



# Facade Materials

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Arch 2431 Spring 2020  
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# Opaque Material- Case Study

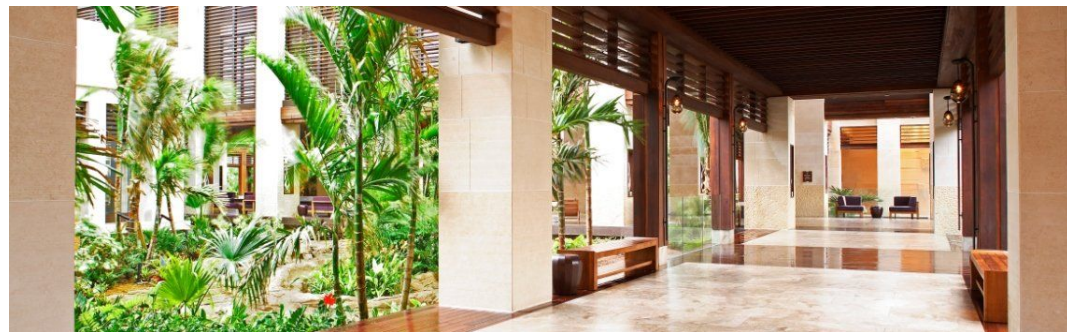
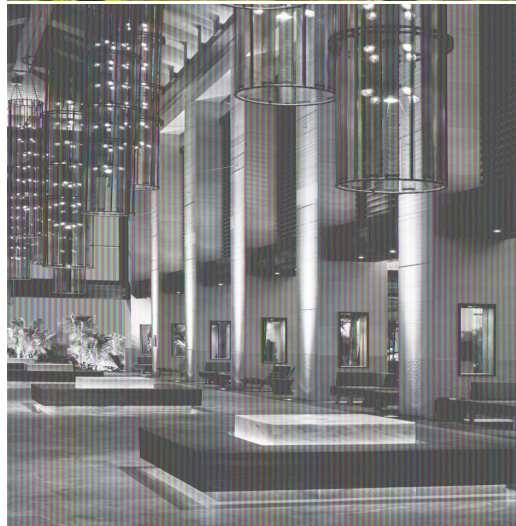
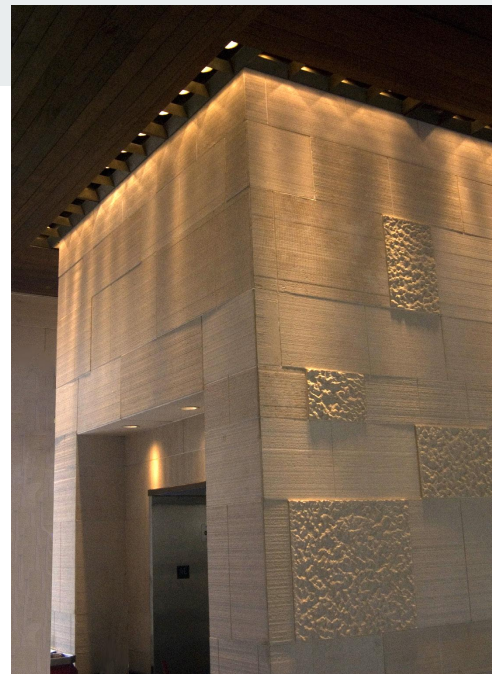


StonePly

Real Stone. Real Strong. Real Thin.



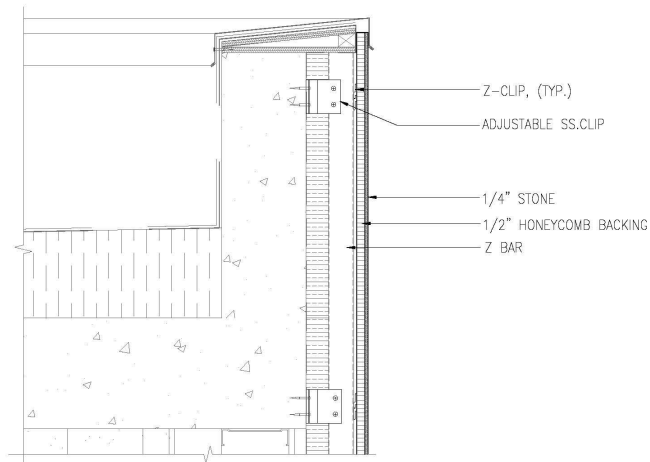
Atlantis Beach Resort



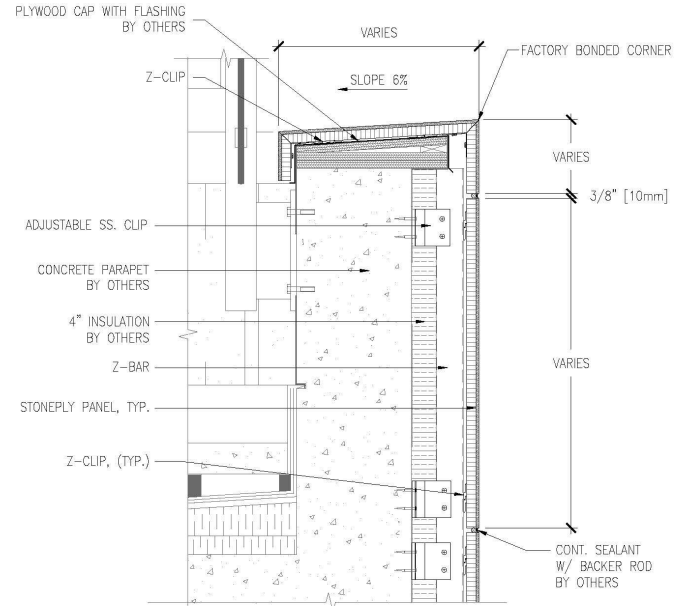


|                            |   |  |
|----------------------------|---|--|
| Freeze/Thaw                | ASTM C67  | Passed. 100 cycles. No checking, delaminating, cracking or splitting.                      |
| Water Resistance           | ASTM D2247  | Passed. No deleterious effects after 120-day exposure.                                     |
| Mildew/Fungus Resistance   | ASTM D3273  | Passes. Tested with both granite and marble.   |
| Water Penetration          | ASTM E331   | Passed. No water penetration to the innermost plane of the wall.                           |
| Large Missile Impact Test  | ASTM 1996-05B Specifications for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes | Passed. A weighted 2x4 was fired at the StonePly panel at 50 fps. There was no penetration |
| Accelerated Weathering     | ASTM G53  | 2000 hours. No deterioration.  |
| Air and Water Infiltration | ASTM E 283-7  | Passed   |
| Absorption - Freeze/Thaw   | Panels soaked in water @ 20 °C for 4 days, then placed at -10 °C for 2 hours and +20 °C for 2 hours.  | 100 cycles. No delamination or failure.  |

# Opaque Material Details

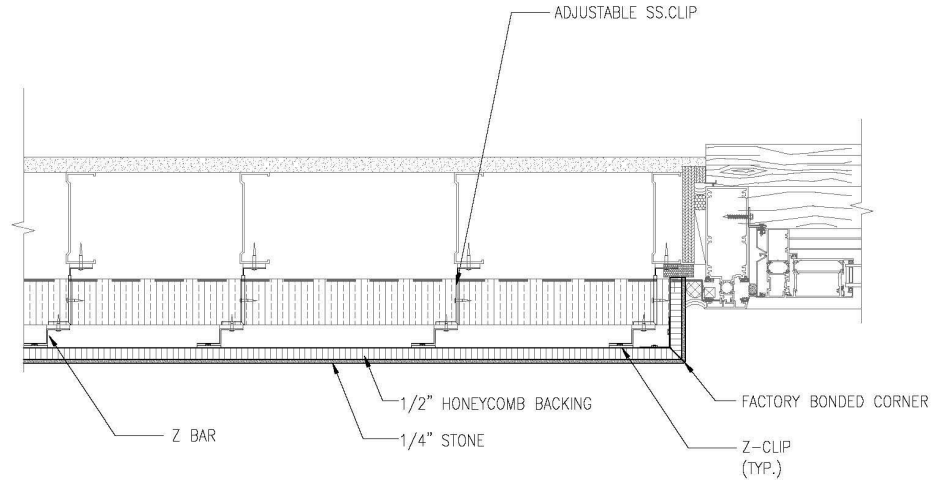
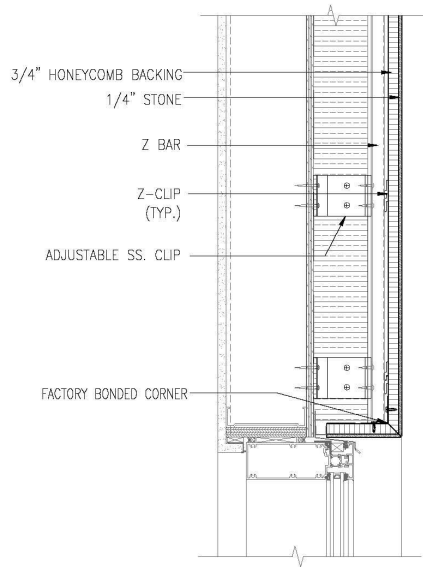


PARAPET DETAIL WITH STONEPLY AND METAL CAP  
 SCALE: 1 1/2" = 1'-0"



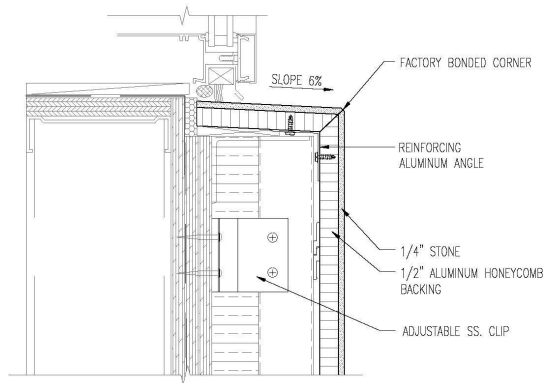
PARAPET DETAIL WITH STONEPLY CAP  
 SCALE: 1 1/2" = 1'-0"

# Opaque Material Details

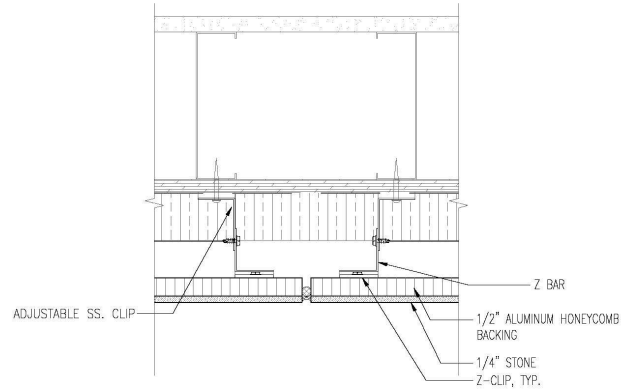


STONEPLY WINDOW JAMB  
SCALE: 1 1/2" = 1'-0"

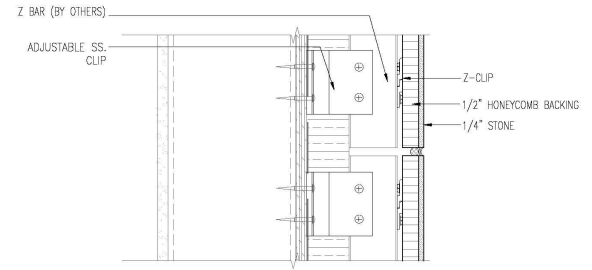
# Opaque Material Details



WINDOW SILL  
SCALE: 3" = 1'-0"

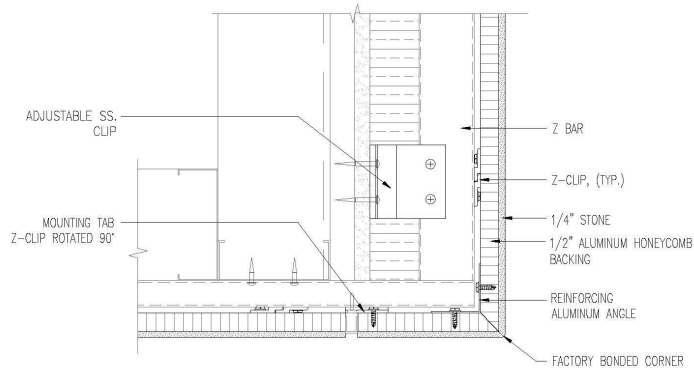


VERTICAL JOINT  
SCALE: 3" = 1'-0"

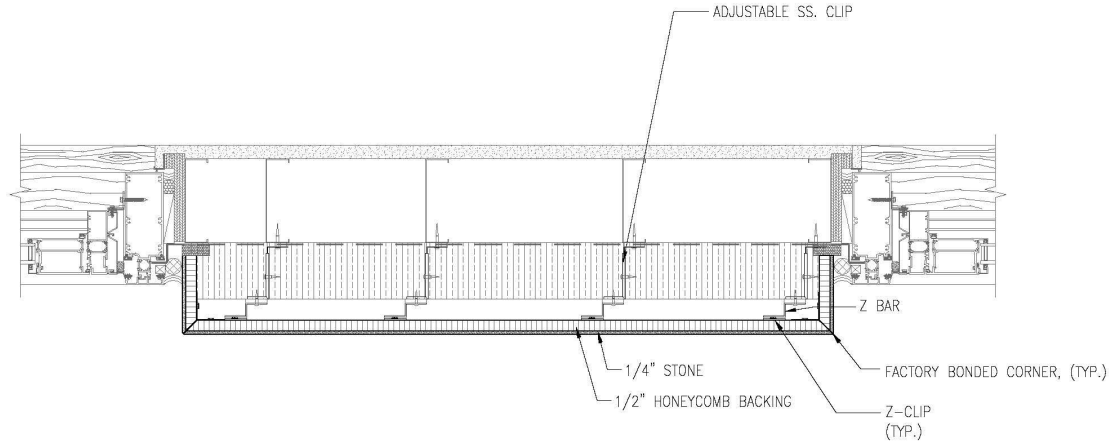


HORIZONTAL JOINT  
SCALE: 3" = 1'-0"

# Opaque Material Details



SOFFIT AND CEILING RETURN  
SCALE: 3" = 1'-0"



PILASTER  
SCALE: 1 1/2" = 1'-0"



# Glass Curtain Wall Material- Case Study



JOHNSON & WALES UNIVERSITY'S JOHN J.  
BOWEN CENTER FOR SCIENCE AND  
INNOVATION





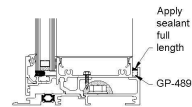
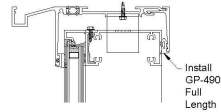
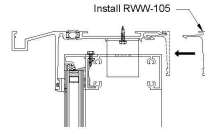
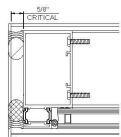
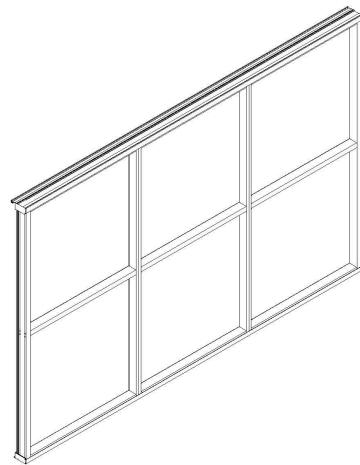
# Glass Material Details



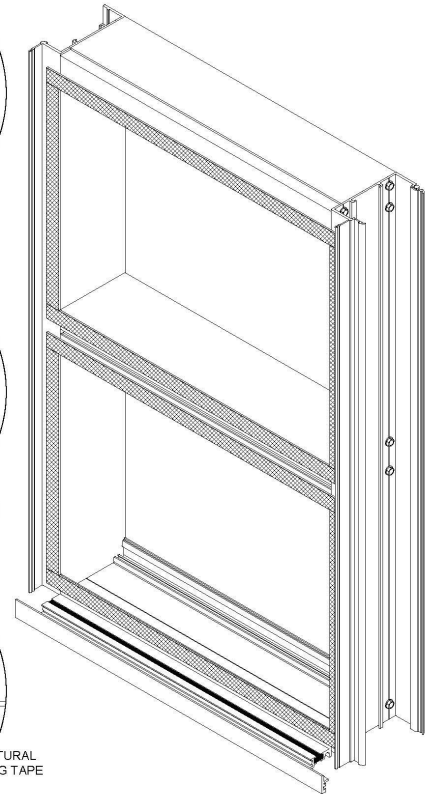
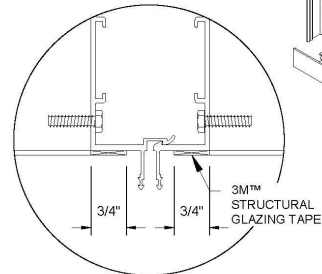
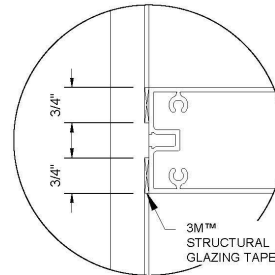
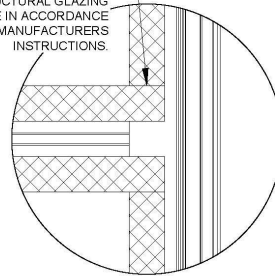
## Reliance™ Window Wall— Thermal Structural Tape Glazed unitized Window Wall system

The **Reliance™ Window Wall** from Oldcastle BuildingEnvelope® is a shop assembled, sealed and glazed window wall product offering both Captured and Non-Captured options with a variety of 1" infill options. This screw spline assembly has square cut components to reduce fabrication and utilizes 3M's™ structural glazing tape in lieu of silicone to reduce glazing labor. The Reliance™ Window Wall design has reinforced polyamide thermal struts integrated into the head/sill cans to provide exceptional thermal performance. **One of the most outstanding benefits of Reliance™ Window Wall is the assembly and glazing of the window wall frames** under shop controlled conditions. This reduces field labor and minimizes on site applied seals. The system is also designed to be installed from inside the building which is an easier installation and eliminates the need for staging equipment during unit installation.

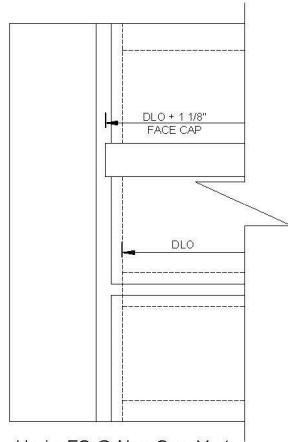
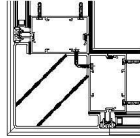
# Glass Material Details



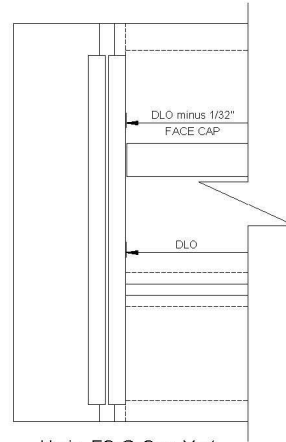
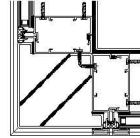
APPLY 3M™  
STRUCTURAL GLAZING  
TAPE IN ACCORDANCE  
WITH MANUFACTURERS  
INSTRUCTIONS.



# Glass Material Details

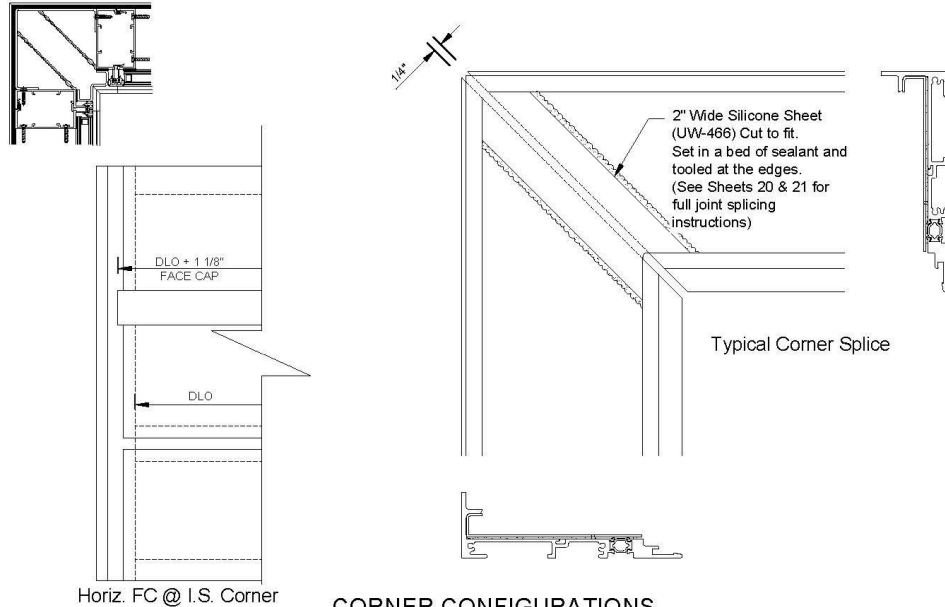


Horiz. FC @ Non-Cap. Vert.  
O.S. Corner



Horiz. FC @ Cap. Vert.  
O.S. Corner

# Glass Material Details



CORNER CONFIGURATIONS