Closed-Cell HFO Spray

Thermal Insulation and Air Barrier

DESCRIPTION

Stablebase™ 2.0 Max R SPF is a two component, next generation HFO blown closed-cell spray applied polyurethane foam system. Stablebase™ HFO technology has a low Global Warming Potential (GWP) of less than 2, with an Ozone Depletion Potential (ODP) of 0. Stablebase™ is an insulation system designed to use in commercial and residential applications.

SYSTEM FEATURES

- World class, High R- Value increases thermal performance and reduces operating energy costs
- Ultra fast re-occupancy period
- Can be sprayed down to 20F ambient temperature
- Optimized design for use with Firestable™ F2.0 - hybrid use Increases yield up to 10% as a system.
- Functions as a vapor retarder in thickness greater than 1 inch
- Formulations adjusted for Seasons for ease of spraying at different ambient temperatures
- Significant control of air infiltration in an air barrier assembly

RECOMMENDED USES

Stablebase™ is used to insulate interior walls, subfloors, and roof cavities including residential and commercial stud walls, ceilings, sub-floor cavities, “controlled atmosphere” storage structures and metal buildings. Uncontrolled air leakage is eliminated increasing overall thermal performance of building structure and saving energy. Maximum thickness of 3½ inches per pass during application.

TYPICAL PHYSICAL PROPERTIES*

-Nominal Density	
ASTM D1622, lbs/ft^3 (±10%)	2.0 Lbs
-Thermal Resistance	
ASTM C518 Aged R Value	7.5 per 1 inch
(140°F @ 90 days)	24.0 @ 3.5 inch
-Air Impermeable	
ASTM E 2178	< .02 (L/s/m^2)
-Water Vapor Transmission	
ASTM E96-00, Method A desiccant	1.4” (cl II)
-Dimensional Stability	
ASTM D2126-98, <9%	PASS - <7.6%
168 hr @ 70° C, 97% humidity	
-Closed Cell Content	
ASTM D 2856, min %	>95%

-Surface Burning Characteristics	
ASTM E84 – Class 1	
Flame Spread Index	<25
Smoke Development Index	<450
-Compressive Strength	
ASTM D1621, psi	> 32 PSI
-Tensile Strength	
ASTM D1623, lb/in^2	46.9
-Viscosities	
Iso (@77ºF)	200
Resin (@77ºF)	600-800
-Re-entry Period(@10ACH)	1 hour
-Re-occupancy Period (@10ACH)	2 hour

APPLICATION

Maximum pass thickness not to exceed 3½” per pass. Between passes foam should be allowed to cool to ambient temperatures.

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STORAGE

Both “A” and “B” components should be stored in their original containers and away from excessive heat and moisture, especially after the seals have been broken or if materials have been used. Drums must be stored indoors between 50°F and 90°F. Containers should be opened carefully to allow and pressure to be vented safely while wearing safety protection. Excessive venting of the “B” component may result in higher density foam which could also reduce yield. Materials stored below 50°F will increase viscosity and some equipment may not be able to reach adequate temperature set points. Supply pumps and hoses must be sized to provide adequate supply when the materials are cold or at a higher viscosity.

SHELF LIFE

Excessive temperature changes may decrease shelf life. When stored in original unopened containers between 50°F - 90°F, shelf life of the “B” material is six months. Temperature above 90°F can decrease the shelf life. When stored in original unopened containers between 50°F – 90°F, shelf life of the “A” material is six months.

SURFACE PREPARATION

All surfaces should be clean and dry, free of dirt, oil, solvent, loose particulates, curing compounds, frost, ice or any foreign matter which could affect adhesion. Contractor should perform a test of a small area to verify moisture content and surface conditions of the substrate prior to full application to verify adhesion.

SUBSTRATES

Exterior grade gypsum sheathing, OSB or plywood or lumber, CMU, Structural & Lightweight concrete (moisture content must be less than 18%), Properly prepared galvanized, aluminum, and painted metal. Lightweight insulating concrete or friable substrates are not acceptable.

Heatsinks: Painted Steel, Galvanized, Stainless and Aluminum, Structural Concrete – Surfaces should be checked for mill oil used in the manufacturing process and moisture. All oil must be removed and the surface clean and dry before priming using a DTM Wash Primer. Heatsink materials should have a flash coat, then a full pass.

ALTERNATE THERMAL BARRIERS

TYPE	WFT	WALL	CEILING
Firestable™ FS2.0	2 ½”Equivalent Thermal Barrier	9”	9”
DC 315	14 mil min.	7.5” max	9.5” max
Flame Control 60-60A	14 mil min.	7.5” max	9.5” max
No Burn XD/Plus THB	14 mil min.	7.5” max	9.5” max

IGNITION BARRIER AC 377X

Complies with the requirements of Appendix X for use in attics and crawl spaces without prescriptive ignition barrier-See ER-0877

TEMPERATURE GRADES

GRADE	AMBIENT TEMP RANGE
Summer+	>95°F
Summer	70°F - 95°F
Regular	50°F - 70°F
Winter	30°F - 50°F

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APPLICATION PARAMETERS

Storage Temperature	60°F - 90°F
Ambient Temperature	20°F - 120°F
Substrate Temperature	30°F - 120°F
Moisture Content of Substrate	Less than 18%
Maximum Lift Per Pass	Not to exceed 3.5”

PROCESSING CHARACTERISTICS

PRE-HEATER TEMPERATURES SHOULD MAINTAIN +/- 5°F

Pre-Heater Component A - ISO	110°F - 130°F
Pre-Heater Component B - Resin	110°F - 130°F
Hose Heat	110°F - 130°F
Fluid Pressure - Dynamic	1100 – 1400 psi
Mixing Ratio	1:1 by Volume
Recommended Mix Chamber Size	10-15 lbs/minute (i.e. 01-Graco AR4242)
Storage Stability	6 Months

THERMAL AND IGNITION BARRIERS

Stablebase™ closed cell wall foam insulation must be separated from the interior of the building be an approved thermal barrier and be installed in accordance with all National, State and Local building code requirements.

See ER 0877 – www.Firestable.com/StablebaseCC-ER

HEALTH AND SAFETY INFORMATION

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling materials used to produce foam from the Stablebase™ system. Before working with this product, you must read and become familiar with the available information on its risks, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels.

Warning signs should be posted at entrances stating, “Warning, Breathing Hazard During Application if Insulation Materials. DO NOT ENTER without Proper Breathing Protection.

FREIGHT CLASSIFICATION

Component A – Class 55, NOIBN Non-Hazardous
Component B – Class 55, NOIBN Non-Hazardous

DISCLAIMER