



West Virginia University Coliseum gets an SPF facelift

Owner

West Virginia University,
Morgantown, WV

Building

174,000 square-foot domed coliseum with folded-plate designed roof

Problems

- Aesthetic concerns
- Difficult work conditions, challenging roof design

Solution

BASF ELASTOSPRAY® spray-applied polyurethane foam (SPF) roofing system with Neogard™ aliphatic urethane UV-resistant coating

Advantages

- Long-life-expectancy with low-maintenance requirements
- Decades of leak-free performance
- Desired aesthetic appearance
- Seamless, self-adhering application
- Quick installation for minimal disruption
- Conformity to curved dome shape
- Environmental responsibility

The domed roof of the West Virginia University Coliseum was starting to look old.

Despite almost 35 years of leak-free performance, the domed 174,000 square-foot (16,156 square-meter) Spray Polyurethane Foam (SPF) roof, which had been previously recoated, needed rejuvenation. The UV-protective coating layer had aged and become dirty.

The only owner complaint about the existing roof was aesthetic – its appearance had become splotchy and dusty after such a long time. Robert Dye, a registered roof consultant with RTE Technologies who advised the University on its new roof, says, “there were no leaks and the SPF still offered good thermal insulation performance and had good adhesion to the concrete deck. It was doing exactly what it was installed to do.”

long life-expectancy and low-maintenance requirements

PROJECT PROFILE

ELASTOSPRAY® Roofing System

Helping Make
Buildings Better™

 **BASF**
The Chemical Company

BASF Polyurethane
Foam Enterprises LLC

After a thorough evaluation of the existing system and the University's expectations for the dome, Dye presented a number of options for rejuvenating the roof, including:

- Power washing the existing system and recoating
- Scarifying the existing coating, applying more SPF and a new coating
- Total removal to the deck, and installing board insulation and coating
- Total removal to the deck and installing an entirely new SPF roof



"We chose to go with a new SPF roofing system for the dome because of its durability and appearance," says Tony Napolillo, senior construction project manager for West Virginia University. "The old roof had served us well for many years."

The next choice to make was the selection of a durable, attractive, low-maintenance coating.

"We opted for an aliphatic urethane coating, applied at a thickness that should last 15 to 20 years without maintenance or renewal. It's more expensive, but it's also more durable," says Dye. "The aliphatic coating also provides a smooth surface with a sheen to it. It's almost self-cleaning and doesn't have the static electricity that attracts particulates from the atmosphere like some other coating systems."

With the decisions made, it was time to call in Insulated Roofing Contractors to perform the work. The roofing work required a delicate touch to protect the coliseum's interior acoustical insulation. In addition to the slope of the roof, the ribs are up to 12 feet high. "The most challenging aspect of this project was getting access to all areas of the roof surface, while ensuring a safe work environment," says Sean Stumler of Insulated Roofing Contractors. "We engineered electrically

powered work platforms, and the entire crew used safety lines at all times."

Once the tear-off was complete, Insulating Roofing Contractors installed a BASF ELASTOSPRAY® spray polyurethane foam roofing system and topped it with Neogard™ 7490 aliphatic coating.

"BASF and Neogard were very helpful right from the design stage," says Dye. "It wasn't difficult for me to make the recommendation to go with them, and then they followed through with the contractor and ensured all the materials were supplied on-time, as specified."

The re-roofing project had to take place after the University's commencement ceremony in May and be completed before the fall semester began. Insulated Roofing Contractors managed to complete the project well ahead of that schedule. And although most of the students were on their summer vacation, there is always a lot of activity around the Coliseum.

"We had to schedule the project around commencements and athletic activities," says Napolillo. "We had to be careful with regard to overspray and environmental concerns that the public was calling attention to. We involved our Environmental Health and Safety Department from the outset of the project. This was a real benefit to us when it came to ensuring the environmental responsibility of the re-roofing."

Dye says SPF's seamless conformity to odd shapes, along with the ease of completing difficult roofing details, made the installation quicker and easier than it would have been if board roof insulation had been selected for the project.

"The Coliseum underwent an entire restoration construction project, of which the roof portion accounted for about 90 percent," he says. "The roof was completed well before the other restorations, even though it was a much larger scope of work."

The university is pleased with the rebirth of one of its major landmarks.

"We are very happy with the new roof and the contractor who performed the work," says Napolillo. "We truly feel that this system will give us a longer life expectancy and retain its color sheen better than any other product we had considered."

BASF Polyurethane Foam Enterprises LLC

13630 Watertower Circle
Minneapolis, MN 55441
Phone: 1-888-900-FOAM
Fax: 713-383-4592
www.basf.com/spray
spfinfo@basf.com

363-1031C



SEE US IN SWEETS.COM