

Energy Efficient Building Codes: The Southwest

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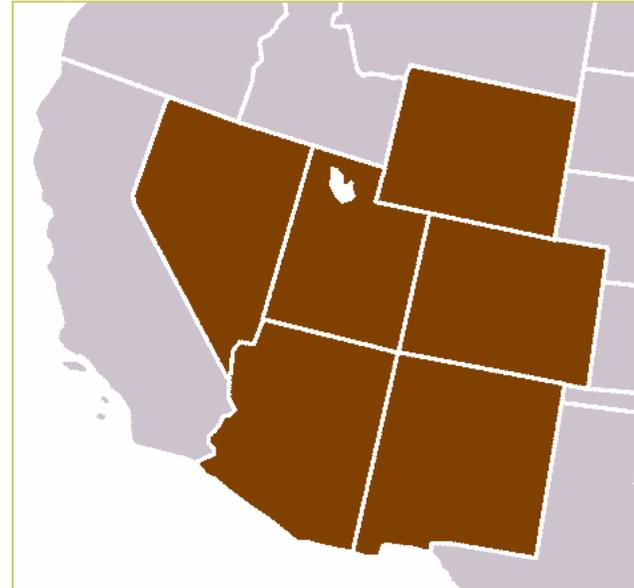
ENERGY CODES 2007

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About SWEEP

- ❑ Regional energy efficiency policy and advocacy organization
- ❑ Focused on fast-growing, 6-state region (AZ, CO, NM, NV, UT and WY)
- ❑ Promoting updated, well-enforced building codes and beyond-code construction practices



Quick Facts: Southwest Region

- ❑ Population (2006): ~18 million
- ❑ Population change, 2001-2006 (US: 6%):
 - NV: 25%; AZ: 20%; UT: 14%
- ❑ # of new building permits, 2006 (SFH, per year): ~150,000
- ❑ Per household electricity demand (kWh/year): 7,940 (NM) – 13,600 (AZ)

Status of Building Codes: Southwest

State	Statewide or Home Rule	Local Adoption	Residential Code	Commercial Code
Arizona	Home rule, with voluntary statewide code	Phoenix (2006 IECC) Tucson (2003 IECC) Pinal County (2000 IECC)	2000 IECC ^c	ASHRAE 99
Colorado	Home rule; legislation passed in 2007 requires municipalities to update their codes to the 2003 IECC or better	2003 IECC adopted by multiple jurisdictions	2003 IECC	Voluntary; based on 2003 IECC/ASHRAE 90.1-2001
Nevada	Home rule with coordination among entities	2006 IECC adopted in Southern Nevada; in progress in N. Nevada	2003 IECC	2003 IECC
New Mexico	Statewide	(code effective statewide)	2003 IECC, but now under review	2003 IECC, but now under review
Utah	Statewide	(code effective statewide)	2006 IECC	2006 IECC
Wyoming	Statewide with voluntary local adoption	Laramie: 2003 IECC	Prior to 1992 MEC ^c	Prior to 90A90B ^c

Beyond Code Initiatives

- ENERGY STAR Homes:
 - Nevada (71% market share; 19,000 homes)
 - Arizona (36% market share; 20,000 homes)
 - Utah (15% market share; 3,500 homes)
- State / Municipal green building programs/ordinances
 - New Mexico 'Low-GHG Building Code'
 - Boulder, Denver, Albuquerque, Salt Lake, Tucson, Las Vegas
- Near-Zero Energy Homes
 - Many builders familiar with energy efficient construction practices (e.g., ENERGY STAR, Built Green); ready to take next step
 - Demonstration homes in AZ, NM, NV, and CO
 - State/utility solar incentives in most states

Climate Change Policies

- EE in State and regional climate initiatives
 - State climate change goals and action plans:
 - Arizona, New Mexico, Utah (under development)
 - Western Climate Initiative (CA, OR, WA, AZ, NM, UT plus British Columbia and Manitoba)
- EE, including enhanced building energy codes, can play an important role in meeting state & regional climate goals



Southwest Challenges and Needs

- ❑ Continued emphasis on ENERGY STAR and beyond ENERGY STAR new construction particularly in high growth states
- ❑ Improve access, availability of training on building codes and building design best practices
- ❑ Develop region-specific building practices and technologies
 - Evaporative cooling and evaporative/condenser hybrids
 - Expand use of passive and active solar thermal heating and cooling (e.g., orientation, thermal mass, solar PV and solar HW)
 - Significantly improve cooling performance
 - Integrate energy and water efficiency (clothes washers, dishwashers, low-flow fixtures for showers, faucets, toilets), landscaping

SWEEP:

Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:

www.swenergy.org

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