

## Gaco 183M-CAN & Gaco 183MW-CAN Winter Spray Application Guide

### Drum Storage

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

### Drum Prep

Prep drums to 16°C to 27°C (60°F to 80°F); maximum of 27°C (80°F). In order for the drum to be ready for use, the drum must be in a temperature range that 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 Gaco 183M-CAN or Gaco 183MW-CAN.**

### Winter Spray Tip:

- ✓ *Maintain drum temperatures for spraying at 21°C (70°F).*

### 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 entire system 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**.

### Spray Pressures

**1,000 to 1,200 psi for optimal performance.** 1,000 psi is minimum for a .01 mix chamber (AR4242) - looking for 15-20 cm (6-8") round spray pattern and good atomization. 1,200 psi is minimum for a .02 mix chamber (AR5252) - looking for 25-30 cm (10-12") round spray pattern and good atomization.

### Winter Spray Tip:

- ✓ *Dial in spray pressures and temperatures so when test sprayed you have a liquid to cream time of 1 second.*

### Spray Temperatures

**41°C to 57°C (105°F to 135°F).** 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 4-6 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 temperature and possibly pressure.

### Winter Spray Tip:

- ✓ *Dial in spray pressures and temperatures so when test sprayed you have a liquid to cream time of 1 second.*

### 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 Gaco 183M-CAN are 4°C to 49°C (40°F to 120°F). For the Winter version, Gaco 183MW-CAN, recommended substrate temperatures are -1°C to 38°C (30°F to 100°F), and substrate temps must be above -6°C (21°F).** Temperatures colder than what is recommended can result in the foam cracking and popping off of the substrate.

### Winter Spray Tips:

- ✓ *Seal off spray environment as well as possible with plastic to help block direct cold winds from entering the spray area.*
- ✓ *Bring in dry element heaters to warm spray environment and substrates; place one heater behind applicator where foam is curing and place one ahead of applicator to warm the environment and substrate.*

(continued on page 2)

## Gaco 183M-CAN & Gaco 183MW-CAN Winter Spray Application Guide – Page 2

### Application Depths

**Anything from a flash pass (1.7 cm or 0.5”) to a full pass (5.1 cm or 2”).** A pass greater than 5.1 cm (2”) can result in charring of the foam which diminishes the physical properties of the foam such as R-value and dimensional stability. **Any applications greater than 5.1 cm (2”) will require multiple passes.**

### Winter Spray Tips:

- ✓ *When multiple passes are required, allow the previous pass to cool to 43°C (109°F).*
- ✓ *While flash passes are not the most desired, flashing the substrate is sometimes necessary to heat the substrate for better adhesion. Keep in mind this can affect your yield and may not always be practical.*

### 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 make sure product is curing.

### Equipment Settings

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

### Reactivity Time

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