

GLASS PERFORMANCE DAYS 2025

PRESERVING THE PAST, SHAPING THE FUTURE WITH GLASS-CLAD LIBRARIES



Introduction:

•Radical Transformation:

From enclosed masonry buildings to light-filled modern-day glass structures

•Emerging Trend:

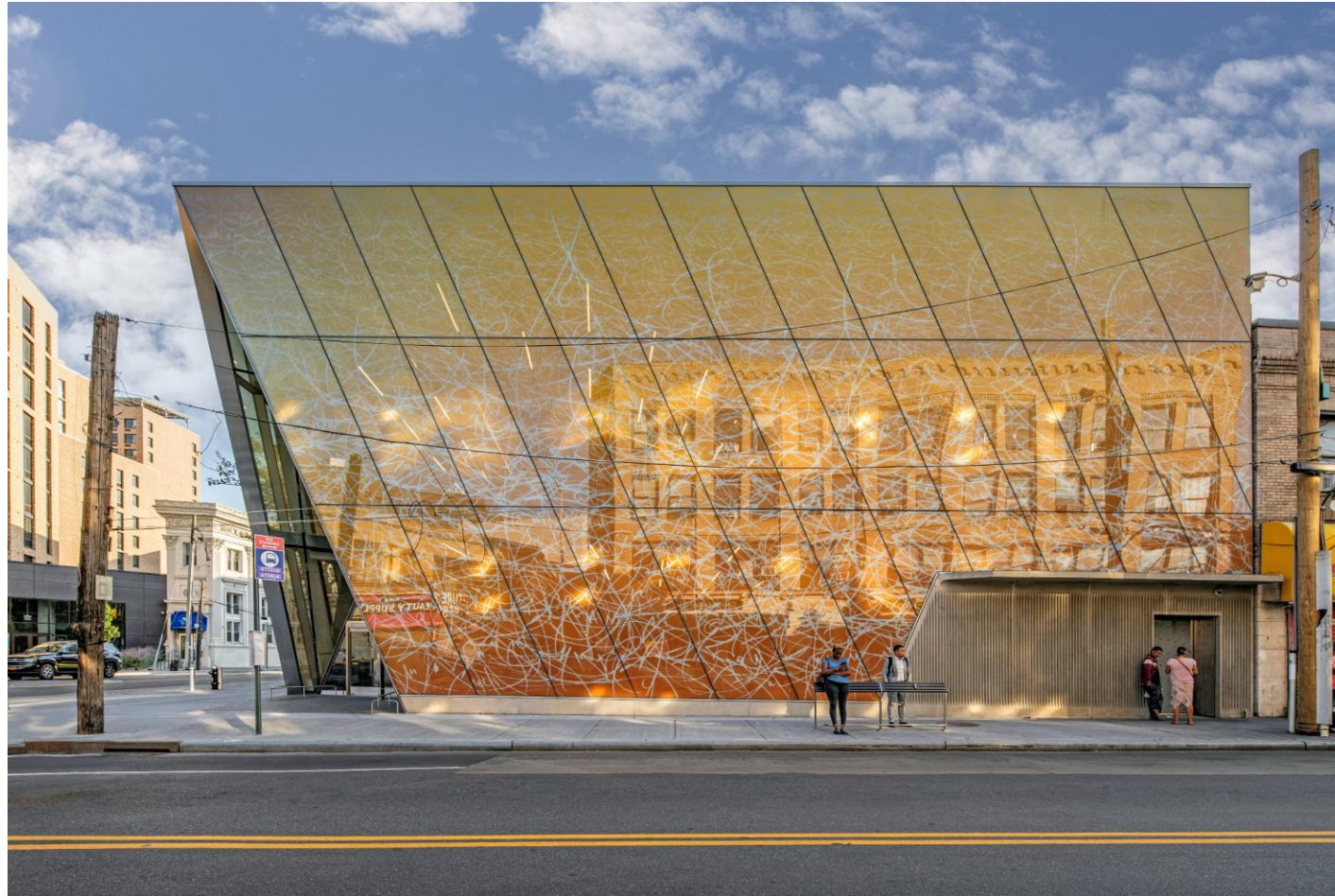
Blending historical preservation with forward-thinking design

•Innovation Showcases:

Award-winning Far Rockaway Library in Queens, New York

Upcoming Omaha Central Public Library

Far Rockaway Library — Snøhetta



Far Rockaway Library — Snøhetta



THEN: 1960's Structure



NOW: Embodies Openness & Community Engagement

Far Rockaway Library — Snøhetta



Geometric Artistic Design



Illuminated Spaces

External Views

Far Rockaway Library — Snøhetta



Laminated Insulated Glass

Gradiant Colors

High Resolution Design Work

None Alike

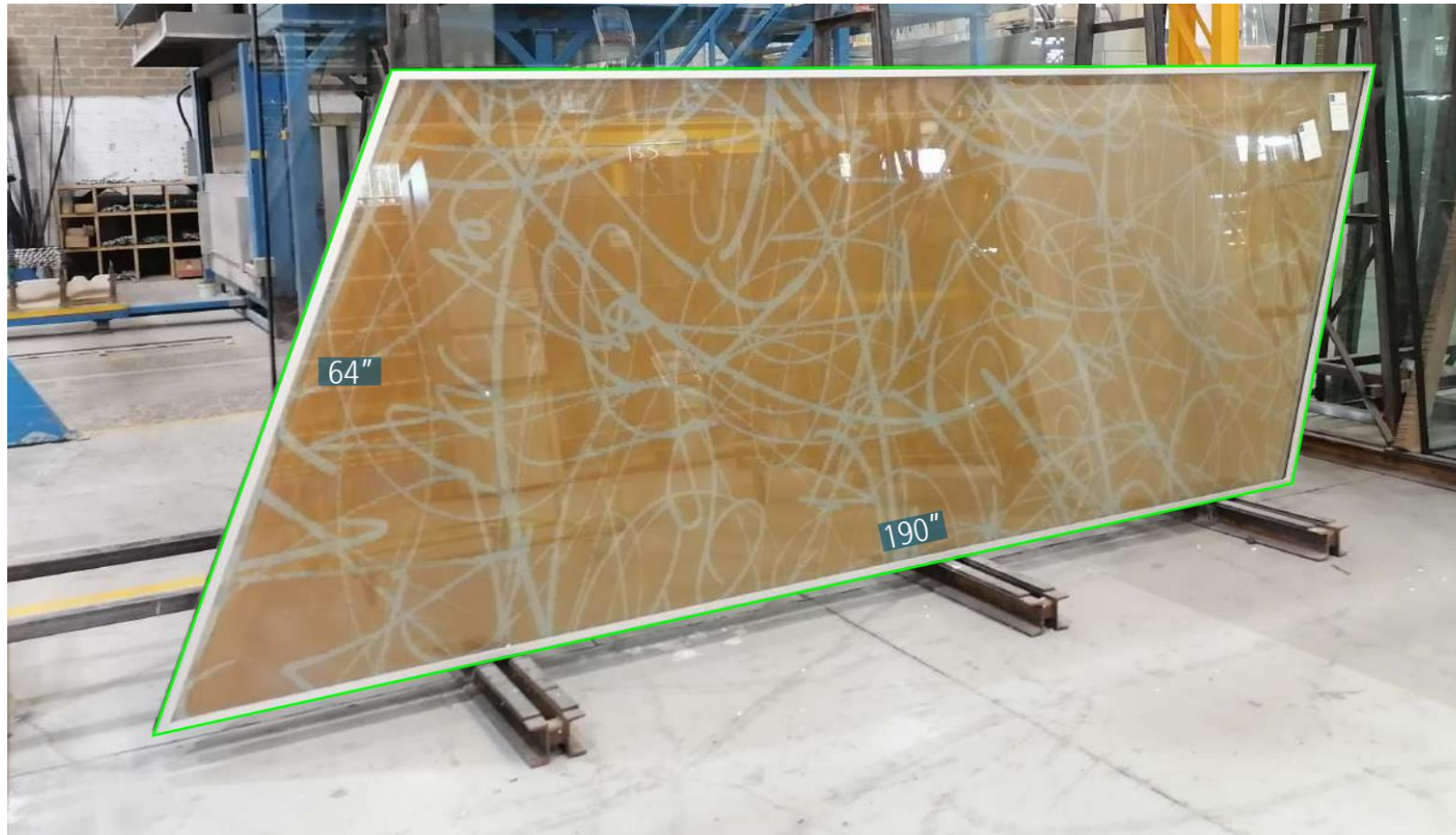
Far Rockaway Library — Snøhetta

Seamless
Angular
Formation

Strong
Architectural
Presence



Far Rockaway Library — Snøhetta



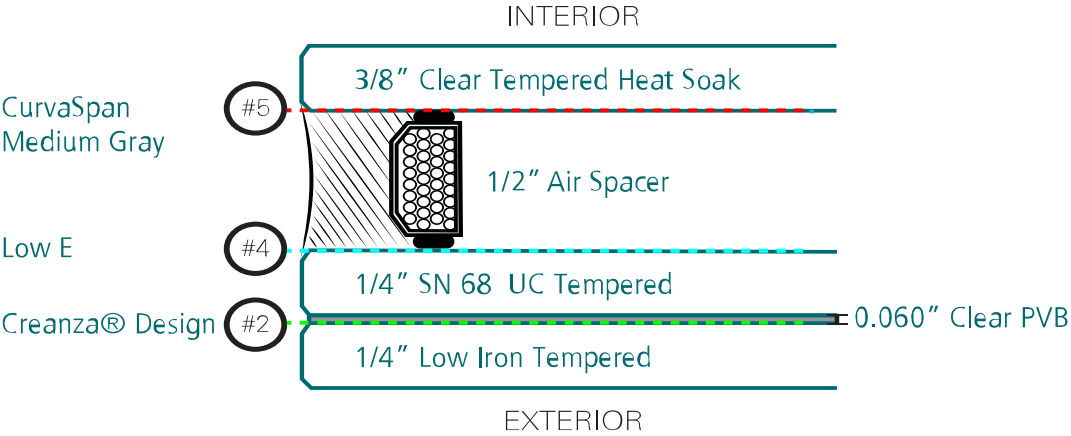
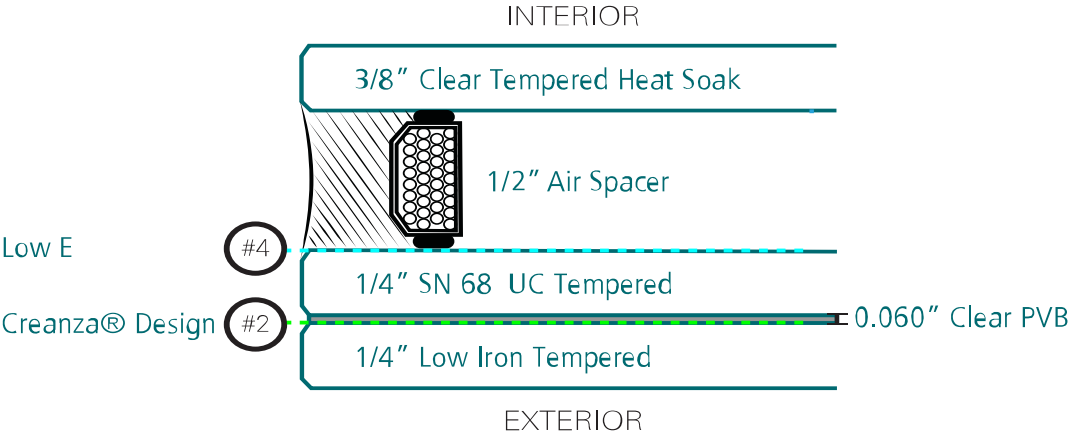
144 Parallelogram IGU's

144 Different Digital Printed Designs

Some Exceeding 5.00m (196")

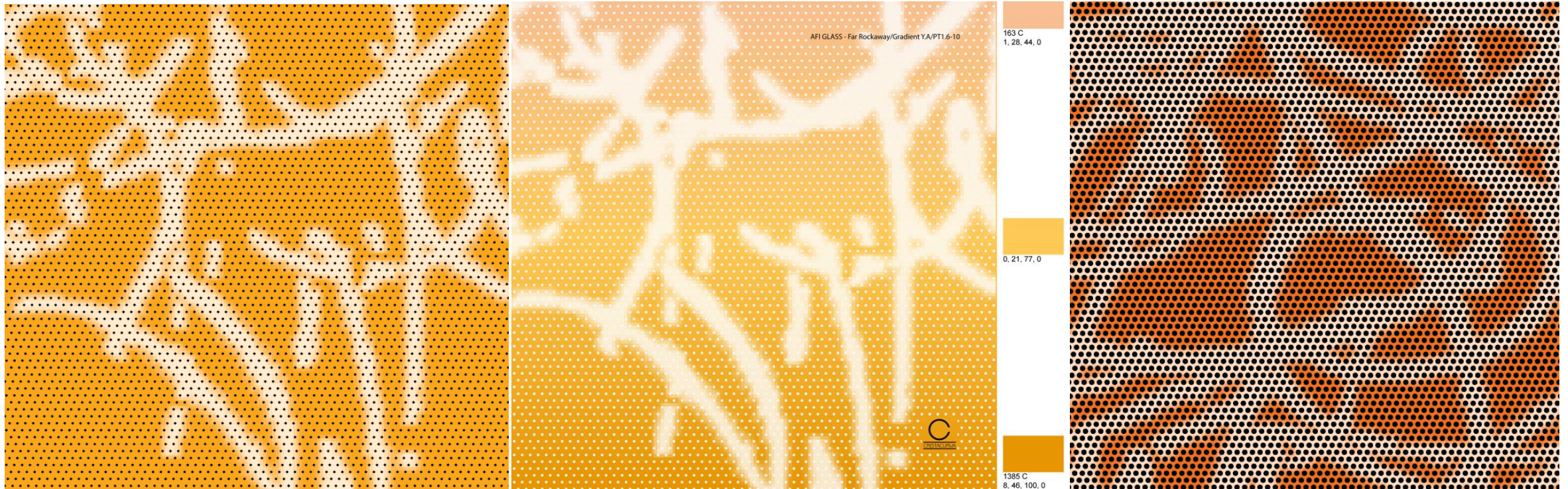
Insulated
Glass Unit
Configurations

Special Shape IG

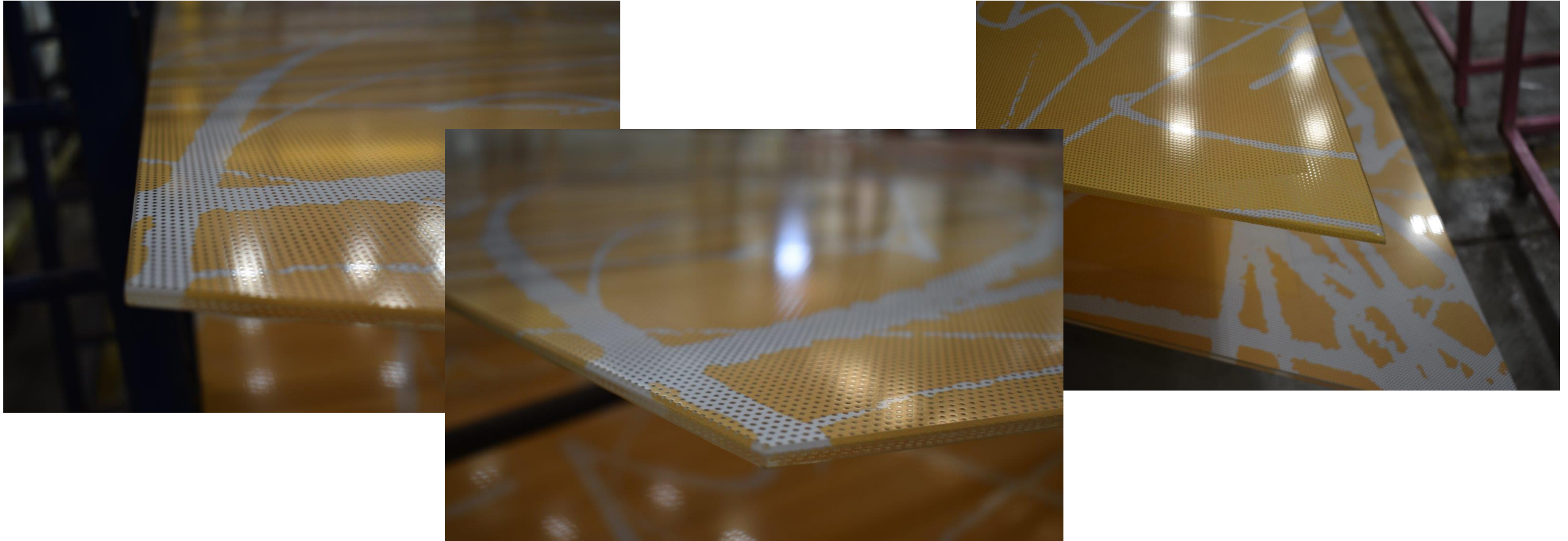


Far Rockaway Library — Snøhetta

The printed patterns were not only different amongst themselves, but they were also very unique. The design had a gradient that went from one specific color hue to another, along with a special linear design printed over these colors. The color matching process was very challenging for the fabricator as the desired color scheme included various yellow and orange hues.



Far Rockaway Library — Snøhetta

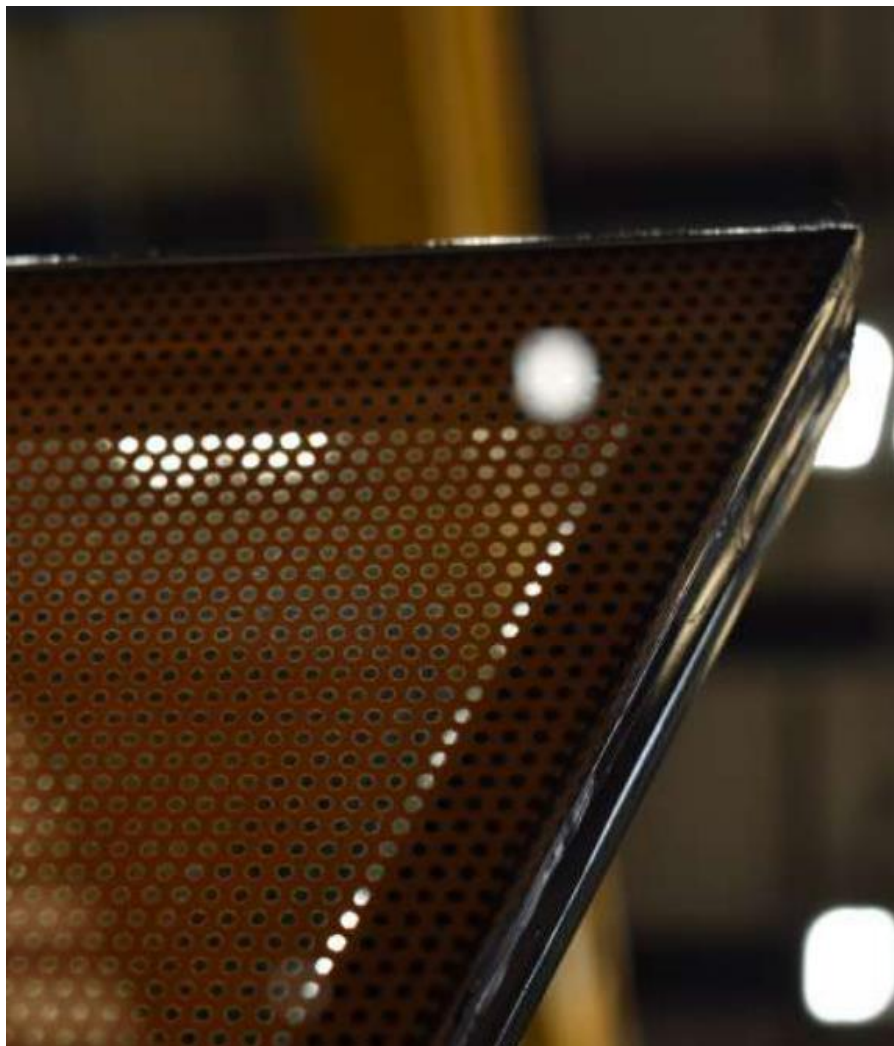


Ceramic Inks

Complex Color Formulation Process

Achieved Architects Vision

Far Rockaway Library — Snøhetta



Scale
Modeling

Full-Size
Mockups



Far Rockaway Library — Snøhetta


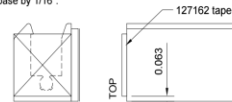
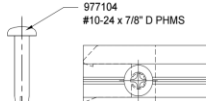
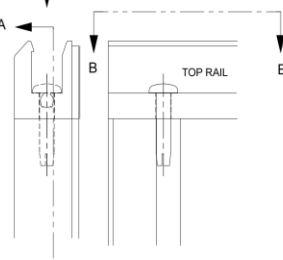
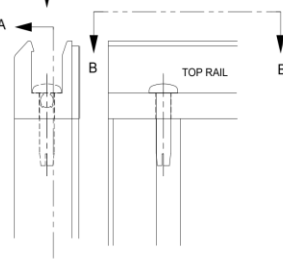
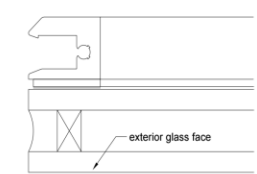
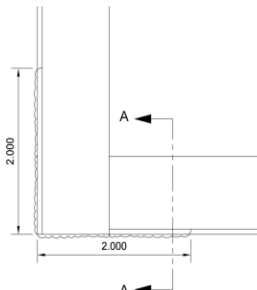
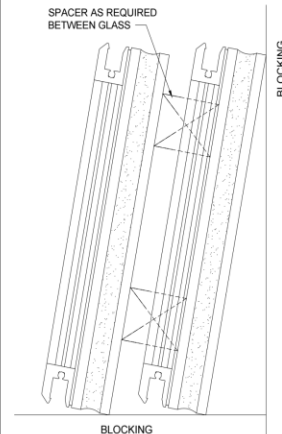


Visual Inspections During Fabrication

Far Rockaway Library — Snøhetta



Turnkey System

<p>SSIT APPLICATIONS ONLY ASSEMBLE INTERFACE FRAME</p> <p>Whether materials are in stock lengths or fabricated, apply 3M VHB SGT (part B23F or G23F, .090" X 7/8") to the interface per 3M's VHB Structural Glazing Tape Technical Guide and 3M training.</p>  <p>172021</p> <p>3M VHB tape</p> <p>liner</p> <p>Fabricate interface as needed. Remove any metal shavings from tape edge. Clean ends of all interfaces with isopropyl alcohol. Apply a 127162 tape square to the top and bottom of the vertical interfaces. Tape aligns on the sides but should be off the base by 1/16".</p>  <p>127162 tape</p> <p>0.063</p> <p>TOP</p> <p>Join vertical interface to horizontal interface and fix together with a 977104 thread cutting screw. Attach all four corners together in a similar manner to make a square or rectangular frame.</p>  <p>977104 #10-24 x 7/8" D PHMS</p> <p>SECTION B-B</p>  <p>SECTION A-A</p> 	<p>SSIT APPLICATIONS ONLY APPLICATION OF INTERFACE FRAME TO GLASS</p> <p>For cleaning, priming and required pressures, follow 3M's VHB Structural Glazing Tape Technical Guide for all applicable information.</p> <p>Prepare tables which are absolutely flat with supports under table to keep tables from sagging or deflecting from the dead weight of the glass and aluminum. This is critical to insure glass flatness and tape adhesion during assembly.</p> <p>NOTE:</p> <ul style="list-style-type: none">If interface extends beyond edge of glass, this may cause interference issues during the installation of toggles.Check interface squareness. Measure diagonally from corner to corner to verify the dimensions are equal. Make adjustments as needed. Sight down interface from end to make sure frame is not bowed. A frame glazed in a "out of square" or bowed position may cause installation problems.  <p>exterior glass face</p> <p>NOTE: 3M™ VHB™ Structural Glazing Tape B23F (Black face with gray edges) or G23F (Gray all sides) is only sold and supported through authorized 3M Distributors. Please contact 3M at 800.831.0558 to find the appropriate distributor. Mandatory project application review, adhesion testing and applicator training are required before installation of 3M™ VHB™ SGT. Size: .875" wide by 0.090" thick.</p>	<p>SSIT APPLICATION ONLY CAP SEAL CORNERS</p> <p>Apply cap seal between the interface and glass at all four corners, as shown, to seal gap between the end and edge of the tape.</p>  <p>2.000</p> <p>2.000</p> <p>SECTION A-A</p> <p>CAP SEAL</p>	<p>172970 SHEET 05 OF 12</p> <p>CONFIDENTIAL AND PROPRIETARY INFORMATION KAWNEER COMPANY INC.</p> <p>THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, UNPUBLISHED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND. © COPYRIGHT KAWNEER COMPANY, INC., 2015</p> <p>SSIT APPLICATION ONLY STACKING GLASS UNITS</p> <p>After assembly, units may be stacked on edge as illustrated below. Spacers must be placed between glass lites to keep the glass flat. Do not stack glass on glazing channel interfaces. Stack lites of same size only.</p>  <p>SPACER AS REQUIRED BETWEEN GLASS</p> <p>BLOCKING</p> <p>KAWNEER</p> <p>CLEARWALL® SS / SSI / SSIT INSTALLATION INSTRUCTIONS</p> <p>Product Engineering & Development</p> <p>97904-158 02/10/20</p> <p>172970 SHEET 05 OF 12</p>
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Metal Channel Application

Omaha Central Public Library — HDR



Omaha Central Public Library — HDR



Currently Under Construction

Omaha Central Public Library — HDR

Triple-Glazed

Demanding
Energy
Performance
specification

Oversized,
Flat and Curved
Combination



Omaha Central Public Library — HDR

Luminous

Exterior

Presence



Omaha Central Public Library — HDR

Natural Light Filled
Interiors

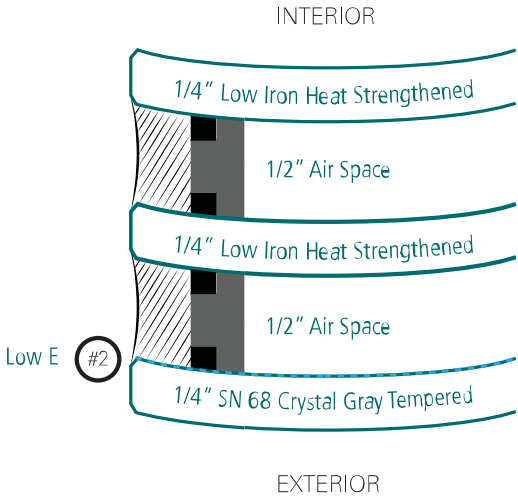
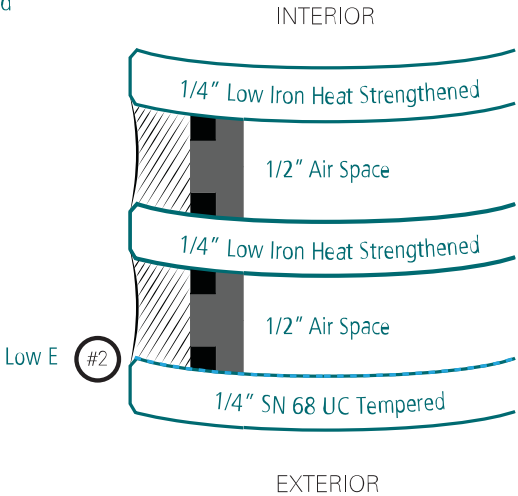
Thermal Comfort

Glare Control

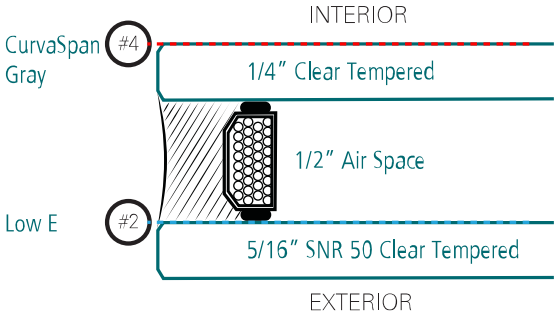
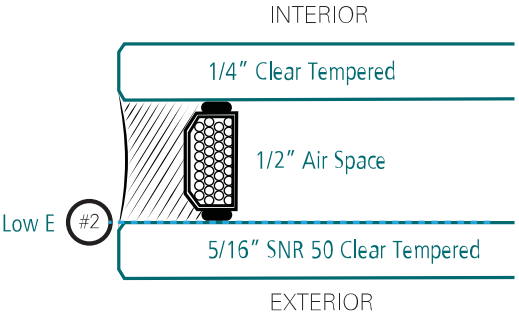
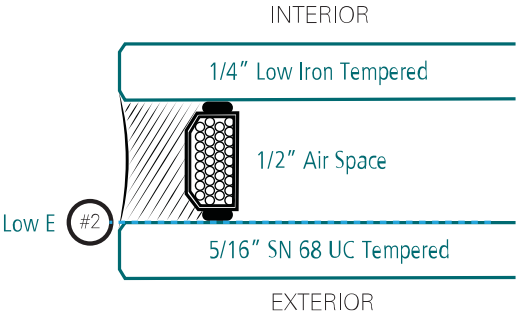


Insulated Glass Unit Configurations

Flat & Curved



Different Low-E Glass Types



Scope:

623 Curved & Flat Triple
IGUs

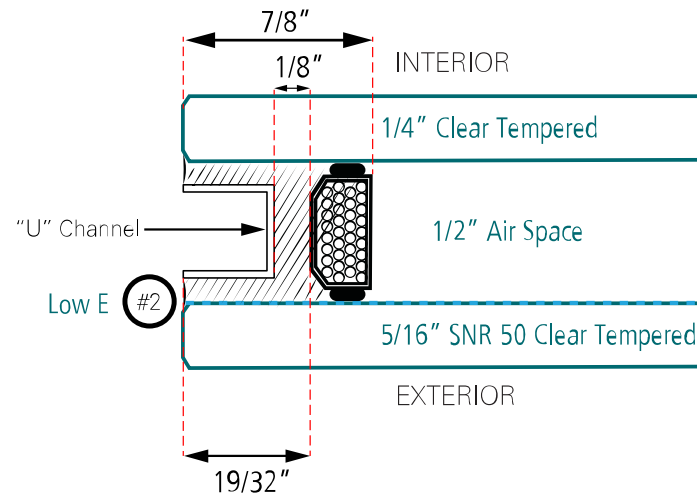
392 Regular Double IGUs

910 Curved and Flat
Monolithic Glass



Turnkey System

Embedded U-Channels



Omaha Central Public Library — HDR



Preserving the Past



Shaping the Future with Glass-Clad Libraries

Conclusions:

- Case Studies represent excellent examples of innovation within New-Day Library Architecture
- Public library designs now incorporate the functionality and aesthetic characteristics of glass cladding facades
- Collaborative efforts between the architectural teams, contractors, glazing installers, and the glass fabricator are paramount to cultivating these building projects

Thank you