



## Spray Application Guide

### Drum Storage

**Store drums at 50 °F to 100 °F (10 °C to 38 °C).** Do not allow drum temperature to fall below 40 °F (4 °C) – it can degrade the formulation and negatively affect the performance of the foam. This damage cannot be repaired.

### B Side (Poly) Drum Prep

**Prep drum to 80 °F to 100 °F (27 °C to 38 °C).** In order for the drum to be ready to use, it must be in a temperature range where the proportioner can take it the rest of the way to spray temperature. *Example: If your drum temperature is 70 °F (21 °C) and you have an E-20 with a delta T of 50 °F (10 °C), your maximum spray temperature can only be 120 °F (49 °C). If you want to spray at 135 °F (27 °C) with the same machine your drum must be 85°F (29 °C) to achieve that spray temperature. It is important to know the delta T of your proportioner and your drum temperature to achieve the proper spray temperature.*

### A Side (Iso) Drum Prep

**Prep drum so it is ten degrees lower** than B side drum.

### Mixing

**GacoFireStop2 must be well mixed \*(See NOTE) for 30 minutes** to ensure a uniform solution before flushing or recirculating. You may continue to recirculate GacoFireStop2 to raise the drum temperature but do not recirculate the product over 100 °F (38 °C). You may continue to mix during recirculation to achieve a uniform temperature for the drum. After initial mixing, turn mixer off to avoid frothing product with airbubbles.

**\*NOTE: GacoFireStop2 should be mixed using a 3-Stage Collapsible Blade Mixer.** Make sure the three blades are evenly spaced out from top to bottom on the shaft. With GacoFireStop2, it is crucial that you are able to mix material in the top with the material in the bottom – if all the blades are on the lower end of the shaft this cannot be achieved.

### Flushing

**When changing from a closed cell product to GacoFireStop2, pre-mix the GacoFireStop2 Poly drum prior to flushing.** Purge the Poly side of the system with water to get the closed cell product out of the system, then come in behind with pre-mixed GacoFireStop2 Poly to flush out the water. Remember to flush the entire Poly system including recirc lines, proportioner and spray hose. Use water again to flush the GacoFireStop2 out of the system before you go back to the closed cell product. Follow steps 1-5 on Tech Tip 028, *Eliminate Cross Contamination by Flushing with Water*. For a more detailed step by step flushing procedure refer to Tech Tip 045, *12 Proper Flushing Techniques*. Tech Tips can be found on [gaco.com](http://gaco.com).

### Spray Pressures

**1,200 to 1,400 psi for optimal performance.** 1,200 psi is minimum for .01 mix chamber (AR4242) and 1,400 psi is minimum for .02 mix chamber (AR5252). Look for good atomization and mix of chemical with proper spray pattern.

### Spray Temperatures

**100 °F to 135 °F (38 °C to 57 °C).** The lower temperature spectrums are used in warmer climates and the higher temperature spectrums are used in colder climates. If the foam is reacting slowly or is slightly runny down the wall it is too cold and requires more heat. If the foam starts to grow erratically and is pushing itself off the substrate it is too hot and temperatures need to be dialed down.

### Substrate Limitations

**Substrates should be clean, dry and warm.** While clean and dry offers the best success for adhesion, warmer substrates provide better yields. The colder the substrate the lower the yields we can expect. Do not spray if surface temperatures are within 5 degrees of the dew point. Substrate moisture levels should be below 18%. Use Psychrometer for exact measurement of temperature, humidity and dew point.



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### Application Depths

Anything from a flash pass (0.5"/12.7 mm) to a full fill pass (3.5" to 5.5"/90 mm to 140 mm) in a cavity and depending on technique and cavity even thicker than 5.5" (140 mm). Keep in mind that the more passes you spray to fill a cavity the less yield you will get. While flash passes are not the most desired pass they are sometimes necessary for spraying thicker passes.

### Inspect Application

Look for good cell structure, adhesion, and a consistent light orange color (salmon color). Remove any unreacted chemical from wall (due to pressure imbalances while triggering gun). As with any open cell product, press on cured foam and feel for voids, if voids are found inject foam into voids.

### Equipment Settings

Pre-Heaters - Iso (A):	100 °F to 135 °F (38 °C to 57 °C)
Pre-Heaters - Poly (B):	100 °F to 135 °F (38 °C to 57 °C)
Hose Heat:	100 °F to 135 °F (38 °C to 57 °C)
Recommended Spray Pressure:	1,200 to 1,400 psi (dynamic)

### Reactivity Time

Cream Time:	1 second
Rise Time:	3 - 4 seconds
Tack Free Time:	5 seconds
Cure Time:	1 hour