

SEALECTION™ 500

INSULATION AND AIR SEAL



SEALECTION™ 500

- **SEALECTION™ 500**

is an open cell semi-rigid spray-applied polyurethane foam insulation system which is made up of millions of microscopic cells that simultaneously insulate and air-seal.

- **SEALECTION™ 500**

has been specifically designed to make your home more energy efficient, comfortable, quiet, and less dusty.

- **SEALECTION™ 500**

is applied as a liquid which expands into a semi-rigid mass; it automatically "SEALS" off those drafty areas like baseboards, headers, sill plates, around windows, doors, electrical outlets, pipes, etc. It also minimizes uncontrolled air leakage throughout the building envelope (wall, ceilings,...) thereby reducing energy losses.

INSULATION «R» VALUE

- **SEALECTION™ 500**

R-Value does not diminish over time.

- **SEALECTION™ 500**

cellular structure and monolithic surface

(no joints or seams) make it ideal for energy conservation.

- **SEALECTION™ 500**

will maintain the same R-Value even at lowered temperatures.



INSTALLATION

- On-site customized installation
 - perfect fit every time
 - insulate and air seal the hard-to-reach areas
- Applied only by approved contractors with qualified installers.
- Applied with specialized equipment designed specifically for a two component urethane system.
- Applied from the interior to open cavities.
- Excellent adhesion on clean dry surfaces (no need for fasteners).
- Like all insulation **SEALECTION™ 500** must be protected by an approved thermal barrier from the interior and conform to the local building codes and regulations.
- Depending upon the geographical location, a vapour barrier maybe required on the warm side of the insulation.





AIR SEAL - AIR LEAKAGE

- **SEALECTION™ 500** seals cracks, gaps, etc. found in on-site construction.
- **SEALECTION™ 500** is an air barrier due to its low air leakage.
- **SEALECTION™ 500** can withstand gust wind conditions (160 miles/hr. wind velocity).



LOW DENSITY POLYURETHANE FOAM IN WALL CAVITIES

- **SEALECTION™ 500** seals and insulates in one application.
- **SEALECTION™ 500** does not settle or compact in cavities.
- **SEALECTION™ 500** expands up to 120 times its liquid volume within seconds.
- **SEALECTION™ 500** is the official trademark of DEMILEC.

THE SEALECTION™ 500 INSULATION SYSTEM FOR HOME OWNERS AND BUILDERS...

PROVIDES SUPERIOR PERFORMANCE:

- **Energy efficient homes** - heating and cooling costs can be reduced by as much as 50%.
- **A reduction of heating and air conditioning** tonnage by as much as 40% without the loss of efficiency or comfort.
- **Draft free environment** - sealing of cracks, joints, etc..., will prevent uncontrolled movement of air through the wall assemblies.
- **Quiet homes** - the open cells and the semi-rigid polyurethane mass will absorb and reduce the transmission of sound.
- **Dust free** - Homes insulated with **SEALECTION™ 500** show a remarkable reduction of dust accumulation.
- **Improved indoor air quality.**
- **Stable insulation**, not subject to structural deterioration or decomposition.
- **Comfort throughout the home.**

R-VALUE and AIR BARRIER

SEALECTION™ 500 is a relatively new product in the home-insulation market with many added benefits over standard fiberglass batts insulation. The greatest benefits of **SEALECTION™ 500** are in its thermal resistance performance and low air leakage. The R-value of a wall using fiberglass batts insulation can be significantly reduced from the laboratory measured R-value as a result of air leakage through the wall. The R-value of a wall using **SEALECTION™ 500**, however, suffers NO reduction in its R-value because **SEALECTION™ 500** minimizes air leakage.

Most factory-made insulation materials suffer a reduction in performance due to air leakage. As a result, the insulating value of many walls may be as low as 50% of the R-value of the insulating material they contain. By contrast, the insulation value of a wall containing custom-installed **SEALECTION™ 500** performs close to the laboratory tested R-value of the material and seals the wall cavity from air filtration as well.

SEALECTION™ 500 is custom installed and expands after spraying. It can completely fill any cavity and form a continuous air barrier by adhering to other building materials. These are things that batts and boards and blown insulation simply cannot achieve, which accounts for the superiority of the **SEALECTION™ 500** system. Think about it: every gap or void in normal insulation has an R-value of nearly zero. That's not a problem with a house insulated with **SEALECTION™ 500**.

Isn't that what you want for your new home?

In conclusion, **SEALECTION™ 500** differentiates its nominal R-value from fiberglass basically showing that R-values are not created equal; there are laboratory R-values and performing R-values.



ENVIRONMENTALLY SAFE

- Contains no ozone depleting chemicals, CFC, HCFC, fibers, formaldehyde or asbestos.
- 100% water blown.
- No toxic substances are emitted.

Passed the established off-gassing tests.

- Approved by Environmental Choice (Canadian version to USEPA)
- Environmental friendly product.



SEALECTION™ 500

Physical Properties

Method	Description	Value
ASTM D 1622	Density	(0.45 - 0.50 lb/ft³)
ASTM C 518	R-Value (Thermal Resistance)	3.81ft².h.°F/BTU.in
ASTM C 1338	Fungi Resistance	No Fungal Growth
ASTM E 283-91	Air Leakage @ 75 Pa (25 miles/hr. wind)	0.04 L/s.m²
	Sustained Wind Load for 60 minutes @ 1000 Pa (90miles/hr. wind)	No Damage
	Gust Wind Load Test @ 3000 Pa (160 miles/hr.)	No Damage
ASTM D 1623	Tensile Strength	2.5 psi
CAN / ULC-S 774	Off Gassing Tests (Volatile Organic Compound)	No Toxic Vapors
ASTM E 84	Surface Burning Characteristics (6" thick)	
	• Flame Spread Index	21 CLASS I
	• Smoke Development	216
CAN/ULC-S102M	Flame Spread	25 < F.S.< 500

*Acousticals Properties

Wood cavities 2" x 6" insulated with SEALECTION™ 500

Method	Description and values					
ASTM E 90	• Frequency (HZ)					
	125	250	500	1000	2000	4000
	• Transmission loss					
	17	29	37	45	47	48
	• Transmission loss index (sound transmission class) = 39 according to ASTM E 413					
ASTM C 423	• Sound absorption					
	.28	.56	.87	.69	.79	.77
	Sound Absorption Coefficient (noise reduction coefficient = .75)					

* **Note:** All tests were conducted by certified independent laboratories.

APPROVALS

Authorities having jurisdiction have evaluated **SEALECTION™ 500** and confirm that it meets the intent of the North American Building Codes. The following approvals were obtained:

- Energy Star
- ICCES # 96-21
- Warnock Hershey Evaluation # 193-7081
- New York State Uniform Fire Prevention and Building Code
- Environmental Choice Product : Eco-Logo ECP-40
- CCMC Evaluation # 12697 - R
- CMHC Canada Mortgage and Housing Corporation
- Ontario Minister of Municipal Affairs & Housing no. 95-10-29





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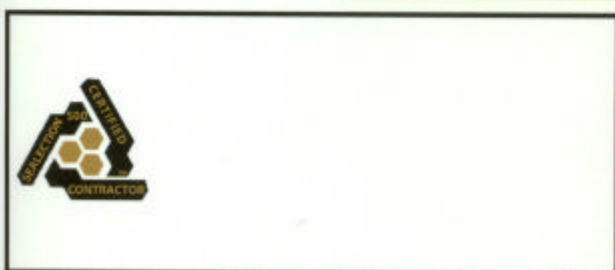
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Waiver

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