

Btech-Case Study Assignment

Leny vargas

Opaque Facade System

Sobotec
(SL-5000P
Sealed-Joint
Aluminum Plate)

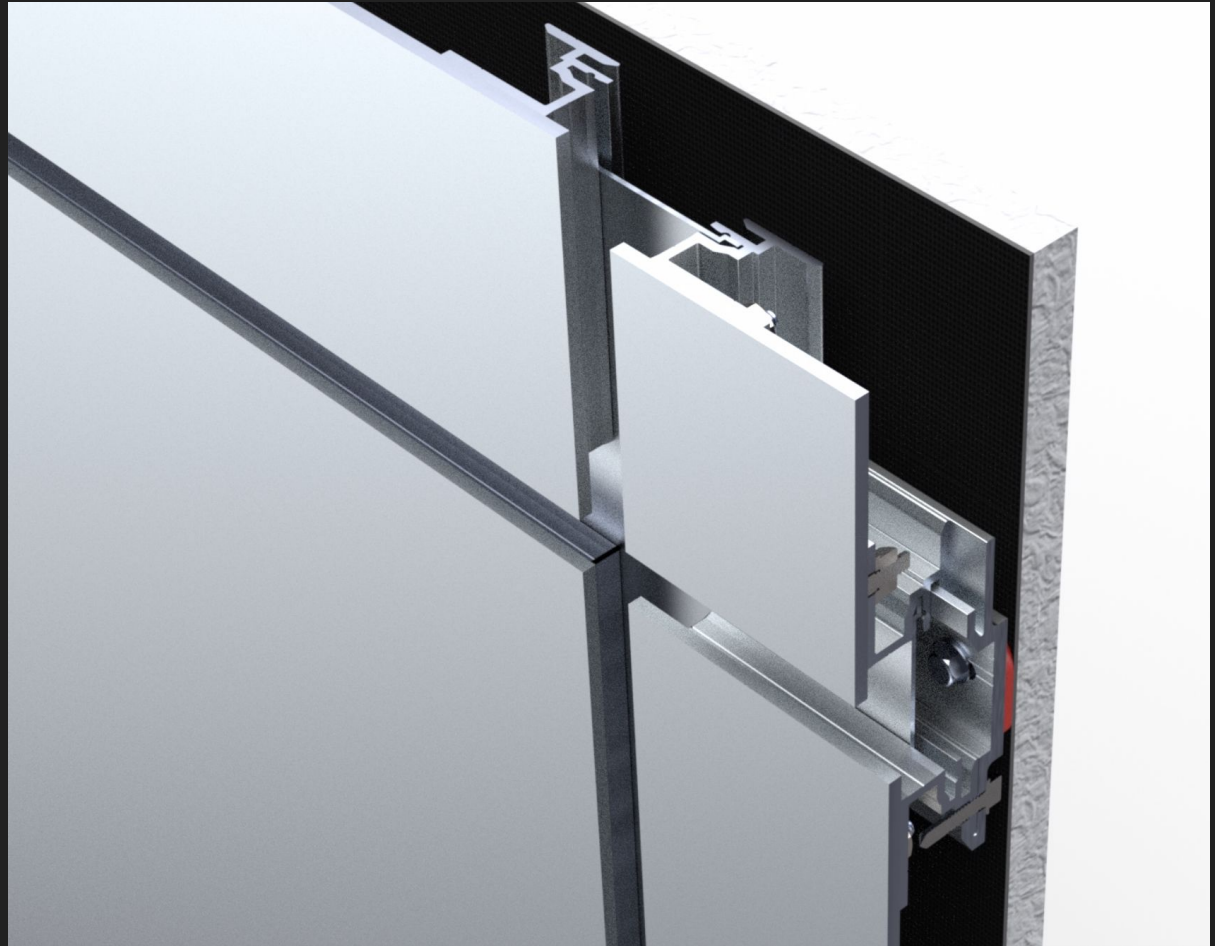


Sobotec (SL-5000P Sealed-Joint Aluminum Plate)

Basically it's a Metal stamping (very thick) solid plates at every system used when the exposed panels edge if they want it that way.

The system attached is customized by engineers using the welded studs so it can reduce heat transfer to face of the panels

The panels joints are set into the wall(just like doors or windows) and done in dark color so it can create a dark shadow.



Sobotec (SL-5000P Sealed-Joint Aluminum Plate)

System Characteristics & Testing

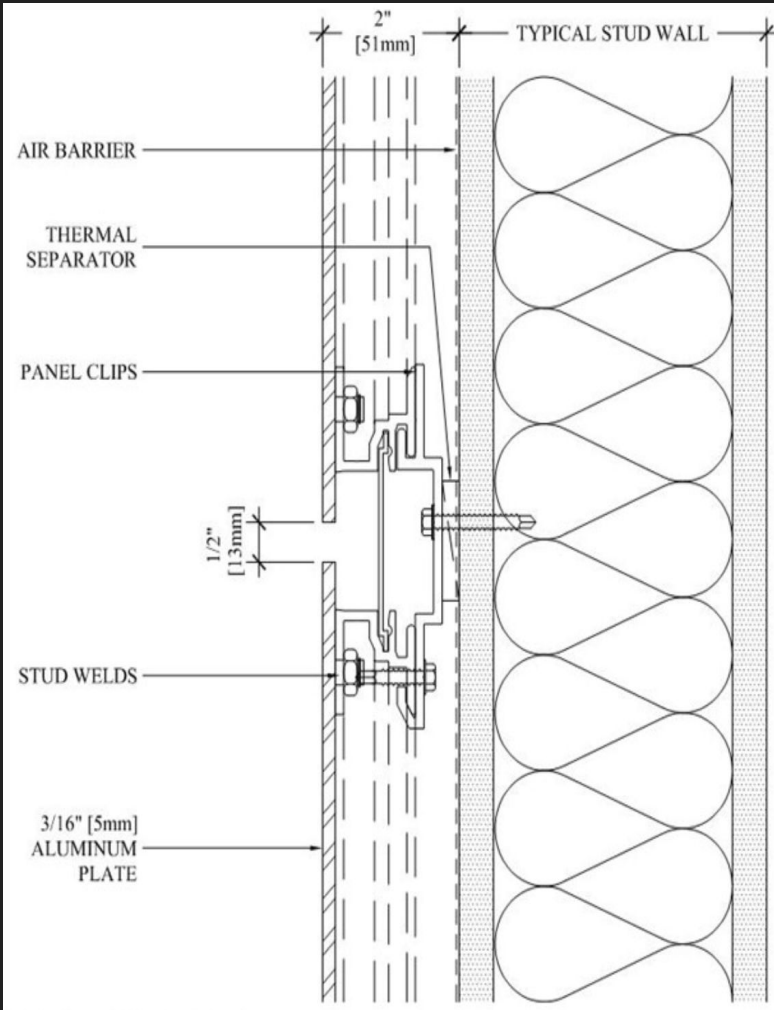
Material: 3/16" (~5mm) Aluminum Plate

**Joint
Type:** Dry

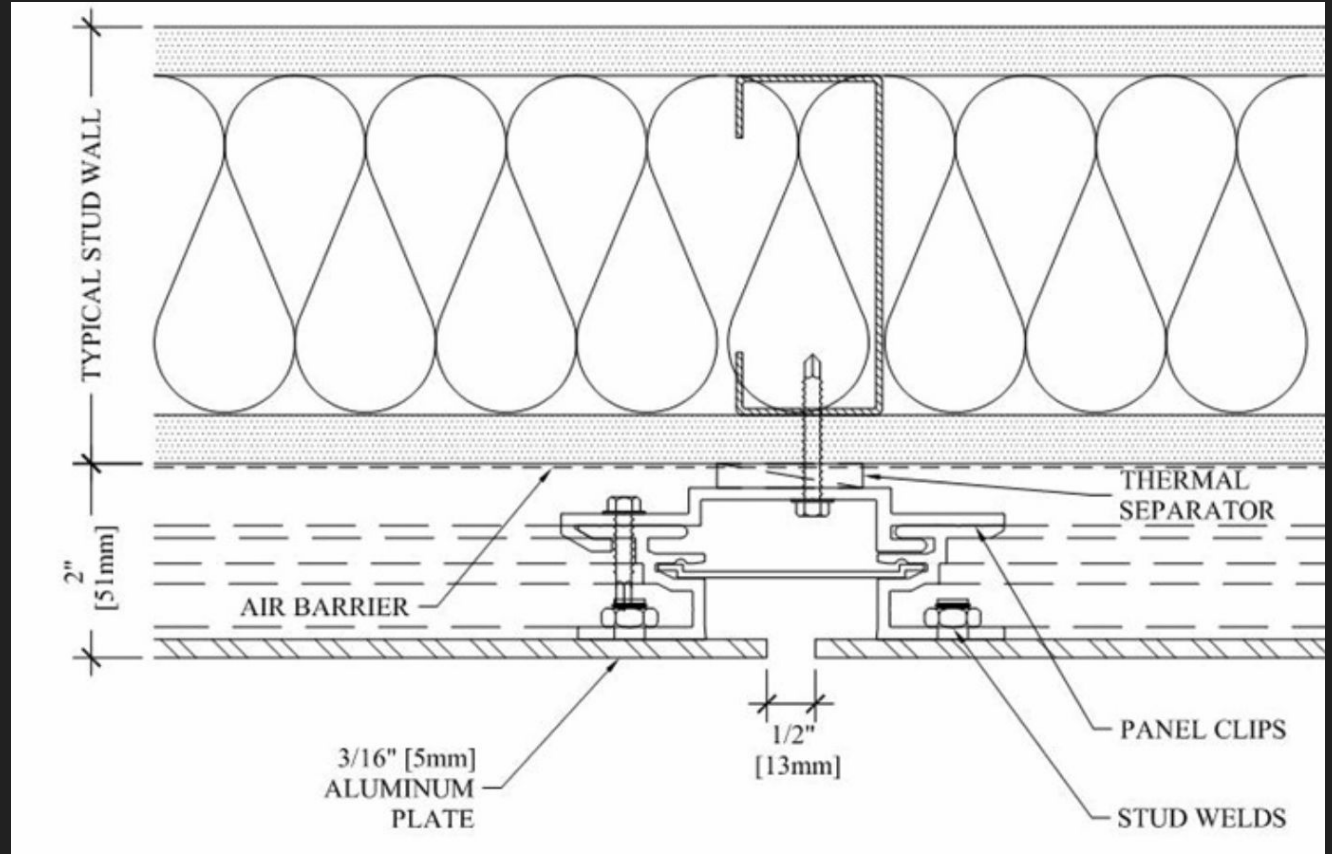
**Standard
Joint Size:** 1/2"

Testing: Full Scale Wall Test at ATI, York, PA;
Panel Load Tests at ITS, Toronto, ON

**Wall
Design:** Pressure Equalized Rainscreen System



Sobotec (SL-5000P Sealed-Joint Aluminum Plate)



Sobotec (SL-5000P Sealed-Joint Aluminum Plate)

https://www.youtube.com/watch?v=Y23Rx_mU5e0

Pressure Equalized Rain screen system

~open joint rainscreen facade choosing alovi cause pressure equalized system.

~LPL/ speed 1-1 which transfer the structural load to the wall which goes inside the brackets

~Trace v-groove bit router with 90 degree cutting angle to make grooves on the ACP/ Then fold the panels into a tray

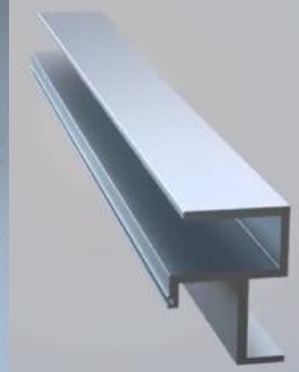
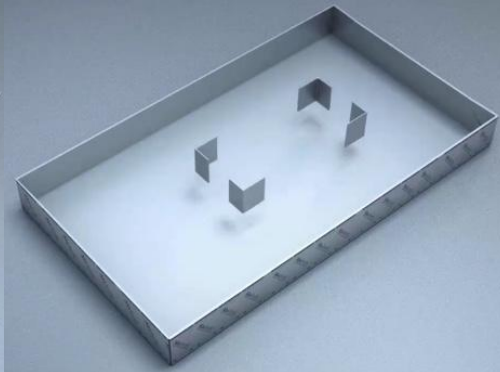
~LPL/P/111 Place at the corner of the tray and connect them and to secure them with aluminum pop rivets and steel screws

<https://www.youtube.com/watch?v=0ZbqxvpuU80>

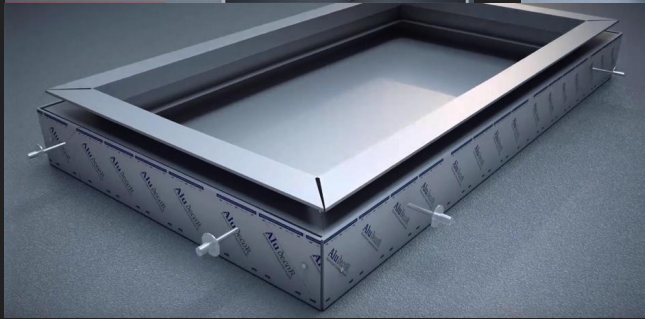
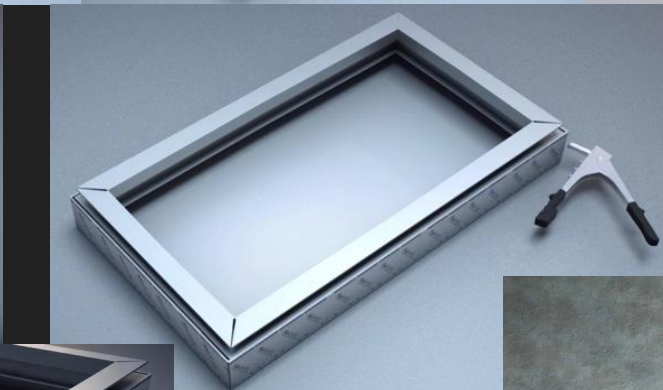
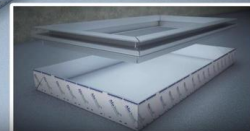
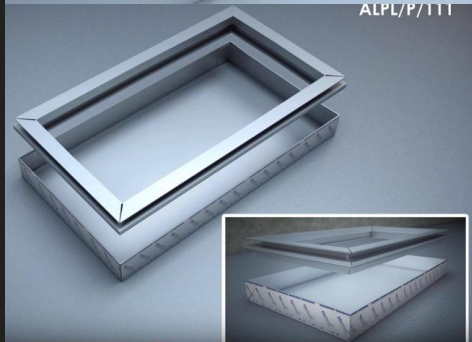
~Drainage Gap from MTI create drainage gaps from $\frac{1}{8}$ in,

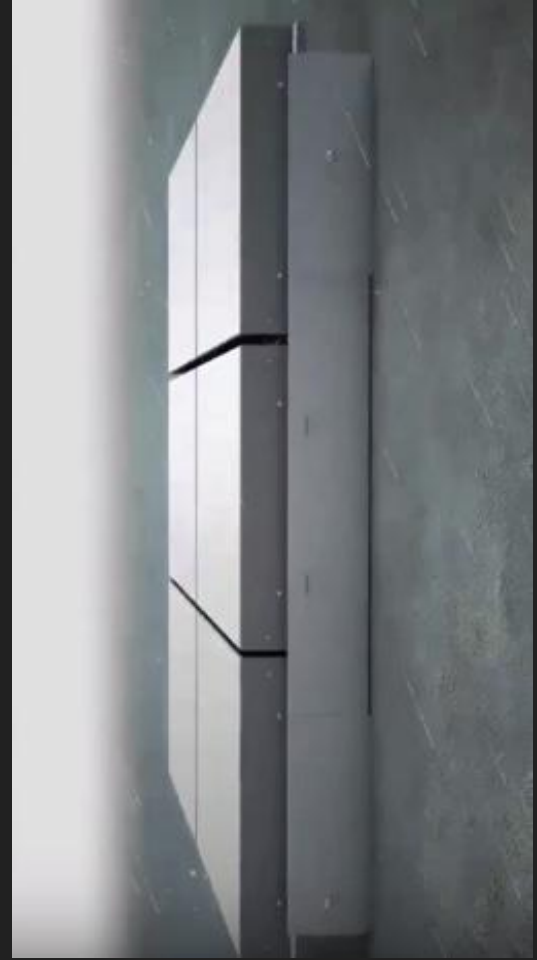
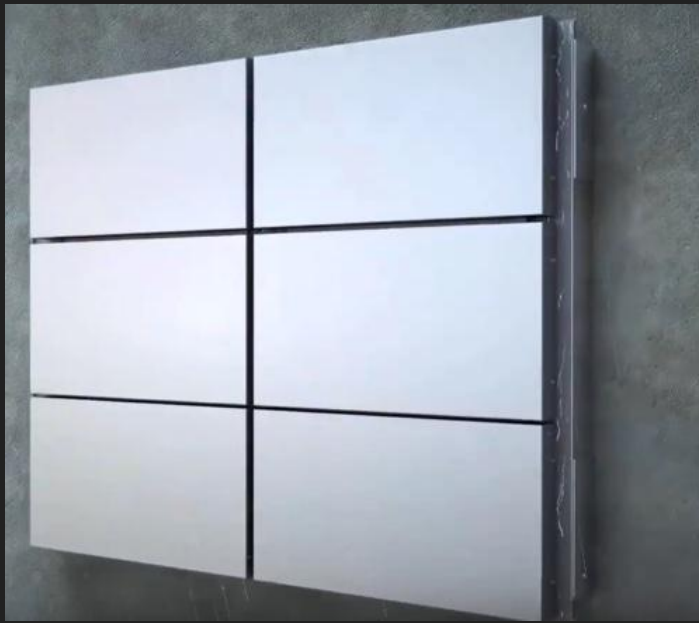
$\frac{3}{16}$ in and $\frac{3}{8}$ in for increasing level of protection.





ALPL/P/111





Project: Gates Vascular
Institute

Location: Buffalo, NY

Architectural Firm:
Yazdani Studio of
CannonDesign

Sobotec System &

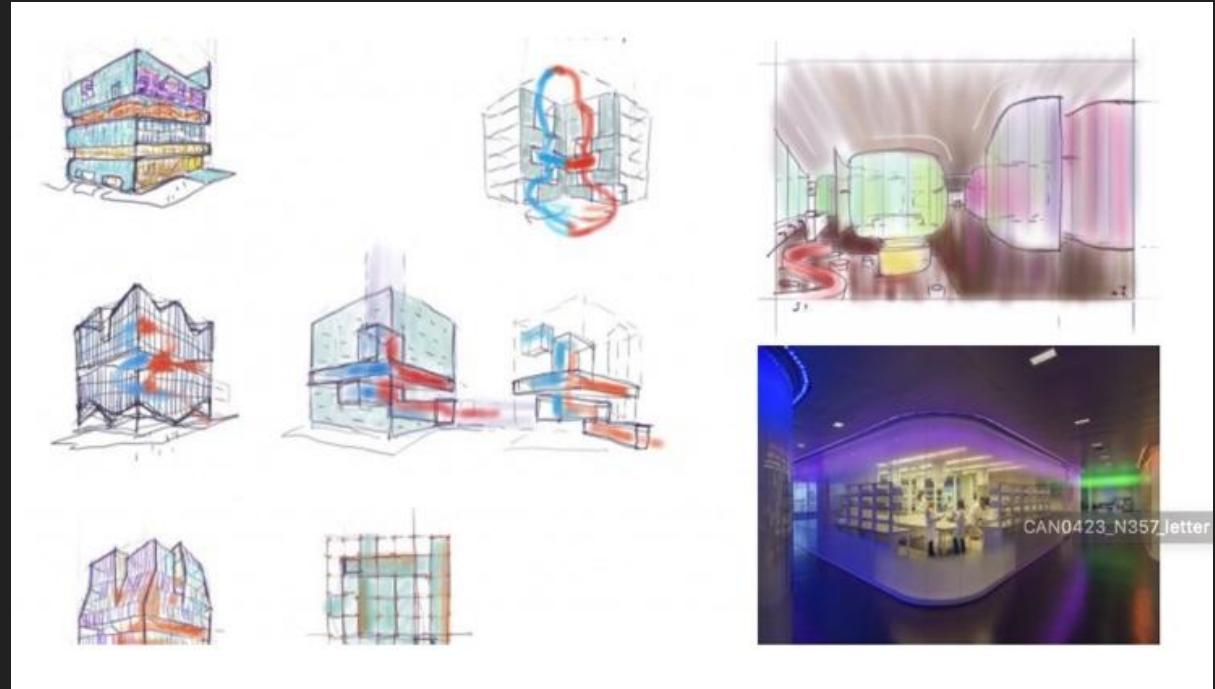
Material: SL-5000P & Solid
Aluminum Plate



Project: Gates Vascular Institute

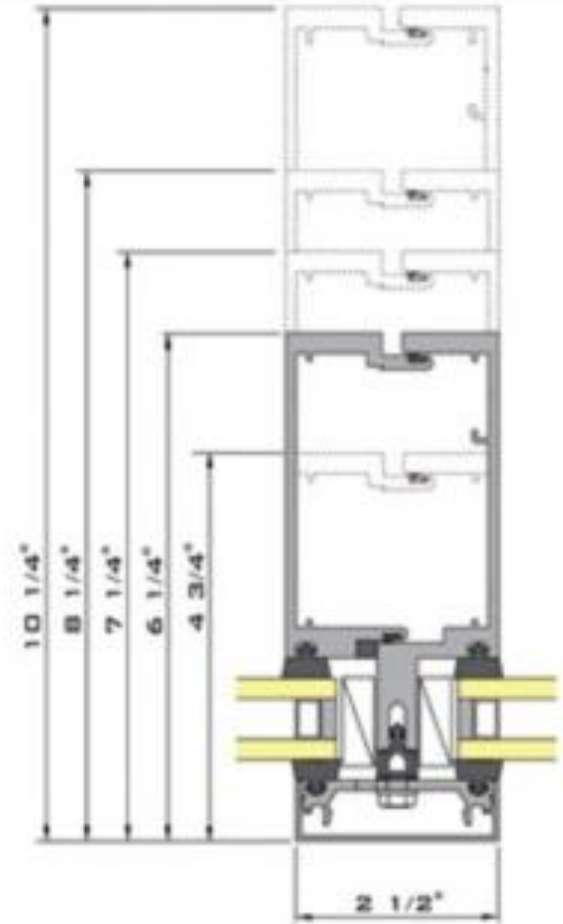
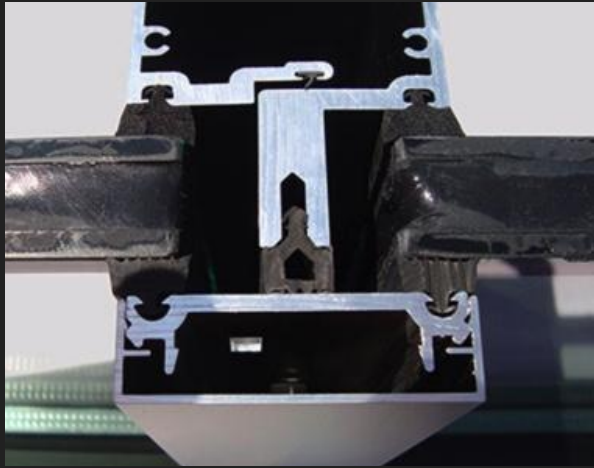
It's a hospital where doctors are performing complicated procedure on patients who are suffering from strokes cardiac and vascular care.

Here's are drawing how they programed the building for the hospital



Glass Curtain Wall System:

-Wausau (Superwall)



Glass Curtain Wall System:

-Wausau (Superwall)

FEATURES:

- Wausau's flagship curtainwall product line
- 4 3/4", 6 1/4", 7 1/4", 8 1/4" or 10 1/4" frame depths
- Several frame depths including cladding for steel tubes
- 2 1/2" or 3" exterior sight line - Many accent covers available
- 3/8" thermal separation
- Proven pressure-plate system designed for field glazing
- Captured or two-side structural glazed
- Splayed mullions available for segmented radii
- Screw-spline construction
- "F" and "T" perimeter anchors
- Zero sight line vents available
- Available with interior access doors and between-glass blinds
- Exterior sun shades and interior light shelves available
- NFRC and Component Modeling Approach (CMA) listed
- Recycled aluminum framing available upon request

http://www.wausauwindow.com/resources/files/Wausau_SuperWall_Binder_Details_PDF.pdf

Thermal Performance Summary	NFRC U-Factor BTU/hr.ft ² .°F	NFRC Solar Heat Gain Coefficient	CRF	STC OITC
	Modeled Range	SHGC Range		
6250 SuperWall Aluminum PP (Captured Glazing)	0.35 to 0.57	0.34 to 0.65	68 Frame 67 Glass	31 to 35 STC
6250 SuperWall Composite PP (Captured Glazing)	0.34 to 0.54	0.34 to 0.65	73 Frame 69 Glass	
6250 SuperWall SSG (Four-Side Silicone)	0.37 to 0.55	0.34 to 0.65	74 Frame 67 Glass	26 to 32 OITC

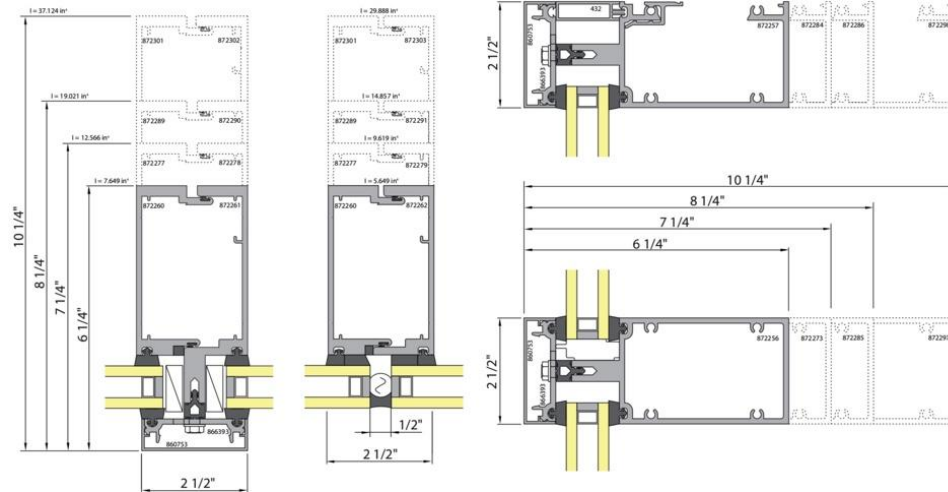
Glass Curtain Wall System:

-Wausau (Superwall)

<https://www.youtube.com/watch?v=rQHZLT82hcE>
shows how they are putting a glass curtain wall

SuperWall™

Details

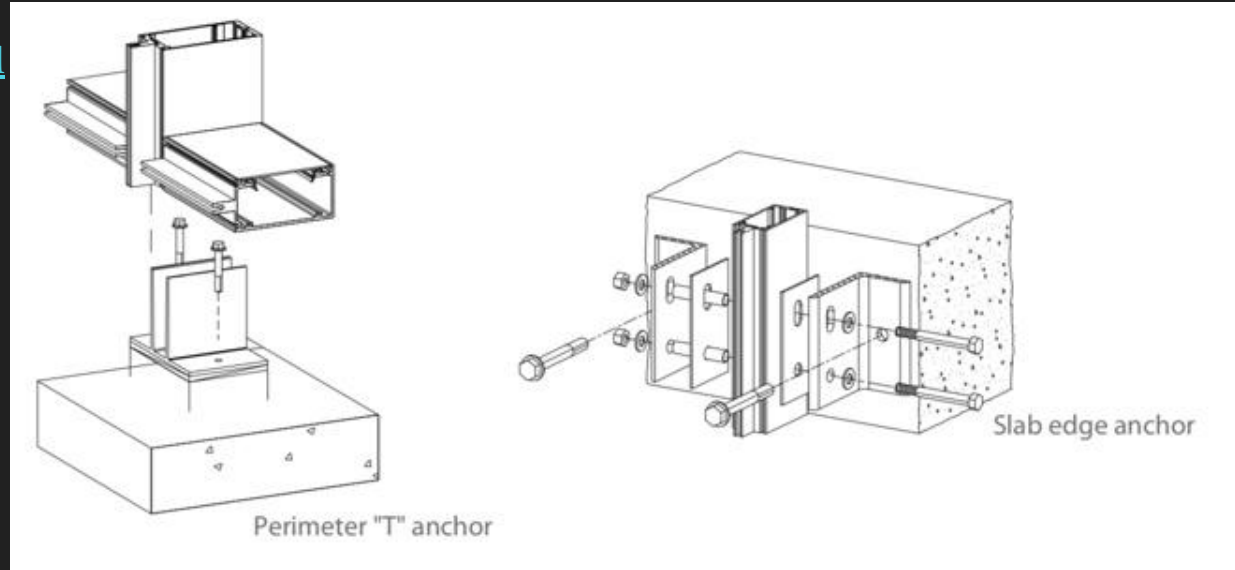


Glass Curtain Wall System:

-Wausau (Superwall)

<https://www.youtube.com/watch?v=yi2g6l-rjISw>

Explains the safety measures and how their various options and materials to pick from as well fireproof and waterproof.



Project:
Seattle's Third & Harrison office building
features Wausau curtain wall and windows

