

TECHNICAL DATA SHEET



Handi-Foam® Fireblock Sealant



Handi-Foam® Fireblock Sealant is a one-component polyurethane foam (OCF) sealant specifically designed and colored orange to seal annular spaces around plumbing penetrations, cables, ducts, and other penetrations between rooms and floors. A critical advantage of Handi-Foam® Fireblock Sealant is its ease of use and its effectiveness at blocking smoke, and toxic gases. The foam sealant stops air infiltration by blocking air from entering/escaping through gaps which prevents the flames, smoke, and gases from spreading. The product is for use in Type V residential construction. Fireblock foam sealants are not intended for use in hourly rated assemblies. Handi-Foam® Fireblock Sealant utilizes an (HC) propellant. Refer to the product storage and special handling section of this document for information regarding the use of flammable aerosol propellants. The product is for professional use only.

Handi-Foam Fireblock Sealant is available as a 12oz or 24oz straw foam and a 24oz gun foam. The gun foam version is designed to be dispensed through any Handi-Tool® dispensing unit. The straw foam versions are designed to be dispensed through a straw adapter (included with each can).

Available as a 10lb or 16lb cylinder; please see technical data sheet A16147.

Application Areas

Apply Handi-Foam Fireblock Sealant onto any clean surface to fill and seal around gaps, beneath base plates, mud sills, top plate penetrations, corner joints, T-joints, exterior cracks, around utility panels, pipes, duct penetrations, etc. It is specifically designed to be dispensed as a bead for filling cracks, crevices, and to fill smaller cavities.

Properties

The pre-pressurized, portable OCF system, applied in a bead form, expands and cures slowly to a semi-rigid, closed cell foam upon reaction with moisture, such as ambient humidity.

Handi-Foam Fireblock Sealant dries tack-free in approximately 5 minutes or less depending on moisture and temperature conditions. The foam fully cures within 24 hours. Expansion of 2-3 times the dispensed bead within the first hour should be expected. It is recommended to fill the cavity only 1/3 of the way full to allow for expansion. Handi-Foam Fireblock Sealant will adhere to itself if more foam need be applied.

Handi-Foam Fireblock Sealant adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon®, silicone, oils, greases, mold release agents, and similar materials.

Optimum chemical temperature is between 65°F and 80°F (18°C - 27°), but may be applied in cold or hot ambient conditions, as long as the optimal chemical temperature range is maintained. Cured foam is dimensionally stable, and known to be resistant to temperatures ranging between -200°F to +240°F (-129°C to + 115°C).

Handi-Foam Fireblock Sealant is water resistant and will not harm electrical wire insulations, Romex, rubber, PVC, polyethylene or other plastic (i.e. PEX, CPVC). It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde. When cured, polyurethane foam is permanent, chemically inert, non-reactive and stable for

an indefinite period of time. Cured foam should be protected against UV rays (i.e. sunlight) by painting or staining to prevent long term discoloration or degradation.

Application/Use

After following instructions for set-up, the cans are ready to use. Straw foam option: Attach the straw, shake well, invert the can, and begin dispensing. By activating the adapter lever carefully, the extrusion rate can be regulated. Gun foam option: Attach the can to the dispensing unit (Handi-Tools), shake well, and begin dispensing. The dispensing units can be metered by pulling the dispensing unit trigger for the desired rate, or with the metering screw located in the back. Foam application can be interrupted when needed as outlined in the instructions and the dispensing unit will be ready for immediate re-use, as long as it remains attached to a pressurized container. An empty gun foam container must be replaced with a new container.

Handi-Foam Fireblock Sealant is especially useful for irregular voids and on non-linear cracks and crevices. Filling excessively large cavities can result in a prolonged curing process. Also, insufficient air or substrate moisture during cure may cause delayed expansion.

Remove fresh foam over spray with Handi-Cleaner® (P10083) or solvents such as acetone. Cured foam can only be removed mechanically.

Always refer to the local building codes before application of product.

Personal Protective Equipment (PPE)

Use only in well ventilated areas. Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure when using. Read all instructions and safety information prior to use of any product. Consult the product's MSDS (available at www.fomo.com).

Important Note:

The product contains no formaldehyde. Cured foam is non-toxic.

KEEP OUT OF REACH OF CHILDREN.

Special Handling

The propellant is extremely flammable during dispensing and cure. Provide sufficient cross-ventilation to remove any buildup of vapors. Keep away from heat, sparks and sources of ignition. Turn off all pilot lights. Vapors may cause flash fire if ignited. Contents are under pressure. Do not puncture, incinerate or store above 120°F (49°C). Do not place in hot water or near radiators, stoves, motor vehicles or other sources of heat. Cured urethane foam produced from these ingredients will support combustion and may present a fire hazard if exposed to a fire or excessive heat 240°F.

Product Storage

Store in dry area. Do not expose the product to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Handi-Foam Fireblock Sealant is reusable by following product instructions.

Fomo Products, Inc.
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management system registered to ISO 9001



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Technical Data

CORE DENSITY– GUNFOAM ASTM D1622	1.00 lbs/ft ³ (16 kg/m ³)
CORE DENSITY– STRAWFOAM * ASTM D1622	1.1 lbs/ft ³ (17.6 kg/m ³)
K-FACTOR ASTM C518-INITIAL	0.222 BTU-inch / ft ² ·h·°F
R-VALUE	4.50 per inch
AIR BARRIER PROPERTIES ASTM E283	<0.01 cfm/ft ² (0.05 L/s/m ²)
@6.24 psf (300 Pa)	<0.0025 cfm/ft ² (0.0125 L/s/m ²)
@1.57 psf (75 Pa), extrapolated	
TACK-FREE TIME	Approx. 5 minutes
FULLY CURES 1" bead (at 70 °F 50% rh)	12-24 hours
CUTTABLE (1" Bead)	<1 hour
COMPRESSION STRENGTH ASTM D1621– PARALLEL	6.38 psi (43.9 kPa)
Closed Cell Content	77% Closed Cell
Open Cell Content ASTM D6226/ASTM D2856	23% Open Cell
FIRE RATING ASTM E814 (Modified)	Approved Alternative for maintaining the integrity of penetrations of fireblocking.
FIRE RATING ASTM E84 Caulking & Sealant Tested at 3/4" bead thickness	Flame Spread Index = 25 Smoke Developed =50
FIRE RATING CAN/ULC S102 Caulking & Sealant Tested at 3/4" bead thickness	Flame Spread Index = 15 Smoke Developed =25
FIRE RATING NFPA 286	Passed Seal openings and cracks in walls without a thermal barrier. (see approvals for limitations)

Approvals / Standards

Handi-Foam® One-Component Fireblock Sealant conforms to the following Classifications, Codes and Standards:

NFPA 286 testing allows for the use of Handi-Foam Fireblock without a thermal barrier when the maximum width must not exceed 1 7/16 inches and the nominal foam thickness must not exceed 1 1/2 inches. The maximum area of exposed sealants must not exceed 18 square inches per square foot.

VOC Content: 16% or 165 g/L (Calculated Value)

Evaluated per ICC-ES Report ESR-1868

NFPA 30B Classification: Level 2 Aerosol

UL Classified - File # R13919 Caulking and Sealants
ASTM E-84 (12.5%)
Flame Spread 25 Smoke Developed 50

ULC Classified - File # R13919 Caulking and Sealants
CAN/ULC S102 (12.5%)
Flame Spread 15 Smoke Developed 25

GREENGUARD Certification

Made in Norton, Ohio

Theoretical Yield

	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (12.7 mm)	VOLUME
12oz (340g) Straw Foam P30033	1996 ft (608 m)	887 ft (270 m)	499 ft (152 m)	.68ft ³ (19 L)
24oz (680g) Straw Foam P30192	3992 ft (1217 m)	1774ft (541 m)	998 ft (304 m)	1.36 ft ³ (39 L)
24oz (680g) Gun Foam P30181	4403 ft (1342 m)	1957 ft (596 m)	1101 ft (336 m)	1.50 ft ³ (42 L)

*Yields are based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application. Note that straw foam core density may be up to 30% higher than gun foam, and consequently, the theoretical yield is reduced accordingly, based on 1.1 lbs/ft³. Density is effected by the applicator.

Always read all operating, application and safety instructions before using any products from Fomo Products, Inc. Use in conformance with all local, state and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release Fomo Products of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call Fomo Products, Inc. 1 330.753.4585 or 1 800.321.5585.

NOTE: Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature and ambient conditions. Right to change physical properties as a result of technical progress is reserved. This information supersedes all previously published data. Yields shown are based on theoretical calculations and will vary depending on ambient conditions and particular application. Read all product directions and safety information before use. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane products in construction.

WARNINGS: Follow safety precautions and wear protective equipment as recommended. Consult Material Safety Data Sheet (MSDS) at www.fomo.com for specific information. Use only in a well ventilated area or with certified respiratory protection. NIOSH approved positive pressure supplied air respirator is recommended if exposure guidelines may be exceeded. Contents may be very sticky and irritating to skin and eyes, therefore wear safety glasses or goggles, nitrile gloves, and clothing that protects against dermal exposure when operating. If liquid chemical comes in contact with skin, first wipe thoroughly with dry cloth, then rinse affected area with water. Wash with soap and water afterwards, and apply hand lotion if desired. If liquid comes in contact with eyes, immediately flush with large volume of clean water for at least 15 minutes and get medical help at once. If liquid is swallowed, get immediate medical attention. Products manufactured or produced from these chemicals are organic and, therefore, combustible. Each user of any product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage. **KEEP OUT OF REACH OF CHILDREN.**

LIMITED WARRANTY: The Manufacturer warrants only that the product shall meet its specifications: THIS WARRANTY IS IN LIEU OF ALL WRITTEN OR UNWRITTEN, EXPRESSED OR IMPLIED WARRANTIES AND THE MANUFACTURER EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. The buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the replacement of the material. Failure to strictly adhere to any recommended procedures shall release The Manufacturer of all liability with respect to the materials or the use thereof. User of this product must determine suitability for any particular purpose, including, but not limited to, structural requirements, performance specifications and application requirements prior to installation and after product is applied.



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