

[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, 2003 ~~2003~~ 2009 Edition, referred to as the International Energy Conservation Code, unless another edition is specifically stated, together with the following amendments:

(a) Subsection ~~104.1,~~ 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. ~~All designs submitted under the provisions of Chapter 4 shall be prepared by an engineer or architect licensed to practice by the state.~~

"Exceptions:

~~1. The code official is authorized to waive the submission of construction documents and other supporting data not required to be prepared by an engineer or architect licensed to practice by the state if it is found the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with this code.~~

“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.”

~~“2. For residential buildings having a conditioned floor area of 5000 square feet (465m²) or less, designs submitted under the provisions of Chapter 4 shall be prepared by anyone having qualifications acceptable to the code official.”~~

(b) Subsection ~~105.2~~ **104.2, Approvals Required** **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) Subsection 502.2.3.6, Basement Walls, is amended by adding the following: “Basement wall insulation below uninsulated floors, except for rim joists and perimeter cripple walls, may be delayed until such time as the basement is actually finished for occupancy.”~~

(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) Subsection ~~502.2.4.1~~ 402.1.1, Walls, is amended by adding the following:

"Lesser R value may be allowed for log building walls."

~~(e) Subsection 503.3.3.1, Piping Insulation, is amended by adding a fourth exception as follows: "4. Pipe insulation is not required in heated or conditioned areas."~~

~~(f) Table 503.3.3.3, Minimum Duct Insulation, is amended by adding footnote e as follows: "e. In locations where annual heating degree days exceeds 7500, minimum R-value for ducts in all areas need not exceed R-8."~~

(e) Table 402.1.1, INSULATION AND FENESTRATION REQUIREMENTS

BY COMPONENT, is modified for climate zone "6" as follows:

| Climate Zone | Fenestration U-Factor(b) | Skylight(b) U-Factor | Glazed Penetration SHGC(b,d) | Ceiling R-Value | Wood Framed Wall R-Value | Mass Wall R-Value(i) | Floor R-Value | Basement(c) Wall R-Value | Slab(b) R-Value & Depth | Crawl Space Wall(c) R |
|--------------|--------------------------|----------------------|------------------------------|-----------------|---|----------------------|---------------|--------------------------|-------------------------|------------------------|
| 6 | 0.35 | 0.60 | NR | 49 | 20 or 13+5(h) 21 or 13+5(h) | 15/19 | 30(g) | 15/19 | 10, 4 ft | 10/13 19 |

(f) 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 10 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."

(g) 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 final building inspection would occur. Crawl space wall insulation shall be permanently fastened to the wall and 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 6 inches and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches up the stem wall and shall be attached and sealed to the stem wall.

(h) 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:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;
2. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers;
3. Interior doors shall be open;
4. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling system(s) shall be turned off;
6. HVAC ducts shall not be sealed; and
7. Supply and return registers shall not be sealed.

(i) Table 502.2.(1), BUILDING ENVELOPE REQUIREMENTS OPAQUE ASSEMBLIES, is modified for climate zone "6" as follows:

| | | |
|--|---------------------------------|---------------------------------|
| Climate Zone | 6 All Other | 6 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-38 R-49 | R-38 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 R-21 | R-13+R-7.5ci 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 |

All footnotes remain the same as in original text of code.

(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.

(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 website 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.