Sprinkler Fitting

Module ID 18101

Introduction to Components and Systems


This module identifies strength/spacing requirements, types, and installation of pipe hangers, supports, and restraints. It also covers the installation of firestopping.

Module ID 18102

Steel Pipe and Fittings


This module describes the steel pipe used in sprinkler systems, including pipe types, schedules, and sizes. Covers common methods of end preparation, including cutting, reaming, grooving, and threading pipe. Describes various types of grooved, threaded, flanged, and plain-end fittings, along with the installation methods and applications of each type.

Module ID 18103

Copper Tubing and Fittings


This module describes the characteristics of standard spray sprinklers. It also covers types of construction, NFPA 13 light and ordinary hazard occupancy classifications, and installation considerations.

Module ID 18104

Standard Spray Sprinklers


This module describes the operation and installation of wet pipe sprinkler systems. It covers various system controls and switches and explains how they operate. It also describes how to complete a Contractor’s Material and Test Certificate for Aboveground Piping and provides an overview of basic system troubleshooting procedures.

Module ID 18105

CPVC Pipe and Fittings


This module describes the operation and installation of dry pipe sprinkler systems. It covers differential and mechanical dry pipe valves and trim, including switches, gauges, air sources, accelerators, and drains. It also provides an overview of basic system troubleshooting and acceptance testing procedures, including the completion of a Contractor’s Material and Test Certificate for Aboveground Piping for a dry pipe sprinkler system.
**Sprinkler Fitting Level 3**

**L3 SPRINKLER FITTING**

**LEVEL 3**

**Curriculum Notes**
- 150 Hours
- Revised: 2022, Fourth Edition to reflect NFPA 13
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.

**PAPERBACK  ISBN**

**MODULaS**
The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

- **Water Supplies (15 Hours)**
  (Module ID 18303) Identifies the chemical and physical properties of water. Covers the water supplies available for sprinkler systems, including tanks and municipal water supply systems. Describes the procedures and NFPA requirements for waterflow testing.

- **Fire Pump Systems (35 Hours)**
  (Module ID 18304) Identifies various types of fire pump systems and their components, including pumps, drivers, controllers, and sensing lines. Describes fire pump system pre-checks and start-up/acceptance testing.

- **Standpipes (25 Hours)**
  (Module ID 18302) Identifies different types and classifications of standpipe systems. Covers hose valves and adapters used with these systems. Describes procedures and NFPA requirements for acceptance testing.

**Sprinkler Fitting Level 4**

**LEVEL 4**

**Curriculum Notes**
- 145 Hours
- Revised: 2023, Fourth Edition to reflect NFPA 13
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.

**PAPERBACK  ISBN**

**MODULaS**
The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

- **System Layout (27.5 Hours)**
  (Module ID 18401) Identifies three types of system configurations and a variety of occupancy and storage classifications. Covers the basics of sprinkler system layout and design methods. Describes flow characteristics and pressure loss.

- **Inspection, Testing, and Maintenance (37.5 Hours)**
  (Module ID 18402) Covers inspection, testing, and maintenance requirements for sprinkler systems, standpipe and hose systems, fire pumps, and other systems.

- **Special Extinguishing Systems (27.5 Hours)**
  (Module ID 18403) Describes water spray, water mist, foam, carbon dioxide, and clean agent extinguishing systems. Covers all of the appropriate system components, including pipe and fittings, nozzles, alarms, detectors, and control equipment.

- **Deluge and Preaction Sprinkler Systems (35 Hours)**
  (Module ID 18301) Describes the operation, installation, and NFPA 13 requirements for deluge and preaction sprinkler systems. Covers initiating and notification devices. Provides an overview of acceptance testing, including completing a Contractor's Material and Test Certificate for Aboveground Piping for these systems.

- **Application-Specific and Special Sprinklers (40 Hours)**
  (Module ID 18305) Covers application-specific sprinklers, including extended coverage sprinklers, residential sprinklers, control mode specific application (CMSA) sprinklers, and early suppression fast-response (ESFR) sprinklers. Describes the area of coverage, positioning, and obstruction requirements for each type. Covers special sprinklers and their uses.

- **Fundamentals of Crew Leadership (22.5 Hours)**
  (Module ID 46101) Covers basic leadership skills and explains different leadership styles, communication, delegating, and problem solving. Jobsite safety and the crew leader’s role in safety are also discussed. Explains details and procedures for project planning, scheduling, and estimating.

- **Procedures and Documentation (30 Hours)**
  ISBN 978-0-13-817417-0
  (Module ID 18405) Explains the various ways sprinkler projects are documented. Reviews daily reports, materials documentation, and documentation of safety policies and incidents. Covers responses to water damage, including documentation and investigation.