

FIREMASTER

FireMaster[®] FastWrap[®] XL



Datasheet Code US: 714-236 © 2020 Morgan Advanced Materials





* Commonly referred to test method CA Section 01350 is CDPH Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.1, Feb 2010

Grease Duct Enclosure System Air Ventilation Duct Enclosure System

Product Data & Installation Guide

1. Product Description

Thermal Ceramics FireMaster[®] FastWrap XL is a flexible blanket composed of high temperature fibers classified for applications to 2192°F (1200°C) and fully encapsulated in a durable glass fiber reinforced foil facing for easy handling and installation. Thermal Ceramics FastWrap XL is UL and ULC Listed for 1 and 2 hour fire resistive enclosure protection, zero clearance for kitchen exhaust ducts, electrical circuit protection, and as a component in UL firestop designs for fire resistance rated floors, ceilings, and walls. The core fibers in FastWrap XL are manufactured using Thermal Ceramics patented Superwool[®] fiber which is an alkaline-earth silicate wool with low biopersistence and therefore increased safety for installers. FastWrap XL is under UL's Follow-Up Service Program to ensure the consistent quality essential to this life-safety application.

Product Features

- Thin and Lightweight at 1-1/2" (38mm) thick, 6 pcf (96 kg/m³) density
- Contours easily to complex duct designs
- Grease duct installation UL and ULC Listed with butt joints at all seams on both layers
- · Fully foil encapsulated for fast and clean installation
- Contains 2192°F (1200°C) rated fibers
- Microbial Resistance validated by UL Environment
- Good sound absorption
- · Compliant to IMC, NFPA 96, UMC, CMC, CNBC

2. Applications

- 2 hour enclosure and firestop system for kitchen exhaust duct
- Zero clearance to combustibles
- 1, 2 and 3 hour enclosure and firestop system for hazardous exhaust ducts, pressurization ducts, clothes dryer exhaust ducts, trash and linen chutes, and other fire rated HVAC ducts
- 1 hour electrical circuit integrity protection
- Engineered and tested solutions for fire protection of structural steel and storage vessels per ASTM E119, ISO 834, and UL1709

3. Specifications - Division 23 07 00 (or 15080)

CSI Spec and AutoCAD available online, www.arcat.com/sd/clients/thermcer.html.

Thermal Ceramics FireMaster FastWrap XL is a flexible high temperature insulation rated to 2192°F (1200°C) that is fully encapsulated in FSP facing. The duct enclosure system shall be listed by UL and /or ULC per ASTM E 2336, CAN/ULC S144 and ISO 6944 for 1-, 2- and 3-hour rating and zero clearance to combustibles, and tested per ASTM E84 for a flame/ smoke rating less than 25/50. Insulation shall have a nominal thickness of 1-1/2 inches (38 mm) and density of 6 lbs/ft³ (96 kg/m³). Insulation shall have a R-Value of 7.3 at 75°F. Installation shall be in strict accordance to manufacturers published installation instructions, UL or ULC Listings, and shop drawings. FastDoor™ XL shall be used for duct access where specified or as required by code.





FireMaster[®] FastWrap[®] XL

4. Physical Characteristics

Product	Unit	Size	Units/ Ctn.	Wt./ Ctn.
FastWrap XL	Roll	1-1/2" x 24" x 25'	1	37.5 lbs.
FastWrap XL	Roll	1-1/2" x 48" x 25'	1	75 lbs.

5. Performance Specifications

Reference Standard	Standard No.	Performance	
Grease Duct Enclosure System	ASTM E2336	Pass	
Section 16.1 - Non-Combustibility	ASTM E136	Pass	
Section 16.2-Fire Resistance (wall)	ASTM E119	Pass	
Section 16.3 - Durability Test	ASTM C518	Pass	
Section 16.4 - Internal Fire Test	ASTM E2336	Pass	
Section 16.5 - Fire Engulfment (duct)	ASTM E814/ E119	Pass	
ULC Grease Duct Test Protocol		Pass	
Standard Methods of Fire Resistance Tests - Grease Duct Assemblies	CAN/ULC S144 Pass		
Grease Duct Clearances	UL 1978	Pass	
Air Ventilation Duct Enclosure	ISO 6944	Pass	
Surface Burning Characteristics	ASTM E84	<25/50	
Thermal Resistance (R-value @ 75°F)	ASTM C518	7.3 per layer	
Mold Growth	ASTM C1338	ULE Validated	
Low VOCs	CA Standard 01350	ULE Validated	

6. Listings/Building Code Reports

Listed Uses	Agency	Listing	Layers	
Grease Duct Enclosure per	UL	G18		
ASTM E2336 and AC101 (2006, 2009, 2012 IMC, NFPA 96, UMC, CMC)	ICC-ES	ESR 2213	2	
ULC Grease Duct Test Protocol and CAN/ULC S144*	ULC	FRD 4, 7*	2	
Through Penetration FireStop	UL			
System per ASTM E814, UL 1479	ULC	See Figure 2	1 or 2	
1- or 2-hour Ventilation Duct	UL	HNLJ.V1, 19, 29	1	
Enclosure per ISO 6944-1985	ULC	FRD 3, 5, 6, 18		
3-hour Ventilation Duct Enclosure per ISO 6944-1985	UL	HNLJ.V2	2	
Electrical Circuit Protective System	UL	FHIT.5	2	

7. Storage

Thermal Ceramics FastWrap XL must be stored in a dry warehouse environment on pallets. Pallets should not be stacked.

8. Installation

Thermal Ceramics FastWrap XL shall be installed by a qualified contractor in accordance with manufacturer's instructions and laboratory design listings.

Materials and Equipment

- Thermal Ceramics FastWrap XL blanket
- Aluminum foil tape
- Glass filament reinforced tape (optional)
- Carbon steel or stainless steel banding material, minimum 1/2" (13mm) wide, minimum 0.015" (0.4mm) thick, with steel banding clips
- Hand banding tensioner and crimping tool
- Minimum 12 gage (3mm) steel insulation pins; steel speed clips, minimum 1-1/2" (38mm) square or 1-1/2" (38mm) diameter, or equivalent sized cup-head pins;
- Capacitor discharge stud gun
- Thermal Ceramics FastDoor™ XL
- An approved firestop sealant