



Beehive Chapter ICC

This newsletter is a monthly publication of the Beehive Chapter of the International Code Council (ICC).

Articles or advertisements appearing herein may be submitted by anyone interested in expressing a viewpoint to the Beehive Chapter membership.

Articles may be submitted to:
Chris Kimball, Editor
chrisk@wc-3.com;
(801) 547-8133



See the back of this newsletter for information regarding this year's Annual Spring Conference.

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APRIL PROGRAM

Beehive Chapter Annual Spring Conference

M-W, April 24-26, 2017
Utah Valley Convention Center
Provo, Utah
(see back of newsletter)

Next Meeting:

Coordinated by
Beehive Chapter Board
May 17, 2017 Time: 12:00P.M.
Orem City Council Chambers
56 North State Street
Orem, UT 84057

MESSAGE FROM THE BOARD



Chris Kimball
Past President

As you can see from the photo above, I had a ton of fun this past weekend digging the footing for my new basketball standard. My old one corroded at the base and fell over during a wind storm a couple of months back. My kids kept asking when they were going to have a basketball hoop again and I finally got myself up off the couch.

In all honesty, I have not been spending much time on the couch and I doubt that any of you have either. There is simply too much

work to be done. I cannot remember another time in my career when I have been as busy as I am now and it seems that the workload never ends.

On top of the immense workload we all know the current difficulty in finding and hiring experienced and qualified inspectors. How are we supposed to get the work done in the amount of time allotted?

While we might occasionally have the temptation to cut corners on a plan review, to not spend as much time on an inspection as we should, or to send a limited inspector out on a job to inspect something they are not yet qualified to do, we need to remember that we are a part of a very important "profession".

We are all building safety professionals. As such, we need to ensure that even in these difficult times we are providing...

(CONTINUED ON NEXT PAGE)

BOARD ARTICLE *(Continued)*

...quality plan reviews and thorough inspections. We also need to ensure that we are providing appropriate training to all of our staff. If we hire limited inspectors I hope that we are not throwing them out in the field to learn on their own but that we are providing them proper training alongside seasoned inspectors.

George Reid is working with the Beehive Chapter Board to develop an inspector training program that will hopefully allow those interested in joining our industry books for studying, a list of seasoned inspectors that they can shadow and gain real-world experience, and other training opportunities.

As a board we hope that you will let us know if you or members of your jurisdiction are willing to serve as mentors in this program and also if you have any new limited inspectors that might

benefit by participating in this program. If you do please contact our president, George Reid, at Georger@vineyardtown.com.

This next week is also a great opportunity for staff training regardless of your level of experience. We hope that we will see all of you at our annual conference Monday through Wednesday at the Utah Valley Convention Center in Provo.

Sincerely,

Chris Kimball

Past President

INSPECTOR PROFILE

Cris Johnson

Vineyard City Building Inspector

Hi, my name is Cris Johnson and I am from Spanish Fork, Utah. I grew up in Salem, Utah and moved to Spanish Fork when I built my first home in 2002. I got married to my wife Shelly in 2008 and we have three beautiful daughters: Ava, Adalyn and Gwen. We love anything outdoors and spend most of our summers camping, fishing and riding ATV's.

I have been in the construction industry for more than twenty years working for Hall Engineering and Construction and also owning my own construction company.

I obtained my contractor's license in 2007 and have designed and built many homes in Utah County. I have spent the last 6 years before coming to Vineyard working at Geneva Nitrogen as a Control Room Operator, also in Vineyard.

I am very excited to be working at Vineyard City as a Building Inspector.



CALENDAR ITEMS

APRIL 2017						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12 IAEI - 2-HR Class 2014 NEC - Article 680	13	14	15
16 Easter	17 Taxes Due	18 Utah Chapter - 2015 IBC Egress Components	19 Utah Chapter - 2015 IBC Egress Components	20	21	22
23	24 Annual Beehive Conference	25 Annual Beehive Conference	26 Annual Beehive Conference	27	28	29

MAY 2017						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2	3	4	5	6
7 IAEI Conference Wendover	8 IAEI Conference Wendover	9 IAEI Conference Wendover Bonneville Chapter - Monthly Meeting	10 IAEI Conference Wendover	11	12	13
14 Mother's Day	15	16 Utah Chapter - 2015 IRC Significant Changes	17 Beehive Chapter - Monthly Meeting Utah Chapter - 2015 IRC Significant Changes	18	19	20
21	22	23	24	25	26	27
28	29 Memorial Day	30	31	1	2	3

FEATURE ARTICLE

Reprinted from the ICC-ES website.

High-Efficiency Plumbing Fixtures: Smart for the Environment, Smart for Business.

By: ICC Evaluation Service

More and more, designers, builders and even tenants are specifying resource-efficient plumbing products for new construction and renovations.

Greater water efficiency is an important aspect of sustainability and is relatively easy to implement. Beyond conserving water, additional benefits include reduced water payments, minimized effect on ecosystems, reduced infrastructure costs from rainwater harvest, offsetting treatment and pumping costs, less runoff/overwatering.

There are many fixtures to choose from that help save billions of gallons of water without compromising performance. Based on the Environmental Protection Agency's (EPA) WaterSense® Program specifications, products must meet certain water efficiency criteria, highlights of which are as follows:

For tank-type toilets:

- Effective flush volume shall not exceed 1.28 gallons
- Solid waste removal must be 350 grams or greater
- Toilet must conform to adjustability and other requirements

For high-efficiency lavatory faucet:

- Lavatory faucets and accessories must conform to applicable code references
- Lavatory faucet accessory flow rate needs to be tested per code references
 - Maximum flow rate cannot exceed 1.5 gallons per minute (gpm), 60 pounds of pressure per square inch (psi) at inlet when water is flowing
 - Minimum flow rate must be 0.8 gpm or greater and 20 psi of pressure at inlet, when water is flowing
 - As long as the lavatory faucet is equipped with an accessory meeting these requirements, the faucet also meets the requirement

- When tested per applicable code reference, the flow rate meets the testing verification protocol.

For flushing urinals:

- No greater than 0.5 gallon of water per flush
- Fixture and flushing device must conform to specified requirements

For showerheads:

- For multi-mode units, no mode can exceed maximum flow rate
- Instructions cannot suggest alternate water-use setting to override maximum flow rate. Conversely, maintenance instructions must direct user to set maximum flow rate

For weather-based irrigation controllers:

- Irrigation adequacy for each zone must be 80 percent or greater
- Excess irrigation cannot exceed ten percent per zone; average excess across all zones cannot exceed five percent

Code-related organizations, such as the International Code Council (ICC), have published provisions devoted to sustainable building practices, many of which focus on water efficiency.

The International Green Construction Code™ (IgCC™) includes comprehensive provisions for water efficiency covering virtually every water conservation related area of construction.

Evaluated Products for Greater Peace of Mind and Efficiency.

The ICC Evaluation Service (ICC-ES) Plumbing, Mechanical and Fuel Gas Listing (PMG) Program is a subsidiary of ICC and is devoted to certifying PMG products. Green plumbing products that are evaluated and listed by ICC-ES PMG make selecting, specifying and approving water-efficient products and solutions faster and easier.

The ICC-ES PMG Listing program is widely accepted and recognized. It gives code officials and inspectors a high level of confidence that a product is code compliant.

For details on the EPA's WaterSense Program and complete specifications on the above-referenced high-efficiency plumbing products, visit www.epa.gov/watersense. For information on the ICC-ES PMG listing program, visit www.icc-es.org/pmg. For information about the IgCC™, visit www.iccsafe.org/cs/igcc.

Beehive Chapter of ICC



Annual Spring Training

April 24-26, 2017

**Utah Valley Convention Center
220 W. Center Street
Provo, Utah 84601**

Beehive Chapter Registration
Attn: Paul Ashton, Treasurer
56 North State Street
Orem, Utah 84057

Approved AIA Courses,
earn AIA CEUs



PREFERRED
EDUCATION
PROVIDER



AIA
Utah

Partial funding by:



Utah Division of Occupational &
Professional Licensing (DOPL)

Welcome

Dear Beehive Chapter Members, Associates, and Friends:

The Beehive Chapter Board would like to extend an invitation to each of you to join us at our Annual Beehive Chapter Education and Training Conference. We have put together a great list of courses with outstanding presenters. This will be a great way to earn continuing education units and expand your knowledge and understanding of the codes.

The conference will again be held at the Utah Valley Convention Center. This has proven to be an excellent home for your conference. All classes have been approved by ICC and each attendee will receive preferred provider education credits. We are also providing AIA credit for architects.

We will be providing a light breakfast in addition to lunch each day. There will also be refreshments served during the breaks. Please come join us at this year's Beehive Chapter Annual Education and Training Conference, we look forward to seeing you.

George Reid

Beehive Chapter President

About our Annual Spring Training

- Registration will begin at 7:30 A.M. each day with classes will begin promptly at 8:00 A.M.
- Learn from both national and local experts on several topics related to the State of Utah adopted codes.
- Breakfast, lunch, and refreshments during breaks will be provided.
- Partial funding for this conference has been provided by the Division of Occupational & Professional Licensing (DOPL) from the 1% surcharge funds from all building permits.

ICC Preferred Provider / AIA Credits

The Beehive Chapter is an approved ICC Preferred Provider. In addition, the Utah Chapter of AIA has approved these courses for those seeking AIA CEUs. All attendees will receive CEU certificates electronically following completion of their attendance at the conference.



PREFERRED
EDUCATION
PROVIDER



AIA
Utah

Registration

Registration for this year's conference must be completed online by clicking the link below. Please be aware that you must register **each** participant separately. The cost for registration is \$85.00 per day or \$225.00 for all three days. Fee includes classes, associated handouts, catered lunch, and two breaks each day.

Registration Link:

<https://form.iotform.com/70087535083154>

Please be aware that you will need to select the classes you are planning on attending (see the schedule in the middle of this packet). We are **no longer able to provide CEU's to General Contractors**, but other contractors (i.e. Electrical, Mechanical, Plumbing, etc.) will need to input their state license information on the registration page for their CEU's.

If paying by check, after registering online, please make your check payable to the **Beehive Chapter** and mail your registration to...

Beehive Chapter Registration
Attn: Paul Ashton, Treasurer
56 North State Street
Orem, Utah 84057

For questions please email Paul Ashton at beehivechaptertreasurer@gmail.com

Utah Valley Convention Center

The Conference will be held on the third floor of the Utah Valley Convention Center located at 220 West Center Street in Provo, Utah. Free parking is located behind the conference center as shown in the picture at the bottom of this page. Please see below for driving directions to the conference center.

From Salt Lake

- Take Interstate I-15 South
- Take Center Street (Exit 265) toward Provo, and stay straight to go onto Center Street.
- The Convention Center will be on the left.

From St. George

- Take Interstate I-15 North toward Salt Lake
- Take Center Street (Exit 265) toward Provo, and stay straight to go onto Center Street.
- The Convention Center will be on the left.



Course Descriptions – Day 1

2015 IBC MEANS OF EGRESS (By: Doug Thornburg)

This seminar will help attendees to understand the code requirements for establishing a means of egress in buildings. Attendees will be provided with an ICC Workbook which will serve as the basis of the course. The three parts of the egress system will be discussed in detail and the eight fundamental means of egress design issues will be clarified. Other egress issues such as occupant load calculations, door hardware, horizontal exits, etc. will also be discussed.

2014 NEC UPDATE (By: Chris Jensen)

This course will highlight the changes made to the 2014 National Electrical Code. Each Chapter of the NEC will be addressed and the more significant changes will be discussed in detail. The IAEI Analysis of Changes 2014 NEC book will be used as the basis of this presentation.

ACCA MANUAL J – LOAD CALCULATIONS

(By: Brent Ursenbach)

This class will help attendees to understand how building mechanical loads are to be calculated in accordance with ACCA Manual J as required by the IRC. Each attendee will receive a copy of ACCA Manual J as well as a copy of a new ACCA checklist, designed for use in verifying Manual J, D and S procedure accuracy. Many common challenges faced by code officials will be discussed.

2015 IBC BUILDING AREAS, FIRE AREAS & MIXED OCCUPANCIES (By: Steve Thomas)

Comprehensive discussion of the major compartmentalization concepts of the IBC, focusing on those requirements that deal with building size, sprinkler options and mixed-use buildings. Fire-resistance-rated construction is also addressed. This class will include topics on allowable areas, area increases, unlimited area buildings, fire area concept and construction, incidental/accessory use areas and separated/non-separated uses.

Course Descriptions – Day 2

2015 IEBC OVERVIEW (By: Roger Axel)

This seminar will introduce critical concepts of the 2015 International Existing Building Code® (IEBC®). It will provide a basis for the correct use and application of the code. It will build an understanding of the intent of the code through detailing basic tables, categorizations and a case study.

2015 IBC: MULTI-FAMILY DWELLINGS (By: Todd Snider)

This class will focus on the specific IBC requirements for multifamily dwellings such as apartment complexes. The course will include accessibility requirements of IBC 1107 and Chapter 10 of ICC A117.1-09 for Type A and B units. It will also cover some common problems associated with the design of multifamily buildings including fire rating, exhaust systems, construction types, etc. Requirements for accessory structures such as pools and carports will also be discussed.

ACCA MANUAL D – DUCT DESIGN (By: Brent Ursenbach)

This class will help attendees to understand how the duct design needs to be accomplished in order to comply with ACCA Manual D as required by the IRC. Each attendee will receive a copy of ACCA Manual D as well as a copy of a new ACCA checklist, designed for use in verifying Manual J, D and S procedure accuracy. Many common challenges faced by code officials will be discussed.

RAPID INSPECTION TECHNIQUES (RIT) FOR FIRE PREVENTION (By: Scott Adams)

This seminar is intended to assist fire code officials to master their skills in code enforcement. Participants will be presented with specific fire and life safety scenarios affecting multiple occupancies and will address specific code provisions. We will discuss the IFC administrative requirements, occupancy classification, general precautions against fire, emergency planning and preparedness, fire service features, interior finish, decorative materials and furnishings, fire protection systems, and means of egress.

Instructors (continued)



Doug Thornburg is currently Vice-President and Technical Director of Products and Services for ICC. Doug continues to provide building code seminars nationally and has developed numerous educational texts and resource materials. He was presented with ICC's inaugural Educator of the Year Award, recognizing his outstanding contributions in education and training. A graduate of Kansas State University and a registered architect, Doug has over 36 years of experience in building code training and administration.



Jay Woodward is a Senior Staff Architect for ICC. His primary responsibility is the development of new ICC publications and instructing seminars. Among the publications he has authored or co-authored are the Significant Changes books on the IBC, IMC and A117.1 standard, and the recent ICC book Firestopping, Joint Systems and Dampers. Jay has more than 30 years of experience in building design, construction, code enforcement and instruction.



Steve Thomas is an industry expert with 30 years of experience in building code plan review, inspection and administration. He is currently the president of Colorado Code Consulting, LLC. He served as the Building Official for the City of Glendale, Colorado for 18 years. Steve started a building code consulting firm in 1999 to provide building department services for governmental agencies, code consulting services for architectural clients and building code education across the country.



Scott Adams currently serves as the Assistant Fire Chief for the Park City Fire Service District and has a bachelor's degree in Fire Protection Engineering. Chief Adams currently serves on the ICC Fire Service Membership Council, ICC Western Regional Fire Code Action Committee, Technical Committee member on the NFPA-1 Fire Prevention Code, NFPA-101 Life Safety Assembly Occupancy Committee, and NFPA Fire Test Committee. He is ICC certified as a Fire Inspector II and Building Plans Examiner.



Brent Ursenbach, CBO is the Salt Lake County Energy/Mechanical Code Specialist and is an ICC Combination Inspector. He retired from HVAC contracting in 2005 after 33 years working in the field, and has now worked as a code official for the past 10+ years. He currently serves on the Utah Chapter ICC Code Change and Development Committee, Utah Conservation Plan-Buildings Subcommittee, RMGA (Rocky Mountain Gas Association) Board of Directors and is the chairman on the Utah UBCC Mechanical Advisory Committee.

Instructors



Chris Jensen was in his early teens when he began working for his grandfather's electrical contracting company. In 1994 he became a Journeyman electrician and in 2004 received his Master electrician's license. In 2005 he changed hats and became a combination inspector for North Logan City and in 2014 became the Building Official. He has taught the electrical apprenticeship program for Bridgerland Applied Technology College as well as multiple classes for the Utah Chapter of I.A.E.I.



Roger Axel Building Official, City of New Hope, Minnesota; 35 years combined construction and inspection experience, including the Mall of America; Bachelor of Science Degree in Industrial Education; Associate in Applied Science Degree in Building Inspection Technology; Certified Building Official; ICC instructor; instructor for Housing and Building Inspection Institute at UW-Madison College of Engineering; past Chairman, and current Executive Officer of the Association of MN Building Officials.



Doug Smith, MCP, CBO has worked in the building safety and construction industries for more than 17 years. He is an ICC Master Code Professional, Certified Building Official, Combination Commercial Plans Examiner, Combination Inspector, Residential Plans Examiner, Accessibility Inspector/Plans Examiner, Fire I and II Inspector, Fire Plans Examiner, and Energy Plans Examiner. Doug is considered an expert on photovoltaic (PV) code requirements and has taught many classes on the subject. He has also developed a variety of PV template checklists.



George Williams, MCP, CBO has worked in the building safety industry for more than 10 years. He is an ICC Master Code Professional, Certified Building Official, Certified Housing Code Official, Combination Inspector and holds many other UICC certifications. George has been instrumental in the start-up of two building departments including the adoption of codes, implementation of permitting processes, development of policies and procedures, as well as hiring and training of staff.



Todd Snider, PE, SE has more than 10 years of plan review and structural engineering design experience. He has performed plan reviews on thousands of projects including various residential, commercial, mixed-use, industrial and hazardous facilities throughout Utah, Nevada, California, and Washington. Todd is a registered structural engineer and has a Master's degree in Civil Engineering with an emphasis in structural engineering. He is also an ICC certified commercial building, energy, accessibility and mechanical plans examiner.

Course Descriptions – Day 3

2015 IBC: ACCESSIBILITY (By: Todd Snider)

This course focuses on the accessibility requirements of the IBC and ICC/ANSI A117.1. It covers requirements for commercial buildings including Use Group R-Occupancies such as hotels and apartment buildings. The course also includes a discussion of accessibility requirements for existing structures undergoing additions, alterations, or change of use. Changes from the 2003 to the 2009 ICC/ANSI A117.1 standards will be highlighted.

2015 IRC: PLAN REVIEW & INSPECTIONS (By: George Williams)

This seminar will discuss how to perform residential plan reviews and inspections, ensuring compliance with the 2015 International Residential Code (IRC). The class will include a brief overview common key elements of the IRC, most applicable in the field and during plan review. The seminar includes best practices and methodology for performing both plan reviews and inspections. Topics include: reasonable submittal requirements, concise review comment writing, and synergy between plan reviewers and inspectors. This seminar is perfect for individuals new to the industry, or in the process of transitioning from inspector to plan reviewer.

2014 NEC: SOLAR PV INSTALLATIONS (By: Doug Smith)

This course is designed to help provide the essentials for a better understanding of how and where the codes address solar photovoltaic (PV) systems. This course will cover the fundamental code requirements of both residential and commercial PV systems. It is designed to start with the basics of Photovoltaic requirements and lead the attendees step by step into more difficult concepts while simplifying the requirements. This class is designed to aid inspectors, electricians, and design professionals in the plan review process of PV systems.

2015 IBC: FIRE & LIFE SAFETY PRINCIPLES (By: Jay Woodward)

This seminar addresses the critical concepts of the 2015 IBC regarding fire and life safety issues. These concepts provide a basis for the correct use of the code in building planning, classification of buildings and occupancies, fire-resistance-rated construction, fire protection systems and means of egress. The content addresses issues that are necessary for many design and plan review decisions.

BEEHIVE CHAPTER OF ICC
 ANNUAL SPRING TRAINING
 UTAH VALLEY CONVENTION CENTER – PROVO, UT
 APRIL 24-26, 2017

MONDAY, APRIL 24		TUESDAY, APRIL 25	WEDNESDAY, APRIL 26
Class #1 2015 IBC Means of Egress <i>Doug Thornburg</i>	Class #5 2015 IEBC Overview <i>Roger Axel</i>	Class #9 2015 IBC - Accessibility <i>Todd Snider</i>	
Class #2 2014 NEC Update <i>Chris Jensen</i>	Class #6 2015 IBC – Multi-Family Dwellings <i>Todd Snider</i>	Class #10 2015 IRC – Plan Review & Inspections <i>George Williams</i>	
Class #3 ACCA Manual J – Load Calculations <i>Brent Ursenbach</i>	Class #7 ACCA Manual D – Duct Design <i>Brent Ursenbach</i>	Class #11 2014 NEC – Solar PV Installations <i>Doug Smith</i>	
Class #4 2015 IBC Building Areas, Fire Areas & Mixed Occupancies <i>Steve Thomas</i>	Class #8 Rapid Inspection Techniques (RIT) for Fire Prevention <i>Scott Adams</i>	Class #12 2015 IBC Fire & Life Safety Principles <i>Jay Woodward</i>	

***C.E.U. CERTIFICATES AWARDED FOR ALL CLASSES ***

Persons requiring assistance due to disabilities, please contact John Little at (801) 804-4542 by April 17, 2017 so proper accommodations can be made.

Daily Schedule → Registration: 7:30 A.M.; Classes begin at 8:00 A.M. and conclude at 5:00 P.M.; Lunch: Noon-1:00 P.M.; Breaks: 10:00 A.M. & 3:00 P.M.