

**CITY OF KERRVILLE, TEXAS
ORDINANCE NO. 2016-17**

AN ORDINANCE AMENDING CHAPTER 26 “BUILDINGS AND BUILDING REGULATIONS”, ARTICLE VI “ENERGY CONSERVATION CODE”, OF THE CODE OF ORDINANCES OF THE CITY OF KERRVILLE, TEXAS, BY ADOPTING THE 2015 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE; ADOPTING LOCAL AMENDMENTS TO SAID CODE; PROVIDING FOR A PENALTY FOR VIOLATION OF ANY PROVISION HEREOF; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; ORDERING PUBLICATION; PROVIDING FOR AN EFFECTIVE DATE; AND PROVIDING OTHER MATTERS RELATED TO THE SUBJECT

WHEREAS, the City of Kerrville, Texas, is a home rule city acting under its charter adopted by the electorate pursuant to Article XI Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, cities may, under their police powers, enact reasonable regulations to promote the health, safety, and general welfare of citizens; and

WHEREAS, it is the intent of the City Council to protect the public health, safety, and welfare; and

WHEREAS, during its 2015 legislative session, the Texas Legislature adopted House Bill 1736 to address energy efficiency standards in Texas, which the governor then signed into law; and

WHEREAS, House Bill 1736 adopted a new energy code in Texas, which in general, moved Texas’s energy code requirements for single family construction to the 2015 International Energy Conservation Code (“IECC”); and

WHEREAS, all local jurisdictions must comply with the new code by September 1, 2016, and this Texas law, in conjunction with state administrative action through the Texas State Energy Conservation Office (“SECO”), also requires the IECC as the energy code for all other residential, commercial, and industrial construction; and

WHEREAS, under the law, cities are required to establish procedures for the administration and enforcement of these codes and may adopt local amendments that do not result in less stringent energy efficiency requirements than those required by the IECC; and

WHEREAS, the City Council, has previously adopted previous editions of the IECC, including the 2006 IECC; and

WHEREAS, City staff has reviewed the IECC and recommends the local amendments specified below; and

*Ordinance
2016-17*

WHEREAS, the City Council finds it to be in the public interest to adopt the 2015 International Energy Conservation Code and recommended local amendments;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KERRVILLE, KERR COUNTY, TEXAS:

SECTION ONE. Chapter 26 “Building and Building Regulations”, Article VI “Energy Conservation Code”, of the Code of Ordinances of the City of Kerrville, Texas, is amended and replaced in its entirety as follows:

“ARTICLE VI. ENERGY CONSERVATION CODE

Sec. 26-201. 2015 International Energy Conservation Code.

(a) Adoption. The International Energy Conservation Code, 2015 Edition (“IECC”), with local amendments as set out in Section 26-201(b), is adopted by the City. Copies of the IECC and amendments shall be available in the Department of Development Services and the City Secretary’s Office.

(b) Amendments. The IECC is amended as follows:

- (1) Subsection C104.2 is amended by adding the language that is underlined (added) and deleting the language that is bracketed and stricken ([deleted]) as follows, and thereafter renumbering the subsections to account for these additions:

‘C104.2 Required inspections. The *code official* or his or her designated agent, upon notification, shall make the inspections set forth in Sections C104.2.1 through C104.2.[6]8.

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C104.2.6 Duct test for one- and two-family dwellings and townhomes. All ducts for one- and two-family dwellings as well as townhomes, in unconditioned spaces, shall be duct tested prior to covering or concealment to disclose leaks and defects. Tests shall be made by an independent certified RESNET energy rater or an alternative approved by the *code official* using objective, verifiable testing criteria and results provided to the *code official*. Apparatus, material, and labor required for testing a mechanical system shall be furnished by the independent certified RESNET energy rater or *code official* approved alternate. Where any work or installation does not

pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this chapter. The work or installation shall then be re-submitted to the *code official* for inspection and testing. See also section 403.3.3 of the IECC.

C104.2.7 Energy efficiency inspections. Inspections shall be made to determine compliance with 4(CE) of the IECC for all occupancies, as amended, and shall include, but not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency. For detached one and two-family dwellings and multiple single-family dwellings (townhomes) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane, an independent certified RESNET energy rater or an alternative approved by the *code official* using objective, verifiable testing criteria, shall test and inspect the air barrier as per section R402.4 Air leakage, of the IECC. The results must be submitted on a form approved by the *code official*. The form shall show that construction is in compliance with the IECC.'

- (2) Subsection C402.3 is amended by revising its first paragraph and adding the language that is underlined (added), with the exceptions to remain unchanged, as follows:

'C402.3 Roof solar reflectance and thermal emittance. Low-sloped roofs, with a slope less than or equal to 2 units vertical per 12 units horizontal, directly above cooled conditioned spaces in *Climate Zones* 1, 2, and 3 shall comply with one or more of the options in Table C402.3. Roof surfaces with a slope greater than 2 units vertical per 12 units horizontal, directly above cooled conditioned spaces shall have a minimum reflectance of 0.35 or a minimum Solar Reflective Index of 29.

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- (3) Subsection C402.4.2 is amended by adding a sixth exception as follows:

'6. In warehouses protected by Early Suppression Fast Response (ESFR) fire sprinklers where vertical wall fenestration is provided with a minimum area.'

- (4) Subsection C404.6.1. is amended by adding the language that is underlined (added) and deleting the language that is bracketed and stricken (~~[deleted]~~) as follows:

‘C404.6.1 Circulation systems. Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermo-siphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall comply with one of the following:

1. start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water[-];
or
2. include a timer clock switch operating pumps based on time of day/night. Controls shall also include a return water temperature sensor switch to pause the re-circulating pump whenever the return water is hot.’

- (5) Subsection C405.6 is amended by adding the language that is underlined (added) as follows:

‘C405.6 Electrical energy consumption (Mandatory). Each dwelling unit located in a Group R-2 multi-family building shall have a separate electrical meter.’

- (6) Subsection C501.6 is amended by deleting the language that is bracketed and stricken (~~[deleted]~~) as follows:

‘C501.6 Historic buildings. No provisions of this code relating to the construction, *repair*, *alteration*, restoration and movement of structures, and *change of occupancy* shall be mandatory for *historic buildings* ~~[provided a report has been submitted to the code official and signed by a registered design professional or a representative of the State Historic Preservation Office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade or destroy the historic form, fabric or function of the building].’~~

- (7) Subsection C503.3.1 is amended by adding the language that is underlined (added) as follows:

C503.3.1 Roof replacement. *Roof replacements* shall comply with Table C402.1.3 or C402.1.4 where the existing roof assembly is part of the *building thermal envelope* and contains insulation entirely above the roof deck. New skylights are not required to be provided as part of a roof replacement where the existing building did not have skylights. Where new skylights are installed at the option of the owner as part of the roof replacement, they shall meet Section C503.3.3.

- (8) Subsection R104.2 is amended by adding the language that is underlined (added) and deleting the language that is bracketed and stricken (~~7~~) as follows, and thereafter renumbering the subsections to account for these additions:

R104.2 Required inspections. The code official or his or her designated agent, upon notification, shall make the inspections set forth in Sections R104.2.1 through C104.2.~~7~~.

R104.2.5 Duct test for one- and two-family dwellings and townhomes. All ducts for one- and two-family dwellings as well as townhomes, in unconditioned spaces, shall be duct tested prior to covering or concealment to disclose leaks and defects. Tests shall be made by an independent certified RESNET energy rater or an alternative approved by the code official using objective, verifiable testing criteria and results provided to the code official. Apparatus, material, and labor required for testing a mechanical system shall be furnished by the independent certified RESNET energy rater or code official approved alternate. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this chapter. The work or installation shall then be re-submitted to the code official for inspection and testing. See also section 403.3.3 of the IECC.

R104.2.6 Energy efficiency inspections. Inspections shall be made to determine compliance with 4(CE) of the IECC for all occupancies, as amended, and shall include, but not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency. For detached one and two-family dwellings and multiple single-family dwellings (townhomes) as well as Group

R-2, R-3 and R-4 buildings three stories or less in height above grade plane, an independent certified RESNET energy rater or an alternative approved by the code official using objective, verifiable testing criteria, shall test and inspect the air barrier as per section R402.4 Air leakage, of the 2015 IECC. The results must be submitted on a form approved by the code official. The form shall show that construction is in compliance with the 2015 IECC.'

- (9) Subsection R402.4.1.1 is amended by adding the language that is underlined (added) and deleting the language that is bracketed and stricken (~~deleted~~) as follows:

R402.4.1.1 Installation. The components of the *building thermal envelope* as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. ~~[Where required by the code official, an]~~ An approved third party shall inspect all components and verify compliance. Insulation letters shall not be submitted to the code official prior to the inspection being performed and shall be submitted on a form approved by the code official.'

- (10) Section R402 is amended by adding a new Subsection R402.6 to read as follows:

R402.6 Radiant Barrier. In new dwellings, a roof radiant barrier with an emittance of 0.10 or less as tested in accordance with ASTM C-1371 or ASTM E-408 is required above conditioned spaces. The radiant barrier shall be installed according to the manufacturer's instructions.

Exceptions:

1. Roofs covered with materials that have a solar reflectance of 0.4 or greater.
2. Residential buildings with sealed attics such as foam type insulation or similar.
3. Residential buildings with all mechanical equipment and all ductwork located wholly within the conditioned space.'

- (11) Subsection R403.3.1 is amended by adding a new exception, as indicated by the language that is underlined (added) as follows:

‘Exceptions:

1. Ducts or portions thereof located completely inside the *building thermal envelope*.

2. Supply and return ducts in attics shall be insulated to a minimum of R-6 where 3 inches (76 mm) in diameter and greater, where the seasonal energy efficiency ratio (SEER) of the installed cooling equipment is higher than the minimum required by federal law for climate zone 3.’

- (12) Subsection R403.5.1.1 is amended by adding the language that is underlined (added) and deleting the language that is bracketed and stricken (~~(deleted)~~) as follows:

‘R403.5.1.1 Circulation systems. Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall comply with one of the following:

1. start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water~~(:)~~;
or
2. include a timer clock switch operating pumps based on time of day/night. Controls shall also include a return water temperature sensor switch to pause the re-circulating pump whenever the return water is hot.’

- (13) Table R406.4 is amended by deleting energy rating index “51” from “Climate Zone” 3.

- (14) Subsection R402.4.1.2 is amended by amending its first paragraph and adding the language that is underlined (added) and deleting the language that is bracketed and stricken (~~(deleted)~~) as follows:

‘R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per

hour in Climate Zone 1 and 2 and ~~five~~ three air changes per hour in Climate Zone 3 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). ~~[Where required by the code official,]~~ ~~[t]~~ Testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the third party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

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- (15) Subsection R501.6 is amended by deleting the language that is bracketed and stricken (~~[deleted]~~) as follows:

‘R501.6 Historic buildings. No provisions of this code relating to the construction, *repair*, *alteration*, restoration and movement of structures, and *change of occupancy* shall be mandatory for *historic buildings* ~~[provided a report has been submitted to the code official and signed by a registered design professional or a representative of the State Historic Preservation Office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade or destroy the historic form, fabric or function of the building].’”~~

SECTION TWO. Future amendments, not including clarifications or technical notices of any type, of the IECC must be subsequently approved and adopted by the City Council.

SECTION THREE. The City Secretary is authorized and directed to submit this amendment to the publisher of the City’s Code of Ordinances and the publisher is authorized to amend said Code to reflect the amendment adopted herein and to correct typographical errors and to index, format, and number and letter paragraphs to the existing Code, as appropriate.

SECTION FOUR. The penalty for violation of this Ordinance shall be in accordance with the penalty provision contained in Section 1-7 of the Code of Ordinances of the City of Kerrville, Texas, which provides for a fine not exceeding TWO THOUSAND DOLLARS (\$2,000.00). Each continuing day’s violation under this Ordinance shall constitute a separate offense.

SECTION FIVE. The provisions of this Ordinance are to be cumulative of all other Ordinances or parts of Ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior Ordinances or parts of Ordinances inconsistent with or in conflict with any of the provisions of this Ordinance are hereby expressly repealed to

the extent of any such inconsistency or conflict. Ordinance Nos. 2003-34 and 2008-14 are repealed.

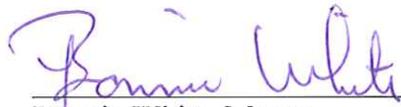
SECTION SIX. If any section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Kerrville, Texas, declares that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SEVEN. In accordance with Section 3.07 of the City Charter and Texas Local Government Code §52.013(a), the City Clerk is hereby authorized and directed to publish the descriptive caption of this Ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

SECTION EIGHT. This Ordinance shall become effective immediately upon the expiration of ten days following publication, as provided for by Section 3.07.b. of the City Charter; provided, however, the provisions of this Ordinance shall be applicable only to work performed in accordance with a building permit issued pursuant to an application filed with the City on or after the effective date of this Ordinance.

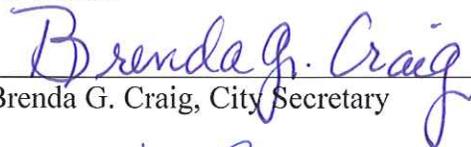
PASSED AND APPROVED ON FIRST READING, this the 13th day of Sept., A.D., 2016.

PASSED AND APPROVED ON SECOND AND FINAL READING, this the 27th day of Sept., A.D., 2016.



Bonnie White, Mayor

ATTEST:



Brenda G. Craig, City Secretary

APPROVED AS TO FORM:



Michael C. Hayes, City Attorney