**DENVER AMENDMENT PROPOSAL FORM**
FOR CPD _INTERNAL_ PROPOSALS TO THE 2016 DENVER BUILDING CODE AMENDMENTS AND THE 2018 INTERNATIONAL CODES

**2018 CODE DEVELOPMENT CYCLE**

1) **Name:** David Renn, PE, SE  
   **Date:** 3/7/2019

2) Proposals should be drafted in Word with the only formatting that is needed being **BOLDING, STRIKEOUT** AND **UNDERLINING**. Please do not provide additional formatting such as tabs, columns, etc.

Please use a separate form for each proposal submitted.

Is separate graphic file provided? ☐ Yes ☒ No

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**AMENDMENT PROPOSAL**

Please provide all of the following items in your amendment proposal.

**Code Sections/Tables/Figures Proposed for Revision:**
DBCA-IBC 712.1.12 and IBC 712.1 (new)

**Note:** If the proposal is for a new section, indicate (new).

**Proposal:**

Delete and substitute as follows

**Section 712.1.12 is replaced in its entirety with the following:**

712.1.12 Exit access stairways and ramps. Vertical openings containing exit access stairways or ramps in accordance with Section 1019 shall be permitted provided that buildings with smoke control have openings protected by draft curtains, closely spaced sprinklers in accordance with NFPA 13 and smoke detectors located at the floor side of the opening.

**Section 712.1 General is amended by adding the following sentence to the end of the paragraph:**

In buildings with a smoke control system, unenclosed vertical openings shall also comply with Section 909 of the International Fire Code as amended.

**Note:** Show the proposal using **strikeout, underline** format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
Supporting Information:

This proposal deletes a Denver amendment that conflicts with a Denver IFC amendment, and substitutes this amendment with a pointer to the IFC amendment.

Background: This amendment was new with Denver’s 2016 amendments to the 2015 IBC with the following supporting information:

**Purpose:** Buildings with smoke control require each smoke zone isolated to provide adequate system performance and avoid contamination of adjacent occupied spaces.

**Reasons:** Smoke control has been an integral part of building design in Denver for over 30 years and is recognized in the International Codes as a viable means of maintaining a tenable environment for occupant evacuation or relocation.

**Substantiation:** The provision for smoke detection around vertical openings in buildings with smoke control was inadvertently dropped from the 2015 amendments. This provision was previously addressed in the 2011 amendments in Section 708.2.

This was a late proposal for the 2015 amendments that attempted to include a provision that was previously addressed in 2011 DBC-IBC 708.2. However, this previous section was specific to stairway and escalator openings protected with draft curtains and closely spaced sprinklers, with the smoke detection requirement being added. The 2015 amendment instead is for all exit access stairways and ramps allowed by IBC 1019, which has 8 different options (including one with draft curtains and closely spaced sprinklers), which I don’t believe was the intent. Furthermore, Denver’s 2016 amendments to IFC 909 for smoke control systems includes the following section:

909.3.1 Unenclosed vertical openings. Where unenclosed vertical openings are provided as permitted by IBC Section 712, buildings with a smoke control system shall have the floor openings between smoke zones protected by draft curtains and closely spaced sprinklers installed in accordance with NFPA 13 smoke detectors located at the floor side of the opening.

The above section has the same requirements that are in DBC-IBC 712.1.12, so the statement that “the provision for smoke detection around vertical openings in buildings with smoke control was inadvertently dropped” was not correct. Also, it should be noted that DBC-IFC 909.3.1 includes these requirements for floor openings between smoke zones and DBC-IBC 712.1.12 does not require that the opening be between smoke zones, which is in conflict and is not necessary (i.e. if the opening doesn’t separate smoke zones, there is no need for the additional requirements).

To avoid conflicts with IFC amendments, it is proposed to delete DBC-IBC 712.1.12. However, since DBC-IFC 909.3.1 includes a requirement for draft curtains that are typically provided as part of the architectural drawings, it is desired to have a pointer in 712 to this requirement so that it is not missed in design and/or review. This is accomplished by adding a sentence to the end of the general IBC Section 712.1.

**Note:** This proposal anticipates that changes to Denver’s amendments to the smoke control section of the IFC will be made so reference to “Section 909” is used instead of a reference to a specific subsection for unenclosed vertical openings (which is currently 909.3.1). The proponent requests that this be revised to the specific subsection once the changes to IFC Section 909 are complete and approved.

**Note:** The following items are required to be included:

**Purpose:** The proponent shall clearly state the purpose of the proposed amendment to physical, environmental and customary characteristics that are specific to the City and County of Denver (e.g., clarify the Code; revise outdated material; substitute new or revised material for physical, environmental and customary characteristics; add new requirements to the Code; delete current requirements, etc.)

**Reasons:** The proponent shall justify changing the current Code provisions, stating why the proposal is necessary to reflect physical, environmental and customary characteristics that are specific to the City and County of Denver. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current does not reflect physical, environmental and customary characteristics that are specific to the City and County of Denver and explains how such proposals will improve the Code.

**Substantiation:** The proponent shall substantiate the proposed amendment based on technical information and substantiation. Substantiation provided which is reviewed and determined as not germane to the technical issues addressed in the proposed amendment shall be identified as such.
**Bibliography** (as needed): The proponent shall submit a bibliography when substantiating material is associated with the amendment proposal. The proponent shall make the substantiating materials available for review.

**Referenced Standards:**

None.

List any new referenced standards that are proposed to be referenced in the code.

**Impact:**

This proposal deletes an amendment that is covered elsewhere and replaces with a pointer, so there is no impact relative to Denver’s 2016 code. The requirement to have smoke detection is more-restrictive than the I-codes.

**Note:** The proponent shall discuss the impact of the proposed amendment and indicate one of the following for each point below regarding the amendment proposal:

- **The effect of the amendment proposal on the cost of construction:** ☒ No Effect
- **The effect of the amendment proposal on the cost of design:** ☒ No Effect
- **Is the amendment proposal more- or less-restrictive than the I-Codes:** ☒ More

**Departmental Impact:**

This proposal deletes an amendment that is covered elsewhere and replaces with a pointer, so there is no impact relative to Denver’s 2016 code.

**Note:** The proponent shall discuss the impact of the proposed amendment and indicate one of the following for each point below regarding the amendment proposal:

- **The effect of the amendment proposal on the cost of review:** ☒ No Effect
- **The effect of the amendment proposal on the cost of enforcement/inspection:** ☒ No Effect