

# Energize your New or Existing Montana Home and get up to... \$500 (\$1,000 per couple) TAX CREDIT on your Income Taxes

**MONTANA HOMEOWNERS** have a \$500 /\$1,000 per couple incentive to make their homes more energy efficient or to purchase a new “above energy code” home. The credit is 25 percent of the cost (material and labor) of the eligible improvement – \$4,000 must be invested in order to receive a \$1,000 credit.

**EXISTING HOMES** Eligible items for the credit include: adding insulation to the ceiling, walls, floors; installing lighting controls that save energy; programmable thermostats; caulking and weather stripping; insulating and sealing heating system ductwork, and items listed below.

The following is a listing of windows, doors, and equipment that are eligible for the Montana Energy Conservation Tax Credit for **both new and existing homes**. The expense of both material and installation labor are eligible for the credit. Note that for new homes, the cost of distribution systems (ductwork, registers, piping, radiators, etc.) is not eligible.

- 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** The installation of air conditioning systems, heat pumps, furnaces, boilers, fans, HRVs, windows, doors, and water heaters listed in the previous section are eligible for the tax credit along with the extra cost of insulation levels that exceed the statewide energy code (2012 International Energy Conservation Code – 2012 IECC). **New home restriction** – only the extra amount spent for above code level 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.

Certified ENERGY STAR® or Montana Green Building Program homes (above Bronze level) with an ENERGY STAR® heating system receive a \$500 Montana Tax Credit. Only one of these credits can be used. If using either of these credits, a couple is limited to a \$500 credit. A couple should be eligible for a \$1,000 credit if the cost of qualifying equipment, and the extra cost for exceeding code requirements for windows, doors, and insulation is documented to be at least \$4,000.

The two most common ways to comply with the energy code are to follow the energy code path requirements listed below or to use REScheck™, a free computer analysis from the DOE ([www.energycodes.gov](http://www.energycodes.gov)). It requires the input of areas and efficiency levels for ceilings, walls, windows, and doors.

The 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.

If you need Energy Component Labels, have questions, or would like additional information on energy efficiency upgrades for homes or alternative energy systems, contact the Montana DEQ at 406-444-6697 or go to our website at: [www.energizemontana.com](http://www.energizemontana.com)

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## Montana Energy Code Path Requirements

Window U-Factor	U-.32
Ceilings	R-49/38*
Exterior Walls	R-21
Floors over Unconditioned Spaces	R-30
Crawlspace Walls (conditioned space)	R 19/15**
Slab Perimeter - 4 feet R-15 with in-floor heat	R-10
Basement Walls	R-19/15**

\*R-38 is allowed for a ceiling if at least R-38 can be achieved in the entire ceiling area.

\*\*R-19 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.

## All new Montana houses should have an Energy Code Compliance Label on or in the electrical breaker panel.

Montana law requires builders to certify that their homes meet the statewide minimum energy code standards. This is accomplished when the builder signs the label listing insulation, window, door, and HVAC system efficiency levels.

## Federal Tax Credits

For 2015 and 2016, existing main homes are eligible for credit of 10 percent (material only) for building energy improvements such as adding insulation, (must meet 2009 IECC levels), air sealing material, qualified windows and doors and Energy Star roof. Limit of \$500 for the life of the building. Limit of \$200 on windows. The credit also applies to certain HVAC equipment with maximum credit amounts: \$50 for advanced furnace circulation fan, \$150 for at least 95AFUE furnace or boiler; \$300 for certain high efficiency water heaters, central air conditioners and heat pumps; \$300 for wood stoves of at least 75 percent efficiency.

For 2015 and 2016, both existing and new homes are eligible for credit of 30 percent of the cost (material and labor) with no upper limit for certain high efficiency geothermal, fuel cell, and small wind systems; and 2015 through 2019 for solar water heating and solar PV.

If you are planning to use, or for additional information on, Federal Tax Credits go to [www.energystar.gov](http://www.energystar.gov) and [www.dsireusa.org](http://www.dsireusa.org).

# Energize your Home and receive... \$500 (\$1,000 per couple)

**in the form of a Montana Income Tax Credit for making new or existing Montana homes more energy efficient.**

Montana is offering a tax credit of up to \$500 or \$1,000 per couple for energy improvements to new or existing homes.

- For existing homes the tax credit is 25 percent of the cost of the eligible improvements.
- For new homes the credit is 25 percent of the cost for certain high efficiency heating, ventilation, air conditioning, water heating equipment, and the “extra” cost to go beyond the minimum code efficiency levels for windows, doors, and insulation.
- Federal Tax Credits:  
30 percent of cost for certain alternative energy systems – unlimited amount;  
10 percent of cost for certain energy improvements - limit of \$500;  
\$50 to \$300 for high efficiency HVAC equipment;  
\$2,000 to builders for certified new homes.

## Alternative Energy System Credits

(Geothermal \$1,500, Wind and Solar \$500/\$1,000 per couple, and eligible Wood and Pellet Stoves \$500/\$1,000 per couple)

Taxpayers should use form ENRG-C to claim the Energy Conservation credit, ENRG-A for the Geothermal, and ENRG-B for other Alternative Energy Systems.

Tax credit forms are available on line at [www.mt.gov/revenue/](http://www.mt.gov/revenue/)

For additional information on Montana tax credits contact the Montana Department of Revenue Customer Service Center at (406) 444-6900.



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# Features of an Energy Efficient House That May Qualify for the Montana TAX CREDIT

If you are planning to build a new home, you have the opportunity to design and build an energy-efficient home that will use 20 - 40 percent less energy than a standard house and provide year-round comfort. All energy-efficient homes have certain features in common: high levels of insulation, tightly sealed structures, ENERGY STAR® -rated windows and appliances, and controlled mechanical ventilation system. For new houses, the credit is 25 percent of the cost for certain high efficiency HVAC, water heating equipment and the "extra" cost to go beyond code minimums for windows, doors, and insulation levels. The ENERGY STAR® Home Program offers you a way to achieve your goal of building an energy-efficient home. For more information about ENERGY STAR® homes and products go to: [www.northwestenergystar.com](http://www.northwestenergystar.com)



**1. AIR SEALING AND LIGHTING** 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 have high energy bills, uncomfortable drafts and possible moisture damage caused by interior air with moisture getting into and condensing within walls, ceiling and floors. The code requires at least 75 percent of the permanent light fixtures must have high efficiency bulbs such as CFLs or LEDs.

**2. 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 homes walls. A better wall would have a minimum of R-25 insulation.

**3. STRUCTURAL INSULATED 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.

**4. 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-floor heat. These foundations provide an economical and energy-efficient foundation.

**5. 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.

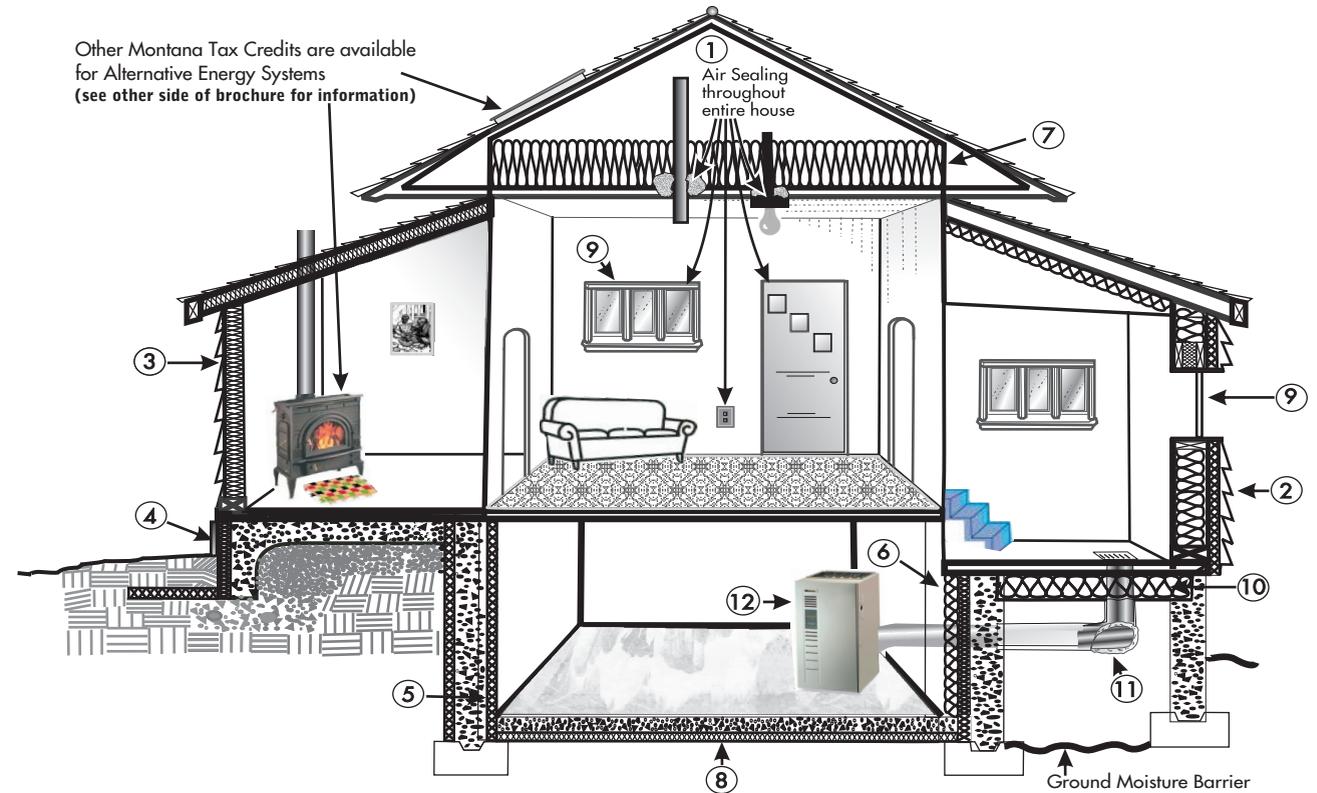
**6. BASEMENT INSULATION** The energy code path requires basements to be insulated; finishing is not required. R-19 insulation is required for cavity insulation or insulation placed within a framed wall, or R-15 continuous insulation without any framing. A REScheck™ analysis may allow lower levels of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

**7. 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.

**8. 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.

**9. 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.

**10. FLOOR AND CRAWLSPACE** The energy code path requires R-30 in floors over unheated spaces, such as a tuck-under garage or unheated crawl space. 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.



Other Montana Tax Credits are available for Alternative Energy Systems (see other side of brochure for information)

**11. 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.

**12. 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.