

City of Killeen

Significant Commercial Code Changes

(Effective January 1, 2016)

2015 IBC (International Building Code)

- Sec 304.1 - Group B includes food processing establishments, commercial kitchens (only) restaurants up to 2,500 sq ft
- Sec 311.1.1 - Accessory storage spaces less than 100 sq ft shall be classified as part of that occupancy
- Sec 424 - Indoor children's play structures over 10 ft in height or 150 sq ft in area must be noncombustible or fire treated
- Sec 419.1.1 - Live Work Area (2012 code)
 - 3,000 max sq ft
 - Maximum 50% area can be non-residential
 - Work area must be on first or main floor
 - Up to 5 employees
- Fire sprinkler increases to Chapter 5 Height and Area tables were added to tables
- Sec 703.7 - Fire assemblies must be marked "Fire and /or Smoke Barrier – Protect all Openings" above concealed openings
- Fire-rated glazing assemblies must be marked in accordance with Table 716.3
- Sec 903.2.1.6 - Assembly occupancies on roof tops over 100/300 persons require all floors below to be fire sprinklered
- Sec 903.2 - Fire Sprinkler for Upholstered Furniture or Mattress exceeding:
 - F-1 and S-1 exceed 2,500 (factory and storage)
 - M – exceed 5,000 (retail)
- Sec 907.2.3 - Group E – Manual fire alarm required when OL exceeds 50 and EVAC voice system when OL exceeds 100
- Sec 907.2.11.3 - Wireless smoke alarms are allowed in one alarm activates all alarms
- Sec 915 - Carbon monoxide alarms are required in Group E occupancies
- Sec 1008.1.2 - Egress doors swing in the direction of egress when serving room/area of 50 or more or Group H
- Sec 1011.2 - Floor level exit signs are required in hotel areas serving guestrooms
- Sec 1004.1 - Design occupant loads shall be the combined OL of interconnected or intervening spaces
- Group M – the occupant load factor is 60 sq ft gross for all floors per Table 1004.1.2
- Sec 1015.8 - Multi-family dwelling operable windows where the sill height is more than 72" above grade and less than 36" above the finished floor must have window opening protection

2015 IPC (International Plumbing Code)

- Ch 2 - Some new definitions
 - Two types of grease traps – Hydro-mechanical and Gravity type
 - Drinking water has been defined as three types:
 - *Drinking fountain* is connected to potable water system and drain system
 - *Water cooler* is a drinking fountain that reduces the temperature of the water
 - *Water dispenser* is controlled by the user and dispenses water into a cup, glass, bottle.
 - Waterless urinals are allowed as a plumbing fixture
 - Clarified that a *toilet facility* is a room or space with at least one water closet and one lavatory
- Sec 410 - Drinking fountains are not required of OL of 15 or less
- Sec 403 – Minimum Plumbing Facilities:
 - Sec 403.1 - Service sinks are not required in Group B or M with OL of 15 or less
 - Sec 403.2 - Group M occupancies can have one unisex restroom for OL up to 100 persons
 - Sec 403.2.1 - Two Family or two Assisted-use toilets may replace basic separate sex restrooms and both be unisex
 - Sec 403.3 - Structures/tenant spaces 300 sq ft or less intended for quick transactions are exempt from public restrooms
 - Sec 403.4.1 - Directional signage for public toilet facilities are required and be readily seen from the main entrance
- Sec 423.3 - Water-temperature limiting devices are required for footbaths and shampoo sinks
- Sec 504.6 - Water heater discharge piping must have air gap and be located in the same room (see all 13 requirements)
- Sec 504.7.2 - Water heater pan drain is not required for replacement WH installations if a drain was not previously installed
- Sec 607.1.1 - The water heater thermostat cannot be used for the temperature limiting device and the water temperature limiting device must conform to ASSE 1070 and limit tempered water to 110 degrees F
- Sec 607.2 - The maximum distance from hot water supply and all fixtures has been reduced from 100 ft down to 50 ft
- Sec 607.3 - Thermal expansion tanks are required for water heaters having a closed loop system
- Sec 705.11.2 - Purple primer is no longer required for 4-inch pipe or smaller
- Sec 1002.4.1.4 - Barrier-type trap seals are allowed to protect floor drain trap seal from evaporation (ASSE 1072)
- Sec 1003.3.7 - Discharge piping from grease interceptors shall be directly connected to the sanitary drainage system
- Sec 1003.4 - Oil separators are required if repair garage or car wash facilities uses floor or trench drains
- Sec 1003.6 - Clothes washers shall discharge through an interceptor with wire basket with ½ inch or less openings
- Sec 1003.9 - Interceptors and Separators shall be vented

2015 IFGC (International Fuel Gas Code)

- Sec 623.2 - Commercial labeled appliances are not allowed in dwelling units (unless labeled for both)
- Sec 308.1 - Gypsum board is considered a combustible material for required clearances in Table 308.2
- Sec 310.1.1 - CSST shall be bonded with minimum #6 AWG copper wire within 75 ft of grounding electrode system
- Sec 404.2 - CSST piping systems shall be installed per manufacturer's instructions and this code
- Sec 404.5 - Threaded elbows, tees, and couplings are allowed to be concealed
- Sec 408.4 - Sediment traps are required if branch connects to an appliance
- Sec 410.2 - Line regulators installed in rigid pipe must have unions installed to allow removal of the regulator
- Sec 411.1.1 - Fuel gas commercial appliances on casters shall be limited by a restraining device.

2015 IMC (International Mechanical Code)

- Sec 304.11 - Fall-arresting restraint systems are allowed in lieu of guard rails for servicing equipment on roofs
- Sec 306.5 - Permanent access is required for equipment located higher than 16 ft above grade
- Sec 308.5 - Approved protective materials for wall, floor and hearth extensions must meet UL 1618
- Sec 403.3 - Each nail salon station must have its own source capture system
- Sec 502.20 - Manicure and pedicure stations must have exhaust systems within 12 inches of chemical application
- Sec 504.5 - Dryer exhaust duct power ventilators are allowed to extend the allowable exhaust duct length
- Sec 505.1 - Kitchen exhaust ducts must be independent of all other exhaust systems
- Sec 506 - There has been several changes to grease hoods, ducts and reservoirs
- Sec 506.3.11 - Code clarified fire and smoke dampers are not allowed in grease ducts
- Sec 507.1 - Installed Type I hoods (grease) shall meet all code requirements even if installed by choice
- Sec 507.2 - Type I or Type II hoods are not required for appliances with listed integral downdraft exhaust systems
- Sec 603.9 - Duct sealant tapes used on sheet metal ducts must be listed to UL 181B
- Sec 805.3 - Factory built chimney offsets are limited to 30 degrees and 4 bends
- Sec 903.4 - Gasketed fireplace doors are prohibited unless it has been tested listed for such use
- Sec 1102.3 - Refrigerant access ports must have locking caps or be located behind barriers

2015 IECC – (International Energy Conservation Code –Commercial and Apartments)

- C103.2 - Construction drawings must include all 12 details listed in C103.2 or other approved electronic reports
- C401.1 - Commercial building shall comply with one of the following:
 - Section 402 General Prescriptive Methods
 - Section 407 Total Building Performance (including mandatory requirements)
 - ASHRAE 90.1 (2013 year).
- Bell County Climate Zone per Figure C301.1 = 2(A) Moist / Warm-Humid climate
- C402.1.1 - Low energy exempt buildings are:
 - Energy use less than 3.4 Btu/hour per sq ft
 - 1.0 watt per sq ft of floor area of conditioned space
 - No conditioned space
- C402.3 - Prescriptive thermal envelope insulation requirements
 - Attic – R38 Walls – R20
 - U-factor – 0.50 SHGC – Orientation = North = .33 and South/East/West = .25
 - FYI - Area-weighted option was removed
- See Section C402.5 for Air leakage and Air Barrier mandatory requirements
- C403.2.4.2.3 - HVAC systems are required to be capable to automatically start up prior to occupancy
- C403.2.4.2.3 - Each cooling system with a fan shall include either an Air or Water Economizer (there are 9 exceptions)
- C404.4 - The inlet and outlet piping of storage type water heaters must be insulated (R3) to the heat trap or 8 feet
- C405.2 - for mandatory lighting controls:
 - Occupant Sensors Manual Switches
 - Time-switch Controls Light-reduction Controls
 - Daylight- responsive Controls
- C408.2 - Mandatory commissioning prior final inspections for Mechanical and Water Heating Systems
 - Except Cooling Sys <480,000 btu; Heating Sys <600,000 btu or Individual dwelling/sleeping units
- C408.3 - Mandatory evidence from design professional that the lighting control system has be documented as operating as designed in accordance with the construction documents
- C403.2.9.1.3 - Air duct leakage test required for high-pressure duct systems (greater than 3 inches water column or 747 pa)