

An Ordinance of the City of Plano, Texas, repealing in its entirety City of Plano Ordinance No. 2022-1-15 codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances; adopting the 2024 Edition of the International Energy Conservation Code, with certain additions, deletions, and amendments, as the Energy Conservation Code of the City of Plano; and providing a repealer clause, a severability clause, a savings clause, a penalty clause, a publication clause, and an effective date.

WHEREAS, on January 24, 2022, by Ordinance No. 2022-1-15, the City Council of the City of Plano adopted the 2021 International Energy Conservation Code, with amendments, and such was codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of the City of Plano (“City”); and

WHEREAS, on April 15, 2025 the Building Standards Commission held a public hearing to discuss the adoption of the 2024 Edition of the International Energy Conservation Code, a publication of the International Code Council (I.C.C.), and to receive input from the general public and all persons who may be affected by the proposed adoption; and

WHEREAS, upon recommendation of the Building Standards Commission and upon full review and consideration of all matters attendant and related thereto, the City Council is of the opinion that the 2024 Edition of the International Energy Conservation Code, and the additions, deletions, and amendments thereto, should be approved and adopted as the Energy Conservation Code of the City.

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

Section I. Ordinance No. 2022-1-15, duly passed and approved by the City Council of the City of Plano on January 24, 2022, is hereby repealed in its entirety.

Section II. A new Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of City of Plano is hereby adopted and shall read in its entirety as follows:

“ARTICLE XVIII. ENERGY CONSERVATION CODE

DIVISION 1. GENERALLY

Sec. 6-684. Penalty.

Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

Sec. 6-685. Adopted.

The 2024 Edition of the International Energy Conservation Code, a publication of the International Code Council (I.C.C.), is hereby adopted and designated as the Energy Conservation Code of the City to the same extent as if such Code were copied verbatim in this Article, subject to deletions, additions, and amendments prescribed in this Article. A copy of the 2024 Edition of the International Energy Conservation Code is on file in the office of the City Secretary.

DIVISION 2. AMENDMENTS

Sec. 6-686. Deletions, Additions, Amendments.

The following deletions, additions, and amendments to the International Energy Conservation Code adopted herein are hereby approved and adopted:

Section C104.1; *change section C104.1 by adding a new Section C104.1.2 to read as follows:*

C104.1.2 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 C403.7.4.1; *change to read as follows:*

C403.7.4.1 Nontransient dwelling units. Nontransient dwelling units shall be provided with outdoor air energy recovery ventilation systems complying with not less than one of the following:

1. The system shall have an *enthalpy recovery ratio* of not less than 50 percent at cooling design condition and not less than 60 percent at heating design condition.
2. The system shall have a sensible recovery efficiency (SRE) that is not less than 65 percent at 32°F (0°C) and, in Climate Zones 0A, 1A, 2A and 3A, shall have a net moisture transfer (NMT) that is not less than 40 percent at 95°F (35°C). SRE and NMT shall be determined from a *listed* value or from interpolation of *listed* values at an airflow not less than the design airflow, based on testing in accordance with CAN/CSA C439.

Exceptions:

1. Nontransient dwelling units in Climate Zone 3C.
2. Nontransient dwelling units with not more than 500 square feet (46 m²) of *conditioned floor area* in Climate Zones 0, 1, 2, 3, 4C and 5C.
3. *Enthalpy recovery ratio* requirements at heating design condition in Climate Zones 0, 1 and 2.

4. *Enthalpy recovery ratio* requirements at cooling design condition in Climate Zones 4, 5, 6, 7 and 8.
5. Dwelling units using ventilation systems per the Fan Efficacy Table in R406, shall be considered in compliance.

Section C405.2.10; *delete Section C405.2.10 “Sleeping unit and dwelling unit lighting and switched receptacle controls” in its entirety.*

Section R104; *change Section R104.1 by adding a new Section R104.1.2 (N1101.4.1) to read as follows:*

R104.1.2 (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 one- and two-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4.1.2 (N1102.4.1.2) and R403.3.3 (N1103.3.3), respectively.

Section R105.2.2; *delete Section R105.2.2 “Solar-ready system” in its entirety.*

Section R106.3; *delete Section R106.3 “Permit valuation” in its entirety.*

Section R202 (N1101.6); *change Section R202 by adding the following definition:*

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).

Section R401.2.1; *change to read as follows:*

R401.2.1 Prescriptive Compliance Option. The Prescriptive Compliance Option requires compliance with Sections R401 through R404.

Table R402.1.2; *change a portion of Table R402.1.2 “Maximum Assembly U-Factors and Fenestration Requirements” to add an additional category and subnote “f” to read as follows (remainder of Table is unchanged):*

Climate Zone	3
Attic roofline <i>U</i> -factor ^f	0.035

- f. Air-impermeable insulation located at the attic roofline but below the roof deck may be used if mechanical equipment and air distribution system are

located entirely within the building thermal envelope. "Air-impermeable shall be defined as having an air permeance not exceeding 0.2 L/s- m² at 75 Pa Pressure differential tested according to ASTM E 2178 or ASTM E 283.

Table R402.1.3; *change a portion of Table R402.1.3 "Insulation Minimum R-Values and Fenestration Requirements by Component" to add an additional category and subnote "i" to read as follows (remainder of Table is unchanged):*

Climate Zone	3
Attic roofline R-value ⁱ	<u>30+0</u> <i>ci</i>

- i. Air-impermeable insulation of R-30 or greater located at the attic roofline but below the roof deck may be used if mechanical equipment and air distribution system are located entirely within the building thermal envelope. "Air-impermeable" shall be defined as having an air permeance not exceeding 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or ASTM E 283.

Section R402.2.10 (N1102.2.10); *change to read as follows:*

R402.2.10 (N1102.2.10) Slab-on-grade floors. Slab-on-grade floors with a floor surface within 24 inches (610 mm) above or below grade shall be insulated in accordance with Section R402.2.10.1 or R402.2.10.2.

Exception: Slab-edge insulation is not required in jurisdictions designated by the code official as having a moderate to heavy or very heavy termite infestation probability.

Section R402.5.5 (N1102.5.5); *change to read as follows:*

Section R402.5.5 (N1102.5.5) Air-sealed electrical and communication outlet boxes. Air-sealed electrical and communication outlet boxes that penetrated the *air barrier* of the *building thermal envelope* shall be caulked, taped, gasketed or otherwise sealed to the *air barrier* element being penetrated. Air-sealed boxes shall be buried in or surrounded by insulation. Air-sealed boxes shall be tested and marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

Exception: Boxes may be air-sealed in the field using caulk, tape, gasket or other approved method to prevent air leakage through the box in lieu of NEMA OS 4 boxes. Boxes air-sealed in the field shall be sealed to the air barrier element being penetrated and installed in accordance with manufacturer's instructions

Section R404.2; delete Section R404.2 “Interior lighting controls” in its entirety.

Table R405.4.2(1) (N1105.4.2(1)); change Table R405.4.2(1) “Specifications for the Standard Reference and Proposed Designs” by amending the Foundations building component and adding a subnote “n” to read as follows (remainder of Table is unchanged):

BUILDING COMPONENT	STANDARD REFERENCE DESIGN	PROPOSED DESIGN
Foundations	Type: same as proposed.	As proposed
	Foundation wall or slab extension above grade: 1 foot (30cm) Foundation wall or slab extension below grade: same as proposed Foundation wall or slab perimeter length: same as proposed Soil characteristics: same as proposed.	As proposed
	Foundation wall U-factor and slab-on-grade F-factor: as specified in Table R402.1.2. ⁿ	As proposed

For SI: 1 square foot = 0.93 m², 1 British thermal unit = 1055 J, 1 pound per square foot = 4.88 kg/m², 1 gallon (US) = 3.785 L, °C = (°F-32)/1.8, 1 degree = 0.79 rad.

- n. In accordance with Section R402.2.10, a maximum *F*-factor of 0.73 shall apply for the reference design in jurisdictions designated by the *code official* as having a moderate to heavy or very heavy termite infestation probability.

Table R406.5 (N1106.5); change a portion of Table R406.5 “Maximum Energy Rating Index” to read as follows (remainder of Table is unchanged):

TABLE R406.5 ¹
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX Not including OPP	ENERGY RATING INDEX with OPP
3	59	

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

TABLE R406.5 ²
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX Not including OPP	ENERGY RATING INDEX with OPP
3	57	

² The table is effective from September 1, 2025 to August 31, 2028.

TABLE R406.5 (N1106.5) ³
MAXIMUM ENERGY
RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX Not including OPP	ENERGY RATING INDEX WITH OPP
3	55	

³ This table is effective on or after September 1, 2028.

Section R408; *Section R408 “Additional Efficiency Requirements” is deleted in its entirety.”*

Section III. All provisions of the Code of Ordinances of the City of Plano in conflict with the provisions of this Ordinance are hereby repealed, and all other provisions of the Code of Ordinances of the City of Plano, not in conflict with the provisions of this Ordinance, shall remain in full force and effect.

Section IV. It is the intention of the City Council that this Ordinance, and every provision thereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other portion of this Ordinance.

Section V. The repeal of any Ordinance or part of Ordinances effectuated by the enactment of this Ordinance shall not be construed as abandoning any action now pending under or by virtue of such Ordinance or as discontinuing, abating, modifying or altering any penalty accruing or to accrue, or as affecting any rights of the municipality under any section or provisions of any Ordinances at the time of passage of this Ordinance.

Section VI. Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

Section VII. This Ordinance shall become effective on August 1, 2025, after its passage and publication as required by law.

PASSED AND APPROVED on the 9th day of June, 2025.

John B. Muns, MAYOR

ATTEST:

Lisa C. Henderson, CITY SECRETARY

APPROVED AS TO FORM:

Paige Mims, CITY ATTORNEY