



19TH ANNUAL
BUILDING CODES
EDUCATION CONFERENCE

19TH ANNUAL BUILDING CODES EDUCATION CONFERENCE

March 11, 2024 – March 15, 2024

Best Western Gran Tree Inn/Comfort Inn/Springhill Suites/Hilton Homewood
Bozeman, MT

Online Registration

[19th-annual-building-codes-conference](#)

Parking Information

Free parking is available in the hotel lot.

Lodging Information

Rooms have been blocked and are available at the following hotels. – make sure to use the registration links/call in code shown below to ensure securing a room at the discounted government rate. Space is limited and fills up fast. Be sure to register for accommodations before the room block closes on February 10, 2024.

Hilton Homewood Suites - [Reservation link](#); Code BDG

Springhill Suites by Marriott - [Reservation Link](#)

Best Western Plus GranTree Inn - [Reservation link](#)

Courtyard by Marriott - [Reservation Link](#)

Hampton Inn Bozeman - [Reservation link](#); Code BDG

Comfort Inn - [Reservation link](#)

Continuing Education Credits

All courses offered at the conference are approved for self-reporting continuing education credits. Unless noted otherwise, International Code Council (ICC) and Shums Coda Associates instructors will report your AIA credits for you if you provide your AIA number on the course sign in sheet. All other credits must be self-reported to AIA. **Please pay close attention to each course description for the type and number of credits available.** The certificates issued for most of the courses offered at the conference will qualify for State Board of Architects licensing CE. Please be advised that the amount of CEUs awarded may vary slightly by provider.

The Conference Location

The Best Western GranTree Inn in Bozeman is the main venue for this year's conference. Courses will also be held at these nearby hotels: Springhill Suites by Marriott, Hilton Homewood Suites, and the Comfort Inn. Shuttle service will be available to get attendees to/from each hotel as needed.

Vendor Expo and Social

The Tuesday evening Expo/Social event will be held again this year. Do not miss this opportunity to network with hundreds of professionals operating in the fields of architecture, engineering, residential building, and commercial contracting. The Expo will also be well attended by Fire and Code Officials.

The Expo will be held on Tuesday March 12, 2024, from 2:00pm to 7:00pm. Prizes will be given away, and Hour's d'oeuvres and refreshments will be served at 5:00 pm.

CONTACT INFORMATION

Traci Collett: (406) 841-2016 or tcollett@mt.gov



BUILDING CODES EDUCATION CONFERENCE COURSES

This conference is presented for Design Professionals, Building Code Officials, Fire Officials, Residential Builders, Commercial Contractors, Inspectors, and other professionals interested in learning about building codes and other related topics.

Monday March 11, 2024

Moisture Intrusion IRC & IECC – Full Day

RUSSELL THORNBURG – THORNBURG CODE SERVICES

During this session, we will discuss the building science behind moisture intrusion in the residential environment in relation to building code requirements. This course will examine the concepts of sustainability, net zero energy, and durability design criteria in terms of providing fundamental information on the 2021 International Residential Code exterior weather barrier provisions. Participants will learn through a detailed examination of the exterior wall envelope weather-barrier components, roof assembly components, and foundation elements how to avoid moisture intrusion problems and how to conform to the requirements of the 2021 IRC. The class will be of interest to designers, general and sub-contractors, building inspectors, plans examiners, architects or engineers, and anyone working in the one-and two-family dwelling environment. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).**

2021 Uniform Solar Hydronics & Geothermal Code (USHGC) – Full Day

JED SCHEUERMANN – IAPMO

This eight (8) hour course will introduce requirements for various solar, hydronic and geothermal installations. It will also incorporate related elements of the 2024 Uniform Mechanical Code (UMC) as they pertain to these installations. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Plumbers licensing CE (8 hours).**

Opening Protectives-the difference between fire resistance and fire protection ratings, and the appropriate use of fabric smoke/fire solutions – Half Day A.M.

DAVID DODGE – MCKEON DOOR COMPANY SPONSORED BY - INTERIOR TECH

In recent years there have been many fire-rated and smoke-rated fabric fire doors and curtains introduced to the market. What does “fire rated” and “smoke rated” really mean when it comes to these fabric products? What tests are fabric products subjected to versus steel fire doors? Where can we use fabric products in a building structure? What are the advantages and disadvantages of fabric? How can we analyze whether a particular product is appropriate and, how do we decipher a cut sheet for a fire curtain product? This course will endeavor to clarify much of the significant confusion currently in the market and arm attendees with information to make good decisions about them. This is not a product presentation.



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In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Residential Energy Inspections – Half Day A.M.

GIL ROSSMILLER – SHUMS CODA ASSOCIATES

Field inspection comes to the classroom by way of pictures, videos, and lessons on real world applications of the code requirements. In this short course, students will find different ways to look at residential building envelope components, mechanical systems, lighting installation as it pertains to energy efficiency, and be given strategies and information to help look at the energy components of the building while still inspecting all other aspects of the building. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**

2021 IBC Multi Family Construction – Full Day

BILL CLAYTON – SHUMS CODA ASSOCIATES

Overview of the requirements for multi- family dwellings in the International Building Code. Type V-A construction may be the most difficult type of construction to build a structure by. This seminar discusses the design, construction and inspection of Group R-2 occupancies including, building planning, fire-resistive rated construction, fire protection requirements and means of egress requirements. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**

Rough & Final Inspection of Sprinkler Systems – Full Day

JOHN SWANSON – NATIONAL FIRE SPRINKLER ASSOCIATION

This one-day course provides attendees with vital information on how to conduct the field inspections for new fire sprinkler and standpipe systems. Fire sprinklers and standpipes are installed in stages and inspections are required before commencing to the next stage. The codes require periodic on-site inspections as the work progresses, to be installed according to the approved construction documents. This work must be inspected and approved before being covered or before the system is commissioned. This course points out the visual and physical inspection requirements of the latest codes and standards. **In addition to providing education credits and providing a class certificate to all attendees the certificate issued with this class qualifies for Montana State Board of Architects and Fire Protection Licensing CE (8 hours). Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.**

Hazardous Materials for Building Officials – Full Day

STEVE THOMAS – SHUMS CODA ASSOCIATES



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This is a full day class that covers the subject of hazardous materials to assist the Building Official in properly dealing with the more dangerous occupancies. The pertinent sections of the IBC regarding Hazardous Materials will be covered, including each type of H occupancy, as well as additional sections of some other codes. The class covers how to correctly classify materials, correctly determine when a label of “H” occupancy is appropriate and determines various manners of protection required to reduce risk. Control areas, storage, open and closed systems will all be discussed in depth. Tips on analyzing materials, going over available resources and special requirements will also be covered. Time will be spent helping to understand MSDS sheets and evaluating specific hazardous situations. Real life examples will be brought up with class participation encouraged in analyzing the possible dangers. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**

2021 IFGC Design, Installation, and Inspection Principles – Full Day MARK FASEL – INTERNATIONAL CODE COUNCIL

Participants of this course will be better able to discuss critical concepts of the 2021 International Fuel Gas Code. It will provide a basis for the correct use of the code in the design, plan review, inspection, and analysis of projects. It will provide a clear understanding and correct use of the requirements identified by basic code provisions, tables, and topics. Allows code users to apply the code in clear-cut situations and helps to build their understanding of the intent of the code when asked to make code compliance decisions. Participants will be able to apply the 2021 International Fuel Gas Code to the design, plan review, installation, and inspection of all fuel-gas-related construction. It is recommended that you bring the 2021 International Fuel Gas Code to class. **In addition to providing (6) education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (6 hours). Additionally, provider will report AIA credits for course attendees providing AIA numbers on the course sign in sheet.**

Commercial Energy Inspections – Half Day P.M. GIL ROSSMILLER – SHUMS CODA ASSOCIATES

Field inspection comes to the classroom by way of pictures, videos, and lessons on real world applications of the code requirements. In this short course, students will find different ways to look at the building envelope components, mechanical systems, lighting installation as it pertains to energy efficiency, and be given strategies and information to help ensure inspection of energy components while still inspecting all other aspects of the building. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**



Tuesday March 12, 2024

Short Term Rental Safety: Common Accidents and Building Code Gaps - Half Day A.M.

JUSTIN FORD – BREEZEWAY

Guests at short-term rental properties are just as prone to accidents, such as slips and falls, fire incidents, and pool accidents, as anyone else. However, short-term rental properties have fallen into a gap in building safety codes where they are not necessarily commercial, but they also aren't residential. In this session, attendees will hear from a short-term rental safety expert as he reviews the most common accidents in rentals, the data when it comes to these accidents, and the push to prevent accidents in the hospitality industry. **A certificate of completion will be provided to all attendees of this course (4 hours). This course is not approved for AIA credits.**

Residential Energy Submittal Information – Half Day A.M.

GIL ROSSMILLER – SHUMS CODA ASSOCIATES

Due to the newly found importance of the energy code, we are all trying our best to get the right information to the right people. We will discuss the items that are often missing from submittal, and or are frequently written up as review comments by building departments. The information in this session has been provided by various Building Departments around Colorado. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**

IRC - Fire Resistant Construction – Two Family Dwelling and Townhouses - Full Day

RUSSELL THORNBURG – THORNBURG CODE SERVICES

This course will cover review of application of through and membrane protections; review assemblies and application of fire separation wall, and review of floor, roof, and ceiling construction applications. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).**

2021 IMC Design, Installation, and Inspection Principles – Full Day

MARK FASEL – INTERNATIONAL CODE COUNCIL

This course highlights key provisions of the 2021 International Mechanical Code ® and provides practice in applying key requirements. It reinforces learning by supplying immediate feedback or clarification. It walks participants through the content outline of the code book and describes key sections. Participants will be able to apply key code sections of the 2021 IMC to aid in its administration and enforcement while performing their job. It is recommended that you bring the 2021 International Fuel Gas Code to class. **In addition to providing (6) education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE**



(6 hours). Additionally, provider will report AIA credits for course attendees providing AIA numbers on the course sign in sheet.

Introduction to Plan Review – Full Day

BILL CLAYTON – SHUMS CODA ASSOCIATES

This seminar takes the new plan reviewer through methods to do a plan review and talks about application of various tables and sections to determine compliance with IBC code requirements. This is an entry level class and assumes the attendees have some knowledge of the code but are new to plan review. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Advanced Commercial Building Inspections – Full Day

STEVE THOMAS – SHUMS CODA ASSOCIATES

This full day class is designed for commercial inspectors looking for a more advanced look at the inspection process and technical portions of the International Building Code. The focus of the class will be on the inspecting the structural portion of the building including concrete, steel, and masonry. Structural testing and special inspection requirements will also be discussed. Inspections of high-rise construction and other types of large projects will also be reviewed during the class. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Fire Sprinkler and Fire Alarm Acceptance Testing – Full Day

JOHN SWANSON – NATIONAL FIRE SPRINKLER ASSOCIATION

This course will provide participants with the requirements from the IFC, NFPA 13 and NFPA 72 related to fire sprinkler and fire alarm acceptance testing. Criteria ensuring the two fire protection systems work together will be addressed, along with potential issues inspectors should look for while conducting final inspections. This class will also be held on Thursday March 14. **In addition to providing education credits and providing a class certificate to all attendees the certificate issued with this class qualifies for Montana State Board of Architects and Fire Protection Licensing CE (8 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.

Commercial Energy Submittal Information – Half Day P.M.

GIL ROSSMILLER – SHUMS CODA ASSOCIATES

This session is focused on the architect topic of interest with more and more jurisdictions updating their energy code with a focus on gaining more energy compliance. We will discuss the items that are often missing from submittal, and or are frequently written up as review comments by building departments. The information in this session has been provided by various Building Departments around Colorado. **In addition to providing education credits and providing a class certificate to building and fire code officials**



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the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Wednesday March 13, 2024

Alternate Materials Tested Standards: IRC & Referenced Standards - Half Day A.M. RUSSELL THORNBURG – THORNBURG CODE SERVICES

Setting the base for code-built environments saves all groups time and money, for when the groundwork is laid the project will have greater success in the office and in the field. This course will offer the participant's opportunities to use alternate materials research that can set them apart from their competitor and allow the inspection department to document the intent of the code. The course will cover: Identifying references required for alternate methods, Identifying acceptable criteria, Receiving testing material, and Review for the intent of the code **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**

2024 UPC Codes & Cannabis JED SCHEUERMANN – IAPMO

Based on 2024 Uniform Plumbing Code (UPC), Indoor Horticultural Facilities, (Appendix Q), this eight (8) hour course will primarily examine plumbing requirements. It will also incorporate general or basic building, mechanical and electrical code provisions as they pertain to grow, processing, extraction, and retail cannabis operations. This is an overview, not an exhaustive course. It is recommended that you bring the 2021 Uniform Plumbing Code book to class. **In addition to providing education credit and providing a class certificate to building officials and inspectors, the certificate issued with this class qualifies as continuing education credits for the State of Montana Board of Plumbers (8 hours).**

Commercial Energy Plan Review – Full Day GIL ROSSMILLER – SHUMS CODA ASSOCIATES

How can we make time to look at energy code compliance during plan review while still looking at everything the other codes require us to look at? This short session will allow the student to identify key energy code requirements on plan sets while understanding why they are in the code and how the different components and systems all affect each. Students will receive strategies and information to assist them in incorporating energy code compliance into their everyday plan reviews. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA number on the sign in sheet.

Solar PV Plan Reviews and Inspections – Full Day DOUG SMITH – WEST COAST CODE CONSULTANTS

This full-day (8 hour) course will cover key requirements of the National Electrical Code (NEC) that govern solar PV systems. The first half of the course will focus on residential solar PV plan reviews. Topics to be



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covered during this portion of the presentation include wire/breaker sizing, wire derating, cold temperature voltage, rapid shutdown of systems, disconnect locations, interconnection requirements, roof fire access clearances, equipment/wiring installation, and signage. There will also be presented several examples of different types of residential solar PV plans and the instructor will walk the class step by step through the plan review process for each one. The second half of this course will explain key concepts of what to look for during inspections and will cover residential and commercial solar PV systems. Topics covered in relation to inspections include roof-mounted systems, ground-mounted systems, carports/car shade structures, typical PV racking support systems, ballasted racking systems, overcurrent protection, disconnects, point of interconnection, grounding and bonding, wire management, and signage. This course will be beneficial not only for plan reviewers and inspectors but will also be helpful for solar contractors and designers to better understand what information needs to be on the construction documents and to know what to look for during an inspection. This course is based on the 2020 NEC. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for State Electrical Board licensing CE (8 hours) & Montana State Board of Architects licensing CE (8 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.

Continued Use & Reuse of Existing Buildings – Full Day BILL CLAYTON – SHUMS CODA ASSOCIATES

This course addresses the relationship of the IBC to existing buildings, as well as the use of the IEBC. Focuses on the fundamental requirements of IBC Chapter 34 that are placed on an existing structure that undergoes repair work, alteration, renovation activity or construction of an addition, and the effect of a change in the building's occupancy classification. Discusses the "compliance alternatives" method of Section 3409. Topics include regulations of additions, alterations and repairs, changes of occupancy considerations, compliance alternatives and application of the IEBC. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the sign in sheet.

Coordinating NFPA 25 & 72 Inspection, Testing & Maintenance Requirements – Full Day JOHN SWANSON – NATIONAL FIRE SPRINKLER ASSOCIATION

Both NFPA 25 and NFPA 72 require coordination of the testing of the sprinkler systems and the fire alarm systems. That is easier said than done. With a variety of administrative code references, varying task frequencies, differences in scope, and unique definitions used in the codes and standards overseeing fire protection system inspection, testing and maintenance (ITM) coordination of work becomes critical to ensure proper and complete building protection. This unique course the participant will explore the issues and develop strategies to coordinate the work required by these two important standards. **In addition to providing education credits and providing a class certificate to all attendees the certificate issued with this class qualifies for Montana State Board of Architects and Fire Protection Licensing CE (8 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.



Designing to the IBC – Full Day

STEVE THOMAS – SHUMS CODA ASSOCIATES

This seminar discusses the best way to present a set of drawings to a building department. The more complete a set of drawings are, the quicker the plans can be reviewed and permit issued. The development of Code Analyses and Code plans will be reviewed. Subjects will also cover how to show fire-resistive rated construction, the means of egress and other code requirements on the plans. This class is designed for architects and designers but may be helpful for plans examiners as well. **In addition to providing education credits and providing a class certificate to building and fire code officials, the certificate issued with this class qualifies for Montana Board of Architects licensing CE (8 hours).** Provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

2021 IMC/IFGC Combustion Air & Venting– Full Day

MARK FASEL – INTERNATIONAL CODE COUNCIL

This course reviews and analyzes selected requirements for combustion air & venting systems and summarizes the purpose and content of combustion air & venting systems contained in the 2021 IFGC and 2021 IMC. It is recommended that you bring the 2021 International Fuel Gas Code and 2021 International Mechanical Code books to class. **In addition to providing (6) education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (6 hours).** Additionally, provider will report AIA credits for course attendees providing AIA numbers on the course sign in sheet.

Engineering Products & Conventional Wood Framing – Half Day P.M.

RUSSELL THORNBURG – THORNBURG CODE SERVICES

This overview surveys the requirements of the International Residential Code’s conventional wood framing provisions and the requirements associated with framing engineered designs for non-conventional construction. We will compare the prescriptive requirements with those of engineered designs. This course is appropriate for code officials, contractors, architects, and engineers. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**

Thursday March 14, 2024

IRC – Means of Egress for Residential Dwellings – Half Day A.M.

RUSSELL THORNBURG – THORNBURG CODE SERVICES

A complete in-depth view of code requirements and best practices for stairways, landings, guards, and handrails etc. Illustrations used represent everyday problems and will serve as the basis for discussion and resolution to some of the problems of means of egress. This course is applicable to designers, contractors, framers, and building inspectors. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**



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Solar PV Inspections – Half Day A.M.

DOUG SMITH – WEST COAST CODE CONSULTANTS

This half-day (4 hour) course specifically focuses on inspections for solar PV systems, including residential and commercial systems. The course will explain key concepts on what to look for during inspections. Topics covered include roof-mounted systems, ground-mounted systems, typical PV racking systems, ballasted racking systems, overcurrent protection, disconnects, point of interconnection, wire management, and signage. This course is based on the 2020 *NEC* (2017 *NEC* also available). **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for State Electrical Board licensing CE (4 hours) & Montana State Board of Architects licensing CE (4 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.

2024 Uniform Plumbing Code (UPC) Essentials – Full Day

JED SCHEUERMANN – IAPMO

Basic provisions of the latest UPC edition along with significant changes from the 2021 UPC will be considered. This eight (8) hour course will hit the high points of the entire code, including appendices. It is recommended that you bring the 2021 Uniform Plumbing Code book to class. **In addition to providing education credit and providing a class certificate to building officials and inspectors, the certificate issued with this class qualifies as continuing education credits for the State of Montana Board of Plumbers (8 hours).**

IECC Multi-Family Buildings – Full Day

GIL ROSSMILLER – SHUMS CODA ASSOCIATES

This course is designed to help the student understand how the International Energy Conservation Code is looked at when it comes to Multi-Family Construction. Depending on the number of stories of a building, it could be looked at under the Commercial Provisions or the Residential provisions. Students will be introduced to both sets of requirements as well as common problems encountered when trying to meet IECC compliance with things like blower door testing, commissioning, window area and more. **In addition to providing education credits and providing a class certificate to building and fire code officials, the certificate issued with this class qualifies for Montana Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Applying the Codes to Cannabis – Full Day

STEVE THOMAS – SHUMS CODA ASSOCIATES

This seminar examines the history and background of codes being applied to cannabis facilities, as well as discussion of the various related uses, hazards involved, and identification of H vs F-1, M and B occupancies within these facilities. Seminar discusses IBC, IFC, and MEP requirements and applying the IEBC to these uses. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.



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Fire Sprinkler & Fire Alarm Acceptance Testing – Full Day

JOHN SWANSON – NATIONAL FIRE SPRINKLER ASSOCIATION

This course will provide participants with the requirements from the IFC, NFPA 13 and NFPA 72 related to fire sprinkler and fire alarm acceptance testing. Criteria ensuring the two fire protection systems work together will be addressed, along with potential issues inspectors should look for while conducting final inspections. This is a repeat of the class held on Tuesday March 12th. **In addition to providing education credits and providing a class certificate to all attendees the certificate issued with this class qualifies for Montana State Board of Architects and Fire Protection Licensing CE (8 hours). Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.**

IBC Accessibility – Non-Residential – Full Day

BILL CLAYTON – SHUMS CODA ASSOCIATES

This full day course provides basic concepts of disabled accessible design and construction using the International Building Code and ICC A117.1 as it relates to non-residential structures. The first portion of the class will discuss **WHEN** accessible features are required by the IBC. The remainder of the class will be devoted to **HOW** a building and its site is made accessible by the A117.1 Standard. This class is intended for the code user who is either new to accessible design or is in need of a refresher on the ever-changing requirements. Application of accessibility requirements for existing buildings will be discussed. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.**

IRC – Residential Deck Design & Construction – Half Day P.M.

RUSSELL THORNBURG – THORNBURG CODE SERVICES

Plan reviewers, field inspectors, permit techs, and contractors attending this course will receive a wide spectrum of information needed to determine minimum requirements for deck construction. Participants will have the opportunity to review new and old code sections, as well as partake in practical application scenarios. This course will be of interest to architects, design professionals, contractors, code enforcers and plan reviewers. Content covered in this course includes but is not limited to: Basic questions to ask with the deck application, The mechanics of wood used in deck construction, How to size joists, beams, posts, and concrete piers; Proper specification and use of fasteners; & Reviewing construction documents and plot plans for permitting process. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**

2020 NEC Solar Photovoltaic (PV) Code Requirements Update – Half Day P.M.

DOUG SMITH – WEST COAST CODE CONSULTANTS

This half-day (4 hour) course is designed to update the students on changes to solar photovoltaic (PV) requirements based on the *2020 National Electrical Code (NEC)*. This course will cover the major changes to solar PV systems including definitions, general requirements, wiring methods, DC voltage allowance,



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disconnects, overcurrent protection, rapid shutdown of systems, wiring methods, grounding, and point of interconnection requirements. A brief explanation of new *NEC* Articles will also be presented. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for State Electrical Board licensing CE (4 hours) & Montana State Board of Architects licensing CE (4 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.

Friday March 15, 2024

IRC – Residential Plan Review – Half Day – A.M.

RUSSELL THORNBURG – THORNBURG CODE SERVICES

To provide a systematic, common-sense approach for residential plan review for One- and Two-Family Dwellings, for the recognition of code compliance. The International Residential Code, Chapters 1 through 10 and Reference Standards will be used for a portion of the specification base. Third party testing, Evaluations Services, ICC, and industry and manufacturer's standards will all be addressed in the plan review process. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**

2024 UPC – Drain, Waste, & Vent (DWV) – Half Day – A.M.

JED SCHEUERMANN – IAPMO

This four (4) hour course will examine drain, waste, and vent provisions of the 2024 UPC. There will be some sizing diagram examples and exercises included. It is recommended that you bring the 2021 Uniform Plumbing Code book to class. **In addition to providing education credit and providing a class certificate to building officials and inspectors, the certificate issued with this class qualifies as continuing education credits for the State of Montana Board of Plumbers (4 hours).**

The Top 10 Approach to Energy Efficiency – Full Day

GIL ROSSMILLER – SHUMS CODA ASSOCIATES

Having trouble trying to enforce energy provisions of the IECC? Let's look at the different types of residential and commercial buildings to see how they use energy. Then we'll look at the concept of, at a minimum, targeting the top 10 code requirements that deal specifically with how each building loses its efficiency **In addition to providing education credits and providing a class certificate to building and fire code officials, the certificate issued with this class qualifies for Montana Board of Architects licensing CE (6 hours). This course also qualifies as State of Montana Fire Protection Licensing CE (8 hours).** Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Advanced Studies of the IBC – Full Day

BILL CLAYTON – SHUMS CODA ASSOCIATES

This class will provide a provocative and higher level of review of the International Building Code. The class will focus on unusual and more complex fire and life safety provisions of the code. Chapters 7-10 of the



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IBC will be discussed during the seminar. Subjects included will be fire walls, fire barriers, smoke barriers, automatic fire sprinklers, fire alarm systems, interior finishes, large building egress and other advanced provisions of the code. Case studies of large and unusual buildings will be discussed during the seminar. In addition to providing education credits and providing a class certificate to building and fire code officials, the certificate issued with this class qualifies for Montana Board of Architects licensing CE (8 hours). Provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Key Requirements of NEC Articles 225-250 – Full Day DOUG SMITH – WEST COAST CODE CONSULTANTS

This course covers some of the more important requirements found under NEC Articles 225 (Outdoor Feeders & Branch Circuits), 230 (Services), 240 (Overcurrent Protection), and 250 (Grounding & Bonding). Some of the topics to be covered include: definitions, overhead wiring requirements, underground service conductor installations, service equipment, service disconnecting means, overcurrent protection for services and feeders, ground-fault protection of equipment, overcurrent protection for conductors, feeder tap provisions, transformer secondary conductor provisions, circuit breaker provisions, series rating protection for overcurrent devices, grounding of AC services, grounding of separately derived systems (such as transformers), grounding and bonding requirements for detached structures, sizing of grounding electrode conductors, rules for grounding electrodes, and sizing of equipment grounding conductors. This course is beneficial for plan reviewers, inspectors, installers, and designers. This course is based on the 2020 NEC. In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for State Electrical Board licensing CE (8 hours) & Montana State Board of Architects licensing CE (8 hours). Additionally, course is approved by AIA but attendees must self-report credits. AIA approved credits may vary from the credits issued on the certificate.

Outside the Box Plan Review – Full Day STEVE THOMAS – SHUMS CODA ASSOCIATES

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. In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours). Additionally, provider will report AIA credits, as approved by AIA, for course attendees providing AIA numbers on the course sign in sheet.

Sprinkler System Plan Review Full Day JOHN SWANSON – NATIONAL FIRE SPRINKLER ASSOCIATION

Examining fire sprinkler shop drawings, cut sheets and hydraulic calculations is a primary duty of the authority having jurisdiction. This course will provide an efficient and thorough review of plans and other fire sprinkler documents. Attendees will learn what documents to accept to start a review, what steps to



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take through the fire sprinkler design and systems review, and how to have confidence while reviewing hydraulic calculations. This course applies current codes and standards to fire sprinkler systems from the initial site plan review, through the construction documents, to the as-built drawings. Considerable time on how to effectively communicate deficiencies to the design professional. Students will receive a handout that provides detailed checklists with expert commentary that is useful to the fire sprinkler plan reviewer for years to come. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (8 hours).** Additionally, course is approved by AIA but attendees must self-report credits. AIA credits may vary from the credits issued on the certificate.

IRC – Exterior Wall Systems – Half Day – P.M.

RUSSELL THORNBURG – THORNBURG CODE SERVICES

Water intrusion through exterior walls may be the largest problem in residential construction today. This course will discuss the IRC requirements for exterior walls of chapters 3, 6 and 7. General installation requirements of products will be discussed, including weather resistance barriers, flashing, vinyl/wood/hardboard siding, masonry and culture veneers, stucco and EFIS systems. **In addition to providing education credits and providing a class certificate to building and fire code officials the certificate issued with this class qualifies for Montana State Board of Architects licensing CE (4 hours).**

2024 Uniform Mechanical Code (UMC) Overview– Half Day – P.M.

JED SCHEUERMANN – IAPMO

Highlights from Uniform Mechanical Code requirements in a four (4) hour introductory course will be considered. **In addition to providing education credit and providing a class certificate to building officials and inspectors, the certificate issued with this class qualifies as continuing education credits for the State of Montana Board of Plumbers (4hours).**