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. 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: David P. Tyree, P.E., C.B.O.  Date: 4/30/19
Phone: (719) 492-3990  E-mail: dtyree@awc.org
Organization: American Wood Council

I, David P. Tyree, hereby grant and assign to City and County of Denver all rights in copyright I may have in any authorship contributions I make to City and County of Denver in connection with this proposal. I understand that I will have no rights in any City and County of Denver publications that use such contributions in the form submitted by me or another similar form and certify that such contributions are not protected by the copyright of any other person or entity.

Signature: David P. Tyree, P.E., C.B.O.

AMENDMENT PROPOSAL

Please use a separate form for each proposal.

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

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-xxxx</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>IEBC</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>IRC</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:

The Structural Engineers Association of Colorado – Denver Building Department Liaison Committee (SEAC-DBDLC) has submitted a new Appendix Chapter U for consideration into the 2018 Denver Building Code. This provision is intended to be inserted into the new Appendix U.

**DBC - International Building Code:**  
(new) Appendix U – Tall Wood Buildings (From separate proposal from SEAC-DBDLC)

Chapter 17  
(new) Section 1705.5.3  
(new) Table 1705.5.3

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

**Proposal:**

Add new text as follows:

1705.5.3 Mass timber construction. Special inspections of Mass Timber elements in Types IV-A, IV-B, and IV-C construction shall be in accordance with Table 1705.5.3.

**TABLE 1705.5.3**  
REQUIRED SPECIAL INSPECTION OF MASS TIMBER CONSTRUCTION

<table>
<thead>
<tr>
<th>Type</th>
<th>Continuous Special Inspection</th>
<th>Periodic Special Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Inspect erection of mass timber construction</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. Inspection of connections where installation methods are required to meet design loads.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.1. Threaded fasteners</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.1.1. Verify use of proper installation equipment</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.1.2. Verify use of pre-drilled holes where required.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.1.3. Inspect screws, including diameter, length, head type, spacing, installation angle, and depth.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.2. Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.3. Adhesive anchors not defined in 3.2.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.4. Bolted connections</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.5. Concealed connections</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**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:**
Purpose:
The Structural Engineers Association of Colorado – Denver Building Department Liaison Committee (SEAC-DBDLC) has submitted a new Denver Building Code Appendix U and Denver Fire Code Appendix P for consideration for adoption into Denver’s Building and Fire codes. The proposals submitted by SEAC-DBDLC include only those provisions which have been approved for the 2021 International codes.

This submittal, along with two other proposals: Public-Code-Amendment-Proposal-Form AWC Group B Ch1.docx and Public-Code-Amendment-Proposal-Form AWC Group B Ch23.docx, is a follow up to the already approved mass timber proposals and provides specifications for special inspections and connections in mass timber construction. This submittal addresses the requirement for special inspections of mass timber construction.

Reasons:
The primary reasons why Denver should adopt a new Appendix U into the 2019 Denver Building Code have been adequately addressed and included in the submittal from the Colorado Structural Engineers Association of Colorado.

The reason for this additional inspection section is to stipulate required special inspections for mass timber structures. This requirement ensures that the special inspections for this structure type are adequately specified in the code.

Substantiation:
The proposed mass timber Denver Building Code Appendix U and Denver Fire Code Appendix P from the Structural Engineers Association of Colorado – Denver Building Department Liaison Committee (SEAC-DBDLC), which includes both new code language and the revision of existing language, have been fully vetted and approved by the International Code Council during Group A Committee Action Hearings [1]. The content of this proposal will be heard by the International Code Council Committee Group B Committee Action Hearings from April 28, 2019 to May 8, 2019, in Albuquerque, New Mexico.

The International Code Council (ICC) Ad Hoc Committee on Tall Wood Buildings created seventeen (17) separate proposals regarding mass timber construction. During the last code change cycle, fourteen (14) of these proposals were reviewed and approved. During this year’s code change cycle, the remaining three (3) code change proposals will be considered and include:

- ADM35-19 – Fire protection of tall wood construction connectors.
- S100-19 – Specials inspection requirements for tall mass timber elements [2].
- S170-19 – Tall wood buildings connection fire resistance ratings.

This proposal uses the language from S100-19, as written by the International Code Council Tall Wood Building Ad-hoc committee. The original proposal is attached for reference [2]. This proposal is in addition to the fourteen (14) proposals addressed by the SEAC-DBDLC’s proposal and is an important element in the special inspections of tall wood buildings.

Bibliography:


Note: This section MUST include these items:
- **Purpose:** 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. to reflect physical, environmental and customary characteristics that are specific to the City and County of Denver)
- **Reasons:** Clearly justify the change to 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 that clearly shows why the current code does not reflect physical, environmental and customary characteristics that are specific to the City and County of Denver and explains how such proposal will improve the code.
- **Substantiation:** 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:** Include a bibliography when substantiating material is associated with the amendment proposal. The proponent shall make the substantiating materials available for review.

**Referenced Standards:**

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

**Impact:**

This proposal provides provisions which address the necessity for special inspections of tall wood buildings for the overall safety of tall wood buildings. This proposal does not impact the cost of design or construction of structures, and provides special inspection requirements which are consistent with requirements in the existing codes.

*Note:* Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:

- The effect of the proposal on the cost of construction: ☒ No Effect
- The effect of the proposal on the cost of design: ☒ No Effect
- Is the proposal more or less restrictive than the I-codes: ☒ Same

**Departmental Impact:** (To be filled out by CPD staff)

*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:

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