



## 2018 International Building Codes Significant Changes

### Residential Building Code (IRC)

- **Deck Construction**– Changes for deck construction include minimum footing and post sizes, joist spacing and beam spans and connections. (Sec. R507.3) (2018)
- **Garage receptacle outlets**– Garage receptacles must be served by a separate branch circuit that doesn't supply other house outlets and at least one outlet is required for each car space. (E3703.5, E3901.9) (2018)
- **Crawl Space GFCI**- GFCI protection is now required for lighting outlets in crawl spaces. (Sec. E3902.4) (2018)
- **Dishwasher & Range Hood Cords**-- Maximum cord lengths for dishwasher cords were increased from 48 to 78 inches and range hoods from 36 to 48 inches. (Sec. E4101.3) (2018)
- **Smoke Alarms**-- Smoke alarms are not allowed less than 3 feet from a bathroom door for bathrooms containing a bathtub or shower unless it would prevent placement of a fire alarm and not less than 20 feet from permanently installed cooking appliances (Sec. R314) (2015)
- **Foundation Anchorage**-- Anchor bolts now required to be placed in the middle third of the sill plate and approved anchors may be used instead of ½-inch anchor bolts. (Sec. R403.1.6) (2015)
- **Unvented Crawl Spaces**-- Ventilation of the under-floor space is not required when an adequately-sized dehumidifier is provided (in addition to the already-required Class I vapor retarder). (Sec. R408.3) (2018)
- **Saddle Tap Fittings on Water Pipe**-- Saddle tap fittings, typically used for installing water lines to refrigerators for ice makers and chilled water dispensers, are no longer allowed due to the risk of being bumped and twisted. (Sec. P2906.6.1) (2018)
- **Dishwashing Machines**. Air gaps or a backflow preventers are required for dishwashers to protect the potable water supply. (Sec. P2717) (2015)
- **Water Heater Drain Pans**-- The water heater pan requirements were expanded to accept aluminum and plastic pans not less than 0.0236 inch in thickness for galv. steel or aluminum and not less than 0.036 in thickness for plastic. Plastic safety pans are now allowed under gas water heaters provided the material falls within the prescribed flame spread and smoke-developed indices. (Sec. P2801) (2015)
- **Water Hammer Arrestors Required**– Water hammer arrestors are now required for quick-closing valves. Quick closing valves or faucets are those that close automatically where by mechanical means for fast-action closing. Washing machine

and dishwashing machine solenoid valves are often considered as being “quick-closing” valves that require water hammer arrestors. (Sec. P2903.5) (2018)

## Commercial Building Code (IBC)

- **Occupied Roofs**— Occupied roofs are assigned one or more occupancy classifications consistent with the use inside the building. (Sec. 302.1) ((2018)
- **Roof Assembly Sprinklers**— In rooftop assembly occupancies an automatic sprinkler system is required to be installed on all floors of a building where the occupant load exceeds 100, and for other assembly occupancies where the occupant load exceeds 300. (Sec. 903.2.1.6) (2018)
- **Occupant Load Calculation**— In small assembly buildings sharing a common means of egress the occupant load for all spaces must be added together to determine if a sprinkler system is required instead of using the occupant load of each individual area. (Sec. 903.2.1.7) (2018)
- **Balcony Sprinklers**— Sprinkler protection is required for non-rated balconies and deck projections for apartment buildings. (Sec. 903.3.1.2.1) (2018)
- **Classification of Self-Service Storage Facilities**— Due to the reasonable expectation that self-storage facilities will contain a considerable amount of combustible materials, such facilities are now specifically identified as Group S-1 occupancies. (Sec. 311.2) (2018)
- **Party Walls Not Constructed as Fire Walls**— Fire wall construction is no longer required for a party wall. The new exception specifies that where a party wall divides a building for ownership purposes, and the aggregate height and area of the buildings on either side complies with the code, then the party wall does not need to be constructed as a fire wall. (Sec. 706.1.1) (2018)

## Local Code Amendments

- **Electrical Disconnect**— All new residential and commercial buildings required to have an electrical disconnect installed on the exterior of the building. Existing buildings where the service is relocated will also require a disconnect.
- **Arc-Fault Circuit Interrupter Protection**— Requires arc-fault circuit interrupter protection as staff’s research has found the technology has greatly improved and is now required by most cities without issues.
- **Photovoltaic (Solar) Installations**— Requires electrical and structural engineered sealed plans for all residential and commercial installations.
- **Concrete Poured in Cold Weather**— Clarifies when concrete is allowed to be poured in cold weather.
- **Vehicle Storage Rooms**— Requires rooms in a single family home that will be used to store flammable and/or combustible liquids or vehicles that contain the same shall meet the same requirements that would apply to a garage.
- **Bathroom Exhaust**— Allows bathroom exhaust ducts to ventilate to an approved soffit or roof vent.
- **Footings and Slabs on Fill Dirt**—Requires fill dirt to be compacted to 98% and testing and approval by a Missouri soils engineer before approval to place concrete.