

**3M**

# Fire Barrier Plenum Wrap 5A

## Product Data and Installation Instructions



## 1. Product Description

3M™ Fire Barrier Plenum Wrap 5A is a fire resistant wrap consisting of a patented inorganic blanket encapsulated with a scrim-reinforced foil. It provides a flexible, non-combustible enclosure for cables and pipe in return air plenums as tested to UL 910. Use with single and multiple 1 in. (25,4 mm) and larger plastic pipe and cabs. This non-asbestos wrap contains a safer fiber construction\* and installs easily because of its high flexibility and strength.

### Features

- Tested to UL 910 flammability test
- Lightweight and with high flexibility for easy installation
- Foil encapsulated with unique center overlap seam for blanket strength, protection and less dust
- Safer fiber construction\*

\*Has been demonstrated to be soluble in the lungs according to EU 67/548/EWG, Note Q for biopersistence.

## 2. Applications

3M Fire Barrier Plenum Wrap is classified by Omega Point Laboratories for use on cables and on PVC, CPVC, PB, PE, PP, PVDF and ABS pipe in return air plenums. The 3M Fire Barrier Plenum Wrap 5A provides protection reducing external flame propagation and smoke generation for plastic pipes that are installed in ducts, plenums and other spaces used for environmental air.

## 3. Availability

Product	Unit	Size	Units/ ctn.	Wt./ ctn.
3M Fire Barrier Plenum Wrap 5A	Roll	1/2 in. x 24 in. x 50 ft. (12,7 mm x 60,9 cm x 1524 cm)	1	45 lbs. 20 kg
3M Fire Barrier Plenum Wrap 5A	Roll	1/2 in. x 48 in. x 25 ft. (12,7 mm x 121 cm x 762 cm)	2	90 lbs. 40 kg

## 4. Typical Physical Properties

Blanket Color: gray/green  
Weight: 0.46 lbs./sq. ft. (2.15 kg/sq. m)

## 5. Performance

3M Fire Barrier Plenum Wrap 5A has been tested in accordance with the following:

ASTM C 411  
ASTM C 518  
ASTM E 84  
ASTM E 136  
UL 910

UL 910 test results covering PVC pipe (this test method does not cover construction requirements for plastic pipe.):

- Maximum Flame Spread (Ft.) 0.01
- Maximum Smoke (Optical Density) 0.01
- Average Smoke (Optical Density) 0.00

## Surface Burning Characteristics (ASTM E 84)

Foil Encapsulated Blanket:

Flame Spread: 0  
Smoke Developed: 0

Blanket:

Flame Spread: 0  
Smoke Developed: 0

## Listing

Omega Point Laboratories Inc., Design Numbers:  
PP 100 F and PP 101 F

## 6. Installation Techniques

3M Fire Barrier Plenum Wrap 5A system should be installed in accordance with the following installation instructions.

## Material and Equipment

- 3M Fire Barrier Plenum Wrap 5A, 1/2 in. (12,7 mm) min. thickness, 24 in. wide by 50 ft. long, (60,9 cm x 1524 cm) and 48 in. wide by 25 in. long, (121 cm x 762 cm) which is totally encapsulated with an aluminum foil scrim.
- Minimum 3/4 in. (19 mm) wide filament tape.
- Carbon steel or stainless steel banding material, minimum 1/2 in. (12,7 mm) wide, minimum 0.015 in. (0.38 mm) thick, with steel banding clips.
- 16 gauge steel tie wire as alternate for banding.
- Hand banding tensioner, crimping tool, and banding cutter.

## Storage

The 3M Fire Barrier Plenum Wrap 5A must be stored in a dry warehouse environment. Pallets should not be stacked.

## Methods:

- A. Cut 3M Fire Barrier Plenum Wrap 5A to a length sufficient to wrap completely around the perimeter of the pipe, plus provide an overlap of not less than 1 in. (25,4 mm). 3M Fire Barrier Plenum Wrap 5A should be completely encapsulated with no exposed fiber. Aluminum foil tape is used to seal cut edges of the blanket. To minimize waste, 3M Fire Barrier Plenum Wrap 5A material should be rolled out tautly before measuring.
- B. Temporarily secure 3M Fire Barrier Plenum Wrap 5A in place using filament tape.
- C. Cut the next adjacent wrap of 3M Fire Barrier Plenum Wrap 5A to completely wrap around the perimeter of the pipe with enough excess to provide an overlap of not less than 1 in. (25,4 mm). A 1 in. (25,4 mm) longitudinal overlap is required onto the previous adjacent wrap.

D. Install banding or tie wire around the 3M Fire Barrier Plenum Wrap to hold it in place. Place the bands or tie wires 1/4 in. (6 mm) from each edge of the blanket and at the midpoint of the blanket, 11-3/4 in. (28,5 mm) on center). Tension the banding or tie wire to hold the 3M Fire Barrier Plenum Wrap 5A snugly in place, compressing the foil but not cutting the foil. Bands or wire may be hand tightened.

### 7. Maintenance

No maintenance is required when installed in accordance with the 3M Installation Instructions. Once installed, if any section of the 3M Fire Plenum Wrap 5A is damaged so that the blanket is damaged, the following procedures will apply:

- The damaged section should be removed by cutting the steel banding or removing the clips holding it in place.
- A new section of the same dimension should be cut

from a roll of 3M Fire Barrier Plenum Wrap 5A, either 24 in. (60,9 cm) or 48 in. (121 cm) wide.

- The new section should be placed and fitted ensuring the same overlap that existed previously.
- The steel banding should be placed around the material and tensioned so as to sufficiently hold the 3M Fire Barrier Plenum Wrap 5A in place.
- If the blanket has not been damaged but the foil has ripped, seal the rip with aluminum foil tape.

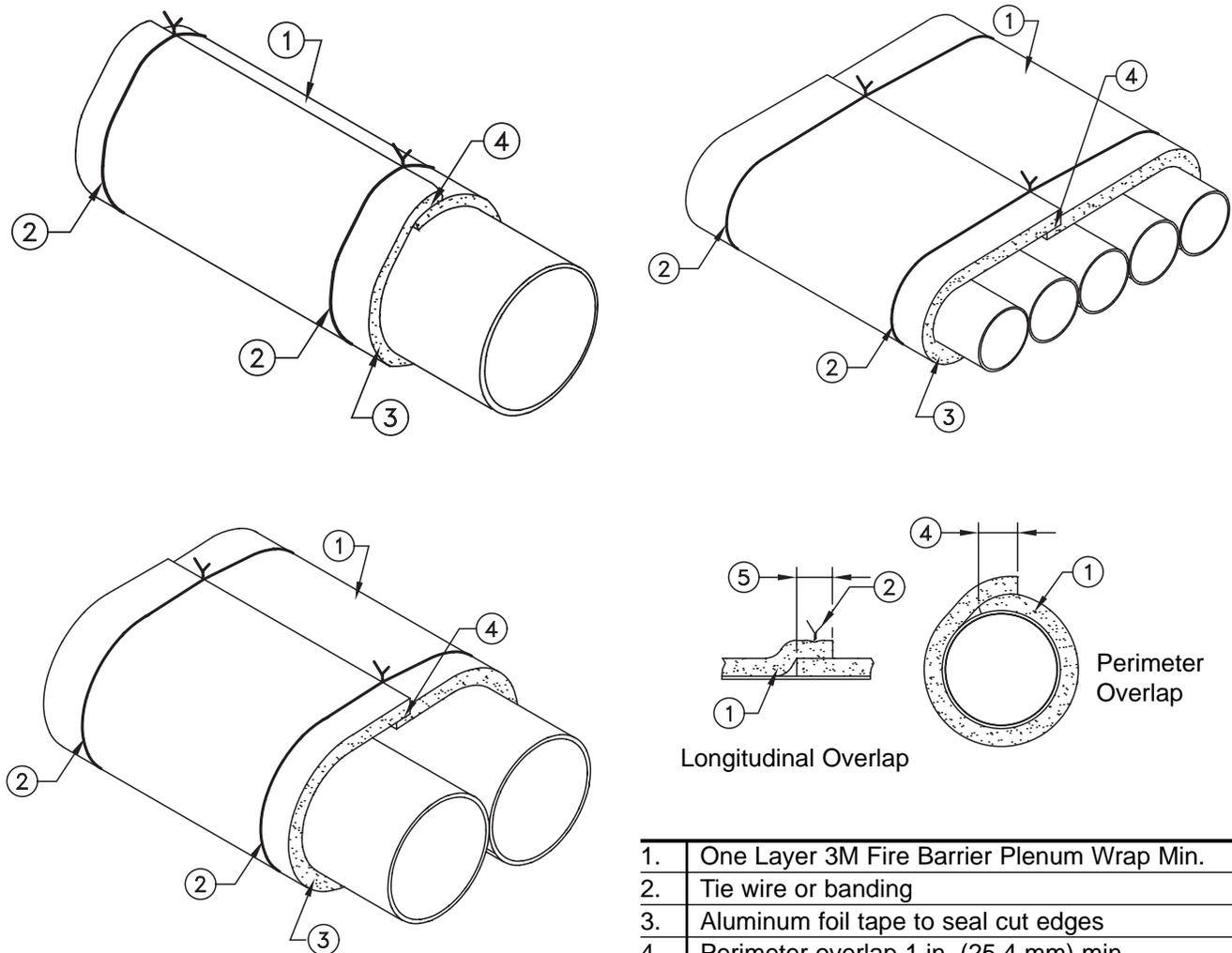
### 8. Purchase Information

3M Fire Barrier products are available through a network of nationwide distributors. For information on where to buy, go to [www.3m.com/firestop](http://www.3m.com/firestop).

### 9. Safe Handling Information

**Consult Material Safety Data Sheet prior to handling and disposing of 3M Fire Barrier Plenum Wrap 5A.**

## 3M Fire Barrier Plenum Wrap 5A Plastic Pipe or Cable System



1.	One Layer 3M Fire Barrier Plenum Wrap Min.
2.	Tie wire or banding
3.	Aluminum foil tape to seal cut edges
4.	Perimeter overlap 1 in. (25,4 mm) min.
5.	Longitudinal overlap 1 in. (25,4 mm) min.

System integrity is limited by quality of installation.

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