

NFCA[®]
National Fireproofing
Contractors Association
WEBINAR
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Dr Gabby Peck, Ph.D., MRSC
Technical Director

OUR MISSION



EDUCATE



ADVOCATE



**ADVANCE THE PASSIVE
FIRE INDUSTRY GLOBALLY**

WHERE YOU'LL SEE US...



WHAT:



**To educate & advocate for the
passive fire industry**

Speak, Write, Advocate & Promote

ICC

CSI

CSC, FFMIA, ON

BOA, ON FMIA

RAIC

NFPA

Centre for Campus Fire Safety

Fire Marshalls

Code officials

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Elevate your fireproofing standards with NFCA's expert resources.

The National Fireproofing Contractors Association (NFCA) has crafted dynamic, industry-consensus Standard Practices and Quality Assurance Procedures to guide the precise application and quality assurance procedures of fireproofing products, such as SFRM and IFRM. These are the industry authority documents, designed to ensure compliance and excellence and uniform industry practices, provide clear, actionable guidelines for contractors and construction professionals to achieve consistent, high-quality installations that meet rigorous safety and performance standards.

Explore the NFCA Approved documents below, essential tools for enhancing building safety and project success.

- [NFCA 100 Standard Practice for the Application of Sprayed Fire-Resistive Material](#)
- [NFCA 200 Field Quality Assurance Procedure for the Application of Sprayed Applied Fire-Resistive Material](#)
- [NFCA 300 Standard Practice for the Application of Intumescent Fire-Resistive Material](#)
- [NFCA 400 Field Quality Assurance Procedure for the Application of Intumescent Fire-Resistive Material](#)

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2025

12/16/2025 - ['What the Structural Fireproofing Discipline Needs to Know about Firestopping Penetrations and Fire-Resistive Joints'](#) with Bill McHugh (FCIA), Carl Fernald (PCI -Tampa), Gus Mancini (Gleeson Powers), and Rich Walke (CTI)

11/11/2025 - ['The Most Commonly Misunderstood Code Requirements for Structural Fire-Resistance: Part II'](#) with Tony Crimi (AC Consulting Solutions), Bill McHugh (NFCA), and Rich Walke (CTI)

09/17/2025 - ['Fireproofing Fluted Metal Decks-to-Beam Connections'](#) with Bill McHugh (NFCA), Carl Fernald (Performance Contracting, Inc.), and Rich Walke (CTI)

08/05/2025 - ['The Most Commonly Misunderstood Code Requirements for Structural Fire-Resistance'](#) with Tony Crimi (A.C. Consulting Solutions), Bill Koffel (Koffel Associates), Bill McHugh (NFCA), and Rich Walke (CTI)

07/15/25 - [Thermal & Ignition Barrier Requirements for Foamed Plastic](#) with John Dalton (Saint-Gobain)

06/17/25 - [Growing the Available Market While Unlocking Carbon Savings in Steel Buildings](#) with Galen Burrell (Saint-Gobain)

04/14/25 - Excellence in Fireproofing Projects - The 2025 NFCA Award of Excellence Winning Projects

03/25/25 - [Fireproofing Materials and Fire-Resistance](#)

02/25/25 - [Fireproofing Inspection](#) with Bill McHugh (NFCA)

01/14/25 - [The ASTM E119, UL 263, and CAN/ULC S101 Fire Test Standards](#) with Rich Walke (CTI).

2024

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Fireproofing Products

Fireproofing protection products protect structural steel framed buildings and are categorized into Sprayed Fire-Resistive Material (SFRM), Intumescent Fire-Resistive Material (IFRM) and Rigid Board Fire Protection. The following information separates products into these several categories and is intended to provide general information about various types of fire protection products.

Manufacturer's information can be easily accessed by clicking on the Manufacturers name in the Manufacturers Section of this web site. Product details are available at the manufacturers website.

- [Sprayed Fire-Resistive Materials \(SFRM\)](#)
- [Intumescent Fire-Resistive Material \(IFRM\)](#)
- [Rigid Board Fire Protection](#)

GET ACCREDITED:



**NFCA online exam
registrations now open for
August '26**



**NFCA IFRM & SFRM Contractor
Accreditation Programs**



**UL Solutions Qualified SFRM
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IAS AC 291 Accreditation Program

OUR EVENTS '26...



02 PFP'CON DUBAI

DUBAI, Dubai World Trade Centre

JAN 12TH TO JAN 14TH



01 PFP CON

Las Vegas, NV

March 30th

to

April 3rd



Bring on '27!





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FRIENDS,
SPONSORS
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BOARD

Welcome to TODAY'S SESSION

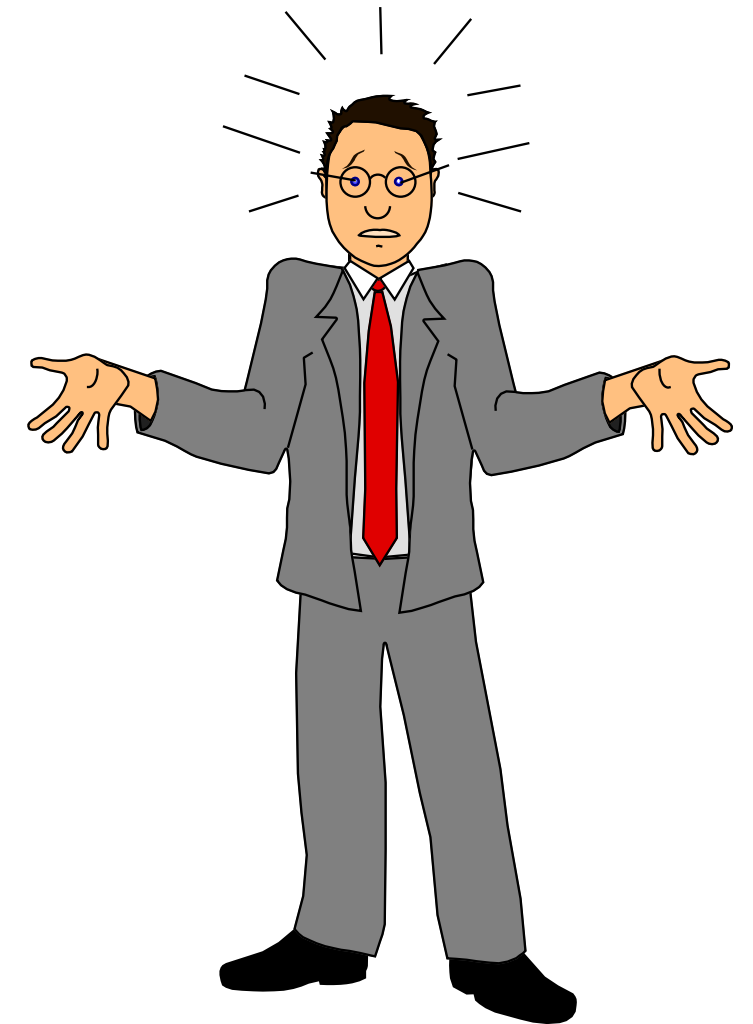
NFCA Fireproofing in the 2027 IBC Update

NFCA FREE Webinar Series

Learn – Network – Grow

August 18, 2026

Bill McHugh, Consultant to the NFCA
Rich Walke, CTI, Consultant to the NFCA



INTRO SLIDES FROM GABBY

OVERVIEW

- Overview of the ICC Code Process
- Overview of the NFPA Code Process
- Discuss the NFCA related Group A and B proposals heard during the ICC 2024 – 2027 Code Development Cycle
- Discuss the NFCA related proposals heard during the NFPA 2027 Code Development Cycle
- Discuss potential future ICC and NFPA code proposals
- Discuss potential future NBCC and NFCC code proposals

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NFCA Technical Code/Standards Committee

- Paul Steele, Chair, Raymond Group, California
- Carl Fernald, Vice Chair, Georgia
- Daniella Lopez, Nevell Group, California
- Don Armand, Donalco Western, Alberta



NFCA work with Others...

AHJ, Consultants, Fire Marshals, & Committee



Overview of the 2027 ICC Code Development Processes

- **ICC Group A 2024**
 - IBC Fire Safety and Egress
 - IFC
 - Others
- **ICC Group B 2025**
 - IEBC
 - IBC General and Structural
 - IRC
 - ADMIN for all I-codes
 - Others
- **ICC “special” activities ongoing**
 - Health care occupancy CAC
 - FCAC and BCAC
- **ICC Group A 2024**
 - Proposal Deadline - January 8, 2024
 - First Committee Hearings – CAH #1 – April, 2024
 - Public Comments Due – July 8, 2024
 - Second Committee Hearing – CAH #2 – October, 2024
- **ICC Group B 2025**
 - Proposal Deadline - January 10, 2025
 - First Committee Hearings – CAH #1 – April/May, 2025
 - Public Comments Due – July 15, 2025
 - Second Committee Hearings – CAH #2 – October, 2025
- **Combined Group A & B Public Comment Hearings –**
 - April 19-24, 2026
- **Online Governmental Consensus Voting**
 - May 8-22, 2026
- **ICC Appeals, Board of Directors Vote**
- **PUBLISH**

Overview of the 2027 ICC and 2027 NFPA Code Development Processes

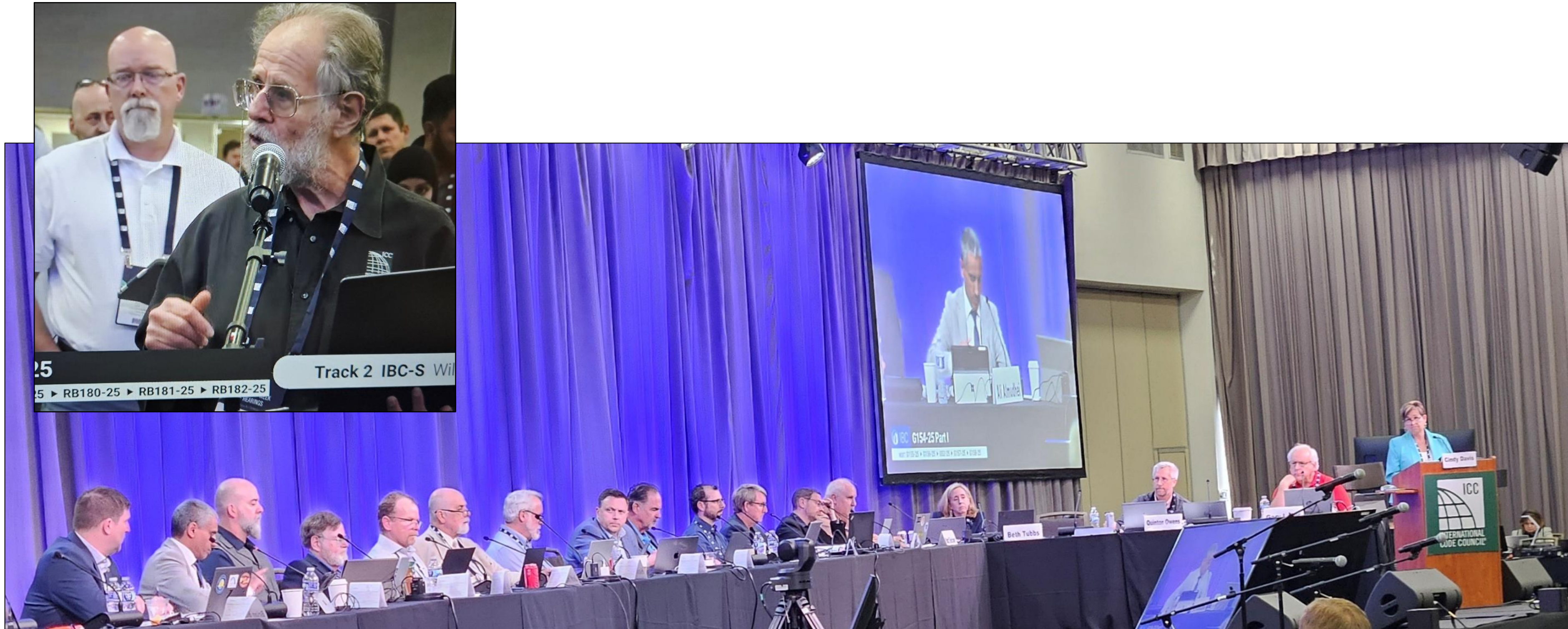
- **NFPA 2027**

- 101 / 5000
- 221 / 1

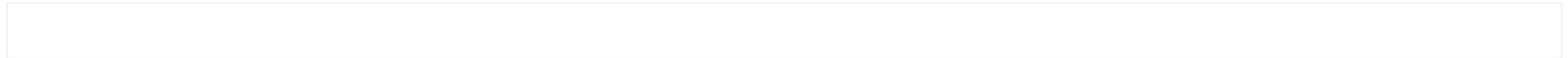
- **NFPA 101/5000/221/1 2027**

- Public Input Deadline – June 3, 2025 / June 3, 2025 / June 3, 2025 / April 24, 2025
- NFPA 1 First Draft Meetings – June, 2024
- NFPA 101/5000/221 First Draft Meetings – July, 2024
- Public Comment Deadline – June 3, 2025 / June 3, 2025 / June 3, 2025 / April 24, 2025
- NFPA 1 Second Draft Meetings – June, 2025
- NFPA 101/5000/221 Second Draft Meetings – July, 2025
- NFPA 101/5000/221 Ballot – November, 2025
- **PUBLISH**

ICC Building & Fire Code Development Process



2027 International FIRE Code Proposals Heard during the 2024 – 2027 Code Development Cycle



2027 – Key Issues/Proposals

- **F89 – Resistant vs RESISTIVE**
- **F90 – Patching SFRM and IFRM**
- **F91 – Annual Visual Inspections of “other” fireproofing products**

F89-24 – Changes Resistant to RESISTIVE

- **IFC 2027 – F89-24**
 - **Proponent: Bill McHugh, NFCA**
- Updates terminology in IFC Section 708.1
 - Sprayed Fire-Resistant Resistive Materials
 - Intumescent Fire-Resistant Resistive Materials
- New terminology is consistent with changes made in the 2024 IBC
 - **Approved as Submitted @ CAH #1**
- **No Comments**
- **Final Resolution – Approved as Submitted**

F90-24 – Patching Fireproofing – Follow Listing

- **IFC 2027 – F90-24**
 - **Proponent: Bill McHugh, NFCA**
- **708.2 Repair of Spray Fire-Resistant Materials and Intumescent Fire-Resistant Materials.** Where damaged, materials used to protect columns, beams and horizontal assemblies shall be repaired, replaced or restored in accordance with the listing, the manufacturer's repair instructions and with the same materials and thicknesses used in the listing. Where the listing is not known, repairs shall be made with the same material type and thickness that exists.
- **Approved as Submitted @ CAH #1 --- BUT???**
- **Comment #1 – Kevin Scott, Code Consultant – Requests Approved as Modified by Committee**

F90-24 – Patching Fireproofing – Follow Listing Cont.

- **IFC 2027 – F90-24**

- **708.2 Repair of sprayed ~~fire-resistant~~ fire-resistive materials and intumescent ~~fire-resistant~~ fire-resistive materials.** ~~Where damaged, materials~~ Materials used to protect columns, beams and horizontal assemblies shall be securely bonded to the substrate without evidence of deterioration or damage, or delamination, cracks or voids through which the substrate is exposed. Where the original material and listing is known or can be identified, such damage shall be repaired, replaced or restored in accordance with to the requirements of the listing in accordance with the manufacturer's repair instructions. and with the same materials and thicknesses used in the listing provided the original material is known or can be identified. Where the listing original material or listing is not known or is no longer available, repairs shall be made with the same material type and thickness that exists as originally used.

- **Approved as Modified by Committee @ CAH #2**

- **No Public Comments**

- **Final Resolution – Approved as Modified by Committee at CAH #2**

F90-24 – Patching Fireproofing – Follow Listing Cont.

- **Kevin Scott, KH Scott Assoc comment - Fire Marshal 'Field' Perspective**
-Where the original material and listing is known or can be identified, such damage shall be repaired, replaced or restored in accordance with the listing and the manufacturer's repair instructions.
- Where the original material or listing is not known or is no longer available, repairs shall be made with the same material type and thickness as originally used
- NFCA NOTES:
 - What material to patch with in NEW CONSTRUCTION?
 - What material to patch with in EXISTING BUILDINGS?

F91-24 – Annual Visual Inspection

- **IFC 2027 F91-24 –**
 - Proponent: Bill McHugh for NFCA
- **708.1 Maintaining protection.** Where required when the building was originally permitted and constructed, spray fire-resistant materials, and intumescent fire-resistant materials and other materials used to provide fire-resistance protection, shall be visually inspected to verify that the materials do not exhibit exposure to the substrate.
 - Approved as Submitted @ CAH #1
- **No Comments**
- **Final Resolution – Approved as Submitted**
- **DIRECTS ANNUAL VISUAL INSPECTION...IN SECTION 701.6**

2027 International Codes

**NFCA related Group A & B Code Proposals Heard
during the 2024 – 2027 Code Development Cycle**



2027 – Key Issues/Proposals

- **FS2 – Restrained & Unrestrained,
AISC/Steel - NRMCA/Concrete**
- **FS3 – Extension of Data**
- **FS10 – Attachments**
- **FS82, FS84, FS85, FS90 – Reference to Industry documents**
- **G66, G116 – 3 hour FRR parking garages, All – Res.**
- **G119, G120, G121 – Occupiable Roofs**
- **G123 – 20' Rule, Columns**
- **S2, S4, S5 – Fireproofing Inspection Standards**

FS2-24 – Restrained/Unrestrained for Concrete Construction

- **IBC 2027 – FS2-24**
 - Proponent: Steve Szoke, ACI, & Shamim Rashid-Sumar, NRMCA
- 703.2.1.3 Restrained classification
 - **Exception:** Unless otherwise determined by the registered design professional, concrete girders, beams, and slabs connected to structural concrete framing or structural concrete walls in accordance with **ACI 318** shall be considered restrained. Restrained concrete construction shall be identified on the construction documents.
- **Approved as Submitted @ CAH #1**

FS2-24 – Restrained/Unrestrained for Steel Construction Cont.

- **IBC 2027 – FS2-24**
 - Comment #1 – Bonnie Manley, AISC
- 703.2.1.3 Restrained classification....Exceptions:
 2. Unless otherwise determined by the registered design professional, cast-in-place or prefabricated concrete floor or roof construction secured to structural steel framing members, and individual structural steel beams and girders that are welded or bolted to integral framing members, shall be considered restrained construction in accordance with AISC 360, Appendix 4, Section 4.3.3.
- **No Action at CAH #2**

FS2-24 – Restrained/Unrestrained for Steel Construction Cont.

- **IBC 2027 – FS2-24**
- AISC proposal refers to AISC 360, Appendix 4, Section 4.3.3.
 - **3. Restrained Construction**
 - For floor and roof assemblies and individual beams in buildings, a restrained condition exists when the surrounding or supporting structure is capable of resisting forces and accommodating deformations caused by thermal expansion throughout the range of anticipated elevated temperatures. Cast-in-place or prefabricated concrete floor or roof construction secured to steel framing members, and individual steel beams and girders that are welded or bolted to integral framing members, shall be considered restrained construction.
- **Will AISC 360 stay the same....or change...CONSENSUS IS??**
- **NFCA attends COMMITTEE meetings, but we just have one vote!**

FS2-24 – Restrained/Unrestrained – Concrete –

NFCA Public Comment for PCH Cont.

- **IBC 2027 – FS2-24**
 - Exception:
 - ~~Unless otherwise determined by the registered design professional,~~ Concrete girders, beams, and slabs connected to structural concrete framing or structural concrete wall shall be considered unrestrained construction unless declared restrained by the Registered Design Professional in accordance with **ACI 318 and ASTM E119, or ACI 318 and UL 263**, and approved by the code official. ~~shall be considered restrained.~~ Restrained concrete construction shall be identified on the *construction documents*.
- **Adds ACI/PCI Documents**
- **Keeps E119/UL 263**
- **Keeps Unrestrained as default**
- **Public Comment Disapproved at PCH**

FS2-24 – Restrained/Unrestrained – Steel –

- **AISC Public Comment for PCH Cont.**
IBC 2027 – FS2-24
 - Exception:
 - Unless otherwise determined by the registered design professional, cast-in-place concrete floor or roof construction secured to structural steel framing members and individual structural steel beams and girders that are welded or bolted to primary or secondary structural framing members designed in accordance with Section 2202 shall be considered restrained construction in accordance with AISC 360, Appendix 4, Section 4.3.3. Restrained concrete construction shall be identified on the *construction documents*.
- **Adds AISC Document**
- **Deletes E119/UL 263**
- **Makes Restrained the default**
- **Public Comment Disapproved at PCH**

FS2-24 – Restrained/Unrestrained – Steel –

- **NFCA** Public Comment for PCH Cont.
IBC 2027 – FS2-24
 - 1. CONCRETE Exception for Restrained...stays
 - 2. Cast-in-place or prefabricated concrete floor or roof construction secured to structural steel framing members and individual structural steel beams and girders that are welded or bolted to integral framing members shall be considered unrestrained construction unless declared restrained by the Registered Design Professional in accordance with AISC 360, Appendix 4, Section 4.3.3 and ASTM E119, or AISC 360 Appendix 4 Section 4.3.3 and UL 263.
- **Adds AISC Document**
- **Keeps E119/UL 263**
- **Keeps Unrestrained as default**
- **Public Comment Disapproved**
- **Final Resolution of FS2-24– As Submitted, R Concrete Only**

FS3-24 – Extension of Data – E119 / E2032

- **IBC 2027 – FS3-24**

- Proponent: Marcelo Hirschler, Code Consultant:

- **703.2.2 Analytical methods.** The fire resistance of building elements, components or assemblies established by an analytical method shall be by any of the methods listed in this section, based on the fire exposure and acceptance criteria specified in ASTM E119 or UL 263.

- 1. – 3. Unchanged

- 4. Extension of fire resistance rating data obtained from tests in accordance with ASTM E119 or UL 263 for beams, floor and roof assemblies, columns, walls, and partitions, based on the principles contained in ASTM E2032.

- 5. – 6. Unchanged

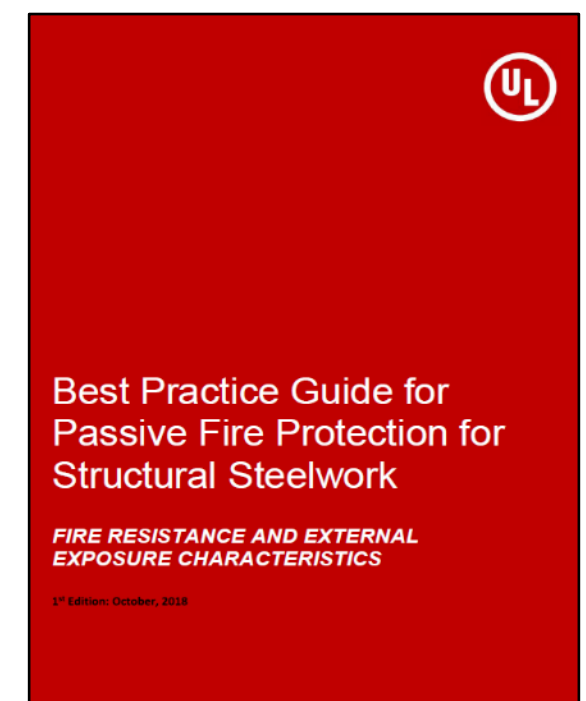
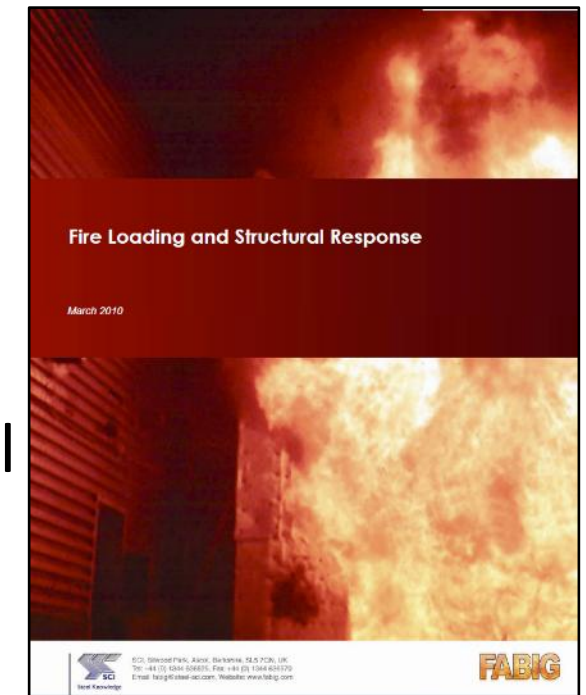
FS3-24 – Extension of Data – E119 / E2032 Cont.

- **IBC 2027 – FS3-24**
 - Approved as Submitted @ CAH #1
- **No Comments**
- **Final Resolution – Approved as Submitted**

FS10-24 – Attachments – NFCA

Did IBC 2024 Cover this?? YES

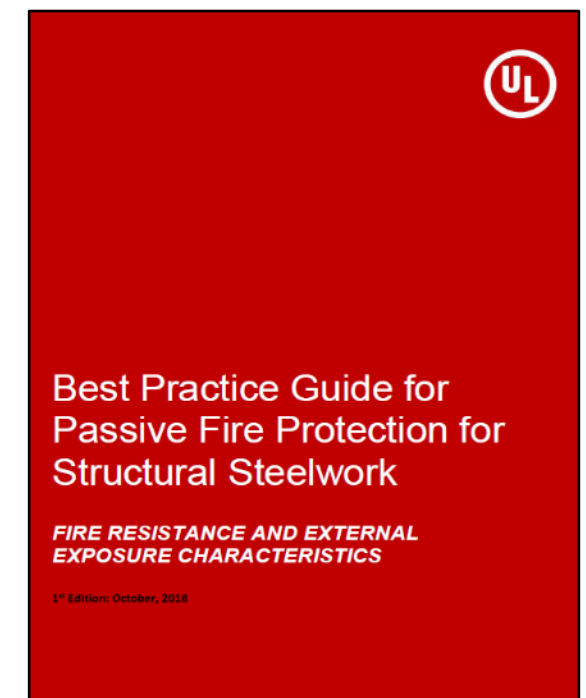
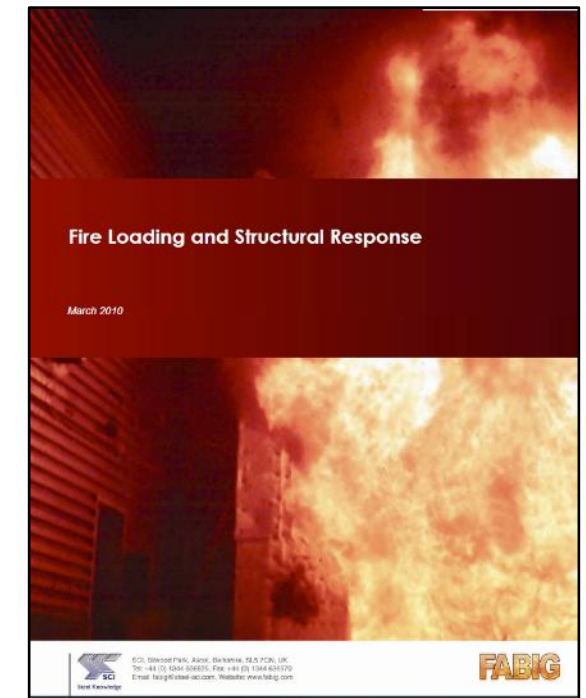
- **IBC 2027 – FS10-24**
 - Proponent: Rich Walke for NFCA
- **Adds size threshold for attachments requiring protection**
- 704.5.1 Secondary attachments to structural members. Where primary and secondary structural steel members require fire protection, any additional structural steel members having direct connection to the primary structural frame or secondary structural member, and having a cumulative unprotected footprint greater than 4.65 square inches (3,000 mm) per 3 linear feet or per linear meter of primary or secondary steel, shall be protected with the same fire resistive material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 18 inches (305457 mm), or shall be applied to the entire length where the attachment is less than 12 18 inches (305457 mm) long. Where an attachment is hollow and the ends are open, the fire-resistive material and thickness shall be applied to both exterior and interior of the hollow steel attachment.



FS10-24 – Attachments – NFCA

Did IBC 2024 Cover this??

- **IBC 2027 – FS10-24**
 - NFCA Requested Disapproval @ CAH #1
- **One Comment (NFCA) – Requested Approved as Submitted**
 - NFCA Requested No Action @ CAH #2 (CAH #1 decision stands)
- **One Public Comment (NFCA) – Requested Approved as Submitted**
 - NFCA Requested Disapproval at PCH
- **Final Resolution of FS10-24 – Disapproved**
- **AISC 360 provides Definitions for *Structural Steel***

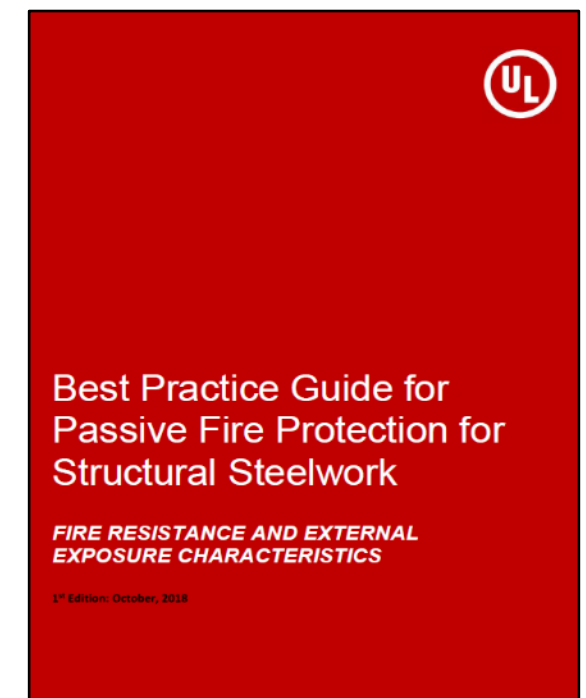
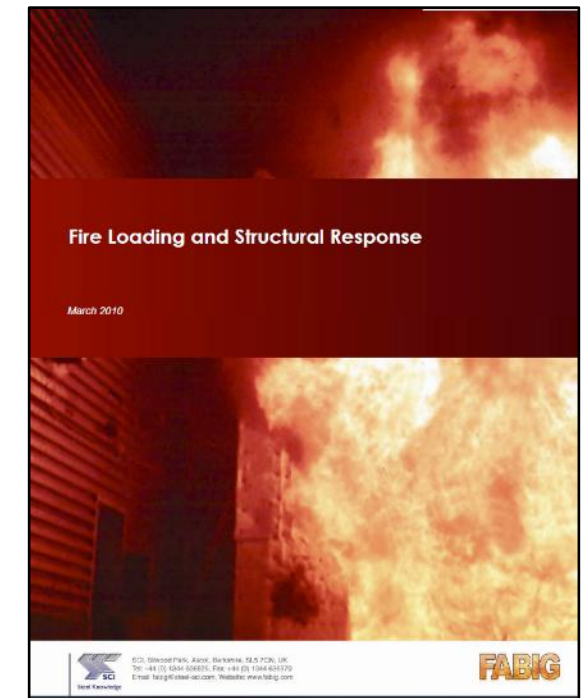


FS10-24 – Attachments – NFCA

Did IBC 2024 Cover this??

AISC 2.1. Definition of Structural Steel - *Structural steel* shall consist of the elements of the structural frame that are shown and sized in the structural *design documents*, essential to support the design loads and described as:

- *Anchor rods* that will receive *structural steel*.
- Base plates, if part of the *structural steel* frame.
- Beams, including built-up beams, if made from *standard structural shapes* and/or plates.
- Bearing plates, if part of the *structural steel* frame.
- Bearings of steel for girders, trusses or bridges.
- Bracing, if permanent.



FS10-24 – Attachments – *AISC Code of Practice*

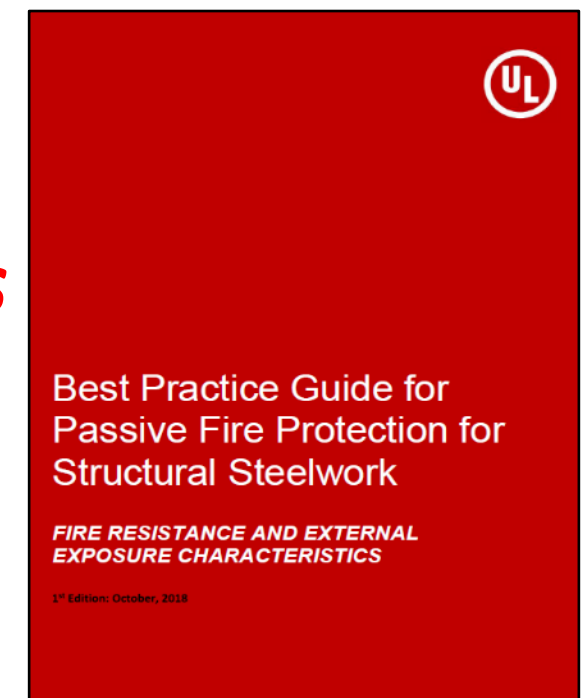
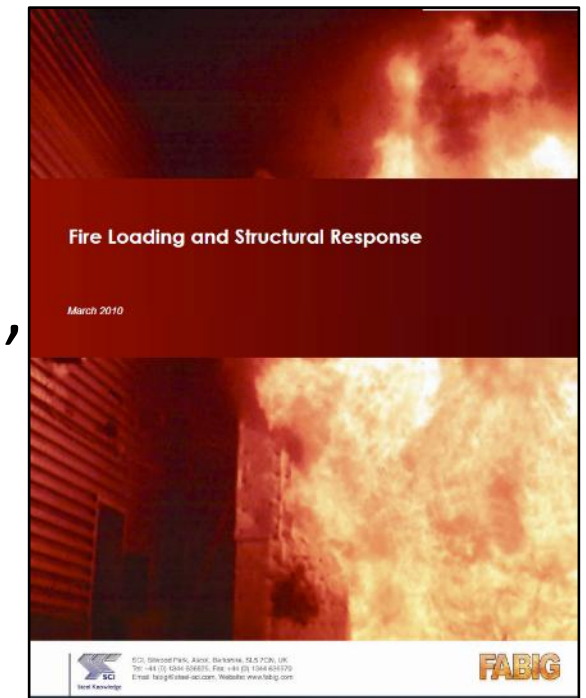
.....**essential to support the design loads and described as:**

- Canopy framing, if made from standard *structural shapes* and/or plates. Columns, including built-up columns, if made from *standard structural shapes* and/or plates.
- *Connection* materials for framing *structural steel* to *structural steel*.
- Crane stops, if made from *standard structural shapes* and/or plates.
- Door frames, if made from *standard structural shapes* and/or plates and if part of the *structural steel* frame.
- Edge angles and plates, if attached to the *structural steel* frame or steel (open-web) joists.
- Embedded *structural steel* parts, other than bearing plates, that will receive *structural steel*.
- **Key is Structural Steel Definition....**

FS10-24 – Attachments – NFCA

Did IBC 2024 Cover this?? YES, SO FAR!

- **IBC 2027 – FS10-24**
- **NFCA Task Force – 10 Monthly Virtual Meetings**
 - Carl Fernald, Paul Steele, Matt Stephenson, Steve Winston, Rich Walke, Bill McHugh, Board Members, Many Manufacturer Members
 - Rich Walke @ AISC TG8 Meeting, June 13, 2024
 - Based on research from UL (UK) and FABIG Tech Note 11 (UK 2010)
- ***Basic Premise – The larger the attachment, the more impact it has on the structural element.***
- ***Where is the threshold? Is ICC 2024 the Solution? Is FS10-24 the Solution? Is more Research needed? Perhaps Fire Modeling? Perhaps Fire Testing?***
- ***Does AISC Code of Practice Definition of Structural Steel cover this???***



FS82-24 – Add Reference to ANSI/AWC FDS

- **IBC 2027 – FS82-24**
 - Proponent: Ed Lisinski, AWC
- Prescriptive Fire Resistance
- TABLE 721.1(2) RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS
- TABLE 721 (3) TABLE 721.1(3) MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS
 - r. Fire-resistance-rated assemblies, as prescribed in the ANSI/AWC FDS, shall be permitted.
- Adds new Standard: ANSI/AWC FDS-2024: Fire Design Specification (FDS) for Wood Construction
 - Approved as Submitted @ CAH #1

FS82-24 – Add Reference to ANSI/AWC FDS Cont.

- **IBC 2027 – FS82-24**
- **No Comments**
- **Final Resolution – Approved as Submitted**

FS84-24 – Adds Reference to ACI/TMS 216.1 and PCI 124

- **IBC 2027 – FS84-24**
 - Proponents: Steve Szoke, ACI, & Shamim Rashid-Sumar, NRMCA
- **721.1 General. Prescriptive Fire Resistance**
 - **721.1.1 Concrete.** Prescriptive details of fire resistance-rated concrete building components shall comply with Section 721.1, **ACI/TMS 216.1, or PCI 124.**
 - **721.1.2 Masonry.** Prescriptive details of fire resistance-rated masonry building components shall comply with Section 721.1 or **ACI/TMS 216.1.**
 - **Approved as Submitted @CAH #1**
 - **No Comments**
 - **Final Resolution – Approved as Submitted**

FS85-24 – SFRM and IFRM Thicknesses Based on Analytical Methods

- **IBC 2027 FS85-24**
 - Proponent: Bonnie Manley, AISC
- Section 722 Calculated Fire Resistance
 - 3. Steel assemblies and composite steel and concrete assemblies shall be permitted in accordance with AISC 360 Appendix 4, Section 4.3 ~~Chapter 5 of ASCE 29~~.

NOTE: AISC 360 Section 4.3 includes Testing, Calculating SFRM and IFRM Thicknesses and advanced analysis methods

- NFCA's Bill McHugh testified in opposition to FS85 at CAH #1
- **Approved as Submitted @ CAH #1**
- **One Comment (NFCA w/AISC Support)**

FS85-24 – SFRM and IFRM Thicknesses Based on Analytical Methods Cont.

- **IBC 2027 – FS85-24**
- Comment #1 – NFCA's Proposal to Clarify....
 - Exception: Establishing equivalency to the standard fire-resistance rating using the advanced methods of analysis of AISC 360 Appendix 4, Section 4.2 in combination with the fire exposure specified in ASTM E119 or UL 263 as the design-basis fire, as permitted in AISC 360 Appendix 4, Section 4.3.1, shall be in accordance with the requirements of Section 104.2.3.
- **Approved as Modified @ CAH #2**
- **No Public Comments**
- **Final Resolution – Approved as Modified @CAH #2**

FS90-24 – Composite Structural Steel and Concrete Columns, Beams and Girders

- **IBC 2027 FS90-24 – IN CALCULATED FIRE-RESISTANCE SECTION**
– Proponent: Bonnie Manley, AISC
- **722.5.3 Composite Structural Steel and Concrete Columns.** The fire-resistance rating of structural steel columns acting compositely with concrete (filled or encased) shall be permitted to be based on the size of the composite member and concrete protection in accordance with [AISC 360, Appendix 4, Section 4.3.2b.](#)
- **722.5.4 Composite and Noncomposite Structural Steel I-shaped Beams and Girders.** The fire-resistance rating of composite or noncomposite structural steel I-shaped beams and girders shall be permitted to be based on the size of the element and the type of protection provided in accordance with [AISC 360, Appendix 4, Section 4.3.2c.](#)

FS90-24 – Composite Structural Steel and Concrete Columns, Beams and Girders Cont.

- **IBC 2027 – FS90-24 – IN CALCULATED FIRE-RESISTANCE SECTION**
- **722.5.5 Concrete Floor Slabs on Steel Deck.** The fire-resistance rating of composite concrete floor slabs on steel deck shall be permitted to be determined in accordance with AISC 360, Appendix 4, Section 4.3.2f.
- **722.5.6 Composite Plate Shear Walls.** The fire-resistance rating for unprotected composite plate shear walls shall be permitted to be determined in accordance with AISC 360, Appendix 4, Section 4.3.2g.
 - Approved as Submitted @ CAH #1
- **No Comments**
- **Final Resolution – Approved as Submitted**

G66-25 – 4 Hour Parking Garage Floors / Walls

- **IBC 2027 – G66-25**
 - Proponent: Bill McHugh for NFCA
- Original Proposal requested 4 hr horizontal and vertical separations between parking garages and residential occupancies
- **Much Debate @ CAH #1 – Committee provided guidance for Comments**
 - Waiting on NFPA Research Data – Phase 3 Fire Tests
 - Is a 4 hr rating necessary?
 - **Committee Support from NFSA....**
 - **Disapproved @ CAH #1**
- **Comment #1 – Bill McHugh, NFCA – Requests Approved as Modified....**
 - Reduces rating requirement from 4 to 3 hrs
 - **Disapproved @ CAH #2** – Still waiting for NFPA Research Data
- **Public Comment #1 – Bill McHugh for NFCA – Requests Approved as Modified by Public Comment**
 - Reduces rating requirement from 4 to 3 hrs
 - **Disapproved @ PCH** – Still waiting for NFPA Research Data
- **Final Resolution – Disapproved**

G116-25 – 4 Hour Rated RESIDENTIAL Parking Garage Floors / Walls

- **IBC 2027 – G116-25**
 - Proponent: Bill McHugh for NFCA
- Original Proposal requested 4 hr horizontal and vertical separations between parking garages and residential occupancies
- **Much Debate @ CAH #1 – Committee provided guidance for Comments**
 - Waiting on NFPA Research Data – Phase 3 Fire Tests
 - Is a 4 hr rating necessary?
 - **Disapproved @ CAH #1**
- **Comment #1 @CAH2 – Bill McHugh for NFCA – Requests Approved as Modified**
 - Reduces rating requirement from 4 to 3 hrs⁵²
 - **Disapproved @ CAH #2** – Still waiting for NFPA Research Data
- **Public Comment #1 – Bill McHugh for NFCA – Requests Approved as Modified...**
 - Reduces rating requirement from 4 to 3 hrs
 - **Disapproved @ PCH**
 - Committee quiet, same issue as G66-25
 - Still waiting for NFPA Research Data
- **Final Resolution – Disapproved**

G119-25 – Occupiable Roofs, Table 601

Footnote b - 20' Rule

- **IBC 2027 – G119-25**
 - Proponent – Rich Walke for NFCA
- Prohibits Use of 20' Rule When Roof is Occupiable
- **Much Debate @ CAH #1 – Committee provided guidance for Comments**
 - Committee – “Limit this to the area of the Occupiable Roof”
 - **Disapproved @ CAH #1**
- **Comment #1 – Rich Walke Requests As Modified**
 - Limits rated area to structural bay beneath occupiable area of roof
 - **No Action @ CAH #2** – People will be off roof before non-rated roof would be breached

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G119-25 – Occupiable Roofs, Table 601

Footnote b - 20' Rule Cont.

- **IBC 2027 – G119-25**
- **Public Comment #1 – Rich Walke for NFCA – Requests Approved as Modified by Public Comment**
 - Limits rated area to structural bay beneath occupiable area of roof
 - **Disapproved @ PCH** – People will be off roof before non-rated roof would be breached
- **Final Resolution – Disapproved**

G120-25 – Occupiable Roofs – Table 601 – Multi-story

- **IBC 2027 – G120-25**
 - Proponent: Rich Walke for NFCA
- Rating of Occupiable Roof equals rating of Floor Below
- Same Debate as with G119-25 @ CAH #1 – Committee provided guidance for Comments
 - Committee – “Limit this to the area of the Occupiable Roof”
 - Disapproved @ CAH #1
- **Comment #1 – Rich Walke for NFCA – Requests Approved as Modified**
 - Limits area to structural bay beneath occupiable area of roof
 - **No Action @ CAH #2** – People will be off roof before non-rated roof would be breached

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G120-25 – Occupiable Roofs – Table 601 – Multi-story Cont.

- **IBC 2027 – G120-25**
- **Public Comment #1 – Rich Walke for NFCA – Requests Approved as Modified by Public Comment**
 - Limits rated area to structural bay beneath occupiable area of roof
 - **Disapproved @ PCH** – People will be off roof before non-rated roof would be breached
- **Final Resolution – Disapproved**

G121-25 – Occupiable Roofs – Table 601 – Single Story

- **IBC 2027 – G110-25**
 - Proponent: Rich Walke for NFCA
- Require 1 hour rating on Occupiable Roofs on single story buildings
- **Same Debate as with G119-25 @ CAH #1 – Committee provided guidance for Comments**
 - Committee – *“Limit this to the area of the Occupiable Roof”*
 - This would require bearing walls to be rated
- **No Comments**
- **Final Resolution – Disapproved**

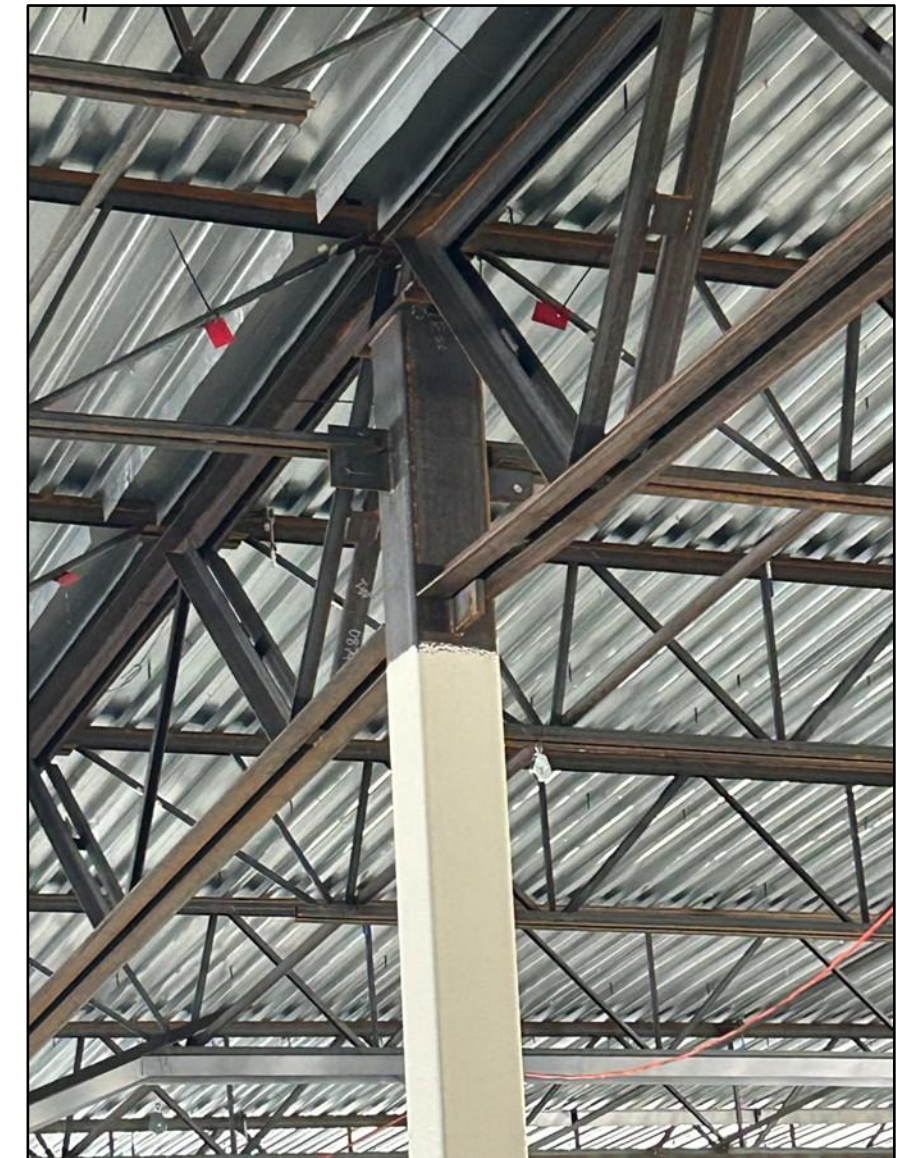
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G123-25 – Modify 20 Ft Rule to Remove Need to Protect Columns Above a 20 ft Height

- **IBC 2027 – G123-25**
 - Proponent: Jeff Grove, Coffman Engineers
- Modifies Table 601, Footnote b to remove requirement to protect columns above a 20 ft Elevation
- **Much Debate @ CAH #1**
 - NFCA challenged logic and impact of unprotected columns
 - **Disapproved @ CAH #1**
- **Comment #1 – Jeff Grove, Coffman Engineers – Requests Approved as Modified**
 - Cleans up language of original proposal
 - **Approved as Modified by Committee at CAH #2**

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G123-25 – Modify 20 Ft Rule to Remove Need to Protect Columns Above a 20 ft Height Cont.

- **IBC 2027 – G123-25**
- Public Comment #1 – Jeff Grove, Coffman Engineers – Requests Approved as Modified by Committee at CAH #2
- Public Comment #2 – Gabby Peck – Requests Disapproval
 - NFCA testified on efficacy of proponent's fire modeling
 - **Approved as Modified by Committee at CAH #1 @ PCH**
 -
- **Final Resolution – Approved as Modified by Committee at CAH #2**

S2-25, S4-25, S5-25 – NFCA Special Inspection Proposals

- **ICC 2027 – S2-24, S4-24 & S5-24**
 - Proponent: Bill McHugh for NFCA
- **Requested inclusion of new Fireproofing Inspections Standards**
 - **S2-24** – SFRM Inspection Standard – **Adds new ASTM Standard E3431.**
 - Deletes prescriptive language
 - **S4-24** – Fireproofing Board & Wrap Materials Inspection Standard – **Adds E3430**
 - **S5-24** – IFRM Inspection Standard – **Add new ASTM Standard E3432.**
 - Deletes AWCI 12-B

S2-25, S4-25, S5-25 – NFCA Special Inspection Proposals Cont.

- **ICC 2027 – S2-24, S4-24 & S5-24**
 - Disapproved @ CAH #1 – Standards not yet published
- **One Comment (NFCA) each – Requested Approved as Submitted**
 - No Action @ CAH #2 (CAH #1 decision stands) – Standards not yet published
- **One Public Comment (NFCA) each – Requested Approved as Modified by Public Comment**
 - Disapproved @ PCH – Issues with new Standards
- **Final Resolution of each Proposal - Disapproved**

ICC Code Development Summary

- **Code Seems to be Optimizing Cost of Construction**
 - Adding Fire-Resistance - “Prove It Works”
 - Deleting Fire-Resistance - “Prove it’s Needed”
- **Committees Looking for**
 - Data
 - Strong supporting statements
 - Life safety risks



2027 NFPA 101 / 5000

NFCA Related **Proposals Resolved at First and Second
Draft Meetings**



NFPA - Methods of Determining Fire Resistance Ratings

- **Public Comments 38, 39 & 59 – NFPA 101-2024 – Second Revision**
 - Proponent: Bonnie Manley, AISC; Bill McHugh, NFCA
- 8.2.4.5 Where calculations are used to establish the fire resistance rating of structural steel assemblies and composite steel and concrete assemblies, the provisions of AISC 360, *Specification for Structural Steel Buildings*, Appendix 4, Section 4.3 shall be permitted.
- Similar change made in NFPA 5000-24
- Related item pertaining to advance analytical methods remains unresolved.
- Compromise language similar to that developed at ICC under FS85-24 agreed to at Second Draft Meeting

NFCA's Watch List

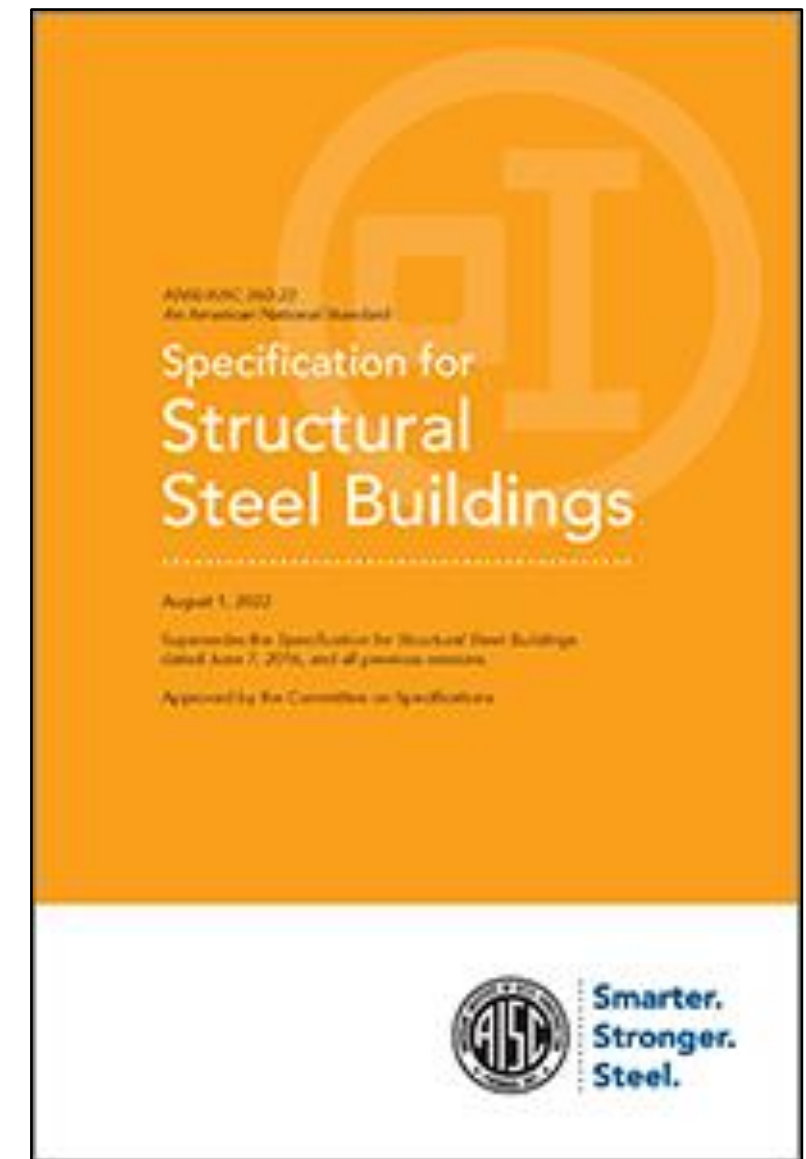
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NFCA's Watch List – INDUSTRY DOCUMENTS

Wood / Steel / Concrete Industries

- Strategic move by all three structural building element industries, to reference:
- **Wood – AWC / Fire Design Specification**
- **Steel – AISC 360 Specification**
- **Concrete – ACI 216 / PCI 318 Concrete**
- Consensus documents???
- Whose Consensus???



NFCA's Watch List – Electric Vehicles – EV's

- **IBC 2027**

- G10-25 – Definition for EV Chargers – **Disapproved @ CAH #1**
- G11-25 – EV Charging Space – **Disapproved @ CAH #1**
- G12-25 – EV Charging Station – **Disapproved @ CAH #1**
- G13-25 – Electric Vehicle Supply Equipment – **Disapproved @ CAH #1**
- G57-25 – Redefines EV Charging Stations, Vehicle Power Export – **Approved as Modified @ CAH #1**
- G58-25 – EV Charger Requirements – **Disapproved @ CAH #1**

- **No comments submitted on any of these proposals**

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- **Final Resolution – As stated above**

NFCA's Watch List – Sprinklers

- **IBC 2027**
- G63-25 – Adds Sprinklers to Open & Closed Parking Garages – Bob Davidson – **Approved as Submitted @ CAH #1**
 - No Comments received
 - **Final Resolution – Approved as Submitted**
- G108-25 – Sprinklers over benches & bleachers
 - Jeff Grove – **Approved as Modified @ CAH #1**
 - No comments received
 - **Final Resolution – Approved as Modified @ CAH #1**

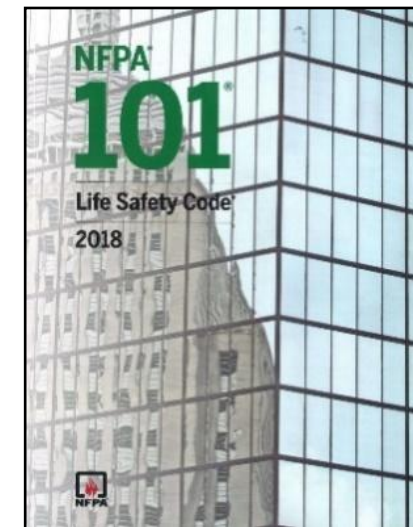
2030 ICC and NFPA Code Development Possible NFPA Codes Proposals

Special Inspections – Quality Assurance ACTION

- Add Special Inspection to NFPA 101 like NFPA 1's??
 - Special Inspection mandated in NFPA 1
 - Special Inspection MENTIONED in NFPA 101 Annex
 - Special Inspection not mandated in NFPA 101 for any building feature



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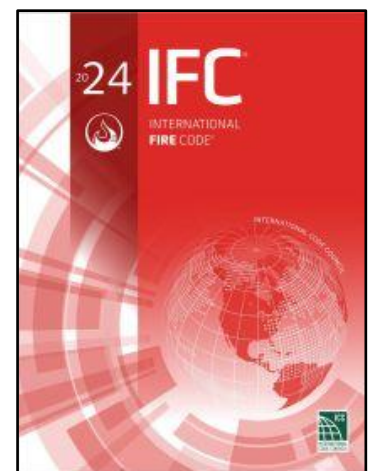


Special Inspections – Quality Assurance ACTION

- **Add Special NEW Fireproofing Inspection Standards to IBC?**
 - SFRM
 - IFRM
 - Boards & Wraps

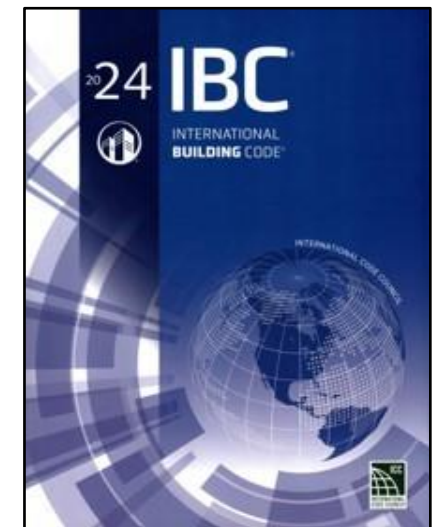
Inventory – IFC – NO ACTION

- **IFC 2018**; Section 701.6 Owner responsible, maintain inventory of all fire-rated and smoke-rated construction
 - **Key requirement - documentation** of fire and smoke rated construction
 - Annual Visual Inspection – ACCESSIBLE
 - Also requires **documentation when system visually inspected and/or repaired with a system**
 - ***SURVEY IS NOT the same as ASTM E2174 / ASTM E2393 Inspection***



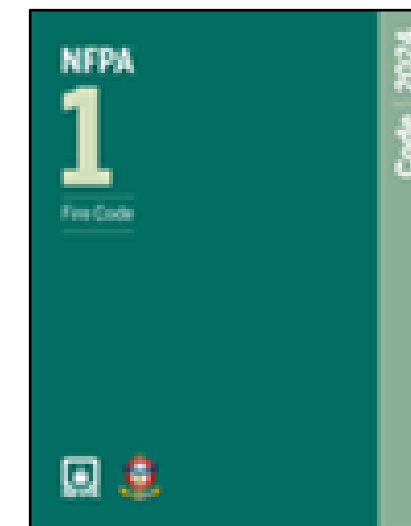
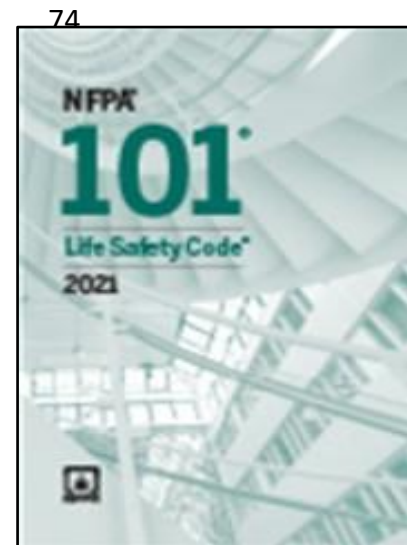
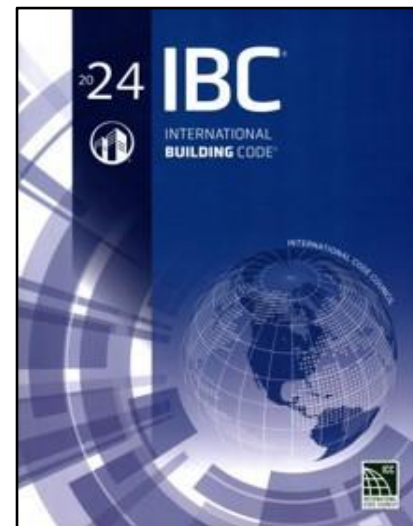
Fire Resistance of Structural Members

- **IBC Section 110.3 – Add new Section:**
 - **110.3.10 Fire-resistance rating of structural members.** Protection of fire-resistance rated structural members shall not be concealed from view until inspected and *approved*.
- **Reverse action of FS2-24** relating to concrete construction being declared restrained as a default
- **Reverse action of G123-25** and require protection of columns for full height
- **Continue to monitor Attachments.** Did the 2024 IBC resolve the Issue? Is something further needed? Are Bent Plates covered?



Fire Resistance Separation Between Parking Garages and Other Occupancies

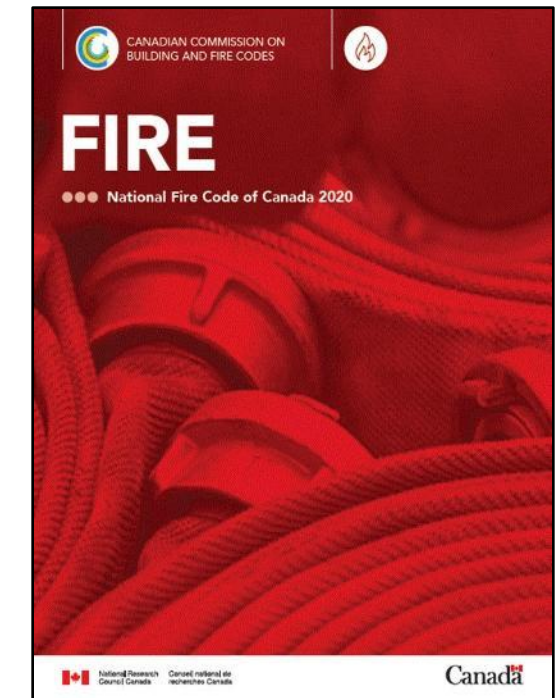
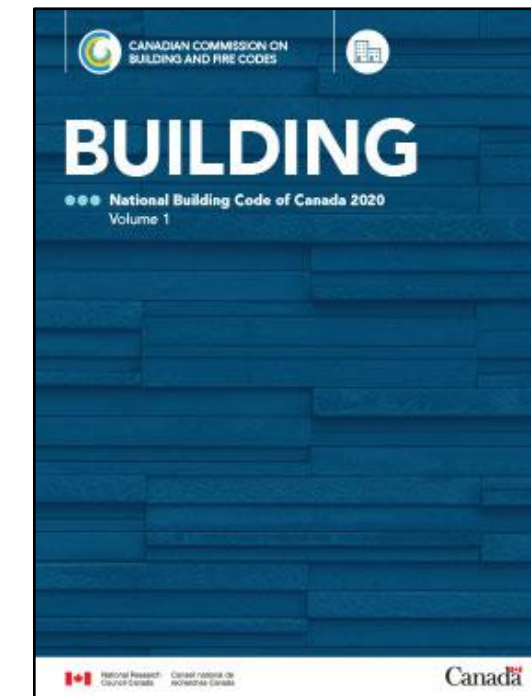
- Monitor results NFPA Research Report on Parking Garage Fires and respond as appropriate:
 - Nothing further needed?
 - 3 hours?
 - 4 hours?



2030 NBCC and NFCC Code Development Possible NFPA Codes Proposals

NBCC & NFCC

- **Standing Committee on Fire Protection**
 - Fireproofing Inspection
 - Annual Visual Inspection
 - Contractor Programs
 - 20' Rule
 - Occupiable Roofs
 - More....
- Canada Committee Works with Staff to Move Proposals
- Consultants 2030??





Thanks for Attending!!!



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