PRECONDITIONING

• Material should be a minimum of 70°F, but 80°F for optimal performance and yield.

MIXING (B-SIDE ONLY)

- Do not Mix
- Mixing can lead to poor performance

PRIMARY AND HOSE HEATERS TEMPS



Temperature Settings

 Summer: 110 - 140°F

Winter: 120 - 140°F



Pressure Settings

Dynamic Pressure: 1000 psi minimum

Static Pressure: 1100 - 1400 psi





QUIK-SHIELD 104EZ - Dial-In Guide

In order to maximize expansion and optimize yield on QUIK-SHIELD 104EZ, 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 104EZ expands greater and faster than most open-cell foams. It is important stay in front of the rising foam by adjusting your speed and/or spray technique.

To Dial-In QUIK-SHIELD 104EZ, do the following:

- 1. Recirculate both A-side (iso) and B-side (resin).
- 2. Determine temperature settings starting point.

Substrate Temp	Set Equipment Temp At
<40°F	135°F
40-50°F	130°F
50-70°F	125°F
70-115°F	120°F
>115°F	115°F



- 3. Test spray on cardboard to make sure you are making good foam.
- 4. Start spraying on the jobsite.
- 5. After spraying approximately six cavities, check expansion time of foam. Adjust equipment temperature settings until rise time is dialed-in.

Foam Rise Time	Status
<3.25 sec.	Foam too hot—turn down temp settings
3.5 sec	OK, but foam running a little hot—if retracting from the studs, turn temp down
4 sec	Temp dialed-In properly
>4.5 sec	Foam too cold—turn up temp settings



6. Dialing in Pressure—start at 1200 psi. Optimal pressure settings for maximum output of product will likely be 1100-1400 psi. Higher pressure will typically lead to greater performance and fewer issues.

Pressure Settings: **1200**psi Starting point for new QS104 sprayers

Optimal Pressure Settings:

psi

1100-1400



For Additional Questions, Call SWD Tech Support at 888-380-2022 PUBLISH DATE: 01/2022



If you are changing to QUIK-SHIELD 104EZ spray foam from closed-cell foam or from a competitor's foam, you must not allow the first product to contaminate the QUIK-SHIELD 104EZ resin drum.

CHANGING TO QUIK-SHIELD 104EZ

- 1. If changing from an open-cell foam, keep hose heat at 90°F during changeover. If you are changing from a closed-cell foam, turn the hose heat off.
- 2. Make sure the drum mixer, dip tubes, drum pump, and pump housing are completely free of the previous resin.
- 3. Allow some air into the drum pump or dip tube.
- 4. Place drum pump into the QUIK-SHIELD 104EZ resin drum.
- 5. If you have a recirculation/pressure relief line, pump the contents to the previous drum or into a waste container with the transfer pumps.
- 6. Connect the recirculation/pressure relief to the new drum lid.
- 7. Remove the gun from the hose manifold and pump the hose contents into the previous drum until you see a color change or until you reach the air pocket in the line. 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 with no collapse. For QUIK-SHIELD 104EZ, you may need to spray more foam out than what is normally required in a changeover in order to eliminate contamination.





QUIK-SHIELD 104EZ - Seasonal Processing Guide

Techniques for optimal QUIK-SHIELD 104EZ open-cell foam differs from summer to winter applications. Strict adherence to these specific techniques will help maximize both the physical and thermal properties of the foam.



Winter (temperatures below 50°F)



Summer (temperatures above 80°F)

STORAGE

Storage temperatures should be 50-90°F (10-32° C). Store out of direct sunlight, in a cool dry place, and avoid freezing.

PREHEATING

A & B liquid components need to be preheated in the drums to a minimum of 70°-80°F (21-27°C).

If material is already greater than 70°F (21°C), no preheating is necessary.

MIXING - B-SIDE ONLY

Mixing is not necessary.

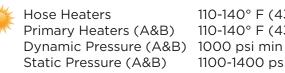
TEMPERATURE & PRESSURE SETTINGS



Hose Heaters Primary Heaters (A&B) Dynamic Pressure (A&B) 1000 psi min Static Pressure (A&B)

120-140° F (49-60° C) 120-140° F (49-60° C) 1100-1400 psi min

If the chemicals are too cold, coarse cell structure, shrinking, shiny skin on the foam, pulling away from the studs, and voids behind the foam will be observed.



110-140° F (43-60° C) 110-140° F (43-60° C) 1100-1400 psi min

If the chemicals are over heated, the foam will not expand and pop like it normally does.

*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

- Flush all hoses with freshly mixed QUIK-SHIELD 104EZ prior to spraying. Contamination from other previously used products may cause the foam to deflate upon application.
- 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 finish of the foam. Spray from one point to the other in a regular and continuous motion to regulate uniformity of foam thickness.
- Shorten the distance between the spray gun and substrate to increase the heat to the foam. The ideal distance is approximately 18". The speed of the application will assist in placing sufficient chemicals to just fill the cavity, reducing the overall wastage of foam.
- Avoid applying liquid components on rising foam. This can cause the formation of blisters on the surface of the foam.
- Ensure spray equipment is always maintained in proper operating condition with a regular maintenance program.





QUIK-SHIELD 104EZ - Troubleshooting Guide

Appearance Issues	Probable Causes	Recommended Solutions
Foam is noticeably darker and somewhat brittle	Blockage on Resin side of the gun, not enough material from Resin side	 Check and clean in-line filters at proportioner and gun (over 20% plugged, replace). Check for empty drum. Check for blocked side seal. Check ball valves on transfer pump, then ball valves and seals on proportioner unit.
Air Pockets	Cold material in resin drum, inadequate spray heat, spraying too close or too far from substrate, not spraying at right angle, improper spray pressure	 Increase heat (primary and hose heaters). Re-circulate until material in the drums reaches a minimum of 70°F, but 80°F is optimal (re-circ temp not to exceed 125°F). Ensure proper distance as determined by pressure and mix chamber size. Spray at 90° angle to substrate to ensure best possible results.

Other Issues	Probable Causes	Recommended Solutions
Overspray—foam adheres to surfaces outside of spray area	High wind, area not sealed off, spraying too far from substrate, pressures set too high for application	 Protect areas not to be foamed with poly and be aware of surroundings and wind conditions. Ensure proper distance as determined by pressure and mix chamber size.
Poor Yield (equal to or less than 16,000 board ft.)	Cold material in resin drum, inadequate spray heat, too much overspray, too much scarfing (over-fill of cavity), cold substrate, too many passes, storage-degraded material, resin rich/Iso rich foam.	 Increase heat (primary and hose heaters). Re-circulate until material in the drums reaches a minimum of 70°F, but 80°F is optimal (re-circ temp not to exceed 125°F). Pre-warm substrate if possible. If not, flashing technique can be used—spraying a thin layer of foam on the substrate to heat it up. Check and clean in-line filters at proportioner and gun (over 20% plugged, replace). Check for empty drum. Check for blocked side seal. Check ball valves on transfer pump, then ball valves and seals on proportioner unit. Maintain sufficient speed of application for pressure and mix chamber size.
Pressure Imbalance: Gauge pressure differential greater than 400 psi or E24 on Graco Reactor	Cold material, blockage at the gun, lack of material from Resin or Iso side (ball valves, pump seals or proportioner packings leaking)	 Increase heat (primary and hose heaters). Re-circulate material until drum temperature reaches 80°F - not to exceed 90°F (use in-line temperature gauges). Check and clean in-line filters at proportioner and gun (over 20% plugged, replace). Check for empty drum. Check for blocked side seal. Check ball valves on transfer pump, then ball valves and seals on proportioner unit.



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