

OPEN-CELL

0.5 LB · WATER BLOWN

ComfortSeal 500

Light-density, semi-rigid open-cell spray polyurethane foam insulation

R-13

at 3.5 in. · IAPMO ER-974

0.5 pcf

core density

>97%

open-cell content

STC 39

sound transmission · E413

PRODUCT DESCRIPTION

ComfortSeal 500 is a two-component, semi-rigid, water-blown 0.5 lb open-cell polyurethane spray foam insulation system, combining an “A” component (ISO) with a blended “B” component (resin). Applied as a liquid spray, it expands approximately 100 times its initial volume and cures within seconds to form a semi-rigid mass — effectively sealing cracks, crevices, and voids where air loss and infiltration are most common.

PHYSICAL PROPERTIES

PROPERTY	VALUE	TEST METHOD
R-Value (installed)	R-4.1 @ 1 in · R-13 @ 3.5 in · R-20 @ 5.5 in	C518 · ER-974
Core Density	0.5 pcf	ASTM D1622
Open-Cell Content	>97%	ASTM D6226
Tensile Strength	5.19 psi	ASTM D1623
Water Vapor Permeance	21 perms @ 1 in	ASTM E96
Air Leakage Rate	<0.002 L/s·m²	ASTM E283
Noise Reduction Coefficient	0.75	ASTM C423
Sound Transmission Class	39	ASTM E413
Dimensional Stability	<5%	ASTM D2126

The R-value per inch of this insulation varies with thickness. The thicker the insulation, the lower the R-value per inch. R-4.1 per inch at 1 in.; R-3.5 to R-3.7 per inch at 3.5 to 14 in. (IAPMO ER-974, Table 1).

FIRE TEST DATA

TEST	RESULT	TEST METHOD
Flame Spread	Class I — Pass (≤25)	ASTM E84
Smoke Developed Index	Class I — Pass (≤450)	ASTM E84
Thermal Barrier	Pass with DC315 at 18 mils WFT / 12 mils DFT	NFPA 286
Ignition Barrier (Appendix X)	DC315 at 6 mils WFT / 4 mils DFT, or No-Burn Plus ThB at 4 mils WFT / 3 mils DFT	ICC-ES AC377

LIQUID COMPONENT PROPERTIES	PROPERTY	A-SIDE (ISO)	B-SIDE (RESIN)
	Color	Brown	Amber
	Viscosity @ 77°F / 25°C	185–235 cps	250–390 cps
	Specific Gravity	1.25	1.14–1.19
	Storage Temperature	50–80°F (10–27°C)	50–80°F (10–27°C)
	Mixing Ratio (by volume)	1 : 1	1 : 1
	Shelf Life (unopened drums)	1 year	6 months

PROCESSING PARAMETERS	PARAMETER	TARGET
	Processing Pressure	1200–1350 psi
	Primary Heater (initial)	125–130°F (52–55°C)
	Hose (initial)	125–130°F (52–55°C)
	Recirculation	75–90°F (24–32°C)
	Substrate & Ambient Temp.	>32°F (>0°C)
	Substrate Moisture Content	<18%
	Maximum Thickness per Pass	6 in. (IAPMO ER-974 §3.3.2)

APPLICATION NOTES

Application processing temperatures vary with indoor and outdoor ambient temperature, substrate temperature, humidity, elevation, substrate type, equipment, and other factors. While manufacturing spray foam on-site, the applicator must continuously observe the sprayed foam and adjust processing temperatures and pressures to maintain optimal cell structure, adhesion, and overall foam quality.

It is the sole responsibility of the applicator to manufacture ComfortSeal polyurethane spray foam on-site within the manufacturer's recommended specifications.

SUBSTRATE At least 10°F above dew point	SURFACE Free of frost, oil, rust, dust and debris	EQUIPMENT Consistent 1:1 by volume, ≥1200 psi, reaches target temps
CODE LIMITS E84 tested at up to 4 in. Max. foam with DC315 thermal barrier: 8 in. walls / 14 in. ceilings. With ignition barrier coatings: 9.5 in. (DC315) or 10 in. (Plus ThB) walls / 14 in. ceilings (ER-974 §3.3.4). Nonstructural; Type V (IBC) and one- and two-family dwellings (IRC).		

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