AFSA45
SUPPORTING FIRE ALARM TESTING AS A SPRINKLER TECHNICIAN
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SAN ANTONIO, TX
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Supporting Fire Alarm Testing as a Sprinkler Technician
Learning Objectives:
Describe the testing requirements for fire alarm components that interface with a fire sprinkler system.
Discuss how a sprinkler contractor can effectively collaborate with the fire alarm technician to perform effective testing of a fire alarm system.
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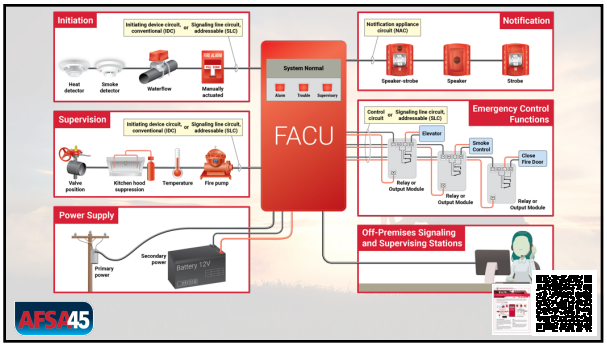
Initiation
Notification
System Normal
FACU
Supervision
Emergency Control Functions
Power Supply
Off-Premises Signaling and Supervising Stations
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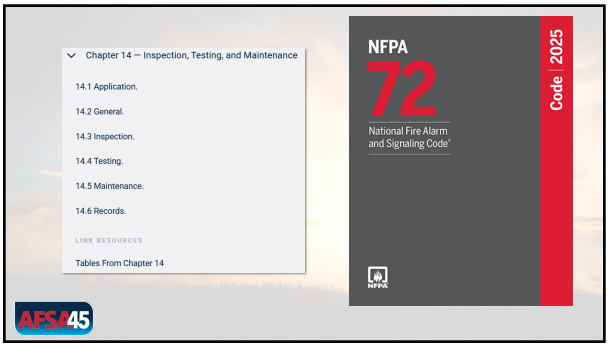
4


Chapter 14 – Inspection, Testing, and Maintenance
14.1 Application.
14.2 General.
14.3 Inspection.
14.4 Testing.
14.5 Maintenance.
14.6 Records.
LINK RESOURCES
Tables From Chapter 14
NFPA
72
National Fire Alarm and Signaling Code
Code | 2025
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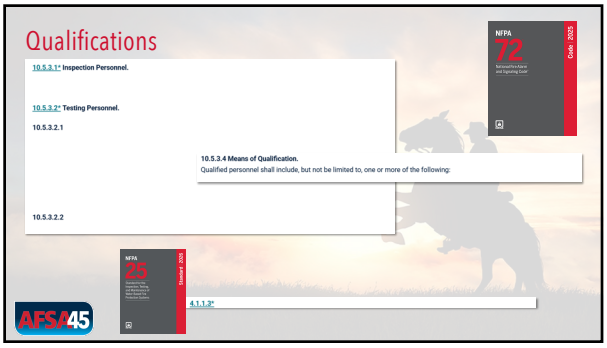
Qualifications
10.5.3.1* Inspection Personnel.
10.5.3.2* Testing Personnel.
10.5.3.2.1
10.5.3.4 Means of Qualification.
Qualified personnel shall include, but not be limited to, one or more of the following:
10.5.3.2.2
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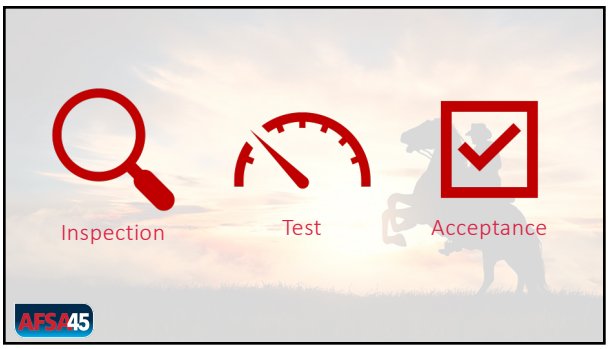
Inspection
Test
Acceptance
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Fire Alarm System Inspections
Component
Frequency
Control Equipment
Annually
Off-Premises Transmitters
Annually
Batteries
Semiannually
Initiating Devices
Semiannually
Notification Appliances
Semiannually
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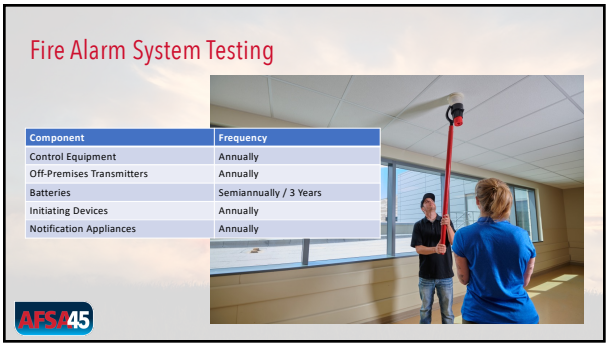
Fire Alarm System Testing
Component
Frequency
Control Equipment
Annually
Off-Premises Transmitters
Annually
Batteries
Semiannually / 3 Years
Initiating Devices
Annually
Notification Appliances
Annually
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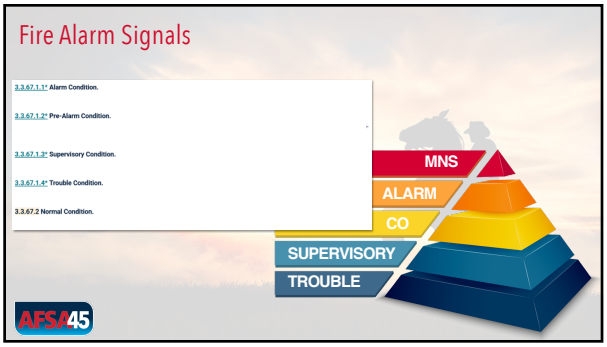
Fire Alarm Signals
3.3.67.1.1* Alarm Condition.
3.3.67.1.2* Pre-Alarm Condition.
3.3.67.1.3* Supervisory Condition.
3.3.67.1.4* Trouble Condition.
3.3.67.2 Normal Condition.
MNS
ALARM
CO
SUPERVISORY
TROUBLE
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Control Valve Supervision
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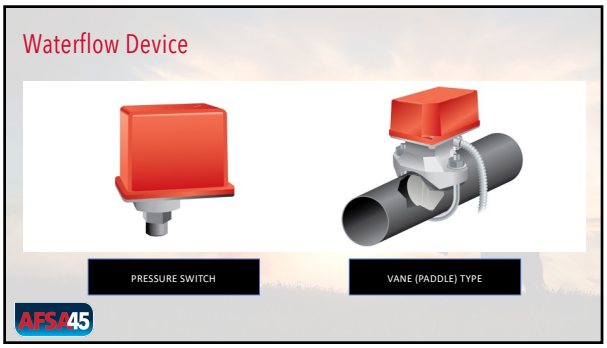
Waterflow Device
PRESSURE SWITCH
VANE (PADDLE) TYPE
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Waterflow Device

90 seconds

Must actuate within 90 seconds of flow equal to the flow from a single sprinkler head

Surges

Device must not respond to surges and varying pressure

FIGURE 14.4.4 Bypass Test Valve for Alarm Pressure Switches

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Floor Control Valve Assemblies

14

High- or Low-Air Pressure

Stop compressor

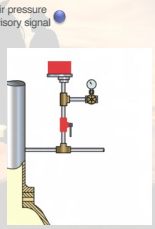
Nominal pressure

High air pressure supervisory signal

Start compressor

Low air pressure supervisory signal

For low air pressure dry pipe valves, the high- and low-pressure values shall be set in accordance with the manufacturer's installation instructions.



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Room Temperature Switch

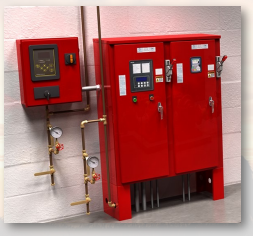
16

Water-Level Switch

17

Fire Pump - Electric

- Pump running
- Controller main switch in position other than "automatic start"
- Trouble on controller
- Phase reversal
- Loss of Phase



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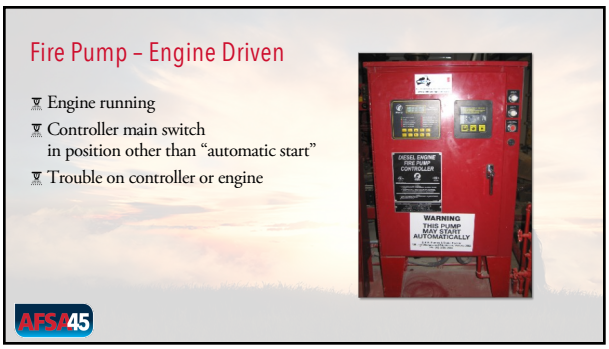

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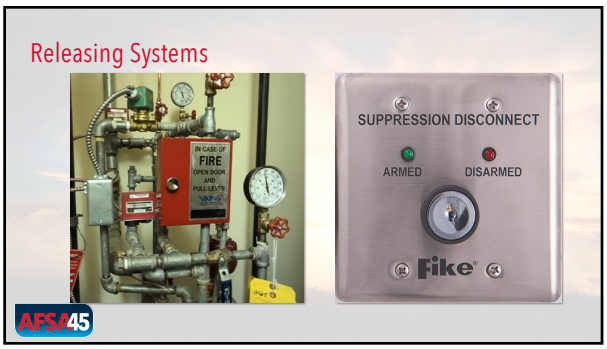

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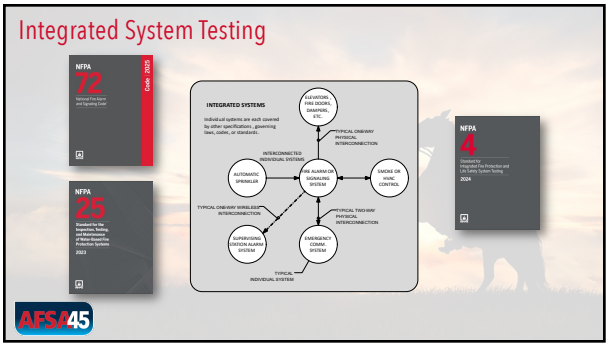

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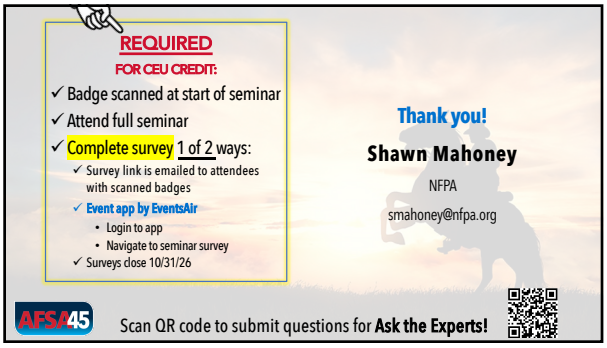

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2027 Training Schedule

WEBINARS

1/6	Updates to NFPA 20
1/20	Calculating Pressure Reducing Hose Valves
2/3	Consumer Alert: Nitrogen in Sprinkler Systems
2/17	Reviewing Hydraulic Calculations
3/3	Updates to NFPA 13, 2028 Ed.
3/17	Updates to NFPA 13R & 13D, 2028 Eds.
4/7	Topic Coming Soon
4/21	NFPA 25: Roles & Responsibilities
5/5	Standpipe Flow Test Procedures
5/19	Storage 101
6/2	NFPA Technical Meeting - Voting Guide
6/16	Topic Coming Soon
6/30	Topic Coming Soon
7/7	Updates to NFPA 14, 2027 Edition
7/21	Adjacent Hazards & Design Methods
8/4	Acceptance Testing
8/18	Modifications to Existing Systems
9/22	Topic Coming Soon
10/6	Seismic 101
10/20	Proposed Updates to NFPA 25, 2029 Ed.
11/3	Evaluating Fire Pump Flow Tests
11/17	Top 10 Tech Reviews
12/1	Designing Water Storage Tanks
12/15	Pump Room Layout

PROGRAMS

Feb 9 - Mar 5 Apr 20 - May 14 Aug 3 - Aug 27** Oct 26 - Nov 19	Beginning Design School*
Apr 26 - May 7 Nov 1 - 12	Intermediate Design School*
Feb 8 - 10** Apr 12 - 14 Jul 12 - 14 Oct 11 - 13	Sprinkler Hydraulics Calculations Workshop
Apr 19 - 21 Oct 18 - 20	Advanced Hydraulics Calculations Workshop
Feb 11** Apr 30 Jul 23 Sep 24	Introduction to the Fire Sprinkler Industry
Mar 1 - 3 May 17 - 19 Aug 16 - 18 Oct 18 - 20**	NFPA 25 Essentials Workshop
Jun 7 - 10 Sep 20 - 23	Experienced Inspector Skills Lab
Mar 4 - 5 May 20 - 21 Aug 19 - 20 Oct 21 - 22**	NFPA 25 Fire Pump Workshop
Spring Summer Fall	ITM Inspector Development Program* *This program is 20 months.*

** Hybrid course **At General Air Products Lab, Exton, PA*

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September 8-11	Manchester Grand Hyatt San Diego, CA

For More Details Visit:
firesprinkler.org

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Dates subject to change. Programs subject to minimum registrations.

rev 9/14/2026

Virtual Instruction Path (VIP)

for Sprinkler Fitting Apprentices

Level 1 - Begins January 2027

Level 2 - Begins February 2027

Level 3 - Begins January 2027

Level 4 - Begins March 2027

www.firesprinkler.org/VIP

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HANDS-ON WORKSHOPS FOR 2027

FEATURING AFSA'S TRAINING LAB

NFPA 25 Essentials Workshop

Mar | May | Aug | Oct

Description: Understand roles, responsibilities, and NFPA 25 ITM procedures through hands-on testing of wet systems, dry systems, and fire pumps.

NFPA 25 Fire Pump Workshop

Mar | May | Aug | Oct

Description: Develop practical NFPA 25 fire pump ITM skills, including no-flow and full-flow testing, water supply graphing, and performance evaluation.

Introduction to the Fire Sprinkler Industry

Feb | Apr | Jul | Sep

Description: This course is designed for those new to the industry. An introductory, wide-ranging 8-hour course that provides a broad overview of core fire sprinkler industry concepts for those new to the field.

Experienced Inspector Skills Lab NEW

Mar | Sep

Description: Take your ITM expertise beyond the basics. Designed for experienced technicians, this course combines focused classroom instruction with hands-on system lab training to strengthen your application of current NFPA 25 inspection, testing, and maintenance requirements. Refine fire sprinkler testing practices, improve documentation, deliver more consistent service, and help reduce liability while reinforcing knowledge commonly covered on certification exams.

Learn more about AFSA's fire sprinkler lab featuring functional risers, a spray room, fire pumps, and an interactive classroom.

firesprinkler.org/lab