Southwest Energy Code Conference

Update on ICC Activities & Collaboration with RESNET

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What We Will Cover

• Brief Background on ICC
• Overview of Current ICC Services Related to Energy Codes
• Update on ICC/RESNET Collaboration
• Industry Trends/Outlook for Inspectors/Code Officials
Background: International Code Council

- Nonprofit corporation
- Annual budget $70 million
- Self-funded (receives no funding from federal or state government)
- Staff of more than 260 engineers, architects and administrators
- Currently maintain 15 base codes and 11 Standards
- Codes updated triennially
Background: International Code Council

60,000 member organization with 360 Chapters dedicated to building safety

Develops codes/standards used to construct residential/ commercial buildings
Background: International Code Council

- 1994 - ICC created by BOCA, ICBO and SBCCI to develop a single set of code
- 2000 - Complete family of *International Codes* published
- 2003 - Three code organizations consolidated into a single organization
Background: International Code Council

- 15 ICC Codes
  - Structural
  - Fire & Life Safety
  - Plumbing, Mechanical & Fuel Gas
  - Energy
  - Green Construction
  - Swimming Pools & Spas
  - Property Maintenance
  - Zoning
  - Etc.
Background: International Code Council (Custom Codes)

- Currently publish custom codes for 28 State/Country/Local Jurisdictions
- Translates into more than 115 specific titles
Background: International Code Council (Code Development)

• New edition of codes every three years
• Changes are made during an open public hearing and voting process
• Participation open to anyone
• Process used is Governmental Consensus Process
• Over 3,000 code changes are submitted each cycle
Background: International Code Council (Code Development)

- Code Change Proposals Submitted
- Committee Action Hearing, Public Testimony, Committee Vote; Possible Assembly Vote; Public Comments Submitted
- Public Comment Hearing; Public Testimony; Final Vote of Governmental Members

New Code Published
Background: International Code Council (Code Development)

• Code Committees
  • Representation of interests
    • **General**: Consumers, Regulators
    • **Producer**: Builders, Contractors, Manufacturers, Material Associations, SDOs, Testing Labs
    • **User**: Academia, Designers, Research Labs, Owners, Product Certifiers
  • Not less than 33% of each committee are Regulators
  • Committees are appointed by the ICC Board
Background: International Code Council

• IECC adopted or in use in 48 states
• Adopted/Adapted in Saudi Arabia, Abu Dhabi, Parts of the Caribbean, Mexico (voluntary) etc.
• IECC with ASHRAE 90.1 as a compliance path for Commercial
• IECC available in English and Spanish
INTERNATIONAL ENERGY CONSERVATION CODE
ADOPTION MAP

The IECC is in use or adopted in 48 states, the District of Columbia, NYC, Puerto Rico, the U.S. Virgin Islands, Saudi Arabia and Abu Dhabi.

Legend:
- **Green**: IECC administered statewide
- **Light Green**: IECC administered at the state and/or local level

Languages used:
- English
Overview of Services Offered Related to the *International Energy Conservation Code*

- Support Publications
- Membership
- Training

- Certification
- Subsidiaries
  - Product Evaluation
  - Accreditation
Overview of Services Offered Related to the *International Energy Conservation Code*

- Support Publications
  - Standards
  - Guidelines
  - Commentary
  - Inspector Guides
  - Study Companions
Overview of Services: ICC Membership

- Participation in code development process
- Access to ICC’s online *Building Safety Journal*
- Complimentary Code
- Access to ICC staff for code opinions
- Membership in one of the Membership Councils
- Discount on ICC reference materials
- Discounts on training seminars/online campus
Overview of Services: ICC Membership

• Code Development Process Access (cdpACCESS)
  • cdpACCESS allows participation through computer or tablet
  • Allows users to:
    • Submit code changes electronically
    • Collaborate on code changes electronically
    • Allows remote voting
  • Offers participation without having to travel to hearings
Overview of Services: Training

• Training
  • 6 Energy courses directly from ICC
    • IECC Essentials
    • ERI Index Compliance
    • IECC Update
    • Performing Residential Energy Inspections
    • Performing Residential Energy Plan Reviews
    • Etc.

• Preferred Provider Network
  • Over 260 Preferred Providers
    • Over 300 Energy Course offerings to choose from
Overview of Services: Certification

• 4 National Exams offered by ICC on Energy:
  • Residential Energy Inspector/Plans Examiner
  • Commercial Energy Inspector
  • Commercial Energy Plans Examiner
  • Commercial Energy/Plans Examiner with ASHRAE 90.1
Overview of Services: Certification

- 2,700 ICC Certified Residential Energy Inspectors
- 1,600 Certified Commercial Energy Inspectors
- 1,062 Commercial Energy Plans Examiners
Overview of Services: Certification

- Available by computer based (CBT) or pencil paper-based testing
- Over 400 testing centers in US (Pearson VUE)
- Certification renewal every 3 years
  - Renewal requires CEUs
  - 50% from ICC or one of its Preferred Providers
- Most examinations are around $200 (US)
- Test results provided same day
- *Coming Soon: Internet Based Testing (IBT)
  - When: Begin rollout in 2017
  - Can test from home, office, etc.
  - 24/7
Becoming ICC Certified as an Residential Energy Inspector

- Pass Residential Energy Inspector/Plans Examiner test
- 50 multiple-choice questions
- Open book, 2-hour exam
- Once passed, it is good for three years
- Renewed every three years by obtaining CEUs
Benefits of Being ICC Certified

• Holding ICC Certification as an Energy Inspector increases marketability to jurisdictions and building industry
• Code Officials are struggling to keep up and often rely on third parties for help
• ICC is a trusted brand with jurisdictions throughout the US and around the globe
Overview of Services: Public Access and Awareness

• New site is up and running: codes.iccsafe.org
• Contains 2015 I-Codes, 2012 I-Codes, 2009 I-Codes, ICC Standards and many state codes
Overview of Services: ICC Subsidiaries

- **ICC Evaluation Service (ICC-ES)**
  - Leader in US in evaluating building products for code compliance

- **International Accreditation Services (IAS)**
  - Accreditation Programs (Building Department, Inspection Agencies, Product Cert. Agencies, Testing Labs, etc.)

- **Solar Rating & Certification Corporation (SRCC)**
  - Administers a certification, rating and labeling program for solar collectors and a similar program for complete solar water heating systems
WHY?

• Tap knowledge base of RESNET and its members to improve level of code compliance
• Recognized the shared mission to promote energy efficiency through education
• RESNET Members can serve as resource in raising efficiency of building performance
• Help meet the demographic challenges facing our industry
ICC/RESNET Collaboration

- **2015 IECC Section R406**
  - Energy Rating Index Compliance Alternative
  - Verification by an *approved* third party (R 406.5)
- **IECC Section R102**
  - Alternative materials, design, and methods of construction and equipment
  - R102.1.1 Above code programs

**SECTION R102 ALTERNATIVE MATERIALS, DESIGN AND METHODS OF CONSTRUCTION AND EQUIPMENT**

**R102.1 General.**
The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. The code official shall be permitted to approve an alternative material, design or method of construction where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code.

**R102.1.1 Above code programs.**
The code official or other authority having jurisdiction shall be permitted to deem a national, state or local energy-efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing by such an energy-efficiency program shall be considered in compliance with this code. The requirements identified as “mandatory” in Chapter 4 shall be met.
Where We See Greatest Impact

• Joint Standards Development
• Joint Training
  – Code Officials and Builders
• Third Party Providers for Building Departments
  – Assist in dealing with demographic shift in code related workforce
• Government Relations
  – Outreach at federal, state and local levels
ICC & RESNET put together a public service announcement aimed at code officials addressing the HERS Index and energy codes.

Available on YouTube: https://www.youtube.com/watch?v=y1s7TEwOvVA

• ICC 2015 IECC ERI Compliance training course
ICC/RESNET Collaboration - Standards

- **301**: Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using the HERS Index
- **380**: Standard for Testing Air Leakage of Building Enclosures, Air Leakage of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems
- **Coming Soon**: **1101**: Standard for the Calculation and Labeling of the Water Efficiency Performance of Low-Rise Residential Buildings Using the WER Index
ICC/RESNET Collaboration- Benefit Package for HERS Raters

• 1 year ICC Professional Membership
  • Valuable Code Opinion Service
  • Member pricing on support materials/services
  • Online subscription to *Building Safety Journal*
• Complimentary download of the IECC
• Complimentary print copy or download of ANSI/RESNET/ICC 301-2014 & ANSI/RESNET/ICC 380-2016
• Voucher for IECC certification exam
• Benefit package provided at a reduced rate of $285
  • Approx. $75 saving
ICC/RESNET Collaboration- Benefit Package for HERS Raters

Your RESNET HERS Rater Certification Qualifies You for the ICC/RESNET Member Value Package

The International Code Council (ICC), in cooperation with RESNET, is offering certified RESNET HERS Raters the opportunity to build their professional qualifications and enjoy the valuable benefits offered exclusively to ICC Members at a savings of more than $100.

Through the ICC/RESNET Member Value Package, you will receive:

- 1-year ICC Building Safety Professional Membership
- A digital download of the 2012 or 2015 International Energy Conservation Code (IECC™)
- A voucher good for one ICC Certification Examination that can be redeemed at any of hundreds of exam locations throughout the country.

The ICC/RESNET Member Value Package also includes:

- One year of free code opinions by ICC’s expert technical staff—an ICC Member favorite
- Special ICC Member pricing on many publications and digital products, training and other products and services.

Don’t miss out on this opportunity that is only available to certified RESNET HERS Raters! Simply submit the application on the back of this flyer and begin to enjoy all the benefits of being an ICC Member.

For more information on ICC Member benefits visit www.iccsafe.org/RESNETraters

RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

INTERNATIONAL CODE COUNCIL
IECC Breakdown (Adoption of ERI Option)
ICC Commissioned NIBS Survey

- 3,850 respondents covering 50 states
- Typical respondent between ages of 55 and 64
- 56% surveyed were over the age of 55 (84% over 45)
- Salary of respondent ranged between $50,000 and $75,000
- Nearly 78% respondents entered the field ≥ 30 years
- 51% surveyed indicated they plan to leave the profession between 5 to 15 years
- Great recession of 2008 drove many from the industry due to massive layoffs
- Demand for code officials is growing, supply is dwindling
Industry Trends/Outlook for Inspectors/Code Officials

Other Studies/Sources Validating ICC Commissioned Study

- MN Construction Codes & Licensing Division (CCLD)
- BYU Graduate Study (Thesis)
  [http://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=6608&context=etd](http://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=6608&context=etd)
- Bureau of Labor Statistics
Key Takeaways

• We will have a serious shortage of Code Officials and Inspectors
• Organic growth will not solve this impending problem
• Many who have left the industry due to the past recession (layoffs) are not coming back
• Wages are driven by supply and demand creating upward pressure on wages
• Trend for outsourcing certain Building Department activities will increase (reliance on third parties)
• Time is not our ally
• The building industry in general is experiencing similar trends
• Complexity of codes/standards is demanding more specialization
Outlook: The Perfect Storm
ICC Programs to Help Address Challenges

• Certification Reinstatement Program
  • Provides pathway through training for those who allowed their Certifications to lapse
  • Short term not long term solution

• High School Technical Training Program (HSTTP)
  • Get Codes introduced in High School Curricula
  • Four disciplines (Bldg, Elect, Mech, Plbg)
  • Successful passing of exam leads to Certificate of Achievement (COA)
  • Nearly 50 High Schools participating

• Safety 2.0 – Building Careers for Today’s Generation
  • Launched at this years Annual Meeting in Kansas City
  • Creation of new Emerging Leaders Membership Council
  • Focus communication and participation towards millennials
  • Mentoring through Shadowing
  • ICC Chapter outreach

• cdpACCESS
  • Reflects how next generation will collaborate in the development of codes and standards