VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA:: 909.483.0250 ph. | 909.483.0336 fx
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 416.550.9280
WEBSITE: WWW.QAI.ORG

BUILDING PRODUCTS LISTING PROGRAM

Customer: **Firestable® Insulation Company**
Class: Polyurethane Foam Insulation
Location: Essex, CT

Listing No. B1134-1
Effective Date: May 30, 2022
Last Revised: Date: October 30, 2024
Expires: <N/A>

Standards:		
	ASTM E84-23d	*Standard Test Method for Surface Burning Characteristics of Building Materials*.
	UL 723-18	*Standard for Test for Surface Burning Characteristics of Building Materials*.
	NFPA 255- 2006	*Standard Method of Test of Surface Burning Characteristics of Building Materials*.
	ASTM E2768-11	*Standard Test method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test)*.
	NFPA 275-2022	*Standard Method of Fire Tests for the Evaluation of Thermal Barriers*.
	UL 1715-2017	*Fire Test of Interior Finish Materials*.
	2021 / 2018	International Building Code Section 803.14 *Stability.*
	2015	International Building Code Section 803.12 *Stability.*

Product: Firestable® FS 2.0 Spray-Applied Foam.

Description: Firestable® FS 2.0 is a spray-applied polyurethane foam used as a thermal barrier for the protection of foam plastics described below. Firestable® is available in the following colors:

- Cloud White.
- Charcoal.

Markings: Firestable® FS 2.0 Component A and Component B drums bear a label with markings including the information outlined below:

- Manufacturer's Name
- Product name – Firestable® FS 2.0
- ASTM E84 Class A: Flame Spread ≤ 25 / Smoke Development ≤ 450 @ 4''
- Traceability Code (Lot Number)
- QAI Listing Number (B1134) and Certification Logo shown:

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Models / Ratings:

The following outlines Firestable® FS 2.0 Spray-Applied Foam results determined in accordance with ASTM E84, UL 723, and ANSI/NFPA 255:

PRODUCT	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)	THICKNESS MAX. (inches)	DENSITY MAX (lbs/ft^3)
Firestable® FS 2.0	≤ 25	≤ 450	4	2.8

The following outlines Firestable® FS 2.0 Spray-Applied Foam results determined in accordance with ASTM E2768 / ASTM E84 Continued for 20 Minutes:

PRODUCT	FLAME SPREAD INDEX (FSI	SIGNIFCANT PROGRESSIVE COMBUSTION	MAX FLAME FRONT (ft)	THICKNESS MAX. (inches)	DENSITY MAX (lbs/ft^3)
Firestable® FS 2.0	≤ 25	No	≤ 10.5	4	2.8

The following outlines Firestable® FS 2.0 spray-applied foam approved installation as a thermal barrier for protection of foam plastics in accordance with NFPA 275:

INSTALLED FIRESTABLE® FS 2.0 ≥ 2.5 INCHES THICKESS, 2.5 lbs/ft^3 DENSITY			
THERMOPLASTIC INSULATION		THERMOSETTING INSULATION	
DENSITY (lbs/ft^3)	MAX. THICKNESS (inches)	MAX. DENSITY (lbs/ft^3)	MAX. THICKNESS (inches)
1.0	5-1/2	3.0	6-1/2
1.5	3-1/4		
2.0	2.5		
2.5	2		
3.0	1-3/4		

Firestable® FS 2.0 spray-applied foam has met 2021 / 2018 International Building Code Section 803.14 *Stability*, 2015 International Building Code Section 803.12 *Stability* when applied to thermoplastic foam plastics, thermosetting foam plastics, cement board, metal and gypsum-based substrates.

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The following outlines Firestable® FS 2.0 results determined in accordance with UL 1715[1]:

Note 1: Testing to UL 1715 was conducted following 2021 / 2018 / 2015 International Building Code Section 2603.9 *Special Approval* evaluation based on full scale testing of an end-use configuration.

PRODUCT	BASE FOAM TYPE	BASE FOAM THICKNESS (inches)	BASE FOAM DENSITY (lbs/ft^3)	INSTALLATION
Firestable® FS 2.0 A) IBC 2603.9 (Alternate)	No Base Foam	Firestable FS 2.0 at 2.5 lbs/ft^3 nominal density target from 1'' to 9'' installed thickness.		Ensure the substrate is dry and clean of debris and dust. Firestable FS 2.0 is applied in a single pass up to 2.5 inches thickness, at 2.5 lbs/ft^3 target density (2.3 – 2.8 lbs/ft^3 required). FS 2.0 is applied to ensure a continuous unbroken surface across walls and ceilings. Installation of Firestable FS 2.0 to be done at ambient temperatures of 30 – 100ºF where temperatures are > 5ºF above the dew point to ensure bond to substrate.
Firestable® FS 2.0 B) IBC 2603.4 (Equivalent)		Firestable FS 2.0 at 2.5 lbs/ft^3 nominal density target at ≥ 2.5 inches where installed per NFPA 275 above.		
Firestable® FS 2.0 IBC 2603.4 (Equivalent)	Thermoplastic	See NFPA 275 Above		Ensure base foam is dry and clean of debris and dust. Firestable FS 2.0 is applied in a single pass to minimum 2.5 inches thickness, at 2.5 lbs/ft^3 target density (2.3 – 2.8 lbs/ft^3 required). FS 2.0 is applied to ensure a continuous unbroken surface across walls and ceilings to ensure underlying foam protection with no voids or gaps present. Installation of Firestable FS 2.0 to be done at ambient temperatures of 30 – 100ºF where temperatures are > 5oF above the dew point to ensure bond to base foam layer.
Firestable® FS 2.0 IBC 2603.4 (Equivalent)	Thermosetting	See NFPA 275 Above		First pass of thermosetting foam base layer is applied to maximum thickness and density described in NFPA 275 above. The base layer is to be allowed to condition to ambient temperature and confirmed to be clean and dry prior to application of Firestable FS 2.0. Following, at minimum a single pass of Firestable FS 2.0 is to be applied at 2.5 inches thickness, at 2.5 lbs/ft^3 target density (2.3 – 2.8 lbs/ft^3 installed required). FS 2.0 is applied to ensure a continuous unbroken surface across walls and ceilings to ensure underlying foam protection with no voids or gaps present. Installation of Firestable FS 2.0 to be done at ambient temperatures of done at ambient temperatures of 30 – 100ºF where temperatures are > 5oF above the dew point to ensure bond to base foam layer.

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For application the manufacturers installations instructions must be followed, foam MUST be cured and cooled to ambient conditions, all surface preparation should be carried out in accordance with good application practices. Firestable® FS 2.0 should be installed by qualified contractors to ensure product performance.

Firestable FS 2.0 is to be installed at target thicknesses noted, in the density tolerances shown for use as a thermal barrier.

Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.

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