



# CASE STUDY

## BILTMORE PALM BEACH

**Sikalastic RoofPro – Biltmore Palm Beach**

**Owner:**

**Project Engineer/Designer:**

**Contractor:**

**Material Supplier/Manufacturer:**



**SikaSmart™**

EXPERT SOLUTIONS FOR THE BUILDING ENVELOPE



**BUILDING TRUST**



## Background

The Biltmore Hotel in Palm Beach, Florida was originally built in 1926 as an exclusive resort hotel where luxury had no limit and price was of no concern. Over time, the promenade and plaza at the rear of the Biltmore Hotel deteriorated. Severe leakage into the parking garage located beneath the plaza area developed and eventually structural damage ensued. The plaza area consisted of 27,000 sf of concrete deck, including a formal stairs leading down to the gardens, swimming pool, and tennis courts. In 2012, a full restoration of the plaza area began and in 2014, the plaza deck opened again.

## The Sika Solution

During the restoration process, all existing overburden materials and original bituminous waterproofing materials were removed. The concrete deck was repaired with Sikaquick® 1000 and Sikaflex® 2C and then primed with Sikalastic® Concrete Primer. All cracks were detailed with Sikalastic® 624 AR resin and Sika® Flexitape Heavy. Sikalastic® 624 AR, an alkaline-resistant waterproofing membrane and flashing, was installed with Sika® Reemat® Premium directly to the primed deck to achieve the most reliable, long-term watertight installation. Once the Sikalastic® RoofPro membrane and flashing installation was complete, new overburden materials were installed to return the promenade and plaza to their former glory. Planter areas were lined with Sika drainage mat and filled with growing media and plantings. The main deck received a layer of Sika drainage mat prior to the installation of a concrete topping slab. Decorative tile was then applied in a cementitious setting bed over the topping slab to create walkways and terrace areas. Following completion of the work, a Sikalastic® RoofPro 20 year materials and workmanship warranty was issued for the Sikalastic membrane installation. The building owners were so pleased with the trouble-free RoofPro application and its leak-free performance following installation that Sikalastic® RoofPro has been selected as the waterproofing for the Biltmore's penthouse terrace areas.



Application of the RoofPro



Various stages of Step Repair

**Sika® Reemat** - a glass fiber matt embedded into Sikalastic® roof coatings for enhanced multi-directional tensile strength. Great for complex details, joints, corners, and protrusions.

**Sika® Flexitape** - is a nylon mesh capable of stretching within a membrane to accommodate a high degree of thermal and structural movement.

**Sikalastic® 601 BC/621 TC** - is a moisture triggered, waterproofing polyurethane roof membrane system able to resist gassing and foaming and is rainproof shortly after application.

**Sikalastic® 624 AR** - Elastomeric, alkaline resistant, moisture-triggered, polyurethane balcony system

**Sikalastic® Clearglaze** - is a clear aliphatic, polycarbonate polyurethane, waterproof coating to protect porous stone against penetration.