

Hydraulic Calculations for Fire Safety Sprinkler Systems

Course Description:

This two -day course will present new insights into hydraulic behavior, and will present the overall methodology for performing hydraulic calculations of fire sprinkler systems. This course reviews key fundamentals while closely analyzing NFPA 13 provisions and presents a reliable 16 step hydraulic design process. Topics include water supply, design criteria, calculation formulas and their output. This course will also introduce the basic principles involved in hydraulic analysis including friction loss formulas and calculation methods of several piping arrangements. This hands-on course will include real life examples using calculation software.

Learning Objectives:

Upon completion of this course participants should be able to:

- Understand the basic principles of hydraulic analysis for fire sprinkler systems.
- Perform and review basic hydraulic calculations for fire sprinkler systems.
- Understand water supplies for fire sprinkler systems with the inclusion of basic fire pump criteria into a water supply.
- Evaluate whether a given water supply is adequate for a system.
- Understand how to take basic sprinkler system design criteria and properly apply it to hydraulic calculations of fire sprinkler systems.
- Become familiar with several methods of spot checking hydraulic calculations.

Pre-requisite

Basic computer skills, knowledge of fluid mechanics. Know and apply the standards. Can read and understand basic construction drawings/technical documents.

Materials Needed

Because of the hands-on nature of this course, participants are required to bring a personal laptop. Software will be provided.

Who will benefit: Experience Level Intermediate

FPEs, Code Officials, Plan Reviewers, Design Professional (Architects/Engineers)

Course assessment

Participants will be assessed via a written test. A passing score of 70% will be required to obtain a Certificate of Completion

Professional Development Hours

Upon completion each participant qualifies for 7 PDHs or .7 CEUs. A certificate of completion will be awarded.