

IECC 2021

Stretch Energy Code

Flow charts for Chapter 5 – Existing Buildings

DEFINITIONS

- **Residential Building** – (IECC) For this code, includes detached one- and two-family dwellings and townhouses as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane.
- **Dwelling Unit** – (IECC) *A single unit* providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.
- **Addition** – (IECC) An extension or increase in the conditioned space floor area, number of stories or height of a building or structure.
- **Alteration** – (IECC) Any construction, retrofit or renovation to an existing structure other than repair or addition. Also, a change in a building...system that involves an extension, addition or change to the arrangement, type or purpose of the original installation.
- **Repair** – (IECC) The reconstruction or renewal of any part of an existing building for the purpose of its *maintenance or to correct damage*.

DEFINITIONS

- **Alteration Level 3** – (IEBC) 505.1 Scope. Level 3 alterations apply where the *work area* exceeds 50 percent of the building area.
- **Work Area** - (IEBC) That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.
- **Extensive Alteration** – (IRC) AJ503.1 Extensive Alterations. Where the total area of all of the work areas included in an alteration exceeds *50 percent* of the area of the dwelling unit, the work shall be considered to be a reconstruction and shall comply with the requirements of these provisions for reconstruction work.
- **Work Area** – (IRC Appendix J) That portion of a building affected by any renovation, alteration or *reconstruction* work as initially intended by the owner as indicated as such in the permit. Work area excludes...
- **Reconstruction** – (IRC Appendix J) The reconfiguration of a space that affects an exit, a renovation or alteration where the work area is not permitted to be occupied because existing means-of-egress and fire protection systems, or their equivalent, are not in place or continuously maintained; or there are *extensive alterations* as defined in Section AJ501.3.
- **Conditioned Space** – (IECC) An area, room or space that is enclosed within the building thermal envelope and that is directly or indirectly heated or cooled. Spaces indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from conditioned spaces by uninsulated walls, floors or ceilings, or where they contain insulated ducts, piping or other sources or heating or cooling.

R502 Additions

Change in Space
Conditioning
<1000sf

The addition alone
complies with prescriptive
or ResCheck
Exempt from blower door
test

Addition <1000sf

The addition alone
complies with prescriptive
or ResCheck
Exempt from blower door
test

Addition of >1000sf or
Addition >100% of existing
Including
Change of space
conditioning >1000sf or
100% of existing

Entire Dwelling Unit
complies with HERS
ratings in Table T406.5

R503 Alterations

Prior to taking the 1000sf into consideration it must be determined if it is a level 3 alteration

Other than Level 3 Alteration
(<50% work area)

Modified components shall comply with current code for new construction (see exemptions 1-6)

Limited compliance with prescriptive (ie. Fill exposed cavity) or ResCheck paths

Level 3 Alteration per IEBC definition (use IBC)
Or
IRC definition for Extensive Alteration (AJ501.3) (Use IRC)

Level 3 Criteria
(work area >50%)
Work area <1000sf

Limited compliance with prescriptive (ie. Fill exposed cavity) or ResCheck paths

Level 3 criteria
(Work area >50%)
Work area >1000sf

Dwelling unit to comply with HERS rating in Table R406.5

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graph TD; A[R504 Repair] --> B[Repairs and maintenance items]; B --> C[Complies with code at the time of installation];
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R504
Repair

Repairs and
maintenance
items

Complies with
code at the time
of installation

R505
**Change of
occupancy or use**

Any space that is
converted to a dwelling
unit or portion thereof
from another use or
occupancy shall comply
with this code.

Addition to existing
dwelling – compliance
with R502 Additions

New Dwelling unit-
Compliance with
chapter 4 for new
dwelling unit