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: 2/21/2019

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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBC-IBC</td>
<td>Denver Building Code–IBC base</td>
</tr>
<tr>
<td>DBC-IEBC</td>
<td>Denver Building Code–IEBC base</td>
</tr>
<tr>
<td>DBC-xxx</td>
<td>Denver Building Code– xxx code base</td>
</tr>
<tr>
<td>IBC</td>
<td>International Building Code</td>
</tr>
<tr>
<td>IECC</td>
<td>International Energy Conservation Code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC</td>
<td>International Plumbing Code</td>
</tr>
<tr>
<td>IRC</td>
<td>International Residential Code</td>
</tr>
<tr>
<td>IFGC</td>
<td>International Fuel Gas Code</td>
</tr>
<tr>
<td>IMC</td>
<td>International Mechanical Code</td>
</tr>
<tr>
<td>IEBCC</td>
<td>International Existing Building Code</td>
</tr>
<tr>
<td>IFC</td>
<td>International Fire 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 705.2

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

**Proposal:**

Delete without substitution

**Section 705.2 Projections is replaced in its entirety with the following:**

**705.2—Projections.** Cornices, eave overhangs, exterior balconies and similar cantilevered or wall hung projections extending beyond the floor area shall conform to the requirements of this section and Section 1406. Exterior egress balconies, exterior exit stairways, and exterior ramps shall also comply with Sections 1021 and 1027, respectively. The distance from exterior edges of projections to the closest interior lot line or to an imaginary line between two buildings on the property shall not be less than four feet (1220 mm).

**705.2.1—Type I and II construction.** Projections from walls of Type I or II construction shall be of noncombustible materials or combustible materials as allowed by Sections 1406.3 and 1406.4.

**705.2.2—Type III, IV or V construction.** Projections from walls of Type III, IV or V construction shall be of any approved material.

**705.2.3—Combustible projections.** Combustible projections located where the distance from the exterior edges of projection to the closest interior lot line or to an imaginary line between two buildings on the property is less than 6 feet (1820 mm) shall be of at least 1-hour fire-resistance-rated construction, Type IV construction, fire-retardant-treated wood or as required by Section 1406.3.

**Exceptions:**

1. Type V construction shall be allowed for R-3 and U occupancies.
2. In buildings required by this Section to have fire resistance rated roof assemblies, vent openings in the bottom membrane of fire-resistance rated roof overhangs are permitted when buildings are protected by an automatic sprinkler system in accordance with Section 903.1.1 or 903.1.1.2.

705.2.1—Noncombustible projections. Noncombustible projections shall not be required to have a fire-resistance rating.

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 is the first of two options for DBC-IBC 705.2, and is the preferred option. This proposal is to delete Denver amendments to IBC 705.2 Projections, since these amendments are not related to any physical, environmental or customary characteristics that are specific to the City and County of Denver. In several past code cycles the projection requirements in the IBC were regularly changing and were overly restrictive (e.g. For fire separation distance (FSD) of 30’ or greater, Table 705.2 required projections to be 20’ minimum from the line used to determine FSD.), so there was some justification to have amendments that aligned with customary practice in Denver. However, in the 2018 IBC, Table 705.2 has more reasonable minimum distances to the edge of projections and this table will remain the same in the 2021 IBC as no proposals were made to change this. Since the IBC is a national consensus document that has settled on reasonable requirements for projections, Denver’s amendments to IBC 705.2 are no longer needed.

The following discussion outlines the major differences between Denver’s current amendments to 705.2 (referred to as DBC) and 2018 IBC Section 705.2 (referred to as IBC), and provides justification for deleting Denver’s amendments to 705.2:

- DBC uses the term “similar cantilevered or wall hung projections” and IBC uses the term “similar projections”. This term is for items similar to cornices, eave overhangs and exterior balconies, all of which are cantilevered or wall hung, so the addition of “cantilevered or wall hung” is not necessary.
- DBC is for projections extending beyond the “floor area” and IBC is for projections extending beyond the “exterior wall”. The term “floor area” has been carried over from previous codes and matched the wording in the 2000, 2003 and 2006 IBC’s. However, per code change proposal FS14-07/08, this term changed to “exterior wall” in the 2009 IBC since “floor area” is measured to the inside perimeter of the exterior walls which meant projections start at the inside of the wall and include the exterior wall, which was confusing and incorrect. Also note that “floor area” is no longer a defined term in the IBC and has been changed “building area”, which creates more confusion with the current wording in the DBC.
- DBC has a single 4’ requirement for the minimum distance from the line used to determine FSD to the edge of a projection. IBC has a table that varies this distance from 24’ at FSD of 2’, to 40” for FSD of 5’ or greater. Varying distances based on FSD is a reasonable approach and the single 4’ distance in the IBC is more restrictive than the IBC, with no justification that is specific to Denver.
- DBC has fire-resistance rating or material requirements for combustible projections located within 6’ of the line used to determine FSD and IBC has these requirements for combustible projections located within 5’ instead. There is no justification that is specific to Denver to have a more restrictive distance than the IBC.
- DBC 705.2.3 Exception 1 is less restrictive than the IBC 705.2.3 Exception since the IBC limits this exception to walls with a FSD of 5’ or greater and the DBC does not have this limitation. There is no justification that is specific to Denver to be less restrictive than the IBC.
- DBC 705.2.3 Exception 2 is not in the IBC. This exception states that vent openings are allowed in the bottom membrane of fire-resistance rated roof overhangs (when sprinklers are provided); however, there is nothing in the code that would prohibit these openings to begin with, so the exception is not needed. To further clarify, there is an option for 1-hour fire-resistance rated “construction” and the term “construction” is meant to only apply to the structure of the projections and there are no requirements for openings. If openings were intended to be regulated, the term “horizontal assembly” would have been used instead of “construction”, which would have imposed the horizontal assembly opening requirements from IBC 711.2.2.
- DBC 705.2.4 is not in the IBC. This section is simply a clarification that noncombustible projections are not required to have a fire-resistance rating. IBC Table 601 does not list projections as a building element that requires a fire-resistance rating so an amendment to specifically state this is unnecessary.

Bibliography:

1. 2018 Group A Proposed Changes to the I-Codes Columbus Committee Action Hearings, as published by ICC.

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 will have little cost impact since Denver’s current amendments are not significantly different that the 2018 IBC, with some being slightly more restrictive and some being slightly less restrictive.

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 proposal should reduce the cost of review since time is often spent writing comments related to Denver’s amendments that a designer may not be aware of. There is then additional time reviewing resubmittals needed to bring the design into compliance with Denver’s amendments.

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; □ Increase □ Reduce □ No Effect
- The effect of the amendment proposal on the cost of enforcement/inspection; □ Increase □ Reduce □ No Effect