



# CLEAN SLATE

## RESTORING NATURAL SLATE ROOF TAKES EXPERT CRAFTSMANSHIP

**EVEN SLATE** roofs have to be replaced sometime.

Howard W. Jones Hall is one of the oldest buildings on the campus of Youngstown State University in Youngstown, Ohio. The limestone structure with its twin towers is an iconic structure, and when the original slate roof finally deteriorated, the university wanted to keep the stately look of natural slate on the building's exterior.

Charles F. Evans Company Inc. of Elmira, N.Y., was awarded the Jones Hall restoration job in early 2017 and named 37-year veteran Ken Dennison as the project manager. "We seem to excel in doing difficult projects, including specialty systems of slate, tile, and architectural sheet metal," Dennison says. "We emphasize quality workmanship

and uncompromising customer satisfaction. We also emphasize safety, and currently we are the only roofing contractor to be an approved OSHA VPP mobile Mobile Workforce STAR contractor."

The university wanted to replicate the existing 6,500-square-foot graduated slate roof with random widths, and slate roofing tiles in the same color and size range were chosen. The scope of work included repairing the existing masonry and installing copper gutters, valleys and flashings.

### GOING OLD SCHOOL

The first step was removing the old slates, which proved a tough task. "We had to remove them almost one by one," recalls Dennison.

The existing wood plank deck was in very good shape, and Carlisle Water & Ice Protection self-adhering underlayment was installed at the eaves, valleys and rakes. It was also applied around all of the details. Then two layers of 30-pound felt were tacked into place with plastic-capped nails.

Natural hand-split roofing slate was delivered pre-cut and pre-punched by Evergreen Slate Co., located in upstate New York. The slates were mixed to ensure proper color distribution and arranged in piles for installation on the site. Once the underlayment was in place, the slate was installed just as it might have been a century ago. "We used copper nails," Dennison notes. "Everything was nailed by hand—two nails per slate."

PHOTOS: CHARLES F. EVANS COMPANY INC.



When it came time to replace the roof on Howard W. Jones Hall, Youngstown State University wanted to closely re-create the original graduated natural slate roof.



engineered to protect pedestrians at the entryways.

The rake edges did not have scaffolding, so a safety perimeter was set up 6 feet from the roof edge. Workers outside the line had use a personal fall arrest system, which was secured to anchors screwed into the rafters. “All of our mechanics are extensively trained, and each year everyone goes through additional training sessions,” Dennison says. “We all know what we’re supposed to do. We have a very stringent plan on project safety.”

Slate itself can pose its own set of safety concerns. “Slate can be heavy and sharp,” Dennison says. “It’s rock. You have to be very careful, but the guys that do it love it. A lot of roofs these days are totally hidden. On a slate project, at the end of the day you can step back, see what you’ve done, and be proud your work.”

Charles F. Evans is just putting the finishing touches on the roof at Jones Hall. “When we’re done with a project and the customer is happy, that’s the best satisfaction you can get,” Dennison says. “When the client is happy and you look back and see a beautiful product that you know you had a hand in—that’s what I like about it. A slate roof is really a work of art that will stand the test of time.” **R**

**HOWARD W. JONES HALL**  
**YOUNGSTOWN STATE UNIVERSITY**  
 YOUNGSTOWN, OHIO

**TEAM**

**ARCHITECT:**  
 eS Architecture and Development  
 Dublin, Ohio  
[esarchitecture.com](http://esarchitecture.com)

**ROOFING CONTRACTOR:**  
 Charles F. Evans Company Inc.  
 Elmira, N.Y.  
[Evans-roofing.com](http://Evans-roofing.com)

**SLATE SUPPLIER:**  
 Evergreen Slate Co. Inc.  
 Grandville, N.Y.  
[Evergreenslate.com](http://Evergreenslate.com)

**COPPER SUPPLIER:**  
 Revere Copper Products  
 Rome, N.Y.  
[Reverecopper.com](http://Reverecopper.com)

The installation called for a 3-inch head lap. “With random slate, you don’t need to put any vertical lines in, because nothing is going to line up vertically,” Dennison explains. “Every side lap has to be at least 3 inches, but there is no set pattern for the widths—we just mix them up. That’s why they use the term ‘random.’”

Handcrafted copper details completed the distinctive, traditional look. Flat-seam copper panels from Revere Copper were installed in the valleys, using clips to allow for expansion and contraction. Copper counterflashing and step flashing were also custom fabricated. “We bend it to fit whatever we might need,” notes Dennison. “We have a talented sheet metal shop at our office where we fabricate the big stuff, but we also cut and shape panels on site.”

A detailed safety plan was set up for the building, which was open and active during the entire installation process. Scaffolds with decking were erected at the eaves, and temporary tunnels were

**LEARN MORE ABOUT SLATE AT THE NSA FALL CONFERENCE**

The National Slate Association will hold its 2017 Fall Conference Sept. 28–Oct. 1 in Ithaca, N.Y. For more information, visit [SlateAssociation.org](http://SlateAssociation.org).