



**American Fire  
Sprinkler Association**

## **VIP Course Schedule – Level 1 Begins January 15th, 2025**

The course schedule contains the following components:

- Schedule for live lessons
  - *Two identical lessons are offered on each date listed below to accommodate varying time zones: **10:00am Central, and 4:00pm Central**. Apprentices need only attend one of these two identical lessons on each live lesson date.*
- Performance task schedule
- Learning objectives for modules

<b>Lesson</b>	<b>Date</b>	<b>Subjects</b>	<b>Performance Tasks</b>	<b>Related Modules</b>
1	15-Jan-25	Course Introduction and Basic Safety: <ul style="list-style-type: none"><li>● Future with construction industry</li><li>● Introduction to the fire sprinkler industry</li><li>● Benefits of safety and reducing hazards</li></ul>	Course Introduction: <i>No tasks for this lesson.</i>	00100 18101 00101
2	29-Jan-25	Basic Safety: <ul style="list-style-type: none"><li>● Importance of safety</li><li>● Common construction hazards</li><li>● Best practices for safety</li></ul>	Basic Safety: <ul style="list-style-type: none"><li>● Properly set up and climb/descend an extension ladder</li><li>● Inspect PPE items and determine if they are safe to use</li><li>● Properly don, fit, and remove PPE items</li><li>● Inspect a typical power cord and GFCI to ensure their serviceability</li></ul>	00101

Lesson	Date	Subjects	Performance Tasks	Related Modules
3	12-Feb-25	Construction Math: <ul style="list-style-type: none"> <li>• Whole and fractional numbers</li> <li>• Tools for measuring lengths</li> <li>• Units</li> </ul>	Construction Math: <ul style="list-style-type: none"> <li>• Using a measuring tape in both English and metric units:               <ul style="list-style-type: none"> <li>○ Measure lumber pieces</li> <li>○ Measure a room-sized space</li> <li>○ Determine a short inside measurement</li> </ul> </li> <li>• Add English measurements that include fractions</li> </ul>	00102
4	26-Feb-25	Hand Tools: <ul style="list-style-type: none"> <li>• Introduction to common manual construction tools</li> <li>• Review of manual tools most common for sprinkler fitters</li> </ul>	Hand Tools: <ul style="list-style-type: none"> <li>• Inspect and demonstrate safe and proper use of the following hand tools:               <ul style="list-style-type: none"> <li>○ Hammers, demolition tools, chisels and punches, screwdrivers, adjustable wrenches, non-adjustable wrenches, etc.</li> </ul> </li> </ul>	00103
5	12-Mar-25	Power Tools: <ul style="list-style-type: none"> <li>• Drills, wrenches, and saws</li> <li>• Tools best suited for different tasks</li> </ul>	Power Tools: <ul style="list-style-type: none"> <li>• Demonstrate the use of the following tools:               <ul style="list-style-type: none"> <li>○ Electric drill, hammer drill, circular saw, jigsaw, reciprocating saw, portable band saw, etc.</li> </ul> </li> </ul>	00104
	<b>17-Mar-25</b>	<b>Supervisor Performance Task Log Due – Lessons 1-5</b>		
6	26-Mar-25	Construction Drawings: <ul style="list-style-type: none"> <li>• Different types of drawings</li> <li>• Scales, symbols, and elements</li> </ul>	Construction Drawings: <ul style="list-style-type: none"> <li>• Using the provided plans:               <ul style="list-style-type: none"> <li>○ Locate the noted items</li> <li>○ Measure the specific rooms and features</li> <li>○ Use an architect's scale</li> </ul> </li> </ul>	00105
7	16-Apr-25	Basic Rigging: <ul style="list-style-type: none"> <li>• Use of rigging equipment</li> <li>• Describe various types of rigging equipment</li> </ul>	Basic Rigging: <ul style="list-style-type: none"> <li>• Demonstrate the proper ASME Emergency Stop hand signal.</li> <li>• Demonstrate the ability to report the load capacity of a sling, and if the sling is too damaged to use.</li> </ul>	00106

Lesson	Date	Subjects	Performance Tasks	Related Modules
8	30-Apr-25	Communication and Employability Skills <ul style="list-style-type: none"> <li>● Improve communication skills</li> <li>● Using critical thinking</li> </ul>	Communication and Employability Skills <ul style="list-style-type: none"> <li>● Perform a given task following oral instructions.</li> <li>● Fill out a work-related form provided by the instructor.</li> <li>● Read and interpret a set of instructions for properly donning a safety harness and then instruct another person on how to don the harness.</li> </ul>	00107 00108
9	14-May-25	Material Handling: <ul style="list-style-type: none"> <li>● Safety precautions for material handling</li> <li>● Review equipment for material handling</li> </ul>	Material Handling: <ul style="list-style-type: none"> <li>● Demonstrate safe manual lifting techniques.</li> <li>● Demonstrate how to tie two of the following common knots: square, bowline, half hitch, or clove hitch.</li> </ul>	00109
10	28-May-25	The Sprinkler Industry <ul style="list-style-type: none"> <li>● Occupational overview</li> <li>● Begin identification of sprinklers and systems</li> <li>● Apprenticeship requirements</li> </ul>	The Sprinkler Industry <i>No tasks for this lesson.</i>	18101
	<b>2-Jun-25</b>	<b>Supervisor Performance Task Log Due – Lessons 6-10</b>		
11	11-Jun-25	Components and Systems <ul style="list-style-type: none"> <li>● Types of sprinkler systems</li> <li>● Variety of fire sprinklers</li> </ul>	Components and Systems <i>No tasks for this lesson.</i>	18102
12	25-Jun-25	Components and Systems <ul style="list-style-type: none"> <li>● Valves for fire sprinkler systems</li> <li>● Introduction to fire pumps</li> </ul>	Components and Systems <i>No tasks for this lesson.</i>	18102
13	9-Jul-25	Steel Pipe <ul style="list-style-type: none"> <li>● Identify different steel pipes and their standards</li> <li>● Methods of joining</li> </ul>	Steel Pipe <ul style="list-style-type: none"> <li>● Identify different steel pipes and applications</li> <li>● Cut and ream pipe.</li> <li>● Groove pipe and install grooved fittings.</li> </ul>	18103

Lesson	Date	Subjects	Performance Tasks	Related Modules
14	23-Jul-25	Steel Pipe <ul style="list-style-type: none"> <li>● Details of flanged and plain-end fittings</li> <li>● Reviewing applications</li> </ul>	Steel Pipe <ul style="list-style-type: none"> <li>● Thread pipe and install threaded fittings.</li> <li>● Install flanged fittings.</li> </ul>	18103
15	13-Aug-25	CPVC Pipe <ul style="list-style-type: none"> <li>● Characteristics of CPVC</li> <li>● Joining methods</li> </ul>	CPVC Pipe <ul style="list-style-type: none"> <li>● Clean, join, and install CPVC piping</li> <li>● Complete a CPVC manufacturer training course</li> </ul>	18104
	<b>18-Aug-25</b>	<b>Supervisor Performance Task Log Due – Lessons 11-15</b>		
16	27-Aug-25	Copper Tube <ul style="list-style-type: none"> <li>● Identify different copper tubes and their standards</li> <li>● Methods of joining</li> </ul>	Copper Tube <ul style="list-style-type: none"> <li>● Identify different copper fittings</li> <li>● Join copper tube with a soldered joint</li> <li>● Join copper tube with mechanical connectors</li> </ul>	18105
17	10-Sep-25	Piping <ul style="list-style-type: none"> <li>● Reinforcement and comparison of piping materials</li> <li>● Uses for different materials</li> </ul>	Piping <i>No tasks for this lesson.</i>	18103 18104 18105
18	24-Sep-25	Underground Pipe <ul style="list-style-type: none"> <li>● Safety guidelines</li> <li>● Piping and components</li> </ul>	Underground Pipe <ul style="list-style-type: none"> <li>● Identify underground piping components</li> </ul>	18106
19	8-Oct-25	Underground Pipe <ul style="list-style-type: none"> <li>● Support and restraining systems</li> <li>● Trenches</li> <li>● Testing requirements</li> </ul>	Underground Pipe <ul style="list-style-type: none"> <li>● Complete an underground pipe Contractor's Material and Test Certificate</li> </ul>	18106
20	29-Oct-25	Course Review <ul style="list-style-type: none"> <li>● Reinforcement lesson covering all Level 1 material.</li> </ul>	Course Review <i>No tasks for this lesson.</i>	All
	<b>10-Nov-25</b>	<b>Supervisor Performance Task Log Due – Lessons 16-20</b>		

**\*\*Schedule is subject to change.\*\***

## Level 1

This level is comprised of Core: Introduction to Basic Construction Skills, 6<sup>th</sup> Edition and Sprinkler Fitting: Level 1, 4<sup>th</sup> Edition. The information coordinates with the 2019 edition of NFPA 13. The course is divided into 16 modules. The subjects and their learning objectives are found below.

### *Module 00100 Build Your Future in Construction (2.5 hours)*

- Describe the construction industry.
- Explain the benefits of a construction career.
- Describe the typical career path for craft professionals.
- Identify ways to pursue a career in the construction industry.

### *Module 00101 Basic Safety (12.5 hours)*

- Explain the benefits of safety, the cost of workplace incidents, and ways to reduce related hazards.
- Describe common fall hazards and methods to prevent them.
- Recognize and avoid struck-by and caught-in-between hazards.
- Identify common electrical hazards and how to avoid them.
- Associate personal protective equipment (PPE) with the hazards they reduce or eliminate.
- Describe safety practices used with other common job-site hazards.

### *Module 00102 Introduction to Construction Math (10 hours)*

- Identify whole numbers and solve basic arithmetic problems with them.
- Name fraction types and calculate with fractions.
- Identify decimal numbers and calculate with them.
- Name the common length-measuring tools and use them to measure lengths accurately.
- Name common length, weight, volume, and temperature units in both the inch-pound and metric systems and convert them into other comparable units.
- Classify angles and geometric shapes, as well as calculating their areas or volumes.

### *Module 00103 Introduction to Hand Tools (12.5 hours)*

- Name common hand tools and state how to use them.

- Identify common measurement and layout tools and describe how to use them.
- Identify and describe other hand tools common to shops and job sites.

### *Module 00104 Introduction to Power Tools (10 hours)*

- Identify and explain how to use various types of power drills and impact wrenches.
- Identify and explain how to use various types of power saws.
- Describe the types of jobs best suited to grinders and oscillating multi-tools.
- Identify and explain how to use miscellaneous power tools.

### *Module 00105 Introduction to Construction Drawings (10 hours)*

- Describe components and features used in construction drawings and identify how the drawings are different.

### *Module 00106 Introduction to Basic Rigging (7.5 hours)*

- Identify and describe various types of rigging slings, hardware, and equipment.

### *Module 00107 Basic Communication Skills (7.5 hours)*

- Describe the communication, listening, and speaking processes and their relationship to job performance.
- Describe good reading and writing skills and their relationship to job performance.

### *Module 00108 Basic Employability Skills (7.5 hours)*

- Describe the opportunities in the construction businesses and how to enter the construction workforce.

- Explain the importance of critical thinking and how to solve problems.
- Explain the importance of social skills and identify ways good social skills are applied in the construction trade.

*Module 00109 Introduction to Material Handling (5 hours)*

- Identify the basic concepts of material handling and common safety precautions.
- Identify various types of material handling equipment and describe how they are used.

*Module 18101 Occupational Overview: The Sprinkler Industry (5 hours)*

- Identify the various types of sprinkler systems and the tools used to install them.
- Identify the codes and standards applicable to sprinkler systems.
- Understand the apprenticeship training process for sprinkler fitters.

*Module 18102 Introduction to Components and Systems (10 hours)*

- Identify the operation of the four main types of sprinkler systems.
- Identify the nationally recognized testing laboratories that are used to evaluate sprinkler system components
- Identify common sprinklers and their operating characteristics.

- Identify different types of piping, valves, and fire pumps.

*Module 18103 Steel Pipe and Fittings (20 hours)*

- Size and select steel pipe.
- Prepare pipe for fittings.
- Groove pipe and install grooved fittings.
- Thread pipe and install threaded fittings.
- Select and install flanged fittings.
- Identify the applications of plain-end pipe fittings.

*Module 18104 CPVC Pipe and Fittings (12.5 hours)*

- Size and select chlorinated polyvinyl chloride (CPVC) pipe.
- Cut and join CPVC.
- Install and test CPVC sprinkler systems.

*Module 18105 Copper Tubing and Fittings (10 hours)*

- Size and select copper tubing and fittings.
- Describe the process for soldering copper tubing.
- Describe the process for brazing copper tubing.
- Identify mechanical connection methods for copper tubing.

*Module 18106 Underground Pipe (12.5 hours)*

- Describe underground piping systems and their components.
- Identify trench safety requirements.
- Describe the installation of underground piping systems.