

FIRE PATCH

FURNACE & RETORT CEMENT

PRODUCT NAME

Fire Patch - Furnace & Retort Cement

MANUFACTURER

Everkem Diversified Products
 120 Regent Drive, Winston Salem, NC 27103
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PRODUCT DESCRIPTION

Fire Patch is a one-part, high-temperature refractory and retort cement. Fire Patch can withstand temperatures in excess of 2700°F (1482°C) and is classified as a medium-duty refractory mortar as per ASTM-C199, possessing a PCE value of 17-18.

APPLICATIONS

- Repairing and sealing openings, cracks, joints, and seams in refractory applications.
- Furnaces, fireboxes, stoves
- Chimneys, flue pipes
- Suitable for use in applications where resistance to temperatures in excess of 2700°F (1482°C) is required

ADVANTAGES

- Pre-mixed
- Ready to use
- Smooth consistency
- Withstands temperatures in excess of 2700°F (1482°C)
- Pyrometric Cone Equivalent (PCE) of 7 - 8

LIMITATIONS

- Do not allow product to get wet prior to heat cure

AVAILABLE COLORS

Fire Patch is available in Gray

TECHNICAL DATA

TYPICAL PHYSICAL PROPERTIES

Typical Uncured Properties

Chemistry:	Silicate mortar
Odor:	Low odor
Uncured State:	Glossy paste
Application Temperature:	40°F to 100°F (4.4°C to 37.78°C)
Tooling Time:	30 minutes
Full Cure Time:	24 hours until air-hardened; Full Cure achieved after firing for heat-cure
Shelf Life:	1 year

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TECHNICAL DATA (CONT.)

TYPICAL PHYSICAL PROPERTIES

Typical Cured Properties

Curing conditions of 75°F (24°C) and 50% relative humidity)

Cured State:	Solid mortar
ASTM-C199:	Tested to ASTM-C199 "Standard Test Method for Pier Test Refractory Mortars"
ASTM-C24:	Tested to ASTM-C24 "Standard Test Method for Pyrometric Cone Equivalent of Fireclay and High-Alumina Refractory Mortars" with PCE value of 7-8
ASTM-E136:	Meets ASTM-136 "Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 1382°F (750°C)"
ASTM-E84:	Meets ASTM-E84 "Standard Test Method for Surface Burning Characteristics of Building Materials" Flame Spread: 0; Smoke Developed: 0
Service Temperature:	-30°F to 2700+°F (-34.4°C to 1482+°C)
V.O.C. Content:	< 1 g/l

APPLICABLE STANDARDS & SPECIFICATIONS

SPECIFIED DIVISIONS

- Section 04 01 00 - Maintenance of Masonry
- Section 04 50 00 - Refractory Masonry

APPLICABLE STANDARDS/SPECIFICATIONS

- ASTM-C199 - Standard Test Method for Pier Test Refractory Mortars
- ASTM-C24 - Standard Test Method for Pyrometric Cone Equivalent of Fireclay and High-Alumina Refractory Mortars
- ASTM-E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 1382°F (750°C)
- ASTM-E84 - Standard Test Method for Surface Burning Characteristics of Building Materials

ECOSEAL STANDARDS

- V.O.C. Content: <1 g/l

INSTALLATION

SURFACE PREPARATION

Surfaces should be clean of any debris or material that may prevent or deter adhesion. Such debris includes, but is not limited to: dirt, frost, loose particles, existing sealants, grease, oils, rust, etc.

APPLICATION

1. Apply thin layer of cement to cover all openings. Ensure material is pressed tightly into area being repaired or sealed, filling joints or openings completely.
2. Apply a second moderate layer of cement and smooth with trowel, avoiding any twisting motions.
3. IMPORTANT - Do not allow material to get wet prior to heat cure.
4. There should be no visible passage upon completion of the firestop application.
5. The product should be left to air-cure for at least 24 hours, but no more than 30 days.
6. Once the product is air-cured, begin firing for heat-cure. Begin firing at a low temperature. Do not start with a hot fire. Gradually increase the temperature to allow the product to harden into a solid, durable body, free from pores. For best results, the heat-facing side of the product should be heated to at least 650°F (340°C).

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INSTALLATION (CONT.)
CLEANUP

Excess caulk should be cleaned off tools and nonporous surfaces while it is in an uncured state, using a dry cloth or paper towels. Excessive amounts may require the use of a solvent such as acetone or mineral spirits. The cured compound should be cut, chiseled, ground, or sanded away.

AVAILABILITY

Fire Patch and other Everkem products are available from stocking distributors nationwide or direct from the manufacturer. For the name and telephone number of the nearest Everkem representative, call the number below or visit www.everkemproducts.com

PACKAGING OPTIONS

PACKAGING OPTIONS			
Part #	Description	Packaging	Color
FP-10	Fire Patch - 10.1 Fl. Oz. (298.7mL) Tube	12 tubes/case	Gray
FP-8	Fire Patch - 8 Fl. Oz. (236.59mL) Cup	24 cupss/case	Gray
FP-16	Fire Patch - 16 Fl. Oz. (473.2mL) Cup	18 cups/case	Gray
FP-32	Fire Patch - 32 Fl. Oz. (946.4mL) Tub	12 tubs/case	Gray
FP-64	Fire Patch - ½ Gallon (1.89L) Pail	8 pails/case	Gray
FP-128	Fire Patch - 1 Gallon (3.79L) Pail	4 pails/case	Gray
FP-25	Fire Patch - 2 Gallon (7.57L) Pail	Each	Gray

Additional packaging options/colors may be available upon request

MAINTENANCE

Inspect sealant joint at a minimum of every five years. If sealant or bond of sealant is damaged, completely remove or cut away sealant in the damaged area, clean surface, and reapply sealant.

TECHNICAL SERVICES

Everkem representatives are available to assist you in selecting the sealant or adhesive appropriate for your application. For further assistance contact your local Everkem Diversified Products representative, call our corporate office at 1-800-638-3160, or contact us via our website at www.everkemproducts.com.

WARRANTY

Everkem Diversified Products warrants this product's performance provided it is properly stored and applied within 1 year. If when applied as directed this material proves to be defective, return the remaining product and proof of purchase for refund or replacement of product exclusive of labor or cost of labor. This is the sole and exclusive remedy for defects of product failure. The determination of eligibility for this warranty shall be made at the sole discretion of Everkem Diversified Products and any decision made shall be final. This warranty is in lieu of any other warranties, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose, and in no instance will Everkem Diversified Products be liable for damages in excess of the purchase price, except where such exclusion or limitation is prohibited by state law. Users must read and follow the directions of the current Technical Data Guide and SDS prior to product use. The user determines the suitability of the product intended for use and assumes all risks. Recommendations for the use of this product are based on tests we believe to be reliable. The manufacturer and seller are not responsible for results where the product is used under conditions not in strict accordance with our published recommendations and in applications considered suitable for this product. Everkem Diversified Products shall not be responsible for the use of this product in a manner to infringe upon any patent or any other intellectual property rights held by others.

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CAUTIONS



WARNING: CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION. MAY CAUSE RESPIRATORY IRRITATION. Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling. **IF ON SKIN:** Wash with soap and water. Remove contaminated clothing, washing before reuse. If skin irritation occurs: Get medical attention. **IF IN EYES:** Rinse cautiously with water. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. **IF INGESTED:** Wash mouth with water. Remove victim to fresh air. Give small quantities of water to drink. Do not induce vomiting. Store locked up. Dispose of contents in accordance with all local, regional, national, and international regulations. **KEEP AWAY FROM CHILDREN.**



WARNING: This product can expose to chemicals including Titanium dioxide, Carbon black, and respirable powder, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

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