

Q: Is there a maximum thickness that foam can be sprayed?

A: Yes. There are also differences in the maximum amount that can be sprayed between low density (half pound) and medium density (2 pound) foams. Low density foams can be applied to the maximum thickness in one pass, but there are limitations to what those maximums are depending on the application. Please refer to the manufacturer's specifications or ICC-ES Evaluation Report for detailed information. Medium density foams cannot be sprayed in more than 2" passes (50mm) according to manufacturers' specifications. Additionally, once 4" has been installed, you have to wait 4 hours before the next 2" pass can be applied. If spray foam is not properly installed, you may not receive the R-value that you have paid to have installed and the foam may not cure properly.

Q: Is spray foam waterproof?

A: Some spray foam insulations are waterproof. This depends on the density of the foam. Open cell foam is definitely not waterproof or water resistant. In fact, open cell foams can hold a tremendous volume of water (half pound foam). Medium density closed cell foam is water resistant, but not waterproof (2 pound foam). High density closed cell foam can be water proof (10 to 12 pound foam).

Q: What is hot roofing?

A: Hot roofing is installing spray foam directly to the sheathing in an unvented attic. When possible, venting should be attempted to prevent temperature fluctuations and to create much needed air flow. Before making the decision to hot roof, you may want to consult the warranty provided for your roofing materials. Many manufacturers will not warrant their products in hot roof applications.

Q: Can spray foam be sprayed outside?

A: Yes, with limitations. Spray foam left directly exposed to the sun and weather will begin to degrade after about 1 year (1/16th of an inch per year after the first year). Even when the spray foam will be covered after installation there are other concerns to be considered. Spray foam particles are carried by the wind, making it difficult to apply in windy weather. It also creates the possibility for overspray on surrounding vehicles, windows, and other valuable items. Depending on the dampness and humidity caused by weather, it may not be permissible to apply spray foam to any substrate until the conditions are suitable for spraying. Spray foam applied outside will not adhere properly if it is raining or too humid. Spray foam applied inside will not adhere properly if the substrate is damp or has frost.

Q: Why is foam more expensive than blown-in fibreglass?

A: The biggest reason is the cost of material. Fibreglass is much less expensive than the chemicals required to make polyurethane foam. The main ingredient in polyurethane foam is petrol and in fibreglass it is sand or recycled glass.

Q: What is half pound foam?

A: Half pound foam is an open cell polyurethane foam that uses only water as a blowing agent. The density is only ½ pound per cubic foot and it can be distinguished by open pockets of air

throughout the foam. Open cell foam is permeable to water and is not rigid in composition. Actually, open cell foam feels soft and spongy to the touch. Open cell foam is less expensive than closed cell foam because less chemical is needed to achieve ½ pound density, and it has a much lower R-value. Half pound foam expands about 150 times its original volume to form a semi-rigid, non-structural plastic. This SPF typically has an R-value of approximately 3.5 per 25.4 mm (1 inch). Half pound foam must be covered as per building code requirements for the protection of foamed plastics from sources of ignition (spark, fire, etc.) Half pound foam manufacturers have not yet found an environmentally sound way to deal with all of the excess waste left over after installations. Half pound foam is not a vapour barrier.

Q: What is the difference between ½ pound foam and 2 pound foam?

A: The raw materials of both types of foam are nearly identical. Both 1/2-lb and 2-lb SPF are made from blended systems of polyol resins, catalysts, surfactants, fire retardants and blowing agents on the B-side, with polymeric MDI (methylene diphenyl diisocyanate) on the A-side. The difference between SPF types is in how these materials are formulated. The main differences between them are how dense they are, their R-values, cost, use as a vapour barrier, water permeability and tensile strength. Closed cell foam is the denser formulation of the material. The denser the physical properties, the greater the benefits. Both ½ lb and 2-lb SPFs have air barrier qualities that can help reduce noise from outside the building envelope (i.e. airplanes and car traffic). The ½ lb foam's density offers additional sound absorbing qualities; however, neither foam is exceptionally effective at reducing vibrational impact noises.

½ lb SPF has a high open-cell content (greater than 50 percent) and liquid water can enter the foam. Conversely, 2-lb SPF has a high closed-cell content (greater than 90 percent) and resists water absorption. In a building assembly, the latter SPF offers added weather or rain barrier protection. Closed cell foam is a vapour barrier at installations of 50mm or more. Closed cell foam is rigid in strength, whereas open cell foam is spongy. Most open cell foams only perform at a maximum of R3½ per inch. Closed cell foams are better for outdoor use and in crawlspaces. As of January 1, 2010 both types of foam promote 0 ozone depletion.

Q: Is your foam the same as the stuff sold in hardware stores? Tiger foam, etc.

A: No, even though closed cell foam purchased in hardware stores is considered a closed cell polyurethane foam, the chemical formulation is very different from ours. Our CCMC (Canadian Construction Materials Centre) government approved foam can only be installed by certified licensed installers who work for a CUFCA (Canadian Urethane Foam Contractors Association) member. Do-it-yourself spray foam kits are extremely messy, unreliable and often end up costing more money to install than having the work done by a professional spray foam contractor. Our foam is manufactured to be more eco-friendly and in turn will qualify for many LEED (Leadership in Energy Efficiency and Design) credits that do-it-yourself kits cannot.

Q: Can foam be sprayed in cold temperatures?

A: Ice dams form when convective heat is present in an attic and melts snow on the roof. This melted snow (water) runs down the roof, under the blanket of snow, to the edge of the roof where colder conditions cause it to freeze, forming ice dams. If ice dams are not removed,

water may be caught behind them, forced under shingles or spill over to form icicles. This can result in costly damage to your home: wet (ineffective) insulation; stained or cracked plaster or sheet rock, damp, rotting walls, and stained, blistered or peeling paint.

Q: Is your foam the same as the foam sprayed around windows and doors?

A: No. Although you can buy cans of foam that are low expansion or high expansion and are a type of polyurethane foam, they contain a different chemical composition and are applied using aerosol which achieves a much lower R-value.

Q: When do you have to fireproof spray foam?

A: All spray foam (half pound and 2 pound) must be protected by a thermal barrier in any area considered a living space (ceiling height over 5'11"), crawlspaces with a plenum (an enclosed space that moves air to living space), and crawlspaces with a heat source. The building code provides different options for achieving a 15 minute thermal break to keep ignition sources away from spray foam insulation (drywall, gypsum board, etc.).