

FLAMESAFE® FS 3000 SPRAY

Elastomeric, sprayable firestop

Product Features

- Underwriters Laboratories classified
- Factory Mutual approved
- Listed in systems with up to 4 hour fire rating
- ASTM E1399 tested, *Cyclic Movement and Measuring the Minimum and Maximum Joint Width of Architectural Joint Systems*
- ASTM E1966 (UL 2079) tested, *Test Method for Fire Resistive Joint Systems*
- Perimeter Barrier tested per ASTM E5.11.14 (draft) using the intermediate scale multi-story test apparatus
- ASTM E814 (UL 1479) tested, *Fire Tests of Through-Penetration Firestops*
- Sound transmission tested in accordance with ASTM E90
- Water-based, easy to apply and clean up
- Excellent adhesion and thickness build
- Head of Wall approvals over Monokote® MK-6®
- Elastomeric
- Sprayable and brushable
- No silicones or outgassing
- Paintable

Description

FlameSafe® FS 3000 Spray is a water-based, elastomeric firestop that is designed for spray applications onto joints between fire-resistive assemblies and perimeter barrier (curtain wall) assemblies. FS 3000 cures to a strong, flexible seal. FS 3000 has been tested to dynamic movement conditions in accordance with ASTM E1399 relating to seismic, wind sway and thermal expansion/contraction environments. It has been specifically formulated for ease of application and provides an efficient solution for firestopping joint systems.



FlameSafe FS 3000 Spray

Physical Properties

Color	Red or white
Weight	10.4 ± 0.4 lbs/gal (1.2 ± 0.05 kg/L)
Storage and installation temperatures	40°F to 90°F (4°C to 32°C)
Viscosity (Brookfield Viscometer)	50,000 cps (average) 24 ± 0.1°C @ 10 rpm
Flame spread (UL 723/ASTM E84)	0
Smoke developed (UL 723/ASTM E84)	0

Applications

FlameSafe FS 3000 has been tested for use in perimeter barrier (curtain wall) construction and head of wall applications. Apply FS 3000 uniformly over mineral wool compressed into gaps, voids or joint openings to obtain a minimum 0.125 in. (3.18 mm) wet film thickness. Overlap a minimum of 0.5 in. (13 mm) beyond all edges of the opening onto surrounding construction surfaces. Small or touch-up areas may be sprayed or brushed. See specific system design for installation details.

Application Guide

Penetrations	
Metallic	X
Non-metallic	
Cables	
Cable trays	
Insulated	
Misc. electrical	
HVAC	X
Mixed	
Joints	
Perimeter Barrier (Curtain Wall)	X

Applicable Standards

FlameSafe FS 3000 is classified by Underwriters Laboratories Inc. and Omega Point Laboratories. Each fire-resistive joint system with FS 3000 is subjected to dynamic movement tests per ASTM E1966 and ASTM E1399 (UL 2079). Refer to the respective UL and/or Omega Point designs for specific joint details and movement limitations. In addition, FS 3000 is accepted by the City of New York (MEA 41-00-M Vol. II) and ICBO.

Installation

Flamesafe FS 3000 is designed for optimal application to clean, dry substrates when the air and substrate temperature is between 40°F to 90°F (4°C to 32°C). FS 3000 should not be applied when the air or substrate temperature is below 32°F (0°C).

FS 3000 is formulated to be spray applied with commonly available airless spray equipment designed for application of heavy bodied latex paint. Electric pumps ranging from 0.5 hp to 1.5 hp requiring 15–20 amp circuits are commonly used. The larger horsepower machines have larger diameter intakes and allow higher application rates and better performance in colder weather. Most pumps are available with wheels for easy movement on job sites.

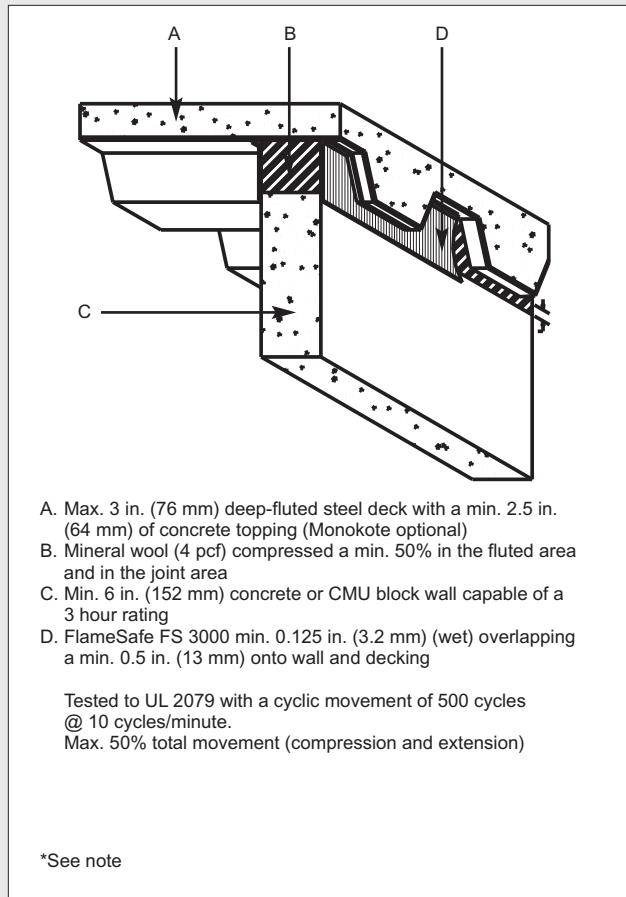
Spray guns can be fitted with a range of wide angle and narrow pattern tips to match the specific job, thereby minimizing overspray and waste. Extension systems for hard to reach areas are also available. Many guns are supplied with fine filters in the handle or gun body. These filters can restrict proper flow and spray pattern. For best results, any filters should be removed from the spray gun and handle before application.

Clean all equipment with soap and water immediately after use. For short stoppage intervals, the spray gun may be immersed in water to prevent clogging of the spray tip. Any unused coating should be resealed tightly in its original container.

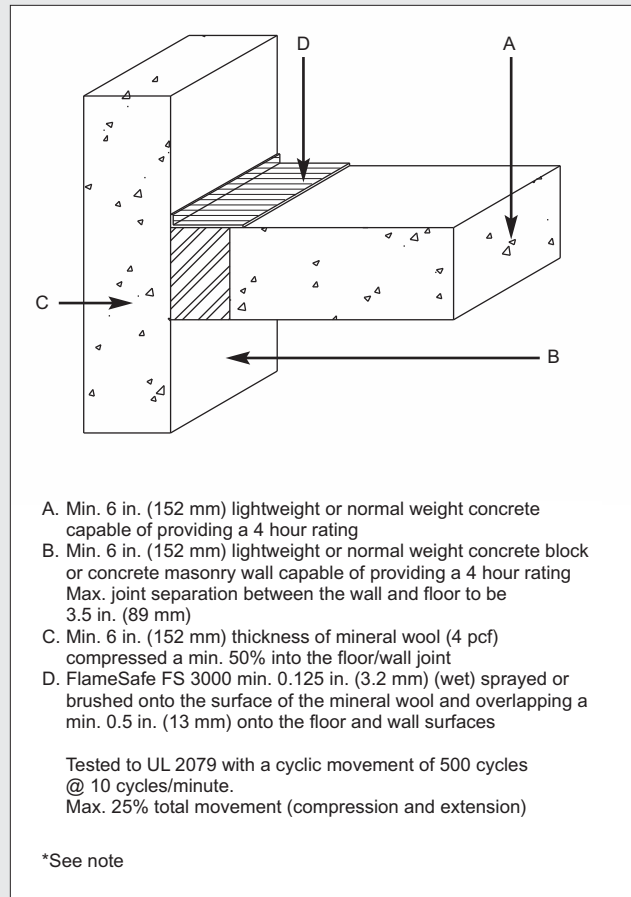
Specifications

Typical pump specifications:				
Model	PSI	G.P.M.	H.P.	Max. Tip Size
Titan 440	3200	0.47	0.75	0.021
Titan 660	3200	0.7	1.0	0.025
SprayTech 2300 (hi-boy)	3000	0.67	1.25	0.025
SprayTech 2510	3000	1.25	1.5	0.019-0.035*

*Single or dual spray gun operation



Head of Wall—3 Hour (UL HW-D-0110)



Wall to Floor Construction Joint—4 Hour (UL FW-D-0017)

*Refer to UL designs for full system description.

Product Estimating Guide

1 gal (3.8 L) of FlameSafe FS 3000 will coat approximately 13 ft²/gal (0.32 m²/L) at a recommended wet film thickness of 0.125 in. (1/8 in. or 125 mils). When applying by airless sprayer, allow for material waste due to over-spray.

Wet film thickness:

3.18 mm = 125 mils = 0.125 in. = 1/8 in.

Dry film thickness:

1.7 mm = 63 mils = 0.062 in. = 1/16 in.

Maintenance

Applications using FlameSafe FS 3000 are maintenance free, however, installations should be inspected periodically for accidental damage and repaired as per the original approved design.

Warranty

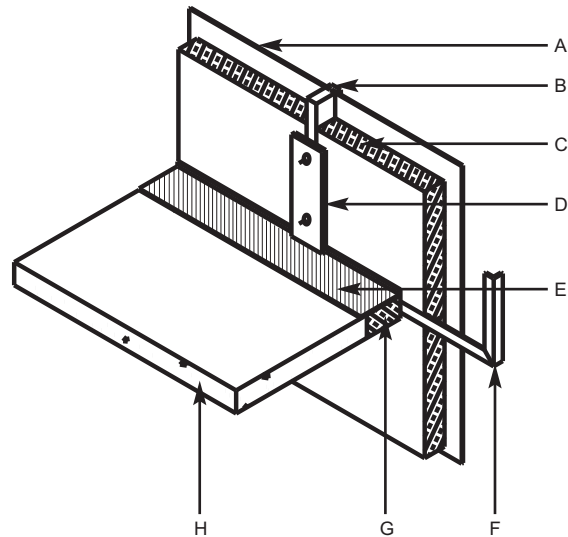
All statements, technical information and recommendations contained herein are based on tests we believe to be reliable. However, since the conditions of use and application are beyond our control, Grace Construction Products shall not be liable for any damage, direct or consequential, resulting from the use of this material or design. Grace Construction Products' only warranty shall be to replace any of its products found to be defective.

Availability

FlameSafe FS 3000 Spray is available through authorized Grace Construction Products distributors in the following quantities:			
Description	Part No.	Volume	Std. Pk.
Poly Pails			
Poly Pail	26878	1,155 in. ³	1
5 gal (19 L)	(Red)	(18,942 cm ³)	
Poly Pail	57572	1,155 in. ³	1
5 gal (19 L)	(White)	(18,942 cm ³)	

Technical Support

Grace Construction Products provides technical support for all of its products, including FlameSafe FS 3000 Spray. Call toll free at 866-333-3SBM (3726) for assistance in product selection and for detailed specifications and approvals. We provide engineering analysis for unique firestopping applications, including system design drawings suitable for submittals. Material Safety Data Sheets are also available. More information is available on our web site at www.graceconstruction.com.



- A. Min. 0.25 in. (6.4 mm) thick clear heat strengthened (HS) spandrel glass panels
- B. Min. 2.5 in. (64 mm) rectangular aluminum tubular mullions and transoms
- C. Min. 4 in. (102 mm) thick (4 pcf) mineral wool batt insulation with aluminum facing
- D. Min. 1 in. (25.4 mm) thick by 4 in. (102 mm) wide (8 pcf) mineral wool framing covers with aluminum facing
- E. FlameSafe FS 3000 min. 0.125 in. (3.2 mm) thick (wet) overlapping a min. 0.5 in. (13 mm) onto floor and insulation
- F. Min. 16 gauge 1.5 in. x 1.5 in. (38 mm x 38 mm) steel angle located at mid-height of joint and attached to each mullion
- G. Min. 4 in. (102 mm) thick (4 pcf) mineral wool compressed 50% within the joint cavity
- H. Lightweight or normal weight 4.5 in. (114 mm) (min.) reinforced concrete slab

*See note

Glass Curtain Wall Architectural Joint—2 Hour (OPL C EJ 154P)

*Refer to UL designs for full system description.



www.graceconstruction.com

For technical assistance call toll free at 866-333-3SBM (3726)

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