Westin Denver International Airport FiberTite® Case Study

The Westin Denver International Airport is the first hotel built to service travelers at Denver International Airport (DIA), the 15th busiest airport in the world and the fifth busiest in the United States.

A convenient destination for business and leisure travelers, the hotel is part of the city's new Hotel and Transit Center that includes a public transit station with rail service to downtown.



CHALLENGE:

The hotel is uniquely situated on airport property. The acclaimed architect, Gensler, with offices world-wide, took on the challenge of designing a building that would not obstruct the line of site for air traffic controllers. The result is a one-of-a-kind, sleek and modern design that is built upon the imagery of flight and aviation. Resembling a bird in flight, the building is wing-shaped at each end, and the center dips 50 feet to allow controllers full view of the airways from the tower.

The roof of the hotel showcases the design to the estimated 53 million travelers passing through DIA each year. Decision makers wanted a durable and hassle-free roofing system that could withstand Colorado's extreme Rocky Mountain climate, delivering snow, ice, hail, high wind, and a guaranteed 300 days of sunshine each year. The product also needed to be resistant to jet fuel fallout from the planes passing overhead.

Roof installation was another challenge. Airport security practices extend to all parties on airport grounds. Crews installing the roof had to pass background checks and get security clearance daily. Furthermore, to keep airways and landing strips free from flying debris, all products and equipment had to be hauled onto and off of the roof each day.



Solution:

Nick Lovato, owner of Cybercon Engineering, Inc., a Colorado-based roofing and waterproofing consulting firm, presented FiberTite® Roofing Systems by Seaman Corporation as the solution. Lovato has been specifying FiberTite for more than 20 years.

"DIA's management team came to me for quality assurance," said Lovato. "The geometry of this roof is like a saddle. It will experience occasional ice slides. This job needed a membrane that is durable, tough, reflective and meets UL fire rating at steeper slopes. It also needed to have excellent wind uplift resistance ratings."

Working closely with the FiberTite team, Lovato designed a roof to meet the challenges the buyer faced.

In the spring of 2015, Douglass Colony Group, based in Commerce City, Colorado, an authorized FiberTite contractor, installed a fully adhered, fleece back FiberTite 60-mil XT membrane on the roof of the new Westin Denver International Airport hotel. The system includes Dens Deck® prime cover board and two layers of two-inch polyisocyanurate, with a torch grade venting vapor barrier over the primed lightweight structural concrete deck.

Seaman Corporation was the first roofing manufacturer to incorporate DuPont Elvaloy® KEE in the original core formula for its FiberTite roofing membrane back in 1979. KEE is widely recognized as a key ingredient for high performance in flexible single ply roofing membranes. Because the original FiberTite KEE formula has demonstrated unmatched resistance to puncture, tear, UV rays and chemicals, Seaman Corporation still uses it today. The proof of performance is validated by a track record: original FiberTite roofs are lasting 35 years.

Westin Denver International Airport

Installation date: Spring 2015

Total Square Feet: 50,000 square feet

Product: FiberTite 60 mil XT, fully adhered, fleece back with Dens Deck prime cover board and two layers of two-inch polyisocyanurate® insulation

Owner: Denver International Airport

Architect: Gensler

Specifier: Nick Lovato, Cybercon Engineering, Inc.

Authorized FiberTite Contractor: Douglass Colony Group

About FiberTite

The foundation of FiberTite is 60 years of high-performance fabric technology. FiberTite's 4-Layer technology synthesizes nearly twice as much fiber as competitors, and features a unique adhesive coat and a proprietary DuPont™ Elvaloy® KEE based formula.

