

Case Study

Pinnacle 350 Double Pitch



Organization of American States, Washington, DC

The headquarters of the Organization of American States (OAS) features a large atrium skylight, over a magnificent tropical patio, which was originally built in 1910. Because its age and the thousands of dollars lost each year in energy costs due to the antiquated skylight structure, a complete skylight reconstruction was undertaken. The focal point of the atrium is the historic 'Peace Tree'—a hybrid of fig and rubber—rising up 60 feet. It was originally planted by President William Howard Taft during the building's dedication ceremonies.

CHALLENGE:

The building is situated right on the national mall in a direct line of sight to the White House, so any roof work required coordination and approval by the Secret Service on a daily basis.

It was necessary to plan a work schedule to accommodate the steady flow ambassadors and diplomats going in and out every day and make almost daily modifications to it. Safety was a major concern since the building had to remain open during construction.

"Balancing the delicate light spectrum requirements of the 'Peace Tree'—between a recommended nanometer range of 435 to 650—with the visible light transmittance and energy efficiency needs of the owner was a critical challenge and important compromise" said Trevor A. Morrison, President, Reinforced Skylights Inc.



Top: Planting of the Peace Tree, April 26, 1910. Bottom: Large atrium skylight, over the magnificent tropical patio.

Case Study

Pinnacle 350 Double Pitch

SOLUTION:

Wasco's Pinnacle skylight system was chosen because of its thermally-enhanced construction, standardized engineering and fast on-site assembly and installation.

"We conducted a comprehensive energy modeling analysis to help choose the appropriate glazing that balanced the light spectrum needs of the 'Peace Tree' but still provided the owners a payback model detailing thousands of dollars of energy saved per year in perpetuity" says Morrison. This was not only a necessary replacement but a wise investment with a strong return payback period.

Working closely with the building's arborist, a glass was chosen which allowed the appropriate spectrum of light—between a nanometer range of 435 to 650 was the recommended amount.

A multi-layer debris and fall protection system was built into the structural steel below the skylight so the Atrium, which is the heart of the building could remain open to accommodate the steady flow of traffic going in and out every day.

"The client was thrilled with the finished product. We didn't strongly consider anyone else besides Wasco because it was such a high-profile, technically difficult, high-stakes project. Wasco responded so quickly and made dozens of changes to the shop drawings. They were just great to work with!" said Morrison.

Specifications:

Pinnacle 350 Double Pitch, 55' 5" wide x 50' 5" long, 4:12 pitch. Glazing: 1 1/16" insulated: 1/4" clear tempered over 1/2" air over 7/16" clear heat strengthened. Finish: Kynar 500 Black.



Reinforced Skylights, Inc.

Reinforced Daylight and Solar is a family run company that has sold, serviced, and installed skylights, commercial daylight systems, and solar hot water systems in the DC region since 1969. No one has more experience, more products, or a longer warranty anywhere.
www.reinforcedlight.com



Before and after of the Atrium exterior.

VELUX America LLC

VELUX Wells • 85 Spencer Drive, Unit A • Wells, ME 04090
Tel 1-800-688-3589 • wascoskylights.com • veluxusa.com