

HOME ENERGY CODE CHECKLIST:



If you are interested in buying a home or want to learn about the energy code and how to make your home more energy efficient, this checklist provides a quick way to assess energy performance and identify opportunities to improve energy efficiency.

This checklist helps you spot check for national minimum requirements set forth in the 2009 International Energy Conservation code. While this checklist doesn't include every requirement, it will help you assess a new home and make an informed decision about the quality of construction and the likelihood that the home will use energy efficiently.

ENERGY CERTIFICATE

- Energy Certificate located on circuit breaker box is completed and signed
See reverse side for example and more details.

AIR SEALING

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

THERMOSTAT

- If a forced air heating system is being installed, the home has a programmable thermostat

DUCTS

IN 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

LIGHTING

- At least half of the home's light fixtures have high efficiency lights

FIREPLACE

- The fireplace doors are sealed with gaskets

INSULATION

- Crawl space walls and/or the crawl space ceiling are properly insulated
- Access hatch or door is weather-stripped and insulated

WINDOWS

- Windows and skylights meet the minimum requirements for U-factors and SHGCs
Visit: www.efficientwindows.org/code_overview.cfm for minimums in your climate zone
- 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

ALTERNATIVE COMPLIANCE PATH

- If these requirements are not met, ask your contractor for documentation showing the home meets minimum standards for energy consumption.



Building Codes Assistance Project

www.bcap-ocean.org



Consumer Reports

www.GreenerChoices.org

www.ConsumerReports.org

SAMPLE ENERGY CERTIFICATE FOR U.S. HOMES

This energy certificate from the 2009 International Energy Conservation Code (IECC) illustrates the energy efficiency standards which are required in many new homes in the United States. This sample form has been completed with the **minimum** standards for each building element in the home, meaning that the certificate in your home should meet or exceed these standards. **These values will vary based on your climate zone.*** Look for this certificate in or near the home's circuit breaker box or electric panel box. Make sure that it has been signed by the builder and identifies the other contractors.

If you have any questions about what is reported on the certificate, ask your builder or your local building permits office.

*Determine your climate zone at: www.energycode.pnl.gov/EnergyCodeReqs/

R-VALUES

These are the minimum requirements allowed for the home's insulation in order to meet the code. R-values on the form should be **greater than or equal to** those shown here.

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 is. Use the chart below

TYPE	MIN. RATING
air conditioner	SEER-13
electric furnace	AFUE: 78%
electric boiler	AFUE: 80%
gas boiler	AFUE: 75%
heat pump	HSPF: 7.7

to determine the minimum rating allowed for each system.

WATER HEATER

Minimum EFs for Water Heaters

SIZE	GAS	ELECTRIC
30 gal	0.63	0.95
40 gal	0.62	0.95
50 gal	0.60	0.95
65 gal	0.75	1.98
75 gal	0.74	1.97

The minimum efficiency factor (EF) for water heaters depends on the size and fuel type used. The higher number, the more efficient the water heater is.

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 certificate below.

2009 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	
Windows	u-factor
Doors	0.35
HVAC Equipment	
Type	Rating
GAS BOILER	75% AFUE
Water Heating	
Type	EF value
Water Heater	50 GAL, GAS
0.60	
General Contractor: K+M CONTRACTORS	
Insulation Contractor: RKM INSULATION	
Form Completed By: [Signature]	

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.