

Building your new home

with Efficiency Vermont


Specifications & Incentives



What are the different requirements and where does your project fit in?


Your [Energy Consultant](#) will work with you to determine the best fit.

Earn up to \$2,000 in incentives!

| Certification Requirements | Efficiency Vermont Certified: Base Level* | Efficiency Vermont Certified: High Performance Level | Your Project |
|---|--|---|--|
| Energy Code Compliance | Meet Vermont energy code and file RBES certificates | | |
| Foundation Wall Insulation — Minimum R-Value | R-15 continuous or R-20 cavity | R-30 | |
| Slab Edge Insulation (when within 12" finished grade) | R-15 Must extend a total of 4 ft. vertical or horizontal | R-30: slab on grade R-20: slab below grade Footing: ≥ R-8 | |
| Insulation Under Slab | R-15 under heated slab only | R-20: unheated below grade R-30: unheated on grade R-30: all heated slabs | |
| Floor Insulation (exposed) | R-38 or R-30 + R-5 continuous | R-40 | |
| Wall Insulation (above grade & band joist) — Minimum R-Value | R-20 cavity or R-13 cavity + R-10 continuous | R-40 | |
| Ceiling Insulation (flat & sloped) — Minimum R-Value | R-49 sloped R-60 flat | R-60 | |
| Insulation Installation — Installation quality (using RESNET Grading System) will be verified by Efficiency Vermont at pre-drywall inspection | Grade II | Grade I | |
| Thermal Enclosure Inspection | Must pass visual inspection by Efficiency Vermont, prior to drywall installation | |  site visit required |

 Call **Efficiency Vermont** to schedule a site visit.

*Efficiency Vermont Certified insulation and window values can be met through any of the Residential Building Energy Standards (RBES) "Stretch Code" Fast Track packages. Refer to RBES Handbook for details at publicservice.vermont.gov/topics/energy_efficiency/rbes.

| Certification Requirements | Efficiency Vermont Certified: Base Level | Efficiency Vermont Certified: High Performance Level | Your Project |
|--|---|--|---|
| Air Leakage — Maximum ACH50 | Test to ≤ 3 ACH50 | Test to ≤ 1 ACH50 | |
| Windows — Maximum Average U-Factor | U-0.28 | U-0.21 | |
| Doors — Maximum Average U-Factor | U-0.28 | U-0.25 | |
| Heating & Cooling Equipment — Minimum Efficiency | ENERGY STAR® certified or equivalent | ENERGY STAR certified or equivalent* *Boilers must achieve minimum 94% AFUE | |
| Heating & Cooling Distribution & Control | At least one programmable thermostat required.* Meets RBES; if ducted system is used, ducts must be inside conditioned space. | Custom approach depending on system chosen. Discuss with HVAC contractor and Energy Consultant. | |
| Ventilation | Whole house: automated mechanical ventilation per code Local (per code): baths with 50 cfm intermittent or 20 cfm continuous | Meets ASHRAE 62.2 or Passive House with: Whole house ventilation (bath and kitchen), balanced with heat recovery efficiency 80% or better | |
| Water Heating Equipment | Meets Federal minimum standard | ENERGY STAR or equivalent <i>Recommended: drain water heat recovery</i> | |
| Lighting (% of bulbs in permanently installed fixtures) | 80% ENERGY STAR certified fixtures and/or bulbs | 95% ENERGY STAR certified fixtures and/or bulbs | |
| Appliances (refrigerator, dishwasher, clothes washer) | ENERGY STAR certified | ENERGY STAR certified | |
| Final Inspection | Must pass visual inspection and performance testing to receive Efficiency Vermont certification | |  |



With a few upgrades in lighting, HVAC, durability, air leakage, insulation quality, and ventilation, you can achieve **nationally-recognized ENERGY STAR Homes Certification**.
Ask your Energy Consultant for more details.

*Programmable thermostats required for furnaces, boilers, or heat pumps—except in zones with radiant heat or inverter-driven, variable-speed ductless heat pumps.

Earn up to \$2,000 in incentives

| EFFICIENCY VERMONT INCENTIVES | | | |
|--|---------------|---|-----------------|
| Efficiency Vermont Certification: Base Level | \$500* | Efficiency Vermont Certification: High Performance Level | \$2,000* |
| Continuous above grade wall insulation bonus (minimum R-11.25 exterior for 2 x 6 wall, R-10 for 2 x 4 wall, or double stud wall) | \$600 | Or \$1,000 plus installation of an online whole-house energy monitoring system and two-year subscription. | |
| TECHNICAL ASSISTANCE | | | |
| Home Energy Rating | | | |
| Help complying with RBES (VT energy code) | | | |
| Energy consultation throughout project | | | |
| ADDITIONAL INCENTIVES | | | |
| In Vermont Gas Systems territory: | | In Washington Electric Cooperative territory: | |
| Drain water heat-recovery system bonus: | \$200 | Heat and energy recovery ventilation systems bonus: | \$500 |

*\$500 comes from Vermont Gas Systems (VGS) or Washington Electric Cooperative (WEC) in their service territories. All incentives are paid by Burlington Electric Department for projects within the city of Burlington.

NOTE: If you are already receiving incentives through another Efficiency Vermont or VGS program for this project, you are not eligible for additional incentives.

Glossary of terms

ACH50

Air changes per hour at 50 pascals pressure difference between indoors and outdoors—a measure of a home's air tightness

cfm

Cubic feet per minute—measures air flow

HERS

Home Energy Rating System

HERS Index

nationally-recognized performance score, measuring overall energy efficiency (the lower the score, the more efficient the home)

Grade I insulation

Air-permeable wall insulation enclosed on six sides; in full contact with enclosure; no gaps; less than 2% compression

Grade II insulation

Air-permeable wall insulation enclosed on six sides; in full contact with enclosure; less than 2% gaps and less than 10% compression (Grade II is less effective than Grade I)

R-value

Measures insulation levels (the higher the better)

RBES

Residential Building Energy Standards (a.k.a. Vermont energy code)

RESNET

Residential Energy Services Network—a national Home Energy Rating certification organization

U-factor

Measures how well a material conducts heat (the lower the better)

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