QUIK-SHIELD 112 XC

2 lb. Extreme Cold Spray Foam Insulation

QUIK-SHIELD® 112 XC is the preferred 2 lb. closed-cell, spray-applied, rigid polyurethane foam system on the market today. It is specially formulated for application to low temperature substrates, and is certified for use in the U. S. and Canada.

HIGH PERFORMANCE:
- Effective insulating material
- Seamless air barrier
- No ignition barrier needed

EXCEPTIONAL CONTRACTOR VALUE:
- Extreme Cold Temperature Application
- Industry leading yield

TYPICAL PHYSICAL PROPERTIES*:	***PROCEDURE***	***VALUES***
Core Density (nominal, lb/ft^3)	D-1622	2.0
Water Vapor Permeance at 1.2" (perms/in)	E-96	.93
Water Absorption (%)	D-2842	1
Dimensional Stability (%)	D-2126	<3
Tensile Strength (psi)	D-1623	>32
Compressive Strength (psi)	D-1621	25
Closed Cell, content (%)	D-6226	>96
Air Leakage (L/s.m^2)	E-283	<0.02
Air Permeance at 1" (L/s.m^2)	E2178-13	<0.02
Emissions (hours to re-occupancy)	CAN/ULC S-744	24

RELATIVE INSULATION VALUES (aged):

R-value	6.6	

THERMAL AND IGNITION BARRIERS

Thermal Barrier:		
DC 315 (wet mils)	NFPA 286	20
Flame Seal FS 1B (wet mils)	NFPA 286	20

HANDLING PROPERTIES at 77°F (25°C):	***A SIDE (ISO)***	***B SIDE (RESIN)***
Viscosity, cps	250±50	680±100
Specific Gravity	1.23	1.22

RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

Dispensing Ratio	1:1
Hose Heaters	115-140° F (46-60° C)
Primary Heaters (A&B)	115-140° F (46-60° C)
Dynamic Pressure (A&B)	1000 psi minimum
Static Pressure (A&B)	1100-1600 psi
Ambient Temperature[2]	-4-130° F (-20-54° C)

[2] *Temperatures outside this range are possible, contact SWD for more information*

MIXING (ADDITIONAL DETAILS ON BACK):
- Do not mix
- Do not recirculate

RECOMMENDED STORAGE AND SHELF LIFE (ADDITIONAL DETAILS ON BACK):
- Storage temperatures 40-100°F (4-38° C). See back for preconditioning of material.
- Shelf life from date of manufacture (unopened containers):
  - *A-Side (iso): 12 months*
  - *B-Side (resin): 6 months*
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

*Properties achieved in a lab environment at 77°F. Field conditions may cause variation in properties.

APPROVALS/ COMPLIANCE:
- CCRR-1011
- IBC, IRC, IECC: 2009, 2012, 2015
- AC377 compliant (ASTM C1029 Type II)
- Appendix X- passed without ignition barrier
- Type I-V construction
- Class 1— ASTM E-84
- E-84, NFPA 285, E-119

Intertek

INDUSTRY LEADING TEMPERATURES:
- Continuous use temperature can be as high as 257˚F (125˚C) and it is dimensionally stable down to -60˚F (-51˚C).
- Solid performance in all climates, including extreme heat and cold, and high humidity.

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)

LEED INFORMATION:
- Quik-Shield® 112 XC has a minimum of 9% total renewable/recycle content
- 2.3% pre-consumer recycled
- 5.2% post-consumer recycled
- 1.6% rapidly renewable
- IEQ Credit- Low Emitting Materials

U.S. GREEN BUILDING COUNCIL LEED USGBC

Quik-Shield 112 XC meets the highest GREENGUARD® standard - GOLD. Products meeting this strict standard for indoor air quality are certified safe and healthy for indoor environments like schools, daycares, and elderly homes.

UL GREENGUARD GOLD

SWD Urethane

800-828-1394 • swdurethane.com
sales@swdurethane.com

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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 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® 112 XC is fully compatible with CPVC piping systems (Paschal Engineering Study for the SPFA)
- Quik-Shield® 112 XC 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. Do not mix.
3. 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 200psi between resin and isocyanate.
4. Static pressure is typically set between 1100 and 1600psi.
5. Primary heaters and hose heaters are typically set between 115 - 140°F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
6. 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. Substrate temperatures should be between -4-130°F Flashing is recommended at lower temperatures. Higher and lower application temperatures are possible, contact an SWD representative 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 an SWD representative for more details.
5. Do not recirculate.
6. Do not exceed a 4 inch lift per pass. It is the responsibility of the contractor to determine when the first layer has cooled sufficiently for additional passes. SWD recommends waiting a minimum of 20 minutes.
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.

SWD Urethane

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