Code Amendment Proposal Form
For public amendments proposed to the 2021 editions of the International Codes

Instructions: Upload this form and all accompanying documentation. If you are submitting your proposal on a separate sheet, make sure it includes all information requested below.

All proposals must be received by **July 23, 2021**.

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**CONTACT INFORMATION**

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Organization or Representing Self: Mechanical Group Organization

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Signature:

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AMENDMENT PROPOSAL

Please use a separate form for each proposal.

1) Code(s) associated with this proposal. Please use acronym: IMC

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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
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<th>Code Name</th>
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</thead>
<tbody>
<tr>
<td>IBC</td>
<td>International Building Code</td>
<td>IRC</td>
<td>International Residential Code</td>
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<tr>
<td>IEBCC</td>
<td>International Existing Building Code</td>
<td>IMC</td>
<td>International Mechanical Code</td>
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<tr>
<td>IECC</td>
<td>International Energy Conservation Code</td>
<td>IPC</td>
<td>International Plumbing Code</td>
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<td>DGC</td>
<td>Denver Green Code</td>
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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.

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

**Section 303.8 of IMC**

**Proposal:**

*Section IMC 303.8 Elevator Shafts is replaced in its entirety as follows:*

**303.8 Heating, air conditioning, and ventilation equipment in electric and hydraulic elevator hoistways, machine spaces, machine rooms, control spaces, and control rooms.**

**303.8.1 Equipment allowed.** Only machinery and equipment used directly in conjunction with the elevator shall be permitted in hoistways, machine spaces, machine rooms control spaces and control rooms.

**303.8.2 The installation shall conform to ASME A17.1 as adopted by the State of Colorado.**
303.8.3 Safe and convenient access within the elevator machinery space, machine room, control space, or control room shall be provided to the air-conditioning equipment for servicing and maintaining.

303.8.4 Elevator hoistways, machine rooms, machinery spaces that contain the driving machine, and control rooms or spaces that contain the operation or motion controller for elevator operation shall be provided with an independent ventilation or air-conditioning system to protect against the overheating of the electrical equipment.

303.8.5 Temperature and Humidity. Hoistways, machinery spaces, machine rooms, control spaces, and control rooms shall be provided with natural or mechanical means to keep the ambient air temperature and humidity in the range specified by the elevator equipment manufacturer to ensure safe and normal operation of the elevator. The temperature and humidity range shall be permanently posted in the machine room, control room, control space, or, where specified by the equipment manufacturer, in the machinery space.

303.8.6 Pipes, ducts, tanks and refrigeration cassettes and refrigerant piping.

303.8.6.1 Steam, hot water, and refrigerant pipes shall be permitted to be installed in hoistways, machinery spaces, machine rooms, control spaces, and control rooms for the purpose of heating these areas only, subject to 303.8.3.1.1 through 303.8.3.1.5.

303.8.6.2 Heating pipes shall convey only low-pressure steam [15 psi (100kPa) or less] or hot water [212°F (100°C) or less.

303.8.6.3 All risers and return pipes shall be located outside the hoistway. When the machinery space, machine room, control space, or control room is located above the roof of the building, heating pipes for the machinery space, machine room, control space, or control room shall be permitted to be located in the hoistway between the top floor and the machinery space, machine room, control space, or control room.

303.8.6.4 Traps and shutoff valves shall be provided in accessible locations outside the hoistway.

303.8.6.5 Other pipes or ducts conveying gases, vapors, or liquid that are not used in connection with the operation of the elevator shall not be installed in any hoistway, machinery space, machine room, control space, or control room. Where a machinery space, machine room, control space, control room, or hoistway extends above the roof of a building, pipes shall be permitted from roof drains to the closest point where they can be diverted out of this space. Pipes shall be covered to prevent leakage or condensate from entering the machinery space, machine room, control space, or hoistway.

303.8.6.6 Where permitted and provided, pipes, drains, and tanks, or similar equipment that contains liquids, shall not encroach upon the required clearances in the hoistway, machinery space, machine room, control.

303.8.6.7 Refrigerant piping shall not be installed in the hoistway, machinery space, machine room, control space, or control room unless it is exclusively serving only the dedicated equipment in these spaces.

303.8.6.8 The total refrigerant quantity of the system shall be less than exceed amount allowed in IMC Table 1103.1 and for institutional occupancies, reduced to 50% per Section 1104.2.1 of IMC.

303.8.7 Ducts shall be permitted to be installed in the hoistway, machinery space, machine room, control space, or control room for the purpose of heating, cooling, ventilation and venting these areas only and shall not encroach upon the required clearances. Ducts shall serve no other areas and shall be connected only to equipment dedicated to serving these areas.

303.8.8 Air-conditioning equipment is permitted to be installed in machinery spaces, machine rooms, control spaces, or control rooms for the purpose of cooling these areas only, subject to 303.8.4.1 through 303.8.4.4.

303.8.8.1 The cassette or fan/evaporator of DX split systems shall be permitted to be located in the hoistway, machinery space, machine room, control space, or control room. The refrigerant system shall be dedicated and only serve the space in which it is installed. Condensate lines serving this equipment shall be routed outside of these spaces in the shortest practical routing.

303.8.8.2 Air-conditioning equipment shall not be located directly above elevator equipment.
308.8.3 The clear headroom below suspended air-conditioning equipment shall conform to ASME A17-1 2.7.4
308.8.4 Means shall be provided to collect and drain condensation water from these spaces.
Condensation drains shall not be located directly above elevator equipment. Drains connected directly to sewers shall not be installed.
303.8.9 Listed/certified electric heaters shall be permitted in the hoistway, machinery space, machine room, control space, or control room.

Supporting Information:
This amendment aligns ASME A17.1 and IBC 3005.2. The Denver Fire Conveyance team and the State of Colorado utilizes the ASME A17.1.

Referenced Standards:
ASME A17.1

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

Impact:
Should help limit confusion from the design community to align Denver’s requirements with the ASME A17.1 standard adopted by the State of Colorado.

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: ☒ Increase ☐ Reduce ☐ No Effect
- The effect of the proposal on the cost of design: ☒ Increase ☐ Reduce ☐ No Effect
- Is the proposal more or less restrictive than the I-codes: ☒ More ☐ Less ☐ 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: ☐ Increase ☐ Reduce ☐ No Effect
- The effect of the proposal on the cost of enforcement/inspection: ☐ Increase ☐ Reduce ☐ No Effect