



DENVER AMENDMENT PROPOSAL FORM FOR PROPOSALS TO THE 2019 DENVER BUILDING CODE AMENDMENTS AND THE 2021 INTERNATIONAL CODES

DENVER
THE MILE HIGH CITY

2021 CODE DEVELOPMENT CYCLE

1) **Name:** Brian Lukus **Date:** August 31, 2021
Email: Brian.lukus@denvergov.org **Representing (organization or self):** Organization

2) One proposal per this document is to be provided with clear and concise information.

Is a separate graphic file provided ("X" to answer): ___ Yes or X No

3) Highlight the code and acronym that applies to the proposal

<u>Acronym</u>	<u>Code Name</u>	<u>Acronym</u>	<u>Code Name</u>
DBC-AP	Denver Building Code—Administrative Provisions	IPC	International Plumbing Code
IBC	International Building Code	IRC	International Residential Code
IECC	International Energy Conservation Code	IFGC	International Fuel Gas Code
IEBC	International Existing Building Code	IMC	International Mechanical Code
IFC	International Fire Code	DGC	Denver Green Code

AMENDMENT PROPOSAL

Please provide all the following items in your amendment proposal.

Code Sections/Tables/Figures Proposed for Revision:

Instructions: If the proposal is for a new section, indicate (new), otherwise enter applicable code section.

New

Proposal:

Instructions: Show the proposal using ~~strikeout~~, underline format.

Place "X" next to choice that best defines your proposal: X Revision ___ New Text ___ Delete/Substitute ___ Deletion

Part One: IFC

504.4 Roof hatches. See Section 1011.12.3 of the *International Building Code*.

All interior exit stairways and ramps extending to the uppermost story in buildings four or more stories above grade plane shall be provided with a roof hatch openable to the exterior. The hatch shall be a minimum of 16 square feet (1.5 m²) in area with a minimum dimension of 2 feet (610 mm).

Exceptions:

1. Pressurized stairway enclosures.
2. Enclosures of interior exit stairways and ramps that extend to the roof in accordance with Sections 1011.12 and 1011.12.2 of the *International Building Code* and are provided with a penthouse complying with Section 1510.2 of the *International Building Code*.
3. Buildings with all roof slopes exceeding 4 units vertical in 12 units horizontal (33-percent).

Part Two: IBC

~~**[B] Section 1011.12.3 Roof hatches is added as follows:**~~

~~**1011.12.3 Roof hatches.** All interior stair enclosures that extend to the roof shall have, at the highest point of the enclosure, an approved roof hatch openable to the exterior (also see Section 504.4 of the *International Fire Code*). The hatch shall be a minimum of 16 square feet (1.5 m²) in area with a minimum dimension of 2 feet (610 mm).~~

~~**Exceptions:**~~

1. Roof hatches are not required on pressurized stairway enclosures.
2. Enclosures of stairways that extend to the roof in accordance with Sections 1011.12 and 1011.12.2 and provided with a penthouse complying with Section 1510.2.

[B] Section 1209.4 Roof hatches is added as follows:

1209.4 Roof hatches. All interior exit stairways and ramps extending to the uppermost story in buildings four or more stories above grade plane shall be provided with a roof hatch openable to the exterior. The hatch shall be a minimum of 16 square feet (1.5 m²) in area with a minimum dimension of 2 feet (610 mm).

Exceptions:

1. Pressurized stairway enclosures.
2. Enclosures of interior exit stairways and ramps that extend to the roof in accordance with Sections 1011.12 and 1011.12.2 of the International Building Code and are provided with a penthouse complying with Section 1510.2 of the International Building Code.
3. Buildings with all roof slopes exceeding 4 units vertical in 12 units horizontal (33-percent).

Supporting Information (Required):

All proposals must include a written explanation and justification as to how they address physical, environmental, and/or customary characteristics that are specific to the City and County of Denver. The following questions must be answered for a proposal to be considered.

- Purpose: What does your proposal achieve?

In prior Denver Fire Code amendments, this section was included in Chapter 5 as it is a fire service feature. Later edition of amendments moved the section to chapter 10. The current amendment uses incorrect reference to the IBC. This change moves the requirement to the fire code to clearly indicate the fire fighter performance requirement and not means of egress per Chapter 10. However, it also retains it in the IBC, but moves it to section 1209 alongside other hatches and accesses where it can be more accessible to architects.

- Reason: Why is your proposal necessary?

Since this section was moved to Chapter 10, it has been misused due to a technicality on the top of shaft enclosure allowance by Chapter 7 regarding top of shaft termination; therefore by technicality the stair enclosure doesn't extend to the "roof" and roof hatches are not being provided. This was never the intent of the Code section.

- Substantiation: Why is your proposal valid? (i.e. technical justification)

The intent of this section is to require roof hatches in stairs in flat roof (less than 33%) buildings 4 or more stories. The roof hatches provide fire fighters a means of ventilating hot smoke and gasses during and after a fire using the stair instead of breaking out windows, which may not be feasible due to height or commercial window construction. This means to remove smoke increases safety for firefighters operating during a fire, any occupants that may still in the building during fire operations, and can reduce overhaul damage after a fire.

Other Regulations Proposed to be Affected

N/A

Referenced Standards:

N/A

Impact:

How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

Cost of construction:	<input type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input checked="" type="checkbox"/> No Impact
Cost of design:	<input type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input checked="" type="checkbox"/> No Impact
Restrictiveness:	<input type="checkbox"/> Increase	<input type="checkbox"/> Decrease	<input checked="" type="checkbox"/> No Impact

Departmental Impact (City use only):

This amendment proposal increases/decreases/is neutral to the cost of plans review.
This amendment increases/decreases/is neutral to the cost of inspections.