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.

CONTACT INFORMATION
Name:
Date:
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Organization or Representing Self:

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AMENDMENT PROPOSAL

Please use a separate form for each proposal.

1) Code(s) associated with this proposal. Please use acronym: IECC
   If you submitted a separate coordination change to another code, please indicate which code:

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<thead>
<tr>
<th>Acronym</th>
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<td>(e.g., DBC-IBC, DBC-IEBC)</td>
<td>IRC</td>
<td>International Residential Code</td>
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<td>IBC</td>
<td>International Building Code</td>
<td>IMC</td>
<td>International Mechanical Code</td>
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<td>IEBC</td>
<td>International Existing Building Code</td>
<td>IPC</td>
<td>International Plumbing 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, STRIKETHROUGH 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:

- C403.2 System design (Modify the section)
- C403.2.4 Space heating equipment (Add new section)
- C403.4.1.1 Heat pump supplementary heat (Modify the section)
Proposal:

Add definitions as follows:

**EMERGENCY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required life safety, fire alarm, detection and ventilation systems in the event of a failure of the primary power. Emergency power systems are required for electrical loads where interruption of the primary power could result in loss of human life or serious injuries.

**STANDBY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required building, hazardous materials or ventilation systems in the event of a failure of the primary power. Standby power systems are required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.

Modify the section as follows:

**C403.2 System design.** Mechanical systems shall be designed to comply with Sections C403.2.1 through C403.2.3 C403.2.4. Where elements of a buildings mechanical systems are addressed in Sections C403 through C403.14, such elements shall comply with the applicable provisions of those sections.

Add new section as follows:

**Effective January 1st, 2024:** Permit applications submitted to the Agency after January 1st, 2024, shall comply with section C403.2.4.

**C403.2.4 Space heating equipment.** Fossil-fuel warm air furnaces and electric resistance space heating equipment shall not be permitted to be used for space heating.

**Exceptions:**

1. Where it has been demonstrated to the code official that the building is required by an applicable law or regulation to provide space heating with an emergency power system or a standby power system.
2. Make-up air systems where energy recovery ventilation is prohibited by the IMC.
3. Electric resistance in buildings that comply with Section C407 or Appendix TE.
4. Electric resistance heat used for supplementary heat in accordance with Section C403.4.1.1.
5. Up to 5 W of electric resistance space heating per square foot of conditioned floor area in the building, not including supplementary heat.
6. Electric resistance heating elements integrated into heat pump equipment.
7. Replacement gas-fired furnace equipment that complies with section C503.3.3.

Modify the section as follows:

**C403.4.1.1 Heat pump supplementary heat.** Heat pumps having supplementary electric resistance heat systems, shall have controls that limit supplementary heat operation to only those times when one of the following applies:

1. The vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting.
2. The heat pump is operating in defrost mode.
3. The vapor compression cycle malfunctions.
4. The thermostat malfunctions.

Supporting Information:

Purpose:

To align the requirements for electrification of space conditioning for new construction in 2022 with those set for existing buildings for 2025 in Energize Denver.

Energize Denver Reference:
(1) When a gas-fired warm air furnace located outside a building is proposed to be replaced with a new gas-fired warm air furnace, the new gas-fired warm air furnace may only provide supplementary heat, and the primary heating system shall be electric.

(2) When a unitary air conditioner or condensing unit serving a heated space is proposed to be replaced, the unit shall include electric equipment capable of providing space heating, and any other heating equipment serving the space shall be reconfigured to provide only supplementary heat.

**Bibliography:**
Pragmatists for Clean Air, 2021, https://pragmatistsforcleanair.org/progress

**Referenced Standards:**
N/A

**Impact:**

**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