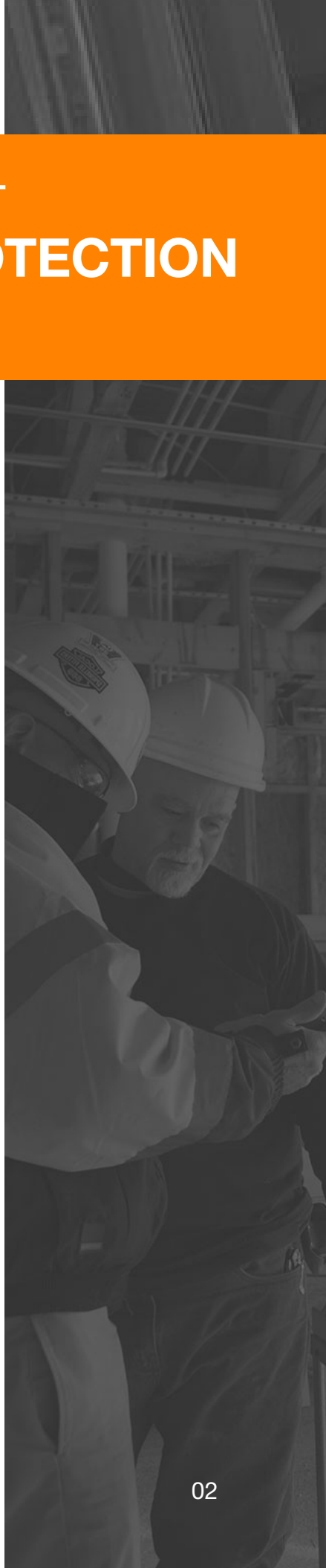
RETROFIT FIRE PROTECTION GUIDE

WHY CPVC IS THE BEST CHOICE FOR **HIGH-RISE BUILDINGS AND RETROFITS**

BlazeMaster®
FIRE PROTECTION SYSTEMS

RETROFIT
FIRE PROTECTION GUIDE



INTRODUCTION

According to the National Fire Sprinkler Network, fire sprinklers in the UK have a reliability of 95%, and in times they did activate, they controlled or extinguished 99% of the fires.

However, only **1 in 50 social housing tower blocks** have full sprinkler systems.

For more than 30 years, BlazeMaster® Fire Protection Systems have been the trusted name in non-metallic piping and fire protection for residential properties.

If you're evaluating fire sprinkler systems for your high-rise building or retrofit, here is why you should put your trust in BlazeMaster Fire Protection Systems.

BlazeMaster®
FIRE PROTECTION SYSTEMS

HOW BLAZEMASTER CPVC COMPARES TO OTHER MATERIALS

CPVC VS. STEEL

BlazeMaster Systems have been relied on by residential properties across the UK, including the Callow Mount high-rise retrofit project in Sheffield. When the tower block needed a complete retrofit for 47 flats, BlazeMaster CPVC made it simple, quick, and cost-effective. **Averaging a 1-day installation time per flat, none of the 47 residents needed to relocate during installation.**

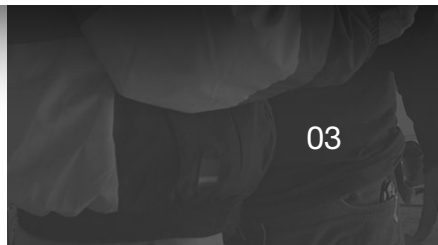
In fact, many contractors rely on BlazeMaster CPVC because they can satisfy tight construction schedules not possible with steel.

Compared to steel, CPVC offers significant advantages. Specifically, it:

- Fits into tighter spaces faster, easier and quieter.
- Maintains a Hazen-Williams C Factor of 150 compared to steel's 120. A higher C Factor means a smoother pipe resulting in **better flow rates.**
- **Limits environmental impact.**
- **Weighs 84% less than steel,** leading to considerable installation savings.
- **Resists corrosion,** even in salt-air environments.

"The feedback from the residents has been absolutely remarkable. The time it has taken to do the full installation in all 47 flats has been incredible. There hasn't been any mess and the workers have been clean and tidy."

Gary Lund
Sheffield Homes Health and Safety Manager



HOW BLAZEMASTER CPVC COMPARES TO OTHER MATERIALS

CPVC VS. PPR

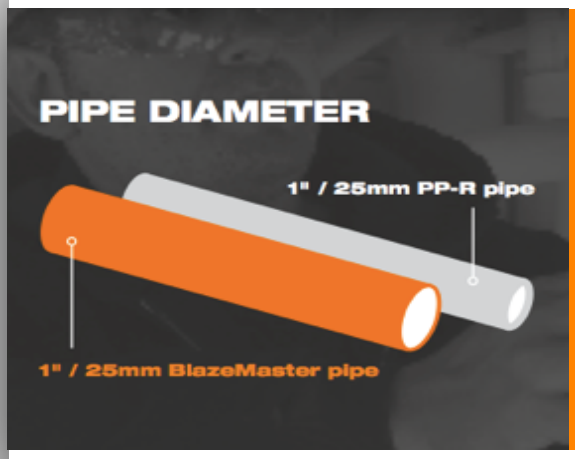
Installation of a BlazeMaster fire sprinkler system is easier, faster and provides significant cost and labour savings over other non-metallic materials, including polypropylene random (PPR).

Unlike PPR, CPVC is ideal for retrofits thanks to its quick and simple installation and ability to easily fit into tight spaces. CPVC pipe can also be easily modified with hand tools, requiring no power source.

CPVC's solvent cement joining process creates strong, permanent bonds without heat or impeding water flow. PPR fusion welding requires heat and can cause bead formation in pipes resulting in reduced flow rate, friction and potential for deposits.

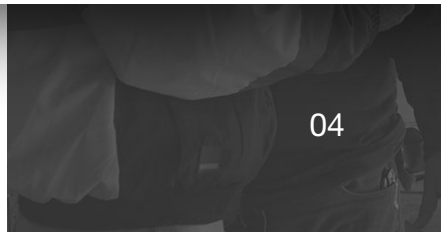
BlazeMaster CPVC advantages over PPR include:

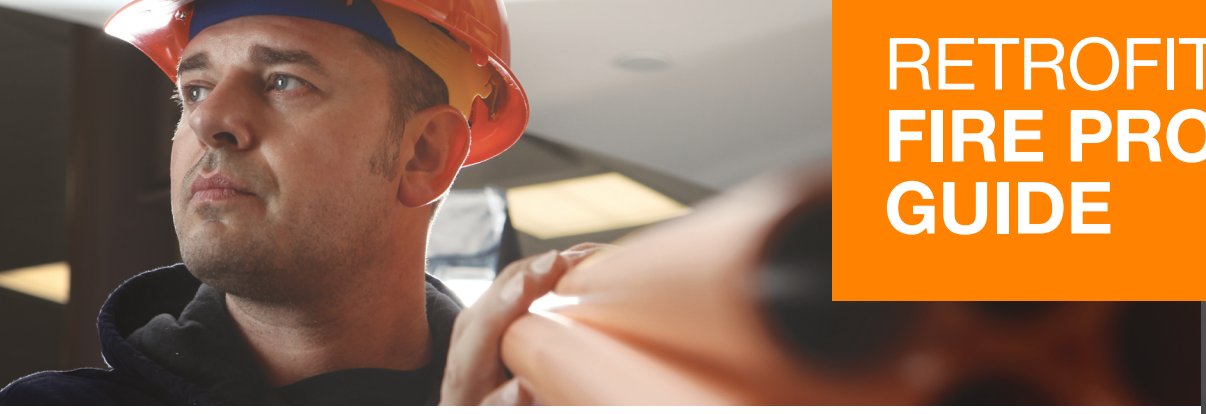
- CPVC does not sustain a flame.
- No need for Hot Works permit.
- Does not require power tools to install, reducing the risk of injuries.
- Comprehensive installation training and free consulting.
- UL listed for all light hazard occupancies.



Pipe diameter also makes a difference.

Due to the strength of its material, BlazeMaster CPVC has a thinner wall resulting in a larger inside diameter (ID) than the inside diameter of PPR pipe. This delivers a better flow rate at a smaller pipe size, resulting in cost savings.





BLAZEMASTER CPVC OFFERS EVEN MORE

Engineered to Not Sustain a Flame

BlazeMaster CPVC pipe and fittings are engineered not to sustain a flame. During a UL test, a fire plume between 698° and 901°F (370° and 483°C) came in direct contact with BlazeMaster CPVC piping for 10 minutes. The pipe continued to perform throughout the test.

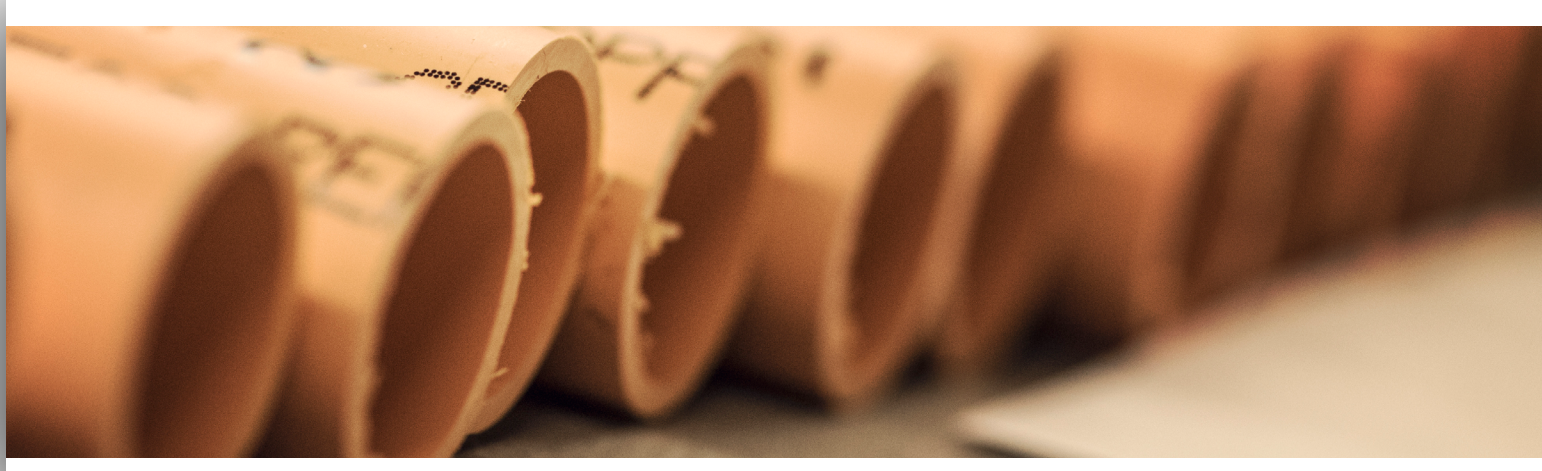
Check out this video to see how well our CPVC stands up to intense heat.

Listings, Approvals and Applications

BlazeMaster pipe and fittings are UL listed, FM Global and LPCB approved, and WRAS certified for all light hazard occupancies and potable water applications. You can be confident our systems will perform when needed.

Widely Available Pipe and Fittings

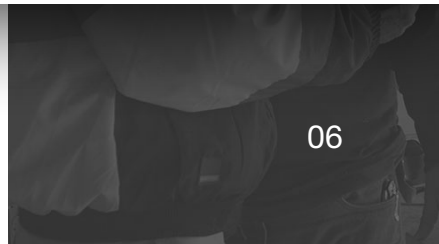
BlazeMaster Fire Protection Systems partners with the top pipe and fittings manufacturers across the globe to ensure quality control and that products meet the most rigid specifications.



DISPELLING MYTHS ABOUT CPVC

There are some misconceptions about CPVC fire protection systems. Here are the facts:

- CPVC is able to withstand high heat and intense flame. When exposed to a fire, it forms a charring layer around the outside of the pipe that acts as a thermal barrier to reduce the conduction of heat.
- Sprinkler heads are not triggered by smoke, so burnt toast will not set them off.
- New sprinkler models can be mounted flush with walls and ceilings, so the piping does not have to distract from the aesthetics of your building.



RETROFIT FIRE PROTECTION GUIDE

BRINGING PEACE OF MIND TO BARTON VILLAGE RESIDENTS

Barton Village Estate in Eccles, Manchester, required a quick, clean installation of a fire sprinkler system. Specifically, building owner City West wanted the best product to be installed with as little tenant disruption as possible.

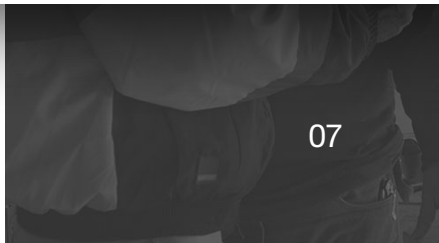
Springhead Sprinklers, who have worked in partnership with Project Twenty Four, recommended BlazeMaster Fire Protection Systems. Springhead Sprinklers knew they could rely on BlazeMaster CPVC and manufacturing partner, Viking, to provide reliable delivery and trusted their expertise on the latest regulations.

The moment work began, installers found the usual ease of installation with BlazeMaster CPVC and Viking. From the speed of product delivery to the onsite technical support, the process was perfectly seamless. In addition, tenant liaison officers had the opportunity to talk with residents and explain what to expect before, during and after installation.

Springhead Sprinklers' decision to use BlazeMaster Fire Protection Systems lead to reduced labour, cost savings, and happy tenants. By selecting a product that was easily accessible and seamlessly installed, it allowed the project to stay on schedule, and limited tenant inconvenience.

"City West was very happy with our decision to go with BlazeMaster Fire Protection Systems. All of their feedback from tenants has been positive. They feel safer with the new installations, especially in light of recent events."

Steven Reed
Springhead Sprinklers



RETROFIT FIRE PROTECTION GUIDE

BLAZEMASTER CPVC: FIRE PROTECTION YOU CAN RELY ON

We understand that implementing life-saving fire safety takes time and can be costly and limiting resident disruption is paramount. We also know the importance of maintaining health and safety is a top priority for your business.

BlazeMaster Fire Protection Systems are **specifically engineered to provide reliable, residential fire protection for a lifetime**. If you're considering a fire sprinkler system for your high-rise or retrofit, and want to learn more about BlazeMaster CPVC, check out these additional resources:

- 2017 UK Report Sheds Light On Importance of Residential Fire Sprinklers
- 'No Money Available' From Government For Tower Block Fire Sprinkler Retrofits
- CPVC vs. Steel: 2018 Cost Savings Report

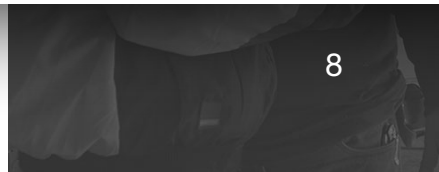
STILL HAVE QUESTIONS?

Whether you're a builder, architect, designer or installer, a BlazeMaster Fire Protection System fulfills the needs of your project and provides significant cost-savings over its lifetime.

Consult with our team on your project today and find out more information on:

- Costs and timings.
- Technical specifications.
- Training workshops for your team.
- Any other questions you have in mind.

To set up up a free call or to ask a question, visit our Support page.



RELIABILITY
TESTED FOR LIFE

BlazeMaster®
FIRE PROTECTION SYSTEMS

Visit **BlazeMaster.eu** or call
+44 (0) 7710 372281 to learn more.