



MORTAR SEAL

**ENSURES A
GAS-TIGHT,
SMOKE-TIGHT
SEAL FOR
LARGE OPENINGS**

FlameSafe®
Mortar Seal

General Description

FlameSafe® Mortar Seal is the most cost-effective endothermic firestop material available for projects with many large openings. It is a lightweight, low density product that is mixed with varying amounts of water to produce the proper consistency for pouring, pumping or troweling into the cavity. Common plaster machines may be used to mix and pump into large openings.

Mortar Seal is a paintable Portland cement-based product that will not shrink when cured to ensure a smoke-tight seal. It has a zero flame spread and does not contain solvents, asbestos or silicones. It produces virtually no toxic fumes or smoke when burned.

Physical Properties

Color	Light Red
Dry Density	30 pcf (481 kg/m ³)
Wet Density	54 pcf (865 kg/m ³) 7.0 lbs/gal (0.8 kg/L)
Water/Mortar Ratio	1:1 by weight
Yield per 22 lbs (10 kg.)	1200±50 cu. in. (19,664±819 cu. cm.)
Application Temp.	40°F to 90°F (4.4°C to 32°C)
Flame Spread	0 (zero)
Smoke Developed	≤25 rating
Working Time	30 to 60 minutes
Compression Strength	240 psi (1650 kPa) 7 day (ASTM C109) 320 psi (2200 kPa) 28 day

FEATURES

- Up to 3-Hour Fire Rating
- UL & ULC Approved/FM Certified
- Lightweight/Low Density
- Nonshrinking
- Nontoxic
- Economical
- Noncombustible/Nonhalogenated
- No Solvents
- No Outgassing
- Pourable/Pumpable/Trowelable

Applicable Standards

FlameSafe Mortar Seal is approved by Underwriters Laboratories Inc., and Underwriters Laboratories of Canada for up to a 3 hour rated system, in accordance with ASTM E814 (UL 1479/CAN4-S115), Fire Tests of Through-Penetration Firestops. The FlameSafe Mortar Seal is Factory Mutual certified.

Applications

FlameSafe® Mortar Seal can be used for all sized openings but is particularly suited for large openings with multiple metallic/cable penetrations.

Mortar Seal is endothermic — the cured mortar material contains chemically bonded water that absorbs heat transmitted by the penetrants. Systems have been tested for most noncombustible penetrants such as steel, copper and cast iron pipe through the most common types of masonry construction, poured concrete floors and walls, and concrete block walls. Systems are also available for cable trays, bus ducts, and multiple penetrants (metallic pipe and cables).

FlameSafe Mortar Seal can be used cost-effectively in conjunction with other FlameSafe products for large openings where combustible penetrants like plastic or insulated pipe require an intumescent product.

Installation

The surfaces of the opening to be sealed and penetrants must be free of loose dirt, dust or oil. Product should be stored in a dry area until ready for use. Installation temperature should be between 40° and 90°F (4.4° to 32°C).

For complicated openings with multiple penetrants, cables, or cable trays, apply mortar first to the space between penetrants, then fill cavity from bottom up in even layers. Allow mortar to set up or cure for one hour and then hand trowel for smooth finish.

Mortar Seal is conductive until dry. Do not apply to energized electrical conductors.

When installing mortar for aluminum cable trays, a protective primer should be applied on areas in which the mortar will come in direct contact with the cable tray to eliminate the possibility of corrosion.

Complete installation instructions are on product label.

Retrofitting/Maintenance

FlameSafe Mortar Seal can be easily drilled for installation of additional penetrants. Holes should be sealed with additional mortar or FlameSafe FS 900/FS 1900 Series Sealant.

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

Technical Support

IPC provides toll free Technical Support for all its products including FlameSafe Mortar Seal. Please call **1-800-334-8796** 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. You can also reach us at our Web site: <http://www.flamesafe.com>

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, IPC shall not be liable for any damage, direct or consequential, resulting from the use of this material or design. IPC's only warranty shall be to replace any of its products found to be defective.

Availability

FlameSafe Mortar Seal is available through authorized IPC distributors either in bags or poly pails.

Description	Cat. No.	Weight
Bag	FSM(B)	22lbs (10kg)
Poly Pail	FSM(P)	22lbs (10kg)



Product Application Key

Large Openings/
Noncombustible



Cable Protection



IPC offers distribution throughout the world. Please call for more information.



International Protective
Coatings Corporation
725 Carol Avenue
Oakhurst, NJ 07755

Toll Free 800-334-8796
Telephone 732-531-3667
Toll Free Fax 888-531-5192
Facsimile 732-531-5192
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DISTRIBUTED BY: