## **CPVC Fire Sprinkler Systems**



## Case Study: BlazeMaster® Products... The Best Choice for Retirement Community's Fire Sprinkler System



Photo 1



Photo 2



Photo 3



Photo 4

Installing a fire sprinkler system in an apartment complex for the elderly (photo1) presents a unique set of problems. In fact the difficulty anticipated in installing such a system in the 144-unit Capitol Towers complex in Hartford, Connecticut, (photo 2) was enough to convince Towers' previous management company to delay the project for years. When the project could finally be delayed no longer, a BlazeMaster® fire sprinkler system was installed. To the delight of everyone associated with the installation process, careful planning and BlazeMaster® product's ease of use made the Capitol Towers fire sprinkler installation easier than had been anticipated.

Because the system was to be installed over existing construction, Jow Gargiulo, of Barnhart, Johnson, Francis & Wold Consulting Engineers, who engineered the Capitol Towers project, decided that CPVC pipe would be the best choice. "I might have recommended steel pipe if it had been a new building going up, but since they had to hang this over existing walls, I felt that BlazeMaster® was the way to go."

Ed Fournier, the project coordinator for Crest Mechanical Contractors & Engineers, the contractor who installed the system, has used CPVC pipe before in other projects, and has been very impressed with BlazeMaster® CPVC's advantages over steel. "It's very easy to work with," says Fournier of BlazeMaster® products, "especially in a high-rise like Capitol Towers. We set up a workshop in the basement, where we did all of the cutting, (photo 3) and were able to transport the pipe in the elevator up to the floor where we were working. We didn't have to worry about it marring the walls of the elevators or the hallways, either, unlike steel pipe."

Rick Berg, Building Superintendent at Capitol Towers, was extremely pleased at how smoothly the installation went. "The installers and our residents got along great, which was something I had worried about at first, but we didn't have any problems. The pipe went up easier and faster than I expected, too. [The installers] started on the eighth floor and went down from there. By the time they got down to the seventh floor, they were more familiar with our layout, and they cut off about 25% of the installation time."

Still, the installation was not without its difficulties. One problem which wasn't anticipated and which, initially, slowed the project down was the fact that the walls of Capitol Towers have steel studs. To combat this, Fournier had to bring in two additional men whose job was simply to get ahead of the installers and drill the holes necessary for hanging the pipe.

Fortunately, however, most of the problems had been anticipated, and careful planning helped to keep these under control. "Since most of the people living in the building are elderly, the installation presented problems of its own," says Berg. "Specifically, the problems we worried about most were the disruption that the installation would create in these people's lives..."

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Photo 5



Photo 6



Photo 7



Photo 8

To combat this, the Capitol Towers staff held meetings with all residents and posted a schedule in the lobby of the building showing were work would be performed in the building for the following two weeks. (photo 4) This advance notice allowed residents to plan ahead for installation in their individual units.

During project planning, odor from the primer and solvent cement was discussed. "Since our residents are older, they're more sensitive to fumes, so we wanted to do all we could to keep the vapors from the primer and adhesive from causing problems." The proposed measures included: leaving windows open in hallways and individual units where work was being performed; use of fans in hallways to help dissipate the odor; and turning on the ventilation systems in individual units in order to keep fresh air moving through. "As it turns out, " says Berg, "all we really had to do was leave a window open. The vapors dissipated very quickly as the cement dried, and the odor problem was really no problem at all."

Berg, who has been with Capitol Towers for 19 years, has only positive comments about the BlazeMaster® fire sprinkler system's installation. "Installing the BlazeMaster® was much easier than I had expected; (pictures 5 and 6) and, they covered the pipes with the Decoshield®, so it looks great. If you didn't know what it was, you would probably think it was just a decorative moulding, if you noticed it at all. I'd recommend this way to anybody who had to install a fire sprinkler system." (pictures 7 and 8)