



# TorqueSafe™ Back-to-Back Sidewall Fittings for Spears® FlameGuard® System

FGB2B-2-0325



FlameGuard® Sidewall Fittings

## FM Global® Listed for U.S. and Canada in NFPA 13, 13R & 13D Systems

FlameGuard® CPVC Fire Sprinkler Products are listed by Factory Mutual Global (FM Global®) for U.S. and Canada applications in 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® FlameGuard® CPVC Fire Sprinkler Products Installation Instructions and NFPA standards for additional information on applications including air plenum, system risers, concealed, exposed, underground, combustible attic, garage, basement and low-pressure dry piping installations.



## Sidewall Fitting Options

Spears® sidewall fittings include tee and cross configurations in 1/2X1-inch sizes. A choice of “Long” or “Short” dimensional “takeout” lengths gives the contractor the option to install the ideal Back-to-Back sidewall fitting in either 1/2” or 5/8” vertical, drywall 3-1/2” (2X4) stud applications.

## Limited Lifetime Warranty

Spears® Manufacturing Company is the only manufacturer to offer a Limited Lifetime Warranty on our products that covers defects in material and workmanship for the life of the product.

## FlameGuard® Back-to-Back Sidewall Fittings with TorqueSafe™ Technology

Sidewall (Back-to-Back) fittings are often used in fire sprinkler systems to optimize hydraulic design, save time and money. Spears® offers an advanced sidewall tee and cross configuration that features our patented TorqueSafe™ head adapter known for eliminating the use of thread sealants and preventing overtightening during installation. The TorqueSafe™ head adapter design is the preferred choice of fire contractors hands down. These sidewall fittings offer the best of both worlds by combining Spears® proven product quality with our revolutionary TorqueSafe™ technology. Available only from Spears® Manufacturing Company.

## TorqueSafe™ Threaded Adapter

Spears® TorqueSafe™ advanced technology features a special molded-in-place brass thread insert fitted with an elastomer gasket seal. The gasket seal allows for a modified thread design that eliminates radial stress and associated problems typical with tapered thread joint make up. The insert is designed to rotate during head installation for easy sprinkler frame alignment without over tightening.

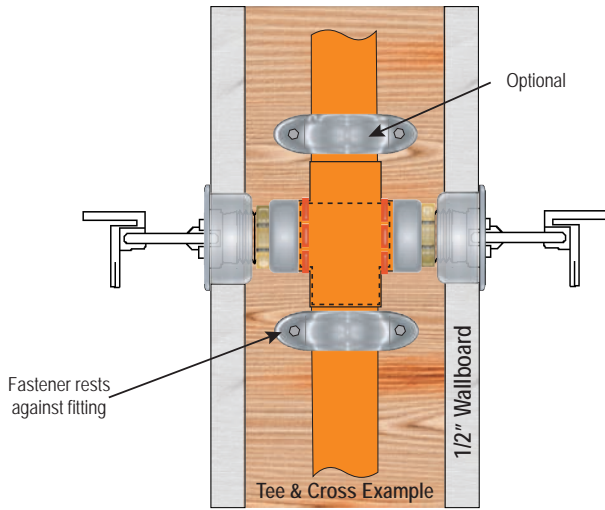
## TorqueSafe™ EPDM Gasket Seal

An EPDM gasket has been engineered for sealing against the sprinkler head. The NPT male thread starts on all sprinkler heads provide a uniform surface for a positive, reliable seal. Rigorous testing has been performed using virtually all sprinkler head brands including rough, galvanized pipe nipples without any damage or loss of sealing.

### Sample Engineering Specification

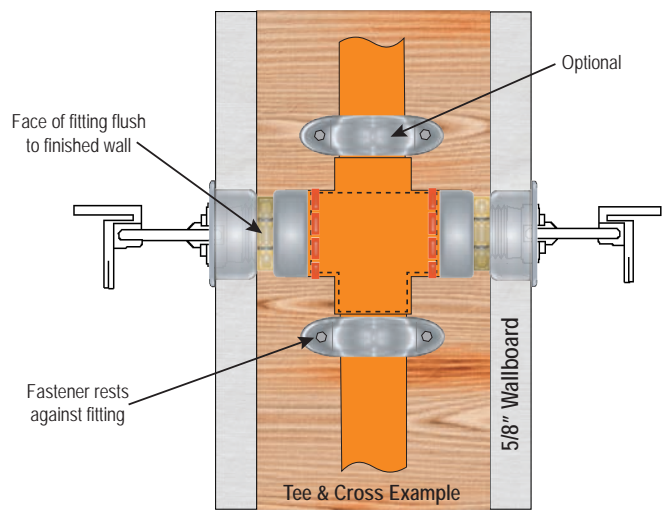
All TorqueSafe™ Back-to-Back Sidewall Tees and Crosses shall be constructed from Type IV Grade I CPVC material with a cell classification of 23447 in accordance with ASTM D1784. Sidewall components shall conform to ASTM F438 and TorqueSafe™ gasket sealed head adapters shall be designed for use without any thread sealant. Gasket material and additional O-ring shall be made from high-quality fire-grade EPDM material. Sidewall components shall be available in sizes 1/2X1-inch in “long” and “short” versions. Product shall be listed by FM Global as manufactured by Spears® Manufacturing Company.

## Sidewall Fitting Installation



### Sidewall Fitting - (S) Short

"Short" Sidewall Tee/Cross are suitable for 1/2" wallboard and must be supported. Fitting take out = 1-7/16"

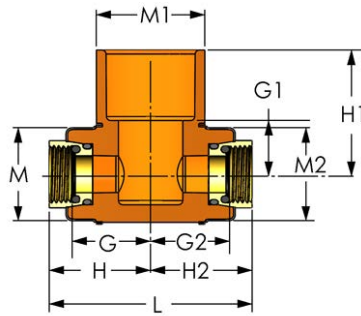


### Sidewall Fitting - (L) Long

"Long" Sidewall Tee/Cross are suitable for 5/8" wallboard and must be supported. Fitting take out = 1-9/16"

## Sidewall Tee

FPT X SOC

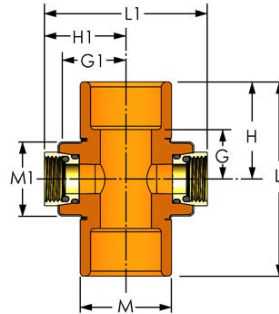


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
4243S-075 G	1/2X1	1-7/16	9/16	1-7/16	1-3/4	1-5/8	1-3/4	3-1/2	1-3/8	1-5/8	1-3/8	.33
4243L-075 G		1-9/16	9/16	1-9/16	1-7/8	1-5/8	1-7/8	3-3/4	1-3/8	1-5/8	1-3/8	.35

G, G2 = Take Out | **Not intended to convey or dispense water for human consumption through drinking or cooking**

## Sidewall Cross

FPT X SOC



Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
4221S-075 G	1/2X1	9/16	1-7/16	1-5/8	1-3/4	3-1/4	3-1/2	1-5/8	1-3/8	.37
4221L-075 G		9/16	1-9/16	1-5/8	1-7/8	3-1/4	3-3/4	1-5/8	1-3/8	.33

G1 = Take Out | **Not intended to convey or dispense water for human consumption through drinking or cooking**



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