

# BOULDER COUNTY ENERGYSMART RESIDENTIAL LOAN ELIGIBLE MEASURES

## Contractors!

Please check <https://www.elevationscu.com/energyloans/home-loans> to ensure you are using the most up to date version of the Energy Loans eligible measures and contractor requirements list. New Construction, Remodels and additions must also comply with this list to be eligible for an Elevations Energy Loan.

Category	Measure	Minimum Efficiency / Certification Requirements	Contractor Certification Requirements
<b>Energy Analysis &amp; Monitoring</b>	<b>EnergySmart Home Energy Assessment</b>	<i>Note; this is the only measure that can be incurred prior to a loan application, if included with additional measures.</i>	Must be scheduled by EnergySmart program staff
	<b>Non-EnergySmart Energy Audit-Assessment</b>	<i>Must include at least a blower door and IR test result.</i>	Performed by a Building Performance Institute (BPI) certified energy auditor
	<b>In-home energy monitor</b>	<i>Ex. The Energy Detective, Tendril or other fixed in-home device.</i>	Installed to manufacturer's specs. This may incl a licensed and insured electrician and/or company trained technician.
	<b>Home Energy Rating Index (HERS model)</b>	<i>Home energy rating and modeling</i>	Performed by a RESNET-certified Home Energy Rater
<b>Insulation and Air Sealing</b>	<b>Professionally Applied Air Sealing (No DIY)</b>	<i>Air infiltration levels must be measured by a blower door before &amp; after improvements. Mechanical ventilation must be recommended if air changes / hour are below 0.35 NACH. Performed to at least to local code requirements.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Duct Insulation</b>	<i>R-8 minimum, in unconditioned space only</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Duct Repair/Sealing</b>	<i>Must use duct mastic or aluminized tape. Performed to at least local code requirements.</i>	Contractor must be licensed and insured.
	<b>Ceiling/Attic Insulation</b>	<i>R-49 minimum required in open attic; cathedral ceilings will vary with rafter depth. Must perform air sealing in attics prior to adding insulation.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Wall Insulation</b>	<i>For framed walls R19 minimum: fill wall cavity where R19 is not possible. For solid walls such as brick or concrete, exterior rigid insulation must be added to a level of at <math>\geq</math> R-10.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Foundation (Crawl Space or Basement) Insulation &amp; Air Sealing</b>	<i>Crawlspace as outlined in the 2012 IECC. R-15 continuous or R-19 Cavity insulation with a vapor-permeable air barrier over insulation. Crawlspaces must have sealed vapor barrier over dirt crawl space floor and ventilation, per 2012 IRC.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner

	<b>Sub-Floor or Frame Floor Insulation</b>	<i>R-30 minimum, over unconditioned space only (i.e., cantilevers, floors over unconditioned crawl, over garage, etc.). Fill enclosed floor cavities when R-30 is not possible. As per 2012 IECC.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Perimeter Insulation, Slab-on-Grade foundations</b>	<i>R-10 minimum. Must extend to entire perimeter of any exposed slab(s). As per 2012 IECC.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
<b>Water Heating</b>	<b>ENERGY STAR Electric Heat Pump</b>	<i>Must be Energy Star qualified</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>ENERGY STAR Gas Water Heater</b>	<i>Tank min. rating = .67 EF, On-Demand Tankless= .90 EF</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
<b>Space Heating and Cooling Space Heating and Cooling</b>	<b>Gas Boiler Replacement</b>	<i>AFUE ≥ 90%, must be sealed combustion.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Gas Furnace Replacement</b>	<i>AFUE ≥ 95%, must be sealed combustion.</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Pellet Stove/ High Efficiency Wood Stove</b>	<i>Must be EPA certified; at least 72% efficient (wood) or 78% efficient (pellet). Only upgrades to a more efficient model; no new installations unless home uses electric heat.</i>	Contractor must be licensed and insured. Necessary building permits are required.
	<b>High Efficiency Fireplace &amp; Fireplace Inserts</b>	<i>Minimum efficiency 75%. Only retrofits of existing fireplaces; no newly installed or constructed fireplaces. EPA Certified.</i>	Contractor must be licensed and insured. Necessary building permits are required.
	<b>Air or Ground Source Heat Pump (inc Mini-Split A/C &amp; heating units)</b>	<i>Air Source: Split systems &amp; single systems ≥ 9.0 HSPF/ 16 SEER/12.5 EER. ENERGY STAR qualified</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
		<i>Ground Source: ENERGY STAR-qualified. Closed loop systems only. Must be 5.5 tons or smaller.</i>	
	<b>Whole House Fan</b>	<i>Fan must have an automated, insulated air sealing mechanism that engages when the fan is off (i.e., doors or damper mechanism, etc). Must have controls (thermostat or timer, multi-speed).</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Solar Thermal Space Heating</b>	<i>For use with hydronic (boiler) systems, 20 kW max. size, SRCC rated</i>	Must be NABCEP certified. Contractor must be licensed and insured
<b>Whole House Evaporative Cooler</b>	<i>Must cool the entire house, not just a single room. Must be permanently installed (no portable units)</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner	

	<b>Electric Commutated Motor on a furnace replacement</b>	Documentation via the Original Equipment Manufacturer spec sheet is required	Must be completed by a contractor participating in EnergySmart's Contractor Partnership Program
	<b>ENERGY STAR Central Air Conditioner</b>	<i>For new and replacements:</i> 15 SEER minimum. Requires recycling of existing unit with supporting documentation. <i>Window (single room) units do not qualify</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
	<b>Radiant heating and cooling (floor, wall, and ceiling)</b>	Hydronic radiant systems must be completely powered (or matched in energy use/output) by a heat pump, efficient gas boiler, or solar system. <i>Electric radiant heating systems are not eligible</i>	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
<b>Solar Hot Water</b>	<b>Solar Thermal Water Heating</b>	SRCC rated.	Must be NABCEP certified
	<b>Solar Thermal Re-Commissioning</b>	SRCC rated.	Must be NABCEP certified
<b>Windows, Doors and Skylights</b>	<b>Exterior windows and glass doors</b>	For existing building shell only (no additions or new construction). Windows or doors only. U Value: ≤.30, Low-E glass	Contractor must be licensed and insured. Necessary permits must be pulled.
	<b>Insulated Exterior Doors</b>	R-6.5 minimum fiberglass doors only with weather-stripping and threshold. Any glass must be double-paned, Low-E, and tempered.	Contractor must be licensed and insured. Necessary building permits are required.
	<b>Window Restoration</b>	Window restoration projects will be considered on a case-by-case basis, with historic preservation or code requirements when applicable.	Contractor must be licensed and insured. Necessary building permits are required.
	<b>Storm Windows</b>	Meets IECC in combination with the exterior window over which it is installed, for the applicable climate zone. On existing building shell only (no additions or new construction)	Contractor must be licensed and insured. Necessary building permits are required.
	<b>Insulating Window Covers &amp; Awnings</b>	Must consult with an energy advisor and refer to: <a href="http://www.efficientwindowcoverings.org/">http://www.efficientwindowcoverings.org/</a> for a listing of eligible brands and models	DIY Allowed
	<b>Solar Light Tube</b>	ENERGY STAR qualified, U-factor: ≤ .55	Contractor must be licensed and insured.
<b>Roofing</b>	<b>Metal and Asphalt Shingle Roofing Only</b>	Class A fire resistant, Reflective Shingles/ENERGY STAR Listed. Please see document "Roof reflectance requirements for EM's list" for further guidance. Roofing requests must be reviewed with program manager prior to approval.	Contractor must be licensed and insured.
<b>Solar PV</b>	<b>Rooftop System</b>	Concurrent energy efficiency measures should be encouraged wherever possible. <b>Costs associated with solar leases, PPA's and other financing options are eligible.</b>	Must be NABCEP certified

	<b>Ground Mounted</b>	Concurrent energy efficiency measures should be encouraged wherever possible. <b>Solar Gardens subscriptions are eligible.</b>	Must be NABCEP certified
<b>Biomass</b>	<b>Biomass Heating System</b>	3MMBtu/hour or smaller.	Must be in ENERGYSMART Referred Contractor Pool OR an Xcel Energy Trade Partner
<b>ENERGY STAR Appliances</b>	<b>ENERGY STAR Clothes Washer</b>	ENERGY STAR models only, but recommend CEE Tier 3 (Modified Energy Factor $\geq 2.40$ & Water Factor $\geq 4.0$ ) See Energy Advisor for list.	DIY allowed
	<b>ENERGY STAR Clothes Dryer</b>	ENERGY STAR certified models only. Can be electric or natural gas	DIY allowed
	<b>ENERGY STAR Refrigerator</b>	Requires recycling of existing unit with supporting documentation. Eligible units must be between 10-30 cubic feet. ENERGY STAR models only.	DIY allowed
	<b>ENERGY STAR Freezer</b>	Requires recycling of existing unit with supporting documentation. Eligible units must be between 10-30 cubic feet. ENERGY STAR models only.	DIY allowed
	<b>ENERGY STAR Dishwasher</b>	ENERGY STAR models only, but recommend CEE Tier 1 ( $\leq 270$ kWh/yr & $\leq 3.5$ gal/cycle).	DIY allowed
<b>Emerging and Other Clean Energy Technologies</b>	<b>May Be Energy Efficiency or Renewable Energy</b>	All measures not otherwise listed on this list will be reviewed as a proposal by Boulder County and EnergySmart program administrators	TBD
<b>Natural Disaster Remediation</b>	<b>Flood, Fire, and other disasters as defined by Boulder County</b>	Remediation and rebuild must be done in conjunction with at least one other measure from this list, not including "sustainably certified building materials". Remediation/rebuild cost cannot exceed 150% of the value of the installed cost of other eligible measures. For Flood victims, eligible participants must be registered as a Disaster Survivor with the Federal Emergency Management Agency (FEMA). For Wildfire Mitigation Measures, please refer to separate "Boulder County Land Use Wildfire Mitigation Eligible Measures List".	Scope of work to be reviewed by program advisors prior to approval