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1. Method 1: Activate “Show/Hide ¶” to reveal formatting symbols. The default shortcut for this setting is ctrl+* (ctrl+shift+8).
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Specifier Note: This guide specification has been prepared using the CSI® (Construction Specification Institute) *MASTERFORMAT*® 2018 Edition.

The purpose of this guide specification is to assist the specifier in correctly specifying sealant products and execution. The specifier needs to edit the guide specifications to fit the needs of specific projects. Editable text fields are highlighted in orange for visibility. Contact a Henkel OSI® Specialist to assist in appropriate product selections.

This guide provides for OSI® Flameseal; Fire, Smoke & Draft Stop Sealant. OSI® Flameseal is a gun grade, non-flammable, latex based fire stopping sealant. This one component sealant is designed for use in both residential and commercial fire stopping applications. Developed to seal service penetrations and joints in fire separations and firewalls, it prevents the passage of flame, smoke, and fumes under actual fire conditions of 1, 2, and 3 hour fire resistance rated systems. It improves STC values and upgrades sound quality. OSI® Flameseal utilizes a special waterborne technology that is both non-flammable and non-hazardous and cleans up easily with water. Cured product is also mold and mildew resistant.

DISCLAIMER: This Henkel Corporation Guide Specifications has been written as an aid to the professionally qualified specifier and design professional. The use of this guideline specification requires the sole professional judgment and expertise of the qualified specifier and design professional to adapt the information to the specific needs for the building owner and the project, to coordinate with their construction document process, and to meet all the applicable building codes, regulations, and laws. HENKEL EXPRESSLY DISCLAIMS ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OF THIS PRODUCT FOR THE PROJECT.

OSI® Flameseal Fire, Smoke, & Draft Stop **SECTION 07 84 43 – Joint Firestopping**

PART 1 GENERAL

1.01 SECTION INCLUDES (Specifier Note: edit the following [A. This section includes the following] to meet project specific applications and conditions.)

- A. This section includes the following:
1. OSI® Flameseal: Application of latex-based sealant specifically designed for use in both residential and commercial fire stopping applications.
- B. RELATED SECTIONS: (Specifier Note: edit the following [B. RELATED SECTIONS] to meet project specific applications and conditions. Specify section numbers in accordance with CSI® *MASTER FORMAT*® and section titles referenced. Remove any of the following that do not apply.)
1. 01 00 00 General Requirement
 2. 03 00 00 Concrete
 3. 04 00 00 Masonry

4. 05 10 00 Structural Metal Framing
5. 06 10 00 Rough Carpentry
6. 07 26 00 Vapor Retarders
7. 07 27 00 Air Barriers
8. 07 84 00 Firestopping
9. 07 86 00 Smoke Seals
10. 07 90 00 Joint Protection
11. 07 92 00 Joint Sealants
12. 09 20 00 Plaster and Gypsum Board
13. 09 80 00 Acoustic Treatment
14. 22 00 00 Plumbing
15. 23 00 00 Heating, Ventilating, and Air Conditioning
16. 26 00 00 Electrical

1.02 REFERENCES

- A. ASTM International (ASTM)
 1. ASTM D2243 – Standard Test Method for Freeze-Thaw Resistance Of Water-Borne Coatings
 2. ASTM D2370 – Standard Test Method for Tensile Properties of Organic Coatings
 3. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials
 4. ASTM E90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
 5. ASTM E814 – Standard Test Method for Fire Tests of Penetration Firestop Systems
 6. ASTM E-1399 – Cyclic Movement and Measuring the Minimum and Maximum Joint Widths of Architectural Joint Systems
- B. Underwriter Laboratories, Inc. (UL)
 1. UL 1479 – Standard for Fire Tests of Penetration Firestops
 2. UL 2079 – Standard for Tests for Fire Resistance of Building Joint Systems
 - a. Contact manufacturer for complete list of UL certified assemblies.
 3. UL *GREENGUARD*[®] certified
- C. California Air Resources Board (CARB)
- D. South Coast Air Quality Management District (SCAQMD)

1.03 SUBMITTALS

- A. Refer to section 01 33 00 – Submittal Procedures ([Specifier Note: Delete all that do not apply or have not been submitted.](#))
 1. 01 33 13 – Certificates
 2. 01 33 16 – Design Data
 3. 01 33 19 – Field Test Reporting
 4. 01 33 23 – Shop Drawings, Product Data, and Samples
 5. 01 33 26 – Source Quality Control Reporting
 6. 01 33 29 – Sustainable Design Reporting

- B. Product Technical Data: Submit most current manufacturer technical literature for each type of product used including the following, but not limited to:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Samples: All products specified. Verify performance criteria and installation procedure.
- D. Quality Assurance Submittals
 - 1. Manufacturer Instructions: Provide manufacturer's written installation instructions.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Installer to comply with quality assurance requirements outlined in ASTM E814 when using joint firestopping.
 - 2. Installation shall be in accordance with manufacturer's installation guidelines and recommendations.
 - 3. Installer shall have documented history of successful project execution and installation of said product.
- B. Pre-Construction Mock-Up: (Specifier Note: Mock-ups are recommended for all projects using OSI® Flameseal. Mock-up requirement will likely be included in the specification section for the wall cladding and/or windows. Include OSI® Flameseal as part of the required mock-up.)
 - 1. Install mock-up prior to installation using OSI® Flameseal joint firestopping including surface preparation per joint firestopping manufacturer's instructions. Obtain Architect/Engineer/Consultant or Owner's approval of joint treatments to establish adhesion, appearance, and workmanship standard.
 - a. Mock-Up Size: insert mock up dimensions
 - b. Mock-Up Substrate: insert substrate vertical surfaces as agreed to prior to Mock-up installation.
 - c. Maintain mock-up during construction for workmanship standard.
 - d. Mock-up to be incorporated into final construction upon Architect/Engineer/Consultant/Owner's written approval.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, handle, and protect all products in accordance with Section 01 60 00, Product Requirements. (Specifier Note: Review the following. Delete all that do not apply.)
 - 1. 01 61 00 – Common Product Requirements
 - 2. 01 64 00 – Owner-Furnished Products.
 - 3. 01 65 00 – Product Delivery Requirements
 - 4. 01 66 00 – Product Storage and Handling Requirements
 - a. 01 66 13 – Product Storage and Handling Requirements for Hazardous Materials

- b. 01 66 16 – Product Storage and Handling Requirements for Toxic Materials
- B. Deliver all OSI®® Flameseal materials and components in manufacturer’s original, unopened, undamaged containers with identification labels intact.
- C. Comply with manufacturer's ordering instructions and lead-time(s) required to avoid construction delays.
- D. Store OSI®® Flameseal materials as recommended by manufacturer. Refer to manufacturer Technical Data Sheet (TDS) available at www.ositough.com.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Verify substrates and ambient air temperature at project site before, during, and after application to assure compliance with manufacturer’s recommendations.
 - 1. Weather Conditions:
 - a. Apply in accordance with manufacturer's instructions. Refer to product Technical Data Sheets (TDS) available at www.ositough.com.
 - b. Compliance: Follow manufacturer's specific safety, health and environmental recommendations per most recent Safety Data Sheets, technical bulletins, and instructions. Handle all solvents in compliance with applicable EPA, OSHA, and VOC requirements regarding health/safety standards.

1.07 WARRANTY

- A. OSI®® Limited Warranty:
 - 1. OSI®® products are warranted by Henkel Corporation to be free from defects in materials when used as directed. Henkel’s sole obligation shall be, at its option, to replace or refund the purchase price of product proven to be defective. Henkel makes no other warranty – express or implied – including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE and will not be liable for consequential or incidental damages. This Limited Warranty gives you specific legal rights, which vary from state to state.
 - a. For warranty assistance, contact Henkel at 1.800.624.7767 M-F 9:00 AM to 4:00 PM ET.

PART 2 PRODUCTS(Specifier Note: Product Information is proprietary to OSI® products. If additional products are required for competitive procurement, contact the Henkel Corporation for assistance – 1-800-624-7767, Mon. – Fri. 9:00AM – 4:00PM ET)

2.01 MANUFACTURER

- A. Approved Manufacturer:
 - 1. Henkel Corporation:
 - a. Address: 26235 First Street, Westlake, OH 44145
 - b. Phone: 1-866-591-2178
 - c. Web Address: <http://www.ositough.com>.

2.02 MATERIALS

- A. Description: OSI® Flameseal – Latex based fire, smoke, & draft joint sealant.
1. Appearance: Thick paste
 2. Color: Brick Red
 3. Composition: Vinyl acetate polymers
 4. Building System Applications: Seal service penetrations and joints in fire separations and firewalls to prevent the passage of flames, smoke, and fumes under actual fire conditions of 1, 2, and 3 hour fire resistance rated systems.
 5. Freeze/Thaw Stability: 3 Freeze/Thaw Cycles
 6. VOC Content (CARB): <1.5% by weight
 - a. SCAQMD rule 1168: 32.5 g/L
 7. Shelf Life: 24 months from date of manufacture (unopened)
- B. Application Properties:
1. Application Temperature:
 - a. Apply between 45°F (7°C) to 90°F (32°C)
 2. Tooling/Open Time:
 - a. 20-30 minutes [At 70°F and 50% relative humidity]
 3. Cure Time:
 - a. 7-21 days or longer [Time is dependent on temperature, humidity, porosity of substrate and depth of sealant applied]
- C. Performance Properties:
1. Service Temperature: Up to 120°F (49°C)
 2. Capabilities: Will control the spread of fire, smoke, fumes and water for up to 4 hours as prescribed by ASTM E814 testing.
 3. Elasticity: Up to 33%
 4. Elongation (ASTM D2370): 1400%
 5. Surface Burning Characteristics (ASTM E88):
 - a. Flame Spread: <25
 - b. Smoke Development: <50
 6. STC – Breached Wall Recovery (ASTM E90): 59 [Tested in a U411 Wall]
- D. Label Precautions:
1. CAUTION! Contains vinyl acetate. May cause skin, eye, and respiratory irritation. Avoid contact with eyes and skin. Use with adequate ventilation. Do not swallow.
 2. FIRST AID: If swallowed do not induce vomiting, call a physician or Poison Control center immediately.
 3. For eye contact, flush with water for 15 minutes, call a physician.
 4. For skin contact, wash thoroughly with soap and water.
 5. KEEP OUT OF THE REACH OF CHILDREN.
 6. Refer to the Safety Data Sheet (SDS) for further information.

2.03 ACCESSORIES

- A. General:
1. Verify compatibility of any product that makes physical contact with or is used in combination with OSI® Flameseal.

- B. Product Specific Application Equipment & Tools: (Specifiers Note: Remove sections below that do not apply to project specific conditions. Include additional sections that aren't explicitly outlined below but are part of project scope and conditions.)
1. Utility Knife
 2. Caulking Gun
 3. Trowel
 4. Puncturing tool (to puncture interior cartridge seal)

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify substrate and surface conditions are in accordance with joint firestopping manufacturer recommended tolerances prior to installation.

3.02 PREPARATION

- A. General:
1. Installer shall refer to manufacturer approved installation instructions and individual product Technical Data Sheets (TDS) for required environmental installation conditions and surface/substrate preparation. www.ositough.com

3.03 INSTALLATION

- A. General:
1. Refer to appropriate Agency Fire Resistance Directories for specific details on installations; or contact the Firestop Hot Line: 1-800-810-1788 for detailed instructions (11:00AM – 7:00 PM EST)
 2. Refer to product Technical Data Sheets (TDS) available at www.ositough.com.

3.04 FIELD QUALITY CONTROL

- A. Notify manufacturer's designated representative to obtain periodic observations of joint firestopping installation.
- B. Field Adhesion testing is recommended for unverified or unapproved substrates. Contact designated manufacturer representative for consultation.

3.05 CLEANING AND PROTECTION

- A. For additional information refer to product Technical Data Sheets (TDS) available at www.ositough.com.

END OF SECTION