

AN ORDINANCE 2009-03-12-0179

**APPROVING AND ADOPTING THE RECOMMENDATIONS OF THE MAYOR'S SUSTAINABLE BUILDING TASK FORCE, PROVIDING FOR AMENDMENTS TO THE CITY CODE TO IMPLEMENT CERTAIN RECOMMENDATIONS, PROVIDING FOR AN EFFECTIVE DATE AND FOR SEVERANCE.**

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**WHEREAS**, during the 2009 State of the City Address, Mayor Phil Hardberger announced his "Mission Verde" effort to begin building a 21st Century energy infrastructure for the City of San Antonio; and

**WHEREAS**, as a component of the "Mission Verde" plan, the Mayor established a Sustainable Building Task Force, consisting of representatives from key stakeholder groups whose mission was "to develop building strategies that enhance San Antonio's capacity to experience a resilient and environmentally sensitive future, emphasizing and focused on energy and water conservation"; and

**WHEREAS**, the City of San Antonio supports the adoption and implementation of energy provisions that result in energy savings of 15% or greater than the currently adopted code in 2008 (International Energy Conservation Code (IECC) 2000 with 2001 supplement and American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 90.1 1999), the goal of 30% energy savings in 2012 over the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of net-zero carbon by 2030 with the intent to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy and to reduce greenhouse gas and ozone precursor emissions in San Antonio and which is not intended to abridge safety, health, or environmental requirements contained in other applicable codes or Ordinances; **NOW THEREFORE**,

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:**

**SECTION 1.** The San Antonio City Council approves and adopts the recommendations of the Mayor's Sustainable Building Task Force as provided for in this Ordinance.

**SECTION 2.** This Ordinance shall regulate the design and construction of new buildings, building additions, or level 3 alterations as defined in the International Existing Building Code 2006 for the effective use of energy and will take effect on January 1, 2010. This Ordinance shall be publicly reviewed before March 1, 2012. After that date, it shall be reviewed, and amended as needed, every three years at a minimum. The Director, Planning and Development Services Department, shall be permitted to approve specific computer software (including at least one free, publicly-available source), worksheets, compliance manuals, and other similar materials that meet the intent of this Ordinance.

**SECTION 3.** Chapter 6, Article XV. International Energy Conservation Code, section 6-658 is amended by adding a Preamble and new sections (b) and (c), and to reflect the following changes underline indicating new.

## ARTICLE XV. INTERNATIONAL ENERGY CONSERVATION CODE

PREAMBLE: The City of San Antonio supports the adoption and implementation of energy provisions that result in energy savings of 15% or greater than the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of 30% energy savings in 2012 over the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of net-zero carbon by 2030 with the intent to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy and to reduce greenhouse gas and ozone precursor emissions in San Antonio and which is not intended to abridge safety, health, or environmental requirements contained in other applicable codes or Ordinances.

The City of San Antonio approves the goals of the following recommendations of the Sustainable Building Task Force:

1. That the Planning and Development Services Department, Office of Public Utilities within Finance, and the Office of Environmental Policy coordinate with CPS Energy and San Antonio Water System (SAWS) to evaluate a new construction residential and commercial financial incentive program to include the provision of specific rebates or other incentives, with an ultimate goal of achieving net zero carbon by 2030 and be designed to reward improved performance in a scaled fashion, within the current limitations of all applicable laws and regulations.
2. That the City of San Antonio create a marketing and education awareness campaign which is a unified comprehensive community-wide outreach effort supporting an advanced sustainable buildings initiative.
3. That CPS Energy and SAWS provide existing rebate and incentive information to the City of San Antonio to coordinate and promote incentives to provide one-stop information.
4. That the Planning and Development Services Department, with assistance from the Office of Environmental Policy, provide information on sustainable building practices and incentives to encourage residential and commercial developers to exceed minimum code requirements and serve as a clearinghouse for green building information from a wide and ever-increasing variety of sources.
5. That the City of San Antonio Office of Environmental Policy coordinate education awareness with other agencies or organizations that include workshops, trainings, and seminars which will provide sustainable building practices for residential and commercial buildings that exceed minimum code requirements.
6. That the City of San Antonio evaluate the feasibility of offering a property tax exemption for new homes and tax abatement or phase-in for new commercial buildings that achieve high energy performance levels, including participation in a third party verified green rating system addressing residential and commercial building. Such considerations may include a minimum HERS score for residential buildings.

7. That the City of San Antonio evaluate the feasibility of offering an additional amount of property tax abatement or phase-in for new homes and commercial buildings that utilize on-site renewable energy.
8. That the City of San Antonio Office of Environmental Policy promote an annual San Antonio Green Leadership awards program to recognize all new residential and commercial builders, architects, and others that significantly exceed the minimum code and to post those names on the City's website and through additional public media outlets.
9. That CPS Energy and SAWS evaluate incentives and rebates to support energy and water conservation for programs that exceeds code and include such programs in a unified city-wide promotion.
10. That the City of San Antonio evaluate the feasibility of funding for incentives through the Planning and Development Services Department, which could include fast-track permitting and reimbursement of fees, within the limitations of the current enterprise organization structure.
11. That energy incentives be provided to achieve 30% or greater savings above the currently adopted energy code; and
12. That a Stakeholder Sustainable Building Committee (SSBC) be formed which consists of representatives of architectural, engineering, construction, development, green building and building code professionals. Among other duties, the SSBC would monitor the implementation of the recommendations of the Mayor's Task Force on Sustainable Buildings and meet as needed but not less often than every three years to review COSA sustainability energy policies and goals. The SSBC would measure periodic progress and recommend the establishment or modification of interim goals to attain agreed long-term goals. Interim and long-term goals would be evaluated and recommended for amendment as required on the basis of sustainable environmental and community benefits, return on investment and practical impact on the regulated community. In 2012 the interim goal would target 30% above the current code in effect in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999); incentives will increase proportionately to achieve greater savings. Finally, should the energy needs/uses of existing buildings be examined in the future, the SSBC would be charged with the responsibility to present recommendations to City Council.

**Sec. 6-658. Adoption of the International Energy Conservation Code.**

- (a) The 2000 International Energy Conservation Code with 2001 supplement is hereby adopted as the energy conservation code for the city. The 2000 International Energy Conservation Code with 2001 Supplement is incorporated herein as fully as if set out at length and three (3) copies of both have been and are now filed in the office of the city clerk for permanent record and inspection

pursuant to section 17 of the City Charter. From the date on which the article shall take effect, the provisions thereof are controlling within the limits of the city.

(b) Beginning January 1, 2010, energy usage in one-and two-family and multi-family dwellings, 3 stories or less, must achieve an efficiency rate of 15% above the current City of San Antonio energy code that was in effect in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999) by complying with any of the following options:

1. IECC 2009 (as approved and/or amended by the City of San Antonio and/or Energy Systems Laboratory (ESL)). This meets the 15% standard referenced above.
2. Energy Star Certification Compliance. This meets the 15% standard referenced above.
3. Software or energy modeling tools or prescriptive building packages approved by the City of San Antonio Building Official and/or ESL. A demonstrated passing score satisfies the 15% standard referenced above.
4. Approved compliance methods as adopted by the State of Texas and/or Energy Systems Lab (ESL). A demonstrated passing score satisfies the 15% standard referenced above.
5. Build San Antonio Green, USGBC LEED-H, or other third-party certification program that meets or exceeds the energy requirements as approved by the Code Official shall be considered in compliance. This meets the 15% standard referenced above.

(c) Beginning January 1, 2010, buildings not covered in (b) above must achieve an efficiency rate of 15% above the current City of San Antonio energy code that was in effect in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999) by complying with any of the following options:

1. COMcheck or other software as approved by Planning and Development Services based on existing codes (ASHRAE 90.1 1999 & IECC 2000 with 2001 supplements) showing 15% or above the passing score.
2. COMcheck based on ASHRAE 90.1 2007. A passing score satisfies the 15% standard referenced above.
3. COMcheck based on IECC 2009 (when IECC 2009 is available and approved by ESL). A passing score satisfies the 15% standard referenced above.
4. ASHRAE 90.1 2007 energy modeling analysis approved methods. This meets the 15% standard referenced above.

5. ASHRAE Advanced Energy Design Guidelines. This meets the 15% standard referenced above.
6. Software or energy modeling methods or prescriptive building packages as adopted by the City of San Antonio Building Official and/or ESL. A demonstrated passing score satisfies the 15% standard referenced above.
7. Approved compliance methods that meet the new energy requirements herein as adopted by the State of Texas. A demonstrated passing score satisfies the 15% standard referenced above.
8. USGBC LEED or other third-party certification program that meets or exceeds the energy requirements as approved by the Code Official shall be considered in compliance.
9. Performance rating calculations and documentation shall be in accordance with the International Building Code, "Performance Rating Method", and shall be submitted with each application for a building permit. Documentation, including calculations, shall be prepared by a registered design professional.

**SECTION 4.** Chapter 6, Article III. Building Code, is amended to reflect the following changes, underline indicating new:

**Sec. 6-37. Local Amendments to the IBC**

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**SECTION 1502  
DEFINITIONS**

**1502.1 General.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**Energy Star Certified Roof:** Applicable to 2:12 sloped roofs or less. A roof that is Energy Star certified. Energy Star is a joint program of the US Environmental Protection Agency and the Department of Energy.

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**SECTION 1506  
MATERIALS**

**1506.1 Scope.** The requirements set forth in this section shall apply to the application of roof-covering materials specified herein. Roof coverings shall be applied in accordance with this chapter and the manufacturer's installation instructions. Installation of roof coverings shall comply with the applicable provisions of Section 1507. Beginning January 1, 2010, Energy Star Certified roofs shall be required on all new buildings with a roof slope of 2:12 or less.

Exception: Buildings with a use classification of Group R-2, R-3, or R-4 and 3 stories or less.

**SECTION 5.** Chapter 6, Article V. Mechanical Code, is amended to reflect the following change, underline indicating new:

**Sec. 6-67. Amendments**

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**107.2.1 New, Altered, extended or repaired systems.** New mechanical systems and parts of existing systems, which have been altered, extended, renovated or repaired, shall be tested as prescribed herein to disclose leaks and defects. Beginning January 1, 2010, all ducts in unconditioned spaces of all new Group R-3 Residential occupancies shall be duct tested prior to covering or concealment as prescribed herein to disclose leaks and defects.

**SECTION 6.** Chapter 6, Article XIII. International Residential Code is amended to reflect the following change, underline indicating new:

**Sec. 6-631. Local Amendments to the IRC**

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**SECTION R109**  
**INSPECTIONS AND TESTING**

**R109.1 Types of inspections and tests.** For onsite construction, from time to time the building official, upon notification from the permit holder or his agent, shall make or cause to be made any necessary inspections and tests and shall approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code.

**R109.1.2 Plumbing, mechanical, gas and electrical systems inspections and tests.** Rough inspections of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment, before fixtures or appliances are set or installed, and prior to framing inspection.

**Exception:** Back-filling of ground-source heat pump loop systems tested in accordance with Section M2105.1 prior to inspection shall be permitted.

Beginning January 1, 2010, for all one-and two-family dwellings, all ducts 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 alternate approved by the building official using objective, verifiable testing criteria and results provided to the building official. Apparatus, material and labor required for testing a mechanical system shall be furnished by the independent certified RESNET energy rater or building official approved alternate. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the building official for inspection and testing.

SECTION 7. Chapter 24, Article II. Plumbing Code, of the City Code of San Antonio, Texas, is amended to reflect the following changes, underline indicating new:

**Sec. 24-12. Amendments**

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**402.8 Certain Plumbing Fixtures.**

When installing gravity flush toilets, bathroom aerators, showerheads, urinals in new buildings on or after January 1, 2010, unless specifically stated otherwise, the fixtures will meet or exceed the following performance standards; and where the Environmental Protection Agency has accepted that specific plumbing fixtures by make and model, meet or exceed the WaterSense standards, such fixtures installed will be from the most current listing available at the time of installation:

- a. Gravity flush toilets shall have a maximum average water use of no more than 1.28 gallons per flush.
- b. Faucet aerators for bathrooms shall have a maximum water flow of 1.5 gallons per minute.
- c. Showerheads shall have a maximum water flow of 2.0 gallons per minute. All associated valves must be appropriate to the flows.
- d. Urinals in commercial buildings shall have a maximum water use of 0.5 gallons per flush.

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**609.11 Hot Water Lines.**

Buildings with a use classification of Group R-2, R-3, or R-4, as defined in the International Building Code and that are 3 stories or less without a dedicated hot-water return line with runs exceeding 20 feet between the heating element and the end use fixture shall be insulated with R-4 sleeve insulation or with materials approved by the Planning and Development Services Department (such as 5/8" foam). A dedicated return loop with an on-demand system is an acceptable alternative. Insulation will not be required to be continuous through studs.

SECTION 8. The following sections of Chapter 34, Water and Sewers, of the City Code of San Antonio, Texas, is amended to reflect the following changes, underline indicating new and strikeout deleted:

**Sec. 34-271. Definitions.**

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*Large property* means a tract of land or several tracts of land managed as a group such as commonly found in neighborhood common areas or medians and street setbacks commonly found associated with commercial development regardless of the number of meters or individual parcel sizes associated with the property [~~owned by a general customer~~] that equals or exceeds five (5) acres in size and has an irrigation system covering all or a portion of the property.

Large property means a tract of land or several tracts of land managed as a group such as commonly found in neighborhood common areas or medians and street setbacks commonly found associated with commercial development regardless of the number of meters or individual parcel sizes associated with the property ~~{owned by a general customer}~~ that equals or exceeds five (5) acres in size and has an irrigation system covering all or a portion of the property.

Large use property means any property that uses 1 million gallons of water or more for irrigation purposes in a single calendar year.

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**Sec. 34-273. Activities to be regulated on or after January 1, 2006.** is amended by the following changes to sections (1) and (2) and the addition of new sections (8), (9), and (10), as follows:

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- (1) ***Minimum irrigation area and flow direction.*** Newly installed irrigation systems using pop-up spray or rotor technology shall not be used in landscaped areas which have both:
- a. Dimensions less than five (5) feet in length and/or width; and,
  - b. Impervious pedestrian or vehicular traffic surfaces along two (2) or more perimeters.

Where pop-up sprays and rotor heads are allowed in newly installed irrigation systems, they:

- a. Must direct flow away from any adjacent impervious surface; and
- b. Shall not be placed within four (4) inches from an impervious surface.
- c. Irrigation systems newly installed in one-and two-family dwellings may not cover more than 10,000 square feet of landscape with spray or rotor irrigation heads. The use of drip irrigation or micro-sprays may be used to expand the coverage size upon approval of the landscape plan by SAWS.

(2) ***Annual irrigation system analysis for athletic fields, golf courses, large use and large properties.***

- a. An annual irrigation system analysis shall be required for all athletic fields, golf courses, large use and large properties and shall be submitted in writing to the San Antonio Water System Conservation Department on or before May 1st of each year ~~{, beginning on May 1, 2006}~~. Golf courses, athletic fields, and large properties that meet the definition of large use and large use properties regardless of size including residential properties must have a licensed irrigator sign-off on the annual irrigation system analysis. Golf courses, either than those utilizing recycled water for irrigation in accordance with an agreement with SAWS, shall comply with residential irrigation requirements on areas other than tee boxes, fairways and greens.

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**(8) Certain Plumbing Fixtures.**

When installing gravity flush toilets, bathroom aerators, showerheads, urinals in new buildings on or after January 1, 2010, unless specifically stated otherwise, the fixtures will meet or exceed the following performance standards; and where the Environmental Protection Agency has accepted that specific plumbing fixtures by make and model, meet or exceed the WaterSense standards, such fixtures installed will be from the most current listing available at the time of installation:



d. Urinals in commercial buildings shall have a maximum water use of 0.5 gallons per flush.

**(9) Coin Operated Washing Machines.**

All newly installed coin-operated washing machines including, but not limited to those that might be found in laundry-mats, apartment houses, dorms or other communal use situations shall be selected from Consortium for Energy Efficiency (CEE) that meet or exceed the most current Tier 2 water and energy standards as determined by the CEE.

**(10) Hot Water Lines.**

Buildings with a use classification of Group R-2, R-3, or R-4, as defined in the International Building Code and that are 3 stories or less without a dedicated hot-water return line with runs exceeding 20 feet between the heating element and the end use fixture shall be insulated with R-4 sleeve insulation or with materials approved by the Planning and Development Services Department (such as 5/8" foam). A dedicated return loop with an on-demand system is an acceptable alternative. Insulation will not be required to be continuous through studs.

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**Sec. 34-275. Landscaping regulations generally applicable on and after January 1, 2006.** is amended by the addition of a new section (6) as follows:

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**(6) Irrigation system use, setting and schedule recommendations.**

All irrigators installing irrigation systems permitted by the City of San Antonio shall provide to the irrigation system owner a recommended seasonal irrigation schedule and instructions on how to use the irrigation system and set the controller. Seasonal schedules provided will be approved by the SAWS Conservation Director or designee. The schedule will be affixed to the irrigation controller or an adjacent wall.

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**SECTION 9.** The City Council finds that the amendments to Chapter 34 of the San Antonio Municipal Code as described above are in the nature of tariff revisions to terms and conditions of water delivery service by the San Antonio Water System. Further, the City Council finds that the amendments are in the public interest; and are fair, reasonable, and non-discriminatory.

**SECTION 10.** To the extent there is a conflict with another Ordinance or provision of the City Code, this Ordinance shall supersede.

**SECTION 11.** All other provisions of the City Code of San Antonio, Texas shall remain in full force and effect unless expressly amended by this Ordinance.

**SECTION 12.** Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this Ordinance, for any reason be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision herein contained be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

**SECTION 13.** The City Clerk is directed to publish notice of this Ordinance in accordance with Section 17 of the Charter of the City of San Antonio.

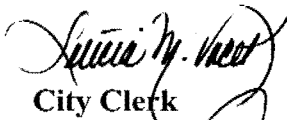
**SECTION 14.** The publishers of the City Code of San Antonio, Texas, are authorized to amend said Code to reflect the changes adopted herein and to correct typographical errors and to format and number paragraphs to conform to the existing code.

**SECTION 15.** This Ordinance shall take effect on January 1<sup>st</sup>, 2010.

**PASSED AND APPROVED** this 12<sup>th</sup> day of March, 2009

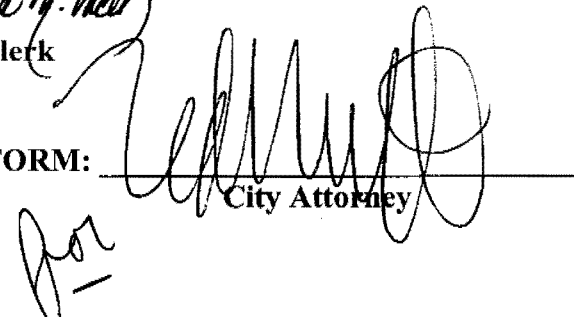
  
M A Y O R

ATTEST:

  
City Clerk



APPROVED AS TO FORM:

  
City Attorney

