

# FlameGuard<sup>™</sup> CPVC FIRE SPRINKLER PRODUCTS

FG-2-0609

## Complete System of Pipe, Fittings & Solvent Cement Corrosion Resistant • Superior Flow • Ease of Installation



Spears<sup>®</sup> FlameGuard<sup>™</sup> CPVC Fire Sprinkler Products provide a cost effective alternative to metal systems with advantages of high corrosion resistance, improved system hydraulics, ease of installation and quick assembly with readily available tools. CPVC Fire Sprinkler Systems are

based on proven products that

have been in continuous service for over 40 years. Spears<sup>®</sup> FlameGuard<sup>™</sup> products are approved by UL, FM Global, LPCB and Certified by NSF International for potable water use. Check local codes for restrictions and limitations.

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#### **Corrosion Resistant CPVC Material Does Not Sustain Biological Growth**

Unlike metal systems, **FlameGuard™** CPVC products never rust, scale or pit and do not sustain biological growth - a cause of Microbiologically Influenced Corrosion (MIC) which can destroy metal fire sprinkler systems from the inside out.

#### **Superior Flow Characteristics for Lower Friction Losses**

The smooth-wall interior surfaces of **FlameGuard™** CPVC systems result in reduced friction loss over metal systems. The design flow characteristics remain constant throughout the life of the product because there is no interior corrosion in the system due to microbiological activity.

# Pressure Rated to 175psi (1200kpa) @ 150°F (65C°)

FlameGuard<sup>™</sup> CPVC Products are produced in combinations of Schedule 40 and Schedule 80 Fitting configurations conforming to ASTM F 438 or F 439 standards and FlameGuard<sup>™</sup> SDR 13.5 CPVC Fire Sprinkler Pipe conforming to ASTM F 442 standards. UL Rated working pressure is 175 psi (1200kpa) @ 150°F (65°C) (LPCB rated to 120°F) (49°C).

## **Easy Installation for Lower Costs**

**FlameGuard™** CPVC system installations significantly reduce costs over conventional metal piping by virtually eliminating prefabrication. Systems can be fully installed on site using solvent cement joining methods.

### UL Listed for NFPA 13, 13R & 13D Systems

FlameGuard<sup>™</sup> CPVC Fire Sprinkler Products are UL listed for Light Hazard occupancies as defined in NFPA 13, Residential occupancies up to and including 4-stories as defined in NFPA 13R, and Residential occupancies for one and two family dwellings and manufactured homes as defined in NFPA 13D. Consult Spears<sup>®</sup> CPVC Fire Sprinkler Piping Products Installation Instructions and NFPA Standards for additional applications including air plenum, system risers, underground, attic, and garage installations.

### **Full 10-Year Limited Warranty**

**FlameGuard™** CPVC Fire Sprinkler Products are warranted for 10 years against defects in material or workmanship. Consult Spears<sup>®</sup> **FlameGuard™** warranty for additional details.



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## Spears<sup>®</sup> FlameGuard<sup>™</sup>... The Leader in Innovative CPVC Fire Sprinkler System Products

## **Pioneer in Molded-in Metal Insert Head Adapters**

Spears<sup>®</sup> pioneered the development of the **FlameGuard**<sup>™</sup> molded-in-place metal thread insert for connection of sprinkler heads to CPVC fire sprinkler systems, plus Metal FIPT threaded female adapters for metal-to-plastic transitions.

## **Developed the Special Reinforced (SR) Head Adapters**

Spears<sup>®</sup> **FlameGuard**<sup>™</sup> continuous improvement program developed the technology to produce a superior patented plastic threaded fitting - the Special Reinforced (SR) Design. This unique design incorporates a patented thermoplastic compression process that equalizes stresses generated by tapered thread joint make-up. All CPVC plastic body and threads provide a more uniform construction and improved corrosion resistance.

# Now, the Revolutionary TorqueSafe<sup>™</sup> Gasket Sealed Head Adapter

- Requires NO Thread Sealants
  - Eliminates Stress

• Prevents Over Tightening • Provides Easy Frame Alignment Spears<sup>®</sup> revolutionary design features a special molded-in-place Brass Thread Insert fitted with an elastomer gasket seal at the base of the threads. The gasket seal allows a modified thread design that eliminates radial stress

and associated problems typical with tapered thread joint make up. The insert is designed to rotate for easy sprinkler frame alignment without over tightening. Patent Pending.

## **Full Assortment of Specialty Products & Fitting Configurations**

Spears<sup>®</sup> **FlameGuard**<sup>™</sup> provides the specialty fittings needed in today's fire sprinkler systems. Like the adjustable drop nipple for fine-tuning to finished ceiling height, and ringed head adapter for ease of locating during installation. Plus, Spears<sup>®</sup> **FlameGuard**<sup>™</sup> line offers a full assortment of CPVC fire sprinkler fitting configurations including Tees, Elbows, Flanges, Couplings, Caps, Grooved Coupling Adapters and Unions, sizes 3/4" through 3".

## **Complete Size Range of CPVC Pipe**

Spears<sup>®</sup> **FlameGuard**<sup>™</sup> CPVC Fire Sprinkler Pipe is available in sizes 3/4" to 3". Conforms to ASTM F 442 standard for SDR 13.5 CPVC pipe.

## **Spears® Solvent Cements & Thread Sealant**

**FlameGuard**<sup>™</sup> products should be installed using Spears<sup>®</sup> FS-5 One-Step Solvent Cement. For threaded joints, use Spears<sup>®</sup> **BLUE 75**<sup>™</sup> Thread Sealant that has been tested for compatibility with **FlameGuard**<sup>™</sup> CPVC Fire Sprinkler Products. Spears<sup>®</sup> **TorqueSafe**<sup>TM</sup> Gasket Sealed Adapter requires no sealant. Consult sprinkler head manufacturer prior to use.

## Installation Training Available - Contact Spears® Technical Services for Details

**FlameGuard**<sup>™</sup> Products must be installed in accordance with Spears<sup>®</sup> CPVC Fire Sprinkler Piping Products Installation Instructions, National Fire Protection Association Standards 13, 13R, 13D, and in accordance with local codes. Code requirements and field conditions may differ. It is the responsibility of the installing contractor to insure that the product is suitable to meet these requirements.



## SPEARS® MANUFACTURING COMPANY CORPORATE OFFICE

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