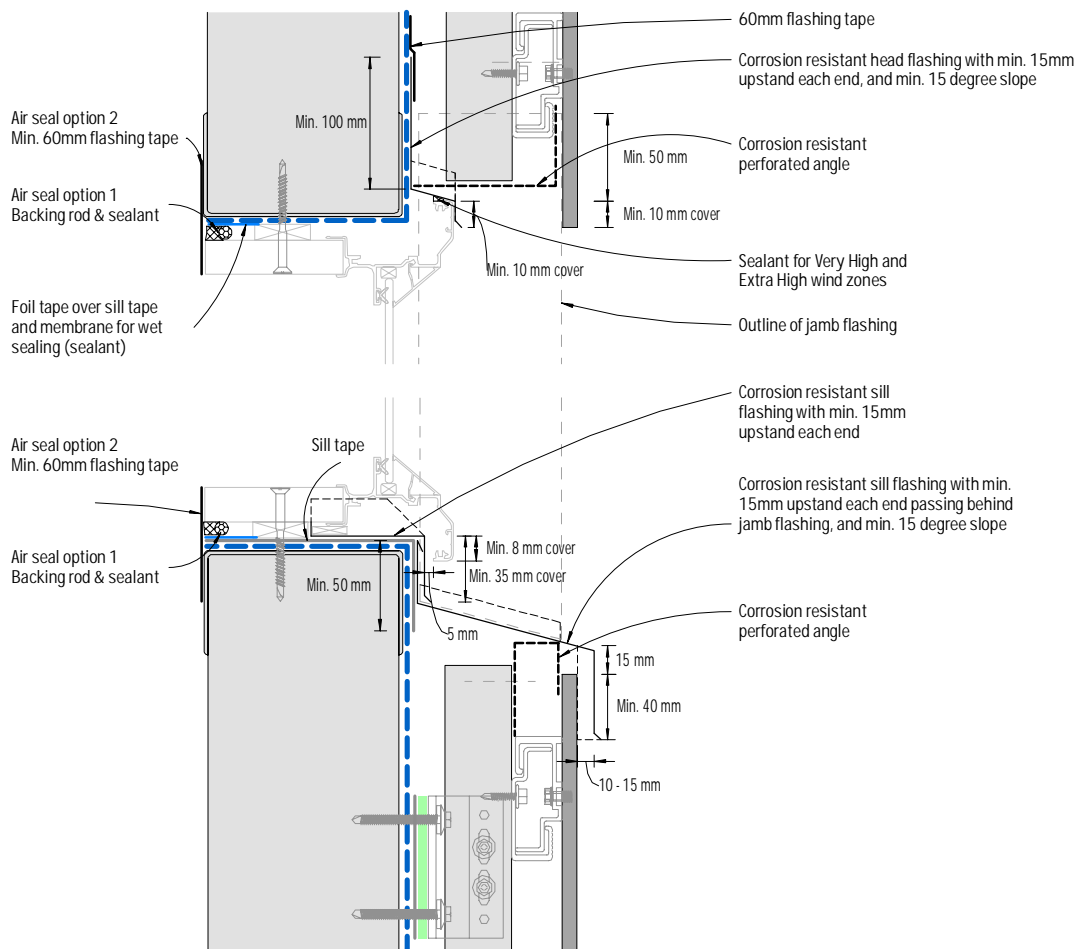


Figure 10: Recessed window - Head and sill

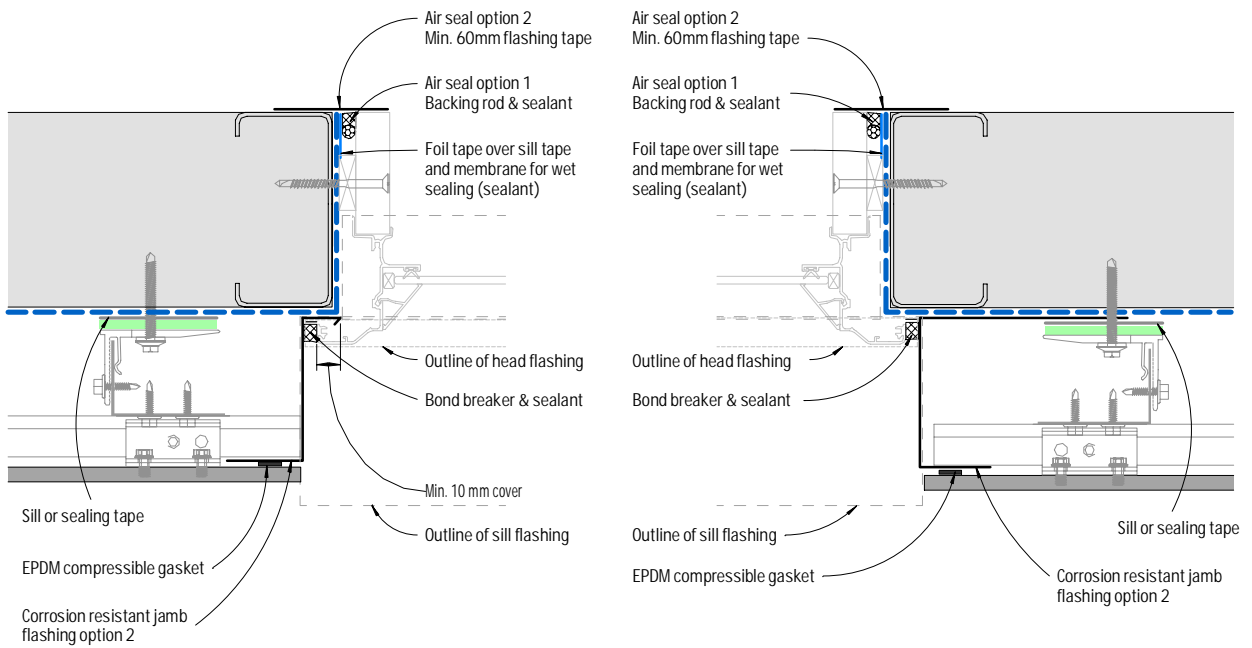


Figure 11: Flush window jamb - Option 1

Figure 12: Flush window jamb - Option 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

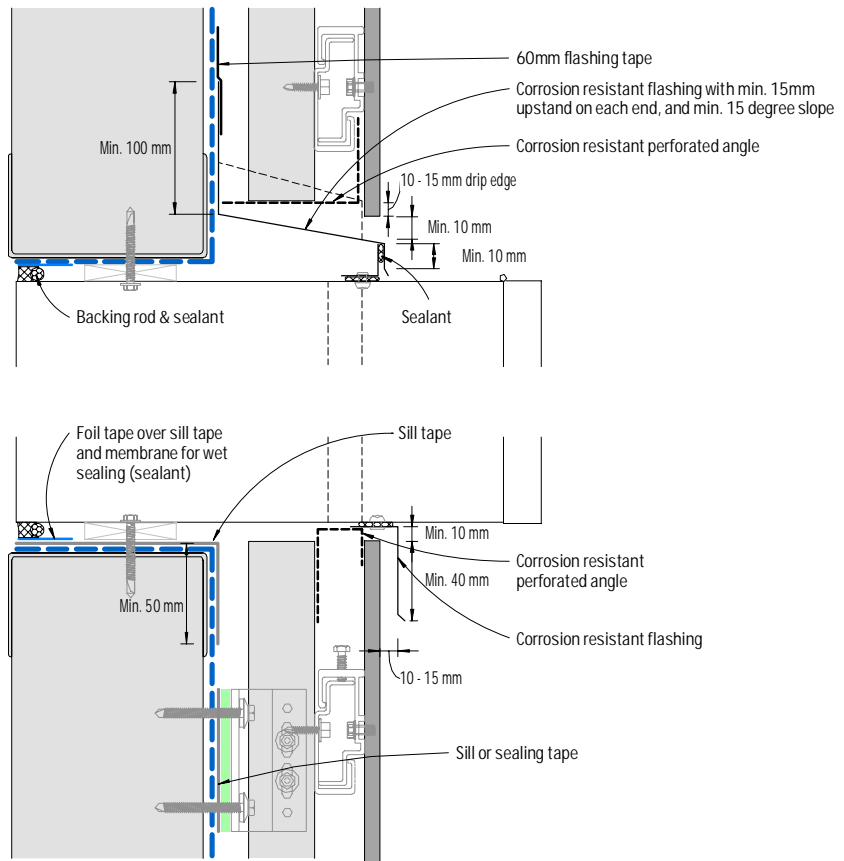


Figure 13: Meter box - Section

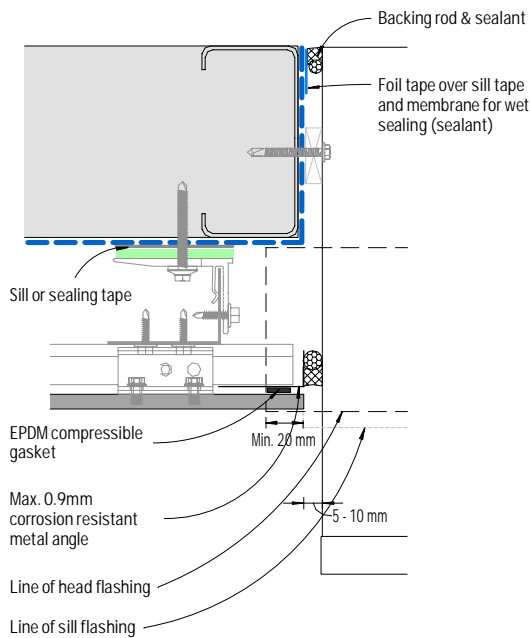


Figure 14: Meter box - Plan view - Detail 1

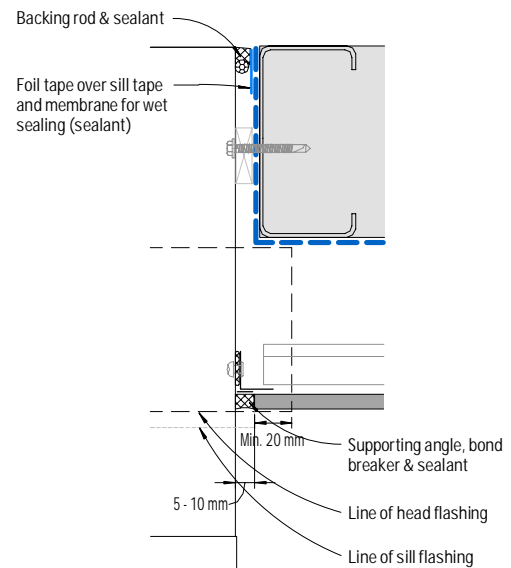


Figure 15: Meter box - Plan view - Detail 2

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

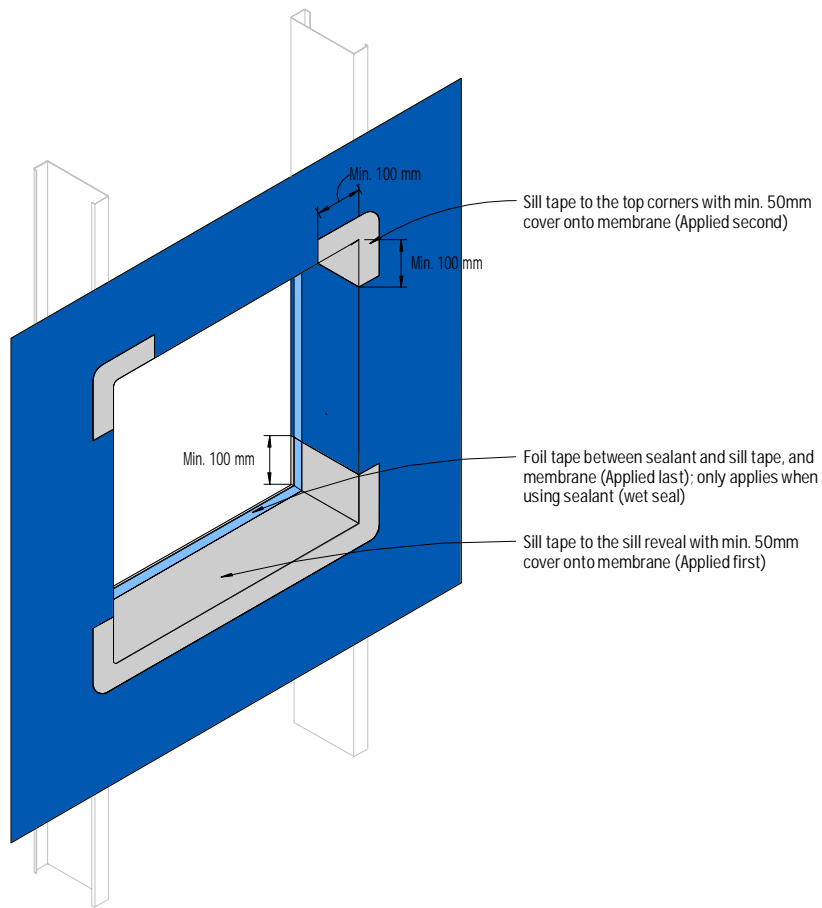


Figure 16: Isometric view of window/meter box opening - Tape application

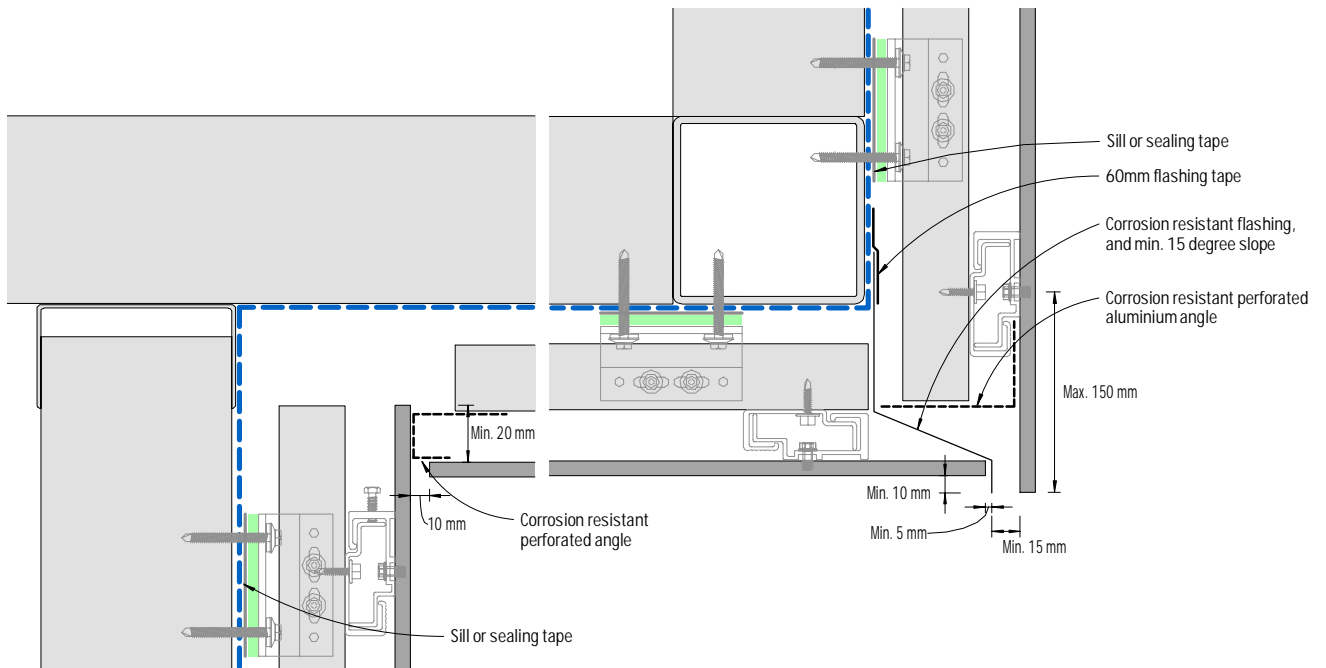


Figure 17: Soffit junction

Notes

- 1) ONLY sealant compatible with the foil tape should be used. Should any sealant be intended to be used directly on the flashing and/or sill tape it must be confirmed with its manufacturer to ensure compatibility with these tapes in accordance with the relevant standards.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

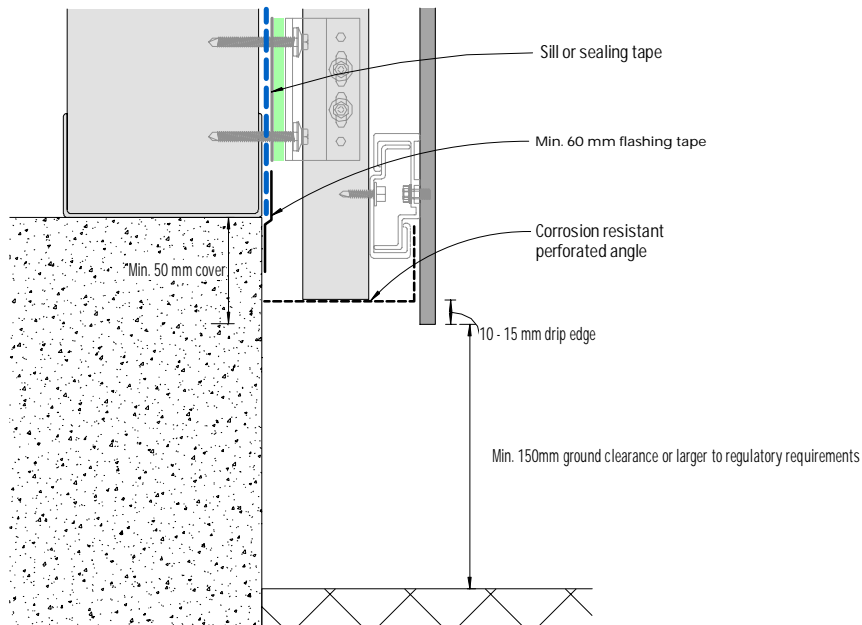


Figure 18: Base detail

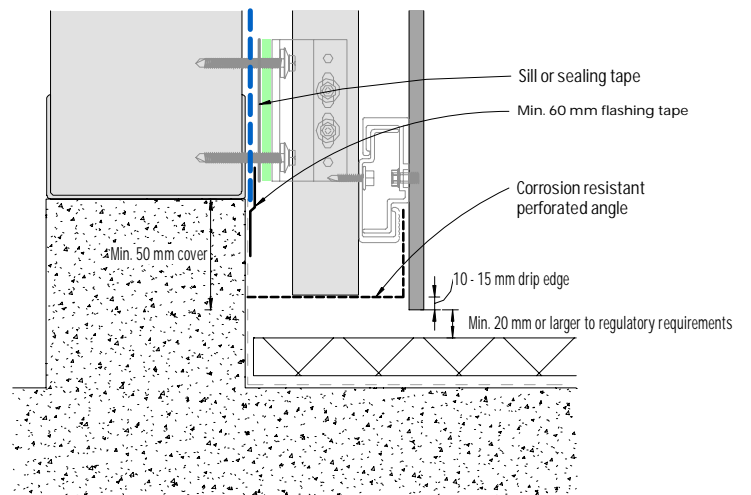


Figure 19: Base detail - Covered area

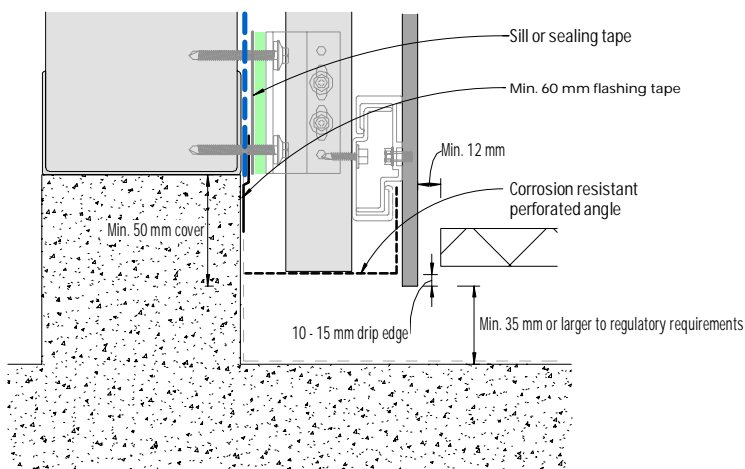


Figure 20: Base detail - Balcony

Notes

- 1) For **EQUITONE [material]**, minimum ground clearance is **300mm**.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

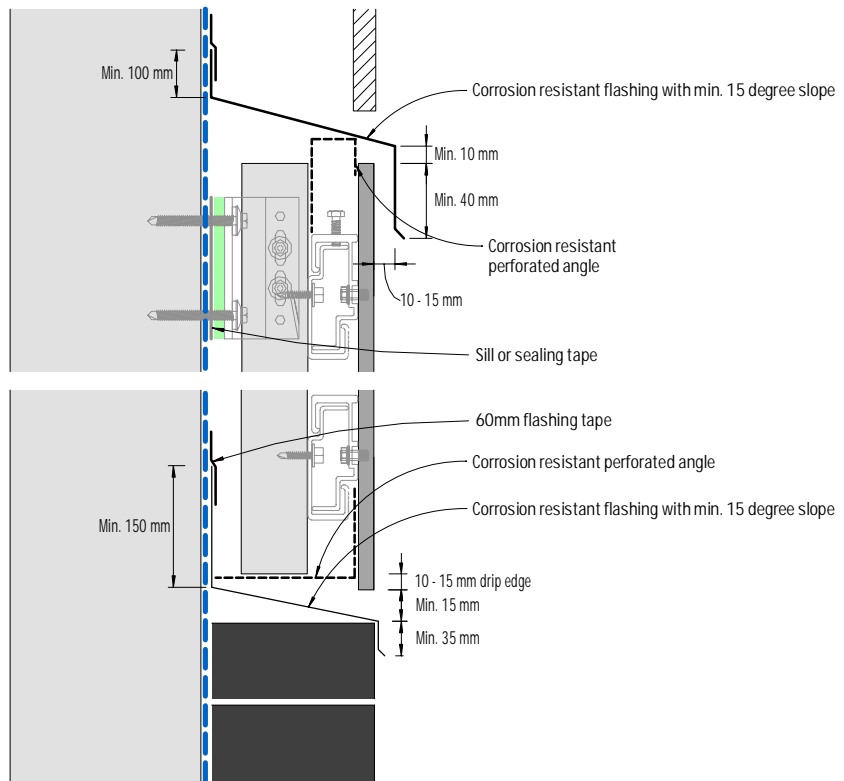


Figure 21: Junction with other materials - flush detail

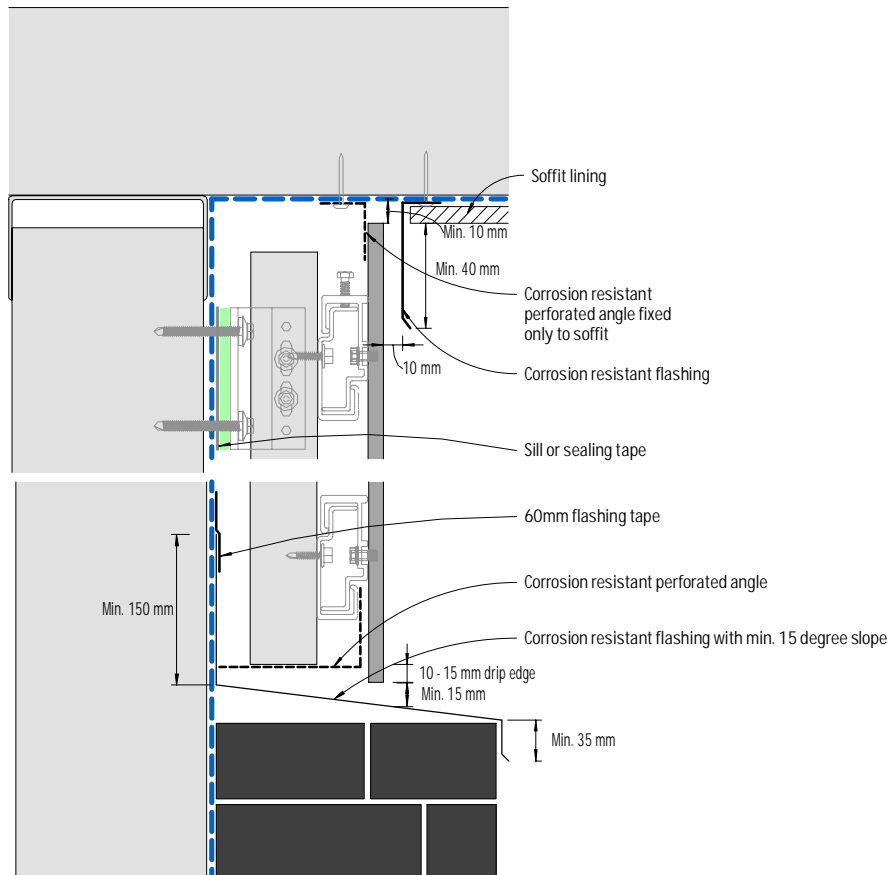


Figure 22: Junction with other materials, eaves or the like - recessed detail

Notes

- 1) Support frame profiles must NOT be fixed crossing over a control joint.
- 2) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

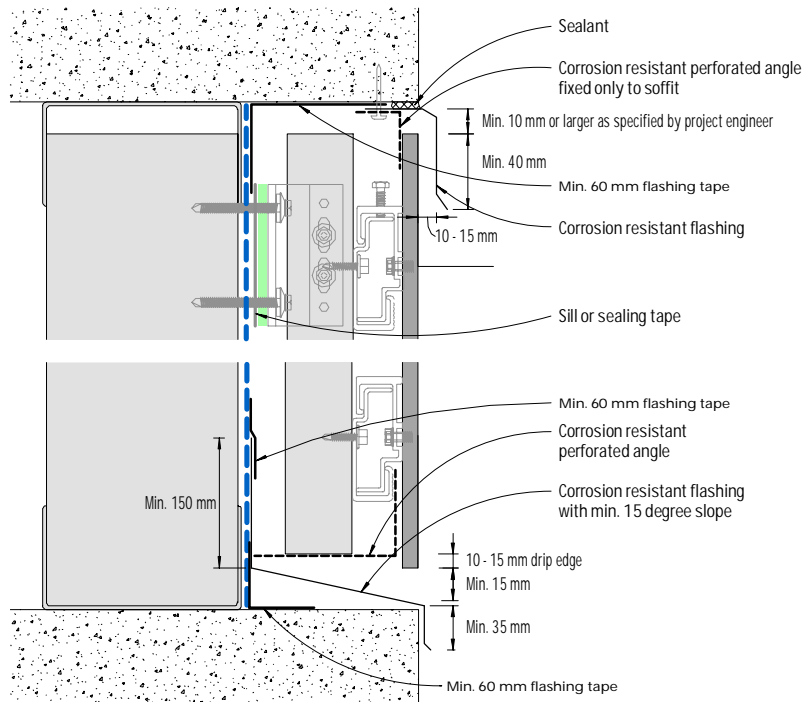


Figure 23: Exposed concrete slab or beam - Cladding flush

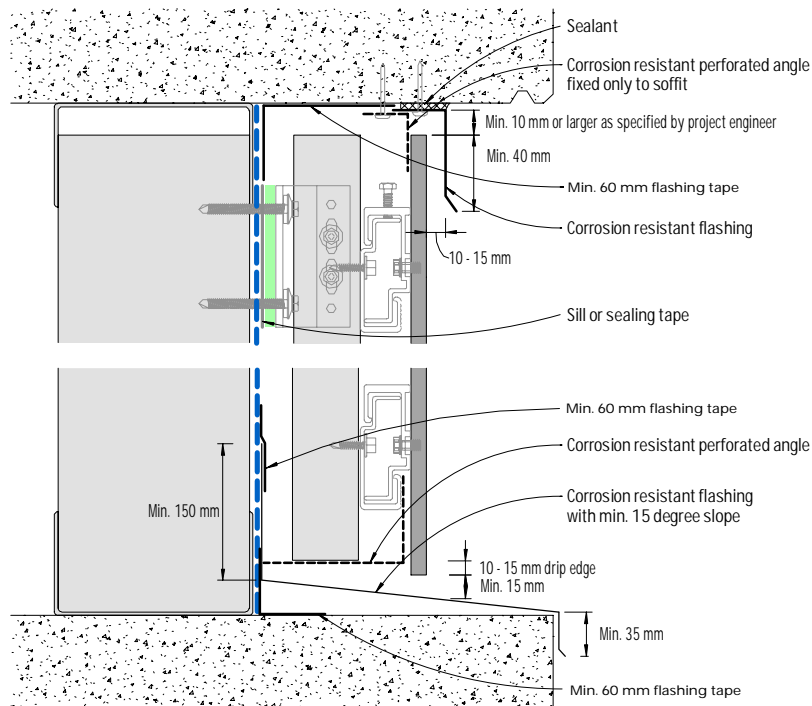


Figure 24: Exposed concrete slab or beam - Cladding recessed

Notes

- 1) Refer to Pro Clima's flashing tape application guide for any pre-treatment required on concrete or masonry for the application of the flashing tape onto these substrates.
- 2) Support frame profiles must NOT be fixed crossing over a control joint.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.

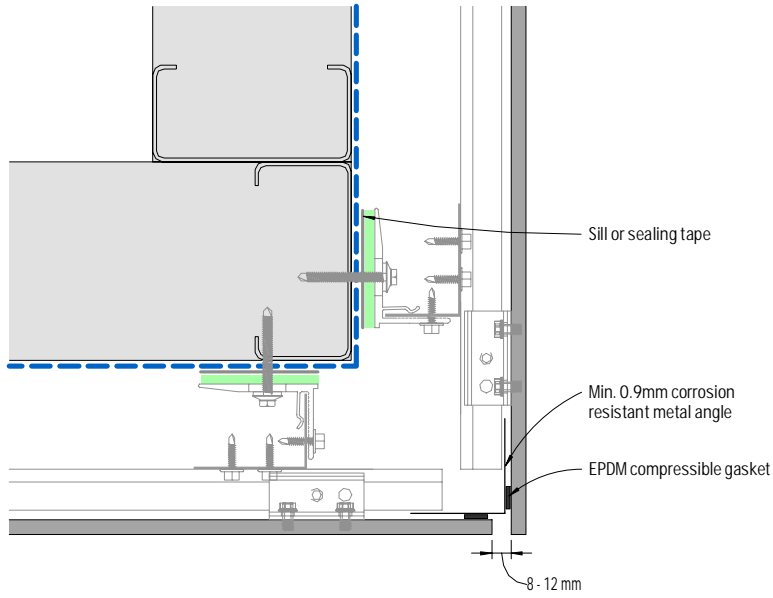


Figure 25: External corner

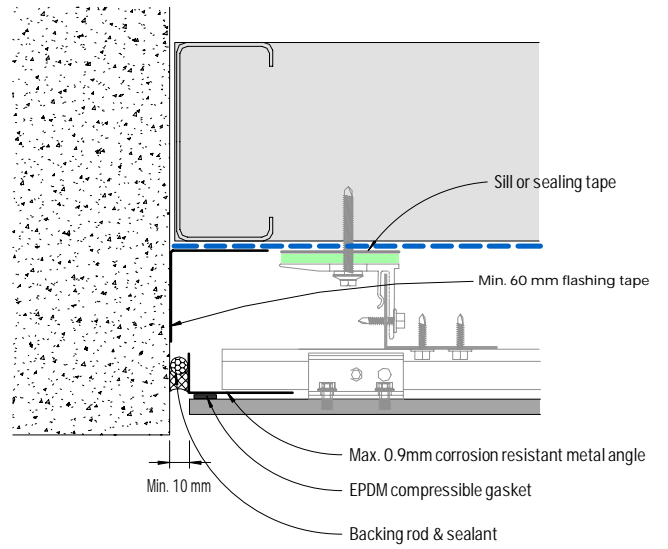


Figure 26: Abutment

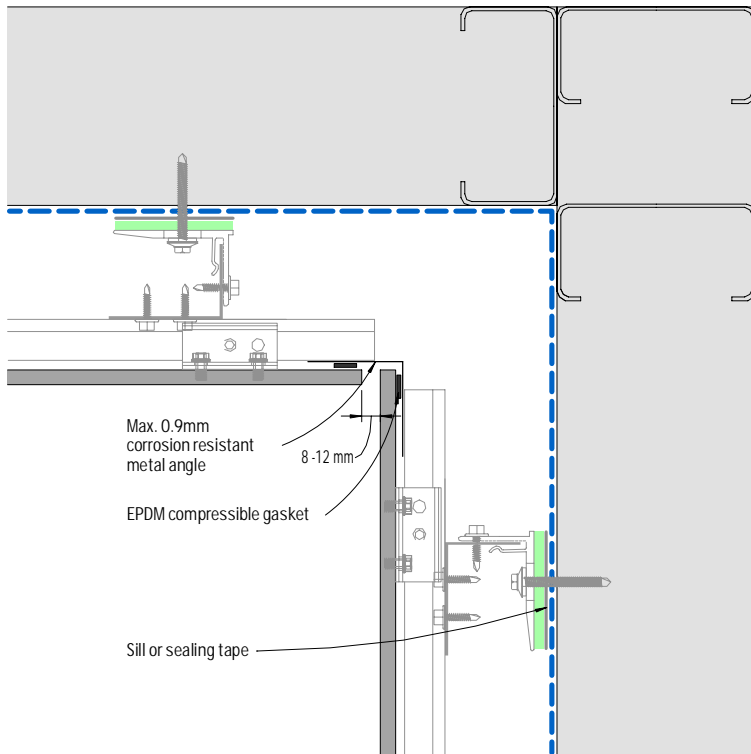


Figure 27: Internal corner

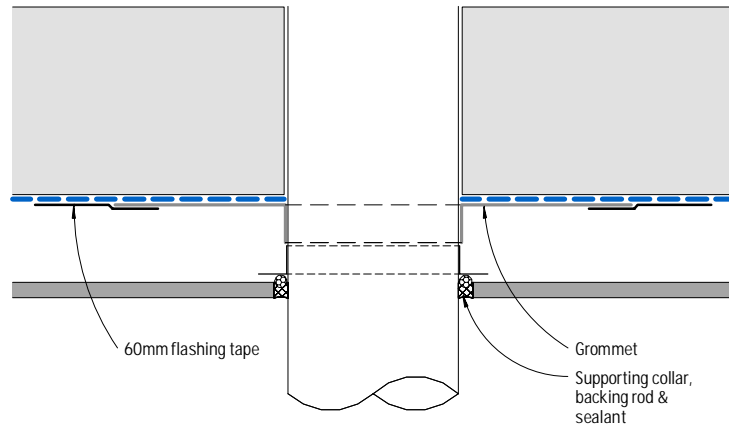


Figure 28: Pipe penetration - Plan view

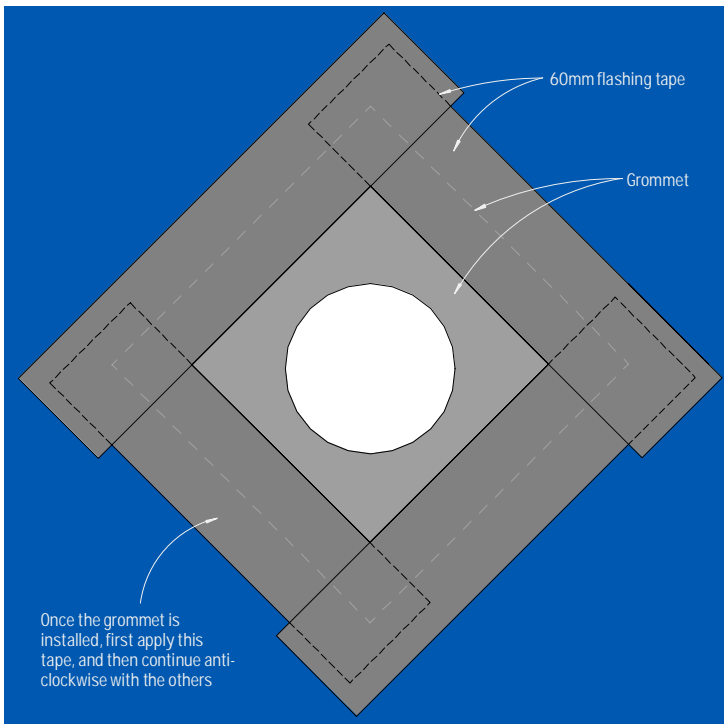


Figure 29: Pipe penetration - Elevation

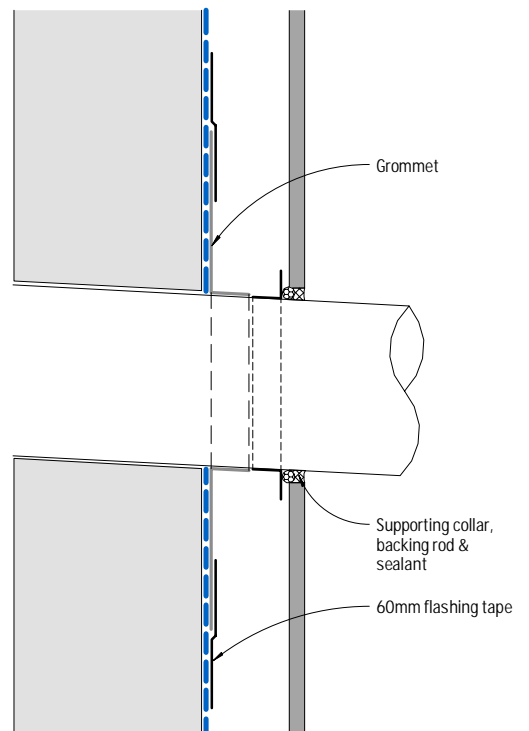


Figure 30: Pipe penetration - Section

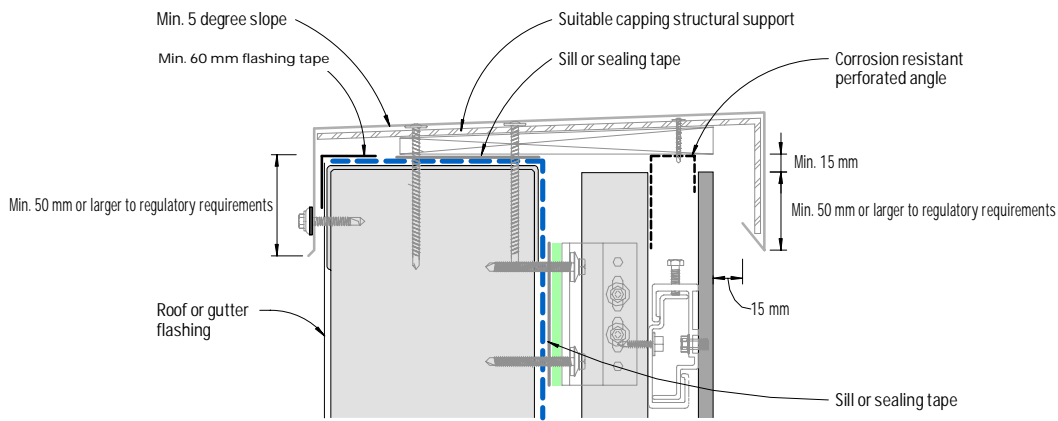


Figure 31: Capping - Detail 1

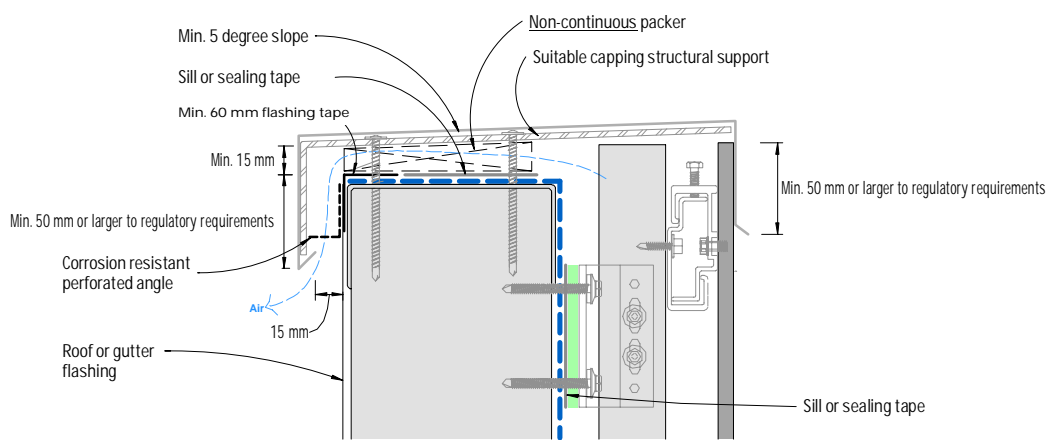


Figure 32: Capping - Detail 2
(Not suitable for EQUITONE [material])

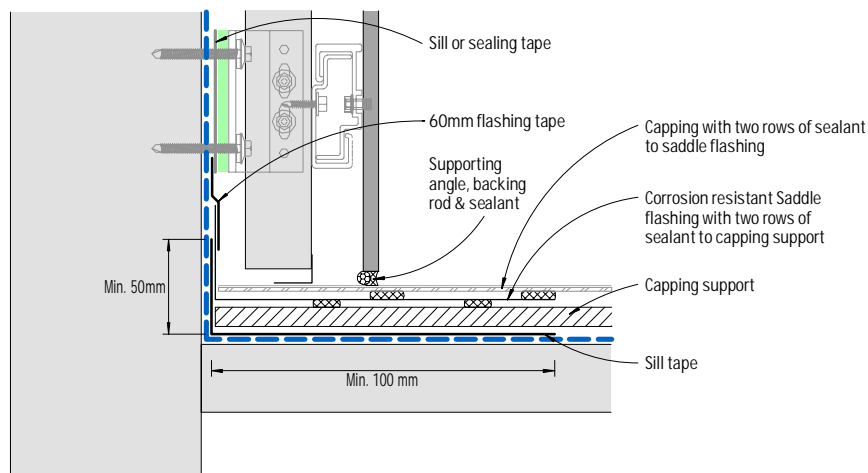


Figure 33: Parapet junction - Section

Notes

- 1) For EQUITONE [material], the following capping dimensions should be followed.
 - A minimum 20mm between panel face and rear of the capping
 - A minimum 50mm overlap with the panel for building up to 8m or larger to regulatory requirements.
 - A minimum 80mm overlap with the panel for building up to 20m or larger to regulatory requirements.
 - A minimum 100mm overlap with the panel for building over 20m or larger to regulatory requirements.
- 2) Any face fixings of capping shall be through an over sized hole (by min 5mm) in the capping as well as the panel.
- 3) Corrosion resistant perforated angle shall be of max. thickness of 0.9mm where located between panel and support frame, and be of min. 50% open area with max. aperture size of 3-5mm.
- 4) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 31 & 32.

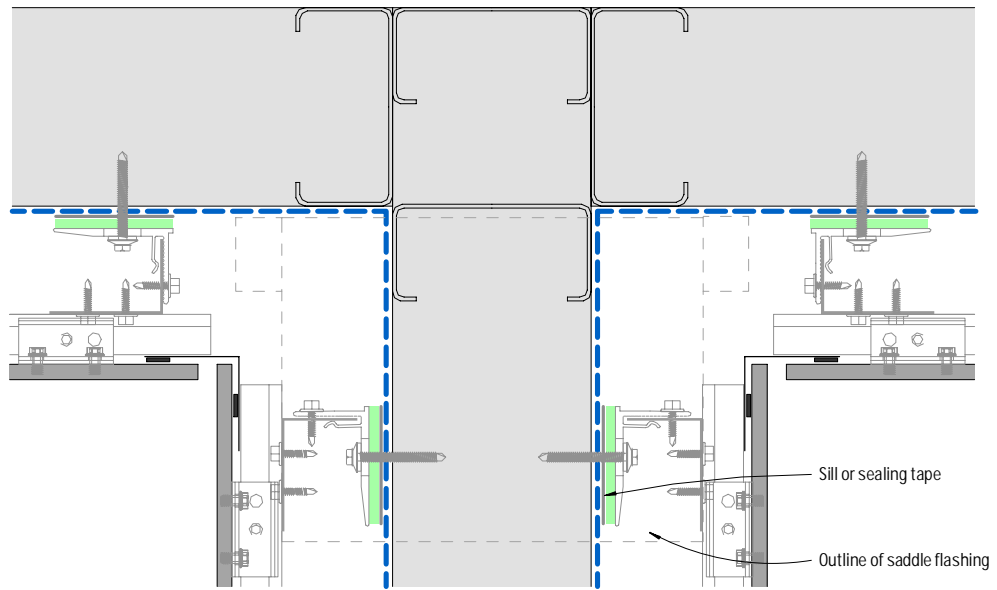


Figure 34: Parapet junction - Plan view

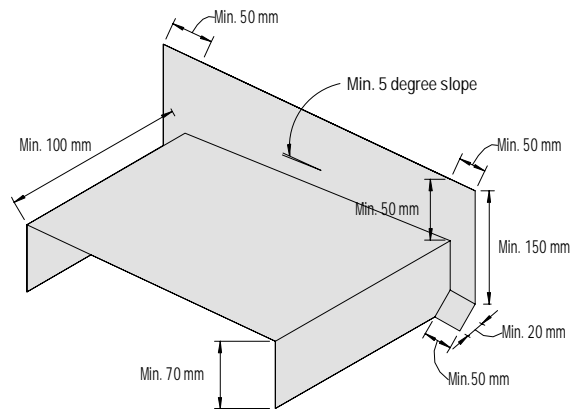


Figure 35: Corrosion resistant saddle flashing