GacoWallFoam
SPRAY POLYURETHANE FOAM INSULATION
by Gaco Western®

GacoToughFoam 10 LB Spray Application Guide

Drum Storage
Store drums at 50°F to 100°F (10°C to 38°C).

Drum Prep
Prep drums to 60°F to 100°F (16°C to 38°C); maximum of 100°F (38°C). In order for the drum to be ready to use, the drum must be in a temperature range where your proportioner can take it the rest of the way to spray temperature. *Example: If your drum temperature is 80°F and you have an E-20 with a delta T of 50°F, your maximum 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.*

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

Spray Temperatures
110°F to 150°F (43°C to 66°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 3-4 seconds and tack free in 7 seconds. Any slower than this and you should increase the temperature 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 minimum substrate temperature for GacoToughFoam is 40°F (4°C). Temperatures colder than what is recommended can result in the foam cracking and popping off of the substrate.

Application Depths
Anything from a flash pass (0.25") to a full pass (0.5"). A pass greater than 0.5" 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 0.5" 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). Press on cured foam and make sure foam has become rigid.

Equipment Settings

Pre-Heaters - Iso (A):	110°F to 150°F (43°C to 66°C)
Pre-Heaters - Poly (B)*:	110°F to 150°F (43°C to 66°C)
Hose Heat:	110°F to 150°F (43°C to 66°C)
Recommended Spray Pressure:	1,200 to 1,400 psi (dynamic)

**It is recommended that the Poly (resin) side pre-heater be set 10°F to 15°F warmer than the Isocyanate side to equalize component viscosities.*

Reactivity Time

Cream Time:	1 second
Rise Time:	3 - 4 seconds
Tack Free Time:	7 seconds
Cure Time:	2 hours