Seminar Title: Fire Service Mains and Their Appurtenances

Seminar Description: This full day seminar describes the responsibility of the contractor, owner and authority having jurisdiction for the proper installation of Fire Service Mains and Their Appurtenances as addressed in NFPA 24.

Total Instructional Time: 8 Contact Hours

Learning Outcomes: At the conclusion of this seminar the participant will be able to:

1. Identify the standards and regulations that govern the installation of private fire service mains and their appurtenances
2. Describe water supply sources, including fire department connections and the requirements governing them.
3. Identify and describe the various valves used in private service mains and the requirements governing them.
4. Identify, describe and explain the purpose and types of hose houses, hydrants and master streams
5. Describe the components of underground fire service mains and the installation requirements associated with them
6. Identify the various steps in providing restraint for fire service mains and apply those steps in calculating the appropriate size and volume of thrust and gravity blocks.
7. Apply the hydraulic calculation principles required for private fire service mains by calculating allowed losses in these systems.
8. Discuss the testing and acceptance criteria for private fire service mains and apply the rules for leakage allowance for these systems by calculating the allowance for a fire protection system.
9. Discuss the requirements for inspection, testing and maintenance for fire service mains and the appropriate standard that applies.
10. Identify the proper documentation associated installation and inspection testing and maintenance of fire service mains.

Seminar Format(s): Lecture, Discussion, Activities, Group Problem Solving, Individual Exercises

Participant Materials: Participant Guide. In addition, participants are strongly encouraged to bring a copy of NFPA 24 and a calculator capable of calculating yx.

Assessment Method: In-class participation, including practice exercises and calculations