

SITE | HYATT REGENCY HOUSTON
SITE LOCATION | HOUSTON, TEXAS
FILM TYPE | ENERLOGIC® 35
GLAZING | SINGLE-PANE BRONZE GLASS

YEAR-ROUND
ENERGY SAVING
IMPACT

HYATT PUTS WINDOW FILM TO THE TEST

As a AAA Four Diamond hotel built in 1972, the 924,000-square-foot Hyatt Regency Houston has a reputation to uphold. It offers state-of-the-art technology, 360-degree views of the city from an award-winning revolving restaurant, and spacious guestrooms. But temperature complaints from guests on the southeast and southwest sides of the building due to the solar heat were diminishing an otherwise high-quality experience.

With energy expenditures totaling \$1.6 million annually, directing money toward high utility bills also was preventing the hotel from offering best-in-class service and amenities.

The 32-floor hotel partnered with Green Generation Solutions (GGS) to find a way of driving down operating costs and reducing temperature inconsistencies across its 950 guestrooms.

ONE SOLUTION OFFERS YEAR-ROUND SAVINGS

GGS suggested high-performance window film as an energy-efficient investment that would bring utility costs down immediately and solve guest discomfort.

After analyzing dozens of window films, GGS found EnerLogic® outperformed all competitors in total energy savings and insulation performance.

“Most solar films are great at blocking solar energy from entering a building in the summer, but they do very little to keep the cold out in the winter. Because EnerLogic improves the insulation of the window, it also keeps the heat in during the winter months. This creates year-round savings and improves occupant comfort.”

—Martin Griffith, SOLUTIONS MANAGER AT GREEN GENERATION SOLUTIONS.

WINDOW FILM BY THE NUMBERS

COOLING SAVINGS

23% REDUCTION

HEATING SAVINGS

25% REDUCTION

PAYBACK PERIOD

3.6 YEARS

RETURN ON INVESTMENT

28% PER YEAR



Window film was the clear choice in reducing costs and energy use, but staff members at CenterPoint Energy (the local utility) wanted to measure the difference film would make.

WINDOW FILM PUT TO THE TEST

During installation, an extensive sub-metering system was installed to monitor energy use in 96 rooms (48 rooms with and 48 without window film). Sub-meters were placed on specific pieces of HVAC equipment to directly measure energy savings from the window film. No other HVAC retrofit projects were performed during this time.

This study was the first of its kind to directly measure the energy saved through window film installation alone. Never before have real-time energy meters been used to monitor energy use and savings on such a large scale.

REALTIME MEASUREMENTS PROVE SAVINGS

Before the project began, GGS completed an energy simulation model with an estimated 20% reduction in in-room HVAC heating and cooling costs. When savings were calculated

by comparing sub-meter data, the rooms with window film showed a reduction of 23% in cooling energy use and 25% in heating energy. Using national average installation costs, these energy savings provided a payback on the hotel's investment in 3 ½ years, or an ROI of 28%.

"The Hyatt staff and the ownership group are extremely pleased with this solution," says Griffith. "They believe the exterior aesthetics of the hotel are greatly improved because it's a more uniform look from window to window; guest comfort complaints are also down, and the energy savings are making the Asset Manager really happy."

The results seen at the Hyatt Regency Houston prove that EnerLogic window film installation is a green solution that can effectively save energy, reduce costs and improve occupant comfort.

