



## Spray **Foam Insulation**

### What are the **Benefits** to **my HOME**?

When it comes to sealing your home from air and moisture intrusion, saving on costly utility bills, strengthening your home, and protecting your family's health from dangerous mold, there is no better home insulating material than Spray



Foam Insulation. Spray Foam Insulation is not a new product. Introduced back in 1983, it has been proven to be the best insulation product made today for insulating your home, office building, or barn.

Spray Foam Insulation is an insulation breakthrough. Applied as a liquid, it expands within seconds to 120 times its volume to fill every nook and cranny. By eliminating air movement through walls, it provides superior energy efficiency and improved indoor air quality. Spray Foam Insulation is a nontoxic spray foam which has undergone extensive testing and meets the intent of all building code requirements. It reduces airborne noise and dust, making it the healthy choice for those who suffer from allergies, asthma or chemical sensitivity. Spray Foam Insulation is the smart choice for healthy living. It is used in both health homes and GREEN Built Homes.

## Benefits of Spray Foam Insulation

Stops air and moisture infiltration reducing the chance of mold growth.

Spray foam is used to seal the entire "building envelope" of the home to prevent air and moisture infiltration. Air can infiltrate the home in the form of drafts through wall sockets, windows and doorways. Traditional fiberglass insulation is only stapled, or placed into the wall cavities and does not seal the stud and wall cavities from end to end, or top to bottom. Air infiltration can pass through these gaps, making it far less efficient than Spray Foam insulation. Spray Foam insulation not only adheres to, but also forms to the walls and floors to create a tight seal, an insulating barrier that stops this air leakage. Since Spray Foam insulation acts as an air barrier, it also helps to reduce moisture infiltration, which is a source of dangerous mold and mildew growth in the home, which can cause severe health problems to its occupants.

## Adds strength to the building structure.

Moisture infiltration can also cause structural damage to your home or building. Spray Foam Insulation helps reduce moisture and mold. Molds produce tiny spores to reproduce. Mold spores waft through the indoor and outdoor air continually. When mold spores land on a damp spot indoors, they can begin growing and digesting whatever they are growing on in order to survive. There are molds that can grow on wood, paper, carpet, and foods. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-

addressed. Spray Foam Insulation can prevent the moisture needed by mold spores thus preventing deterioration in the structure of the home. There is no practical way to eliminate all mold and mold spores in the indoor environment. The way to control indoor mold growth is to control moisture. Spray Foam insulation is the key.

[Increases comfort and saves on energy costs](#) (up to 50% savings).

The US Department of Energy (DOE) studies indicate that 40%- 50% of a home's energy is lost due to air infiltration. Spray Foam insulation boasts of the highest R-value per inch than any other commercial material (R-3.8 or higher, compared with Fiberglass at R-3.5, making your home more comfortable and less expensive to heat in the winter, and cool in the summer. Sprayed polyurethane foam has an aged R-value of approximately 3.8 per 1 inch thickness (depending on the particular formulation and application, higher values have been achieved), enabling it to provide more thermal resistance with less material than any other type of commercial insulation material. Spray Foam Insulation systems are frequently used to insulate and protect a wide variety of residential, commercial, and industrial buildings. Monthly energy and utility savings of 30%-50% or greater can be achieved when compared to the alternative attic & wall systems. The cost of Spray Foam insulation system can often be recovered in less than 4- 5 years, simply through energy savings alone.

Redefines traditional construction methods and benefits modern building sciences and energy efficient GREEN building initiatives.



[\(Read all about how spray foam used in the "building envelope" outperforms fiberglass insulation, becomes a superior air barrier, and defies traditional, and perhaps, outdated building practices of attic and crawl space ventilation.\)](#)

Is a great choice for those with allergies.

Spray foam insulation keeps dust and pollen out. It also reduces capacity requirements, maintenance and wear of HVAC equipment

## Deadens Sound Travel and Noise

. Spray Foam insulation also reduces airborne sound making the home acoustically tighter and more private from room to room. Open Cell Foam Insulation can absorb up to 75% of the sound and is great in the theater room. It can reduce sound transfer from floor to floor.



After you have made the decision to use Spray Foam Insulation in your home, you will need to choose between open-cell and closed-cell polyurethane foams. With the open-cell vs. closed-cell issue, there are two major factors to understand and consider. The first is the nature of the foam. It is either

open-cell foam, where the tiny cells of the foam are not completely closed or closed-cell foam where the tiny foam cells are closed and packed together. The choice of foam can also be based on the requirements for the other performance or application specific characteristics such as strength, vapor control, available space, etc. The advantages of closed-cell foam compared to open-cell foam include its strength, higher R-value, and its greater resistance to the leakage of air or water vapor. The disadvantage of the closed-cell foam is that it is denser, requires more material, and therefore, is more expensive. It is not recommended that Closed Cell foam be used in an attic area. Closed Cell will not allow water to pass through it and if you ever had a leak in that area you would not be aware of it for years. Even though it has a better R-value, typically the cost per R is still higher than open-cell foam. Your choice of foam can make a big difference in the application, cost and performance of the Spray Foam insulation. Ask your installer which one he would recommend in your application. Most professional installers have both products, but please sure that he has been certified by the Manufacture of the product.

Whichever form you choose, spray Foam Insulation is the smart choice for those looking for healthy, cost effective ways to insulate their home. It will pay for itself in a relatively short amount of time and bring comfort and protection to your home for years to come.

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