



3M™ Fire Barrier Duct Wrap 615+

Product Data Sheet

1. Product Description

3M™ Fire Barrier Duct Wrap 615+ is a flexible fire-resistant wrap consisting of an inorganic fiber blanket encapsulated with a scrim-reinforced foil. The product is 1-1/2 in. thick, 6pcf density.¹ It is used to fire rate commercial kitchen grease ducts as well as ventilation ducts. 3M™ Fire Barrier Duct Wrap 615+ is a proven alternative to 1- or 2-hour fire-resistant rated shaft enclosures for grease ducts (ICC-ES ESR-1255). With its excellent insulating capabilities, low weight and thin profile, it is an ideal choice for a duct enclosure system. This non-asbestos² wrap installs easily due to its high flexibility and strength.

¹ In accordance with the tolerances in ASTM C 892 Standard Specification for High-Temperature Fiber Blanket Thermal Insulation.
² Has been demonstrated to be soluble in the lungs according to EU guideline 97/69/EG, for biopersistence.



Flexible and lightweight with a thin profile for easier application and reduced space requirements

Product Features

- Two-layer wrap for grease ducts rated as a shaft alternative per ASTM E 2336
- Zero clearance to combustible throughout the entire enclosure system for congested spaces
- Butted inner layer in 2-layer Grease Duct Applications
- One-layer wrap for fire-resistive ventilation ducts per ISO 6944
- High flexibility for installation ease
- Foil encapsulated for blanket protection, less dust, and high wrap strength
- Widest range of penetration seal systems
- Available in 24 in. x 25 ft. (609.6 mm x 7.62 m) and 48 in. x 25 ft. (1219.2 mm x 7.62 m) rolls
- Blanket adhered to foil scrim

2. Applications

3M™ Fire Barrier Duct Wrap 615+ is an ideal fire resistive enclosure for commercial kitchen grease ducts and ventilation air ducts. It is a proven performance alternative to a 1- or 2-hour fire-resistant rated shaft enclosures for grease ducts and provides zero clearance to combustible construction throughout the entire enclosure system. 3M™ Fire Barrier Water Tight Sealant 1000 NS, 3M™ Fire Barrier Water Tight Sealant 1003 SL or 3M™ Fire Barrier Silicone Sealant 2000+ is used in combination with 3M™ Fire Barrier Duct Wrap 615+ to firestop the duct when the duct penetrates fire-rated floor or wall assemblies. 3M™ Fire Barrier Duct Wrap 615+ also provides a firestop solution where a T-rating is required for penetrations located outside wall cavities or outside fire-resistance rated shaft enclosures.

Two-layer grease duct applications: 3M™ Fire Barrier Duct Wrap 615+ meets the criteria of ASTM E 2336 Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems.

Single-layer air duct applications: 3M™ Fire Barrier Duct Wrap 615+ has passed ISO 6944-1985 Fire Resistance Tests – Ventilation Ducts.

T-rating for metallic through-penetrating items: 3M™ Fire Barrier Duct Wrap 615+ is used in conjunction with 3M Fire Barrier sealants to achieve up to 2-hour equal F & T-ratings in ASTM E 814 (UL 1479) tested through-penetrations.

3. Specifications

Installation shall be in strict accordance with manufacture's written instructions, as shown on the approved shop drawings. 3M™ Fire Barrier Duct Wrap 615+ shall be a high-temperature fiber blanket thermal insulation encapsulated in a fiberglass-reinforced aluminized polyester foil. Duct Wrap density shall be nominal 6 pcf (96 kg/m³) and have a nominal 1-1/2 in. (38.1 mm) thickness. The fiber blanket shall have a continuous use limit of 1000 °C (1832 °F). The blanket thermal resistance (R-value) at ambient temperature shall be minimum $6.3 \frac{^{\circ}F-ft^2-hr}{Btu}$.

Smoke Developed Index and Flame Spread Index of the bare blanket, and of the foil encapsulated blanket shall be 0/0. The foil encapsulation shall be bonded to the core blanket material.

For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687

For more information on 3M Fire Protection Products, visit: www.3m.com/firestop

Typically Specified Division or Section

Division 7 – Thermal and Moisture Protection
 Section 23 07 13 – Duct Insulation

Related Sections

Section 07 21 00 – Thermal Protection
 Section 07 21 16 – Blanket Insulation
 Section 07 84 00 – Firestopping
 Section 23 00 00 – Heating, Ventilation and Air-Conditioning (HVAC)
 Section 23 31 13 – Metal Ducts

FIRE BARRIER

FLEXIBLE WRAP

ICC-ES ESR-1255

LISTED

Intertek

FIRE RESISTANT DUCT
SEE INTERTEK DIRECTORY

LISTED

Intertek

FIRE RESISTANT DUCT
SEE INTERTEK DIRECTORY

CLASSIFIED

BATTS AND BLANKETS
FOR USE IN FIRE RESISTIVE DUCT ASSEMBLIES
SEE UL FIRE RESISTANCE DIRECTORY
9069

CSFM
LISTING No.
2440-0941:112



4. Performance & Typical Physical Properties

Scrim Color:	Aluminum with Black Text
Blanket Color:	White
Blanket Weight:	0.9 lbs./ft. ² (4.38 kg/m ²)
Surface Burning:	Foil Encapsulated Blanket (ASTM E 84) Flame Spread 0, Smoke Development 0

Thermal Conductivity:	<i>Temp.</i>	$\frac{Btu - in.}{hr - ft^2 - ^\circ F}$	$\frac{W}{m^2 - K}$
	500°F (260°C)	0.60	0.09
	1000°F (537°C)	1.15	0.17
	1500°F (815°C)	1.93	0.28
	1800°F (982°C)	2.51	0.36
	2000°F (1093°C)	2.94	0.43

Single layer R-Value of 3M™ Fire Barrier Duct Wrap 615+ at 77°F (25°C):

$$6.38 \frac{^\circ F - ft^2 - hr}{Btu}$$

Linear Shrinkage (24 Hr@ 2012°F (1000°C)): 1.2%

5. Design Listings

Grease Duct Listings – ASTM E 2336 / ICC-ES AC101

Fire Resistive Rating	Enclosure System	Third-Party Testing Services Design Listing	Description
1- and 2-hour	2 layers of 3M™ Fire Barrier Duct Wrap 615+	ICC-ES ESR-1255	Rectangular
		Intertek 3MU/FRD 120-18	Rectangular
		Intertek 3MU/FRD 120-19	Round

Ventilation Duct Listings – ISO 6944

Fire Resistive Rating	Enclosure System	Third-Party Testing Services Design Listing	Description
1- and 2-hour	1 layer of 3M™ Fire Barrier Duct Wrap 615+	Intertek 3MU/DI 60-01	Rectangular/Round (1 Hour)
		Underwriters Laboratories HNLJ.V-27	Rectangular (2 Hour)
		Intertek 3MU/DI 120-01	Rectangular/Round (2 Hour)

This document only contains a partial list of Design Listings. For the latest information go to www.3M.com/firestop or speak to your authorized 3M distributor or sales representative at (800) 328-1687.

6. Codes & Test Standards

3M™ Fire Barrier Duct Wrap 615+ has been tested in accordance with the following:

ICC-ES AC101	ASTM E 2336	ASTM E 119	ASTM E 814	ASTM E 84
ASTM E 136	ASTM C 518	ISO 6944-85		

3M™ Fire Barrier Duct Wrap 615+, when installed per ASTM E 2336 tested Grease Duct Design Listings, meets the following code requirements:

NFPA 96 2008 Edition	International Mechanical Code® 2003/2006/2009	Uniform Mechanical Code 2003/2006/2009
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3M™ Fire Barrier Duct Wrap 615+, when installed per ISO 6944 tested Ventilation Duct Design Listings, can help to satisfy the following code requirements:

NFPA 92A 2009 Edition – Section 6.6.2	NFPA 92B 2009 Edition – Section 7.5.2
International Mechanical Code® 2006/2009 Editions – Section 513.10.2	International Building Code® 2006/2009 Editions – Section 909.10.2

7. Packaging, Storage, Shelf Life

3M™ Fire Barrier Duct Wrap 615+ rolls are packaged in corrugated cardboard boxes.

Product is stable under normal storage conditions. Normal stock and stock rotation practices are recommended. 3M™ Fire Barrier Duct Wrap 615+ shelf life is indefinite when stored in original unopened packaging in a dry warehouse environment. Pallets should not be stacked. 3M™ Fire Barrier Water Tight Sealant 1000 NS or 1003 SL or 3M™ Fire Barrier Silicone Sealant 2000+ must be also stored in a dry warehouse environment.

8. Safe Handling Information

Consult country-of-use Material Safety Data Sheet (MSDS) prior to handling and disposal.

9. Availability

Description	Size	Unit	Billing UPC Number	Units/Case	Price Unit
Space-saving, flexible duct wrap with up to 2-HR protection	24" x 25' Roll	Roll	00051115-54905-2	1	EA
Space-saving, flexible duct wrap with up to 2-HR protection	48" x 25' Roll	Roll	00051115-54906-9	1	EA
Collar for butted joint installations	6" x 25' Roll	Roll	00051115-18804-6	4	EA

For additional technical and purchasing information regarding 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3m.com/firestop. 3M™ Fire Barrier Duct Wrap 615+ is available from 3M Authorized Fire Protection Products Distributors and Dealers.



Building and Commercial Services Division

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Important Notice to User:

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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