



A Berkshire Hathaway Company

INITIAL PROCESSING PARAMETERS JM CORBOND® OPEN-CELL SPRAY POLYURETHANE FOAM

Suggested Processing Parameters

Drum Storage Temperature	40°-85°F (4°-29°C)
Drum Preheat Temperature	85°-95°F (29°-35°C)
Surface Temperature	45°-120°F (7°-49°C)
Proportioner Temperature	125°-135°F (52°-57°C)
Hose Temperature	125°-135°F (52°-57°C)
Maximum Agitator Working Pressure	100 psi
Maximum Agitator Speed	500 rpm
Proportioner Pressure (Dynamic)	800-1450 psi

Storage

JM Corbond oc SPF Part A and Part B should be stored between 40-85°F. JM Corbond oc SPF has a twelve month shelf life when properly stored.

Drum Temperature

JM Corbond oc SPF will perform better when material temperatures in the drum are between 85°-95° F. While placing the drums into a heated room for two days before use is an effective means of doing this, many applicators find it easier to simply recirculate the material during the 30-45 minute mixing stage of jobsite-setup. This is done by setting the machine heaters at 130° F and then pumping the material through the proportioner and back to the drums via circulation lines or a re-circulation manifold. Extreme caution must be used to avoid cross-contamination. See “JM Corbond SPF Change-Over Procedure” for more information.

Mixing/Recirculation

JM Corbond oc SPF should be mixed thoroughly prior to application. If recirculation is being used as a means of heating the material in the drum, the drum should be agitated for 3-5 minutes before commencing with recirculation. Adequate mixing is critical to successful application. Continue mild agitation throughout the application process.

Temperature Settings

125-135°F A and B primary heater
 125-135°F Hose heat

The temperature settings are a guideline and ambient and substrate temperatures may require settings outside of the suggested window.

Humidity

Care should be taken if the relative humidity is greater than 80%. Excessive humidity will adversely affect system performance and physical properties.

Pressure Settings

The finished foam properties are affected by both temperature and pressure settings. The goal of 1000 psi at the gun when the trigger is pulled is an important part of proper mix. To meet this you must take into account the pressure drop from the machine to the gun. A rough rule of thumb (depending on several parameters) is that the pressure will drop approximately 1 psi per foot of hose. Therefore, set the pressure at the machine so that when the trigger is pulled, the pressure maintained is the target gun pressure plus the pressure drop across the hose length. For example, a machine with 260 feet of hose should have a dynamic spray pressure of 1260 psi.

Example Calculation:

$$\begin{aligned}
 \text{Pressure Setting (psi)} &= \text{Gun Pressure Target (psi)} + \left| \frac{1.0 \text{ psi}}{\text{ft}} \right| * \left| \text{length of hose in ft} \right| \\
 &= 1000 \text{ psi} + \left| \frac{1.0 \text{ psi}}{\text{ft}} \right| * \left| (260) \text{ ft} \right| \\
 &= 1000 \text{ psi} + 260 \text{ psi} \\
 &= 1260 \text{ psi}
 \end{aligned}$$

Pass Thickness

JM Corbond oc SPF may be applied in passes of uniform thickness from a minimum of 1". Open cell spray foam is very different from closed cell spray foam. Because the cells are open, the finished product doesn't retain heat and the need to limit pass thickness goes away. The greatest limiting factor in pass thickness with open cell is that if the applicator attempts to spray back into the rising foam, the foam will blow out of the cavity. Given the right conditions a pass thickness of as much as 12" may be possible. Cooling time between passes is not necessary.

Shut Down

For breaks in application between 15-60 minutes:

- 1) Grease spray gun according to the manufacturer's instructions.
- 2) Upon start-up, recirculate for 5 minutes to ensure that material in the hose is uniform.
- 3) It is recommended that breaks are rotated and the gun handed off to an alternate applicator as opposed to interrupting spray.

For breaks in application longer than 60 minutes:

- 1) Park the proportioner according to the manufacturer's instructions.
- 2) Purge all material from the spray gun.
- 3) Grease the spray gun according to the manufacturer's instructions.

Partial Drum Pour-up

Residual materials should be thoroughly mixed to ensure homogeneity before transferring to other drums for storage.