

Significant Changes for Contractors

Adoption of 2018 International Building Codes (Commercial)



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2018 INTERNATIONAL BUILDING CODE (IBC) AND FIRE CODE (IFC)

IBC 508.4 Separated Occupancies vs. Fire Area

Clarification that fire separations for mixed occupancy purposes has been made, such that, the most restrictive fire resistance-rated conditions shall apply.

IBC 202 Greenhouse Definition

Clarification for greenhouse occupancy has been clarified for the construction requirements.

IBC 202 Sleeping Unit Definition

Clarification a sleeping unit has been clarified for the construction requirements.

IBC 420 Cooking Facilities

Use of cooking appliances are further defined and regulated in Institutional Facilities and dormitories. Appliances are allowed in common areas.

IBC Chapter 7 Fire and Smoke Protective Features

Fire-resistive structure protection is further defined. Fire-rated construction for balconies, party walls, have changed location in the code. Fireblocking and draftstopping section of the code has been modified.

IBC 904.14 Domestic Cooking Protection in Institutional and Residential Occupancies

Clarification for an automatic fire-extinguishing system requirement is now in the code.

IBC 1004.8 Means of Egress and Occupant Loads

Business Occupancy allows a higher occupant load in certain concentrated business areas, such as a telephone call center.

IBC Table 1609 Wind Loads

Wind speed maps have been updated.

IBC Table 2308.4.1.1 Header and Girder Spans – Exterior/Interior Walls

The header and girder spans tables are updated to allow #2 Southern Pine design values (this reduces span lengths in comparison to #1 Southern Yellow Pine).

IBC Chapter 31 Special Construction

A process has been put in place for relocatable modular buildings.

2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

were not previously included in the occupant sensor control requirements of the 2015 code.

IECC R402.1.2 Fenestration Requirements

The prescriptive U-factors for fenestration have been lowered.

IECC 403.3.6 Ducts Buried within Ceiling Insulation

New provisions address the methods, minimum coverage requirements and

thermal benefits for ducts buried within ceiling insulation, and when those ducts are considered inside the building thermal envelope.

IECC 404.1.1 Lighting

The required percentage of permanent lighting fixtures having high-efficacy lamps has increased from 75 to 90 percent.

2018 INTERNATIONAL FUEL GAS CODE (IFGC)

IFGC 404.14 Piping Underground Beneath Buildings

A listed encasement system instead of a conduit encasement is recognized where plastic piping is installed underground beneath buildings.

IFGC 409.5.1 Shutoff Valves Located within Same Room

Shutoff valves serving moveable appliances, such as cooking appliances and clothes dryers, shall be considered to be provided with access where installed behind such appliance.

2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

There are no significant changes to the IEBC that will increase the cost implication of meeting its requirements.

2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

IECC C403.4.4.1 Heated or Cooled Vestibules

Adds a new requirement for heated/cooled vestibules. A control is required to turn off heat source when outdoor air temperature is above 45 degrees F. Also will limit heating temperature to maximum 60 degrees F and cooling temperature to not less than 85 degrees F.

IECC C403.7.6 Automatic Control HVAC in R-1 Guestrooms

New code provision reduces energy use by thermostat setback and ventilation control in unrented guest rooms.

IECC C405.2.1.3 Occupant Sensor Control in Open Plan Office Areas

New code section adds occupant sensor control to open plan office areas which

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2017 NATIONAL ELECTRIC CODE (NEC)

NEC 210.12 Arc-Fault Circuit-Interrupter Protection

The AFCI requirements have been expanded and now include additional requirements for dormitory units and guest rooms and suites.

NEC 300.5 Underground Installations

Changes include added footnotes in table 300.5, clarifications to requirements for parallel conductors, burial warning ribbons, sealing underground raceways, and backfill materials.

NEC 314.17 Conductors that Enter Boxes or Conduit Bodies

Nonmetallic-sheathed cables installed in metal boxes must now meet the 1/4" cable sheath rule.

NEC 330.15 Exposed Work

New requirements for the installation of Type MC Cables have been added.

NEC 358.10 Uses Permitted

The permitted uses list for electrical metallic tubing (EMT) has been greatly expanded.

NEC 406.12 Tamper-Resistant Receptacles

The locations requiring tamper-resistant receptacles have been expanded.

NEC 600.6 Disconnecting Means for Electric Signs

Several changes have been made to the disconnect requirement for signs.

NEC 680.11 Underground Wiring for Pools, Spas, Hot Tubs, Fountains, and Similar Installations

The cover (burial depth) requirements are now no different than those for other installations.

2018 INTERNATIONAL PLUMBING CODE (IPC)

IPC Table 403.1 Minimum Number of Required Plumbing Fixtures

The Occupancy (Group) column of the table has been deleted for greater flexibility and accuracy for determining fixture requirements.

IPC 403.1.2 Single-user Toilet Facility and Bathing Room Fixtures

Single-user toilet facilities having required plumbing fixtures must now be labeled for use by either sex.

IPC 403.1.3 Lavatory Distribution

Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.

IPC 403.2 Separate Facilities

New exception added regarding separate facilities provided for each sex: Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.

2018 INTERNATIONAL PLUMBING CODE (IPC) [continued]

IPC 608.16.1.2 Coffee Machines and Noncarbonated Drink Dispensers

The water supply connection to each coffee machine and each noncarbonated beverage dispenser shall be protected against backflow by a backflow preventor conforming to ASSE 1022 or ASSE 1024, or protected by an air gap.

IPC Table 702.3 Building Sewer Pipe

Polypropylene (PP) Plastic Pipe has been added to the approved materials list.

IPC 716 Replacement of Underground Building Sewers and Building Drains by Pipe Bursting Methods

Section on replacement of building sewers by pipe bursting methods has been expanded to include replacement of underground building drains.

IPC 1003.3.2 Food Waste Disposers Restriction

A food waste disposer shall not discharge to a grease interceptor.

2018 INTERNATIONAL MECHANICAL CODE (IMC)

IMC 403.3.2.4-5 System Controls and Ventilation Equipment

There is a new requirement for labeling of controls for whole-house ventilation systems and for the testing of exhaust fans for dwelling units.

IMC 504.4.1 Exhaust Termination Outlet and Passageway Size

The code now addresses the required size of dryer exhaust duct terminals.

IMC 506.3.13.2-3 Termination through an Exterior Wall, Termination Location

The intent was clarified regarding clearance to openings to prevent other requirements from being overlooked.

IMC 507.2.6 Clearances for Type I Hood

A new exception was added to recognize Type I hoods that are listed for clearances to combustibles of less than 18 inches.

IMC 603.5.2 Phenolic Ducts

The code added coverage for a newer type of non-metallic duct, phenolic duct.

IMC 929 High-Volume Large-Diameter Fans

Added a code section and new definition of high volume large diameter fan.

IMC 1107.2 Refrigerant Piping Location

This code section was rewritten to clearly state the intent regarding the prohibited locations for refrigerant piping.

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2018 INTERNATIONAL RESIDENTIAL CODE (IRC)

IRC 302.2 Townhouse Separation

Two paths for achieving the fire-resistance separation between townhouse dwelling units – two 1-hour walls or a common wall – are spelled out in this section.

IRC 308.4.2 Glazing Adjacent to Doors

Glazing within 24 inches of the hinge side of an in-swinging door now requires safety glazing where the glazing is at an angle less than 180 degrees from the plane of the door.

IRC 311.7.3 Maximum Stair Rise between Landings

The maximum rise of a flight of stairs has increased by 4 inches, from 147 to 151 inches.

IRC 324.6 Roof Access for Photovoltaic Solar Energy Systems

Requirements for roof access and pathways for firefighters have been introduced into the IRC provisions for rooftop mounted photovoltaic solar energy systems.

IRC N1103.3.6-7 Ducts Buried within Ceiling Insulation

New provisions address the methods, minimum coverage requirements and thermal benefits for ducts buried within ceiling insulation, and when those ducts are considered inside the building thermal envelope.

IRC 1104.1 Lighting

The required percentage of permanent lighting fixtures having high-efficacy lamps has increased from 75 to 90 percent.

IRC M1502.3.1 Dryer Exhaust Duct Termination

A minimum area of 12.5 square inches has been established for the terminal outlet of dryer duct exhaust

IRC G2420.5.1 Shutoff Valve Location

Shutoff valves located behind movable appliances are considered as meeting the requirement for access.

IRC G2447.2 Commercial Cooking Appliances

Commercial cooking appliances are now permitted in dwelling units when installed in accordance with an engineered design and the manufacturer's instructions.

IRC P2503.7 Air Testing of PEX Piping

Compressed air testing of PEX water supply piping is now allowed when testing is in accordance with the manufacturer's instructions.

IRC P2903.5 Water Hammer Arrestors

A water hammer arrestor is now required where quick-closing valves are used in the water distribution system.

IRC 3703.5 Garage Branch Circuits

A separate 20-ampere branch circuit is now required to serve receptacle outlets of attached garages and detached garages with electric power.

IRC E4101.3 Cord-and-Plug-Connected Appliances

The maximum cord lengths for range hoods and built-in dishwashers have increased and the code clarifies that the receptacle outlet for the dishwasher has to be in the space adjacent to the appliance.

IRC Appendix Q – Tiny Houses

A new Appendix Q covers provisions for tiny houses, defined as dwellings with a maximum floor area of 400 square feet.