

CITY OF SHAWNEE

ORDINANCE NO. 3271

AN ORDINANCE INCORPORATING BY REFERENCE THE INTERNATIONAL ENERGY CONSERVATION CODE, 2018 EDITION, WITH OMISSIONS AND ADDITIONS, TO REGULATE THE ENERGY EFFICIENCY OF BUILDING ENVELOPES AND THE INSTALLATION OF ENERGY EFFICIENT MECHANICAL, LIGHTING AND POWER SYSTEMS IN THE CITY OF SHAWNEE, KANSAS.

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

PARAGRAPH 1. Chapter 15.18 of the Shawnee Municipal Code of Shawnee is amended to read as follows:

**CHAPTER 15.18
INTERNATIONAL ENERGY CONSERVATION CODE ADOPTED**

Sections:

15.08.010 Incorporated by Reference
15.18.020 Amendments and Additions
15.18.030 Copies on File

Section 15.18.010 Incorporated by Reference. There is hereby incorporated by reference the International Energy Conservation Code, 2018 Edition, prepared and published in book form by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795, and hereby referenced as IECC.

Section 15.18.020 Amendments and Additions. The following sections of the IECC, as adopted by Section 15.18.010, are amended as follows:

- A. Amend Section 101.1 Title of the IECC by replacing “[NAME OF JURISDICTION]” with “City of Shawnee, Kansas.”
- B. Amend by adding a new Section C101.4.2 Additions, Alterations, Renovations or Repairs., of the IECC.

C101.4.2 Additions, Alterations, Renovations and Repairs. Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Additions, alterations, renovations or repairs shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone

complies or if the existing building and addition comply with this code as a single building.

EXCEPTION: The following need not comply provided the energy use of the building is not increased.

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash and frame.
3. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.

C. Amend by omitting Table C402.1.3 Opaque Thermal Envelope Requirements of the IECC, and amend by adding in lieu thereof a new Table C402.1.3 Opaque Thermal Envelope Requirements, which reads:

Table C402.1.3 Opaque Thermal Envelope Requirements

	All Other	Group R
Roofs		
Insulation Entirely Above Deck	R-20 ci	R-20 ci
Metal Building Roofs (w/ R-5 Thermal Blocks) ^{ab}	R-19 + R-11 LS	R-19 + R11 LS
Attic and Other	R-38	R-38
Walls Above Grade		
Mass	R-9.5 ci	R-11.4 ci
Metal Building	R-13 + R-13 ci	R-13 + R-13 ci
Metal Framed	R-13 + R-7.5 ci	R-13 + R-7.5 ci
Wood Framed and Other	R-13	R-13
Walls Below Grade		
Below-Grade Wall	R-7.5 ci	R-7.5 ci
Floors		
Mass	R-10 ci	R10.4 ci
Joist/Framing	R-30	R-30
Slab-On Grade Floors		
Unheated Slabs	R-10 for 24" Below	R-10 for 24" Below
Heated Slabs	R-15 for 24" Below	R-15 for 24" Below
Opaque Doors		
Swinging	U-0.61	U-0.61
Roll-Up or Sliding	U-0.61	U-0.61

ci= Continuous insulation. LS= Liner System – A continuous membrane installed below the purlins and uninterrupted by framing members. Uncompressed, un-faced insulation rests on top of the membrane between the purlins.

a. Assembly descriptions can be found in ANSI/ASHRAE/IESNA Appendix A.

b. Where using R – value compliance method, a thermal spacer block shall be provided, otherwise use the U – factor compliance method in Table C402.1.2.

d. Where heated slabs are below grade, below-grade walls shall comply with the exterior insulation requirements for heated slabs.

- D. Amend by omitting Section C402.4 Fenestration (Prescriptive), of the IECC, in its entirety, and amend by adding a new Section C402.4 Fenestration (Prescriptive), which reads:

C402.4 Fenestration (Prescriptive). Fenestration shall comply with Table 402.4. Automatic day-lighting controls specified by this Section shall comply with Section C405.2.3.1.

C402.4.1 Maximum Area. The vertical fenestration area (not including opaque doors and opaque spandrel panels) shall not exceed forty percent (40%) of the gross above grade wall area. The skylight area shall not exceed three percent (3%) of the gross roof area.

C402.4.2 Increased Skylight Area with Daylighting Controls. The skylight area shall be permitted to be a maximum of five percent (5%) of the roof area provided automatic daylighting controls are installed in daylight zones under skylights.

- E. Amend by omitting Section C406 ADDITIONAL EFFICIENCY PACKAGE OPTION, of the IECC, in its entirety.
- F. Amend by omitting Section C408 MAINTENANCE INFORMATION AND SYSTEM COMMISSIONING, of the IECC, in its entirety.
- G. Amend by adding a new Section R101.4.2 Additions, Alterations, Renovations or Repairs., of the IECC.

R101.4.2 Additions, Alterations, Renovations or Repairs. Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Additions, alterations, renovations or repairs shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building.

EXCEPTIONS: The following need not comply provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash or frame.
3. Existing ceiling, wall or floor cavities exposed during construction provided these cavities are filled with insulation.

- H. Amend by omitting Section R103 CONSTRUCTION DOCUMENTS, of the IECC, in its entirety.
- I. Amend by omitting Section R401.2 Compliance., of the IECC, and amend by adding in lieu thereof a new Section R401.2 Compliance., which reads:

R401.2 Compliance. Projects shall comply with one of the following:

1. Sections N1101.14 through N1104
2. Section N1105 and the provisions of Sections N1101.14 through N1104 indicated as "Mandatory".
3. The energy rating index (ERI) approach in Section N1106.

The permit applicant of record must elect which compliance will be followed at the time permit application is made.

The energy rating index option can be met by hiring a HERS rater and constructing a residence that scores 80 or less on the HERS Index. A preliminary HERS Certificate with 'Draft' watermark or copy of a REM/Rate compliance report with 'Draft' watermark must be submitted with building permit plans. The "Draft" HERS certificate or report shall identify the project address, and include the HERS raters name and contact information.

All HERS ratings shall be performed by a rater accredited by the Residential Energy Services Network (RESNET). The HERS rater is required to perform a blower door test, duct blaster test, pre-drywall inspection and Final inspection as part of the standard HERS index rating process. The final HERS Index score must be posted on the Certificate required by Section N1101.14 (R401.3). The final HERS Certificate which indicates that the dwelling unit achieved a compliant HERS Index score must be submitted to the city before issuance of a Certificate of Occupancy. The final HERS certificate shall identify the project address, and include the HERS raters name and contact information.

- J. Amend by omitting Table R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT of the IECC, and amend by adding in lieu thereof a new Table R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT, which reads:

Table R402.1.2 Insulation and Fenestration Requirements by Component

Climate Zone	Fenestration on U-factor	Skylight U-factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value & Depth	Crawl Space Wall R-Value
4	0.32	0.55	0.40	49	13	8/13	19	10/13	NR ^d	10/13

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. NR shall mean no requirement.

e. The second R-value applies when more than half the insulation is on the interior of the mass wall.

- K. Amend by omitting Section R402.4.1.2 Testing., of the IECC, and amend by adding in lieu thereof a new Section R402.4.1.2 Testing., which reads:

R402.4.1.2 Testing (Mandatory). The building or dwelling unit shall be tested and verified as having an air leakage rate of 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). Where required by the Building Official, 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 Building 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, fireplaces 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.

- L. Amend by omitting Section R402.4.4 Rooms Containing Fuel-Burning Appliances., of the IECC.
- M. Amend by omitting Section R403.3.2.1 Sealed Air Handler., of the IECC.
- N. Amend by omitting Section R403.3.3 Duct Testing (Mandatory)., of the IECC, and amend by adding in lieu thereof a new Section R403.3.3 Duct Testing (Mandatory)., which reads:

R403.3.3 Duct Testing (Mandatory). Where required by the Building Official, duct tightness shall be verified by either of the following:

1. Post construction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pascals) 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 (113.3 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pascals) 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 (85 L/min) per 100 square feet (9.29 m²) 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 post construction 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 (226.5 L/min) per 100 square feet (9.29 m²) of conditioned floor area.

- O. Amend by omitting Section R403.3.5 Building Cavities (Mandatory), of the IECC.
- P. Amend by omitting Section R406.2 Mandatory Requirements., of the IECC, and amend by adding in lieu thereof a new Section R406.2 Mandatory Requirements., which reads:

R406.2 Mandatory Requirements. Compliance with this section requires that the provisions identified in Sections 401 through 404 indicated as "mandatory" be met. The building thermal envelope shall be greater than or equal to the levels of efficiency and Solar Heat Gain Coefficients in Tables R402.1.2 and R402.1.4.

EXCEPTIONS:

1. Supply and return ducts not completely inside the building thermal envelope shall be insulated to an R-value of not less than R-6.
2. Section R403.5.1 shall not be "mandatory".

- Q. Amend by omitting Table R406.4 Maximum Energy Rating Index., of the IECC, and amend by adding in lieu thereof a new Table R406.4 Maximum Energy Rating Index., which reads:

Table R406.4 Maximum Energy Rating Index

Climate Zone	Energy Rating Index ^a
4	80

a. Where on-site renewable energy is included for compliance using the ERI analysis of Section R406.4, the building shall meet the mandatory requirements of Section R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

Section 15.18.030 Copies on File. There shall be not less than one (1) copy of the code adopted by reference in Section 15.18.010 kept on file in the office of the City Clerk, to which shall be attached a copy of the incorporating ordinance, and which shall be marked or stamped, "Official Copy as Incorporated by Ordinance No. 3271" with all sections or portions thereof intended to be omitted clearly marked to show any such deletion or change, and filed with the City Clerk and open to inspection and available to the public at all reasonable hours. The Fire Department, Municipal Judges and all administrative departments of the City charged with the enforcement of the incorporating ordinance shall be supplied, at the cost of the City, such number of official copies of such standard ordinance similarly marked, deleted and changed as may be deemed expedient.

PARAGRAPH 2. REPEALED - The previously existing Chapter 15.18 of the Shawnee Municipal Code in effect prior to the effective date of this Ordinance, is hereby repealed.

PARAGRAPH 3. SEVERABILITY - That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the remaining portions of this ordinance. The City of Shawnee, Kansas hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

PARAGRAPH 4. SAVINGS CLAUSE - Neither the adoption of this Ordinance nor the repeal or amendment of any section or portion thereof shall in any manner affect the prosecution for violation of this Ordinance or the International Energy Conservation Code adopted, which violations were committed prior to the effective date hereof, nor be construed as a waiver of any license, fee or penalty at said effective date and unpaid under such Ordinance or provisions, nor be construed as affecting any of the provisions of or the penal provisions applicable to the violation thereof, nor to affect the validity of any bond or cash deposit in lieu thereof required to be posted, filed or deposited pursuant to any Ordinance, and all rights and obligations thereunder shall continue in full force and effect.


PARAGRAPH 5. EFFECTIVE DATE - This ordinance shall take effect and be in force on July 1st, 2019 after passage and publication as required by law.

PASSED by the Governing Body this 25th day of March, 2019.

APPROVED AND SIGNED by the Mayor this 25th day of March, 2019.

CITY OF SHAWNEE, KANSAS

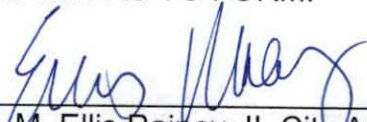


By: 
Michelle Distler, Mayor

ATTEST:

By: 
Stephanie Zaldivar, Interim City Clerk

APPROVED AS TO FORM:

By: 
M. Ellis Rainey, II, City Attorney

The Legal Record

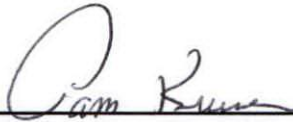
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CITY OF SHAWNEE - CITY CLERK
11110 JOHNSON DR
SHAWNEE KS 66203-2750

Proof of Publication

STATE OF KANSAS, JOHNSON COUNTY, SS; Pam Kruse, of lawful age, being first duly sworn, deposes and says that she is Legal Notices Billing Clerk for The Legal Record which is a newspaper printed in the State of Kansas, published in and of general paid circulation on a weekly, monthly or yearly basis in Johnson County, Kansas, is not a trade, religious or fraternal publication, is published at least weekly fifty (50) times a year, has been so published continuously and uninterrupted in said County and State for a period of more than one year prior to the first publication of the notice attached, and has been entered at the post office as Periodicals Class mail matter. That a notice was published in all editions of the regular and entire issue for the following subject matter (also identified by the following case number, if any) for 1 consecutive week(s), as follows:

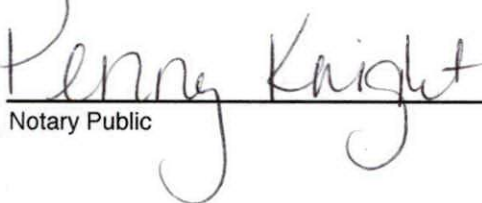
ORDINANCE #3271 SUMMARY
4/2/19



Pam Kruse, Legal Notices Billing Clerk

Subscribed and sworn to before me on this date:

April 2, 2019



Notary Public

PENNY KNIGHT
Notary Public-State of Kansas
My Appt. Expires Dec. 31, 2021

ORDINANCE NO. 3271
First published in The Legal Record, Tuesday, April 2, 2019.
CITY OF SHAWNEE
Summary of Ordinance No. 3271

On the 25 day of March, 2019, the Governing Body of the City of Shawnee, Kansas passed Ordinance No. 3271, an Ordinance incorporating by reference the International Energy Conservation Code, 2018 edition, with omissions and additions, to regulate the energy efficiency of building envelopes and the installation of energy efficient mechanical, lighting and power systems in the City of Shawnee, Kansas, effective July 1, 2019.

A complete text of the Ordinance may be obtained or viewed free of charge at the office of the City Clerk or at www.cityofshawnee.org.

The undersigned hereby certifies as prescribed by KSA 12-3007 that the foregoing Summary of Ordinance No. 3271 is legally accurate and sufficient.

Dated: March 26, 2019
/s/ M. Ellis Rainey, II, City Attorney
4/2

L79315

Publication Fees: \$8.47