### 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:** 3/20/2019

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.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
<th>Acronym</th>
<th>Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBC-xxx</td>
<td>Denver Building Code– xxx code base</td>
<td>IMC</td>
<td>International Mechanical Code</td>
</tr>
<tr>
<td>IBC</td>
<td>International Building Code</td>
<td>IEBE</td>
<td>International Existing Building Code</td>
</tr>
</tbody>
</table>

#### AMENDMENT PROPOSAL

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

**Code Sections/Tables/figures Proposed for Revision:**
DBC-IBC 705.8.1.

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

**Proposal:**

Revise as follows

**Section 705.8.1 Allowable area of openings is replaced as follows, with exceptions to remain:**

705.8.1 Allowable area of openings. The maximum area of unprotected and protected openings permitted in an exterior wall of a building shall not exceed the percentages specified in Table 705.8 based on fire separation distance of each individual story. story as measured from the building face within the height of each individual story that is closest to the line used to determine fire separation distance.

**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
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

#### Supporting Information:
This proposal revises IBC 705.8.1 to reflect Denver’s long-standing interpretation of exterior wall requirements where a building has overhanging stories. Also, the commentary to the 2018 IBC includes a figure that incorrectly shows the fire separation distance of each story, and this proposal provides code language to clarify this.

The 2018 IBC added language to 705.8.1 that states that exterior wall openings are “based on fire separation distance of each individual story.” The word “story” is not shown in italics which would have indicated that the definition in IBC 202 is applicable, and it is believed that this is an oversight, so this proposal changes this word to be in italics. The definition of a story is a portion of a building between the upper surface of a floor and the upper surface of a floor or roof next above. For cantilevered floors, the portion of the cantilever below the upper floor surface is actually within the story below based on this definition. The same applies to any exterior wall that extends below the cantilever. For this case, the fire separation distance of the lower story would be measured to the face of the cantilevered building above since it is within the height of the lower story. To avoid confusion with an incorrectly drawn figure in the IBC commentary, which doesn’t include the depth of the floor or any exterior wall that extends below the floor, this proposal provides code language to clarify that the fire separation distance is measured to the building face within the height of each story that is closest to the line used to determine fire separation distance.

It should be noted that for a tall first story, the exterior wall of an overhanging story is often extended well below the second floor, so a significant portion of the exterior wall of the first story is in the plane of the exterior wall of the overhang. For this condition, radiant heat from a fire in an adjacent building would reach this wall before reaching the wall of the tucked under exterior wall, so it is certainly appropriate that fire separation distance and maximum opening area be applied at the plane of the exterior wall that extends below the overhanging floor.

The language in this proposal is consistent with the way Denver has interpreted the code in the past since IBC Table 705.8 is for maximum openings “per story”. This proposal codifies this interpretation to avoid confusion with a commentary figure that conflicts with the actual requirements in the code.

Bibliography: 2018 IBC Commentary as published by the International Code Council

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 is a clarification of the code that enforces a long-standing Denver interpretation so there is no impact.

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; □ Increase □ Reduce ☒ No Effect
- The effect of the amendment proposal on the cost of design; □ Increase □ Reduce ☒ No Effect
- Is the amendment proposal more- or less-restrictive than the I-Codes; □ More □ Less ☒ Same

Departmental Impact:

This is a clarification of the code that enforces a long-standing Denver interpretation so there is no impact.

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:
<table>
<thead>
<tr>
<th>The effect of the amendment proposal on the cost of review;</th>
<th>☒ No Effect</th>
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</thead>
<tbody>
<tr>
<td>The effect of the amendment proposal on the cost of enforcement/inspection;</td>
<td>☒ No Effect</td>
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