

2015 International Energy Conservation Code Overview of Changes

The International Energy Conservation Code (IECC) establishes regulations for the design of energy-efficient residential and commercial buildings and structures, as well as portions of factory and industrial occupancies designed for human comfort.

The State of Texas is divided into climate zones which are used in determining applicable requirements for residential and commercial energy efficiency. Insulation, window and skylight requirements for the thermal envelope for both residential and commercial buildings are based on the climate zones. The performance criteria for compliance with residential energy efficiency requirements using simulated energy analysis are also addressed.

New in the 2015 Edition

C403.3 Economizers. Exemption eligible unit size has increased from 33,000 Btu/h to 54,000 Btu/h.

R401.2 Compliance. Performance provisions have been added as a means of compliance.

R401.3 Certificate. The code now requires the permanent energy certificate to be placed on a wall in proximity to the furnace, in a utility room, or in another approved location inside the building.

R402.2.4 Access Hatches and Doors. Vertical doors that access unconditioned attics and crawl spaces do not require an R-value to match the required wall insulation.

2015 International Energy Conservation Code Proposed Amendments

Note: An asterisk at the beginning of a section identifies a new amendment with the 2015 code edition.

- G. The International Energy Conservation Code adopted by reference in Section 101.4.6, 2012 International Building Code, is hereby amended as follows:
1. Section C&R106.1 (Referenced codes and standards) is amended by adding the following to said section:

“Any reference to the ICC Electrical Code shall mean the National Electrical Code, as adopted and amended by the City of College Station.”
 2. Section C&R109 (Board of Appeals) is amended by deleting the section in its entirety.
 3. Section C402.5 (Air leakage-thermal envelope (Mandatory)) is amended by adding an exception:

“**Exception:** The air leakage – thermal envelope shall be considered acceptable when the items listed in Table 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 and approve the thermal envelope and insulation installation.”
 4. *Table C403.3 (2) (Equipment Efficiency Performance Exception for Economizers) is amended by adding 2A directly beside 2B under “Climate Zones” in said table.

(Reason: This allows for an increase in equipment efficiency in lieu of economizers.)
 5. Section R401.3 (Certificate) is amended by deleting the existing text from said section:

“The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list “gas-fired unvented room heater,” “electric furnace” or “baseboard electric heater.” as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.”
 6. Section R402.4.1.2 (Testing) is amended by adding an exception:

“**Exception:** Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table 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 and approve the air barrier and insulation installation.”
 7. Section R403.3.1 (Insulation (Prescriptive)) is amended by adding the following to the end of the section:

“Supply and return air ducts in unconditioned spaces may have an insulation R-Value of 6 when installed in conjunction with an air conditioner having a minimum SEER rating of 14.”
 8. Section R403.3.3 (Duct Testing (Mandatory)) is amended by adding an additional exception below said section:

Exception: 2. Duct tightness shall be considered acceptable when the items listed below, applicable to the method of construction, are field verified:

Connections:

- a. Seal core to collar with UL listed mastic or at least 2 wraps of UL 181 listed tape .
- b. Secure connection with mechanical clamp placed over the core and tape.
- c. Pull jacket and insulation back over core. Use a mechanical clamp, two wraps of UL 181 listed tape or UL listed mastic to secure insulation.

Splices

- a. Butt two cores together on a 4” length metal sleeve.
- b. Secure core and sleeve with UL listed mastic or two wraps of UL 181 listed tape
- c. Secure connection with 2 clamps placed over the taped core ends.
- d. Pull jacket and insulation back over core. Use two wraps of UL 181 listed tape or UL listed mastic to secure insulation.

9. Section R403 (Systems) is amended by adding R403.13 to read as follows:

“403.13 Heating equipment. Electrical resistance heat may be used as the primary source of heating for residential use not exceeding five hundred (500) square feet in area.”

10. *Section R406.5 (Verification by approved agency) is amended by replacing the existing text with:

“The Code Official may require verification of compliance with Section R406 be completed by an approved third party.”

(Reason: This change will provide flexibility in sources when requesting supporting documentation.)