



# Hotel developer chooses CPVC for water distribution system

PLASTICS IN THE  
CONSTRUCTION  
MARKET

by Corzan Piping Systems

**B**eyond cost, hotel developer Cooper Companies considers long-term performance and reliability when specifying building materials, placing high value on those that improve the quality of a guest's lodging experience. Such was the case in building a new Hilton Garden Inn® in Romulus, MI. Following the recommendation of builder Mark McCray, superintendent of Walton Construction Co., the decision was made to install an all-CPVC water distribution system to help meet that goal. This included all plumbing pipe and fittings in the complex, as well as the fire sprinkler system.

"Based on past experience and my knowledge of the superior performance characteristics of CPVC compared to other materials, it was clearly the material of choice," said McCray. "CPVC provides a fast, quality plumbing installation that requires less maintenance than traditional systems."

## Quality and quick installation

For more than 40 years, CPVC has been used in a variety of plumbing system applications in millions of hotels, condominiums, buildings, apartments and homes with great success. Unlike other materials, CPVC plumbing systems will never pit, scale or corrode, which substantially reduces the risk of leaks, premature failures and costly re-piping. Exhibiting superior toughness and reliability, the all-CPVC system provided Cooper with a high-per-

formance, yet easy-to-install, solution for the new property's potable water system.

According to McCray, because CPVC systems are also extremely lightweight, fast and easy installation translated into reduced overall labor costs. "The number one advantage of a CPVC plumbing system for a property owner is the cost savings over other systems," said McCray. "It generates an overall savings for the owner through reduced labor time, and the inherent performance capabilities of CPVC eliminate the risk of the system corroding and failing."

Available in iron pipe sizes ranging from 1/4" to 16" and copper tube sizes up to 2", CPVC pipe and fittings were installed throughout the Hilton Garden Inn to meet high- and low-volume demands. Whereas installing other materials, like metallic systems, requires torches and heavy equipment, fabrication and alterations to the CPVC system were made on site using simple hand tools. Joints were created with either solvent cement, flanging or threading, adding to a cleaner, safer installation.

## Quiet performance ensures restful nights

Key to the quality of any hotel's accommodations is the ability to ensure a quiet stay. For instance, guests would rather not have to listen to their neighbor's water running late at night or early in the morning. That fact was another consideration that influenced Cooper Companies to select an all-CPVC plumbing system. The thermoplastic properties of CPVC systems offered a quieter system because the material does not transmit sound as easily as other materials, thus minimizing the sound of water flow.

Another advantage the CPVC system offered in decreasing noise levels was the significant reduction of water hammer that is characteristic of metallic pipes. Water hammer is the result of pressure fluctuations that develop in a pipe when the flow is suddenly changed, which creates a variety of disruptive sounds, depending on the design of the plumbing system. Because CPVC is more dimensionally yielding than other materials, it can actually

expand slightly and absorb the "energy" or noise to significantly reduce (or eliminate) water hammer.

## CPVC use for fire sprinkler system

Cooper Companies sought a reliable fire sprinkler system that was guaranteed to deliver years of unflinching performance and ensure the safety and comfort of its guests. According to Webb Myers, director of construction and renovation, the developer had past experiences with metallic systems developing pinhole leaks. Recognizing that thermoplastic is naturally corrosion resistant, Myers opted for CPVC fire sprinklers to meet the company's demand.

CPVC sprinkler systems offer superior reliability with a UL life expectancy of 50 years with a safety factor of two. Highly durable CPVC systems exhibit excellent impact resistance and natural immunity to corrosion and MIC (microbiologically influenced corrosion). The systems also demonstrate low flame spread and smoke emission levels.

The CPVC fire sprinkler system was substantially lighter than metal and was engineered quickly using only simple hand tools. Fabrication and alterations can be done on site for fast and easy installation. They also employ a solvent-cement joining system, again eliminating the need for torches or heavy equipment.

Regional fire protection contractor S.A. Comunale Co. Inc. installed the CPVC system in the Hilton Garden Inn. According to company Vice President Len Friedman, ease of installation allowed S.A. Comunale-Detroit to install 637 sprinkler heads in the 79,000-square-foot hotel using only a two-man crew.

"We've built a reputation in the fire protection industry as a leader," said Friedman. "CPVC fire sprinkler systems have helped ensure that we never miss a deadline, while providing quality and lasting performance backed by our reputation, experience and depth of resources." ■



The Hilton Garden Inn® in Romulus, MI, was constructed using FlowGuard Gold® and Corzan CPVC® pipe and fittings for the plumbing system and BlazeMaster® CPVC pipe and fittings for the fire sprinkler system.

For more information about CPVC plumbing and fire sprinkler systems, contact Corzan Piping Systems, 9911 Brecksville Road, Cleveland, OH 44141-3247 USA; (888) 234-2436, [www.corzancpvc.com](http://www.corzancpvc.com).