FOR PROFESSIONAL USE ONLY

SPFFlashing
Spray Polyurethane Foam

Operating Instructions

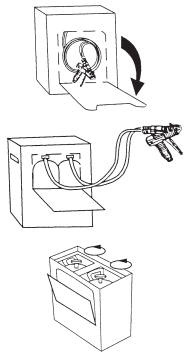
Instructions for Use:

When spraying the dispensing unit for the first time or when starting a new kit, it is recommended to trigger the gun only ½ to ¾ open, until the desired output is achieved. This controllable metering ability is a major advantage of this dispensing unit. It allows the user complete control of the flow rate that best fits the application.

Initial Prep:

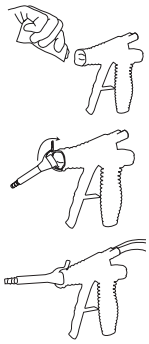
For proper PPE please see our Safety Data Sheet on gaf.com.

Setup Procedures for Single-Package Two-Component Model:



1. Shake kit for at least 1 minute before use to ensure proper mixing. Kit should be between 70°F – 85°F (21°C – 29°C).
2. Push in top of back panel to open. Pull down flap for dispensing unit hose assembly. Remove nozzle packet and read instructions.
3. Attach hoses to cylinders. Tighten with a wrench.
4. Open top flap of box to expose cylinder valves. Extend attached dispensing unit hose assembly.
5. Open the valves completely by turning the valves COUNTERCLOCKWISE. Top flap may be removed or left in place during use or storage.

Attaching the Nozzle:



1. Before attaching nozzle, use petroleum jelly on face of gun.
2. Insert bottom tab of nozzle into bottom slot of dispensing unit.
3. Attach top latch by pushing towards back of unit, until an audible "snap" is heard.
4. Unit is ready to use.
5. After attaching nozzle, spray into "test shot" receptacle. To ensure equal parts A and B, double-check foam is curing.
6. To remove used nozzle, push top latch up and forward to unsnap.

For additional information, contact GAF Design Services at **1-877-423-7663** or **designservices@gaf.com**

Spraying Foam:

1. For proper PPE please see our Safety Data Sheet on gaf.com.
2. Kit should be between 70°F – 85°F (21°C – 29°C). Clean grease, oil, dirt,and water off surfaces to be foamed. Shake kit or cylinders before use for at least 1 minute.
3. Attach hoses to cylinders. Tighten with a wrench.
4. Fully open both cylinder (A & B) valves.
5. Attach nozzle to the dispensing unit; use of enclosed petroleum jelly on the face of the dispensing unit before attaching nozzle will help prevent contamination by cured foam and help keep the sealing ports clean. (Detailed instructions for attaching nozzle shown above.)
6. When spraying the dispensing unit for the first time and with each new kit, dispense foam by squeezing the trigger only ½ to ¾ open until desired output is achieved.
7. Once the trigger is released it MUST BE REACTIVATED WITHIN 30 SECONDS or a new nozzle must be installed. Failure to do this could result in leakage, spills, or splashes which can ruin the dispensing unit and/or hoses.
8. IMPORTANT: After releasing trigger, activate the trigger safety to prevent accidental discharge.
9. All dispensing unit nozzles are easily cleanable and solvent resistant. To clean nozzles, dissolve Part A and Part B residue before it completes its chemical reaction by flushing the nozzle with an acetone cleaner. Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
10. Do not remove hoses from cylinders. Do not flush/clean hoses with air, water, or solvent. Removing and/or cleaning hoses may compromise the foam.

Important Application Notes:

1. See product Technical Data Sheets for approximate product-specific yields. Disposable kit yields are measured in board feet. A board foot is a square foot with 1" thickness (12" x 12" x 1"). Actual yields will vary depending on factors such as ambient conditions, application technique, foam density, etc.
2. Suitability of this product for any particular purpose, such as achieving desired application requirements, must be determined by the installer, prior to use. Verification that product is properly applied and installed is also the responsibility of the installer.
3. The spray foam application MUST be covered with an approved covering or coating to protect it from discoloration or deterioration due to UV exposure.
4. Take care when applying excessive layers at one time because of exothermic heat generation. For thickness greater than 2 – 3" (5 – 8 cm) apply foam in multiple layers, allowing heat to dissipate between applications.

For additional information, contact GAF Design Services
at **1-877-423-7663** or **designservices@gaf.com**

Storage and Reuse:

1. Close cylinder valves when not in use.
2. Do not store cylinders at temperatures below 60°F (10°C), and do not store full cylinders above 100°F (38°C) or partially used cylinders above 90°F (32°C). Kits stored below 70°F (21°C) must be given sufficient time (1 – 2 days) to warm up to 70°F – 85°F (21°C – 29°C). See TDS for formula-specific temperature recommendations.
3. The used nozzle should be left on the dispensing unit during storage in order to help keep the outlet ports of the dispensing unit clean and free from any dust, dirt, or residual Part A & Part B that can affect the proper sealing of the nozzle. SAFETY: Always engage the trigger safety and close all supply valves during storage.
4. All dispensing unit nozzles are easily cleanable and solvent resistant. To clean nozzles, dissolve Part A and Part B residue before it completes its chemical reaction by flushing the nozzle with an acetone cleaner. Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
5. Do not remove hoses from cylinders. Do not flush/clean hoses with air, water, or solvent. Removing and/or cleaning hoses may compromise the foam.

To Reuse Dispensing Unit After Storage:

1. Remove the used nozzle.
2. Check the face of the dispensing unit to make sure the outlet ports are clear and the face of the unit is free from dirt, Part A & Part B, or other debris. If necessary, use a soft cloth or rag to remove any cured foam or chemicals from the face of the dispensing unit. Use of enclosed petroleum jelly is recommended to cover the face of the unit in order to prevent further contamination.
3. Shake kit or cylinders for at least 1 minute to ensure proper mixing. Part A & Part B should be between 70°F – 85°F (21°C – 29°C).
4. Fully open all supply valves.
5. Dispense into waste container to verify that both Part A & Part B are being dispensed in approximately equal streams.
    a. The dispensing unit is a disposable unit not designed for prolonged storage or continuous re-use. To help extend the storage life, it is recommended to dispense a minimal amount of foam from unit at least once every 3 days to ensure optimum flow of Part A & Part B through hoses. Contents of dispensing unit should be used within 30 days of initial use.

For additional information, contact GAF Design Services
at **1-877-423-7663** or **designservices@gaf.com**

Effects of Temperature:

- Proper temperature plays a critical role in the performance of any two-component polyurethane foam system. Part A & Part B temperature, ambient air temperature, and substrate temperature will affect system performance.
- Recommended Part A & Part B temperature is 70°F – 85°F (21°C – 29°C). If the Part A & Part B are not at the proper temperature, they may dispense in an improper ratio, thereby leading to poor-quality foam. Please see TDS for specific formulation-temperature requirements.
- **NOTE: It may take from several hours to several days (in the case of the larger systems) for Part A & Part B to reach the proper temperature. This is especially true if the product has been recently shipped or stored in colder temperatures.**
- For best results, substrate temperature should be 40°F – 100°F (4°C – 38°C), as this will improve both the adhesion of the foam and allow for proper expansion of the foam. A colder substrate will act as a heat sink, taking away the heat that is generated from the exothermic reaction of the chemicals during cure. This may reduce expansion, flowability, and performance.

Disposal Procedures:

Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area. Procedure for handling empty or partially used disposable cylinders (cylinders are NOT refillable):

1. **DO NOT INCINERATE CYLINDERS.**
2. Empty cylinders by dispensing the foam into a waste container like a cardboard box lined with a plastic bag , that has adequate industrial liquid-absorbing medium in the bottom. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays Part A & Part B.
3. Remove the nozzle and then continue to depressurize by dispensing the remaining Part A & Part B into the waste container. Dispense the residual Part A & Part B until the pressure is down to a minimum or there are just large bubbles in the hose.
4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual Part A & Part B and/or pressure in the hoses.
5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.
6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN — do not close.
7. **DO NOT PUNCTURE.**
8. The user of this material has the responsibility to dispose of empty cylinders, unused material, and residues in compliance with all applicable federal, state, international, and local regulations regarding the treatment, storage, and disposal for hazardous and nonhazardous wastes. Check with your local waste disposal service for guidance.

For additional information, contact GAF Design Services
at **1-877-423-7663** or **designservices@gaf.com**

Troubleshooting Guide:

Equivalent flow of both Part A-component and Part B-component is required with all two-component polyurethane systems in order to obtain proper performance, curing, and optimum yields. If a problem occurs, the cause is typically due to uneven flow that is caused by a blockage of one of the Parts.*

Problem	Possible Cause	Solution
Poor (Part A/Part B) Part A or Part B flow	Cylinder valves not fully open	Turn cylinder valves counterclockwise until they stop
	Cylinder valves in incorrect position	Place cylinder valves in upright position
	Damaged rubber gasket in nozzle	Replace nozzle
	Material is too cold	Part A & Part B temperature must be between 70°F – 85°F (21°C – 29°C)
Foam leaking from hose connections	Hoses not tightened	Tighten all hose fittings
	Cross-threaded hose	Replace gun hose assembly
Dark crunchy foam/ off-ratio (A-rich)	Material is too cold	Part A & Part B temperature must be between 70°F – 85°F (21°C – 29°C)
	Clogged nozzle	Replace nozzle
	Blockage of one chemical port	Clean gun face and apply petroleum jelly
	Gun crossover	Replace hose
White spongy or shrinking foam/ off-ratio (B-rich)	Material is too cold	Part A & Part B temperature must be between 70°F – 85°F (21°C – 29°C)
	Clogged nozzle	Replace nozzle
	Blockage of one chemical port	Clean gun face and apply petroleum jelly
	Gun crossover	Replace hose
Sputtering from nozzle	Propellant off-ratio	Shake the kit for at least 1 minute.
	Cylinders are empty	Switch to new kit
	Clogged nozzle	Replace nozzle
	Hose blockage	Replace hose

*If kit is still not fully operational, stop spraying and contact GAF Design Services at 1-877-423-7663 or designservices@gaf.com

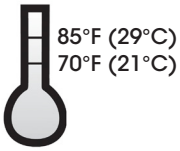
Effects of Temperature:

Apply a small amount of petroleum jelly, which is provided with each kit, to help keep the gun face clean from cured foam or contamination that could block one of the Part A or Part B ports.

Change nozzles frequently. Foam will cure inside the nozzle in the same amount of time that foam becomes tack-free in the air.

For additional information, contact GAF Design Services at **1-877-423-7663** or **designservices@gaf.com**

Temperature and Storage:



- Part A & Part B temperature is very important, store kits at or above 70°F (21°C) prior to use.
- Cold Part A & Part B may lead to off-ratio flow.
- Optimum Part A & Part B temperature is 70°F – 85°F (21°C – 29°C).

Use Solvents:

- All nozzles are easily cleanable and solvent resistant.
- To clean nozzles, dissolve Part A and Part B residue before it completes its chemical reaction by flushing the nozzle with an acetone cleaner.
- Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
- Cleaning a nozzle more than twice is not recommended.
- The Part A cylinder may eventually harden and clog the hose if stored for too long.
- The gun hose assembly is disposable and is not intended for continuous re-use.
- For best results, dispense foam from hose at least once every 3 days.
- Use full contents within 30 days of initial use.

For proper PPE please see our Safety Data Sheet on gaf.com.

NOTE: Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal conditions and may vary upon use, temperature, and ambient conditions. Yields shown are optimum and will vary depending on ambient conditions and particular application. Read all product directions and safety information before use. This product is organic and, therefore, is combustible. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane foam in construction.

For additional information, contact GAF Design Services
at **1-877-423-7663** or **designservices@gaf.com**