

Ordinance No. 2451 Summary

On November 15, 2018, the City of De Soto, Kansas, adopted Ordinance No. 2451 (to be effective on January 1, 2019), adopted and incorporated into the De Soto City Code, with certain delineated additions, exceptions, or revisions, the 2018 Editions of the International Building Code, the International Existing Building Code, the International Residential Code, the International Property Maintenance Code, the International Mechanical Code, the International Plumbing Code, the International Fuel Code, the International Swimming Pool and Spa Code, the International Solar Energy Provisions, and the Energy Conservation Code, and the “ICC A117.1-2017” Standard for Accessible and Usable Buildings and Facilities, all as recommended by the International Conference of Building Officials. A complete copy of this ordinance may be obtained or viewed free of charge at the Office of the City Clerk at City Hall, 32905 West 84th Street, De Soto, Kansas or at www.desotoks.us. This summary is certified by Patrick G. Reavey, De Soto City Attorney pursuant to K.S.A. 12-3001, et seq.

ORDINANCE NO. 2451

AN ORDINANCE AMENDING ARTICLE 2 OF CHAPTER IV OF THE CITY OF DE SOTO CODE RELATED TO 2018 INTERNATIONAL BUILDING CODES, AND THE “ICC A117.1-2017” STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

WHEREAS, § 4-202 of Chapter IV of the De Soto City Code adopts the 2012 Editions of the International Building Codes; and

WHEREAS, the City desires to update its building standards by adopting the 2018 Editions of the International Building Code, the International Existing Building Code, the International Residential Code, the International Property Maintenance Code, the International Mechanical Code, the International Plumbing Code, the International Fuel Code, the International Swimming Pool and Spa Code, the International Solar Energy Provisions, and the Energy Conservation Code, and the “ICC A117.1-2017” Standard for Accessible and Usable Buildings and Facilities, all as recommended by the International Conference of Building Officials; and

WHEREAS, to allow those who will be affected by the new codes to familiarize themselves with them, the effective date of this Ordinance will be January 1, 2019.

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

SECTION 1: Article 2, § 4-202 of Chapter IV of the City Code is amended to read as

follows:

4-202. ADOPTION OF INTERNATIONAL BUILDING CODE, THE INTERNATIONAL EXISTING BUILDING CODE, THE INTERNATIONAL RESIDENTIAL CODE, THE INTERNATIONAL PROPERTY MAINTENANCE CODE, THE INTERNATIONAL MECHANICAL CODE, THE INTERNATIONAL PLUMBING CODE, THE INTERNATIONAL FUEL CODE, THE INTERNATIONAL SWIMMING POOL AND SPA CODE, THE INTERNATIONAL SOLAR ENERGY PROVISIONS, AND THE ENERGY CONSERVATION CODE, AND THE STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES. There is hereby adopted and incorporated by reference, for the purpose of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of buildings and structures, swimming pools and spas, and plumbing and mechanical equipment, the International Building Code, 2018 Edition, the International Existing Building Code, 2018 Edition, the International Residential Code, 2018 Edition, the International Property Maintenance Code, 2018 Edition, the International Mechanical Code, 2018 Edition, the International Plumbing Code, 2018 Edition, the International Fuel Code, 2018 Edition, the International Swimming Pool and Spa Code, 2018 Edition, the Energy Conservation Code, 2018 Edition, the International Solar Energy Provisions, 2018 Edition, and the “ICC A117.1-2017” Standard for Accessible and Usable Buildings and Facilities, all as recommended by the International Conference of Building Officials, such codes being made a part of the ordinances and code of the city as if the same had been set out in full herein, all as authorized and in the manner prescribed by K.S.A. 12-3009 through 12-3012 including any amendments thereto. At least one copy of each Code referenced herein shall be marked or stamped “Official Copy as Incorporated by the Code of the City of De Soto,” and shall be available from the city clerk to be open to inspection and available to the public at all reasonable hours of business.

SECTION 2: Article 2, § 4-203 of Chapter IV of the City Code is amended to read as follows:

4-203. ADDITIONAL AND REVISED PROVISIONS. The following sections of this article are in addition to, or are revisions of, the standard codes incorporated by reference in section 4-202 of Article 2 of Chapter IV of the City Code :

(a) Adoption of Street, Storm Sewer and Sidewalk Construction Standards. There is hereby adopted by reference the street, storm sewer and sidewalk construction standards of the latest publication by the Kansas City Metropolitan Chapter of the American Public Works Association.

Building Code

(b) **101.4.1 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code, specifically the 2018 Editions of the International Building Code, the International Existing Building Code, the International Residential Code, the International Property Maintenance Code, the International Mechanical Code, the International Plumbing Code, the International Fuel Code, the International Swimming Pool and Spa Code, the International Solar Energy Provisions, and the Energy Conservation Code, and the “ICC A117.1-2017” Standard for Accessible and Usable Buildings and Facilities, and 2017 National Electric Code, shall be considered part of the requirements of this code.

(c) **105.1.3 Contractor’s License.** All persons undertaking work which requires a permit as provided in section 105, or seeking to obtain said permit from the City, must comply with the Johnson County, Kansas Contractor’s License program.

(d) **105.2 Work exempt from permit.**

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet.
2. This subsection (2) related to fences is deleted.
14. Re-siding the dwelling or structure with materials other than stucco or EIFS.

(e) **110.3.8.1 Other Inspections.** Whenever gas service is disconnected or shut off to a structure for a period of six (6) months or more, a gas pressure test will be required before the gas service may be restored by the utility.

(f) **202 Definitions.** The term "approved certified sprinkler system" shall mean one that has been designed by an engineer who is licensed in the State of Kansas, and installed by a contractor licensed to do so by the Johnson County Contractor Licensing Program, and approved by the City Building Code Official.

(g) **308.5.5 Daycare being provided in a dwelling unit in compliance with K.S.A. 31-133.** A facility within a dwelling unit that is providing custodial care in compliance with K.S.A 31-133 shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code for One and Two-Family Dwellings as adopted by the City.

(h) **[F] 903.4.1 Monitoring.** Alarm, water-flow, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved UL-listed central station as defined in NFPA 72, or, when approved by the fire code official, shall sound an audible signal at a constantly attended location. The fire alarm system installed to transmit such signals shall be considered a building fire alarm system and shall be documented as a UL-certified central station service system.

Exceptions:

1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.

2. Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electronically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

(i) **[F] 903.4.2 Alarms.** One exterior audible/visual device shall be connected to every automatic sprinkler system in an approved location. Such sprinkler water-flow devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a building fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Interior alarm notification appliances shall be installed as required by Section 903.4.2.1.

(j) **[F] 903.4.2.1 Notification devices.** Where an automatic fire sprinkler system is installed in a building, audible and visible notification appliances shall be installed throughout the building as follows:

1. Audible notification appliances shall be installed so as to be audible at 15 dBa above average sound pressure level throughout the building.

2. Visible notification appliances shall be installed in all public and common use areas, restrooms and corridors in accordance with the spacing requirements of NFPA 72.

3. Visible notification devices can be eliminated in normally unoccupied portions of the buildings where permitted by the fire code official.

(k) **[F] 907.6.5 Monitoring.** Fire alarm systems required by this Section or by the International Building Code shall be monitored by an approved supervising station in accordance with NFPA 72. An Underwriters Laboratories (UL) Fire Alarm certificate shall be issued by the UL listed fire alarm contractor for all newly installed fire alarm systems or existing fire alarm systems included in an existing building involved in any construction project involving a building permit.

Exceptions: Monitoring by a supervising station is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.11.

2. Smoke detectors in Group I-3 occupancies.

3. Automatic sprinkler systems in one and two story dwellings.

(l) **[F] 907.7.4 Contractor's Statement.** A contractor's statement verifying that the system has been installed in accordance with the approved plans and specifications and has been 100% tested in accordance with NFPA 72. The statement will also include that all personnel involved with the installation of the fire alarm system meet the qualification requirements of the fire code official.

(m) **[F] 912.3.4 Fire department connections.** The connection shall be a four-inch (4") Storz quick coupling connector with cap.

(n) **1805.2.1.1 Frost Protection.** Extending below the frost line of the locality, which, for De Soto, Kansas, is 36 inches in depth.

Residential Code

(o) **R102.5.1 Appendices.** Appendices E, F, and H are adopted.

(p) **R105.2 Work exempt from permit.**

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet.

2. This subsection (2) related to fences is deleted.

(q) **R109.1.2.1 Gas Test Required.** Whenever gas service is disconnected or shut off to a dwelling for a period of six (6) months or more a gas pressure test will be required before the gas service may be restored by the utility.

(r) **R109.5 Approval required.** If the required erosion control measures are not in place and operational as required by KDHE guidelines, all inspections related to the permitted site from that date forward will not be conducted until the erosion control measures have been reinstated and inspected.

(s) **Table R301.2(2).** Ground snow load -20, Wind Speed -90, Seismic Design Category - A, Weathering – Severe, Frost line Depth – 36”, Termite – M-H, Winter Design Temp. – 6 degree, Ice Barrier – Yes, Air Freezing Index – 92.7, Mean Annual Temp. – 55 degree F.

(t) **R303.4 (1203.1) Mechanical Ventilation.** Where the air infiltration rate of a dwelling unit is less than 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 mechanical ventilation in accordance with Section M1507.3.

(u) **R306.5 New single family dwellings toilet facilities.** Toilet facilities shall be provided within 500 feet (measured from the property line adjacent to the street for platted subdivisions along the public way) for all new single family dwellings starting from the time of the first footing inspection until facilities are available in the dwelling. If the facilities are not located on the job site, the location of the required facilities shall be posted on the job site or other certification provided to the Building Code Official to verify the availability of toilet facilities, should the building official approve. The facilities on the site shall be removed prior to issuance of a Temporary Certificate of Occupancy.

(v) **R306.6 New single family dwellings construction site maintenance.** All construction sites shall be maintained in a good, clean, and safe condition, including, but not limited to, the following minimum requirements:

1. Construction materials shall be stored, maintained and secured so as to prevent safety risk or danger. Accumulated construction debris shall be hauled away and disposed of at an approved land fill. Dumpsters shall be emptied or removed when full and may be used only for construction debris. Construction materials shall not be stored in a public right-a-way.

2. All mud, dirt, or debris deposited on any street, crosswalk, sidewalk, or other public property as a result of excavation, construction, or demolition shall be immediately broom cleaned to the extent possible and disposed of in an acceptable manner.
3. It shall be unlawful to intentionally place, deposit, or otherwise dispose of construction debris in any public or private sewer.
4. Airborne particles shall be controlled on the property at all times during work by means of a water truck and/or spraying equipment, or other water sources capable of spraying and thoroughly saturating all portions of the structure and surrounding property affected by the work. Spraying shall be undertaken at all times necessary to thoroughly control the creation and migration of airborne particles, including, without limitation, dust, from the subject property.
5. No person shall operate or cause to be operated any radio, media player, telecommunications device or other such object at such a volume or in any other manner that would cause a nuisance or disturbance to any person.
6. Every contractor shall be responsible for all actions of their employees, agents, and subcontractors under this subsection, and shall be responsible for all violations of the provisions of this subsection committed by such employees, agents, or subcontractors.

(w) **R309.5 Fire Sprinklers.** This section is deleted.

(x) **R313.1 Townhouses.** An automatic residential fire sprinkler system may be installed in townhouses.

(y) **R313.2 One- and two-family dwellings automatic fire systems.** An automatic residential fire sprinkler system may be installed in one- and two-family dwellings.

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

(z) **R401.4.3 Soils report required.** Foundation designs for new dwellings using the standards referenced in Subsection R404.1.3 shall submit a report from a registered design professional specifying the properties of the soil based on Table 405.1 prior the inspection of footings, if deemed necessary by the Building Code Official.

(aa) **R401.4.4 Johnson County Residential Foundation guideline.** Foundation designs for one-and two-family dwellings may use the approved standards design provided in the Johnson County Residential Foundation Guidelines in lieu of the prescriptive requirements of the 2018 International Residential Code as approved by the Building Code Official.

(bb) **R402.1 Wood foundations.** Wood foundation systems shall be designed and installed in accordance with the provisions of this code, but in no event shall wood foundations be used for 1 or 2 family dwellings.

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

(dd) **R403.1.1.2 Column pads.** Column pads shall be a minimum of 24 inches by 24 inches and 8 inches deep (24" x 24" x 8"). Reinforcement shall consist of a minimum of three No. 4 bars each way, uniformly spaced.

(ee) **R404.1.3 Design required.** A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls when any of the conditions listed below exist. Where applicable, a standard design approved by the Building Official 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 support 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. Garage floor slabs supported on more than 24 inches (24") of clean sand or gravel or eight inches (8") of earth.

(ff) **R502.2.2 Decks.** The construction of decks and balconies shall be done following the "Johnson County Residential Decks – Permit and Construction Guidelines."

(gg) **R506.2.5 Basement floor slab isolation.** Basement floor slabs shall be isolated from column pads, interior columns and interior bearing walls to facilitate differential movement. Nonbearing walls supported on basement floor slabs shall be provided with a minimum one inch (1") expansion joint to facilitate differential movement between the floor slab and the floor framing above. Isolation and/or an expansion joint is not required within six inches (6") of the exterior walls.

(hh) **R602.10.4 Braced wall panel construction methods.** The "Johnson County Braced Wall Report", shall be the standard for all garages, including the "H" frame detail.

(ii) **N1101.1 Scope.** An exception is hereby added to N1101.1.

Exception. HERS Option:

Energy efficiency code compliance can be met by the following one of three compliance paths:

1. Prescriptive path (compliance with all sections of Chapter 11 that are identified as "prescriptive"), or
2. Performance path (as described in Section N1105), or
3. HERS Index rating option.

The HERS Index rating option can be met by hiring a HERS rater and constructing a

residence that scores 80 or less on the HERS Index.

The permit applicant of record must elect the HERS compliance path or the code prescribed compliance path at the time permit application is made.

A Preliminary HERS Certificate with “Draft” watermark or a copy of a REM/Rate Building File Report with “Draft” watermark must be submitted with building permit plans. The HERS index documents proposed compliance with mandated requirements.

A HERS rating 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 N1101.16 (R401.3).

The **final** HERS Certificate must be submitted to the Building Official before issuance of a Certificate of Occupancy.

(jj) **N1102.4.1.2 (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.

(kk) **N1103.3.5 (R403.2.3) Building Cavities.** Delete this section.

(ll) **E3902.5 Unfinished basement receptacles.** All 125 volt, single-phase, 15- and 20-ampere receptacles installed in finished basements shall have ground-fault circuit-interrupter protection for personnel. For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exceptions:

- 1) A receptacle supplying only a permanently installed fire alarm or burglar alarm system.
- 2) A receptacle supplying only a sump pump.

(mm) **E3902.16 Arc-fault circuit-interrupter protection.** All branch circuits that supply 120-volt, single phase, 15- and 20-ampere outlets installed in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, and similar rooms or areas shall be protected by a combination type arc-fault circuit interrupter installed to provide protection of the branch circuit. For these purposes, a smoke alarm or carbon monoxide alarm shall not be considered an outlet and shall not be included in the arc-fault circuit.

Plumbing Code

(nn) **1202.1 Nonflammable medical gases.** The following requirement shall be added to this

section:

1. On and after January 1, 2011, no person shall install, improve, repair, maintain or inspect a medical gas piping system within a county or city unless such person: (a) is licensed under the provisions of K.S.A. 12-1508 et seq., and amendments thereto; and (b) is certified under the appropriate professional qualifications standard or standards of ASSE Series 6000. All installers shall obtain a proper permit from the county or city for which the medical gas is being installed, all inspections shall be done by a third party agency certified under the appropriate professional qualifications standard or standards of ASSE Series 6000 for medical gas systems inspectors and all documentation of the inspections and certifications of installers and inspectors shall be provided to the county or city prior to any occupancy of the building or unit of the building in which the medical gas piping has been installed until an occupancy permit is issued.
2. As used in this subsection, “medical gas piping” means the piping used solely to transport gasses used for medical purposes at a health care facility.

(oo) **305.4.1 Sewer Depth.** Building sewers that connect to private sewage disposal systems shall be installed not less than 18” below finished grade at the point of septic connection. Building sewers shall be installed not less than 24 inches below grade.

(pp) **701.3.1 Separate sewer connection.** All residential duplex and or condominium units shall have installed separate sanitary sewer service lines to each living unit, from the main line to the living unit.

(qq) **Table 702.3 Building sewer pipe.** Delete vitrified clay pipe.

(rr) **708.1.3.1 Building drain and building sewer junction.** An approved type clean out fitting shall be installed outside of the building and extended above grade from the waste or soil lines serving a building constructed with concrete floor or with a crawl space foundation.

(ss) **Footnote a. to Table 709.1 Building Drains and Sewers.** The minimum size of any building drain serving a water closet shall be four (4) inches.

(tt) **714.1.1 Sewage Backflow.** Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, such fixtures shall be protected by a backwater valve installed in the building drain, branch of the building drain or horizontal branch serving such fixtures. Additionally, backwater valves must be installed at the owner’s expense in residential drains under any of the following circumstances: (1) the residence experiences a sanitary sewer backup that, as determined by the City Building Inspector or Wastewater Superintendent, was directly caused by a backup in the public sewer main; or (2) a new residence is being constructed; or (3) replacements or repairs are being made to an existing residential sanitary sewer lateral line; or (4) a residential remodeling project that exceeds twenty five percent of the residential structure, or (5) more than twenty five percent of the plumbing fixtures in a residential structure are replaced. The plumbing permit fee for installation of a backwater valve at a residence shall be waived by the city.

(uu) **903.1 Roof extension.** All open vent pipes that extend through a roof shall be terminated at least six inches (6”) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least seven feet (7’) above the roof.

Property Maintenance Code

(vv) **102.3 Application of other codes.** Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the 2018 Editions of the International Building Code, the International Existing Building Code, the International Residential Code, the International Property Maintenance Code, the International Mechanical Code, the International Plumbing Code, the International Fuel Code, the International Swimming Pool and Spa Code, the International Solar Energy Provisions, and the Energy Conservation Code, and the “ICC A117.1-2017” Standard for Accessible and Usable Buildings and Facilities, and the 2017 National Electric Code. Where the term ICC Electrical Code is used in other portions of this code, the term shall be used synonymously with the term “NFPA 70 National Electrical Code (NEC), 2017 Edition.”

REFERENCED STANDARDS. Chapter 13 – Referenced Standards of the 2018 International Mechanical Code, shall be amended to read:
NFPA 70-99 – National Electric Code (NEC), 2017 Edition.

(ww) **103.6 Fees.** The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be as indicated in the International Building Code.

(xx) **304.14 Insect screens.** During the period from March 1 to October 31, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25mm) and every swinging door shall have a self-closing device in good working condition.

(yy) **602.3 Heat supply.** Every owner and operator of any building who rents, leases or lets one or more dwelling unit, rooming unit, dormitory or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from October 1 to May 1, to maintain a temperature of not less than 65 degrees F (18 degrees C) in all habitable rooms, bathrooms, and toilet rooms.

Exception: When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code.

(zz) **602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from October 1 to May 1 to maintain a temperature of not less than 65 degrees F (18 degrees C) during the period the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.

2. Areas in which persons are primarily engaged in vigorous physical activities.

Mechanical Code

(aaa) **102.12 State Boiler Inspector.** Where permits are issued and portions of the work require inspection and approval of boilers and pressure vessels by the state of Kansas, those portions of the work will comply with the state requirements in lieu of compliance with the technical provisions of this Code. Contact the State Boiler Inspector at the State Department of Human Resources for complete information regarding state requirements. State approval is generally required for all boilers that require permits.

Exceptions:

1. Boilers serving individual dwelling units and their accessory structures.
2. Boilers serving apartment houses with less than five (5) families.
3. Pressure vessels that do not exceed 15 cubic feet and 250 psi.

Energy Conservation Code

(bbb) **R103.2.1 Information on construction documents.** When following the Resnet Path, this information will be provided to the rater.

(ccc) **Table R402.1.2. Insulation and Fenestration Requirements by component.** Amend the table to read:

**Table R402.1.2
Insulation and Fenestration Requirements by Component^a**

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

(ddd) **R402.4.1.2 Testing.** “Five air changers per hour in climate zone 3-8.”

(eee) **C408 System Commissioning.** Delete this section.

SECTION 3. Repealer. Any Ordinances or Code provisions inconsistent herewith are repealed.

SECTION 4. Effective Date. This Ordinance shall take effect and be in force on January 1, 2019 in the event of its prior passage, approval and publication as provided by law.

ADOPTED BY THE GOVERNING BODY AND APPROVED BY THE MAYOR OF DE SOTO, KANSAS THIS 15TH DAY OF NOVEMBER, 2018.

(seal)

RICK WALKER
Mayor of De Soto, Kansas

ATTEST:

LANA R. McPHERSON, MMC
City Clerk of De Soto, Kansas

APPROVED AS TO FORM:

PATRICK G. REAVEY
City Attorney for De Soto, Kansas