For L&I Staff Use Only	
CC 11/19/2024	Teri Gardner 11-21-24
CC 11/18/2024	Teri Gardner 11-18-24
L&I Apprenticeship Consultant	L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Request for Revision of Standards

TO: Washington State Apprenticeship & Training Council

FROM: **SPOKANE HEAT AND FROST INSULATORS AND ALLIED WORKERS APPRENTICESHIP COMMITTEE #272**

Please update our Standards of Apprenticeship to reflect the following changes:

- Additions shall be underlined (<u>underlined</u>).
- Deletions shall be struck through (~~struck through~~).
- See attached.

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 11/18/2024	☐ Secretary	Date
Print Name: Andrew Richman		Print Name:	
Signature:		Signature:	

Approved By: **Washington State Apprenticeship & Training Council**
Signature of Secretary of the WSATC:
Date:

Attach additional sheets if necessary

Cover

Occupational Objective(s):	SOC#	Term [WAC 296-05-015]
ASBESTOS WORKER	**47-2132.00**	**6000 HOURS**
ASBESTOS WORKER (Registered after 1/1/2025)		**7500 HOURS**

IV. TERM OF APPRENTICESHIP:

(For apprentices registered prior to 12/31/2024)
6,000 hours, within four twelve (12) month periods of reasonably continuous employment.

(For apprentices registered after (1/1/2025)
7,500 hours, within five twelve (12) month periods of reasonably continuous employment.

V. INITIAL PROBATIONARY PERIOD:

(For apprentices registered prior to 12/31/2024)
1,200 hours of employment shall constitute the probationary period.

(For apprentices registered after (1/1/2025)
1,500 hours of employment shall constitute the probationary period.

VII. APPRENTICE WAGES AND WAGE PROGRESSION:

C. Asbestos Worker: (For apprentices registered prior to 12/31/2024

Step	Hour Range or competency step	Percentage of journey-level wage rate
1	**0000 - 1400 hours**	**60%**
2	**1401 - 2900 hours**	**70%**
3	**2901 - 4400 hours**	**80%**
4	**4401 - 6000 hours**	**90%**

(For apprentices registered after (1/1/2025)

Step	Hour Range or competency step	Percentage of journey-level wage rate
1	**0000 - 1500 hours**	**60%**
2	**1501 - 3000 hours**	**65%**
3	**3001 - 4500 hours**	**70%**
4	**4501 - 6000 hours**	**80%**
5	**6001-7500 hours**	**90%**

VIII. WORK PROCESSES:

B. Asbestos Worker: (Apprentices registered after 12/1/2025) **Approximate Hours**

1. Commercial 3000
Plumbing, heating, air conditioning, (ducts covering and linings including plenums). Metal lagging pertaining to insulation. Pre-tab fittings, headcovers, Firestopping and fire penetration and related work.

2. Industrial and Process Plant.....3000
Piping, vessels, equipment, etc. Metal lagging pertaining to insulation. Pre-tab fittings, headcovers, and related work.

3. Asbestos Awareness and Safety Training.....40

4. Refrigeration and Low Temperature.....460
(Piping, equipment, vessels, and tanks, etc.)

5. Prefabrication.....1000
(Fittings, Heads, pads, thermal tapes, miters, layouts, and rolled materials)

TOTAL HOURS: 7500

C. NOTE: The committee realizes that the completion of 7500 hours of on-the-job training is ideal but recognizes that most apprentices will not be able to fulfill the total amount of hours specified in every work process as set forth in these standards. When an apprentice is unable to fulfill the total work hours in each process the committee will evaluate the apprentice's knowledge, skills and abilities and provide appropriate additional related instruction to assure competency is acquired in each work process. The evaluation and summary of the additional instruction will be noted in the apprentice's file.

IX. RELATED/SUPPLEMENTAL INSTRUCTION:

C. Additional Information:

2. Apprentices registered after 1/1/2025 will attend 200 hours RSI for the first year, years 2-5 will attended 160 hours per year.

For L&I Staff Use Only	
CC 11/20/2024 Christina Chance 11/18/2024 L&I Apprenticeship Consultant	Teri Gardner 11-21-24 Teri Gardner 11-18-24 L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Name Spokane Heat and Frost Insulators and Allied Workers Apprenticeship Committee	
Occupation Asbestos Worker	
Term/OJT Hours 7500	Total RSI Hours 840
Training Provider Spokane Heat and Frost Insulators and Allied Workers Apprenticeship Committee	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the “competent instructor” as described in WAC 296-05-003:
    a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
    b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
    c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 11/20/2024	☐ Secretary	Date
Print Name: Andrew Richman		Print Name:	
Signature:		Signature:	

Training Provider Signature

Approved By (Print Name): Andrew Richman	Title: Apprenticeship Coordinator/Instructor
Signature of the Training Provider:	
Date: 11/20/2024	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
☐ SBCTC recommends approval	☐ SBCTC recommends return to sponsor

Program Name	Occupational Objective
Spokane Heat and Frost Insulators and Allied Workers Apprenticeship Committee	Asbestos Worker

Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

☒ 12-month period from date of registration.

☐ Defined 12-month school year.

☐ 2,000 hours of on-the-job training.

Element/Course: Orientation to Mechanical Insulation Yr. 1	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Introduction of apprentice responsibilities (standards, work hour history sheets, field evaluation sheets). Introduction to shop protocol (attendance, appropriate attire/PPE, clean-up, shop safety video with quiz). Introduction to jobsite responsibilities (professional craftsman code of conduct, show-up and quitting times, breaks, journeyman to apprentice ratio and supervision). Sexual harassment training with quiz. Insulation sizes and thicknesses (callout size vs actual size). Properties of a circle (bisecting and trisecting, definitions).	

Element/Course: Element/Course Respiratory Protection Yr. 1	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Description of different types of respiratory protection. Appropriate fitting. Video on respiratory protection. Proper use and storage of respirators. Demonstration on donning and doffing a respirator. Fit testing. 6 hrs class 4 hrs lab	

Element/Course: History of the Trade Yr. 1	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Beginning in 1903 through the present-day history of how our trade came to be and the importance of the trade to the industry. Exploring the evolution of insulation throughout the years and how health and safety standards play a role in the evolution.	

Element/Course: OSHA 10 Yr. 1	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: It is required on most jobsites in our Local's territory to carry a valid OSHA 10 card. Topics covered are: Intro to OSHA, Falls, Electrocution, Struck-by, Caught-in or between, PPE, Health hazards in construction, Scaffold safety, Material handling, Use and disposal. 6 hrs class 4 hrs lab	

Element/Course: Firestop Training and Certification Yr. 1	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course:	

Train and certify apprentices in the 3 major brands of firestopping and fireproofing (STI, Hilti, 3M). Apprentices will firestop and fireproof a mock-up. Identifying the appropriate system to be used in certain scenarios. History of firestopping and fireproofing. 30 hrs class 10 hrs lab

Element/Course: First Aid/CPR/AED Yr. 1	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: It is required that all card-carrying members keep and maintain a current 1st Aid/CPR/AED card. It is also required that it be renewed bi-annually. Initial training will be an 8-hour course. 4 hrs class 4 hrs lab	

Element/Course: Math Yr. 1	Planned Hours: 25
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Math is a major part of our trade. Apprentices will learn to be proficient in: addition, subtraction, multiplying, dividing, fractions, decimals, area, and perimeter. It is also necessary to learn algebra and geometry to perform layouts of patterns for insulation and jacketing.	

Element/Course: Asbestos Awareness Yr. 1	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn the hazards of asbestos. Topics covered are: safe handling procedures, proper disposal procedures, containment building, required PPE, testing of suspected ACM, health monitoring, definitions and certification requirements. 6 hrs class 4 hrs lab	

Element/Course: Boom and Scissor Lift Training Yr. 1	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: 4 hours of classroom work provided by a qualified instructor on the safe practices and proper techniques to operate MEWPS. 4 hours of hands-on training and certification by a qualified instructor of proper operating procedures and inspections.	

Element/Course: Geometric Layouts Yr.1	Planned Hours: 30
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to use geometry to perform the following layouts: equal tee, unequal tee, lateral 45, unequal lateral 45.	

Element/Course: Safety Videos Yr. 1	Planned Hours: 9
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course:	

Creating a strong safety culture is very important to the health and welfare of apprentices. The following videos help create that culture and are accompanied by a quiz at the end of the video and brief discussion. Each video, discussion period and quiz will last 1 hour. All videos are from the National Safety Compliance library and include: Ladder safety, Sexual harassment, hearing conservation, slips/trips/falls, hand and power tool safety, eye safety, scaffold safety, confined space entry, lockout/tagout.

Element/Course: Commercial Pipe and Duct Work Yr. 2	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn key definitions and blueprint schematics pertaining to commercial pipe insulation and duct work. There will be both classroom work and hands-on practical work done on mock-up modules in the lab. 20 hrs class 20 hrs lab	

Element/Course: Removable Blanket Construction Yr. 2	Planned Hours: 30
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: This training will consist of both conventional blanket construction and sewing. Apprentices will learn how to properly measure blankets, when and where to use blankets, construction of removable blankets with a clinch stapler (manual and pneumatic). After learning some basics apprentices will apply these techniques on various mock valve and piping modules in the lab. 20 hrs class 10 hrs lab	

Element/Course: Math Yr. 2	Planned Hours: 20
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Math is a major part of our trade. Apprentices will learn to be proficient in: addition, subtraction, multiplying, dividing, fractions, decimals, area, and perimeter. It is also necessary to learn algebra and geometry to perform layouts of patterns for insulation and jacketing.	

Element/Course: Geometric Layouts Yr. 2	Planned Hours: 30
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to use geometry to perform the following layouts: Radial line development, miters and gores, reading a miter chart, butterfly 90.	

Element/Course: Asbestos Awareness Yr 2	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn the hazards of asbestos. Topics covered are: safe handling procedures, proper disposal procedures, containment building, required PPE, testing of suspected ACM, health monitoring, definitions and certification requirements. 6 hrs class 4 hrs lab	

Element/Course: Introduction to Industrial Pipe Insulation Yr. 2	Planned Hours: 30
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course:	

Apprentices will learn key definitions and blueprint schematics pertaining to industrial pipe insulation. There will be both classroom work and hands-on practical work done on mock-up modules in the lab. 20 hrs class 10 hrs lab

Element/Course: Refrigeration Piping, Tanks and Vessels Yr. 3	Planned Hours: 40

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:

Apprentices will learn how to identify refrigeration systems and how to properly insulate them. They will also learn the different types of insulation used in refrigeration work and when and where to use them. Sufficient lab work will be required for this training due to the fact that it takes a lot of steps to properly insulate cold/cryogenic work and learning those steps are crucial to preventing system failures. Lab that will be done includes: learning refrigeration cutting of various materials, vapor barriers of various sorts, using a foam gun properly, using different types of mastics, applying refrigeration materials to pipes, tanks, and vessels, proper jacketing procedures and calking. 20 hrs class 20 hrs lab

Element/Course: Removable Blanket Construction Yr. 3	Planned Hours: 20

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:

This training will consist of both conventional blanket construction and sewing. Apprentices will learn how to properly measure blankets, when and where to use blankets, construction of removable blankets with a clinch stapler (manual and pneumatic). After learning some basics apprentices will apply these techniques on various mock valve and piping modules in the lab. 10 hrs class 10 hrs lab

Element/Course: Math Yr. 3	Planned Hours: 16

Mode of Instruction (check all that apply)

☒ Classroom ☐ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:

Math is a major part of our trade. Apprentices will learn to be proficient in: addition, subtraction, multiplying, dividing, fractions, decimals, area, and perimeter. It is also necessary to learn algebra and geometry to perform layouts of patterns for insulation and jacketing.

Element/Course: Elastomeric Insulation Layouts and Applications Yr. 3	Planned Hours: 40

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:

Apprentices will learn about the different types of elastomeric insulation. How to properly cut and glue elastomeric insulation. They will review the SDS on the different glues and mastics and when and where to use them. 30 hrs class 10 hrs lab

Element/Course: First Aid/CPR/AED Refresher Yr. 3	Planned Hours: 4

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:

It is required that all card-carrying members keep and maintain a current 1st Aid/CPR/AED card. It is also required that it be renewed bi-annually. 2 hrs class 2 hrs lab

Element/Course: Asbestos Awareness Yr. 3	Planned Hours: 10

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☐ Online ☐ Self-Study

Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee

Description of element/course:
Apprentices will learn the hazards of asbestos. Topics covered are: safe handling procedures, proper disposal procedures, containment building, required PPE, testing of suspected ACM, health monitoring, definitions and certification requirements. 6 hrs class 4 hrs lab

Element/Course: Geometric Layouts Yr. 3	Planned Hours: 30
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to use geometry to perform the following layouts: Concentric reducer, eccentric reducer.	

Element/Course: Asbestos Awareness Yr. 4	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn the hazards of asbestos. Topics covered are: safe handling procedures, proper disposal procedures, containment building, required PPE, testing of suspected ACM, health monitoring, definitions and certification requirements. 6 hrs class 4 hrs lab	

Element/Course: Geometric Layouts Yr.4	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to use geometry to perform the following layouts: Head gores, understanding a lagging chart. 30 hrs class 10 hrs lab	

Element/Course: Math Yr. 4	Planned Hours: 20
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Math is a major part of our trade. Apprentices will learn to be proficient in: addition, subtraction, multiplying, dividing, fractions, decimals, area, and perimeter. It is also necessary to learn algebra and geometry to perform layouts of patterns for insulation and jacketing.	

Element/Course: Industrial Pipe Insulation/Advanced Metal Layouts Yr.4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn about the different types of insulation commonly used on industrial jobsites. They will work as a team to insulate and jacket a large steel pipe loop consisting of valves, various bends, pressure tank, strainers, and piping. Apprentices will learn alternative methods to layouts they have already learned thus far. 30 hrs class 20 hrs lab	

Element/Course: Refrigeration Piping, Tanks and Vessels Yr. 4	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to identify refrigeration systems and how to properly insulate them. They will also learn the different types of insulation used in refrigeration work and when and where to use them. Sufficient lab work will be required for this training due to the fact that it takes a lot of steps to properly insulate cold/cryogenic work and learning those steps are crucial to preventing system failures. Lab that will be done	

includes: learning refrigeration cutting of various materials, vapor barriers of various sorts, using a foam gun properly, using different types of mastics, applying refrigeration materials to pipes, tanks, and vessels, proper jacketing procedures and calking. 10 hrs lab 30 hrs lab

Element/Course: Mud and Fab Glass Work Yr. 5	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to identify the different types of mud and when and where to use them. They will learn about the proper tools to use while applying mud. They will learn how to secure chicken wire to a tank, vessel, and head. Proper finishing techniques. 20 hrs lab 20 hrs lab	

Element/Course: Industrial Tank and Vessel Insulation and Cladding Yr. 5	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will be introduced to industrial materials used in the insulation of tanks and vessels. They will learn the temperature ranges of the different types of insulation, when and where to use the different types, methods of fastening insulation to both tanks and vessels. How to use a pin welder. Proper cladding techniques and fastening techniques for the cladding. Apprentices will then apply what they learned to a large tank mock-up and vessel mock-up. 20 hrs class 20 hrs lab	

Element/Course: Foreman Training Yr. 5	Planned Hours: 20
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn how to conduct themselves as a foreman on a jobsite. This training will include: COMET training, time management, material management and ordering, labor supervision, in-depth blueprint reading, how and when to do a change order, how to handle an upset employee, and scheduling. There will be extensive role-play activities.	

Element/Course: Blueprint Reading Yr. 5	Planned Hours: 20
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will learn to read blueprints and spec sheets for commercial and industrial projects. They will learn to identify symbols used to notate mechanical systems that we insulate. They will also learn to arrange a change order for anything that was missed on the blueprints. 12 hrs class 8 hr lab	

Element/Course: Journeyman Testing Yr. 5	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Spokane Heat & Frost Insulators & Allied Workers Apprenticeship Committee	
Description of element/course: Apprentices will have 10 hours to complete a written exam and 30 hours to complete a hands-on mock piping system with various types of techniques of insulation and jacketing.	

Additional Training Providers (if necessary)

Click or tap here to enter text.
Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.
Title of Training Provider

Click or tap here to enter text.
Organization of Training Provider

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