QUIK-SHIELD® 931 is a 100% solids, aromatic, low modulus, polyurea hybrid coating.

**DURABLE:**
- High tensile strength
- Chemical, corrosion, and abrasion resistant

<table>
<thead>
<tr>
<th>TYPICAL PHYSICAL PROPERTIES*:</th>
<th>PROCEDURE</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength (psi)</td>
<td>D-412</td>
<td>2200 ± 200</td>
</tr>
<tr>
<td>Elongation (%)</td>
<td>D-412</td>
<td>250 ± 25</td>
</tr>
<tr>
<td>Hardness</td>
<td>Shore A</td>
<td>80</td>
</tr>
<tr>
<td>Water Vapor Permeance (perms)</td>
<td>E-96</td>
<td>1.04</td>
</tr>
<tr>
<td>At 40 dry mils</td>
<td>E-96</td>
<td>0.81</td>
</tr>
<tr>
<td>At 60 dry mils</td>
<td>E-96</td>
<td>0.54</td>
</tr>
<tr>
<td>At 90 dry mils</td>
<td>D-4060</td>
<td>38</td>
</tr>
<tr>
<td>Abrasion Weight Loss (CS-17, 1k cycles, mg)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**APPROXIMATE COVERAGE:**
- Mils/100 sqft/gallon: 16 mils
- 60 mils/100 sqft: 3.75 gallons

**HANDLING PROPERTIES at 77°F (25°C):**
- A SIDE (ISO)
  - Viscosity, cps: 450
  - Specific Gravity: 1.10
- B SIDE (RESIN)
  - Viscosity, cps: 1000 ± 200
  - Specific Gravity: 1.02

**REACTIVITY PROFILE at 150°F (66°C):**
- Tack Free Time (seconds): 30-60
- Cure Time (hours): 24

**RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):**
- Ratio: 1:1
- Drum Heaters: 70-80°F (21-27° C)
- Hose Heaters: 140-170°F (60-77° C)
- Primary Heaters (A&B): 140-170°F (60-77° C)
- Dynamic Pressure (A&B): 1800 psi minimum
- Static Pressure (A&B): 2000-3000 psi
- Ambient Temperature**: 32-130°F (0-54° C)

**MIXING (ADDITIONAL DETAILS ON BACK):**
- Mix B-side (resin) for 30 minutes before application.
- Mix B-side (resin) during application.
- Mixing of A-side (iso) is not required.

**STORAGE AND SHELF LIFE:**
- Storage temperatures 50-100°F (10-38° 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.
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, latex paint, and alternative polymers from all surfaces prior to applying SWD products.

See NRCA and SPFA guidelines for further details on substrate polymers from all surfaces prior to applying SWD products.

SPRAY FOAM

1. Coating should be applied 2-24 hours after installation of foam. Beyond 24 hours, contact SWD for recommendations.
2. Avoid contaminating surface of foam after foam installation.
3. Blow off surface of foam, as necessary, before application of coating.

STEEL & OTHER METALS

1. Metal surfaces should be free of all rust, scale, dirt, grease, oil, chalking, paint or other contaminants.
2. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Blasting and priming is not always required. Contact SWD for recommendations.
3. If priming, use Quik-Shield 990. Refer to Quik-Shield 990 TDS for more details.

CONCRETE

1. The concrete surface should be fully cured, structurally sound, clean, and dry.
2. Fill large voids with appropriate backer rods or appropriate fillers.
3. Blasting and priming is not always required. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.
4. If priming, use Quik-Shield 990. Refer to Quik-Shield 990 TDS for more details.

PREVIOUSLY APPLIED FOAM or OTHER POLYMERS

1. 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.

OTHER SUBSTRATES

1. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.

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. We recommend using an electric driven drum mixer (Krause & Becker 69856 Dual Speed Mixer or equivalent) in the center bung of drum and ensure that the mixer is securely attached. Recommended configuration - 400RPM-800RPM, 120V, 10A. Pneumatic configuration - 400RPM-800RPM, 100psi inlet, 12cfm.
3. Recommended folding blade arrangement: 6” blade top, 6” blade middle, 8” blade bottom.
4. Mix B-Side (Resin) for 30 minutes prior to application.
5. Continually mix B-Side (Resin) while applying material.
6. Mixing of A-Side (Iso) is not required.
7. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1800psi dynamic pressure and a maximum pressure differential of 200-psi between resin and isocyanate.
8. Static pressure is typically set at 2000-3000psi. Dynamic pressure should operate at a minimum of 1800psi.
9. Primary heaters and hose heaters are typically set between 140-170°F. Drum heaters set at 70-80°F are recommended for temperatures lower than 60°F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
10. 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. Contact an SWD representative for further recommendations.

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. Ambient/Substrate temperatures should be between 32-130°F. Higher and lower application temperatures are possible, contact 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. 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).
7. Never allow liquid components to run out.
8. Recoat window is less than 12 hours after installation of initial coat. Beyond 12 hours, contact SWD for recommendations.
9. Recoat preparation techniques may include abrasion, and/or solvent wiping.

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.