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## General information

This document provides generic construction details for Cedral Click façade systems to assist with the design of Cedral Click façade.

Construction details in this document have been independently certified for the purpose of compliance with Clause E2, External moisture, of the New Zealand Building Code within the scope of E2/VM1.

The weatherproofing performance of any project specific detail or application that is different from or not included in the construction details of this document shall be evaluated by the project engineer or consultant.

It is the responsibility of the project designer, architect and engineer to ensure that the information and construction details provided in this document are appropriate for the intended application.

Cladding support frame and its connection to substructure shall be designed by the project engineer in accordance with the relevant standards. The support frame maximum deflection under the influence of load shall be limited to Span/250.

The support frame, fixings, flashings and the like shall be of adequate corrosion resistance appropriate to the corrosivity category of the project location.

Non-proprietary flashings and capping shall be designed with respect to project wind loading, relevant standards and regulations.

This document is not designed to serve as an installation guide, and is intended to be used in conjunction with other relevant technical and installation documents.

Construction details contained in this document are not to a specific scale, and are for illustration purposes only.

The information in this document is correct at the time of issuing. However, due to our committed program of continuous material and system development we reserve the right to amend or alter the information contained therein without prior notice. Please contact your local Cedral sales organisation to ensure you have the most current version.

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## Ventilated facade

Cedral Lap and Click are designed for a ventilated façade system.

A ventilated façade is a kind of two stage construction, an inner structure with a protective outer skin, and the cladding panel or rainscreen. A ventilated façade consists of an insulated and weathertight structure, a ventilated cavity formed with a cladding support frame, and the cladding panel.

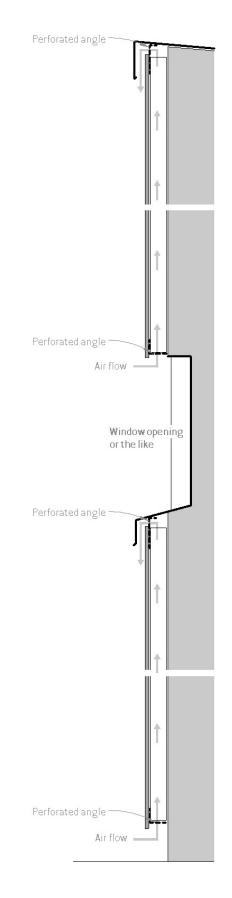
Allowance for adequate ventilation is paramount in ensuring a successful Cedral façade. Ventilated façades provide a number of added benefits to the building and its occupants. These may include but are not limited to the following:

- · Positive contribution to energy savings
- · Minimises thermal bridges
- · Assists with condensation management
- Reduces thermal movement of the structure and cladding support frame
- Dissipates radiant heat
- · Increases acoustic performance of the external wall
- Provides an effective drainage path for any moisture passing the cladding skin
- Eliminates the need for exposed caulking and sealant, therefore reducing maintenance requirements
- · Assists with keeping the weather barrier dry and healthy
- Provides opportunities for concealing external services such as downpipes within the cavity
- · Proven to be a more sustainable and healthier façade construction
- · Architectural design freedom

Air must be allowed to enter the cavity from bottom of the façade, window head, soffit, slab junctions, and the like, and exit from top of the façade, capping, window sill, slab and soffit interfaces, and the like.

All air inlets and outlets shall be protected against entry of birds and vermin into the cavity with a corrosion resistant perforated profile (angle).

The perforated angle should be of maximum 0.9mm in thickness, where placed between the cladding panel and support frame, and be of a minimum 50% open area with aperture size of maximum 3mm to 5mm. The perforations must be kept open and unobstructed to maintain drainage and ventilation of the cavity. The perforated angle shall be positioned to allow an adequate drip edge to the cladding panel.







CEDRAL CLICK

CEDRAL CLICK SMOOTH

Cedral Click is supplied in a range of 22 factory applied colours and two wood stain finishes, providing an aesthetic option to suit most project requirements. Refer to <u>https://www.cedral.world/en-nz/cladding/</u> for all available colours and finishes. Bespoke colours are subject to minimum order quantities and extended lead times.

#### **CEDRAL CLICK** profiles

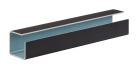
**Starter profile** For Cedral Click vertical

**External corner profile** 





External corner junction (connector) profile



### Internal corner profile

### **End profile**

### Lintel profile

**EPDM strip** 0,75mm flat EPDM strip 100mm wide.

Applied on timber cavity battens for moisture protection as specified on the construction details

#### **EPDM compressible gasket** Tesa<sup>®</sup> 61102

A compressible closed-cell EPDM gasket used for sealing interfaces with flashings and the like Minimum width: 9mm









#### Expanding foam gasket

pro clima CONTEGA® FIDEN EXO

A pre-compressed sealing tape used to seal interfaces with window joineries and the like as specified on the construction details.

The required tape size depends on the gap which needs to be sealed. Refer to pro clima CONTEGA® FIDEN EXO datasheet to determine the required tape size.

## Weather resistive barrier option 1

pro clima SOLITEX EXTASANA®

Cedral façade systems have been certified with pro clima SOLITEX EXTASANA® to E2/VM1 for the purpose of compliance with Clause E2 of the NZBC for the following scope:

- · Serviceability wind pressure: Up to ±1515Pa
- Ultimate wind pressure: Up to  $\pm 2500$ Pa
- Building height: Up to 10m

pro clima SOLITEX EXTASANA® shall be applied in accordance with pro clima SOLITEX EXTASANA® installation guidelines and relevant standards.

### Weather resistive barrier option 2

pro clima SOLITEX EXTASANA® AHERO

Where a rigid air barrier is required the ADHERO version of pro clima SOLITEX EXTASANA® may be used with 6mm Kalsi (RigidBacker) fibre cement sheeting. pro clima SOLITEX EXTASANA® AHERO and Kalsi shall be applied in accordance with their respective installation guidelines and recommendations. Same wind pressure and building height limits as those of Option 1 apply unless otherwise specified by project engineer.

Flashing tape pro clima TESCON EXTORA®

A pressure sensitive adhesive tape for overlaps and end laps used with both weather resistive barrier options.

Sill tape pro clima TESCON EXTOSEAL<sup>®</sup>

A flexible tape for use around window and door openings, used with both weather resistive barrier options.











Sealing tape pro clima TESCON<sup>®</sup> NAIDECK mono patch

A single-sided adhesive nail or screw sealing adhesive used with both weather resistive barrier options.

Foil tape pro clima TESCON<sup>®</sup> ADHISO WS

A pure aluminium tape for wet seal connections to TESCON EXTOSEAL® and EXTORA® and SOLITEX EXTASANA®.

**Grommet** pro clima ROFLEX and KALFEX

pro clima ROFLEX is used to seal pipe and pro clima KAFLEX for cable penetrations. pro clima ROFLEX and KALFEX are used with both weather resistive barrier options.









## Cedral Click Vertical With Timber Batten Construction



## Fixings and support frame

## **CEDRAL CLICK Vertical with timber batten** construction

Cedral Click may be fixed vertically to horizontal timber battens.

#### Fixings

Cedral Click stainless steel (304) clip and screw

Cedral Click colour matched mushroom head screw for fixing Cedral Click to timber batten where fixings are visible (4.8 x 38 mm, head diameter ~12 mm, TORX T20, stainless steel 304)





#### Support frame

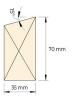
Cedral Click may be fixed vertically to horizontal timber battens with minimum depth of 35mm and width of 70mm ( $35 \times 70 \text{ mm}$ ) chamfered at the top with 15-degree slope. Suitable vertical 45x20mm cavity battens are used behind the horizontal chamfered battens to form a 20mm gap between weather barrier and the horizontal battens for ventilation and drainage purposes.

Timber battens shall be of minimum preservative treatment of H3.1, and of minimum structural grade of SG6 as per the relevant standards.

Maximum deflection of support framing must be limited to Span/250. Structure and support frame shall be designed to relevant standards including, but not limited to, the following:

- · AS/NZS 4600 Cold-formed steel structures
- NZS 3404 Steel structures
- NZS 3604 Timber framed buildings





## Construction details

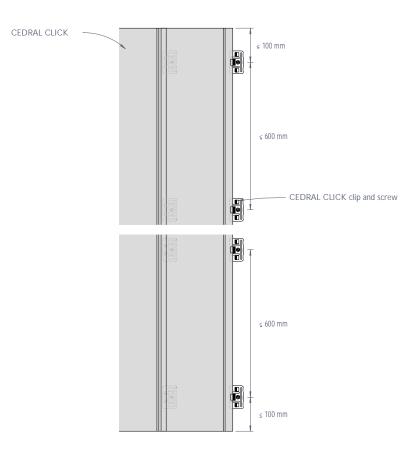


Figure 1: CEDRAL CLICK fixings arrangement - Elevation

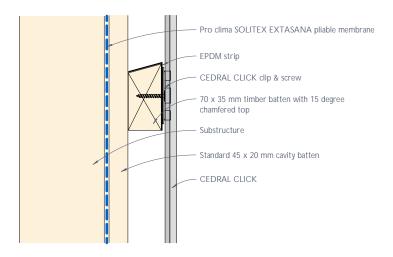
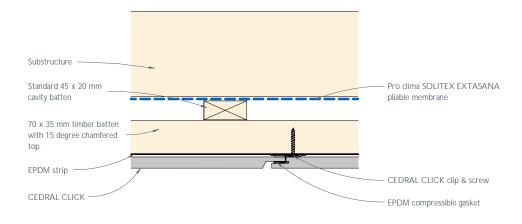


Figure 2: CEDRAL CLICK typical vertical section





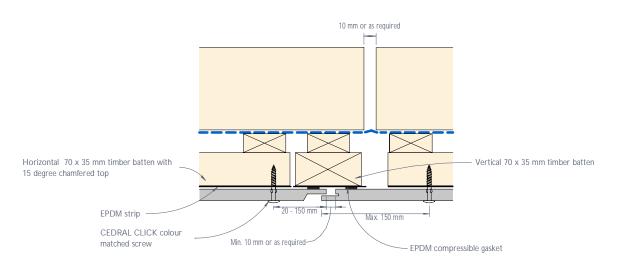


Figure 4: CEDRAL CLICK vertical control joint - Detail 1

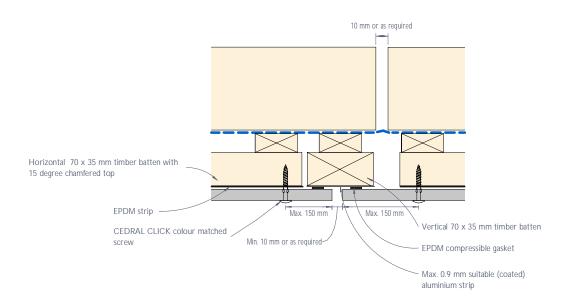


Figure 5: CEDRAL CLICK vertical control joint - Detail 2

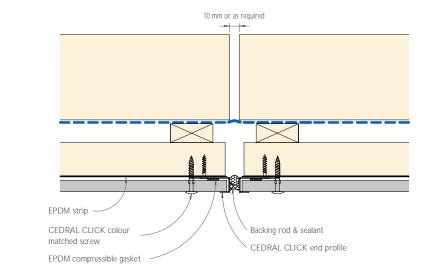


Figure 6: CEDRAL CLICK vertical control joint - Detail 3

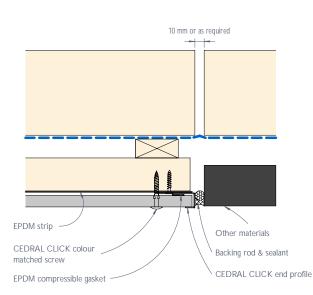


Figure 7: CEDRAL CLICK vertical control joint - Detail 4

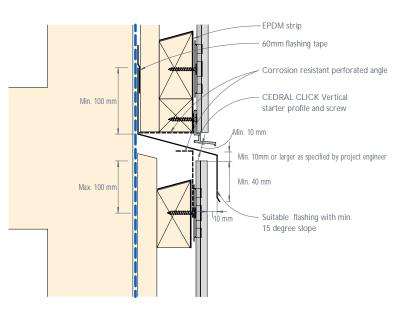


Figure 8: CEDRAL CLICK horizontal control joint and inter-storey detail

1) Support frame (battens) must NOT be fixed crossing over a control joint.

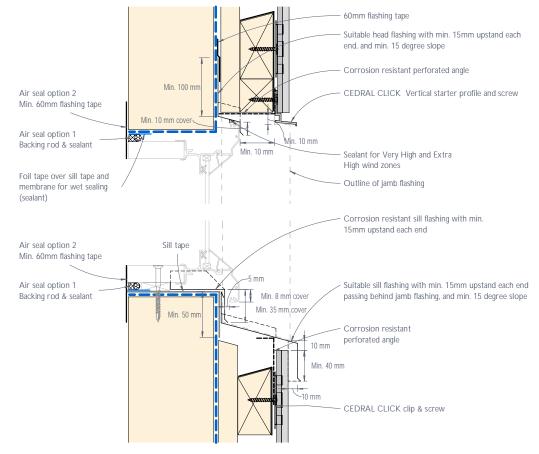


Figure 9: CEDRAL CLICK window head and sill junction or the like - Recessed detail

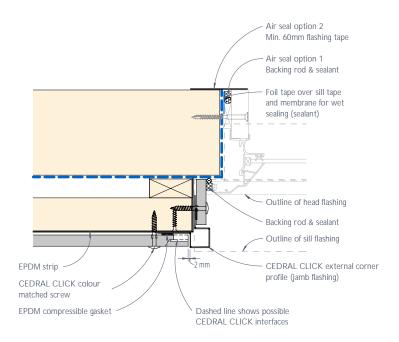


Figure 10: CEDRAL CLICK window jamb junction or the like - Recessed detail

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.

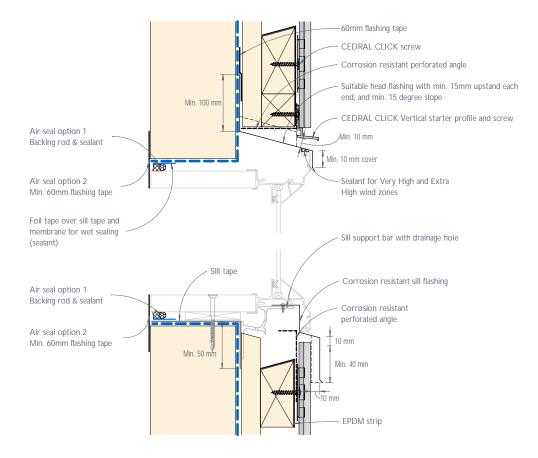


Figure 11: CEDRAL CLICK window head and sill junction - - Flush detail

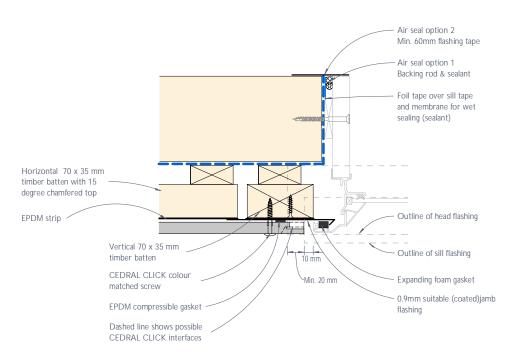
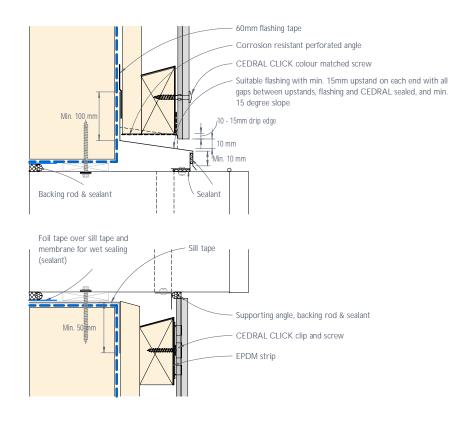


Figure 12: CEDRAL CLICK window jamb junction or the like - Flush detail

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.





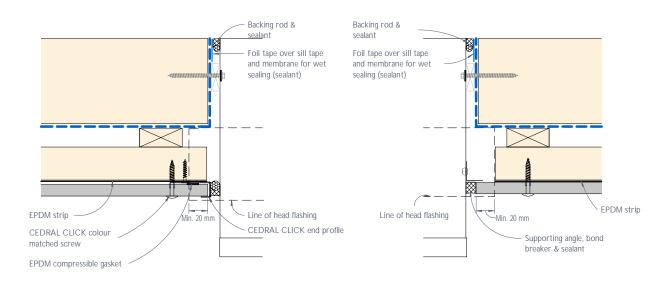


Figure 14: CEDRAL CLICK meter box junction Plan view - Option 1

Figure 15: CEDRAL CLICK meter box junction Plan view - 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.

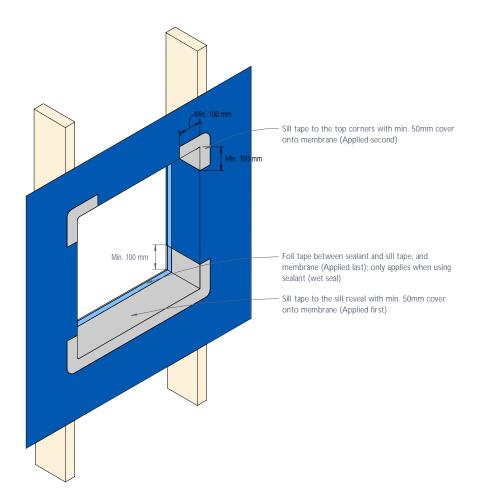


Figure 16: Isometric view of window/meter box opening - Tape application

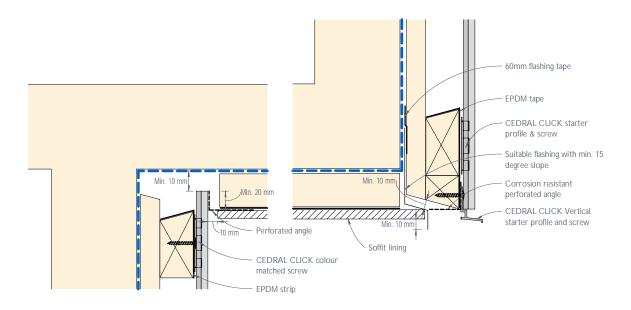
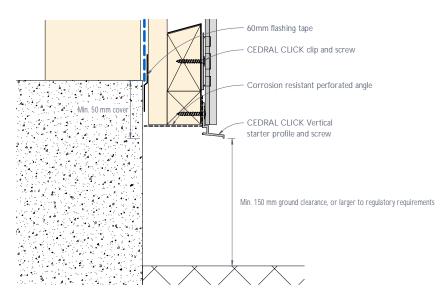


Figure 17: CEDRAL CLICK soffit junction

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 (battens) must NOT be fixed crossing over a control joint.





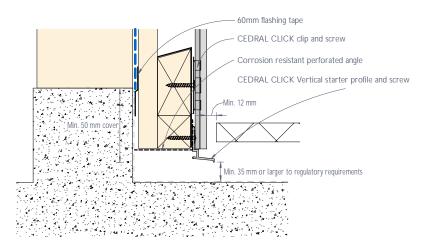


Figure 19: CEDRAL CLICK base detail - Covered area

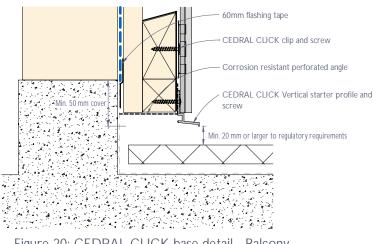


Figure 20: CEDRAL CLICK base detail - Balcony

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.

2) Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.

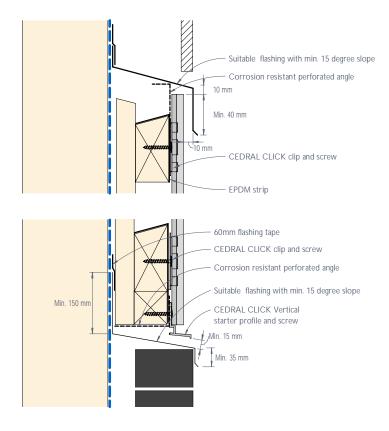


Figure 21: CEDRAL CLICK junction with other materials - Flush detail

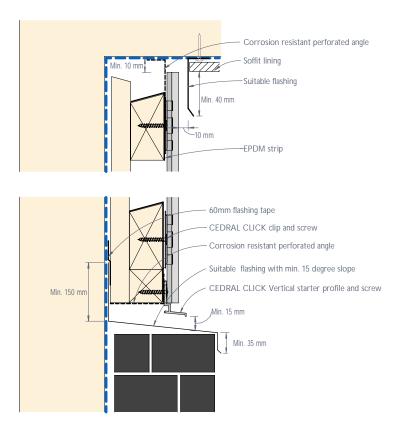
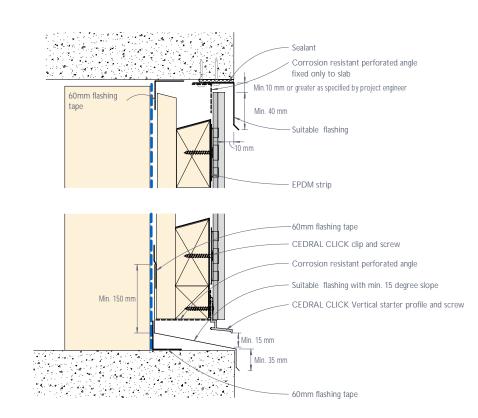


Figure 22: CEDRAL CLICK junction with other materials, eaves or the like - Recessed detail

1) Support frame (battens) must NOT be fixed crossing over a control joint.





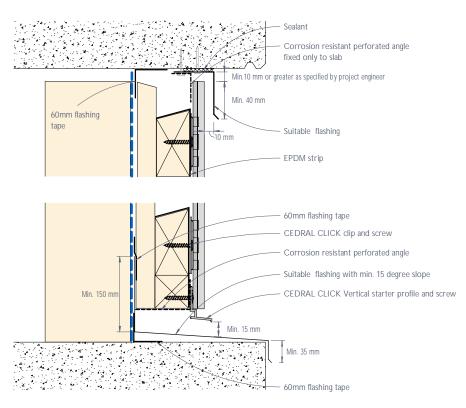


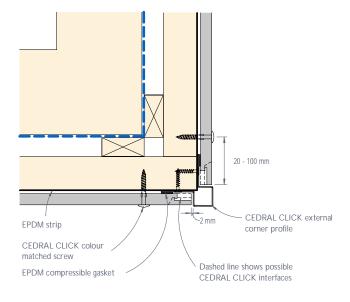
Figure 24: CEDRAL CLICK junction with exposed concrete slab or beam - Cladding recessed

1) Support frame (battens) 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.

3) Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.





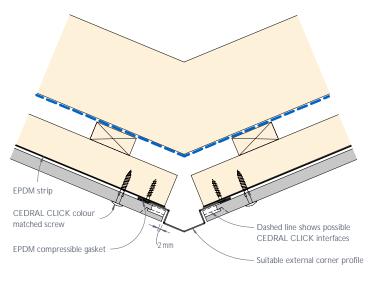


Figure 25: CEDRAL CLICK typical external corner

Figure 26: CEDRAL CLICK 45 degree external corner

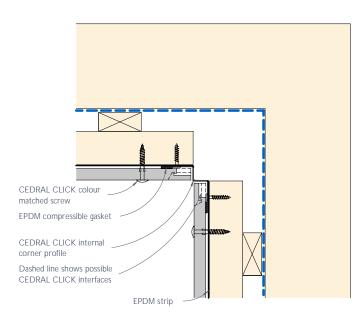


Figure 27: CEDRAL CLICK internal corner

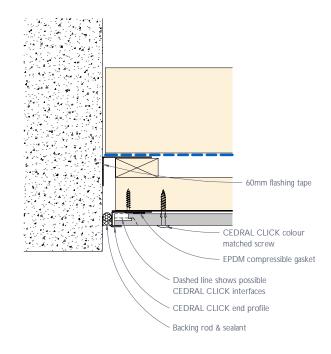


Figure 28: CEDRAL CLICK abutment detail

### Note

Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.

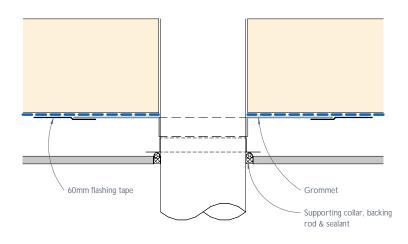


Figure 29: Pipe penetration - Plan view

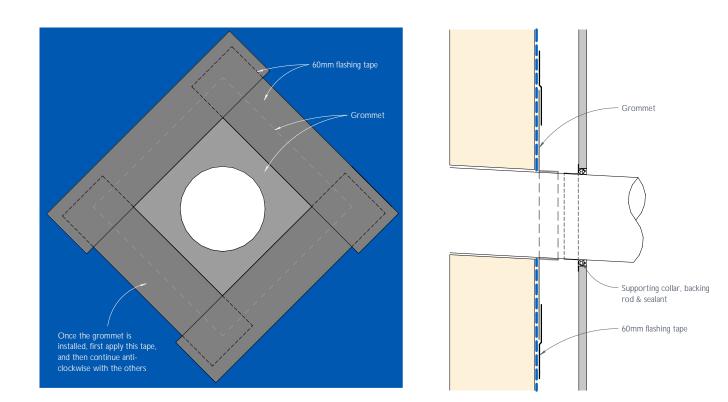




Figure 31: Pipe penetration - Section

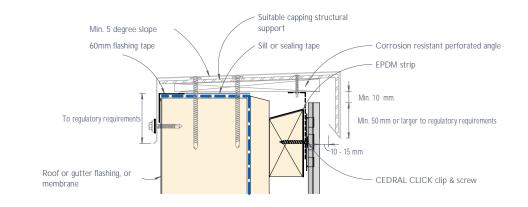


Figure 32: CEDRAL CLICK typical capping detail

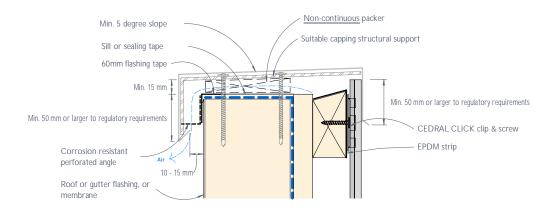


Figure 33: CEDRAL CLICK flush capping detail

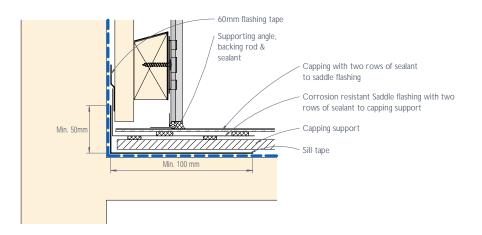


Figure 34: CEDRAL CLICK parapet junction - Section

1) Capping profiles are indicative and for illustration purposes.

2) Flush capping detail (Figure 35) will involve further maintenance requirement in order to maintain the seal at the interface with the panel. Any deterioration of the sealant may result in panel staining, and will compromise the weatherproofing performance. Use UV stable and resistant external grade sealant.

3) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 32 & 33.

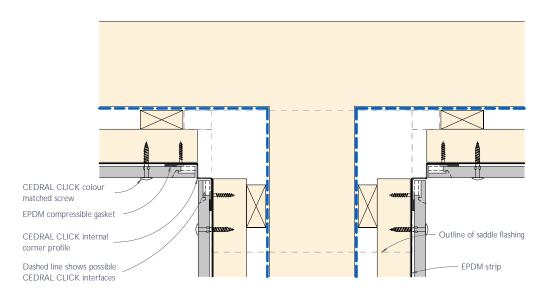


Figure 35: Parapet junction - Plan view

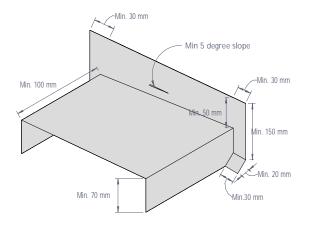


Figure 36: Corrosion resistant saddle flashing

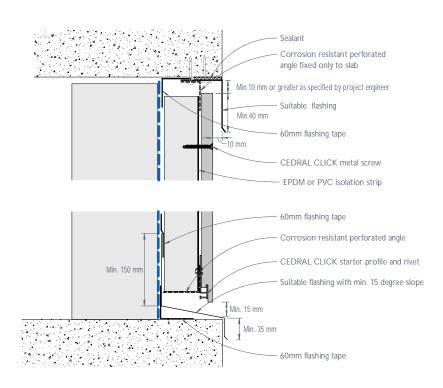


Figure 25: CEDRAL CLICK junction with exposed concrete slab or beam - Cladding flush

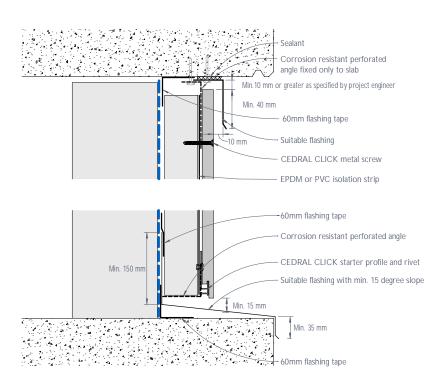


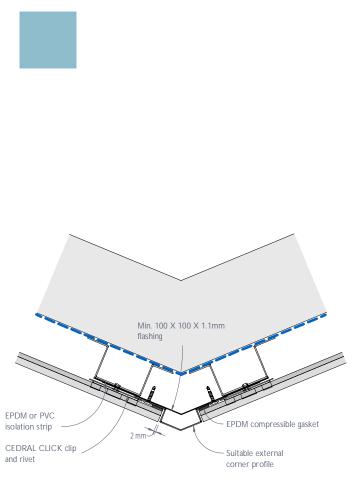
Figure 26: CEDRAL CLICK junction with exposed concrete slab or beam - Cladding recessed

Notes

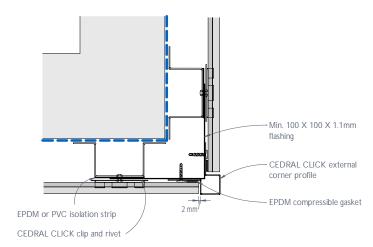
1) Support frame (battens) must NOT be fixed crossing over a control joint.

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.

3) Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.







## Figure 27: CEDRAL CLICK typical external corner

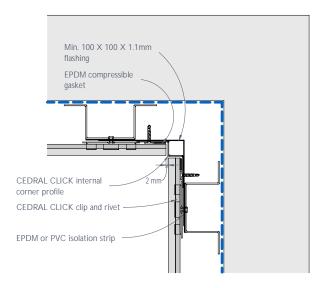


Figure 29: CEDRAL CLICK internal corner

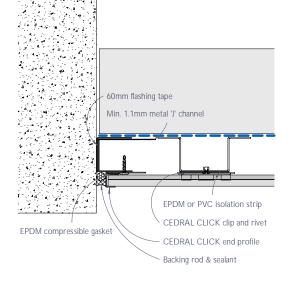


Figure 30: CEDRAL CLICK abutment detail

## Note

Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.

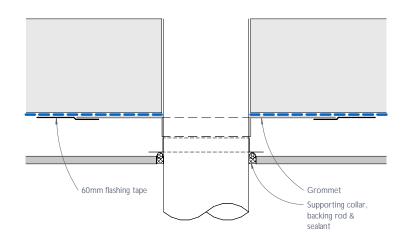
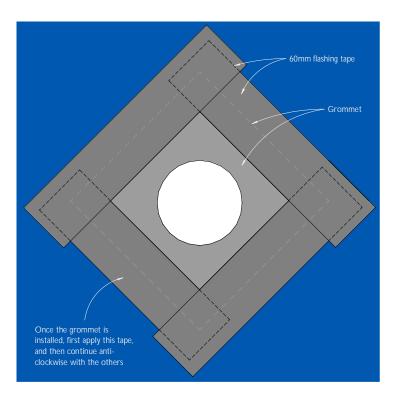


Figure 31: Pipe penetration - Plan view



Grommet Grommet Supporting collar, backing rod & sealant 60mm flashing tape

Figure 32: Pipe penetration - Elevation

Figure 33: Pipe penetration - Section

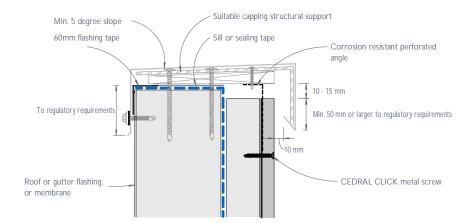


Figure 34: CEDRAL CLICK typical capping detail

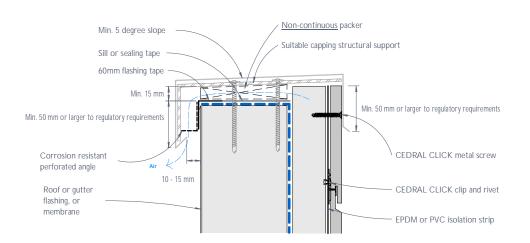


Figure 35: CEDRAL CLICK flush capping detail

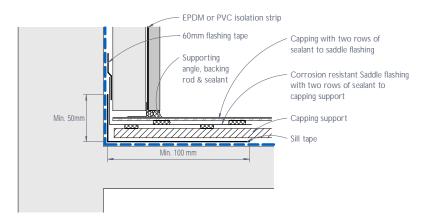


Figure 36: CEDRAL CLICK parapet junction - Section

1) Capping profiles are indicative and for illustration purposes.

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) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 34 & 35.

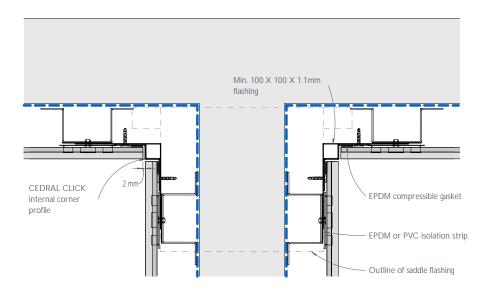


Figure 37: Parapet junction - Plan view

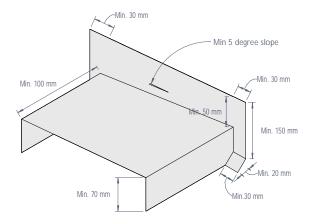


Figure 38: Corrosion resistant saddle flashing



Cedral Click Vertical With Top Hat Construction



## Fixings and support frame

## CEDRAL CLICK Vertical with metal top hat construction

Cedral Click may be fixed vertically in traditional lapped style to metal top hat support frame.

#### **Fixings**

Cedral Click stainless steel (304) clip and rivet

Cedral metal screw for fixing Cedral Click to metal support frame (4.5 x 32 mm, head diameter ~7 mm, drill point, Phillips n°2, stainless steel 304)

#### Support frame

Cedral Click may be fixed vertically to horizontal metal top hat profiles with minimum gauge (thickness) of 1.1mm BMT, minimum depth of 25mm, and minimum width of 50mm. A layer of minimum 15mm deep (minimum 1.1.mm BMT) vertical top hats are used between the horizontal top hats and weather barrier to form a minimum 15mm gap behind the horizontal top hats for ventilation and drainage purposes.

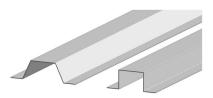
Metal top hats shall be of adequate corrosion resistance required for the project.

Maximum deflection of support framing must be limited to Span/250. Structure and support frame shall be designed to relevant standards including, but not limited to, the following:

- · AS/NZS 4600 Cold-formed steel structures
- NZS 3404 Steel structures
- NZS 3604 Timber framed buildings







Examples of standard top hat sections



Top hat's minimum size

## Construction details

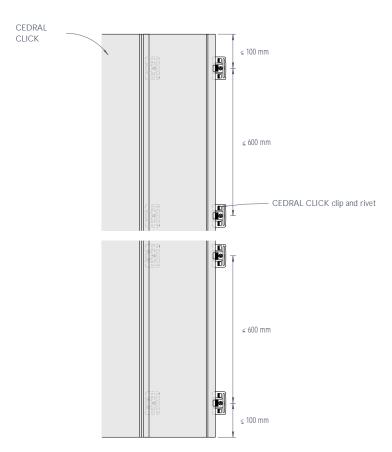


Figure 1: CEDRAL CLICK fixings arrangement - Elevation

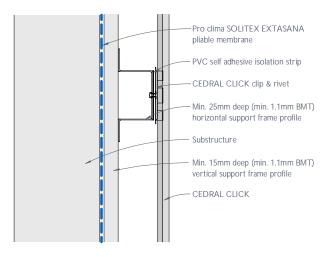


Figure 2: CEDRAL CLICK typical vertical section

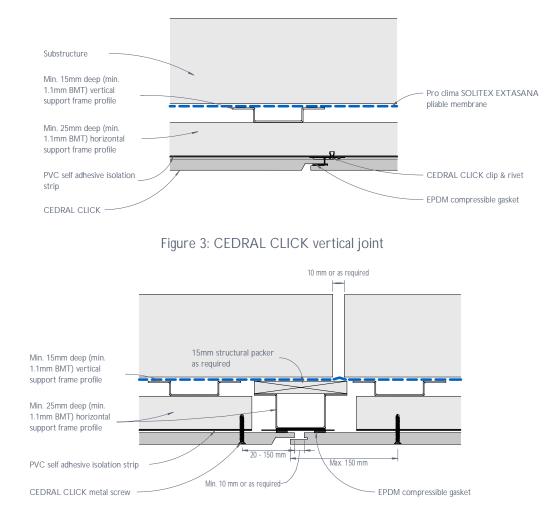


Figure 4: CEDRAL CLICK vertical control joint - Detail 1

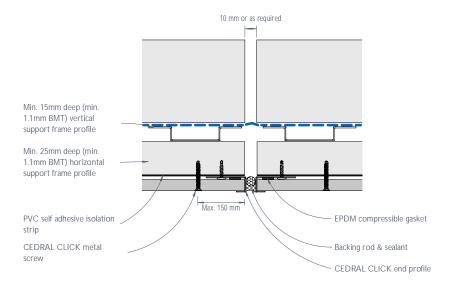


Figure 5: CEDRAL CLICK vertical control joint - Detail 2

### Note

Support frame (battens) must NOT be fixed crossing over a control joint.

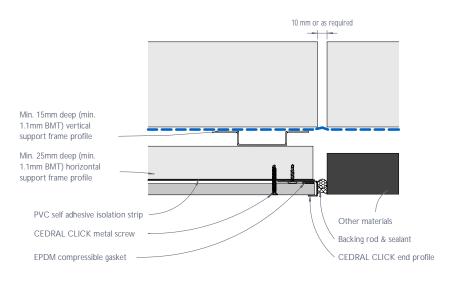


Figure 6: CEDRAL CLICK vertical control joint - Detail 3

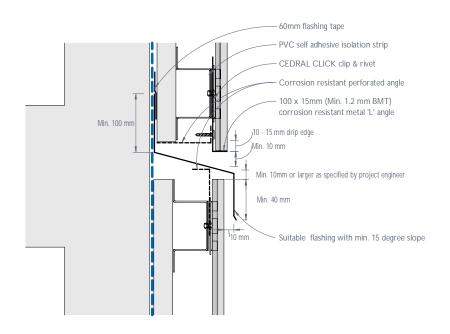


Figure 7: CEDRAL CLICK horizontal control joint and inter-storey detail

1) Support frame (battens) must NOT be fixed crossing over a control joint.

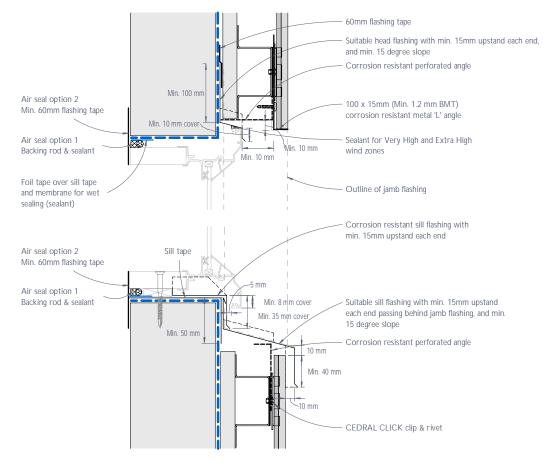


Figure 8: CEDRAL CLICK window head and sill junction or the like - Recessed detail

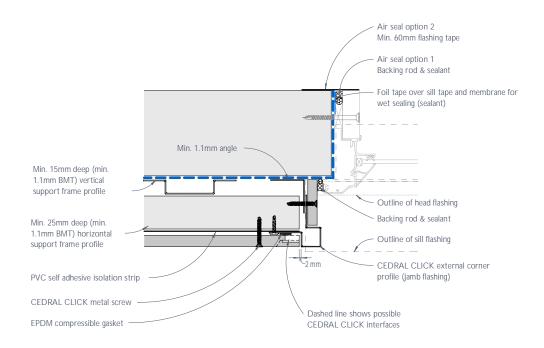


Figure 9: CEDRAL CLICK window jamb junction or the like - Recessed detail

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.

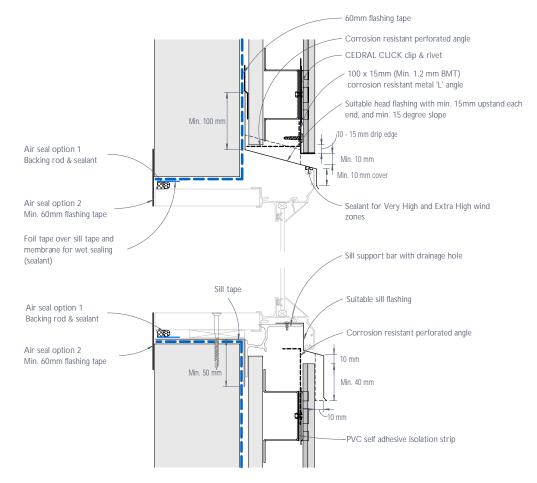


Figure 10: CEDRAL CLICK window head and sill junction - Flush detail

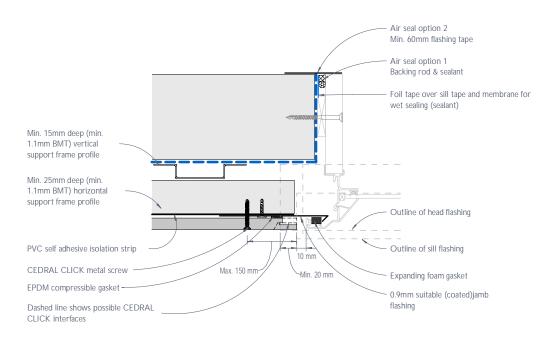
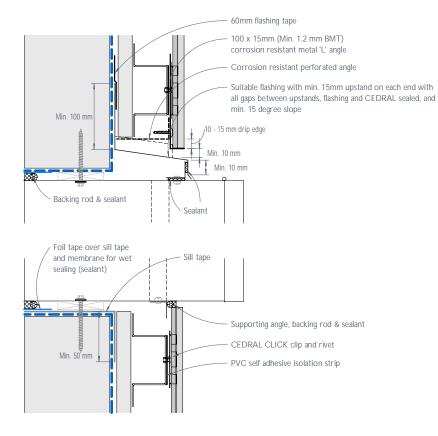


Figure 11: CEDRAL CLICK window jamb junction or the like - Flush detail

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.





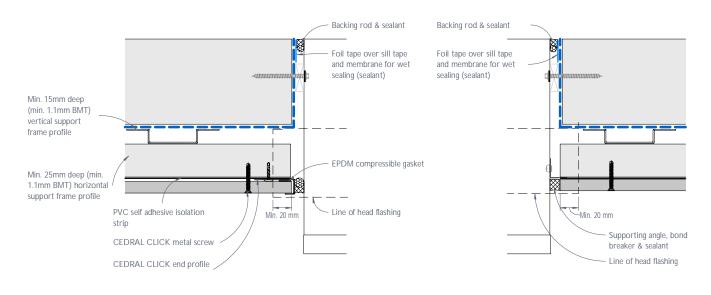


Figure 13: CEDRAL CLICK meter box junction Plan view - Option 1

Figure 14: CEDRAL CLICK meter box junction Plan view - 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.

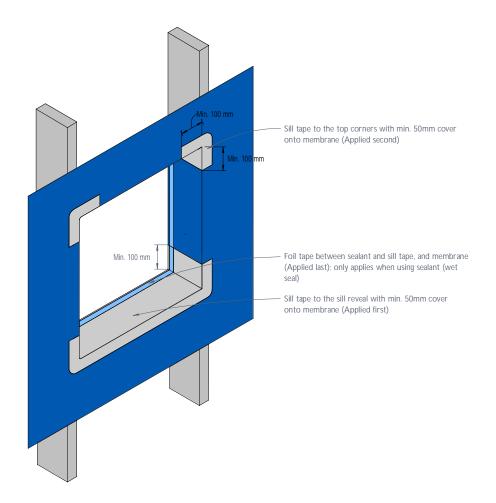


Figure 15: Isometric view of window/meter box opening - Tape application

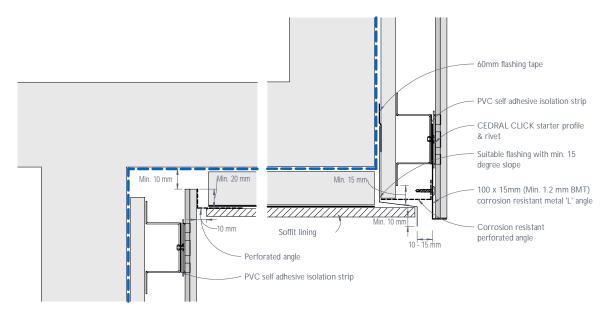
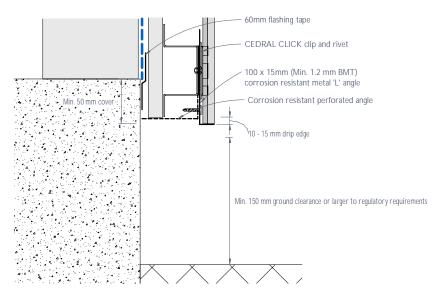


Figure 16: CEDRAL CLICK soffit junction

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 (battens) must NOT be fixed crossing over a control joint.





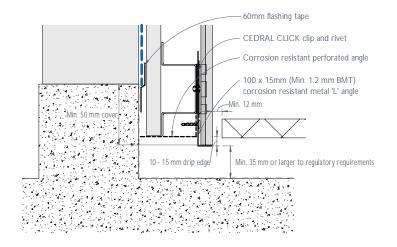


Figure 18: CEDRAL CLICK base detail - Covered area

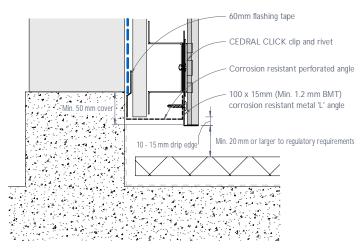


Figure 19: CEDRAL CLICK base detail - Balcony

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.

2) Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.

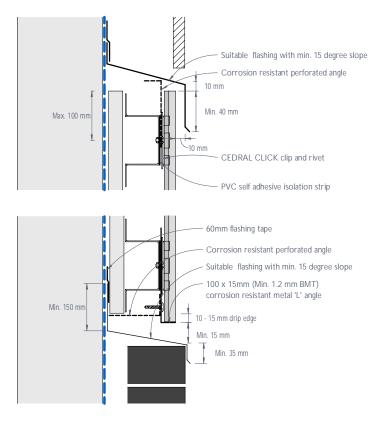


Figure 20: CEDRAL CLICK junction with other materials - Flush detail

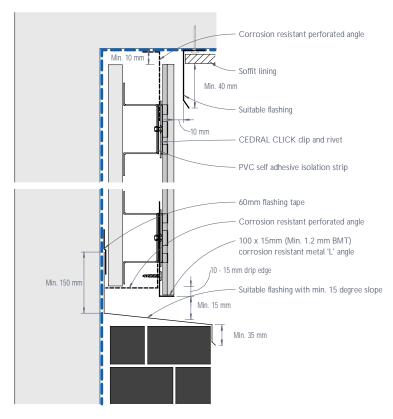


Figure 21: CEDRAL CLICK junction with other materials, eaves or the like - Recessed detail

1) Support frame (battens) must NOT be fixed crossing over a control joint.

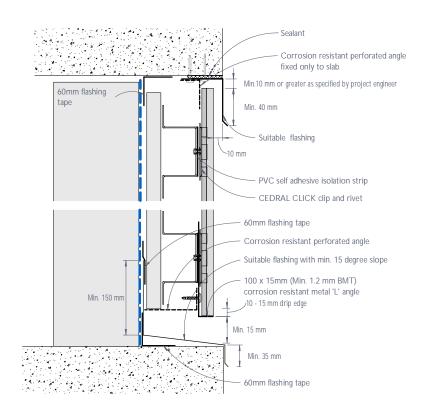


Figure 22: CEDRAL CLICK junction with exposed concrete slab or beam - Cladding flush

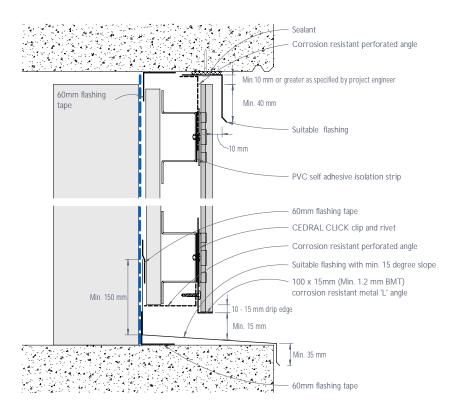


Figure 23: CEDRAL CLICK junction with exposed concrete slab or beam - Cladding recessed

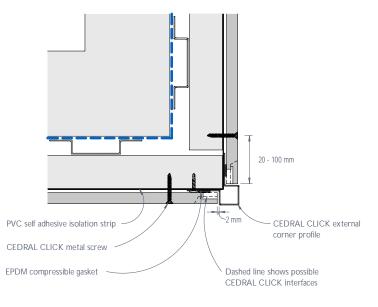
Notes

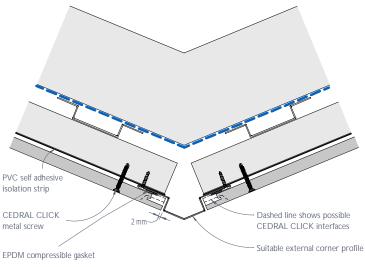
1) Support frame (battens) must NOT be fixed crossing over a control joint.

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.

3) Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.

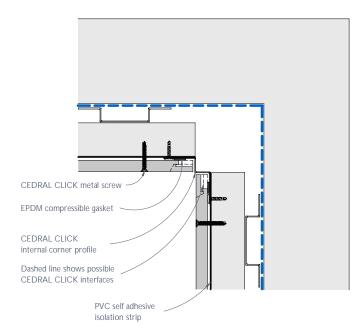






### Figure 24: CEDRAL CLICK typical external corner

Figure 25: CEDRAL CLICK 45 degree external corner





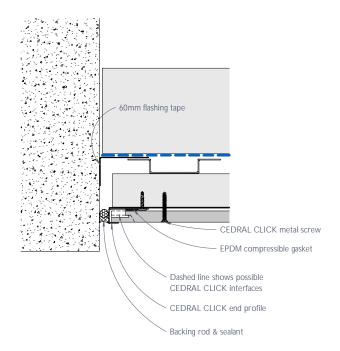
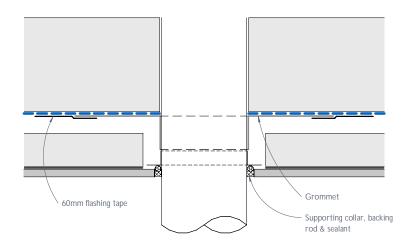


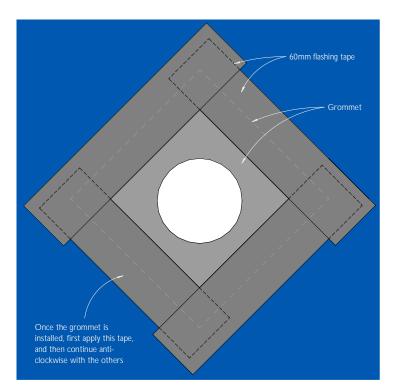
Figure 27: CEDRAL CLICK abutment detail

## Note

Refer to pro clima's application guide for the application of the flashing tape and any pre-treatment required on various substrates including concrete and masonry.







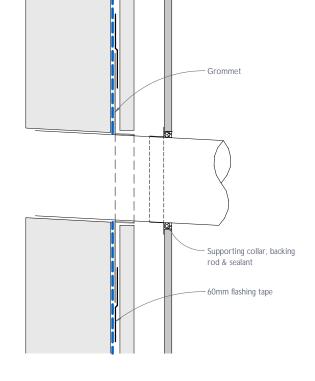


Figure 29: Pipe penetration - Elevation

Figure 30: Pipe penetration - Section

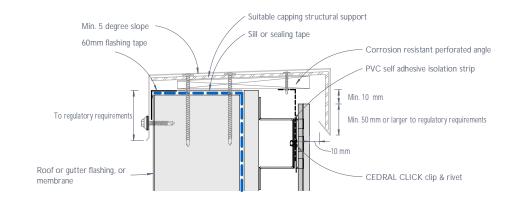
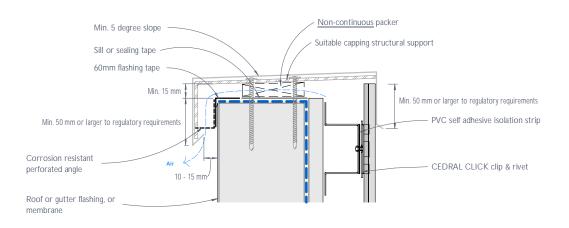


Figure 31: CEDRAL CLICK typical capping detail





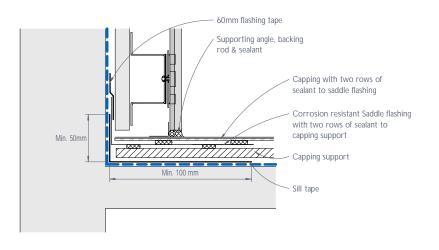


Figure 33: CEDRAL CLICK parapet junction - Section

1) Capping profiles are indicative and for illustration purposes.

2) Flush capping detail (Figure 35) will involve further maintenance requirement in order to maintain the seal at the interface with the panel. Any deterioration of the sealant may result in panel staining, and will compromise the weatherproofing performance. Use UV stable and resistant external grade sealant.

3) Capping shall be designed and engineered accordingly to provide adequate allowance for ventilation as shown in Figures 31 & 32.

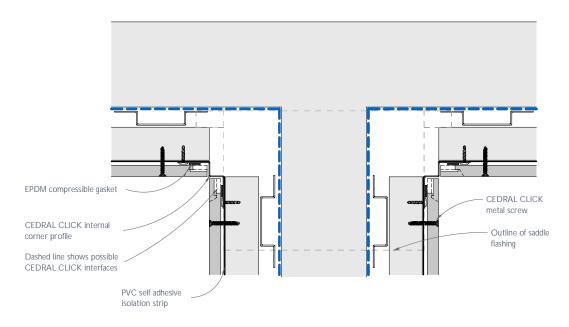


Figure 34: Parapet junction - Plan view

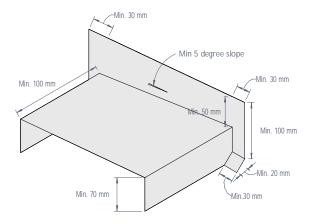


Figure 35: Corrosion resistant saddle flashing





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