CASE STUDY

ECOLOGICALLY INTELLIGENT

CONSTRUCTION EXCELLENCE
GOLD AWARD
CISCA
Ceilings & Interior Systems Construction Association
April 2020

TYKESON HALL
UNIVERSITY OF OREGON
EUGENE, ORE.

9 WOOD

DIVISION 9 ENGINEERED-TO-ORDER WOOD CEILINGS

The monument stairwell in Tykeson Hall at the University of Oregon is a four-story, switchback design that integrates wood, lighting and a hanging, vibrating, chime-like sculpture. The project features 15,017 sq. ft. of panelized linear wood ceilings.

"The result is an ecologically intelligent and elegant application of the salvaged wood."

Tykeson Hall, a four-story, 65,000 SF, interdisciplinary building at the University of Oregon, Eugene, Ore., is home to the university's College of Arts and Sciences and the Dean's Office, the University Career Center, Academic and Career Advising, Office of the Vice President for Equity and Inclusion and more. The building is an example of sustainable design.

Pin oak trees, some storm damaged, were sustainably salvaged from the construction site, repurposed and used within the building.

"The result is an ecologically intelligent and elegant application of the salvaged wood to create a rich experience within the building," says a post on the web site of the design architect, Office 52 Architecture, Portland, Ore.

Managing the Timber Yield. A local company slabbed the logs, milled them and kiln-dried the planks. The reclaimed pin oak was used to create panelized linear wood ceilings for the top floor of the building. The rest of project featured red oak linear ceilings, which is similar to pin oak.

The 15,017 SF of wood ceilings feature a hybrid design. Both the pin oak panels and the red oak panels have five wood members — three at ¾" x 1 ⅜", one ¾" x 2 ¼" and one ¾" x 3 ⅛" with black cross-piece backers every 12". The panels have varying lengths to create a random pattern.

"Our role was to quantify the pin oak plank sizes to get a good yield from the milling," says Benjamin Chase, 9Wood project manager.

"There was also a time crunch. It took longer than anticipated to get the logs down to the right

The fourth floor features pin oak planks milled from timber harvested from the building site by a lumber company. 9Wood played a pivotal role in managing the timing and yield of these planks.

PROJECT

Tykeson Hall at the University of Oregon
Eugene, Ore.

ARCHITECT OF RECORD

Rowell Brokaw
Eugene, Ore.

DESIGN ARCHITECT

Office 52 Architecture
Portland, Ore.

CEILING AND WALL CONTRACTOR

The Harver Company
Eugene, Ore.

SYSTEMS

Custom engineered wood ceilings
from 9Wood
Springfield, Ore.

moisture content," Chase adds. "It got done. But, for a while, it was 'iffy.'"

Switchback Staircase. The most challenging part of the project was the monument stairwell ceilings. Here, the switchback staircase design was at first hard to conceptualize. Even the architect had only an idea and no drawings to show how four stories of twisting linear wood would integrate with the lighting alongside it.

"We got the lighting layout from the electrician, and I drew out how to build the soffit and line up the wood," says Michael Bohl, project foreman at Harver Company. "I added steel angle so they could mount their lighting. Then, we built the wood off of where their lights sat. We could flatten out our ceiling to be level with their lights, making sure that our reveals stayed ¼" to ½" all the way up the stairs."

> "THE LOCATION OF ALL THE DEVICES CERTAINLY 'UPPED' THE DIFFICULTY OF THIS JOB

Knots and heavy graining give pin oak tremendous eye-appeal. Being recycled and regional, the wood offered a LEED points opportunity.

Elements of a hanging sculpture were tuned to the acoustical properties of the wood ceilings. "The sculptor turned our panels into a sound resonance system," Bohl says.

The installer had to make many cuts to transition the linear ceilings around the varying pitches and staircase elevations.

"We did have to add custom boards on the panels," Bohl says. "Sometimes we had to build a custom panel."

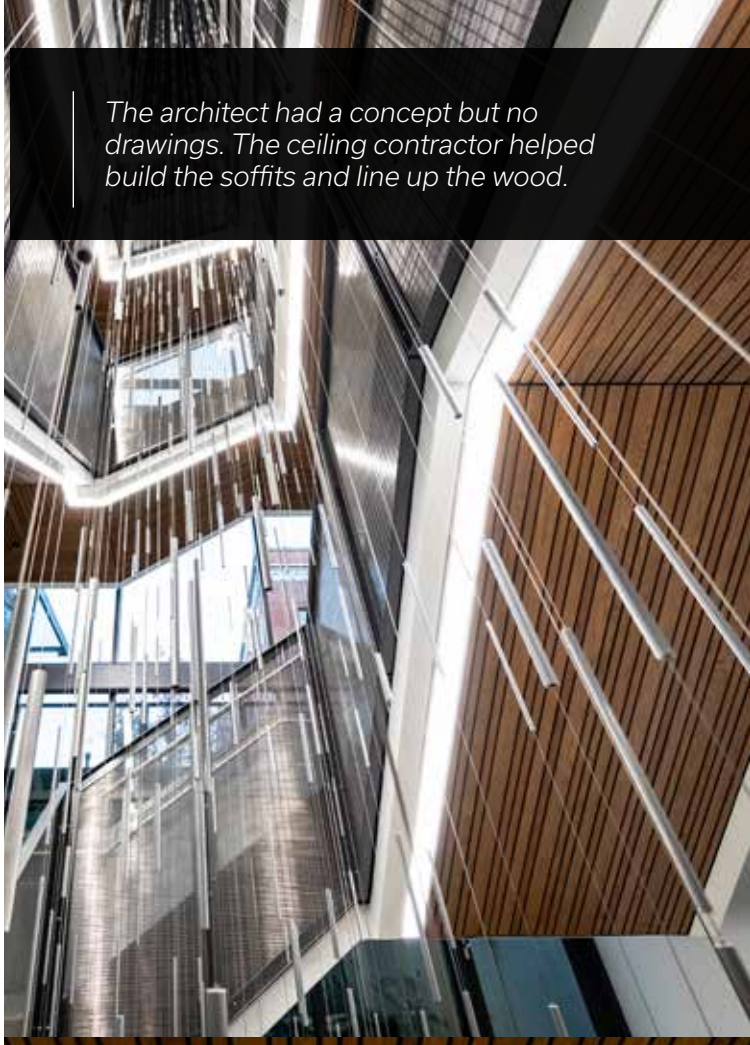
The architect wanted cut outs for devices, such as light fixture mounts and occupancy sensors, to be recessed into the wood instead of flush mounted with it. This exposed the wood cuts to view and, thus, required care to produce them.

"The location of all the devices certainly 'upped' the difficulty of this job," Bohl says.

Work on the wood ceilings began in early March 2019 and was completed in five months — just in time for the fall semester. The installer used a total of eight specialty craftworkers to do the work.

Installing the ceilings up, down and around the monument staircase required field cuts. No panels were preordered cut to length.

The architect had a concept but no drawings. The ceiling contractor helped build the soffits and line up the wood.



Red oak panels are carried into wood slat "welcome walls" on each floor, giving each floor its own identity.

DIVISION 9 ENGINEERED-TO-ORDER WOOD CEILINGS

9wood.com

999 South A Street
Springfield, OR 97477
Tel: 888-767-9990
sales@9wood.com

Photography by Steve Kovarik