



BONNEVILLE CHAPTER

28th
Annual Fall
Educational Institute

Utah Cultural
Celebration Center
1355 West 3100 South
West Valley City, Utah

Nov 30th, Dec 1st, 2nd, 2021

Up to 8 C. E. U.
Credit Hours
awarded per day for:
Architects,
Engineers,
Fire and Building
Departments

Courses Provided by:



**PREFERRED
EDUCATION
PROVIDER**

*New Approved AIA
Courses, earn AIA CEUs*



**AIA
Utah**

Partial Funding by:



DEPARTMENT OF
COMMERCE
Division of Occupational and
Professional Licensing



**ABOUT OUR FALL EDUCATIONAL INSTITUTE:
THE RIGHT TOPIC AT THE RIGHT TIME AT THE RIGHT PLACE!**

- Join us for our 28th annual conference. As always we strive to maintain our tradition of excellent and relevant education at a reasonable cost.
- The conference will be held live and virtually-live with classes featuring a wide variety of topics.
- Learn from national and local experts including ICC seminars, a local engineering firm, and very well-known independent national instructors. All courses will provide ICC Preferred Provider Credit Hours. Please remember to bring your license numbers as we are required to report to DOPL.
- Partial funding of this training program has been provided by the Division of Occupational & Professional Licensing of the State of Utah from the 1% surcharge funds from all building permits.

Registration Form

Name: _____

Title: _____ Representing: _____

Address: _____ City: _____ State: _____ Zip: _____

E-mail: _____ Telephone: _____ Fax: _____

Inspectors:

DOPL # _____ ICC # _____

Architects:

DOPL # _____ AIA # _____

Electricians:

Journeyman's#: _____ Masters # _____



IBC ADVANCED TRACK: COURSE DESCRIPTIONS

2018 Special Inspections and Testing

This seminar is a comprehensive review of Chapter 17 of the 2018 International Building Code. We will discuss the development of a special inspection program in a jurisdiction and how to evaluate special inspection agencies. The requirements for special inspection agencies will be reviewed. We will also discuss the types of special inspections required by the code and how they will be conducted. This provides the building department with the knowledge to do oversight inspections. Available resources will also be provided and discussed.

2018 IBC Assembly Means of Egress and Exit Systems

Focusing on Section 1029 of the 2018 IBC, this seminar identifies those provisions specific to assembly buildings and assembly spaces. The hazards associated with large numbers of occupants in concentrated areas are specifically addressed through the special requirements of Section 1029. The seminar also includes a discussion of ICC 300, Standard for Bleachers, Folding and Telescoping Seating, and Grandstands.

This seminar focuses on IBC Chapter 10 means of egress components that are defined and regulated as exits. These components, defined in Chapter 2, are considered as high-level elements that provide a considerable degree of occupant protection within the means of egress system. The exit discharge provisions will also be discussed. Specific topics include interior exit stairways, exit passageways, horizontal exits and exterior exit stairways

2018 International Existing Building Code

This course covers the practical application of the IEBC. This course will help the attendee to understand how the IEBC is organized and will help assist in understanding the different compliance paths that are available. This course is designed to be a complete overview of the IEBC and is intended for both code and design professionals of all levels of expertise.



SIGNIFICANT CHANGES TRACK

2018 Energy Code

Course will begin with a review of the finding of a recent field study conducted under the direction of the DOE, identifying Utah areas which are strong or weak in compliance. A discussion will follow on each of the 5 Options available for showing compliance with the 2015 Residential IECC / Chapter 11 IRC. Includes discussion on:

- Prescriptive Tables - acceptable code years / editions.
- 2015 REScheck – UA Trade-off, options, common errors, review guidance.
- Simulated Performance – what is this, required documentation.
- ERI (Energy Rating Index) – HERS Ratings, documentation, is this the future?
- 2012 Utah REScheck – why, pass by 5% or more, what does it allow, can a R-11 wall really pass?

Also includes discussion and guides for energy plan review and inspection, insulation products and installation, fenestration performance, required documentation, plans, compliance option, ducts insulation, the typical negative impact on efficiency when HVAC systems are located in attics, and ACCA Manuals J, D, & S.

Afternoon: Air Barriers, Blower Door Testing or Inspection Checklist, and Duct Pressure Testing

Course will review the IECC insulation and air barrier installation check list, comparing its use with the optional blower test. Includes specific details on state amendments and each of the following:

- Compliance guidance for each item in the inspection checklist.
- Blower door test requirements including adjustments for townhouses and multi-family projects.
- Vented and un-vented attics
- Air sealing methods and air barrier penetrations.
- Duct Leakage and testing.
- Mechanical ventilation, blower door testing triggers



COURSE DESCRIPTIONS - CONTINUED

- Mechanical ventilation strategies, CFM requirements, and fan efficacy.

Comments, questions, and discussion are encouraged!

Outside the Box Plan Review

The discussion will address the review and inspections of alternate designs and performance-based design. The class addresses the true intent of the code versus the prescriptive language of the code. It encourages the student to look outside the box when evaluating unusual conditions or projects. The ICC Performance Code will be reviewed as part of this class. Although not widely adopted, this code provides a method to deal with unusual conditions. It also describes the true intent of the International Codes to assist in evaluating performance-based design.

2018 Commercial TI of A, B, & M

Identifies IBC provisions applicable to the design and construction of tenant space improvements. The discussion addresses the three most common types of uses: business, mercantile and assembly. It emphasizes options available in the code for gaining compliance. Discussion includes occupancy separations and fire areas, type of construction features, fire-resistance-rated construction, interior finish materials, fire protection features, means of egress components and means of egress design.



PLAN REVIEW TRACK: COURSE DESCRIPTIONS

2018 IBC Apartment Buildings

The design and construction of apartment buildings requires the application of both fundamental and unique IBC requirements. This seminar focuses on those provisions that are commonly encountered in these types of residential buildings. Provisions specific to residential building classification, fire-resistance, fire protection, means of egress and accessibility will be addressed. In addition, detailed provisions discussed will include podium buildings, occupied roofs, incidental uses and dwelling unit separations.

2020 Solar PV & Battery Storage

This full day (8 hour) course will give many examples of different types of residential solar PV/energy storage systems (ESS) and will walk the class step by step through the plan review process for each one. This course will also explain the key items to look for during inspections. Topics to be covered throughout the presentation include: wire/breaker sizing, interconnection requirements, rapid shutdown of systems, disconnect and equipment locations, required separations between ESS equipment, smoke/heat alarm requirements for ESS, roof fire access clearances, equipment/wiring installation, and signage. This course will be very beneficial for plan reviewers and inspectors, but will also be helpful for solar contractors and designers to better understand what information is required on solar PV plans and what is expected during inspections.

2020 NEC Update

Learn the most essential changes to the 2020 edition of NFPA 70, National Electrical Code (NEC). Don't let a change in code catch you unaware! This class highlights and explains revisions to residential, commercial, and industrial design and installation requirements. Analysis of Changes, NEC 2020 also gives an in-depth look into the four newest articles to the NEC: Overvoltage Protection, Article 242; Medium Voltage Conductors and Cable, Article 311; Type P Cable, Article 337; and General Requirements for Communications Systems, new Article 800.



FIRE SERVICE TRACK: COURSE DESCRIPTIONS

2018 IBC & IFC Fire Protection Systems

This seminar is designed to guide participants through the 2018 IFC requirements related to fire protection systems (Chapter 9). These requirements include suppression systems, standpipe systems, automatic fire alarm systems, automatic detection systems and additional fire protection assemblies. Because the 2018 IFC and Chapter 9 of the 2018 IBC have such broad scopes, the focus of this seminar is to review design, construction, inspection and testing requirements for:

- Fire sprinkler systems
- Fire-extinguishing systems
- Standpipe systems
- Fire alarm and detection systems
- Smoke control systems
- Smoke removal systems

2018 IBC Overview of Fire Alarm Provisions, Based on the 2018 IBC, IFC and NFPA 72

This course provides an overview of the latest safety provisions related to fire alarm, detection, signaling and emergency communication demands. The building and fire code requirements based on occupancy classification for automatic and manual systems and other scoping provisions related to fire alarms will be presented. This will be followed by coverage of NFPA 72 installation, performance, inspection, testing, and maintenance of fire alarm systems and fire systems components. This will include the identification of alarm testing, maintenance of fire alarm systems and identification of fire alarm elements on building plans.



**28th AN
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NOVEMBER 30, 2021**

COURSE PATH	NOVEMBER 30, TUESDAY	D
IBC ADVANCED	2018 SPECIAL INSPECTIONS & TESTING VIRTUAL-LIVE AIA/ICC PREFERRED PROVIDER SHUMS CODA, STEVE THOMAS	2018 II 2018 II LIVE AIA/IC ICC, DC
FUNDAMENTALS/ CRITICAL TOPICS	2018 ENERGY CODE VIRTUAL-LIVE AIA/ICC PREFERRED PROVIDER WC3, BRENT URSENBACH	OUTS VIRTL AIA/IC SHUN
PLAN REVIEW	2018 IBC APARTMENT BUILDINGS LIVE AIA/ICC PREFERRED PROVIDER ICC DOUG THORNBURG	2020 S VIR TU AIA/IC WC3 I
FIRE SERVICE	2018 IBC & IFC FIRE PROTECTION VIRTUAL- LIVE AIA/ICC PREFERRED PROVIDER WC3/ICC, SCOTT W. ADAMS	2018 I VIR TL AIA/IC WC3/

AIA C.E.U & ICC Preferred Provider C.E.U. CERT
disabilities, please contact Jerry Thompson (801)963-3276 b
Pre-Registration Required





**NNUAL
INAL INSTITUTE
CHAPTER – ICC
L-DECEMBER 2, 2021**

DECEMBER 1, WEDNESDAY	DECEMBER 2, THURSDAY
IBC ASSEMBLY MEANS OF EGRESS IBC EXIT SYSTEMS ICC PREFERRED PROVIDER DOUG THORNBERG	2018 EXISTING BUILDING CODE VIRTUAL- LIVE AIA/ICC PREFERRED PROVIDER WC3, CHRIS KIMBALL
SIDE THE BOX UAL- LIVE ICC PREFERRED PROVIDER MS CODA, STEVE THOMAS	2018 COMMERCIAL TI OF A-B & M VIRTUAL-LIVE AIA/ICC PREFERRED PROVIDER SHUMS CODA, STEVE THOMAS
SOLAR PV & BATTERY STORAGE JAL -LIVE CC PREFERRED PROVIDER DOUG SMITH	2020 NEC UPDATES VIRTUAL-LIVE AIA/ICC PREFERRED PROVIDER UL CHRIS JENSEN
IFC & NFPA FIRE ALARM SYSTEMS UAL- LIVE ICC PREFERRED PROVIDER /ICC, SCOTT W. ADAMS	2018 IBC FIRE & LIFE SAFETY PRINCIPLES LIVE AIA/ICC PREFERRED PROVIDER ICC, DOUG THORNBERG

TIFICATES AWARDED FOR MANY CLASSES Persons requiring assistance due to
by November 01, 2021 so proper accommodations may be provided
ed for all Courses by November 1, 2021:





FIRE SERVICE TRACK - CONTINUED

2018 IBC Fire & Life Safety Principles

This seminar addresses the critical concepts of the 2018 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 designs and plan review decisions. During this training, participants will be listening to lecture and viewing examples, as well as discussing sections of the IBC that pertain to fire and life safety principles in building. They will participate in activities that involve a set of discussion, quizzes, questions and answers individually and in groups.





COURSE INSTRUCTORS:

Stephen L. Thomas, CBO

Mr. Thomas has over forty years' experience in working with building codes including plan reviews, inspections and administration. His firm provides building code consulting services for governmental agencies and architectural firms, as well as educational seminars on building codes across the country. Working for a building code-consulting firm since 1999, he has served as the contract Building Official for different local jurisdictions in Colorado. Mr. Thomas has served on several ICBO and ICC committees including serving as a member and then Chairman of the ICC Means of Egress Code Development Committee. He is also the author of the book, *Building Code Basics*, based on the 2009 & 2012 IBC and *Building Code Essentials* based on the 2015 & 2018 IBC, both available from ICC. He and his previous firm, Colorado Code Consulting were awarded the Educator of the Year Award by the ICC in 2018. He has presented building code classes for the last 35 years and provides an interesting and engaging look at building codes.

Brent Ursenbach

Brent Ursenbach is a Building Construction Consultant, Expert Witness, the Energy/Mechanical Code Specialist at West Coast Code Consultants, an ICC Certified Building Official and a LEED Accredited Professional. He retired in 2018 after 13 years as a Building Inspector from Salt Lake County. Previous experience includes a 33 year in HVAC contracting and 5 years adjunct faculty at Salt Lake Community College. He currently serves on several ICC and ACCA Committees. He is a Past President on the RMGA (Rocky Mountain Gas Association) Board of Directors, served eight years as Chair-Utah UBCC Mechanical Advisory Committee, and the 2019 Utah Chapter ICC Jess Miller Award Recipient. Brent presents across the country, numerous seminars and classes on energy, mechanical and fuel gas code, as well as HVAC design principles. He received a B.S. in Sustainability Studies from U-Mass Amherst UWW. He currently provides statewide energy code training, working with the Utah Office of Energy Development, Building Talks Program.



COURSE INSTRUCTORS: *CONTINUED*

Doug Thornberg

Doug Thornburg AIA, CBO is currently Vice-President and Technical Director of Products and Services for the International Code Council (ICC) where he provides administrative and technical leadership for the ICC product development activities

In his current role, Doug also continues to create and present building code seminars nationally and has developed numerous educational texts and resource materials.

A graduate of Kansas State University and a registered architect, Doug has over 40 years of experience in building code training and administration. He has authored a variety of code-related support publications, including the IBC Illustrated Handbook and the Significant Changes to the International Building Code.

Scott W. Adams

Mr. Adams graduated from the University of Maryland with a Bachelor of Science degree in Fire Protection Engineering. Mr. Adams is a licensed Fire Protection Engineer in CA and NV, and is certified as an ICC Fire Code Inspector II and Building Plans Examiner. Mr. Adams is employed with West Coast Code Consultants, Inc. and manages the Fire Group that provide third party plan review and inspection services for fire sprinkler systems, fire alarm systems, specialized fire protection and detection systems, smoke management systems and detailed water supply analysis. Mr. Adams is retired from Park City Fire Service District where he served as the Assistant Fire Chief / District Fire Marshal. Mr. Adams served as Chairman for the ICC Governing Committee for the Fire Service Membership Council and Past President of the International Fire Marshal's Association.

Doug Smith, MCP, CBO

Mr. Smith has been an inspector for over 16 years and has been in the construction industry for over 21 years. He began his career as a Building Inspector in 2005. During his career he has obtained 19 ICC certifications, including Certified Building Official and Master Code Professional (among others). When it comes to understanding of



COURSE INSTRUCTORS: *CONTINUED*

the building codes, you could say Doug is “well rounded,” but particularly he specializes in electrical code requirements and is especially knowledgeable on the topic of solar photovoltaics and energy storage systems. Doug has taught hundreds of electrical, solar photovoltaic, and energy storage system classes over the years for various organizations throughout the Western United States. With WC3, Doug has performed well over 10,000 plan reviews for solar PV and energy storage systems (small and large-scale) for jurisdictions across Utah, Nevada, California, and Idaho. He has also performed thousands of inspections on such systems. Doug currently serves on the National Electrical Code for Code Making Panel 10. He also serves as an STP Member on five UL Standards: UL 9540 (Energy Storage Systems), UL 1703/61730 (Flat Plate PV Modules), UL 1741 (Inverters, Converters, Chargers...), UL 2703 (PV Racking...), and UL 6703 (PV Connectors...).

Chris Kimball, SE, MCP, CBO

Chris Kimball is a vice president for WC3. He is a licensed structural engineer, and is an ICC Master Code Professional, certified building official, combination plans examiner, and combination building inspector. He has performed plan reviews for thousands of projects throughout Utah, Wyoming, Nevada, California, Arizona, and Texas. In addition, Chris has provided numerous training classes to help design professionals, building officials, and contractors alike to understand the requirements of the adopted building codes.

Chris Jensen

Chris Jensen has nearly 30 years' experience in the electrical industry as a master electrician, electrical inspector, plans examiner, Chief Building Official, electrical apprenticeship coordinator, electrical instructor and currently as a senior regulatory engineer for UL. Chris' career highlights include:

Current Principal member of NEC Code Making Panel 5 representing UL for the 2023 NEC Cycle. Past member of NEC Code Making Panel 10 representing IAEI for the 2014 and 2017 NEC Cycle.

COURSE INSTRUCTORS: CONTINUED

Past Chairperson for the Uniform Building Codes Committee Electrical Advisory Committee for the State of Utah.
Current member of the State of Washington 2020 Electrical Rules Technical Advisory Committee representing UL.
Current education chairperson and 5th Vice President for the Northwestern Section of the International Association of Electrical Inspectors (IAEI).
Chris holds an active Combination Inspectors License in the State of Utah and has 15 ICC Certifications.
Chris holds an active Master Electricians License in the State of Utah

Supplemental Instructions:

Each person registering must submit the attendees direct email address and telephone number. Each attendee must submit a DOPL, AIA, Journey electrical or Master electrical license number to complete the registration process. **Please do not submit license numbers ending in 5501.**

Fees: \$115 per Person per Day. **Contractors must add \$10.00 processing fee per license for the State contractor reporting. Late Registration after 11/19/2021 may not be accommodated.** We regret that we can no longer accept split or shared registrations. Everyone must submit a registration form with a check. No invoices please. Everyone must pay the minimum registration fee of \$115.00.

Make checks payable to:	Total Enclosed
BONNEVILLE CHAPTER ICC	
P.O. Box 672	
Farmington, Utah 84025	\$

Please check the boxes for the classes you will be attending.

Pre-registration will insure you a workbook!!

28th Annual

Fall Educational Institute

Bonneville Chapter – ICC

November 30th, Dec 1st, and 2nd, 2021

All classes listed are full day classes

Path	November 30 th	December 1 st	December 2nd
IBC Advanced	2018 Special Inspections and Testing	2018 IBC Assembly Means of Egress and Exist Systems	2018 IEBC
Fundamentals/ Critical Topics	Utah Energy Code Training	Outside the Box	2018 Commercial TI of A-B & M
Plan Review	2018 IBC Apartment Buildings	2020 Solar PV & Battery Storage	2020 NEC Updates
Fire Service	2018 IBC & IFC Fire Protection	2018 IFC & NEPA Fire Alarm Systems	2018 IBC Fire & Life Safety Principles

All classes are 8-hour sessions. Refund Policy: \$10.00 processing fee until November 16, 2021. Thereafter, maximum 80% for exceptional reasons. REQUESTS MUST BE IN WRITING.

PLEASE CUT ALONG DOTTED LINE AND SEND THIS FORM FOR EACH PERSON ATTENDING INSTITUTE

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Bonneville Chapter ICC
c/o Mike Bosch, Treasurer
P. O. Box 672
Farmington, UT 84025-0672

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