Course Catalog

In Class Seminars

NFSA offers in-class, hands-on fire sprinkler training by some of the industry's finest experts. Seminars are offered all over the country throughout the year. There are many options available, and if your topic is not being offered, please send us a request at learning@nfsa.org, and we will see if it's feasible.

Hands On ITM

This 2-day hands-on program, Hands On ITM covers a wide variety of inspection and testing procedures for water-based fire protection systems as outlined in NFPA 25 (2017) to include main drain, water flow alarm device testing, control valve testing and valve trip tests as well as pressure reducing valve test and testing multiple types and components of fire sprinkler systems (based on location and available props). These manipulative skills will provide the participant with an understanding of the procedures typically performed by water-based inspectors and contractors. Hydrant, standpipe, system pressure reducing valve and underground flow testing is also addressed in the classroom setting. The target audience for this course is someone seeking NICET Level II or equivalent. Students are asked to bring a copy of NFPA 25 (2017) to the class.

Total Instructional Contact Hours: 16 Contact Hours

Hydraulics for Fire Protection

Hydraulic calculations are the foundation for supplying water-based fire protection systems with the appropriate amount of water. This seminar covers the procedures for hydraulic calculations in accordance with NFPA 13. The equations, principles and process will be reviewed in detail including selecting a design method along with finding the remote area and calculating flows and pressures. This program can be advantageous to those responsible for performing the hydraulic calculations as well as those who review them.

Total Instructional Time: 8 Contact Hours

Advanced Topics in Codes and Standards

This program covers a variety of advanced topics in the design and installation of sprinkler systems including an explanation of the NFPA Standards Making Process, a discussion of the use of CMSA and ESFR sprinklers, the design of freezer and cooler systems, and the analysis of the results of different tests performed periodically on sprinkler systems. This program will be an excellent study session for those people seeking NICET Level III and Level IV certification.

Total Instructional Time: 8 Contact Hours

Advanced Fire Pumps

This program covers a number of advanced topics in the design and selection of fire pumps including the evaluation of water supplies to calculate suction pressure, the selection of fire pumps under a variety of water supply situations, and the evaluation of discharge pressure to make sure that system pressure does not get too high, especially in high-rise buildings. Balancing the pressure in the system to meet all of the requirements of NFPA 14 and NFPA 20 both with and without pressure reducing devices and situations with multiple water supplies (with different pressures) will be discussed. The use of break tanks as permitted by NFPA 22 will also be discussed.

Due to the advanced nature of the program, it is recommended that only those already knowledgeable in basic hydraulic calculations (including use of the Hazen-Williams formula and adjustments for elevation) attend. Anyone needing a refresher on these topics is encouraged to read Chapters 30 and 31 in the NFSA text, Layout, Detail and Calculation of Fire Sprinkler Systems, 2nd edition. This program will be an excellent study session for those people seeking NICET Level III and Level IV certification

Total Instructional Time: 8 Contact Hours

Fire Pumps 101

Explore general fire pump design requirements in NFPA 20: The Standard for the installation of Stationary pumps for Fire Protection. This program will include a detailed walkthrough of fire pump sizing, design and layout.

Total Instructional Time: 1 Contact Hour

Fire Pumps for High Rises

This course will begin by defining high rise and a very tall building. With the understanding of what a high rise we will review the requirements of the 2019 edition of NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection.

Total Instructional Time: 1 Contact Hour

Fire Pumps for Multiple Water Supplies

Explore the challenges that could be posed when designing a fire pump system with two different water supplies. This course will review the options to overcome these challenges in compliance with NFPA standards.

Total Instructional Time: 1 Contact Hour

Advanced Hydraulics

This program covers a wide variety of topics all having to do with making decisions regarding the discharge criteria for sprinklers and nozzles (flow, pressure, number of sprinklers in the design area, location of sprinklers in the design area) for advanced and complex situations in fire sprinkler and water spray systems.

This seminar assumes that the participant knows and understands the meaning of basic hydraulic terms such as density and design area as well as knowing the Hazen-

Williams formula for calculating friction loss. Participants not familiar with these terms and formulas are certainly welcome to take the class, but they may find that they need to do more work to keep up. Everyone that comes to the class should bring a calculator with a [y x] key that they know how to use.
This seminar is an excellent study session for people holding NICET Level II certification in Layout of Water-Based Fire Protection Systems who are preparing to sit for the Level III certification exams. This program will cover information from NFPA 13, NFPA 15 and NFPA 16.

Total Instruction Hours: 8 Contact Hours

Coordinating NFPA 25 & 72 Inspection, Testing and Maintenance Requirements

Both NFPA 25 and NFPA 72 require coordination of the testing of the sprinkler systems and the fire alarm systems. That is easier said than done. With a variety of administrative code references, varying task frequencies, differences in scope, and unique definitions used in the codes and standards overseeing fire protection system inspection, testing and maintenance (ITM) coordination of work becomes critical to ensure proper and complete building protection. This unique seminar the participant will explore the issues and develop strategies to coordinate the work required by these two important standards.

Total Instruction Hours: 8 Contact Hours

Design Advantage – Fire Sprinkler Systems and the International Building Code

This program reviews the 2015 – 2018 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. The seminar 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.

Total Instructional Time: 7 Contact Hours / AIA 7 LU|HSWs

Estimating and Proposals for Fire Sprinkler Installation Projects

The first step in a successful fire sprinkler installation is building an accurate cost estimate for bid purposes. This course highlights the process of estimating costs associated with a fire sprinkler installation project and ultimately submitting a bid that is competitive and considers all applicable conditions for a specific project

Total Instructional Time: 14 Contact Hours

Sprinkler System Plan Review (1-day)

Examining fire sprinkler shop drawings, cut sheets and hydraulic calculations is a primary duty of the authority having jurisdiction. This course will provide a method of reviewing plans and other fire sprinkler documents that is efficient and thorough. 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 current codes and standards to fire sprinkler systems from the initial site plan review, through the construction documents, to the as-built drawings. Significant 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. Attendees must bring a copy of NFPA 13 to class.

Total Instructional Time: 8 Contact Hours

Fire Service Mains and their Appurtenances

This full day seminar describes the responsibility of the contractor, owner and authority having jurisdiction for the proper installation of Fire Service Mains and Their Appurtenances as addressed in NFPA 24.

Total Instructional Time: 8 Contact Hours

Hydraulics for Fire Protection

Hydraulic calculations are the foundation for supplying water-based fire protection systems with the appropriate amount of water. This seminar covers the procedures for hydraulic calculations in accordance with NFPA 13. The equations, principles and process will be reviewed in detail including selecting a design method along with finding the remote area and calculating flows and pressures. This program can be advantageous to those responsible for performing the hydraulic calculations as well as those who review them.

Total Instructional Time: 8 Contact Hours

Inspection and Testing for the Fire Sprinkler Industry

This interactive seminar will provide an introduction to the various types of water-based fire protection systems as well as an in-depth exploration of the codes, standards and other documents that are used during the inspection and testing process. The seminar is designed for individuals interested in obtaining certification as an inspection and testing technician for water-based fire protection systems.

Total Instructional Time**:** 24 Contact Hours

Proposals for Inspection, Testing, and Maintenance of Water Based Fire Protection Systems

Explore what to consider when creating accurate and detailed proposals for the inspection, testing and maintenance (ITM) of water-based fire protection systems, based on the requirements of NFPA 25.

Total Instructional Time: 4 Contact Hours

Sprinkler Selection for High-Piled Storage

Explore the selection and application of automatic sprinklers for storage arrays where solid-pile, palletized, bin-box, shelf or rack storage commodity configurations exceed 12 feet. The course addresses the influence of various commodity and ceiling heights in sprinkler selection and system design. Learners should enter this program with the ability to apply NFPA 13 density/area design curves.

Total Instructional Time: 8 Contact Hours

Rough and Final Inspection of Sprinkler Systems

This one day seminar provides attendees with vital information on how to conduct the field inspections for new fire sprinkler and standpipe systems.
Fire sprinklers and standpipes are installed in stages and inspections are required before commencing to the next stage. The codes require periodic on-site inspections as the work progresses, to be installed according to the approved construction documents. This work is required to be inspected and approved before being covered or before the system is commissioned. This course points out the visual and physical inspection requirements of the latest codes and standards. Attendees must bring a copy of NFPA 13, NFPA 14 and IBC or IFC to class.

Total Instructional Time: 8 contact hours

Seismic Protection for Fire Sprinkler Systems

As a life safety system, fire sprinkler systems need to remain operational following an earthquake event. In order to do this, NFPA 13 has guidelines in place to seismically protect the piping system. The rules provide both flexibility and rigidity so that the system can move with the building structure it is protecting against fire. Learn when seismic protection is needed for a building. In addition, the components used to protect against earthquake motion and the necessary calculations will be reviewed.
This seminar will refer to ASCE 7-16 and NFPA 13 (2016). It is recommended that participants bring an NFPA 13 2016 to class.

Total Instructional Time: 8 Contact Hours

Sprinkler Installation in One- and Two Family Dwellings

Explore multipurpose residential sprinkler systems with this blended program that combines self-paced eLearning with live virtual instructor-led training. Learn how to competently install multipurpose residential fire sprinkler systems in one- and two-family dwellings using two major standards:
- NFPA 13D: Installation of Sprinkler Systems in One- and Two- Family Dwellings and Manufactured Homes, 2016 edition
- International Residential Code, Section P2904, 2018 edition

Sprinkler System Installation Requirements

There are hundreds of types of sprinklers in use today. Determining where to locate them can be a complex task. They need to be spaced properly and installed in specific locations to ensure coverage of the protected area and located far enough away from obstructions to ensure that the spray pattern can adequately develop and control or suppress a fire. The rules that govern this complex matrix of decisions are found in Chapter 8 of NFPA 13 on Installation Requirements. This fast paced and interactive seminar will guide the participant through series of decisions and requirements that lead to compliance with NFPA 13 and ensure the system will operate properly when needed. Attendees should bring a copy of the NFPA 13 with them.

Total Instructional Time: 8 Contact Hours

Sprinkler System Plan Review

This two-day seminar provides attendees with vital information on how to conduct the plan review process for water-based fire protection systems. Utilizing the requirements of NFPA 13 the participants will be guided through an actual review of sprinkler system plans and calculations. They will discuss the importance of employing a systematic review process and identify the documents required for a complete plan review. Finally, participants will review and discuss a submittal of the hydraulic calculations presented with the plans. Discussion points include the process of hydraulic calculations, and identification of the key pieces of information, and the common errors that are made. Attendees must bring a copy of NFPA 13 to class.

Total Instructional Time: 16 Contact Hours

Standpipe Systems for Fire Protection

This one-day program provides the participant with the requirements for design, layout, installation and acceptance testing of standpipe systems using NFPA 14. Through discussion and activities, the seminar will address topics such as system pressures,

the challenges of tall buildings, requirements for horizontal standpipes and the acceptance requirements for standpipe systems.

Total Instructional Time: 8 Contact Hours

Understanding, Applying and Enforcing NFPA 13D

As residential fire sprinkler systems become more widely recognized and adopted by communities it becomes more important than ever to understand the requirements for proper design and installation. NFPA 13D, *Standard for the Installation of Fire Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes* is the primary standard governing design and installation for residential sprinklers. Understanding the requirements of the standard and how they are applied is the key to a solid enforcement program. This one-day seminar will guide the participant through the requirements of NFPA 13D and identify how the standard is applied as well as the alternative approaches, such as IRC P2904. Participants are recommended to bring an NFPA 13D to class.

Total Instructional Time: 8 Contact Hours

Understanding, Applying and Enforcing NFPA 25

This highly interactive full day seminar describes the requirements for properly maintaining a water-based fire protection system in accordance with NFPA 25. The seminar clearly describes the responsibilities for compliance and record keeping. It describes the specific scope of the standard and identifies the various ways in which information related to changes in the system are handled. It describes the various tables used in the standard, their specific purposes, and when to use which tables. It involves the attendees in a significant number of exercises to describe problems encountered, identify the appropriate section(s) of the standard and how to deal with issues not covered by the standard that may still be encountered. A copy of NFPA 25 is included in the registration fee.

Total Instructional Time: 8 Contact Hours

NFPA 13 Updates

Identify and compare changes to the 2019 Edition of NFPA 13

Total Instructional Time: 2 Contact Hours

NFPA 13R Updates

Identify and compare changes to the 2019 Edition of NFPA 13R

Total Instructional Time: 1 Contact Hour

NFPA 13D Updates

Identify and compare changes to the 2019 Edition of NFPA 13D

Total Instructional Time: 1 Contact Hour

Layout Technician Pathway

The NFSA's Learning and Development Team has restructured and revamped its Layout Technician class. While the course maintains many of its core contents and topics, it is being taught in a new way that provides deeper learning, more engaging activities, and directly applicable real-world scenarios.

This class is designed for anyone new to the fire protection industry, or anyone who is simply trying to learn more and advance their career, such as designers, estimators, and sales professionals.

The purpose of the layout technician course is to take a person with basic knowledge of math, physical science and drafting skills and teach them to be productive basic sprinkler layout and detailing technicians. All of the work elements necessary for NICET Level II Certification will be covered by the course including sprinkler selection, sprinkler spacing and location, obstructions to sprinklers, water supplies (public mains, tanks and pumps), hydraulic calculation of sprinkler systems, and standpipe system layout and calculation.

Purchased as a single transaction, a student receives Layout Technician: Fundamentals, a series of self-paced eLearning modules and signs up for a real-time class, Layout Technician: Application. The real-time class will be offered at NFSA headquarters in Maryland and across the US, with virtual options available. The choice is entirely yours!

Layout Technician: Fundamentals – A series of self-paced learning with opportunities for instructor office hours, intervention, and support. These modules focus on the various core concepts necessary to understand and function as a Layout Technician in the 21st century. Learners explore content as simple as parts of a sprinkler using advanced 3D technology, up through and including carefully instructed hydraulic calculations – all while developing the soft skills necessary to overcome design challenges with the codes and standards in hand.

Layout Technician: Application – A 3-day in-person, with a virtual option available, instructor-led class that applies the fundamental content learned in the previous course. Using project-based learning, students apply their knowledge of fire sprinkler layout concepts to a legitimate plan, learning through problem solving, research, and simply doing.

Self-Paced Interactive Online Learning

Introduction to Fire Sprinklers and NFPA 13

This 2-hour self-paced online interactive seminar provides an overview to fire sprinkler systems and the National Fire Protection Association's 13 standard. Items addressed include occupancy classification and hazard groups, commodity classification, components and characteristics, piping and tubing, hangers and bracing, valves, FDC and sprinkler system types. This seminar also leads the professional through the navigation of NFPA 13. After successful completion, the student will receive a certificate and CEU credit. *Revision 2.0 (179)*

Certificate Contact Hours: 2

Applying Fire Sprinkler System Installation Rules

This 2-hour self-paced online interactive seminar addresses the general rules and requirements for fire sprinkler installation. This seminar also discusses specific sprinkler positioning, spacing and locations as well as requirements for areas like small rooms, slopes and other developmental variables. After successful completion, the student receives a certificate and CEUs. *Revision 2.0 (180)*

Certificate Contact Hours: 2

Project Management

This 1-hour self-paced interactive seminar provides an overview of coordinating jobs and surveying buildings. Subjects addressed includes job coordination meetings, CAD and BIM software and light fixture, plumbing and HVAC considerations. It also addresses building surveys, plans and existing sprinkler systems. After successful completion, the student will receive a certificate and CEU credit. *Revision 2.0 (181)*

Certificate Contact Hours: 1

Introduction to Residential Sprinkler Systems

This 1-hour self-paced interactive seminar provides an overview of residential sprinkler systems to include fire sprinkler tests, listings, NFPA 13, 13D and 13R. This seminar also addresses the residential water main and values. After successful completion, the student will receive a certificate and CEUs. *Revision 2.0 (182)*

Certificate Contact Hours: 1

NFPA Standards Overview (NFPA 14, 20, 22, & 24)

This 1-hour self-paced online interactive seminar provides an overview of the following National Fire Protection Association's standards: NFPA 14: Standard for the Installation of Standpipe and Hose Systems, NFPA 20: Standard for the Installation of Stationary Pumps for Fire Protection, NFPA 22: Standard for Water Tanks for Private Fire Protection, and NFPA 24: Standard for the Installation of Private Fire Service Mains and Their Appurtenances. After successful completion, the student will receive a certificate and CEUs. *Revision 2.0 (183)*
Certificate Contact Hours: 1

The ITM Series

Bundled ITM Seminars

Inspection of Fire Sprinkler Systems Bundled Seminar

This 6-hour interactive learning course addresses an introduction to various types of water-based fire protection systems as well as an in-depth exploration of the codes, standards, and other documents that are used during the inspection process.

This all-inclusive inspection-based program includes the inspection of fire sprinkler systems, standpipe, private mains, hydrant, pumps and tanks and valves and other components. It also includes an in-depth look at NFPA 25 Scope and Definition and General Requirement chapters. This seminar is designed for individuals interested in obtaining certification as an inspection technician for water-based fire protection and having a better understanding and working knowledge for water-based inspectors. At the completion of course, the student will complete an online exam and receive an NFSA certificate.
Inspection, Testing and Maintenance Series
Contact hours – 6

Testing of Fire Sprinkler Systems Bundled Seminar

This 7-hour interactive learning course addresses an introduction to testing procedures for various types of water-based fire protection systems as well as an in-depth exploration of the codes, standards, and other documents that are used during the testing process.
This all-inclusive testing-based program includes the testing of fire sprinkler systems, standpipe, private mains, hydrant, pumps and tanks and valves and other components. It also includes an in-depth look at internal assessments, obstruction investigations and impairments and the coordination between NFPA 25 and 72.
This seminar also includes a preparation for certification testing element. In this section, the NFSA staff will review the best tips and study preparation for national, state and local certification exams. This section also includes three level of practice exam questions.
This seminar is designed for individuals interested in obtaining certification as an inspection and testing for water-based fire protection technician and having a better understanding and working knowledge for water-based testing. At the completion of course, the student will complete an online exam and receive an NFSA certificate.
It is recommended that students complete the Inspection of Fire Sprinkler System Bundled Seminar (or equivalent) before this course.
Inspection, Testing and Maintenance Series
Contact hours – 7

Individual ITM Seminars

Introduction to NFPA 25 and ITM

This 2-hour self-paced online interactive seminar provides an overview of inspection, testing and maintenance as well as NFPA 25: Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems. After successful completion, the student will receive a certificate and CEU credit. *Revision 2.0 (165)*
Certificate Contact Hours: 2

NFPA 25 Scope and Definition (ITM Series)

In this one-hour interactive seminar, we will discuss the scope and definition of NFPA 25 and its effect on the basic elements of the standard, who is responsible for ITM, what is required, what should occur when there are changes in occupancy, use, or materials, and other general requirements. *Revision 2.0 (247)*
Certificate Contact Hours: 1

NFPA 25 General Requirements (ITM Series)

In this one-hour interactive seminar, we will address the general requirements that relate to the types of systems covered under the scope of the standard. The standard reviews who is responsible for ITM, required maintenance, notifications, what should occur when there are changes in occupancy, use, or materials, required signage, and other general requirements. *Revision 2.0 (248)*

Certificate Contact Hours: 1

Inspection of Fire Sprinkler Systems ITM Series

NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" addresses the requirements, procedures and methods of inspecting, testing and maintaining water-based systems. This one-hour self-paced lesson provides details and tips for inspectors of fire sprinkler systems based on the NFPA standard. Working with Ken Isman, one of the leading experts in fire protection systems, we will address the inspection of sprinkler system components. This is part of the NFSA's ITM training series. *Revision 2.0 (185)*

Certificate Contact Hours: 1

Inspection of Standpipe Systems, Private Mains, and Hydrants ITM Series

NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" addresses the requirements, procedures and methods of inspecting, testing and maintaining water-based systems. This one-hour self-paced lesson provides details and tips for inspectors of fire sprinkler systems based on the NFPA standard. Working with Ken Isman, one of the leading experts in fire protection systems, we will address inspection of standpipe systems, private mains, and hydrants. This is part of the NFSA's ITM training series. *Revision 2.0 (186)*

Certificate Contact Hours: 1

 Inspection of Pumps and Tanks ITM Series

NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" addresses the requirements, procedures and methods of inspecting, testing and maintaining water-based systems. This one-hour self-paced lesson provides details and tips for inspectors of fire sprinkler systems based on the NFPA standard. Working with Ken Isman, one of the leading experts in fire protection systems, we will address inspection of pumps and tanks. This is part of the NFSA's ITM training series. *Revision 2.0 (187)*

Certificate Contact Hours: 1

Inspection of Valves and Other Common Components ITM Series

NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" addresses the requirements, procedures and methods of inspecting, testing and maintaining water-based systems. This one-hour self-paced lesson provides details and tips for inspectors of fire sprinkler systems based on the NFPA standard. Working with Ken Isman, one of the leading experts in fire protection systems, we will address inspection of valves and other common components. This is part of the NFSA's ITM training series. *Revision 2.0 (188)*

Certificate Contact Hours: 1

Testing of Fire Sprinkler Systems ITM Series

NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" addresses the requirements, procedures and methods of inspecting, testing and maintaining water-based systems. This one-hour self-paced lesson provides details and tips for inspectors of fire sprinkler systems based on the NFPA standard. Working with Ken Isman, one of the leading experts in fire protection systems, we will address testing of sprinkler system components. This is part of the NFSA's ITM training series. *Revision 2.0 (189)*
Certificate Contact Hours: 1

Testing of Standpipe Private Mains and Hydrants (ITM Series)

In this one-hour interactive seminar, we will address the use of NFPA 25 as a reference for identifying the frequency and purpose for conducting flow and hydrostatic testing for standpipes, private mains, and hydrants. Upon completion you will be able to: Understand the purpose for testing, Determine the frequency of testing, identify equipment used, and Evaluate test results. *Revision 2.0 (249)*
Certificate Contact Hours: 1

Testing of Pumps and Tanks (ITM Series)

In this one-hour interactive seminar, we will address the use NFPA 25 as a reference for the testing of pumps and tanks. In this lesson you will learn testing requirements as they relate to fire pumps, pump operation, no-flow conditions for diesel engine and electric motor driven pumps, flow conditions and fire pump alarm signals, and the various requirements related to tanks. Upon completion you will be able to: understand the purpose for testing, determine the frequency of testing, evaluate pump performance, decide which test to perform, understand flow test data and test curve charts, and understand the various testing requirements related to tanks. *Revision 2.0 (251)*
Certificate Contact Hours: 1

Testing Valves and Other Components (ITM Series)

In this one-hour interactive seminar, we will address the use of NFPA 25 as reference for identifying the frequency of testing for valves and other components that are part of a fire protection system. Upon completion of this module, you will be able to: Identify testing requirements, identify equipment with which testing could be accomplished, and determine the frequency of testing various components. *Revision 2.0 (252)*
Certificate Contact Hours: 1

Internal Assessments, Obstruction Investigations and Impairments (ITM Series)

Piping systems of any type can become inoperative when the pipe is filled with obstructing material. Fire protection systems are no exception. Any maintenance program must include means for assessing the internal conditions of piping and removing any obstructions.

In this one-hour interactive seminar, we will provide general guidance regarding assessment of the interior conditions of a piping system, obstruction investigations and impairment handling.
Upon completion of this module, you will be able to: Understand the differences between internal piping assessments and obstruction investigations, identify equipment used when conducting internal assessments, identify triggers requiring an obstruction investigation, and Understand how to properly address impairments. *Revision 2.0 (253)*
Certificate Contact Hours: 1

NFPA 25 and 72 Coordinating the Work for Successful ITM

Both NFPA 25 and NFPA 72 require coordination of the testing of the sprinkler systems and the fire alarm systems. That is easier said than done. With a variety of administrative codes as well as varying frequencies and definitions used in the codes and standards overseeing fire protection system ITM coordination of work becomes critical to ensure proper and complete building protection. This unique seminar the participant will explore the issues and develop strategies to coordinate the work required by these two important standards. *Revision 2.0 (184)*
Certificate Contact Hours: 1

Video Based Training

Prerecorded Technical Tuesday

Seismic Protection for Dummies

Broadcasting June 16, 2020

This hour-long webinar will be a crash course on seismic design. This brief overview will touch on all of the basic requirements for seismic and its general application. Participants are encouraged to take “Seismic Protection of Fire Sprinkler Systems” offered by NFSA’s Training Department which contains in depth lecture, videos, and in-class exercises. *Revision 1.0 (177)*
Certificate Contact Hours: 1

Potential Changes to 2022 NFPA 13 Installation and Residential (NFPA 13/13D/13R)

Broadcasting May 19, 2020

NFPA 13 has finished the first step in the revision process that will lead to the 2022 edition. This presentation will highlight the major changes potential changes to both the installation chapters of the 2019 edition of NFPA 13 as well as the residential criteria as found in the 2019 edition of NFPA 13, NFPA 13R, and NFPA 13D. These changes may significantly affect the layout and installation of sprinkler systems and is a “must-know” for layout technicians, installers, AHJs and others in the industry. These updates may change by the time the final edition is published; however, it is valuable information on what changes that may affect our industry. *Revision 1.0 (176)*

Certificate Contact Hours: 1

[Important changes to NFPA 25 2017 Edition]
Broadcasting April 21, 2020

Many states have already or may be adopting the 2018 fire codes. This will make the 2017 edition of NFPA 25, The Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, the current adopted standard for ITM. This seminar will update the fire sprinkler industry on changes that affect the ITM world. This seminar will present changes that are important to the fire sprinkler industry with some discussion on the reasons for the updates. *Revision 1.0 (175)*
Certificate Contact Hours: 1

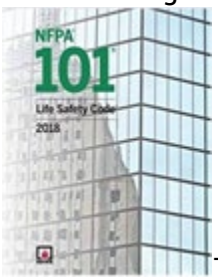
[Introducing NFPA 200 – The New Hanging and Bracing Standard]
Broadcasting March 17, 2020

A new standard is being developed to provide design and installation requirements for hanging, bracing and anchorage of fire suppression systems. The webinar will identify why the standard is being developed, how it will incorporate requirements for sprinklers systems, and the intended inter-relationship with NFPA 13 and related documents. This webinar will discuss the proposed structure for the document, and the proposed process. *Revision 1.0 (174)*
Certificate Contact Hours: 1

[2019 NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*]
Broadcasting February 18, 2020

This presentation will be an overview of the 2019 NFPA 14 *Standard for the Installation of Standpipe and Hose Systems* and will cover changes made from the 2016 edition of the standard. The seminar will also discuss standpipe system requirements from a fire service user perspective of the end user. *Revision 1.0 (173)*
Certificate Contact Hours: 1

[2018 NFPA 101, *Life Safety Code*, Fire Protection Updates]
Broadcasting January 21, 2020



The 2018 edition of NFPA 101, *Life Safety Code*, is adopted worldwide. This seminar will update

the fire sprinkler industry on changes that affect how the NFPA 101 is interpreted and applied. Automatic fire sprinkler systems provide material, egress and economic benefits in the model life safety and building codes. When codes change, it impacts how design, bidding, installation and management is applied to every project. This

seminar will present the code changes that are important to the fire sprinkler industry with detailed discussion on the reasons for the updates. *Revision 1.0 (172)*
Certificate Contact Hours: 1

[Overview of NFPA 15: Water Spray Fixed Systems]
December 17, 2019

Fixed Water Spray Systems is specialized water-based fire protection systems that is very different then the more familiar NFPA 13 type fire sprinkler systems. NFPA 15, The Standard for Water Spray Fixed Systems for Fire Protection, provides the minimum requirements for the design, installation and acceptance testing of this important tool in the active fire protection arsenal. Along with NFPA 25, this standard also outlines the ITM requirements of these systems.
NFPA 15 is not a new standard and was first adopted in 1940, however many of us in the industry do not have more than a cursory understanding of these systems. *Revision 1.0 (172)*
Certificate Contact Hours: 1

[NFPA 909 Requirements for Cultural Properties]
November 19, 2019

Seeing fires at the Notre Dame, Brazil's National Museum and other historical/culturally significant properties is devastating to say the least. NFPA 909 provides protection requirements for museums, libraries and other cultural properties in a wholistic manner. The document requires fire prevention, active fire protection systems, passive fire protection features, and considerations for resiliency and salvage planning. When applied, it imposes additional requirements for water-based fire protection systems beyond what is typically required by building and fire codes which impact cost and schedule. Fire protection contractors need to function as part of the team assembled by the facility operators. Understanding roles and responsibilities is necessary to manage expectations. Communicating effectively will ensure successful projects in these facilities. This webinar will discuss issues effecting fire protection contractors working in these types of facilities. *Revision 2.0 (212)*
Certificate Contact Hours: 1

[NFPA 75 Information Technology Equipment]
October 15, 2019

While NFPA 13-2019 extracts several sprinkler requirements for the protection of information technology equipment in section 26.14, it is important to understand the context of the standard where it came from. NFPA 75, Standard for the Fire Protection of Information Technology Equipment, provides the full scope and requirements to

protect ITE equipment from damage from the various byproducts of fire and discharge from the sprinkler system. From a fire risk assessment to prescriptive requirements, this course will outline the unique requirements and applications of this standard as it pertains to the fire sprinkler industry. *Revision 2.0 (211)*
Certificate Contact Hours: 1

Extracts in NFPA Codes and Conflicts
September 17, 2019

Many times, NFPA model codes borrow or extract text from an installation standard and insert into a model code. Extracted text allows rules to be enforced uniformly in a code from the standard. Users of NFPA 1 or NFPA 101 will often see extracted text from NFPA 13, NFPA 14 or NFPA 25. A user of NFPA 13 will also notice extracts from other codes and standards. This course will highlight where the NFPA model codes (NFPA 1, NFPA 101, NFPA 5000) extract fire sprinkler installation or maintenance requirements (NFPA 13, NFPA 13R, NFPA 25, etc.) and where potential conflicts or differences exist. *Revision 2.0 (210)*
Certificate Contact Hours: 1

Foam Systems ITM – NFPA 25, NFPA 11, and NFPA 16
August 20, 2019

Foam systems, like other water-based fire protection systems, are required to be inspected, tested, and maintained. This course will highlight the basic types of foam systems, equipment used, ITM requirements and some alternative testing methods. We will explore testing requirements of NFPA 25, NFPA 11, and NFPA 16. *Revision 2.0 (209)*
Certificate Contact Hours: 1

Recommended Practices for Insulation
June 18, 2019

Information on insulation practices for sprinkler system installations is very limited in the three NFPA sprinkler standards (13, 13R, and 13D). This Tech Tuesday will review the content of a white paper under development by the NFSA's Insulation Task Group, which has representatives of the sprinkler industry as well as the insulation industry. Specifically, the different types and methods of insulation used, design criteria developed through mathematical models and historical data will be explained. Common shortfalls encountered during installation along with common failures will be illustrated, along with possible recommendations on how to avoid them. In addition, alternative methods, such as use of antifreeze, dry pipe sprinkler systems, heat tracing, or combinations of options will be highlighted. *Revision 2.0 (208)*
Certificate Contact Hours: 1

Proposed Updates to NFPA 25, 2020 edition
May 21, 2019

The NFPA process must be followed to make changes needed to improve a document. However, most contractors and inspectors do not know how the process works, yet they identify issues with the NFPA codes and standards that they use on a regular basis. This presentation will explain the process used to make changes to the 2020 edition of NFPA 25. Several changes initiated by NFSA staff at the direction of the E&S committee will be used to demonstrate the different stages of the process. Although the process has not been completed, important changes will be illustrated along with the next steps. *Revision 2.0 (207)*

Certificate Contact Hours: 1

[The IFC for Fire Sprinkler Contractors]

April 16, 2019

International Fire Code (IFC) is a model fire code that has numerous fire protection layout, density and installation differences from the other national referenced standards, such as NFPA 13, NFPA 13R and NFPA 14. When fire protection requirements found in the model codes differ from those found in the referenced standards, the requirements of the model codes overrule the requirements of the referenced standard. This means, fire sprinkler contractors and layout technicians without knowledge of the IFC can find themselves delayed with costly change orders at times when it is most inconvenient. This course highlights the areas such as; sprinklers in open corridors, balcony sprinklers, density differences, high-piled storage and much more. *Revision 2.0 (206)*

Certificate Contact Hours: 1

[Using UFC and NFPA Standards for DoD Projects]

March 19, 2019

DoD projects can be challenging by their very nature. Having to apply Unified Facilities Criteria (UFC) concurrent with NFPA requirements can complicate matters if not properly implemented. The UFC imposes many requirements that are more restrictive than those found in NFPA standards. However, locating the requirements is not always simple. Understanding where and how to find UFC requirements, and how to integrate these requirements with those of NFPA standards is paramount for a successful project. The impact of not knowing these things can be costly in terms of time, money and reputation. This presentation will explain how the UFC and NFPA requirements can be used effectively to maintain profit and complete fire protection system projects on time without surprises. *Revision 2.0 (205)*

Certificate Contact Hours: 1

[The Special Occupancy Chapter of NFPA 13]

February 19, 2019

NFPA 13 includes a chapter called “Specially Occupancy Requirements”. In the 2019 edition this is chapter 26. This chapter basically extracts fire sprinkler requirements from other NFPA standards for specific situations. For example, in facilities where there is a paint spray booth, there is a section that extracts applicable sprinkler requirements from

NFPA 33, Standard for Spray Application Using Flammable or Combustible Materials. If your project includes a hypobaric chamber, Chapter 26 includes some important extracts from NFPA 99B, Standard for Hypobaric Facilities. The list goes on and Chapter 26 includes requirements from 36 separate NFPA standards. *Revision 2.0 (204)*
Certificate Contact Hours: 1

[2019 Updates to NFPA 14 with Some Common Questions]
January 15, 2019

The 2019 edition of NFPA 14, Standard for the Installation of Standpipe and Hose Systems, includes new definitions, new language for automated ITM and monitoring, changes to pressure limits, and a new chapter on maritime applications of standpipes. This presentation will highlight those changes as well as reviewing some of the common questions about standpipes submitted to NFSA's Expert of the Day program. *Revision 2.0 (198)*
Certificate Contact Hours: 1

[NFPA 13, 2019 Edition, Sprinkler System Discharge and Hanging & Bracing Updated]
December 18, 2018

Sprinkler System Discharge criteria changes will be discussed during this presentation. Protection of storage occupancies using the new layout of NFPA 13, 2019 edition, will be discussed. The presentation will also include a discussion of changes relating to definitions and relocation of occupancy hazard information and commodity classifications. Revisions to the hanging and bracing criteria will be discussed, including some revisions to align with ASCE 7 and separation of requirements for hanging and bracing in new chapters of the standard. *Revision 2.0 (197)*
Certificate Contact Hours: 1

[Third Party Summit Changes]
November 20, 2018

Several jurisdictions are taking advantage of 3rd-Party ITM reporting to enforce and track water-based fire protection system status throughout their municipalities. The NFSA hosted several 3rd-Party ITM reporting summits across the country in 2018. This presentation will give an overview of the Chicago, Austin and Fort Lauderdale summits as well as the parties involved, the discussion and solutions to the online reporting process. Fire sprinkler contractors, building owners and AHJs will benefit from this online overview. *Revision 2.0 (196)*
Certificate Contact Hours: 1

[NFPA 20 Updates for 2019]
October 16, 2018

The 2019 edition includes updates in several areas including extensive new language regarding variable speed pumps; several revised definitions; new requirements for automated monitoring, inspection, and testing; as well as changes in monitoring of pumps during fire events, pumps installed outdoors, refill rates in tall buildings, multistage multiport pumps, and batteries used with diesel engines. This presentation will review the highlights of these changes. *Revision 2.0 (203)*
Certificate Contact Hours: 1

NFPA 13, 2019 Edition, Installation and Residential Updates
September 18, 2018

This presentation will highlight the major changes and updates to both the installation chapters of the 2019 edition of NFPA 13 as well as the residential criteria as found in the 2019 edition of NFPA 13, NFPA 13R, and NFPA 13D. These changes will significantly affect the layout and installation of sprinkler systems and is a "must-know" for layout technicians, installers, AHJs and others in the industry. *Revision 2.0 (202)*
Certificate Contact Hours: 1

Assessing Water Supply Adjustments
August 21, 2018

NFPA 13 suggests adjusting water supply data used in sprinkler demand calculations as appropriate but making too large an adjustment can ultimately create just as many problems as making one that is too small. This presentation summarizes some of the factors that should be considered for assessing adjustments as well as potential negative consequences of adjusting water supply data too aggressively. *Revision 2.0 (201)*
Certificate Contact Hours: 1

NFPA 13, 2019 Edition, Reorganization
July 24, 2018

The next edition of NFPA 13 includes a complete reorganization of the document intended to provide a better roadmap for designers and reviewers. This was the most significant change to NFPA 13 since the 1999 edition when criteria for the Protection of Storage Commodities was added from the NFPA 231 series of documents and its restructuring in the 2002 edition. This presentation will discuss the reasons why the changes were made, the new layout of the standard and where information can be found. Chapter 8, the "junk drawer" or catch-all chapter has been blown up with information being distributed throughout the document. The approach for storage has been redefined based on sprinkler type rather than by commodity classification. These topics and others of significance will be discussed during this presentation. *Revision 2.0 (200)*
Certificate Contact Hours: 1

Hydrant Flow Tests per NFPA 291
June 19, 2018

Water-based fire protection systems rely on a reliable source of water and the municipal water system is a common source of this water. The characteristics of a municipal water supply is typically determined through hydrant flow tests. NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants, highlights the proper procedures, equipment and data collection for these vital tests. This seminar will highlight the requirements of this recommended practice and will include valuable information on the various aspects of hydrant flow testing including: Procedures, Test Layout, Equipment and Determination of Discharge as well as proper data collection and limitations of the tested data. *Revision 2.0 (213)*
Certificate Contact Hours: 1

[2015 and 2018 Changes to Building Codes for Sprinkler Contractors]
May 15, 2018

Building codes reference installation standards and while layout technicians and contractors know the installation standards well, there are numerous building code rules that affect layout and system design. This course highlights changes to the 2015 and 2018 International Building Code, International Fire Code and NFPA's Life Safety Code as it relates to the fire sprinkler contractor. *Revision 2.0 (214)*
Certificate Contact Hours: 1

[An Overview of Corrosion in Sprinkler Systems]
April 17, 2018

This presentation identifies design limitations and installation pitfalls which influence corrosion in sprinkler systems. Topics will include how corrosion is commonly detected and why it is a problem. The basic forms of corrosion, its effects on system reliability, and failure mode concepts will be described. The basic framework for conducting corrosion investigations, factors for consideration in determining whether to salvage or replace a system, and possible corrosion management strategies will also be discussed. *Revision 2.0 (215)*
Certificate Contact Hours: 1

[Understanding the 2017 Edition of NFPA 25]
March 20, 2018

This seminar will address significant changes to the 2017 edition of NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, including an overview of the changes in the reference tables. This seminar will also discuss clarifications of existing rules, addition of newly required procedures, adjustments to reference tables and changes in various time requirements for inspections and testing procedures. *Revision 2.0 (216)*

Certificate Contact Hours: 1.5

[Discussing Design Approaches]
February 20, 2018

Chapter 11 of NFPA 13 (2016) provides a layout technician the tools to determine the hydraulic design approach for a fire sprinkler system. While the pipe schedule method is still permitted for small systems which meet the requirements of Chapter 11, essentially all systems are now required to be hydraulically calculated based on Section 11.2.3. This seminar will discuss the available hydraulic design options, including the density/area method, room design method, and special design approaches, such as residential sprinklers, water curtains and a discussion on deluge systems. *Revision 2.0 (217)*

Certificate Contact Hours: 1.5

[Protecting Buildings Under Construction]
January 16, 2018

Buildings under construction pose special challenges for fire protection. This presentation will examine the requirements of NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations and IBC Chapter 33 Safeguards During Construction. *Revision 2.0 (218)*

Certificate Contact Hours: 1.5

[Other Special Situations]
December 19, 2017

This session rounds out the special situation topics of NFPA 13, section 8.15, which has often been referred to as the "junk drawer." A variety of miscellaneous and somewhat seemingly unrelated topics will be discussed including, library stack areas, glazing protection, revolving doors, and stages. Although these topics do not appear to be related, each has its own unique set of specialized sprinkler protection requirements and/or permitted omissions. Knowing how to provide protection for these conditions is important to ensure compliance. In addition, requirements for return bends, dry pipe underground and old-style sprinklers will be discussed. *Revision 2.0 (219)*

Certificate Contact Hours: 1.5

[Unusual Ceilings]
November 21, 2017

The installation of complex and ornate ceilings has become the norm rather than the exception in many contemporary construction projects. Special situations involving spaces above ceilings, open grid ceilings, drop out ceilings, ceiling clouds and stepped ceilings will be reviewed. Architectural ceiling designs have continued to evolve beyond

the limitations for cloud ceilings. The special ceiling situations included in the sub-sections of 8.15 will be reviewed. Sprinkler protection requirements and compliance options will be discussed for these unique and challenging ceiling configurations. *Revision 2.0 (220)*

Certificate Contact Hours: 1.5

Vertical Shafts, Stairways and Elevators
October 17, 2017

Where are sprinklers required in vertical shafts, stairways, elevator equipment rooms and elevators shafts? The special situations included in NFPA 13 sections 8.15.2, 8.15.3, 8.15.4 and 8.15.5 will be reviewed. NFPA 13 requires sprinkler protection in vertical shafts having exposed combustible construction. The basic requirements for installation of sprinklers, considerations for inspection and conditions allowing omission of protection in vertical shafts will be identified. Sprinkler protection requirements for stairways of combustible, limited combustible and noncombustible construction will be identified. Situations involving vertical openings for escalators, staircases and atriums will be reviewed. Sprinkler protection requirements for elevator equipment rooms and shafts will be identified. These requirements have evolved over the last several cycles and reviewed to demonstrate when sprinkler protection is required and when it can be omitted. *Revision 2.0 (221)*
Certificate Contact Hours: 1.5

Protected and Unprotected Concealed Spaces: Part 2
September 19, 2017

NFPA 13 requires sprinklers to be installed to protect all areas of a building unless an area is specifically permitted to allow omission of sprinklers by a section of the standard. Section 8.15, Special Situations, provides guidance on which of these areas are permitted to have sprinklers when meeting certain criteria. Arguably one of the most utilized areas of this section is 18.15.1.2 which provides 18 subsections of arrangements for concealed spaces in which sprinklers are not required to be installed. This seminar is part 2 of 2 which will tackle issues involved with omitting sprinklers from these spaces and how to properly protect these spaces when you cannot omit sprinklers. *Revision 2.0 (225)*

Certificate Contact Hours: 1.5

Protected and Unprotected Concealed Spaces: Part 1
August 15, 2017

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Section 8.15, Special Situations, provides guidance on which of these areas are permitted to have sprinklers when meeting certain criteria. Arguably one of the most utilized areas of this section is 18.15.1.2 which provides 18 subsections of arrangements for concealed spaces in which sprinklers are not required to be installed. This seminar is part 1 of 2 which will tackle issues involved with omitting sprinklers from these spaces and how to properly protect these spaces when you cannot omit sprinklers. *Revision 2.0 (224)*
Certificate Contact Hours: 1.5

NFPA 13 and Sprinklers Under Exterior Projections
July 18, 2017

The NFPA 13 sprinkler installation rules for exterior projections appear simple but have long been a source of confusion. This lesson will review the cases where sprinklers are required under exterior projections and those where they are permitted to be omitted. Topics will include: Recognizing what building features should be treated as exterior projections and which should not; Determining the combustibility classification of exterior projections; Determining the use of the space underneath exterior projections. *Revision 2.0 (226)*
Certificate Contact Hours: 1.5

The Impact of NFPA 3 and NFPA 4 on Sprinkler Systems
June 20, 2017

As part of the 2018 NFPA code cycle, two documents are changing in ways that will impact the way you do business. First, NFPA 3, Recommended Practice for Commissioning of Fire Protection and Life Safety Systems will become a standard. Both NFPA 3 and NFPA 4, Standard for Integrated Fire Protection and Life Safety System Testing are being incorporated through reference into the International Building Code, NPFA 101, Life Safety Code and NFPA 5000, the Building Construction and Safety Code. The important changes impacting how sprinkler systems are commissioned will be discussed as NFPA 3 becomes a standard. What will you need to do that you aren't doing now? How will this impact cost and time? The important changes impacting integrated testing will be discussed as NFPA 4 becomes more widely used. Will every sprinkler system supervised by a fire alarm system require integrated testing plans and written procedures? These important topics will be discussed. *Revision 2.0 (227)*
Certificate Contact Hours: 1.5

Trade Up in the IBC
May 16, 2017

This Tech Tuesday addresses the Trade Up in the International Building Codes. The 1973 America Burning report encouraged the U.S. building codes to allow more increased active fire protection systems to reduce passive fire protection systems. This becomes the birth of the tradeoff, or when lives and properties are saved, it is better referred to as the "trade up". Since then, the NFSA and many allies have been involved in the model code arena to promote the attributes of fire sprinkler systems.

This program will highlight some of the long serving trade ups in the model codes, the financial benefits of trade ups for building designers and building owners, and tools to convince customers and communities that fire sprinkler systems and trade ups save lives, property and money which benefit everyone that uses current codes. *Revision 2.0 (199)*

Certificate Contact Hours: 1.5

Tanks per NFPA 22

April 18, 2017

Water-based fire protection systems need a reliable source of water. Stored water is a common and acceptable type of water supply for these systems. NFPA 22 is the Standard for Water Tanks for Private Fire Protection. This document describes the minimum requirements of the various types of tanks used for fire protection including gravity tanks, suction tanks, pressure tanks and break tanks. This seminar will highlight the requirements of this standard and will include valuable information on the various aspects of water tanks design and installation including: tank capacity, acceptable tank material, tank heating, pipe connections and fitting as well as acceptance test requirements and inspection testing and maintenance of water tanks. *Revision 2.0 (228)*

Certificate Contact Hours: 1.5

Piping and Valve Installation

March 21, 2017

Pipe and valves are key components of any sprinkler system. They need to be installed correctly and with consideration of how they will be used over the life of the system, which includes the ability to perform maintenance. Choosing the correct types components for the system at hand is a necessity. The detailed locations and trim for valves, including control valves, check valves and pressure reducing valves will be discussed. In general, this seminar will cover the installation requirements for pipe and valves for various sprinkler systems. *Revision 2.0 (229)*

Certificate Contact Hours: 1.5

Remote Monitoring and Remote ITM

February 21, 2017

The use of remote or automated systems are becoming more commonplace and because of that, ensuring the automated inspection/testing equipment performs as needed is more important now than ever. The 2017 edition of NFPA 25 now contains regulations and guidance for automated inspections and testing. In this presentation, we will take a look at some of the remote inspection and testing systems that exist and what should be done to ensure their proper operation. *Revision 2.0 (230)*

Certificate Contact Hours: 1.5

Sprinklers Installed Outside

January 17, 2017

The sprinkler installation standards are generally concerned with where and how to install sprinklers inside of a building, but sprinklers are sometimes required outdoors, too. Examples of sprinklers outside include exposure protection systems, assembly pavilions, eaves, and other projections. Concerns arise for corrosion, freezing, and other environmental conditions when sprinklers are installed in these applications. This lesson will review some of the situations requiring sprinklers to be installed outdoors as well as some of the special installation issues that must be considered. *Revision 2.0 (231)*

Certificate Contact Hours: 1.5

Inspecting Storage Occupancies

December 20, 2016

Storage occupancies have long been segregated from other occupancy hazards for planning their protection schemes. Once a system is in place, it is important that the system is inspected, maintained, and tested over its lifetime. This lesson will review the nuances of inspecting storage occupancies in accordance with NFPA 25. *Revision 2.0 (232)*

Certificate Contact Hours: 1.5

Protecting Rack Storage of Group A Plastics

November 15, 2016

The storage of Group A plastic on racks is one of the most challenging fire situations that fire sprinklers can experience. These storage arrangements can promote a severe fire condition which may include a rapid spread of fire with a high rate of heat release. Chapter 17 in NFPA 13 titled “Protection of Rack Storage of Plastic and Rubber Commodities” spells out the acceptable protection options for this extreme fire risk. Chapter 17 gives the layout technician many options including the use of Standard Spray Sprinklers (CMDA), Control Mode Specific Application sprinklers (CMSA), Early Suppression Fast Response sprinklers (ESFR) and in-rack sprinklers. *Revision 2.0 (233)*

Certificate Contact Hours: 1.5

Protecting Rack Storage for Class I-IV

October 18, 2016

Rack storage is definitely a high challenge fire scenario. There are many options presented in NFPA 13 for protecting racks. Different ceiling sprinklers, sprinkler inside the racks, variations in configurations including aisle width will all result in different sprinkler locations and demands. This lesson will review the many standardized options available when protecting Class I through Class IV commodities. *Revision 2.0 (234)*

Certificate Contact Hours: 1.5

Protecting Palletized and Solid-Piled Class I-IV and Group A

September 20, 2016

When many people think of storage, often the first thing they think of is rack storage. This seminar will highlight the other storage configurations-palletized, solid-piled, bin box, shelf, or back-to-back shelf storage. It will focus on NFPA 13, 2016 edition, Chapter 14, Chapter 15, and some of their unique sprinkler protection requirements and challenges. High challenge fires of these storage arrangements require attention to the details of protecting them properly. *Revision 2.0 (235)*

Certificate Contact Hours: 1.5

Miscellaneous and Low-Piled Storage

August 16, 2016

When is storage not treated as storage? When it meets the definition of miscellaneous or low-piled storage. Typically, the requirements of NFPA 13 for the protection of storage are distinct from the occupancy or hazard class requirements of the standard. Miscellaneous and low-piled storage is the exception. These specific storage arrangements are protected by the rules found in Chapter 13, which typically reference the occupancy rules and not the storage rules within NFPA 13.

This program will show how the provisions of this chapter combine with both the occupancy hazard classification rules and the rules for protection of high-piled storage involving commodity classification. It will also focus on these specific storage arrangements and the protection rules found in Chapter 13, Protection of Miscellaneous and Low-Piled Storage. This presentation will discuss situations where the application of the rules found within Chapter 13 are appropriate and what that application entails. *Revision 2.0 (236)*

Certificate Contact Hours: 1.5

General Storage Requirements

July 19, 2016

When a building is protecting high piled storage, whether it be a project with solid piled Class II Commodities or Group A Plastics stored on racks, Chapter 12 of the 2016 edition of NFPA 13 will provide the general requirements for the installation. This seminar will highlight the requirements applicable to all storage arrangements and commodity classifications with standardized protection criteria in NFPA 13. Topics include applications, discharge considerations, design methods and protection of idle pallets. *Revision 2.0 (237)*

Certificate Contact Hours: 1.5

NFPA 20 Updates for 2016

June 21, 2016

The 2016 Edition of NFPA 20 is now available with many updates to the rules for the design and installation of fire pumps. This seminar will focus on the major changes including multistage multiport pump criteria, requirements for transfer switches, and there will be discussions on automatic testing, remote monitoring and more. This review will assist AHJs and installers a like in updating to the current materials. *Revision 2.0 (238)*
Certificate Contact Hours: 1.5

NFPA 13 Installation Criteria Updates for the 2016 Edition
May 17, 2016

The installation chapters of NFPA 13 include chapters 1, 2, 3, 4, 6, 7, 8, 25, 26 and 27. Changes for the 2016 edition to these chapters will significantly affect the layout and installation of sprinkler systems and is a "must-know" for layout technicians, installers, AHJs and others in the industry. This seminar will focus on the major changes including new criteria for "Cloud Ceilings", new requirements for air venting of wet systems to prevent corrosion, changes in obstruction rules, new requirements for sprinkler protected glazing, main drain sizing and more. *Revision 2.0 (239)*
Certificate Contact Hours: 1.5

NFPA 13, NFPA 13R, and NFPA 13D Residential Updates for the 2016 Edition
April 19, 2016

The new 2016 residential standards, NFPA 13R and NFPA 13D, introduce some clarifications of existing requirements as well as some notable new ones such as bringing language regarding architectural features in NFPA 13D from the Annex to the body of the standard. Other key changes include language dealing with the replacement of residential sprinklers listed for design densities less than 0.05 gpm/ft2; reinstalling dry sprinklers; sprinklers outside of dwelling units; sprinkler-protected glass; and drains for trapped sections of pipe. This presentation will review these and other highlights of the residential updates from 2013 to 2016 editions. *Revision 2.0 (240)*
Certificate Contact Hours: 1.5

NFPA 13 Discharge Criteria Updates for the 2016 Edition
March 15, 2016

Many changes for the discharge criteria for fire sprinkler systems were made to the 2016 Edition of NFPA 13 recently released. This seminar will focus on the major changes including the updates to design criteria for the protection of exposed expanded Group A plastics, guidance on the protection of columns within or near rack structures, handling idle wood pallets and more. *Revision 2.0 (241)*
Certificate Contact Hours: 1.5

Commodity Classification Updates for 2016 and Beyond

February 16, 2016

This online program will present the changes in the 2016 edition of NFPA 13 to Chapter5, Classification of Occupancies and Commodities. NFPA 13 has new figures that include percentages of mixed commodities with Group A Expanded and Unexpanded plastics. Chapter 5 has also greatly changed how commodities are listed within the document. The layout with new figures and updated tables will assist in determining the appropriate commodity for the ever-changing world of storage protection. The discussion will also address commodity classification in the 2015 edition of the International Fire Code (IFC). *Revision 2.0 (242)*

Certificate Contact Hours: 1.5

NFPA 13 Hanging and Bracing Updates for the 2016 Edition

January 19, 2016

Another edition of NFPA 13 hit the streets this past fall. Although gravity and seismic loads have been impacting fire sprinkler systems since the beginning, this program will discuss the modifications made to the hanging and support requirements. Properly supporting fire sprinkler systems, as well as other water-based fire protection, is instrumental to the system's function throughout its lifespan. *Revision 2.0 (243)*

Certificate Contact Hours: 1.5

NFSA Planning for Backflow Prevention and Fire Protection Systems

This 1-hour video Tech Tuesday focuses on Planning for Backflow Prevention and Fire Protection Systems. CEUs and certificate available upon completion. *Revision 2.0 (245)*

Certificate Contact Hours: 1.5

Best Practices in the 2016 NFPA 13 standard

The 2016 NFPA 13 standard is out. This seminar describes the top ten best practices to consider now before its adoption. *Revision 2.0 (246)*

Certificate Contact Hours: 1.5

Spanish Self-Paced Online Learning

Aprendizaje a su propio ritmo en español

Alcance y definición de NFPA 25

NFPA 25 Scope and Definitions

Este curso aborda el capítulo de alcance y definición de NFPA 25 para el técnico de ITM. NFPA 25 establece quién es responsable de la inspección, las pruebas y el mantenimiento del sistema de protección contra incendios a base de agua, incluidos el mantenimiento y los cambios en el sistema. Existen requisitos generales que se relacionan con los tipos de sistemas cubiertos por el alcance de la norma. El estándar revisa quién es responsable de ITM, qué se requiere, qué debe ocurrir cuando hay cambios en la ocupación, el uso o los materiales, y otros requisitos generales. *Revision 2.0 (254)*

Certificate Contact Hours: 1

Requisitos generales para ITM

General Requirements for ITM

Este curso aborda los requisitos generales del capítulo NFPA 25 para el técnico de ITM. Estos requisitos establecen quién es responsable de la ITM del sistema de protección contra incendios, incluidos el mantenimiento y los cambios en el sistema cuando se producen cambios en el edificio. Existen requisitos generales que se relacionan con los tipos de sistemas cubiertos por el alcance de la norma. El estándar revisa quién es responsable de ITM y qué debe ocurrir cuando hay cambios en la ocupación, el uso o los materiales, la señalización requerida y otros requisitos generales. *Revision 2.0 (255)*

Certificate Contact Hours: 1

Inspección de la NFSA de los sistemas de rociadores contra incendios de la serie ITM

Inspection of Fire Sprinkler Systems ITM Series

NFPA 25 "Estándar para la inspección, prueba y mantenimiento de sistemas de protección contra incendios a base de agua" aborda los procedimientos y métodos de inspección, prueba y mantenimiento de sistemas basados en agua. Esta lección de una hora a su propio ritmo proporciona detalles y consejos para los inspectores de los sistemas de rociadores contra incendios basados en este estándar. Al trabajar con Ken Isman, uno de los principales expertos en sistemas de protección contra incendios, abordaremos la inspección de los componentes del sistema de rociadores. (4.1) *Revision 2.0 (191)*

Certificate Contact Hours: 1

Inspección de los sistemas de tubos verticales, redes privadas e hidrantes de la serie ITM

Inspection of Standpipe Systems, Private Mains, and Hydrants ITM Series

NFPA 25 "Estándar para
la inspección, prueba y mantenimiento de sistemas de protección contra incendios a base
de agua" aborda los requisitos, procedimientos y métodos de inspección, prueba y man tenimiento de sistemas basados en agua. Esta lección de una hora
a su propio ritmo proporciona detalles y consejos para los inspectores de los sistemas de rociadores contra incendios basados en el estándar NFPA. Trabajando con Ken Isman, uno
de los principales expertos en sistemas de protección contra incendios, abordaremos l a inspección de sistemas de tuberías verticales, redes privadas e hidrantes. Esto
es parte de la serie de capacitación ITM de la NFSA. (4.2) *Revision 2.0 (192)*
Certificate Contact Hours: 1

Inspección de Bombas y Tanques Serie ITM
Inspection of Pumps and Tanks ITM Series

NFPA 25 "Estándar para
la inspección, prueba y mantenimiento de sistemas de protección contra incendios a base
de agua" aborda los requisitos, procedimientos y métodos de inspección, prueba y man tenimiento de sistemas basados en agua. Esta lección de una hora
a su propio ritmo proporciona detalles y consejos para los inspectores de los sistemas de rociadores contra incendios basados en el estándar NFPA. Trabajando con Ken Isman, uno
de los principales expertos en sistemas de protección contra incendios, abordaremos l a inspección de bombas y tanques. Esto es parte de la serie de capacitación ITM de la NFSA. (4.3) *Revision 2.0 (193)*
Certificate Contact Hours: 1

Inspección de válvulas y otros componentes comunes Serie ITM
Inspection of Valves and Other Common Components ITM Series

NFPA 25 "Estándar para
la inspección, prueba y mantenimiento de sistemas de protección contra incendios a base
de agua" aborda los requisitos, procedimientos y métodos de inspección, prueba y man tenimiento de sistemas basados en agua. Esta lección de una hora
a su propio ritmo proporciona detalles y consejos para los inspectores de los sistemas de rociadores contra incendios basados en el estándar NFPA. Trabajando con Ken Isman, uno
de los principales expertos en sistemas de protección contra incendios, abordaremos l a inspección de válvulas y otros componentes comunes. Esto es parte de la serie de capacitación ITM de la NFSA. (4.4) *Revision 2.0 (194)*
Certificate Contact Hours: 1

Prueba de la serie ITM de sistemas de rociadores contra incendios
Testing of Fire Sprinkler Systems ITM Series

NFPA 25 "Estándar para la inspección, prueba y mantenimiento de sistemas de protección contra incendios a base de agua" aborda los requisitos, procedimientos y métodos de inspección, prueba y mantenimiento de sistemas basados en agua. Esta lección de una hora a su propio ritmo proporciona detalles y consejos para los inspectores de los sistemas de rociadores contra incendios basados en el estándar NFPA. Trabajando con Ken Isman, uno de los principales expertos en sistemas de protección contra incendios, abordaremos las pruebas de los componentes del sistema de rociadores. Esto es parte de la serie de capacitación ITM de la NFSA. (5.1) *Revision 2.0 (190)*
Certificate Contact Hours: 1

Pruebas de tuberías verticales, tuberías privadas e hidrantes
Testing of Standpipe, Private Mains and Hydrants

Este curso utiliza NFPA 25 como referencia para identificar la frecuencia y el propósito de realizar pruebas de flujo y pruebas hidrostáticas para tuberías verticales, tuberías principales e hidrantes. El curso aborda la comprensión del propósito de las pruebas, la determinación de la frecuencia de las pruebas y la identificación del equipo utilizado en las pruebas. (5.2) *Revision 2.0 (256)*
Certificate Contact Hours: 1

Pruebas de bombas contra incendios y tanques
Testing of Fire Pumps and Tanks

Este curso utiliza NFPA 25 como referencia para la prueba de bombas y tanques. En este módulo aprenderá los requisitos de prueba en relación con las bombas contra incendios, el funcionamiento de la bomba, las condiciones sin flujo para las bombas accionadas por motores diesel y motores eléctricos, las condiciones de flujo y las señales de alarma de la bomba contra incendios, y los diversos requisitos relacionados con los tanques.
Certificate Contact Hours: 1

Evaluaciones internas, investigaciones de obstrucción y deficiencias
Internal Assessments, Obstruction Investigations and Impairments

Los sistemas de tuberías de cualquier tipo pueden dejar de funcionar cuando la tubería se llena con material obstructor. Los sistemas de rociadores no son una excepción. Cualquier programa de mantenimiento debe incluir medios para ev aluar las condiciones internas de las tuberías y eliminar cualquier obstrucción.
El propósito de este curso es proporcionar una guía general sobre la evaluación de las condiciones interiores de
un sistema de tuberías, investigaciones de obstrucción y manejo de daños.
El curso aborda la comprensión de las diferencias entre las evaluaciones de tuberías internas y las investigaciones de obstrucción, la identificación del equipo utilizado al realizar evaluaciones internas,
la identificación de los factores desencadenantes que requieren una investigación de o bstrucción y la comprensión de cómo abordar adecuadamente las deficiencias.
Certificate Contact Hours: 1

Coordinación de NFPA 25 y 72

NFPA 25 and 72 Coordinating the Work for Successful ITM

Ambos NFPA 25 y NFPA 72 requieren la coordinación de las pruebas de los sistemas de rociadores y los sistemas de alarma contra incendios. Eso es más fácil decirlo que hacerlo.
Con una variedad de referencias de código administrativo,
las diferentes frecuencias de tareas, las diferencias de alcance y las definiciones únicas utilizadas en los códigos y normas que supervisan la inspecció n, pruebas y mantenimiento del sistema de protección contra incendios (ITM),
la coordinación del trabajo se convierte en crítica para garantizar una protección adecu ada y completa del edificio. En este seminario único de 1 hora, el participante explorará los temas y desarrollará estrategias para coordinar el tra bajo requerido por estos dos estándares importantes. Aunque no
es absolutamente necesario, los participantes deben tener un conocimiento básico de la NFPA 25 y 72 para sacar el máximo provecho del seminario. *Revision 2.0 (195)*
Certificate Contact Hours: 1