FACTS ABOUT SCHOOL FIRES

EVERY YEAR FIRES IN K-12 CAUSE AN AVERAGE OF:

- One death
- 39 injuries
- $37 million in property damage

Source: National Fire Protection Association

BlazeMaster CPVC Delivers Cost Savings for New School

A West Texas school district saved 5% – 10% by using CPVC instead of steel on a 140,000 square-foot school for 700 students in grade K – 8. In particular, BlazeMaster CPVC proved to be a more easily adaptable system than steel in accommodating design alterations.

View Full Case Study

BlazeMaster®
FIRE PROTECTION SYSTEMS

CPVC: The Right Choice for School Fire Sprinkler Systems

Fire sprinkler systems keep students, teachers and staff safe when fire strikes by suppressing the flames before they can spread. Whether you are constructing a new school or retrofitting an existing facility, the choice of piping materials is key to success in protecting classrooms, offices and other structures. While traditional steel pipe remains popular, CPVC offers five key advantages in light hazard applications.

BlazeMaster® CPVC is designed to:

1. ENSURE PERFORMANCE

It's critical to ensure the system will perform as designed when fire strikes. Unlike other thermoplastics, when installed per its listing BlazeMaster CPVC resists heat and maintains its structure when directly exposed to a flame to ensure delivery of water to extinguish a fire. In addition, BlazeMaster CPVC's interior surface is smoother than steel pipe, creating less friction to slow water flows. That advantage grows over time as CPVC retains its smooth surface while steel pipe's hydraulic performance declines due to corrosion and scaling.

2. SAVE TIME AND MONEY

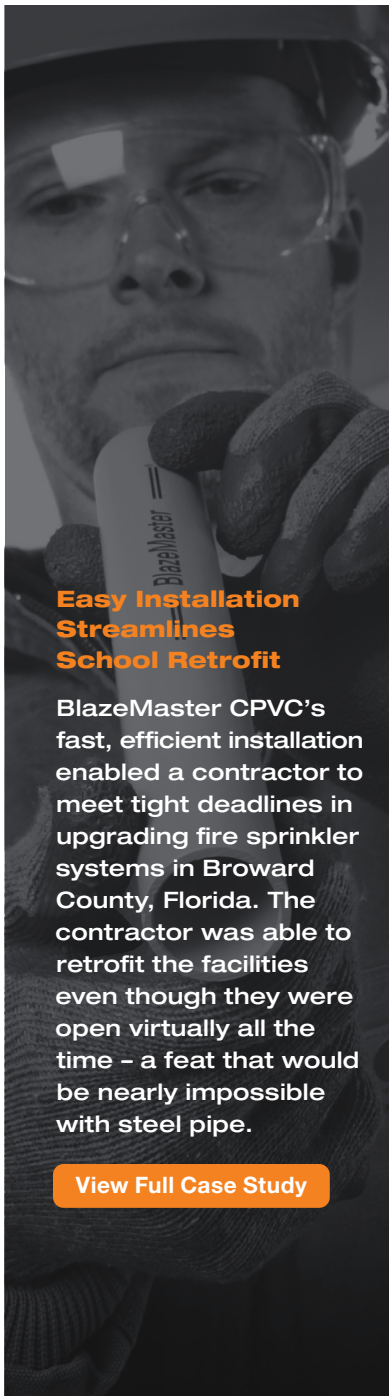
BlazeMaster Fire Protection Systems offer significant savings in the cost of materials and labor. Depending on the type and size of the project, use of BlazeMaster CPVC can save up to 30% compared to a steel system through:

- **More efficient installation.** BlazeMaster CPVC is much easier to install than steel pipe. With lightweight CPVC, one person can cover an area using basic hand tools along with a quick, one-step solvent cement welding process. By comparison, steel is heavy to move around the job site, so special equipment and extra workers are needed. Torches and loud threading machines are needed to fabricate and join the system. Parts of the system may require off-site fabrication, which slows the installation process.
- **Lower material costs.** CPVC offers superior hydraulics compared to steel, which means designers can specify smaller diameter pipe to reduce overall material costs.

3. REDUCE LONG-TERM MAINTENANCE COSTS

In steel pipe, the combination of water, water treatment chemicals and oxygen can cause corrosion to start quickly – in some cases in less than two years. According to a study by a German fire safety firm, 35% of wet systems have significant corrosion issues after 25 years. That translates to costly, disruptive repairs. Even more important, the sprinkler system might not perform as expected to deliver water to stop a fire – with potentially deadly consequences.

CPVC pipe naturally resists corrosion and scaling for the life of the system, even in challenging environments with salt air or with fluctuating pH balances in the water. If repairs are needed, neither hot work nor messy cutting oils are needed, minimizing the disruption of building occupants.



Easy Installation Streamlines School Retrofit

BlazeMaster CPVC's fast, efficient installation enabled a contractor to meet tight deadlines in upgrading fire sprinkler systems in Broward County, Florida. The contractor was able to retrofit the facilities even though they were open virtually all the time – a feat that would be nearly impossible with steel pipe.

View Full Case Study

4. LIMIT DISRUPTION FOR BUILDING OCCUPANTS DURING RETROFITS

Installing steel fire sprinkler systems is a noisy process that creates unpleasant odors. Open-flame torches require special permits and create a fire hazard. Noisy threading machines are needed to fabricate and connect the system. That may prove too disruptive for schools to continue holding classes.

CPVC installation is cleaner and quieter, which creates minimal disruption for building occupants. For instance, if installers work in a classroom overnight, they can leave the site ready for students and teachers. With steel installation, there would be much more cleanup required and heavy equipment would need to be relocated.

5. SUPPORT GREEN BUILDING PRACTICES WITH CPVC'S SUPERIOR SUSTAINABILITY METRICS

Green building is a top priority as developers choose products that mitigate environmental impacts, and CPVC offers significant advantages over steel pipe. An ISO-compliant lifecycle assessment found that BlazeMaster CPVC is much less harmful to produce and has half the climate change impact of steel pipe. CPVC outperformed steel in 12 out of 13 categories such as human toxicity, mineral and water depletion, non-renewable energy use and others.

Find out more about how BlazeMaster CPVC is right for your school project.
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BlazeMaster®
FIRE PROTECTION SYSTEMS

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