

CITY OF FORNEY, TEXAS

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF FORNEY, TEXAS, AMENDING CHAPTER 3 OF THE CODE OF ORDINANCES OF THE CITY OF FORNEY, TEXAS, BY AMENDING ARTICLE 3.02, DIVISION 9, “ENERGY CONSERVATION CODE,” ADOPTING THE 2021 EDITION OF THE *INTERNATIONAL ENERGY CONSERVATION CODE* BY THE AMENDMENT OF SECTION 3.02.401, “ADOPTION,” AND ESTABLISHING AMENDMENTS TO THE 2021 EDITION OF THE *INTERNATIONAL ENERGY CONSERVATION CODE* IN ACCORDANCE WITH THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS’ RECOMMENDED AMENDMENTS, LOCAL AMENDMENTS AND INDUSTRY STANDARDS THROUGH THE AMENDMENT OF SECTION 3.02.402, “AMENDMENTS”; PROVIDING A PENALTY; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the 77th 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*, and further requires municipalities to review and consider adopting updates to the Code, which occur in three-year cycles; and

WHEREAS, SB 5 provides that municipalities may adopt local amendments to the *International Energy Conservation Code*; and

WHEREAS, the City of Forney, Texas (“City”), together with other local governments of the North Central Texas Council of Governments region, has participated in a study of the *International Energy Conservation Code* to provide amendments that address the conditions of the North Central Texas area; and

WHEREAS, the *International Energy Conservation Code* is designed to reduce the air pollutant emissions that affect the health of persons in the state and City, assist in moderating future peak electric power demand, and reduce energy consumption by residents and businesses in the state and City; and

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

WHEREAS, the City Council of the City of Forney, Texas (“City Council”) has determined that it is in the best interest of the citizens of the City of Forney to update and adopt the 2021 edition of the *International Energy Conservation Code* as the standard for construction, use, occupancy, maintenance, and energy efficiency of buildings and structures in the City limits, as set forth herein and as that code is specifically modified by this Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORNEY, TEXAS, THAT:

Section 1. FINDINGS INCORPORATED

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

Section 2. AMENDMENT OF ORDINANCE

From and after the effective date of this Ordinance, Chapter 3, Article 3.02, Division 9, of the Code of Ordinances of the City of Forney, Texas, entitled “Energy Conservation Code,” is hereby amended by amending Sections 3.02.401, entitled “Adoption,” and 3.02.402, entitled “Amendments,” in their entirety and replacing said provisions with new Sections 3.02.401, entitled “Adoption of *International Energy Conservation Code*,” and 3.02.402, entitled “*International Energy Conservation Code* Amendments,” to read as follows:

“Sec. 3.02.401 Adoption of *International Energy Conservation Code*.

The *International Energy Conservation Code*, 2021 edition, a copy of which is on file in the offices of the City of Forney, is hereby adopted and designated as the Energy Conservation Code of the City, 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 3.02.402.

Sec. 3.02.402 *International Energy Conservation Code* Amendments.

The following amendments repeal and reenact or add sections to the *International Energy Conservation Code*, 2021 edition, adopted by Section 3.02.401 of this Code for the purpose of consistency with specific past practices and the recommendations of the North Central Texas Council of Governments, and all sections not expressly amended remain in full force and effect as adopted.

- (1) Section 101.1 of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

101.1. Title. This code shall be known as the Energy Conservation Code of the City of Forney and shall be cited as such. It is referred to herein as “this code.”

- (2) Section 105.2, Required Inspections, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to change numbering and to read as follows:

R105.2.1 Footing and foundation inspection.

Inspections associated with footing and foundations shall verify compliance with the code as to R-value, location, thickness, depth of burial and protection of insulation as required by the code and approved plans and specifications.

R105.2.2 Framing and Air Barrier rough-in inspection.

Inspections at framing and rough-in shall be made before application of insulation and shall verify compliance with the code as to air leakage controls as required by this code; and approved plans and specifications.

R105.2.3 Insulation and Fenestration rough-in inspection.

Inspections at framing and rough-in shall be made before application of interior finish and shall verify compliance with the code as to: types of insulation and corresponding R-values and their correct location and proper installation; fenestration properties such as U-factor and SHGC and proper installation.

R105.2.4 Plumbing rough-in inspection.

Inspections at plumbing rough-in shall verify compliance as required by the code and approved plans and specifications as to types of insulation and corresponding R-values and protection and required controls.

R105.2.5 Mechanical rough-in inspection.

Inspections at mechanical rough-in shall verify compliance as required by the code and approved plans and specifications as to installed HVAC equipment type and size, required controls, system insulation and corresponding R-value, system air-leakage control, programmable thermostats, dampers, whole-house ventilation, and minimum fan efficiency.

Exception: Systems serving multiple dwelling units shall be inspected in accordance with Section C105.2.4.

R105.2.6 Final Inspection.

The building shall have a final inspection and shall not be occupied until approved. The final inspection shall include verification of the installation of all required building systems, equipment and controls and their proper operation and the required number of high efficacy lamps and fixtures.

- (3) Section C102 of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add Section C102.1.2 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.

- (4) Section R102 of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add Section R102.1.2 (N1101.4.1) to read as follows:

R102.1.2 (N1101.4.1) 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 (N1102.4.1.2) and R403.3.3 (N1103.3.3) respectively.

- (5) Section R202 (N1101.6) of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add a new definition to the list of definitions in alphabetical order to read as follows:

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.

- (6) Section R202 (N1101.6) of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add a new definition to the list of definitions in alphabetical order to read as follows:

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).

- (7) Table 402.1.2, Maximum Assembly/Climate Zone Items, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

CLIMATE ZONE	FENESTRATION U-FACTOR	Ceiling U-Factor
2	0.40	0.29
2	0.32	0.29

- (8) Table 402.1.3, Insulation/Climate Zone Items, 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
2	0.40	42	13 or 0 + 10	0
3	0.32	42	19 or 13 + 3 ci, 0 + 15	0

- (9) Section C402.5.2, Dwelling and sleeping unit enclosure testing, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

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/ft² (1.5 Us m²) 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 two three units shall be tested, including a mixture of testing unit types and locations.
- (10) Section R402.4.1, Building thermal envelope, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add Section R402.4.1.4 to read as follows:

R402.4.1.4 Sampling options for R2 multifamily dwelling units. For buildings with eight or more testing units that must be tested as required by R402.4.1.2 or R402.4.1.3, 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. Where buildings have fewer than eight testing units, each testing unit shall be tested.

- (11) Section R403.3, Ducts, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add Section R403.3.8 to read as follows:

R403.3.8 Sampling options for R2 multifamily dwelling units. For buildings with eight or more testing units that must be tested as required by R403.3.5, 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 floor area. For each tested unit that exceeds the maximum duct leakage rate, an additional three units shall be tested, including a mixture of testing unit types and locations. Where buildings have fewer than eight testing units, each testing unit shall be tested.

- (12) Section R403.6, Mechanical Ventilation, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to add Section R403.6.4 to read as follows:

R403.6.4 Sampling options for R2 multifamily dwelling units. For buildings with eight or more testing units that must be tested as required by R403.6.3, 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 floor area. For each tested unit that does not meet the minimum ventilation rate, an additional three units shall be tested, including a mixture of testing unit types and locations. Where buildings have fewer than eight testing units, each testing unit shall be tested.

- (13) Section R405.2, Performance-based compliance, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

Section R405.2 Performance-based compliance. Compliance based on total building performance requires that a proposed design meets all of the following:

1. The requirements of the sections indicated within Table R405.2.
2. The building thermal envelope greater than or equal to levels of efficiency and solar heat gain coefficients in Table R402.1.1 or R 402.1.3 of the 2009 International Energy Conservation Code.
3. An annual energy cost that is less than or equal to the annual energy cost of the 2021 standard reference design or 8% less than the annual energy cost of the 2018 standard reference design. Energy prices shall be taken from a source approved by the code official, such as the Department of Energy, Energy Information Administration's State Energy System Prices and Expenditures reports. Code officials shall be permitted to require time-of-use pricing in energy cost calculations.

Exception: The energy use based on source energy expressed in Btu or Btu per square foot of conditioned floor area shall be permitted to be substituted for the energy cost. The source energy multiplier for electricity shall be 3.16. The source energy multiplier for fuels other than electricity shall be 1.1.

- (14) Section R401.2.5, Additional Energy Package Options, of the *International Energy Conservation Code*, 2021 edition, is hereby deleted.
- (15) Section R408, Additional Efficiency Package Options, of the *International Energy Conservation Code*, 2021 edition, is hereby deleted.
- (16) Section R402.4.6, Electrical and Communication outlet boxes, of the *International Energy Conservation Code*, 2021 edition, is hereby deleted after the first sentence to read as follows:

R402.4.6 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. ~~Electrical and communication outlet boxes shall be tested in accordance with NEMA OS 4, Requirements for Air-Sealed Boxes for Electrical and Communication Applications, and shall have an air leakage rate of not greater than 2.0 cubic feet per minute (0.944 L/s) at a pressure differential of 1.57 psf (75 Pa). Electrical and communication outlet boxes shall be marked "NEMA OS 4" or "OS 4" in accordance with NEMA OS 4. Electrical and communication outlet boxes shall be installed per the manufacturer's instructions and with any supplied components required to achieve compliance with NEMA OS 4.~~

- (17) Section R404.2, Interior Lighting Controls, of the *International Energy Conservation Code*, 2021 edition, is hereby deleted.

(18) Table R406.4 (N1106.4), Maximum Energy Rating Index, of the *International Energy Conservation Code*, 2021 edition, is hereby amended to read as follows:

**TABLE R406.4 (N1106.4)¹
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
2	63
3	63

¹ The table is effective until August 31, 2022.

**TABLE R406.4 (N1106.4)²
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
2	59
3	59

² This table is effective from September 1, 2022 to August 31, 2025.

**TABLE R406.4 (N1106.4)³
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
2	57
3	57

³ This table is effective from September 1, 2025 to August 31, 2028.

**TABLE R406.4 (N1106.4)⁴
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
2	55
3	55

⁴ This table is effective on or after September 1, 2028.

Section 3. PENALTY CLAUSE

Any person, firm or corporation violating any of the provisions or terms of this Ordinance or the Code of Ordinances as amended hereby shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000.00) for each offense, and each and every day such violation shall continue shall constitute a separate offense.

Section 4. SEVERABILITY CLAUSE

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 judgment or decree of any court of competent jurisdiction, such unconstitutionality 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 of this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

Section 5. REPEALER CLAUSE

Any provision of any prior ordinance of the City, whether codified or uncodified, which is in conflict with any provision of this Ordinance, is hereby repealed to the extent of the conflict, but all other provisions of the ordinances of the City, whether codified or uncodified, which are not in conflict with the provisions of this Ordinance shall remain in full force and effect.

Section 6. EFFECTIVE DATE

Upon its passage and publication as required by law, this Ordinance shall become effective on January 1, 2023.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Forney, Texas, on this the _____ day of _____, 2022.

Amanda Lewis, Mayor

ATTEST:

Laura Calcote, Interim City Secretary

APPROVED AS TO FORM AND LEGALITY:

Jennifer Barnes Smith, City Attorney