

Study Session

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2015 IECC Chapters 1 and 5 Scope, Administration and Existing Buildings

OBJECTIVE: To obtain an understanding of the administrative provisions of the *International Energy Conservation Code*, including the scope and purpose of the code, types of uses and projects covered under the provisions of the code, materials, systems and equipment identification requirements, submission of construction documents, plan review and inspection procedures.

REFERENCE: Chapters 1 and 5, 2015 *International Energy Conservation Code*

- KEY POINTS:**
- What is the purpose and scope of the *International Energy Conservation Code*?
 - Which occupancies are considered under the residential provisions of the IECC?
 - Which occupancies are considered under the commercial provisions of the IECC?
 - How does the code apply to unconditioned parts of the building?
 - Which types of projects are exempt from compliance with the IECC?
 - When must compliance be demonstrated for an addition, alteration or repair?
 - How must compliance be shown for a mixed-occupancy building?
 - Can an above-code program be used to demonstrate compliance with the IECC?
 - What information is required to be in the construction documents?
 - Which inspections are required to be conducted? When should they be conducted?

Topic: Intent

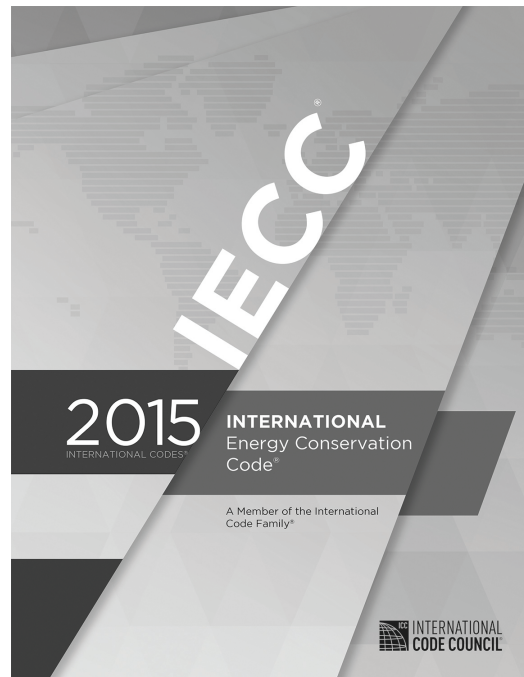
Category: Administration

Reference: IECC 101.3

Subject: General Requirements

Code Text: The International Energy Conservation Code *shall regulate the design and construction of buildings for the effective use and conservation of energy over the useful life of each building. The International Energy Conservation Code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. The International Energy Conservation Code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.*

Discussion and Commentary: The IECC enables effective use of energy in new building construction, as well as in alterations and additions to existing buildings, by regulating the building envelope, mechanical systems, electrical systems and service water heating systems. The IECC also provides flexibility through Section 102, Alternative Materials—Method of Construction, Design or Insulating Systems, which allows software approaches such as the U.S. Department of Energy’s REScheck and COMcheck software.



The IECC contains provisions for the use of new technology, such as solar modules and ground-source heating systems.

Topic: Scope

Category: Administration

Reference: IECC 101.2

Subject: General Requirements

Code Text: The International Energy Conservation Code *applies to residential and commercial buildings and the buildings' sites and associated systems and equipment.*

Discussion and Commentary: The IECC is applicable to residential and commercial buildings regulated under the scope of the *International Residential Code*® (IRC®) and the *International Building Code*® (IBC®). A residential building as defined by the *International Energy Conservation Code* includes detached one- and two-family dwellings and multiple single-family dwellings (townhouses) as regulated by the IRC; and Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane. A commercial building is simply defined as any building that is not included in the definition of residential buildings and includes all other buildings for the purpose of the code. These definitions are included in Chapter 2 for both commercial buildings and residential buildings.



Residential Building



Commercial Building

Commercial buildings are generally considered to house office, warehouse, manufacturing, retail and similar uses. By definition, however, an apartment building would also be considered a commercial building for purposes of compliance with the IECC if it were four or more stories in height above grade plane.

Code Text: *Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code.*

Alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of this code than the existing building or structure was prior to the alteration. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. See the seven exceptions identifying alterations not required to comply with the IECC provided energy use is not increased.

Discussion and Commentary: Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter. Routine maintenance, ordinary repairs exempt from permit and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section. See seven exceptions identifying work not required to comply with the IECC provided energy use is not increased.

Any alteration to the energy system within a building will evoke the application of the IECC. Examples of alterations include adding more glazing to the building envelope, changing out a lighting system or updating the HVAC system. Adding conditioned space to the building is also regulated by the IECC. The IECC offers exceptions based on the type of alteration, as long as the alteration does not increase the overall energy use of the building.

