

**MODIFICATIONS ASSOCIATED WITH THE INTERNATIONAL ENERGY CONSERVATION CODE
(IECC)**

24.301.161 INCORPORATION BY REFERENCE OF INTERNATIONAL ENERGY CONSERVATION CODE

(1) The Department of Labor and Industry adopts and incorporates by reference the International Code Council's International Energy Conservation Code, 2009 Edition, referred to as the International Energy Conservation Code, unless another edition is specifically stated, together with the following amendments:

(a) Subsection 103.1, General, is deleted and replaced with the following: "With each application for a building permit, and when required by the building official, plans and specifications shall be submitted. The building official may require plans and specifications be prepared by an engineer or architect licensed to practice by the state, except for owner-occupied, single-family dwelling houses.

(i) Exception:

"The code official is authorized to waive the requirements for construction documents or other supporting data if the code official determines they are not necessary to confirm compliance with this code."

(b) Subsection 104.2, Required Approvals, is deleted in its entirety when the code is used by the Building Codes Bureau of the Department of Labor and Industry. It remains undeleted and available for use for certified local governments using the code.

(c) Section 202, General Definitions, the definition for "Air Barrier" is deleted and replaced with a new definition for "Air Barrier" as follows: "Air Barrier: Material(s) assembled and joined together to provide a barrier to air leakage through and into the building envelope. An air barrier may be a single material or a combination of materials."

(d) Table 402.1.1, INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT, is amending footnote c for climate zone "6" and is adding footnote k as follows:

Footnotes: "c." "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/19" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall.

"k." Fenestration *U*-Factor is 0.33 after January 1, 2010."

Climate	Fenestration	Skylight(b)	Glazed	Ceiling	Wood
Zone	<i>U</i> -Factor(b)	<i>U</i> -Factor	Penetration	<i>R</i> -Value	Framed Wall

			SHGC(b,d)		R-Value
6	0.35(k) 0.33(l)	0.60	NR	49	21 or 13+5(h)

Mass	Floor	Basement(c)	Slab(b)	Crawl
Wall	R-Value	Wall	R-Value	Space Wall(c)
R-Value(i)		R-Value	& Depth	R-Value
15/19	30(g)	15/19	10, 4 ft	10/19

(e) Subsection 402.2.2, Ceilings Without Attic Spaces, is deleted and replaced with the following: "Where Section 402.1.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section 402.1.1, shall be limited to 250 square feet or ten percent of the total insulated ceiling area, whichever is less. This reduction shall not apply to the *U*-factor alternative approach in Section 402.1.3, and the total UA alternative in Section 402.1.4."

(f) Subsection 402.2.9, Crawl Space Walls, is deleted and replaced with the following: "As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Temporary crawl space vent openings are allowed during construction for crawl spaces that have insulated crawl space walls. These temporary crawl space vent openings shall be closed, sealed, and insulated to the same R-value of the surrounding crawl space wall insulation once construction is complete and prior to the time that the final building inspection would occur. Crawl space wall insulation shall be permanently fastened to the wall and shall extend downward from the floor, the entire height of the crawl space wall. Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder. All joints of the vapor retarder shall overlap six inches and be sealed or taped. The edges of the vapor retarder shall extend at least six inches up the stem wall and shall be attached and sealed to the stem wall."

(g) Subsection 402.4.2.1, Testing Option, is deleted and replaced with the following: "Building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than four air changes per hour (ACH), when tested with a blower door at a pressure of 33.5 psf (50Pa). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances. During testing:

"(i) exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;

"(ii) dampers shall be closed, but not sealed, including exhaust, intake, makeup air, back draft and flue dampers;

"(iii) interior doors shall be open;

"(iv) exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

"(v) heating and cooling system(s) shall be turned off;

"(vi) "B" or "L" vents, combustion air vents, and dryer vents shall be sealed;

"(vii) HVAC ducts shall not be sealed; and

"(viii) supply and return registers shall not be sealed."

(h) Table 502.2(1), BUILDING ENVELOPE REQUIREMENTS OPAQUE ASSEMBLIES, is deleted for climate zone "6" and replaced, with all footnotes remaining the same as in the original text of the code, as follows:

Climate Zone	6	6
	All Other	Group R
Roofs		
Insulation Entirely Above Deck	R-20ci	R-20ci
Metal Buildings (with R-5 Thermal Blocks) a, b	R13+R19	R-19
Attic and Other	R-49	R-49
Walls, Above Grade		
Mass	R-13.3ci	R-15.2ci
Metal Buildings (b)	R-13+R-5.6ci	R-13+R-5.6ci

Metal Framed	R-13+R-7.5ci	R-13+R-7.5ci
Wood Framed and Other	R-13+R-7.5ci or R-21	R-13+R-7.5ci or R-21
Walls, Below Grade		
Below Grade Wall (d)	R-7.5ci	R-7.5ci
Floors		
Mass	R-12.5ci	R-14.6ci
Joist/Framing Steel/Wood	R-30	R-30(e)
Slab-on-Grade Floors		
Unheated Slabs	R-10 for 24 in. below	R-15 for 24 in. below
Heated Slabs	R-15 for 24 in. below	R-20 for 48 in. below
Opaque Doors		
Swinging	U-0.70	U-0.50
Roll-up or sliding	U-0.50	U-0.50

(2) The purpose of the International Energy Conservation Code is to provide minimum requirements for the design of new buildings and structures and additions to existing buildings, regulating their exterior envelopes and selection of their heating, ventilating, air conditioning, service water heating, electrical distribution and illuminating systems, and equipment for effective use of energy.

(a) The department encourages owners, design professionals, and builders to voluntarily implement greater levels of energy efficiency in building design and construction than those required by the International Energy Conservation Code. Information regarding voluntary building standards for greater levels of energy efficiency can be obtained from the department

by contacting the department at the address listed in (3), by telephone at 406-841-2053, or at the department's web site, <http://mt.gov/dli/bsd/bc/bs>.

(3) The International Energy Conservation Code is a nationally recognized model code for energy efficient construction of buildings. A copy of the International Energy Conservation Code may be obtained from the Department of Labor and Industry, Building Codes Bureau, P.O. Box 200517, Helena, MT 59620-0517, at cost plus postage and handling. A copy may also be obtained by writing to the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, or visiting the International Code Council web site at www.ICCsafe.org.

(History: 50-60-203, 50-60-803, MCA; IMP, 50-60-201, 50-60-203, 50-60-803, MCA; NEW, 2004 MAR p. 2103, Eff. 9/3/04; AMD, 2006 MAR p. 567, Eff. 2/24/06; AMD, 2010 MAR p. 750, Eff. 3/26/10.)

24.301.162 ENERGY LABELING STICKERS (1) Where the energy labeling sticker is required by 50-60-803, MCA, the labeling sticker shall describe the energy efficiency components of the home. The builder or representative shall sign, date, and complete the label and permanently attach it to the interior electrical panel. The energy efficiency component labeling sticker must be a permanent self-adhesive label four by six inches in size that includes the following information:

(a) building address, name of builder or representative, date, and signature; (b) nominal R-values for flat and vaulted ceilings, above grade walls, basement and crawlspace foundation insulation, floors over unheated space, slab insulation, and exterior doors;

(c) overall window unit U-factor. Window U-factor information is the factor stated on the window label from the National Fenestration Rating Council (NFRC);

(d) the energy efficiency rating of the heating system. This is the annual fuel utilization efficiency (AFUE) for gas heating systems and the heating season performance factor (HSPF) for heat pumps;

(e) energy efficiency information for water heaters. This is the energy factor (EF) rating, from the manufacturer and stated on the water heater; and

(f) other information that may be listed as an option to describe energy efficiency features of the home not stated above.

(History: 50-60-203, 50-60-803, MCA; IMP, 50-60-201, 50-60-203, 50-60-803, MCA; NEW, 2004 MAR p. 2103, Eff. 9/3/04.)