FAQ: REFILLABLE SYSTEMS

LOW PRESSURE POLYURETHANE FOAM ADHESIVES FOR LOW SLOPE COMMERCIAL ROOFING
AVAILABLE FOR POLYSET CR-20 AND POLYSET BOARD-MAX ROOFING ADHESIVES

How important is ambient and chemical temperatures for spraying performance of CR-20 and Board-Max?

Extremely critical.

- **Ambient Temperatures:**
  - CR-20: Ambient temperatures must be **40˚F (4˚C) and rising.**
  - Board-Max: Ambient temperatures must be **30˚F (-1˚C) and rising.**
- **Chemical Temperatures:**
  - CR-20 and Board-Max: The temperatures for optimal performance of the chemical must between **70-85˚F (21-29˚C).**
  - ColorWise Temperature Warning Nozzles provide a visual indication the chemicals are too cold to continue spraying. The nozzle tip changes from a clear to blue, indicating that the chemical has reached a cold temperature, below 60˚F (16˚C), and the adhesive should not be dispensed. Stop spraying and condition chemicals to the recommended chemical temperature between 70-85˚F (21-29˚C).

What if the chemical becomes colder than recommended?

Warm it up to the recommended temperature.

- Place in temperature-controlled environment or construct a heat box from polyisocyanurate board or iso board and add a heat source. **Do not overheat.**
- ColorWise Temperature Warning Nozzles provide a visual indication the chemicals are too cold to continue spraying. The nozzle tip changes from a clear to blue, indicating that the chemical has reached a cold temperature, below 60˚F (16˚C), and the adhesive should not be dispensed. Stop spraying and condition chemicals to the recommended chemical temperature between 70-85˚F (21-29˚C).

How do you keep the chemicals cool in the summer (70-85˚F)?

Store properly.

- Store in a temperature-controlled environment.
- Keep out of direct sunlight (create shade for cylinders).
- Keep cylinders elevated from roof deck (do not place directly onto roof deck surface).
- Store unused product on pallet to eliminate direct heat transfer from deck.

What to do if the roof deck is hot to help the chemicals inside the 100' hoses from getting too hot?

Elevate the hoses from the roof deck.

- Purchase pipe insulation and place around the hoses that are laying across the roof as a way to elevate the hoses off of the deck.

What to do if the roof deck is cold to help the chemicals inside the 100' hoses from getting too cold?

Elevate the hoses from the roof deck.

- Purchase pipe insulation and place around the hoses that are laying across the roof as a way to elevate the hoses off of the deck.

What is the proper operating range for the chemical itself?

70-85˚F.

- The chemicals must be between 70-85˚F (21-29˚C).

What is the longest hose length that should be used with this system?

100'

- When utilizing the disposable Handi-Gun dispensing unit a 100' hose is the maximum length.

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Why are the safety valves popping on regulators & cylinders?

Pressures are set too high.

- Turn the nitrogen intake valves on the cylinders off.
- Turn the regulator knobs on each regulator counterclockwise 2 turns.
- Pull the nitrogen pressure release valve found on each cylinder up 2-3 times (short controlled bursts).
- Open nitrogen intake valves on cylinders.
- **Note:** The pressures on the regulator should begin to drop.
- Close the nitrogen intake valve again and slowly adjust your regulators by turning the regulator knobs clockwise to the desired psi.
- Open the nitrogen intake valve on each cylinder and allow the cylinders to fill with nitrogen.

How can the pressures be turned up if higher pressures are desired?

Adjust your regulators.

- Turn the nitrogen intake valves on the cylinders off.
- Slowly adjust your regulators by turning the regulator knobs clockwise to the desired psi.
- Open the nitrogen intake valve on each cylinder and allow the cylinders to fill with nitrogen.
- **NOTE:** After adjusting the regulators, a ratio test must be performed. (See Polyset Refill Operating Instructions for more information.)

Can the same Handi-Gun® Hose Assembly be used with CR-20 and then switched to being used with Board-Max?

No. Here's why.

- The Handi-Gun Hose Assembly should be used with only one formulation to avoid cross-contamination of chemicals in the hose.

Can an air compressor be used rather than nitrogen?

No.

- No. The propellant must be nitrogen.

Can the roof be wet when applying the adhesive?

No.

- The substrate and materials must be dry and free of dirt, dust and or oils for the adhesive to perform properly.

Can I clean the gun/hose with soap and water?

No, here's why.

- You cannot flush the hose with soap and water.
- The face of the gun may be sprayed with Polyset PS1 Multipurpose Cleaner (62484448303) prior to the adhesive curing, but the interior cannot be cleaned/flushed with anything.
- **The residue from any type of soap will have a negative effect on the adhesive quality.**

Why does chemical dispense at different volumes if the pressures of both are set the same?

Viscosity.

- The viscosity is different between the 2 chemicals (one is thicker than the other).

What happens during the calibration process if I dispense more grams of chemical than the calibration charts shows?

Redo the calibration test or complete math shown in example.

- You can verify the calibration by simply dividing the weight of the B chemical into the A chemical.
- The proper ratio will be 1.0 – 1.15 or you can redo the calibration shot dispensing the product for a lesser amount of time.
- Example: **If you were to dispense 120 Grams of "A" and dispense 115 Grams of "B"... 120 / 115 = 1.04. You are in calibration.**

What is the best way to adjust cylinder pressures for calibration?

Bring the pressure up on the cylinder with the lower pressure.

- If the cylinder pressures need to be adjusted, do not lower the pressure in one cylinder by opening the pressure release valve. This could cause a release of blowing agent and result in poor foam properties.
- Instead, bring the pressure up on the cylinder recording the lower pressures.

$$\frac{A}{B} = 1.10 \quad \begin{matrix} 1.15 \\ \uparrow \\ +/- 0.10 \\ \downarrow \\ 1.00 \end{matrix}$$

- **Higher than a ratio of 1.15:** Add pressure in increments of 10 psig to the B-side.
- **Lower than a ratio of 1.00:** Add pressure in increments of 10 psig to the A-side.

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How often should I replace the nozzle?

After interrupted spray of 30+ seconds.

- Before adhesive has had a chance to cure in the nozzle, flush nozzle with Polysolv solvent.
- **Note:** The solvent will not dissolve cured adhesive. This step must be performed prior to the adhesive curing.

Do I calibrate with the nozzle on or off?

Use a calibration nozzle.

- The calibration process requires the use of a **calibration nozzle only.** (F66118)
- This is not the ColorWise Temperature Warning Nozzle utilized to dispense the chemicals during application.

When dispensing chemicals to verify calibration, how many seconds should I pull the trigger?

3-4 seconds.

- Full trigger pull for 3-4 seconds.

Can the vessels being used for the calibration process be different weights?

No, here's why.

- No, the empty vessels should be the same weights.

Does it matter whether I partially pull the trigger on the Handi-Gun when calibrating or use a full trigger pull?

Full-trigger pull.

- When calibrating, always pull the trigger all the way back (use a full trigger pull).

Why can't I calibrate utilizing the ColorWise dispensing nozzle?

A ratio nozzle must be used.

- The ColorWise nozzles do not keep the "A" and "B" chemicals separated which is required for a proper calibration process.

How often should I calibrate my system?

At least twice a day.

- The calibration should be verified at least twice a day.
  - At startup just prior to dispensing and after lunch or prolonged interruptions.
- It also a good practice to verify your calibration as temperatures vary +10 or -10 degrees.

The pressures keep rising after initial calibration, what do I do?

Regulators were not properly set-up.

- Turn the nitrogen intake valves on the cylinders off.
- Turn the regulator knobs on each regulator counterclockwise 2 turns.
- Pull the nitrogen pressure release valve found on each cylinder up 2-3 times (short controlled bursts).
- Open nitrogen intake valves on cylinders.
- **Note:** The pressures on the regulator should begin to drop.
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How do I get the system up and running again after sitting idle for several days or months?

Follow our re-use procedure.

- Remove and replace the used Handi-Gun® Hose Assembly with a new Handi-Gun® Hose Assembly.
- Perform the calibration process and ratio test again. (See Polyset Refill Operating Instructions for more information.)

What are the shutdown procedures for the end of the day?

Turn off all valves in a certain order.

- Start at the Handi-Gun and engage the safety latch.
- Turn off hose valves.
- Turn the chemical cylinder valves off.
- Turn the nitrogen intake valves off.
- Turn off the nitrogen valve at the top of the nitrogen cylinder.
- **Note:** It's a good practice to remove the nitrogen hoses from the chemical cylinders, disconnect the regulators from the nitrogen bottle and replace the nitrogen safety cap (especially during transportation).

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Are the hoses to be depressurized and/or emptied at shutdown? **No.**

- No. Remove used ColorWise nozzle, but do not discard.
- Add petroleum jelly to the face of the gun and replace with previously removed used ColorWise nozzle.
- **Note:** This nozzle should be discarded upon the next startup

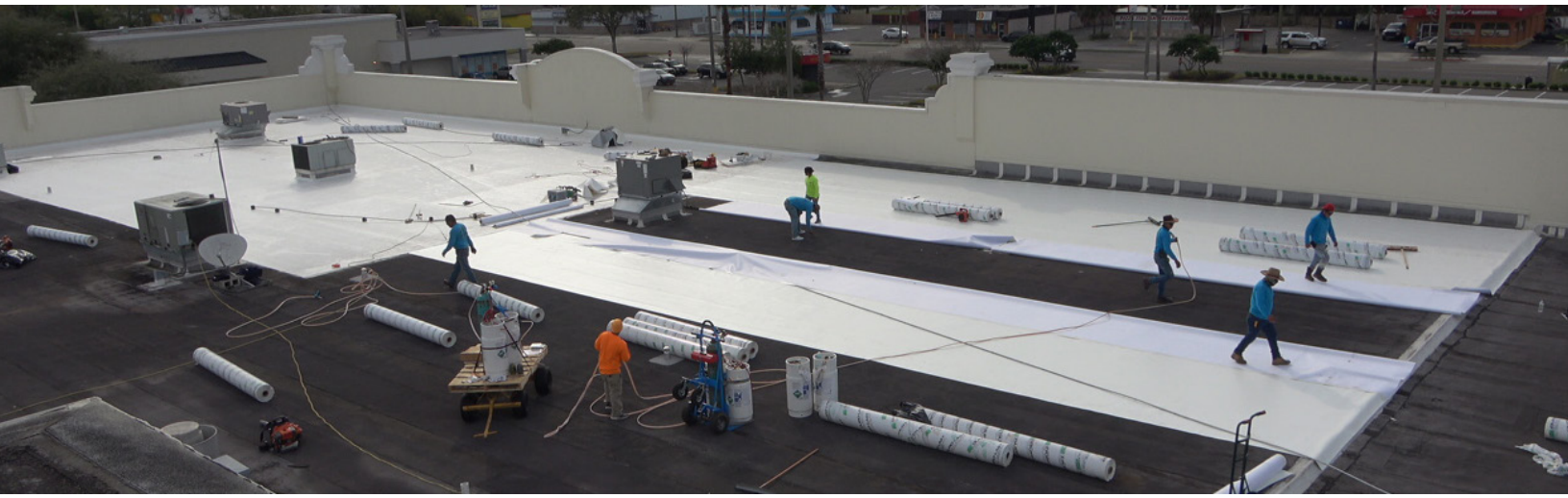
There is a small amount of chemical left in either the "A" or the "B" cylinder. Can I purchase a single cylinder of either? **Yes, you can purchase a single cylinder.**

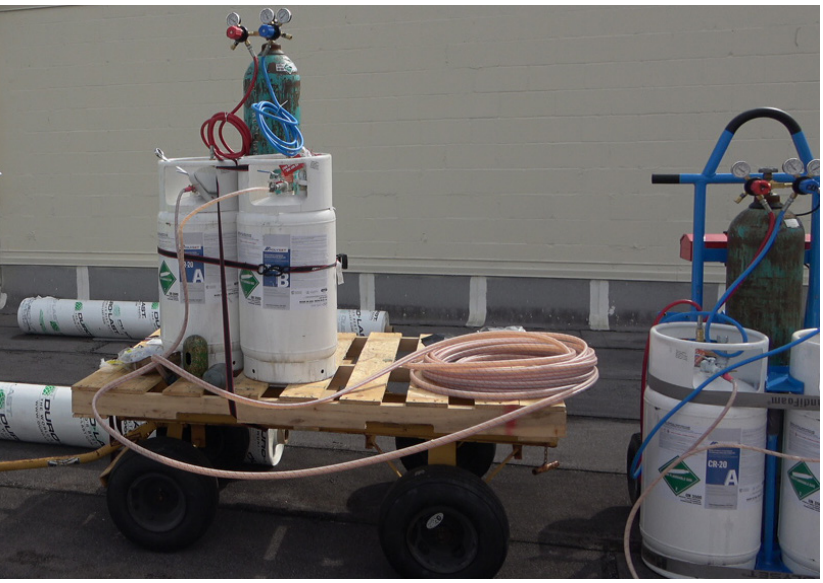
- Greater attention to the calibration throughout the day can help minimize this issue.

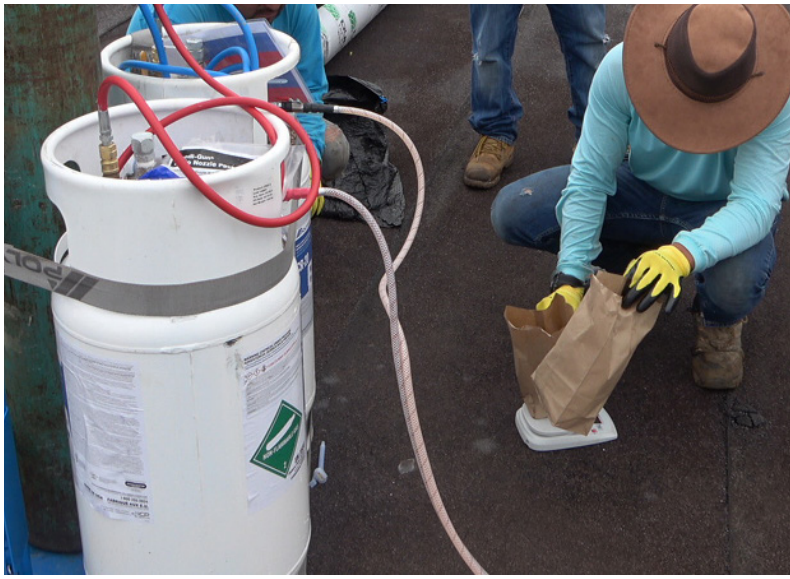
What do I do with the empty refill cylinders when they are depleted? **Follow the Refill Cylinder Return Process detailed below.**

- Do not discard pallets the refill cylinders arrived on.
- When the chemical in the cylinders has been depleted, place back on the original pallets.
- Shrink wrap the empty cylinders.
- Complete the Bill of Lading.
- Contact ICP for empty refill cylinder pick up. (330-753-4585)

IF ADDITIONAL QUESTIONS ARISE, REACH OUT TO YOUR LOCAL POLYSET REPRESENTATIVE!







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