

Energy Efficiency in Michigan Homes

Michigan has adopted the 2015 International Energy Conservation Code (2015 IECC) as the baseline energy code for residential buildings in the state. You can use the checklist below to verify key residential code requirements that are easy to identify in your home.

While this checklist doesn't include every requirement, it serves as a helpful guide for homeowners to better understand the energy efficiency features in your home. Please refer to the state energy code for complete documentation of all requirements and consult your local code official for questions and clarification. Michigan buildings are constructed in climate zones 5a, 6a and 7.

Mandatory Requirements:

Energy Certificate

- An energy certificate located on a circuit breaker box is completed and signed

See Reverse Side for Example

Heating & Cooling

- Home has a programmable thermostat installed
- All** ducts are sealed with approved materials (e.g. mastic or UL 181 tape)
Regular duct tape is not acceptable
- Ducts in an uninsulated attic or basement are tested to ensure entire ductwork system is properly sealed

Mechanical Ventilation

- Home has a mechanical ventilation system to provide fresh and controlled air. Systems can be exhaust only, supply only, or balanced.

Windows & Doors

- Windows, skylights and sliding glass doors meet minimum infiltration and efficiency requirements. (You can find the u-factor and infiltration rates on new window and door stickers or the energy certificate)

Lighting

- At least **75%** of the home's lighting fixtures are energy efficient fixtures

Air Sealing

- All holes between ceilings, floors and through walls are sealed using caulk or foam

Key areas include:

- Points where phone & cable wires enter home
- Points where plumbing goes through walls, floors and ceilings
- Points where dryer vents, bathroom exhaust, furnace air intake and exhaust, and kitchen exhaust goes through walls/roofs

- Blower door test performed to ensure home is well-sealed and meets the specified air leakage rate. You can request a copy of the results from the contractor

Other Requirements

- Wood-burning fireplaces have tight flue dampers or doors, outdoor combustion air, and should be vented to the outside
- Hot water piping insulated to a minimum of R-3 for >105° F or <55° F

Energy Code Compliance Paths:

Compliance with the energy code requirements can be achieved in four different ways. Ask your builder for documentation showing the home meets minimum requirements for energy consumption according to the path they've chosen.

This energy certificate illustrates the energy efficiency standards which have been adopted and are required in every new home in each Michigan jurisdiction. This sample form has been completed with the minimum prescriptive standards for each building element in the home. Homes may meet other standards for these measures if a builder is using an alternative compliance path. Look for this certificate on or near the home’s circuit breaker box or electric panel box. Make sure that it has been fully completed and signed by the builder and identifies the other contractors.

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

R-values

R-values are used to measure the efficiency of insulation materials. Insulation materials with higher R-values are more efficient and better at resisting heat transfer.

U-factor

A U-factor is a measure of efficiency for windows and doors. U-factors are the inverse of R-values, so lower u-factors mean the material is more energy efficient.

Heating and Cooling (HVAC)

Minimum levels of efficiency for heating and cooling systems depend on the type of equipment and fuel used. Heating and cooling systems with higher ratings are more efficient. Use the chart below to determine the minimum rating allowed for each system.

Type	Min Rating
Air Conditioner	13 SEER
Gas Furnace	80 AFUE
Gas Boiler	82 AFUE
Heat Pump	14 SEER
	8.2 HSPF

2015 Michigan Energy Code Certificate		
Compliance Method	Date	Climate Zone
Prescriptive	5/1/2019	5
Insulation		R-Value
Ceiling/Roof		38
Exterior Walls		20 or 13+5
Exterior Floors		30
Ducts		8
Basement Walls		10/13 *
Window and Door Rating		U-factor
Windows		0.32
Doors		0.32
HVAC Equipment	Type	Rating
Furnace	Gas	80 AFUE
Water Heating		EF Value
Water Heater		50 Gal, Gas 0.60
General Contractor:		ABC Contractors
Insulation Contractor:		123 Insulation
Form Completed By:		<i>John Smith</i>

*"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.

Water Heater

The minimum efficiency factor (EF) for water heaters depends on the size and fuel type used. Water heaters with higher EF ratings are more efficient.

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



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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