



## Buildings for the 21st Century

Buildings that are more energy-efficient, comfortable, and affordable...that's the goal of DOE's Office of Building Technology, State and Community Programs (BTS). To accelerate the development and wide application of energy efficiency measures, BTS:

- Conducts R&D on technologies and concepts for energy efficiency, working closely with the building industry and with manufacturers of materials, equipment, and appliances
- Promotes energy/money saving opportunities to both builders and buyers of homes and commercial buildings
- Works with State and local regulatory groups to improve building codes, appliance standards, and guidelines for efficient energy use
- Provides support and grants to States and communities for deployment of energy-efficient technologies and practices



BUILDING  
ENERGY CODES



# COMcheck-EZ™ ENERGY CODE COMPLIANCE MADE EASY FOR ALL COMMERCIAL BUILDINGS

The U.S. Department of Energy developed *COMcheck-EZ™* products as compliance support materials for codes based on the ASHRAE/IES Standard 90.1-1989, 90.1-1999, 1998 IECC, 2000 IECC, Colorado, Louisiana, Massachusetts Minnesota, and New York state versions.

*COMcheck-EZ™*, for **ALL** commercial buildings and it's **FREE**.

*COMcheck-EZ™* products offer two ways to demonstrate compliance with energy codes—the prescriptive compliance method and the systems performance method. For simple buildings, building professionals can use the prescriptive method to show compliance, requiring nothing more than pencil and paper. As the building design becomes more complex, the software allows a systems performance approach for the envelope and lighting systems. This approach allows trade-offs among system components to achieve compliance for the entire envelope or lighting system. Mechanical system compliance is guided by the software. The mechanical wizard allows users to select simple-to-complex HVAC systems, asking only for information relevant to the selected systems. Added flexibility in lighting design allows users to demonstrate compliance with several state code variations.

*COMcheck-EZ™* product line compliance guides:

- ✓ Scope and Application
- ✓ Envelope
- ✓ Lighting
- ✓ Mechanical
- ✓ Software
  - a. Field Inspection Checklists
  - b. *COMcheck-EZ™* software.

*COMcheck-EZ™* Software features:

- ✓ Mechanical Wizard
- ✓ Compliance tool for ALL commercial buildings
- ✓ Gross area inputs for envelope and other options
- ✓ Flexible lighting design for state code variations
- ✓ Windows95/98/2000 or NT format
- ✓ Easy modification for state code variations.

DOE provides the products to help designers, builders, code officials, and others in the building industry more easily comply with energy code requirements for commercial and high-rise residential buildings. Compliance materials may be customized for state codes based on the national models through DOE's Technical Assistance to States program.

For more information about the DOE Office of Building Technology, State and Community Programs, contact:

Energy Efficiency and Renewable Energy Clearinghouse (EREC)  
**1-800-DOE-3732**  
[www.eren.doe.gov/buildings](http://www.eren.doe.gov/buildings)

**Building Energy Codes Home Page:**  
[www.energycodes.gov](http://www.energycodes.gov)

For more information on COMcheck-EZ™ contact:

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The Model Energy Code can be obtained by calling BOCA: **708-799-2300**; ICBO: **562-699-0541**; or SBCCI: **205-591-1853**.

COMcheck-EZ™, a companion compliance software package, can be ordered from DOE by calling **1-800-270-CODE** or downloaded directly from the Web at [www.energycodes.gov/comcheck/ez\\_download.stm](http://www.energycodes.gov/comcheck/ez_download.stm)



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## What training resources are available?

The 90.1 Code, 90.1-1999 Standard, 1998 IECC and the 2000 IECC compliance training materials include PowerPoint slides and course notes.

COMcheck-EZ™ training materials include PowerPoint slides, course notes, and a case study.

A computer-based training tool is available to train users of the COMcheck-EZ™ software. This interactive multimedia tool is available on CD with the COMcheck-EZ™ software and includes text, full-color photographs and illustrations, and video and audio narration.

A video, *An Overview of Chapter 7 of the International Energy Conservation Code*, was developed in conjunction with International Conference of Building Officials (ICBO) and North American Insulation Manufacturers Association (NAIMA), and provides information on the 1988 provisions of the International Code Council (ICC) IECC.

Standard 90.1-1999 *The Next Generation Commercial Building Energy Standard*, and Standard 90.1-1999 in more detail are videos of satellite broadcasts, were produced in conjunction with ASHRAE and IESNA.

COMcheck-EZ™ Train-the-Trainer Workshop is available for training state officials on commercial standards and on how to develop their own commercial code implementation classes.



## What about other information or assistance?

DOE's Office of Building Technology, State and Community Programs Building Energy Codes (BEC) Program provides other information and reference data, including:

- ✓ State energy code information
- ✓ A list of state energy office and building department contacts
- ✓ Energy Conservation Measure cost data
- ✓ Commercial building start data and weather data (heating degree-days, cooling degree-days)
- ✓ Average fuel price information
- ✓ Examples of code adoption legislation
- ✓ Energy Policy Act of 1992 (EPAct) information.

Many items are distributed to states at no cost. In addition, staff members are available to provide testimony, attend meetings and make presentations.



## How can I get assistance?

Call the Energy Codes Hotline at **1-800-270-CODE (2633)** to obtain these products and services, speak to a specialist, or receive the Program's newsletter, *Setting the Standard*. Visit the BEC Website at [www.energycodes.gov](http://www.energycodes.gov).