

Appendix A

WORK PROCESS SCHEDULE
SPRINKLER FITTER
O*NET-SOC CODE: 47-2152.01 RAPIDS CODE: 0414S

This schedule is attached to and a part of these Standards for the above identified occupation.

1. TERM OF APPRENTICESHIP

The term of the occupation shall be four (4) years with an OJL attainment of 8000 hours supplemented by the required hours of related technical instruction.

2. RATIO OF APPRENTICES TO JOURNEYWORKERS

One (1) apprentice to one (1) journeyworker: One (1) apprentice for each journeyworker employed, and one additional apprentice for each additional journeyworker thereafter.

3. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages and fringe benefits based on a percentage of the current journeyworker wage rate.

Journeyworker rate as of January 1, 2013 = \$19.00

Term: 8000 Hours

- 1st 1000 hours = 50% of journeyworker's rate
- 2nd 1000 hours = 55% of journeyworker's rate
- 3rd 1000 hours = 60% of journeyworker's rate
- 4th 1000 hours = 65% of journeyworker's rate
- 5th 1000 hours = 70% of journeyworker's rate
- 6th 1000 hours = 75% of journeyworker's rate
- 7th 1000 hours = 80% of journeyworker's rate
- 8th 1000 hours = 85% of journeyworker's rate

Fringe Benefits are provided for eligible employees each year to include: Holiday and Paid Time Off (PTO), Group Term Life Insurance, Medical and Pharmacy Coverage, Dental Coverage, Vision Coverage, Short and Long Term Disability Insurance and 401(k) Retirement Plan. Eligibility for employee benefits is governed by the benefit plan or policy, and the most current AFPG Employee Handbook.

4. **SCHEDULE OF WORK EXPERIENCE** (See attached Work Process Schedule)

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

5. **SCHEDULE OF RELATED INSTRUCTION** (See attached Related Instruction Outline)

Instruction can incorporate elements of both electronic media and traditional classroom including online training, distance learning, or independent study of established curriculum. The Sponsor may modify the related instruction to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

6. **INSTRUCTION FEES AND BENEFITS**

A charge of \$6.00 a week will be deducted from the weekly pay of the apprentice. This deduction covers course fees and all materials. Upon successful completion of each yearly module, the apprentice will receive all of the money that has been withheld over that module, as an employee savings bonus.

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WORK PROCESSES

HOURS

These work processes and experience requirements shall include the following operations, but not necessarily in the listed sequence. Time spent on specific operations need not be continuous.

<ol style="list-style-type: none"> 1. Plan reading and interpretation <ol style="list-style-type: none"> a. Reading shop drawings b. Symbols and abbreviations c. Familiarization with National Fire Protection Association (NFPA) Pamphlets #13, 14, 20 and 24 2. Care of tools, materials, and equipment <ol style="list-style-type: none"> a. Identifying materials, grades and types of pipe, fittings, valves, hose and equipment, and sprinkler heads b. Use and operation of trade tools c. Maintaining and servicing of tools and equipment 3. Preparation of tools, material and equipment <ol style="list-style-type: none"> a. Selection of pipe, fittings, hangers and devices for rough and distribution and finish b. Loading of required materials and equipment c. Unloading of materials and equipment at job site using safety precautions and care in not damaging materials or equipment d. Set-up and use of rigging, scaffolding and mechanical lifts and platforms 4. Pipe cutting, threading, reaming and welding <ol style="list-style-type: none"> a. Use of hand cutters b. Use of dies and reamer c. Set-up and operation of power threading machine d. Operation of power drills e. Operation of torch and welder 5. Installation of underground piping and accessories <ol style="list-style-type: none"> a. Installation of cast iron pipe and fittings b. Installation of plastic pipe and fittings c. Installation of valves, post indicators and hydrants d. Rodding and thrust block installation e. Valve pit installation f. Flushing and testing of underground piping 	<p>750</p> <p>800</p> <p>650</p> <p>1250</p> <p>650</p>
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6. Wet pipe systems	1600
a. Distribution of system	
b. Installation of feed main and cross main, grooved, screwed and welded	
c. Branch line installation on exposed systems	
d. Branch line installation for concealed piping with drop nipples	
e. Hanger types and installation	
f. Trimming of valves including Siamese connection installation	
g. Set-up and testing of system	
7. Dry pipe systems	500
a. Distribution of system	
b. Installation of feed main and cross main, grooved, screwed and welded	
c. Branch line installation on exposed systems	
d. Hanger types and installation	
e. Trimming of valves including Siamese connection installation	
f. Set-up and testing of system	
8. Standpipe systems	500
a. Distribution of system	
b. Pipe installation	
c. Installation of hose valves, nozzles and accessories	
d. Testing procedures	
9. Special hazard installation	350
a. Installation of deluge systems	
b. Installation of preaction systems	
c. Installation of gas suppression systems	
d. Installation of CO2 systems	
e. Installation of fire extinguishers	
10. Installation of fire pumps and accessories	350
a. Setting of fire pumps and jockey pumps	
b. Alignment of fire pump and driver	
c. Trimming of fire pump, jockey pump and controllers	
d. Start up and testing of fire pumps and equipment	

11. Maintenance and Repairs	600
a. Fabrication and installation of pipe on job site	
b. Care in cutting and patching of walls and ceilings	
c. Repair and replacement of system components	
d. Restoring system to service	
e. Notifying owner, fire department, insurance company of impairment to system	
TOTAL HOURS	8000

Appendix A
 RELATED CLASSROOM INSTRUCTION OUTLINE
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Note: Due to regional and local code differences and climate conditions, duration of instructional modules is suggested estimates only.

<u>MODULES</u>	<u>SUGGESTED HOURS</u>
<u>First Year</u>	
Basic Safety	12.5
Introduction to Construction Math	10
Introduction to Hand Tools	10
Introduction to Power Tools	10
Introduction to Construction Drawings	10
Basic Rigging	15
Basic Communication Skills	7.5
Basic Employability Skills	7.5
Introduction to Materials Handling	5
Orientation to the Trade	5
Introduction to Components and Systems	7.5
Steel Pipe	22.5
CPVC Pipe and Fittings	10
Copper Tube Systems	10
Underground Pipe	17.5
<u>Second Year</u>	
Hangers, Supports, Restraints, and Guides	15
General Purpose Valves	15
General Trade Math	20
Shop Drawings	32.5
Standard Spray Fire Sprinkler Systems	20
Wet Pipe Systems	25
Dry Pipe Systems	25
<u>Third Year</u>	
Deluge/Preaction Systems	40
Standpipes	25
Water Supplies	15
Fire Pumps	40
Application-Specific Sprinklers and Nozzles	27.5

FourthYear	
System Layout	45
Inspection, Testing, and Maintenance	17.5
Special Extinguishing Systems	42.5
Introductory Skills for the Foreman	20
Procedures and Documentation	20

It is in the best interest of AFPG to assist and mentor the apprentices to pass their module tests on the first try. In regards to the testing: AFPG will cover the exam fee for each module test. If an apprentice does not pass a test and a retake is necessary, AFPG will pay the first \$10.00 retake fee, and will provide additional instruction to assist the apprentice to pass the test. For any subsequent test retakes, the apprentice will be charged \$10.00 to cover the additional retake fees.