



2006

National Workshop on State Building Energy Codes



U.S. Department of Energy

Building Energy Codes



U.S. Department of Energy

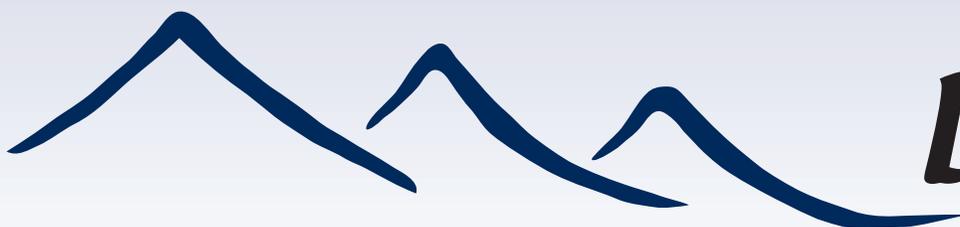
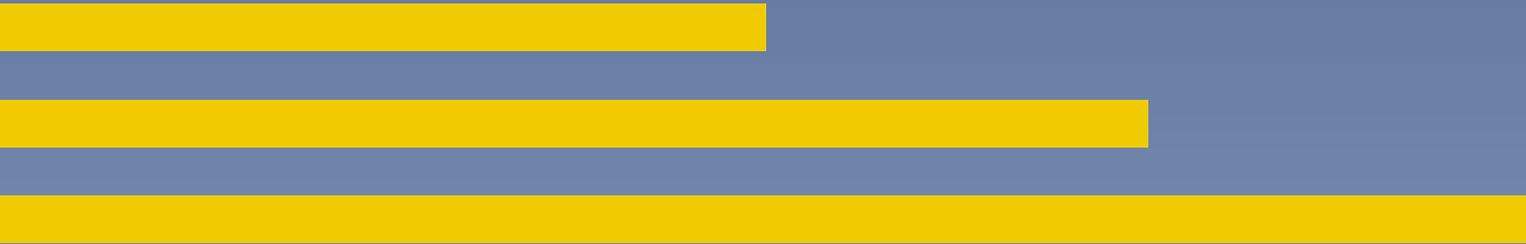
Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

July 31 - August 3, 2006



Denver, Colorado



DENVER

2006 National Workshop on State Building Energy Codes

July 31 – August 3, 2006



Denver, Colorado

Workshop Program

We wish to acknowledge those who have made this Workshop possible and have worked hard to make it a success:

Our Sponsors

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Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

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U.S. Department of Energy

Building Energy Codes

Paperless Workshop

In our efforts to conserve resources, the 2006 National Workshop will not make copies of individual presentations available to attendees. A signup sheet for presentation CDs (to be sent after the workshop) will be at the registration desk, otherwise all presentations will be available at www.energycodes.gov/news/2006_workshop/presentation.stm.

Pre-Workshop: Monday, July 31, 2006

7:00 – 5:00	Registration – Ballroom Foyer	
		Salons A – D
8:00 – 12:00		Commercial Requirements of the 2006 IECC
10:00 – 12:00	Stapleton Development Corporation – Residential Building Tour	
12:00 – 1:00	Lunch and transportation provided with tour	Lunch on your own
1:00 – 4:30	NREL - Commercial Building Tour	Residential Requirements of the 2006 IECC
6:00 – 8:00	Welcoming Reception – Poolside	

Day 1: Tuesday, August 1, 2006

7:30 – 8:30	Registration – Continental Breakfast – Ballroom Foyer/Salons 1 – 2	
	Salons A – D	
8:30 – 9:40	Welcome/Agenda/Keynote	
9:40 – 10:15	An Unfortunate Link Between Colorado Energy Codes and Energy Price Projections	
10:15 – 10:30	Break	
10:30 – 10:45	Jeffrey A. Johnson Award	
10:45 – 11:30	What is the Government Doing for You?/Showcasing DOE Efforts	
11:45 – 1:30	States Expo/Networking Lunch – Ballroom Foyer/Salons 1 – 2	
	Salon E Commercial	Salons F – H Residential
1:30 – 2:00	Can You Have Good Lighting Design and Still Meet Code?	What's New
2:00 – 3:00		Ventilation
3:00 – 3:15	Break	
3:15 – 3:45	What's New	The 2006 IECC – Will It Change Your Life For the Better?
3:45 – 4:45	Alterations	
Evening Events: 1) Colorado Rockies vs. Milwaukee Brewers or 2) Dinner and a Nature Walk. Check at the Registration Desk for details.		



Day 2: Wednesday, August 2, 2006

7:30 – 8:30	Registration – Continental Breakfast – Ballroom Foyer/Salons A – D	
	Salons 1 – 2 Code Adoption & Compliance	Salons E – H Green Buildings and Above Code Performance
8:30 – 10:05	Code Power – Leading the Way to Codes of the Future <ul style="list-style-type: none"> • NASEO • Title 24 • Other Innovators 	Residential Green Buildings and Above Code Programs – What’s New? <ul style="list-style-type: none"> • ENERGY STAR • RESNET • NAHB Green Buildings Initiative
10:05 – 10:25	Break	
10:25 – 12:00	Future of Compliance	Residential Best Practices - Integrating Building Science with Above Code Programs <ul style="list-style-type: none"> • Southface (Southern Living House in Atlanta & Better Homes and Gardens America’s House near Atlanta) • E-Star Colorado (LEED) • DOE Zero Energy Buildings/Building America
12:00 – 1:00	Banquet Lunch – Salons A – D Keynote Speaker: <i>Michael Glantz</i> , Center for Capacity Building	
	Salons 1 – 2: Training	Salons E – H: Green Buildings
1:10 – 2:45	Energy Code Training – From Soup to Nuts	Commercial Green Buildings and Above Code Programs – What’s New? <ul style="list-style-type: none"> • ASHRAE • LEED
2:50 – 3:10	Break	
3:15 – 4:50	Web Based Training – Should it be on Today’s Menu?	Commercial Best Practices – Integrating Building Science with Above Code Programs <ul style="list-style-type: none"> • EPA Region 8 – New Building to be LEED Gold Certified
	Salons A – D	
5:00 – 7:30	Cracker Barrel (<i>Hors d’oeuvres will be provided</i>)	

Day 3: Thursday, August 3, 2006

7:15 – 8:30	Continental Breakfast – Ballroom Foyer	
	Salons A – D	Lobby
8:30 – 10:00	COMcheck Training	8:00 – 11:00 Johns Manville Tour and Free Airport Transportation (<i>be in the lobby at 7:30 am</i>)
10:30 – 11:30	REScheck Training	



National Workshop on State Building Energy Codes

Training/Sessions

Monday, July 31, 2006

Choose one:

Building Tours

or

Training: Commercial/Residential Requirements of the 2006 IECC

Tuesday, August 1, 2006

An Unfortunate Link Between Colorado Energy Codes and Energy Price Projections

Jeffrey A. Johnson Award

What is the Government Doing for You?/Showcasing DOE Efforts

States Expo

Choose one:

Commercial: Can You Have Good Lighting Design and Still Meet Code?; What's New; Alterations

or

Residential: What's New; Ventilation; The 2006 IECC – Will it Change Your Life for the Better?

Wednesday, August 2, 2006

Choose one of these tracks:

Code Adoption & Compliance / Training:

Code Power – Leading the Way to Codes of the Future; Future of Compliance; Energy Code Training – From Soup to Nuts; Web-Based Training – Should it be on Today's Menu?

or

Green Buildings and Above Code Performance:

Residential Green Buildings & Above Code Programs – What's New?; Residential Best Practices – Integrating Building Science with Above Code Programs; Commercial Green Buildings and Above Code Programs – What's New?; Commercial Best Practices – Integrating Building Science with Above Code Programs

Cracker Barrel

Thursday, August 3, 2006

COMcheck Training / REScheck Training

Johns Manville Tour and Free Transportation to Airport



Pre-Workshop Training/Sessions

Monday, July 31, 2006

Registration

7:00 am – 5:00 pm

Building Tours to Two Locations

10:00 am – 4:30 pm

Stapleton Development Corp.

10:30 am – 11:30 am

The Stapleton Development Corporation (SDC) is a private sector, non-profit entity created by Mayor Wellington E. Webb and the Denver City Council in 1995 to oversee the disposition of the former Stapleton International Airport. The SDC is responsible for implementing the Stapleton Development Plan, a community-based vision for creating new jobs, housing, and open space on the 4,700-acre airport property that lies in the heart of the Denver metropolitan area. The Stapleton Development Plan calls for the development of 17 million square feet of new commercial space and up to 10,000 units of housing. At the same time, more than one third of the property would be preserved as 1,700 acres of parks and open space; that plan has been approved by the Denver Planning Board and the Denver City Council as part of the City of Denver's Comprehensive Plan.

National Renewable Energy Laboratory

1:00 pm – 3:30 pm

Discover the power of clean energy at the U.S. Department of Energy's National Renewable Energy Laboratory (NREL). NREL, a premier laboratory for renewable energy and energy efficiency research, offers guests a glimpse into a bright future powered by the sun, wind and plant matter. NREL's Visitors' Center features interactive exhibits, educational videos and free literature on renewable energy and energy efficiency technologies.

Building tours lunch sponsored by E-Star Colorado.



Transportation provided and scheduled to depart the hotel lobby at 10:15 am.



Commercial Requirements of the 2006 IECC

8:00 am – 12:00 pm

This half-day session focuses on the commercial thermal building envelope, lighting, and mechanical requirements of the 2006 International Energy Conservation Code (IECC).

Speakers: *Eric Makela* – Britt/Makela Group
Mark Halverson – PNNL
Eric Richman – PNNL

Residential Requirements of the 2006 IECC

1:00 pm – 4:30 pm

This half-day afternoon session focuses on the residential requirements of the 2006 International Energy Conservation Code.

Speakers: *Pam Cole* – PNNL
Todd Taylor – PNNL

Welcoming Reception

6:00 pm – 8:00 pm

Join us poolside for a casual welcoming reception with hors d'oeuvres and beverages.

Reception sponsored by Icynene Inc, U.S. Greenfiber, manufacturers of Cocoon, and NuWool Co., Inc.



The Icynene Insulation System®
Healthier, Quieter, More Energy Efficient®



AIA Continuing
Learning Credits (LUs)



ICC Continuing Education Credits (CEUs) are
offered toward renewal of an ICC certification:

Monday, July 31, 2006

Commercial Requirements of the 2006 IECC = 4 LUs, .40 CEUs
Residential Requirements of the 2006 IECC = 3 LUs, .30 CEUs

Thursday, August 3, 2006

COMcheck Training = 1.5 LUs, .15 CEUs
REScheck Training = 1 LU, .10 CEUs

Workshop Sessions

Tuesday, August 1, 2006

Registration and Continental Breakfast 7:30 am – 8:30 am

Welcome, Agenda Overview, and Keynote 8:30 am – 9:40 am

Keynote Speakers:

Doug Seiter – U.S. Department of Energy – Golden Office

John Kersten – U.S. Department of Energy – Golden Office

Susan Castellon – Colorado State Energy Office

David Rodgers – U.S. Department of Energy – Headquarters

An Unfortunate Link Between Colorado Energy Codes and Energy Price Projections 9:40 am – 10:15 am

The cost-effectiveness of adopting energy codes is dictated to a large degree by the assumed cost of the proposed change and the projected costs of future energy prices for home space conditioning plus water heating. Historically, the latter costs have been provided by outside organizations and they've been too low. This presentation will compare the Colorado energy price forecasts of recent years vs. actual prices, then comment on implications for code cost-effectiveness.

Speaker: *Steve Andrews* – Association for the Study of Peak Oil and Gas

Break 10:15 am – 10:30 am

Jeffrey A. Johnson Award 10:30 am – 10:45 am

What is the Government Doing for You?/Showcasing DOE Efforts 10:45 am – 11:30 am

DOE's efforts in building energy codes across the nation and showcasing the latest tools.

Speakers: *Jean Boulin* – U.S. Department of Energy – Headquarters

Heather Dillon – PNNL

State Expo and Lunch 11:45 am – 1:30 pm



Choose Commercial or Residential Track

Commercial – Track A

Can You Have Good Lighting Design and Still Meet Code?

1:30 pm – 3:00 pm

Come listen to lighting experts address the application of the newest lighting energy requirements. Attendees will be shown the basis of the requirements and how they apply to real building designs. Examples of actual lighting designs will be used to show how the requirements are met and the appropriate use of additional power allowances and exemptions. Special needs designs will be discussed to show attendees how to address those tough compliance cases. Bring your favorite compliance nightmare questions to test the presenters.

Speakers: *Eric Richman* – PNNL

Nancy Clanton – Clanton & Associates, Inc.

Break

3:00 pm – 3:15 pm

What's New?

3:15 pm – 3:45 pm

What's new in the world of commercial energy codes and standards? Topics to be covered include: tax credits, what's happening at ASHRAE, and what's been proposed for the 2007 IECC Supplement.

Speakers: *Mark Halverson* – PNNL

David Weitz – Conservation Services Group

Alterations

3:45 pm – 4:45 pm

Ever deal with the headache of getting an alteration project to comply with the energy code? Come listen as participants share examples of their experiences and bring your own cases to share. A demonstration of the new Alteration feature in COMcheck will also be given.

Speakers: *Eric Makela* – Britt/Makela Group

Eric Richman – PNNL

Pam Cole – PNNL

Residential – Track B

What's New?

1:30 pm – 2:00 pm

What's new in the world of residential energy codes? Two popular topics will be covered in this session: tax credits and the new equipment efficiency requirements.

Speakers: *Steve Baden* – RESNET

Jean Boulin – U.S. Department of Energy – Headquarters

Ventilation

2:00 pm – 3:00 pm

People need fresh, clean air to breathe wherever they live or work. Tight building techniques have limited the amount of natural ventilation air increasing the impact of pressure differences resulting in poor indoor air quality, including CO infiltration from attached garages, the growth of mold, and an increase in health problems, particularly asthma. ASHRAE Standard 62.2 has set out to address these problems with ventilation. This session will outline the details of the Standard and discuss the effects of unbalanced pressures on occupant health and building durability.

Speaker: *Paul Raymer* – Tamarack Technologies, Inc.



The 2006 IECC – Will it Change Your Life for the Better?

3:15 pm – 4:45 pm

Todd Taylor will discuss both the obvious and the subtle differences between the 2003 and 2006 editions of the IECC and explain how they might influence adoption, compliance, and enforcement.

Speaker: *Todd Taylor* – PNNL

Evening Events:

5:15 pm

Complimentary roundtrip transportation is provided for both events and departs the hotel lobby at 5:30 pm. (*Inquire at the registration table if you have any questions*)

Colorado Rockies vs. Milwaukee Brewers

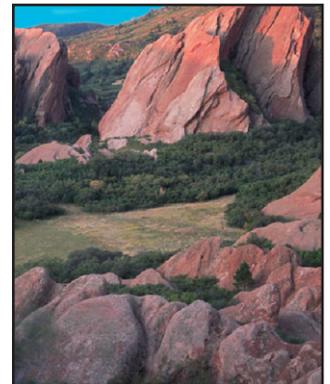
The Rockies play the Brewers at home. The game starts at 7:05 pm. You are responsible for purchasing your own tickets. **Tickets:** 18 price levels from \$4.00 to \$45.00 per seat. Purchase your ticket at the gate or in advance at http://colorado.rockies.mlb.com/NASApp/mlb/schedule/index.jsp?c_id=col&m=8&y=2006.



Dinner and a Nature Walk

You are responsible for the expense of dinner. The Fort, an award-winning restaurant located in Southwest Denver, is one of the nation’s most recognized establishments. Co-owners, Sam Arnold (noted author, historian and entrepreneur) and Holly Arnold Kinney (entrepreneur), have been featured in local and national publications such as the New York Times, Sunset, Bon Appetit and Modern Maturity. The Fort was just recently voted a “Must-See Restaurant” in the Rocky Mountain News’ Dining Guide edition (March 2006).

More than 1.2 billion years of geologic time are represented by the spectacular red-rock formations found within Roxborough State Park, which is located southwest of Denver. Ecologically, the park is highly diverse as a result of its location in a transition zone between the plains and the mountains. The area’s geological structure has resulted in microclimates that have produced seven distinct plant communities in a unique mixture of prairie and mountain species. As a result, Roxborough is home to abundant wildlife, including black bear, mountain lion and elk.



Workshop Track C – Code Adoption & Compliance

Wednesday, August 2, 2006

The Code Adoption and Compliance track will feature two approaches to the codes of the future. Code Power – Leading the Way to Codes of the Future will offer a Larry King investigative look into the minds of several empowered state voices as they seek to improve the energy codes. Future of Compliance will focus on a vision for the future of digital compliance and give you a glimpse into the code format of the future. Don't miss this unique peek at the near and distant future of energy codes!

Registration and Continental Breakfast

7:30 am – 8:30 am

Code Power – Leading the Way to Codes of the Future

8:30 am – 10:05 am

This session brings you speakers interviewed by one of our own celebrities to help attendees understand the innovation and leadership of several groups. NASEO, California, and state groups are highlighted in this session and the audience has an opportunity to ask questions live.

Speakers: *Brian Henderson* – NYSERDA
Elaine Hebert – CEC
Chuck Murray – Washington State University Energy Program

Break

10:05 am – 10:25 am

Future of Compliance

10:25 am – 12:00 pm

The electronic transfer of information is the future of codes and compliance. Speakers will present the vision of ICC and the views of electronic permitting vendors in this insightful glimpse into the near and distant future of electronic codes.

Speakers: *Paul Watkins* – MobileHWY, LLC
Robert Wible – Robert Wible & Associates
Becky Baker – Jefferson County

Banquet Lunch

12:00 pm – 1:00 pm

Keynote Speaker:
Michael Glantz – Center for Capacity Building



Workshop Track D – Green Buildings & Above Code Performance

Wednesday, August 2, 2006

This track looks at using the energy code as a foundation for achieving higher levels of performance in buildings. Experts participating in above code programs will help you explore the interaction of energy code compliance with voluntary efforts and best practices.

Registration and Continental Breakfast

7:30 am – 8:30 am

Residential Green Buildings and Above Code Programs – What’s New? 8:30 am – 10:05 am

This session will tap the expertise of national experts involved in the balance of codes and voluntary programs. What role have building energy codes played in helping to further advance voluntary programs to achieve greater energy efficiency levels with new construction? What changes have been incorporated into key national voluntary programs that you need to know about? Hear what years of practical experience have told us.

Speakers: *Sam Rashkin* – EPA ENERGY STAR
Steve Baden – RESNET
Emily English – NAHB

Break

10:05 am – 10:25 am

Residential Best Practices – “Integrating Building Science with Above Code Programs”

10:25 am – 12:00 pm

This session will provide you with an opportunity to learn what best practices in new home construction look like on the ground. Not just the pretty pictures (there may be some), but also the nitty gritty. The session will provide examples of LEED, Zero Energy and EarthCraft homes.

Speakers: *Laura Uhde* – Southface
Kristin Shewfelt – E-Star Colorado
Ren Anderson – National Renewable Energy Laboratory

Banquet Lunch

12:00 pm – 1:00 pm

Keynote Speaker:
Michael Glantz – Center for Capacity Building



Commercial Green Buildings and Above Code Programs – What’s New? 1:10 pm – 2:45 pm

This session will update everyone on the latest news regarding LEED specifications and how they interface with building energy codes. You will also hear about ASHRAE’s new ventures into the development of sustainable buildings and creating a standard that can be adopted by states and local jurisdictions as a complement to voluntary LEED programs

Speakers: *Bill Harrison* – Trane Arkansas

Courtney France – Architectural Energy Corporation

Break

2:45 pm – 3:10 pm

Commercial Best Practices – “Integrating Building Science with Above Code Programs”

3:15 pm – 4:50 pm

This session will provide you with an opportunity to hear from all of the key players in the planning, development and construction of the EPA Region 8 building that is to be Gold Certified when completed. We will hear from EPA Headquarters, EPA Region 8, Opus (design/build team) and AEC about their various roles and lessons learned. There should be something for everyone in what will no doubt be a lively discussion.

Speakers: *Shayne Brady* – U.S. EPA Region 8

Cathy Berlow – U.S. EPA-HQ

Amy Javernic-Will – Opus Northwest, LLC

Courtney France – Architectural Energy Corporation

Cracker Barrel

5:00 pm – 7:30 pm



Workshop Track E – Training

Wednesday, August 2, 2006

This track provides an overview of how to effectively develop, deliver, evaluate, and refine an energy code training program. It also will address the issues, benefits, and challenges of web-based training, plus provide a live demonstration of this new, innovative training approach.

Energy Code Training – From Soup to Nuts

1:10 pm – 2:45 pm

This session will deliver a “full course meal” on how to effectively develop, deliver, evaluate, and refine an energy code training program. It will be delivered by three “well seasoned” (but not overcooked) speakers who will share their insights, successes, horror stories, and lessons learned. This “meal” will be followed by an in-depth discussion and demonstration (the recipe for success) of an increasingly popular training approach – live instructor-led, web-based training.

Speakers: *Eric Makela* – Britt/Makela Group

Doug Schanne – Connecticut Department of Public Safety

Shirley Muns – Energy Systems Laboratory, Texas A&M University

Break

2:45 pm – 3:10 pm

Web-Based Training – Should It Be on Today’s Menu?

3:15 pm – 4:50 pm

Web-based training is now on the menu of national and state training programs as an effective way to reach a broad audience of energy code users, is it time for you to update your menu? DOE’s BECP trainers will discuss the issues, benefits, and challenges of web-based training, and how their program has reached over 7,000 individuals (May ‘05 through July ‘06). A live, web-based training demonstration will be included in this session to give you a real “taste” of this training method.

Speakers: *Rose Bartlett* – PNNL

Pam Cole – PNNL

Cracker Barrel

5:00 pm – 7:30 pm



Cracker Barrel

Wednesday, August 2, 2006

Cracker Barrel

5:00 pm – 7:30 pm

Come enjoy some hors d'oeuvres and then select your five favorite topics of interest and spend 20 minutes exploring each of them.

Speakers: *Heather Dillon* – PNNL

Pam Cole – PNNL

Rob Pickett – Rob Pickett & Associates

Muthusamy Swami – Florida Solar Energy Center

Wes Golomb – New Hampshire Public Utilities Commission

Eric Makela – Britt/Makela Group

Steve Ferguson – ASHRAE

Michael Fischer – Kellen Company, representing Window & Door Manufacturers Association

Paul Watkins – MobileHwy and *Robert Wible* – Robert Wible and Associates

Eric Lacey – Responsible Energy Codes Alliance

Presentation Descriptions

REScheck for the 2006 IECC – Heather Dillon

Spend a few minutes taking a more detailed look at how REScheck handles the 2006 IECC.

This session will focus on feedback and suggestions for the demonstration version of the software.

COMcheck Update – Pam Cole

Come hear the latest in features and resources available for COMcheck. Topics include the 2004 IECC and tax credit resources for designers.

Thermal Performance of Log Structures – Rob Pickett

This topic will include a brief overview of the log home industry, an update on the ICC 400 Standard and its relationship to REScheck, and Q&A.

Tools for Code Compliance and Energy Tax Deductions – Muthusamy Swami

This session includes a demonstration of residential and commercial building code compliance tools that implement the latest IECC (residential) and ASHRAE (commercial) standards. In addition, the presentation will also demonstrate tools that allow one to qualify for the 2005 Energy Bill's provisions for residential energy tax credits and commercial building energy tax deductions.

New Hampshire Energy Programs – Wes Golomb

Come get an overview of New Hampshire's energy programs, codes, and beyond code programs.



2006 IECC Training Material Overview – Eric Makela

Britt/Makela Group, Inc is pleased to announce the roll-out of training materials on the 2006 International Energy Conservation Code. The training materials, funded by industry, cover both the residential provisions of the 2006 IECC and International Residential Code. The commercial materials cover compliance with IECC using Chapter 5. The Cracker Barrel will provide a brief overview of the training materials and how to access them.

ASHRAE 90.1 - 2004 and 90.2 - 2004 – Energy Standards for Commercial and Residential Energy Efficiency – Steve Ferguson

ASHRAE has two energy efficiency standards. ANSI/ASHRAE/IESNA 90.1-2004 Energy Standard for Buildings Except Low-Rise Residential Buildings and ANSI/ASHRAE 90.2-2004 Energy-Efficient Design of Low-Rise Residential Buildings. Standard 90.1-2004 is available as an alternate compliance path to Chapter 7 of the 2003 IECC and Chapter 5 of the 2006 IECC. Both 90.1-2004 and 90.2-2004 have informative appendices that allow for above code performance.

Windows/NFRC/ENERGY STAR® – Michael Fischer

Come hear the latest on windows, NFRC, and ENERGY STAR.

More Effective and Efficient Codes Administration and Enforcement through the Application of Information Technology. – Paul Watkins and Robert Wible

Session covers the growing importance of I.T. to energy conservation and other public safety programs administered by state and local government. Examples of mobile field inspections and I.T. technologies that make it possible will be provided. Get details on the ITIAS interoperability work with DOE/PNNL on making REScheck and COMcheck data useful throughout the building department's regulatory function processes.

Responsible Energy Codes Alliance – Building Stronger Energy Codes Today – Eric Lacey

This presentation will cover RECA's mission to support the adoption of the IECC in states and localities, and will outline state-specific resources available to state officials and advocates who are considering adopting the IECC.

Post-Workshop

Thursday, August 3, 2006

Continental Breakfast

7:15 am – 8:30 am

Johns Manville Tour and Free Transportation to the Airport

8:00 am – 11:00 am

Johns Manville is a leading manufacturer and marketer of premium-quality building insulation, commercial roofing, roof insulation, and specialty products for commercial, industrial, and residential applications. Lab tours will include Glass, Organic Chemistry, Acoustics, Fire, Thermal, and Building Insulation Product Development. Motorcoach leaves the hotel promptly at 8:00 am. Plan to be in the lobby by 7:30 am. The motorcoach will leave Johns Manville, stop at the airport, and then return to the hotel.



REScheck and COMcheck Energy Code Compliance Software Tools

COMcheck

8:30 am – 10:00 am

This session will provide “hands-on” training using the commercial building energy codes compliance software – COMcheck. Both the IECC and ASHRAE 90.1 paths will be addressed. Personal laptops are helpful but not required for the class. Case studies will be used to demonstrate how to show compliance for new commercial buildings and alterations to existing buildings using the software tool.

Speakers: *Rose Bartlett* – PNNL
Pam Cole – PNNL
Mark Halverson – PNNL

Break

10:00 am – 10:30 am

REScheck

10:30 am – 11:30 am

This session will provide “hands-on” training using the residential building energy codes compliance software REScheck and supporting tool, AreaCalc. A case study will be used to demonstrate how to show compliance for new residential projects and additions to existing residences using the software.

Speakers: *Rose Bartlett* – PNNL
Pam Cole – PNNL
Mark Halverson – PNNL

Abbreviations and Acronyms

AEC	Architectural Energy Corporation
ANSI	American National Standards Institute
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BCAP	Building Codes Assistance Project
BECF	Building Energy Codes Program
CEC	California Energy Commission
CEU	Continuing Education Unit
DOE	Department of Energy
EPA	Environmental Protection Agency
ICC	International Code Council
IECC	International Energy Conservation Code
LEED	Leadership in Energy and Environmental Design
LU	Learning Unit
NAHB	National Association of Home Builders
NASEO	National Association of State Energy Officials
NREL	National Renewable Energy Laboratory
NYSERDA	New York State Energy Research and Development Authority
PNNL	Pacific Northwest National Laboratory
RESNET	Residential Energy Services Network



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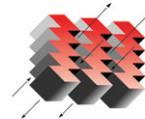


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Special Thank You and Appreciation



E-Star Colorado has been helping Coloradoan's save energy and conserve natural resources since 1994. E-Star started as an Energy Rating Provider and has grown to help the Rocky Mountain region with environmental challenges, green building, and home renovations.

E-Star has based its programs and services on building science, manufacturer best practices, and industry building codes. E-Star continues to partner with industry leading organizations such as ENERGY STAR®, Building America, DOE, EEBA, Building Knowledge, RESNET, and many more to bring this knowledge to both the Colorado residents and the building industry.



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U.S. Department of Energy
Building Energy Codes

http://www.energycodes.gov/news/2006_workshop