

Sealection® 500 is a two-component, open cell, spray applied, semi-rigid polyurethane foam system. This product is a fully water-blown foam system with a low in-place density with excellent adhesion to various substrates and to itself. Sealection 500 incorporates the single-phase solution technology developed by Huntsman Building Solutions excellent shelf life and consistent processing. Sealection 500 complies with the intent of the International Code Council's residential and commercial building codes for spray polyurethane foam plastic insulation. Sealection 500 has been approved by the Eco Logo (formerly Environmental Choice) Program of Canada and is an NAHB Green Approved Product. SEALECTION 500 has been fully re-tested by a recognized independent laboratory and evaluated by CCMC (12697-R) for installation in open cavities such as stud walls, perimeter joist, cathedral and garage ceilings and complies with the intent of the National Building Codes of Canada, Article 9.25.2.2.(1). Ruling No. 95-10-29-(12697-R) authorizing the use of this product in Ontario. Canada Mortgage and Housing Corporation permits the use of this product in construction financed or insured under the National Housing Act. Sealection 500 is applied exclusively by CALIBER QAP licensed installers and contractors in accordance with the standard CAN/ULC S712.2.

| PHYSICAL PROPERTIES (CCMC #12697-R) | | | |
|--|---|---|-----------------------------|
| ASTM D 1622 | Density | 0.50 lb/ft ³ | 8.3 kg/m ³ |
| ASTM C 518 | Aged Thermal Resistance (R-value @ 25.4mm) | 3.5 ft ² h ² F/BTU | 0.61 Km ² /W |
| ASTM D2126 | Dimensional Stability, 28 days, Volume change % <ul style="list-style-type: none"> ▪ -29°C / Ambient RH ▪ 80°C / Ambient RH ▪ 70°C / 95 ±3 % RH | -0.5 -4.4 -5.1 | |
| ASTM D2842 | Water Absorption (%) | 50% | |
| ASTM E 96 | Water Vapor Permeance @ 25mm thick core sample | 22.72 perms | 1300 ng/Pa•s•m ² |
| CAN/ULC-S774-09 | VOC Emissions Standard | Pass | |
| CAN/ULC S102 (including S127) | Flame Spread Rate Smoke Development | 435 240 | |
| PHYSICAL PROPERTIES (Additional Testing) | | | |
| ASTM E 413 | Sound Transmission Class (STC) (see website for assembly specs) | 49 – 51 | |
| ASTM C 423 | Noise Reduction Coefficient (NRC) | 0.75 | |
| ASTM E 283 | Air Leakage (air impermeable IAW 2006, 2009 & 2012 IRC, IBC & IECC requirements) | | |
| | Air Permeance @ 75 Pa @ 3.5" Sustained wind load for 60 minutes @ 1000 Pa (90 mph wind) Gust wind load test @ 3000 Pa (160 mph wind) | 0.001 L/sm ² No Damage No Damage | |
| ASTM E 2178 | Air Permeance @ 50 Pa @ 3.5" Air Permeance @ 100 Pa @ 3.5" Air Permeance @ 300 Pa @ 3.5" | 0.001 L/sm ² 0.003 L/sm ² 0.008 L/sm ² | |
| ASTM C 1338 | Fungi Resistance Tests | No Fungal Growth | |
| ASTM D 1929 | Spontaneous Ignition Temperature | 560°C (1040°F) | |
| ASTM D 1621 | Compressive Strength | 0.7 psi | 4.8 kPa |
| ASTM D 1623 | Tensile Strength | 5.6 psi | 38.6 kPa |

| REACTIVITY PROFILE | | | |
|--------------------|---------------|----------------|---------------|
| Cream Time | Gel Time | Tack Free Time | End of Rise |
| 1 – 2 seconds | 3 – 4 seconds | 6 – 7 seconds | 6 – 7 seconds |

| LIQUID COMPONENT PROPERTIES* | | |
|---|------------------------|------------------------|
| PROPERTY | A-PMDI ISOCYANATE | SEALECTION 500 RESIN |
| Color | Brown | Amber |
| Viscosity @ 77°F (25°C) | 180 – 220 cps | 150 – 300 cps |
| Specific Gravity | 1.24 | 1.08 – 1.12 |
| Shelf Life of unopened drum properly stored | 12 months | 12 months |
| Storage Temperature | 50 – 100°F (10 – 38°C) | 50 – 100°F (10 – 38°C) |

| | | |
|-----------------------|-----|-----|
| Mixing Ratio (volume) | 1:1 | 1:1 |
|-----------------------|-----|-----|

*See SDS for more information.

| RECOMMENDED PROCESSING CONDITIONS* | | |
|---|---|------------------|
| Initial Recirculating Setpoint Temperature | 90 – 100°F | 32 – 38°C |
| Initial Primary Heater Setpoint Temperature | 110 – 130°F | 43 – 54°C |
| Initial Hose Heat Setpoint Temperature | 110 – 130°F | 43 – 54°C |
| Initial Processing Setpoint Pressure | 1100 – 1500 psi | 7584 – 10342 kPa |
| Substrate & Ambient Temperature | > 23°F | > -5°C |
| Moisture Content of Substrate | ≤ 19% | ≤ 19% |
| Moisture Content of Concrete | Concrete must be cured, dry and free of dust and form release agents. | |

*Foam application temperatures and pressures can vary widely depending on temperature, humidity, elevation, substrate, equipment and other factors. While processing, the applicator must continuously observe the characteristics of the sprayed foam and adjust processing temperatures and pressures to maintain proper cell structure, adhesion, cohesion and general foam quality. It is the sole responsibility of the applicator to process and apply Sealection 500 within specification.

General Requirements: Equipment must be capable of delivering the proper ratio (1:1 by volume) of polymeric isocyanate (PMDI) and polyol blend at adequate temperatures and spray pressures. Substrate must be at least 5 degrees above dew point, with best processing results when ambient humidity is below 80%. Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the polyurethane foam.

Sealection 500 must be separated from the interior of the building by an approved thermal barrier or an approved finish material equivalent to a thermal barrier in accordance with applicable codes. Sealection 500 must be sprayed at a minimum thickness of 3" per pass. This product must not be used when the continuous service temperature of the substrate or foam is below -60°F (-51°C) or above 180°F (82°C). Sealection 500 should not be used in contact with bulk water, below grade or to cover flexible ductwork.

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, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.

