

QUIK-SHIELD 106 Open-Cell Spray Foam

QUIK-SHIELD® 106 is an open-cell, spray-applied, polyurethane foam. It is ideal for use as a high-performance insulation and air barrier. Quik-Shield® 106 is an integral component of energy efficient building envelopes.

HIGH PERFORMANCE:

- Effective insulating material
- Seamless air barrier
- Acoustical material

EXCEPTIONAL CONTRACTOR VALUE:

- Industry leading yield
- Low application odor
- Superior foam adhesion

TYPICAL PHYSICAL PROPERTIES*:

Core Density (nominal, lb/ft ³)
Water Vapor Permeance (perms/in)
Water Absorption (%)
Dimensional Stability (%)
Tensile Strength (psi)
Closed Cell, content (%)
Air Leakage (L/s/m ²)
Noise Reduction Coefficient (NRC)
Sound Transmission Class (STC)

PROCEDURE

D-1622
E-96
D-2842
D-2126
D-1623
D-2856
E-283
C-423
E-90

VALUES

0.45-0.5
51
2.9
<6
13.5
<90
<0.02
0.70
39

RELATIVE INSULATION VALUES (aged):

R-value at 1"
R-value per inch at ≥ 3.5 "

ASTM C518
ASTM C518

4.0
3.7

THERMAL AND IGNITION BARRIERS

Thermal Barrier:

DC 315 (wet mils)

NFPA 286

24

HANDLING PROPERTIES at 77°F (25°C):

Viscosity, cps
Specific Gravity

A SIDE (ISO)

250±50
1.23

B SIDE (RESIN)

250±50
1.11

RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

Ratio	1:1
Hose Heaters	115-160° F (46-71° C)
Primary Heaters (A&B)	115-160° F (46-71° C)
Dynamic Pressure (A&B)	900 psi minimum
Static Pressure (A&B)	1100-1400 psi minimum

MIXING (ADDITIONAL DETAILS ON BACK):

- Mix B-side (resin) on high speed for 30 minutes before application and continue mixing throughout application.
- Mixing of A-side (iso) is not required.

RECOMMENDED STORAGE AND SHELF LIFE (ADDITIONAL DETAILS ON BACK):

- 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.

APPROVALS/ COMPLIANCE:

- CCRR-1011
- IBC, IRC, IECC: 2009, 2012, 2015 (AC377)
- Type 1-V construction
- Class 1— ASTM E-84
- IRC Section 316.6 - Ignition barrier not required in unvented attics per CCRR-1011, section 5.4.2.4
- 1 hour reentry time for new residential construction, natural ventilation (Commercial/retrofit construction, 12 hours)
- CalBerkeley Analytical

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

Intertek

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.

INDUSTRY LEADING TEMPERATURES:

Continuous use temperatures as high as 250°F (121° C).

PACKAGING:

275 Gallon Tote
55 Gallon Drum

FINISHED PRODUCT COLOR:

White to off-white (UV exposure will cause discoloration. Discoloration by itself is not a sign of product damage)

BLOWING AGENT:

100% Water Blown

LEED INFORMATION:

- Quik-Shield® 106 has a minimum of 19.7% total renewable/recycle content
- 2.6% pre-consumer recycled
- 3.4% post-consumer recycled
- 13.7% rapidly renewable



The reaction used to expand Quik-Shield 106 generates carbon dioxide. Carbon dioxide has a GWP of 1.

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 for technical 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.
- 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 an SWD representative for more details.

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 an SWD representative for more details.

CONCRETE

- If applying foam to concrete, the concrete surface should be structurally sound, clean, and dry/cured (typically 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 an SWD representative for more details.

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 & PLUMBING:

- 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.

PROCESSING

1. It is recommended to precondition material to 70-80°F prior to application. Material may thicken at lower temperatures which can cavitate pumps.
2. Mix B-Side (Resin) for 30 minutes 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 speed of 5 is recommended. 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.
6. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000psi dynamic pressure and a maximum pressure differential of 200-psi between resin and isocyanate.
7. Static pressure is typically set between 1100-1400psi. Dynamic pressure typically operates at approximately 900-1300psi.
8. Primary heaters and hose heaters are typically set between 115 - 160°F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
9. 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, contact an SWD representative for more details.

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) or the ACC (www.spraypolyurethane.org).

**SWD Urethane**800-828-1394 • swdurethane.com

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