CASE STUDY

BlazeMaster® FIRE PROTECTION SYSTEMS

SCIENCE. SERVICE. SAFETY.

PROJECT:
Benedictine College

LOCATION:
Atchison, Kansas

INSTALLATION TYPE:
College Retrofit

SCOPE OF PROJECT:
Heads: 540
Square Feet: 59,000
Stories: 6

CONTRACTOR:
J.E. Dunn Construction Company

BENEFIT:
Original Architecture Left Untouched and Unharmed

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>
> Craig Barulich
> Sales Representative,
> National Fire Suppression/
> Western States

Retrofitting an Iconic Building Made Possible with BlazeMaster® CPVC

When Benedictine College in Atchison, Kansas (about one hour north of Kansas City, Mo), found itself in need of additional student housing, they turned to a familiar building: their old Freshman Hall (now called Ferrell Hall), that had remained empty since the 1970s.

The structure, which was built in 1893, had originally served as a monastery. Years of abandonment, combined with a badly leaking roof had taken its toll on the hall, which now required a full renovation. In addition, current codes further mandated that the building include sprinkler systems before students could move in.

J.E. Dunn Construction Company was hired to serve as General Contractor for the renovation. "We knew this would be a challenging project," explained Jeff Kleinschmidt, project manager at J.E. Dunn. "In the Bell Tower, the roof had actually collapsed and 10 to 15% of the hall had severe water damage. Partially because of the major expense to repair the roof, this became a $7 million project for us."

The building's historical architecture also complicated the renovation work. And, as is the case with most private colleges, the administration needed to adhere to a tight budget.

"Following the competitive bid process, the successful bidder, National Fire Suppression (a division of Western States Fire Protection), was asked to recommend ways we could reduce the fire protection costs," noted Kleinschmidt. "They recommended the installation of a BlazeMaster® Fire Protection Systems, not only for cost reasons, but also because it could adapt best to the tight, uneven spaces of this very old building." Reliability also played a role in the recommendation—and the decision to use BlazeMaster CPVC.

Since Kleinschmidt himself was not familiar with CPVC as an alternative to traditional metal systems, he needed the product substantiated before he'd move forward. "My biggest concern was verifying that it would satisfy local

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code requirements and that the local authority was comfortable with it," Kleinschmidt said. "But it turned out that no one had any problems with CPVC. The City cleared its use and there were no objections from the state fire marshall."

Kleinschmidt describes the installation of the BlazeMaster CPVC system as quick and flexible. "I think we probably avoided above-ceiling conflict issues that we weren't even aware of by going with BlazeMaster CPVC," he said.

Craig Barulich, sales representative for National Fire Suppression/Western States, agrees. "There is absolutely no way we could have done what we did with a metal system. We were asked to leave all of the original architecture in place. That meant working within very tight spaces and in walls that often weren't parallel. The flexibility of the CPVC pipe was essential. We did not have to re-do or change any of the existing structure."

Today, based on his experience at Benedictine College, Kleinschmidt is a supporter of CPVC. "Whenever there is an existing building, especially an older one, there appears to be an advantage in using BlazeMaster CPVC," Kleinschmidt commented.

"With a renovation project, there are many unknown factors. You never know what you'll encounter behind the walls. That's challenging with a metal system which requires the pipe to be pre-fabricated off-site. With the BlazeMaster CPVC system, they were able to cut and assemble in the field and make any necessary, last-minute changes. In addition, we avoided all of the mess associated with a metal installation."

Since BlazeMaster Fire Protection Systems are installed using a one-step solvent cement joining system, there are no messy, time-consuming welding operations. And since torches are not needed to install a CPVC system, there is an added safety benefit that eliminates the risk of an accidental fire. For these reasons and others, BlazeMaster Fire Protection Systems are listed for more applications than any other non-metallic system.

Barulich points out that the selection of a BlazeMaster CPVC system over metal also results in a more cost-efficient installation. Because the system is faster and easier to install, owners realize a major labor savings. And the pipe is also lighter in weight which makes it easier to move on the job site.

"We find that many times an engineering firm may initially specify a metal fire sprinkler system," said Barulich. "Then we show them the cost savings, along with the added benefits, and most often they are convinced to switch."

In the case of Benedictine College, that decision paid off. Expenses were minimized. The beautiful architecture and charm of the original structure was also preserved. As a result, in 2002, the college and its newly restored Ferrell Hall received an Award of Excellence from the Kansas Preservation Alliance. Benedictine College also received an Honorable Mention in the 2002 Education Showcase for College Planning & Management magazine.

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BlazeMaster®
FIRE PROTECTION SYSTEMS

The Lubrizol Corporation, a Berkshire Hathaway company
9911 Brecksville Road ■ Cleveland, Ohio 44141-3201 USA
216.447.5330 ■ blazemaster@lubrizol.com

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