Copper Alternative Joining Systems: A+“Solderless” copper systems offer longevity, quick and easy installations

In today’s economy, educational districts and campuses are facing tough choices in planning programs and facilities that offer better educational and operational options. As such, it becomes even more important to carefully consider the cost-benefit of any construction project. How it comes to buildings and maintenance, no decision should be made without the careful scrutiny of cost and quality. Lower overall construction costs and quicker installation times make reliable, long-lasting facilities to serve them long into the future.

Do you remember standing on your tip toes for a drink at the water fountain in the hallway? Copper has long been the preferred piping material chosen to deliver safe, potable water for that and many others uses within a school building. New construction or repairs, copper is still the benchmark for plumbing and heating systems due to its reliability, long life, and overall value. With today’s new joining methods, copper can continue to offer school districts a lifetime of safety and value while coming down on installation, labor and future repair costs.

Alternatives “solderless” joining systems rely on pre-attached contacts or mechanical fittings, or similar fittings that utilize a structural adhesion joining system, all of which are suitable for most plumbing applications and are capable of withstanding the pressures and temperature ranges common to both residential and multi-family buildings. Another advantage of “solderless” joining systems is the ability to perform service work and repair work done instantly, without draining the system.

Robert Hall is the national technical consultant for Viega, which specializes in plumbing and heating technology, and advocates the role of copper in commercial buildings, including educational facilities. Copper has the track record, and its still a mainstay in construction today. Copper has always been known for its performance.

The principal advantage of solderless joining systems for many commercial projects, especially those that have a project deadline, is the ability to install the system without shutting down the building or any one of its components. Having a single-project that is not just solderless and brazing anymore,” said Andy Kireta Jr., vice president of Copper Development Association (CDA) between “trading floors” complete with ticker boards, where students can learn how to execute real-time transactions in global markets, to link up with the increasing digital world or connecting them to the global network of businesses of knowledge pertaining to their specialized fields of study.

A computer-oriented educational facility requires the amount of reliable, robust and clean electrical power, or what’s known as high power quality. An excellent example of power quality on campus: The 720,000-sq ft “Stata” is arguably one of the most architecturally audacious buildings ever completed and is rich with copper cladding to cover the majority of its exterior segments, water piping and, of course, electrical wiring. For instance, the State’s electrical infrastructure not only benefits from a robust wiring and grounding systems, but also offers an added layer of protection against electromagnetic interference.

For more information about the electrical infrastructure of the State Center and the optimization of power quality at educational facilities, please visit www.copper.org. To learn more about alternative joining systems, please visit www.copper.org.

Power Quality on Campus: Electrical Infrastructure is a Top Priority at Renowned Computing Center

Copper makes the grade on college and university campuses

Many iconic and historic buildings are famous for their copper details. Architectural copper, as an undying testament to the beauty, durability and sustainability of buildings, is used in the most famous museums, landmarked buildings and skyscrapers worldwide use for a roof, exterior cladding and flashing, water piping and, of course, electrical wiring. Because copper is one of the most efficient non-ferrous metals, there is a very good chance that the world’s oldest metal is also prominent in the University of Tennessee’s College of Arts and Sciences.

It makes for an interesting thought that so much of the most notable educational institutions in the country. College campuses across the U.S., including Stanford University, University of Minnesota, Florida State University, and Dartmouth College and flexibility to accommodate the future needs of the learners.

For more information about the electrical infrastructure of the State Center and the optimization of power quality at educational facilities, please visit www.copper.org. **HPN**

An Alloy of Copper

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Antimicrobial Copper at the Head of the Class

Bacteria can be kept at bay with copper in the classroom

A computer-intensive educational facility is the heart of the educational system and what do you want? Sealing faces and almonds, creating the perfect cooking setup, turning around the lunch table, or working hard over the big screen? Schools are laboratories for diseases and illnesses. Eighty percent of those who touch a door handle, handrail or any other surface in between. Schools are laboratories for bacteria. One way to combat the spread of bacteria is through the integration of copper in the overall school environment. Antimicrobial Copper at the Head of the Class. Copper is the perfect antibiotic for any public facility, particularly for schools where germs can thrive," said Andy Kireta Jr., vice president of Building construction for the Copper Development Association (CDA). “We see a lot of copper used for a building’s exterior, piping and mechanical systems where beauty, durability and reliability are important. Add to that copper’s antimicrobial action and it makes it a ‘no brainer’ choice for any facility.”

With antimicrobial copper, touch surfaces, no action other than standard cleaning is required of the microbial staff and nothing other than good hygiene practice is required of the students. For more information, please contact www.antimicrobialcopper.com. **HPN**

A pale-green copper roof was installed on The Class of 1959 Life Science 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 longevity—life-saving the new building’s roof was pre-fabricated before installation, a process that accelerates the color change.

Other notable projects include the University of Minnesota’s Weiler Music Hall in Duluth, MN, and the Florida State University College of Medicine in Tallahassee, FL. The Weiler Music Hall, which measures 402,000 square feet of copper-clad metal roofing for its angular domes, and the medical building needed more than 3,800-square-feet of impervious copper roofing panels and 13,000-square-foot of impervious copper sheet stock in its design.

“Copper’s alloy nature will continue to be the model of choice for architects and contractors who want to highlight a building’s beauty and preserve its longevity.”

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

For more information on the technical uses of copper in building construction, please contact the Copper Development Association at 212-251-7200 or visit the website at www.copper.org.

Copper System Installation, courtesy of Viega, LLC

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