

## Spray Application Guide

### Drum Storage

Store drums at 50°F to 70°F (10°C to 21°C).

### Drum Prep

**Prep drums to 60°F to 80°F (16°C to 27°C); maximum of 80°F (27°C).** In order for the drum to be ready for use, the drum must be in a temperature range where your proportioner can take it the rest of the way to spray temperatures. *Example: If your drum temperature is 80°F and you have an E-20 with a delta T of 50°F, your max spray temperature can only be 130°F. With this information it is important to know the delta T of your proportioner and drum temperature to achieve the proper spray temperature. Do NOT recirculate or agitate GacoOnePass Low GWP F1880.*

### Flushing

**When changing from a closed cell product to open cell product,** first purge the system with water to get the closed cell product out of the system, then follow with open cell product to flush the water out. Remember to flush the resin side of the proportioner including recirc lines, proportioner and spray hose. 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).

### Starting Spray Pressures

**1,000 to 1,200 psi for optimal performance.** 1,000 psi is minimum for a .01 mix chamber (AR4242) - looking for 6"- 8" round spray pattern and good atomization. 1,200 psi is minimum for a .02 mix chamber (AR5252) - looking for 10"- 12" round spray pattern and good atomization.

### Spray Temperatures

**105°F to 135°F (41°C to 57°C).** The lower temperature spectrums are used in warmer climates and the higher temperature spectrums are used in colder climates. The foam should react at a rate of rise in 3-6 seconds and a tack free time of 4-8 seconds. Any slower than this and you should increase the temperatures and possibly pressure if needed. Any faster than 3-5 seconds means you should decrease temperatures and possibly pressure.

### 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. **Recommended substrate temperatures for GacoOnePass Low GWP F1880 are 50°F to 120°F (10°C to 49°C).** Temperatures colder than what are recommended can result in the foam cracking and popping off of the substrate.

### Application Depths

**Anything from a flash pass (0.5") to a full pass up to 5 ½" in depth.** Any applications greater than 5 ½" will require multiple passes. While flash passes are not the most desired, they are sometimes necessary to heat substrates for better adhesion.

### Inspect Application

**Look for good cell structure and adhesion.** Remove any unreacted chemical from wall (due to pressure imbalances while triggering gun). Look for a consistent skin surface of the foam and be sure product is curing. Gaco requires uniform ventilation of the immediate and adjacent work areas at a minimum of 10 air exchanges per hour. Once spraying is completed and for 1 hr following, ventilation should continue at this minimum (10ach) rate. We then recommend ensuring passive ventilation (overnight) by opening a window on each level of the structure in the vicinity of the spray installations.



**Equipment Settings**

Pre-Heaters - Iso (A):	105°F to 135°F (41°C to 57°C)
Pre-Heaters - Poly (B):	105°F to 135°F (41°C to 57°C)
Hose Heat:	105°F to 135°F (41°C to 57°C)
Recommended Spray Pressure:	1,000 to 1,200 psi (dynamic)

**Reactivity Time**

Cream Time:	1 second
Rise Time:	3 - 6 seconds
Tack Free Time:	4 - 8 seconds
Cure Time:	24 hours