



# QUIK-SHIELD 106

## Open-Cell Spray Foam

**QUIK-SHIELD® 106** is an open-cell spray foam insulation. It is ideal for high-performance and air barrier insulation applications in residential and commercial construction. QUIK-SHIELD® 106 is an effective insulation material with excellent adhesion and can be used as an acoustical material.

### TYPICAL PHYSICAL PROPERTIES

Properties achieved in a lab environment at 25°C (77°F). Field conditions may cause variation in properties.

	PROCEDURE	VALUES
Air Leakage at 3.5 (L/s @75 Pa)(L/s/m²)	E-283	<0.005 (0.02)
Closed-Cell, content (%)	D-2856	<90
Core Density (nominal, kg/m³)(nominal, lb/ft³)	D-1622	7.21-8 (0.45-0.5)
Dimensional Stability (% max total change)	D-2126	<6
Surface Burning Characteristics	CAN/ULC-S102/S127	PASS
Tensile Strength (kPa)(psi)	D-1623	93 (13.5)
Water Absorption (%)	D-2842	2.9
Water Vapor Permeance (50mm ng/Pa·s·m²)(perms/in)	E-96	2140 (51)

### RELATIVE INSULATION VALUES (aged)

RSI @ 25.4mm (m2 C°/W)	0.63
R-value @ 25.4mm	3.6

### HANDLING PROPERTIES at 25°C (77°F)

	A-SIDE (ISO)	B-SIDE (RESIN)
Specific Gravity	1.23	1.11
Viscosity, cps	250±50	250±50

### RECOMMENDED STORAGE AND SHELF LIFE

- Storage temperatures 10-38°C (50-100°F) See back for preconditioning of material.
- 6 month shelf life from date of manufacture (unopened containers).
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

### PRODUCT INFORMATION

Blowing Agent	100% Water Blown
Emissions	Per CAN/ULC-S774 occupants must wait 24 hours before re-occupancy.
Extreme Temperatures	Continuous use temperature can be as high as 121°C (250°F) per ASTM C411
LEED	QUIK-SHIELD® 106 has a minimum of 19.7% total renewable/recycle content, 2.6% pre-consumer recycled, 3.4% post-consumer recycled, and 13.7% rapidly renewable. The reaction used to expand QS106 generates carbon dioxide. Carbon dioxide has a GWP of 1.
Product Colour	White to off-white (UV exposure will cause discoloration. Discoloration by itself is not a sign of product damage.)
Product Packaging	275 Gallon Tote and 55 Gallon Drum
Water Absorption	Water can be forced into any open-cell foam under pressure. Water will drain with gravity allowing wet foam to fully dry and restore all chemical and physical properties of the insulation.

### APPROVALS / COMPLIANCE

CCMC 13390-R

Certification Organization (CO) - Caliber Quality Solutions Inc.



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**PREPARATION OF SUBSTRATES**

Providing the proper substrate is the responsibility of the owner, the owner’s appointed representative, the contractor, and/or inspector. The following are manufacturer’s recommendations. However, other preparation techniques may be required given unique/specialized application circumstances. Contact **SWD Technical Support at 888-380-2022** for additional questions.

It is recommended to remove dust, dirt, oil, paint, and alternative polymers from all surfaces prior to applying SWD products.

See SWD specifications or SPFA guidelines for further details on substrate prep.

Wood	<ul style="list-style-type: none"> <li>• Ensure wood is relatively dry and protect surfaces from contamination. For moisture content exceeding 19%, contact SWD Technical Support.</li> <li>• Water or oil present may cause poor adhesion or excessive foaming.</li> <li>• Fill large voids with appropriate backer rods or appropriate fillers.</li> <li>• If additional information is required, contact SWD Technical Support.</li> </ul>
Steel & Other Metals	<ul style="list-style-type: none"> <li>• It is the responsibility of the contractor/end user to determine proper adhesion and suitability through field testing. Blasting and/or priming is not always required. If additional information is required, contact SWD Technical Support.</li> </ul>
Concrete	<ul style="list-style-type: none"> <li>• If applying foam to concrete, the concrete surface should be structurally sound, clean, and curing for 28 days.</li> <li>• Fill large voids with appropriate backer rods or appropriate fillers.</li> <li>• Blasting and/or priming is not always required. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. If additional information is required, contact SWD Technical Support.</li> </ul>
Previously Applied Foam or Other Polymers	<ul style="list-style-type: none"> <li>• As practical, remove previously applied foam and other polymer products. Application of product over existing materials should be performed only after adhesion/compatibility is verified by the contractor and accepted by the building owner or owner’s appointed representative.</li> </ul>
Wiring and Plumbing	<ul style="list-style-type: none"> <li>• QUIK-SHIELD® 106 is fully compatible with CPVC piping systems (Paschal Engineering Study for the SPFA).</li> <li>• QUIK-SHIELD® 106 is compatible with typical electrical wiring coverings. (NEMA Bulletin 95)</li> </ul>

**PROCESSING**

Preconditioning	<ol style="list-style-type: none"> <li>1. It is recommended to precondition material to 21-27°C (70-80°F) prior to application. Material may thicken at lower temperatures which can cavitate pumps.</li> </ol>
Mixing	<ol style="list-style-type: none"> <li>2. Mix B-Side (resin) for 20 minutes on high prior to application using an electric driven drum mixer (Krause &amp; Becker 69856 Dual Speed Mixer or equivalent) in the center bung of drum. Ensure that the mixer is securely attached. Clutch setting 2 (dots) at a recommended speed of 5. Recommended configuration - 400RPM-800RPM, 120V, 10A.</li> <li>3. Recommended folding blade arrangement: 15cm (6in) blade top, 15cm (6in) blade middle, 20cm (8in) blade bottom.</li> <li>4. Continually mix B-Side (resin) while applying material.</li> <li>5. Mixing of A-Side (iso) is not required.</li> </ol>
Pressure Settings	<ol style="list-style-type: none"> <li>6. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000 psi dynamic pressure.</li> <li>7. Static pressure is typically set between 1200-1500psi.</li> <li>8. Dynamic pressure typically operates at a minimum of 1000psi.</li> </ol>
Temperature Settings	<ol style="list-style-type: none"> <li>9. Primary heaters and hose heaters are typically set between 46-66°C (115-150°F). Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.</li> </ol>

Proper application temperature setting is the responsibility of the end user. Equipment temperature varies and can be dependent on equipment, hose length, elevation, ambient temperature, substrate temperature, humidity, and other factors. If additional information is required, refer to QS106 Processing Packet found on [swdurethane.com](http://swdurethane.com) and the SWD mobile app, or contact

**SWD Technical Support at 888-380-2022.**

**APPLICATION**

1. Clean surfaces according to “Preparation of Substrates” section.
2. If priming, follow manufacturer recommendations. Ensure primer is adequately cured prior to application.
3. It is the contractor’s responsibility to determine if ambient and substrate temperatures are conducive for spraying foam.
4. Flush an adequate amount of material through the lines/gun prior to spraying desired surface when changing between systems. Flush amount will be dependent on prior system used. If additional information is required, contact an SWD representative for more details.
5. Before application, test material to ensure that material sprays, cures, and hardens properly.
6. Inspect applied material intermittently to ensure no problems exist. If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).

**CLEANING AND MAINTENANCE**

1. Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer’s maintenance procedures for more details.
2. Contact SWD for long-term equipment storage recommendations.



The information herein is believed to be reliable; however, unknown risks may be present. SWD Urethane makes no warranty, expressed or implied, concerning this product’s merchantability or fitness for any particular use. The product will meet the written liquid component specifications as indicated on the technical data sheet published at the time of the purchase. The entirety of SWD Urethane’s responsibility is limited only to the cost of the SWD material. The foregoing constitutes SWD Urethane’s sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Safety is the responsibility of the owner, the owner’s appointed representative, the contractor, and/or inspector. Become familiar with local, state, and federal regulations regarding chemical health, safety, and handling. For more information consult the product SDS, contact the SPFA ([www.sprayfoam.org](http://www.sprayfoam.org)) or the ACC ([www.spraypolyurethane.org](http://www.spraypolyurethane.org)).