# SpecSeal® SSM Firestop Mortar

SpecSeal Solution

SpecSeal® Firestop Mortar is an economical, light-weight portland cement-based firestop product. This passive (non-intumescent) material utilizes a combination of heat sinking and insulating properties to provide an extremely high level of fire resistance.

SpecSeal® Firestop Mortar mixes with water to form a non-shrinking, high yield mortar that may be applied by pouring, pumping, or troweling.

Its low density and light weight means that less forming as well as less forming support is required. Its low density also makes re-penetration for retrofitting a simple task.

SpecSeal® Firestop Mortar is designed to dry quickly and will not crack or spall due to freezing or changes in temperature. Its adhesion is due to a chemical bond thus most installations require little or no mechanical anchoring.

## **Applications**

SpecSeal® Firestop Mortar is used to seal through-penetrations as well as construction gaps and blank openings. This product is also used in conjunction with other SpecSeal® Firestop Products such as SpecSeal® Firestop Collars and Wrap Strips.

SpecSeal® Firestop Mortar has been tested for a wide range of penetrants including metallic pipes, cables, cable trays (both steel and aluminum), busways, steel dutcts, as well as combustible penetrants such as plastic pipes or insulated metallic pipes (when used in conjunction with other SpecSeal® intumescent products).

SpecSeal® Firestop Mortar is suitable for openings of all sizes. Its method of application makes it specifically useful for medium to large openings with simple to very complicated combinations of penetrants.

## **Specifications**

The Firestopping material shall be a light-weight, fast drying portland cement based material. The density of the wet mortar shall be = 53-80 lb./cu. ft. The density of the dry mortar shall be = 24 to 26 lb./cu.ft. The specified mortar shall be approved for a wide range of applications including combustible and noncombustible penetrants when used by itself or in combination with other products from the same manufacturer. The firestop mortar shall be UL Certified and/or FM Systems Approved and tested to the requirements of ASTM E814 (UL1479) and CAN/ULC-S115.

#### **Specified Divisions**

Division 7	07 84 13	Penetration Firestopping
Division 22	22 00 00	Plumbing
Division 23	23 00 00	HVAC
Division 26	26 00 00	Electrical



#### **Features & Benefits**

- · Light weight less forming and support required
- Fast drying forms come down faster
- · Low density easy retrofit
- Economical highest yield per pound means lower installed cost
- Wide range of application includes aluminum cable tray
- Red color for easy identification and inspection
- Chemical adhesion reduces the need for expensive and time consuming concrete fasteners
- Versatile performer for a wide range of complex applications
- · Paintable when dry





## **Performance**

SpecSeal® Firestop Mortar is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479) and CAN/ULC-S115. Systems have been tested for all common forms of masonry construction and most common penetrants with ratings up to 3 hours.

STI designed firestop systems are engineered to maximize the fire resistance of the seal by not only sealing off the spread of fire and hot gasses but also by minimizing the amount of heat conducted through the assembly. Thus all systems have been designed to provide T Ratings capable of matching the rating of the wall or floor assembly (where possible) when tested without penetrants.



## SpecSeal® SSM Firestop Mortar



PHYSICAL PROPERTIES						
Color	Pale red					
Odor	No perceptible odor					
Density Mixed (Wet)	53 to 80 lb/cu ft = $7.1-10.7$ lb/gal ( $0.85-1.28$ kg/L)					
Density (Dry Mortar)	24 to 26 lb/cu ft = 3.21-3.4 lb/gal (0.38-1.42 kg/L)					
Flame Spread*	0					
Smoke Development*	Less than 5					
Application Temperature	35°F (2°C) to 100°F (38°C)					
In Service Temperature	-10°F (-23°C) to 200°F (93°C)					
Storage Temperature	No Limit					
Ratio of Water/Mortar	18.1/22 to 22/22					
Yield (Per 22 lb.)	1,150 cu. in (18.8 L) to 1,300 cu. in. (21.3 L)					
Open Time	30 Minutes working time					
Shelf Life	No Limit					

<sup>\*</sup>Tested to ASTM E84 (UL723) at 14% surface coverage (modified test for sealants and caulks)

#### Limitations

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

#### Maintenance

Inspection: Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® Firestop Mortar per the original approved design.

Retrofit: When adding or removing penetrants, care should be taken to minimize damage to the seal. Reseal using SpecSeal® Mortar at the original design depth or SpecSeal® Sealant at the depth required for the type of penetrant being sealed (See Sealant Product Data Sheet for details and requirements). NOTE: New penetrants of a different nature than the original design may require a totally new firestop design or extensive modifications to the existing design. Reseal all openings as per the requirements of the new design.

## System Selection

To find your firestop system or create a submittal, visit <a href="https://systems.stifirestop.com/">https://systems.stifirestop.com/</a> to use System Search & Submittal Builder. You may also visit the <a href="https://systems.stifirestop.com/">UL Online Certifications Directory/UL Product iQ $^{IM}$ </a> for complete listings. (Firestop Systems).

#### **Technical Service**

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website <a href="https://www.stifirestop.com">www.stifirestop.com</a> including Safety Data Sheets (SDS's).



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## **Precautionary Information**

WARNING: THIS PRODUCT IS CONDUCTIVE WHEN WET AND WILL CREATE A PATH TO GROUND UNTIL DRY. DO NOT INSTALL IN CONTACT WITH ENERGIZED ELECTRICAL CONDUCTORS. EXERCISE CARE WHEN ENERGIZING PENETRANTS. THIS PRODUCT CONTAINS PORTLAND CEMENT AND LIME. DO NOT INGEST. AVOID CONTACT WITH EYES. DO NOT INHALE.

Consult Safety Data Sheet (SDS) for additional information on the safe handling and disposal of this material. Normal safety-wear such as rubber gloves, safety glasses, and dust mask used to handle conventional cement-based products should be worn.

## **Availability**

SpecSeal® SSM Firestop Mortar is available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit <a href="https://www.stifirestop.com">www.stifirestop.com</a>.

ORDERING INFORMATION							
Catalog Number	UPC Number	Description	Packaging	Weight (Each)	Nom. Yield (Mixed)		
SSM106	730573041062	SpecSeal® SSM Firestop Mortar	Poly Pail	22.87 lbs (10.37 kg)	1,225 in <sup>3</sup> (20.1 L)		
SSM22B	730573042007	SpecSeal® SSM Firestop Mortar	Fiber Bag	22.41 lbs (10.17 kg)	1,225 in <sup>3</sup> (20.1 L)		

IMPORTANT NOTICE: ALL STATEMENTS, TECHNICAL INFORMATION, AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON TESTING BELIEVED TO BE RELIABLE, BUT THE ACCURACY AND COMPLETENESS THEREOF IS NOT GUARANTEED.

STI TYPICALLY WARRANTIES ITS PRODUCTS FOR ONE FULL YEAR. FOR COMPLETE DETAILS OF OUR STANDARD WARRANTY, PLEASE VISIT WWW.STIFIRESTOP.COM/LEGAL/WARRANTY MADE IN THE USA - @ 2021 SPECIFIED TECHNOLOGIES INC.



