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 (IRC) and commercial (IBC) 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 77°F. Field conditions may cause variation in properties.

	PROCEDURE	VALUES
Air Leakage at 3.5 (L/s/m^2 @ 75 Pa)	E-283	<0.02
Closed-Cell, content (%)	D-2856	<90
Core Density (nominal, lb/ft^3)	D-1622	0.45-0.5
Dimensional Stability (% max total change)	D-2126	<6
Tensile Strength (psi)	D-1623	13.5
Water Absorption (%)	D-2842	2.9
Water Vapor Permeance (perms/in)	E-96	51

RELATIVE INSULATION VALUES (aged)

R-value at 1”	4.0
R-value per inch at ≥ 3.5”	3.7

THERMAL BARRIER

DC 315 (wet mils)	NFPA 286	24

HANDLING PROPERTIES at 77°F (25°C)

	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 50-100°F (10-38°C) 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
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 QS 106 generates carbon dioxide. Carbon dioxide has a GWP of 1.
Product Color	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
Reentry Times	1-hour Reentry for new residential construction with natural ventilation. 12-hour Reentry for commercial/retrofit.
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

QUIK-SHIELD® 106 has been tested by a third party laboratory (Intertek Testings Services NA, Inc.) and evaluated by Priest and Associates Fire Consultants, LLC.

CCRR-1011	Type I-V construction
IBC, IRC, IECC: 2009, 2012, 2015, 2018 (AC377)	Berkley Analytical
Class 1— ASTM E-84.	IRC Section 316.6 - Ignition barrier not required in unvented attics per CCRR-1011, section 5.4.2.4.

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	• Ensure wood is relatively dry and protect surfaces from contamination. For moisture content exceeding 19%, contact SWD Technical Support. • Water or oil present may cause poor adhesion or excessive foaming. • Fill large voids with appropriate backer rods or appropriate fillers. • If additional information is required, contact SWD Technical Support.
Steel & Other Metals	• 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.
Concrete	• If applying foam to concrete, the concrete surface should be structurally sound, clean, and curing for 28 days. • Fill large voids with appropriate backer rods or appropriate fillers. • 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.
Previously Applied Foam or Other Polymers	• 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.
Wiring and Pluming	• QUIK-SHIELD® 106 is fully compatible with CPVC piping systems (Paschal Engineering Study for the SPFA). • QUIK-SHIELD® 106 is compatible with typical electrical wiring coverings. (NEMA Bulletin 95)

PROCESSING

Preconditioning	1. It is recommended to precondition material to 70-80°F prior to application. Material may thicken at lower temperatures which can cavitate pumps.
Mixing	2. Mix B-Side (resin) for 20 minutes on high prior to application using an electric driven drum mixer (Krause & 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. 3. Recommended folding blade arrangement: 6" blade top, 6" blade middle, 8" blade bottom. 4. Continually mix B-Side (resin) while applying material. 5. Mixing of A-Side (iso) is not required.
Pressure Settings	6. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000 psi dynamic pressure. 7. Static pressure is typically set between 1200-1500psi. 8. Dynamic pressure typically operates at a minimum of 1000psi.
Temperature Settings	9. Primary heaters and hose heaters are typically set between 115-150°F (46-66°C). Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.

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 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.