







ICC Upper Great Plains Region III Annual Educational Institute

February 12-16, 2024

















Welcome to the 20th Annual ICC Upper Great Plains Region III **Educational Institute**

Welcome!

Check out the abundant networking opportunities and outstanding educational offerings at a superb venue. The Association of Minnesota Building Officials (AMBO), the International Code Council (ICC), and the Region III Chapter of ICC are proud to collaborate on this annual educational event. This week-long event focuses on the construction-inspection industry. You are invited to join us the week of February 12th through 16th, 2024, at the Minneapolis Marriott Northwest in Brooklyn Park, Minnesota.

There will be a Week of Diversified, Engaging Programs

The Institute features 40 sessions of construction-industry related topics offered in eight tracks over five days. Check the brochure for a few select sessions to be offered virtually (\vee). Presenters are wellqualified and often well-known individuals from ICC and from construction-inspection industry-related areas. Everyone is invited and welcome to attend. The week should be of particular interest to individuals involved in building code administration, building inspections, and related regulatory and/or design positions, as well as contractors, builders, and students. Network with colleagues. Meet and mingle with Building Officials, Building Inspectors, Permit Technicians, Fire Inspectors, Mechanical and Plumbing Inspectors, Housing Inspectors, Design Professionals, Contractors, Students in Construction-Related Programs, and other attendees.

Do You Need Continuing Education?

The International Code Council provides continuing education approvals for ICC certifications. The Minnesota Department of Labor and Industry provides continuing education approvals for Minnesota licensees. The International Code Council also submits some specific ICC-labeled sessions to the American Institute of Architects for continuing education approval. For submission to AIA for continuing education credit, you must sign-in on the separate AIA attendance sheets provided for eligible sessions. Check session descriptions to learn which sessions are ICC-specific and eligible for AIA submission.

It's a Great Venue for the Event

At the Minneapolis Marriott Northwest you can enjoy the convenience of modern, well-appointed hotel suites and classrooms under one roof. The Marriott is conveniently located 30 minutes from the Minneapolis-Saint Paul International Airport, near multiple shopping and dining options, and offers free onsite self-parking. Registered institute attendees are provided with continental breakfast prior to session starts, light morning and afternoon breaks, and buffet lunch.

Location

Minneapolis Marriott Northwest 7025 Northland Drive North Minneapolis, Minnesota 55428 763.536.8300 - General Hotel Information Or, visit the website.



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Marriott Guestroom Reservations and AMBO Group Rate

All guest rooms are two-room suites. AMBO group-rate reservations are available through January 22, 2024. The AMBO Group Rate is \$134 per day plus applicable taxes and is available for the dates of the Institute, starting Sunday, February 11, 2024, and ending Friday, February 16, 2024.

- Reserve your room <u>on-line</u> (Preferred):
- Or, enter in browser:
 - https://www.marriott.com/event-reservations/reservation-link.mi?id=1691074556664&key=GRP&app=resvlink
- Or, call the reservation line, 1.877.303.1681, and request the Group Rate for the AMBO Conference.

Registration Information

Registration is Online Only: Register at www.iccsafe.org/RegionIII.

IMPORTANT! Registration Closes: Monday, February 5, 2024, the week prior to the event.

Walk-In Registration: Walk-in registration (as classroom space allows) is welcomed during the event at the site after 7:00 a.m.

Daily Registration Rates:

- The on-site registration includes continental breakfast, breaks, and lunch.
- Registration closes Monday, February 5, 2024. Walk-ins accepted on-site after 7:00 a.m. as space permits.

Daily Rate: \$210 each day for one or two days.

Multi-Day Discount: \$180 per day for three, four, or five days.

Early-Bird Rate: \$180 per day if registered by Monday, January 8, 2024.

Walk-In Rate: \$225 per day. Popular sessions may fill and may close early.

Cancellation/Refund Policy and Point-of-Contact for Questions: Submit cancellation and refund requests by email to <u>learn@iccsafe.org</u>. For registration questions, email <u>learn@iccsafe.org</u> or call ICC at 888.422.7233, extension 33821.

Chapter President's Special: ICC Chapter Presidents may take advantage of a complimentary day of attendance at the Institute. Contact Jerry Backlund, AMBO Chair, at ibacklund@hastingsmn.gov.

Special Events

AMBO General Membership Meeting

The AMBO General Membership Meeting will be after class on Monday. All are welcome. Plan to attend! Location to be announced.

Trade Show

Wednesday is "Trade Show Day." Vendors from throughout the area will showcase their products and provide timely and relevant information. Visit participating vendors and welcome them to the Institute.

ICC Resource Center

The ICC Resource Center will be on-site throughout the day on Wednesday and on Thursday with a wide assortment of Code books as well as ICC merchandise. Check it out!

ICC Region III Chapter Meeting

The Region III Chapter of ICC will hold their annual membership meeting on Wednesday during lunch. Location to be announced.

AMBO Board Meeting

The AMBO Board of Directors will hold an on-site Board Meeting. Time and Location to be determined.

We look forward to seeing new faces and renewing past acquaintances at this unique, networking and training opportunity!

How to Register

In-Person Classes (all classes)

Check out the Blue Matrix for the In-Person classes offered at the Minneapolis Marriott Northwest Hotel.

Virtual Classes (select few)

Can't travel? Join us virtually! Check out the virtual offerings in the matrix with a Yellow Bar and noted with a V.

How do I register Myself?

If you are registering yourself and you will be the one attending classes at Region III Education Event, go to iccsafe.org/RegionIII and click on **Individual Registration** You will see the registration page as shown below. Click on New Registration and follow the prompts to complete your individual registration.



How do I register a **Group or Another Individual**?

There are two options for group registrations and registering another individual this year.

1. Click on Individual Registration (same process as above). Complete attendee #1. Once entered, you will be prompted if you will be registering any other attendees for this event:

Will you be registering any other attendees for this event?* ○ Yes ○ No



After you click Yes, you will be prompted to enter the information for the additional attendee. You may repeat this process until you register all your participants.

2. You may register groups by clicking **Group Enrollment** and completing the online form on iccsafe.org/RegionIII. ICC will manually register all individuals on your online form within 7 days and send confirmation emails directly to the individuals. Please provide the specific attendee emails.

TRACK 1 – CODE COMPLIANCE AND PROFESSIONAL DEVELOPMENT

MONDAY 2/12/2024

Advanced Legal Aspects for Property Maintenance Inspectors

Session 411

In addition to reviewing key concepts necessary for legal aspects of code administration, participants will be provided with more in-depth material for effective code administration and enforcement. The following topics will be covered during the seminar: powers and duties of the code official, foreclosure, unsafe structures, overcrowding, hoarding, rental inspections, right of entry and administrative search warrants, liability, using zoning ordinances to obtain compliance, effective techniques for enforcement, and using internet databases for corporate, LLC and real estate records.

Instructor: Linda Pieczynski (ICC)

TUESDAY 2/13/2024

2018 IPMC Overview

Session 412

This seminar provides code officials and other interested parties with the fundamental knowledge necessary to administer and enforce applicable code requirements of the 2018 International Property Maintenance Code® (IPMC®). This information will increase the participant's ability to locate, describe and apply the appropriate code sections of the IPMC in order to determine compliance or noncompliance while performing a residential or commercial inspection.

Instructor: Cecilia Sevilla (ICC)

WEDNESDAY 2/14/2024

AM: Effective Communication and Customer Service

Session 413

Effective communication is more than simply exchanging information. It entails a level of understanding on both the delivery and receiving end. It includes proper framing of information being shared for optimal effectiveness and response. This class will focus on how to fine tune your communication skill set to deliver optimal customer service.

Instructor: Cecilia Muela (Monarch Consulting)

PM: Officer Safety and Field Work

Officer Safety in the field is imperative and today's world poses more challenges for the ever-evolving field/code inspection profession. This course will explore the variety of field safety challenges code and field officers may encounter. We will discuss different safety scenarios focused on field interactions with the public to the health and safety of the code/field inspector.

Instructor: Cecilia Muela (Monarch Consulting)

YOU ARE INVITED!

AMBO Annual General Membership Meeting

After Class on Monday

Everyone is Welcome

Location to be Announced



Track 1 continued on next page



TRACK 1 – CODE COMPLIANCE AND PROFESSIONAL DEVELOPMENT (CONTINUED)

THURSDAY 2/15/2024

AM: Proactive Rental Inspection Program: Session 414 Why is it necessary? How to create one. How to run one.

This presentation will expound on the issues surrounding a program for proactive inspection of housing for rent within a municipality. We will cover the definition of a proactive rental housing inspection program, the importance of such a program, how to determine if your jurisdiction could benefit from such a program, how to establish such a program, what are the components of a program and how to manage a program once it is up and running.

Instructor: Orlando Givens (4Leaf)

PM - Part 1: Short-Term Rentals

This specialized course, tailored for code enforcement officials, delves into managing the impact of short-term rental platforms like Airbnb and VRBO on local communities. It covers key areas such as understanding the sharing economy, effective regulation and enforcement strategies, balancing stakeholder interests, and the financial implications for municipalities. The course equips officers with the skills to mitigate issues like noise pollution, traffic, and housing availability challenges, while ensuring equitable treatment of property owners and optimizing tax revenue generation. It's an essential resource for officers aiming to maintain community quality of life and safety in the face of the evolving sharing economy.

Instructor: Pete Roque (4Leaf)

PM - Part 2: Marketing Your Code Enforcement **Department**

This course is designed specifically for code enforcement officers who seek to elevate the profile and recognition of their department within their organization. It provides practical skills in marketing and promotion, focusing on creating a strong departmental identity, effective messaging, and engaging content targeted towards key stakeholders. The course also covers strategic use of various marketing channels, audience analysis, and persuasive tactics to effectively communicate the department's value and importance. Ideal for officers at any level, this course is a key tool for ensuring your department is acknowledged and well-resourced within your organization.

Instructor: Pete Roque (4Leaf)

FRIDAY 2/16/2024

2021 IBC Applying Codes to Cannabis Facilities Session 415

This class will be a full exploration of the multitude of building uses and mixed uses related to the burgeoning marijuana industry, and how the codes may apply. A further examination of how the industry is reacting and adjusting to the maze of State and local regulations, and becoming efficient will be addressed. This course is conducted in a forum style, with opportunities for the attendees to ask questions, compare notes, and share the solutions discovered.

Instructor: Steve Thomas (ICC)

Don't Miss This!

Tuesday After Class in the Parking Lot





TRACK 2 – BUILDING: UNDERSTAND THE BASICS

MONDAY 2/12/2024

Introduction to the 2018 IBC

Session 421 V



This course explores major provisions of the 2018 International Building Code. The presentation will include discussions of provisions addressing the following issues: occupancy classification, types of construction, means of egress, fire sprinklers and fire-resistive-rated construction, administration provisions and accessibility. This class is designed to introduce the provisions of the IBC.

Instructor: Gil Rossmiller (Shums Coda)

TUESDAY 2/13/2024

Fundamentals of I-Codes for Permit Techs Session 422

This session provides the permit technician with the knowledge, skills and abilities needed to perform their jobs in code administration: legal aspects, code language, code enforcement, reading construction documents, performing plan reviews and the permitting and inspection process. Participants will become familiarized with the International Building Code® (IBC®) and the International Residential Code® (IRC®) and sharpen customer relations skills.

Instructor: Roger Axel (ICC)

WEDNESDAY 2/14/2024

2018 IRC Chapter 3

Session 423

This course explores the major provisions of Chapter 3, Building Planning of the 2018 International Residential Code. The presentation includes detailed discussion of the provisions addressing the following issues: fire-resistant rated construction, means of egress, smoke and carbon monoxide alarms and glazing. The class is designed to introduce the provisions of the code to the user.

Instructor: Gil Rossmiller (Shums Coda)

THURSDAY 2/15/2024

Cladding Standards, Sustainability and **Exterior Wall System Performance**

Session 424

This session showcases a guest speaker from the Vinyl Siding Institute to provide an overview of the IBC, IRC and ASTM standards relevant to exterior cladding in the I-Codes including how sustainability plays a role with material life cycle assessment. This session also includes a deep dive into issues that impact water intrusion through exterior walls. This 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/ hardboard siding, masonry and culture veneers, stucco and EFIS systems.

Instructors: Russell Thornburg (Thornburg Code Services) and Matt Dobson (Vinyl Siding Institute)

FRIDAY 2/16/2024

Soils, Footings and Foundations (Chapter 4 & 6 of 2018 IRC)

Session 425

This course will help establish a base for understanding and inspecting the construction aspects concerning soils, footings, and foundations. Through a review of industry basic standards and the IRC requirements for construction with masonry and concrete, this course will provide a detailed examination of the use and application of standards governing these fundamental building blocks of residential construction.

Instructor: Russell Thornburg (Thornburg Code Services)

Education is the passport to the future, for tomorrow belongs to those who prepare for it today.

-Malcolm X



TRACK 3 – BUILDING: GENERAL TOPICS

Session 432 V

Session 433

MONDAY 2/12/2024

2018 IRC Performing Residential Plan Reviews Session 431

This course provides a procedure for reviewing residential building plans and specifications based on Chapters 1 through 10 of the 2018 International Residential Code® (IRC®). Participants will have the opportunity to practice a building plan review using actual construction documents and an IRC Plan Review Record.

Instructor: John Gibson (ICC)

TUESDAY 2/13/2024

2018 IRC Performing Residential Building Inspections

This seminar provides building inspectors with fundamental knowledge necessary to administer and enforce applicable code requirements from the 2018 IRC, which apply from foundation-to-final residential building inspection. Specifically, the seminar provides participants with checklists that enable those performing residential building inspections to determine whether the materials, design, construction, installation and location of building components comply with the code.

Instructor: John Gibson (ICC)

WEDNESDAY 2/14/2024

2018 IBC Performing Nonstructural Plan Reviews - Day 1

With knowledge of performing a nonstructural plan review, participants will be better able to understand and apply the requirements of the 2018 International Building Code (IBC®) When you complete this seminar, you will be able to determine whether a given set of building plans complies with the outlined requirements of the 2018 IBC.

Instructor: John Gibson (ICC)

THURSDAY 2/15/2024

2018 IBC Performing Nonstructural Plan Reviews - Day 2

Session 434

This session is a continuation of Session 433 covering nonstructural plan reviews. Completing this two-day seminar will allow participants to be better able to determine whether a given set of building plans complies with the outlined requirements of the 2018 IBC.

Instructor: John Gibson (ICC)

FRIDAY 2/16/2024

2018 IBC Performing Commercial Building Inspections

Session 435

This seminar is designed to assist you with becoming an effective commercial building inspector. This course will increase your ability to apply the requirements of the IBC in the field during an inspection. The seminar will cover the following topics: general administration; building planning; footings and foundation; floor construction; wall construction and coverings; roof/ceiling construction; and public safety and special construction. You will have a basic checklist to follow as you learn the basics of code inspection so you can become the best commercial building inspector.

Instructor: John Gibson (ICC)

TRACK 4 - BUILDING: ESSENTIALS TO KNOW

MONDAY 2/12/2024

2018 IEBC Essentials

Session 441

This seminar will introduce critical concepts of the 2018 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.

Instructor: Sandra Hyde (ICC)

TUESDAY 2/13/2024

2021 IBC Transition from the 2015 IBC

Session 442

This seminar will assist participants in implementing the transition from the 2015 IBC to the 2021 IBC. It will include relevant changes in the 2018 IBC. This interactive training will focus on the key changes presented in the participant material. Knowledge review questions will provide an opportunity for participants to discuss and consider the changes.

Instructor: Doug Thornburg (ICC)

WEDNESDAY 2/14/2024

2021 IRC Transition from the 2015 IRC

Session 443 V

This seminar will assist participants in implementing the transition from the 2015 IRC to the 2021 IRC. It will include relevant changes in the 2018 IRC. This interactive training will focus on the key changes presented in the participant material. Knowledge review questions will provide an opportunity for participants to discuss and consider the changes.

Instructor: Sandra Hyde (ICC)

THURSDAY 2/15/2024

2021 IBC Accessibility Significant Changes Session 444 V



This seminar will discuss the changes to Chapter 11 of the 2021 IBC and the 2017 ICC A117.1 Accessibility Standard. The discussion will include the application of the code and standard to new and existing buildings. It will also discuss the new dimensions required for accessibility. The reasons and intent of the changes will be discussed.

Instructor: Steve Thomas (Shums Coda)

FRIDAY 2/16/2024

ASHRAE 90.1 (2019)

Session 445

The IECC had allowed the use of ASHRAE 90.1 as a compliance path option to demonstrate compliance with the IECC for several cycles. How many of us own the standard of know what the standard requires to find compliance on the plans or in the field? Whether we have the standard on hand for reference or not, does not change the fact that designers and architects have the choice of utilizing it for their projects. Join us as we discuss the requirements found in 90.1. Let's get to know this standard

Instructor: Gil Rossmiller (Shums Coda)





TRACK 5 – BUILDING: SPECIFIC CONCERNS

MONDAY 2/12/2024

AM: Mass Timber Buildings and the IBC Session 451

This presentation will provide an overview of mass timber which includes any product currently permitted for use in Type IV (heavy timber) construction. Structural and fire protection characteristics of mass timber will be discussed as well as IBC code provisions that allow their specification in both residential and commercial applications for a wide variety of occupancies. This presentation will provide an overview of changes to the 2015, 2018 and 2021 International Building Code (IBC) related to mass timber construction. Changes to the 2021 IBC allow for construction of mass timber buildings with larger heights and areas than is currently permitted in Types III, IV, and V construction. This presentation will provide an overview of the allowable heights and areas for the three new types of mass timber construction: Types IV-A, IV-B, and IV-C. Construction fire safety requirements and owner responsibilities related to the fire resistance elements of the building will also be discussed. An overview of fire design of mass timber building elements and assemblies and protection of connections will be discussed.

Instructor: Ed Lisinski (AWC)

PM: Introduction to Floor, Wall and Roof Framing

This introductory course will focus on basic framing concepts, engineering principles supporting them, and relevant code provisions associated with conventional light-frame wood construction. Common code violations that will be encountered in the field, along with potential solutions will be illustrated to assist newer inspectors with ensuring building safety and conformance with applicable state building codes.

Instructor: Ed Lisinski (AWC)

Visit Participating Vendors All Day Wednesday!

TUESDAY 2/13/2024

AM: Roof and Floor Trusses

Session 452

The first half of class is intended to cover the basics of roof and floor trusses, with a focus on how vertical loads impact buildings. Students will be introduced to how to load paths travel through buildings, learn how to read truss drawings, and identify required truss bracing. We will cover the hot topic of deck ledger connections to floor trusses and include tips to improve the efficiency of truss field inspections.

Instructor: Adam Barthel (City of Minneapolis)

PM: Wall Bracing & Tall Walls

In the second half, we will look at wall bracing and tall walls. Here we build upon the load path concepts addressed in the first half but focus on lateral loads from wind. Here, we will cover why wind loads matter, and wall bracing concepts found in R602.10. In addition, limitations of prescriptive bracing vs. engineered wall bracing will be discussed as will construction methods, compliance paths, and how to calculate required vs. provided wall bracing.

The intended audience is plans examiners, building inspectors, contractors, and building designers. This class offers something for everyone with topics ranging from beginner/novice to moderately advanced concepts.

Instructor: Adam Barthel (City of Minneapolis)

WEDNESDAY 2/14/2024

Conventional Wood-Framed Construction Session 453

A fundamental of the IRC and its predecessor code is to provide Americans an affordable and prescriptive method to frame a house without a design professional. Though there are many engineered products and designs in common use, conventional wood framing is still in the code and across our communities. These generations-old techniques have been adapted with engineering validation and insulation accommodation over recent decades. Take a ride in the IRC from the foundation plates to the roof sheathing and learn the old and modern methods of prescriptive wood construction in between.

Instructor: Glenn Mathewson (BuildingCodeCollege.com)



TRACK 5 - BUILDING: SPECIFIC CONCERNS (CONTINUED)

THURSDAY 2/15/2024

Decks, Down the Load Path

Session 454

From the decking to the foundation, this course covers all segments of a deck load path and how the IRC accommodates its design. New IRC tables specific to deck joist and beam spans, posts, and deck foundations are explained with a deep dive into the flexibility and options they provide for deck designs. On the flip side, the provisions for ledgers and lateral loads are not nearly as forgiving and will also be presented with a deep and critical look to make them as useful and practical as possible. The presenter of this course has assisted in the creation and inclusion of these new deck provisions in the IRC since the 2015 edition and is the author of the deck construction code book published by ICC.

Instructor: Glenn Mathewson (BuildingCodeCollege.com)

FRIDAY 2/16/2024

2018 IBC/IFC Assembly Spaces

Session 455

This seminar will address the 2018 International Building Code® requirements applicable to design and construction of assembly spaces. It will address the differences between the various Group A occupancies and how assembly uses may also fit within the business or educational occupancy classifications. The seminar will cover the unique aspects of the code related to assembly uses including the stage and platform requirements of Section 410, the ICC 300 Standard for Bleachers, Folding and Telescopic Seating, and Grandstands, the special egress provisions of Section 1028, along with the special amusement building and motion picture projection room requirements from Chapter 4. International Fire Code® provisions related to places of assembly such as requirements for a fire watch, limitations on open flames, combustibles and finishes will also be addressed. The discussion will include the unique IBC criteria applicable to accessibility, fire protection and building size issues in assembly buildings.

Instructor: Doug Thornburg (ICC)









Quality Education for Construction Industry Professionals

ICC Upper Great Plains Region III Annual Educational Institute

February 10-14, 2025

Minneapolis Marriott Northwest | 7025 Northland Drive North | Minneapolis, Minnesota 55428

TRACK 6 - MULTI-DISCIPLINARY: BUILDING AND FIRE

MONDAY 2/12/2024

Design Advantage - Fire Sprinkler Systems Session 461 and the IBC/IFC

This program reviews the 2018, 2021 and changes to the 2024 International Building Code (IBC) for fire sprinkler requirements and details areas, such as water supply, open corridor protection, Chapter 9, tradeoffs and other current IBC information on fire sprinkler systems. The program identifies and explains the various types of sprinkler systems and where they are required and used throughout the IBC. Several discussions will arise over the design options which will permit design flexibility in all building types and uses. This course will cover relevant sections of the IBC and fire sprinkler installation standards (such as NFPA 13, 13R and 13D) that all code officials, contractors, layout technicians and engineers should know.

Instructor: John Swanson (NFSA)

TUESDAY 2/13/2024

Sprinkler System Plan Review

Session 462

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 take through the fire sprinkler design and systems review, and how to have confidence while reviewing hydraulic calculations. This course applies to 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.

Instructor: John Swanson (NFSA)

WEDNESDAY 2/14/2024

2018 IFC Essentials

Session 463

This seminar will introduce building and fire officials to the administrative provisions, fire-protection systems and general precautions against fire that are identified in the 2018 International Fire Code (IFC). Additional topics that both code officials must be aware of include fire service features, interior finish, means of egress and hazardous materials. Activities and discussions will further enhance participant learning.

Instructor: Roger Axel (ICC)

THURSDAY 2/15/2024

Protect Your Openings - Fire Door and Session 464 **Fire Window Assemblies**

This program provides a detailed look at the requirements of Chapter 7 of the 2021 International Building Code for protections of fire door and fire window assemblies. For each topic, the program includes a discussion of code requirements. the referenced standards, the testing process, the available methods of demonstrating code compliance, the installation process and the inspection process. In addition, it will cover the maintenance requirements of the International Fire Code and NFPA 80.

Instructor: Rich Walke (Creative Technology)

FRIDAY 2/16/2024

Protecting Penetrations, Joints, and Voids Session 465

This presentation will provide a detailed review of how through- and membrane- penetrations, and joints and voids in fire-resistance-rated-assemblies are protected. It includes an in-depth review of code requirements, testing procedures, what materials make up firestop or joint systems, and how to use the UL Product iQ online directory to locate code compliant systems, and how to ensure that the systems are installed as "complete assemblies".

Instructor: Rich Walke (Creative Technology)



TRACK 7 – MULTI-DISCIPLINARY: MECHANICAL AND PLUMBING

MONDAY 2/12/2024

IFGC Design, Plan Review, & Inspections Session 471

This course reviews and analyzes selected requirements for commercial design and plan review of mechanical systems. The course will provide participants with a thorough understanding of key areas of the 2018 International Mechanical Code (IMC) and related standards.

Instructor: Jerry Flanik (Associated Consulting Services) **Jonathan Sargeant, Guest (Omegaflex)**

TUESDAY 2/13/2024

2018 IMC Performing Commercial Mechanical Inspections

Session 472

This seminar highlights key provisions of the 2018 International Mechanical Code® (IMC®) and provides practice in applying key requirements when performing mechanical inspections. It reinforces learning by supplying immediate feedback or clarification. This seminar walks participants through the focused areas for inspections. Selected systems with associated appliances and equipment will be discussed while describing key sections of the 2018 International Mechanical Code® (IMC®) and making references to the 2018 International Fuel Gas Code® (IFGC®).

Instructor: Jerry Flanik (ICC)

WEDNESDAY 2/14/2024

2018 IRC Performing Residential **Mechanical Inspections**

Session 473

This seminar will focus on the key changes from the 2018 International Residential Code® (IRC®). The details provided will enhance your understanding of mechanical terminology, equipment, materials and methods of installation related to residential construction. This seminar concentrates on the mechanical portion of the IRC along with the appropriate portions of the International Fuel Gas Code and the International Energy Conservation Code. It covers the minimum requirements for residential mechanical inspections. You will also discuss major portions of a residential plan. This seminar will provide information so that the residential mechanical inspector can perform inspection tasks that are consistent with the requirements in the 2018 IRC.

Instructor: Jerry Flanik (ICC)

THURSDAY 2/15/2024

Commercial Kitchen Ventilation

Session 474

CKV systems represent one of the most challenging tasks to designers. Proper venting and capture of the heat, grease, vapors, and smoke generated by cooking equipment is critical for fire prevention and sanitation. Developing an effective airflow plan requires systems and equipment working together to provide adequate ventilation and climate control.

This presentation will go over everything from the hoods, ducts, and exhaust fans required to remove heat and smoke, to the make-up air units required to provide fresh air. The impact equipment and menu play in the design of CKV will also be discussed. From plan review to the capture and containment test and final inspection, you will learn how to verify compliance with the requirements of ASHRAE 154, NFPA 96 and the Mechanical Code.

Instructors: AM – Gary Reinsberg (City of St. Paul)

PM - Mark Lottie (Nardini Fire)

PM - Eric Solie (City of Bloomington)

Friday 2/16/2024

Session 475 **Basic Requirements of Backflow Prevention,** Water Distribution Sizing, Wet Venting, and Circuit Venting

Join our instructor as he reviews the requirements and application of the various backflow prevention assemblies, devices, and methods. Attendees will determine the proper backflow requirements needed for given scenarios. This presentation will also give attendees the opportunity to apply their knowledge of sizing water distribution pipe and both wet vent and circuit vent systems.

Instructor: Randy Lorge (IAPMO)

Session begins at 7:30 am. This is an 8 hr. class. This session is approved by DLI for 8 CE hours.

TRACK 8 – MINNESOTA FOCUS

MONDAY 2/12/2024

AM: Permit Revenue, What You Don't Know, What You Need to Know

Session 481

Code officials and administrative professionals working within and supporting building departments are at the heart of understanding, developing and communicating fee criteria. Oftentimes we find a lack of understanding of the various influencing factors and want to discuss how working together can further advocate for our profession and assure we fulfill our obligation to residents and property owners.

Instructors: Carri Levitski (Rum River) Andy Schreder (Rum River)

PM: Code Administration and Enforcement for Modular **Buildings**

This program is intended for MN code officials and designers of Interstate Industrialized Building Commission (IIBC) Modular Buildings. Attendees will learn to identify the different types of manufactured structures and the roles and responsibilities of the Local Code Official and IIBC Evaluation and Inspection Agency for permitting, plan review, field inspection and corrective actions for IIBC structures.

Instructor: Scott Wheeler (DLI)





INVITES YOU

To Attend the Annual **Membership Meeting**

Wednesday During Lunch

Location to be Announced

TUESDAY 2/13/2024

AM - Part 1: Highlights of the 2024 MN **Commercial Energy Code**

Session 482

This segment highlights revisions to the Minnesota Energy Code so that code officials and designers can quickly focus on key changes in 2024.

Instructor: Greg Metz (DLI)

AM - Part 2: MN Residential Building Code -**Solar Energy Systems**

Residential solar energy systems are growing in popularity as technology improves and as funding programs continue. This program will give a brief explanation of these systems and will also address plan review submittal documents, building code requirements, and review an actual example.

Instructor: Steve Shold (DLI)

PM: 2024 MN Commercial Energy Code Mechanical and **Electrical Provisions**

This presentation will address the commercial HVAC and electrical provisions in the 2024 Minnesota Energy Code, which adopts the ANSI/ASHRAE/IES Standard 90.1-2019 with amendments. It will give an overview of different system types and how the code applies to them. There will also be an introduction to what information should be asked for during the permitting process to assure compliance with the code requirements. The intended audience is mechanical and building inspectors, however this class is also appropriate for plan reviewers, designers, engineers, contractors and others involved with the design, installation and operation of heating, ventilation, air conditioning and electrical systems.

Instructor: John Smith (Independent)

WEDNESDAY 2/14/2024

Chapter 1300 - Essential Strategies in **Code Administration**

Session 483

This full day course will cover the MN Chapter 1300 "administration" as outlined in the Minnesota State Building Code and is for everyone working in building code enforcement. What does the code actually say? Are you following the code?

Instructor: Rick Breezee (Independent)



TRACK 8 - MINNESOTA FOCUS (CONTINUED)

THURSDAY 2/15/2024

Review of MN DWV, Backflow Prevention, Session 484 **Indirect Wastes and Traps-Interceptors Requirements**

Join our instructor as he reviews Sections from Chapters 6-10 of the 2020 Minnesota Plumbing Code. In addition to reviewing specific code requirements from each of these chapters, this presentation will allow time for attendees to apply their knowledge of sizing various drain, waste, and vent system drawings, including but not limited to residential, and light commercial buildings. These activities will also include an overview of commercial kitchen plumbing designs. Attendees will also be quizzed on their knowledge of backflow prevention methods, devices, and assemblies.

Instructor: Randy Lorge (IAPMO)

Session begins at 7:30 am. This is an 8 hr. class. This session is approved by DLI for 8 CE hours.

An investment in knowledge pays the best interest.

-Benjamin Franklin

FRIDAY 2/16/2024

Session 485 V AM: Accessible Means of Egress VS. Accessible Entrances, plus, new Accessibility Rules

Participants will gain an understanding of how to find and track the accessibility requirements for Egress within IBC Section 1009 and compare it to Accessible Entrance requirements. This session will also review new accessibility scoping and design criteria for adult changing facilities, and accessible parking at electric vehicle charging stalls.

Instructor: Karen Gridley (DLI)

PM - Part 1: Residential Building Contractor Licensing and **Enforcement**

This part of the session provides an overview of Minnesota's residential building contractor licensing requirements and DLI's enforcement authority. A summary of recent legislative changes impacting licensing will also be provided. It is designed to encourage attendee participation with time for questions and answers.

Instructor: Sean O'Neil (DLI)

PM - Part 2: State Legislative and Division Updates

This segment provides legislative and division updates that impact municipal building officials and inspection departments. This segment will also provide topic-specific instruction relevant to the industry.

Instructor: Greg Metz (DLI)

The Region III Chapter of ICC

The Board of Directors for the Region III Chapter of ICC has Representatives from each of the Fives States in the Region.

lowa Representatives: Adam Ostert; Gary Hansen; Roger Schemmel (2nd Vice President)

Minnesota Representatives: Kip LaMotte; Pam Christiansen; Silvia Gonzalez (Secretary)

North Dakota Representatives: Todd Johnson; Luke Olson; Christine Rose (President)

South Dakota Representatives: Lauralee Patton; Tom Paisley (Past President); Butch Warrington (Treasurer)

Wisconsin Representatives: Brian Flannery; Nicole Krahn; Scott Satula (1st Vice President)

2024 ICC UPPER GREAT PLAINS REGION III EDUCATIONAL INSTITUTE | FEBRUARY 2024

TRACK	Monday Feb. 12	Tuesday Feb. 13	Wednesday Feb. 14	Thursday Feb. 15	Friday Feb. 16
Track 1 Code Compliance and Professional Development	SESSION 411 Advanced Legal Aspects for Property Maintenance Inspectors Linda Pieczynski (ICC)	SESSION 412 2018 IMPC Overview Cecilia Sevilla (ICC)	SESSION 413 AM – Effective Communication and Customer Service PM – Officer Safety and Field Work Cecilia Muela (Monarch Consulting)	SESSION 414 AM - Rental Programs Orlando Givens (4Leaf) PM - Part 1 Short-Term Rentals/ Marketing PM - Part 2 Marketing Your Code Enforcement Department Pete Roque (4Leaf)	SESSION 415 Applying the Codes to Cannabis Facilities Steve Thomas (ICC)
Track 2 Building: Understand the Basics	SESSION 421 Introduction to the 2018 IBC Gil Rossmiller (Shums Coda) ALSO VIRTUAL	SESSION 422 Fundamentals of I-Codes for Permit Techs Roger Axel (ICC)	SESSION 423 2018 IRC Chapter 3 Gil Rossmiller (Shums Coda)	SESSION 424 Cladding Standards, Sustainability and Exterior Wall System Performance Russell Thornburg (Thornburg Code Services) and Matt Dobson (Vinyl Siding Institute)	SESSION 425 Soils, Footings and Foundations (Chapter 4 & 6 of 2018 IRC) Russell Thornburg (Thornburg Code Services)
Track 3 Building: General Topics	SESSION 431 2018 IRC Performing Residential Plan Reviews John Gibson (ICC)	SESSION 432 2018 IRC Performing Residential Building Inspections John Gibson (ICC) ALSO VIRTUAL	SESSION 433 2018 IBC Performing Nonstructural Plan Reviews (DAY ONE) John Gibson (ICC)	SESSION 434 2018 IBC Performing Nonstructural Plan Reviews (DAY TWO) John Gibson (ICC)	SESSION 435 2018 IBC Performing Commercial Building Inspections John Gibson (ICC)
Track 4 Building: Essentials to Know	SESSION 441 2018 IEBC Essentials Sandra Hyde (ICC)	SESSION 442 2021 IBC Transition from the 2015 IBC Doug Thornburg (ICC)	SESSION 443 2021 IRC Transition from the 2015 IRC Sandra Hyde (ICC) ALSO VIRTUAL	SESSION 444 2021 IBC Accessibility Significant Changes Steve Thomas (Shums Coda) ALSO VIRTUAL	SESSION 445 ASHRAE 90.1 (2019) Gil Rossmiller (Shums Coda)
Track 5 Building: Specific Concerns	SESSION 451 AM – Mass Timber Buildings and the IBC PM – Introduction to Floor, Wall and Roof Framing Ed Lisinski (AWC)	SESSION 452 AM - Roof and Floor Trusses PM - Wall Bracing & Tall Walls Adam Barthel (City of Minneapolis)	SESSION 453 Conventional Wood- Framed Construction Glenn Mathewson (BuildingCodeCollege.com)	SESSION 454 Decks, Down the Load Path Glenn Mathewson (BuildingCodeCollege.com)	SESSION 455 2018 IBC/IFC Assembly Spaces Doug Thornburg (ICC)

Sessions begin at 8 am CT unless otherwise noted.

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TRACK	Monday Feb. 12	Tuesday Feb. 13	Wednesday Feb. 14	Thursday Feb. 15	Friday Feb. 16
Track 6 Multi-Disciplinary: Building and Fire	SESSION 461 Design Advantage – Fire Sprinkler Systems and the IBC/IFC John Swanson (NFSA)	SESSION 462 Sprinkler System Plan Review John Swanson (NFSA)	SESSION 463 2018 IFC Essentials Roger Axel (ICC)	SESSION 464 Protect Your Openings – Fire Door and Fire Window Assemblies Rich Walke (Creative Technology)	SESSION 465 Protecting Penetrations, Joints, and Voids Rich Walke (Creative Technology)
Track 7 Multi-Disciplinary: Mechanical and Plumbing	SESSION 471 IFGC Design, Plan Review, & Inspections Jerry Flanik (ICC)	SESSION 472 2018 IMC Performing Commercial Mechanical Inspections Jerry Flanik (ICC)	SESSION 473 2018 IRC Performing Residential Mechanical Inspections Jerry Flanik (ACS)	SESSION 474 Commercial Kitchen Ventilation Gary Reinsberg (City of St. Paul) Mark Lottie (Nardinie Fire) Eric Solic (City of Bloomington)	SESSION 475 Basic Requirements of Backflow Prevention, Water Distribution Sizing, Wet Venting, and Circuit Venting Randy Lorge (IAPMO)
Track 8 Minnesota Focus	SESSION 481 AM – Permit Revenue, What You Don't Know, What You Need to Know Carri Levitski Andy Schreder (Rum River) PM – Code Administration and Enforcement for Modular Buildings Scott Wheeler (DLI)	SESSION 482 AM - Part 1 Highlights of the 2024 MN Commercial Energy Code Greg Metz (DLI) AM - Part 2 MN Residential Building Code - Solar Energy Systems Steve Shold (DLI) PM - 2024 MN Commercial Energy Code Mechanical and Electrical Provisions John Smith (Independent)	SESSION 483 Chapter 1300 – Essential Strategies in Code Administration Rick Breezee (Independent)	SESSION 484 Review of MN DWV, Backflow Prevention, Indirect Wastes and Traps-Interceptors Requirements Randy Lorge (IAPMO)	SESSION 485 AM - Minnesota Accessibility Karen Gridley (DLI) PM - Part 1 MN Lic & Enforcement Sean O'Neil (DLI) PM - Part 2 MN Legislative Update Greg Metz (DLI)
Special Events	AMBO Membership Meeting		Trade Show ICC Resource Center Region III Chapter Meeting	ICC Resource Center	

Sessions begin at 8 am CT unless otherwise noted.

REGISTER ONLINE at www.iccsafe.org/RegionIII

Early bird pricing ends Monday, 8 January 2024







2024 Annual ICC Upper Great Plains Region III Educational Institute

Acknowledgments, a Bit of History, and Some Thank Yous

An Amazing Two Decades for AMBO

In 2003, a cadre of determined and passionate individuals deliberated tirelessly over how to deliver relevant, quality education to construction-inspection-industry professionals. General sentiment believed them to be crazy dreamers. The group set out to prove otherwise.

The strong-minded, determined individuals formed the Association of Minnesota Building Officials. AMBO struggled through hard-hitting opposition for three years before celebrating the first AMBO Educational Institute in February 2006. The following year, the ICC Region III Board of Directors agreed to allow AMBO to use their name and logo to sponsor the ICC Upper Great Plains Region III Institute.

The ICC Upper Great Plains Region III Institute was originally held at the Northland Inn in Minneapolis. Major renovations at the Northland Inn in 2012 forced the Institute to move. The breath-takingly beautiful Oak Ridge Conference Center in Chaska became a much-loved venue for nine years. In 2021, the Institute moved again to the current location at the Minneapolis Marriott Northwest in Minneapolis. Since the Marriott was previously the Northland Inn, it was a familiar location providing all-suite lodging and increased classroom space under one roof.

We applaud the determination and diligence of those who spearheaded to efforts to initiate this annual event. Thank you, Ron Nienaber, Merwin Larson, Greg Johnson, Gary Yoder, Sid Fossan, Keith Wille, Pat Parsley, Larry Huff, Steve Carson, Duane Lasley, Joe Ryan, and Code Guy Roger Axel.

AMBO Board of Directors

Each year since the beginning, the AMBO Board has continued to sponsor the February Institute. The Board membership changes over the years. The current Board members are Jerry Backlund (Chair); Michele Engberg (Vice Chair); Silvia Gonzalez (Secretary); Joanne Hager (Treasurer); Jim Williamette (Past Chair); Matt Munter (Arrowhead Chapter); Sid Fossan (Northwest Chapter); James Coyle (Southeast Chapter); Doug Fortune (Southwest Chapter); Todd Hoekstra (10K Chapter); Brian Hoffman (At-Large); Liz Riel (At-Large); Gill Rossmiller (At-Large); Nathan Bruhn (At-large); Barb Williams (Web Developer).

Education Planning Committee

Planning for the Institute begins in the spring of each year with barely a break from wrapping-up the February event. In-person meetings every two-or-three weeks for two-or-three months have become virtual meetings. Members of the Education Planning Committee work to determine relevant educational topics and locate quality presenters. Planning Committee members for the 2024 Institute are Adam Ostert, Andy Schreder, Brian Stemwedel, Carri Levitski, Chad Payment, Chad Whiting, Christine Rose, Dave Skallet, Gil Rossmiller, Jason Klema James Coyle, Jerry Backlund, Jim Williamette, Kyle Klatke, Liz Chagolla, Mark Finn, Matt Munter, Michele Engberg, Moria Awuku, Scott Anderson, Sid Fossan, Silvia Gonzalez, and Tom Bakken. Thank you for sharing your knowledge, expertise, and industry contacts.

continued on next page

Partnerships Make it all Possible

It takes extensive teamwork and cooperation to create a successful event such as the February Institute. We recognize the work of many who are involved in the event.

Region III Chapter of ICC

- Iowa Representatives: Adam Ostert; Gary Hansen; Roger Schemmel (2nd Vice President)
- Minnesota Representatives: Kip LaMotte; Pam Christiansen; Silvia Gonzalez (Secretary)
- North Dakota Representatives: Todd Johnson; Luke Olson; Christine Rose (President)
- South Dakota Representatives: Lauralee Patton; Tom Paisley (Past President); Butch Warrington (Treasurer)
- Wisconsin Representatives: Brian Flannery; Nicole Krahn; Scott Satula (1st Vice President)

Liz Chagolla is the ICC point-of-contact for ICC presenters, coordinating the brochure, managing registrations, and much more.

DH

Chad Payment is the DLI point-of contact for DLI education. Josie Steinhoff is the go-to for Minnesota Continuing Education approvals.

Presenters

Each year, our quality education is delivered by exceptional presenters. We appreciate each of them!

Our event planner, Katie and the entire Marriott staff have been wonderful hosts to the event.

Audio-Visual Team

Encore technicians assure quality delivery.

Trade Show

We thank our Trade Show Coordinators, Liz Riel and Silvia Gonzalez, as well as all of the participating vendors and supporters.

Awesome Attendees

And of course, the attendees. This event would clearly not be possible without our attendees and their continuing appreciation for the education and the networking opportunities.

Special Recognition for Scholarship Donation

Andy Schreder of Rum River Construction Consultants approached the AMBO Board with a muchappreciated offer to donate half of his presentation stipend to AMBO to be used to help train and educate those new to becoming an inspector and with the hope that other presenters would follow the lead.

Going Forward

We've come this far. Let's keep it going!

AMBO hopes the February Institute will continue to provide:

- Quality Education for the betterment of the industry as well as for Continuing Education;
- Networking Opportunities with professionals in the construction-inspection industry; and
- Sustainability with break-even financials, positive commentaries, and repeat attendance.

As Code Guy Roger Axel Would Say

"Not bad for a bunch of volunteers!"

Thank you to all who participate in this annual event!

2024 ICC Region III Upper Great Plains Educational Institute

February 12-16, 2024







NOTE: Printed handouts will not be available on-site.

Easy and Convenient to access your Session Materials!

Handouts will be available for download on February 2, 2024.

Visit: Region III Handouts Page

Password: 24region3

Session Handouts are Organized by Track, then Day, then Session Number & Title.

Download and Print to bring to class or to retain for reference. Follow along on your device during the session.

Thank you for your support of AMBO, ICC, and Region III!