

# ANSWERS TO COMMON SPRAY FOAM HEALTH AND SAFETY QUESTIONS FOR WORKERS AND HOMEOWNERS

Spray Polyurethane Foam (SPF) is a one-step spray-applied product widely used to insulate and seal cracks and other small gaps in homes and buildings, improving energy efficiency and comfort. SPF is a highly effective insulator and air barrier, which limits air leaks in a building.

Because it is applied on site, builders, homeowners, and other interested parties may have questions about the product. The following addresses some common questions about SPF application and safety:

## WHERE IS SPF USED?

SPF is spray applied, on site, as a liquid that quickly reacts to form polyurethane foam. Because of its versatility and energy efficient qualities, SPF is used in a variety of locations throughout a home or building.

### WALLS

SPF insulates and seals small cracks and gaps helping to reduce air leaks in walls, which helps to save energy. SPF can help form a barrier against insects and other pests where it is applied.

### LOW SLOPE ROOFS

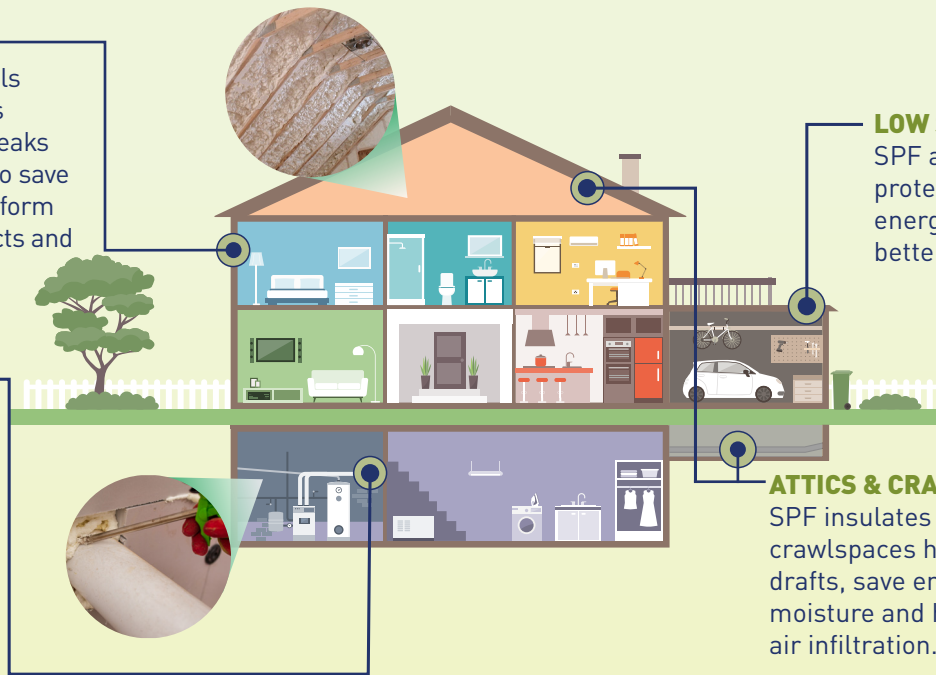
SPF aids in moisture protection, improved energy efficiency, and better wind resistance.

### GAPS AND HOLES

"Foam in a can" insulating sealant fills small gaps, such as spaces around electrical outlets, ductwork, or cracks in materials, reducing air leaks and saving energy.

### ATTICS & CRAWLSPACES

SPF insulates and seals attics and crawlspaces helping to prevent drafts, save energy, and minimize moisture and humidity caused by air infiltration.



## WHAT IS THE DIFFERENCE BETWEEN REENTRY TIME AND REOCCUPANCY TIME?

It is important for SPF applicators and trade workers to follow manufacturer's recommended reentry times to determine when it is safe to return, without wearing personal protective equipment (PPE), to areas where SPF has just been applied. Building occupants and members of the public also must follow recommended building reoccupancy times after SPF application.

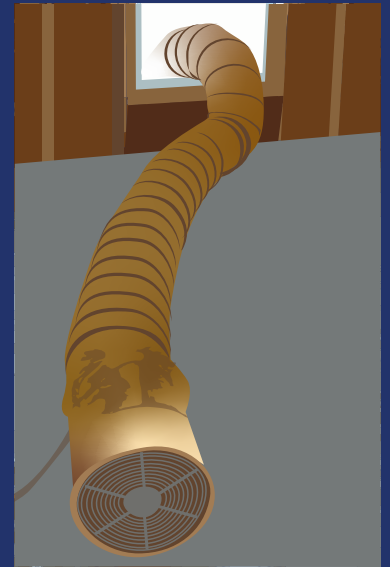
**REENTRY TIME** is the time elapsed after installing SPF insulation when it is deemed safe for workers to enter the building and resume work activities without the need for PPE.

**REOCCUPANCY TIME** is the time elapsed after installing SPF insulation when it is deemed safe for building occupants or residents to resume normal building operations and activities. Normally, manufacturers recommend building occupants wait a minimum of 24 hours after application of high pressure SPF to reoccupy the area, but recommendations may vary based on factors such as the particular product and conditions. Questions about reoccupancy times are less common with newly constructed homes, because SPF is often installed long before the home is occupied.



## SHOULD I BE CONCERNED ABOUT POTENTIAL WORKER EXPOSURE TO SPF?

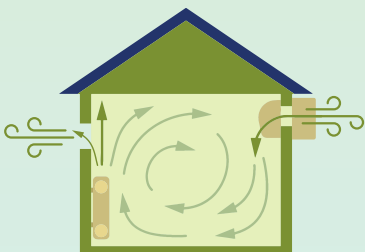
Because application of SPF involves the use of a high-pressure spray gun and a chemical reaction, both chemical vapors and spray mist particles are a source of potential worker exposure and an inhalation (breathing) and skin or eye contact hazard. For this reason, it's important that professional applicators have adequate training.



Potential risks can be reduced if the applicator spraying foam wears the manufacturer's recommended PPE. The U.S. Occupational Health and Safety Administration requires the use of appropriate PPE during the application of SPF. The U.S. Environmental Protection Agency's (EPA) Ventilation Guidance for Spray Polyurethane Foam Application also recommends general ventilation practices, such as opening doorways and windows, and the use of mechanical ventilation such as exhaust fans or blowers, to lower concentrations of chemical emissions during SPF application.

## SHOULD I BE CONCERNED ABOUT LONG-TERM EXPOSURE TO SPF IN MY HOME?

In general, all building materials off gas for some time after installation and SPF is no different. Building occupants tend to have a reduced potential for exposure to SPF chemical emissions because the insulation is generally found in spaces that homeowners do not access regularly— behind walls and in crawlspaces and attics. According to the Department of Energy, proper ventilation is important for any energy efficient home.



## WHAT ABOUT SAFETY EDUCATION?

Risks associated with SPF exposure can be controlled when workers who apply SPF in a building are educated on and implement proper workplace controls such as appropriate ventilation and wearing proper PPE. Other trade workers and homeowners should remain an appropriate distance from the SPF application work area during and for a period of time after SPF application.

The Spray Foam Coalition recently published an easy-to-understand document called: *High Pressure SPF Insulation in New Home Construction and Retrofit Applications: Worker and Homeowner Health and Safety Information*. The document outlines the many years of research conducted on SPF, provides an overview of industry practices for workers, and helps answer questions in a concise and simple manner that builders, workers, and homeowners might have about the chemicals used in SPF.

It is important that builders, workers, and homeowners be educated and prepared regarding the use of SPF. The white paper is available at: <https://polyurethane.americanchemistry.com/SPFemissions/> and additional health and safety resources can be found at [www.spraypolyurethane.org](http://www.spraypolyurethane.org). If you would like to learn more about SPF, visit [www.whysprayfoam.org](http://www.whysprayfoam.org) for more information.

