

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

2021 CODE DEVELOPMENT CYCLE

1)	Name:	David Renn, PE	, SE	Date:	10/15/2021

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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

Acronym	Code Name	Acronym	Code Name
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.

IBC 1511.2.4

Proposal:

Instructions: Show the proposal using strikeout, underline format.

Place an "X" next to the choice that best defines your proposal: _X Revision __ New Text __ Delete/Substitute __ Deletion

1511.2.4 Type of construction. Penthouses shall be constructed of <u>building element materials</u> as required for the type of construction of the building. <u>Penthouse exterior walls</u> and roof construction shall have a <u>fire-resistance rating</u> as required for the type of construction of the building. <u>Supporting construction of such exterior walls</u> and roof construction shall have a <u>fire-resistance rating</u> not less than required for the <u>exterior wall</u> or roof supported.

(exceptions remain)

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

The purpose of this proposal is to carry forward a 2024 code change that has already been approved through the ICC Group A hearings under proposal S7-21. This amendment is needed to fix an oversight in the 2021 IBC revisions to this section. Without a Denver amendment for this, I would anticipate having to approve Administrative Modification requests for nearly every project with a penthouse. Note that the ICC committee voted 13-1 to approve this proposal as submitted, and there were no public comments.

S7-21						
Committee Action: As Submitted						
Committee Reason: The proposal was approved as it revises the language to meet the intent and corrects what could have been misread. (Vote: 13-1)						
The reason statement from proposal S7-21 follows:						
The 2021 IBC changed penthouse construction requirements to be as required for <u>building elements</u> based on type of construction instead of requiring <u>walls</u> , <u>floors and roofs</u> to be as required for the type of construction. This change results in overly conservative fire-resistance ratings when the exceptions to this section are used since the exceptions only reduce ratings for exterior walls and roofs. For example, Exception 1 could allow exterior walls and roofs to not have a fire-resistance rating; however, the exception doesn't apply to the secondary members supporting the roof, primary structural frame supporting the roof, or interior bearing walls supporting the roof. The result would be a non-rated roof supported by a primary structural frame with a 1 or 2-hour rating, secondary members with a 1 or 1 1/2-hour framing and interior bearing walls with a 1 or 2-hour rating.						
Prior to the 2021 change, IBC Section 704.1 required the fire-resistance rating of supporting construction for penthouse exterior walls and roofs to be not less than the rating of the wall or roof supported. This level of protection is appropriate for a penthouse that is constructed above the roof of the building and is not considered to be part of the primary structural frame of the building. This proposal makes this clear by putting this requirement into the penthouse requirements rather than relying on Section 704.1.						
This proposal also removes the requirement that penthouse floors be constructed as required for the type of construction. By definition, rooftop structures (including penthouses) are constructed over the roof deck of the building, so the fire-resistance rating of the roof of the building should be allowed for the "floor" of the penthouse.						
Bibliography and Access to Materials (as needed when substantiating material is associated with the amendment proposal):						
Other Regulations Proposed to be Affected						
*For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory						
Denver codes and/or regulations, only. Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.						
Referenced Standards: List any new referenced standards that are proposed to be referenced in the code.						
Impact: How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)						
Cost of construction: IncreaseX_ Decrease No Impact						
Cost of design: Increase DecreaseX_ No Impact						
Restrictiveness: Increase 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.						