

**Status of Building Codes
And
Energy Codes
In
New Mexico**

For

**The New Mexico Chapter of ASHRAE
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By

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History

October 2002

- The International Building Code 2000 was adopted
- The International Residential Code 2000 was adopted
- The International Energy Conservation Code 2000 was adopted

December 2002

All International Codes were rescinded. The Battle between Industry Developed Standards using the ANSI Consensus process and Standards developed by Code Officials with input from industry and others.

January 2003

New Commissioners were appointed

February/March 2003

The Building Code Law was revised

May 16 2003

New Commission Directed the Construction Industries Division (CID)

Dec 19 2003

The Commission expects to adopt the administrative framework for all the new codes.

April 2004

Adoption of the detailed building codes is expected.

Current Status of Energy Codes in New Mexico November 17, 2003

Commercial Buildings – 1986 Model Energy Code

Residential Buildings – 1992 Model Energy Code

New Mexico Energy Conservation Applications Manual

- **Component performance Compliance Approach**
- **Trade-off Procedure**
- **Passive Solar System Compliance Approach**

Why Update Energy Codes

- **Reduction in energy and operating costs**
- **Reduction in Construction Costs**
- **Reduction in pollution**
- **Reduction in Utility Infrastructure**

New Mexico Specific Benefits For Adopting the International Energy Conservation Code 2003

Adopting the Lighting Requirements has the following Benefits:
 Currently the New Mexico Electrical Code allows a lighting system with **2 watts** per square foot. The energy code only allows **1 Watt/SF for Offices, 1.5 W/SF for Retail and 1.2 W/SF for Public Schools.**

Cost Savings for Eliminating 2 Watts/SF Allowance IECC 2000 vs New Mexico Electrical Code			
Sample Building Type	Size	Construction Savings	Energy Savings
Small Office	10,000 SF	\$ 1,723	\$ 2,160
Small Retail	10,000	\$ 493	\$ 346
Elementary School	50,000	\$ 2,481	\$ 5,798
Source: Pacific Northwest National Lab. January 2003, PNNL-14073			
Cost Savings for Public Schools			
Activity	Annual Construction	Construction Savings	Energy Savings
Additions	1.5 Million SF	\$74,430/yr	\$173,940/yr
Renovations	1.0 Million SF/year	\$49,620/yr	\$115,960/yr
Grand Total	2.5 Million SF/year	\$124,050	\$289,900/yr
In 2003 \$231.6 million was spent on additions and renovations for public schools. More than 1.3 million square feet was added and 1.5 million square feet was renovated involving 122 projects.			

Why is the lighting requirement important

In terms of energy cost, the fraction of the energy savings that is coming from adoption of the IECC lighting requirements is:

- **Small Office: 74%,**
 - **Small Retail: 91%,**
 - **100% for schools.**
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- Electric utilities in NM would need to provide 45 Megawatts of additional generation capacity over a 10-year period based on 8 million square feet of additional commercial space being built every year.

Procedures for adopting new codes in New Mexico

- 1 The Construction Industries Commission directs the Bureau Chiefs in the Construction Industries Division to review the latest published building codes.
- 2 The Commission selects industry representatives to participate in technical advisory committees to review codes and to recommend amendments to national codes. Bureau Chiefs can also recommend participants.
- 3 Subcommittees are assigned codes and groups of chapters to review.
- 4 Subcommittees make recommendations to the general advisory committee.
- 5 The General Advisory Committees review and vote on subcommittee recommendations.
- 6 The Chairman of the General Advisory Committee reports the recommendations to the Construction Industries Commission (CIC).
- 7 The CIC reviews the recommendation and determines to go to public hearing.
- 8 Bureau Chiefs conduct public hearings and report recommendations to the CIC.
- 9 CIC Acts on recommendations from public hearings.
- 10 Training is initiated on new codes.

It's the Law – Federal Law

42 USC Sec. 6833

TITLE 42 - THE PUBLIC HEALTH AND WELFARE

CHAPTER 81 - **ENERGY** CONSERVATION AND RESOURCE RENEWAL

SUBCHAPTER II - **ENERGY** CONSERVATION STANDARDS FOR NEW BUILDINGS

Sec. 6833. Updating State building energy efficiency codes -STATUTE-

(b) Certification of commercial building **energy** code updates

(1) Not later than 2 years after October 24, 1992, each State

shall certify to the Secretary that it has reviewed and updated the provisions of its commercial building code regarding energy efficiency. Such certification shall include a demonstration that such State's code provisions meet or exceed the requirements of ASHRAE Standard 90.1-1989.

(2)(A) Whenever the provisions of ASHRAE Standard **90.1-1989** (or any successor standard) regarding **energy** efficiency in commercial buildings are revised, the Secretary shall, not later than 12 months after the date of such revision, determine whether such revision will improve **energy** efficiency in commercial buildings.