



Fire Codes and Best Practices: An Introduction

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Expertly Engineering Safety From Fire

Authority Having Jurisdiction (AHJ)

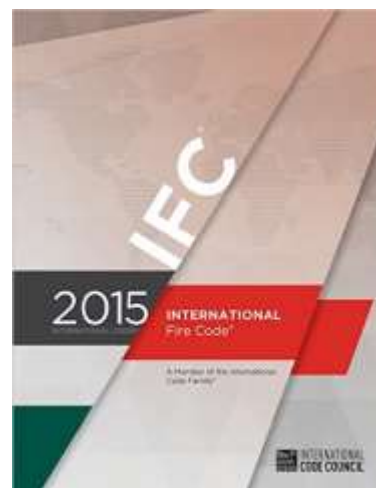
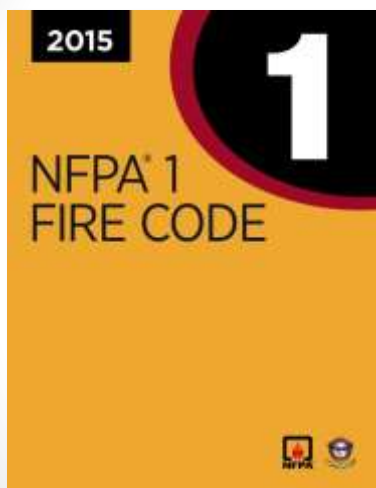


Overview

- Understand the fire code regulatory process in the USA
- Understand the NFPA Code Development Process
- Understand the ICC Code Development Process
- Become aware of key code changes impacting YOUR business
- Discuss some key challenges with current code requirements



Model Codes

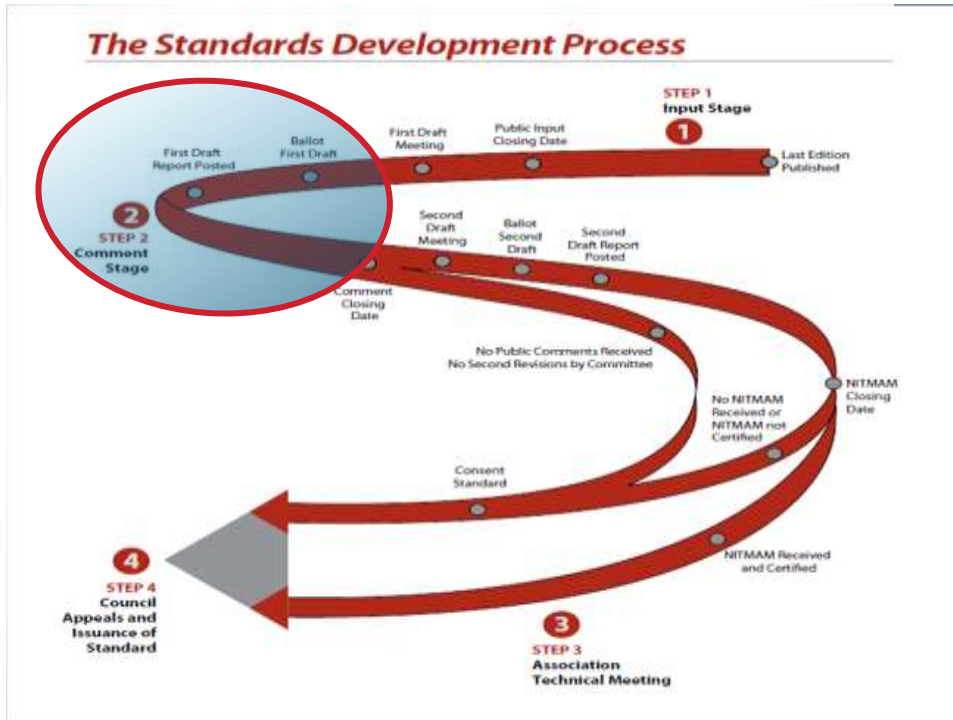


Model Codes



NFPA Code Development Process





Current Requirements in NFPA 1-2015

- Section covers all outside storage of all pallet types
 - 20 – 50 ft. clearance from other storage
 - Separation from buildings depending on building construction and number of pallets
 - Maximum pile height – 15 ft.
 - Maximum stack area – 400 sq. ft.
 - Minimum distance between stacks – 8 ft.
 - Minimum clearance to property line – 8 ft.

Current NFPA 1 Requirements



Current NFPA 1 Requirements



Current NFPA 1 Requirements



NFPA 1 -2018

- Based upon Public Proposal submitted by NWPCA
- Key concepts
 - Manufacturing/recycling facilities are different from idle storage
 - “BEST” operating practices
 - Site plan
 - Fire prevention plan
 - Emergency evacuation plan
 - Security management plan



NFPA 1 - 2018

- Based upon Public Proposal submitted by NWPCA
- Key concepts
 - Manufacturing/recycling facilities are different from idle storage
 - “BEST” operating practiced
 - Site plan
 - Fire prevention plan
 - Emergency evacuation plan
 - Security management plan
 - Not stored within 0.75 times stack height of property line or important building
 - Public comment to add a minimum dimension likely to be submitted
 - Maximum pile height – 20 ft.
 - Alternative approach based upon improved access, protection, or risk assessment



NFPA 1 - 2018

- First Draft was further modified by:
- Key modifications
 - Applies to wood, wood composite, and pallets listed to be equivalent to wood
 - Site plan shall include all hazardous areas, not just flammable liquid storage
 - Limitations of pallet array size
 - If access by less than 20 ft, depth shall not exceed 30 ft. from access
 - If access by “fire lane”, depth shall not exceed 50 ft. from access
 - Exception for approved existing arrangements



NFPA 1 – 2018 Edition

- NO GUARANTEES!
- Important dates
 - NFPA Membership Consideration – June 8, 2017
 - Released date – August 2017
 - Adoption/effective date – VARIES - HOWEVER



SMART CODES

- NFPA 1 contains a paragraph to permit equivalent approaches subject to approval by AHJ.



ICC Code Development Process

- Conceptually similar to NFPA
 - Committee hearings are public hearings
 - Final vote restricted to governmental members
- Key Dates for 2018 IFC
 - Document release – Fall 2017



NWPCA Proposal to ICC

- Based on preliminary First Draft Report of NFPA 1
 - Additional edits
 - Minimum distance to property line of 8 ft.
- NOTE: IFC did not contain a section for idle pallet storage, BUT
 - Proposal was submitted by Washington State Fire Marshals Association
 - NWPCA worked to coordinate two proposals to exempt manufacturing/recycling facilities
- NWPCA Proposal was accepted
 - Public Comment with editorial revisions by NWPCA was withdrawn



• SMART CODES BY EARLY INVOLVEMENT BY INDUSTRY

Application

- Although adoption of the 2018 Editions may be years away, plan now:
 - NFPA 1 contains a paragraph to permit equivalent approaches subject to approval by AHJ.
 - IFC contains a paragraph to permit alternative approaches subject to approval by the code official
 - These are recent changes that could easily be redone or overridden with poor fire experience
 - It is the best thing for your business!!!



Risk Management



Safety



Security





Fire Safety



Maintenance & Housekeeping





Pile Size I



Pile Size II



Code Compliance Issues

- Code development activities were Phase I
- Compliance resources for industry
 - NWPCA members or entire industry
- Education of Code Officials
 - Program scheduled for ICC Conference in September
- Ongoing resources for members



Code Compliance Issues

- I am being told that I can only store pallets 6 ft. high inside my building. Is that true?
 - MAYBE – Most likely the requirement is coming from the requirements for the sprinkler system that is protecting your building. See NFPA 13.



Code Compliance Issues

- What is involved with
 - Site plans
 - On-site assessments
 - Security management
 - Emergency and evacuation plans
 - Inspection, testing, and maintenance
- Multitude of NFPA documents that could be references



Code Compliance Document

- Second group to review the document
- Questions
 - Is there anything that you are doing that is not included in the document?
 - Is there anything in the document that would present a significant problem to you if required to do?
 - Does the document meet the needs of the intended audience?
 - Too much material
 - Too little material
 - What should be in the document as compared to:
 - An appendix
 - Separate online resource
 - Other resource
- Do you have resource documents that we can use?



Questions?

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