



Semi-Rigid, Spray-Applied Polyurethane Foam

SEALECTION® 500 is a two-component, open-celled, spray-applied, semi-rigid polyurethane foam system. This product is a fully water-blown foam system with a very low in-place density. **SEALECTION® 500** meets the off gassing requirements of CGSB 51.23-92 for new residential construction. **SEALECTION® 500** has been approved by the EcoLogoSM (formerly Environmental Choice) Program of Canada and is listed as a *Certified Green Product*. **SEALECTION® 500** complies with the intent of the International Code Council's residential and commercial building codes for spray polyurethane foam plastic insulation.

Physical Properties

Method	Description	Value
ASTM D 1622	Density (core)	0.45 – 0.5 lb/ft³
ASTM C 518 (R-value)	Thermal Resistance 2 days @ 76°F, per inch	3.81 ft².h°F/BTU
	Thermal Resistance 90 days @ 76°F, per inch	3.81 ft².h°F/BTU
ASTM E 283	Air Leakage (<i>Air Impermeable IAW 2006 IRC Requirements</i>)	
	3.5" @ 75 Pa (25 mph wind)	0.001 L/s•m²
	5.5" @ 75 Pa (25 mph wind)	0.001 L/s•m²
	10" @ 75 Pa (25 mph wind)	0.002 L/s•m²
	Sustained Wind Load for 60 minutes @ 1000 Pa (90 mph wind) Gust Wind Load Test @ 3000 Pa (160 mph wind)	No Damage No Damage
ASTM E 2178	Air Permeance if Building Materials	
	3.5" @ 25Pa	0.001 L/s•m²
	3.5" @ 50 Pa	0.001 L/s•m²
	3.5" @ 75 Pa	0.002 L/s•m²
	3.5" @ 100 Pa	0.003 L/s•m²
	3.5" @ 150 Pa	0.004 L/s•m²
3.5" @ 300 Pa	0.008 L/s•m²	
ASTM E 96	Water Vapor Transmission (<i>Class III Vapor Retarder at normal installed thicknesses</i>)	
	3.5"	6.6 Perms
	5.5"	4.2 Perms
	7"	3.3 Perms
10"	2.3 Perms	
ASTM D 1621	Compressive Strength	0.7 psi
ASTM D 1623	Tensile Strength	5.6 lbs/in²
ASTM E 413	Sound Transmission Class (STC)	49-51*
ASTM C 423	Noise Reduction Coefficient (NRC)	75
CGSB 51.23-92	Off Gassing Tests (VOC Emissions)	Pass (No toxic vapors)
ASTM D 2863	Oxygen Index	22%
ASTM D 1929	Ignition Properties (Spontaneous-ignition temperature)	1040°F (560°C)
ASTM E 84	Surface Burning Characteristics, 6" thick	
	• Flame spread Index	21
	• Smoke Developed	216
ASTM E 119	Wall Assembly Test (non-loadbearing)	Pass 1 hour*

*based on specific wall design.

Liquid Components Properties

Property	Isocyanate A 500	Resin B 500
Color	Brown	Transparent Clear
Viscosity @ 77°F	180-220 cps	150-300 cps
Specific Gravity	1.22 – 1.25	1.09 – 1.11
Shelf life*	6 months	6 months
Mixing ratio (volume)	100	100

* See MSDS for more information.

Processing Parameters

	Imperial units	Metric units
Type of machine	Graco® Reactor E-30 with Fusion gun and O2 Mixing Chamber	
Components A & B temperature	130°F	54.5°C
Hose temperature	130°F	54.5°C
Ambient temperature	70°F	21°C
Thickness per pass	Full thickness of application	
Substrate	Plaster board	

Reactivity Profile

Cream time (s)	Gel time (s)	Tack free time (s)	End of rise (s)
1-2	3-4	6-7	6-7

Recommended Processing Conditions

	Value
Primary heater	130°F
Hose temperature	130°F
Mixing pressure	1000 psi
Substrate & Ambient temperature	>23°F
Curing temperature	>23°F

General Information: It is recommended that the foam is covered with an approved thermal barrier in accordance to the local and national building codes when used in buildings and a protective coating when used outside. This product should not be used when the continuous service temperature of the substrate is outside the range of -60°F (-51°C) to 176°F (80°C).



Disclaimer: The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent infringement. All patent rights are reserved. The foam product is combustible and must be covered by an approved thermal barrier. Protect from direct flame and sparks contact. The exclusive remedy for all proven claims is replacement of our materials.