Case Study

Checking in to a Sustainable Hotel Experience

with Hilton Worldwide

Easier comparison shopping has provided hotel customers with more choices than ever before. With easy access to information, consumers are increasingly interested in hotels that adopt sustainable operations. In fact, when prices are the same, 62% of consumers are choosing hotels that advertise sustainability.

The Need for an Energy Efficient Building

Hilton Worldwide and Performance Building Solutions (PBS) formed a relationship as Olympic sponsors and decided to collaborate on a project that would help Hilton's new hotels achieve higher levels of sustainability. For this first project, the companies chose a 10-story Hilton Homewood Suites building that was intended for construction in Arlington, Virginia. The franchisee of the Homewood Suites was eager to reduce costs and improve sustainability for the new building while maintaining its structural integrity. PBS and Hilton collaborated with Gordon Greenberg Architects and Donohoe Construction to make it happen.

Hilton's environmental and social impact commitments align with the United Nations Sustainable Development goals (SDGs) to address issues that include making cities more sustainable and combatting climate change. More energy-efficient buildings are critical to those efforts as buildings consume nearly half of all the energy produced in the United States. This project aimed to show how collaboration between building stakeholders can yield significant energy efficiency gains.

Construction and the Required Materials

The design phase of the construction project started in November 2016, and the project broke ground in early January 2017. The architect and construction manager used Performance Building Solutions Thermax™ Wall System with Liquidarmor™ (LT) Flashing and Sealant as a cost-effective, sustainable and efficient option for the job. The Thermax™ Wall System offers efficiencies such as streamlined design and construction. The use of Liquidarmor™ (LT) Flashing and Sealant reduces air leakage to help building owners save money and offers a more comfortable environment to occupants. Performance Building Solutions also provided estimated cost savings, dewpoint calculations, and performed a construction detail review, which clearly outlined the changes made to the building's design so that all parties involved were aligned and the building performed as intended.

Results

- **Estimated $198,283 in cost savings (~$2.64 per square foot of exterior wall)**
- **17% increase in R-Value**
- **1 8% R-Value improvement over code**
- **Warranties: 6 month exposure,15-year thermal resistance and10-year weatherization performance**

Stellar Results That Can Be Replicated

As a result of this collaboration, the project realized an estimated $198,283 in cost savings (~$2.64 per square foot of exterior wall), a 17% change in R-Value, 18% R-Value improvement over code and added 6-month exposure, 15-year thermal resistance and 10-year weatherization warranties. These improvements help the hotel owner save money over time, reduce the environmental impact of the building and increase occupant comfort due to high-quality insulation and sealing. The success of the project doesn't stop at this one building. The plans are being shared with Hilton franchise members to help them envision better building options that yield a more profitable operating model and better customer experience. For franchisees interested in taking a similar approach to cost savings and using efficient designs with their buildings, you can reach DuPont™ Performance Building Solutions at 1-866-583-2583 to be connected with a local DuPont Building Envelope Specialist.

DUPONT™

For more information visit us at building.dupont.com or call 1-866-583-2583

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ℠ or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2019 DuPont.

43-D100601-enNA-0919 CDP