

STANDARDS OF APPRENTICESHIP

Adopted by

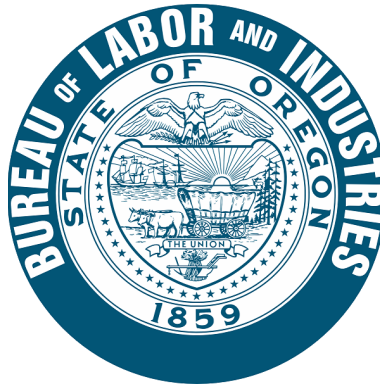
OR SW-WA NW-CA PLUMBERS & STEAMFITTERS JATC

Occupational Title	SIC #	SOC #	Symbol	Suffix	Term
HVAC/R Technician	1711	49-9021	0637	000	8,000 hours

MA#: 1071

SOC Title: **Heating, Air Conditioning
and Refrigeration Mechanics
and Installers**

License: **Ltd Energy
Technician Class B**



APPROVED BY THE

Oregon State Apprenticeship and Training Council (OSATC)
Registered with the

Apprenticeship and Training Division
Oregon Bureau of Labor and Industries
1800 SW 1st Ave, Suite 500
Portland, Oregon 97201

APPROVAL

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Introduction—Apprenticeship Standards

The Oregon State Apprenticeship and Training Council (OSATC) has the authority, under the direction of the Apprenticeship and Training Division, to develop, administer, and enforce apprenticeship program standards (Standards) for the operation and success of an apprenticeship or on-the-job training program in the State of Oregon. Apprenticeship sponsors function to administer, exercise or relinquish authority only with the consent of the OSATC. Only apprentices registered with or recognized by the Oregon Bureau of Labor and Industries (BOLI), Apprenticeship and Training Division (ATD) will be recognized by the OSATC. Parties' signatory to these apprenticeship standards declare that their purpose and policy is to establish and sponsor an organized system of registered apprenticeship and training education.

These Standards are in conformity with and are to be used in conjunction with the Apprenticeship Rules, [Chapter 839-011 OAR](#) (Oregon Administrative Rules); Apprenticeship and Training Statutes, [Chapter 660 ORS](#) (Oregon Revised Statute); The National Apprenticeship Act, 29 U.S.C. (United States Code) 50; Apprenticeship Programs, [Title 29 Part 29 CFR](#) (Code of Federal Regulations); and Equal Employment Opportunity in Apprenticeship and Training, [Title 29 Part 30 CFR](#) which collectively govern the employment and training in apprenticeable occupations. They are part of the apprenticeship agreement and bind all signers to compliance with all provisions of registered apprenticeship.

If approved by the OSATC, such amendment(s) and such changes as adopted by the OSATC shall be binding to all parties on the first day of the month following such approval. Sponsors shall notify apprentices and training agents of changes as they are adopted by the OSATC. If and when any part of these Standards becomes illegal, as it pertains to federal and/or state law, that part and that part alone will become inoperative and null and void, and the Oregon Bureau of Labor and Industries (BOLI) may recommend language that will conform to applicable law for adoption by the OSATC. The remainder of the Standards will remain in full force and effect.

See ORS Chapter 660.[010](#) & [OAR 839-011-0070](#) for the definitions of terms used within these Standards.

Notes: The body of this document contains boilerplate language that applies to all registered apprenticeship programs in the State of Oregon. Boilerplate language may only be modified by the Oregon State Apprenticeship and Training Council.

Appendices A-H are specific to the individual standard and may be modified by the sponsor by submitting a revised standard for approval by the Oregon State Apprenticeship and Training Council or by the Apprenticeship and Training Division (ATD) with concurrence from OSATC where permitted by [ORS 660](#) and [OAR 839-011](#).

1. Geographic Area Covered

These standards establish the apprenticeable occupation to be taught and designate the geographical area or areas in which the standards will apply. ([ORS 660.126](#)) The Sponsor shall have a plan to ensure that participating employers will provide work in all areas covered by the program standards ([OAR 839-011-0084](#)). The Sponsor shall ensure compliance with the provisions for and of any Reciprocity Agreement recognized by the OSATC. (ORS 660.120/OAR 839-011-0260)

The geographic area covered by these standards is located in [Appendix A: Geographical Area](#).

2. Minimum Qualifications

Minimum qualifications, including a minimum age of at least 16, must be clearly stated, comply with federal and state regulations, and be applied in a nondiscriminatory manner ([ORS 660.126\(1\)\(b\)](#)). The Sponsor shall maintain documentation for all minimum qualifications for any apprentice who is registered.

Minimum Qualifications for this standard are located in [Appendix B: Minimum Qualifications](#).

3. Oregon Plan for Equal Employment Opportunity in Apprenticeship (OAR 839-011-0200) – Program Obligations

Standards must include the Oregon Equal Employment Opportunity in Apprenticeship and Training Pledge as specified in [OAR 839-011-0200](#) via PDF attachment, Oregon Plan for Equal Employment Opportunity in Registered Apprenticeship Programs (OPEEO) Section 3(h)(i).

The program EEO Pledge is in [Appendix H: Program Contact Information](#).

Sponsors with standards with five (5) or more apprentices must adopt an Equal Employment Opportunity Plan and Selection Procedures and submit the plan for OSATC approval. ([OAR 839-011-0200/ OPEEO Section 4 & 10](#)).

A. Equal Employment Opportunity Plan

- i. A Sponsor's commitment to equal opportunity in recruitment, selection, employment and training of apprentices shall include the adoption of a written affirmative action plan. ([OAR 839-011-0200 / OPEEO section 8](#)). Each Sponsor required under OPEEO section 4 to develop and maintain an EEO program must retain both the written EEO plan and documentation of its component elements set forth in OPEEO sections 5, 6, 7, 8, 9, and 11.
- ii. In addition, the sponsor will set forth the specific steps that it will take under this plan, review and update the specific steps that it will take to implement the plan at

least yearly and submit the updated steps to the Apprenticeship and Training Division (ATD) for review and approval. (OPEEO section 8)

- iii. Numerical utilization goals for the selection of minorities, females, and individuals with disabilities for apprenticeship shall be submitted to ATD at least every three (3) years and prior to the date that any previous goals expire. (OPEEO sections 6 & 7).
- iv. The sponsor hereby adopts the following activities, at a minimum, in order to generate an increase in applications for apprenticeship and improve retention of apprentices from the targeted groups and/or individuals with disabilities:

- a. Recruitment

- Advertising openings for apprenticeship opportunities using methods and in locations that result in applications from candidates from the underutilized groups.

- b. Outreach

- Dissemination of information to organizations serving underutilized groups regarding the nature of apprenticeship.

- Cooperation with local school boards and career technical education systems to develop and/or establish relationships with pre-apprenticeship programs targeting students from the underutilized groups to prepare them to meet the standards and criteria required to qualify for entry into apprenticeship programs.

- Establishment of formal agreements or partnerships enlisting the assistance and support of pre-apprenticeship programs, community-based organizations, advocacy organizations, or other appropriate organizations, in recruiting qualified individuals for apprenticeship.

- c. Retention

- Practices to retain targeted populations and maintain working and learning environments which supports current apprentices to remain with the program.

B. Selection Procedures

- i. Standards with five (5) or more apprentices must adopt a selection procedure and apply it uniformly to all applicants regardless of race, color, religion, national origin, sex, sexual orientation, age (18 or older), genetic information, and disability. ([ORS 660.137 \(3\)](#) / [OPEEO section 10](#)).

Selection Procedures for this program are located in [Appendix C: Selection Procedures](#).

C. Discrimination Complaints

- i. Any apprentice or applicant for apprenticeship who believes they have been discriminated against with regards to apprenticeship by the committee may file a complaint with the Registration Agency (BOLI Apprenticeship and Training Division, the agency who the apprenticeship sponsor is registered to). ([OAR 839-011-0200 / OPEEO Section 14](#))
- ii. The basis of the complaint may be:
 - a. Discrimination on the basis of race, sex, color, religion, national origin, age, disability or as otherwise specified by law by a sponsor or a sponsor's program;
 - b. The equal employment opportunity plan has not been followed; or
 - c. The Sponsor's equal employment opportunity plan does not comply with the requirements of the Oregon Equal Employment Opportunity in Apprenticeship Plan.
- iii. Generally, in accordance with [OAR 839-011-0200](#), an apprenticeship complaint must be filed within three hundred (300) days of the alleged discrimination or specified failure to follow the equal opportunity standards. However, in Oregon a complaint alleging an unlawful employment practice of discrimination can be filed with the Civil Rights Division up to five years after the occurrence of the alleged unlawful employment practice. ([ORS 659A.820 \(3\)](#)).
- iv. The written complaint must include the name, address and telephone number of the person allegedly discriminated against, the sponsor involved and a description of the circumstances of the complaint, a short description of the events that took place, and the complainant's signature.
- v. For complaints dealing with program operations see section 10 (Administrative Disciplinary Procedures) of this standard.

4. Term Of Apprenticeship

- A. The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (at least 2,000 hours in the time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach).
- B. The time-based approach measures skill acquisition through the individual apprentice's completion of at least 2,000 hours of on-the-job learning as described in a work process schedule.

- i. The term of apprenticeship for a time-based approach must be stated in hours unless otherwise required by a collective bargaining agreement, civil service or other governing regulation. ([ORS 660.126](#))
- C. The competency-based approach measures skill acquisition through the individual apprentice's successful demonstration of acquired skills and knowledge, as verified by the program sponsor. Programs utilizing this approach must still require apprentices to complete an on-the-job learning component of Registered Apprenticeship. The program standards must address how on-the-job learning will be integrated into the program, describe competencies, and identify an appropriate means of testing and evaluation for such competencies.
- D. The hybrid approach measures the individual apprentice's skill acquisition through a combination of specified minimum number of hours of on-the-job learning (at least 2,000 hours) and the successful demonstration of competency as described in a work process schedule. ([Title 29 Part 29\(5\)\(b\)\(2\) CFR](#)) [OAR 839-011-0084\(E\)](#)
- E. When the apprentice is granted advanced standing, the employer must pay the apprentice at the appropriate wage per the wage progression schedule specified in these standards or higher. ([ORS 660.142](#))

NOTE: In licensed occupations the apprentice must complete the minimum hours of documented legal experience.

The term of apprenticeship for this program is located in [Appendix D: Term, Probationary Period, Ratio](#).

5. Initial Probationary Period

- A. All apprentices are subject to an initial probationary period, stated in hours of employment, beginning on the effective date of the apprentice's current registration into the program. During this time, the apprentice's appeal rights are restricted, and the Sponsor may terminate an apprenticeship agreement without cause. ([ORS 660.126 \(1g\)](#))
- B. The initial probationary period must be reasonable in relationship to the full term of the apprenticeship unless otherwise required by Civil Service, Collective Bargaining Agreement (CBA) or law. It cannot exceed one year (12 months) or 25 percent of the length of the program, whichever is shorter. ([ORS 660.126 \(1g\)](#))
- C. During the initial probationary period either party to the agreement may terminate the apprenticeship agreement upon written notice to the Apprenticeship and Training Division of the Oregon Bureau of Labor and Industries. ([ORS 660.126 \(1g\)](#) & [ORS 660.060 \(6\)](#))
- D. Full appeal rights are available to apprentices who have completed the initial probationary period. After the probationary period the Sponsor may only suspend, cancel or terminate the apprenticeship agreement for good cause, with prior written

notice to the apprentice, and with written notice to the apprentice and to the Apprenticeship and Training Division of the Bureau of Labor and Industries of the final action taken by the committee. ([ORS 660.060 \(6\) & \(7\)](#) and section 10 of this standard)

The probationary period for this program is located in [Appendix D: Term, Probationary Period, Ratio](#).

6. Ratio of Apprentices to Journey Level Workers

- A. There shall be a maximum numeric ratio of apprentices to journey-level workers consistent with proper supervision, training, safety and continuity of employment. (ORS 660.126 (1f))([ORS 660.126 \(1f\)](#))
- B. The ratio shall be specifically and clearly stated as to its application to the job site, workforce, department, shift, plant or combination therein. ([ORS 660.126 \(1f\)](#))
- C. To ensure safety and training in all phases of the work, the Sponsor and its Training Agents shall ensure that apprentices are under the supervision of competent and qualified journey-level workers on the job who are responsible for the work being performed. ([ORS 660.126 \(1f\)](#), [ORS 660.137 \(5\)](#), [OAR 839-011-0143](#))

The ratio of apprentices to journey level workers for this program is located in [Appendix D: Term, Probationary Period, Ratio](#).

7. Apprentice Wages and Wage Progression

- A. The apprentice shall be paid according to a progressively increasing schedule of wage based on specified percentages of the average journey-level wage consistent with skills acquired. ([ORS 660.126 \(1h\)](#), [OAR 839-011-0082\(6a\)](#), [OAR 839-011-0093](#), & [OAR 839-011-0310](#))
- B. Wage progressions shall be indicated in hourly or monthly periods (the registration agency recommends the use of hour periods) set by the Sponsor. ([ORS 660.126 \(1h\)](#))
- C. The entry wage listed in this standard shall not be less than the federal or state minimum wage rate for the region covered by the geographical jurisdiction by that standard, whichever is higher. ([ORS 660.142 \(4\)](#))
- D. The wage listed in this standard at all periods establishes a minimum, but a higher wage shall be paid if it is required by other applicable federal law, state law, respective regulations, or by a collective bargaining agreement. ([ORS 660.126 \(1h\)](#), [ORS 660.137 \(6\)](#), [ORS 660.142](#) & [OAR 839-011-310 \(3\)](#))
- E. The sponsor must re-determine the average journey-level wage at least annually and submit the new average journey wage to the Director of the Apprenticeship and Training Division with a statement explaining how such determination was made and the effective date of the new average journey wage. ([ORS 660.137 \(6\)](#))

- F. Upon receipt of a committee's determination of its current journey worker hourly wage rate, the Director, the Division shall notify all training agents and apprentices of the new wage. ([ORS 660.142 \(2\)](#))

The average wage and wage progression for this apprenticeship standard are located in [Appendix E: Wage and Wage Progression](#).

8. Work Processes

- A. The Sponsor shall provide the necessary instruction and experience for apprentices to become journey-level workers versed in the theory and practice of the occupation. ([ORS 660.137](#), [OAR 839-011-0084\(3\)\(e\)](#))
- B. The Sponsor shall require the approximate hours listed in the standard's Work Processes as closely as conditions will permit for every apprentice. A Sponsor unable to provide an apprentice with work experience equaling at least 50% of the hours listed in any of the work processes must provide and document additional related training to compensate for the lack of on-the-job training. ([ORS 660.126 \(1\)\(e\)](#), [OAR 839-011-0084\(3\)\(b\)](#), and [OAR 839-011-0265\(1\)](#))

NOTE: In licensed occupations apprentices must complete the minimum required total hours prior to being referred to the license examination. ([OAR 839-011-0265\(2\)](#))

Work processes for this program are located in [Appendix F: Work Processes](#).

9. Related Training

- A. The apprentice must attend related/supplemental instruction for at least 144 hours per year unless otherwise stated in this standard. Time spent in related/supplemental instruction will not be considered as hours of work, and the apprentice is not required to be paid for time so spent except where the training agent states by policy or CBA whether and under what circumstances an apprentice is entitled to be financially compensated for attending related instruction. ([ORS 660.126 \(1\)\(e\)](#), [ORS 660.157](#), [OAR 839-011-0084](#), and [OAR 839-011-0088\(1\(b\)\)](#))
- B. The Committee must provide for instruction of the apprentice during the related/supplemental instruction in safe and healthful work practices in compliance with the Oregon OSHA regulations and applicable federal and/or state regulations. ([ORS 660.137](#) / [OAR 839-011-0082 \(6\(a\)\)](#), [OAR 839-011-0084](#), & [OAR 839-011-0310](#))
- C. In case of failure on the part of any apprentice to fulfill the related instruction obligation, the sponsor has the authority to withhold the apprentice's periodic wage advancement; or with a reasonable opportunity to remedy deficiencies, suspend, or cancel the Apprenticeship Agreement. ([ORS 660.137 \(4\)](#))
- D. Clock hours of actual attendance by the apprentice in related/supplemental instruction classes at the community college, training trust or other approved training provider shall be documented and tracked by the Committee. ([ORS 660.137 \(2\(a\)\)](#))

- E. Related instruction activities must be at the direction of a qualified instructor. ([ORS 660.120 \(3\)](#), [ORS 660.157 \(5\)](#), [ORS 660.160](#), [OAR 839-011-0084 \(3f\)](#))

The Sponsor must identify the methods of related/supplemental training must consist of one or more of the following: ([ORS 660.120 \(3\)](#), [ORS 660.157](#), [OAR 839-011-0084 \(3\(f\)\)](#)).

A minimum number of 144 hours per year are recommended unless the program has received a waiver from the Oregon State Apprenticeship and Training Council. ([ORS 660.157\(2\)](#))

A summary of related training topics, hours, and methods are located in [Appendix G: Related Training](#).

10. Administrative/Disciplinary Procedures

- A. The Sponsor shall administer its program in conformity with its approved standards, with the provisions of [660.002](#) to [660.210](#), and with the rules and policies of the council and the division. The Sponsor shall establish policies to meet these requirements and list them in this section. The Sponsor shall maintain a separate document for the procedures it will utilize to implement its policies. ([ORS 660.137 \(2\)](#) and [OAR 839-011-0073](#))
- B. The committee may include provisions for committee-imposed “disciplinary probation,” which is a time assessed when the apprentice's progress is not satisfactory; a “disciplinary probation” may only be used to provide an opportunity for the apprentice to correct deficiencies and cannot affect the apprentice’s appeal rights after the initial probation is completed. ([ORS 660.137 \(4\)](#))
- C. During disciplinary probation the committee may withhold periodic wage advancements, suspend or cancel the apprenticeship agreement, or take other disciplinary action. ([ORS 660.137 \(4\)](#))
- D. The apprentice has the right to file an appeal of the committee's disciplinary action with the Director of the Apprenticeship and Training Division. ([ORS 660.120](#), [OAR 839-011-0090](#) and [OAR 839-011-0093](#))
- E. Complaint and Appeal Procedures
- i. Each committee shall adopt and submit complaint review procedures for Division approval. ([OAR 839-011-0084 \(3\)\(g\)](#))
 - ii. All approved committees are expected to administer the program's approved complaint review process in a fair and consistent manner. ([ORS 660.060](#), [ORS 660.120](#), & [OPEEO Section 14](#))

- iii. Complaints that involve matters covered by a collective bargaining agreement are not subject to the complaint review procedures in this section. ([ORS 660.126 \(2\)](#))
- iv. After the initial probationary period the apprenticeship agreement may be canceled by a written request from the apprentice. ([ORS 660.060 \(7\)](#), [ORS 660.126 \(1\)\(g\)](#))
- v. After the initial probationary period the committee may only suspend, cancel or terminate the apprentice agreement for good cause, which includes but is not limited to: failure to report to work, nonattendance at related instruction, failure to submit work progress reports and lack of response to committee citations. ([ORS 660.060 \(7\)](#))
 - a. Due notice and a reasonable opportunity for correction must be provided to the apprentice.
 - b. Upon suspension a written notice must be provided to the apprentice and to the Apprenticeship and Training Division.
 - c. Upon cancellation a written notice must be provided to the apprentice and to the Apprenticeship and Training Division.
- vi. Each committee shall utilize the following procedures and timelines for disciplinary action (cancellation or termination). Committees may adopt and submit alternate complaint procedures, for Division review and approval, providing the procedures are reasonably expected to offer equal protection to the apprentice. ([ORS 660.137](#), [OAR 839-011-0175](#))
 - a. At least 22 days prior to potential disciplinary action by a committee ([OAR 839-011-0175](#)):
 - The committee must notify the apprentice in writing of alleged reason for the proposed disciplinary action and potential action to be taken if the allegation is substantiated
 - The decisions are effective immediately upon committee action
 - The committee will send written reason(s) for such action to the apprentice by registered or certified mail and will include the appeal rights of the apprentice.
 - b. Within 30 days of receipt of committee decision the apprentice may request reconsideration of the action taken by the committee
 - The apprentice's request for the local committee to reconsider their disciplinary action must be submitted in writing and must include the reason(s) the apprentice believes the committee should reconsider the disciplinary action.

- vii. Within 30 days of the apprentice's request for reconsideration
 - The local committee must provide written notification of their final decision including the appeal rights of the apprentice if the committee upholds its decision on the disciplinary action.
- viii. If the apprentice chooses to pursue the complaint further
 - a. Within 30 days of notification of the committee's final action
 - The apprentice must submit the complaint describing in writing the issues associated with the disciplinary action to the Director of the Apprenticeship and Training Division
 - The apprentice must describe the controversy and provide any backup information
 - The apprentice must also provide this information to the local committee/organization
 - b. Within 60 working days the Director of the Apprenticeship and Training Division will complete a review of the record
 - If no settlement is agreed upon during review, the Director must issue a non-binding written decision resolving the controversy.
- ix. If the apprentice or local committee disputes the Director's decision
 - a. Within 30 days of Director's decision the dissenting party must submit a request for the OSATC to hear its case
 - Request must be in writing
 - Must specify reasons supporting the request
 - Request and supporting documents must be given to all parties
 - OSATC Rules and Policy Sub-Committee conducts hearing within 45 days and reports its findings to the next regular quarterly meeting of the OSATC
 - The OSATC renders a decision based on the sub-committee's report.
 - b. Within 30 days of the OSATC meeting
 - The Secretary of the OSATC issues the decision in writing.

11. Committee – Responsibilities and Composition

The following is an overview of the requirements associated with administering an apprenticeship committee and/or program. These provisions are to be used in conjunction with the corresponding ORS and/or OAR.

- A. The committee is the policymaking and administrative body responsible for the operation and success of this Apprenticeship program.
- B. The committee is responsible for the day-to-day operation of the apprenticeship program and must be knowledgeable in the application of [Chapter 660 ORS](#), [OAR 839 division 011](#) and other law and rule as appropriate to the occupation(s).
- C. Sponsors must develop policies and procedures for committee operations and provide a copy to registered apprentices ([ORS 660.060 \(8\)](#), [ORS 660.135](#), [ORS 660.137](#), [OAR 839-011-0073](#), and [OAR 839-011-0310 \(1\)\(b\)](#)). The committee's specific policies pertaining to the operation of the program are included in this standard. The procedures for the implementation of the approved policies are maintained by the committee. After approval by the division the approved procedures shall be distributed to all apprentices and training agents.
- D. Committees shall meet as often as is necessary to transact business and at least semi-annually with a quorum in order to review and evaluate the progress of each apprentice. ([ORS 660.137 \(4\)](#) and [ORS 660.145](#))
 - i. A quorum shall consist of at least two (2) members representing the employers and two (2) members representing the employees. ([ORS 660.135 \(3\)](#), [ORS 660.145](#))
 - ii. Sponsors must hold a physical meeting for all disciplinary actions. Electronic polling is prohibited for issues requiring the personal appearance of applicants, apprentices, trainees, training agents or employers. ([OAR 839-011-0170](#))
 - iii. Minutes of all meetings must be submitted to the Apprenticeship and Training Division within 10 working days of the meeting. ([OAR 839-011-0170](#))
- E. Program Operations ([ORS 660.135](#), [ORS 660.137](#), [OAR 839-011-0170](#), [OAR 839-011-0200](#))
 - i. The Committee will record and maintain records pertaining to the local administration of its Apprenticeship Program and make them available to the OSATC or its representative on request.
 - a. These records include, but are not limited to:
 - Selection of applicants
 - Administration of the apprenticeship program
 - Affirmative action plans
 - Documentation necessary to establish a sponsor's good faith effort in implementing its affirmative action plan
 - Qualification standards

- ii. The Records required by the Oregon Equal Employment Opportunity in Apprenticeship Plan ([OAR 839-011-0200](#)) will be maintained for five (5) years; all other records will be maintained for five (5) years after the final action taken by the committee on the apprenticeship agreement.

The following must be submitted by all programs through the Oregon Apprenticeship Tracking System (OATS) apprenticeship management portal:

- a. Apprenticeship Registration Agreement – within the first 45 days of employment as an apprentice([ORS 660.020](#), [OAR 839-011-0088\(2\)](#)) (In licensed occupations registration must occur prior to employment in the trade.)
- b. Committee Minutes – within 10 working days of the meeting. ([OAR 839-011-0170](#))
- c. Authorized Training Agent Agreements – with the meeting minutes at which they are approved. ([ORS 660.020](#), [OAR 839-011-0162](#))
 - Interim recognition may be authorized by committee policy but may not exceed 45 calendar days.
 - Any recognition of a training agent prior to formal action of the committee must be in conformance with the committee's OSATC approved policy.
- d. Revision of Occupation Standards - as necessary, no later than 45 days prior to OSATC meeting. ([OAR 839-011-0030](#)) (Programs should review their Standards at least annually)
- e. Revision of Committee Member Composition as necessary (included in committee minutes). ([OAR 839-011-0074](#))
- f. Average Journey Level Wage – at least annually or whenever changed (included in committee meeting minutes with a summary of how the average wage was determined). ([ORS 660.137 \(6\)](#), [ORS 660.142](#))
- g. Adopt, as necessary or as directed, local program policies and procedures for the administration of the apprenticeship program in compliance with this Standard. ([ORS 660.060 \(9\)](#), [ORS 660.120 \(4\)\(a\)](#), [OAR 839-011-0073](#))
 - Policies must be submitted to the OSATC for review and approval.
 - Procedures must be submitted for Division (ATD) approval and inclusion by reference in this Standard prior to implementation.
- h. Authorization for issuance of initial license may be granted after the committee is found to be in compliance for operational purposes.

- i. Forms are available from the Apprenticeship and Training Division. If approved by the OSATC, such amendment(s) and such changes as adopted by the OSATC will be binding to all parties on the first day of the month following OSATC approval.

F. Apprentice Management

- i. Applicants accepted by the committee who have documented legal experience creditable to the apprenticeship in the skilled occupation or in some other related capacity, may be granted advanced standing as apprentices. ([OAR 839-011-0088 \(3\)\(a\)](#)) Apprentices admitted to advanced standing will be paid the wage rate for the period to which such credit advances them. In licensed occupations previous credit must be documented legal experience. ([OAR 839-011-0088 \(3\)\(b\)](#))
- ii. Each apprentice (and, if under 18 years of age, the parent or guardian) will sign an Apprenticeship Agreement with the Sponsor, who will then register the Agreement, with the Apprenticeship and Training Division of the Bureau of Labor and Industries within the first 45 days of employment as an apprentice. ([ORS 660.020 \(1\)](#), [ORS 660.060](#), [OAR 839-011-0088](#))
- iii. The Sponsor shall provide a copy of the committee meeting minutes approving any change of disposition or modification of the Registration Agreement to the Apprenticeship and Training Division within 10 working days of the committee meeting. ([OAR 839-011-0170](#))
 - a. Requests for disposition or modification of Agreements include: (1) Certificate of completion, (2) Additional credit, (3) Suspension, military service, or other, (4) Reinstatement, (5) Cancellation, (6) Re-rates, (7) Holds, (8) Examination Referral, (9) Corrections, (10) Limited Supervision-electrical, (11) Phased Supervision-plumbing.
- iv. Rotate apprentices in the various processes of the skilled occupation to ensure the apprentice is trained to be a competent journey-level worker. ([ORS 660.137 \(2\)\(c\)](#), [OAR 839-011-0265](#)).
- v. At least once every six months the sponsor must review and evaluate each apprentice's progress and take action to advance based on the apprentice's progress or hold the apprentice at the same level for a reasonable period and opportunity for corrective action or terminate for continued inadequate progress. ([ORS 660.137 \(4\)](#))
- vi. The evidence of such action will be the record of the apprentice's progress on the job and during related/supplemental instruction.
 - a. If the apprentice's progress is not satisfactory, the committee has the obligation to withhold the apprentice's periodic wage advancements, suspend or cancel the Apprenticeship Agreement, or take other

disciplinary action as established under the “Administrative/Disciplinary Procedures.”

- vii. The Sponsor has the obligation and responsibility to provide, within the constraints of industry and market conditions, reasonably continuous employment for all apprentices in the program. ([ORS 660.020](#), [ORS 660.126](#), and [OAR 839-011-0310 \(2\)](#))
 - a. The committee may arrange to transfer an apprentice from one training agent to another or to another committee when the committee is unable to provide reasonably continuous employment, or they are unable to provide apprentices the diversity of experience necessary for training and experience in the various work processes as stated in this Standard.
 - b. If, for any reason, a layoff of an apprentice occurs, the Apprenticeship Agreement will remain in effect unless canceled by the committee.
- viii. An apprentice who is unable to perform the on-the-job portion of apprenticeship training may, if the apprentice so requests and the committee approves, participate in related/supplemental instruction classes, subject to the apprentice obtaining and providing written medical approval for such participation. However, time spent will not be applied toward the on-the-job portion of apprenticeship training. ([ORS 660.126 \(i\)](#))
- ix. The Sponsor shall hear and address all complaints of violations of apprenticeship agreements. ([ORS 660.137](#))
- x. Upon successful completion of apprenticeship, as provided in these Standards, and passing any examination that the committee may require, the committee will recommend that the Oregon Commissioner of Labor award a Certificate of Completion of Apprenticeship. ([ORS 660.137](#), [ORS 660.205](#))

G. Training Agent Management

- i. The Sponsor shall afford all employers and their qualified employees the opportunity to participate, on a non-discriminatory basis, in existing programs. ([OAR 839-011-0084 \(2\)](#))
- ii. The Sponsor shall provide equal treatment and opportunity for all apprentices through reasonable working and training conditions and apply those conditions to all apprentices uniformly. ([OAR 839-011-0200](#))
- iii. The Sponsor shall provide training agents and prospective training agents with a written statement of costs for program participation. ([OAR 839-011-0084\(3\)\(c\)\(D\)](#))
- iv. The Sponsor shall not require an employer to sign a collective bargaining agreement or join an association as a condition of participation. ([OAR 839-011-0162 \(3\)](#))

- v. The Sponsor shall determine the adequacy of an employer to furnish proper on-the-job training in accordance with the provisions of these Standards. ([ORS 660.137\(5\)](#))
- vi. The Sponsor shall require all employers requesting approved training agent status to complete a training agent application and comply with all Oregon State apprenticeship laws and the appropriate apprenticeship Standards. ([ORS 660.137\(5\)](#))
- vii. The Sponsor shall submit approved training agent agreements to the Apprenticeship and Training Division within ten (10) working days of committee approval with a copy of the agreement and/or the list of approved training agents and committee minutes where approval was granted. ([OAR 839-011-0170](#))
- viii. The Sponsor shall make periodic checks of approved training agents and withdraw approval when approval qualifications are no longer met or when it appears to the committee that the employer is in violation of the terms of the apprenticeship agreement, standards, rules, regulations and policies of the committee or OSATC. ([ORS 660.137\(5\)](#))
- ix. If a committee acts to withdraw training agent status from an employer, the action must be recorded in the committee minutes and submitted to the Apprenticeship and Training Division within 10 working days of the committee action. ([OAR 839-011-0170](#))

H. OSATC Required Policies ([ORS 660.120 - ORS 660.137/OAR 839-011-0073](#))

- i. All local committees shall develop and administer operating policies and procedures to govern program operations as directed by the OSATC and administer such policies and procedures in a consistent manner. Policies and procedures will be approved by the committee and recorded in the meeting minutes.
- ii. When adopted or revised, the Sponsor shall submit these policies and procedures to ATD staff who will advise the Sponsor regarding their conformity with apprenticeship laws, rules and OSATC guidelines.
- iii. Committee policies and procedures must include the following written policies:
 - a. Credit for prior experience
 - b. OJT requirements (hours, work processes, rotation/partial rotation, monthly progress reports, timelines, applicable penalties)
 - c. Related training requirements (attendance, grades):
 - d. Complaint procedures:
 - e. Process for the review and evaluation of apprentice progress:
 - f. Advancement requirements (re-rates, completions):

- g. Disciplinary process (appearances, holds, cancellations):
 - h. Training agent requirements (approval, discipline, removal):
 - i. Traveling training agent policy:
 - j. Initial employment policy:
 - k. Placement procedures for out-of-work apprentices:
 - l. License requirements, including exam referral and completion requirements (for licensed trades only).
- I. Composition of Committee
- i. Joint apprenticeship and training committees must be composed of an equal number of employee and employer representatives composed of at least four principal members but no more than eight principal members. An alternate member may be appointed for each principal member. A quorum shall consist of at least two employer members and two employee members. ([ORS 660.135](#); [OAR 839-011-0074](#))
 - ii. Trades apprenticeship and training committees must be composed of an equal number of employee and employer representatives composed of one principal employee and one principal employer member for each occupation covered by the trades committee. An alternate member may be appointed for each principal member. A quorum shall consist of at least two employer members and two employee members. ([ORS 660.145](#); [OAR 839-011-0074](#))
 - iii. Employee representatives shall
 - a. be skilled practitioners of the trade or occupation and be a member of the collective bargaining unit if a collective bargaining agreement exists for the trade or occupation that is the subject of the apprenticeship or training program administered by the committee ([OAR 660.135](#)); or
 - b. be a bargaining unit representative for the employees of a participating training agent ([OAR 839-011-0074\(1b\)](#)); and
 - c. not serve in a supervisory capacity as defined in the National Labor Relations Act, as amended. ([OAR 839-011-0074\(1b\)](#))
 - iv. The committee shall elect a chairperson and a secretary from the committee members. One of the offices must be held by an employer member and one office must be held by an employee member. ([OAR 839-011-0074\(8\)](#))
 - v. The Council or the Sponsor may remove committee members or officers for failure to abide by ORS 660 or the rules and policies of the OSATC or committee. ([OAR 839-011-0078](#))

12. Subcommittee

Subcommittee(s) may be approved by the sponsor but may only recommend actions to the parent Committee.

13. Program Contact Information

The Sponsor may employ a person(s) as a full or part-time Training Coordinator(s)/Training Director(s)/Administrator(s). This person(s) will assume responsibilities and authority for the operation of the program as are specifically delegated by the Sponsor. ([ORS 660.135\(5\)](#)) See Appendix H for this program's contact information.

Program contact information is located in [Appendix H: Program Contact](#).

Appendix A: Geographical Area

The geographic area covered by these standards shall be **as listed below** for the areas in the State of Oregon and in the State of Washington for notification.

These standards apply to those areas that lie within the boundaries of the State of Oregon and in the State of Washington and are supplemented by standards registered with the State of California with their respective apprenticeship councils:

Beginning at the point where the Columbia River ship channel enters the Pacific Ocean; thence east up the Columbia River ship channel to a point two and one-half miles south of the City of Woodland, Washington; thence on a straight line east to the intersection with the west boundary line of Klickitat County, Washington; thence south on the Klickitat County line to the southwest corner of Klickitat County; thence east to the point directly north of the Deschutes River; thence south to the south bank of the Columbia River; thence east along the south bank of the Columbia River to the west boundary of Morrow County, Oregon; thence south along the west boundary of Morrow County, and east boundary of Wheeler County, Oregon; thence east along the second Standard Parallel to a point approximately five miles north of John Day, Oregon; thence directly south to a point five miles east and three miles south of Burns, Oregon; thence on an airline west to Wagontire, Oregon; thence south on the west boundary of Harney County and east boundary of Lake County to the Oregon and California border; thence west to Highway 395; thence southwest in an airline to Percy, California; thence in an airline west to Mt. Hebo, California; thence northwest in an airline to where the Jackson-Klamath County line intersects the California state line; thence west on the Southern Oregon state border to the Pacific Ocean; thence north along the Oregon coastline to the ship channel of the Columbia River, the point of beginning; also all of Del Norte and Humboldt Counties of Northern California.

Appendix B: Minimum Qualifications

Minimum Qualifications for this standard are:

Age:	Applicants must be at least 17 years of age and may not be registered until at least 18 years of age.
Education:	• Must have a HS Diploma or GED • Must have completed one full year of high school algebra, integrated math 2, or equivalent post-high school algebra course (s) with a grade of 'C' or better or must present current math placement test results from a community college facility indicating a placement level beyond high school level algebra. • Certified transcripts, from a post high school educational institution accredited by a state education agency, may be accepted as evidence the education qualification standard is met if the transcript affirms the applicant as high school, community college or baccalaureate graduate status or is a GED exam score qualifier.
Physical:	None
Testing:	• Must watch the Realistic Job Preview video • Must score a green or yellow on the Journey Assessment. • Must score a green on the Math Assessment Note: The Journey Assessment, Math Assessment and Structured Interview are scored on a green, yellow and red rating scale where green is a score of 3, yellow is a score of 2 and red is a score of 1.
Other:	None

Note: Training Center or Employment Conditions:

- A. Application Fee: \$35.00 non-refundable application fee will be charged to individuals deemed Qualified Applicants prior to assessments. Individuals with incomes below 150% of the federal poverty guidelines may apply for a fee waiver.
- B. All qualified applicants must have a valid email address.
- C. As a condition of employment, if a training agent registered to these standards, requires employment qualifications that exceed the minimum qualifications, those qualifications must be disclosed to the committee in writing in advance of a refusal to accept dispatch of an

apprentice. Conditions that a training agent must disclose under this paragraph include:

- i. that an apprentice, pursuant to a reasonable written policy, submit to a test for detectable levels of drugs or alcohol present in the applicant's body;
- ii. that an apprentice possesses a driver's license and meets the requirements of the employer's liability insurance carrier.

Appendix C: Selection Procedures

Selection Procedure

All out of work apprentices in good standing will be offered the opportunity for re-employment prior to new applicants being registered in conformance with the committee's approved initial employment policy.

The committee shall select apprentices from a pool of eligible applicants according to the following procedure:

Application Notice and Schedule:

- a. The committee will accept and process applications as the need arises in regions defined in the committee's Geographic Policy and on dates specified by the committee in accordance with these Standards, its Affirmative Action Work Plan, and its policies and procedures.
- b. Application information will be disseminated by opening announcement at least 30 days prior to the earliest date of application. Applications will be available on the <https://290tech.edu> website during the application period.
- c. Applications will be retained and active for two years from date of submission. Applicants that reapply during subsequent openings will be processed as new applicants.

Non-Qualified Applicants:

- a. Applicants who fail to meet the minimum qualifications will be notified in writing; notification will include the reason for rejection, the requirements for admission to the eligibility pool, and the appeal rights available to the applicant.

Qualified Applicants:

- a. *Qualified Applicants* are the individuals who meet the minimum qualifications.
- b. Qualified Applicant will select which areas in the program's geographical jurisdiction they would accept a dispatch from if registered.
- c. The JATC will then schedule a Structured Interview for the Qualified Applicants. The Structured Interview will be a panel interview.
- d. All Qualified Applicants that are interviewed make up the Qualified Applicants List.

Accepted for Apprenticeship List and Final Qualified Scoring Bands:

- a. All applicants who interview will be assigned to a band based upon the combined results of the Journey Assessment, Math Assessment and Structured Interview.
The Journey Assessment, Math Assessment and Structured Interview are scored on a green, yellow and red rating scale where green is a score of 3, yellow is a score of 2 and red is a score of 1.
- b. The JATC will grant Qualified Applicants with relevant education, trade-specific work experience or military service-as reflected in the Work Experience section of the Structured interview-additional credit by being advanced by one band in the Final Qualified Scoring Band placement.

Qualified Applicants that meet specific criteria will qualify for a +1 band improvement to their final Qualified Scoring Band standing. **A Qualified Applicant may only receive credit for one (1) band improvement regardless of how many requirements they meet.**

Any of the following criteria qualify for the +1 band improvement:

- **Experienced Apprentices** – Apprentices from state registered non-union apprenticeship programs or applicants previously registered to the OR SW-WA NW-CA Plumbers and Steamfitters JATC. Applicants must supply their *Monthly Progress Report Summary* and their *Related Training Transcripts*.
- **Pre-Apprentices** – Applicants that have completed a state approved pre-apprenticeship program. Applicants must provide their *Pre-apprenticeship Graduation certificate*.
- **Veterans** – Applicants who are veterans of the United States armed forces, within 2 years of the date of honorable discharge, or of an active Service Member who is within 180 days of honorable discharge or a member of the Selected Reserve, Ready Reserve, or National Guard honorably discharged within the preceding 24 months. Applicants must supply their *DD-214* showing Honorable discharge or Discharge under Honorable Conditions.
- **UA Local 290 Members** – Applicants that have documented work experience under the employ of a signatory contractor of the UA Local 290 Plumbers, Steamfitters, HVAC/R and Marinefitters union for at least six (6) months. Applicants must supply a *Detailed Job History report* obtained by UA Local 290.
- **TERO Participants** – Applicants that are enrolled as members of an Indian Tribe or Nation, and/or Qualified Native American applicant referred by a Tribal Employment Rights Office (TERO). Applicants must supply their *TERO letter*.
- **Mechanical Equipment Specialist** – Qualified Applicants serving a UA Mechanical Equipment Specialists for no less than six (6) months and able to document curriculum completion of an accredited technical training school or has a minimum of 4,000 hours of documented trade experience as well as successfully passing the HVAC Excellence Core Exam Technical Certification (Exam Code C-50), developed in association with the United Association Training Department and Ferris State University with a score of 70% or above. Applicants must supply *transcripts showing completion of an accredited technical training school or documentation of no less than 4,000 hours experience* in the form of a *Detailed Job History report* obtained by the UA Local 290 or *W2's* and copies of their *job descriptions* reflecting relevant trade experience. Also, the applicant must supply their passing test results from the *HVAC Excellent Score Exam Technical Certification*.

- c. The Qualified Applicants will then be placed, based on their final results, from highest to lowest into one of seven (7) tiered cohorts called **Final Qualified Scoring Bands**.

Final Qualified Scoring Bands			
Band	Journey	Basic Math	Interview
Green 1*	3	3	3
Green 2	3	3	3
Green 3	2	3	3
Green 4	3	3	2
Yellow 1	2	3	2
Yellow 2	3	3	1
Yellow 3	2	3	1
*scored 3/3/3 and received a +1 band improvement credit from Work Experience section.			

- d. Based on the number of Qualified Applicants in each Final Qualified Scoring Band, the JATC will determine how many Final Qualified Scoring Bands will make up the Accepted for Apprenticeship List.
- e. Once placed into the Final Qualified Scoring Band, the Qualified Applicants in that band will have their position randomized/shuffled and assigned band placement. Any Qualified Applicants that do not end up on the Accepted for Apprenticeship List will remain on the Qualified Applicants List until the next Opening Announcement.
- f. Applicants in the Qualified Applicants List, or on the Accepted for Apprenticeship List, may be removed from the List:
 - 1) at the request of the applicant;
 - 2) in accordance with the committee policies and procedures;
 - 3) if a new Accepted for Apprenticeship List is created;
 - 4) for dishonesty in completion of the application process;

Applicants removed from the List involuntarily may reapply during an open term for applications 12 months after the removal date.

Placement From Accepted for Apprenticeship List:

- a. All apprentices will be selected from the Accepted for Apprenticeship List starting from the top Final Qualified Scoring Band and then from subsequent bands in order until all designated bands are exhausted.
- b. From the Accepted for Apprenticeship List only, the committee may dispatch one applicant, by name, to a training agent provided the applicant has been in the employ of the training agent for no less than six months.

Exceptions

The JATC shall accept applications for Exceptions at any time. Applicants that meet the minimum qualifications for the program and satisfy the requirements for the exception will be placed at the top of the Accepted for Apprenticeship List.

1. APPRENTICE TRANSFER

- a. Upon the following terms, the committee may allow application for transfer of currently registered apprentices from another UA program that trains in the Plumber, HVAC/R, Pipefitter or Steamfitter occupations:
 - i. The applicant, within the preceding 90 days, has made no other application for admission to this program;
 - ii. Application for admission has been made on a form obtained from the committee and signed by the applicant;
 - iii. The applicant meets this program's Minimum Qualifications and conditions for dispatch from the Accepted for Apprenticeship List;
- b. The committee may allow application for entry of a UA VIP graduate into the apprenticeship program.

3. NEW TRAINING AGENT

If an employer has not participated in the training of an apprentice under ORS Chapter 660 for at least two years prior to seeking entry or re-entry into the apprenticeship program, the employer may select as his/her initial apprentice, without going to the pool, those bona fide employees who have been on his/her payroll for at least 480 hours prior to the employer's application for an apprentice and who meet the minimum qualifications for entry into the trade or craft. Once the initial selection of apprentices has been made, the employer is thereafter restricted to a selection from applicants in the pool of eligibles established by the sponsor which has jurisdiction in this area.

7. ORGANIZING (UNION ORGANIZES AN EMPLOYER)

Individuals who are employed by an employer who becomes signatory will be provided direct referral into the program if they:

- a. Meet the current minimum qualifications of this program; and
- b. Do not qualify as a journey worker.

Individuals qualifying under this exception will be evaluated by the committee and registered at the appropriate period of apprenticeship based upon previous work experience and related training.

8. ORGANIZING (50%+1 OF THE EMPLOYEES SIGN BARGAINING CARDS)

Individuals who sign an authorization card during an organizing effort wherein more than 50% of the employees have signed, will be provided direct referral into the program if they:

- a. Meet the current minimum qualifications; and
- b. Do not qualify as a journey worker.

Individuals qualifying under this exception will be evaluated by the committee and registered at the appropriate period of apprenticeship based upon previous work experience and related training.

Appendix D: Term, Probationary Period, Ratio

Term of Apprenticeship

This is a time-based apprenticeship standard. The term of this standard of apprenticeship shall be **8,000** hours of employment.

Probationary Period

The probationary period shall be the first **2,000** OJT hours of employment, or one year after the current registration to this standard, whichever is shorter. (ORS 660.126 (g))

Ratio

The ratio of apprentices to journey-level worker shall not be more than **one (1)** apprentice to the first **one (1)** licensed journey-level worker in full employment: for the first **two (2)** apprentices in

the jobsite and in the shop.

in order to assure adequate training and supervision. Additional apprentices are authorized at a ratio of **one (1)** apprentice for each additional **three (3)** journey-level workers. (See ORS 660.126 (f))

Appendix E: Wage and Wage Progression

The average wage for those journey-level workers employed by the participating employers in this occupation on **APRIL 1, 2025** is **\$60.77** per hour.

Period	Number of required hours	% of the journey level rate
1	0-800	40
2	801-1600	50
3	1601-2400	55
4	2401-3200	60
5	3201-4000	65
6	4001-4800	70
7	4801-5600	75
8	5601-6400	80
9	6401-7200	85
10	7201-8000	90
11	COMPLETE	

Appendix F: Work Processes

The work processes and approximate training hours in each area are:

Work processes	Approximate hours
<u>Mechanical</u>	
a. Installation, troubleshooting, and service of HVAC systems	1,000
b. Duct design, layout, air flow, and refrigeration theory	400
c. Piping, welding, brazing, and soldering	300
d. The committee will distribute, with specificity and considering the needs of the apprentice and the employer, the remainder of mechanical category hours to the above, or other, mechanical work processes. All work processes will be recorded by the apprentice, with specificity, on the monthly progress report.	2,300
<u>Electrical</u>	
e. Limited energy installations, including: Cables & supports, wire pulling, splices, conduit, flex tray & duct, control panels & controls, wiring devices, removal & finish work, stock room & materials, overhead & underground	1,750
f. Troubleshooting & maintenance	250
g. Occupation-specific applications, including: 1) Communications systems, including data telecommunication, intercom, paging 2) Specialized control systems, including HVAC, medical, boiler, clock, instrumentation	2,000
TOTAL	8,000

In licensed occupations apprentices must complete the minimum required total hours prior to being referred to the license examination. (OAR 839-011-0265(2)) (For electrical licenses, ORS 479.630 & OAR 918-282-0270) (For plumbing licenses, ORS 693.060 & OAR 918-695-0140)

Apprentices must complete a total of **8,000** hours of on-the-job training. However, the committee recognizes that most apprentices will not be able to fulfill the total amount of hours specified in every work process as set forth in this standard. When an apprentice is unable to fulfill the total work hours in each work process the committee will evaluate the apprentice's knowledge, skills and abilities and provide appropriate additional related instruction to assure that competency is acquired in each work process. The evaluation and summary of the additional instruction will be noted in the apprentice's file. (OAR 839-011-0265(1))

Appendix G: Related Training

A minimum of **216** hours of related training shall be required during each year the apprentice is registered in this program. (ORS 660.126(e) / ORS 660.157(1))

The following is a summary of related instruction including required class hours in each element of instruction. (ORS 660.157)

Related training must cover the following subjects and must be completed with a grade of 'C' or better for graded classes or 'Pass' for non-graded classes. (OAR 918-282-0170 to -0365)

Instructional Element	Hours
Year 1 – HVAC/R -Construction Safety -Fundamental Soldering, Brazing, and Welding (gas/arc) -Fundamental Construction Math -Fundamental Construction Science -Union Heritage -OSHA 30 -Fundamental Drawing and Blueprint Reading -Refrigerants and Refrigeration Cycle (EPA) -Pipe Threading -Knots and Rigging -First Aid -Pipefittings and Valves	216
Year 2 – HVAC/R -Intermediate Construction Math and Science -Fundamental Electricity -Fundamental Refrigeration -Intermediate Soldering, Brazing, and Welding -HVAC/R Safety -Fundamental Refrigerant Flow	216
Year 3 – HVAC/R -Intermediate Electricity -Intermediate Refrigeration -Light Commercial Refrigeration -Advanced Soldering, Brazing, and Welding -Rigging -Drawing Interpretation and Plan Reading -Specialty Refrigeration -Fundamental Variable Refrigerant Flow -Gas Service	216
Year 4 – HVAC/R -Advanced Electrical -Hydronics -Advanced Refrigeration -Tube Bending	216

-Variable Refrigeration Flow -Advanced Drawing and Plan Design -Economizers -Fundamental Air Conditioning	
-Supermarket Refrigeration -Variable Frequency Drives	
Year 5 – HVAC/R -UA Foreman Training -Pumps -Advanced Air Conditioning -Specialized Refrigeration -Class 5 Boiler Rules and Regulations -Pneumatics -Chilled Water Systems -Direct Digital Controls -Specialized HVAC Controls -Specialized Electrical -Oregon Electrical Exam Preparation	216

Methods of related/supplemental training shall consist of the following:

- ☒ Training Trust: UA Local 290 Apprentice and Journeyman Training Trust
- ☒ Other: UA Local 290 College of Mechanical Systems and Technology Training
Centers: Tualatin, Springfield, Redmond, White City, Eureka

Appendix H: Program Contact Information

This standard is administered by this committee as a:

JATC

(ORS 660.135) or (ORS 660.145)

Administrator/Coordinator

Dominic De Piero, Director of Training

Matt J. Walters Training Center, UA Local 290

20220 SW Teton Ave.

Tualatin, OR 97062

503-691-1997 (office)

503-691-0908 (fax)

EEO PLEDGE

OR SW-WA NW-CA PLUMBERS & STEAMFITTERS JATC shall not discriminate against apprenticeship applicants or apprentices based on race, color, religion, national origin, sex (including pregnancy and gender identity), sexual orientation, genetic information, or because they are an individual with a disability or a person 18 years old or older. **OR SW-WA NW-CA PLUMBERS & STEAMFITTERS JATC** shall take affirmative action to provide equal opportunity in apprenticeship and shall operate the apprenticeship program as required under these rules and Title 29 CFR, part 30.