

**CHAPTER 4
COMMERCIAL ENERGY EFFICIENCY**

**SECTION C402.5.1.2
2021 Edition
IECC Interpretation 06-22
Issued: 6-6-2022
EC_21_06_22**

C402.5.1.2 Air barrier compliance.

A continuous air barrier for the opaque building envelope shall comply with the following:

1. Buildings or portions of buildings, including Group R and I occupancies, shall meet the provisions of Section C402.5.2.
Exception: Buildings in Climate Zones 2B, 3C and 5C.
2. Buildings or portions of buildings other than Group R and I occupancies shall meet the provisions of Section C402.5.3.
Exceptions:
 1. Buildings in Climate Zones 2B, 3B, 3C and 5C.
 2. Buildings larger than 5,000 square feet (464.5 m²) floor area in Climate Zones 0B, 1, 2A, 4B and 4C.
 3. Buildings between 5,000 square feet (464.5 m²) and 50,000 square feet (4645 m²) floor area in Climate Zones 0A, 3A and 5B.
3. Buildings or portions of buildings that do not complete air barrier testing shall meet the provisions of Section C402.5.1.3 or C402.5.1.4 in addition to Section C402.5.1.5.

REFERENCED SECTIONS:

**SECTION C402
BUILDING ENVELOPE REQUIREMENTS**

C402.5 Air leakage – thermal envelope.

The *building thermal envelope* shall comply with Sections C402.5.1 through Section C402.5.11.1, or the *building thermal envelope* shall be tested in accordance with Section C402.5.2 or C402.5.3. Where compliance is based on such testing, the building shall also comply with Sections C402.5.7, C402.5.8 and C402.5.9.

C402.5.1.5 Building envelope performance verification.

The installation of the continuous air barrier shall be verified by the *code official*, a *registered design professional* or *approved agency* in accordance with the following:

1. A review of the construction documents and other supporting data shall be conducted to assess compliance with the requirements in Section C402.5.1.
2. Inspection of continuous air barrier components and assemblies shall be conducted during construction while the air barrier is still accessible for inspection and repair to verify compliance with the requirements of Sections C402.5.1.3 and C402.5.1.4.
3. A final commissioning report shall be provided for inspections completed by the *registered design professional* or *approved agency*. The commissioning report shall be provided to the building owner or owner's authorized agent and the *code official*. The report shall identify deficiencies found during the review of the construction documents and inspection and details of corrective measures taken.



Q: Are buildings that are not subject to the testing requirements of either Item 1 or Item 2 of Section C402.5.1.2 by the applicable exception(s) required to comply with Item 3 of Section C402.5.1.2?

A: Yes. Buildings that are not tested in accordance with Section C402.5.2 or Section C402.5.3 are required to comply with the requirements of Section C402.5.1.3 or Section C402.5.1.4 in addition to Section C402.5.1.5 as indicated in Item 3 of Section C402.5.1.2.

Q: Is Item 3 of Section C402.5.1.2 an alternate compliance option for buildings required to be tested per Item 1 or Item 2 of Section C402.5.1.2?

A: No. Item 3 is not an option that is applicable to any building of any occupancy type. Items 1 and 2 of Section C402.5.1.2 are specific to occupancy classification. Item 1 requires Group R and I occupancies to comply with Section C402.5.2 while Item 2 requires other than Group R and I occupancies to comply with Section C402.5.3. Therefore, in order to comply with the provisions of Section C402.5.1.2, those buildings that are not exempted in Item 1 and Item 2 of Section C402.5.1.2 must comply with the applicable testing provisions of Section C402.5.2 or Section C402.5.3.

Those buildings that are exempted in Items 1 and 2 are not prohibited from air barrier testing. Therefore, if a building is tested even though not required to be tested by an exception(s) of either Item 1 or Item 2 of Section C402.5.1.2, such a building is not required to comply with Item 3 of Section C402.5.1.2.

Q: Are buildings or the portions of buildings that are exempted from the testing requirements of Section C402.5.1.2 via compliance with an applicable exception to either Item 1 or Item 2 of Section C402.5.1.2 required to comply with all three items of Section C402.5.1.5?

A: Yes. Compliance with all three items of Section C402.5.1.5 must be demonstrated including a review of the construction documents and supporting data, an inspection of continuous air barrier components and assemblies and a final commissioning report. Buildings exempted from the testing requirements of either Item 1 or Item 2 of Section C402.5.1.2 are still subject to the provisions of Item 3 of Section C402.5.1.2 which specifically requires compliance with Section C402.5.1.5.

Section C402.5 provides two main options to establish that there is limited air leakage in the building's thermal envelope. Section C402.5 requires the building thermal envelope to comply with Sections C402.5.1 through C402.5.11.1 **or** be tested in accordance with Section C402.5.2 or C402.5.3. Therefore, if a building is not tested in accordance with Section C402.5.2 or C402.5.3, the building thermal envelope must still comply with Sections C402.5.1 through C402.5.11.1 which includes Section C402.5.1.5 in its entirety.