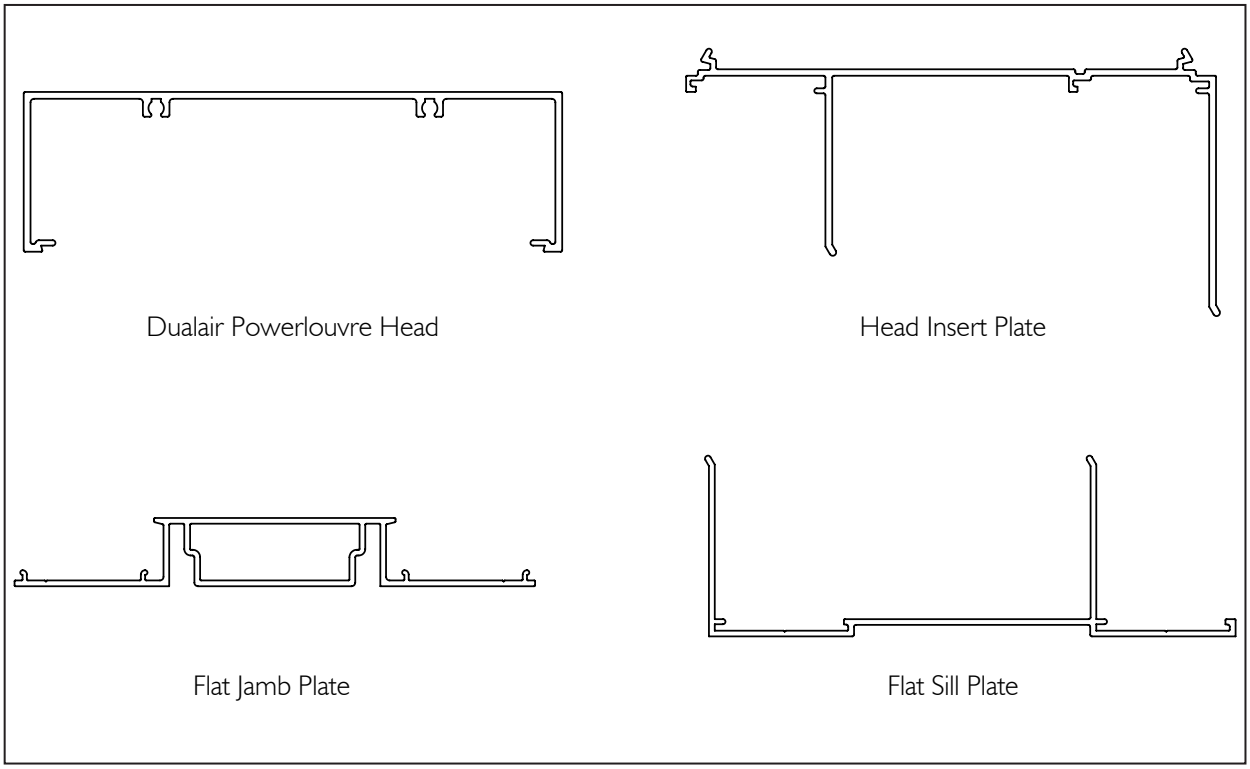
Dualair Flat Framing Assembly Instructions



All materials are supplied CTL based on daylight sizing.
Confirm Flat Sill Plate has drainage and fixing holes processed.
Confirm Flat Jamb Plate has fixing holes processed.
Confirm Sub Sill is drained with a minimum of 2 x '6x25mm' slots, drainage holes must be covered by a one-way flap.
Measure and confirm surround frame opening sizing and confirm daylight dimensions.

Use colour matched sealants in place of clear silicone wherever possible.

Note: Ensure all excess silicone is wiped away during assembly.
If access to the motors and wiring will be required at time of installation, it is recommended that the head plate assembly is instead installed on site **after** all wiring is complete.

18.4.0-1 (B)

Dualair Flat Framing Assembly Instructions

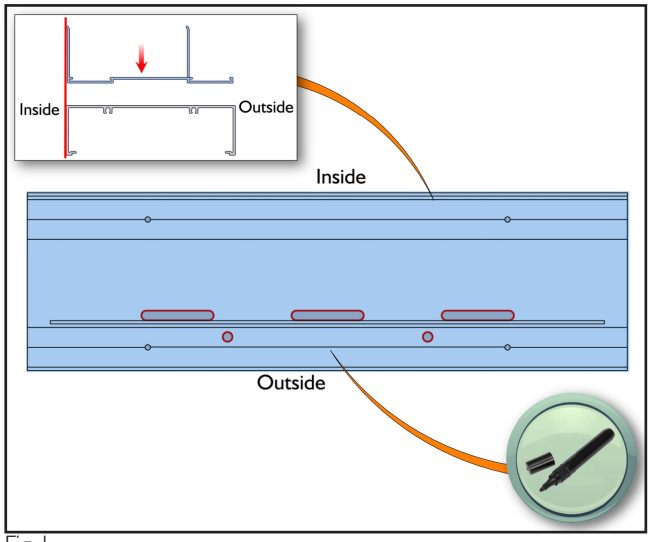


Fig 1.

Step 1.

Place the Flat Sill Plate onto the Commercial Frame Sill (150 x 44.5mm plain frame shown) and mark the drainage details, ensuring the inside edge of the upstand of the Flat Sill Plate aligns with the inside edge of the Commercial Frame Sill.

Refer to Figure 1.

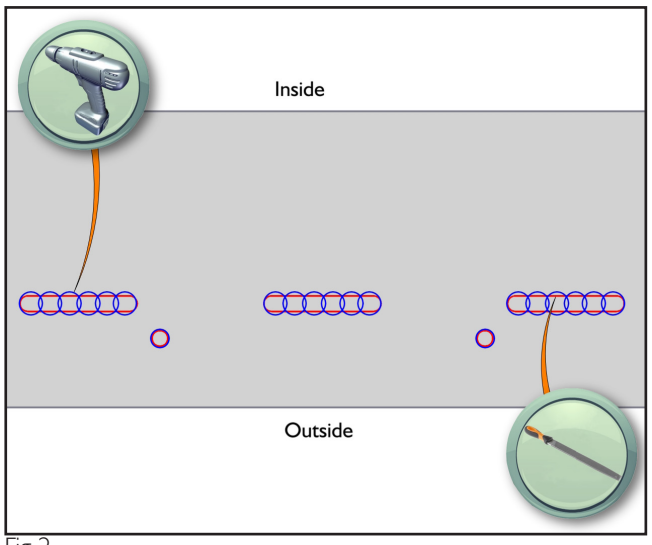


Fig 2.

Step 2.

Remove the Flat Sill Plate and drill oversized holes in the location of the vent slots and drain holes.
File the remaining material so the processing in the supplied sill plate is unobstructed.

Refer to Figure 2.

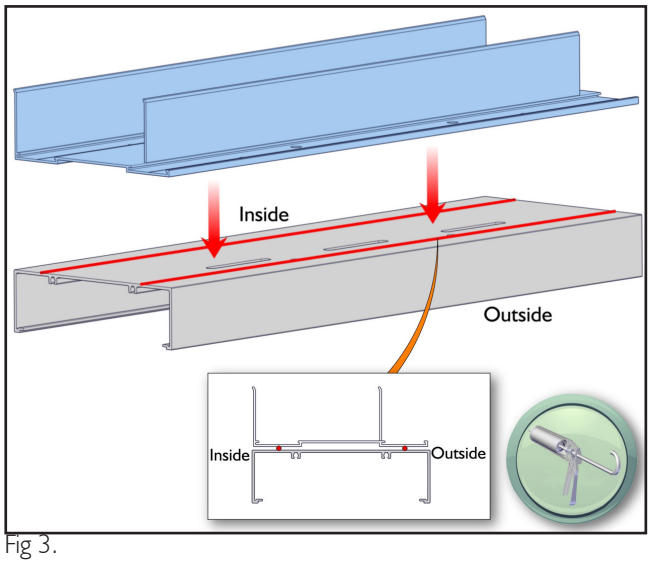


Fig 3.

Step 3.

Apply silicone along the Commercial Frame Sill in two lines. Each line runs length of the sill and is directly under each weatherstrip snap in area.
Ensure a continuous bead of silicone is applied end to end.

Refer to Figure 3.

18.4.0-1 (B)

Dualair Flat Framing Assembly Instructions

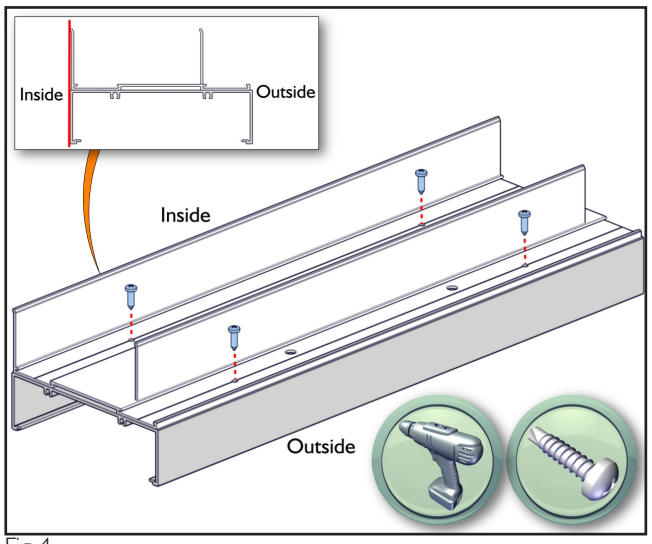


Fig 4.

Step 4.

Put the Flat Sill Plate onto Commercial Frame Sill, Visually inspect to ensure the Flat Sill Plate drain holes and the Commercial Frame Sill drain holes are aligned correctly. Ensure the edge of the upstand of the Flat Sill Plate align with the edge of the Commercial Frame Sill.
Screw the Flat Sill Plate to the Commercial Frame Sill via the pre-processed holes using 8g x 1/2" button head self drilling screws, checking to confirm the processing is unobstructed.

Refer to Figure 4.

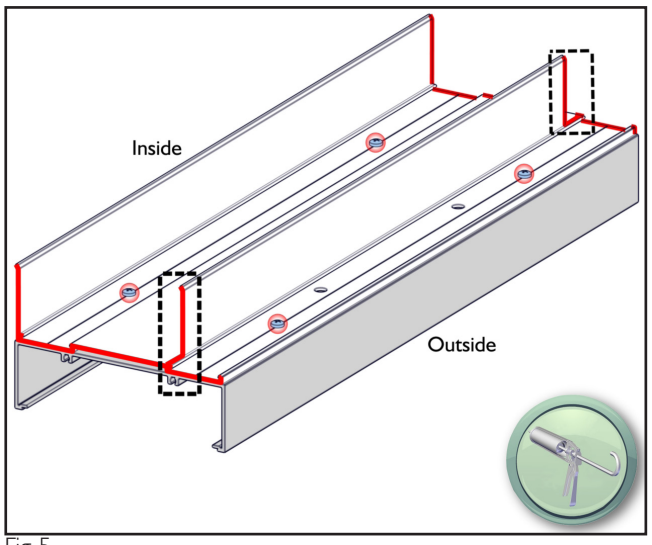


Fig 5.

Step 5.

Seal over screw heads with silicone.
Apply silicone to the ends of the Flat Sill Plate, making sure to apply silicone to both upstands. Ensure a line of silicone is applied across where the upstand has been processed.
Repeat this on both sides. All surfaces that contact jamb elements must have silicone.

Refer to Figure 5.

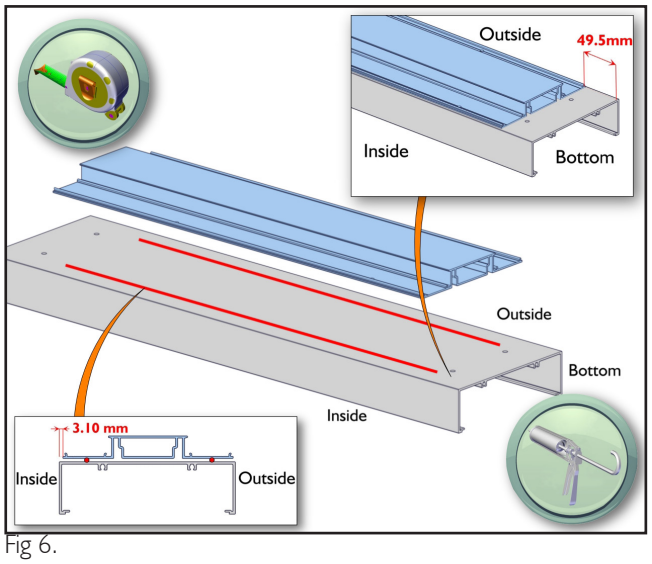


Fig 6.

Step 6.

Apply silicone in two lines to the underside of the Flat Jamb Plate, directly under each gallery snap in point, where it will contact the jamb below.
The Bottom of Flat Jamb Plate should be 49.5mm (Commercial Frame Sill Height plus 5mm) from the bottom of the Commercial Frame Jamb.
Inside edge of Flat Jamb Plate should be 3.1mm from the inside edge of the Commercial Frame Jamb.

Refer to Figure 6.

Dualair Flat Framing Assembly Instructions

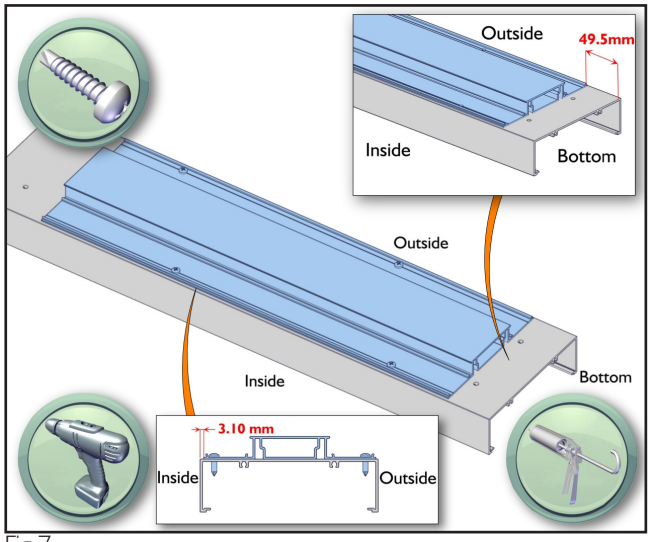


Fig 7.

Step 7.

Screw the Flat Jamb Plate to the Commercial Frame Jamb via the pre-processed holes using 8g x 1/2" button head self drilling screws.
The Bottom of Flat Jamb Plate should be 49.5mm (Commercial Frame Sill Height plus 5mm) from the bottom of the Commercial Frame Jamb.
The Inside edge of the Flat Jamb Plate should be 3.1mm from the inside edge of the Commercial Frame Jamb.
Seal over screw heads with silicone.

Refer to Figure 7.

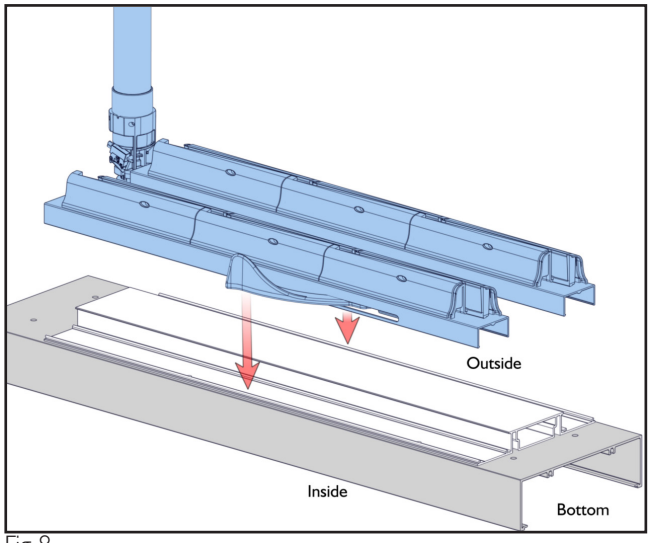


Fig 8.

Step 8.

Snap the Galleries to the Flat Jamb Plate.

Refer to Figure 8.

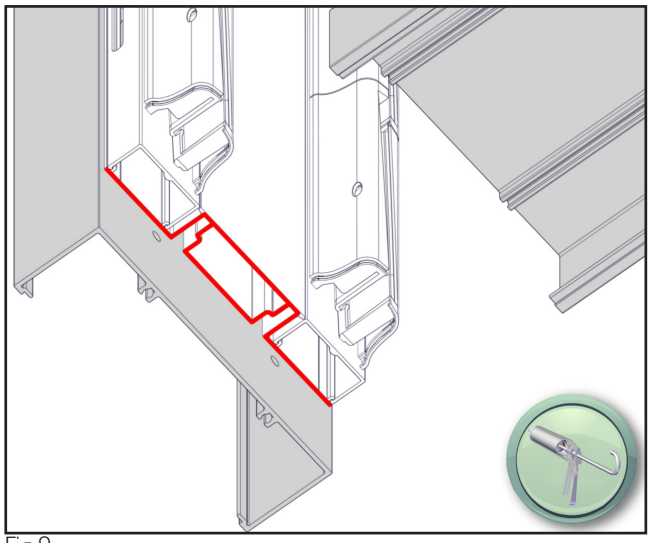


Fig 9.

Step 9.

Apply silicone to the bottom face of Flat Jamb Plate.

Refer to Figure 9.

Dualair Flat Framing Assembly Instructions

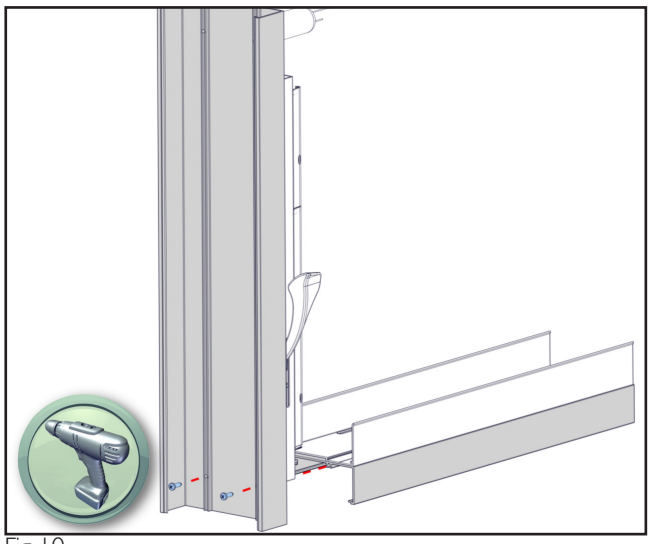


Fig 10.

Step 10.

Assemble the jamb assembly to the sill assembly. The Flat Jamb Plate and Galleries sit on top of the Flat Sill Plate.

Refer to Figure 10.

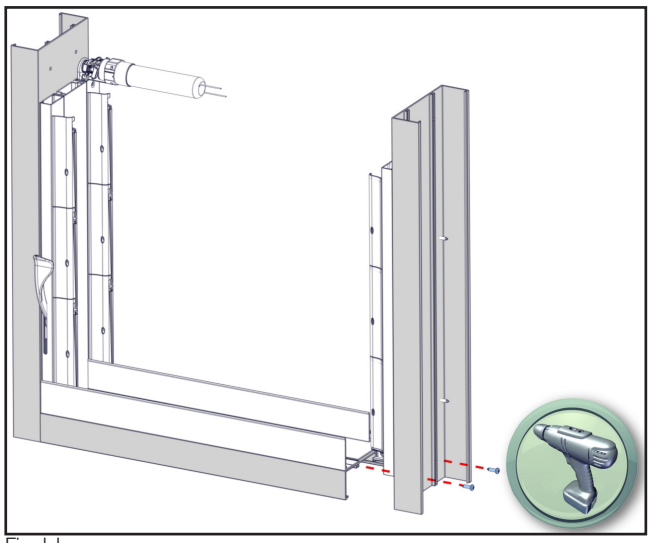


Fig 11.

Step 11.

Repeat steps 6-10 with the other side of the sill & the other jamb assembly.

Refer to Figure 11.

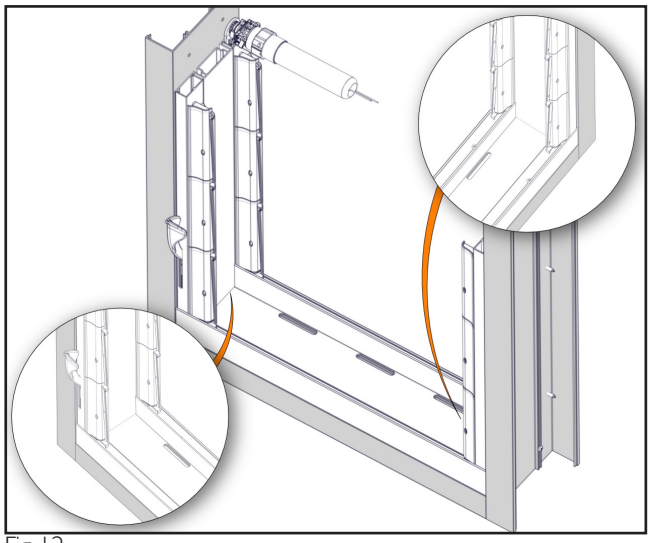


Fig 12.

Step 12.

The Flat Jamb Plate & Galleries should be sitting on top of the Flat Sill Plate.

Take care not to damage the motors or motor components during this step.

Refer to Figure 12.

18.4.0-1 (B)

Dualair Flat Framing Assembly Instructions

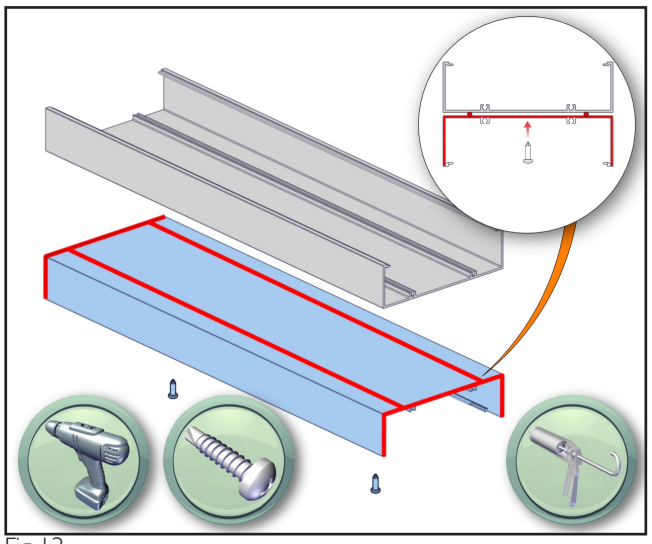


Fig 13.

Step 13.

Once Jambs are correctly positioned, apply silicone to both end faces of the Dualair Powerlouvre head supplied, plus two rows of silicone above the internal and external gallery.
Screw fix the Dualair Powerlouvre head to the Commercial Frame Head 100mm from each end, max 450mm spacing, ensuring the Dualair Powerlouvre head aligns with the centre of the Commercial Frame Head.

Refer to Figure 13.

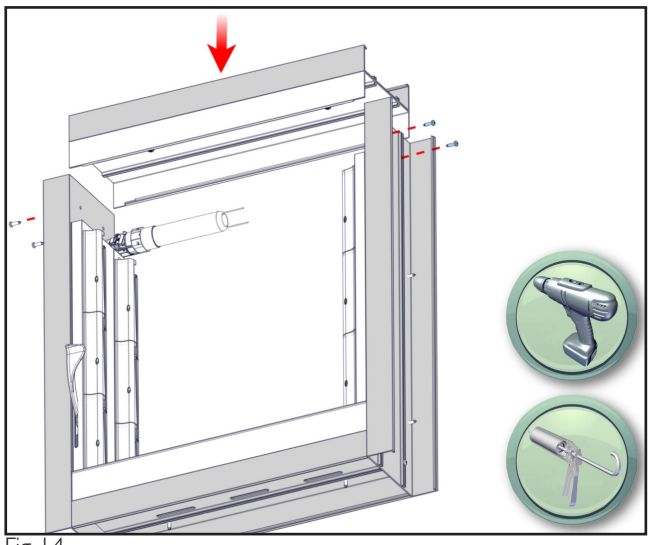


Fig 14.

Step 14.

Carefully slide the combined Head assembly into position and fix with screws. Take care to ensure the screws don't impact the motor.
Seal over screw heads with silicone.
Ensure any excess silicone is wiped away after the pieces are joined.

Refer to Figure 14.

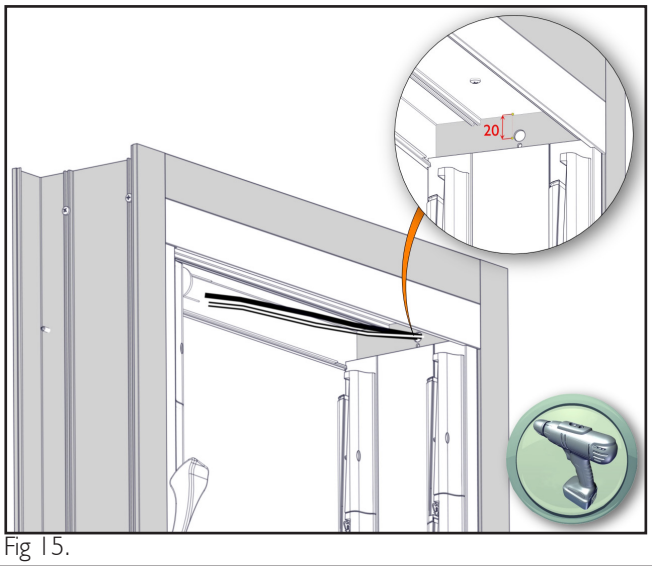


Fig 15.

Step 15.

Drill a 10mm hole for the Powerlouvre wiring in the centre of the Commerical Frame Jamb, 20mm down from the top of the jamb. Then drill a smaller 4mm hole directly below (leave a 1mm wall minimum between holes).
Insert rubber grommet into the 10mm hole to protect wiring. Feed wiring through the 10mm hole. Insert a zip tie through both holes to secure the wires in place. Then cover over the holes with sealant. The PCB and internal wires are then to be fixed inside the head, using double sided tape or similar.
Refer to Figure 15.

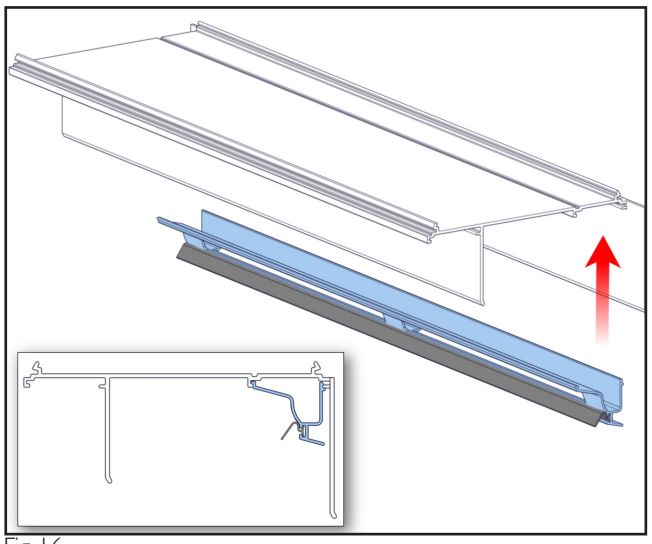


Fig 16.

Step 16.

Snap the OUTSIDE weatherstrip into position on the Head Insert Plate.
The outside head weatherstrip has slots processed along the length.

Refer to Figure 16.

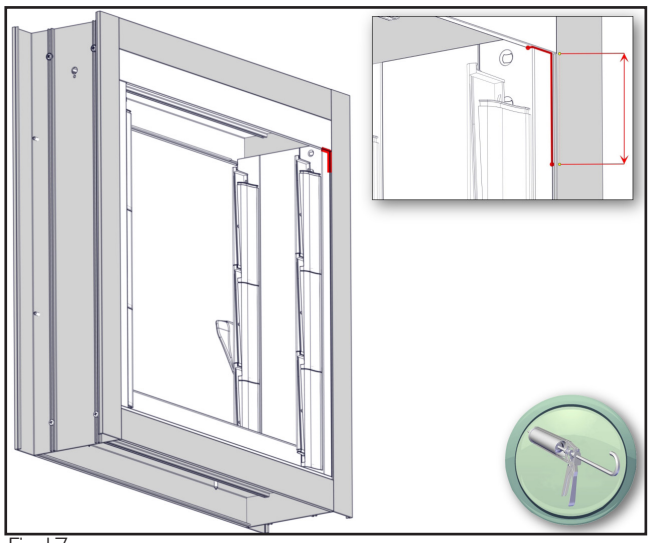


Fig 17.

Step 17.

Apply silicone to the joint between the Dualair Powerlouvre head and outside galleries, continue the silicone line down approximately 65mm to where the gallery and Jamb Plate meet.
Do this to both sides.

Refer to Figure 17.

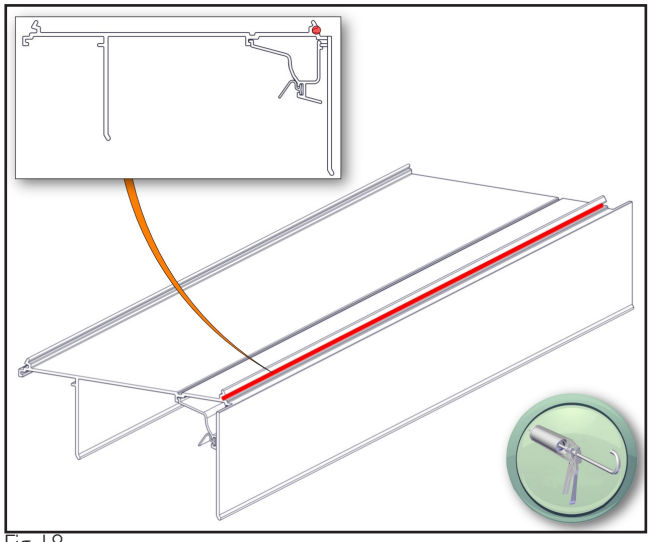


Fig 18.

Step 18.

Run a bead of silicone in the snap in point on the OUTSIDE of the Head Insert Plate.
This is the area where the Head Insert Plate will snap to the head.
Ensure there is a continuous bead from end to end.

Refer to Figure 18.

Dualair Flat Framing Assembly Instructions

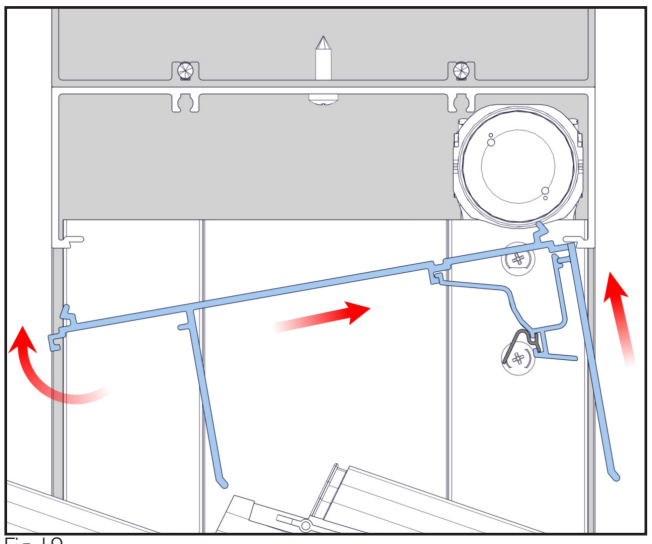


Fig 19.

Step 19.

Open the inside and outside louvres. Manouver the head insert assembly into position, with the OUTSIDE upstand overlapping the outside of the galleries & the Head Insert Plate fitting between the Jamb Plates.
Push the outside snap in point up into position, then swing the inside snap in point up and snap into place, taking care to ensure no wires are trapped in the process.

Refer to Figure 19.

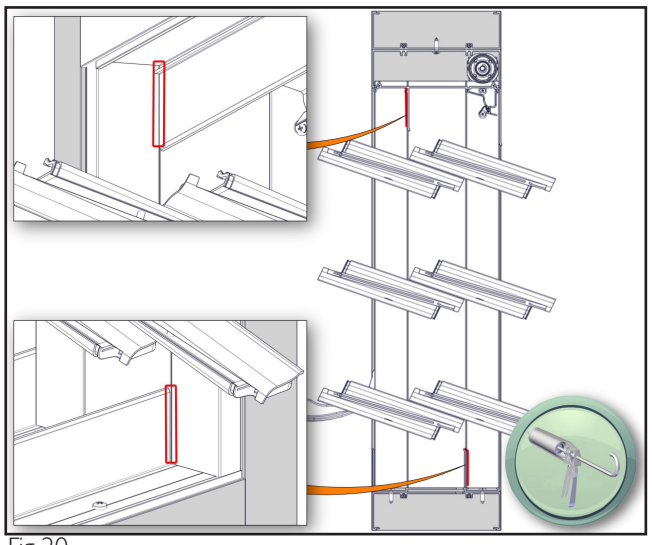


Fig 20.

Step 20.

Apply silicone to inside Head Insert upstand where it meets the gallery. Ensure this silicone is to the inside of the upstand in a place where the weatherstrip will cover it.
Apply silicone to the outside Sill Insert upstand where it meets the gallery. Ensure the silicone is to the outside of the upstand in a place where the weatherstrip will cover it.

Refer to Figure 20.

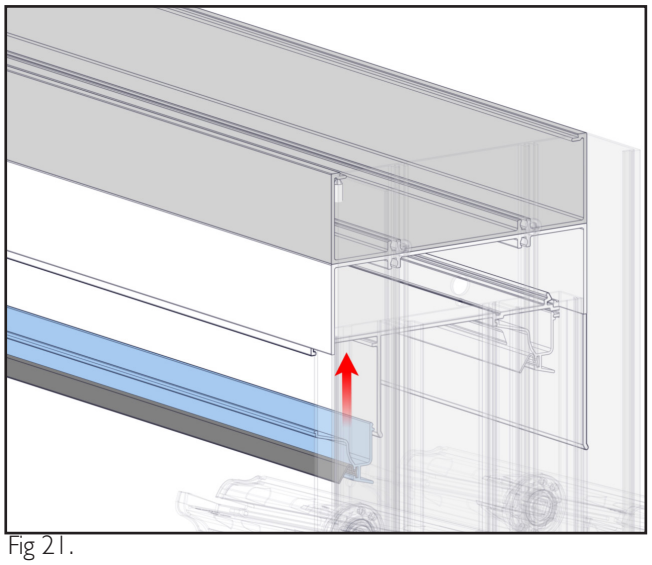


Fig 21.

Step 21.

Snap the inside Head Weatherstrip into place.

Refer to Figure 21.

Dualair Flat Framing Assembly Instructions

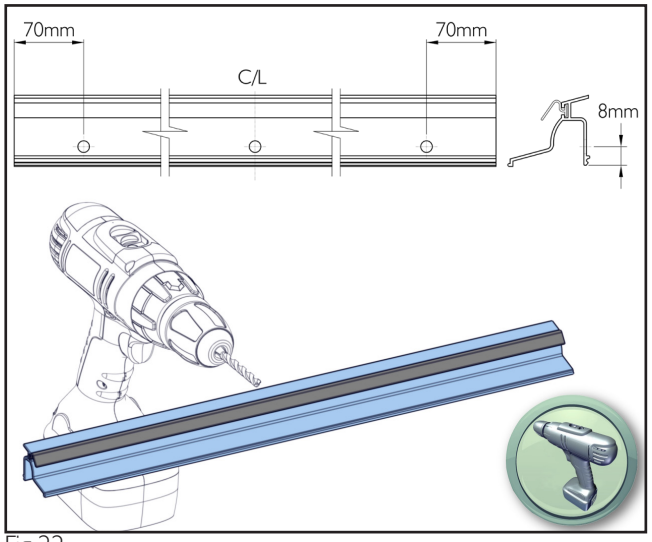


Fig 22.

Step 22.

Process the drainage holes into one of the sill weatherstrips using a 5mm drill bit. There should be three holes, 70mm from each end and one in the center. The holes should be approximately 8mm from the bottom of the leg.

Refer to Figure 22.

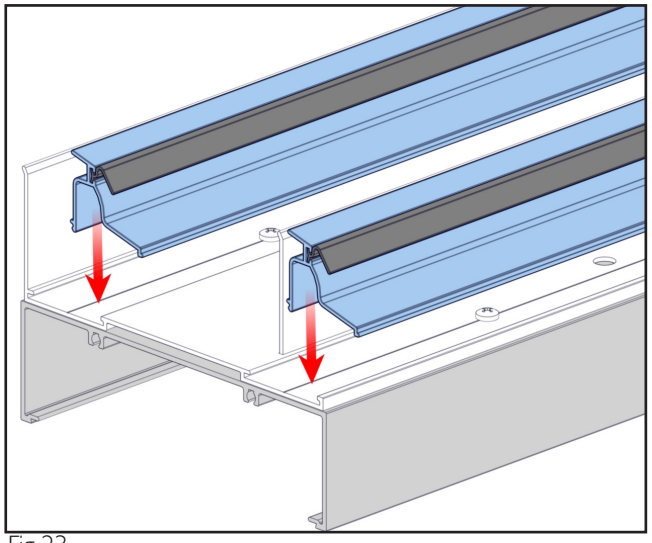


Fig 23.

Step 23.

Snap the sill weatherstrips into place.
The sill weatherstrip placed toward the outside should have the processed drain holes.

Refer to Figure 23.

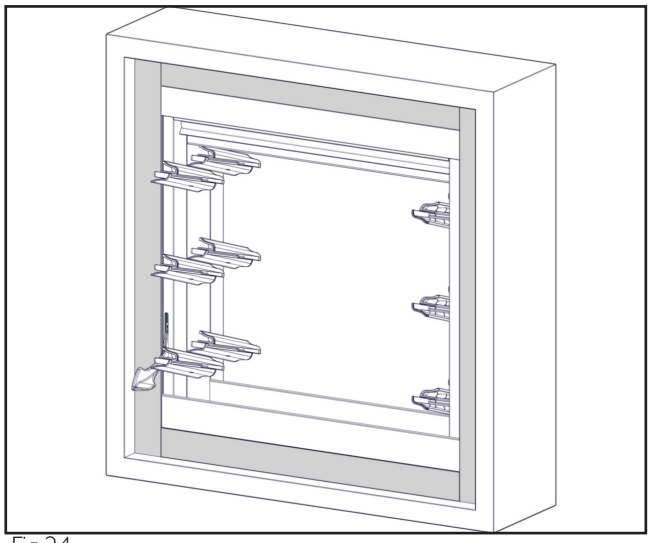


Fig 24.

Step 24.

Install the assemblied frame into the prepared opening, taking care to connect and manage the wiring.

Refer to Figure 24.

Dualair Flat Framing Assembly Instructions

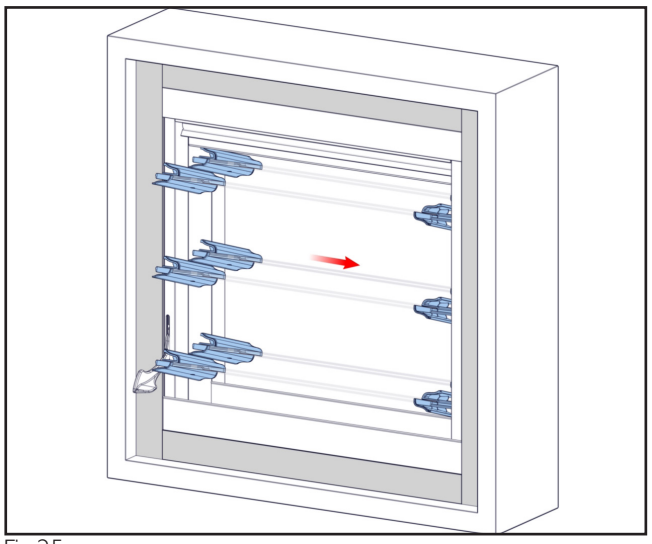


Fig 25.

Step 25.

Test the Powerlouvre motors operate freely and fully. Open both the internal and external galleries. Install the blades

Refer to Figure 25.

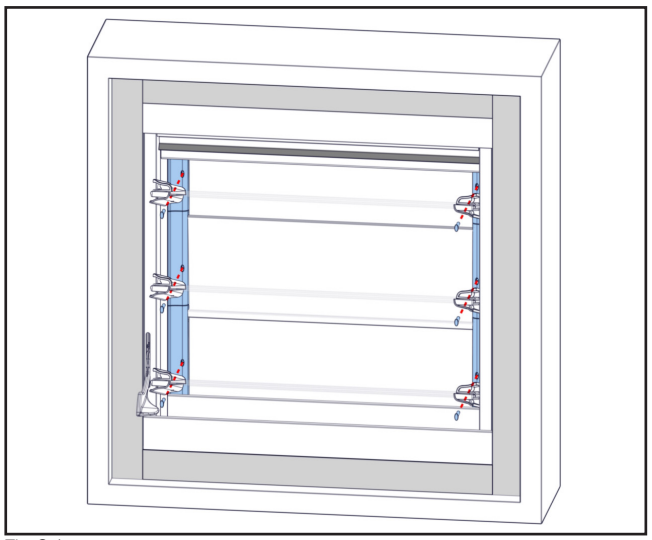


Fig 26.

Step 26.

Close the outside clips. If using Stronghold, push Stronghold pins into place.

Refer to Figure 26.

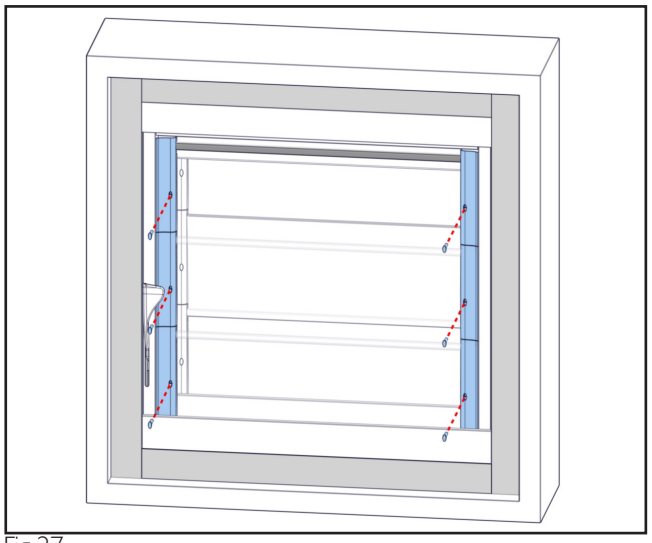


Fig 27.

Step 27.

Close the inside clips. If using Stronghold, push Stronghold pins into place.

Refer to Figure 27.

18.4.0-1 (B)