

ORDINANCE NO. 2016-3-7

**An Ordinance of the City of Plano, Texas, repealing in its entirety City of Plano Ordinance Nos. 2013-10-29 and 2014-1-5, codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances; and adopting the 2015 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 October 28, 2013, by Ordinance No. 2013-10-29, the City Council of the City of Plano established an Energy Conservation Code and provided regulations thereunder, and such Ordinances were codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of the City of Plano (“City”); and

**WHEREAS**, on January 13, 2014 by Ordinance 2014-1-5, the City Council of the City of Plano amended the Energy Conservation Code and such Ordinances were codified as Article XVIII, Energy Conservation Code, of Chapter 6 of the Code of Ordinances of the City of Plano, and

**WHEREAS**, on November 17, 2015 the Building Standards Commission held a public hearing to discuss the adoption of the 2015 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 2015 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. 2013-10-29, duly passed and approved by the City Council of the City of Plano on October 28, 2013 and Ordinance No. 2014-1-5 duly passed and approved by the City Council of the City of Plano on January 14, 2015 are hereby repealed in their entirety.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**

**Section 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.

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### **Section 6-685 Adopted.**

The 2015 Edition of the International Energy Conservation Code, a publication of the International Code Council (I.C.C.), along with the Appendices of such Code, 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 2015 Edition of the International Energy Conservation Code is on file in the office of the City Secretary.

### DIVISION 2. AMENDMENTS

### **Section 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 C102/R102;** *add Section C102.1.2 and R102.1.2 to read as follows:*

**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.

**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 and R403.3.3 respectively.

**Section C202 and R202;** *add the following definition:*

**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.

**Section R202;** *add 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).

**Table R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT;** Amend by changing the WOOD FRAME WALL R-VALUE for CLIMATE ZONE 3 to read as follows:

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<sup>i</sup> This amendment expires on August 31, 2016 and the code requirements revert to the code as published

**Table R402.1.4 EQUIVALENT U-FACTORS;** Amend by changing the WOOD FRAME WALL U-FACTOR for CLIMATE ZONE 3 to read as follows:

0.082<sup>d</sup>

<sup>d</sup> This amendment expires on August 31, 2016 and the code requirements revert to the code as published

**Section R402.3.2 Glazed fenestration SHGC;** amend by adding a paragraph and table following the exception to read as follows:

Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

**Table R402.3.2 SHGC Multipliers for Permanent Projections <sup>a</sup>**

Projection Factor	SHGC Multiplier (all Other Orientation)	SHGC Multiplier (North Oriented)
0 - 0.10	1.00	1.00
>0.10 – 0.20	0.91	0.95
>0.20 – 0.30	0.82	0.91
>0.30 – 0.40	0.74	0.87
>0.40 – 0.50	0.67	0.84
>0.50 – 0.60	0.61	0.81
>0.60 – 0.70	0.56	0.78
>0.70 – 0.80	0.51	0.76
>0.80 – 0.90	0.47	0.75
>0.90 – 1.00	0.44	0.73

<sup>a</sup> North oriented means within 45 degrees of true north.

**Section R402.4.1.2 Testing;** modify the first paragraph to read as follows:

**R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zone 3. {Remainder of text unchanged}

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**This amendment expires on August 31, 2016 and the code requirements revert to the code as published**

**R402.4.1.2 Testing;** *add a last paragraph to read as follows:*

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.

**R403.3.3 Duct Testing (Mandatory);** *add a last paragraph to read as follows:*

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 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.

**Section C402.2. /R402.2;** *add Section C402.2.7 and R402.2.14 to read as follows:*

**Section C402.2.7/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.

**Section R405.6.2;** *add the following sentence to the end of paragraph:*

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 R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

**TABLE R406.4 MAXIMUM ENERGY RATING INDEX;** *amend to read as follows:*

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

<b>CLIMATE ZONE</b>	<b>ENERGY RATING INDEX</b>
3	65

<sup>1</sup> This table is effective until August 31, 2019.

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

<b>CLIMATE ZONE</b>	<b>ENERGY RATING INDEX</b>
3	63

<sup>2</sup> The table is effective from September 1, 2019 to August 31, 2022.

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

CLIMATE ZONE	ENERGY RATING INDEX
3	59

<sup>3</sup> This table is effective on or after September 1, 2022.”

**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.

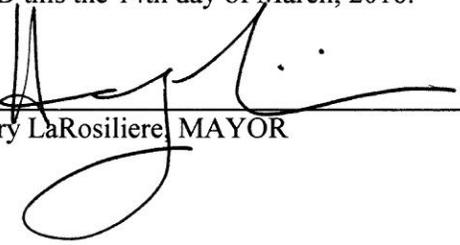
**Section IV.** It is the intention of the City Council that this Ordinance, and every provision thereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other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

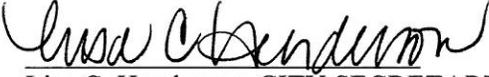
**Section VI.** Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute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

**Section VII.** This Ordinance shall become effective April 1, 2016, and after its passage and publication as required by law.

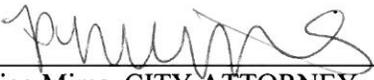
DULY PASSED AND APPROVED this the 14th day of March, 2016.

  
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Harry LaRosiliere, MAYOR

ATTEST:

  
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Lisa C. Henderson, CITY SECRETARY

APPROVED AS TO FORM:

  
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Paige Mims, CITY ATTORNEY