

COVER STORY

ROOFING STORIES AND EVENTS THAT ARE MAKING HEADLINES

KFC YUM! CENTER



Cover photo taken by Aerial Innovations of Tennessee, courtesy of Kalkreuth Roofing & Sheet Metal, Inc. Article photos taken by Brian Covington

It stands as one of the premier college basketball arenas in the country, and it was roofed entirely by union roofers and waterproofers. Situated prominently on the banks of the Ohio River in the heart of downtown Louisville, KY, the KFC Yum! Center has proven in just a few months that it can draw basketball fans and concert goers from throughout the region to its state-of-the-art structure.

And what's on top of it is not just any roof. The signature curving roof is inspired by the wing of a Louisville Cardinal and imitates the flow of the Ohio River. The arena's riverfront position accentuates this iconic design element.

The 406-foot primary roof trusses vary in depth to provide the roof shape with maximum efficiency. The top chord is segmented at each panel point and forms the curved roofline through subtle variations in each truss chord connection. The wave-like roof continues its downward curvature, transitioning from steel-supported roof deck to aluminum panels and then glass to form the arena's other signature architectural element, the "waterfall."

The project was awarded to signatory contractor Kalkreuth Roofing & Sheet Metal, Inc. out of Wheeling, WV. Crew consisted of members from Local 188, Wheeling, WV; Local 147, Louisville, KY; and Local 86, Columbus, OH.

It took seven months to complete the project. The roofing system was mechanically fastened Firestone TPO and it also had a few areas requiring a totally adhered version.

Structurally, the new center has been referred to as a "jewel in the architectural crown" for the community. In addition, as the Louisville Arena Authority is an Energy Star partner with the EPA, the energy performance of the KFC Yum! Center will be tracked through Energy Star. The roof system will play a critical role in meeting the high standards of energy efficiency.

KFC Yum! Center is the official home of the University of Louisville men's and women's basketball teams. It also hosts "hot ticket" concerts, events and conventions. It made history when it was awarded the 2012 NCAA Women's Volleyball Championship. It was the first time in NCAA history that it chose what was an unfinished facility at the time to host a championship game.

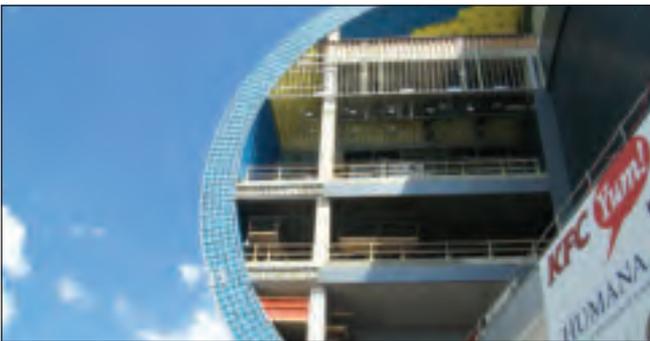
Crew members were Local 188 members Brian Covington (foreman), Gary Long, Josh Tickerhoof, Tom Tweedlie, Laymond Daily and Benny Doneski; Local 86 member Barry Cast; and Local 147 members Chris Morrison, Ron Barker, Dean Wheat, Lara Thalman, Brandon Larson and Adrian Torian.



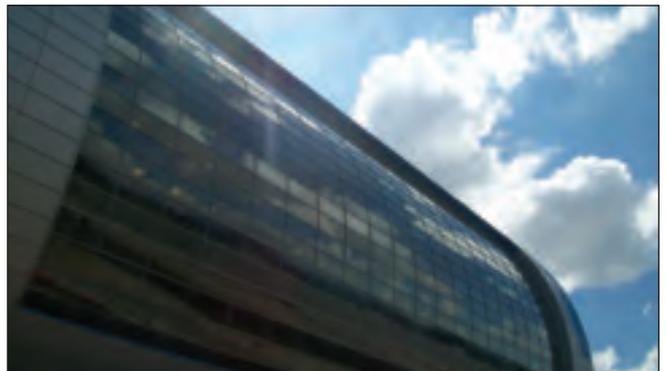
The north side of the KFC Yum! Center is known as the “waterfall.” A Carlisle mechanically fastened system was used as an underlayment for the metal panel system that would be the finished look.



Work was done on the waterfall using proper safety equipment and chicken ladders. When the slope became too steep, a 135’ aerial lift was used. Pictured is Laymond Daily working on a seam and Tom Tweedlie and Barry Cast positioning the lift.



This side view gives a better look at the challenging slope on the waterfall.



Completed waterfall with metal panels installed.



Roof of the main lobby, located on the south end of the building. The roof was structurally sloped. Roofers installed DensDeck, two layers of ISO, saddles and mechanically fastened TPO for the roof.



The top of the ticket booth, with totally adhered TPO roof.



The drainage on the main “wave” roof was provided through these large gutter bays. The Alpine snow rails were installed to break up sliding ice and prevent damage to the roofing membrane that lines the gutters.



View along the east edge of the building looking north. The Ohio River and I-65 bridge into Indiana can be seen in the background.