

## **DIVISION OF FIRE SAFETY** VER

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## **CODE INFORMATION SHEET**

Based on the 2015 edition of the Vermont Fire and Building Safety Code, NFPA 101 NFPA 1 and Other Codes and Standards

# SECONDARY MEANS OF ESCAPE - WINDOW WELLS & BULKHEAD ENCLOSURES

The purpose of the secondary means of escape is to provide an occupant with an alternate escape route when fire or smoke blocks the primary means of escape from an area.

The code requires that every sleeping room or living area must be provided with a secondary means of escape. This means at least one operable window or exterior door approved for emergency egress must be available in finished off basements. and ice.



NFPA Life Safety Handbook Exhibit 24.5

Make sure all doors and windows that lead outside open and are not blocked by furniture. Make sure bulkhead doors or well covers are clear of snow and ice.

Requirements of the Vermont Fire and Building Safety Code

# Secondary Means of Escape - WINDOW WELLS NFPA 101: 24.2.2.3.3

An outside window or door operable from the inside without the use of tools, keys, or special effort and shall provide a clear opening of not less than 5.7 square feet for new windows.

The width shall be not less than 20 in. and the height shall be not less than 24 in. The bottom of the opening shall be not more than 44 in. above the floor.

Such means of escape shall be acceptable where one of the following criteria is met:

(4) Windows having a sill height below the adjacent finished ground level shall be provided with a window well meeting all of the following criteria:

NFPA 101: 24.2.2.3.3 continued

- (b) The window well shall have an accessible net clear opening of not less than 9 square feet with a length and width of not less than 36 in.
- (c) A window well with a vertical depth of more than 44 in. shall be equipped with an approved permanently affixed ladder or with steps meeting both of the following criteria:
- i. The ladder or steps shall not encroach more than 6 in. into the required dimensions of the window well.
- ii. The ladder or steps shall not be obstructed by the window.

NFPA 101: 24.2.2.3.4

It shall be a bulkhead complying with 24.2.7 and meeting the minimum area requirements of 24.2.2.3.

NFPA 101: 24.2.7.1 Bulkhead Enclosures. Where provided, bulkhead enclosures shall provide direct access to the basement from the exterior

#### NFPA 101: 24.2.7.2 Bulkhead Enclosure Stairways.

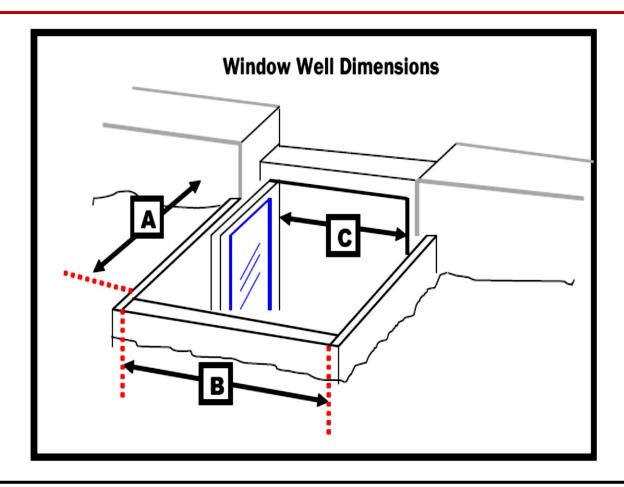
Stairways serving bulkhead enclosures that are not part of the required primary means of escape, and that provide access from the outside finished ground level to the basement, shall be exempt from the provisions of 24.2.5.1 when the maximum height from the basement finished floor level to the finished ground level adjacent to the stairway does not exceed 8 ft. and the finished ground level opening to the stairway is covered by a bulkhead enclosure with hinged doors or other approved means.

Use the worksheet on page 2 to determine if your window well or bulkhead enclosure meets the requirements for second means of escape.

This sheet is designed to provide information to enhance the public safety of all Vermonters. This code information sheet is not an all-inclusive list of state laws or additional code requirements that may apply. This educational resource sheet does not carry the force of legal opinion and was developed by the Vermont Division of Fire Safety, with information provided by The U.S. Fire Administration, the National Fire Protection Association (NFPA) and other fire safety partners. For additional information please visit firesafety.vermont.gov

### **Special Notes:**

If a Bulkhead Enclosure or window well is used as a secondary means of escape it must be kept clear of any accumulation of snow and ice any time the building is occupied. One and two family dwellings snow and ice shall be removed as soon as practicable, so not to impede or prevent the emergency use of the bulkhead. (NFPA1:14.10.2.3)



1. Measure the clear horizontal distance [A ] " Is it at least 36"? Yes [ ] No [ ]		
2. Measure the clear horizontal distance [B ] " Is it at least 36"? Yes [ ] No [ ]		
3. Measure the clear horizontal distance [C ] $\_\_\_$ " with the window open Is it at least 30"?	Yes [ ]	No [ ]
Check the window well opening area [A] X [C] = Area		
Is the Area at least 1080 square inches Yes [ ] No [ ]		
4. Is the Bulkhead Enclosure that provides access from the outside finished ground level?	Yes [ ]	No [ ]