



Case Study

CARRIE MENDOZA

PROF. PAUL KING

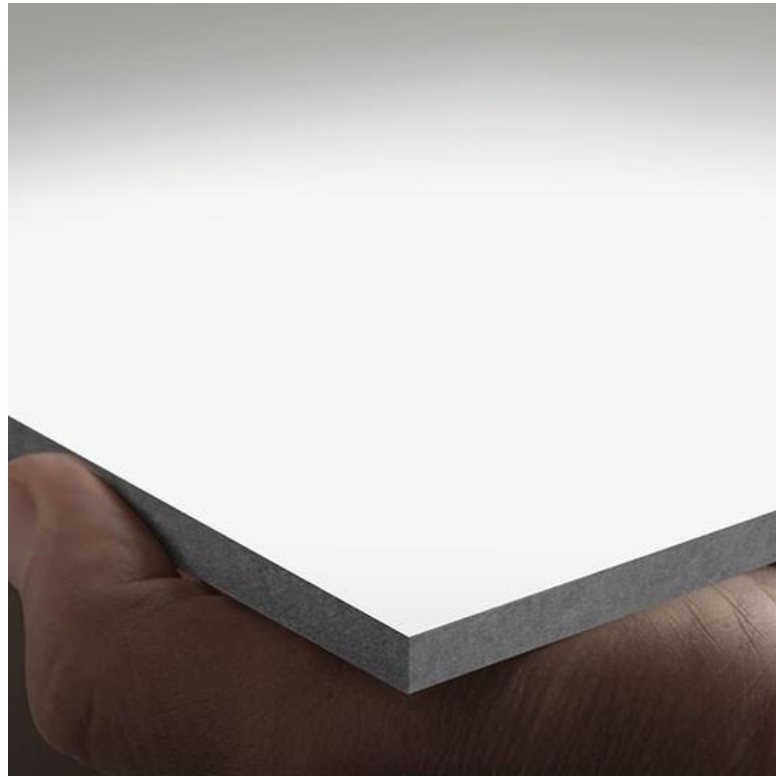
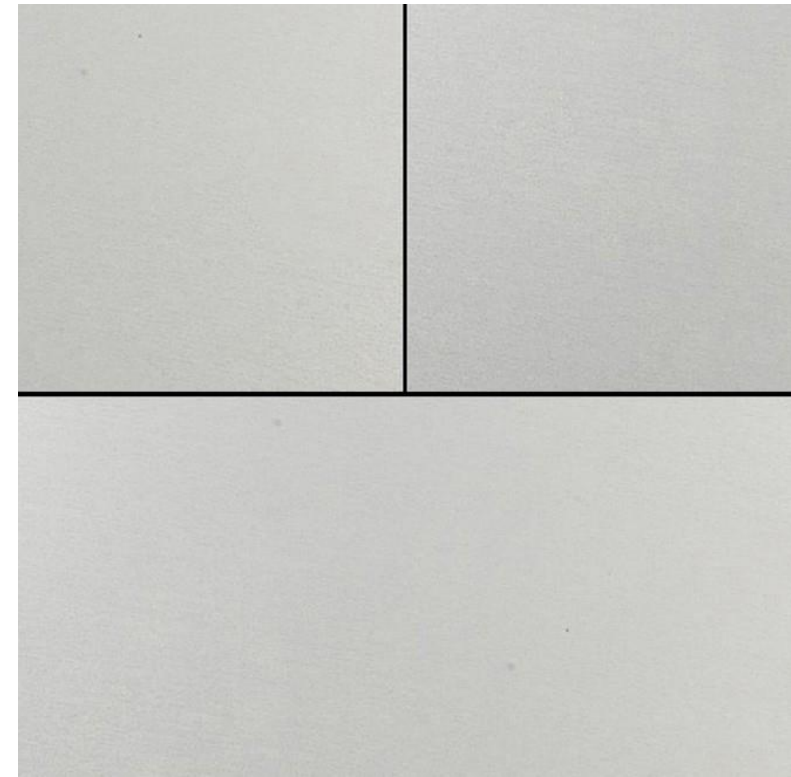
ARCH 2431 SPRING 2020

TEAM: CARRIE MENDOZA & ALANA WILLIAMS

Renzo Piano Morgan Library

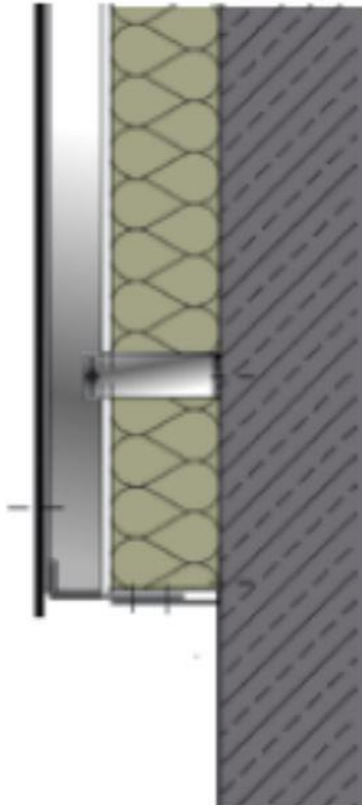


Opaque Material



Opaque Material-Detail

Base Details



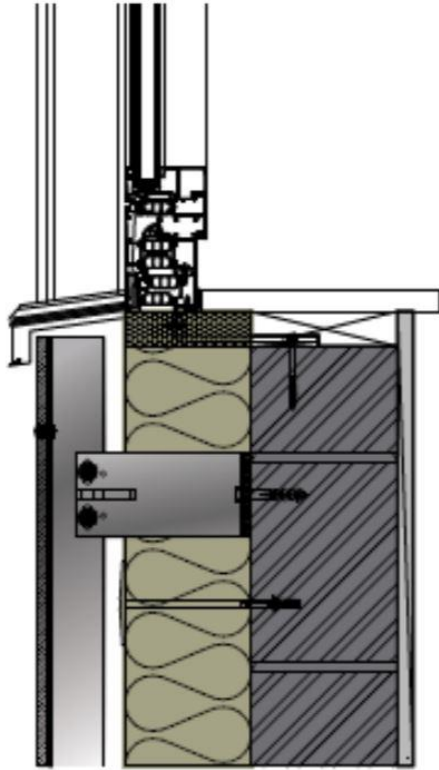
Securing* : Making a thermal bridge is crucial to creating a cooling and heating system that flows. The insulation can not move. It is a risk that the cavity can be blocked. It eliminates the façade being ventilation, by creating gaps. The gaps creates a space for condensation and mold growth.

Base Details: The ends of the panel are at best positioned above the finishing ground. The minimum requirement is 6 in. Helps prevent rain splash back from the ground while maintaining enough space for the air to enter the cavity. There shouldn't be any planting near the air inlet. Over the time the plants may block the air inlet.

The space between the panels and the wall must have a perforated fit. This piece allows air to enter the cavity space while preventing birds or vermin entering. Fasten the perforated profile to the wall and ensure it extends to within $\frac{3}{16}$ in of the back of the panel.

Recommended the panel overhangs the perforated profile between $\frac{3}{4}$ - 2 in to form a drip to allow rainwater to fall away from the building. The bottom row of panel fasteners should be between $2\frac{3}{4}$ - 4 in up from panel's bottom edge.

Opaque Material-Detail

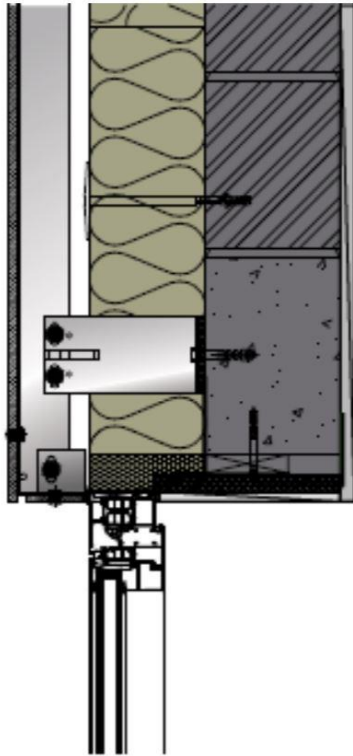


Window- Sill

Air from the cavity must be allowed to exit under the metal sill. A minimum of a $\frac{3}{8}$ in. gap should be left between the panel and the base of the sill. A perforated profile can be used for wider gaps to prevent entry of birds or vermin.

The front edge of the sill must be between $\frac{3}{4}$ - 2 in. away from the face of the panel and must be an adequate cover to the panels. The sill should extend down over the panels by a minimum of 2 in. The panel fasteners can be placed between $2\frac{3}{4}$ - 4 in. from the top edge of the panel.

Opaque Material-Detail

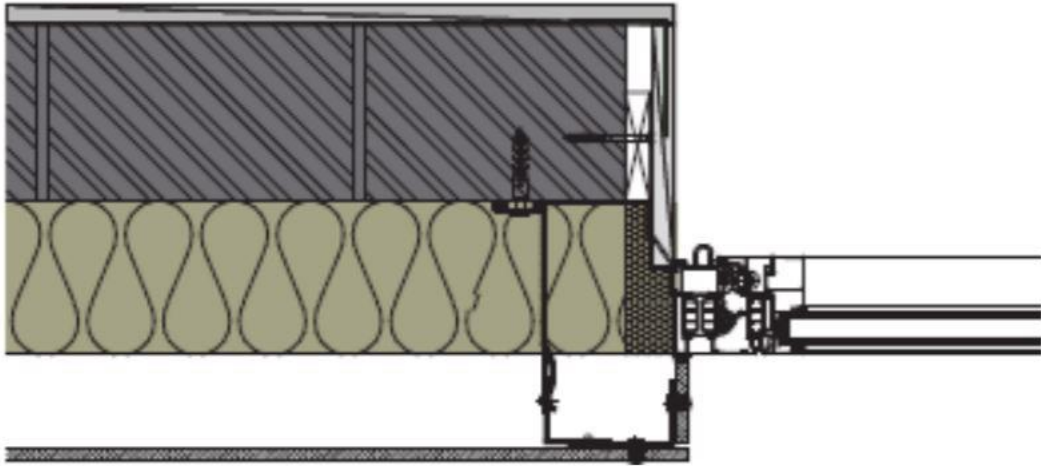


Window Head: Air must be allowed to enter the cavity above the heads of windows, doors, or other openings. A perforated profile used to protect the opening from the entry of birds or pest. For recessed window frames, a narrow strip of panel can be used as the reveal. For narrow reveals, flashings are best suited.

The panel can overhang the ends of the rails to form a drip by $\frac{3}{4}$ - 2 in. The panel fasteners should be between $2\frac{3}{4}$ - 4 in. up from bottom edge of the panel. To help conceal the perforated profile, the installer can paint it black prior to fitting.

Opaque Material-Detail

Window Opening/Jams: The ends of the window sill must be returned up, behind the panel, or the flashing at the reveals, to offer protection from moisture. For recessed window frames, a narrow strip of panel can be used as the reveal. For wide reveals, an F-profile accessory can be fastened to the window frame to hold the end of panel secure.

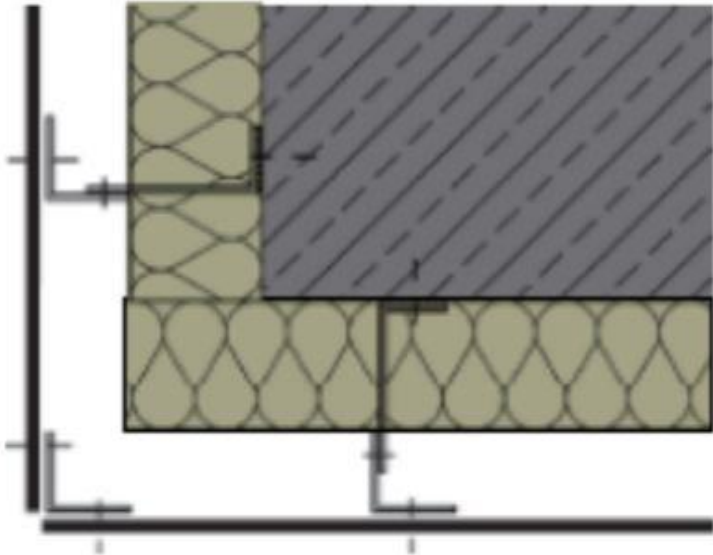


The front edge of the reveal panel can be fastened to the support frame corner profile. For narrow reveals, specialist flashings are best suited. The fasteners can be positioned between

Opaque Material-Detail

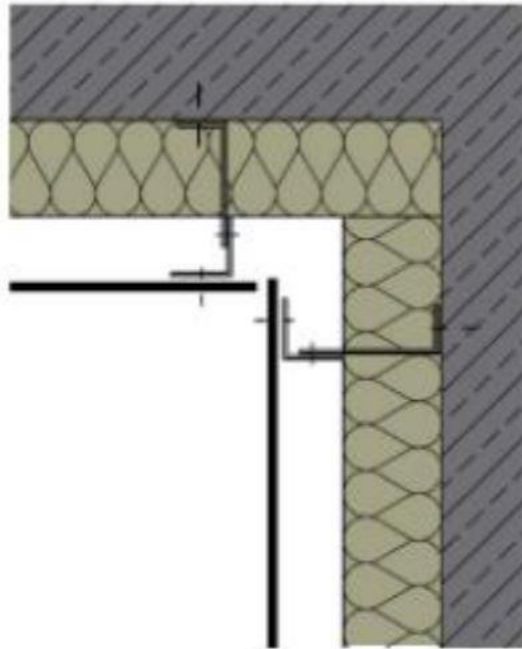
External Corners

External corners may be left as open joints or fitted with a proprietary trim profile. Normally, for open joints, a 2 11/32 x 2 11/32 in. . Joints in the corner profiles must coincide with the support frame expansion joints.



Opaque Material-Detail

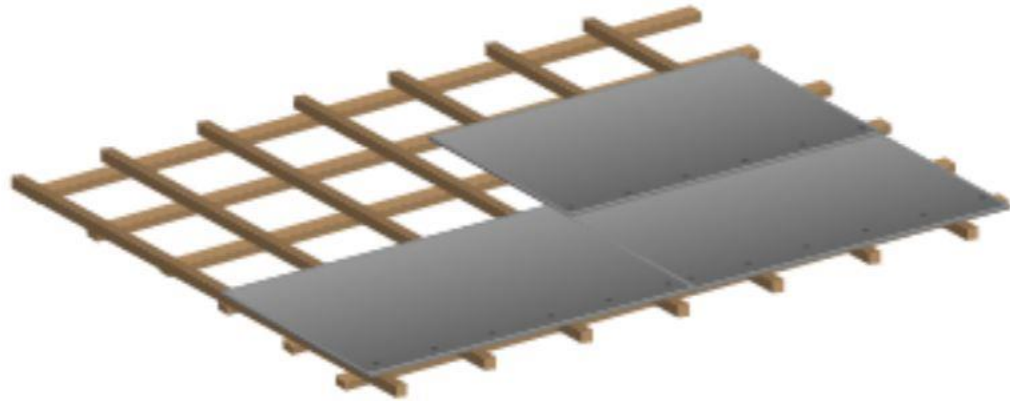
Internal Corners



Internal corners may be left as open joints or fitted with a proprietary trim profile. A 2 11/32 x 2 11/32 in. (60 x 60 mm) angle profile can be used to support the panel edges.

Opaque Material-Detail

Panels can be part of a roof. The panel is only decorative, and there must be a suitably designed water-proof construction under the panels.

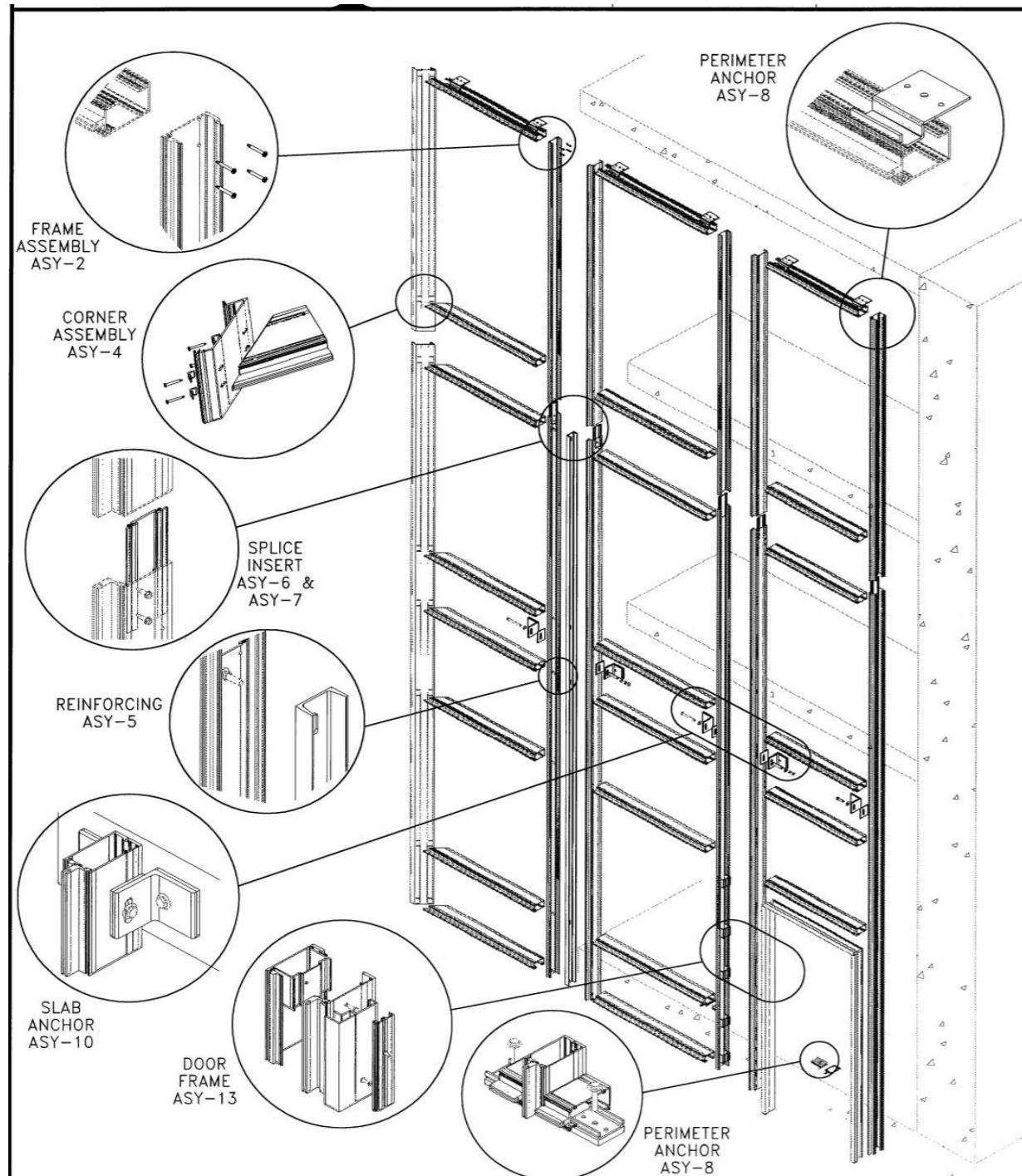
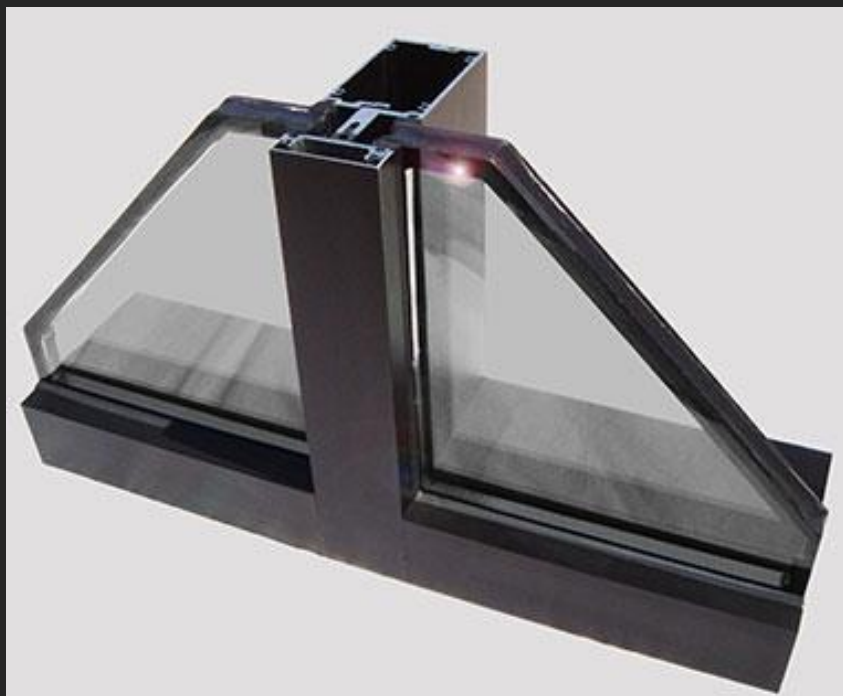


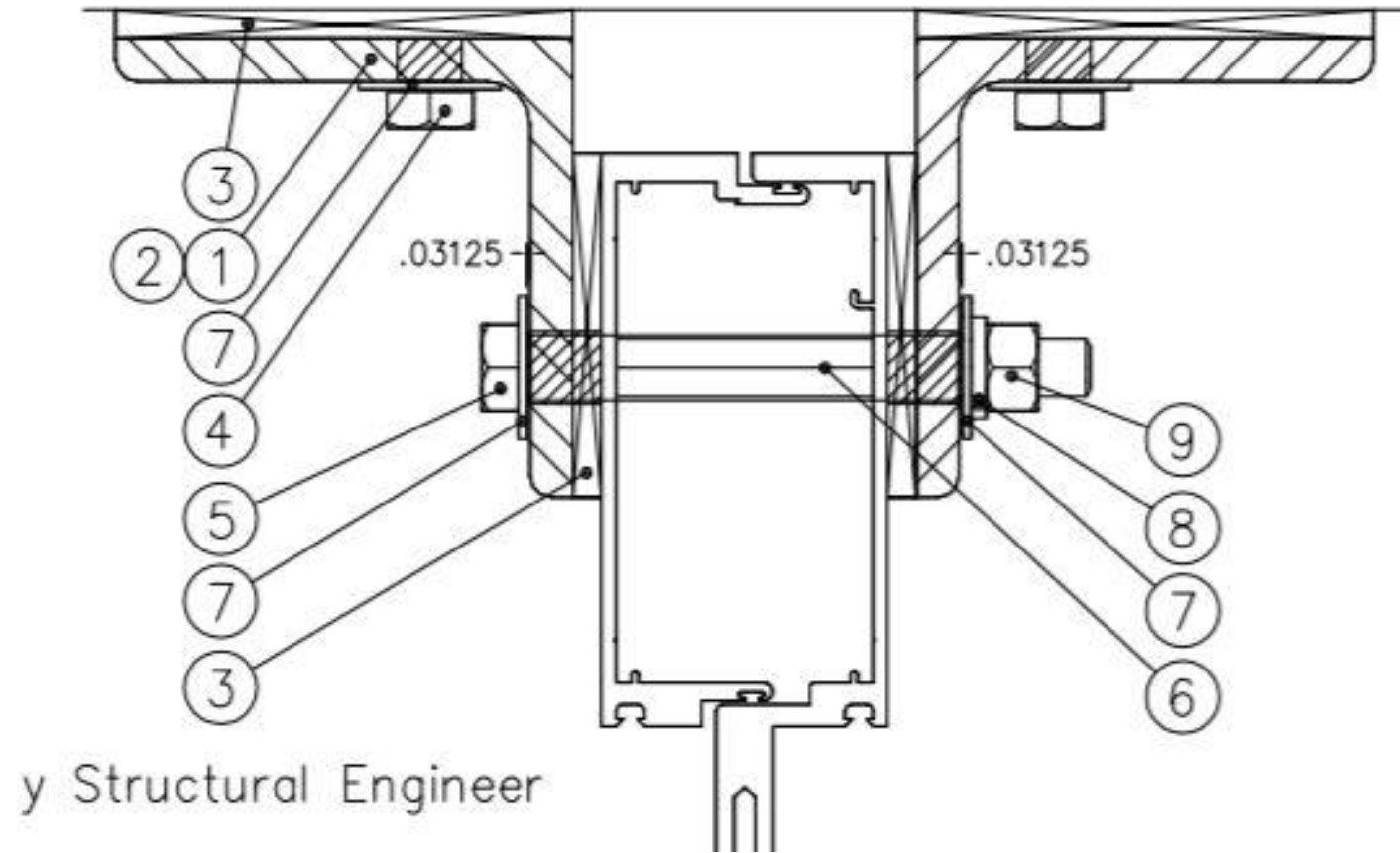
YouTube Video

<https://www.youtube.com/watch?v=LK83ekzQRww>

1:17

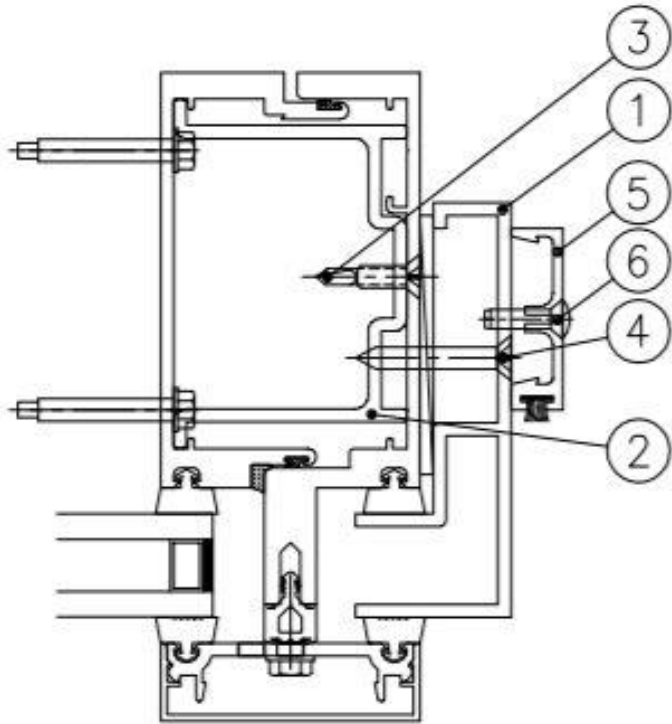
Glass Curtain Wall



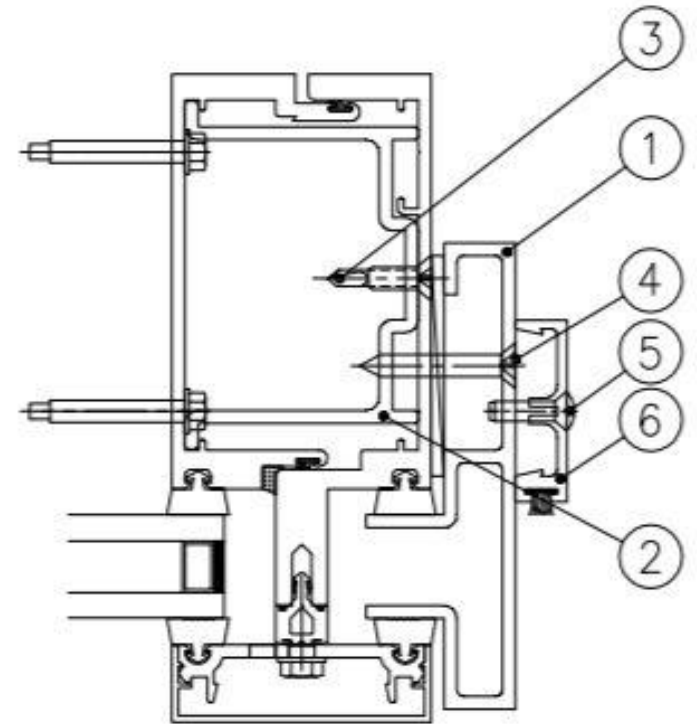


Slab Anchor

1-DeadLoad, 2- Wind load, 3- Solid PVC Shim, 4-Slab Anchor Bolt, 5- Steel Anchor Bolt, 6-Pipe Spacer-Stainless Steel, 7-Flat Washer, 8-Lock Washer, 9-Hex Nut



FLUSH WITH GLASS



FLUSH WITH COVER

Door Opening

1. Aluminum Door Insert 2. Aluminum Hot Channel 3" Long, 3. Flat Head Stainless Steel, 4. Sheet Metal Screw Flat Head, 5. Tap title, Oval Head, Stainless Steel, 6. Aluminum Door Stop with Wool Pile weather strip.

YouTube Video

<https://www.youtube.com/watch?v=qyY9Fx8pNts>

1:30