



## **ORDINANCE NO. 3407**

**AN ORDINANCE OF THE CITY OF FARMERS BRANCH, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 22 TITLED "BUILDINGS AND BUILDING REGULATIONS" BY AMENDING ARTICLE VII.7 TITLED "ENERGY CONSERVATION CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL ENERGY CODE WITH LOCAL AMENDMENTS; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the International Code Council (ICC) has developed a set of comprehensive and coordinated national model construction codes (known generally as the "International Codes"); and

**WHEREAS**, the City of Farmers Branch has been involved throughout the development process of the International Codes through participation with the North Texas Chapter of the International Code Council and through the regional review process by the Regional Codes Coordinating Committee of the North Central Texas Council of Governments (NCTCOG); and

**WHEREAS**, the creation of the 2015 editions of the International Codes by the ICC was in conjunction with the International Conference of Building Officials (ICBO), the organization whose codes the City of Farmers Branch has adopted since the 1970s; and

**WHEREAS**, the International Codes have been reviewed by the NCTCOG and City staff; and

**WHEREAS**, the City's building and construction codes are intended to be updated periodically, with the 2012 editions of the International Codes being the most current published building and construction codes for which local amendments have been developed; and

**WHEREAS**, the City Council of the City of Farmers Branch has determined that it is in the best interest of the citizens of the City of Farmers Branch to adopt the 2015 editions of the International Codes, as stated herein, as the minimum standards for the construction, use, occupancy and maintenance of buildings and structures within the City limits, as set forth herein, and to adopt local amendments to said codes in order to account for unique local practices and/or conditions relating to the design and construction of structures within the City;

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FARMERS BRANCH, TEXAS, THAT:**

**SECTION 1.** Chapter 22 titled “Buildings and Building Regulations” of the Code of Ordinances of the City of Farmers Branch, Texas, is amended by amending Article VII.7 titled “Energy Conservation Code” to read as follows:

**ARTICLE VII.7. ENERGY CONSERVATION CODE**

**Sec. 22-240. Adoption of International Energy Conservation Code; purpose.**

The 2015 Edition of the *International Energy Conservation Code*, as published by the International Code Council and as amended pursuant to Sec. 22-241, is hereby adopted. Copies of the Energy Conservation Code are on file in the office of the city secretary for permanent record and inspection and are incorporated into this section as if fully set forth herein. The chief building official, or his authorized representative, is hereby authorized and directed to enforce all provisions of the Energy Conservation Code. For purposes of this Article, the phrase “Energy Conservation Code” means collectively (i) the 2015 Edition of the International Energy Conservation Code, as published by the International Code Council and (ii) the local amendments adopted pursuant to Sec. 22-241.

**Sec. 22-241. Local Amendments to International Energy Code.**

For purposes of enforcement of the provisions of the Energy Conservation Code within the incorporated limits of the City, the following sections, paragraphs, and sentences of the *2015 Edition of the International Energy Conservation Code* are hereby amended as follows:

**Section C102/R102 is amended by adding a new Section C102.1.2 and a new Section 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 are amended by adding definitions for the phrases “Projection Factor” 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.

**Section R202 is amended by adding a definition for the phrase “Dynamic Glazing” 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).

**Table R402.1.2 is amended by changing the WOOD FRAME WALL R-VALUE for CLIMATE ZONE 3 to read “13”.**

**Table R402.1.4 is amended by changing the WOOD FRAME WALL U-FACTOR for CLIMATE ZONE 3 to read “0.082”.**

**Section R402.3.2 is amended 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 is amended by amending the first sentence 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....

**Section C402.2/R402.2 is amended by adding a new 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 or other equivalent material approved by the building official.

**Section R402.4.1.2 is amended by adding the following at the end of the section:**

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.

**Section R403.3.3 is amended by adding the following at the end of the section:**

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 405.6.2 is amended by add the following sentence to the end of paragraph:**

Acceptable performance software simulation tools may include, but are not limited to, REM Rate<sup>TM</sup>, 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 is amended 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.

**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 2.** All provisions of the Ordinances of the City of Farmers Branch, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

**SECTION 3.** An offense committed before the effective date of this ordinance is governed by prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

**SECTION 4.** That should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance, be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

**SECTION 5.** That any person violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Farmers Branch as heretofore amended and, upon conviction, shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000.00).

**SECTION 6.** This ordinance shall take effect on the first day of the calendar month following its passage in accordance with the provisions of the charter and state law.

**DULY PASSED BY THE CITY COUNCIL OF THE CITY OF FARMERS BRANCH,  
TEXAS, ON THE 13<sup>TH</sup> DAY OF DECEMBER, 2016.**

**ATTEST:**

**APPROVED:**

\_\_\_\_\_  
Amy Piukana, City Secretary

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Bob Phelps, Mayor

APPROVED AS TO FORM:

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Peter G. Smith, City Attorney  
(kbl:11/18/16:81277)