

**Amendments to the
2021 International Energy Conservation Code
IECC – Commercial Provisions
City of Merkel, Texas**

The following sections, paragraphs, and sentences of the 2021 International Energy Conservation Code are hereby amended as follows:

Appendices CA, CB, CC, RA, RB & RC are excluded from adoption.

{Amend to read as follow,}

C101.1 Title. This code shall be known as the Energy Conservation Code of the City of Merkel, Texas, hereinafter referred to as “this code”.

{C101.5.1 Compliance Materials; Add new subsection as follows}

C101.5.1.1 Approved software program. COMcheck or other approved software, 2009 edition or later, is an acceptable computer software program to be used to determine compliance with specific provisions of this code.

(Reason: Allow for more options for compliance.)

{Section C104 Fees; delete entire section and amend as follows}

C104.1 Fees. Permit fees are set by Merkel City Council ordinance. Fees are located here: <https://merkeltxas.com/code-enforcementbuilding-inspection/>. Fees published are subject to change at any time by Council action to ordinance.

(Reason: To insure consistency)

{Section C109 Stop work order; delete entire section and amend as follows}

C109.1 Stop Work Order. Stop Work orders shall be in accordance with Section 115 of the Building Code.

(Reason: To insure consistency)

{Section C110 Board of Appeals; delete entire section and amend as follows}

C110 .1 General. In order to hear and decide appeals of order, decisions or determinations made by the Building official relative to the application and interpretation of this code, appeals may be heard by the Board of Building Standards as established in Chapter 8, Sec. 8-361.

(Reason: To clarify appropriate board set by municipality)

{Section C202 Definitions.} Add last sentence to paragraph

Wall, Above-Grade. An above-grade wall enclosing conditioned space which is vertical or sloped at an angle of sixty (60) degrees (1.1rad) or greater from the horizontal.

(Reason: Clarification to identify wall as opposed to roof)

{C401.3 Thermal envelope certificate. Delete section in its entirety}

{C402. Building Envelope Requirements}

C402.1 General

#2. Delete.

(Reason: To clarify specific penalties for such violations..)

{Table C402.1.3; Delete table and use Table 502.1.2 from the 2009 IECC.

{Table C402.1.4; Delete table and use Table 502(1) from the 2009 IECC.

{C405.2.3 Light-reduction controls. Amend Exception #3.1 to read as follows}

3.1 Areas that have 4 or fewer luminaires.

**Amendments to the
2021 International Energy Conservation Code
IECC – Residential Provisions**

{Amend to read as follow,}

R101.1 Title. This code shall be known as the Energy Conservation Code of the City of Merkel, Texas, hereinafter referred to as “this code”.

{R101.5.1 Compliance Materials; Add new subsection as follows}

R101.5.1.1 Approved software program. REScheck or IC3 or other approved software, 2009 edition or later editions, are acceptable computer software program to be used to determine compliance with specific provisions of this code.

(Reason: Allow for more options for compliance.)

{Section R104 Fees; delete entire section and amend as follows}

R104.2 Fees. Permit fees are set by Merkel City Council ordinance. Fees are located here: <https://merkeltexas.com/code-enforcementbuilding-inspection/>. Fees published are subject to change at any time by Council action to ordinance.

(Reason: To insure consistency)

{Section R109 Stop work order; delete entire section and amend as follows}

R109.1 Stop Work Order. Stop Work orders shall be in accordance with Section 114 of the Residential Building Code.

(Reason: To insure consistency)

Section R110 Board of Appeals; delete entire section and amend as follows}

R110 .1 General. In order to hear and decide appeals of order, decisions or determinations made by the Building official relative to the application and interpretation of this code, appeals may be heard by the Merkel City Council.

(Reason: To clarify appropriate board set by municipality)

{Section R202 Definitions.}

Wall, Above-Grade. An above-grade wall enclosing conditioned space which is vertical or sloped at an angle of sixty (60) degrees (1.1rad) or greater from the horizontal.

(Reason: Clarification to identify wall as opposed to roof)

{Section R402 Building Thermal Envelope; Delete Tables R402.1.2 and R402.1.3 and add Table R402.1.4 to show the following prescriptive method minimum requirements for new construction and additions.

Table R402.1.4

Fenestration U-factor	.30
Skylight U- factor	.55
Glazed fenestration SHGC	.30
Ceiling Value	R-38
Wood frame wall value	R-13
Floor Value (pier and beam)	R-19
Slab on grade	0

Reason: clarify consistent requirements for new construction and additions.

Add new subsection:

R402.1.6 Replacement fenestration. When replacing more than 50% of the area of all glazed fenestration products (where the entire unit, including the frame, sash and glazing, is replaced) they shall meet the prescriptive fenestration criteria in Table R402.1.4.

(Reason: To make replacement of fenestration less restrictive)

{Section R402.4.1.2 Testing; Delete in its entirety and amend as follows}

R402.4.1.2 Testing. Building envelope airtightness and insulation installation shall be demonstrated to comply with one of the following options given by Section R402.4.2.1 or 402.4.2.2.

R402.4.2.1 Testing Option. Building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than seven air changes per hour (ACH) when tested with a blower door at a pressure of 50 pascals (1 psf). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;
 2. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers;
 3. Interior doors shall be open;
 4. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
 5. Heating and cooling system(s) shall be turned off;
 6. HVAC ducts shall not be sealed; and
 7. Supply and return registers shall not be sealed.
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R402.4.2.2 Visual inspection option. Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, and approved party independent from the installer of the insulation shall inspect the air barrier and insulation.

(Reason: To offer flexibility in testing and inspections)

R403.6.2 Whole-dwelling mechanical ventilation system fan efficacy. {Delete section in its entirety}

{R404.1 Lighting equipment; Amend to read as follows}

R404.1 Lighting equipment. A minimum of 50 percent of the lamps in permanently installed lighting fixtures shall be high efficacy lamps or a minimum of 50 percent of the permanently installed lighting fixtures shall contain only high efficacy lamps.

(Reason: To offer flexibility in construction practices)

R404.2 Interior lighting controls {Delete section in its entirety}

END
