

SOLAR INNOVATIONS® CASE STUDY

Project 14-01-292 | Edition 4.13.2020



CONTEMPORARY COHESIVENESS

ACHIEVING UNIFORM APPEARANCE THROUGH A SINGLE-SOURCE PROVIDER

THE CHALLENGE

A cohesive look between door and window systems

The owners of this Long Island, NY beach home came to Solar Innovations® in search of doors and windows that would create a consistent look and feel across their home. They also wanted many of the window systems to be operable. The finishes, hardware, operation, glazing type, and other features would need to be uniform. When doors and windows are ordered from different suppliers, the slightest difference in appearance can destroy the overall aesthetics of a building. A single-source provider would be needed for this job to succeed.



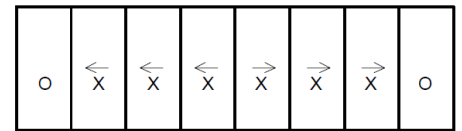
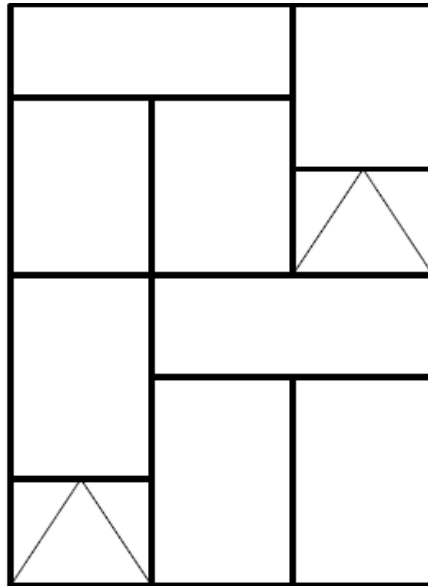
THE SOLUTION

A single-source provider

The Solar Innovations® team utilized several of our systems to create a complete glazing solution, including our G2 In-Swing Terrace Door, G2 Multi-Track Sliding Door, and G2 International Windows. Tilt & turn, fixed, casement, French casement, and awning windows were incorporated throughout this project to allow for multiple opening styles. Finally, a large curtain wall with integrated awning windows would showcase sweeping views of the Long Island Sound from both the first and second floor.

Sills used on the door systems for this project differed depending on which side of the home they were installed. High-performance sills were used on the multi-track sliding doors because their superior air and water resistance protected the home from the conditions brought forth by the sound. A standard sill could be used for the in-swing terrace door at the front of the home as it was more protected from the elements.

Creating a uniform appearance across the project came naturally for the Solar Innovations® team because the same sizes and finishes could be applied to all the frames while the glazing chosen would also be uniform. A Class 1 Clear Anodized finish was applied to both the interior and exterior surfaces of all the G2 frames. LoE 366 one-inch insulated glass was incorporated into all the panels of this project. This glazing was ideal as it adds privacy for the



homeowner, while reducing glare. uniform look long after the installation is complete.

THE OUTCOME

The benefits of a complete glazing package

In a complete glazing solution, the homeowner can benefit greatly from economies of scale, because costs incurred by the manufacturer are lower with the higher volume of materials purchased, which is passed on to the customer. This is especially true when similar frame, glass, and hardware types are chosen across the system. Additional savings come at the time of installation and subsequent service. When installation of the whole package is completed at the same time, waterproofing can be done in a uniform fashion and cost savings can be incurred in shipping and overhead. Because the systems are accompanied by the same warranty, service can be done at one time, eliminating the need for multiple trips and additional costs to the homeowner.



homeowner, while reducing glare.

By choosing a single-source provider, all the materials on the building will age at the same rate, maintaining a

TECHNICAL SPECIFICATIONS

LOCATION	Southold, NY
TYPE OF SYSTEM	G2 In-Swing Terrace Doors G2 Multi-Track Sliding Doors G2 International Windows (Tilt & Turn, Fixed, Casement, French Casement, Awning, and Motorized Awning)
FINISH	Class 1 Clear Anodized
GLAZING	1" Insulated Glazing Unit 3/16" LoE 366 Tempered 3/8" Stainless Steel Air Space (Argon Filled) 7/16" Heat-Strengthened Laminated with .090 SGP Interlayer 1" Insulated Glazing Unit 3/16" LoE 366 Tempered 1/2" Stainless Steel Air Space (Argon Filled) 5/16" Heat-Strengthened Laminated with .090 SGP Interlayer
APPLICATION	Residential
GLASS SQUARE FOOTAGE	1,600 ft ²
SILL (FINISH)	Standard Sill (G2 In-Swing Terrace Doors) High Performance Wind Load Sill (G2 Multi-Track Sliding Doors)
HARDWARE TYPE (FINISH)	3 Point Locking Toronto Handle (G2 In-Swing Terrace Doors) Ergonomic Sliding Door Handle (G2 Multi-Tracking Sliding Doors) Flush Mount Handle (G2 Multi-Track Sliding Doors) Prima Cremona Handle (Tilt & Turn Windows) Single Arm Folding Crank Operator (Awning and Casement Windows) Cam Handle (French Casement Windows) Marvel Motor with Wireless Remote (Awning Window)
AIR PERFORMANCE	Not rated for this configuration (G2 In-Swing Terrace Door) Not rated for this configuration (G2 Multi-track Sliding Door) .30 @ 1.57 and 6.24 psf (G2 International Tilt & Turn Window) .30 @ 1.57 and 6.24 psf (G2 International Fixed Window) .30 @ 1.57 and 6.24 psf (G2 International Casement Window) .30 @ 1.57 and 6.24 psf (G2 International Awning Window)

TECHNICAL SPECIFICATIONS (cont'd)

WATER PERFORMANCE	Not rated for this configuration (G2 In-Swing Terrace Door) Not rated for this configuration (G2 Multi-track Sliding Door) 30 psf (G2 International Tilt & Turn Window) 15 psf (G2 International Fixed Window) 12 psf (G2 International Casement Window) 15 psf (G2 International Awning Window)
STC RATING	Not rated for this configuration (G2 In-Swing Terrace Door) Not rated for this configuration (G2 Multi-track Sliding Door) Not rated for this configuration (G2 International Tilt & Turn Window) 35 (G2 International Fixed Window) 36 (G2 International Casement Window) 35 (G2 International Awning Window)
DESIGN PRESSURE	Not rated for this configuration (G2 In-Swing Terrace Door) Not rated for this configuration (G2 Multi-track Sliding Door) +/- 60 psf (G2 International Tilt & Turn Window) +/- 65 psf (G2 International Fixed Window) +/- 65 psf (G2 International Casement Window) +/- 65 psf (G2 International Awning Window)