



	<b>Alarm requirements.</b> Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.	<b>315.3</b>
Habitable Rooms.	All habitable rooms shall be provided with aggregate glazing area of not less than 8 percent of the floor area of such rooms to provide natural light. One-half of the required glazing shall be operable to provide natural ventilation.	<b>303.1</b>
	<b>Commentary # 1:</b> Since these new habitable rooms are located in the basement, and you are unable to comply with the requirement for natural lighting, you must provide a means of permanent artificial lighting. The lighting as shown on your plan will not be adequate since code requires that you provide 6 foot-candles of light measured 30 inches above the finished floor. Refer to the manufacturer's specs for the lighting to be installed, to determine what the maximum spacing between fixtures will be to achieve the required 6 foot-candles over the entire habitable space.	
	<b>Commentary # 2:</b> The glazed area to provide ventilation may be omitted when a whole house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cfm per occupant. <b>Install 6" makeup air to HVAC system.</b>	
	<b>Mechanical Ventilation:</b> Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.	<b>IECC 403.5</b>
Underside of Stairs.	When the basement stairs are enclosed and the underside is accessible for storage, then top and bottom of the stair stringers shall be firestopped, and the enclosed underside of the stairs shall be completely drywalled (1/2" min)	<b>302.7</b>
<b>Wall Section</b>	Refer to the attachment which shows options for finished below grade spaces.	
<b>Fireblocking</b>	Shall be provided to cut off all concealed draft openings (vertical & horizontal) and to form an effective fire barrier between stories and between a top story and roof space. The top plate of the walls adjacent to the foundation walls shall extend and fit tight against the sill plate of the foundation wall or 16 inches of approved insulation shall be installed from the top plate down.	<b>602.8</b> <b>302.11</b>
Required Heating	Every dwelling unit shall be provided with heating facilities capable of maintaining a room temperature of 68 degrees F. at a point 3 feet above the floor at the design temperature in all habitable rooms.	<b>303.8</b>
Heating and Cooling <b>Equipment Sizing.</b>	<b>A.)</b> Heating and cooling equipment shall be sized according to ACCA Manual J, Manual J's or other approved alternate methods ( <i>which can be obtained from most HVAC contractors</i> ), are required for finish basements to verify that the existing system is adequate to condition the new habitable spaces. <b>B.)</b> <u>Manual J-calculations are not required if all perimeter walls of finish space, are insulated full height with min. R-11 insulation.</u>	<b>1401.3</b>
Combustion Air	The space in which fuel burning appliances will be housed requires 50 cubic feet of volume for each 1000 Btu/h, based on the appliance's input ratings. This would include both the furnace and the water heater if fuel burning.	<b>1701.1</b>
Appliance Access.	<b>A 30 inch working space shall be provided in front of the control side to service an appliance.</b>	<b>1305.1</b>
Appliance Clearance	<b>Appliances shall have clearances from combustible materials in accordance with appliance label and the manufacturers installation instructions.</b>	<b>1306.1</b>
Receptacle Outlet <b>Distribution.</b>	Electrical outlets shall be distributed per Section 210-52, in the latest edition of the National Electrical Code . (2011)	
<b>Tamper Resistant</b>	In all areas specified in article 210.52, all 125-volt, 15 and 20 ampere receptacles shall be listed tamper-resistant receptacles.	<b>NEC 406.12</b>
<b>Access Panels</b>	Provide access to all shut offs, unions and connections.	
<b>Arc-Fault</b>	All 120 volt single phase, 15 and 20 ampere branch circuit supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed arc-fault circuit interrupter,	<b>NEC 210.12(A)</b>

combination type installed to provide protection of the branch circuit.

**Conditional Room Usage**

THE PROPOSED FINISHED AREAS SHALL NOT BE USED FOR SLEEPING UNLESS AN APPROVED EGRESS WINDOW AND ASSOCIATED WINDOW WELL ARE INSTALLED

**Emergency Egress**

Every sleeping room shall have at least one (1) operable window as required per RCO section 310. Egress clear opening shall be 5.7 sq. ft. on the 1st & 2nd floor bedrooms. Exception: *1st floor may be reduced to 5.0 sq. ft. only if the sill of window in no higher than 44 inches above finished grade.*

**310.1.1**

**310.1**

(Minimum opening height of 24" or width of 20" required). (net clear opening)

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**PLAN REQUIREMENTS FOR  
FOR ONE, TWO AND THREE FAMILY DWELLINGS  
FINISH BASEMENTS**

One, Two, and three family residential construction documents will show floor plans, and appropriate cross sections, fully dimensioned as required by the building official. All distances, heights, dimensions, thickness and sizes of walls, supporting members, structural parts and openings, shall be accurately figured and drawings made accurate and complete and shall show the following information:

- A. A cover sheet with index of drawings
- B. All room designations
- C. All structural members, size, span, and bearing (if applicable)
- D. Light and ventilation schedule
- E. Electrical and HVAC drawings
- F. Engineering for all structure not addressed by 2013 RCO
- G. Model Energy Code (2009 IECC)

Our plan review staff uses a plan review checklist to review your plans. All of the information on the checklist will be required to be addressed on your plans if it is applicable to your building. A copy of the checklist is included with your application packet. If the plans do not contain all the information required, they may be returned for completion. Clean copies of drawings will be required at time of submittal and if alterations are required, corrections or alterations must be made to separate drawings and clean copies submitted.