

HEALTH AND SAFETY CODE

TITLE 5. SANITATION AND ENVIRONMENTAL QUALITY

SUBTITLE C. AIR QUALITY

CHAPTER 388. TEXAS BUILDING ENERGY PERFORMANCE STANDARDS

Sec. 388.001. LEGISLATIVE FINDINGS. (a) The legislature finds that an effective building energy code is essential to:

- (1) reducing the air pollutant emissions that are affecting the health of residents of this state;
- (2) moderating future peak electric power demand;
- (3) assuring the reliability of the electrical grid; and
- (4) controlling energy costs for residents and businesses in this state.

(b) The legislature further finds that this state has a number of unique climate types, all of which require more energy for cooling than for heating, and that there are many cost-effective measures that can reduce peak energy use and reduce cooling and other energy costs in buildings.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Sec. 388.002. DEFINITIONS. In this chapter:

- (1) "Affected county" has the meaning assigned by Section [386.001](#).
- (2) "Building" has the meaning assigned by the International Building Code.
- (3) "Code official" means an individual employed by a local jurisdiction to review construction plans and other documents, inspect construction, or administer and enforce building standards under this chapter.
- (4) "Code-certified inspector" means an inspector who is certified by the International Code Council, the Building Officials and Code Administrators International, Inc., the International Conference of Building Officials, or the Southern Building Code Congress International to have met minimum standards for interpretation and enforcement of requirements of the International Energy Conservation Code and the energy efficiency chapter of the International Residential Code.

(5) "Commission" means the Texas Natural Resource Conservation Commission.

(6) "International Residential Code" means the International Residential Code for One- and Two-Family Dwellings as adopted by the International Code Council.

(7) "International Energy Conservation Code" means the International Energy Conservation Code as adopted by the International Code Council.

(8) "Laboratory" means the Energy Systems Laboratory at the Texas Engineering Experiment Station of The Texas A&M University System.

(9) "Local jurisdiction" means the authority responsible for implementation and enforcement of local building codes.

(10) "Municipality" has the meaning assigned by Section 1.005, Local Government Code.

(11) "Nonattainment area" has the meaning assigned by Section 386.001.

(12) "Single-family residential" means having the character of a detached one- or two-family dwelling or a multiple single-family dwelling not more than three stories high with separate means of egress, including the accessory structures of the dwelling.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

For expiration of Subsections (j) and (k), see Subsection (k).

Sec. 388.003. ADOPTION OF BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS. (a) To achieve energy conservation in single-family residential construction, the energy efficiency chapter of the International Residential Code, as it existed on May 1, 2001, is adopted as the energy code in this state for single-family residential construction. On September 1, 2016, the energy efficiency chapter of the International Residential Code, as it existed on May 1, 2015, is adopted as the energy code in this state for single-family residential construction. On or after September 1, 2021, the State Energy Conservation Office may adopt and substitute for that energy code the latest published edition of the energy efficiency chapter of the International Residential Code, based on written findings on the stringency of the chapter submitted by the laboratory under Subsection (b-3). The office:

(1) may not adopt an edition under this subsection more often than once every six years; and

(2) by rule shall establish an effective date for an adopted edition that is not earlier than nine months after the date of adoption.

(b) To achieve energy conservation in all other residential, commercial, and industrial construction, the International Energy Conservation Code as it existed on May 1, 2001, is adopted as the energy code for use in this state for all other residential, commercial, and industrial construction. The State Energy Conservation Office may adopt and substitute for that energy code the latest published edition of the International Energy Conservation Code, based on written findings on the stringency of the edition submitted by the laboratory under Subsection (b-3). The office by rule shall establish an effective date for an adopted edition that is not earlier than nine months after the date of adoption.

(b-2) The State Energy Conservation Office by rule shall establish a procedure for persons who have an interest in the adoption of energy codes under Subsection (a) or (b) to have an opportunity to comment on the codes under consideration. The office shall consider persons who have an interest in adoption of those codes to include:

- (1) commercial and residential builders, architects, and engineers;
- (2) municipal, county, and other local government authorities;
- (3) environmental groups; and
- (4) manufacturers of building materials and products.

(b-3) The laboratory shall:

- (1) submit to the State Energy Conservation Office written findings on the stringency of the latest published edition of the International Residential Code energy efficiency provisions only if the date of the edition allows the office to adopt the edition under Subsection (a) (1);
- (2) submit to the State Energy Conservation Office written findings on the stringency of the latest published edition of the International Energy Conservation Code not later than six months after publication of a new edition; and
- (3) in developing the findings, consider the comments submitted under Subsection (b-2).

(c) A municipality shall establish procedures:

- (1) for the administration and enforcement of the codes;
- (2) to ensure that code-certified inspectors shall perform inspections and enforce the code in the inspectors' jurisdictions; and
- (3) to track and report to the state energy conservation office on implementation of the codes.

(d) A municipality may establish procedures to adopt local amendments to the International Energy Conservation Code and the energy efficiency chapter of the International Residential Code. Notwithstanding the requirements of Subsection (e), a municipality located in an area defined by Section 388.002(11) or in an affected county may establish procedures to adopt local amendments to the Energy Rating Index Compliance Alternative or subsequent alternative compliance path as described by Subsection (j).

(e) Local amendments may not result in less stringent energy efficiency requirements in nonattainment areas and in affected counties than the energy efficiency chapter of the International Residential Code or International Energy Conservation Code. Local amendments must comply with the National Appliance Energy Conservation Act of 1987 (42 U.S.C. Sections 6291-6309), as amended. The laboratory, at the request of a municipality or county, shall determine the relative impact of proposed local amendments to an energy code, including whether proposed amendments are substantially equal to or less stringent than the unamended code. For the purpose of establishing uniform requirements throughout a region, and on request of a council of governments, a county, or a municipality, the laboratory may recommend a climatically appropriate modification or a climate zone designation for a county or group of counties that is different from the climate zone designation in the unamended code. The laboratory shall:

(1) report its findings to the council, county, or municipality, including an estimate of any energy savings potential above the unamended code from local amendments; and

(2) annually submit a report to the commission:

(A) identifying the municipalities and counties whose codes are more stringent than the unamended code, and whose codes are equally stringent or less stringent than the unamended code; and

(B) quantifying energy savings and emissions reductions from this program for consideration in the state implementation plan for emissions reduction credit.

(f) Each municipality, and each county that has established procedures under Subsection (d), shall periodically review and consider revisions made by the International Code Council to the International Energy Conservation Code and the energy efficiency chapter of the International Residential Code adopted after May 1, 2001.

(g) The laboratory shall have the authority to set and collect fees to perform certain tasks in support of the requirements in Sections 388.004, 388.007, and 388.008.

(h) Within the boundaries of an airport operated by a joint board created under Subchapter D, Chapter 22, Transportation Code, the constituent agencies of which are populous home-rule municipalities, the powers of a municipality under this section are exclusively the powers of the joint board.

(i) A building certified by a national, state, or local accredited energy efficiency program and determined by the laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the municipality, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. A home energy rating system index utilizing Standard 301 of the American National Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index, commonly cited as ANSI/RESNET/ICC 301, as it existed on January 1, 2021, as described by Subsection (j) shall be considered in compliance provided that:

- (1) the building meets the mandatory requirements of Section R406.2 of the 2018 International Energy Conservation Code; and
- (2) the building thermal envelope is equal to or greater than the levels of efficiency and solar heat gain coefficient in Table R402.1.2 or Table R402.1.4 of the 2018 International Energy Conservation Code.

(j) For the purposes of this chapter, Standard 301 of the American National Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index, commonly cited as ANSI/RESNET/ICC 301, as it existed on January 1, 2021, used to measure compliance for single-family residential construction that uses an energy rating index is as follows:

- (1) for climate zone 2, an energy rating index of:
 - (A) 63 or lower from September 1, 2019, to August 31, 2022;
 - (B) 59 or lower on or after September 1, 2022;
 - (C) 57 or lower on or after September 1, 2025; and
 - (D) 55 or lower on or after September 1, 2028;
- (2) for climate zone 3, an energy rating index of:
 - (A) 63 or lower from September 1, 2019, to August 31, 2022;
 - (B) 59 or lower on or after September 1, 2022;
 - (C) 57 or lower on or after September 1, 2025; and
 - (D) 55 or lower on or after September 1, 2028; and
- (3) for climate zone 4, an energy rating index of:
 - (A) 67 or lower from September 1, 2019, to August 31, 2022;
 - (B) 63 or lower on or after September 1, 2022;

(C) 61 or lower on or after September 1, 2025; and

(D) 59 or lower on or after September 1, 2028.

(k) This subsection and Subsection (j) expire September 1, 2031.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by Acts 2003, 78th Leg., ch. 1331, Sec. 15, eff. June 20, 2003.

Amended by:

Acts 2005, 79th Leg., Ch. 1125 (H.B. 2481), Sec. 15, eff. September 1, 2005.

Acts 2007, 80th Leg., R.S., Ch. 262 (S.B. 12), Sec. 3.01, eff. June 8, 2007.

Acts 2007, 80th Leg., R.S., Ch. 939 (H.B. 3693), Sec. 11, eff. September 1, 2007.

Acts 2009, 81st Leg., R.S., Ch. 87 (S.B. 1969), Sec. 12.013, eff. September 1, 2009.

Acts 2011, 82nd Leg., R.S., Ch. 937 (H.B. 51), Sec. 3, eff. September 1, 2011.

Acts 2015, 84th Leg., R.S., Ch. 541 (H.B. 1736), Sec. 1, eff. June 16, 2015.

Acts 2015, 84th Leg., R.S., Ch. 541 (H.B. 1736), Sec. 2(1), eff. June 16, 2015.

Acts 2015, 84th Leg., R.S., Ch. 541 (H.B. 1736), Sec. 2(2), eff. June 16, 2015.

Acts 2021, 87th Leg., R.S., Ch. 487 (H.B. 3215), Sec. 1, eff. September 1, 2021.

Sec. 388.004. ENFORCEMENT OF ENERGY STANDARDS OUTSIDE OF MUNICIPALITY. (a) For construction outside of the local jurisdiction of a municipality:

(1) a building certified by a national, state, or local accredited energy efficiency program shall be considered in compliance;

(2) a building with inspections from private code-certified inspectors using the energy efficiency chapter of the International Residential Code or International Energy Conservation Code shall be considered in compliance; and

(3) a builder who does not have access to either of the above methods for a building shall certify compliance using a form provided by the laboratory, enumerating the code-compliance features of the building.

(b) A builder shall retain until the third anniversary of the date on which compliance is achieved the original copy of any documentation that

establishes compliance under this section. The builder on receipt of any compliance documentation shall provide a copy to the owner of the building.

(c) A single-family residence built in the unincorporated area of a county the construction of which was completed on or after September 1, 2001, but not later than August 31, 2002, shall be considered in compliance.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by Acts 2003, 78th Leg., ch. 1331, Sec. 16, eff. June 20, 2003.

Sec. 388.005. ENERGY EFFICIENCY PROGRAMS IN INSTITUTIONS OF HIGHER EDUCATION AND CERTAIN GOVERNMENTAL ENTITIES. (a) In this section:

(1) "Institution of higher education" includes an institution of higher education as defined by Section 61.003, Education Code, and a private institution of higher education that receives funding from the state.

(2) "Political subdivision" means:

(A) an affected county; or

(B) any political subdivision in a nonattainment area or in an affected county other than:

(i) a school district; or

(ii) a district as defined by Section 36.001 or 49.001, Water Code, that had a total annual electricity expense of less than \$200,000 in the previous fiscal year of the district.

(3) "State agency" means a department, commission, board, office, council, or other agency in the executive branch of state government that is created by the constitution or a statute of this state and has authority not limited to a geographical portion of the state.

(b) Each political subdivision, institution of higher education, or state agency shall implement all energy efficiency measures that meet the standards established for a contract for energy conservation measures under Section 302.004(b), Local Government Code, in order to reduce electricity consumption by the existing facilities of the entity.

(c) Each political subdivision, institution of higher education, or state agency shall establish a goal to reduce the electric consumption by the entity by at least five percent each state fiscal year for seven years, beginning September 1, 2019.

(d) A political subdivision, institution of higher education, or state agency that does not attain the goals established under Subsection (c) must include in the report required by Subsection (e) justification that the entity has already implemented all available cost-effective

measures. An entity that submits a report under this subsection indicating that the entity has reviewed its available options, has determined that no additional measures are cost-effective, and has already implemented all available cost-effective measures is exempt from the annual reporting requirement of Subsection (e) if a subsequent report would indicate no change in status. An entity may be required to provide notice that it is exempt to the State Energy Conservation Office.

(e) A political subdivision, institution of higher education, or state agency annually shall report to the State Energy Conservation Office, on forms provided by that office, regarding the entity's goal, the entity's efforts to meet the goal, and progress the entity has made under this section. The State Energy Conservation Office shall provide assistance and information to the entity to help the entity meet goals established under this section. The office must develop and make available a standardized form for reporting purposes.

(f) This section does not apply to a state agency or an institution of higher education that the State Energy Conservation Office determines, before September 1, 2007, adopted a plan for conserving energy under which the agency or institution established a percentage goal for reducing the consumption of electricity. The exemption provided by this section applies only while the agency or institution has an energy conservation plan in effect and only if the agency or institution submits reports on the conservation plan each year to the governor, the Legislative Budget Board, and the State Energy Conservation Office.

(g) Except as provided by Subsection (h), this section does not apply to the electricity consumption of a district as defined by Section 36.001 or 49.001, Water Code, that relates to the operation and maintenance of facilities or improvements for:

- (1) wastewater collection and treatment;
- (2) water supply and distribution; or
- (3) storm water diversion, detention, or pumping.

(h) At least once every five years, a political subdivision that is a district as defined by Section 36.001 or 49.001, Water Code, shall for district facilities described by Subsection (g):

- (1) evaluate the consumption of electricity;
- (2) establish goals to reduce the consumption of electricity; and
- (3) identify and implement cost-effective energy efficiency measures to reduce the consumption of electricity.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by Acts 2003, 78th Leg., ch. 248, Sec. 1, eff. June 18, 2003.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 262 (S.B. 12), Sec. 3.02, eff. June 8, 2007.

Acts 2007, 80th Leg., R.S., Ch. 939 (H.B. 3693), Sec. 12, eff. September 1, 2007.

Reenacted and amended by Acts 2009, 81st Leg., R.S., Ch. 87 (S.B. 1969), Sec. 12.014, eff. September 1, 2009.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 637 (S.B. 898), Sec. 1, eff. September 1, 2011.

Acts 2011, 82nd Leg., R.S., Ch. 1049 (S.B. 5), Sec. 6.12, eff. June 17, 2011.

Acts 2013, 83rd Leg., R.S., Ch. 105 (S.B. 902), Sec. 1, eff. September 1, 2013.

Acts 2019, 86th Leg., R.S., Ch. 573 (S.B. 241), Sec. 1.29, eff. September 1, 2019.

Sec. 388.006. STATE ENERGY CONSERVATION OFFICE EVALUATION. The State Energy Conservation Office annually shall provide the laboratory with an evaluation of the effectiveness of state and political subdivision energy efficiency programs, including programs under this chapter. The laboratory shall calculate, based on the evaluation and the forms submitted to the office, the amount of energy savings and estimated reduction in pollution achieved as a result of the implementation of programs. The laboratory shall share the information with the commission, the United States Environmental Protection Agency, and the Electric Reliability Council of Texas to help with long-term forecasting and in estimating pollution reduction.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 637 (S.B. 898), Sec. 2, eff. September 1, 2011.

Acts 2019, 86th Leg., R.S., Ch. 573 (S.B. 241), Sec. 1.30, eff. September 1, 2019.

Sec. 388.007. DISTRIBUTION OF INFORMATION AND TECHNICAL ASSISTANCE.
(a) The laboratory shall make available to builders, designers, engineers, and architects code implementation materials that explain the requirements of the International Energy Conservation Code and the energy efficiency

chapter of the International Residential Code and that describe methods of compliance acceptable to code officials.

(b) The materials may include software tools, simplified prescriptive options, and other materials as appropriate. The simplified materials may be designed for projects in which a design professional is not involved.

(c) The laboratory may provide local jurisdictions with technical assistance concerning implementation and enforcement of the International Energy Conservation Code and the energy efficiency chapter of the International Residential Code, including local amendments to those codes.

(d) The laboratory may conduct outreach to the real estate industry, including real estate agents, home builders, remodelers, appraisers, and financial institutions, on the value of energy code compliance and verified, above-code, high-performance construction.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 937 (H.B. 51), Sec. 4, eff. September 1, 2011.

Sec. 388.008. DEVELOPMENT OF HOME ENERGY RATINGS. (a) The laboratory shall develop a standardized report format to be used by providers of home energy ratings. The laboratory may develop different report formats for rating newly constructed residences from those for existing residences. The form must be designed to give potential buyers information on a structure's energy performance, including:

- (1) insulation;
- (2) types of windows;
- (3) heating and cooling equipment;
- (4) water heating equipment;
- (5) additional energy conserving features, if any;
- (6) results of performance measurements of building tightness and forced air distribution; and

(7) an overall rating of probable energy efficiency relative to the minimum requirements of the International Energy Conservation Code or the energy efficiency chapter of the International Residential Code, as appropriate.

(b) The laboratory shall establish a public information program to inform homeowners, sellers, buyers, and others regarding home energy ratings.

(c) The laboratory may cooperate with an industry organization or trade association to:

- (1) develop guidelines for home energy ratings;
- (2) provide training for individuals performing home energy ratings and providers of home energy ratings; and
- (3) provide a registry of completed ratings for newly constructed residences and residential improvement projects for the purpose of computing the energy savings and emissions reductions benefits of the home energy ratings program.

(d) The laboratory shall include information on the benefits attained from this program in an annual report to the commission.

Added by Acts 2001, 77th Leg., ch. 967, Sec. 1(b), eff. Sept. 1, 2001.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 939 (H.B. 3693), Sec. 13, eff. September 1, 2007.

Sec. 388.010. OUTREACH TO NEAR-NONATTAINMENT AREAS. The commission shall conduct outreach to near-nonattainment areas and affected counties on the benefits of implementing energy efficiency initiatives, including the promotion of energy-efficient building programs and urban heat island mitigation techniques, as a way to meet air quality attainment goals under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), as amended.

Added by Acts 2003, 78th Leg., ch. 1331, Sec. 17, eff. June 20, 2003.

Sec. 388.011. CERTIFICATION OF MUNICIPAL BUILDING INSPECTORS. The laboratory shall develop and administer statewide a training program for municipal building inspectors seeking to become code-certified inspectors. The laboratory shall also work with national code organizations to assist participants in the certification program. The laboratory may collect reasonable fees from participants in the program to pay the costs of administering the program.

Acts 2003, 78th Leg., ch. 1148, Sec. 1.

Renumbered from Health and Safety Code, Section 388.009 by Acts 2005, 79th Leg., Ch. 728 (H.B. 2018), Sec. 23.001(50), eff. September 1, 2005.

Sec. 388.012. DEVELOPMENT OF ALTERNATIVE ENERGY-SAVING METHODS. The laboratory shall develop at least three alternative methods for achieving a 15 percent greater potential energy savings in residential, commercial, and industrial construction than the potential energy savings of construction

that is in minimum compliance with Section [388.003](#). The alternative methods:

- (1) may include both prescriptive and performance-based approaches, such as the approach of the United States Environmental Protection Agency's Energy Star qualified new home labeling program; and
- (2) must include an estimate of:
 - (A) the implementation costs and energy savings to consumers;and
 - (B) the related emissions reductions.

Added by Acts 2005, 79th Leg., Ch. 1095 (H.B. [2129](#)), Sec. 4, eff. September 1, 2005.