

# Case History



<b>Type of Project / Name:</b>	<b>Concrete Roof Restoration</b>
<b>Location:</b>	<b>Teaneck, NJ</b>
<b>Specification:</b>	<b>SI-38-GF20 with LM-60</b>
<b>Architect:</b>	<b>LAN Associates</b>
<b>Contractor:</b>	<b>Hollister Construction Services, General Contractor Strober Wright Roofing, Roof Contractor Hygrade Insulators, Insulation and Coating Contractor</b>
<b>Customer:</b>	<b>Fairleigh Dickinson University</b>
<b>Problem to be Solved:</b>	<b>Concrete roof deck needed an extra-strength waterproofing solution.</b>
<b>Completion Date:</b>	<b>June 2016</b>





**GacoFlex E5990 100% Solids Two Component Primer/Sealer.**



**GacoRoofFoam 2733 Closed Cell Spray Polyurethane Roofing Foam.**



**GacoRoofFoam 2733 Closed Cell Spray Polyurethane Roofing Foam being coated with GacoFlex S20 Silicone Roof Coating.**

GacoFlex S20 Roof Coating System /  
Concrete Roof Restoration, Teaneck, NJ

Team work and the

# **GacoFlex S20 Silicone Roof Coating System**

prove to be an A+ solution for this University's concrete roof deck renovation.

**PROBLEM:** The largest private university in New Jersey, Fairleigh Dickinson University, is a not-for-profit, nonsectarian, multi-campus institution. Recently the University announced expansion plans including an enhancement of their offerings in the STEM (science, technology, engineering and mathematics) fields. Becton Hall on the Metropolitan Campus received many internal upgrades including 11 laboratories and academic facilities, as well as renovations to the exterior. When the roof deck was being addressed, the project team wanted to be sure to get the most bang for their buck with a permanent waterproof solution.

## **UNIQUE CHARACTERISTICS:**

The roof deck was saturated, so the architect wanted a double waterproofing system to ensure future leakage would not occur.

**SOLUTION:** LAN Associates specified the GacoFlex S20 Silicone Roof Coating System and worked with their GacoFlex Architectural Specialist to add a primary waterproofing layer to the specification. This system can be applied to virtually any existing roof to create a durable, glossy, seamless membrane that seals and protects against permanent ponding water, ultraviolet light, rain and extreme heat. This is an extremely appealing solution because it is much more cost-effective than an entire re-roof project.

**INSTALLATION DETAILS:** The original deck consisted of concrete, a waterproof membrane, and pavers. The pavers and waterproof membrane were removed and then the concrete

was scarified in order to remove old tar and create a surface profile. After moisture testing with an RH Probe (.85) the team determined that it would be necessary to use GacoFlex E5990 100% Solids Two Component Primer/Sealer as a moisture barrier. After application and ample dry time, GacoFlex E5320 2-Part Epoxy Primer/Filler was applied. This easy-to-apply primer bonds to properly prepared roofing surfaces and improves adhesion of GacoFlex silicone coatings and other top coats, especially on weathered surfaces that are difficult to get completely clean.

All flashings were completed with GacoFlex NF621 Field Curing Neoprene. Then GacoFlex LM60 Liquid Applied Polyurethane Elastomeric Membrane was installed on the horizontal and vertical surfaces to a thickness of 80 mils. A tack coat of LM60 was used on the back of a recovery board and the recovery board was placed over the entire deck.

Next GacoRoofFoam 2733 Closed Cell Spray Polyurethane Roofing Foam was sprayed at a 2" thickness (3" thickness on vertical surfaces) and then a single coat of GacoFlex S20 Solvent-Free 100% Silicone Coating was applied. A second coat of S20 was applied to flashings and edge terminations.

The result of this project was outstanding. Communication and careful consideration of details were a pivotal component to this multi-step restoration, and the contractor team worked closely with the Architect to address the complicated transition of coping, drains and expansion joints.

