

A low-angle photograph of a modern building corner. The building features a facade of light-colored terracotta panels and large glass windows. The sky is a deep blue with some light clouds. The text "TERRACOTTA PANEL WALL ASSEMBLY" is overlaid in large, white, bold, sans-serif capital letters. Below it, the name "Eduardo Ramirez" is written in a smaller, white, sans-serif font.

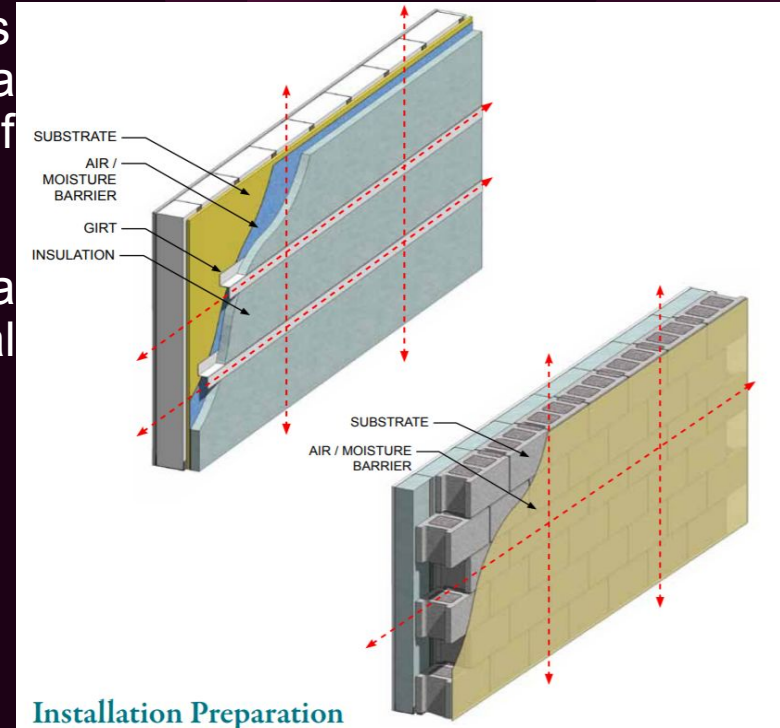
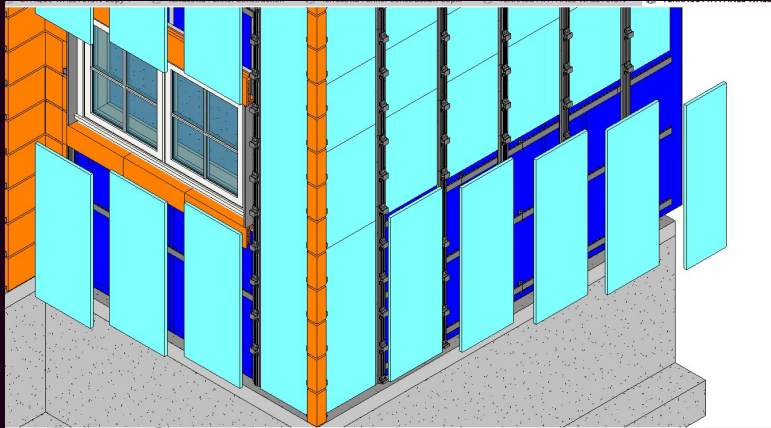
TERRACOTTA PANEL WALL ASSEMBLY

Eduardo Ramirez

THERMAL PROPERTIES

Terracotta panels have a minimum of 4 inch gaps from the studs or CMU to back of finished terracotta panels, there is enough space for different types of insulation.

The most commonly used insulation in terracotta panels is 1-2" rigid insulation between the vertical and horizontal tracks



PICTURE: BOSTON VALLEY

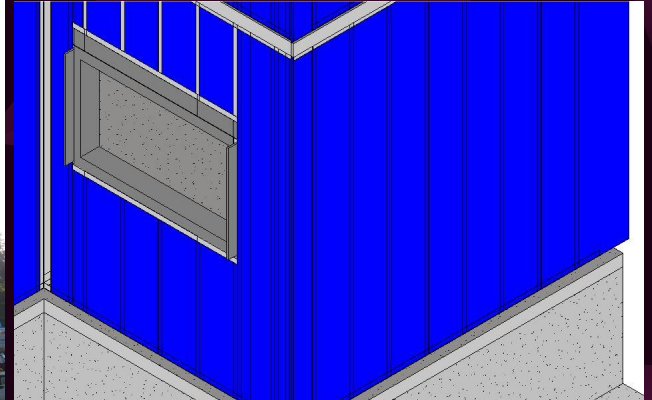
WATERPROOFING PROPERTIES

Terracotta panels have a minimum of 4 inch gaps from the studs or CMU to back of finished terracotta panels, in which a waterproofing membrane is used on top of the CMU or on a sheathing wall on the studs

Because there is an air gap, it allows water to go right through the gap and out with help of flashing

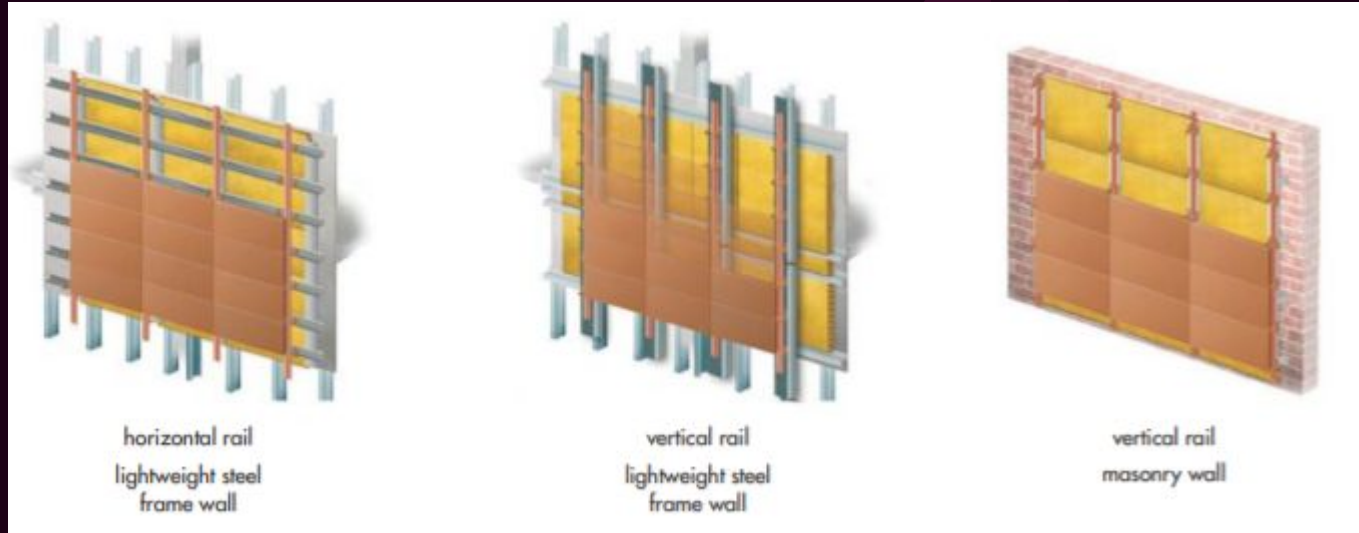


PICTURE: BOSTON VALLEY



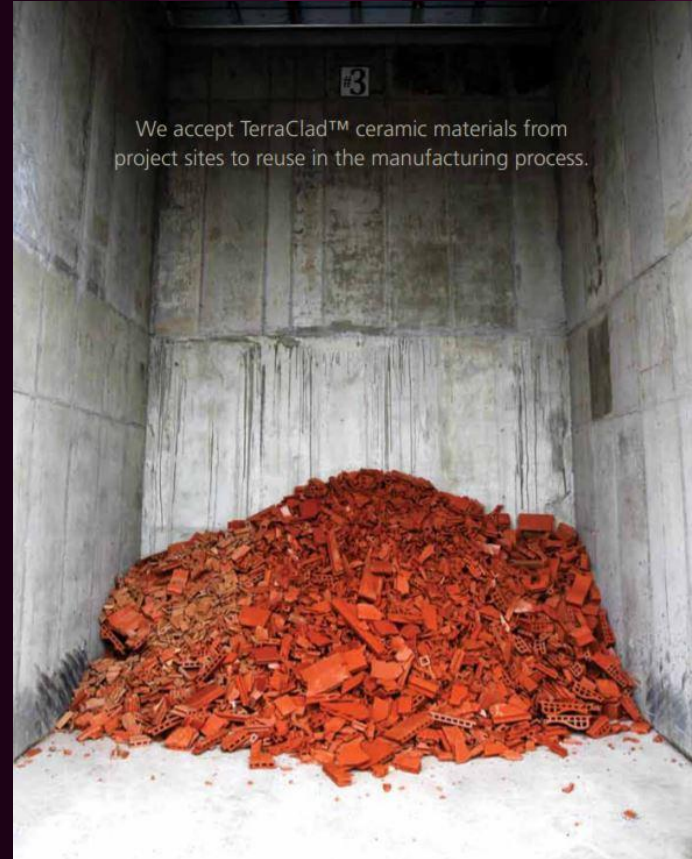
FIRE PROTECTION PROPERTIES

Terracotta panels and the aluminium tracks used are non combustible to help with fire protection



SUSTAINABILITY

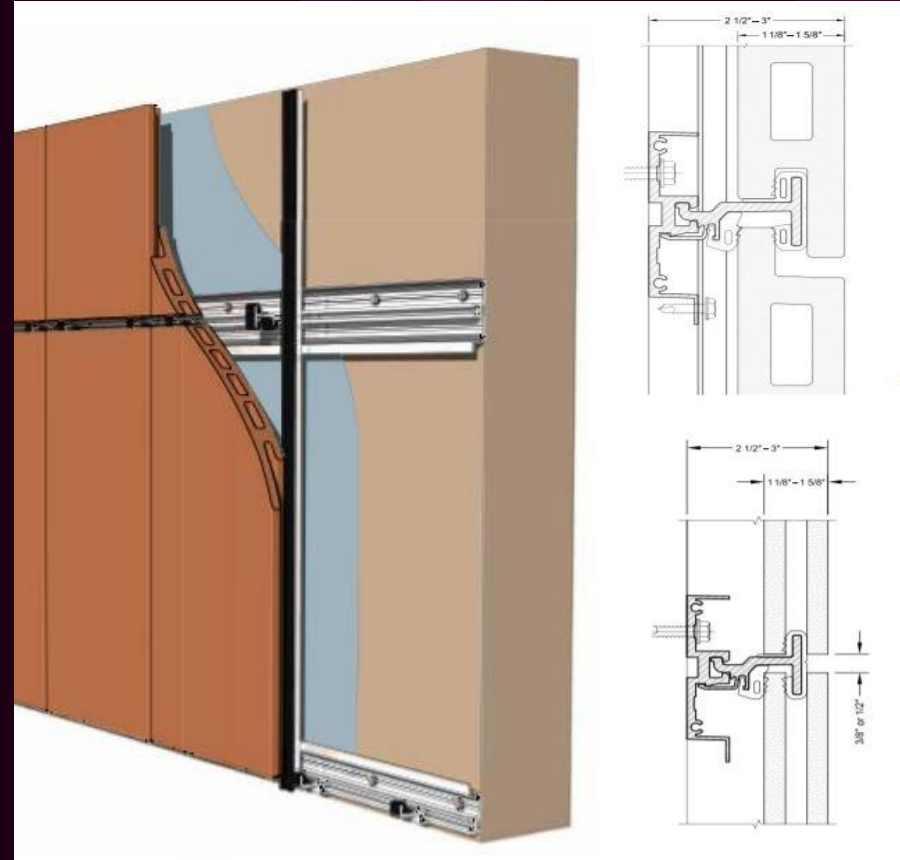
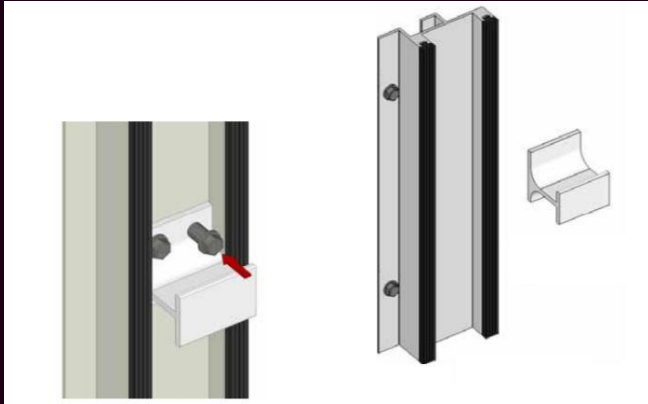
Boston Valley offers a way in which you can give them most ceramic materials from old construction sites and through their manufacturing process, can be used to create new terracotta panels



STRUCTURAL PROPERTIES

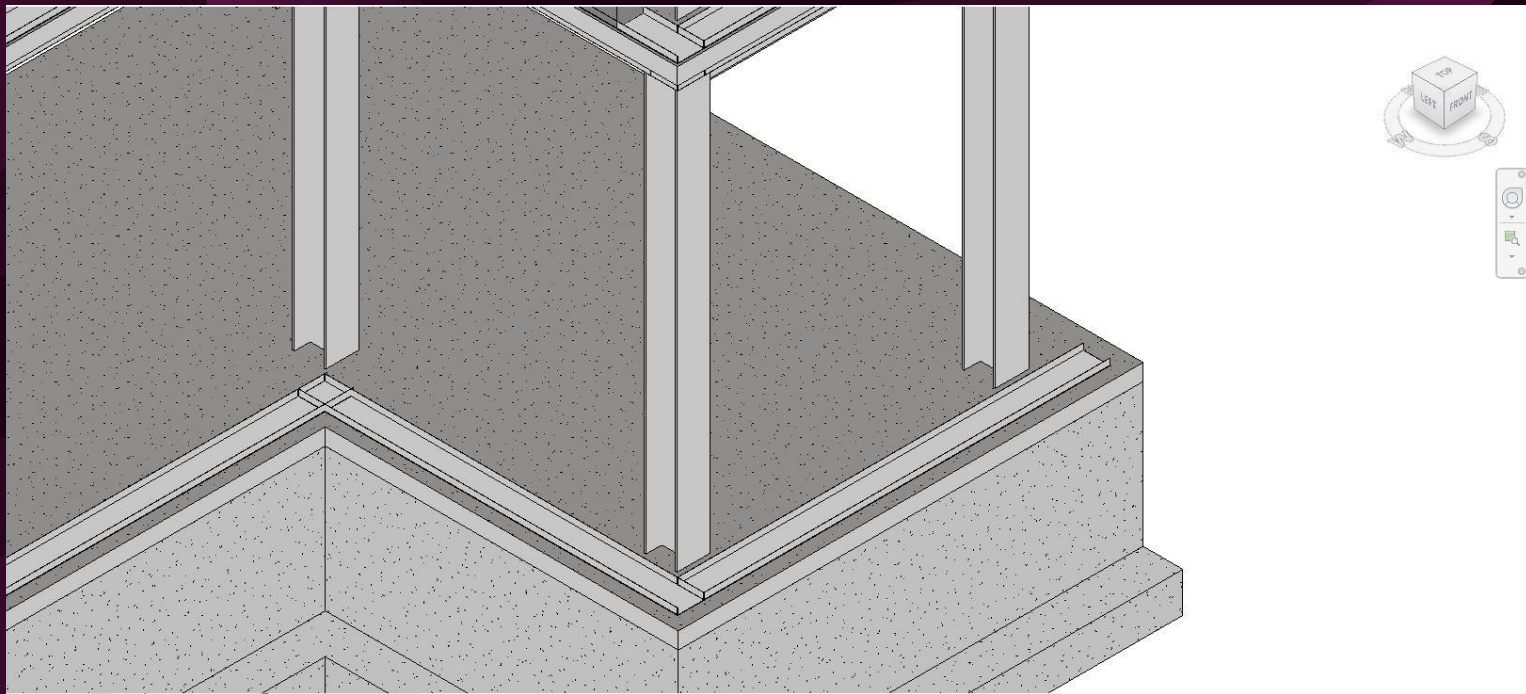
The main structure of the terracotta panel system is held by vertical and horizontal tracks. These tracks span the length and width of the wall.

The tracks serve as the backing for the clips that are bolted to the tracks and then the panels are hung from the clips.

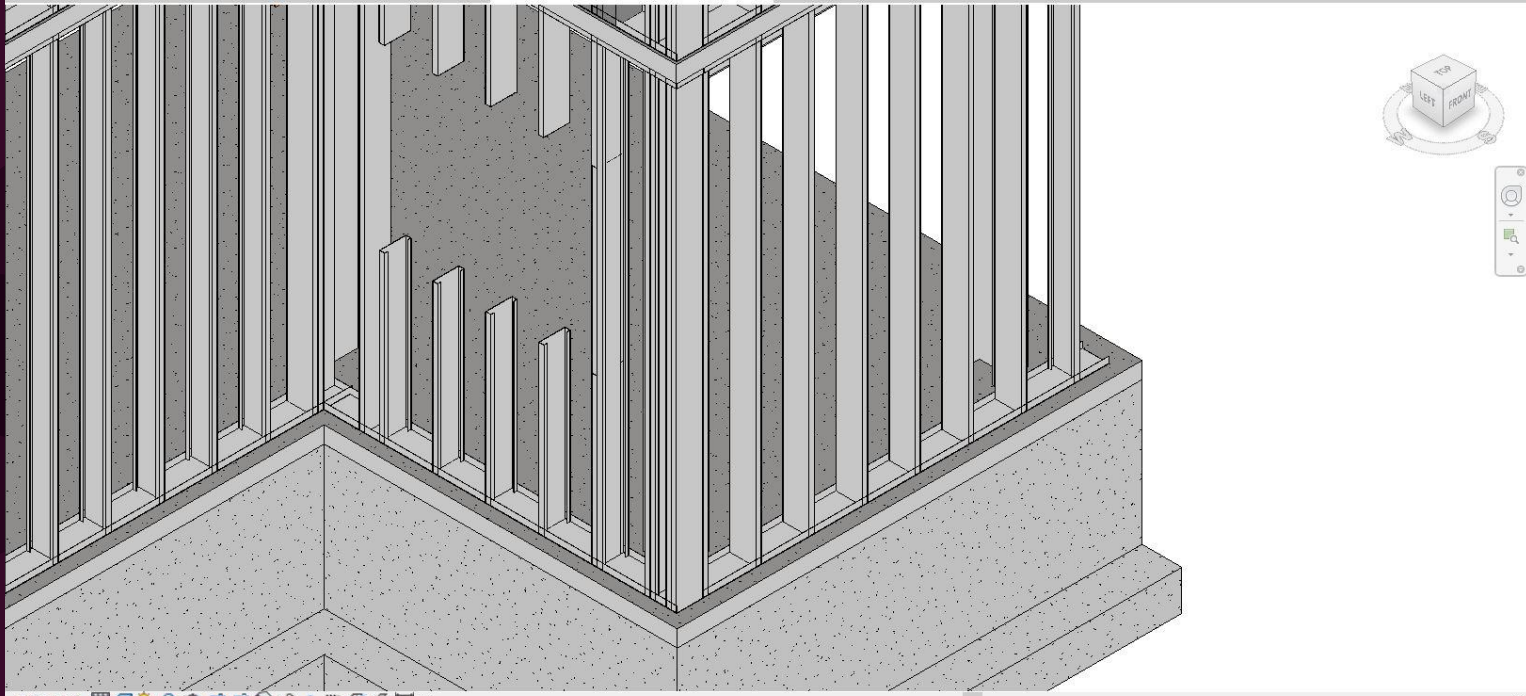


PICTURES: BOSTON VALLEY

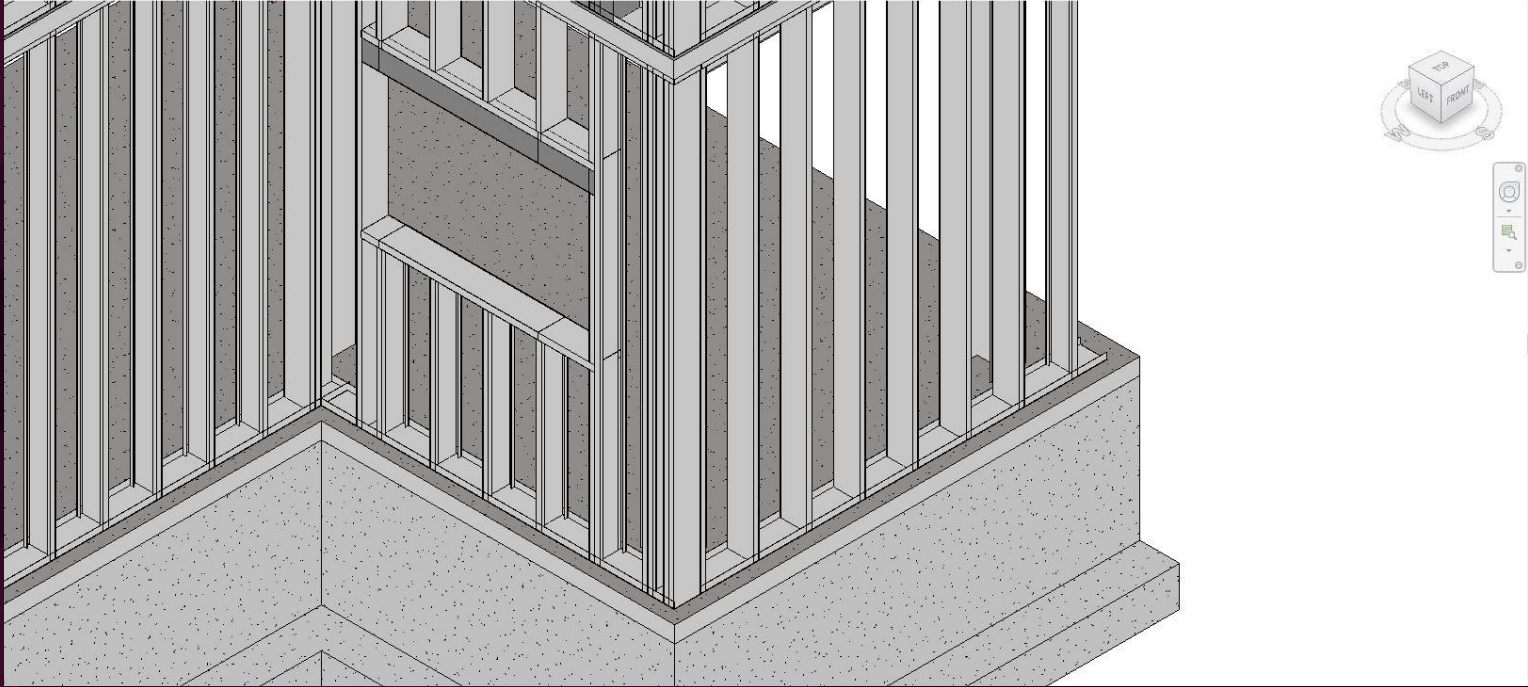
8" TRACKS



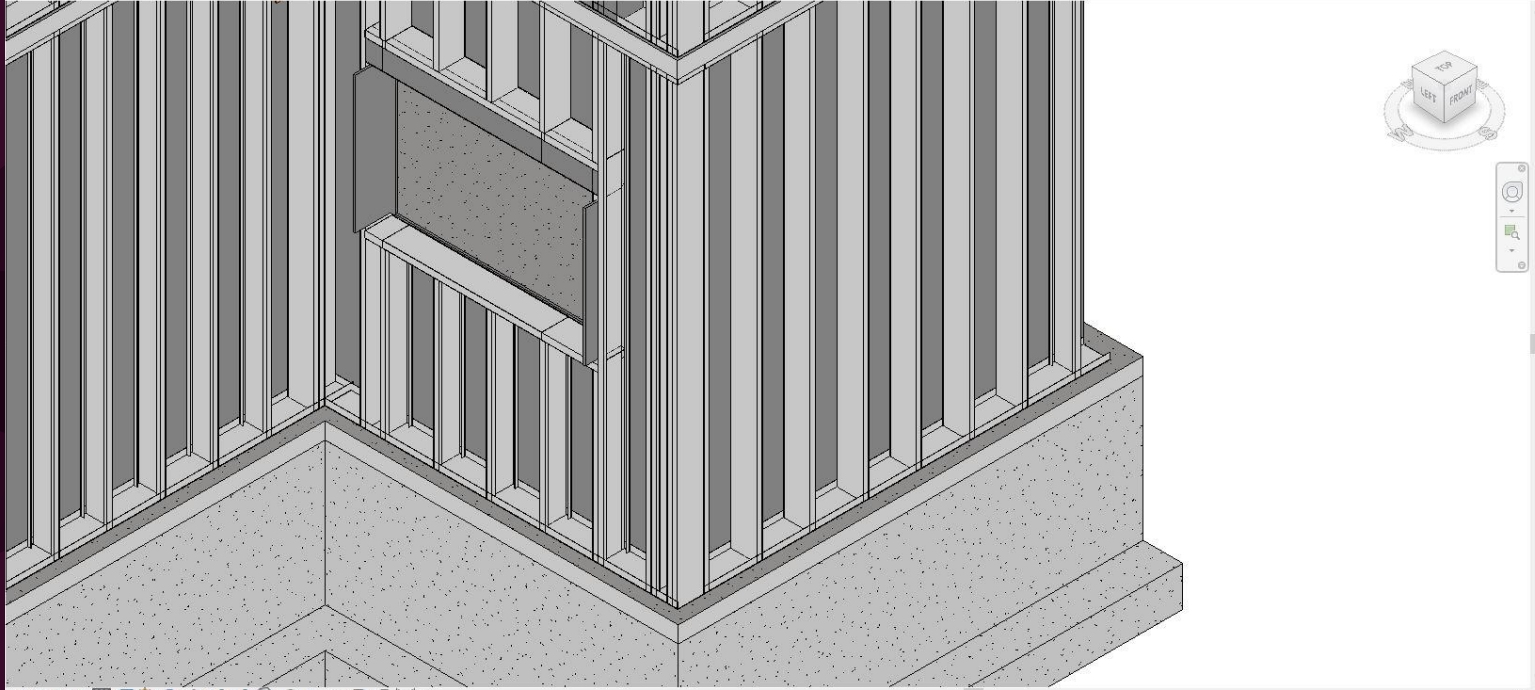
8" STUDS



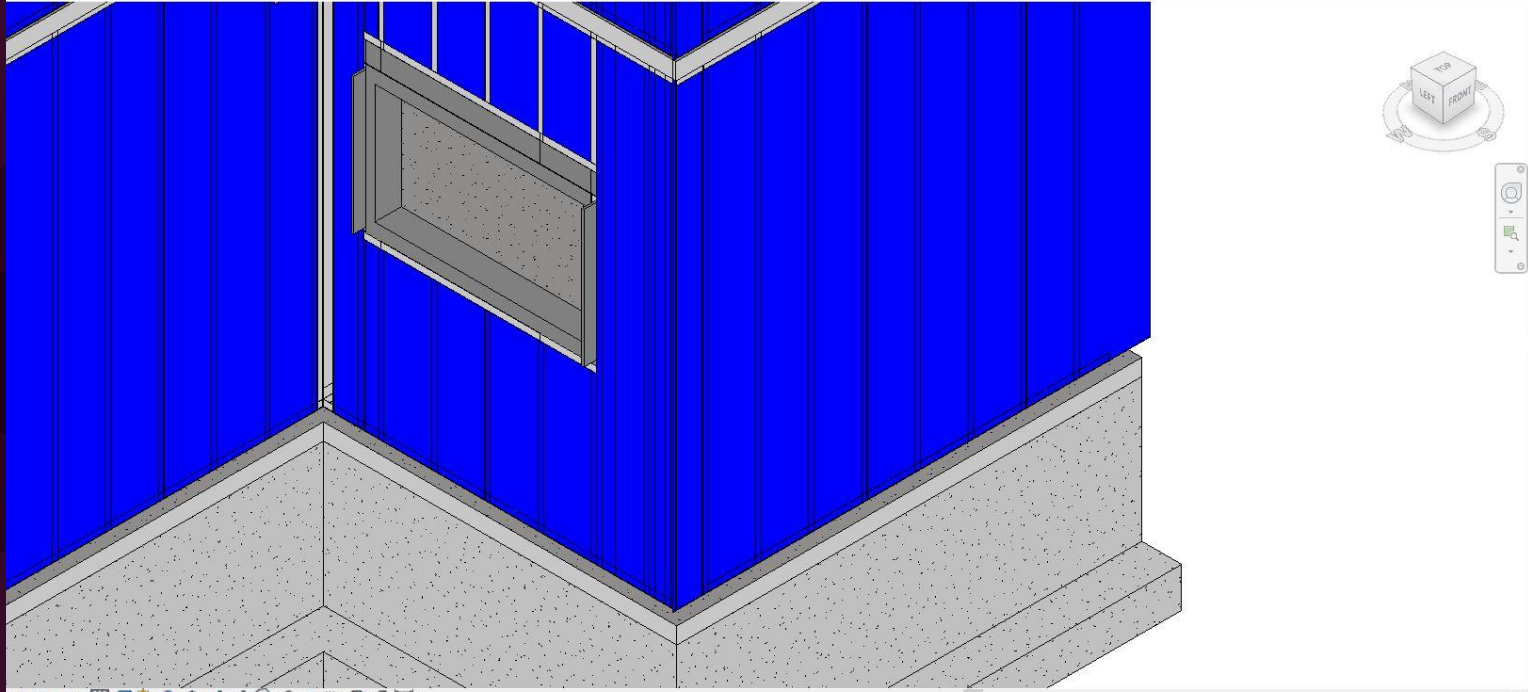
STUD FRAMING FOR WINDOW



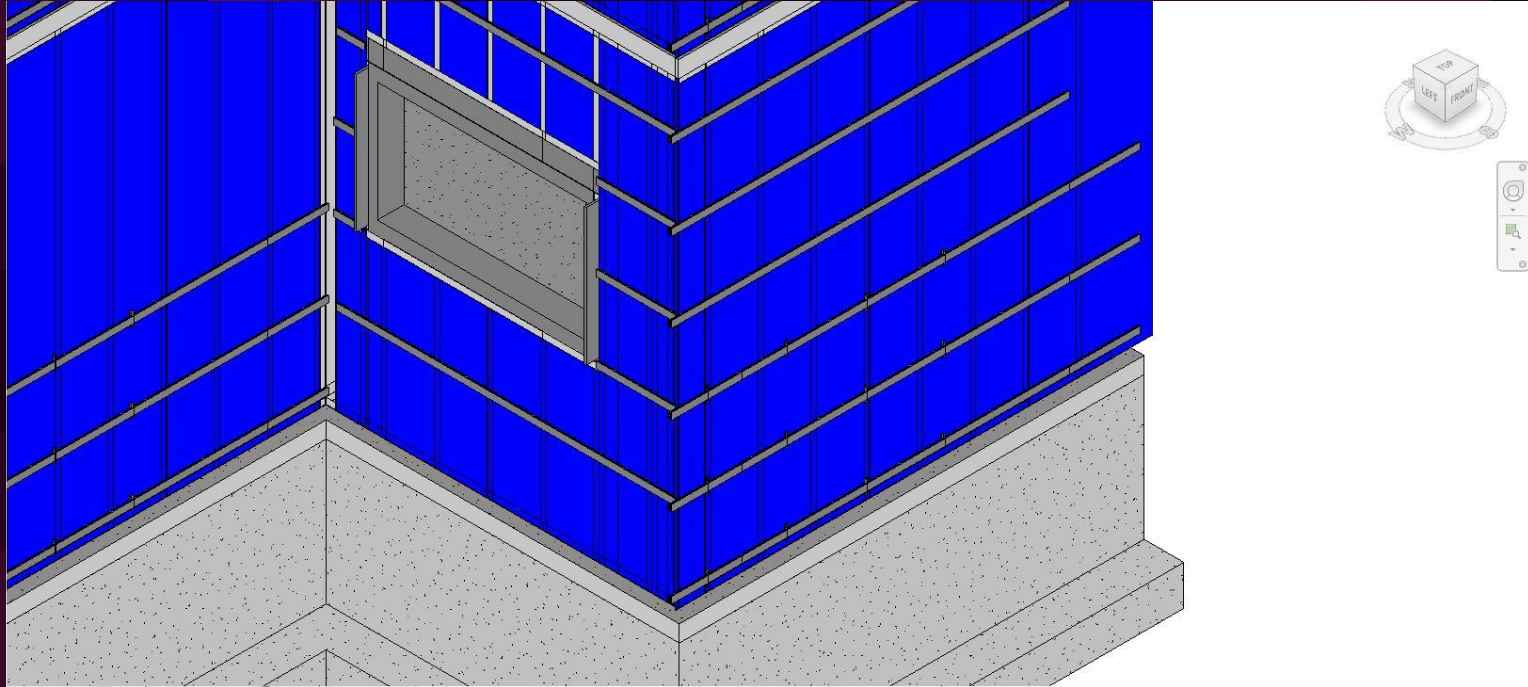
5/8" GYPSUM WALL BOARD



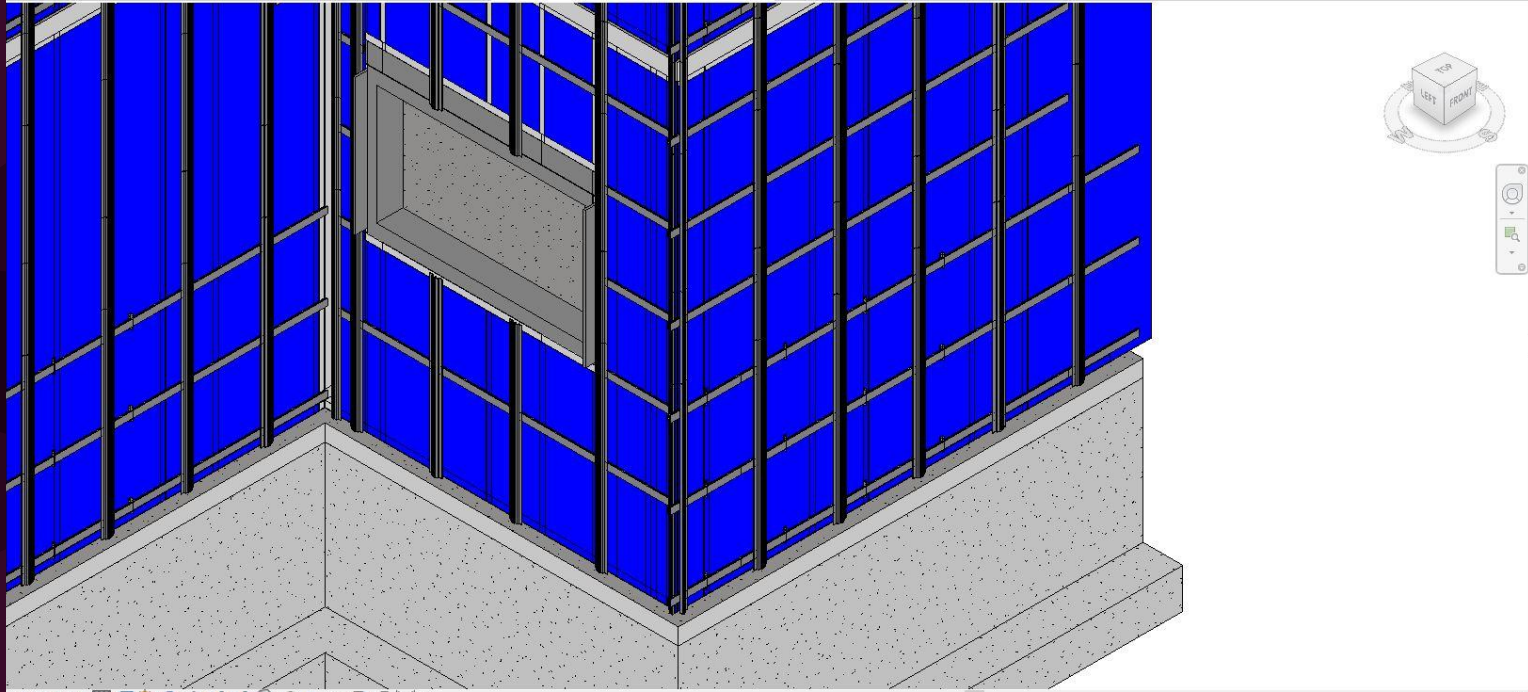
WATERPROOFING MEMBRANE ON SHEATHING



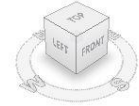
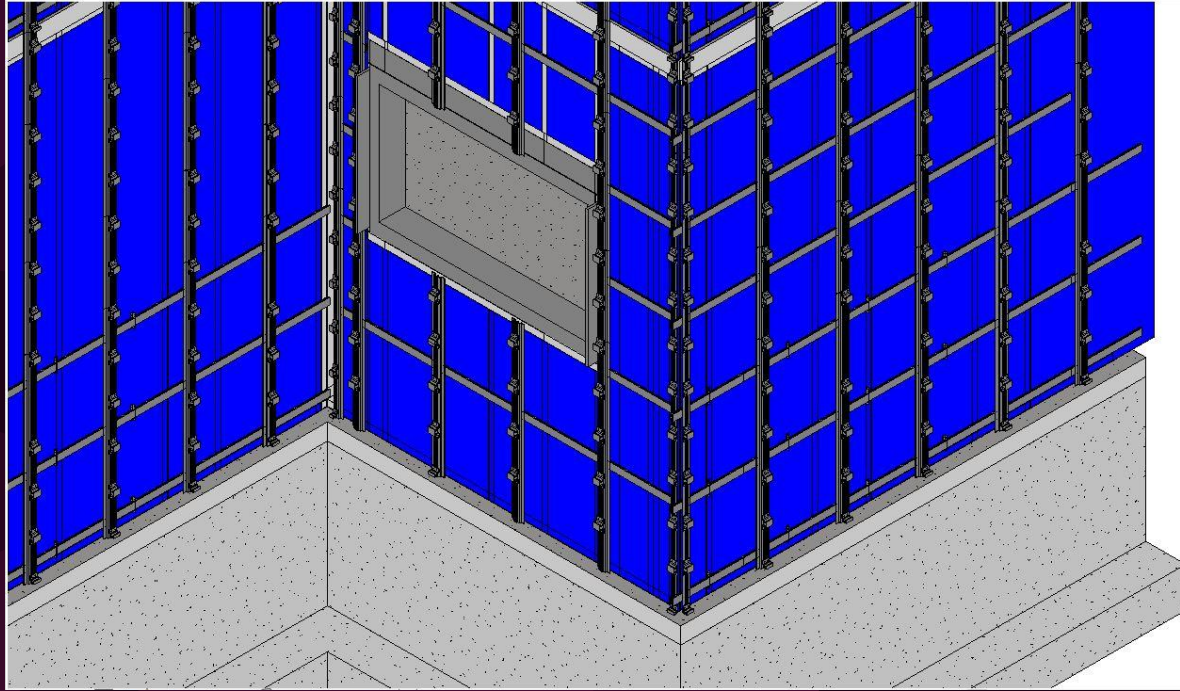
BOSTON VALLEY HORIZONTAL TRACKS



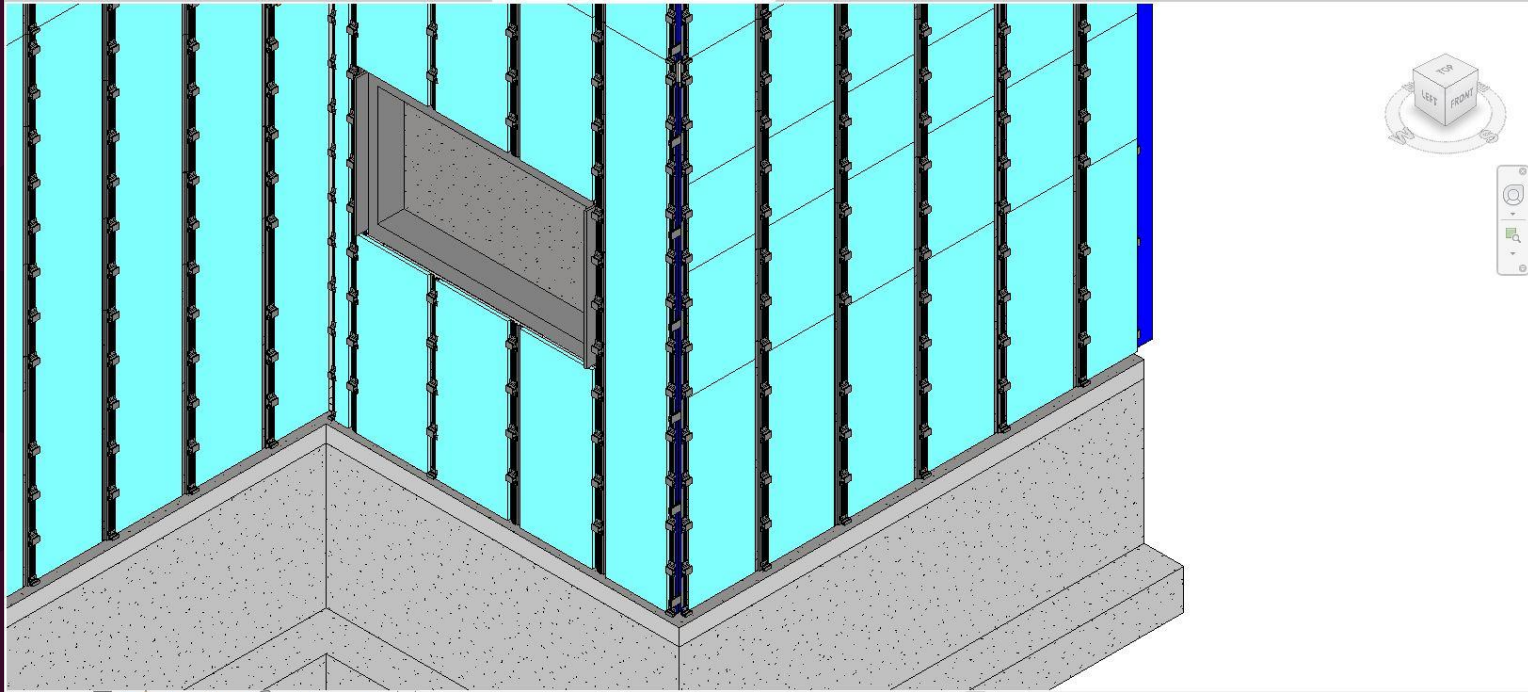
BOSTON VALLEY VERTICAL TRACKS



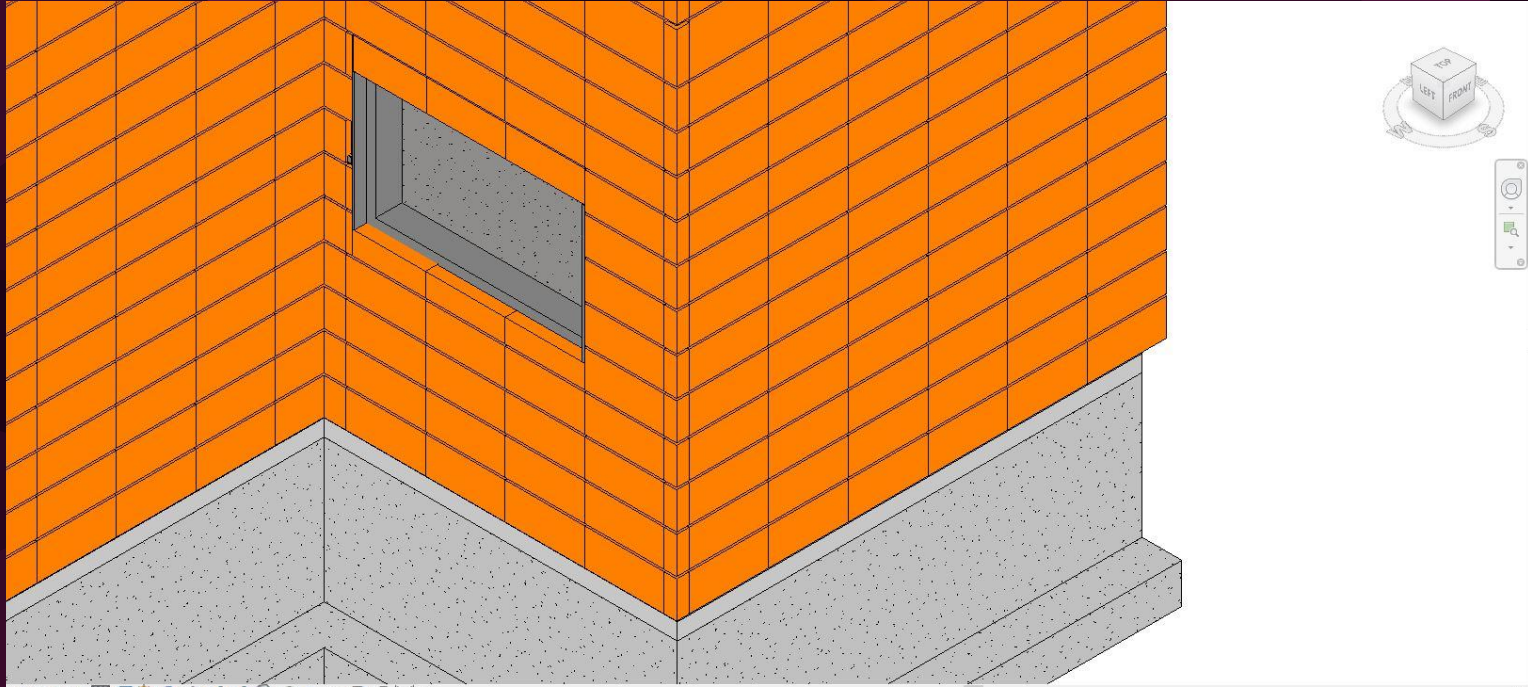
BOSTON VALLEY TERRACOTTA CLIPS



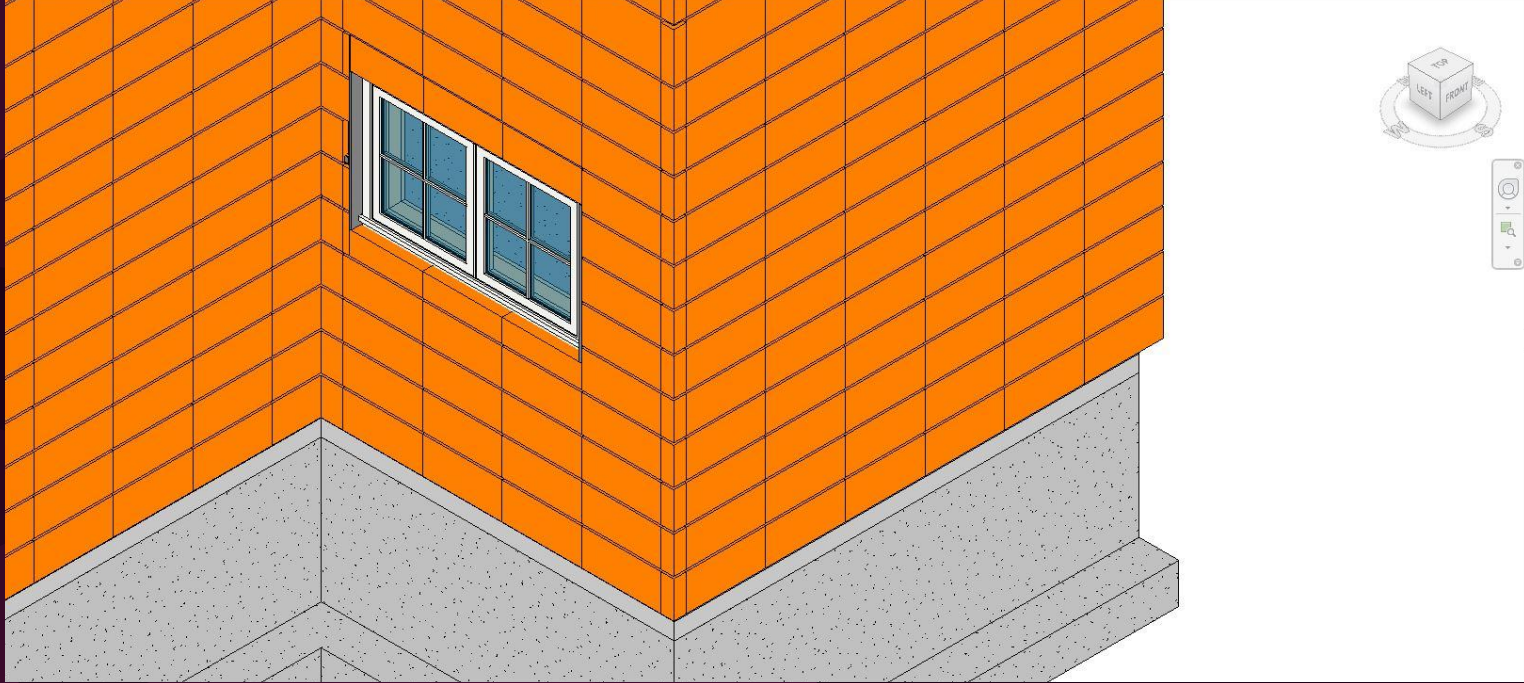
1" OR 2" RIGID INSULATION



TERRACOTTA PANELS



WINDOW PLACED



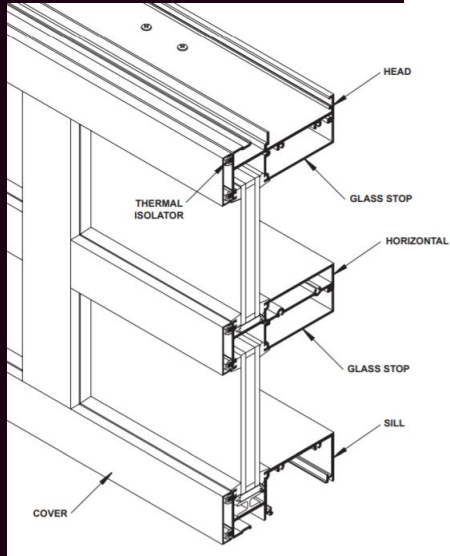


2250 IG CURTAIN WALL ASSEMBLY

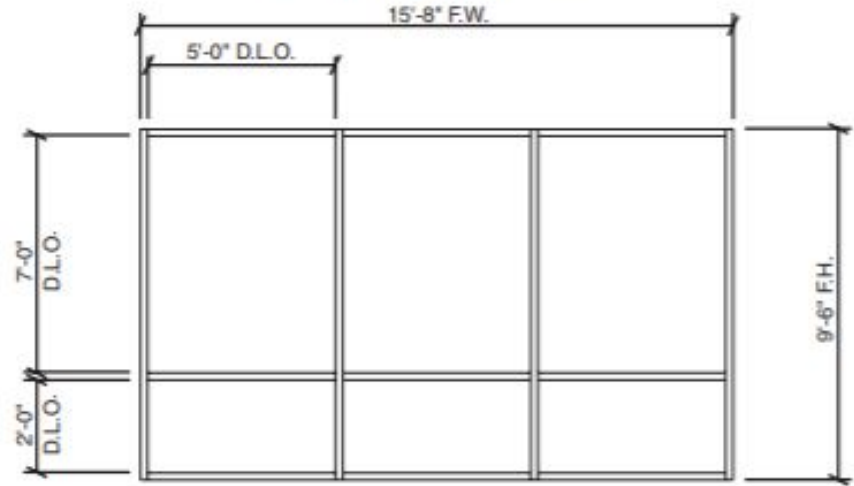
THERMAL PROPERTIES

Since the 2250 IG Curtain Wall system has an added amount of tint, it allows for more shading inside the building which helps regulate temperature by not allowing much heat that will factor in the building

The system also features economical thermal insulation clips



Project Specific U-Factor Example Calculation

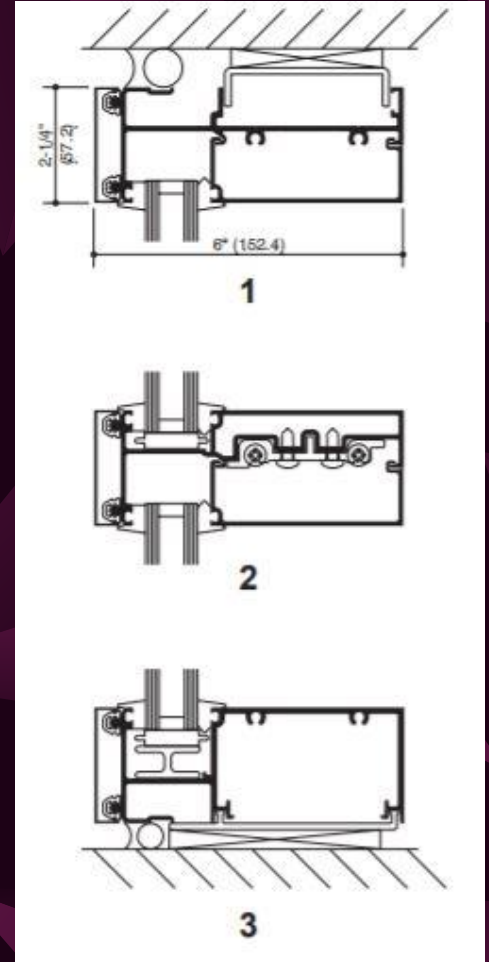


Example Glass U-Factor	= 0.42 Btu/(ft ² ·h·°F)
Total Daylight (Vision) Area	= 3(5' x 7') + 3(5' x 2') = 135 ft ²
Projected Total Area	= 15'-8" x 9'-6" = 148.83 ft ²
Percent of Vision Glass	= (Total Daylight Area ÷ Projected Total Area) = (135 ÷ 148.83)100 = 91%

PICTURES : KAWNEER

WATERPROOFING PROPERTIES

The Curtain Wall system has double pane system to offer a dry glazing to provide a weather seal that helps prevent water from coming in through sealed mullions that have glazing gaskets to prevent water from entering building as well as caulking on blocking on end conditions

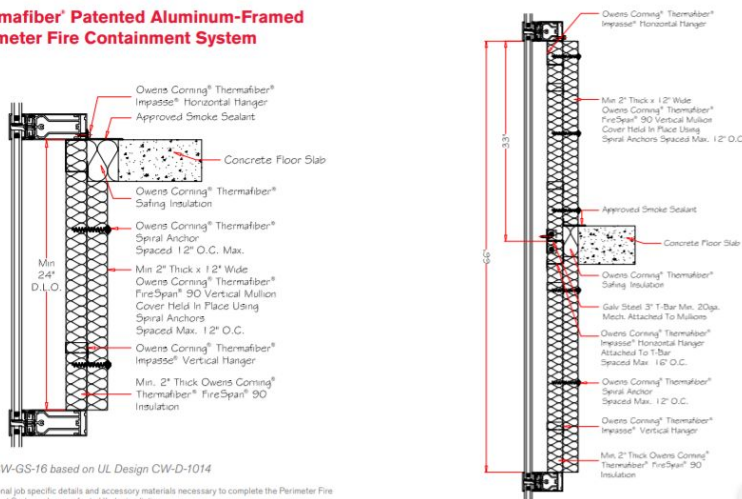


FIRE PROTECTION PROPERTIES

Thermafiber products offer different level of protection against fire

Protects floor slabs, Mullions, bolts, and connections

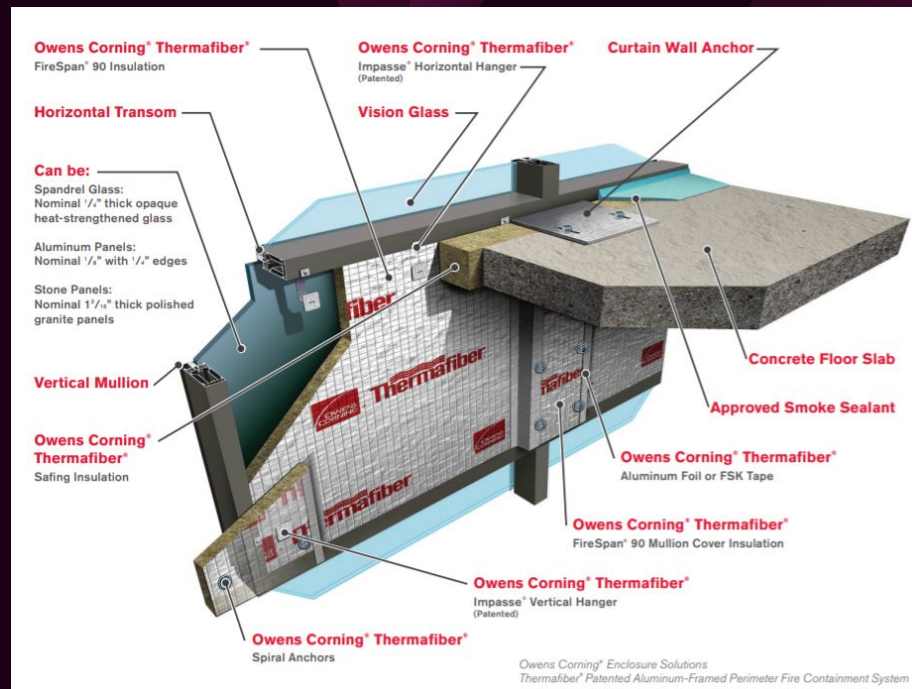
Thermafiber® Patented Aluminum-Framed Perimeter Fire Containment System



Detail CW-GS-16 based on UL Design CW-D-1014

For additional job specific details and accessory materials necessary to complete the Perimeter Fire Containment System, please refer to UL design listing.

Detail CW-GS-17 based on UL Design CW-D-2039



Owens Corning® Enclosure Solutions
Thermafiber® Patented Aluminum-Framed Perimeter Fire Containment System

PICTURES : OWENS CORNING

STRUCTURAL PROPERTIES

This Wall is held by unitized mullions that are fabricated and put together off site and have the option of including steel reinforcement inside the mullions and well as structural Silicone Sealant



ARISTO-STRUCTURAL SILICONE

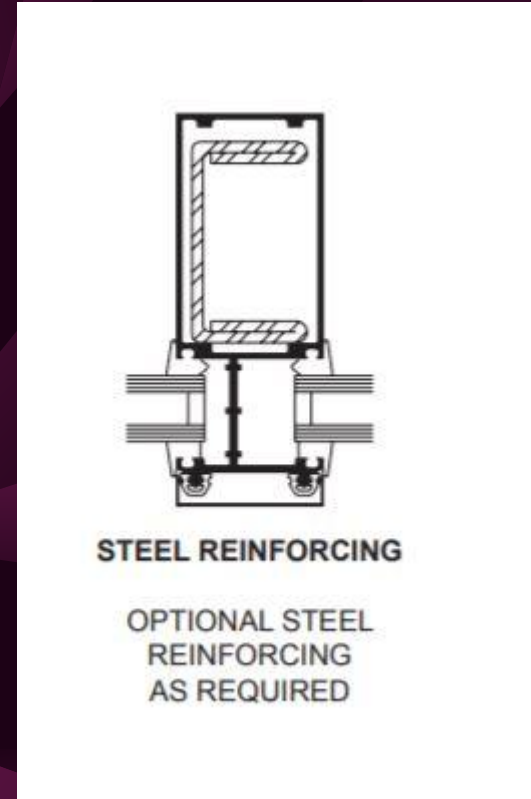
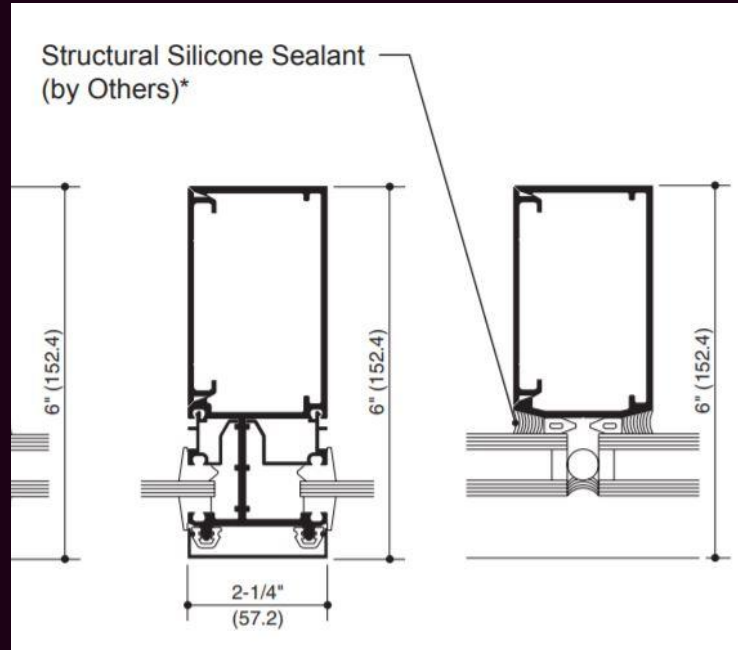
Art No.: AA7310

Structural Silicone Sealant

- * Excellent adhesion
- * Excellent weatherproof and stability
- * High modulus after cured
- * Easily use

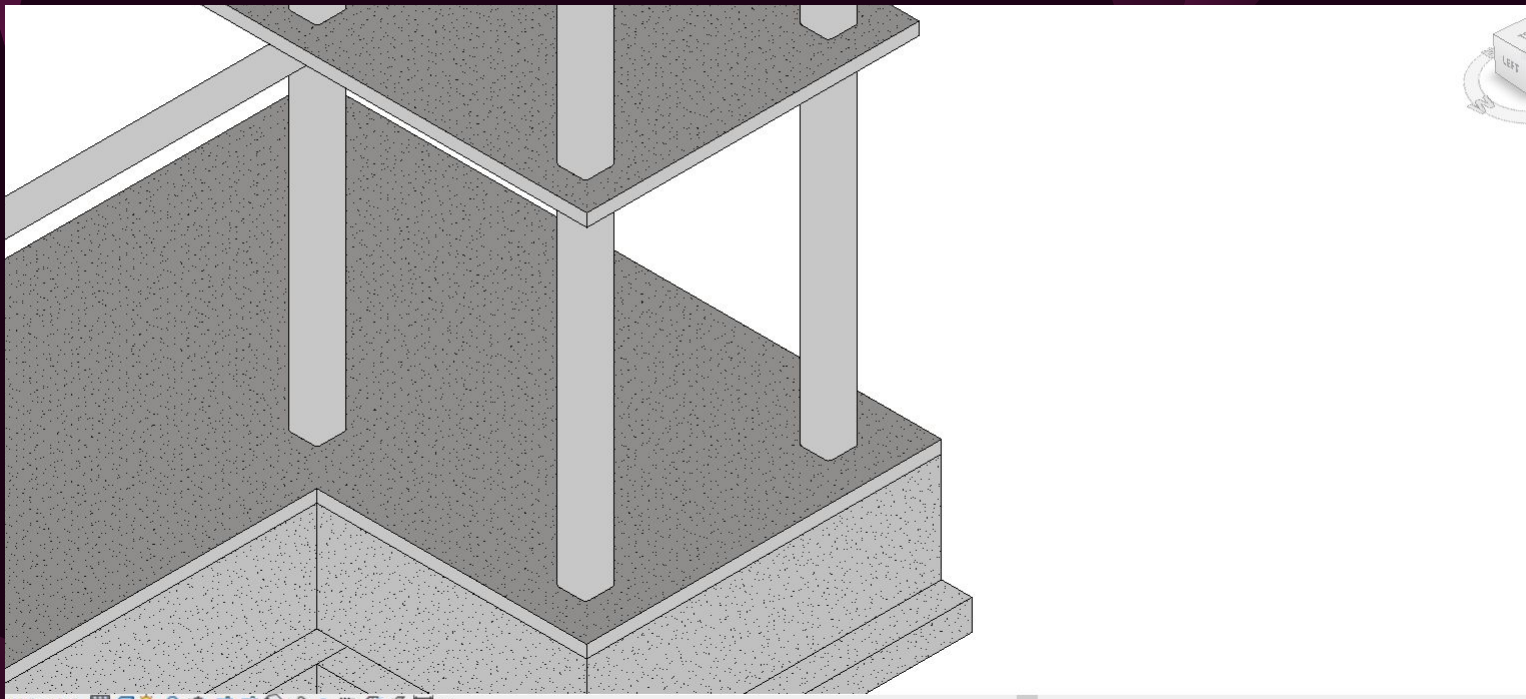




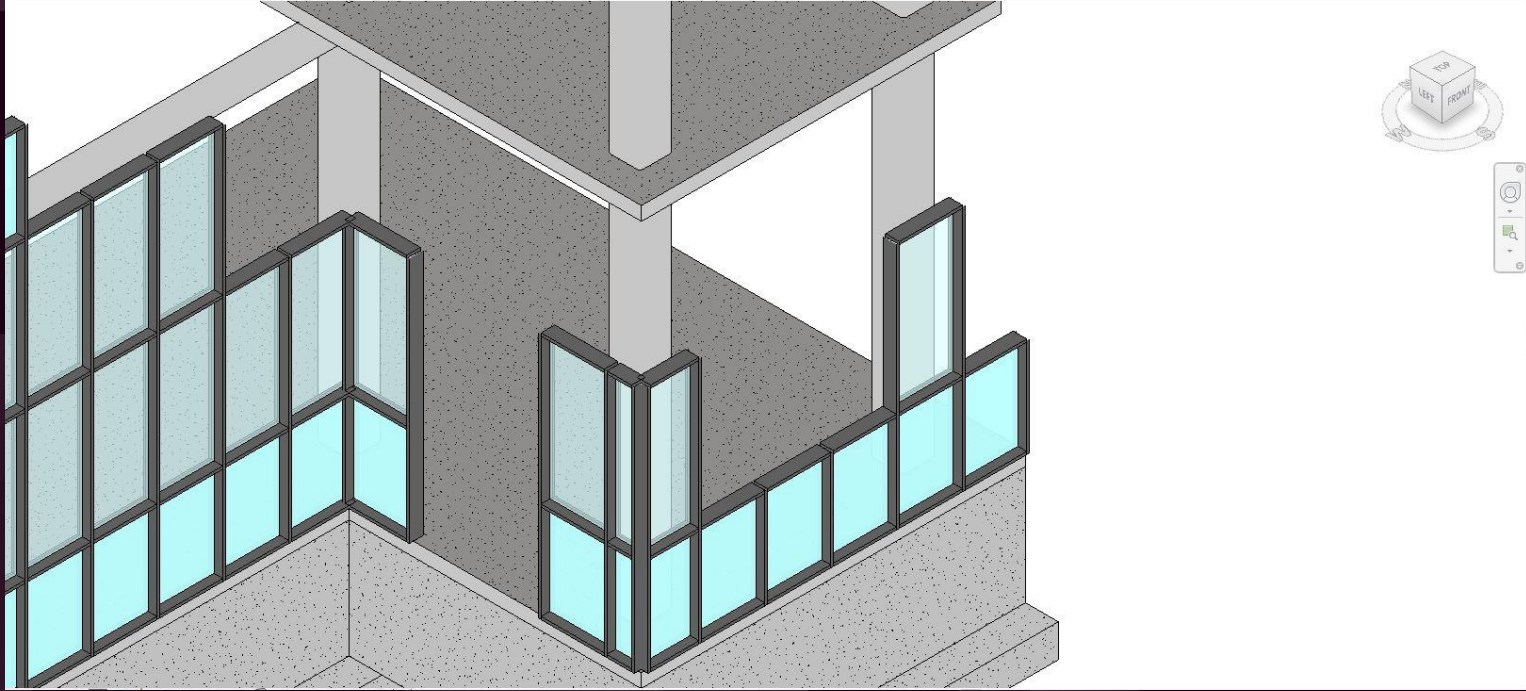


PICTURES : KAWNEER AND ARISTO INDUSTRIES

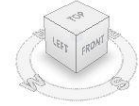
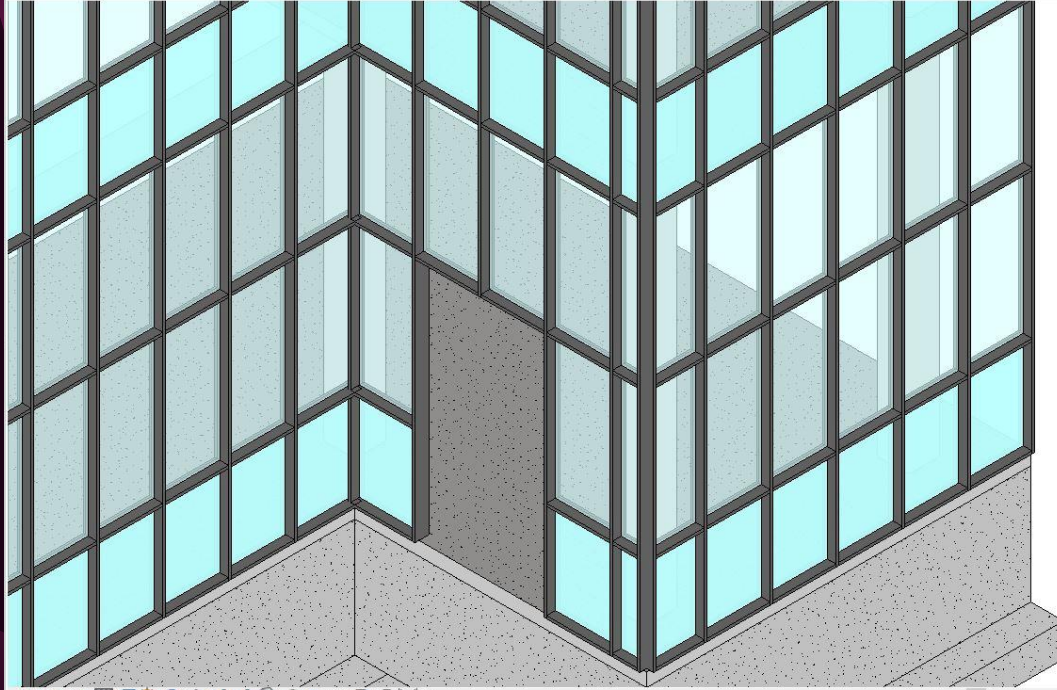
STRUCTURE



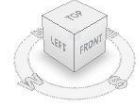
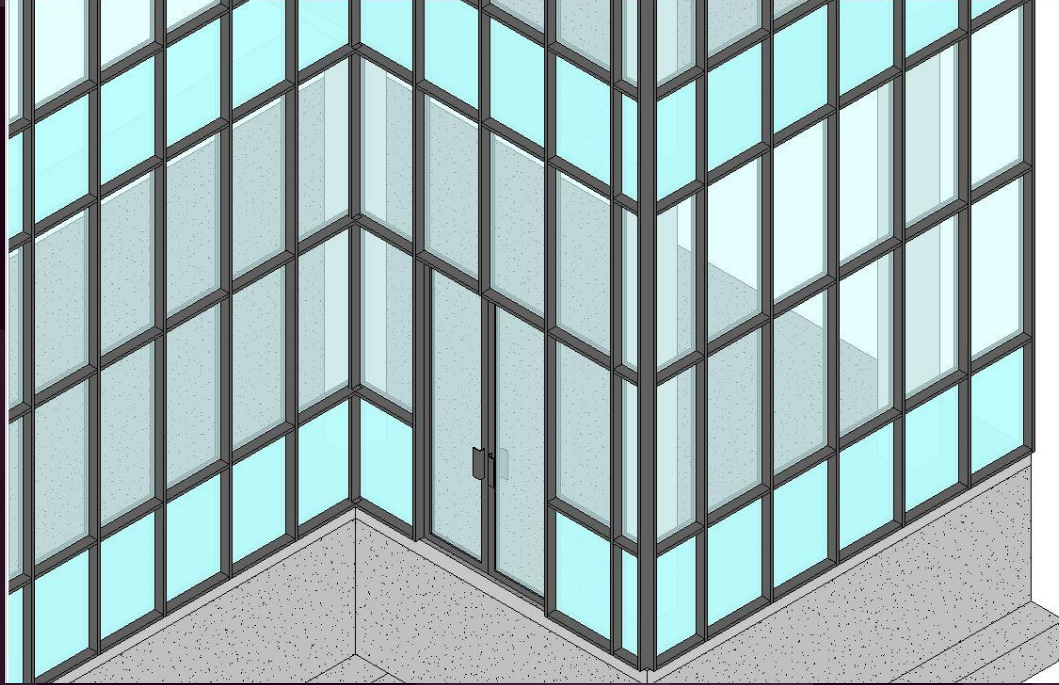
UNITIZED WINDOW PLACEMENT



UNITIZED WINDOW PLACEMENT



DOUBLE DOOR PLACEMENT



RESOURCES

https://bostonvalley.com/downloads/BVTC.TerraClad_book-web.pdf

https://www.bostonvalley.com/downloads/BVTC.install-guide.Panels.FINAL_SCREEN.pdf

https://www.kawneer.com/kawneer/north_america/catalog/product_flyers/17-2228_2250IG.pdf

https://www.kawneer.com/kawneer/north_america/catalog/97911/ADMD150EN.pdf

<https://www.wje.com/projects/detail/robert-d-moreton-building>

<http://www.owenscorning.com/NetworkShare/EIS/Owens-Corning-Enclosure-Solutions-Curtain-Wall-Perimeter-Fire-Containment-Joint-ASTM-E2307-Tech-Bulletin.pdf>

<http://www.aristoindustries.com/sale-4767109-neutral-cure-structural-liquid-waterproof-silicone-sealant-for-structural-bonding-300ml.html>