

Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)

Occupation description: Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.

Employment and Job Openings

	Employment			Average annual openings		
	2016 estimate	2026 projection	Percent change	Labor force exits	Occupation transfers	Total
Alaska	366	378	3.3	10	25	36
United States	332,900	381,700	14.7	9,900	24,000	38,780

Job outlook

Alaska: Alaska's employment growth is low with moderate employment opportunities. [Read more.](#)

2019 Wages

	Mean Wage	Wage by Percentile				
	Mean	10th	25th	Median	75th	90th
United States	24.72	14.72	18.11	23.43	29.84	37.46
Alaska	32.86	20.33	27.67	32.84	37.76	42.98
Anchorage/Mat-Su Area	33.08	25.79	29.40	33.43	37.40	39.50
Fairbanks North Star Borough	37.76	24.95	27.32	30.86	39.96	68.33
Balance of State	29.99	15.71	18.21	32.27	38.68	44.33

Labor Force Indicators

2016 Worker Characteristics

Total workers	Nonresident workers	Percent nonresident	Percent age 45 plus	Percent age 50 plus
475	101	21.3	40.0	27.9

2016 Potential Supply

Qualified but working in another occupation	93
Currently employed in a lower paid occupation	37
UI claimants previously working in occupation	62

2016 ALEXsys Employment Data

Number of registrants	357
Number of job position postings	87
Ratio of registrants to job position postings	4.1

Alaska Licensing Information

Freon Technician, Certified – [View licensing requirements and number licensed](#)
 Mechanical Administrator – [View licensing requirements and number licensed](#)

Typical Entry-level Education, Experience, and/or On-the-job Training

Education: Postsecondary non-degree award

Work experience: None

On-the-job training: Long-term on-the-job training

Training Resources

	Degree
Alternative Energy in Alaska	
Boiler Maintenance and Repair	
Breathing in Buildings – 3-Hour	
Breathing in Buildings - 4-Hour	
Complying with Ventilations Requirements of BEES	
Energy Programs in Alaska	
Energy Retrofit of an Existing Home	
Energy, Alternative Energy Systems and Infrastructure	
Foundations and Crawl Space Ventilations	
Getting to Zero Energy in Alaska Homes	
Healthy Air: What You Should Know about the Air You Breathe	
Heating and Ventilation Best Practices	
Heating System Design Details	
Heating Systems for Energy Efficient Homes: 1-Hour	
Heating Systems for Energy Efficient Homes: 2-Hour	
IAQ - Parking Your Car in the Living Room	
Introduction to Radiant Heat	
Introduction to Solar Energy Design	
Introduction to Solar Thermal Energy	
Mold and Moisture in the Healthy House	
Of Mold, Moisture and Other Things	
Passive Ventilation	
Preventing and Solving Air Quality Problems in Homes	
Solutions to Preventing Moisture Scare	
Ventilation Strategies for Existing Homes	
Ventilation Strategies for New Homes	

Ventilation System Design and Installation	
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Ventilation: Understanding ASHRAE 62.2	
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Degree

ABC of Alaska (Anchorage)

Confined Space Entry	
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HVAC Apprenticeship	
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Degree

Alaska Craftsman Home Program (Anchorage)

Air Tightness & Ventilation	
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Airtightness for Energy Efficiency	
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Combustion Safety Training	
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Energy Efficient Doors and Windows	
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Energy Savings with Lighting and Appliances	
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Evaluating Doors and Windows	
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Finding and Fixing Air Leaks	
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First Steps: Building Science Basics	
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Healthy Indoor Air through Ventilation	
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Heating and Hot Water Choices	
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Ice Dams	
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Insulating for Savings and Comfort	
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Insulation	
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Plugging Into Energy Savings	
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Understanding Heating Systems- Options for AHFC Programs	
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Ventilated Crawl Spaces; Best Practices	
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Ventilation	
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Degree

Alaska Housing Finance Corporation (Anchorage)

Heating and Hot Water	
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Ventilation and Indoor Air Quality	
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Degree

Alaska Petroleum Academy (Kenai)

Confined Space Entry (8 Hours)	
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Confined Space Rescue (16 Hours)	
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Degree

Alaska West Training Center (Fairbanks)

Permit Required Confined Space Entry - S01	
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Permit Required Confined Space Entry and Fire Watch - S01a	
Permit Required Confined Space Rescue - S02	
Degree	
AVTEC (Seward)	
Confined Space Entry/Rescue	
Plumbing and Heating	Certificate
Refrigeration	
Degree	
Beacon Occupational Health and Safety Services (Anchorage)	
Confined Space Entry (OSHA and NSTC Offered)	
Confined Space Rescue (OSHA)	
Degree	
Charter College, Anchorage (Anchorage)	
Heating, Ventilation, Air Conditioning and Refrigeration (HVAC)	Certificate
Degree	
Environmental Management Inc (Anchorage)	
Confined Space Procedures	Certificate
Degree	
LTR Training Systems, Inc. (Anchorage)	
Bear Awareness & Handgun Defense	
Confined Space Entry	
Confined Space Rescue	
Degree	
Northern Industrial Training (Palmer)	
Confined Space Entry/011	
Confined Space Entry/011	
Degree	
Partners for Progress in Delta, Inc (Delta Junction)	
Residential Heating Controls	
Degree	
Plumbers & Steamfitters Joint Apprenticeship Training Committee (Anchorage)	
Plumbers and Pipefitters Apprenticeship	
Degree	

Satori Group Inc (Anchorage)

Confined Space Entry	Certificate
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Degree	
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Southwest Alaska Vocational and Education Center (Igiugig)

Marine Refrigeration	
Residential Heating and Controls	

Degree	
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University of Alaska Anchorage, Mat-Su (Palmer)

Commercial HVAC System	OEC
Commercial Refrigeration	OEC
Heating	CT1
Refrigeration & Heating Technology	AAS
Refrigeration & Heating Technology	CT2

Degree	
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University of Alaska, Mining and Petroleum Training Service (Soldotna)

Confined Space Entry	
Mechanical Maintenance Oil Fired Heating Systems	
Mechanical Maintenance Power Boiler	

Degree	
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Vocational Training and Resource Center (Juneau)

HVAC Technician	
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Degree	
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Wisdom & Associates, Inc. (Kenai)

2009 International Mechanical Code	
2012 International Mechanical Code, Part 1	
2012 International Mechanical Code, Part 2	
A Review of the BEES Ventilation Standard	
Advanced AKWarm	
Advanced Heating	
Air Conditioning and Heat Pumps	
Air Conditioning and Heat Pumps - AHFC Sponsored	
Air Sealing & Vapor Barrier Details	
Air Tightness 1	
AkWarm	
Alaska's Commercial Energy & Ventilation Standard - AHFC Sponsored	
Alaska's Energy & Ventilation Standard	

Balancing HRVs	
Combustion Safety Testing	
Duct Diagnostics - AHFC Sponsored	
Forced Air & HRV Duct Design	
Heat Pumps & Alternative Energy Sources	
Heating Systems	
Heating, Ventilation & Motors	
Heating, Ventilation & Motors - AHFC Sponsored	
HRV Duct Design - AHFC Sponsored	
Indoor Air Quality	
Introduction to Indoor Air Quality	
Manual J Heat Load Design	
Ventilation Retrofit	
Ventilation Strategies	

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