

TECHNICAL DATA SHEET

Staycell® 245-2.0 Spray Foam Insulation

Product Description

Staycell® 245-2.0 is a two-part, closed-cell polyurethane foam insulation material utilizing an EPA approved, zero-ozone depleting blowing agent and contains no CFC's, HCFC's or VOC's. It is used to insulate structural steel, ceilings, roof decks, walls and tanks and as an air barrier in building envelope assemblies.

Physical Properties

TYPICAL PHYSICAL PROPERTIES ¹		
	ASTM Method	
Nominal Density	D 1622	2.0 pcf
Compressive Strength	D 1621	25 psi
Tensile Strength	D 1623	50 psi
Shear Strength	C 273	45 psi
Closed Cell Content (min)	D 1940	90%
Aged R-Value @ 1" ²	C 518	6.5
Water Absorption (gm/cc)	D 2842	0.020
Dimensional Stability, Volume Change	D 2126	7%
Water Vapor Transmission 1.5 inch thickness 2.0 inch thickness	E 96	1.269 Perms .859 Perms
Air permeability @1 inch	E 2178	.004 cubic feet/minute/sq. ft.

¹ These physical properties are typical for this material as applied at manufacturing facility under controlled conditions. SPF performance and actual properties will vary with differences in application (i.e. ambient conditions, process equipment and settings. etc). As a result, these published properties should be used as guidelines solely for the purpose of evaluation.

² R-value varies depending on age and use conditions.

Fire Performance and Ratings; Listed and Labeled by Quality Auditing Institute



Preferred Solutions, Inc.

LISTED PRODUCT – ASTM E84*
Listing No. B1011-1

2003, 2006 & 2009 International Building Code, Chapter 26, Section 2603.3
2003, 2006 & 2009 International Residential Code, Section R314.3

This product is a two-component foam insulation system, which mixed per the manufacturer's instructions is listed by QAI as having the following surface burning characteristics:

STAYCELL® 245-2.0
2.0 PCF Density

Preferred Solutions, Inc.
7819 Broadview Road
Cleveland, Ohio 44131

Material Thickness
2 to 4 inch

Flame Spread Index (FSI)
20

Smoke Developed Index (SDI)
450

* Numerical flame spread ratings and all other data presented are not intended to reflect potential hazards presented by this product under all actual fire conditions.

Building Code Information

Polyurethane foam produced from these materials may present a fire hazard if exposed to fire or excessive heat (i.e. cutting torches). The use of exposed polyurethane foam in interior applications on walls or ceilings may present an unreasonable fire risk unless covered with a thermal barrier material having 15 minutes of fire resistance when tested in accordance with the ASTM E-119 test method or when tested in accordance with full-scale fire tests such as, but not limited to, UL 1715, UL 1040, NFPA 286 or FM 4880 test standards.

Equipment Information

The proportioning equipment shall be manufactured specifically for heating, mixing and spray application of polyurethane foam and be able to maintain 1:1 metering by volume with $\pm 2\%$ variance. All proportioners shall have adequate main heating capacity to deliver heated and pressurized materials up to 130° F. Heated hose shall be able to maintain pre-set temperatures for the full length of the hose. 2:1 ratio feeder pumps and ¾ inch supply hoses are recommended to transfer material from container to the proportioner.

Recommended equipment (contact PSI for more details):

- Graco Reactor proportioners or equivalent set at 1:1 volume ratio.
- Graco P2 or Fusion air-purge spray gun.
- Graco T2 2:1 transfer pumps or equivalent.

Staycell® 245-2.0 has shown acceptable on-site performance with temperature settings in the range of 110°F - 130°F for isocyanate, resin and hose. Every job site and set of ambient/substrate conditions are different; therefore, one set of process settings may not work for every situation. It is the responsibility of the applicator to evaluate the on-site conditions and then determine the appropriate SPF reactivity and process settings.

Handling & Storage

Keep containers tightly sealed and stored at 50° to 75°F for maximum shelf life. Storage temperatures must not exceed 85°F. Do not store in direct sunlight. Open the container slowly to allow any pressure to be released before removing the bung. Keep drums tightly sealed when not in use to avoid contamination. Water, solvents or oil in the liquid components will degrade foam quality. Protect from heat, sparks and open flame. Do not cut or weld near this container. Do not smoke near container. Do not store near food or feed.

Shelf Life

Staycell® 245-2.0 has a shelf life of approximately three (3) months from the date of manufacture when stored in original, unopened containers between 50° to 75°F. As with all industrial chemicals, this material should be stored in a covered, secure location and never in sunlight or direct sources of heat. Storage temperatures above the recommended range will shorten shelf life. Storage temperatures above the recommended range may also result in elevated headspace pressure within packages.

Limited Warranty Information

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are only intended for sale to industrial and commercial customers. Customer assumes full responsibility for quality control, testing and determination of suitability of products for its intended application or use. We warrant that our products will meet our written liquid component specifications. We make no other warranty of any kind, either express or implied, by fact or law, including any warranty of merchantability or fitness for a particular purpose. Our total liability and customers' exclusive remedy for all proven claims is replacement of nonconforming product and in no event shall we be liable for any other damages.

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