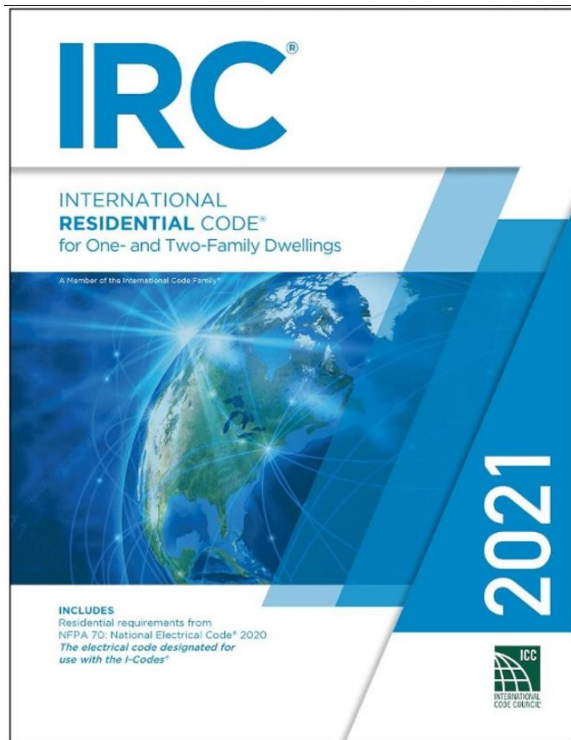


# 2021 INTERNATIONAL RESIDENTIAL CODE SIGNIFICANT CHANGES



The City of McKinney is planning to change from the 2018 to the 2021 Edition of the International Residential Code (IRC) on January 1, 2023. The following are significant changes to the IRC 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](#)).

- **102.7.1 – Additions, alterations or repairs**
  - **Clarification:** Clarifies that additions, alterations, repairs and relocations of existing buildings will not cause them to become *less compliant*, and that the International Existing Building Code shall apply to changes in use or occupancy.
- **202 - Definitions: Townhouse unit (amended by NCTCOG)**
  - **Amendment:** The language “separated by property lines” was added to the townhouse definition.
- **202 – Definitions: Grade floor emergency escape and rescue opening**
  - **Clarification:** Clarifies that to qualify for the grade-floor reduction in open area, the bottom of the clear opening can’t be more than 44 inches above or below the adjacent grade. This is to clarify how the height is measured and to be consistent with the IBC.
- **301.1.4 – Intermodal shipping containers (amended by NCTCOG)**
  - **Addition:** Shipping containers are now recognized and regulated in the code.
- **Figure 301.2(2) – Ultimate design wind speeds**
  - **Modification:** Our region is 105 mph.

# 2021 INTERNATIONAL RESIDENTIAL CODE SIGNIFICANT CHANGES

- **301.3 – Story height**
  - **Clarification:** A story can be up to 13 ft. 7 in. if certain framing conditions are met.
  
- **302.5 – Dwelling-garage opening protection**
  - **Clarification:** The door between a garage and a residence must be self-latching.
  
- **307.3 & 307.4 – Blocking (amended by NCTCOG)**
  - **Amendment:** Blocking is required in the walls around one toilet at grade level for future accessibility hardware.
  
- **310.1 – Emergency escape and rescue openings**
  - **Clarification:** The pathway from an emergency escape and rescue opening out to a public way must be at least 36 inches wide.
  
- **311.7 & 311.8 – Stairways & Ramps (exceptions)**
  - **Clarification:** Additional language and exceptions make clear that where required by the code or provided, only attached stairs/ramps either inside or outside are regulated. Also, the exceptions for non-attached stairs, non-habitable attics, and crawl spaces clearly indicated where the requirements do apply.
  
- **311.7.7 – Stairway and landing walking surface**
  - **Modification:** An exception was added to satisfy surface drainage requirements away from the structure/swelling. A 5% slope is now permitted for landings that are a part of the requirement of 401.3 to provide drainage away from the structure/dwelling.
  
- **312.2 – Window fall protection**
  - **Clarification:** The height of 72 inches above grade that triggers the need for window fall protection is measured to the bottom of the clear opening, not the windowsill.
  
- **314.3 – Smoke alarm locations**
  - **Modification:** If the ceiling height of an adjacent room to a hallway exceeds that of the hallway by 24" or more, then a smoke detector is required on the higher ceiling adjacent to the hallway.
  
- **315.2.2 – Carbon monoxide alarms (amended by NCTCOG)**
  - **Modification:** An exception was added to clarify that the retroactive carbon monoxide alarm rule does not apply to a mechanical furnace when the furnace is not fuel-fired.

# 2021 INTERNATIONAL RESIDENTIAL CODE SIGNIFICANT CHANGES

- **320 – Accessibility**
  - **Modification:** Clarifies that the nonresidential portion of live/work units must be accessible in accordance with the IBC.
  
- **323 – Storm shelters**
  - **Addition:** A definition was added in 202 for Storm Shelter and requirements were added that the design should be in accordance with ICC 500. Section 323.1.1 was added requiring sealed documentation from a design professional verifying that it is compliant with ICC 500, or else the storm shelter must be listed/labeled for compliance.
  
- **324.3 – Photovoltaic systems**
  - **Modification:** Building-integrated photovoltaic (BIPV) systems (i.e. solar shingles) don't require firefighter access pathways and setbacks provided that removal or cutting of the BIPV components during firefighting operations does not pose a shock hazard.
  
- **326 – Habitable attics**
  - **Modification:** A new section was created for habitable attics including the addition of new restrictions associated with it being defined as a story above grade plane and establishes exceptions to it being treated like a story.
  
- **327.1.1 – Swimming pools, adjacency to structural foundation (amended by NCTCOG)**
  - **Addition:** A minimum ration of 1:1 must be maintained from the depth of a swimming pool or spa to the distance to the nearest foundation or footing unless a sealed engineered design is provided.
  
- **506.2.3 – Vapor retarder under concrete slab**
  - **Modification:** 10 mil. poly required.
  
- **507 – Decks**
  - **Modification:** Decks are now being designed based on live and snow loads. The remainder of section 507 includes revised requirements for footings, posts, beams, joists, and decking. Section 507.10 also adds regulations for guards specifically for decks.
  
- **609.4.1 – Garage doors**
  - **Addition:** This section was added and requires that all garage doors must be labeled with a permanent label provided by the garage door manufacturer. The label shall identify the garage door manufacturer, the garage door model/series number, the positive and negative design wind pressure rating, the installation instruction drawing reference number, and the applicable test standard.

# 2021 INTERNATIONAL RESIDENTIAL CODE SIGNIFICANT CHANGES

- **2447.2 – Commercial cooking appliances**
  - **Modification:** Commercial cooking appliances are not allowed in a residence. The previous exception allowing them if engineered has been deleted.
  
- **2503.5.1 – Drain, waste and vent system testing**
  - **Modification:** The head pressure for DWV water testing has been increased from 5 feet to 10 feet (like it was before 2015). This section also adds permission for air vacuum resting of plastic DWV pipe.
  
- **3011 – Relining of building sewers and building drains**
  - **Modification:** The code recognizes new technologies to inject lining into pipes as a means of repair and refurbishment and introduces regulations addressing these practices.