# Code Amendment Proposal Form

For public amendments proposed to the 2018 editions of the International Codes

**Instructions:** Upload this form and all accompanying documentation at [www.denvergov.org/BuildingCode](http://www.denvergov.org/BuildingCode). If you are submitting your proposal on a separate sheet, make sure it includes all information requested below.

All proposals must be received by **April 26, 2019**.

## CONTACT INFORMATION

Name: Greg Bradshaw  
Phone: 303-475-7714  
Email: greg.bbsi@gmail.com  
Organization: Bradshaw Building Solutions, Inc.

## AMENDMENT PROPOSAL

Please use a separate form for each proposal.

1) Code(s) associated with this proposal. Please use acronym:  
DBC-IFC

If you submitted a separate coordination change to another code, please indicate which code: _________________

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
<th>Acronym</th>
<th>Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBC-xxxxx</td>
<td>Denver Building Code–xxxx (code) amendments (e.g., DBC-IBC, DBC-IEBC)</td>
<td>IFGC</td>
<td>International Fuel Gas Code</td>
</tr>
<tr>
<td>IEBCC</td>
<td>International Existing Building Code</td>
<td>IMC</td>
<td>International Mechanical Code</td>
</tr>
<tr>
<td>IECC</td>
<td>International Energy Conservation Code</td>
<td>IPC</td>
<td>International Plumbing Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IBC</td>
<td>International Residential Code</td>
</tr>
</tbody>
</table>

2) Please check here if a separate graphic file is provided: ☐  
*Graphics may also be embedded within your proposal below.*

3) Use this template to submit your proposal or attach a separate file, but please include all items requested below in your proposal. The only formatting needed is **BOLDING, STRIKEOUT** AND **UNDERLINING**, Please do not provide additional formatting such as tabs, columns, etc., as this will be done by CPD.

**Code Sections/Tables/Figures Proposed for Revision:**

DBC-IFC 909.10.2.2 & 909.10.3.2.3 & 909.10.5.3.2

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

**Proposal:**

909.10.2 **Testing requirements.** Tests shall be performed in full automatic mode with the building operating under both normal power and emergency power. Test equipment shall include manometer (calibrated within last 12 months), spring scale and other equipment as necessary to adequately measure and record system
performance. Communications shall be provided between the test locations and the fire command center.

1. For a building that is not a high rise, multiple tests on more than one floor or smoke zone shall be required to demonstrate proper operation.

2. For high rise buildings, tests shall be conducted at a minimum of three locations. For high rise buildings, tests shall be conducted at 15% of the smoke-controlled floors with a minimum of 2 floors.

   a. A floor in the lower third, a floor in the middle third and a floor in the upper third of the building. The required number of floors shall be evenly spaced throughout the building so that each vertical section of the building is represented.

**909.10.3.2 Performance tests.** Within 30 days after completion of annual equipment operating tests defined above, conduct the following smoke control system performance tests. The annual smoke control systems tests shall be conducted under the direct supervision of a professional engineer qualified in the testing of such smoke control systems.

1. Activate the smoke control systems manually for tests used to confirm minimum pressure differentials defined in this section.

2. Activate the smoke control systems automatically through the fire alarm system for tests used to confirm proper sequencing of the system components. Measure actual relative pressure differentials between areas in alarm and adjacent areas and actual door opening forces.

3. For high rise buildings, conduct smoke control tests, observations and measurements of all aspects of the smoke control system at a minimum of three (3) locations: a floor in the lower third, a floor in the middle third and a floor in the upper third of the building. Smoke control tests in subsequent years shall be conducted on previously untested floors, as may be practical so that all floors ultimately are tested.

**909.10.5.3 Non-dedicated systems.**

909.10.5.3.1 Non-dedicated systems shall be tested annually.

909.10.5.3.2 The smoke-control system shall be operationally tested as prescribed in Section 909.10.5. Non-dedicated smoke control systems shall be operated on a representative sample of each type of equipment sufficient to verify proper operation for each control sequence. For high rise buildings, tests shall be conducted at a minimum of three (3) locations: a floor in the lower third, a floor in the middle third and a floor in the upper third of the building. 15% of the smoke-controlled floors with a minimum of 2 floors, evenly spaced throughout the vertical sections of the building.

**Note:** Show the proposal using *strikeout*, *underline* format. At the start of each section, give one of the following instructions:

- Revise as follows:
- Add new text as follows:
- Delete and substitute as follows:
- Delete without substitution:

**Supporting Information:**

**Note:** This section MUST include these items:

- **Purpose:** To more realistically take into account the number of stories for a high-rise building. Under the current requirement of 3 floors to be tested, the buildings I’ve tested range from 4 stories of smoke control (with 6 stories of parking garage below) to 56 stories. The building with 4 stories of smoke control would be duplicated somewhat every year whereas the 56 story would take 19 years to check every floor.
- **Reasons:** The 15% of floors tested would be equivalent to checking every floor every 7 years.
- **Substantiation:** NA.
- **Bibliography:** NA.

**Referenced Standards:**

NA

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

**Impact:**
<table>
<thead>
<tr>
<th>Note: Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● The effect of the proposal on the cost of construction: ☑ Reduce ☐ Increase ☐ No Effect</td>
</tr>
<tr>
<td>● The effect of the proposal on the cost of design: ☑ Reduce ☐ Increase ☐ No Effect</td>
</tr>
<tr>
<td>● Is the proposal more or less restrictive than the I-codes: ☑ More ☐ Less ☐ Same</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Departmental Impact</strong>: (To be filled out by CPD staff)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Note: CITY STAFF ONLY. Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● The effect of the proposal on the cost of review: ☐ Increase ☐ Reduce ☐ No Effect</td>
</tr>
<tr>
<td>● The effect of the proposal on the cost of enforcement/inspection: ☐ Increase ☐ Reduce ☐ No Effect</td>
</tr>
</tbody>
</table>