ESJ TOWERS RESORT - SAN JUAN, PUERTO RICO
COMMERCIAL WINDOW AND DOOR DESIGNS
PROJECT PROFILE
There is no off-season for a 17-story condominium resort with hotel-like amenities located on the finest beach in San Juan, Puerto Rico. The operators of ESJ Towers on Isla Verde Beach knew it was time to upgrade the nearly 40-year-old complex, but the resort’s popularity made remodeling a challenge.

Among the most crucial upgrades were new windows and doors overlooking the Atlantic Ocean. ESJ management wanted to retain the aesthetic qualities that contribute to each unit’s five-star comfort while lowering utility costs, blocking out UV rays and eliminating exterior noise.

On top of that, the windows needed to be able to withstand hurricane conditions as well as the corrosive effects of salt, sand and sun. Aluminum, once the product of choice for many commercial and residential buildings, clearly wasn’t able to meet the modern demands for energy efficiency, oceanfront durability and sound control requirements of this project.

REHAU designs stood head and shoulders above the rest in marryng distinctive style with proven durability while Storm King Windows and Doors Inc. mastered just-in-time fabrication, delivery and installation, allowing each condominium to be upgraded whenever that particular unit was vacant.

Manufacturer Paul Lambert of Storm King says his crews have completed renovations to more than half of the 450 units in ESJ Towers over the past three years. Lambert is equipping each condo with REHAU System 4500 French hinged doors that open to the balconies and a beautiful beach view, as well as REHAU System 4500 windows in the configuration inward-opening, turn-only above fixed.

REHAU Account Manager Peete Kikerpill says the windows and doors have been directly responsible for reduced energy costs by more than 60 percent. With Puerto Rico’s extremely high electricity costs of 22.19 cents per Kwh compared to about 8 cents per Kwh in mainland United States, thousands of dollars are saved every year. The System 4500 windows and doors not only keep the heat out; they dramatically reduce exterior noise and all but eliminate carpet and curtain fading caused by harmful UV rays.

Lambert says he uses REHAU materials exclusively because of the company’s flexibility, support, quality, reliability and strong established reputation within the industry.

The System 4500 is a compression-seal projected window and door design that provides high energy efficiency, hurricane-impact and acoustical performance and security. These systems achieve U-factors down to 0.18, which is significantly better than thermally broken aluminum.

Commercial developers have historically used aluminum windows, but Kikerpill says the stellar performance of uPVC products like the REHAU System 4500 has them reconsidering their stance. “Once these products are used the first time by architects, they quickly become the standard with these particular architects and eventually also in the market,” he says.

---

**Project:** ESJ Towers, San Juan, Puerto Rico

**Type of Construction:** Hotel & Condominiums, renovation completed in 2014

**Scope of Project:** 500,000 ft² (46,452 m²) building; 100 windows and 150 doors

**Manufacturer:** Storm King Windows and Doors Inc.

**REHAU Systems Used:** System 4500 tilt-turn window, System 4500 hinged door, System 100 slider, System 2100 sliding patio door