



# Product Information Sheet

## FyreWrap® 0.5 Plenum Insulation

### Introduction

Unifrax's FyreWrap® 0.5 Plenum Insulation is a high-temperature insulation blanket specifically designed to provide a single layer, flexible enclosure around combustible items located within fire-rated return air plenums. New construction, building renovations or modifications to the electrical and mechanical systems may result in the installation of plastic pipe or plastic-coated cables that cannot meet the minimum combustibility requirements defined in the Mechanical Code. FyreWrap 0.5 Plenum Insulation provides fire protection for these installed items by preventing flame propagation and smoke development in the plenum area. FyreWrap 0.5 Plenum Insulation offers the following product features:

- Lightweight, flexible product form
- Easy to cut, fabricate, wrap around pipes or cables
- Thin, single layer design
- High-temperature, biosoluble insulation
- Durable foil-scrim tested covering
- GREENGUARD listed for Microbial Resisitance

### Typical Product Parameters

Thickness	1/2"
Nominal Density	8pcf
Standard Product Form	Scrim Encapsulated
Product Availability	24"w x 25LF 48"w x 25LF

### Typical System Properties

Intertek Laboratories (OPL) Listed	Applied Fire Protection, File 16341-3	
UL 1887 – modified results	Passes; Intertek Design Nos. UNI/BI 20-03, UNI/BI 20-04	
Plastic Pipe and Cable Sheathing	PVC, CPVC, PB, PE, PP, PVDF and ABS	
Plastic Pipe Size (minimum)	1" or larger individual pipes or pipe bundles	
Plastic Coated Cable Groupings	3 or more multi-stranded telecommunication wires	
ASTM E136 Non-combustibility	Passes	
ASTM E84, UL 723, ULC S102.2	UL File No. R14514	
	Unfaced Blanket	Encapsulated
Flame Spread Rating:	Zero	<25
Smoke Developed Rating:	Zero	<50



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### Product Components

**Core Material:** FyreWrap 0.5 Plenum Insulation incorporates Insulfrax® Thermal Insulation as its core material. Insulfrax is a high-temperature insulation made from a calcia, magnesia, silica chemistry designed to enhance biosolubility. It provides excellent insulation in a noncombustible blanket product form.

**Encapsulating Material:** The core insulation blanket is completely encapsulated in an aluminum foil, fiberglass reinforced scrim covering. This scrim provides additional handling strength as well as protection from moisture absorption and tearing.

Complies with: IMC2015



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## Installation (Figure 1)

The FyreWrap 0.5 Plenum Insulation System<sup>1</sup> is a single layer application, which is to be applied directly on to the surface of the combustible item. To minimize waste, FyreWrap 0.5 Plenum should be rolled out tautly before measuring and making any material cuts. Install the single layer of material with a 1" overlap at all transverse and longitudinal joints<sup>2</sup>. All visually exposed blanket edges are to be sealed with aluminum foil tape and the use of filament tape is not required but is permitted to ease installation.

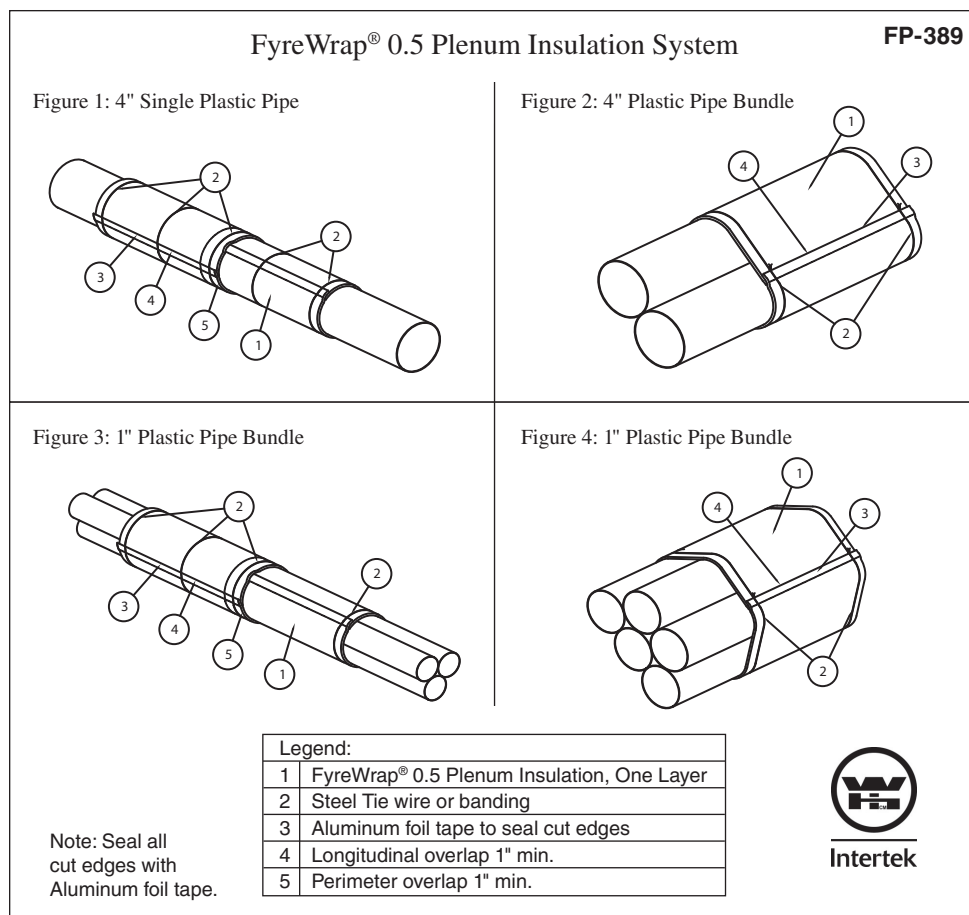
<sup>1</sup> Unifrax's FyreWrap DPS product complies with the same testing as FyreWrap 0.5 Plenum and can be installed as an alternate to achieve the appropriate rating for a combustible item.

<sup>2</sup> The FyreWrap 0.5 Plenum Insulation may be installed either linearly or with multiple adjacent pieces along the length of combustible item.

## Attachment Method (Figure 1)

Either min. 24 ga. steel tie wire or 1/2" steel banding is to be utilized as the permanent attachment method. Place the chosen attachment method within a 1/2" of all transverse terminations and add additional tie wire/bands as needed to ensure the spacing is max. 11 1/2" on center. Twist tension the tie wire or tighten banding to firmly hold the wrap system in place, but not so tight as to cut or damage the blanket. Hand tightening of wire is adequate. The banding is to be secured with 1/2" crimp clips.

Figure 1. Installation Detail



For additional information about product performance or for assistance identifying the recommended product for your fire protection application, please contact Unifrax at 716-768-6500 and ask for Fire Protection Application Engineering.

Refer to the product Safety Data Sheet (SDS) No. M0406 for recommended work practices and other product safety information.