

Water-based Fire Protection Inspector Level I Content Outline

1.1 Purpose, Organization and Scope

Candidates should understand the difference between a standard and a code and be able to identify the different NFPA standards as they pertain to NFPA 25. Candidates should be able to answer questions regarding the identification of the scope of work for an NFPA 25 Inspection, Testing and Maintenance service. The Candidate should also understand the specific requirements of any state and/or local regulations as they pertain to NFPA 25.

1.2 System Types

The Candidate should be able to identify the various types of water-based systems (wet, dry, preaction & deluge) to properly apply the rules for each respective system. The candidate must also be able to differentiate between other systems such as: Antifreeze, Standpipes, Fire Pumps and Fire Service Mains.

1.3 Basic System Components

The candidate should show a basic understanding of the inspection, testing and maintenance requirements of:

- Control Valves

Gages

- FDC's

Water Flow Alarms

- Check Valves

- Back Flow Preventers

- Drains

- Compressors

Various types of Sprinklers

- Sprinkler Cabinets

- Pipe

Fittings

Hangers

Seismic bracing

- Hose Equipment

PRV's and other special

equipment

- Supervisory signal devices

Relief Valves

- Pump packing

1.4 Inspection Preparation, Procedures and Reporting

The Candidate should demonstrate an understanding of the records required by NFPA 25 and any additional state or local regulations as they apply to NFPA 25. The candidate should be able to understand who is responsible for the various reporting and record keeping requirements of either NFPA 25 or any state and/or local jurisdictions.

1.5 Impairments and Deficiencies

Candidates should understand the requirements for tagging in relation to impairments according to NFPA. In addition, candidates should understand the various reporting procedures for deficiencies and/or impairments that may be required by state and/or local jurisdictions, and who is responsible for any such respective tagging and/or reporting procedures.



Water-based Fire Protection Inspector Level II Content Outline

The ACE Inspector II certification is designed for inspectors who work independently to perform normal ITM duties and have a minimum of 2,000 hours of work experience in the field of inspection and testing of water-based fire protection systems.

- **2.1 Basic Position Functions** (Questions related to these tasks make up approximately 5% 10% of the exam) Candidates should be able to answer questions regarding science and math that applies to the Inspection, Testing and Maintenance, including the ability to determine the difference in acceptable temperatures (Celsius and Fahrenheit), quantities of sprinklers, and percentage of sprinklers for testing. Candidates should also be able to answer questions and understand concepts for all content areas covered in the Level I exam.
- **2.2 Scope and Documentation** (Questions related to these tasks make up 5-15% of the exam) Candidates should understand the scope of work for an NFPA 25 Inspection, Testing and Maintenance service. Candidates should also have a clear understanding of who is responsible for the overall ITM of the system, corrections and repairs, notifications, and the potential for hazard evaluation.
- **2.3** Inspection, Testing and Maintenance of Water based Systems (Questions related to these tasks make up 65% 75% of the exam)

Candidates should have the knowledge and skills to conduct:

- 2.3.1 ITM of System Valves and all common system components
- 2.3.2 ITM of Wet Systems
- 2.3.3 ITM of Dry Systems
- 2.3.4 ITM of Standpipe Systems
- 2.3.5 ITM of Fire Pump System
- 2.3.6 ITM of Private Fire Service Mains
- 2.3.7 ITM of Water Storage Tanks
- 2.3.8 ITM of Deluge and Pre-action systems
- 2.3.11 Inspection of Internal Piping and obstruction investigations
- **2.4 Impairments and Deficiencies** (Questions related to these tasks make up 5 10% of the exam)

Candidates should show a complete understanding of the various types of impairments and deficiencies and the appropriate impairment procedures in NFPA 25. In addition, candidates should understand the various reporting procedures for deficiencies and/or impairments that may be required by state and/or local jurisdictions, and who is responsible for any such respective tagging and/or reporting procedures. Candidates should also be able to explain the proper procedures for restoring a system to service.