



STATE OF MAINE
MAINE OFFICE OF COMMUNITY AFFAIRS
127 STATE HOUSE STATION
32 BLOSSOM LANE, 3RD FLOOR SOUTH
AUGUSTA, MAINE 04333-0127

SAMANTHA D. HORN
DIRECTOR

DATE: 12/18/2025

TO: Code Officers and Members of the Public
CC: Samantha Horn, Director of Maine Office of Community Affairs

FROM: Greg Gilbert, State Building Official

SUBJECT: MUBEC MEMORANDUM: 25.02 –
Bulkhead Doors as Emergency Escape and Rescue Openings

Purpose:

Since the update of the Maine Uniform Building and Energy Codes (MUBEC) to adopt the 2021 I-codes for the base code, there has been misinformation and miscommunication as to the validity of bulkhead doors as an acceptable Emergency Escape and Rescue Opening in residential one- and two-family dwellings and townhouses. This memo will provide a clear determination as well as supporting information.

Background:

As found in the 2021 International Residential Code:

R310.2 Emergency escape and rescue openings. *Emergency escape and rescue openings* shall have minimum dimensions in accordance with Sections R310.2.1 through R310.2.4.

R310.2.1 Minimum size. *Emergency escape and rescue openings* shall have a net clear opening of not less than 5.7 square feet (0.530 m²).

R310.2.2 Minimum dimensions. The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

R310.2.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) above the floor.

R310.3 Emergency escape and rescue doors. Where a door is provided as the required *emergency escape and rescue opening*, it shall be a side-hinged door or a sliding door.



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R310.4.4 Bars, grilles, covers and screens. Where bars, grilles, covers, screens or similar devices are placed over *emergency escape and rescue openings*, bulkhead enclosures or area wells that serve such openings, the minimum net clear opening size shall comply with Sections R310.2 through R310.2.2 and R310.4.1. Such devices shall be releasable or removable from the inside without the use of a key or tool or force greater than that required for the normal operation of the escape and rescue opening.

R311.7.10 Special stairways. *Spiral stairways* and bulkhead enclosure *stairways* shall comply with the requirements of Section R311.7 except as specified in Sections R311.7.10.1 and R311.7.10.2.

R311.7.10.2 Bulkhead enclosure stairways. *Stairways* serving bulkhead enclosures, not part of the required building egress, providing access from the outside *grade* level to the *basement* shall be exempt from the requirements of Sections R311.3 and R311.7 where the height from the *basement* finished floor level to *grade* adjacent to the *stairway* is not more than 8 feet (2438 mm) and the *grade* level opening to the *stairway* is covered by a bulkhead enclosure with hinged doors or other *approved* means.

Summary:

As stated above, Emergency Escape and Rescue Openings (EERO's) are required in a basement of a single-family dwelling, a two-family dwelling or a townhouse where a sprinkler system is not provided. It is important to understand that in accordance with the I-codes, an EERO is not considered a means of egress. They are for Emergency Escape consideration only.

All EERO openings need to be a minimum of 5.7 sf with its vertical dimension not being less than 24 in and its horizontal dimension not being less than 20 in. A 24in x 20in opening will not achieve the required size, these dimensions clarify the minimum height and width when achieving the 5.7 sf (821 square inches).

These EERO's have minimum requirements but do not specifically call out upright doors. Most importantly, bulkheads are specifically referenced in section R310.4.4 as a type of EERO as it reviews the requirements of the use of bars grilles covers and screens. All EERO's, and access from EERO's, shall be operable from the inside without the use of tools, keys, or special effort.



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Conclusion:

The Technical Codes and Standards Board has decided, by a vote of 9 to 0, that bulkhead doors DO qualify as Emergency Escape and Rescue Openings based on the 2021 IRC.

The IRC requires basement EEROs to meet minimum clear-opening dimensions (5.7 sq. ft., minimum 24-inch height, 20-inch width, and no more than 44 inches above the floor). While the code does not mandate that EEROs be upright doors, it explicitly includes bulkhead enclosures in Section R310.4.4, which governs devices such as covers, grilles, and screens placed over EEROs or bulkhead enclosures. All EEROs must be operable from the inside without keys, tools, or special effort.

Because EEROs provide *emergency escape*, not a formal means of egress, the presence of a compliant bulkhead exit fulfills the code requirement when dimensions and operability criteria are met.

References:

2021 International Residential Code

A handwritten signature in black ink, appearing to read "Greg Gilbert", written over a horizontal line.

Greg Gilbert,
State Building Official
Maine Office of Community Affairs