

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.
2. 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.
3. 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.)
5. 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.

6. 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.
7. 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.)
8. 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.