

ORDINANCE NO.

ORDINANCE AMENDING CHAPTER 4, ARTICLE 8 OF THE CITY OF LEAWOOD, 2000, INCORPORATING THE INTERNATIONAL ENERGY CONSERVATION CODE, 2012, SAVE AND EXCEPT SUCH ARTICLES, SECTIONS, PARTS OR PORTIONS WHICH ARE OMITTED, DELETED, MODIFIED OR CHANGED, AND MAKING ADDITIONS THERETO, AND REPEALING EXISTING ARTICLE 8, AND OTHER SECTIONS IN CONFLICT HEREWITH.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAWOOD, KANSAS:

SECTION ONE: That Section 4-801 of the Code of the City of Leawood, Kansas 2000, is hereby amended to read as follows:

ARTICLE 8. ENERGY CONSERVATION CODE

4-801. INTERNATIONAL ENERGY CONSERVATION CODE ADOPTED. There is hereby incorporated by reference that certain code known as the International Energy Conservation Code, ~~2006-2012~~ edition, prepared and published in book form by the International Code Council, Inc., including appendices save and except such articles, sections, parts or portions as are hereafter omitted, deleted, modified or changed, or added thereto, such incorporation being authorized by K.S.A. § 12-3009 through 12-3012, as amended. No fewer than three copies of said Code shall be marked or stamped "Official copy as incorporated by Ordinance No. _____" with all sections or portions thereof intended to be omitted or changed clearly marked to show any such omission or change and to which shall be attached a copy of this ordinance, and filed with the City Clerk to be open to inspection and available to the public at all reasonable hours.

(Ord. 2296C; 02-04-08)
(Ord. 1935C; 01-22-02)

SECTION TWO: That Section 4-802 of the Code of the City of Leawood, Kansas 2000, is hereby amended to read as follows:

4-802. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION 101.1. TITLE. Section 101.1 is hereby amended to read as follows: **Title.** This code shall be known as the *International Energy Conservation Code* of the City of Leawood, Kansas, and shall be cited as such. It is referred to herein as this code or this *Energy Code* of the City of Leawood, Kansas.

(Ord. 2296C; 02-04-08)
(Ord. 1935C; 01-22-02)

SECTION THREE: That Section 4-803 of the Code of the City of Leawood, Kansas 2000, is hereby amended to read as follows:

4-803. INTERNATIONAL ENERGY CONSERVATION CODE DELETIONS. The following provisions of the 2012 International Energy Conservation Code, as adopted, shall be deleted and not applicable under this Code:

- (a) Section C107 Fees
- (b) Section C108 Stop Work Order
- (c) Section C109 Board of Appeals
- (d) Section R107 Fees
- (e) Section R108 Stop Work Order
- (f) Section R109 Board of Appeals

INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION 402.2.6 BASEMENT WALLS. Section 402.2.6 is hereby amended to read as follows:

~~**402.2.6 Basement walls.** Exterior basement walls associated with conditioned basements shall be insulated from the top of the basement wall down to ten (10) feet below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections 402.1.1 and 402.2.5.~~

~~**Exception:** Exterior basement walls made of concrete or masonry are not required to be insulated when such walls are not adjacent to finished space and are more than fifty (50) percent below grade. Exterior basement walls shall be insulated whenever the adjacent interior space is finished.~~

(Ord. 2296C; 02-04-08)
(Ord. 1935C; 01-22-02)

SECTION FOUR: That Section 4-804 of the Code of the City of Leawood, Kansas 2000, is hereby amended to read as follows:

~~**4-804. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION R401.2 COMPLIANCE.** Section R401.2 is hereby amended to read as follows:~~

~~**R401.2 Compliance.** Projects shall comply with Sections identified as “mandatory” and with either sections identified as “prescriptive” or the performance approach in Section R405.~~

~~**EXCEPTION:** Structures certified to meet or exceed the energy efficiency standards of the 2009 International Energy Conservation Code (IECC) through a simulated energy performance analysis conducted by a nationally certified energy auditor (for example, a HERS rating of 85 or lower) shall be exempted from the requirements of Chapter 11. The energy auditor shall present their national certification credentials for review and approval by the Building Official prior to issuance of the permit, and no Certificate of Occupancy shall be issued for the structure until documentation from the auditor certifying 2009 IECC performance compliance is submitted to and approved by the Building Official.~~

~~**4-804. INTERNATIONAL ENERGY CONSERVATION CODE, PENALTIES.** Any person violating any provision of this Article or this code is guilty of a public offense, punishable by a fine of not more than five hundred dollars (\$500) or by imprisonment~~

~~not exceeding thirty (30) days or both such fine and imprisonment. Each day that the violation continues shall be deemed a separate offense.~~

(Ord. 2296C; 02-04-08)
(Ord. 1935C; 01-22-02)

SECTION FIVE: That a new Section 4-805 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-805. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; TABLE R402.1.1. Table R402.1.1 is hereby amended to read as follows:

Table R402.1.1
Insulation and Fenestration Requirements by Component ^a

<u>Climate Zone</u>	<u>Fenestration U-factor^b</u>	<u>Skylight U-factor^b</u>	<u>Glazed Fenestration SHGC^b</u>	<u>Ceiling R-Value^f</u>	<u>Wood Frame Wall R-Value</u>	<u>Mass Wall R-Value^e</u>	<u>Floor R-Value</u>	<u>Basement Wall R-Value^c</u>	<u>Slab R-Value & Depth^d</u>	<u>Crawl Space Wall R-Value^c</u>
4	<u>0.35</u>	<u>0.55</u>	<u>0.4</u>	<u>49</u>	<u>13^B</u>	<u>8/13</u>	<u>19</u>	<u>10/13</u>	<u>10, 2 ft</u>	<u>10/13</u>

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement walls.
- d. R-5 shall be added to the required slab edge R-values for heated slabs.
- e. The second R-value applies when more than half the insulation is on the interior of the mass wall.
- f. Loose-fill insulation shall be installed at the rate recommended by the manufacturer's statement "so many bags per 1000 sq ft." Where the pitch of the roof restricts the "minimum thickness" at the exterior wall line, the insulation shall be blown into the cavity so as to achieve a greater compacted density to a point where the "minimum thickness" can be achieved. An alternative is to install high-density batts around the perimeter edge per R402.2.
- g. Where 2 x 6 framing is used, a minimum R-19 insulation is required.

SECTION SIX: That a new Section 4-806 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-806. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION R402.4.1.2 TESTING. Section 402.4.1.2 is hereby amended to read as follows:

R402.4.1.2 Testing. Where required by the Building Official, the building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by

the party conducting the test and provided to the Code Official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather-stripping or other infiltration control measures;
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

SECTION SEVEN: That a new Section 4-807 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-807. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION R403.2.2 SEALING (MANDATORY). Section R403.2.2 is hereby amended to read as follows:

R403.2.2 Sealing (mandatory). Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with the International Mechanical Code or International Residential Code, as applicable.

EXCEPTIONS:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than two inches (2") of water column (500 Pa) pressure classification shall not require additional closure systems.

Where required by the Building Official, duct tightness shall be verified by either of the following:

1. Postconstruction test: Total leakage shall be less than or equal to 4 cfm per 100 square feet of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
2. Rough-in test: Total leakage shall be less than or equal to 4 cfm per 100 square feet of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler

enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm per 100 square feet of conditioned floor area.

EXCEPTIONS:

1. The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope.
2. On the postconstruction test, it is permissible to test for "leakage to the outdoors" versus a "total leakage." Leakage to the outdoors shall be less than or equal to 8 cfm per 100 square feet of conditioned floor area.

SECTION EIGHT: That a new Section 4-808 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-808. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION R403.2.3, BUILDING CAVITIES (MANDATORY), DELETED. Section R403.2.3 is hereby deleted.

SECTION NINE: That a new Section 4-809 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-809. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION R403.4.2 HOT WATER PIPE INSULATION (PRESCRIPTIVE). Section R403.4.2 is hereby amended to read as follows:

R403.4.2 Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping located under a floor slab.
2. Buried piping.
3. Supply and return piping in recirculation systems other than demand recirculation systems.

SECTION TEN: That a new Section 4-810 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-810. INTERNATIONAL ENERGY CONSERVATION CODE AMENDED; SECTION 404.1 LIGHTING EQUIPMENT (MANDATORY). Section R404.1 is hereby amended to read as follows:

R404.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

SECTION ELEVEN: That a new Section 4-811 of the Code of the City of Leawood, Kansas 2000, is hereby added to read as follows:

4-811. INTERNATIONAL ENERGY CONSERVATION CODE, PENALTIES. Any person violating any provision of this Article or this code is guilty of a public offense, punishable by a fine of not more than five hundred dollars (\$500) or by imprisonment

not exceeding thirty (30) days or both such fine and imprisonment. Each day that the violation continues shall be deemed a separate offense.

(Ord. 2296C; 02-04-08)
(Ord. 1935C; 01-22-02)

SECTION TWELVE: This ordinance shall be construed as follows:

A. Liberal Construction. The provisions of this Ordinance shall be liberally construed to effectively carry out its purposes which are hereby found and declared to be in furtherance of the public health, safety, welfare, and convenience.

B. Savings Clause. The repeal of Ordinance sections, as provided herein below shall not affect any rights acquired, fees, fines, penalties, forfeitures or liabilities incurred there under, or actions involving any of the provisions of said Ordinances or parts thereof. Said Ordinance repealed is hereby continued in force and effect after the passage, approval, and publications of this Ordinance for the purposes of such rights, fees, fines, penalties, forfeitures, liabilities and actions therefore.

C. Invalidity. If for any reason any chapter, article, section, subsection, sentence, portion or part of this proposed Ordinance set out herein, or the application thereof to any person or circumstances is declared to be unconstitutional or invalid, such decision will not affect the validity of the remaining portions of this Code or other Ordinances.

SECTION THIRTEEN: That existing Article 8 of Chapter IV and any provisions in conflict herewith are hereby repealed.

SECTION FOURTEEN: This ordinance shall take effect and be in force from and after April 1, 2013 and its publication in accordance with K.S.A. 12-3007 and amendments thereto.

PASSED by the Governing Body this 3rd day of December, 2012.

APPROVED by the Mayor this 3rd day of December, 2012.

[SEAL]

Peggy J. Dunn, Mayor

ATTEST:

Debra Harper, City Clerk, CMC

APPROVED AS TO FORM:

Patricia A. Bennett, City Attorney