

BUILDING DIVISION – POLICIES AND PROCEDURES

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Emergency Escape and Rescue Openings and Window Wells

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ISSUE: When a basement finish permit is applied for, in what was a previously approved finished or unfinished basement area, questions arise as to when emergency escape and rescue openings will be required.

ANALYSIS: As stated in the “International Residential Code, Code and Commentary, “It is the intent of the code that the windows required for emergency escape or rescue be located on the exterior of the building so that rescue can be effected from the exterior of the building or, alternatively, so that the occupants may escape from that window to the exterior of the building without having to travel through the building itself.” The required dimensions are designed to admit a firefighter with full rescue equipment and are based on extensive testing.

However, on occasions existing windows marginally do not fully comply with the maximum height of 44 inches above the floor to the sill. It should also be noted that until the 1976 UBC the sill height for emergency escape and rescue windows was allowed to be 48 inches.

On other occasions, while an emergency escape and rescue window well may comply with the net clear accessible area of 9 square feet, it may not comply with the minimum required clear horizontal dimension of 3 feet. Many existing windows wells are provided with either 24 inches or 30 inches of clear horizontal dimension. It should be noted that a window well over 44 inches in height requires a ladder which may encroach 6 inches into the minimum horizontal dimension resulting in a net clear horizontal dimension of 30 inches. It should also be stated that, while previously implied by the definitions of “public street, public alley, yard or exit court”, it was not until the 1994 UBC that the code contained specific language relative to window wells associated with emergency escape and rescue windows.

Section R310.1 of the 2009 International Residential Code (IRC) and Section 1029 of the 2009 International Building Code (IBC) states: (*Essentially*)

“Basement in dwelling units and every sleeping room below the forth story shall have at least one operable window or door approved for emergency escape or rescue that shall open directly into a public street, public alley, yard or exit court. The emergency door or window shall be operable from the inside to provide a full, clear opening without the use of separate tools”

Section R102.7 of the 2006 IRC states:

“The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Property Maintenance Code* or the *International Fire Code*, or as deemed necessary by the building official for the general safety and welfare of the occupants and the public.”

Section R102.7.1 of the IRC states:

“Additions, alterations, or repairs to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with all the requirements of this code, unless otherwise stated. Additions alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

POLICY & PROCEDURE: The following policy and procedure is adopted to clarify and establish criteria for granting modifications, as permitted by Section R104.10 of the 2009 International Residential Code, as may relate to escape and rescue window requirements associated with existing windows in basement finishes and remodels.

A. Basement finish or remodel does not contain bedrooms as determined by the building official and defined by the building code.

In that the basement is a legally pre-existing approved condition, no new emergency escape or rescue windows are required. However all natural light and ventilation requirements as would normally be required for such habitable spaces will be required. Should the natural light and ventilation requirements necessitate the installation of new windows or the enlargement of existing windows, then such modification shall include provisions to meet the emergency escape and rescue openings as otherwise required by the code.

B. Basement finish or remodel contains bedrooms as determined by the building official and defined by the building code.

Case #1 – Non-conforming Emergency Escape and Rescue Window Sill height conditions:

- 1) Sill height is more than 44 inches but less than or equal to 48 inches provided the structure under consideration was built prior to the adoption of the 1976 UBC.

Existing condition shall be approved.

- 2) Sill height is more than 48 inches.

Window shall be modified to fully comply with all current Emergency Escape and Rescue Window requirements.

Case #2 – Non-conforming Emergency Escape and Rescue Window Well conditions:

- 1) The window well provides a clear horizontal dimension of greater than or equal to 30 inches, provides an unobstructed 9 square foot area in front of and encompassing the operable portion of the window, has a vertical height of less than or equal to 44 inches, and a ladder is not provided.

Existing condition shall be approved.

(Note: A ladder may be provided where such ladder is not located in the unobstructed 9 square foot wide area in front of the operable portion of the window.)

- 2) The window well provides a clear horizontal dimension of greater than or equal to 30 inches, has a vertical height of more than 44 inches, and the required ladder is not located in the unobstructed 9 square foot area in front of and encompassing the operable portion of the window.

Existing condition shall be approved.

Where the foundation window header is located above the top of the window well such that the dimension from the outer most corner of the foundation header to the top of the window well is 30 or more inches and provides an unobstructed 9 square foot opening area in front of and encompassing the operable portion of the window, it shall be permissible to measure the required clear horizontal dimension to the outer most face of the window glazing rather than the foundation face.

Last Revised: 04/23/2010