Pillow *Firestop Intumescent Pillows*

PRODUCT DESCRIPTION

PFP Partners' Pillows is a pliable brick shape firestopping device. The Pillow's brick shape makes firestopping medium to large through-penetration easy, just stack and compress. When exposed to fire or very high temperatures, the core of the intumescent Pillow will expand and seal around penetration(s) forming a solid barrier against the spread of fire, smoke, fumes and toxic gases in 1, 2 and 3 hour rated assemblies.

The Pillows are easy to install and reusable. This makes the Pillow an ideal choice fore firestopping through-penetrations that may require frequent retrofitting (i.e. cable trays, fiber optics, control cables and electrical conduit).

Pillows are non-hazardous, safe for the environment and do not require special shipping procedures. It does not contain solvents and are VOC compliant.

GENERAL APPLICATIONS AND USES

Pillows have been designed specifically to seal voids, cables, cables trays and metallic through-penetrations against the spread of fire, smoke, fumes and toxic gases in 1, 2 and 3 hour rated assemblies.

Remove any dust, dirt and oil from surfaces with dry cloth and remove sharp edge that may snag the pillows during installation and/or removal. The pillow is installed with the 9 inch (229 mm) dimension projecting through wall or floor assembly. Stack and compress (minimum 25 percent) pillows. Start by installing vertical pillows, against the edge of the opening, subsequent pillows are then stacked and compressed in horizontal rows between the vertical rows. Any voids between pillows or between pillows and penetrations should be sealed with either PFP Partners 3300PS (recommend for opens that are subject to retrofitting or re-entry) or PFP Partners 3600EX.

The Pillow has been tested and listed as an effective firestop by Intertek Testing Services - Warnock Hersey (WHi) and meets the requirements of ASTM E814, CAN/ULC S115 & UL 1479.

Pillows must be installed in compliance with the Intertek Testing Services – Warnock Hersey listed system designs. Refer to their published Fire Resistance Directories or website. The manufactures recommended this product be installed by those trained in proper installation procedures (TQ Card) and be able to read and understand a firestop system design listing (i.e. UL or WHi listing designs).

Tested and Classified for use in Fire Rated Assemblies:

- Concrete Floors
- Concrete Walls
- Framed Walls

Firestopping Penetration Items:

- Voids
- Grouped penetrations
- Metallic pipe, conduit and tubing
- Electrical, cables, cable trays, busways

SECTION CONTENTS

Pillow

PACKAGING

FSP392 – 3 inches by 9 inches by 2 inches (76 mm by 229 mm by 51 mm)

FSP692 – 6 inches by 9 inches by 2 inches (152 mm by 229 mm by 51 mm)

COLOR

Red

PILLOWS

PRODUCT FEATURES

- Pliable Brick – non-hardening with a highly intumescent core
- Environmental Safe – No harmful components, solvent free and is VOC compliant – LEEDs – California Air Resource Board SCM Districts – Rule 113 – South Coast Air Quality Management Districts (SCAQMD)
- Can be shipped without restriction and is environmentally friendly
- Improves STC Values and upgrades sound quality
- Easily to install and reusable
- Post-consumer recyclables

TECHNICAL DATA

Physical State	Pliable red poly brick
Application Temperature	33°F to 90°F (1°C to 32°C)

Expansion Temperature	320°F (160°C)
In-Service Temperature	Up to 120°F (49°C)

- Shelf Life – Not applicable when stored in its original undamaged, unopened packaging (store in a cool dry place 40°F to 90°F (4°C to 32°C). A stock rotation program is recommended.

PILLOWS

INSTALLATION GUIDELINES AND SUGGESTED USE

Application

- Method: Installed by hand.

Installation Preparation

- Pillows should be applied to surfaces that are clean and free of dust, dirt and grease.

Health and Safety

- Hand and eye protection is highly recommended, consult the MSDS.

First Aid

- Incase of contact with eyes, flush w ith large amount of water and consult a physician. For skin contact, wash thoroughly with soapy water. Contact a physician if skin irritation develops or persists. Consult the MSDS for additional information.

Special Application

- Pillows should not be installed in submerged conditions. Do Not expose Pillows to water.

MAINTENANCE

The Pillows do not require maintenance after installation. Use only materials approved by through-penetration firestop manufacturer as suitable for repair of original seal. Never mix different manufacturer's firestopping materials.

WARRANTY

Passive Fire Protection Partners will not accept liability for more than product refund. Any claim regarding product defect must be received in writing within 1 year from date of shipment. Passive Fire Protection Partners makes no other warranty or guarantee, expressed or implied, including warranties or fitness for a particular purpose or merchantability. The seller shall assume on other liability for incidental or consequential damages arising out of the sale or use of this product.

CALCULATION

Measure the horizontal and vertical dimensions of the opening in inches. Divide the vertical dimension by 6 and multiple by 2 gives the number of vertical pillows required. Subtract 2 x 1.5 (compressed vertical pillows) from the overall horizontal dimension and then divided by 6. This gives the number of columns of compressed pillows that will be required. Divide the vertical dimension by 1.5 to get the number of rows required. Multiple the required rows by the required columns and add the number of vertical pillows will give the total number of pillows required for a blank opening.

When a penetrant is present, subtract the number of pillows displaced by the penetrant. Horizontal dimension of the penetrant divided by 6. Vertical dimension of the penetrant multiplied by the percentage of fill then divide by 1.5. Multiple the number of rows by the number of columns gives the number of pillows displaced. Subtract the number of pillows displaced from the total blank opening number will give the total required pillows.

Example:

A concrete wall opening that is 36 in. by 6 in. with a 4 in. by 24 in. cable tray filled to 50 percent.

Number of pillows required for the blank opening:

1. **VP** - Number of vertical pillows: (6 in. / 6) * 2 = 2 FSP692 vertical pillows
2. **NPC** - Number of pillow columns: (36 in. – (2*1.5)) / 6 = 5.5 5 columns of FSP692 and 1 columns of FSP392
3. **NPR** - Number of pillows rows: 6 / 1.5 = 4 rows
4. **TPB** - Total number of pillows for blank opening is: (VP + (NPC*NPR)) = 2 FSP692 + (5 (FSP692)*4 + 1(FSP392) *4) = 22 FSP692 + 4 FSP392

Number of pillows displaced by the cable tray is:

1. **NPCD** - Number of pillow columns displaced: 24 in. / 6 = 4 4 columns of FSP692
2. **NPRD** - Number of pillows rows displaced: 4 in. multiplied by 50 percent (percentage of fill) (4 * .5) / 1.5 = 1.3 rows equals 1 row (compression will be great in cable tray then required)
3. **TPD** - Total number of pillows displaced by cable tray is: (NPCD*NPRD) = (4 (FSP692)*1) = 4 FSP692

Overall number of pillows required:

TPB – **TPD** = 22 (FSP692) – 4 (FSP692) + 4 (FSP392) = 18 (FSP692) and 4 (FSP392)

ORDERING INFORMATION

Pillows

Cat No.	Size	Color	Applied	Units per Case	Units per Skid
PIL-F1	2 inches x 6 inches x 9 inches (51 mm x 152 mm x 229 mm)	Red	By Hand	10	480
PIL-F2	2 inches x 3 inches x 9 inches (51 mm x 76 mm x 229 mm)	Red	By Hand	20	960

Passive Fire Protection Partners
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