

HOME ENERGY EFFICIENCY CHECKLIST:

FOR ALASKA HOMES

KNOW
YOUR
ENERGY
RIGHTS

If you are interested in purchasing a quality home—or want to learn more about how to make your home more energy-efficient—this guide provides a quick way to assess home energy performance.

This checklist helps you spot check for compliance with the 2009 International Energy Conservation Code (IECC), which may be adopted in your community or as amended by AHFC's Building Energy Efficiency Standard (BEES). While it does not include every requirement, this checklist will help you assess a home and make an informed decision about the quality of construction and efficiency of a home.

ENERGY CERTIFICATE

- Energy Certificate located on circuit breaker box is completed and signed

See reverse side for an example and more details.

AIR SEALING

- All holes between floors and through walls have been sealed with caulk or foam, examples include:
 - where phone and cable wires enter the house
 - where plumbing goes through walls, floors, and ceiling

THERMOSTAT

- The home must have a programmable thermostat, except for spaces with radiant floor heat

DUCTS

IN ATTIC:

- Attic ceiling and walls are insulated, or
- Ducts are sealed and insulated to a value of R-8

WHOLE HOUSE:

- All ducts are sealed with mastic (similar to caulk)

LIGHTING

- At least half of the home's light fixtures have high-efficiency bulbs, such as, compact fluorescents (CFLs) and light-emitting diodes (LEDs)

FIREPLACE OR WOOD STOVE

- The fireplace or wood stove doors are sealed with gaskets

INSULATION

- Crawl space walls or the crawl space ceiling is insulated
- Attic door or access hatch is air-sealed and insulated

WINDOWS

- Windows and skylights meet the standards for U-factors and SHGCs
- Visit AHFC energy section for standards in your climate zone at: www.ahfc.us/energy

EXISTING HOMES:

- Evaluate windows for age, quality, and air tightness

TESTS

- A blower door test resulted in a score of seven air changes per hour (ACH) or less, if applicable
- The builder tested ducts for air leakage

PERFORMANCE COMPLIANCE PATH

- If the compliance method on the energy certificate is listed as "performance", ask your contractor for the documentation used to certify that the home met an energy efficiency standard.

For the latest information on codes in Alaska, check out energycodesocean.org.

SAMPLE ENERGY CERTIFICATE FOR ALASKA HOMES

This energy certificate is a sample as required by the 2009 International Energy Conservation Code (IECC). The AHFC BEES/IECC 2009 Specification Table below has the minimum standards for Alaska by Climate Zone.* Look for this certificate on or near the home's electrical breaker box. If you have any questions or concerns about details on the certificate, talk to your builder or your local building permits office.

*Determine your climate zone at: www.ahfc.us/iceimages/reference/bees_amendments.pdf

R-VALUES

R-value refers to the thickness and effectiveness of insulation. In order to meet code, R-values on the form should be greater than or equal to those shown in the certificate on your electric panel.

HEATING AND COOLING (HVAC)

The way heating and cooling systems are rated and the minimum levels for efficiency depend on the type installed, and fuel used. These abbreviations: SEER, AFUE, and HSPF indicate efficiency. The higher the rating, the more efficient the heating or cooling system

TYPE	MIN.RATING	is. Use the chart at the left to determine the minimum rating allowed for each system.
air conditioner	SEER-13	
electric furnace	AFUE: 78%	
oil boiler	AFUE: 80%	
gas boiler	AFUE: 75%	
heat pump	HSPF: 7.7	

ALASKA IECC-2009 SPECIFICATION

AHFC BEES/IECC 2009 Specifications	Zone 6 Southeast	Zone 7 Southcentral	Zone 8 Interior	Zone 9 N Slope
ceiling/roof (R-value) ^a	49 or 38	49 or 38	49 or 38	65 or 52
walls (R-value)	21	21	30	35
floors (R-value)	30	38	38	43
ducts (R-value)	8	8	8	8
basement walls (R-value) ^b	15/19	15/19	15/19	NR
windows, doors & skylights (U-value)	0.33	0.33	0.22	0.20

a. Use smaller value if an energy-heel truss is used

b. Smaller value is for continuous sheathing, larger value is for cavity fill

U-FACTORS

These are the requirements for the insulation value of a home's windows, doors, and skylights. U-values on the home's energy certificate should be less than or equal to those shown in the AHFC BEES/IECC 2009 Specifications Table.

2009 BEES/IECC Energy Certificate

Compliance Method	Date
PERSCRIPTIVE	5/1/2011
Insulation	
Ceiling/Roof	r-value
Walls	38
Floors	13+5
Ducts	19
Basement Walls	8
Window and Door Ratings	10/13
Window and Door Ratings	
Windows	u-factor
Doors	0.35
HVAC Equipment	
Type	Rating
GAS BOILER	75% AFUE
Water Heating	
Type	EF value
50 GAL, GAS	0.60
General Contractor: K+M CONTRACTORS	
Insulation Contractor: RKM INSULATION	
Form Completed By: <i>[Signature]</i>	

INSULATION NOTE

"10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home (sealed at joints) or R-13 cavity insulation at the interior of the basement wall.