



COLORADO SCHOOL OF MINES WEAVER TOWERS

ENERGY TRANSFER PIPING PROJECT PROFILE

REHAU INSULPEX Energy Transfer Pipe Brings the Cool to Colorado School of Mines' Weaver Towers

In 2011, an aging and outdated cooling system in the Colorado School of Mines' 230-student Weaver Towers dormitory was scheduled to be replaced. The stand-alone system had been maintained beyond its life expectancy, and the prestigious engineering school's mechanical operations team knew they needed to identify a reliable, long-term replacement cooling solution as quickly as possible.

The school consulted with REHAU technical associate Kenko Co., Inc. and Kevin Hale, a REHAU account manager who specializes in underground PEX piping systems, and with their help selected REHAU INSULPEX® energy transfer pipe as part of a complete redesign of the dorm's cooling system. Instead of operating as an independent entity, the new system would use INSULPEX to bring chilled water from the university's central plant to the Weaver Towers dormitory.

"The overall installed cost was considerably cheaper and easier than the alternative, which would have been to completely replace the old system's pipes with new steel," Hale said. According to Hale, installing a rigid steel system would likely have required corrosion protection and time-demanding welding. Simple, flexible and available in long pipe lengths requiring minimal fittings, the REHAU INSULPEX system was an ideal alternative to this, and also provided the long-term durability necessary for the project.

"The school wanted a piping solution that would last, and would be easy to install," said Hale. "INSULPEX was able to meet both these demands, particularly because it is a flexible, insulated PEXa-based product with exceptional durability."

Rick Cuba, U.S. Engineering general plumbing foreman and installer on the project, was able to experience the benefits of the REHAU PEXa-based system for the first time on the Weaver Towers job. According to Cuba, the flexible nature of the INSULPEX pipe provided considerable time savings and facilitated a smooth overall installation.

"It worked out just great," said Cuba, "and we were able to complete the job in only two days. It would have taken three or four weeks to do it with steel."



Project: Weaver Tower at Colorado School of Mines, Golden, Colorado

Type of Construction: Student residential, completed 2011

Scope of Project: 584 ft (178 m) of INSULPEX pipe

REHAU System Used: Energy transfer piping (INSULPEX®)

Website: <http://inside.mines.edu/RES-Weaver-Towers>

To create supply and return lines to and from the university's central chiller plant, Cuba's team installed two 292 ft (89 m) runs of 4 in. INSULPEX in an underground trench between the Weaver Towers dorm and a utility tunnel. At the end of the tunnel, they also tied the new piping into the plant's chilled water distribution system.

"Installing INSULPEX was terrifically simple," Cuba said. "We dug the ditch, unrolled the pipe, backfilled it and connected it to the vault. No welding, no insulating, no corrosion protecting steps necessary."

Based on his experience with the Colorado School of Mines Weaver Towers project and other recent work, Cuba and U.S. Engineering have specified the REHAU INSULPEX piping system for several current and future projects. "We're using INSULPEX on a retrofit condominium complex project and a new-construction hospital project," Cuba said.

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