

# **Quik-Shield 112XC - Quick-Start Processing**

# **PRECONDITIONING**

• Material should be 60 - 80°F for optimal performance.

# PRIMARY AND HOSE HEATERS TEMPS



### **Temperature Settings**





### **Pressure Settings**

Dynamic Pressure: 1000 psi minimum

Static Pressure: 1100 - 1600 psi





## **Quik-Shield 112XC - Dial-In Guide**

In order to maximize expansion and optimize yield on Quik-Shield 112XC, it is important to dial-in the foam at each jobsite. Dialing-in not only improves yield, but it also improves the quality of the foam, making the job more profitable with fewer issues. Quik-Shield 112XC expands greater and faster than most closed-cell foams. It is important stay in front of the rising foam by adjusting your speed and/or spray technique.

As per SWD's recommendations, do the following:

1. Determine temperature settings starting point.

Substrate Temp	Set Equipment Temp At
<40°F	130°F
40-50°F	125°F
50-70°F	120°F
70°F	115°F

Temperature Settings:

125°F

Standard Starting point

- 2. Test spray on cardboard to make sure you are making good foam.
- 3. Start spraying on the jobsite.
- 4. After spraying approximately six cavities, check tack free time of the foam. Adjust equipment temperature settings until times are dialed-in. tack free time is definied to be from the time you release the trigger to the time the foam is fully tack free.

Foam Rise Time	Status
2.5-3 sec.	Foam too hot—turn down temp settings
3.5-4.5 sec	Temp dialed-In Properly
5 sec	Foam too cold—turn up temp settings

Tack Free Time:

**3.5-4.5** sec

5. Dialing in Pressure—start at 1200 psi. Optimal pressure settings for maximum output of product will likely be 1100-1600 psi. Higher pressure will typically lead to greater performance and fewer issues.

Pressure Settings:

**1200** psi

Starting point for new QS112XC sprayers

Optimal Pressure Settings:

1100-1600 ps





# **Quik-Shield 112XC - Seasonal Processing Guide**

Techniques for optimal Quik-Shield 112XC closed-cell foam differs from summer to winter applications. Adherence to these specific techniques will help maximize both the physical and thermal properties of the foam.



Winter (temperatures below 70°F)

#### **STORAGE**

Storage temperatures should be 50-100°F (10-38° C). Store out of direct sunlight, in a cool dry place, and avoid freezing. Caution: If the drum temperature is 80°F (27°C) or higher, use caution when opening the drum! The contents will be under pressure.

#### **PRECONDITIONING**



A & B liquid components need to be preconditioned in the drums to a minimum of 60-80°F (16-27°C).

\*Do not recirculate

#### **TEMPERATURE & PRESSURE SETTINGS**



Hose Heaters Primary Heaters (A&B) Dynamic Pressure (A&B) Static Pressure (A&B) 115-150° F (46-65° C) 115-150° F (46-65° C) 1000 psi minimum 1100-1600 psi

\*These settings may vary according to specific jobsite conditions and should be maintained to the spray gun by heated hoses. These are recommendations only, individual variations may be needed.

#### **APPLICATION TIPS**

- When switching products, flush all hoses with Quik-Shield 112XC prior to spraying. Contamination from other products may cause foam quality issues.
- Always hold spray gun perpendicular to the surface being sprayed. Spraying at an angle can cause a lack of adhesion to the substrate and an irregular surface of the foam.
- The ideal distance is approximately 24".
- Avoid spraying onto rising foam because this can cause displacement of the rising foam, which can lead to excessive dripping.
- Ensure spray equipment is always maintained in proper operating condiditon with a regular maintenace program.





# **Quik Shield 112XC - Changeover Guide**

If you are changing to Quik-Shield 112XC foam from closed-cell foam or from a competitor's foam, you must not allow the first product to contaminate the Quik-Shield 112XC resin drum.

#### **CHANGING TO QUIK-SHIELD 112XC**

As per SWD's recommendations, do the following:

- 1. Turn the hose heat and primary heaters off.
- 2. Make sure the return lines, drum pump, and pump housing are completely free of the previous resin.
- 3. Place drum pump into the Quik-Shield 112XC resin drum.
- 4. If you have a pressure relief line, pump the contents to the previous drum or into a waste container with the transfer pumps.
- 5. Connect the pressure relief to the new drum.
- 6. If switching from a similar product, it's best to spray it out.
- 7. If you want to purge the material rather than spray it out, remove the gun from the hose manifold and pump the hose contents into the previous drum until you see a color change. Some liquid in the line may remain as a mixture of the two resins. Run this mixture into a container or spray out as foam for disposal.
- 8. Spray a test out onto a sheet of cardboard or wood, and watch for good foam.





# **Quik-Shield 112XC - Troubleshooting Guide**

Appearance Issues	Probable Causes	Recommended Solutions
Slow rise and/or runny foam	Cold material (lack of heat), cold substrate	<ol> <li>Increase heat (primary and hose).</li> <li>Pre-warm substrate or area of installation if possible.         If not, flashing technique can be used.</li> <li>Ensure material in drums is within its processing temperature range.</li> </ol>
Finished foam not smooth or being blown off	Spraying too close, spray gun motion too slow, spray pressures set too high	<ol> <li>Ensure proper distance and pressure as determined by mix chamber size.</li> <li>Keep spray gun motion and amount of overlap consistent throughout. Maintain sufficient speed of application for pressure and mix chamber size.</li> </ol>
Excessive overspray	High wind, spray area not sealed off, spraying too far from substrate, spray pressure set too high	<ol> <li>Protect areas not to be foamed with poly and be aware of surroundings and wind conditions.</li> <li>Ensure proper distance as determined by pressure and mix chamber size.</li> </ol>
Foam is a lighter color, is soft & spongy & tacky, foam is shrinking	Blockage on Iso side at gun, lack of material being supplied on Iso side	<ol> <li>Check and clean in-line filters at proportioner and spray gun. Replace screens if 20% or more clogged.</li> <li>Check for empty or cold drum.</li> <li>Check for blocked side-seal or impingement port.</li> <li>Check ball valves and air supply to transfer pumps, then ball valves and seals on proportioner.</li> </ol>
Foam is a darker brown color, is brittle & chalky, foam is shrinking	Blockage on Resin side at gun, lack of material being supplied on Resin side	<ol> <li>Check and clean in-line filters at proportioner and spray gun. Replace screens if 20% or more clogged.</li> <li>Check for empty or cold drum.</li> <li>Check for blocked side-seal or impingement port.</li> <li>Check ball valves and air supply to transfer pumps, then ball valves and seals on proportioner.</li> </ol>
Other Issues	Probable Causes	Recommended Solutions
Foam falls off substrate or is easily removed within a few hours after application	Cold substrate, cold material (lack of heat), improperly prepared substrate	<ol> <li>Increase heat (primary and hose).</li> <li>Pre-warm substrate or area of installation if possible.         If not, flashing technique can be used.</li> <li>Ensure material in drums is within its processing temperature range.</li> </ol>
Yield under 5,000 board feet	Cold material (lack of heat), cold substrate, excessive overspray, thin passes, excessive touch- ups, off-ratio foam, degraded material	<ol> <li>Increase heat (primary and hose).</li> <li>Pre-warm substrate or area of installation if possible. If not, flashing technique can be used.</li> <li>Ensure proper distance and pressure as determined by mix chamber size.</li> <li>Keep spray gun motion and amount of overlap consistent throughout. Maintain sufficient speed of application for pressure and mix chamber size.</li> <li>Protect areas not to be foamed with poly and be aware of surroundings.</li> <li>Check and clean in-line filters at proportioner and spray gun. Replace screens if 20% or more clogged.</li> <li>Check for empty or cold drum.</li> <li>Check for blocked side-seal or impingement port.</li> <li>Check ball valves and air supply to transfer pumps, then ball valves and seals on proportioner.</li> <li>Spray maximum amount per pass 3" and avoid excessive touch-up work.</li> <li>Ensure material in drums is within its processing temperature range.</li> </ol>





# **Quik-Shield 112XC - Troubleshooting Guide**

Other Issues	Probable Causes	Recommended Solutions
Density is too high	Cold substrate, cold material, thin passes, degraded material, spraying too far	<ol> <li>Increase heat (primary and hose).</li> <li>Pre-warm substrate or area of installation if possible.         If not, flashing technique can be used.</li> <li>Ensure proper distance and pressure as determined by mix chamber size.</li> <li>Spray maximum amount per pass 3" and avoid excessive touch-up work.</li> <li>Ensure material in drums is within its processing temperature range.</li> </ol>
Foam is popping and cracking	Likely cold substrate, thick passes, previous pass not cool, cold material	<ol> <li>Increase heat (primary and hose).</li> <li>Pre-warm substrate or area of installation if possible.         If not, flashing technique can be used.</li> <li>Ensure substrate is clean, dry, and properly prepared in accordance with the Installation Instructions.</li> <li>Spray maximum amount per pass 3" and avoid excessive touch-up work.</li> <li>Adhere to proper waiting times before applying subsequent passes.</li> </ol>
Pressure guage differential greater than 400 psi or E24 on Graco Reactor	Cold material (lack of heat), blockage at the gun, lack of material being supplied	<ol> <li>Increase heat (primary and hose).</li> <li>Check and clean in-line filters at proportioner and spray gun. Replace screens if 20% or more clogged.</li> <li>Check for empty or cold drum.</li> <li>Check for blocked side-seal or impingement port.</li> <li>Check ball valves and air supply to transfer pumps, then ball valves and seals on proportioner.</li> <li>Ensure material in drums is within its processing temperature range.</li> </ol>

