

Framework for a Sprinkler Apprentice Enrolled in the 8000 Hour Program

144 Hours of study per year of apprenticeship (576 Hours Total)

To include at a minimum:

- Work Element Sign Off
- OSHA Safety Certification (OSHA 30)
- OSHA Hazard Communication Standard
- Lock Out / Tag Out (LOTO)
- OSHA Confined Spaces
- OSHA Underground Piping
- OSHA Trenching and Excavation
- Hot-work Requirements and Local Permit Requirements
 - o Spark/Ignition License
- Interfacing between system and fire alarm
- Low voltage/basic fire alarm knowledge
- Knowledge of MGL 146 & 528 CMR
- Back flow and Back flow testing
- Low Air Actuator Valve knowledge (18207-13)
- NFPA 241 Compliance
- NFPA Sprinkler System Compliance with Currently Adopted Standards
- Trouble Shooting Techniques
- Familiarity of Sprinkler System Components
- Threading, Grooving, and other Joining Method Techniques (Grooving, Flanges, Glue, Solder, Compression)
- Hangers, Supports, Restraints, Expansion Loops, Seismic Bracing, and Guides
- Trade Math (Basic & Construction)
- New Technology (Nitrogen Dry Systems, Vacuum Type Dry Systems, Air Vents, Flexible Sprinkler Attachments, etc.)
- Inspection, Testing, and Maintenance (MIC Microbiological Induced Corrosion, 5 year inspections, etc.)
- Schematics and Drawings
- Cutting Methods and Techniques
- Methods of Testing (Pressure testing, leak testing, hydrostatic testing, etc.)
- Tools (Hand and Power)
- Basic Rigging
- Material Handling
- Basic Communication and Employability Skills
- Components and Systems
- Steel Pipe
- CPVC Pipe and Fittings
- Copper Tube Systems
- Knowledge of Sprinkler Fitting Valves
- Shop Drawings
- Standard Spray Fire Sprinklers
- Wet Fire Sprinkler Systems
- Dry-Pipe Systems
- Deluge/Pre-action Systems
- Standpipes
- Water Supplies
- Fire Pumps
- Application-Specific Sprinklers and Nozzles
- System Layout
- Special Extinguishing Systems
- Foremanship, Procedures, and Documentation