Bureau of Development Services FROM CONCEPT TO CONSTRUCTION

CODE GUIDE

TOPIC: **Residential Construction - IRC/3/#1**

CODE: **Residential Specialty Code: 2011 Edition**

REVISED: **January 16, 2013 *[Paul L. Scarlett]*, Director**

REFERENCE: **Residential Specialty Code, Chapters 3 and 11**

SUBJECT: **Habitable Space Standards for Existing Elements within One and Two Family Dwellings**

QUESTION: Are there any alternative standards which are acceptable when nonhabitable space is being converted to habitable space, or when the habitable use of a space is changing within an existing one or two family dwelling?

RESPONSE: This code guide establishes the minimum acceptable standards for changing a space to habitable space or for changes in the habitable use of a space. These standards only apply to existing elements in existing one and two family dwellings and does not apply to new construction (additions or new buildings) or to the creation of Accessory Dwelling Units. When designs for alterations comply with the provisions of this code guide, no administrative appeal will be required.

CEILING HEIGHT

Ceiling heights in habitable spaces shall be as provided below. All ceiling heights shall be measured from the top of the finished floor surface to the bottom of the ceiling finish or projection. All projections must be located at least 3 feet away from any door leading into the room.

1. **Flat Ceilings.** Where the ceiling is flat, ceiling heights may be a minimum of 6 feet 8 inches. Beams, ducts, pipes or similar objects projecting from the ceiling may be as follows:

a. Ceiling projections may be as low as 6 feet where they are located within 2 feet from the wall; or
b. Ceiling projections may be as low as 6 feet 2 inches where they do not take up more than 10% of the floor area in the room that they are located.

2. **Sloped Ceilings.**
   a. General. Where the ceiling is sloped, the height may be as follows:

      1) The minimum ceiling height must be at least 6 feet 8 inches over an area comprising at least 50% of the overall room area; and
      2) Portions of the room with a ceiling height less than 5 feet may not be counted toward overall room area.

   b. Bathrooms. In bathrooms with a sloped ceiling, 75% of the floor area may have a ceiling height less than 6 feet 8 inches. The ceiling height at fixtures shall comply with the Oregon Residential Specialty Code.

DOORS
Doors leading to converted spaces shall be at least 6 feet 2 inches high and shall be at least 30 inches wide. In basements, doors meeting this requirement may be used to meet emergency egress requirements.

STAIRS
1. **General.** Existing stairways providing access to new habitable spaces must meet the following conditions:

   a. Stairways must be at least 30 inches wide;
   b. Stairway headroom must be at least 6 feet 2 inches;
   c. Tread run must be 9 inches minimum; and
   d. Riser height must be 9 inches maximum.

   A maximum variation of 3/8 inch will be allowed between the largest and smallest riser height or tread run.

2. **Winder stairs.** Existing "winder" stairs, which are triangular in shape, are allowed.

LIGHT
All habitable rooms must have either natural or artificial lighting.

1. Artificial lighting must meet the provisions of the current Oregon Residential Specialty Code.
2. Windows used to meet this requirement must have a glass area of at least 6.8% of the room's floor area.

VENTILATION

1. **General**. All habitable rooms must have either natural or mechanical ventilation.

   a. Mechanical ventilation must meet the provisions of the current Oregon Residential Specialty Code.
   b. Windows used to provide ventilation must open directly to the outside, with an opening area equal to at least 2.5 percent of the room's floor area.

2. **Fuel burning appliances.** Ventilation for fuel burning appliances shall be provided in accordance with the Oregon Residential Specialty Code and the manufacturer's installation requirements.

EMERGENCY EGRESS

1. **General.** Basements converted to habitable spaces and bedrooms shall comply with emergency egress requirements of the Oregon Residential Specialty Code, except as noted below.

2. **Existing Windows.** Where an existing window is used for emergency egress, the window sill height must be not more than 44 inches above the floor. A single permanently installed step located below the window may be used to reduce the sill height to 44 inches provided that all of the following conditions are met:

   a. Be no higher than 12 inches and not less than 12 inches deep;
   b. Extend the full width of the window; and
   c. Provide a minimum of 6 feet from the top of the step to the ceiling.

3. **Doors.** Where a door meeting the requirements as outlined above is used to meet the emergency egress requirements, the sill height is not limited.

ENERGY CONSERVATION

The following energy conservation provisions must be provided:

1. **Windows.** Existing double glazed windows, or storm windows over existing single glazed windows, will be accepted.

2. **Wall insulation.**
   - **a.** Where wallboard, lath and plaster and other finishes are removed from an existing exterior wall, exposed cavities must be insulated to at least R-15.
   - **b.** Existing concrete exterior walls must be furred out with 2 by 4 inch framing.
     - **1)** If there is existing insulation in the exposed cavities it can be retained provided it has a thermal value of R-11 or better.
     - **2)** Where no existing insulation was found in exposed cavities or new cavities are created by furring out of walls, insulation of not less than R-15 value shall be installed.

3. **Ceilings.**
   - **a. General.** Where finishes are removed from an existing ceiling, and in attics and garages being converted to living space, exposed areas of ceilings must be insulated to current code standards. A minimum of R-15 insulation will be accepted in existing 2 by 4 rafter spaces.

   - **b. Dormer additions.** Minor dormer additions may be constructed and insulated to match existing construction.

   - **c. Roof insulation ventilation.** All roof insulation must be ventilated using insulation baffles that provide at least a one-inch air space between the insulation and the roof deck.

Updates August 22, 2007 edition, Code Guide IBC/3/#3 & IRC/3/#1
Updates February 1, 2006 edition
Updates March 1, 1999 edition
Replaces July 1, 1996 edition, Code Guide UBC/12/#2 & CABO/2/#4