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

1) Name: Robby Schwarz  
Date: 3/25/2019

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 or No):

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
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<tbody>
<tr>
<td>IBC</td>
<td>International Building Code</td>
<td>IBC</td>
<td>International Residential Code</td>
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<td>IEBC</td>
<td>International Existing Building Code</td>
<td>IMC</td>
<td>International Mechanical Code</td>
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<td>IFC</td>
<td>International Fire Code</td>
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**AMENDMENT PROPOSAL**

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

**Code Sections/Tables/Figures Proposed for Revision:**  
Section R503 Alterations  
R503.1.1 Building Envelope

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

**Proposal:**

**SECTION R503 ALTERATIONS**

**R503.1 General.** Alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is not less conforming to the provisions of this code than the existing building or structure was prior to the alteration. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall not create an unsafe or hazardous condition or overload existing building systems. Alterations shall be such that the existing building or structure does not use more energy than the existing building or structure prior to the alteration. Alterations to existing buildings shall comply with Sections R503.1.1 through R503.2.

**R503.1.1 Building envelope.** Building envelope assemblies that are part of the alteration shall comply with Section R402.1.2 or R402.1.4, Sections R402.2.1 through R402.2.13, R402.3.1, R402.3.2, R402.4.3 and R402.4.5. A pre and post blower door test shall be completed when building thermal envelope alterations are performed. If the alternation results in a post blower door CFM50 measurement that is less than the building airflow standard as set forth in ASHRAE 62-89, then combustion safety testing shall be performed.

**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

November 15, 2005
### Supporting Information:

**Reason Statement:**
Alterations to the building's thermal envelope inevitably impact the air tightness of the building and therefore the combustion safety of the building. This section of the code is in existing buildings which is an indication that the majority of the structures have atmospherically vented appliances. Specifically, atmospherically vented water heaters, which are the most likely appliance to backdraft, are susceptible to pressure changes in existing homes. Replacing windows, adding insulation, installing air tight IC rated can lights, or any individual building thermal envelope upgrade changes the dynamic in the building significantly to warrant preventative combustion safety testing and possibly mechanical ventilation. The proposed language continues to demonstrate the importance of energy codes relationship to health safety and durability as well as efficiency as described in the code’s intent Section R101.3.

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

**Impact:**

**Cost Statement:**
Cost would be impacted as the health and safety of the building to better ensure that the occupant was not poisoned by carbon monoxide would have to be tested. This test cost approximately $200-400 if conducted as a stand-alone test. Many energy retrofit specialists and building envelope specialists include this test as part of their service which brings down the cost.

**Note:** The proponent shall indicate one of the following regarding the impact of 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:**
Click or tap here to enter text.

**Note:** Indicate one of the following regarding the impact of 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:

November 15, 2005