

Significant Changes to the 2024 I-Codes for Windows, Doors, & Skylights

Every three years, the International Code Council (ICC) utilizes a consensus-based process to develop new editions of the I-Codes. It's a process that involves public participation and input from building professionals nationwide to review and consider proposed changes to future building code editions. WDMA actively participates in ICC's code-development process.

This is a summary highlighting the significant building code changes in the 2024 I-Codes: International Building Code (IBC) and the International Existing Building Code (IEBC), impacting WDMA members and the window, door, and skylight industry, manufacturers and suppliers alike.

Notes to the reader:

- In this summary, the new 2024 code language in the new edition of the I-Codes is shown in blue text and *italicized* with existing code language only *italicized* and in black text.
- This summary will be updated to include the significant changes to the 2024 International Residential Code (IRC) and the International Energy Conservation Code once published by ICC (anticipated in 2024).

For questions about this summary or ICC's building code development process, please contact:

Craig Drumheller – Vice President of Technical Activities

Cesar Lujan – Director of Codes and Standards

2024 International Building Code (IBC)

The IBC applies to all buildings except one- and two-family dwellings and townhouses up to three stories. It affects various building occupancies and uses that utilize doors, windows, and skylights for safety, health, and energy purposes.

Chapter 2 Definitions

New definitions have been added in the 2024 IBC.

Dead Bolt: Door locking hardware with a bolt that is extended and retracted by action of the lock mechanism.

Manual Bolt: Door-locking hardware operable from one side of the door, or from the edge of a door leaf, with a bolt rod extended and retracted by manual movement of the bolt or rod, such as a manual flush bolt or manual surface bolt.

Section 716.2.6.1 Door Closing

An exception has been added clarifying the compliance of door closing for fire doors.

Exception:

3. Fire doors required solely for compliance with ICC 500 shall not be required to be self-closing or automatic closing.

Section 1003.3.1 Headroom

An exception was added to clarify that door closers, door stops, and other overhead door hardware can project into the door opening.

Exception: Door closers, overhead doorstops, frame stops, power door operators, and electromagnetic door locks shall be permitted to project into the door opening height lower than 78 inches (1980 mm) above the floor.

Section 1004.7 Outdoor Areas

Occupiable roofs are included in the list of areas that can be used by occupants that shall be provided with a means of egress in Chapter 10. Yards, patios, courts, and similar outdoor areas are already included in the list of areas that are to be provided with a means of egress.

Yard, patios, occupiable roofs, courts, and similar outdoor areas accessible to and usable by the building occupants shall be provided with a means of egress as required by this chapter.

Section 1006.3 Egress from Stories or Occupiable Roofs

This section adds language to clarify that occupiable roofs shall have exits or access to exits.

All spaces located on a story or occupiable roof shall have access to the required number of separate and distinct exits or access to exits based on the aggregate occupant load served in accordance with this section.

Section 1009.2.2 Doors

This section adds new language to clarify where doors are part of an accessible route for areas of refuge, maneuvering clearances shall be provided as required by ICC A117.1.

Where doors are part of an accessible route to provide access to an exit, area of refuge, or exterior area of assisted rescue, maneuvering clearances shall be proved as such doors as required by ICC A117.1 in the direction of egress. Where doors lead to an area of refuge or exterior area for assisted rescue and reentry to the floor is possible, door maneuvering clearances shall be proved on both sides of the door.

Section 1010.1.2 Egress Door Types

This section adds dwelling units as part of exception #8 stating that doors serving bathrooms in Group R-1 are not required to be side-hinged, pivoted, or balanced door types.

Exceptions:

8. Doors serving a bathroom within an individual dwelling unit or sleeping unit in Group R-1.

Section 1010.2.3 Hardware Height

This section adds exceptions for the hardware height for locks used only for security purposes are permitted at any height.

Exceptions:

1. Locks used only for security purposes and not used for normal operation are permitted at any height.

Section 1015.8 Window Openings

For windows in Group R-2 and R-3, new language has been added to clarify the location of the bottom of the clear opening, opening control devices complying with ASTM F2090, and language for window fall prevention devices and their reference to complying with ASTM F2090.

- Where the bottom of the clear opening of the window is located more than 72 inches (1829 mm) and less than 75 feet (22,860 mm) above the finished grade or other surface below on the exterior of the building, the window shall comply with one of the following:
 - 1.3 Operable windows where the openings are provided with window opening control devices that comply with ASTM F2090. The window opening control devices, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1031.3.1 for emergency escape and rescue openings.

2.1 Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.

2.3 Window fall prevention devices that comply with ASTM F2006.

Section 2405.3 Screening

This section adds language clarifying where screens are required and not required to be installed under monolithic glazing and sloped glazing systems.

2405.3.1 Screens Under Monolithic Glazing

Heat-strengthened glass and fully tempered glass shall have screens installed below the full area of the glazing material.

2405.3.2 Screens Under Multiple-Layer Glazing

Heat-strengthened glass, fully tempered glass, and wired glass used as a bottom glass layer shall have screens installed below the full area of the glazing materials.

December 2023

2405.3.3 Screening Not Required in Monolithic and Multiple-Layer Sloped Glazing Systems

In monolithic and multiple-layer sloped glazing systems, the retention screens are not required for any of the following:

- Fully tempered glass where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane, and the highest point of the glass is 10 feet (3048 mm) or less above the walking surface.
- 2. Any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.
- 3. Any glazing material, including annealed glass, in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144) mm) above grade.
- 4. Individual dwelling units in Groups R-2, R-3, and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and all of the following conditions are met:
 - 4.1 Each pane of the glass is 16 square feet (1.5 m2) or less in area.

4.2 The highest point of the glass is 12 feet (3658 mm) or less above any walking surface or other accessible area.

4.3 The glass thickness is 3/16 inch (4.8 mm) or less.

5. Laminated glass with a 15-mil (0.38 mm) polyvinyl butyral or equivalent interlayer used in individual dwelling units in Groups R-2, R-3, and R-4 where both of the following conditions are met:

5.1 Each pane of glass is 16 square feet (1.5 m2) or less in area.

5.2 The highest point of the glass is 12 feet (3658 mm) or less above a walking surface or other accessible area.

2405.3.4 Screens Not Required

For all types of glazing not specifically noted in Sections 2405.3.1 through 2405.3.3 and complying with Section 2405.2, retention screens shall not be required.

Chapter 35 Referenced Standards

This section adds WDMA I.S. 11-2018 as a referenced standard under the WDMA heading.

WDMA I.S. 11-2018 Industry Standard for Analytical Method for Design Pressure (DP) Ratings of Fenestration Products.

2024 International Existing Building Code (IEBC)

The IEBC affects the repair, alteration, addition, and change of occupancy for existing buildings and historic buildings. It impacts the exterior envelope of a building when major portions are replaced or added such as windows, doors, and skylights.

Section 702.4 Window

In this section, language is added to clarify that window fall prevention in Groups R-2 or R-3 of the IRC should include window fall prevention devices for window replacements.

In Group R-2 or R-3 buildings containing dwelling units or one- and two-family dwellings and townhouses regulated by the International Residential Code, window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

Section 702.5 Replacement Window for Emergency Escape and Rescue Openings

This section adds clarification of conditions for replacement windows and that they shall be permitted to be the same operating style as the existing window. This would only apply if the replacement window opening is of equal or greater size.

The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.