



QUIK-SHIELD 112UE

Ultra-Efficient Closed-Cell Spray Foam

QUIK-SHIELD® 112UE is the an ultra-efficient, closed-cell spray foam insulation. It is ideal for high-performance and air barrier insulation applications in residential and commercial construction. QUIK-SHIELD® 112UE increases jobsite efficiency, decreases labour and overhead costs, reduces jobsite risk, and delivers the lowest cost installed.

TYPICAL PHYSICAL PROPERTIES

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

	PROCEDURE	VALUES
Air Permeance at 1" (L/s @75 Pa)(L/s/m²)	CAN/ULC-S705.1	<0.005 (0.02)
Compressive Strength (kPa)(psi)	D-1621	259 (37.56)
Core Density (nominal, kg/m³) (nominal, lb/ft³)	D-1622	28.8-32 (1.8-2.0)
Dimensional Stability (% @ -20 °C) (% @ 80 °C) (% @ 70 °C, 97+3%RH)	D-2126	-0.5 -1 -1
Surface Burning	CAN/ULC-S102	PASS
Tensile Strength (kPa)(psi)	D-1623	573 (83)
Water Absorption (%)	D-2842	1
Water Vapor Permeance (50mm ng/(pa•s•m²)	E-96	58.1

RELATIVE INSULATION VALUES (aged)

LTTR Type 2 RSI @ 50mm (m² C°/W)	2.0
R-value @ 50mm	11.4

HANDLING PROPERTIES at 25°C (77°F)

	A-SIDE (ISO)	B-SIDE (RESIN)
Specific Gravity	1.23	1.22
Viscosity, cps	250±50	550±100

RECOMMENDED STORAGE AND SHELF LIFE

- Storage temperatures 10-38° C (50-100°F). See back for preconditioning of material.
- 6 month shelf life (resin) 12 month shelf life (iso) from date of manufacture (unopened containers).
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

PRODUCT INFORMATION

Emissions	Per CAN/ULC-S774 occupants must wait 24 hours before re-occupancy.
Extreme Temperatures	Continuous use temperature can be as high as 125°C (257°F) per ASTM C411, and a low of -51°C (-60°F) per D-2126
LEED	QUIK-SHIELD® 112UE has a minimum of 9% total renewable/recycle content, 2.3% pre-consumer recycled, 5.2% post-consumer recycled, 1.6% rapidly renewable, and IEQ Credit- Low Emitting.
Product Colour	Pearl Gray (UV exposure will cause discoloration. Discoloration by itself is not a sign of product damage.)
Product Packaging	275 Gallon Tote and 55 Gallon Drum

APPROVALS / COMPLIANCE

CCMC #13555-L	CAN/ULC S-705.1, S-705.2
GREENGUARD Gold Certified	Certification Organization (CO) - Caliber Quality Solutions Inc.



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"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Plumbing	<ul style="list-style-type: none"> • QUIK-SHIELD® 112UE is fully compatible with CPVC piping systems (Paschal Engineering Study for the SPFA). • QUIK-SHIELD® 112UE is compatible with typical electrical wiring coverings. (NEMA Bulletin 95)

PROCESSING

Preconditioning	<ol style="list-style-type: none"> 1. If the drum temperature is 26.6°C (80°F) or higher, use caution when opening the drum! The contents will be under pressure. 2. It is recommended to precondition material to 13-27°C (55-80°F) prior to application. Material may thicken at lower temperatures which can cavitate pumps.
Mixing	<ol style="list-style-type: none"> 3. Do not mix. 4. Do not recirculate.
Pressure Settings	<ol style="list-style-type: none"> 5. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000 psi dynamic pressure. 6. Static pressure is typically set between 1100-1400psi. 7. Dynamic pressure typically operates at a minimum of 1000psi.
Temperature Settings	<ol style="list-style-type: none"> 8. Primary heaters and hose heaters are typically set between 43-60°C (110-140°F). 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 QS112UE 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. Substrate temperatures should be between -4°C - 54°C (25-130°F) Flashing is recommended at lower temperatures. Higher and lower application temperatures are possible, contact SWD Technical Support for more details.
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 SWD Technical Support for more details.
5. Do not recirculate.
6. As per CAN/ULC S-705.2, you should not exceed a 50mm (2”) lift per pass. Up to four 50mm (2”) lifts can be applied at a time without having to wait for the foam to cool. It is the responsibility of the approved contractor to determine if the foam has cooled sufficiently for additional passes. If applying more than four 50mm (2”) lifts at a time, SWD recommends waiting a minimum of 20 minutes for the foam to cool.
7. Before application, test material to ensure that material sprays, cures, and hardens properly.
8. 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).