Alternative Joining Systems Meet the Challenge

Quick installations and reliable performance are displayed with copper press-connect systems

Easy installation, cost-effectiveness and reliability — these were essentials when Naperville Central High School in Illinois was looking to install 18,000 feet of copper tubing.

Capitol Mechanical, the contractor working with the Naperville School District, was already familiar with copper press connect systems, that's why they chose to incorporate the Advantage Press™ Tube, from Cerro Flow Products. Advantage Press is an alternative joining technology system that takes the proven press-fit, flameless technology further by incorporating a factory formed press-connect end directly on each copper tube length, similar to "bell and spigot" type designs used in other types of piping systems. It still utilizes the same tools that contractors already use to install press connect fittings.

Copper press-connect systems have become popular alternatives to traditional soldered joints. They are flameless systems that can save a lot of time and money in installation, while being able to handle pressure and temperature ranges for both commercial and residential building systems. In most cases, the advantages really shine in commercial projects. Case in point like is the Naperville High School, where a quick, easy and reliable installation was a must. Since the Advantage Press Tube means one less joint to be made with each piece of tube, greater savings can be achieved.

"Part of the project was installing new pipe, and the other part was retrofitting the older system," said Chris LaVoie, project manager of Capitol Mechanical Inc., who installed the system. "Speed of installation was vital so using Advantage Press Tube was a natural extension to copper press fittings — it simply made sense as we have several press tools so we were good to go."

Aside from easy installation, alternative joining systems can offer precise and reliable results, comparable to a brazed or soldered joint.

"As well as providing a system with less connections, Advantage Press Tube addresses the issue of misalignment that can be a big issue with other press connect systems, especially over long runs. Advantage Press Tube always goes on flush," said Forrest Nixon, director of R&D for Cerro Flow Products. "It has been designed to fit into the next piece perfectly and has a built in stop so optimal insertion depth is achieved."

The time savings offered by alternative joining systems are more than just hype. For example, a case study of the Naperville High School project shows that

installation time was reduced by 12 to 18 percent over the savings achieved by using press connect fittings alone.

Besides being easier and quicker to install, reliability isn't compromised when using alternative joining systems for copper; as years of testing and in-field performance have proven. Plus, alternative joining systems such as this press connect system, or other alternatives such as push connect, and structural adhesive systems, don't require a flame to install the joint. So hot work permits and fire watches are unnecessary.

"Technology has moved on," Nixon said. "Copper press connect systems are quick, and the tools to install them are getting cheaper and easier to handle."

Alternative joining systems are suitable for most plumbing applications and have proven that you don't have to sacrifice quality. Current systems come in three main types: press connect systems such as Cerro Flow's Advantage Press and the XPress™ fittings manufactured by Elkhart Products Corporation; Push connect systems such as Elkhart's QTite™ and TecTite™ fittings: and structural adhesive systems such as the StreamTech™ system offered by Mueller Industries.

The advantages offered by alternative joining systems, matched with quality copper pipe make it the smart choice for a contractor. For more information about alternative joining systems, visit www.copper.org.

For more information on specific systems mentioned visit:
www.cerroflow.com/advantage for the Naperville case study
www.elkhartproducts.com
www.muellerindustries.com