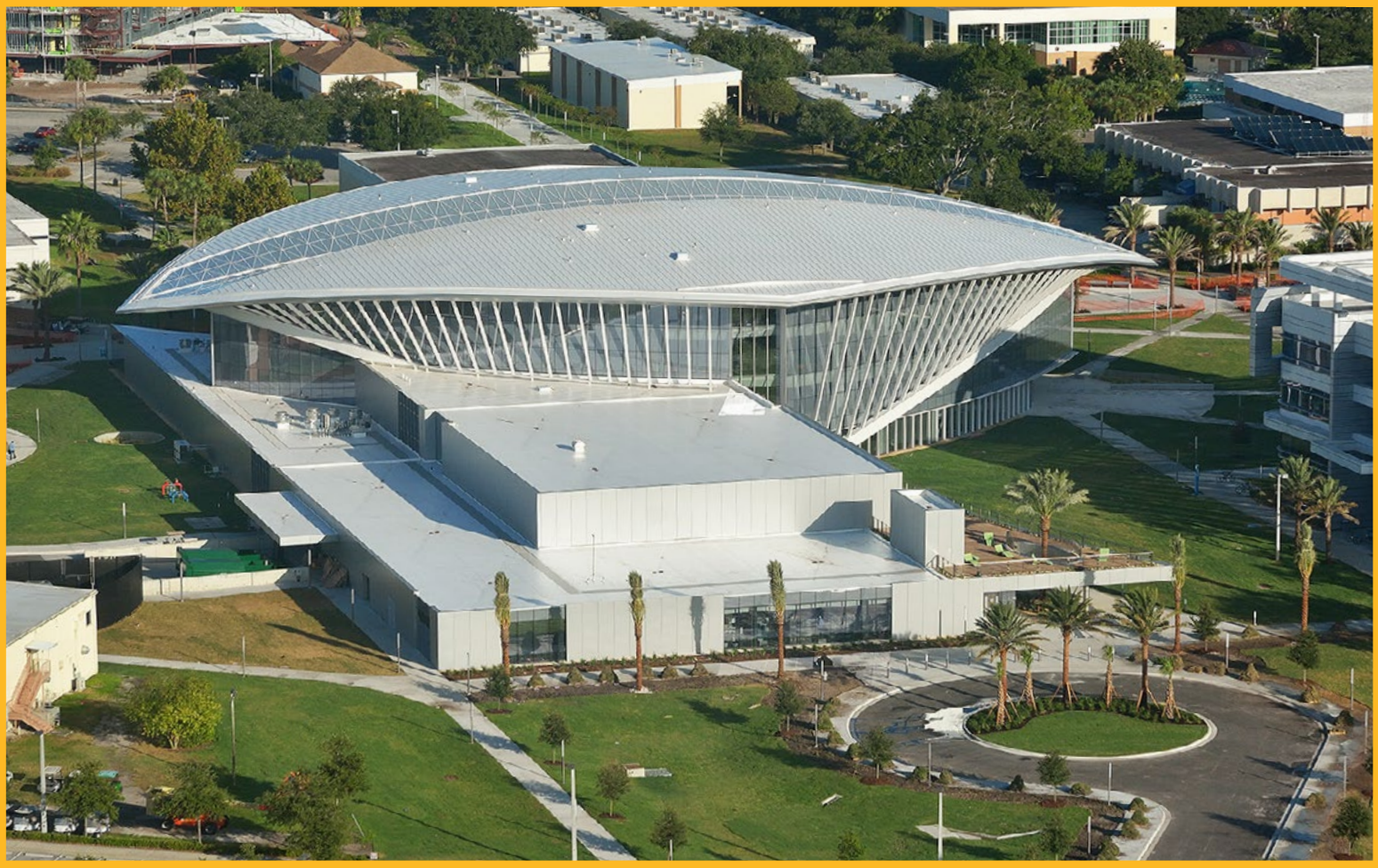

SIKA AT WORK

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY'S MORI HOSSEINI STUDENT UNION DAYTONA BEACH, FLORIDA

DÉCOR ROOF SYSTEM, USING 60 MIL G 410 FELTBACK MEMBRANE IN WHITE

Sarnafil®

BUILDING TRUST

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STUDENT UNION SOARS WITH SARNAFIL DÉCOR ROOF SYSTEM

Embry-Riddle Aeronautical University is widely considered one of the top aviation and aerospace schools in America, and the most recent addition to the school's Daytona Beach campus visually expresses this dedication to flight. The gently vaulted roof of the Mori Hosseini Student Union is inspired by a bird in flight, calling for a roof which could compliment the roof expression and provide added texture which would be visible from much of the central portion of the campus. The design team chose the Sarnafil Décor Roof System which combines the Sarnafil G 410 single-ply PVC roofing membrane with Décor profile ribs to give the visual texture of a standing seam metal roof. This system utilizes Sika Sarnafil's time-tested PVC membrane. It is the only roofing system of this type that also includes warranty coverage for the hot-air welded profile ribs that give the roof the appearance of metal.

"The three-dimensional form of this roof is very visible from other adjacent buildings and as one approaches the building," explained Charles J. Maira, principal at ikon.5 architects of Princeton, New Jersey. The architects considered using a metal roof, but it was too costly and wouldn't meet the 147-mph wind load requirement for Daytona Beach. "We had used Sarnafil roofs on numerous projects but never the Décor system. It was available, met the wind uplift specifications, and was reasonably priced, so we chose the system which best served the projects requirements," Maira said.

WINGING IT

Roughly 95 percent of the building's 86,000-square-feet roof area is comprised of a convex radius at both the ridgeline and the eave, making the installation both difficult and laborious. Fortunately, Hartford South of Orlando was up to the task.

The first issue Hartford South faced was material loading and removal. "There was no staging on the ground so staging was done on the roof in the convex/concave angles of the eaves," stated Peter Rintelmann, president of Hartford South. "We took material deliveries as needed, so just a few truckloads at a time. We had a crane on-site and a large forklift, which is how we moved materials around."

TAKING FLIGHT

The roof assembly consisted of the gypsum roof board mechanically fastened to the Sarnatherm insulation. The Sarnafil G410 60 mil roof membrane was then adhered to gypsum roof board and then the Décor ribs were hot-air welded.

The roof's steep slope combined with the convex radius made installing the field and perimeter Sarnafil membrane sheets difficult. However, laying out and installing the Sarnafil Décor ribs was even more demanding, as it was very detail-oriented and time consuming. There were no straight lines to follow and each rib had to be measured at multiple points along the

PROJECT
Embry-Riddle Aeronautical University's Mori Hosseini Student Union
Daytona Beach, Florida

OWNER
Embry Riddle Aeronautical University

ROOFING CONTRACTOR
Hartford South, LLC
Orlando, Florida

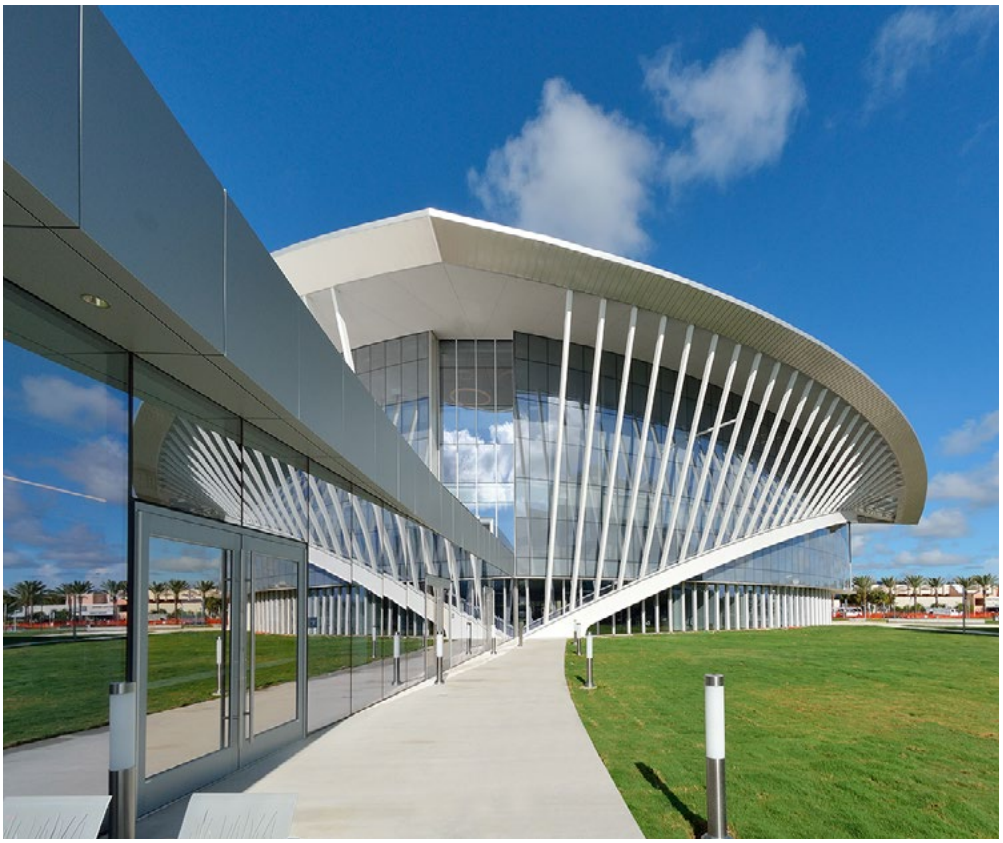
ARCHITECT
ikon.5 architects
Princeton, New Jersey

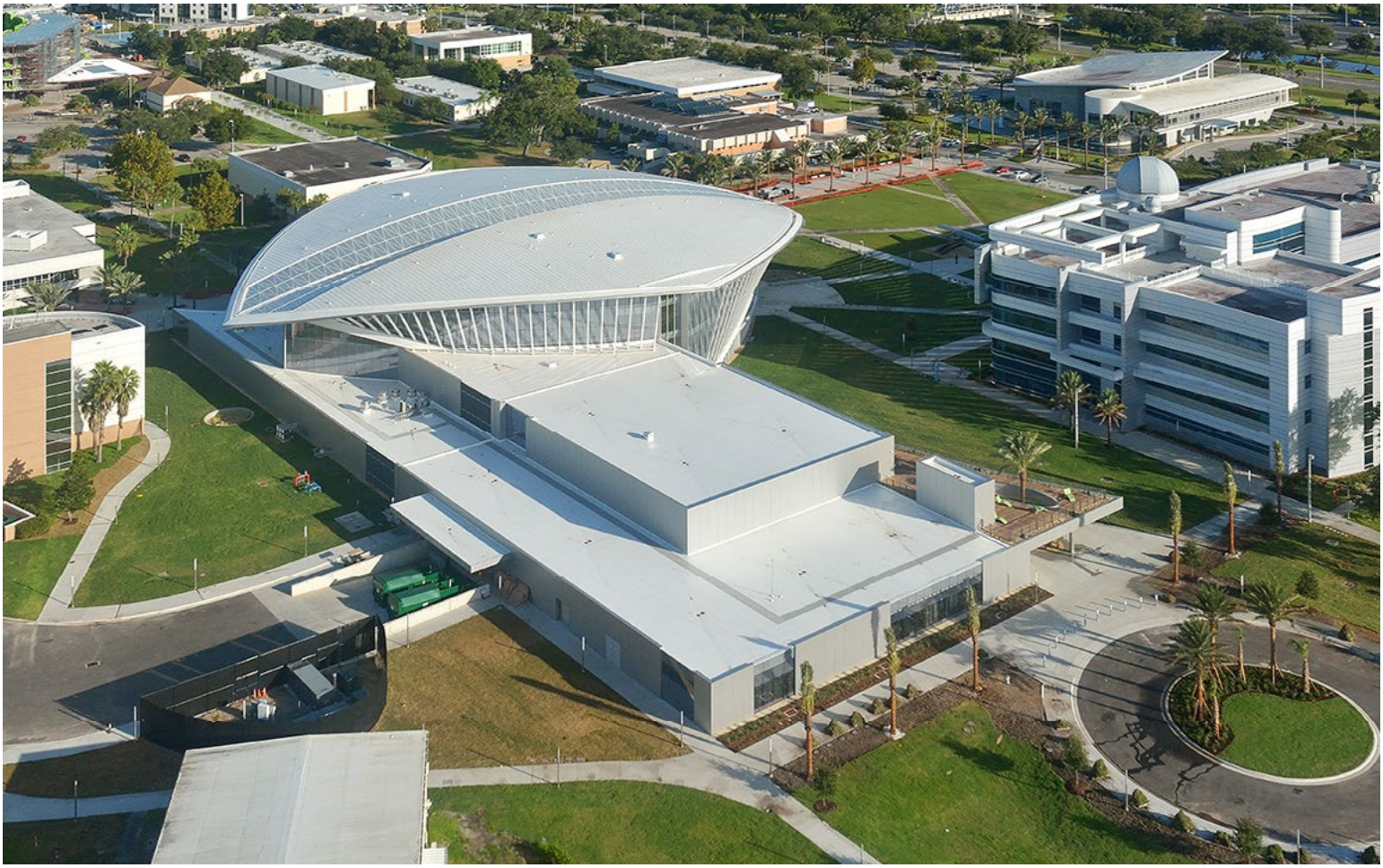
GENERAL CONTRACTOR
Barton Malow Company
Orlando, Florida

ROOFING SYSTEM
Décor Roof System, using 60 mil G 410 feltback membrane in white

PROJECT SIZE
86,240 square feet

COMPLETED
August 2018





installation to ensure a plumb and true aesthetic from the curb/grade.

"Our guys ended up coming up with templates for the rib layout, which worked out very well," Rintelmann remarked. The templates used 2" x 4" pieces of wood cut to proper length for proper spacing. Once the ribs were installed adjacent to the wood, the template was moved three feet for the next ribs installation. "In the end the hard work was worth it because of the roof's appearance and cost savings," Rintelmann added.

In addition to the roofing membrane, Hartford South also fabricated and installed all the radius fascia and soffit panels, which created an aesthetic focal point of the building's architecture. Each piece was measured and skillfully fabricated while accounting for the curved nature of the structure. Installation was done from a 110' man-lift, at a very slow progression to make sure each piece fit perfectly.

SAFETY ALOFT

The overall building height – 77 feet to the eave – meant safety protocols had to followed at all times. "There were no parapet walls so we used a harness and retractable lanyard system," Rintelmann stated. "Safety is part of our culture and we went the extra measure to make sure our crew was comfortable."

School was in session during the building of the student union, so student safety was also critical. "We had to rope off areas on the ground to keep students safe, and make sure the roof was clear of any debris that might fall or become airborne due to the wind," Rintelmann commented.

Rintelmann added that Sika representatives were very helpful throughout the project. "Sika treats us incredibly well. We're very happy with the membrane and their technical expertise."

Hartford South also received praise. "Hartford South well exceeded our expectations," remarked Phillip Sayers, project manager at Barton Malow Company of Orlando, the general contractor. "They did a great job with the installation, had no safety concerns, and did a very favorable job of managing their manpower." "It was a challenging project but we worked together as a team for 2.5 years and Hartford South did a good job," Maira added.

It was this professionalism and detailed installation that earned Hartford South first place in the Steep Slope Category of Sika Sarnafil's 2018 Project of the Year competition.

FLYING HIGH

Not only is the roof performing well and looking great, it has also garnered several awards such as the FRSA's Craftsmanship in Roofing S.T.A.R. Award. "It's a beautiful roof, and I would absolutely use the Décor Roof System again," Sayers said. "We are absolutely pleased with the roof and it has won many architectural honors," Maira remarked. "Though troublingly difficult, the work on this roof was ultimately rewarding and source of pride for those involved in its completion," Rintelmann added.

Another Décor Roof System soars.

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY'S MORI HOSSEINI STUDENT UNION

WHO WE ARE

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Please consult the Product Data Sheet prior to any use and processing.
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