

**CITY OF SHAWNEE**

**ORDINANCE NO. 3267**

**AN ORDINANCE INCORPORATING BY REFERENCE THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2018 EDITION, INCLUDING APPENDICES E, H AND Q, WITH OMISSIONS AND ADDITIONS, TO REGULATE THE ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, MOVING, REMOVAL, CONVERSION, DEMOLITION, OCCUPANCY, AND MAINTENANCE OF ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOMES IN THE CITY OF SHAWNEE, KANSAS.**

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

**PARAGRAPH 1.** The Shawnee Municipal Code is hereby amended by repealing the previously existing Chapter 15.06 and providing in lieu thereof the following:

**CHAPTER 15.06  
INTERNATIONAL RESIDENTIAL CODE ADOPTED**

Sections:

15.06.010 Incorporated by Reference  
15.06.020 Amendments and Additions  
15.06.030 Copies on File

15.06.010 Incorporated by Reference.

There is hereby incorporated by reference the International Residential Building Code of One- and Two-Family Dwellings, 2018 Edition, including Appendices E and H, prepared and published in book form by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795, hereby referenced as IRC.

15.06.020 Amendments and Additions.

The following sections of the IRC, as adopted by Section 15.06.010, are amended as follows:

- A. Amend Section R101.1 Title., of the IRC, by replacing "[NAME OF JURISDICTION]" with "City of Shawnee, Kansas."
- B. Amend by omitting Sections R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113 and R114 of the IRC, in their entirety, and amend by adding a new Section R103, which reads:

**SECTION R103  
ADMINISTRATIVE PROVISIONS**

R103.1 Administrative Provisions. The administrative provisions of the 2018 International Building Code, Chapter 1, in its entirety, and as modified by the Shawnee Municipal Code, along with Sections R101 and R102 of the IRC, shall govern all matters within the scope of this code.

- C. Amend by omitting Table R301.2(1) Climatic and Geographic Design Criteria, of the IRC, and amend by adding in lieu thereof a new Table R301.2(1) Climatic and Geographic Design Criteria, which reads:

Table 301.2(1) Climatic and Geographic Design Criteria

Ground Snow Load	Wind Design				Seismic Design Category	Subject to Damage			Winter Design Temp	Ice Barrier Underlayment	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed (mph)	Topographic Effects	Special Wind Region	Windborne Debris Zone		Weathering	Frost Line Depth	Permit					
20	115	No	No	No	A	Severe	36	Moderate to Heavy	6 Degrees F	Yes	a)11/14/1978 b)8/3/2009 c)Panel #'s 20091C001G Thru 20091C007G And 20091C0016G Thru 20091C0022G And 20091C0030G Thru 20091C0037G	1000	54.7

For SI: 1 pound per square foot = 0.0479kN/m.0 squared, 1 mile per hour = 1.609km/h

- D. Amend by omitting Section R303.4 Mechanical Ventilation., of the IRC, and amend by adding in lieu thereof a new Section R303.4 Mechanical Ventilation., which reads:

R303.4 Mechanical Ventilation. Where the air infiltration rate of a dwelling unit is less than three (3) air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c. (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole-house ventilation in accordance with Section M1507.3.

- E. Amend the IRC by omitting all of Section R313 AUTOMATIC FIRE SPRINKLER SYSTEMS, of the IRC, and amend by adding in lieu thereof a new Section R313 AUTOMATIC FIRE SPRINKLER SYSTEMS, which reads:

SECTION R313  
AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 General. An automatic fire sprinkler system shall be provided throughout all structures that contain four (4) or more townhouses.

R313.2 Design and Installation. Automatic sprinkler systems required by this code shall be designed and installed in accordance with Section P2904 or NFPA 13D.

- F. Amend the IRC by omitting all of Section R314.2.2 Alterations, Repairs and Additions., of the IRC, and amend by adding in lieu thereof a new Section R314.2.2 Alterations, Repairs and Additions, which reads:

R314.2.2 Alterations, Repairs and Additions. Where alterations, repairs or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms and carbon monoxide alarms located as required for new dwellings.

**EXCEPTIONS:**

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing, mechanical or electrical systems are exempt from the requirements of this section.

- G. Amend the IRC by adding a new Section R314.8 Heat Detectors, which reads:

R314.8 Heat Detectors. Any integral or attached garage to the main house shall be provided with a single heat detector. Heat detectors shall be hard wired and interconnected with the household smoke alarm system, such that the activation of the heat detector will activate all of the audible alarms of the required household smoke alarm system. The required heat detector is not required to incorporate audible alarm notification nor is any audible notification device required in the garage. The heat detector shall be listed for the ambient environment and installed per the manufacturer's installation instructions.

**EXCEPTIONS:**

1. Heat detectors shall not be required with alterations, repairs or additions.
2. Heat detectors shall not be required in detached garages.

- H. Amend by omitting Section 326 Swimming Pools, Spas and Hot Tubs., of the IRC.

- I. Amend the IRC by adding a new Section R328 PHYSICAL SECURITY, which reads:

**SECTION R328  
PHYSICAL SECURITY**

R328.1 Purpose. The purpose of this Section is to establish minimum standards that incorporate physical security to make dwelling units resistant to unlawful entry.

R328.1.1 Scope. The provisions of this Section shall apply to all new structures.

R328.2 Doors. Except for vehicular access doors, all exterior swinging doors of residential buildings and attached garages, including the doors leading from the garage area into the dwelling, shall comply with Sections R 328.2.1 through R328.4.4. For purposes of this Section, doors leading from the garage area into the dwelling shall be deemed to be exterior doors.

R328.2.1 Wood Doors. Where installed, exterior wood doors shall be of solid core construction such as high-density particleboard, solid wood, or wood block core with a minimum thickness of one and three-fourths inches (1 ¾") at any point. Doors with panel inserts shall be solid wood. The panels shall be a minimum of one inch (1") thick. The tapered portion of the panel that inserts into the groove of the door shall be a minimum of one-quarter inch (¼") thick. The groove shall be a dado groove or applied molding construction. The groove shall be a minimum of one-half inch (½") in depth.

R328.2.2 Steel Doors. Where installed, exterior steel doors shall be a minimum thickness of twenty-four (24) gauge.

R328.2.3 Fiberglass Door. Fiberglass doors shall have a minimum skin thickness of one-sixteenth inch (1/16") and have reinforcement material at the location of the deadbolt.

R328.2.4 Double Doors. Where installed, the inactive leaf of an exterior double door shall be provided with flush bolts having an engagement of not less than one inch into the head and threshold of the doorframe.

R328.2.5 Sliding Doors. Where installed, exterior sliding doors shall comply with all of the following requirements:

1. Sliding door assemblies shall be installed to prevent the removal of the panels and the glazing from the exterior with the installation of shims or screws in the upper track.
2. All sliding glass doors shall be equipped with a secondary locking device consisting of a metal pin or a surface mounted bolt assembly. Metal pins shall be installed at the intersection of the inner and outer panels of the inside door and shall not penetrate the frames exterior surface. The surface mounted bolt assembly shall be installed at the base of the door.

R328.3 Door Frames. The exterior door frames shall be installed prior to a rough-in inspection. Door frames shall comply with Sections R328.3.1 through R328.3.3 for the type of assembly installed.

R328.3.1 Wood Frames. Wood door frames shall comply with all of the following requirements:

1. All exterior door frames shall be set in frame openings constructed of double studding or equivalent construction, including garage doors, but excluding overhead doors. Door frames, including those with sidelights shall be reinforced in accordance with ASTM F476-84 Grade 40.
2. In wood framing, horizontal blocking shall be placed between studs at the door lock height for three (3) stud spaces or equivalent bracing on each side of the door opening.

R328.3.2 Steel Frames. All exterior door frames shall be constructed of eighteen (18) gauge or heavier steel, and reinforced at the hinges and strikes. All steel frames shall be anchored to the wall in accordance with manufacturer specifications. Supporting wall structures shall consist of double studding or framing of equivalent strength. Frames shall be installed to eliminate tolerances inside the rough opening.

R328.3.3 Door Jambs. Doors jambs shall comply with all of the following requirements:

1. Door jambs shall be installed with solid backing in a manner so no void exists between the strike side of the jamb and the frame opening for a vertical distance of twelve inches (12") each side of the strike. Filler material shall consist of a solid wood block.
2. Door stops on wooden jambs for in-swinging doors shall be of one-piece construction. Jambs for all doors shall be constructed or protected as to prevent violation of the strike.

R328.4 Door Hardware. Exterior door hardware shall comply with Sections R328.4.1 through R328.4.6.

R328.4.1 Hinges. Hinges for exterior swing doors shall comply with the following:

1. At least two (2) screws, three inches (3") in length, penetrating at least one inch (1") into wall structure shall be used. Solid wood fillers or shims shall be used to eliminate any space between the wall structure and door frame behind each hinge.
2. Hinges for out-swinging doors shall be equipped with mechanical interlock to preclude the removal of the door from the exterior.

R328.4.2 Strike Plates. Exterior door strike plates shall be a minimum of eighteen (18) gauge metal with four (4) offset screw holes. Strike plates shall be attached to wood with not less than three inch (3") screws, which shall have a minimum of one inch (1") penetration into the nearest stud. Note: For side lighted units, refer to Section R328.4.6.

R328.4.3 Locks. Exterior doors shall be provided with a locking device complying with one of the following:

Single Cylinder Deadbolt shall have a minimum projection of one inch (1"). The deadbolt shall penetrate at least three-fourths inch (3/4") into the strike receiving the projected bolt. The cylinder shall have a twist resistant, tapered hardened steel cylinder guard. The cylinder shall have a minimum of five (5) pin tumblers, shall be connected to the inner portion of the lock

by solid metal connecting screws at least one-fourth inch (1/4") in diameter and two and one-fourth inches (2 1/4") in length. Bolt assembly (bolt housing) unit shall be of single piece construction. All deadbolts shall meet ANSI Grade 2 or Grade 3 specifications.

R328.4.4 Entry Vision and Glazing. All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view of not less than one-hundred eighty (180) degrees through windows or through view ports.

R328.4.5 Side Lighted Entry Doors. Side light door units shall have framing of double stud construction or equivalent construction complying with Section R328.3.1, R328.3.2 and R328.3.3. The door frame that separates the door opening from the side light, whether on the latch side or the hinge side, shall be double stud construction or equivalent construction complying with Sections R328.3.1 and R328.3.2. Double stud construction or construction of equivalent strength shall exist between the glazing unit of the side light and wall structure of the dwelling.

R328.5 Street Numbers. Street numbers shall comply with Section R319.

R328.6 Exterior Lighting. Exterior lighting shall comply with Sections R328.6.1 through R328.6.2.

R328.6.1 Front and Street Side Exterior Lighting. All front and street side door entrances should be protected with a minimum of one light outlet having a minimum of sixty (60) watts of lighting (or energy efficient equivalent) installed so that the light source is not readily accessible.

R328.6.2 Rear Exterior Lighting. Homes with windows or doors near ground level below eight feet (8') on the rear side of the house shall be equipped with a minimum of one light outlet having one-hundred (100) watt lighting (or energy efficient equivalent) and shall be of the flood light type. Those fixtures placed below eight feet (8') shall be fixtures manufactured such that the light source is not readily accessible.

R328.7 Alternate Materials and Methods of Construction. The provisions of this Section are not intended to prevent the use of any material or method of construction not specifically prescribed by this Section, provided any such alternate has been approved by the enforcing authority, nor is it the intention of this Section to exclude any sound method of structural design or analysis not specifically provided for in this Section. The materials, methods or construction and structural design limitations provided for in this Section shall be used, unless the enforcing authority grants exception.

The enforcing authority is authorized to approve any such alternate provided they find the proposed design, materials, and methods of work to be at least

equivalent to those prescribed in this Section in quality, strength, effectiveness, burglary resistance, durability, and safety.

- J. Amend the IRC by adding a new Section R329 FENCE MATERIALS, which reads:

SECTION R329  
FENCE MATERIALS

R329.1 Materials. All fences, regardless of whether or not a permit is required for their construction, that are constructed, repaired, expanded, or enlarged after the effective date of this ordinance, shall be constructed only of approved fence materials. Approved fence materials shall mean materials normally manufactured for, used as, and recognized as, fencing materials such as: wrought iron or other decorative metals suitable for the construction of fences, masonry, concrete, stone, chain link, metal tubing, wood planks, and vinyl or fiberglass composite manufactured specifically as fencing materials that are approved by the Building Official. Approved fence materials shall be approved for exterior use and shall be weather and decay-resistant. The Building Official is authorized to evaluate proposed fence materials, and to determine if the proposed material is satisfactory and complies with the intent of the provisions of this code, and that the material is, for the purposed intended, at least the equivalent of that prescribed in this Chapter in quality, strength, effectiveness, durability and safety.

R329.2 Temporary Fencing. The Building Official is authorized to approve temporary fencing, such as plastic silt fence and safety fencing, for active construction projects. Temporary fencing shall not remain in place longer than is necessary to perform its function.

- K. Amend by omitting Section R402.1 Wood Foundations., of the IRC, and amend by adding in lieu thereof a new Section R402.1 Wood Foundations., which reads:

R402.1 Wood Foundations. Wood foundation systems are not allowed. All other references in this code to wood foundations systems are null and void.

- L. Amend the IRC by adding a new Section R403.1.1.1 Continuous Footing Reinforcement., which reads:

R403.1.1.1 Continuous Footing Reinforcement. Continuous footing for basement foundation walls shall have minimum reinforcement consisting of not less than two (2) No. 4 bars, uniformly spaced, located a minimum 3 inches (3") clear from the bottom of the footing.

- M. Amend the IRC by adding a new Section R403.1.1.2 Column Pads., which reads:

R403.1.1.2 Column Pads. Column pads shall be a minimum of twenty-four inches (24") and eight inches (8") deep (24"x24"x8"). Reinforcement shall consist of a minimum of three (3) No. 4 bars each way, uniformly spaced. Deck column pads shall be a minimum of twelve inches (12") in diameter and six inches (6") in

thickness, and shall extend below the frost line specified in Table R301.2(1), unless specifically approved otherwise by the Building Official.

- N. Amend by omitting Section R404.1.1 Design Required., of the IRC, and amend by adding in lieu thereof a new Section R404.1.1 Design Required., which reads:

R404.1.1 Design Required. A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls, including top of wall restraint details, when any of the conditions 1 through 10 listed below exist. A design in accordance with accepted engineering practice shall be provided for concrete slabs when conditions number eleven (11) exists. Where applicable, a standard design approved by the City may be used in lieu of a design from the design professional. For new single family dwellings where standard designs approved by the City are used, the design professional sealing the plans shall specify the use of those designs on the approved plans or through a separate report.

1. Walls are subject to hydrostatic pressure from ground water.
2. Walls supporting more than 48 inches (48") of unbalanced backfill that do not have permanent lateral supports at the top and bottom.
3. Sites containing CH, MH, OL or OH soils as identified in Table R405.1.
4. Foundation walls exceeding nine feet (9') in height, measured from the top of the wall to the bottom of the slab.
5. Lots identified on the subdivision grading plan as having more than six feet (6') of fill or having a finished slope steeper than 4 horizontal to 1 vertical before grading.
6. Footings and foundations with existing fill soils below the footing level.
7. Sloping lots steeper than 4 to 1 before grading.
8. Lots where some footings will bear on soil and others will bear on rock.
9. Areas where problems have historically occurred.
10. Stepped footing and foundation walls.
11. Concrete floor slabs supported on more than twenty-four inches (24") of clean sand or gravel fill or eight inches (8") of earth fill.

- O. Amend by omitting Section R404.4 Retaining Walls., of the IRC, and amend by adding in lieu thereof a new Section R404.4 Retaining Walls., which reads:

R404.4 Retaining Walls. Retaining walls that are not laterally supported at the top and that retain in excess of forty eight inches (48") (1219 mm) of unbalanced fill shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

- P. Amend by omitting Section R405.1 Concrete or Masonry Foundations., of the IRC, and amend by adding in lieu thereof a new Section R405.1 Concrete or Masonry Foundations., which reads:

R405.1 Concrete or Masonry Foundations. Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone



drains, perforated pipe or other approved systems or material shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least one foot (1') beyond the outside edge of the footing and six inches (6") above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of two inches (2") of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered not less than six inches (6") of the same material.

**EXCEPTIONS:**

1. A drainage system is not required when the foundation is installed on well drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.
2. A filter membrane is not required where perforated drains are covered with at least eighteen inches (18") of washed gravel or crushed rock.
3. For gravel or crushed stone drains a filter membrane is not required when the gravel or crushed stone extends at least eighteen inches (18") above the top of the footing.

- Q. Amend by omitting Section R502.6.2 Joist Framing., of the IRC, and amend by adding in lieu thereof a new Section R502.6.2 Joist Framing., which reads:

R502.6.2 Joist Framing. Joist framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips not less than nominal two inches by two inches (2" by 2") or (51mm by 51mm). Where joists run parallel to foundation walls, solid blocking for a minimum of three (3) joist spaces shall be provided at a maximum of 3 feet (3') centers to transfer lateral loads on the wall to the floor diaphragm. Each piece of blocking shall be securely nailed to joists, sill plate and flooring with not less than three (3) eight penny nails at each connection. Where applicable, a standard design approved by the City and shown on the approved plans may be used in lieu of this requirement.

- R. Amend the IRC by adding a new Section R506.3 Floor Slab Placement., which reads:

506.3 Floor Slab Placement. Basement floor slabs shall be isolated from the column pads, interior columns and interior bearing walls by an approved material or barrier to act as a bondbreaker. Interior columns and bearing walls shall be supported on a separate interior footing, not on top of the floor slab. Two (2) layers of fifteen (15) pound asphalt-impregnated felt will be considered adequate to act as a bondbreaker between the basement floor slab from the columns and column footings, and interior bearing walls.

- S. Amend by omitting Section R602.6.1 Drilling and Notching of Top Plate., of the IRC, and amend by adding in lieu thereof a new Section R602.6.1 Drilling and Notching of Top Plate., which reads:

R602.6.1 Drilling and Notching of Top Plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than fifty percent (50%) of its width, a galvanized metal tie not less than 0.054 inch thick (16 ga) and one and one-half inches (1 ½") wide shall be fastened across and to the plate at each side of the opening with not less than four 10d (0.148 inch diameter) nails having a minimum length of one and one-half inches (1 ½") at each side or equivalent. The metal tie must extend a minimum of six inches (6") past the opening. See Figure R602.6.1.

**EXCEPTION:**

When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

- T. Amend by omitting Section R703.2 Water-Resistive Barrier., of the IRC, and amend by adding in lieu thereof a new Section R703.2 Water-Resistive Barrier., which reads:

R703.2 Water-Resistive Barrier. One (1) layer of No. 15 asphalt felt, free from holes and brakes, complying with ASTM D226 for Type 1 felt or other approved water resistive barrier shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than two inches (2"). Where joints occur, felt shall be lapper not less than 6 inches (6"). The felt or other approved material shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section R703.1.

**EXCEPTION:**

Omission of the water-resistive barrier is permitted in the following situations:

1. In detached accessory buildings.

- U. Amend by omitting Section N1101.5 (R103.2) Information on Construction Documents., of the IRC.

- V. Amend by omitting Section N1101.13 (R401.2) Compliance., of the IRC, and amend by adding in lieu thereof a new Section N1101.13 (R401.2) Compliance., which reads:

N1101.13 (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 a 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.

- W. Amend by omitting Table N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIRMENTS BY COMPONENT, of the IRC, and amend by adding in lieu thereof a new Table N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT, which reads:

Table N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>

Climate zone	Fenestration U-factor <sup>b</sup>	Skylight <sup>b</sup> U-factor	Glazed Fenestration SHGC <sup>b</sup>	Ceiling R-value	Wood Frame Wall R-value	Mass Wall R-Value <sup>e</sup>	Floor R-Value	Basement Wall R-value <sup>c</sup>	Slab <sup>d</sup> R-Value & Depth	Crawl Space <sup>c</sup> Wall R-Value
4	0.32	0.55	0.40	49	13	8/13	19	10 / 13	NR	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 that 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.

- X. Amend by omitting Section N1102.4.1.2 (R402.4.1.2) Testing., of the IRC, and amend by adding in lieu thereof a new Section N1102.4.1.2 (R402.1.2) Testing., which reads:

N1102.4.1.2 (R402.1.2) 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 measure;
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.

- Y. Amend by omitting Section N1102.4.4 (R402.4.4) Rooms Containing Fuel-Burning Appliances., of the IRC.

- Z. Amend by omitting Section N1103.3.2.1 (R403.3.2.1) Sealed Air Handler., of the IRC.

- AA. Amend by omitting Section N1103.3.3 (R403.3.3) Duct Testing (Mandatory)., of the IRC, and amend by adding in lieu thereof a new Section N1103.3.3 (R403.3.3) Duct Testing (Mandatory)., which reads:

N1103.3.3 (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 (113.3L/min) per 100 square feet (9.29 m<sup>2</sup>) 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 (113.3L/min) per 100 square feet (9.29 m<sup>2</sup>) 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 (85L/min) per 100 square feet (9.29 m<sup>2</sup>) 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 per 100 square feet of conditioned floor area.

BB. Amend by omitting Section N1103.3.5 (R403.3.5) Building Cavities (Mandatory), of the IRC.

CC. Amend by omitting Section N1104 ELECTRICAL POWER AND LIGHTING SYSTEMS (Mandatory), of the IRC.

DD. Amend by omitting Section N1106.2 (R406.2) Mandatory Requirements., of the IRC, and amend by adding in lieu thereof a new Section N1106.2 (R406.2) Mandatory Requirements., which reads:

N1106.2 (R406.2) Mandatory Requirements. Compliance with this section requires that the provisions identified in Section 1101.13 through N1104 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 Table N1102.1.2 (R402.1.2) and N1102.1.4 (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 N1103.5.1 (R403.5.1) shall not be "mandatory."

EE. Amend by omitting Table N1106.4 (R406.4) Maximum Energy Rating Index., of the IRC, and amend by adding in lieu thereof a new Table N1106.4 (R406.4) Maximum Energy Rating Index., which reads:

Table N1106.4 (R406.4) Maximum Energy Rating Index

Climate Zone	Energy Rating Index
4	80

Where on-site renewable energy is included for compliance using the ERI analysis of section N1106.4, the building shall meet the mandatory requirements of section N1106.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in table N1102.1.2 or table N1102.1.4

FF. Amend by omitting Section P2503.2 Concealment., of the IRC, and amend by adding in lieu thereof a new Section P2503.2 Concealment., which reads:

P2503.2 Concealment. A plumbing or drainage system, or part thereof, shall not be covered, concealed or put into use until it has been inspected and approved

by the Building Official, or his authorized representative. A plumbing or drainage system, or part thereof, shall not be covered, concealed or put into use until it has been tested by the permittee, or his or her authorized representative. The Building Official may require that any test of the plumbing or drainage system be witnessed by the Building Official or his authorized representative.

- GG. Amend by omitting Section P2603..5.1 Sewer Depth., of the IRC, and amend by adding in lieu thereof a new Section P2603.5.1 Sewer Depth., which reads:

P2603.5.1 Sewer Depth. Building sewers shall be installed as required by the appropriate authority having jurisdiction.

- HH. Amend by omitting Section E3902.2 Garage and Accessory Building Receptacles., of the IRC, and amend by adding in lieu thereof a new Section E3902.2 Garage, Unfinished Basements and Accessory Building Receptacles., which reads:

E3902.2 Garage, Unfinished Basements and Accessory Building Receptacles. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection.

**EXCEPTIONS:**

1. A dedicated single receptacle for a garage door opener.
2. A single receptacle supplied by a dedicated branch circuit that is located and identified for specific use by cord-and plug-connected appliance such as a refrigerator or freezer.
3. A dedicated single receptacle for a sump pump.
4. A dedicated receptacle supplying a permanently installed fire alarm or security alarm system.

- II. Amend the IRC by adding a new Chapter 45 Swimming Pools, Spas and Hot Tubs, which reads:

Chapter 45  
SWIMMING POOLS, SPAS AND HOT TUBS

SECTION 4501  
GENERAL

4501.1 General. The provisions of this Chapter shall control the design and construction of swimming pools, spas and hot tubs installed in or on the *lot* of a one- or two-family dwelling.

4501.2 Pools in Flood Hazard Areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section 4501.2.1 or 4501.2.2.

**EXCEPTIONS:** Pools located in riverine flood hazard areas which are outside of designated floodways.

**4501.2.1 Pools Located in Designated Floodways.** Where pools are located in designated floodways, documentation shall be submitted to the Building Official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

**4501.2.2 Pools Located Where Floodways Have Not Been Designated.** Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

## Section 4502 DEFINITIONS

**4502.1 General.** For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

**ABOVE-GROUND/ON-GROUND POOL.** See "Swimming pool."

**BARRIER.** A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

**HOT TUB.** See "Swimming pool."

**IN-GROUND POOL.** See "Swimming pool."

**RESIDENTIAL.** That which is situated on the premises of a detached one- or two-family dwelling, or a one-family town house not more than three stories in height.

**SPA, NONPORTABLE.** See "Swimming pool."

**SPA, PORTABLE.** A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

**SWIMMING POOL.** Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above ground and on-ground swimming pools, hot tubs and spas.

**SWIMMING POOL, INDOOR.** A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

**SWIMMING POOL, OUTDOOR.** Any swimming pool which is not an indoor pool.

## SECTION 4503 SWIMMING POOLS

4503.1 In-Ground Pools. In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.

4503.2 Above-Ground and On-Ground Pools. Above ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.

4503.3 Pools in Flood Hazard Areas. In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

## SECTION 4504 SPAS AND HOT TUBS

4504.1 Permanently Installed Spas and Hot Tubs. Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.

4504.2 Portable Spas and Hot Tubs. Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

## SECTION 4505 BARRIER REQUIREMENTS

4505.1 Application. The provisions of this Chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

4505.2 Outdoor Swimming Pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa, shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow the passage of a 4-inch diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.



4. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 ¾ inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ¾ inches (44 mm).
6. Maximum mesh size for chain link fence shall be 2 ¼ inches (57 mm) square, unless the fence has slats fastened at the top of bottom which reduce the openings to not more than 1 ¾ inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 ¾ inches (44 mm).
8. Access gates shall comply with the requirements of Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates, other than pedestrian access gates, shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
  - 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and
  - 8.2. The gate and barrier shall have no openings larger than ½ inches (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
  - 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346;
  - 9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its scree, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
  - 9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described herein.
10. Where above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

- 10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
- 10.2 The ladder or steps shall be surrounded by a barrier which meets the requirements of Item 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter (102 mm) sphere.

4505.3 Indoor Swimming Pool. Walls surrounding an indoor swimming pool shall comply with Item 9 of Section 4505.2.

4505.4 Prohibited Locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

4505.5 Barrier Exceptions. Spas or hot tubs with a safety cover which comply with ASTM F 1346 shall be exempt from the provisions of this chapter.

#### SECTION 4506

#### ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

4506.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

#### Section 15.06.030 Copies on File.

There shall be not less than one (1) copy of the code adopted by reference in Section 15.06.010 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. 3267" 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 15.06 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 future repeal or amendment of any section or portion thereof shall in any manner affect the prosecution for violation of this Ordinance or the International Residential 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 provision, nor be construed as affecting any of the provisions of such Ordinances or provisions relating to the collection of any such license, fee or penalty, 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 1<sup>st</sup>, 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**

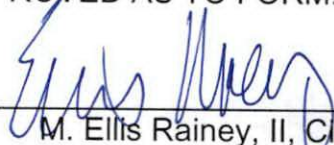


By:   
Michelle Distler, Mayor

ATTEST:

By:   
Stephanie Zaldivar, Interim City Clerk

APPROVED AS TO FORM:

By:   
M. Ellis Rainey, II, City Attorney

# The Legal Record

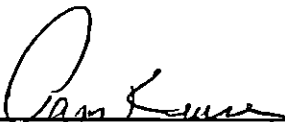
P.O. Box 273  
Olathe, KS 66051-0273  
(913) 780-5790

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:

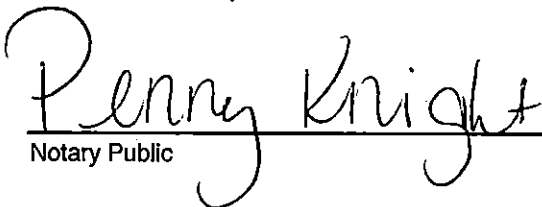
ORDINANCE #3267 SUMMARY  
4/2/19



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. 3267  
First published in The Legal Record, Tuesday, April 2, 2019.  
CITY OF SHAWNEE  
Summary of Ordinance No. 3267

On the 25 day of March, 2019, the Governing Body of the City of Shawnee, Kansas passed Ordinance No. 3267, an Ordinance incorporating by reference the International Residential Code for one- and two-family dwellings, 2018 edition, including appendices e, h and q, with omissions and additions, to regulate the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, occupancy, and maintenance of one- and two-family dwellings and townhomes 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](http://www.cityofshawnee.org).

The undersigned hereby certifies as prescribed by KSA 12-3007 that the foregoing Summary of Ordinance No. 3267 is legally accurate and sufficient.

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

L79314

Publication Fees: \$9.71