

R402.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, an *approved* third party independent from the installer shall inspect both air barrier and insulation installation criteria. Heated, attached private garage space and heated, detached private garage space shall be thermally isolated from all other habitable, *conditioned spaces* in accordance with Sections R402.2.12 and R402.3.5, as applicable.

During testing:

- ~~1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.~~
- ~~2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.~~
- ~~3. Interior doors, where installed at the time of the test, shall be open.~~
- ~~4. Exterior or interior terminations for continuous ventilation systems shall be sealed.~~
- ~~5. Heating and cooling systems, where installed at the time of the test, shall be turned off.~~
- ~~6. Supply and return registers, where installed at the time of the test, shall be fully open.~~

Exception:

2. When testing individual *dwelling units*, an air leakage rate not exceeding 0.30 cubic feet per minute per square foot [0.008 m³/(s × m²)] of the dwelling unit enclosure area, tested in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pa), shall be an accepted alternative permitted in all climate zones for:

1. Attached one- and two-family *dwelling units* and *townhouses*.
2. Buildings or *dwelling units* that are 1000 square feet or smaller.
3. Rx occupancies built in accordance with Section 429 of the *International Building Code*.
 - ~~1. Attached single and multiple family building *dwelling units*.~~
 - ~~2. Buildings or *dwelling units* that are 1,500 square feet (139.4 m²) or smaller.~~

Mechanical ventilation shall be provided in accordance with Section M1505 of the *International Residential Code* or Section 403.3.2 of the *International Mechanical Code*, as applicable, or with other *approved* means of ventilation.

~~**R402.4.1.3 Leakage rate.** When complying with Section R401.2.1, the building or dwelling unit shall have an air leakage rate not exceeding 5.0 air changes per hour in Climate Zones 0, 1 and 2, and 3.0 air changes per hour in Climate Zones 3 through 8, when tested in accordance with Section R402.4.1.2.~~

Supporting Information (Required):

All proposals must include a written explanation and justification as to how they address physical, environmental, and/or customary characteristics that are specific to the City and County of Denver. The following questions must be answered for a proposal to be considered.

- Purpose: What does your proposal achieve?
- Reason: Why is your proposal necessary?
- Substantiation: Why is your proposal valid? (i.e. technical justification)

This proposal is put forward to ensure that there is consistency of language between the City of Denver's 2018 IECC amendment and newly added language in the 2021 IECC. It ensures that confusion that was implemented in the 2021 IECC has been removed. This confusion was related to setting a backstop air leakage rate for the performance compliance options without clearly stating that that was the rationale. Many interpreted the backstop of 5.0 ACH as a relaxing of the climate zone 3 ACH requirement that has been in the code since the 2012 IECC. The restructuring of this section brings this section back into alignment with the needs of the City of Denver.

Lastly the proposal sets the baseline for which the Denver Green Code can improve upon in order to meet the Cities 2030 goals. The City of Denver currently has exceptions for the air leakage requirement of 3 ACH for town homes and ADU's. This proposal addresses those building types in exception #2 by using the CFM/sqft of shell metric which

was added in Denver's amendments during the 2018 IECC. This metric is not volumetric which enables better quantification of air leakage; However, it also is not a one-to-one comparison with the ACH metric. The 0.30 CFM/sqft of shell area is a good starting point for town houses, duplexes and ADU's and can be reduced in future code cycles and in the Denver Green Code. Exception #1 has been modified to ensure that heated garages are not considered to be inside the building thermal envelope. The first part of this exception was stricken due to its not being understandable.

Bibliography and Access to Materials (as needed when substantiating material is associated with the amendment proposal):

Other Regulations Proposed to be Affected

***For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory Denver codes and/or regulations, only.**

Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.

Referenced Standards:

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

Impact:

How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

Cost of construction: ___ Increase ___ Decrease x No Impact

Cost of design: ___ Increase ___ Decrease x No Impact

Restrictiveness: ___ Increase ___ Decrease x No Impact

Departmental Impact (City use only):

This amendment proposal increases/decreases/is neutral to the cost of plans review.

This amendment increases/decreases/is neutral to the cost of inspections.