# **2023** Conference Education Session Descriptions

## 2024 IBC/IEBC Significant Changes

This session addresses selected significant changes in the 2024 International Building Code (IBC) from the 2021 edition. In addition, a few key changes between the 2021 and 2024 editions of the International Existing Building Code (IEBC) will be covered. The discussion will be general in nature, focusing on those additions, modifications and clarifications that will have an impact on the design, plan review and inspection of buildings regulated by these 2024 I-Codes. Emphasis will be placed on the intent and application of the new and revised code provisions.

## **2024 IRC Significant Changes**

This seminar covers the most significant changes to the 2024 International Residential Code. Each topic selected focuses on the section changed, the significance of the change and how it will likely change dwelling and townhouse design. The course familiarizes building officials, fire officials, plans examiners, inspectors and design professionals with many of the significant changes in the 2024 IRC. It assists code users in identifying the specific code changes that have occurred, and more importantly, understanding the reason behind the change.

# **2024 IFC Significant Changes**

This session addresses selected significant changes in the 2024 International Fire Code (IFC) from the 2021 edition. The discussion will focus on those additions, modifications and clarifications that will have an impact on the design, plan review and inspection of buildings regulated by these 2024 I-Codes. Emphasis will be placed on the intent and application of the new and revised code provisions.

## 2023 NEC

This session will analyze major changes to the National Electrical Code (NEC<sup>®</sup>) for this code cycle, covering the most significant changes to the NEC. It will include interpretations by enforcers of the code. Bringing you illustrations that clearly identify each change and provides an explanation of the change.

## **Application and Administration of the I-Codes**

This course provides a comprehensive review of the Chapter 1 administrative provisions of the International Codes. The provisions found in the various I-Codes are very similar in application, resulting in this course's relevance to any and all of the codes. The basis of this seminar will be those provisions found in the 2021 International Building Code.

# How to be a Better Leader by Practicing Active Listening

The responsibilities of each one of us could vary. Still, we all have shared aspects of teamwork, meetings, planning and organizing the work, managing the day-to-day activities, identifying

potential, and delivering projects. Active listening is essential in our collaboration, meetings, and solving disputes or conflicts.

We listen to obtain information, understand, and share experiences and points of view. Active listening determines ways/suggested solutions to meet all stakeholders' shared goals and provides a good teamwork environment. It also provides good data for critical thinking. Critical thinking includes analysis and evaluation of an issue to make a judgment. Also Identify potentials is critical; one of the essential tools is to allow brainstorming between all team members at all company levels to get general feedback and suggestions that could help modify or enhance some of the processes to improve the outcomes.

All of the above provide the ability to be a great leader by making reasonable decisions, solve a problem, develop alternate solutions, and look for root causes of issues or conflicts.

# **Professional Ethics**

This session explores the challenges and opportunities associated with ethical behavior in modern business behavior and provides practical suggestions for participants to pursue higher ethical standards.

## **Active Shooter**

The security and safety of buildings are the overriding concern when approving plans and inspecting structures. This course explores the unique role building department personnel can play in analyzing buildings in terms of their vulnerabilities in active shooter situations and how the office of code officials can assist law enforcement and first responders during and after an event.

## **Evaluation Reports: Purpose and Criteria**

This session is designed to provide building code officials, design professionals and builders with an overview of the ICC Evaluation Service (ICC-ES) product evaluation program including the importance of verifying compliance of building products with applicable codes and standards. The process for developing evaluation reports and listings to show a building product's compliance to codes and standards will be addressed, and a short demonstration will be given of an ICC-ES tool that helps building code officials, designer professionals and builders find code compliant products.

# Mass Timber and Type IV Construction in the IBC

The 2021 International Building Code (IBC) allows for construction of tall mass timber buildings with larger heights and areas than previously permitted in Types III, IV, and V construction. This course will provide an overview of mass timber which includes any product currently permitted for use in Type IV (heavy timber) construction such as cross-laminated timber (CLT), structural composite lumber (SCL), glued laminated timber (glulam), mechanically laminated decking (aka nail-laminated timber, NLT), and

large section sawn timbers. Learn about provisions first introduced in the 2015 and 2018 IBC for mass timber construction as well as an overview of tall mass timber construction per the 2021 IBC and 2021 International Fire Code.

## The Tiny House

Learn the most important safety features and elements of tiny house planning, construction and administration. The background and the need for tiny houses is included in the presentation in addition to detailed discussion of supplementary/specific provisions for tiny houses based on the International Residential Code (IRC) appendix AQ. Other applicable topics from the IRC and Appendix AQ that are presented include but are not limited to foundations, building safety features (such as room sizes, ceiling heights, sleeping/storage lofts, use of ladders, guards, handrails), plumbing, mechanical, fuel gas, electrical and energy efficiency.

# **Grant Basics for Code Officials**

In recent years the federal government has prioritized the adoption and enforcement of up-to-date building codes by providing hundreds of millions of dollars in federal grants to support activities such as consulting, publications, and training, as well as software and accreditation. Understanding the grant application process is critical towards capturing these opportunities. In this training, you will learn the basics to effectively apply for federal grants. Participants will gain the knowledge and skills necessary to navigate the grant lifecycle, from finding and applying for grants to initial post-award management and compliance. This course is tailored for relevant grants to Code Professionals and is designed and taught by ICC staff.

## **Batteries in the Built Environment**

This course will highlight the changes in the ICC Family of Codes for the 2024 editions. Much of the world is adjusting to batteries in secondary power through new production and storage facilities for batteries. These new facilities are challenging all in the code profession and this course will highlight the major resources availed to the code officials.

## **Commercial Energy 2021 IECC**

This seminar reviews key changes from the 2018 to the 2021 edition of the International Energy Conservation Code<sup>®</sup> (IECC<sup>®</sup>) for commercial projects. This course will assist code officials, plans examiners, inspectors, and design professionals in identifying the specific code changes that have occurred and understanding the reasoning behind the changes. In addition, the presentation will provide a broad overview of the IECC, including scope and application, to provide context to the topics under discussion.

## 2024 IECC Changes and Status

This course will cover the proposed changes in the 2024 IECC. Participants will also learn how the standards development process and a new scope and intent have affected the development of the 2024 IECC.

#### Third Parties and Residential Energy Code Compliance

This course explores the effective use of residential third-party professionals in the design, construction and enforcement processes to achieve compliance with the 2021 International Energy Conservation Code (IECC). Attendees will explore the roles of third parties and the benefits of using these professionals in the code compliance process; discuss the concerns, challenges and successes of third parties from the Code Official's perspective; and explore how HERS Raters are used to verify code compliance while also meeting the needs the jurisdictions they serve. This course will offer best practices and lessons learned with the goal of enhancing the relationship and communication between third parties and Code Officials.

#### Law & Ethics in Code Enforcement

This presentation will address ethical concerns for government employees when dealing with the public, especially regarding First Amendment auditors. It will explain why these individuals invoke the First Amendment by recording government employees. Lastly, it will cover how to avoid being in a situation where a video goes viral on the Internet.

#### **Code Enforcement and IPMC**

This class will have a direct focus on the benefits of working with the IPMC in successful execution of code enforcement programs. Code Enforcement departments have many tentacles that touch on many working departments, and it is essential to understand how to effectively walk cases to compliance with the assistance of the IPMC and minimum life safety requirements at every scope and trade. Discussion will also take place on how to look into adopting this code and the benefits thereof.

#### Permit Tech: Trends, Issues and Importance of Roles

Permitting has had some significant changes in the last few years, it's time to discuss how Permit Techs can continue to adapt and grow in their roles as Code Officials.

#### Trends:

Review

- Issues:
- Paperless Permitting and
  Keeping up with Change
  - Training and Growth Potential

Career vs. Job

- Virtual Counters/Counter Appointments
- Hybrid Work Environment

Importance of Roles:

- The "Face of the Dept"
- Creating Better Customers
- They're a Code Official Too

Bring your questions, your struggles, and let's talk about creating and supporting an environment that encourages and elevates Permit Techs to be your greatest resource.

## Fire Safety in the IBC

People have expectations that when they enter a building, they will be safe from inherent dangers caused by natural or man-made disasters. The International Building Code (IBC) addresses that through five significant sections: code administration and enforcement, building planning, life safety, structural safety, and fire safety. The code is a set of minimum standards to protect and safeguard public health, safety and general welfare. Fire and smoke are the leading causes of death in buildings. Fire can spread rapidly within a building and, in some cases, from building to building. The IBC is designed to limit the spread of fire inside and outside of a building. The IBC protects the structure and occupants from fire by providing both passive and active fire protection. Passive fire protection safeguards the building and occupants from fire by constructing the fire protection into the structure. This is done by protecting the structural frame of the building and constructing fire-resistance-rated construction walls, floors and roofs.

# Increasing Sustainability and Community Resilience Through Water Reuse

During this session we will review existing non-potable onsite water reuse provisions in the IPC and IRC. Provide an overview of the PMG CAC Water Reuse Working group code proposals for the 2027 PMG Codes. Update from the EPA on the Water Reuse Action Plan (WRAP). Updated from the National Blue-Ribbon Commission (NBRC) on effort for indirect and direct potable water reuse.

# Hydrogen Gas and the Built Environment

This session provides an overview of:

- The global advancement of the use of hydrogen gas,
- U.S. Federal Government actions taken to support the hydrogen industry,
- natural gas/hydrogen blended fuel introduction into the built environment,
- resources for building and fire officials for the safe use of hydrogen, and
- current requirements for the installation of gaseous hydrogen systems as regulated by Chapter 7 of the 2021 International Fuel Gas Code (IFGC).

## **Medical Gas**

This session is an introduction to Medical Gas Systems covering basics of source equipment, piping, valves, inlets/outlets, and alarms. A brief discussion and overview of installation, inspection, verification, and maintenance requirements will be included.

# 2024 PMG Significant Changes

This session reviews and analyzes selected significant changes from the 2021 IPC, IMC, IFGC to the 2024 IPC, IMC, IFGC. Discussions will assist code users in identifying the specific code changes that have occurred, and more importantly, understanding the reason behind the change. Finally, it explains those code changes selected due to their frequency of application, special significance or change in application.