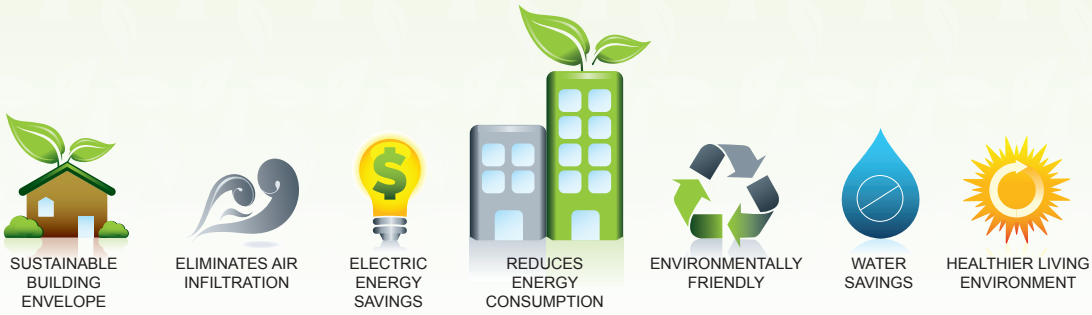
AirTight
SPRAY FOAM INSULATION MFG. BY LAPOLLA

Home Retrofit
Program

ENERGY SAVINGS FOR LIFE



What is an AirTight Home?

Designing, building or retrofitting an AirTight home is a professional approach to identifying traditional building envelope problems and correcting them through the use of spray foam insulation and other air sealing products. Conventional insulation products do not address many of the building envelope concerns that exist today such as:

- Air infiltration
- Vapor Drive
- Non-Conventional Framing
- Non-ventilated attics/crawl spaces

Insulation should add value to energy savings, indoor air quality, safety, durability and comfort. AirTight Spray Foam insulation is designed to meet all of these demands. With the addition of AirTight Spray Foam, homeowner's gain "peace of mind" that their home delivers maximum protection against energy loss and maximum comfort for their family.

Caulking, weather-stripping, water and electric savings will help lead to overall energy cost savings.

What is the AirTight Program?

The AirTight Licensed Applicator Program was created and designed to offer the highest level of training and support for the spray foam industry in the United States. The AirTight Program consists of a nationwide network of spray foam contractors that are all united under one brand – AirTight. All AirTight Licensed Applicators go through extensive training and testing to ensure their ability to provide premium service to their customers. Our management and support staff has decades of experience and knowledge, further ensuring the success of every AirTight Licensed Applicator.

AirTight Licensed Applicators

AirTight Licensed Applicators have an aptitude for building science solutions. Many are trained energy auditors that possess the equipment and skills to scientifically evaluate a home's energy performance and can perform the work to achieve home energy performance upgrades. AirTight Licensed Applicators value a collaborative approach to design, build, retrofit and deliver AirTight Homes to their customers. With the addition of AirTight Spray Foam, homeowner's gain "peace of mind" that their home delivers maximum protection against energy loss and maximum comfort for their family.

The AirTight Retrofit Program

Adding insulation is a part of almost every home retrofit project. Installing spray foam insulation as a barrier between the home and the outside environment is one of the most important ways to improve the efficiency of any home.

Creating an "air tight" building through the installation of spray foam insulation, caulking, and weather stripping, is the fastest way to reduce energy consumption, improve indoor air quality, and maintain a comfortable indoor environment. The AirTight Retrofit Program simplifies the weatherization process for homeowners by creating one point of contact to rely on when beginning a home energy evaluation and upgrade project.

Sealing and insulating the "envelope" or "shell" of your home — its outer walls, ceiling, windows, doors, and floors — is often the most cost effective way to improve energy efficiency and comfort.

Source: www.energystar.gov/index.cfm?c=home_sealing.hm_improvement_sealing

Energy Audit

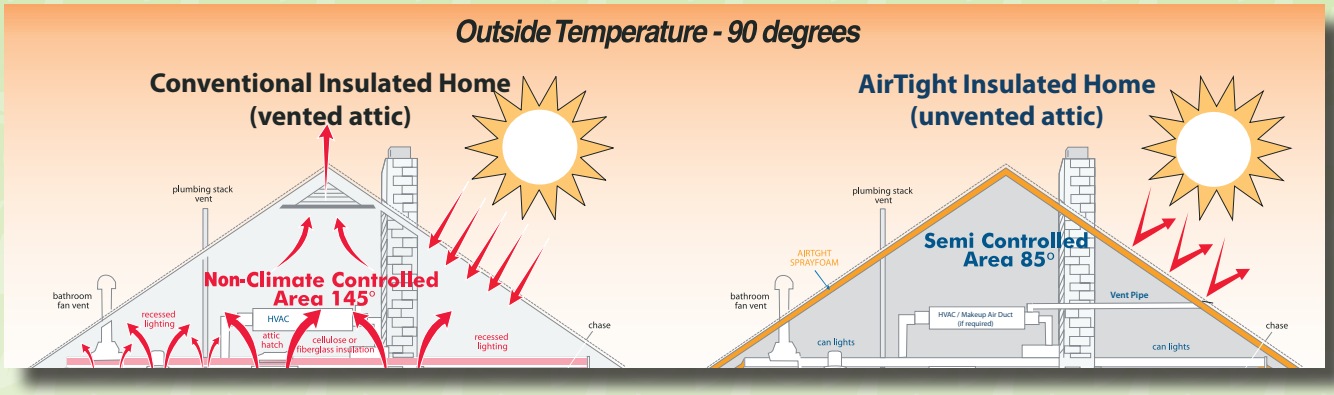
It is always recommended to first perform a home energy audit when considering making home efficiency upgrades. An energy audit will help pin point areas of your home that need to be upgraded to allow for better home energy performance.

During the audit, your AirTight Licensed Applicator will perform an on site interview and inspection. Homeowners are encouraged to make a list of existing problems such as uncomfortable areas, condensation issues or any other areas of concern. It is also recommended to provide copies of your home's yearly utility bills. Auditors use this information to establish benchmarks during the home energy evaluation process.

Once the home inspection and energy audit are complete, the AirTight Licensed Applicator will make recommendations for building envelope improvements that will create a more comfortable and efficient home.

Duct Leak Pressure Test

A duct pressure test combines a small fan and a pressure gauge to pressurize a house's duct system and accurately measure air leakage of the duct work. This test is similar to a pressure test of a plumbing system. Duct leakage can increase heating and cooling costs over 30% and can lead to problems regarding comfort, health, and safety.



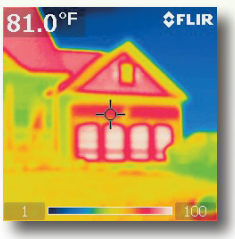
Energy Evaluation Tools

Blower Door Test

AirTight Energy Auditors may use a blower door test to help determine the "AirTightness" of a home. How they work – A blower door is a powerful fan that mounts into the frame of an exterior door. The fan pulls air out of the house, lowering the air pressure inside. The higher outside air pressure then flows in through all unsealed cracks and openings. This test determines the air infiltration rate of a building.

Thermal Imaging

An effective way to determine the heat loss or gain in a building envelope is by using thermal imaging photography. Thermal imaging identifies leaks where air may be entering or exiting a building by displaying warmer areas with a distinct RED color, as it stands out against cooler areas.



Retrofit Applications

Attic Applications

Spray Polyurethane Foam Insulation can be used in two common ways to insulate your attic space and protect your home from in climate weather and moisture related damages – Vented and Non-Vented Attic spaces. In a Vented attic, insulation is used on the attic floor to insulate the living space from seasonal heat and/or cold. Spray foam is used where traditional insulation would be; between the floor joists. The rest of the attic (ie: the roof assembly) is left un-insulated and ventilation is incorporated into the gable, soffit, and ridge vents throughout the roof structure. In a Non-Vented attic, insulation is applied directly to the underside of the roof sheathing to insulate the entire attic from seasonal heat and/or cold.

Spray foam is installed between the roof rafters, along the soffit areas and directly to all exterior surfaces such as gable walls, dormers, etc., to produce an air tight building envelope.

Crawl Space Application

Traditional crawlspaces are designed to be ventilated for the purpose of air movement and moisture control. In this type of application spray foam is applied between the floor joists and directly to the subfloor sheathing to protect the interior of the structure from unwanted air infiltration, ground gases, insects, rodents and heat loss.

Non ventilated crawl spaces have become very popular over the past decade. In a non vented crawlspace, spray foam is applied directly to the exterior foundation walls and rim joists to create an air tight thermal barrier between the crawlspace and the exterior climate. Additionally, a vapor barrier is installed over the ground to keep ground moisture from entering the crawlspace.

Energy Savings for Life in **THREE** easy steps

Air Sealing

Airflow through cracks and holes in the walls, ceiling and floor is referred to as air infiltration. In addition to the use of spray foam, air infiltration is minimized by caulking and sealing the building envelope. A home that is not sealed for air infiltration will be uncomfortable due to drafts and will use about 30% more energy than a well sealed home. Controlling air infiltration is one of the most cost-effective energy-efficiency measures in modern construction practices.

Affording Energy Upgrades

Home energy upgrades are more affordable today than ever before. Programs such as the "American Recovery and Reinvestment Act", Home Performance with Energy Star, and others, are paving the way for homeowners to better afford home energy upgrades. There are also many product rebates that are contributing to the affordability of home energy improvements. The easiest way to research energy upgrade options is to visit the following websites and search for rebates, programs and incentives that are available in your specific area of the country.

www.energystar.gov
www.dsireusa.org

Retrofit Your Home Today

Here's how to get started.

LAPOLLA®

To learn about the AirTight Retrofit Program or find an AirTight Licensed Applicator, visit: **www.AirTightInsulation.com** or call **(888) 4-LAPOLLA**