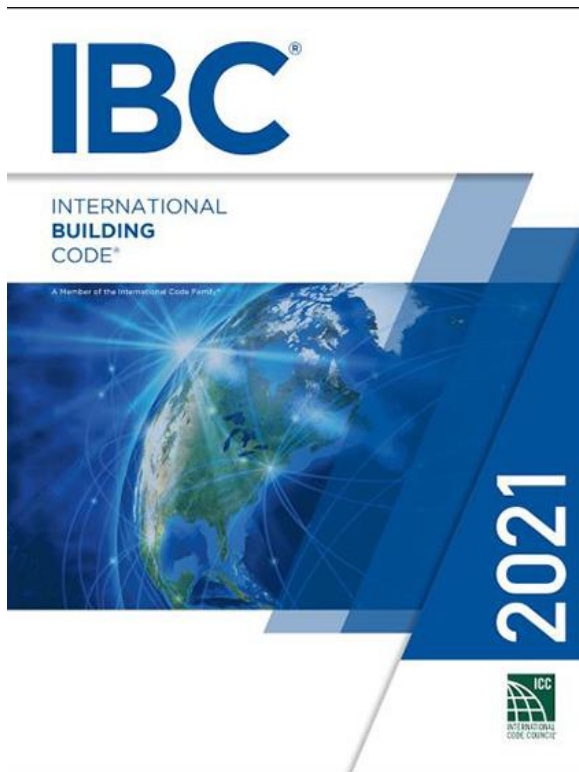


# 2021 INTERNATIONAL BUILDING CODE SIGNIFICANT CHANGES



The City of McKinney is planning to change from the 2018 to the 2021 Edition of the International Building Code (IBC) on January 1<sup>st</sup> of 2023. The following are significant changes to the IBC and its proposed amendments. The full text of the code is available through [ICC](#), and the proposed amendments are available through the North Central Texas Council of Governments ([NCTCOG](#)).

- **110.3.7 - Inspection of weather-exposed balconies**
  - **Modification:** Where balconies or other walking surfaces have weather-exposed surfaces, the moisture barrier must be inspected before being concealed.
  
- **202 - Definition: Change of occupancy**
  - **Modification:** Defines change of occupancy as a change in occupancy classification, purpose, or activity level, generally associated with an increase in safety, accessibility, fire protection, structural, egress, ventilation, or sanitation requirements.
  
- **202 - Definition: Puzzle room**
  - **Addition:** New definition to go with new regulations for escape rooms
  
- **202 - Definition: Special amusement area**
  - **Addition:** New definition to go with regulations for haunted houses and similar attractions where the path of travel may be deliberately unclear

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## SIGNIFICANT CHANGES

- **306.2 - Group F-1 occupancy**
  - **Addition:** Water/sewer treatment facilities and buildings dedicated to energy storage systems have been added the list of F-1 occupancies.
- **307.1.1 - Uses not classified as Group H**
  - **Modification:** Distilling, brewing, and storing beer, wine, and spirits is not necessarily in Group H as long as it complies with the International Fire Code.
- **311.2 & 311.3 - Alcoholic beverage storage**
  - **Clarification:** Beverages over 16% alcohol are in the S-1 moderate-hazard storage group; beverages at or below 16% are in the S-2 low-hazard storage group.
- **404.5 - Atriums**
  - **Modification:** Added exemption for smoke control if rated as per shaft requirements
- **406.6.4 - Mechanical access parking garage**
  - **Addition:** New section covers enclosed parking garages where cars are parked by machinery.
- **411.5 - Puzzle room exiting**
  - **Addition:** New language addresses egress requirements for escape rooms, including provisions that doors must unlock when the fire alarm goes off.
- **422.7 - Domestic cooking in ambulatory care facilities**
  - **Addition:** New rules for domestic cooking appliances in care facilities include fire safety measures, gas shutoffs with supervisory staff access, and timed shutoffs for appliances.
- **423.5.1 - Storm shelters (amended by NCTCOG)**
  - **Amendment:** Allows building official to accept the actual occupant capacity (e.g., TEA capacity) in lieu of calculating the occupant load per the IBC
- **424 - Play structures**
  - **Modification:** This section was formally known as *children's* play structures. The code dropped the "children's" part because this section applies to recreational equipment used by adults as well, such as climbing walls and obstacle courses. A section was also added to address flame spread limitations on interior finishes for play structures.
- **503.1 - Height/area limitations (amended by NCTCOG)**
  - **Amendment:** Clarified that fire walls are required between different types of construction

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- **503.1.4 - Occupied roof allowances**
  - **Clarification:** Occupied roofs are not included in the height or number of stories as long as the penthouse and other roof structures comply with section 1511.
- **506.3.2 - Allowable areas**
  - **Addition:** Simplified calculations for increases based on open yards
- **Table 508.4 - Required separation of occupancies**
  - **Clarification:** Required separation in hourly rating is simplified in this table
- **508.4.4.1 - Separated occupancies**
  - **Addition:** Requires thermal barrier between mass timber and the building interior in new Types IV-B and IV-C construction types
- **508.5 - Live/work units**
  - **Clarification:** The live/work requirements have been relocated from the special use provisions in chapter 4 to the mixed occupancy provisions in section 508, with no technical changes.
- **509.4.1.1 - Incidental areas**
  - **Addition:** Requires thermal barrier between mass timber and the building interior in new Types IV-B and IV-C construction types
- **510.2 - Podium buildings**
  - **Modification:** Now allows combustible stair construction to below the 3-hour horizontal separation
- **603.1 - Combustible materials in Types I & II construction**
  - **Modification:** Fire retardant treated wood may be allowed in walls rated 2 hours or less, except in shaft enclosures for I-2 and ambulatory care facilities. It is allowed in I-2 roof construction with Class A roof covering.
- **602.4/Table 601 - Mass timber**
  - **Addition:** 3 new construction types: IV-A, IV-B & IV-C for mass/heavy timber construction.
- **Chapter 7 - Fire resistance**
  - **Various amendments** and new sections added to coincide with new mass timber construction types.

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- **Chapter 7 - Fire resistance**
  - **Various amendments** and new sections added to coincide with new requirements in IFC 1207 for energy storage systems.
- **704.6.1 - Structural fire Protection**
  - **Modification:** Now requires any attachments to fire rated steel members to be rated for at least 12" away from structural member.
- **707.5 - Enclosure of exit passageways**
  - **Modification:** Walls enclosing exit passageways don't necessarily have to extend to the roof; they can terminate at a ceiling with the same rating.
- **716.4 - Fire Curtains**
  - **Addition:** New listing and labeling requirements for fire curtains. Fire curtains are not specifically required or allowed by the code, but if they are used by special approval or trade-off, standards are now provided.
- **Table - 716.1(2)**
  - **Modification:** Added requirements for back-to-back doors in Double Fire Walls
- **717.2 - Static fire dampers**
  - **Modification:** Static fire dampers & ceiling dampers are now allowed if HVAC has automatic shut down during fires.
  -
- **718.3 & .4 - Draftstopping (amended by NCTCOG)**
  - **Amendment:** Sprinklers required in floor cavities and attics in order to meet exception to eliminate draft stops
- **806.9 - Combustible lockers**
  - **Addition:** Lockers that are wooden, plastic, etc. now have to meet the same interior finish rating as for walls & ceilings.
- **1006.3.4 - Single exit from stories**
  - **Modification:** Instead of using Common Path of Travel, total travel to an exit is now used to determine when 2 exits are required from a story. Total travel is still limited to 75'-100' for most occupancies.
- **1008.2.1 - Egress illumination**
  - **Modification:** Increases amount of lighting for along stairs & landings from 1 foot-candle to 10 f-c while stairs are in use (occupant sensors)

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- **1009.2.1 - Accessible egress**
  - **Modification:** Now requires elevator to occupied roofs if 4 stories or more
- **1009.6.3 - Areas of refuge**
  - **Modification:** Increased size of areas of refuge from 30"x40" to 30"x 52"
- **1010.1.1 - Max. door width**
  - **Modification:** Door width no longer limited to 4 ft. max. (if all other requirements met)
- **1020.5 - Dead end corridors**
  - **Modification:** Dead ends increased for hospitals from 20 ft. to 30 ft. if not serving patient areas
- **1105.1.1 - Accessible entrances**
  - **Addition:** Now requires automatic doors at public entrances for larger buildings in A, B, M, R-1 uses with occupant load exceeding 300
- **1107.2 - Vehicle charging stations**
  - **Addition:** Now requires 5% of charging spaces to be van accessible parking spaces
- **1202.3 - Unvented attics**
  - **Modification:** Expands alternatives for unvented attic spaces if air permeable insulation and 'vapor diffusion ports' (new definition) are used
- **1207 - Classroom acoustics**
  - **Addition:** Now requires Group E classrooms to comply with acoustics standards in ICC/ANSI A117.1-2017
- **1210.3 - Restroom privacy**
  - **Addition:** New requirement to provide privacy screening at entrance to public restrooms designed for more than one occupant
- **Chapter 29 - Various sections (amended by NCTCOG)**
  - Additional methods added to determine number and distribution of toilet and bathing facilities
- **3005.4 - Elevator machine rooms (amended by NCTCOG)**
  - **Amendment:** Revises exceptions for machine room enclosures. All machine rooms will be required to be rated, except if in an atrium or parking garage.

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- **3103.1 - Special event structure**
  - **Clarification:** Temp structures now include Special Event Structures (outdoor stages, etc.)
- **3114 - Public restrooms in flood hazard areas**
  - **Addition:** New requirements for public restrooms on public land (parks, etc.) that are in flood hazard areas
- **3115 - Shipping containers**
  - **Addition:** IBC now recognizes shipping containers as buildings if they comply with certain standards, shipping containers are valid for safe construction
- **3313 - Fire protection**
  - **Modification:** Expands requirements to provide fire protection water on construction sites before and during vertical construction