

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

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Organization or Representing Self: Group14 Engineering

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Signature: Anna McCullough

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: _____

<u>Acronym</u>	<u>Code Name</u>	<u>Acronym</u>	<u>Code Name</u>
DBC-AP	Denver Building Code—Administrative Provisions	IFC	International Fire Code
DBC-xxx	Denver Building Code—xxx (code) amendments (e.g., DBC-IBC, DBC-IEBC)	IFGC	International Fuel Gas Code
IBC	International Building Code	IRC	International Residential Code
IEBC	International Existing Building Code	IMC	International Mechanical Code
IECC	International Energy Conservation Code	IPC	International Plumbing Code
		DGC	Denver Green Code

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:

2021 IMC: Section 401.2

Proposal:

Revise as follows:

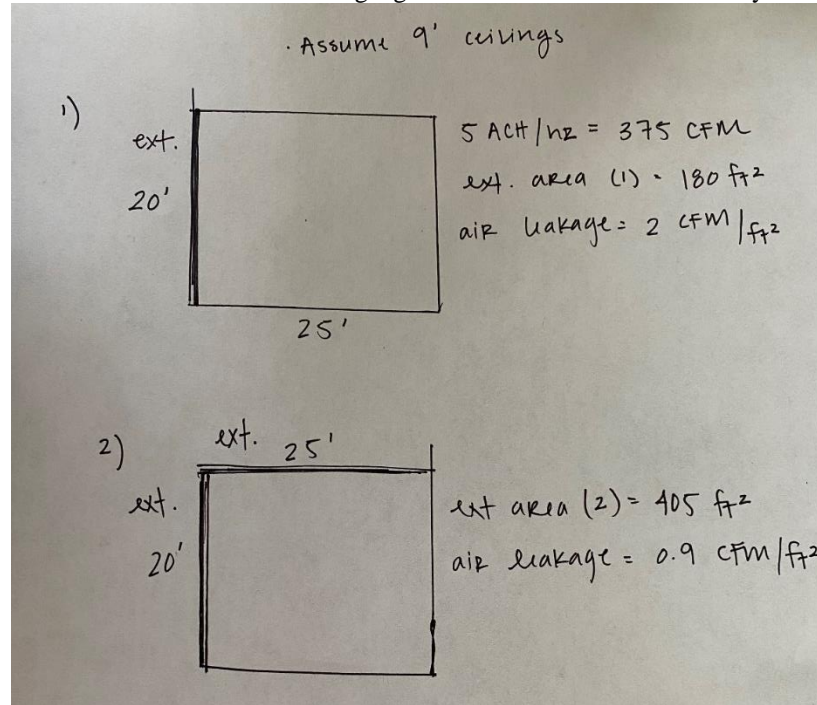
401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Where the air infiltration rate in a dwelling unit is less than ~~5 air changes per hour~~ **0.3 cfm/ft²** when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section ~~R402.4.1.2~~ **C402.5.2** of the *International Energy Conservation Code*, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403.

Supporting Information:

Purpose: The purpose of this proposal is to clarify a discrepancy between the 2021 IMC reference to the residential section of the 2021 IECC for residential units which are commercial spaces under the amendments specific to the City and County of Denver.

Reasons: Under the 2021 IMC, mechanical ventilation is only required in residential units if the air leakage in the unit is less than 5 air changes per hour, as seen in the residential portion of the 2021 IECC. Denver has amended the 2021 IECC to make residential units commercial spaces. This section of the 2021 IMC, therefore, should reference section C405.2 of the IECC, which requires air leakage rates less than 0.3 CFM/ft² of building thermal envelope area. This leakage rate will, on average, provide less than 5 air changes per hour of infiltration. This will require mechanical ventilation in residential units. To simplify this reference, Section 401.2 of the 2021 IMC should be amended to match the language in Section C402.5.2 of the IECC.

Substantiation: The current language of the 2021 IMC states that any residential unit with less than 5 air changes per hour of



air infiltration is required to have mechanical ventilation. Under the 2021 IECC's air leakage testing requirements, residential units are to have less than 0.3 CFM/ft² of air leakage. In the example to the left, we see that a 500 ft² unit with 9-foot ceilings and 5 air changes per hour of air infiltration will not meet Denver's air barrier testing requirements for corner units (example 2) or typical units (example 1). Furthermore, Section 401.2 of the IMC references the residential section of the IECC, however the IECC has been amended in Denver to make multifamily buildings comply with the commercial energy code. The language in the 2021 IMC should be amended to better match the language in the 2021 IECC so that mechanical ventilation is provided in accordance with the air infiltration rates that are required under the commercial code.

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