



Sprinklers, Systems, and Fire Protection Solutions

Seminar Description: This program focuses on how sprinklers and systems provide unique and targeted

solutions to fire protection challenges. This is an applications-driven program utilizing digital tools to drive the learning objectives. The participant will utilize digital tools and programs to explore the advantages of various Viking products and how they

address specific challenges.

Duration (Days): 2

Number of Modules: 5

Total Instructional Minutes: 720 / 12 hours (12CEUs) (20 CPDs)

Seminar Format(s): Lecture, activity, hands-on labs, and demonstration.

Participation Materials: Participant activity handouts and digital tools.

Learning Outcomes: Upon completion of this seminar the attendee will be able to:

Describe how fire develops and the impact of fuels loads, fuel arrangement, and location.

- Utilize digital tools to select the appropriate sprinkler to protect the occupancy or fire challenge.
- Compare various sprinklers and explain how they address fire challenges.
- Explain the applications of wet and dry sprinkler systems.
- Explain the applications of preaction and deluge sprinkler systems.
- Perform system testing and troubleshooting.

Assessment Method(s): Activity participation and participation.

Module 1: Anatomy of a Fire Sprinkler

Duration: 90 minutes

Learning Outcomes:• Describe and discuss the various fire challenges to fire sprinklers.

Identify and discuss the functions of the component parts of a fire sprinkler.

Describe the process of testing and listing fire sprinklers.

Delivery Methods: Manufacturing and R&D tour.

Activity Descriptions: Sprinkler build and tour.

Assessment Method(s): Participation.

Module 2: Applying Fire Sprinkler

Duration: 150 minutes

Learning Outcomes: Compare the differences in sprinkler characteristics.

Utilize digital tools to select the appropriate sprinkler to protect the occupancy

or fire challenge.

Compare standard spray to extended coverage sprinklers.

Identify the differences of ESFR fire sprinklers to control mode sprinklers.

Delivery Methods: Activity driven by Sprinkler Selector and Flow Lab demonstration.

Activity Descriptions: Sprinkler worksheet.

Assessment Method(s): Participation.

Module 3: Wet and Dry Systems

Duration: 150 minutes

Learning Outcomes: Identify the characteristics of the wet and dry sprinkler system valve

configurations.

■ Explain the applications of wet and dry sprinkler systems.

Explain the operational sequence of wet and dry sprinkler systems.

Identify the parts of wet and dry sprinkler systems.

■ Perform system activation and reset.

Delivery Methods: Activity driven by configurator and hands-on lab, VR lab.

Activity Descriptions: Labs.

Assessment Method(s): Perform system activation and reset.

Module 4: Deluge, Preaction, and Specialty Preaction Systems

Duration: 240 minutes

Learning Outcomes:• Identify the characteristics of the preaction and deluge sprinkler system valve

configurations.

Explain the applications of preaction and deluge sprinkler systems.

Explain the operational sequence of preaction and deluge sprinkler systems.

■ Identify the parts of preaction and deluge sprinkler systems.

■ Use the Valve Configurator.

Delivery Methods: Activity driven by configurator and hands-on lab, VR lab.

Activity Descriptions: Demonstration.

Assessment Method(s): None.



Module 5: Specialty Systems and Components

Duration: 90 minutes

Learning Outcomes: Discuss CPVC Pipe Solutions.

■ Describe the components of foam systems.

Discuss the application of special hazards systems.

■ Discuss the application of integrated safety systems.

■ Use Buy American digital tool.

Delivery Methods: Activity driven by digital tools.

Activity Descriptions: Sprinkler worksheet.

Assessment Method(s): Participation.



