

Manufactured 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. Many manufactured homes were under-insulated when they were built, allowing 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 adding roof and belly insulation, you can create a more comfortable and energy-efficient home, and reduce monthly utility bills.

Along with air sealing, installing proper insulation is one of the most effective ways to reduce heat transmission in a manufactured home. It is also one of the most cost-effective, energy-saving measures. There are many different types of insulation, which make it possible to find a solution that fits your home, budget and comfort goals.

Roof and Belly Insulation

Roof/attic insulation is a critical component in preventing heat transmission in a manufactured home and can drastically reduce this heat transmission year-round. In an under-insulated home during the summer, heat builds up on the roof and radiates down into the living space. In the winter, hot air rises from the living space and escapes through the roof. How well insulation performs depends on the material type and thickness, or R-value, and how well the living space is separated from the roof/attic through proper air sealing.

Insulating the belly — the underside of the home has multiple benefits in addition to energy savings. Belly insulation helps keep the floors a comfortable temperature throughout the year, and, when paired with effective air sealing, can significantly improve the air quality in your home. An effective belly insulation project also includes adding a ground vapor barrier, which blocks moisture and soil gases such as radon, and adding crawlspace ventilation, which improves airflow and prevents moisture build up.

The best types of insulation for a manufactured home are:

- Fiberglass loose fill.
- Fiberglass batt insulation.
- Foam board insulation with weatherproof roofing.

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

R-values

R-values are used to describe how well insulation resists heat transmission throughout your home. There are different types of insulation for different purposes; costs vary and each requires different tools.

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. 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 <u>air sealing</u> 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 manufactured 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 \$0.90 per square foot may be available, depending on the type of insulation. Check with your local utility for offers and information about insulation, air sealing and other weatherization opportunities for your home.

Customer Benefits

- Improves comfort by providing stable temperatures throughout the house.
- Saves money by reducing how much your heating and cooling systems run.
- 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.
- Adds durability to your structure by preventing air and moisture transmission.
- Reduces external noise pollution.

Recommended For

Manufactured homes with existing insulation levels of R-11 or lower.

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.