

**CITY OF BELLMEAD, TEXAS
ORDINANCE 2021-06**

AN ORDINANCE OF THE CITY OF BELLMEAD, TEXAS AMENDING CHAPTER 4 – BUILDINGS AND BUILDING REGULATIONS, ARTICLE II. – BUILDING CODE; PROVIDING FOR THE ADOPTION OF THE *INTERNATIONAL RESIDENTIAL CODE 2018 EDITION*; PROVIDING FOR THE ADOPTION OF LOCAL AMENDMENTS AND APPENDICES THERETO; PROVIDING FOR RECORDING OF SUCH CODE AS A PUBLIC RECORD; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Bellmead is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and,

WHEREAS, the *International Residential Code, 2018 Edition*, for one – and – two -family dwellings regulate the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all one – and two – family dwellings and multiple single-family dwellings; and,

WHEREAS, Chapter 214 of the Local Government Code authorizes a municipality to regulate substandard buildings and establishes procedures thereof; and,

WHEREAS, the City Council desires to update, revise and clarify the standards and regulations that apply to substandard buildings in conformance with legislative amendments and to provide for civil penalty as permitted by law; and,

WHEREAS, the City Council of the City of Bellmead deems it necessary to adopt this ordinance providing minimum standards to safeguard the health, property, and welfare of the citizens of Bellmead by regulating and controlling the use, occupancy, maintenance, repair, design, construction, and quality of materials for buildings and structures within the City.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BELLMEAD, TEXAS:

SECTION 1

Sec. 4-27. – Code Adopted.

There are hereby adopted by the city, for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of buildings and structures, including permits. The following codes which are adopted by reference as though they were fully copied herein:

(2) 2018 International Residential Code, including Appendices A, B, C, D, E, G, H, I, J, M, and T, including Amendments.

- a) The ICC Electrical Code is no longer published as a separate document but the electrical provisions are included in Appendix K of the IBC, 2018 Edition.

SECTION 2

Sec. 4-31. – Residential Code Amendments. (Addition to Chapter 4 – BUILDINGS AND BUILDING REGULATIONS, ARTICLE II. – BUILDING CODE)

102.4 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code.... *{Remainder Text unchanged}*.

102.4.3 Local amendments. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 or the *National Electrical Code* (NEC) shall mean the Electrical Code as adopted.

R105.1 Permits Required. Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, to excavate or change the grade of any property, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit.

(Reason: Provide means to regulate grading affecting other properties.)

R105.2 Work exempt from permit.

Building:

11. Residential foundation repairs performed for the purpose of stabilizing an existing foundation without the removal of any existing concrete, except for the installation of new piers, pilings, or other associated support.

Grading:

1. Grading in an isolated, self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties.
2. Excavation for construction of a structure permitted under this code.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells or trenches for utilities.
6. Mining, quarrying, excavating, processing or stockpiling rock, sand, gravel, aggregate or clay controlled by other regulations provided such operations do not affect the lateral support of or significantly increase stresses in soil on adjacent properties.
7. Exploratory excavations performed under the direction of a registered professional engineer.

Exemption from the permit requirements of this section shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

(Reason: No inspections or other services are provided for this type of permit.)

R202

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with a yard or public way on not less than two sides.

(Reason: To distinguish Townhouses on separate lots.)

R302.3 Two-family dwellings.

Exceptions:

3. Two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.

(Reason: Provide guidance for a common construction method in this area. Correlates with amendment to IRC Section R202 Townhouse definition.)

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors. (Removed “equipped with a self-closing device.”)

(Reason: Absence of data linking self-closing devices to increased safety. Self-closing devices often fail to close the door entirely.)

R303.3 Bathrooms.

Exception: {existing text unchanged} Spaces containing only a water closet, a lavatory, or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

(Reason: Consistent with common local practice as recirculating fans are recognized as acceptable air movement.)

R313 Automatic Fire Sprinkler Systems. Amend to read as follows: AP101 Fire sprinklers. An approved automatic fire sprinkler system shall be installed in new one- and two-family dwellings and townhouses in accordance with Section 903.3.1 of the *International Building Code*

Exception: Dwellings containing less than 6,000 square feet enclosed space. For upper-level attic type rooms, areas where the ceiling height is less than five feet (5' 0") shall not be considered. Unfinished space framed to permit future expansion of floor area shall be considered

as part of the area. Joists designed to support floor loads shall be assumed to be for future area. (Living area plus garages and any other enclosed spaces but not open porches or patios).

AP101.1 Existing dwellings. An approved automatic fire sprinkler system shall be installed in existing dwellings in accordance with Section 903.3.1 of the *International Building Code* when the existing dwelling plus the proposed addition exceeds 6,000 square feet enclosed space (living area plus garages and any other enclosed spaces but not open porches or patios)

Exception: Existing unfinished space under roof (e. g. bonus space in attic) may be converted to living area unless the existing dwelling is already sprinklered, then the protection shall be extended to include the new area.

(Reason: In 2009, the State Legislature enacted SB 1410, amending section 1301. 551 subsection 1 of the occupation code, prohibiting cities from enacting fire sprinkler mandates in residential dwellings only. However, jurisdictions with ordinances that required sprinklers for residential dwellings prior to and enforced before January 1, 2009, may remain in place.)

R315.2.2 Alterations, repairs and additions.

Exception:

1. {existing text remains}
2. Installation, alteration or repairs of all electrically powered mechanical systems or plumbing appliances.

(Reason: Code intent is to protect against the products of combustion.)

R321.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall not be spelled out. Each character shall be a minimum of 6 inches (152.4 mm) high with a minimum stroke width of ½ inch (12.7 mm). {Remainder of text unchanged}.

(Reason: Call attention to addressing ordinance. Also matches amendment to IFC 505.1)

R401.2. Requirements. {existing text unchanged}

Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by a Texas-registered engineer.

Section R703.8.4. 1. 2; Veneer Ties for Wall Studs. add to read as follows:

In stud framed exterior walls all ties shall be anchored to studs as follows:

1. When studs are 16 in (407 mm) o. c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o. c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm) from the foundation.

(This amendment had been a carryover amendment for years to provide clear instruction for placement of brick ties. It is now retained with changes to reflect its correct placement and use for clarity when attachment to framing lumber (studs). It should remain for those purposes. It is in addition to the new Table in 2018 which provides for brick ties directly to sheathing.)

Chapter 11 [RE] - Energy Efficiency is deleted in its entirety; Reference the 2018 IECC for energy code provisions and recommended amendments.

(Reason: The recommended energy code changes from the Energy and Green Advisory Board update the amendments for Chapter 11. The 2018 International Energy Conservation Code should be 11 referenced for residential energy provisions. This approach simply minimizes the number of amendments to the IRC.)

M1305.1.3 Appliances in attics. Attics containing appliances shall be provided ... {bulk of paragraph unchanged} ... sides of the appliance where access is required. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm), or larger and large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb. (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IPC 502.3, IFGC 306.3 and IMC 306.3.)

M1411.3 Condensate disposal. Condensate from cooling coils and evaporators shall be conveyed from the drain pan outlet to a sanitary sewer through a trap, by means of a direct or indirect drain. {remaining text unchanged}.

(Reason: Reflects regional practice and to reduce excessive runoff into storm drains.)

M1411.3.1 Auxiliary and secondary drain systems. {paragraph unchanged}.

1. {text unchanged}
2. {text unchanged}
3. An auxiliary drain pan... {bulk of text unchanged} ... with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.
4. A water level detection device... {bulk of text unchanged} ... overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

(Reason: Reflects standard practice in this area.)

M1411.3.1.1 Water-level monitoring devices. On down-flow units ... {bulk of text unchanged} ... installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

(Reason: Reflects standard practice in this area.)

M1503.6 Makeup air required. Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or passively provided with makeup air at a rate approximately to the difference between exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with no fewer than one damper complying with Section M1503.6.2.

Exception: Make-up air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open. Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately the difference between the exhaust air rate and 600 cubic feet per minute.

(Reason: Exception requires makeup air equaling the amount above and beyond 400 cfm for larger fan which will address concerns related to "fresh" air from the outdoors in hot humid climates creating a burden on HVAC equipment and negative efficiency impacts from back-drafting and wasted energy. Consistent with IMC 505.4)

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that combustion air will not be taken from the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the *International Energy Conservation Code* and equipped with an approved self-closing device. Installation of direct-vent water heaters within an enclosure is not required.

(Reason: Corresponds with the provisions of IFGC Section 303.3, exception #5.)

G2415.2.1 Gas Pressure labeling. Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

“WARNING: ½ to 5 psi gas pressure – Do Not Remove”

(Reason: To protect homeowners and plumbers. Corresponds with IFGC 404.2.1)

G2415. 12 (404.12) Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

G2415.12. 1 (404.12.1) Individual Outdoor Appliances; Delete in its entirety.

(Reason. To provide increased protection to piping systems. Corresponds with IFGC 404.12)

G2417.1 (406.1) General. Prior to acceptance and initial operation, all piping installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the building official when the piping system is ready for testing. The equipment, material, power, and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be reasonable for determining that work will withstand the test pressure prescribed in the following tests.

(Reason: To utilize language used in the IFGC 406.1 regarding who is responsible for testing procedures.)

G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. (remainder of paragraph removed).

(Reason: To require the use of more accurate diaphragm gauges. Spring gauges do not provide accurate measurement below approximately 17 psig. Corresponds to IFGC 406.4)

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three- and one-half inches (3 ½”), a set hand, 1/10-pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing.

(Reason: To provide for lesser pressure to coordinate with the use of more accurate diaphragm gauges. Corresponds with IFGC 406.4.1)

G2417.4.2 (406.4.2) Test duration. The test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than thirty (30) minutes.

(Reason: To comply with accepted regional practices. Corresponds with IFGC 406.4. 2)

G2420.1.4 (109.1.4) Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the valves, or adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

(Reason: To provide proper security to CSST valves. These standards were established in this region in 1999 when CSST was an emerging technology. Corresponds with IFGC 409.1.4)

G2420.5.1 (409.5.1) Located within the same room. The shutoff valve ... {bulk of paragraph unchanged} ... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

(Reason: Reflects regional practice and provides an additional measure of safety. Corresponds with IFGC 409.5.1)

G2421.1 (410.1) Pressure regulators. A line pressure regulator shall be ... {bulk of paragraph unchanged} ... approved for outdoor installation. Access to regulators shall comply with the requirements for access to appliances as specified in Section M1305.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

(Reason: To require adequate access to regulators. Corresponds with IFGC 410. 1)

Section G2422. 1. 2.3 (411.1.3.3); Prohibited locations and penetrations. Delete Exception 1 and Exception 4.

(Reason: To comply with accepted regional practices. Corresponds with IFGC 411.1.3.3)

G2445.2 (621.2) Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented room heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Building Official unless an unsafe condition is determined to exist as described in International Fuel Gas Code Section 108.7.

(Reason: Gives code official discretion. Corresponds with IFGC 621.2)

G2448.1.1 (624.1.1) Installation requirements. The requirements for water heaters relative to sizing... {bulk of paragraph unchanged} ... with this code. The requirements for water heaters relative to access sizing, relief valves, drain pans and scald protection shall be in accordance with this code.

(Reason: To clarify installation requirements. Also corresponds with amendments regarding water heater access. Corresponds to IFGC 624.1.1)

P2603.3 Protection against corrosion. Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects 15 piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

Reason: Allows for other materials to be accepted. Corresponds with IPC 305.1)

P2603.5.1 Sewer depth. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

(Reason: Provides sewer depth that is common in this region. Deleted reference to private sewage disposal because a private sewage disposal code is not typically adopted in this region. Corresponds with IPC 305.4.4)

P2604.3.1 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

(Reason: To follow manufacturer backfill requirements and to be clear to Inspectors out in the field.)

P2801.6 Required pan. Where a storage tank -type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
2. Plastic not less than 0.036 inch (0.9 mm) in thickness.
3. Other approved materials.

(Reason: Plastic burns degrading material over time on gas fired water heaters and to maintaining protection level. Corresponds to IPC 504.7 unamended)

P2801.6.1 Pan size and drain. The pan shall be not less than 1½ inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than ¾ inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table P2906.5. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufacturer's installation instructions and installed with those instructions. {existing test unchanged}

(Reason: Regionally accepted practice. Corresponds with IFGC 504.7.1)

P2804.6.1 Requirements for discharge pipe.

1. {text unchanged}
2. {text unchanged}
3. Not be smaller than the diameter of the outlet of the valves served.
4. {text unchanged}

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacturer's installation instructions and installed with those instructions.

5. Discharge to the outdoors.

{remainder unchanged}

(Reason: To ensure the T & P is run to the exterior. Corresponds with IPC 504.6)

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric -type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principal backflow prevention assembly. {remainder unchanged}

(Reason. To recognize regional practices. Corresponds with IPC 608.17.5)

P3003.9.2. Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA 13137.3, CSA B181.2 or CSA 13182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

(Reason: To keep the process of joining PVC pipe. Corresponds to IPC 705.10.2)

P3111 Combined waste and vent systems. Delete section.

(Reason: A combination waste and vent system is not approved for use in residential construction.)

P3112.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

(Reason: To clarify the installation of island venting and to provide a regional guideline on a standard installation method for this region. Corresponds with IPC 916.2)

SECTION 3

This ordinance shall be cumulative of all provisions of ordinances of the City of Bellmead, Texas, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinance are hereby repealed.

SECTION 4

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs, and sections of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgement or decree of any court of competent jurisdiction, such unconstitutional shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of and such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 5

This ordinance shall be in full force and effect May 1, 2021.

PASSED AND APPROVED ON FIRST READING MARCH 9, 2021.

PASSED AND APPROVED ON SECOND READING APRIL 13, 2021

PASSED AND APPROVED ON THIRD READING APRIL 13, 2021.

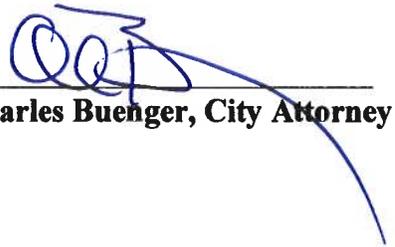



James Cleveland, Mayor

ATTEST:


Holly Owens, City Secretary

APPROVED AS TO FORM & LEGALITY:


Charles Buenger, City Attorney



CITY COUNCIL AGENDA MEMO

Prepared by: Holly Owens

April 13, 2021

City Manager Approval: Yousry Zakhary

ICC updates – International Residential Code 2018 Edition

DESCRIPTION:

Ordinance 2021-06: An Ordinance of the City of Bellmead, Texas, Amending Chapter 4 – Buildings and Building Regulations, Article II. – Building Code; Providing for the adoption of the *International Residential Code 2018 Edition*; Providing for the adoption of local amendments and appendices thereto; Providing for recording of such code as a public record; Providing that this ordinance shall be cumulative of all ordinances; Providing a severability clause; Providing a savings clause; and Providing an effective date.

BACKGROUND:

Currently, the City of Bellmead operates under the 2012 International Code Council. All codes directly affect construction, inspections, and the ISO rating for the city. Each appendices and amendments are reflective of our community and the surrounding communities. They are also recommended for our region by the NCTCOG.

The ISO (Insurance Services Office) rating is a score that indicates how well-protected a community is by the fire department. This score is provided to insurance companies which effect the rates. The BCEGS (Building Code Effectiveness Grading Schedule) assesses the building code in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards. Municipalities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that. In the ISO rating scale, a lower number is better: 1 is the best possible rating, while a 10 means the fire department did not meet the ISO’s minimum requirements. The City of Bellmead received a Class 9 for 1 & 2 family residential property and a Class 9 for commercial and industrial property in the February 2021 report. By adopting the 2018 codes and consecutively updating every two years, the City of Bellmead’s rating will reflect our mission to better serve our community and keep them safe.

What’s new in the IRC 2018 codes?

- **R301.2 Wind Design Criteria and Wind Speed Maps**
 Ultimate design wind speed values replace basic wind speed values for 3-sec gust wind speeds in Section 301.2.1. A wind speed conversion table has been added for conversion from ultimate design to nominal design wind speeds.

**TABLE R301.2.1.3
WIND SPEED CONVERSIONS***

V_{ult}	110	115	120	130	140	150	160	170	180	190	200
V_{nom}	85	89	93	101	108	116	124	132	139	147	155

For SE: 1 mile per hour = 0.447 m/s.
 a. Linear interpolation is permitted.

- **R305 Ceiling Height**

AGENDA ITEM 9B

The minimum ceiling height for bathrooms, toilet rooms, and laundry rooms has been reduced from 7 feet to 6 feet, 8 inches.

- **R325.6, R202 Habitable Attics**

The definition and technical requirements of habitable attic have been revised and clarifies, that a habitable attic, even if unfinished, is a habitable space.

- **R404.4 Retaining Walls**

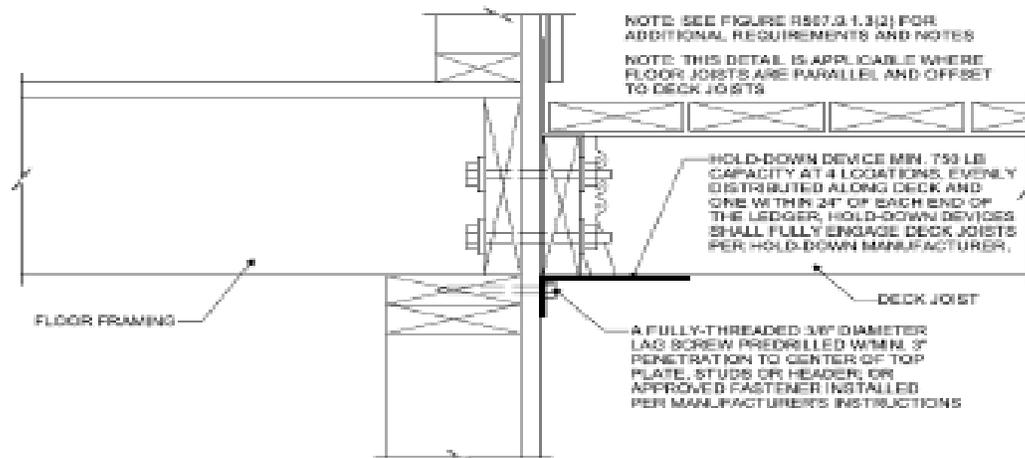
Retaining walls that are not laterally supported at the top and that retain in excess of 48 inches of unbalanced fill, or retaining walls exceeding 24 inches in height that resist lateral loads in addition to soil, shall be designed by accepted engineering practice to ensure stability against overturning. *(The underlined section was added to the code.)*

- **R408.3 Unvented Crawl Space**

Ventilation of the under-floor space is not required when an appropriately-sized dehumidifier is provided in combination with the Class 1 vapor retarder requirements. *(This was added to the other possible choices under this section.)*

- **R507.9.2 Lateral Connection**

Four smaller hold-down tension devices with 750 lb. capacity can now be utilized as an alternative to the larger 1,500 lb. capacity tension devices.



- **M1502.4.4 Dryer Exhaust Duct Power Ventilators**

The use of duct-power ventilators for dryer exhaust has been added into the code which can allow the maximum allowable exhaust length to exceed 35 feet when installed.

- **M1503.6 Makeup Air for Kitchen Exhaust Systems**

Makeup air for domestic cooking exhaust systems is no longer required if all fuel-burning appliances in the dwelling unit have a direct vent or mechanical draft vent system.

- **R504.3 Materials**

Framing materials including sleepers, joists, blocking and plywood subflooring, shall be pressure-preservative treated and dried after treatment in accordance with AWPA U1

AGENDA ITEM 9B

(Commodity Specification A, Special Requirements 4.2), and shall bear the label of an accredited agency. (The underlined section was added to the code.)

- **R1003.9.2 Spark Arrestors**

The spark arrestor shall be located with access for the cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue. *(This was added as a requirement.)*

- **N1101.6 (R202) Defined Terms**

Addition: An extension or increase in the conditioned space floor area, number of stories or height of a building or structure. *(The underlined section was added for added clarification defining an addition.)*

- **P2801.6 Required Pan**

A plastic pan beneath a gas-fired water heater shall be constructed of material having a flame spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E84 or UL 723. *(This was added to the requirements.)*

- **E3702.10 Branch Circuits Serving Heating Loads**

Electric space-heating and water-heating appliances shall be considered to be continuous loads. Branch circuits supplying two (2) or more outlets for fixed electric space-heating equipment shall be rated not over 30 amperes [424.3(A)] *(Sentence added to be more specific under the requirements.)*

These are only a few of the changes.

This is the link for the code book for IRC.

[2018 INTERNATIONAL RESIDENTIAL CODE - ICC DIGITAL CODES \(iccsafe.org\)](https://www.iccsafe.org/)

This is the second and third final reading. The first reading was held on March 9, 2021 with a vote of 6-0-0. Any plans that come in for review between now and April 30th, will be reviewed under the current 2012 codes. After final approval, the ordinance caption will be published in the Waco Tribune-Herald and will take full effect May 1, 2021.

FISCAL IMPACT or FUNDING SOURCE:

N/A

STAFF RECOMMENDATION:

Motion to approve **Ordinance 2021-06:** An Ordinance of the City of Bellmead, Texas, Amending Chapter 4 – Buildings and Building Regulations, Article II. – Building Code; Providing for the adoption of the International Residential Code 2018 Edition; Providing for the adoption of local amendments and appendices thereto; Providing for recording of such code as a public record; Providing that this ordinance shall be cumulative of all ordinances; Providing a severability clause; Providing a savings clause; and Providing an effective date.

ATTACHMENTS:

- Ordinance 2021-06 - IRC