Single-Family Home Insulation

Why Insulation

The largest contributor to high energy bills in winter and summer months is the movement of heat into and out of your home. Under-insulated homes allow opportunities for this movement, called heat transmission, between the living space and the outside. Heat transmission requires a lot of energy to maintain comfortable indoor temperatures. By properly insulating your attic, walls and floors, you will create a more comfortable and energy-efficient home, while reducing your monthly utility bills.

There are many different types of insulation, which make it possible to find a solution that fits your home, budget and comfort goals. When paired with air sealing (strongly recommended), insulation is the most cost-effective, energy-saving measure for a Single-family home.

R-values

R-values are used to describe how well insulation resists heat transmission throughout your home. R-value is determined by the type and thickness of a material. The higher the R-value, the greater the insulating power. There are different types of insulation for different purposes; costs vary and each requires different tools.

THESE ARE THE FIVE MAIN TYPES OF HOME INSULATION:

- Fiberglass insulation.
- Mineral wool insulation.
- Cellulose insulation.
- Spray foam insulation.
- Rigid foam board insulation.

Each of these options has different qualities, costs, characteristics and installation guidelines. It is best to discuss insulation options for your home and budget with a qualified professional.

Complementary Measures

Air that leaks into the home's living space often enters from the attic, crawlspace and other cavities in the home, and can pass through your existing insulation. Closed cell spray foam and rigid foam act as an air barrier as well as insulation. This air can carry dust, mildew, mold, pollutants, wildfire smoke, radon gas and moisture into the home, resulting in poor air quality and causing or aggravating health issues. Pairing air sealing and proper ventilation with insulation is the best way to address these issues and get the most out of your insulation project. Insulation is also a smart investment if you are considering upgrading to an energy-efficient HVAC system. A well-insulated home requires less energy to maintain comfortable temperatures, making it possible to use a smaller, more energy-efficient HVAC system.

Cost Factors and Incentives

The cost of adding Single-family home insulation depends on the size of the project, type of insulation, location and any accommodations needed to access the installation area. An incentive of up to $2.35 per square foot for attic insulation, $2.00 per square foot for wall insulation and up to $1.20 per square foot for floor insulation may be available, depending on the existing insulation levels and home type. For qualified customers, incentives may cover dollar-for-dollar the entire cost of the insulation upgrade. Check with your local utility for offers and information about insulation, air sealing and other weatherization opportunities for your home.

Save money by installing your own insulation. Visit Energy Saver or ENERGY STAR® for more information on DIY guidelines before you start your project.

Customer Benefits

- Saves money on your utility bill.
- Reduces external noise pollution.
- When combined with proper air sealing, insulation can improve the air quality in your home.
- Can improve the energy efficiency of other measures such as windows, doors and HVAC systems.
- Improves comfort by providing stable temperatures throughout the house.

Recommended For

Homes built before 1990, which may benefit from additional attic insulation and floor insulation repair or replacement. Homes built before 1976 may also benefit from adding wall insulation.

Speak with a qualified professional to assess your home's insulation needs and ask about adding air sealing, duct sealing, HVAC upgrades, and window and door replacement to get the most comfort and savings out of your insulation upgrade project.