

An Education in Copper



Stuckeman Family Building for the School of Landscape Architecture (SALA). Photo courtesy of WTW Architects.

Copper makes the grade on college and university campuses

Many iconic and historic buildings are famous for their copper details. Architectural copper is a popular choice because of its beauty, durability and sustainable qualities. Churches, museums, libraries government buildings and skyscrapers worldwide use it for roofing, exterior cladding and flashing, water piping and, of course, electrical wiring.

Because copper is one of the most efficient materials to work with, it is no surprise that the world's oldest metal is also prominent in the architectural design of some of the most prestigious educational institutions in the country.

College campuses across the U.S., including Penn State University, University of Minnesota, Florida State University and Dartmouth College

—just to name a few—have used copper because of its distinctive features, ease of installation, recyclability, availability, low or nonexistent maintenance costs and its durability.

“Copper is a traditional metal that is proven to be long lasting when used in its purest, unalloyed form,” said Andy Kireta Jr., vice president of building and construction for the Copper Development Association (CDA). “Historically, some of the greatest architectural masterpieces of our time have used copper because of its aesthetic beauty and sustainable characteristics.”

For instance, the Stuckeman Family Building for the School of Architecture and Landscape Architecture (SALA) on the Penn State campus used more than 30 tons of recycled prepatinated copper cladding to cover the majority of the building's exterior. Adding copper not only contributed to the building's financial and environmental performance, it helped the university achieve its LEED certification.

When constructing a new academic center for biological research on the Dartmouth campus, the college decided that the new building should feature the “traditional” architecture of the rest of the buildings in Hanover, New Hampshire.

A pale-green copper roof was installed on The Class of 1978 Life Sciences Center building. Because it can take years for copper to achieve a green patina—a natural barrier that protects the metal and contributes to its legendary lifespan—the new building's roof was prepatinated before installation, a process that accelerates the color change.

Other notable projects include the University of Minnesota's Weber Music Hall in Duluth, MN, and the Florida State University College of Medicine in Tallahassee, FL. The Weber Music Hall called for 12,000-square-foot of copper-clad metal roofing for its angular dome, and the medical building used more than 32,000-square-foot of unpainted copper roofing panels and 10,000-square-foot of copper flat stock in its design.

“Copper is and will continue to be the metal of choice for architects and contractors who want to highlight a building's beauty and preserve its longevity,” Kireta added.

To learn more about architectural benefits and opportunities for using copper in building and construction, please visit www.copper.org.

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