



**American Fire
Sprinkler Association**

**VIP Course Schedule – Level 1
Begins August 5th, 2024**

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

Lesson	Date	Subjects	Performance Tasks	Related Modules
1	5-Aug-24	Course Introduction and Basic Safety: <ul style="list-style-type: none">● Future with construction industry● Introduction to the fire sprinkler industry● Benefits of safety and reducing hazards	Course Introduction: <i>No tasks for this lesson.</i>	00100 18101 00101
2	19-Aug-24	Basic Safety: <ul style="list-style-type: none">● Importance of safety● Common construction hazards● Best practices for safety	Basic Safety: <ul style="list-style-type: none">● Properly set up and climb/descend an extension ladder● Inspect PPE items and determine if they are safe to use● Properly don, fit, and remove PPE items● Inspect a typical power cord and GFCI to ensure their serviceability	00101

Lesson	Date	Subjects	Performance Tasks	Related Modules
3	9-Sept-24	Construction Math: <ul style="list-style-type: none"> ● Whole and fractional numbers ● Tools for measuring lengths ● Units 	Construction Math: <ul style="list-style-type: none"> ● Using a measuring tape in both English and metric units: <ul style="list-style-type: none"> ○ Measure lumber pieces ○ Measure a room-sized space ○ Determine a short inside measurement ● Add English measurements that include fractions 	00102
4	23-Sept-24	Hand Tools: <ul style="list-style-type: none"> ● Introduction to common manual construction tools ● Review of manual tools most common for sprinkler fitters 	Hand Tools: <ul style="list-style-type: none"> ● Inspect and demonstrate safe and proper use of the following hand tools: <ul style="list-style-type: none"> ○ Hammers, demolition tools, chisels and punches, screwdrivers, adjustable wrenches, non-adjustable wrenches, etc. 	00103
5	7-Oct-24	Power Tools: <ul style="list-style-type: none"> ● Drills, wrenches, and saws ● Tools best suited for different tasks 	Power Tools: <ul style="list-style-type: none"> ● Demonstrate the use of the following tools: <ul style="list-style-type: none"> ○ Electric drill, hammer drill, circular saw, jigsaw, reciprocating saw, portable band saw, etc. 	00104
	14-Oct-24	Supervisor Performance Task Log Due – Lessons 1-5		
6	21-Oct-24	Construction Drawings: <ul style="list-style-type: none"> ● Different types of drawings ● Scales, symbols, and elements 	Construction Drawings: <ul style="list-style-type: none"> ● Using the provided plans: <ul style="list-style-type: none"> ○ Locate the noted items ○ Measure the specific rooms and features ○ Use an architect’s scale 	00105
7	4-Nov-24	Basic Rigging: <ul style="list-style-type: none"> ● Use of rigging equipment ● Describe various types of rigging equipment 	Basic Rigging: <ul style="list-style-type: none"> ● Demonstrate the proper ASME Emergency Stop hand signal. ● Demonstrate the ability to report the load capacity of a sling, and if the sling is too damaged to use. 	00106

Lesson	Date	Subjects	Performance Tasks	Related Modules
8	18-Nov-24	Communication and Employability Skills <ul style="list-style-type: none"> ● Improve communication skills ● Using critical thinking 	Communication and Employability Skills <ul style="list-style-type: none"> ● Perform a given task following oral instructions. ● Fill out a work-related form provided by the instructor. ● Read and interpret a set of instructions for properly donning a safety harness and then instruct another person on how to don the harness. 	00107 00108
9	2-Dec-24	Material Handling: <ul style="list-style-type: none"> ● Safety precautions for material handling ● Review equipment for material handling 	Material Handling: <ul style="list-style-type: none"> ● Demonstrate safe manual lifting techniques. ● Demonstrate how to tie two of the following common knots: square, bowline, half hitch, or clove hitch. 	00109
10	16-Dec-24	The Sprinkler Industry <ul style="list-style-type: none"> ● Occupational overview ● Begin identification of sprinklers and systems ● Apprenticeship requirements 	The Sprinkler Industry <i>No tasks for this lesson.</i>	18101
	23-Dec-24	Supervisor Performance Task Log Due – Lessons 6-10		
11	6-Jan-25	Components and Systems <ul style="list-style-type: none"> ● Types of sprinkler systems ● Variety of fire sprinklers 	Components and Systems <i>No tasks for this lesson.</i>	18102
12	20-Jan-25	Components and Systems <ul style="list-style-type: none"> ● Valves for fire sprinkler systems ● Introduction to fire pumps 	Components and Systems <i>No tasks for this lesson.</i>	18102
13	3-Feb-25	Steel Pipe <ul style="list-style-type: none"> ● Identify different steel pipes and their standards ● Methods of joining 	Steel Pipe <ul style="list-style-type: none"> ● Identify different steel pipes and applications ● Cut and ream pipe. ● Groove pipe and install grooved fittings. 	18103

Lesson	Date	Subjects	Performance Tasks	Related Modules
14	17-Feb-25	Steel Pipe <ul style="list-style-type: none"> • Details of flanged and plain-end fittings • Reviewing applications 	Steel Pipe <ul style="list-style-type: none"> • Thread pipe and install threaded fittings. • Install flanged fittings. 	18103
15	3-Mar-25	CPVC Pipe <ul style="list-style-type: none"> • Characteristics of CPVC • Joining methods 	CPVC Pipe <ul style="list-style-type: none"> • Clean, join, and install CPVC piping • Complete a CPVC manufacturer training course 	18104
	10-Mar-25	Supervisor Performance Task Log Due – Lessons 11-15		
16	17-Mar-25	Copper Tube <ul style="list-style-type: none"> • Identify different copper tubes and their standards • Methods of joining 	Copper Tube <ul style="list-style-type: none"> • Identify different copper fittings • Join copper tube with a soldered joint • Join copper tube with mechanical connectors 	18105
17	7-Apr-25	Piping <ul style="list-style-type: none"> • Reinforcement and comparison of piping materials • Uses for different materials 	Piping <i>No tasks for this lesson.</i>	18103 18104 18105
18	21-Apr-25	Underground Pipe <ul style="list-style-type: none"> • Safety guidelines • Piping and components 	Underground Pipe <ul style="list-style-type: none"> • Identify underground piping components 	18106
19	5-May-25	Underground Pipe <ul style="list-style-type: none"> • Support and restraining systems • Trenches • Testing requirements 	Underground Pipe <ul style="list-style-type: none"> • Complete an underground pipe Contractor's Material and Test Certificate 	18106
20	19-May-25	Course Review <ul style="list-style-type: none"> • Reinforcement lesson covering all Level 1 material. 	Course Review <i>No tasks for this lesson.</i>	All
	2-Jun-25	Supervisor Performance Task Log Due – Lessons 16-20		

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

Level 1

This level is comprised of Core: Introduction to Basic Construction Skills, 6th Edition and Sprinkler Fitting: Level 1, 4th 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.