

Protection of Storage Occupancies

Course Description

This one-day seminar provides participants with basic knowledge of the available technology and techniques for protecting these very challenging occupancies. This course will review the range of storage types and configurations that exist as well as emphasize the necessary prerequisite knowledge required to competently provide engineering solutions that are both sound in principal and practice while maintaining constructability. Current full scale testing, available modeling and actual events will be a part of this presentation. Participants will learn the use and application of NFPA standards (and connections to the IBC and IFC), which are the basis for the majority of the engineering solutions. Participants will become familiar with applicable techniques and solutions, the effect of the variety of available storage sprinklers on the design criteria, and exercises will allow detailed evaluations of opposing protection solutions. Participants should be able to classify many hazards and evaluate and apply the appropriate design criteria not only to the sprinkler systems, but also the effect on design decisions relative to other fire protection features such as smoke control, draft curtains, and more.

Learning Objectives

Upon completion of this course participants should be able to:

- Explain storage arrangements and associated terminology
- Classify proper commodity classification including those with mixed plastic components
- Determine major changes in NFPA 13 involving commodity classification and options for exposed, expanded plastics
- Know the qualification requirements for miscellaneous and low-piled storage
- Design requirements for standard rack storage
- Design requirements for shelf, non-standard rack, and floor storage
- Understand allowable configurations and protection requirements for idle pallets storage.
- Find and apply definitions of storage terms and locate and apply storage requirements

Pre-requisite

Understanding of NFPA 13

Equipment needed

Participants should bring an engineering quality calculator, copy of the latest edition of the NFPA Automatic Sprinkler Systems Handbook and 2010 Edition of NFPA 13, Standard for the Installation of Sprinkler Systems, available through NFPA at www.nfpa.org.

Who will benefit: Experience Level Intermediate

FPEs, Designers, Installers, Engineers, Electrical Contractors, Technicians, Project Managers, AHJs, Fire Marshals

Course assessment

Participants will be assessed via a written test. A passing score of 70% is required to obtain a Certificate of Completion

Professional Development Hours

Upon completion each participant qualifies for 7 PDHs or .7 CEUs. A certificate of completion will be awarded.