

# CASE STUDY: ACHIEVING PERFORMANCE AND STYLE ON A LARGE SCALE WITH LIFT SLIDE DOORS

PROJECT ID: 13-12-194

Edition: 5.18.17

## CHALLENGE

An architect designing a glass clad high-rise hotel in Honolulu, Hawaii required a series of high performance sliding doors suited for exposure to harsh ocean air and hurricanes while maintaining high thermal performance. These doors, totaling over 1,000 panels, would allow access to private hotel balconies overlooking Māmalā Bay to the southwest. In addition to offering high wind, water, and thermal performance, the doors would need to complement the rest of the building's façade. While searching for a manufacturer to meet these rigorous standards, the architect reached out to Solar Innovations®.

## SOLUTION

Solar Innovations® discussed the desired performance of the sliding doors with the architect, and advised the use of the Lift Slide Door Systems to maximize water performance. As opposed to traditional sliding doors, the Lift Slide System locks the panels down into the sill when closed, sealing itself with built in gaskets and locking pressure. The handle is the home of the Lift Slide technology; a turn of the handle lifts the gaskets and allows the panels to travel smoothly along the track. Lift Slide Doors can be arranged in nearly unlimited configurations of operable and fixed panels, providing the variety and flexibility that the architect desired.

Solar Innovations® worked with the architect to provide doors with even higher performance ratings than previously achieved with the Lift Slide System. Water performance, design pressure, and thermal performance were all rigorously tested and improved. The in-house engineering team at Solar Innovations® was able to achieve a design pressure of  $\pm 65$ psf. Combined with the Lift Slide System's water performance, the doors were well suited to resist harsh coastal weather.

1¼" insulated glazing was selected to both increase thermal and energy performance as well as match the glass façade of the rest of the hotel. Solar Innovations® provided custom color matches on both the interior and exterior of the door panels to blend the units seamlessly into the suites' contemporary design palette. To maximize the precious balcony space, finger grips were substituted for handles on the exterior of the doors, with the iconic Lift Slide handle implemented on the interior only. The Lift Slide Doors allow vacationers to enjoy the beautiful Hawaiian vista of Māmalā Bay while providing the comfort and security of a high performance system.



## PROJECT DETAILS

**SERIES:** SI8600LS Lift Slide Multi-Track System

**FINISH:** Custom Color Match: "Pine Frost" & "LG Twister"

**GLAZING:** 1¼" Insulated Tempered Glazing

