



NEVADA LABOR COMMISSIONER
NEVADA STATE APPRENTICESHIP COUNCIL
2023 Non-Joint Standards of Apprenticeship

Appendix A

WORK PROCESS SCHEDULES AND RELATED INSTRUCTION OUTLINE

Pye-Barker Fire & Safety LLC

FIELD SERVICE ENGINEER/ELECTRONIC SECURITY TECHNICIAN

O*NET-SOC CODE: 49-2094.00 RAPIDS CODE: 0916

**APPROVED BY
THE NEVADA LABOR COMMISSIONER AND THE NEVADA STATE APPRENTICESHIP COUNCIL**

Toni Giddens, Nevada State Apprenticeship Director

REGISTRATION DATE: _____

RAPIDS PROGRAM ID NUMBER: _____

**DEVELOPED IN COOPERATION WITH THE
THE NEVADA LABOR COMMISSIONER, THE NEVADA STATE APPRENTICESHIP COUNCIL AND
THE U.S. DEPARTMENT OF LABOR**

Appendix A

WORK PROCESS SCHEDULE

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

1. TYPE OF OCCUPATION

☒ Time-based ☐ Competency-based ☐ Hybrid

2. TERM OF APPRENTICESHIP

The term of the occupation shall be defined by the attainment of all competencies of the position. 1) If the program uses a time-based approach, requires the completion of not less than 2,000 hours of [work experience,] on-the-job learning, consistent with training requirements as established by practice in the trade; (2) If the program uses a competency-based approach, specify the skills that must be demonstrated by an apprentice and address how on-the-job learning will be integrated into the program; or (3) If the program uses a hybrid approach, specify the skills that must be acquired and the minimum number of hours of on-the-job learning that must be completed by an apprentice.

This would be expected to occur within approximately 4000 hours (must be at least 2,000 hours) of OJL, supplemented by the minimum of 144 hours of related instruction per year of the apprenticeship.

3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journey worker/fully trained worker ratio is: 1: 1 apprentice(s) to journey worker/fully trained worker(s).

4. APPRENTICE WAGE SCHEDULE

An apprentice minimum starting wage will be at least \$21.50 per hour. Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journey worker/fully trained worker wage. A journey worker/fully trained worker minimum wage will be at least \$29.50.

2-Year Term Example:

1 st	6 months = \$21.50
2 nd	6 months = \$24.00
3 rd	6 months = \$26.00
4 th	6 months = \$28.00
Completion = \$29.50	

Periodic review and evaluation of the apprentice's on-the-job learning and related technical instruction will be conducted in alignment with the wage schedule established.

5. WORK PROCESS SCHEDULE (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.

6. RELATED INSTRUCTION OUTLINE (See attached Related Instruction Outline)

The sponsor may modify the related instruction to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

Appendix A

WORK PROCESS SCHEDULE

The term of the occupation shall be defined by the attainment of all competencies, both technical and behavioral, of the position, which would be expected and approximated to occur within 8000 hours of OJL, supplemented by a minimum of 144 hours of related instruction per year of apprenticeship.

Apprenticeship Competencies – Technical

Job Function	Hours
Prepare for System Installation Review & understand electronic system requirements & documents <ol style="list-style-type: none"> 1. Perform site survey 2. Develop overall job plan 3. Organize technical work plan 4. Complete pre-assemblies & fabrication of sub systems 5. Gather inventory/parts 6. Pre-Test/Bench-Test components 7. Inventory tools 	400
Wire Buildings <ol style="list-style-type: none"> 1. Use documentation to lay out components 2. Secure work area & Safety area security 3. Rough in device component locations 4. Install cable support structure or drill wire paths 5. Pull & secure wire 6. Label tag wire/cable per documentation 	400
Trim-Out <ol style="list-style-type: none"> 1. Pre-termination functions <ul style="list-style-type: none"> • Prepare cable ends • Route cable 2. Connect passive devices <ul style="list-style-type: none"> • Connectors • Outlets • Patch panels 3. Splicing 4. Intermediate termination 	750
Installation Components <ol style="list-style-type: none"> 1. Remote location components 2. Central/main location 	250
Configure – Program <ol style="list-style-type: none"> 1. Calibrate & align electronically and physically 2. Install or enter control programs 3. Set up system instructions, labels, etc. 	400
Test, Troubleshooting, Debug	750

2023 Non-Joint Standards of Apprenticeship

<ol style="list-style-type: none"> 1. Power up/Power Down 2. Operate and test functions 3. Evaluate performance 4. Identify problems, errors, discrepancies 5. Diagnose causes of problems 6. Take remedial action 7. Document actions 	
Train Users <ol style="list-style-type: none"> 1. Review of user documentation manuals & instructions 2. Identify training objectives 3. Confirm actual users and their requirements 4. Procure or develop training & user aids, manuals, etc. 5. Demonstrate system function by guiding users through the system 6. Observe user using the system (Customer Demonstration) 7. Communicate results of training back to all relevant parties 	250
Documentation <ol style="list-style-type: none"> 1. Review final blueprints, writing diagrams, and hookup instructions 2. Complete work reports and time sheets 3. Provide/prepare/deliver system documentation <ul style="list-style-type: none"> • User manual and training materials • As built drawings • Zone/Area diagrams • Equipment lists 	400
Maintenance & Repair <ol style="list-style-type: none"> 1. Maintenance <ul style="list-style-type: none"> • Perform scheduled preventive maintenance 2. Repair <ul style="list-style-type: none"> • Diagnose problems 3. Read documentation 	400
Total	4000

The above on-the-job-learning (OJL) work process competencies are intended as a guide. It need not be followed in any sequence, and it is understood that some adjustments may be necessary in the hours allotted for different work experience. In all cases, the apprentice is to receive sufficient experience to make them fully competent and use good workmanship in all work processes, which are a part of the industry. In addition, the apprentice shall be fully instructed in safety and OSHA requirements.

Apprenticeship Competencies – Behavioral

In addition to mastering all the essential technical competencies, an apprentice must consistently demonstrate at an acceptable level the following behavioral competencies, to complete the apprenticeship.

Item #	Behavioral Competencies
1.	Participation in team discussions/meetings
2.	Focus in team discussions/meetings
3.	Focus during independent work
4.	Openness to new ideas and change
5.	Ability to deal with ambiguity by exploring, asking questions, etc.
6.	Knows when to ask for help
7.	Able to demonstrate effective group presentation skills
8.	Able to demonstrate effective one-on-one communication skills
9.	Maintains an acceptable attendance record
10.	Reports to work on time
11.	Completes assigned tasks on time
12.	Uses appropriate language
13.	Demonstrates respect for patients, co-workers, and supervisors
14.	Demonstrates trust, honesty, and integrity
15.	Requests and performs work assignments without prompting
16.	Appropriately cares for personal dress, grooming and hygiene
17.	Maintains a positive attitude
18.	Cooperates with and assists co-workers
19.	Follows instructions/directions
20.	Able to work under supervision
21.	Able to accept constructive feedback and criticism
22.	Able to follow safety rules
23.	Able to take care of equipment and workplace
24.	Able to keep work area neat and clean
25.	Able to meet supervisor's work standards
26.	Able to not let personal life interfere with work
27.	Adheres to work policies/rules/regulations

RELATED INSTRUCTION OUTLINE

The related instruction has been developed in cooperation with employer-partners as part of the apprenticeship. The following is a set of courses to be delivered by subject matter experts.

Related Technical Instruction (RTI) - This instruction shall include, but not be limited to, at least 326 hours per year for each year of the apprenticeship. The related theoretical education listed below is tightly integrated with real work product. The curriculum is defined as a variety of classes, around which the exams and projects are based. By defining the RTI this way, all competencies required of the students are met, through project work.

Related Instruction Guidelines:

- The course listings outline the related instruction that supplements the on-the-job learning. It is through the combination of both the on-the-job learning and the related instruction that the apprentice can reach the skilled level of the occupation.
- Each apprentice's attendance and progress in related education must be tracked and appropriate records maintained.
- Time devoted to the job-related education shall not be considered as part of the on-the-job learning.
- Failure on the part of the apprentice to fulfill their obligation as to the related education and/or attendance, or their failure to maintain passing grades therein, shall constitute adequate cause for cancellation of their Apprenticeship Agreement.

Hours Instruction Provided: ☐ During Work Hours ☐ During Non-Work Hours ☒ Both

Apprentices **will** be paid for hours spent attending related instruction classes.

Instruction Method: ☒ Classroom ☒ Correspondence/Shop ☒ Web-Based Learning

All related instruction will be administered through virtual live training through American Fire Sprinkler Association's VIP program. All apprentices will have the opportunity to have hands-on training in branch training labs and/or branch warehouse/shops as well. Apprentices will be able to work on related instruction learned components in those settings prior to performing the components at the jobsite during the On-the-Job (OJT) time.



RTI Provider Name: **Electronic Security Association**

Contact Name: **Tim McDonald**

Contact Phone: **972-807-6815**

Contact Email: **tim.mcdonald@esaweb.org**

Contact Address: **P O Box 610605, Dallas, TX 75261**

RTI LEVEL 1 (0-6 months)	Hours	Total
<ul style="list-style-type: none"> • Certified Alarm Technician Level 1 (CAT 1) ** • OSHA 30 • Understanding Electronic Security Systems ** 	30 35 25	90
RTI LEVEL 2 (6-12 months)		
<ul style="list-style-type: none"> • Life Safety Code ** • Wireless Systems 101, 102 & 103 • Fundamentals of Networking • Low Voltage Cabling ** • Fire Alarm Installation Methods ** • Testing Security Systems 	15 10 8 20 20 5	78
RTI LEVEL 3 (12-18 months)		
<ul style="list-style-type: none"> • Introduction to Construction Drawings • International Building Code ** • Video Systems Technology ** • Advanced Intrusion Systems ** 	20 18 20 20	78
RTI LEVEL 4 (18-24 months)		
<ul style="list-style-type: none"> • Networking 101, 102, 103, 104, 105, 106 • Electronic Access Control ** • Troubleshooting Intrusion Alarm Devices • Job Safety and False Alarm Reduction • Troubleshooting, Service and Maintenance • Troubleshooting Fire Devices • Power and Electricity with National Electrical Code 	10 20 5 5 5 20 15	80
TOTAL		326
**Instructor Lead Courses		

SECTION 27 - OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS

Pye-Barker Fire & Safety LLC hereby adopts these standards of apprenticeship.

Sponsor(s) designate the appropriate person(s) to sign the standards on their behalf.

Signature of Sponsor (*designee*)

Date:_____

Jeffrey B McCurley / Director, Apprenticeship & Skilled Labor Training

Type Name & Title