
Appendix A

Plumbing Heating Cooling Contractors Association

HVAC TECHNICIAN

WORK PROCESS SCHEDULE

AND

RELATED INSTRUCTION OUTLINE



Appendix A

WORK PROCESS SCHEDULE HVAC TECHNICIAN

O*NET-SOC CODE: 49-9021.01 RAPIDS CODE: 0637

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

1. APPRENTICESHIP APPROACH

Time-based Competency-based Hybrid

2. TERM OF APPRENTICESHIP

The term of the apprenticeship is 4 years with an OJL attainment of **8000** hours, supplemented by the minimum required 576 hours of related instruction.

3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice to 1 Journeyworker.

4. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: **\$45.18**.

Wage increases will be granted upon the successful completion of both on-the-job training and related instruction. Apprentices shall be paid a progressively increasing schedule of wages based on the following schedule:

Period	Hours	Percentage	Period	Hours	Percentage
1 st	1000	40%	5 th	1000	70%
2 nd	1000	45%	6 th	1000	80%
3 rd	1000	50%	7 th	1000	85%
4 th	1000	60%	8 th	1000	90%

5. PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of 2000 Hours.



6. SELECTION PROCEDURES

SELECTION PROCEDURES

1. The program sponsor shall schedule the interview and evaluation session. All applicants who have met the basic qualifications and have submitted the required documents must be notified of the date, time, and place to appear.
2. The interviewer(s) will rate each applicant during the interview on each of the factors on the Applicant Rating Form taking into account the information on the application, required documents, if applicable, and the judgment derived from the interview.
3. After completing the interview and evaluation of the applicants, the individual rating scores of the interviewer(s) will be added together and averaged to determine the applicant's final rating.
4. Applicants will be placed on a "Ranking List" according to their scores at the evaluation session, with the name of the applicant having the highest score at the top of the list, and all applicants then listed in descending order based on score.
5. As openings for the registration of new apprentices occur, the highest ranked applicant will be notified of selection by telephone. It shall be the responsibility of the applicant to keep the program sponsor informed of their current mailing address and phone number.
6. Selected applicants must respond to the notice of selection within forty-eight (48) hours of notice. If applicants cannot be reached by telephone, their names will be passed and notice sent to their address by "Certified Mail-Return Receipt Requested," to determine if the applicants are still interested. If no response is received in fifteen (15) working days from the written notice, the applicant's name will be removed from the list. Only one certified notice will be mailed.
7. Qualified applicants remaining on a preceding ranking list will automatically be carried forward on the new ranking list and slotted in wherever their rating score placed them for a period of two (2) years, unless the applicant has been removed from the list by their own written request or following failure to respond to an apprentice opening. Applicants who were not placed during the two (2) year period they were on the ranking list will be required to reapply.
8. During the two-year period, applicants who feel that their qualifications have improved since their original rating may submit documented evidence of such additional experience or training and request reevaluation and rating at the next regular processing cycle.
9. Youth who complete a Job Corps training program in any occupation covered in the Apprenticeship Standards, who meet the minimum qualification of the apprenticeship program, may be admitted directly into the program, or if no apprentice opening is available, the Job Corps graduate may be placed at the top of the current applicant ranking list and be given first opportunity for placement. The program sponsor shall evaluate the Job Corps training received for granting appropriate credit on the term of apprenticeship. Entry of Job Corps graduates shall be done without regard to race, color, religion, national origin, or gender.
10. Veterans who completed military technical training school and participated in a registered apprenticeship program while in the military in the Plumbing, Heating and Cooling Industry may be given direct entry into the apprenticeship program. The program sponsor shall evaluate the military training received for granting appropriate credit on the term of apprenticeship and the appropriate wage rate. The program sponsor will determine what training requirements they need to meet to ensure that they receive all necessary training for completion of the apprenticeship program. Entry of military veterans shall be done without regard to race, color, religion, national origin, or sex.



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	Approximate Hours
1. Refrigeration basics and orientation	500
2. Safety	160
3. Customer relations	160
4. Methods of handling equipment	500
5. Constant humidity	320
6. Heavy air conditioning	500
7. Soldering and welding	1000
8. Tube bending and fitting	500
9. Diagram and blueprint reading	320
10. Pipefitting	1000
11. Controls	180
12. Power tools	1000
13. Test instruments	1000
14. Testing equipment	160
15. Service and trouble-shooting	<u>1200</u>
Total Hours	8000



RELATED INSTRUCTION OUTLINE HVAC TECHNICIAN

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FIRST YEAR

Mechanical Systems Lecture/Lab	108
Brazing & Soldering	54
Electrical Theory Lecture	54

SECOND YEAR

Electrical Controls II	108
Installation	54
Computers/Customer Relations	54

THIRD YEAR

Electrical Controls III	54
DDC III	54
Thermodynamics III	54
Compressors III	54

FOURTH YEAR - HVAC

HVAC Systems IV	54
Heat Loads & Air Distribution IV	54
Pneumatics IV	54
Market for HVAC IV	54

FOURTH YEAR – REFRIGERATION

HVAC for Market IV	54
Market Energy Management IV	54
Market Applications IV	108

ADVANCED (OPTIONAL)

FIFTH YEAR - HVAC

Advanced Troubleshooting V	54
Chillers V	54
Start, Test & Balance V	54
Hydronics & VSD V	54

FIFTH YEAR – REFRIGERATION

Adv Market Energy Management V	54
Market Start, Test & Balance V	54
Market Systems V	54
Adv Market Troubleshooting V	54