

Clothes Dryer Exhaust Systems

Clothes dryer fires account for an average of 10 deaths, 310 injuries, and more than \$84.4 million in property damage annually. While building code requires clothes dryer exhaust systems to be sized properly to prevent accumulation of lint, the complexity of the actual installations often leads to potential fire hazard from the inside of these ducts. To prevent accumulation of lint, building code also requires clothes dryer exhaust ducts that pass through fire rated assemblies to be enclosed in fire resistive shaft enclosures in lieu of smoke/fire dampers.

FireMaster flexible duct wrap enclosure systems have been used extensively in the commercial construction industry to contain grease fires inside ducts and to act as a flexible fire resistive shaft alternative to prevent fire and smoke from spreading across fire rated construction.

FireMaster FastWrap XL is the newest innovation of flexible duct wrap enclosure materials from Thermal Ceramics. FastWrap XL is thin (1-1/2" thick) and light (6 PCF density), and is a highly insulating duct wrap which has been thoroughly tested in various configurations of internal fire tests, external fire tests, and through penetration firestop systems.

FastWrap XL is UL classified for 1 and 2 hour F and T-Rating in through penetration system F-C-7037, which models directly a light gage galvanized steel duct passing through a UL classified floor/ceiling assembly similar to the installation found in many clothes dryer exhaust systems.

FastWrap XL applied in 1 layer will provide protection from a potential fire inside a clothes dryer exhaust system. While there is not a specific test protocol that describes this potential fire hazard, the following protection is calculated from advanced computer modeling.



Contours easily to elbows that are required in maximum 20 ft. ducts.

Potential Fire Temperatures Inside 4" Dryer Vent	Nominal Temperature On Surface Of One Layer FireMaster FastWrap XL
1000°F for 30 min.	165°F
1200°F for 30 min.	197°F
1500°F for 30 min.	250°F



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FireMaster® FastWrap® XL Fire Protection Duct Wrap



Other Applications: Commercial Kitchen Grease and Air Ventilation Ducts

Thermal Ceramics, a global manufacturer of high temperature insulation products, has provided engineered solutions for heat containment problems for over 75 years, and was the first to develop flexible fire resistive duct enclosures, FireMaster Duct Products, for commercial kitchen grease and air ventilation ducts. Unlike imitation wraps on the market today, Thermal Ceramics has the widest range of duct enclosure systems that are performance-tested beyond minimum laboratory listings or code requirements. This assures fire containment, from the typical to the most complex duct designs, without theorizing. FireMaster innovative duct products are high temperature (2000°F) fire rated solutions that do not age, become brittle, or shrink during in-service operations. With a vast number of field installations worldwide and 20 years of successful fire containment in real-world fires, FireMaster duct products have proven their worth.

FastWrap XL



- Special fiberization technology for stronger fiber and better fire resistance
- Low biopersistence fiber blanket, capable of withstanding 2000F continuous temperatures
- Flexible, 1-1/2" thick, 6 pcf
- Non-combustible
- Double layer tested to ASTM E2336 for zero clearance, 1 and 2 hour shaft alternative for grease ducts
- Single layer tested to UL 1978 for zero clearance, 1 and 2 hour shaft alternative for grease ducts
- Single layer tested to ISO 6944 for 1 and 2 hour shaft alternative for air ducts
- UL listed systems
- Building code report ESR 2213 per ICC-ES
- Fully encapsulated for easy handling and installation
- Meets the requirements of the NFPA 96, International Mechanical Code 2003 and 2006
- Available in space saving 50 and 100 SF cartons
- Available in 48" wide widths for faster and more economical installation



PlenumWrap+



- Low biopersistence fiber blanket, capable of withstanding 2000°F continuous temperatures
- Flexible, 1/2" thick, 8 pcf
- Non-combustible
- Single layer tested to NFPA 262 (UL 910)
- UL and OPL listed systems to reduce flame spread and smoke development of PVC, CPVC, PB, PE, PP, PV, PVDF, and ABS pipes and coated electrical cables in return air plenums
- Fully encapsulated for easy handling and installation

