



Special Pipe – Spears® FlameGuard® CPVC Fire Sprinkler Piping Systems

Spears® FlameGuard® CPVC Fire Sprinkler Products are manufactured from high quality, Post-Chlorinated Poly Vinyl Chloride (CPVC), a specialty thermoplastic material tested and approved by certifying agencies for use in CPVC fire sprinkler systems. Spears® FlameGuard® CPVC Fire Sprinkler Products provide unique advantages over traditional metal fire sprinkler systems through superior hydraulics, ease of installation and handling.

IMPORTANT – The information in this section is introductory only. **Spears® publication FG-3, FlameGuard® CPVC Fire Sprinkler Products, must be used and followed.** National Fire Protection Association (NFPA) Standards 13, 13R, and 13D must be referenced for design and installation requirements in conjunction with the FG-3 manual and all local codes. Details of product listings, requirements and limitations are beyond the scope of this publication.

Listings & Approvals

Spears® FlameGuard® CPVC Fire Sprinkler Products are fully tested and approved for use in wet pipe fire sprinkler systems by Underwriters Laboratories Inc., FM Global, and the Loss Prevention Certification Board. Spears® FlameGuard® CPVC Fire Sprinkler Products are approved for use in low pressure dry pipe or pre-action systems by Underwriters Laboratories Inc. and for use in Light Hazard Occupancies (NFPA 13), and Residential Occupancies (NFPA 13R & 13D). The Listing also includes use in Return Air Plenums (NFPA 90A), use in Underground Service Mains (NFPA 24), and use in exposed systems with certain restrictions when installed in accordance with Spears® FG-3 installation instructions. Spears® FlameGuard® CPVC Fire Sprinkler Products are listed by NSF International for use in potable water systems.

Product Ratings

Spears® FlameGuard® CPVC fire sprinkler pipe is produced to SDR 13.5 dimensions in strict accordance with ASTM F 442 and Listed for a rated working pressure of 175 psi @150°

Dimensions

Nom. Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nom. Nom. Wt./Ft.
3/4	1.050	0.874	0.078	0.168
1	1.315	1.101	0.097	0.262
1-1/4	1.660	1.394	0.123	0.418
1-1/2	1.900	1.598	0.141	0.548
2	2.375	2.003	0.176	0.859
2-1/2	2.875	2.423	0.213	1.257
3	3.500	2.950	0.259	1.867

Joining Method

Spears® FlameGuard® CPVC piping is joined using a special one-step solvent cement specifically listed and approved for use in CPVC fire sprinkler systems. See Spears® FG-3 installation instructions for use, applicable set and cure times and additional information.