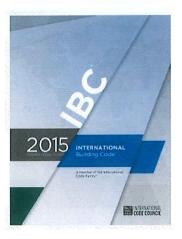
2015 INTERNATIONAL BUILDING CODE SIGNIFICANT CHANGES



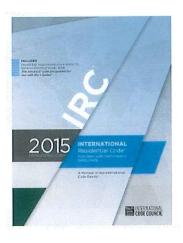
The International Building Code (IBC) covers all types of buildings except one- and two-family dwellings. It serves as a comprehensive manual for constructing safe, efficient, accessible buildings that will be a lasting part of our environment. Many of the changes in the 2015 IBC, as with the other 2015 I-codes, consolidate and clarify existing requirements to be more user-friendly.

SIGNIFICANT CODE CHANGES:

- > Private garages are limited to 1000 square feet. [406.3.1]
- > Storm shelters are required in new schools and emergency facilities, and are regulated by the ICC 500 Standard. [423]
- > Smoke alarms must be separated from cooking appliances and bathrooms. [907.2.11.3]
- > Carbon monoxide detectors are required in Group E (school) occupancies. [915]
- There are new requirements for structural design of rooftop solar panels, both for the roof itself and the panels and supporting framework. [1603.1.8 & 1607.12.5]
- > Roof load requirements address rooftop vegetation. [1607.12.3]
- > Public toilet facilities are not required in small quick-service tenant spaces. [2902.3]
- Chapter 34, Existing Structures, has been deleted and replaced with a stand-alone code, International Existing Building Code (IEBC), which the City is seeking to adopt.

- > Chapter 11, Accessibility, is amended to specifically reference the Architectural Barriers Division of the Texas Department of Licensing and Regulation as a compliance path.
- ➤ Individual replacement shingles must comply with the material standards of code. [1511.1]
- ➤ The amendments to Section 1704.2 add details regarding the qualifications of Special Inspectors and Fabricators.
- ➤ The amendment to Section 2902.1 allows the Building Official some flexibility in interpreting the actual occupant load of a space with respect to required restrooms.

2015 INTERNATIONAL RESIDENTIAL CODE SIGNIFICANT CHANGES



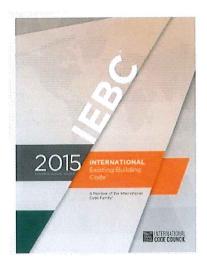
The International Residential Code (IRC) covers minimum standards for one- and two-family low-rise residential structures. It includes planning for minimum living conditions, structural design, energy efficiency, and life safety provisions. The IRC also contains mechanical, electrical, plumbing, and fuel gas provisions that are specific to residential construction.

SIGNIFICANT CODE CHANGES:

- ➤ Wind speed maps have been added, and wind speed values have increased. [Figure R301.2(4) & Table R602.10.3(1)]
- > Expanded sunroom regulations address specific construction types and uses. [R301.2.1.1.1]
- > The minimum ceiling height for bathrooms, toilet rooms, and laundry rooms has been reduced to 6 feet, 8 inches. [R305.1]
- Carbon monoxide detectors are required to be hardwired in new construction. Combination smoke and carbon monoxide alarms are allowed to satisfy both requirements. Exterior work does not trigger the requirement for smoke and carbon monoxide alarms. [R314 & R315.5]
- ➤ There are new specifications for attaching exterior cladding over foam sheathing. [R703.15-R703.17]
- > Allowed spans have been reduced for Southern Pine. [Tables R802.4]
- > There are new requirements for rooftop photovoltaic systems [R905.16 & R907]

- > Chapter 11 Energy has been replaced with the International Energy Conservation Code.
- ➤ Chapter 45 Residential Swimming Pools has been added, summarizing the pool barrier requirements of the International Swimming Pool and Spa Code (not adopted).

2015 INTERNATIONAL EXISTING BUILDING CODE SIGNIFICANT CHANGES

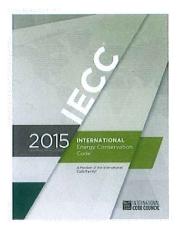


The International Existing Building Code (IEBC) is new to the City of Coppell, although the code has existed since 2003. Through the 2012 code cycle, existing buildings were addressed in Chapter 34 of the International Building Code. In the 2015 edition, Chapter 34 of the IBC has been deleted in its entirety and replaced with a reference to the International Existing Building Code. The City is seeking to adopt the 2015 International Existing Building Code as a necessary companion to the 2015 International Building Code. The overall technical content of the 2015 International Existing Building Code is fundamentally similar to Chapter 34 of the 2012 IBC. The key difference is that the IEBC provides greater detail and flexibility.

SIGNIFICANT CHANGES – 2012 IBC CHAPTER 34 TO 2015 IEBC:

- ➤ The IEBC offers three compliance methods for additions, repairs, alterations, changes of occupancy, and relocations of existing buildings:
 - Prescriptive Compliance Method [Chapter 4], which most closely resembles
 Chapter 34 of the 2012 IBC
 - Work Area Compliance Method [Chapters 5-13]
 - Performance Compliance Method [Chapter 14]
- Even when there is no change in the occupancy classification in accordance with the IBC, a "change in the character of use" of an existing space may still trigger additional requirements by code. [407.1.1]
- Chapter 5 of the IEBC defines the following work classifications: Repairs, Alteration Level 1 (fixtures and finishes), Alteration Level 2 (reconfiguration/addition), Alteration Level 3 (exceeds 50% of building), Change of Occupancy, Additions, Historic Buildings, and Relocated Buildings.
- ➤ Historic Building criteria is expanded into its own chapter. [Chapter 12]

2015 INTERNATIONAL ENERGY CONSERVATION CODE SIGNIFICANT CHANGES



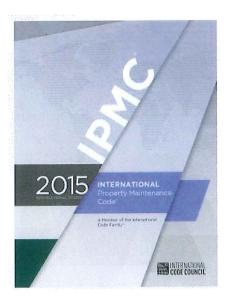
The International Energy Conservation Code regulates the design and construction of buildings for the use and conservation of energy. The Texas state legislature passed HB 1736 in 2015, which adopted the 2015 IRC (Chapter 11 referencing the 2015 IECC) for new homes as the statewide minimum for residential energy codes, effective on September 1, 2016. Because the 2015 energy provisions are mandatory in Texas, the City has little leeway to amend the code, and deferred mostly to the North Central Texas Council of Governments for recommended amendments.

SIGNIFICANT CODE CHANGES:

- ➤ Additional required energy inspections are listed, such as foundation insulation, plumbing, electrical, and mechanical systems. [C104.2 &R104.2]
- Over 50 new technical definitions have been added. [C202 & R202]
- ➤ The geographic border line designating Warm-Humid locations moved, affecting 14 Texas counties (not Dallas). [Figures C301.1 & R301.1]
- ➤ The minimum R-value increased for commercial roof insulation and residential wall insulation. [Tables C402.1.3 & R402.1.2]
- New regulations reconcile the ambient fresh air intake requirements for fuel-burning appliances with the air-sealing requirements for the building envelope.
- ➤ HVAC efficiency ratings and lighting power restrictions have increased.
- ➤ New regulations have been added for commercial walk-in coolers and freezers, refrigerated warehouses, and refrigerated display cases. [403.2.14-17 & C403.5]
- ➤ The allowable rate of air changes per hour is reduced from five to three for residential buildings. [R402.4.1.2]
- ➤ The Energy Rating Index (ERI) is a new compliance alternative. [R406]

- > Section R102.1.2 Alternative Compliance has been further amended to clarify that all dwelling units must be tested for air and duct leakage, regardless of compliance method.
- > The qualifications and objectivity of third-party testing agencies have been clarified.

2015 INTERNATIONAL PROPERTY MAINTENANCE CODE SIGNIFICANT CHANGES



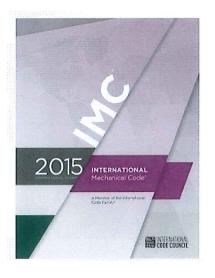
The International Property Maintenance Code (IPMC) provides for the regulation and safe use of existing structures in the interest of the social and economic welfare of the community. The City has substantially amended portions of the IPMC to reflect our own neighborhood standards, rental registration policy, and enforcement protocols. These amendments have not changed in the 2015 edition, except as noted.

SIGNIFICANT CODE CHANGES:

- > Section 101.2 adds the term "owner's authorized agent" to the list of responsible parties (repeated throughout the Codes).
- > Section 704.2 Smoke Detectors has been reformatted and expanded to include a required separation distance between smoke detectors and bathrooms or cooking appliances.

- > Section 404.4.1 is amended to increase the minimum room size of bedrooms for multiple occupants.
- ➤ Alterations in use or construction that increase the number of bedrooms should not be disproportional to the number of bathrooms and living spaces. [404.4.5]

2015 INTERNATIONAL MECHANICAL CODE SIGNIFICANT CHANGES



The International Mechanical Code (IMC) covers mechanical systems, appliances, and duct and ventilation systems for buildings other than one- and two-family residential structures. It establishes standards for the safe and efficient use of temperature control and ventilation systems. This code relies heavily on manufacturer's specifications for appliance installation. The code has evolved to reflect new technologies and energy efficiency measures.

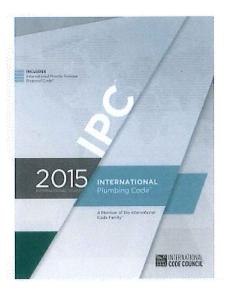
SIGNIFICANT CODE CHANGES:

- Manicure and pedicure stations must be equipped with exhaust systems, with minimum ventilation rates established to remove chemical vapors. [502.20 & Table 403.3.1.1]
- ➤ Dryer Exhaust Duct Power Ventilators (booster fans) are recognized as a means to increase dryer exhaust vent length. [504.5 & 504.8.4.3]
- ➤ Return air provisions have been reorganized, and language has been added requiring return air openings to be at least ten feet from draft hoods or combustion chambers of appliances. [601.5]
- ➤ All duct sealant tapes must be UL 181B listed. [603.9]
- ➤ Refrigerant access ports must be retrofitted with locking caps when an air conditioner is serviced or refrigerant is added; previously, locking caps were only required on new units. [1102.3]

CHANGES IN PROPOSED AMENDMENTS:

No significant changes in amendments

2015 INTERNATIONAL PLUMBING CODE SIGNIFICANT CHANGES



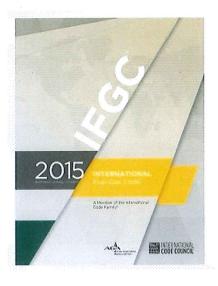
The International Plumbing Code (IPC) regulates the design and installation of plumbing systems in buildings other than one- and two-family dwellings. This code is designed to protect health and safety by safeguarding the potable water system, providing for effective wastewater disposal, and promoting the efficient use of water resources. The code continues to evolve in response to new technology and environmental demands.

SIGNIFICANT CODE CHANGES:

- ➤ The minimum number of plumbing fixtures may be based on the actual use of a building, rather than going strictly by the whole building's occupancy classification. [403.1]
- > Small spaces intended for quick transactions, such as drop-off, pick-up, or take-out, are not required to have a public toilet facility. [403.3 Exception 2]
- ➤ Water temperature limiting devices are required on shampoo sinks and pedicure foot baths. [423.3]
- ➤ Replacement water heaters must have a pan, but the pan drain does not need to be piped out, if no drain piping existed previously. [504.7.2]
- ➤ The allowable lead content of pipes, fittings, and fixtures carrying potable water has been reduced to 0.25 percent. [605.2.1]
- > The pipe-bursting method of replacing building sewer pipes is addressed. [717]
- ➤ Multiple options are given for trap seal protection. [1002.4 & 1002.4.1]

- ▶ Drinking fountains are not required for an occupant load of 20 or less (code says 15 or less). [410.2]
- > Section 1003.3.1 Grease Interceptors and Automatic Grease Removal Devices has been substantially rewritten to set more specific sizing standards for our jurisdiction.

2015 INTERNATIONAL FUEL GAS CODE SIGNIFICANT CHANGES



The International Fuel Gas Code (IFGC) regulates the installation of fuel gas piping and fuel utilization equipment. The code provides for the safe conveyance of fuel gas, efficient combustion, and the elimination of combustion gasses. These regulations work in conjunction with the International Mechanical Code and the International Plumbing Code.

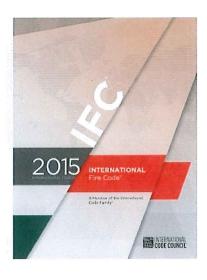
SIGNIFICANT CODE CHANGES:

- ➤ Language is added to address door swing with respect to clearance from potentially-hot vent terminals. [502.7.1]
- > Booster fans are addressed as a means to allow for longer dryer ducts. [614.5]

CHANGES IN PROPOSED AMENDMENTS:

No significant changes in amendments

2015 INTERNATIONAL FIRE CODE SIGNIFICANT CHANGES



The International Fire Code (IFC) addresses conditions hazardous to life and property from fire, explosion, and hazardous materials. These regulations aim to ensure the safe use and occupancy of buildings and premises. The IFC parallels the International Building Code when it comes to many life safety regulations. The City is amending the IFC to be consistent with regional best practices, and to make the best use of local techniques and equipment.

INTERESTING CODE CHANGES:

- Abandoned material and wiring cables must be removed from plenums. [315.6]
- ➤ Commercial cooking exhaust hoods and ducts must cleaned in accordance with ANSI/IKECA C10. [609.3.3.2]
- ➤ Listed flexible connectors are required between fixed fuel-gas piping and cooking appliances on casters or appliances that are moved for cleaning. [609.4]
- ➤ Cables used for survivability of circuits supplying fire pumps shall be listed in accordance with UL 2196. [913.2.2]
- ➤ Plastic pallets used in high-piled combustible storage areas can affect the classification of commodity. [3206.4.1]
- ➤ Addition of Carbon Dioxide systems used in beverage dispensing applications section due to a number of fatalities from CO₂ exposure in restaurants. [5307]

CHANGES IN PROPOSED AMENDMENTS:

> Changes to the proposed local amendments are mainly for clarification purposes. No significant changes have been added to the 2015 International Fire Code.