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AMIA Louvre Windows Installation Instructions – Steel Clad Buildings



POWDER COATING 🔶 BALUSTRADING 🔶 WINDOWS & GLASS

RECOMMENDED WINDOW INSTALLATIONS DETAILS FOR VERTICALLY FIXED STEEL PROFILES & HORIZONTALLY FIXED CORRO® CLADDING CORRO® CLADDING WALL CONSTRUCTIONS – 102mm FRAMED PRODUCTS

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RECOMMENDED LOUVRE WINDOW INSTALLATIONS DETAILS

Part A. FOR VERTICALLY FIXED STEEL CLADDING (102mm Framed Products)

1. Technical Terms



2. Accurately Locating the Louvre Window and Cutting the Opening

AMIA recommends the installation of Colorbond[®] steel head flashing in order to comply with **National Construction Code 2019 Volume 2 Clause 3.4.5.6** unless windows/doors are protected by an awning or similar roof. **AMIA** do not supply flashing. Details of the 3 head flashing options can be found in **STEP 17**.

IMPORTANT! The cut dimensions should finish in the pan or valley equally at both jambs as shown in **Figure 2.1** and **2.2**. **DO NOT position the jamb(s) on a ridge in the cladding.** Some builders may prefer to fix windows prior to cladding the wall; however the risk of doing this may mean adjusting the sheets to match the location of the window. **If CORRO**[®] **cladding is used; AMIA does not recommend installing Louvre Window before cladding walls.**

Installation of steel mullions to Louvre Window jambs can be performed during **STEP 5** to ensure it fits neatly to the Louvre Window frame.

AMIA has shown 3 choices of Colorbond[®] steel head flashing in **STEP 3** and an option without a Colorbond[®] steel flashing over the Louvre Window head. Cut out dimensions for opening width and height are found in **Table 2a**, **Table 2b**, **Figure 2.1** and **Figure 3.1**. Slots for head flashing to be cut as indicated in **Figure 3.2** and **3.3**.

Select the Louvre Window position by marking the centre dimension of the window on the wall. Mark the cut out dimensions. Check the opening is level and square by checking diagonal measurements.



Figure 2.1 Cutting of Cladding

Figure 2.2

Table 2a. CLADDING STANDARD OPENING WIDTH		
Size of Louvre	Minimum Opening Width, W1	
590 x 793	601	
590 x 1501	601	

Table 2b. CLADDING STANDARD OPENING HEIGHT			
Type of Head Flashing	Total Opening Height, H1	Critical Dimension, H2	
Louver 590 x 793			
Туре 1	830	828	
Туре 2	820	818	
Type 3 (Head Trim Bead discarded)	803	801	
No Head Flashing	803	no slot required	
Louver 590 x 1501			
Туре 1	1538	1536	
Туре 2	1528	1526	
Type 3 (Head Trim Bead discarded)	1511	1509	
No Head Flashing	1511	no slot required	

All dimensions are in millimetres

3. Head Flashing Details - (recommended and supplied by others)

When satisfied that the Louvre Window frame will fit the opening, install the steel lintel to accept the head flashing.



There are three type of flashing to choose from. Refer to flashing drawing in **STEP 17** for the selection of the preferred type of flashing. Apply continuous silicone seal to rear leg of head flashing and apply to opening as shown in **Figure 3.4 to 3.6**.

NOTE: ALL COLORBOND FLASHINGS ARE EXCLUDED from Louvre Window – must be supplied by others. Flashing are to be made from 0.55t Colorbond[®] steel.

Provide internally, structural members (or **AMIA** Stiffener) to the jambs (minimum) and preferably all around the Louvre Window frame. Then place all the remaining self-drilling screws around the perimeter.

NOTE: For some windows widths in some wind pressure zones, structural framing will be required horizontally to support the window head, sill and head flashing.



4. Sealing the Louvre Window

Apply silicone seal over all the fasteners as shown in Figure 4.1.



Figure 3.5 **Head Flashing Type 2** See Head Flashing Drawings Fixings applied after window has been installed







Apply fin patches in all corners and seal them as shown in **Figure 4.2** and **Figure 4.3**. These patches are to be fully sealed all around.

IMPORTANT! There are two small notches in the jamb extrusion at the join of the head and jamb extrusions. These notches allow the water to drain from the head to the jamb and **MUST NOT BE FILLED WITH SILICONE SEAL**. If silicone enters this notch, remove it with a tool such as a small blade, screwdriver or knife before the silicone dries.

Provide a 5mm x 5mm bead of silicone in the exterior face of the Louvre Window jamb fin, approximately in the centre of the fin as shown in **Figure 4.2** and **4.3**.

Open the Louvre Window blades to assist with installation. If a screen is ordered, remove this first.



Apply 5mm x 5mm silicone bead to centre of fin after fin patch is attached.

Exterior side fin patch (head) place corner of patch into the jamb recess. Apply silicone seal around the fin patch.

Figure 4.2 Fin Patch (Head)



Figure 4.3 Fin Patch (Sill)

- Apply 5mm x 5mm silicone bead to centre of fin after fin patch is attached.
- Exterior side fin patch (sill) place corner of patch into the jamb recess. Apply silicone seal around the fin patch.

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5. Installing the Louvre Window

NOTE: If timber reveals are required, go to STEP 15 and install reveals to window frame before attempting this step.

- Place the Louvre Window in the opening from inside the building.
- From outside screw to building the first self-drilling screw externally through the cladding into the Louvre Window fin, and lintel member if provided in STEP 3 along the Louvre Window head to hold the Louvre Window in place.
- Check the Louvre Window for square by measuring the diagonals as shown in Figure 3.1. When both diagonals are equal, the Louvre Window is square and ready to be firmly fixed. See diagram below.
- These screws should be 10mm away from the cut opening to align centrally with the Louvre Window fin.

NOTE: AMIA recommend Class 4, #10 self-drilling screws at 150mm maximum centres, or, #8 gauge self-drilling screws at 125mm maximum centres for Cyclonic regions, and 300mm or 250mm centres respectively for Non Cyclonic regions. (These screws are NOT supplied by AMIA with the Louvre Window.)

If there is NO HEAD FLASHING being installed - place corrugated foam infill strip between cladding and frame fin to prevent water entering inside the Louvre Window frames as shown in Figure 5.1. This should be done before lintel is installed as shown in STEP 3.



Figure 5.1 Corrogated Expanded Foam Infill View from inside

6. Complete the Sealing Externally

To complete the sealing we recommend running a full bead of silicone seal vertically down each jamb externally to seal the junction of the jamb to the wall cladding. Particular attention must be given to seal the junction of the jamb to the head and sill as shown Figure 6.1 and 6.2.



When tooling the silicone with your finger, check for any sharp edges in the steel removing first to avoid injury or USE a tool like a table knife.

Ø8.5 Drain hole **DO NOT SEAL** THIS HOLES

Seal cladding and jamb fin with silicone seal

Frame fin -



Figure 6.1 Head to Jamb Junction

IMPORTANT

Failure to correctly seal these areas may allow water to enter between the fin and the cladding and run down the inside face of the cladding.



Figure 6.2 Sill to Jamb Junction

Apply silicone seal along cladding to seal the head flashing. Fix the flashing using #10 Hex head Tek screws as shown in Figure 6.3 below.

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NOTE: If there is NO Head Flashing installed, make sure to apply silicone seal along cladding and window as shown below **Figure 6.4.**



7. Installing the Trim Beads

If you are using the "CORRO[®]" cladding profile, and it runs vertically, you will need to cut the Trim Bead to the head and sill only. If the cladding runs horizontally, then the jamb Trim Beads only needs to be trimmed. These Trim Beads can be trimmed with a hacksaw or tin snips. Trimming is only required when installing to "CORRO[®]" profile as shown in Figure 7.1 and 7.2.



NOTE: IF YOU ARE USING 28mm PROFILE CLADDING (TRIMDECK® and MONOCLAD®) or similar products, the Trim Beads along the head and sill require removal of part of the Trim Bead.

NOTE: THIS PROCESS IS NOT REQUIRED WHEN INSTALLING TO CORRO[®], MULTICLAD[®] AND KPANEL[®] PROFILES or similar products.

There is small "V" in the shorter leg of the Trim Bead which allows this metal to be easily removed. Removal of this short leg is necessary to allow the Trim Bead to rest against the ridges in these cladding sheets. Refer to **Figure 7.3** and **7.4**. To remove this, simply start one end using pliers, wriggle pliers vertically to start a tear, then begin to rotate the pliers and the metal will tear away at the "V". Continue rotating the pliers removing the metal along the entire length of the Trim Bead.



The head and sill Trim Beads are longer than the head and sill dimensions of the Louvre Window frame.



Align the sill Trim Bead first making it equidistant past the edge of the Louvre Window jambs on both ends as shown in Step 1 of Figure 7.5. Guide the longer leg of the bead between the locating leg on the fin and the external of the framing. Push firmly, beginning at one end, until a "snap" sound is heard as shown in Figure 7.6. This is the positive engagement of the Trim Bead locking into position and it resting on the external face of the Louvre Window frame. If the trim bead is resting against the Louvre Window frame, it is correctly installed.



- NOTE: DO NOT SEAL THE DRAIN HOLES as shown in Figure 7.8.
- Before installing the **jamb** Trim Beads, the junction between the **sill** Trim Bead and the external face of the cladding needs to be sealed with silicone as shown in **Figure 7.7**.
- Next install the two vertical jamb Trim Beads in the Louvre Window jambs as shown in Step 2 of Figure 7.5. Check the alignment of the Trim Beads and if they are not correctly aligned, they can be "tapped" left or right using a nylon mallet or timber block – tap until correct alignment is achieved.
- And finally clip in the head Trim Bead in the Louvre Window head as shown in Step 3 of Figure 7.5.



8. Installing the Trim Bead Extension

NOTE: Trim Bead Extensions do not come standard with the Louvre Window. It is an optional extra that can be ordered with the Louvre Window.

The Trim Bead Extension usually goes on the vertical edge of the Trim Bead to hide fasteners from view. This is the last step in installing the window. It can be used on metal cladding profiles like Trimdeck[®], Monoclad[®], Multiclad[®] and Kpanel[®]. Trim Bead Extensions are **NOT REQUIRED** for "CORRO[®]" profiles.



Part B. FOR HORIZONTALLY FIXED STEEL CORRO® CLADDING

9. Accurately Locating the Louvre Window and Cutting the Opening

AMIA recommends the installation of Colorbond® steel head flashing in order to comply with National Construction Code 2019 Volume 2 Clause 3.4.5.6 unless windows/doors are protected by an awning or similar roof. AMIA do not supply flashing. Details of the 3 head flashing are found in STEP 17.

IMPORTANT! The cut dimensions should finish in the pan or valley equally at both jambs. DO NOT position the jamb(s) on a ridge in the cladding. Some builders may prefer to fix windows prior to cladding the wall; however the risk of doing this may mean adjusting the sheets to match the location of the window. If CORRO® cladding is used; AMIA does not recommend installing Louvre Window before cladding walls.

AMIA standard window height; 793mm and 1501mm are sized to fit horizontally fixed CORRO® cladding.

Installation of steel mullions to Louvre Window jambs can be performed during STEP 12 to ensure it fits neatly to the window frame.

AMIA has shown 3 types of Colorbond[®] steel head flashing in STEP 3 and an option without Colorbond[®] steel flashing over the window head. Cut out dimensions for opening width and height are found in Table 9a and 9b below and Figure 9.1. Slots for head and sill flashing to be cut as indicated in Figure 9.2 and 9.3.

Select the Louvre Window position by marking the centre dimension of the window on the wall. Mark the cut out dimensions. Check the opening is level and square by checking diagonal measurements.



Table 9a. CLADDING STANDARD OPENING WIDTH		
Size of Louvre Minimum Opening Width, W1		
590 x 793	605	
590 x 1501	605	

Table 9b. CLADDING STANDARD OPENING HEIGHT			
Type of Head Flashing	Total Opening Height, H1	Critical Dimension, H2	
Louver 590 x 793			
Туре 1	849	844	
Туре 2	839	834	
Type 3 (Head Trim Bead discarded)	822	817	
Louver 590 x 1501			
Туре 1	1557	1552	
Туре 2	1547	1542	
Type 3 (Head Trim Bead discarded)	1530	1525	

All dimensions are in millimetres

10. Installing the Flashings (recommended and supplied by others)

AMIA recommends the installation of Colorbond[®] steel head flashing in order to comply with National Construction Code 2019 Volume 2 Clause 3.4.5.6 unless windows/doors are protected by an awning or similar roof. AMIA do not supply flashing. Details of the 3 head flashing are found in STEP 17.

- i. Apply continuous silicone seal to rear leg of Sill flashing and apply to opening. See **Figure 10.2**.
- ii. Apply continuous silicone seal to Jamb flashing and apply to opening. See Figure 10.3.
- iii. Apply continuous silicone seal to rear leg of Head flashing and apply to opening. See Figure 10.4.



11. Complete Sealing all Flashing to Opening



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12.Installing the Louvre Window

NOTE: If timber reveals are required, go to STEP 15 and install reveals to window frame before attempting this step.

Perform frame sealing as shown in **STEP 4** before fixing window to building. Use #10 Hex head Tek screws to fix the window frame as shown in **Figure 12.1** and **12.2**. Sealing of Louvre Window frame to flashing are found over.



NOTE: Affix Metal Teks to Head flashings after window and Trim Beads are installed so head flashing can be perfectly align to Louvre Window frame.

Full silicone seal is required between Louvre Window frame (Jamb) and jamb flashing to waterproof.



WARNING! DO NOT FIX INSULATION BLANKET BETWEEN WINDOW FIN AND FLASHINGS. TRIM BEADS MAY NOT ENGAGE

- a. ALL FLASHINGS ARE EXCLUDED from window must be supplied by others
- b. Properly seal the Window side.
- c. Sarking/snake skin plastic Flashings, Timber Reveals and Architraves are to be supplied by builder (if required). Or can be ordered from AMIA as extra products.

13. Final Sealing of Head Flashing to CORRO® Cladding

Complete all sealing before applying Trim Beads.



14. Installing the Trim Beads

- Install sill Trim Bead. Refer to Section "A"-"A". Silicone Bead to be applied to Trim Bead (Sill) after Trim Bead (Sill) has been installed and before Trim Beads (Jambs) are installed.
- Install jamb Trim Beads. Refer to Section "B"-"B".
- Install head Trim Bead. Refer to Section "C"-"C". Silicone Bead to be applied to Trim Bead (Head) after Trim Bead (Head) has been installed. See detail over.





- a. ALL FLASHINGS ARE EXCLUDED from window must be supplied by others
- b. Properly seal the Window side.
- c. Sarking/snake skin plastic Flashings, Timber Reveals and Architraves are to be supplied by builder (if required). Or reveals can be ordered from AMIA as extra products.

RECOMMENDED LOUVRE WINDOW INSTALLATIONS DETAILS

Part C. ADDITIONAL DETAILS

15. Assembly of Timber Reveal

NOTE: Timber Reveals do not come standard with the Louvre Window. It is an optional extra that can be ordered with the window.

Timber Reveals. AMIA offer Timber Reveal Kits in 3 standard reveal widths; 1) 116mm x 18mm, 2) 138mm x 18mm and 3) 185mm x 18mm. Reveals could be sourced locally too.

Your reveals may need to be trimmed to width to suit stud or wall girt depth plus wall lining and batten thickness, as shown in **Figure 15.3**. Reveals should be installed to frames before the frame is installed to the building. You will find the screws in the reveal kit.

Assemble the timber reveal as shown in **Figure 15.1**. Using a portable impact driver, apply three 8#x50mm Phillips countersunk head Chipboard screws in each junction through the head reveal and into the jamb reveal as shown in **Figure 15.2**. Repeat this step to fix the sill reveal to jamb reveal.



Table 15a. TIMBER REVEAL CUTTING LENGTH		
Size of Window	Head and Sill Reveal Length, L1	Jamb Reveal Length, L2
590 x 793	626	793
590 x 1501	626	1501

All dimensions are in millimetres

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Place the timber reveals assembly (sawn edge if trimmed), behind the door frame fins and fix the timber reveal as shown in **Figure 15.4 to 15.6**. Use #8x25mm button needle point screws at 300mm maximum centres. (Staples should also be used here if you have stapling tool). Place sawn side of reveal against the fin to ensure the finished (primed) edge has the architrave applied.



16. Installation of Louvre Window, with Timber Reveal and Architraves

Pre drill steel framing (lintel, sill plate and mullions) with Ø4.5 holes for needle point screws at 300 maximum centres.

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17a. Head Flashing Type 1 – (recommended and supplied by others)

Full silicone seal is required between Louvre Window frame (Head and Sill) and CORRO® cladding to waterproof. We recommend this step for all types of cladding profiles. Refer to Head and Sill Sealing Detail.



REMINDERS:

- a. This step is for Head Flashing Type 1.
- b. Snake skin jamb flashing to overlap Snake Skin Sill Flashing 150mm (min). Snake Skin Sill Flashing to overlap Insulation Blanket if required.
- c. Jamb plastic flashing TO OVERLAP externally the Sill flashing.

- a. ALL FLASHINGS ARE EXCLUDED from window must be supplied by others
- b. Properly seal the Window side.
- c. Sarking/snake skin plastic Flashings, Timber Reveals and Architraves are to be supplied by builder (if required). Or reveals and plastic flashing can be ordered from AMIA as extra products. AMIA does not supply architraves.

17b. Head Flashing Type 2 – (recommended and supplied by others)

Full silicone seal is required between Louvre Window frame (Head and Sill) and CORRO® cladding to waterproof. We recommend this step for all types of cladding profiles. Refer to Head and Sill Sealing Detail.



REMINDERS:

- a. This step is for Head Flashing Type 2.
- b. Snake skin jamb flashing to overlap Snake Skin Sill Flashing 150mm (min). Snake Skin Sill Flashing to overlap Insulation Blanket if required.
- c. Jamb plastic flashing TO OVERLAP externally the Sill flashing.

- a. ALL FLASHINGS ARE EXCLUDED from window must be supplied by others
- b. Properly seal the Window side.
- c. Sarking/snake skin plastic Flashings, Timber Reveals and Architraves are to be supplied by builder (if required). Or reveals and plastic flashing can be ordered from AMIA as extra products. AMIA does not supply architraves.

17c. Head Flashing Type 3 – (recommended and supplied by others)

Full silicone seal is required between Louvre Window frame (Head and Sill) and CORRO® cladding to waterproof. We recommend this step for all types of cladding profiles. Refer to Head and Sill Sealing Detail.



REMINDERS:

- a. This step is for Head Flashing Type 3.
- b. Snake skin jamb flashing to overlap Snake Skin Sill Flashing 150mm (min). Snake Skin Sill Flashing to overlap Insulation Blanket if required.
- c. Jamb plastic flashing TO OVERLAP externally the Sill flashing.

- a. ALL FLASHINGS ARE EXCLUDED from window must be supplied by others
- b. Properly seal the Window side.
- c. Sarking/snake skin plastic Flashings, Timber Reveals and Architraves are to be supplied by builder (if required). Or reveals and plastic flashing can be ordered from AMIA as extra products. AMIA does not supply architraves.

RECOMMENDED LOUVRE WINDOW INSTALLATIONS DETAILS

Part D. DRAWINGS OF STEEL FLASHINGS

20a. Head Flashing Drawings



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20b. Sill Flashing and Jamb Flashing Drawings (for horizontally fixed CORRO® Cladding)



Table 1 JAMB FLASHING LENGTH			
Type of Head Flashing	L1	L2	
Louver 590 x 793			
Туре 1	846.1	845.5	
Туре 2	836.1	835.5	
Туре 3	819.1	818.5	
Louver 590 x 1501			
Туре 1	1554.1	1553.5	
Туре 2	1544.1	1543.5	
Туре 3	1527.1	1526.5	

All dimensions are in millimetres

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