

**TOWN OF FLOWER MOUND, TEXAS**

**ORDINANCE NO. 18-22**

**AN ORDINANCE OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING CHAPTER 14, "BUILDINGS AND BUILDING REGULATIONS," ARTICLE XV, OF THE CODE OF ORDINANCES OF THE TOWN OF FLOWER MOUND, TO PROVIDE FOR ADOPTION OF THE *INTERNATIONAL ENERGY CONSERVATION CODE*, 2021 EDITION, AND LOCAL AMENDMENTS THERETO; PROVIDING THAT THE BOARD OF ADJUSTMENT SHALL BE THE BOARD OF APPEALS FOR PURPOSES SET OUT HEREIN; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the 77<sup>th</sup> Texas Legislature passed Senate Bill 5 ("SB 5") in 2001 adopting the *International Energy Conservation Code* for all structures in Texas not otherwise regulated by the *International Residential Code*; and,

**WHEREAS**, SB 5 requires all municipalities to adopt the *International Energy Conservation Code*, allows municipalities to adopt local amendments thereto, and further requires municipalities to review and consider adopting updates to the Code, which occur in three-year cycles; and,

**WHEREAS**, the current energy code in the Town is the 2018 edition of the *International Energy Conservation Code*, and the Town's energy code should be updated to the most current published energy code available; and,

**WHEREAS**, the Town of Flower Mound, together with other local governments of the North Central Texas Council of Governments region, has participated in a study of the 2021 edition of the *International Energy Conservation Code* to provide local amendments that address the conditions of the North Central Texas area; and,

**WHEREAS**, the 2021 edition of the *International Energy Conservation Code* is the most current published code available that addresses the standard for energy efficiency of buildings and structures within the Town; and,

**WHEREAS**, the Town Council of the Town of Flower Mound has determined that it is in the best interest of the citizens of the Town of Flower Mound to update and adopt the 2021 edition of the *International Energy Conservation Code* and has determined that this will promote the health, safety and general welfare of the citizens of the Town of Flower Mound and the general public; and,

**WHEREAS**, the Town Council of the Town of Flower Mound further desires to adopt certain local amendments to such Code reflecting the unique needs of the Town of Flower Mound;

NOW, THEREFORE, BE IT ORDAINED (RESOLVED) BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, THAT:

**SECTION 1**

All of the above premises are found to be true and correct factual and legislative determinations of the Town of Flower Mound and are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

**SECTION 2**

From and after the effective date of this Ordinance, Section 14-601 of the Code of Ordinances of the Town of Flower Mound, Texas, entitled "International Energy Conservation Code Adopted," is hereby deleted and replaced with the following provision:

**"Sec. 14-601. International Energy Conservation Code Adopted.**

The *International Energy Conservation Code*, 2021 edition, a copy of which is on file in the office of the town secretary, is hereby adopted and designated as the energy code of the town, the same as though the provisions of the *International Energy Conservation Code*, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in section 14-602."

**SECTION 3**

From and after the effective date of this Ordinance, Section 14-602 of the Code of Ordinances of the Town of Flower Mound, Texas, entitled "Local Amendments to International Energy Conservation Code," is hereby deleted and replaced with the following provision:

**"Sec. 14-602. Local Amendments to International Energy Conservation Code.**

The *International Energy Conservation Code*, 2021 edition, is hereby amended by amending only the enumerated sections and provisions, as follows, and all sections and provisions not expressly amended or deleted shall remain in full force and effect:

- (a) Section C101.1 and Section R101.1 of the *International Energy Conservation Code*, 2021 edition, are hereby amended to read as follows:

**Section C101.1. Title.** This code shall be known as the Energy Conservation Code of the Town of Flower Mound and shall be cited as such. It is referred to herein as “this code.”

**Section R101.1 Title.** This code shall be known as the Energy Conservation Code of the Town of Flower Mound and shall be cited as such. It is referred to herein as “this code.”

- (b) Sections C102.1.2 and R102.1.2 of the *International Energy Conservation Code*, 2021 edition, are hereby added to read as follows:

**Section C102.1.2. Alternative compliance.** A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

**Section R102.1.2. Alternative compliance.** A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4.1.2 and R403.3.3 respectively.

- (c) Sections C202 and R202 of the *International Energy Conservation Code*, 2021 edition, are hereby amended by adding a new definition of “Projection Factor” to the list of definitions, adding the definition of “Dynamic Glazing” to R202 only, and amending the definition of “Building Thermal Envelope,” in alphabetical order to read as follows:

**BUILDING THERMAL ENVELOPE.** *{Existing text unchanged}*. The building thermal envelope shall include any building element that separates a commercial occupancy from a residential occupancy and provides a boundary between conditioned spaces.

**DYNAMIC GLAZING.** Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

**PROJECTION FACTOR.** The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device.

- (d) Section R401.2.5 of the *International Energy Conservation Code*, 2021 edition, is hereby amended by deleting this section in its entirety.

**Section R401.2.5. Additional energy efficiency.** Deleted.

- (e) Table R402.1.2 of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

CLIMATE ZONE	FENESTRATION U-FACTOR	CEILING U-FACTOR
3	<u>0.32</u>	.029

- (f) Table R402.1.3 of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

CLIMATE ZONE	FENESTRATION U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	SLAB R-VALUE & DEPTH
3	<u>0.32</u>	42	19 or 13+3ci or 0+15	0

- (g) Sections C402.2.8 and R402.2.14 of the *International Energy Conservation Code*, 2021 edition, are hereby added to read as follows:

**Section C402.2.8. Insulation installed in walls.** To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting, or other equivalent material approved by the building official.

**Section R402.2.14. Insulation installed in walls.** To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing,

wood structural panel sheathing, netting, or other equivalent material approved by the building official.

- (h) Section R402.4.1.2 of the *International Energy Conservation Code*, 2021 edition, is hereby amended by adding a paragraph at the end to read as follows:

**Section R402.4.1.2. Testing.** *{Existing text unchanged}* ... Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed or have any financial interest in the company that constructs the structure.

- (i) Section R402.4.6 of the *International Energy Conservation Code*, 2021 edition, are hereby amended to read as follows:

**Section R402.4.6. Electrical and communication outlet boxes (air-sealed boxes).** Electrical and communication outlet boxes (air-sealed boxes). Electrical and communication outlet boxes installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces.

- (j) Section C402.5.2 of the *International Energy Conservation Code*, 2021 edition, are hereby added to read as follows:

**Section C402.5.2. Dwelling and sleeping unit enclosure testing.** The building thermal envelope shall be tested in accordance with ASTM E779, ANSI/RESNET/ICC 380, ASTM E1827 or an equivalent method approved by the code official. The measured air leakage shall not exceed 0.30 cfm/ft<sup>2</sup> (1.5 Us m<sup>2</sup>) of the testing unit enclosure area at a pressure differential of 0.2 inch water gauge (50 Pa). Where multiple dwelling units or sleeping units or other occupiable conditioned spaces are contained within one building thermal envelope, each unit shall be considered an individual testing unit, and the building air leakage shall be the weighted average of all testing unit results, weighted by each testing unit's enclosure area. Units shall be tested separately with an unguarded blower door test as follows:

1. Where buildings have fewer than eight testing units, each testing unit shall be tested.

2. For buildings with eight or more testing units, the greater of seven units or 20 percent of the testing units in the building shall be tested, including a top floor unit, a ground floor unit, a middle floor unit, and a unit with the largest testing unit enclosure area. For each tested unit that exceeds the maximum air leakage rate, an additional three units shall be tested, including a mixture of testing unit types and locations.
- (k) Section R403.3.3 of the *International Energy Conservation Code, 2021* edition, is hereby amended by adding a paragraph at the end to read as follows:
- Section R403.3.3. Duct testing. (Mandatory).** *{Existing text unchanged}*.
- Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individual must be an independent third-party entity, and may not be employed or have any financial interest in the company that constructs the structure.
- (l) Section R404.2 of the *International Energy Conservation Code, 2021* edition, is hereby amended by deleting this section in its entirety.
- Section R404.2. Interior lighting controls.** Deleted.
- (m) Section R405.5.2 of the *International Energy Conservation Code, 2021* edition, is hereby amended by adding a sentence to the end of the paragraph to read as follows:
- Section R405.5.2. Specific approval.** *{Existing text unchanged}*. Acceptable performance software simulation tools may include, but are not limited to, REM Rate™, Energy Gauge, and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in R405.3.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.
- (n) Table R406.4 of the *International Energy Conservation Code, 2021* edition, is hereby amended to read as follows:

**TABLE R406.4<sup>1</sup>**  
**MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	63

<sup>1</sup> This table is effective until August 31, 2022.

**TABLE R406.4 <sup>2</sup>  
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	59

<sup>2</sup> The table is effective from September 1, 2022 to August 31, 2025.

**TABLE R406.4 <sup>3</sup>  
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	57

<sup>3</sup> This table is effective from September 1, 2025 to August 1, 2028.

**SECTION 4**

From and after the effective date of this Ordinance, Section 14-603 of Chapter 14 of the Code of Ordinances of the Town of Flower Mound, Texas, entitled “Board of Appeals,” is hereby deleted and replaced with the following:

**“Sec. 14-603. Board of Appeals**

The members of the Flower Mound Board of Adjustment are hereby appointed as the Board of Appeals as provided by the *International Energy Conservation Code*, 2021 edition, and any changes in membership of said Board of Adjustment shall likewise be reflected in the membership of said Board of Appeals.”

**SECTION 5**

All ordinances, orders, or resolutions heretofore passed and adopted by the Town of Flower Mound, Texas, are hereby repealed to the extent that said ordinances, orders, or resolutions, or parts thereof, are in conflict herewith.

**SECTION 6**

If any section, subsection, clause, phrase, or provision of this Ordinance or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void, or unconstitutional, the remaining sections,

subsections, clauses, phrases, and provisions of this Ordinance, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

**SECTION 7**

Any person who violates any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine as provided in Section 1-13 of the Code of Ordinances of the Town of Flower Mound, Texas. Each day any such violation or violations exist shall constitute a separate offense and shall be punishable as such.

**SECTION 8**

The Town Secretary of the Town of Flower Mound is hereby directed to publish the caption in the official newspaper of the Town of Flower Mound as required by Section 3.07 of the Charter of the Town of Flower Mound.

**SECTION 9**

This Ordinance shall take effect and be in full force from and after its passage and publication, as provided by the Revised Civil Statutes of the State of Texas and the Home Rule Charter of the Town of Flower Mound, Texas.

**DULY PASSED AND APPROVED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, BY A VOTE OF 5 TO 0, ON THIS 18<sup>TH</sup> DAY OF APRIL 2022.**

**APPROVED:**

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**Derek France, MAYOR**

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**ATTEST:**

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**Theresa Scott, TOWN SECRETARY**