

CLOSED CELL FOAM SealTite ECO

SealTite ECO medium density, closed cell spray foam insulation is the newest product offering from Carlisle Spray Foam Insulation Canada to meet the strict requirements of the current CAN/ULC-S705.1 standard. Teal in colour, this foam stands out in both colour and performance with both a CCMC 13359-L listing and a ULC R39311 listing. SealTite ECO is the only spray foam insulation in Canada tested to CAN/ULC-S742 Air Barrier Assembly.

SealTite ECO utilizes, zero ozone-depleting substances and is designed for use in commercial and residential construction applications that involve the National Building Code of Canada. SealTite ECO must be applied by licensed installers that follow the CAN/ULC S705.2 program. Carlisle utilizes Caliber Quality Solutions Inc. to administer its Site Quality Assurance Program (SQAP).

SealTite ECO provides high LTRR insulation value while also meeting requirements as a vapour barrier and air barrier. Other benefits include reductions in noise, dust, pollen, pest infiltrations and significantly improves on structural racking strength. SealTite ECO is available in two reactivities including: Winter and Summer.

For proper use of SealTite ECO spray foam, please refer to the Carlisle's Installer Manual and the CAN/ULC S705.2 Rigid Polyurethane Foam Medium Density Application standard.

TYPICAL PHYSICAL PROPERTIES:

Property	CAN/ULC S705.1 Requirements	Metric Value (Imperial)	Test	
Core Density	> 28 kg/ m ³	33.3 kg/m ³ (2.08 lb/ft ³)	ASTM D1622	
Compressive Strength	> 170 kPa	175 kPa (25 psi)	ASTM D1621	
Tensile Strength	> 200 kPa	414 kPa (60 PSI)	ASTM D1623	
Dimensional Stability	At -20C At 80C At 70C, 97% + 3% RH	-2/+5 -2/+8 -2/+14	< 1.0 < 1.0 < 1.0	ASTM 2126
Open Cell Content	< 10% by volume	8%	ASTM D2856	
Water Absorption	< 4% by volume	< 2%	ASTM D2842	
Water Vapour Permeance	< 60 ng/(PAsm ²)	41 ng/Pa.s.m ²	ASTM E96	
Air Barrier Assembly	A1 Rated	0.02 L/s-m ² (0.004 cfm/ft ²)	CAN/ ULC S742	
Air Permeance	< 0.02 L/s @75 Pa (1.57 lb/ft ²)	0.00005	ASTM E2178	
Flame Spread	< 500	< 50	CAN/ ULC S102	
Flame Spread	NA	< 250	CAN/ ULC S127	
Smoke Development	NA	< 500	CAN/ ULC S102	
Volatile Organic Compounds (VOC)*	Declare	24 hours	CAN/ULC S774	
Initial R Value	Declare	2.4 (R6.9)	ASTM C518	
LTRR (Long Term Thermal Resistance)	Declare	2.0 (R5.7)	CAN/ULC S770	



LONG TERM THERMAL RESISTANCE:

Thickness mm (inches)	R VALUE PER INCH °F • ft ² • hr/BTU • in	R Value Total At Thickness °F • ft ² • hr/BTU • in	RSI K • m ² /W
50 mm (2 inches)	5.7	11.4	2.0
75 mm (3 inches)	5.9	17.6	3.1
100 mm (4 inches)	6.1	24.4	4.3

CODE COMPLIANCE: The National Building Code of Canada requires the use of ½ inch gypsum board, intumescent paint, or other approved thermal barriers over any exposed foamed plastic insulation for occupied spaces.

ADVANTAGES:

- High R-Value
- High Yield
- Air Barrier Assembly CAN/ULC-S742
- Vapour Barrier
- Low Viscosity Resin
- Ease of Application
- High Closed Cell Content
- Zero ODP
- Seamless Insulation

APPLICATION GUIDELINES: 15–50 mm (½ inch to 2 inch) is the required thickness per pass of SealTite ECO as per CAN/ULC S705.2. Allow adequate time between each pass. Multiple passes can be applied to reach the desired thickness and insulation value. Long term exposed applications should be protected from UV exposure with the use of a protective coating (project examples are tank or exposed ducting related applications). Always follow CAN/ULC S705.2 guidelines for application limitations and protocol for residential and commercial applications.

Ambient Temperature guidelines for application of SealTite ECO: (temperature will vary depending on substrate type, moisture and wind)

SealTite ECO Winter	-10°C to +25°C (-14°F to 77°F)
SealTite ECO Regular	+10°C to +50°C (50°F to 122°F)

APPLICATION INFORMATION:

STORAGE AND USE OF CHEMICALS: Cold A & B components can cause poor mixing, pump cavitation, or other process problems due to higher viscosity. Condition and maintain the liquid components in each drum to 64–86°F prior to use. Do not store in direct sunlight or weather. Keep drums tightly closed when not in use. Shelf life of resin (B component) is six months from date of manufacture.

SAFE HANDLING OF LIQUID COMPONENTS: When removing bungs from containers use caution, contents may be under pressure. Loosen bung first and let any built up gas escape before completely removing. Avoid prolonged breathing of vapors. All individuals in contact with SealTite and Foamsulate™ ISO liquids should have access and familiarize themselves to the SDS. Kit sizes are 454 kgs (227kg A and 227kg B).

EQUIPMENT AND COMPONENT SETTINGS: Polyurethane foam systems should be processed through 1:1 fixed ratio spray equipment. SealTite B-side (white drum) is connected to the resin pump and the SealTite A-side or Foamsulate A-Side (black or red drum) is connected to the isocyanate pump. The pre-heater should be set between 122°–140°F (50°C–60°C) and the hose heat is able to maintain within 5° F of the primary temperature right to the spray gun. Proportioner pumps must be able to maintain at least 1000 psi output during spray (dynamic spray pressure). SealTite has varying reactivities of system depending on the ambient conditions with Winter reactivity being labeled as “SealTite ECO Winter” and Summer reactivity being “SealTite ECO Regular”.

