



RESIDENTIAL FIRE PROTECTION YOU CAN TRUST

A residential fire sprinkler system must be reliable, effective, easy to install and affordable. BlazeMaster® Fire Sprinkler Systems lead the way in residential fire protection, giving housebuilders, engineers and installers a product that is ideal for new build and retrofit projects.



The Lubrizol Corp. pioneered the use of nonmetallic piping in fire sprinkler systems and continues its leadership through continuous R&D, rigorous product testing and innovation. Its BlazeMaster® technology is composed of flame-resistant pipe and fitting material specifically engineered for durability, ease of installation and dependability. BlazeMaster Fire Sprinkler Systems offer an unbeatable combination of performance, dependability and cost-effectiveness.

PRODUCT FEATURES AND BENEFITS

BlazeMaster has been used as piping for fire sprinkler systems since 1984, and in the UK, has been installed in hotels, schools, care homes and all types of residential buildings including the Callow Mount retrofit project in Sheffield and many of the pilot projects in Wales ahead of new legislation requiring all new homes to be sprinkler protected.

- Cost-effective with lower life-cycle costs.
- Eliminates the need for costly tools and equipment.
- Safe and dependable joining system reduces installation costs.
- Resistant to corrosion, both inside and out, for the life of the system.
- In the past 30 years, more than 2 billion feet (610 million meters) of BlazeMaster Piping Systems have been installed in more than 60 countries.
- Expert consultation regarding compliance with local, regional and national codes.
- In-person and online training program for installers.

Availability and Sizing

BlazeMaster Pipe & Fittings are available worldwide through a network of manufacturers.

**BLAZEMASTER PIPING
SYSTEMS MAKE
RESIDENTIAL FIRE
PROTECTION
AFFORDABLE**



Sizing

- Pipe: ASTM F442 in ¾" to 3" or 20mm to 76mm (SDR 13.5 Iron Pipe Size)
- Fittings: ASTM F437 or F438 in ¾" to 1¼" or 20mm to 32mm; ASTM F439 in 1½" to 3" or 38mm to 76mm

LISTINGS, APPROVALS AND APPLICATIONS

BlazeMaster® Pipe & Fittings are UL listed, FM Global and LPCB approved, and WRAS certified for residential applications.

BS 9251:2014

BlazeMaster® can be used in all three categories of system under BS 9251:2014 from single family dwellings and HMO's up to care homes, student accommodation and high-rise residential blocks.



Advantages Over Steel

- Hazen-Williams C Factor of 150.
- Lower environmental impact.
- Lightweight pipe does not require special rigging or equipment to transport through a construction site.
- No offsite fabrication required.
- Faster, cleaner installation.
- Immune to corrosion, even in salt air environments.
- Lightweight pipe goes into tight spaces faster, easier and quieter and is easier to work with around other contractors. Ideal for retrofits.

Advantages of PP-R

- One-step solvent welding process allows for fast and easy assembly.
- No need for electrical source.
- In the event of a fire, will not sustain a flame and is not combustible.
- Does not support microbiological growth.
- Reduced wall thickness leads to same or better flow rate at smaller pipe size which results in cost savings.
- Allowed in exposed applications.
- Comprehensive installation training and free consulting.

NFPA 13D

BlazeMaster® Pipe & Fittings are UL listed and FM approved for residential applications.

INSTALLATION



BlazeMaster Is Fast and Easy to Install

- Hand tools only; no power source needed
- Solvent only; no heat
- Easy fit in tight spaces

PP-R Takes Longer

- Power tools and electrical source required
- Hard to fit in tight spaces
- Takes longer to install

PIPE DIAMETER



Thinner Walls = Better Flow

BlazeMaster CPVC has thinner walls than PP-R pipe of the same diameter. That delivers a better flow rate and material savings.

PP-R fusion welding causes bead formation in pipes, which leads to reduced flow, friction loss and bacterial growth.



Other Advantages Over PP-R

- In the event of a fire, BlazeMaster pipe will not sustain a flame and is not combustible.
- BlazeMaster Pipe & Fittings do not support microbiological growth.
- BlazeMaster is approved to be used in exposed residential applications.
- BlazeMaster Pipe & Fittings are UL listed and WRAS approved for potable water applications.



BENEFITS OF A BLAZEMASTER® FIRE SPRINKLER SYSTEM



Environmental Impact

A study completed by FM Global and the Home Fire Sprinkler Coalition in April 2010 lists some of the many benefits that can result from the installation of a fire sprinkler system:

- Greenhouse gases released by burning buildings can be reduced by 98%.
- Reduce fire damage by up to 97%.
- Reduce water usage to fight a home fire by upwards of 90%.
- Firefighters utilize 250 gal./min. and BlazeMaster® Fire Sprinkler Systems use only 25 gal./min.
- Reduce the amount of water pollution released into the environment.

Protecting Against the Dangers of Modern Home Construction

Over the last 25 years, homes have been built more economically, utilizing lightweight construction techniques and products. While cost-effective, this method has consequences, including a much faster burn time and greater destruction of property. Modern furnishings also burn more quickly.

- A BlazeMaster Fire Sprinkler System reacts quickly and provides additional escape time from burning structures.
- Increases chance of survival by 80%.*
- Reduces property loss by 70%.*



**A SPRINKLER SYSTEM
INCREASES CHANCE
OF SURVIVAL BY 80%
AND REDUCES PROPERTY
LOSS BY 70%.***

THE TRUTH ABOUT BLAZEMASTER® FIRE SPRINKLER SYSTEMS



MISCONCEPTION	FACT
“When a fire occurs, every sprinkler will go off and ruin the whole house.”	Only the fire sprinkler closest to the fire wall will activate. Roughly 85% of the time, just one sprinkler operates.
“Burnt toast could set them off.”	Sprinkler heads are not triggered by smoke, they activate only when they sense extreme temperatures between 135°F (57°C) and 165°F (74°C) degrees.
“They’re ugly – they’ll ruin the look of the house.”	New sprinkler models can be mounted flush with walls or ceilings and concealed behind decorative coverings.

Additional Resources

British Automatic Fire Sprinkler Association - bafsa.org.uk/, National Fire Sprinkler Network - nfsn.co.uk/



FBC System Compatible



BlazeMaster® Pipe & Fittings are tested to ensure chemical compatibility with a range of ancillary products, including thread sealants, construction materials and firestops. Go to [FBCSystemCompatible.com](https://www.FBCSystemCompatible.com) for a full list of compatible products and proceed with confidence.

Training and Education

To ensure proper installation, BlazeMaster offers comprehensive in-person and online training for installers, contractors, engineers and construction managers. Training covers cutting and joining, listings and approvals, chemical compatibility, best practices, health and safety and more. Those who successfully complete the course receive a BlazeMaster training card and certificate.

Manufacturing Network

BlazeMaster partners with the top pipe and fittings manufacturers globally. BlazeMaster works closely with these partners to ensure quality control and meet the most rigid specifications.





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Visit **blazemaster.com** or call **+32 2-678-1911**
or email **blazemaster.emena@lubrizol.com** to contact a piping systems consultant.

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