PERFORMANCE TESTING

BlazeMaster® FIRE PROTECTION SYSTEMS

SCIENCE. SERVICE. SAFETY.

BlazeMaster® CPVC Outperforms the Competition

Fire protection professionals know how important the use of reliable systems is to saving lives and property. BlazeMaster® Fire Protection Systems tested itself against the competition and came out on top in pressure burst testing and impact resistance. Compared head to head by independent laboratory Engineering Systems Inc. (ESi), BlazeMaster CPVC 1-inch pipe scored higher in pressure burst testing and impact resistance than Spears FlameGuard 1-inch pipe.

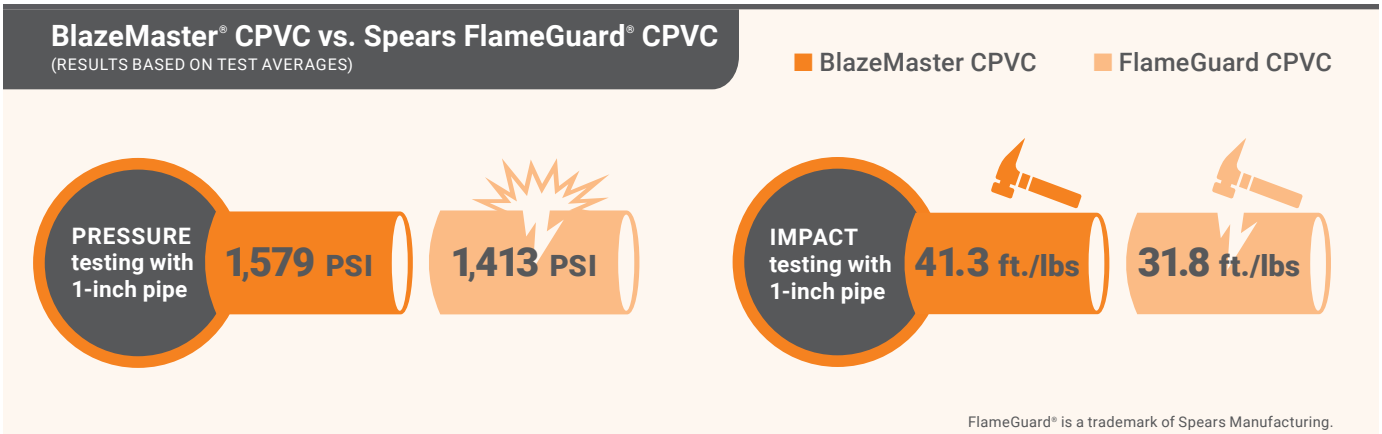
The Science of Safety

When installed per its listings, BlazeMaster CPVC resist heat and fire and maintain its structure when directly exposed to flame to ensure water is delivered to suppress a fire. That's because CPVC is a thermoplastic made from a base PVC polymer that has been fortified with additional chlorine molecules. The extra chlorine, along with specialized additives, enables the material to reliably stand up to intense heat and pressure.

When CPVC is exposed to fire, a charring layer is formed on the outside of the pipe and fittings, which then functions as a thermal barrier that reduces the conduction of heat. Water flowing through the piping system will also cool the inside to further resist heat. BlazeMaster Fire Sprinkler Systems have been listed by UL to UL1821 and approved by FM to FM1635.

Equally important, BlazeMaster CPVC offers superior hydraulics compared with steel pipe. Because they feature a smoother interior surface, water flows with less friction

BlazeMaster® CPVC vs. Spears FlameGuard® CPVC
(RESULTS BASED ON TEST AVERAGES)



FlameGuard® is a trademark of Spears Manufacturing.

than in steel pipe. And the hydraulic performance of steel will decline over time due to corrosion and scaling (mineral buildups).

Diverse Commercial Applications

There's a widespread misconception that BlazeMaster Fire Sprinkler Systems are restricted to residential projects. In fact, BlazeMaster CPVC is UL listed for use in light hazard occupancies as defined by NFPA 13, such as:

- Clubs
- Schools
- Hospitals
- Libraries
- Museums
- Offices
- Institutional
- Nursing Homes
- High-rises
- Places of Worship
- Theaters and Auditoriums

Specifications and Innovative Uses for BlazeMaster Fire Sprinkler Systems

You can find the detailed specification for installing BlazeMaster Fire Protection Systems at BlazeMaster.com. In addition, keep in mind that BlazeMaster pipe and fittings are approved for use in unique applications such as:

- **Poured concrete.** BlazeMaster fire sprinkler systems have a unique UL listing for embedding in concrete walls and ceilings. Embedding BlazeMaster CPVC within a concrete ceiling hides the fire sprinkler system to improve aesthetics and eliminates the cost of drop ceilings and fire sprinkler system hangers.
- **MRI rooms and other healthcare settings.** A BlazeMaster Fire Sprinkler System is the right choice for special settings such as MRI rooms, where non-ferrous materials must be used to protect sensitive equipment from electrical and magnetic interference. In other areas with sensitive equipment, BlazeMaster CPVC is less likely to interfere with wireless connections that are now common in healthcare.
- **Drain pipes.** While there's a long-standing myth that steel is required for drain pipes, BlazeMaster CPVC is permitted under NFPA guidelines and help prevent leaks and reduce total cost of ownership.
- **Low-pressure dry/preaction systems.** Where required to prevent freezing, BlazeMaster Fire Sprinkler Systems are an optimal choice for streamlining installation and reducing costs.
- **Aspirating smoke detection systems.** BlazeMaster CPVC is an ideal choice for these systems, used in active fire protection, that draw air through a network of pipes to detect smoke and trigger the sprinkler system.

BlazeMaster®
FIRE PROTECTION SYSTEMS

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