

City of San Antonio Sustainable Buildings Ordinance

➤ **Adopted : Sustainable Buildings Ordinance and IECC 2009**

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)

➤ **Takes Effect : January 1, 2010**



Background



Mayor's Task Force on Sustainable Buildings

Chairman: Ed Kelley

Representatives from key community - stakeholder groups:

- Formed Executive Committee
- Created Advisory Committees:
 - Commercial Committee
 - Residential Committee
- Formed Technical Support Committee

Mission: “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 conversation”



Committee Process



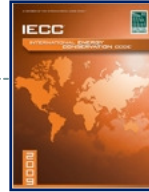
Specific recommendations by each subcommittee focused on:

- energy codes,
- compliance methods,
- incentives,
- water codes,
- related issues

Energy Recommendations



Energy Code



- Now -- 15% better than current code
- IECC 2009
 - Residential – ducts tested or ducts in conditioned space
 - Commercial – Energy Star roof
 - January 1, 2010 start date
- 2012 -- 30% below current code (target)
- 2030 -- Carbon neutral (target)



Energy Performance Compliance



Residential:

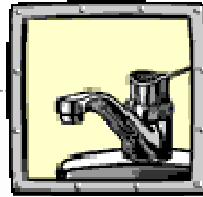
- IECC 2009 (as approved and/or amended by the City of San Antonio and/or Energy Systems Laboratory (ESL). This meets the 15% standard referenced above.
- Energy Star Certification
- Software or energy modeling tools or prescriptive building packages approved by the City of San Antonio Building Official and/or ESL. *(including at least one free, publicly-available source)*
- Approved compliance methods as adopted by the State of Texas and/or Energy Systems Lab (ESL).
- Build San Antonio Green, or other third-party certification program that meets or exceeds the energy requirements as approved by the Code Official shall be considered.

Amendments– Duct testing



- 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.
- 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.

Plumbing Fixtures



- Gravity flush toilets shall have a maximum average water use of no more than 1.28 g per flush.
- Faucet aerators for bathrooms shall have a maximum water flow of 1.5 gallons per minute.
- Showerheads shall have a maximum water flow of 2.0 gallons per minute. All associated valves must be appropriate to the flows.
- Insulated hot water lines > 20 feet or demand system

Energy Performance Compliance



Commercial :

- Energy Star roofs
- Multiple compliance options
 - Software or energy modeling tools or prescriptive building packages approved by the City of San Antonio Building Official and/or ESL. (*including at least one free, publicly-available source*)
 - COMcheck based on IECC 2009 (when IECC 2009 is available and approved by ESL).
 - ASHRAE 90.1 2007
 - ASHRAE Advanced Energy Design Guidelines(Prescriptive documentation)
 - Approved compliance methods as adopted by the State of Texas and/or Energy Systems Lab (ESL).
- Higher performance for coin operated washing machines in new facilities

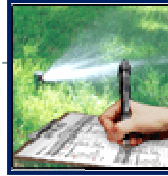
Energy Performance Compliance



Commercial :

- All new commercial buildings shall incorporate Energy Star Certified roofs.
- Multiple compliance options
 - Software or energy modeling tools or prescriptive building packages approved by the City of San Antonio Building Official and/or ESL. (*including at least one free, publicly-available source*)
 - COMcheck based on IECC 2009 (when IECC 2009 is available and approved by ESL)
 - ASHRAE Advanced Energy Design Guidelines(Prescriptive documentation)
 - ASHRAE 90.1 2007
 - Approved compliance methods as adopted by the State of Texas and/or Energy Systems Lab (ESL).
 - USGBC LEED ® or other third party certification that meets the energy performance requirements as approved by the Code Official

Water Performance



Commercial :

- Golf courses, athletic fields, and large properties -- *uses 1 million gallons of water or more for irrigation purposes in a single calendar year* including residential properties must have a licensed irrigator sign-off on the annual irrigation system analysis.
- Urinals shall have a maximum water use of 0.5 gallons per flush (applies to commercial only).

City of San Antonio Approved Goals



- Create a marketing and education awareness campaign.
- Create One-Stop high-performance building information resource.
- CPS Energy and SAWS to provide rebate and incentive information to the City of San Antonio to coordinate and promote incentives.
- Create a financial incentive model proportional to the benefit (higher performance = higher incentive) – towards 30% energy savings.
- Minimum 3 year review for update considerations for Energy.

Discussion



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