

Energy Conservation Tax Credit

Existing Homes: For existing homes the tax credit is 25% of the cost of labor and materials for eligible improvements. Eligible improvements include: adding roof, ceiling, wall or floor insulation; installing programmable thermostats, lighting controls with cutoff switches to permit selective use of lights, low-flow showerheads, or glass fireplace doors; replacing incandescent lights with a more efficient fixture; caulking and weather stripping; insulating and sealing heating and air conditioning ducts and pipes; and items listed below.

- ⇒ Windows and doors with a U-factor of .30 or less. See restriction for new homes.
- ⇒ Storm windows and storm doors with a U-factor of .30 or less when measured in combination with the exterior window or door over which it is installed.
- ⇒ Central air conditioning split system with EER of at least 13 and SEER of at least 16.
- ⇒ Central air conditioning packaged system with EER of at least 12 and SEER of at least 14.
- ⇒ Air source heat pumps split system with HSPF of at least 8.5, EER of at least 12.5 and SEER of at least 15.
- ⇒ Air source heat pump packaged system with HSPF of at least 8, EER of at least 12.5 and SEER of at least 14.
- ⇒ Furnace using natural gas or propane with AFUE of at least 95; using oil with an AFUE of at least 90.
- ⇒ Boiler with an AFUE of at least 90.
- ⇒ Water heater using natural gas, propane, or oil with an energy factor (EF) of at least .82 or thermal efficiency of at least 90.
- ⇒ Electric heat pump water heater with an energy factor of at least 2.
- ⇒ Advanced furnace fan using no more than 2 percent of the total furnace energy use.
- ⇒ Heat recovery ventilators (HRV) meeting the CSA C439-00 standard.

New Homes: For new homes the tax credit is 25% of the cost of labor and materials for the eligible improvements listed above. These may include: air conditioners, heat pumps, furnaces, boilers, fans, HRVs, water heaters, and the extra cost of windows, doors, and insulation levels exceeding the statewide energy code (2012 International Energy Conservation Code – 2012 IECC).

New home restriction: Only the extra amount spent for above-code windows and doors (U-.32 rating) is eligible for the credit. The extra cost is the amount spent on the qualifying product with at least a U-.30 rating compared to the cost of a code level product of similar material and style.

Alternative Energy Tax Incentives

Alternative Energy Systems Income Tax Credit:

A \$500 income tax credit is available to individuals living and paying taxes in Montana who have installed a new alternative energy system in their primary dwelling. If you and your spouse both paid for the system, and the cost is \$1,000 or more, you both may claim up to \$500. Unused credit may be carried forward for up to four years. File MT Revenue form ENRG-B to claim the credit. Qualifying expenditures include installation costs for an alternative energy system, such as:

- ⇒ Solar photovoltaics (PV)
- ⇒ Solar thermal system
- ⇒ Ground Source Heat Pump
- ⇒ EPA certified low-emission pellet or wood stove
- ⇒ Wind turbine
- ⇒ Hydroelectric plant under 1 megawatt

Geothermal Systems Income Tax Credit:

A \$1,500 income tax credit is available to individuals living and paying taxes in Montana who have installed a new geothermal energy system or ground source heat pump for heating or cooling their principal dwelling. Home builders that are individuals or C corporations are also eligible for the credit, however the builder and home buyer may not both claim the credit. The credit may not exceed \$1,500 per installation. Unused credit may be carried forward for up to seven years. File MT Revenue form ENRG-A to claim the credit.

Federal Residential Renewable Energy Tax Credit:

A federal income tax credit of up to 30% of the installation costs of a solar PV, solar water heating system, a wind turbine no larger than 100 kilowatts, or a geothermal heat pump is available to individuals, with no upper limit. For individuals the system does not have to be installed on the taxpayer's principal residence. Excess credit generally may be carried forward to next tax year. The Federal tax credit is scheduled to step down to 26% for systems placed in service in 2020, 22% for systems installed in 2021, and will expire after December 2021.

More Information

Energy Efficiency & Alternative Energy Systems:

For information about energy efficiency upgrades, Energy Code Compliance Labels, renewable energy systems, or the Alternative Energy Revolving Loan Program, contact the Energy Office at the Montana Department of Environmental Quality.

- ⇒ deq.mt.gov/energy
- ⇒ (406) 444-0281

State Tax Incentives:

For tax credit forms, filing information, or additional details about tax credit eligibility, contact the Montana Department of Revenue.

- ⇒ mtrevenue.gov/
- ⇒ (406) 444-6900

Utility and Federal Tax Incentives:

For a searchable database of federal, state and utility tax credits and incentives for efficiency and renewables, visit:

- ⇒ dsireusa.org

ENERGY STAR® Home Program:

For more information on the ENERGY STAR® Home Program and the ways it can help you achieve your goal of building an energy efficient home visit:

- ⇒ betterbuiltnw.com

This document was produced with the support of the Northwest Energy Efficiency Alliance (NEEA)

NEEA is an alliance of more than 140 Northwest utilities and energy efficiency organizations working to accelerate the innovation and adoption of energy-efficient products, services and practices in the Northwest. More at neea.org.

Home Energy Efficiency & Alternative Energy Tax Incentives

Montana offers a series of income tax credits to support the installation of residential energy saving measures and alternative energy systems.

Tax payers may be eligible for income tax credits against the costs of installing energy conservation measures such as new windows, insulation, and high-efficiency heating systems. Tax credits are also available for installation of solar panels, ground source heat pumps, and more.

Individual income tax credits are available for:

- ⇒ **Energy Conservation Measures:** up to \$500 per individual, or \$1,000 per couple
- ⇒ **Alternative Energy Systems:** up to \$500 per individual, or \$1,000 per couple
- ⇒ **Geothermal Energy Systems:** up to \$1,500 per project



Features of an Energy Efficient Home that may Qualify for Montana Tax Credits

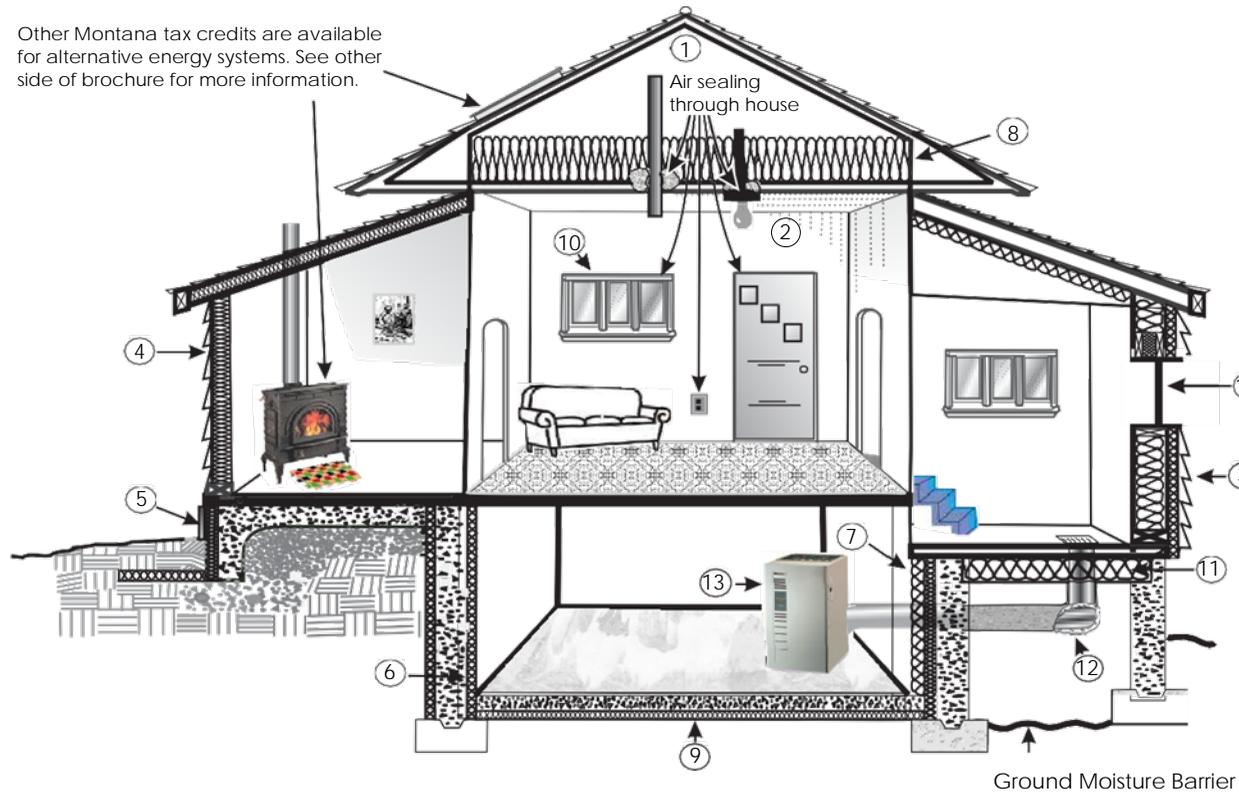
If you are planning to build a new home, you can design and build an energy-efficient home that will use 20 to 40 percent less energy than a standard house and provide year-round comfort. All energy efficient homes have certain features in common including: high levels of insulation, tightly sealed structures, ENERGY STAR® rated windows and appliances, and controlled mechanical ventilation systems. A \$500 or \$1,000 (per couple) tax credit is available to homeowners who make their homes more energy efficient or purchase a new “above energy code” home. The credit is 25 percent of the cost (material and labor) of the eligible improvement. To receive the full \$1,000 credit a \$4,000 eligible investment must be made. The energy code lists building component requirements in R- values and U- factors. R-value refers to resistance to heat flow, so the higher the R-value number the better. Windows are rated in U-factors that refer to conductivity – or heat loss – so the lower the U-factor the better.

1. Air Sealing and Mechanical Ventilation: The energy code requires air sealing around windows, doors, electrical boxes on exterior walls and ceilings, and openings where pipes and wires pass through the building shell. The code also requires an air barrier such as drywall, spray foam, sealed poly or foam board behind bathtubs and showers on exterior walls, rim joists and dropped ceilings. A blower door test for air tightness is now required for all new houses. An efficient house with good indoor air quality is well sealed and has a mechanical ventilation system that allows the occupants to control air flow through the house. Code required mechanical ventilation options range from an efficient bathroom fan to heat recovery ventilation (HRV) systems. HRVs bring fresh air into the house and reclaim about 70 percent of the heat from the stale air that is being drawn out of the house. Some HRVs qualify for the tax credit. A poorly sealed house where random gaps and weather conditions control air flow through the house will lead to high energy bills, uncomfortable drafts and possible moisture damage caused by interior air with moisture getting into and condensing within walls, ceilings, and floors.

2. Lighting: The code requires at least 75 percent of the permanent light fixtures to have high efficiency bulbs such as CFLs or LEDs.

3. Exterior Wall: The energy code path requires a minimum of R-21 in a standard wood framed wall. Wood has a relatively poor insulation value, so when possible, insulating material should occupy the maximum possible volume within a home’s walls. A better wall would have a minimum of R-25, including a continuous layer of insulation (R-5 or higher) to reduce heat loss caused by conduction through frames in the wall.

4. Structural Insulation Panels (SIPs): Panels are usually composed of a sandwich of oriented strand board and polystyrene foam. The polystyrene core comes in thicknesses of 5.5 to 11.5 inches and can be used as floors, walls, and ceilings.



5. Slab and Frost-Protected Shallow Foundation: The energy code path requires slab edges to be insulated to at least R-10 for 4 feet (combination of vertical and horizontal placement) or R-15 with in-floorheat. These foundations provide an economical and energy-efficient foundation.

6. Foam Foundation Systems: Typically, R-10 on each side of insulated concrete forms (ICFs) made of foam and filled with concrete. These provide an excellent insulating value for foundations, basements, and above ground walls.

7. Basement Insulation: The energy code path requires basements to be insulated; finishing is not required. R-19 insulation is required for cavity insulation or insulation placed within a framed wall, or R-15 continuous insulation without any framing. A REScheck™ analysis may allow lower levels of insulation. Basement insulation can be placed on the interior or exterior wall.

8. Attic Insulation and Raised-Heel Trusses: The energy code path requires a minimum of R-49 insulation in the attic. R-38 is acceptable in the entire attic with an energy truss that provides R-38 at the outer wall. A better home would have energy trusses with R-49 insulation, in which case the added cost to go above R-38 would be eligible for the tax credit.

9. Foam Insulation under the floor is especially beneficial for an in-floor heating system. The energy code does not require insulation under the entire concrete floor. Because it exceeds the code, its cost is eligible for the tax credit.

10. Windows and Doors: The energy code path requires at least a U-.32 window rating for both windows and doors. To be eligible for the tax credit, they must exceed code and have a U-factor of .30 or less. See new home restriction on other side.

11. Floor and Crawlspace: The energy code path requires R-30 in floors over unheated spaces, such as a tuck-under garage or unheated crawlspace. Another code option is to insulate the crawlspace foundation wall to R-19 when insulation is placed in a framed wall or R-15 with continuous insulation without any framing.

12. Duct Work: The energy code requires that both supply and return ducts be sealed, and if located in unheated parts of the house such as garage or attic, they must be tested for tightness. Supply ducts in unheated attics require at least R-8 insulation and R-6 on supply and return ducts in other unheated parts of the house. Duct tape is not a good duct-sealing material because its adhesive often fails. Duct mastic, available in buckets and caulking tubes from heating wholesalers and home improvement stores, is the preferred sealant.

13. Heating and Cooling Systems must be sized in accordance with ACCA manual J or other approved method. In the past, many systems have been oversized, resulting in higher installation and operating costs. High efficiency equipment, such as a gas furnace with at least a 95 AFUE rating and other HVAC equipment listed on the other side of this brochure, are eligible for the tax credit. A programmable thermostat automatically adjusts your home’s temperature setting to help save energy when you are asleep or away from home. Automatic thermostats can provide savings of about 10 percent in heating costs when used as directed. The energy code requires them for new furnaces.