

2024 IECC

NBI has submitted proposals into the ICC process to advance the 2024 IECC. The proposed amendments cover a wide range of measures and improve the code by adding additional efficiency, clarifying requirements, and creating greater flexibility for code users and local jurisdictions. Learn more at newbuildings.org/code_policy/2024-iecc-national-model-energy-code-base-codes.

Code Change Title: Additional Efficiency Packages for Existing Buildings **REPI-144-21**

Summary: This proposal adds a requirement that large additions and large alterations include a package option from R408.

Revise text as follows:

R502.3 Prescriptive compliance. Additions shall comply with Sections R502.3.1 through R502.3.4 ~~R502.3.5~~.

R502.3.5 Additional Efficiency Packages. *Additions shall comply with Section R506. Alterations to the existing building that are not part of the addition, but permitted with the addition, may be used to achieve this requirement.*

Exceptions:

1. Additions that increase the building's total conditioned floor area by less than 25 percent.
2. Additions that do not include the addition or replacement of equipment covered in Sections R403.5 or R403.7.
3. Additions that do not contain conditioned space.
4. Where the addition alone or the existing building and addition together comply with Section R405 or R406.

Revise text as follows:

R503.1 General. Alterations to any building or structure shall comply with the requirements of the code for new construction, without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall be such that the existing building or structure is not less conforming to the provisions of this code than the existing building or structure was prior to the alteration.

Alterations shall not create an unsafe or hazardous condition or overload existing building systems. Alterations shall be such that the existing building or structure does not use more energy than the existing building or structure prior to the alteration. Alterations to existing buildings shall comply with Sections R503.1.1 through ~~R503.1.4~~ R503.1.5.

Add new text as follows:

R503.1.5 Additional Efficiency Packages. *Alterations shall comply with Section R506.*

Exceptions:

1. *Alterations only requiring compliance with one of Sections R402.1, R403.5, or R403.7.*
2. *Alterations that are part of an addition complying with section R502.3.5.*
3. *Alterations that comply with Section R405 or R406.*

Add new text as follows:

SECTION R506

ADDITIONAL EFFICIENCY PACKAGE OPTIONS

C506.1 General. Where required in Section R502 or R503, the *building* shall comply with one or more additional efficiency package options in accordance with the following:

1. Enhanced envelope performance in accordance with Section R408.2.1.
2. More efficient HVAC equipment performance in accordance with R408.2.2
3. Reduced energy use in service water-heating in accordance with R408.2.3
4. More efficient duct thermal distribution system in accordance with R408.2.4
5. Improved air sealing and efficient ventilation system in accordance with R408.2.5

Section R408 requires homes to include an additional efficiency option to achieve greater efficiency. There is one significant gap in R408, it does not apply to additions or alterations. The exclusion from R408 is a significant loophole. Additions and substantial alterations are prime opportunities for achieving greater energy efficiency utilizing R408. This proposal creates a framework to apply R408 to large additions and substantial alterations.