

Instructions for Applying Two-Part Expanding Foam Sealant

Our foam sealant is a two-part expanding polyurethane foam with high expansion and quick curing. A typical curing time for expanding foam sealant is between 3 and 4 minutes, depending on the temperature. The units are self-contained in the sense that no other components are required for the foam to expand and cure. The chemistry of the foam formation is sensitive to temperature and the ratio in which the two parts are combined. When the foam expands and sets properly, it is a high density and high R-value foam which will adequately prevent the flow of air through any voids in the panels insulation or connections of panels together to minimize the chance for air & moisture to be transported through these areas. Examples of these areas are ridge, valley, & eave connections.

The following is a list of hints and suggestions that supplement the manufacturer's instructions for successful use of this product.

- 1) A vinyl tube can be added to the end of the tip to assist in reaching hard-to-reach places such as the bottom of ridge cuts. Suitable hose can be purchased at any reasonable hardware store. Hoses are reusable and transferable from one kit to the next, even after several months provided that the hose either remains attached to a tank or is suitably plugged to prevent air from contacting the chemicals in the hose.

- 2) Use of foam sealant in cold weather requires special care. Watch for the following:
 - 1) Cold tanks (the temperature indicator on the side of the tank shows the temperature of the contents of the tank, not ambient air temperature.) For best results, the tank contents should be at 75 F or warmer.
 - 2) Holes in the seams will need to be placed closer together.
 - 3) Foam often tends to be dry and crumbly which signifies a slightly "A" rich foam. (This is not a problem – the foam will pick up moisture from the atmosphere and soften in time.)

- 3) Apply the foam in dry conditions and to dry materials. ***DO NOT apply the foam in wet conditions or to wet materials.*** Water will cause the propellant to disintegrate and prevent proper expansion and curing.

- 4) When foaming in a ridge or valley connection, make sure to get foam applied all the way through the panels to the inside skin to make sure all voids are filled adequately.
- 5) To foam in an eave detail like the L-Shaped Wedge, after the panels are installed drill holes every 12"-18" through the 2x material making sure to take special care if any electrical wiring was run in the void behind the wedge. Then fill every other hole with foam sealant for 4-10 seconds depending on the temperature and how much foam remains in the tank. Make sure that foam comes out of the holes which had no foam placed in them. If no foam comes up the middle holes, you will need to increase the length of time that you spray the foam sealant into the holes. (Note: Make sure you do a test shot on the next tank before spraying in the seam.)
- 6) If it is required to foam seams in the panels, first drill holes to the foam chase 12-18" apart over the whole roof prior to starting to foam. Then fill every other hole with foam sealant for 4-10 seconds depending on the temperature and how much foam remains in the tank. Make sure that foam comes out of the holes which had no foam placed in them. If no foam comes up the middle holes, you will need to increase the length of time that you spray the foam sealant into the holes. After the foam has cured, go back and drill new holes in the locations where no foam came up the middle holes and drill new holes to determine the extent of the foam sealant and then re-foam to fill any voids. If you think the foam has not set up in the seam, drill test holes along the seam to determine if it has or not. If the foam has completely collapsed, new foam can be put in the existing holes. (Note: Make sure you do a test shot on the next tank before spraying in the seam.) Methodically foam each seam so every seam on both sides of the spline and every open seam is adequately foamed.

OPERATING INSTRUCTIONS

English

FROTH-PAK™ Polyurethane Foam System

WARNING

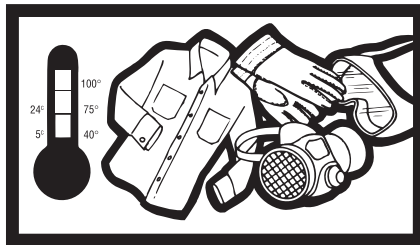
Before using *Froth-Pak*™ polyurethane foam, please read and follow the instructions on this sheet.

CONTENTS

HCFC Complete Kit of *Froth-Pak* polyurethane foam

- 2 Steel tanks of *Froth-Pak* foam (1 iso, 1 polyol)
- 1 *Insta-Flo*™ dispenser and hose assembly
- 1 assortment Anti-Crossover Nozzles
- 1 Petroleum jelly packet (5g)
- 1 Operating instruction sheet
- 1 Wrench 5/8" (*Froth-Pak* 600 kit only)

PERSONAL PROTECTION



ALWAYS WEAR PROTECTIVE EYEWEAR, GLOVES, AND CLOTHING WHEN OPERATING.

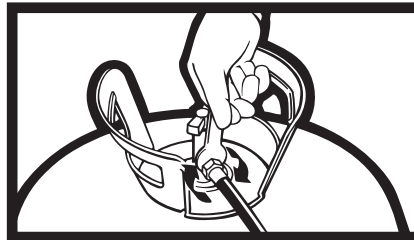
USE ONLY WITH ADEQUATE VENTILATION OR APPROPRIATE RESPIRATORY EQUIPMENT.

GETTING THE KIT READY

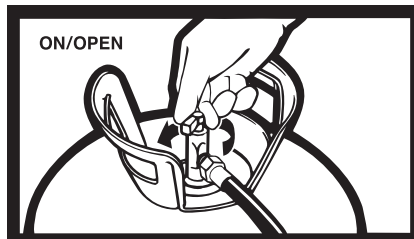
- 1) This instruction sheet is packed in a reusable bag with an assortment of Anti-Crossover Nozzles, and a petroleum jelly packet (5g). The *Insta-Flo* dispenser and hose assembly is connected to the chemical tanks. Lift the *Insta-Flo* dispenser and hose assembly from the box and fully uncoil hose.
- 2) Free the perforated section in upper section of the box (near the locking tab that retained the lid), and bend it down to allow the hoses to enter into the two cutouts provided.



- 3) Apply a coating of petroleum jelly to the inside face of the *Insta-Flo* dispenser. This makes cleaning of the dispenser face much easier and extends the effective life of the *Insta-Flo* dispenser.



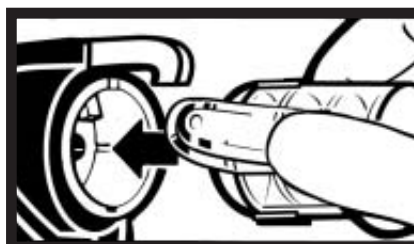
- 4) **For users of *Froth-Pak* 600 polyurethane foam.** Using the wrench provided, tighten the hose assemblies for both "A" and "B" valves until both are tight. The enclosed wrench is intentionally designed to warp or bend if excessive pressure is applied.



- 5) Turn the tank valves on fully, noting the initial movement of chemical through the clear hoses as a confirmation of flow.



- 6) Purge the system into a waste container by activating the trigger of the *Insta-Flo* dispenser. When streams are equal, release the trigger, clean the chemical from the dispenser face with a clean rag, and reapply petroleum jelly.



- 7) Select either a clear (caulking) or blue (spray) Anti-Crossover Nozzle. Insert it firmly into the front of the *Insta-Flo* dispenser. Be sure the dispenser clips the nozzle firmly in place.

USING THE KIT

Like all foam kits, replace nozzle when nozzle has not been used for more than 30 seconds. Nozzle is removed by firmly depressing the yellow ejector located on the top of the *Insta-Flo* dispenser.

Before applying foam, make a small test shot into waste container to verify foam quality.

- 1) Hold the *Insta-Flo* dispenser about 6" – 24" (15 cm – 60 cm) away from the area you intend to spray. Apply foam by squeezing trigger. Note yellow safety on the trigger must be depressed first, unlocking trigger. Move the *Insta-Flo* dispenser with a steady back and forth motion when dispensing foam.
- 2) Foam will expand and will be tack free within 60 seconds (3–4 minutes for slow rise formulas), and is fully cured in five minutes. It is recommended that foam be applied in layers of 2" or less in any single application layer.

Note: If the foam is to be injected into a hidden cavity, a test shot is recommended prior to each injection.

TEMPERATURE

The temperature indicator on the side of the tank shows the temperature of the contents of the tank, not ambient air temperature. For best results the tank contents should be at 75° F (24° C) or warmer. *Froth-Pak* polyurethane foam can be applied effectively in cold air temperatures or on cool work surfaces (above freezing) provided the kit contents are at least 75° F (24° C).

DISPOSAL

The cylinders should have all pressure vented and all the material removed to be considered empty cylinders. **DO NOT PUNCTURE THE CYLINDERS TO RELIEVE THE PRESSURE.**

The cured foam and the empty cylinders may be disposed of as a non-hazardous waste in accordance with state and local regulations. Landfilling may have special requirements depending on local regulations. These regulations should be reviewed to insure compliance. Do not dispose of pressurized tanks.

OPERATING INSTRUCTIONS

English

TROUBLESHOOTING

If your spray pattern becomes noticeably different (i.e. cone spray changes to stream), this may be caused by dispensing foam with a used nozzle. Always inspect a nozzle prior to dispensing to make sure you have an unused nozzle mounted in the *Insta-Flo* dispenser.

If the foam or spray pattern does not react properly, replacing the nozzle will usually correct the problem. If the problem persists, remove the nozzle and carefully activate the dispenser into a waste container. Two chemical streams of approximately equal volume should flow. If streams are unequal a blockage has occurred. Shut off the tank valve on the side that is flowing properly and activate the trigger full force for 15 seconds. Once the blockage is freed turn off all tank valves. Clean any chemical from the face of the *Insta-Flo* dispenser with a clean rag and reapply petroleum jelly. Insert an unused nozzle, open all valves and dispense a test shot into a waste container. After curing check the foam quality.

If problems still occur, stop foaming.

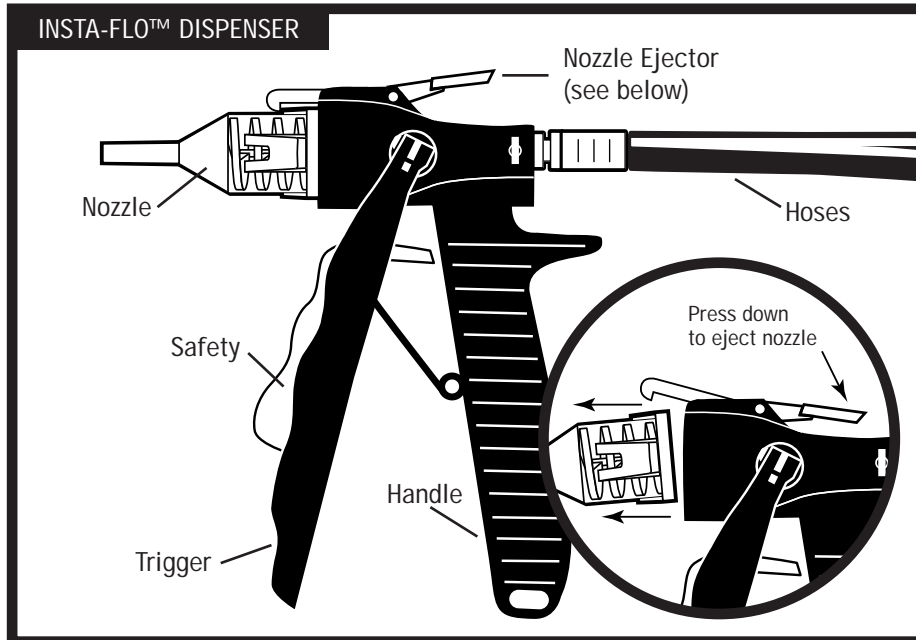
Turn off chemical tank valves, eject the used nozzle, and release chemical line pressure by activating the dispenser into a waste container. Slowly loosen the hose connections at the tank valves. Clean chemical from the threads and replace with a new *Insta-Flo* dispenser/hose assembly. If the replacement of the *Insta-Flo* Dispenser/Hose Assembly does not solve the problem, please contact our technical staff at 800-868-1183. Note: A variety of foam dispensing nozzles are available with alternative spray patterns and various dispensing rates.

To prevent hoses from clogging, if your dispenser has not been used for one week or longer, activate the system for a few seconds by turning on the tank valves and squeezing the trigger fully without nozzle to dispense twin streams into a waste container. This will clear and repressurize the hoses and should be done every week when the system is idle. Reapply petroleum jelly and reinsert used nozzle for storage.

STORAGE

Store the *Froth-Pak* polyurethane foam system at 75° F (24° C), in a clean dry area. **DO NOT STORE AT TEMPERATURES ABOVE 120° F (49° C).** Avoid prolonged storage in direct sunlight or near heat sources. Store a partially used kit with the safety ON (do not tie

INSTA-FLO™ DISPENSER



trigger down) and valves CLOSED. Remove used nozzle, reapply petroleum jelly to face of *Insta-Flo* dispenser, and reinsert the used nozzle. Do not bleed pressure off hoses during storage. See Troubleshooting above.

WEAR PROTECTIVE EYEWEAR, GLOVES AND PROTECTIVE CLOTHING.

24 HOUR EMERGENCY PHONE (989) 636-4400.

FOAM QUALITY

If friable or brittle, the foam is iso rich, and a partial blockage of the polyol side exists. Clear the blockage from the polyol side. (See Troubleshooting.)

If foam remains soft or mushy, the foam is polyol rich and a partial blockage of the iso side exists. Clear the blockage from the iso side. (See Troubleshooting.)

FIRST AID

Irritating to eyes, skin, and respiratory tract. May cause sensitization by skin contact and/or inhalation. Use in a well-ventilated area or wear a self-contained breathing apparatus. Call for Material Safety Data Sheet for additional information.

EYE: Flush with water for 15 minutes.

SKIN: Remove contaminated clothing; wash skin with soap and water.

INHALATION: Remove to fresh air.

INGESTION: Give large quantities of liquids. **DO NOT INDUCE VOMITING.**

In ALL FIRST AID cases, CONSULT A PHYSICIAN.

KEEP OUT OF THE REACH OF CHILDREN.



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www.polyurethanesystems.com
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