

45-4023 Log Graders and Scalers



Grade logs or estimate the marketable content or value of logs or pulpwood in sorting yards, millpond, log deck, or similar locations. Inspect logs for defects or measure logs to determine volume. *Examples: Timber Estimator; Landing Scaler*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$17.59
2016 Estimated Employment:	49
2026 Projected Employment:	46
Growth Rate, 2016-2026:	-6.1%
Annual Openings:	6

Industry		2016 Share	2026 Share
321	Wood Product Manufacturing	77.6%	80.4%
	Self-employed Workers	22.5%	19.6%

47-1011 First-Line Supervisors of Construction Trades and Extraction Workers



Directly supervise and coordinate activities of construction or extraction workers. *Example: Cement Contractor*

Training Category: High School | 5+ yrs | none

2017 Average Wage:	\$30.87
2016 Estimated Employment:	2,686
2026 Projected Employment:	2,929
Growth Rate, 2016-2026:	9.1%
Annual Openings:	291

Industry		2016 Share	2026 Share
236	Construction of Buildings	26.6%	27.7%
238	Specialty Trade Contractors	23.8%	23.7%
	State Government, excl. Education and Hospitals	12.6%	11.7%
	Self-employed Workers	8.9%	8.7%
237	Heavy and Civil Engineering Construction	8.6%	9.2%
	Local Government, Excluding Education	8.5%	8.2%

47-2011 Boilermakers



Construct, assemble, maintain, and repair stationary steam boilers and boiler house auxiliaries. Align structures or plate sections to assemble boiler frame tanks or vats, following blueprints. *Examples: Boiler Installer; Boiler Mechanic; Pressure Tester*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$37.83
2016 Estimated Employment:	83
2026 Projected Employment:	87
Growth Rate, 2016-2026:	4.8%
Annual Openings:	9

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	84.3%	82.8%
	Self-employed Workers	2.4%	3.5%
237	Heavy and Civil Engineering Construction	n	n
5617	Services to Buildings and Dwellings	n	n
6111	Elementary and Secondary Schools	n	n

47-2021 Brickmasons and Blockmasons



Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, with mortar and other substances to construct or repair walls, partitions, arches, sewers, and other structures. *Examples: Adobe Layer; Chimney Builder; Furnace Liner*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$23.97
2016 Estimated Employment:	442
2026 Projected Employment:	473
Growth Rate, 2016-2026:	7.0%
Annual Openings:	41

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	50.5%	51.4%
	Self-employed Workers	26.7%	26.6%
	State Government, excl. Education and Hospitals	13.4%	12.7%
5617	Services to Buildings and Dwellings	n	n
6111	Elementary and Secondary Schools	n	n
	Local Government, Excluding Education	n	n

47-2022 Stonemasons



Build stone structures, such as piers, walls, and abutments. Lay walks, curbstones, or special types of masonry for vats, tanks, and floors. *Examples: Granite Setter; Monument Installer; Rock Mason*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$20.76
2016 Estimated Employment:	201
2026 Projected Employment:	216
Growth Rate, 2016-2026:	7.5%
Annual Openings:	20

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	38.8%	39.4%
	Self-employed Workers	26.9%	26.4%
236	Construction of Buildings	n	n
5617	Services to Buildings and Dwellings	n	n

47-2031 Carpenters



Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. *Examples: Shipwright; Cabinetmaker; Wood Floor Layer*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$22.11
2016 Estimated Employment:	4,431
2026 Projected Employment:	4,731
Growth Rate, 2016-2026:	6.8%
Annual Openings:	443

Industry		2016 Share	2026 Share
236	Construction of Buildings	40.6%	41.1%
	Self-employed Workers	30.0%	29.8%
238	Specialty Trade Contractors	17.2%	17.2%
237	Heavy and Civil Engineering Construction	2.0%	2.1%
321	Wood Product Manufacturing	1.9%	1.7%
337	Furniture and Related Product Manufacturing	1.8%	1.5%

47-2041 Carpet Installers



Lay and install carpet from rolls or blocks on floors. Install padding and trim flooring materials. *Examples: Floor Coverer; Rug Layer*

Training Category: none | none | Short OJT

2017 Average Wage:	\$18.65
2016 Estimated Employment:	159
2026 Projected Employment:	172
Growth Rate, 2016-2026:	8.2%
Annual Openings:	15

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	42.1%	42.4%
	Self-employed Workers	32.7%	32.0%
442	Furniture and Home Furnishings Stores	25.2%	25.6%

47-2042 Floor Layers, Except Carpet, Wood, and Hard Tiles



Apply blocks, strips, or sheets of shock-absorbing, sound-deadening, or decorative coverings to floors. *Examples: Composition Floor Setter; Linoleum Layer; Soft Tile Setter*

Training Category: none | none | Moderate OJT

2017 Average Wage:	\$20.41
2016 Estimated Employment:	55
2026 Projected Employment:	60
Growth Rate, 2016-2026:	9.1%
Annual Openings:	5

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	60.0%	60.0%
	Self-employed Workers	32.7%	31.7%
442	Furniture and Home Furnishings Stores	7.3%	8.3%

47-2043 Floor Sanders and Finishers



Scrape and sand wooden floors to smooth surfaces using floor scraper and floor sanding machine, and apply coats of finish. *Examples: Floor Sanding Machine Operator; Floor Surfer; Hardwood Finisher*

Training Category: none | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry		2016 Share	2026 Share
	Self-employed Workers	n	n
238	Specialty Trade Contractors	n	n
442	Furniture and Home Furnishings Stores	n	n

47-2044 Tile and Marble Setters



Apply hard tile, marble, and wood tile to walls, floors, ceilings, and roof decks. *Examples: Ceramic Tile Installer; Hard Tile Setter; Marble Installer*

Training Category: none | none | Long OJT

2017 Average Wage:	\$22.56
2016 Estimated Employment:	124
2026 Projected Employment:	135
Growth Rate, 2016-2026:	8.9%
Annual Openings:	12

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	55.7%	56.3%
	Self-employed Workers	32.3%	31.9%
327	Nonmetallic Mineral Product Manufacturing	n	n
442	Furniture and Home Furnishings Stores	n	n

47-2051 Cement Masons and Concrete Finishers



Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, roads, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs, or gutters; patch voids; use saws to cut expansion joints. *Examples: Curb Builder; Concrete Floor Installer*

Training Category: none | none | Moderate OJT

2017 Average Wage:	\$22.80
2016 Estimated Employment:	162
2026 Projected Employment:	177
Growth Rate, 2016-2026:	9.3%
Annual Openings:	20

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	96.9%	96.6%
	Self-employed Workers	1.9%	2.3%
237	Heavy and Civil Engineering Construction	n	n
	Local Government, Excluding Education	n	n

47-2061 Construction Laborers



Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. *Examples: Air Hammer Operator; Asphalt Patcher; Construction Craft Laborer*

Training Category: none | none | Short OJT

2017 Average Wage:	\$17.58
2016 Estimated Employment:	4,200
2026 Projected Employment:	4,625
Growth Rate, 2016-2026:	10.1%
Annual Openings:	487

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	38.3%	37.9%
	Self-employed Workers	22.4%	21.6%
236	Construction of Buildings	19.6%	20.2%
237	Heavy and Civil Engineering Construction	13.7%	14.6%
5613	Employment Services	1.7%	1.6%
321	Wood Product Manufacturing	0.8%	0.7%

47-2071 Paving, Surfacing, and Tamping Equipment Operators



Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators. *Examples: Asphalt Spreader Operator; Black Top Machine Operator; Road Grader*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$20.18
2016 Estimated Employment:	235
2026 Projected Employment:	258
Growth Rate, 2016-2026:	9.8%
Annual Openings:	27

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	55.7%	55.8%
237 Heavy and Civil Engineering Construction	32.8%	33.0%
Local Government, Excluding Education	2.1%	1.9%
Self-employed Workers	n	n
324 Petroleum and Coal Products Manufacturing	n	n

47-2072 Pile-Driver Operators



Operate pile drivers mounted on skids, barges, crawler treads, or locomotive cranes to drive pilings for retaining walls, bulkheads, and foundations of structures, such as buildings, bridges, and piers.

Training Category: High School | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
237 Heavy and Civil Engineering Construction	100.0%	100.0%

47-2073 Operating Engineers and Other Construction Equipment Operators



Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties. *Examples: Bulldozer Operator; Power Grader Operator; Steam Shovel Operator*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$23.64
2016 Estimated Employment:	867
2026 Projected Employment:	960
Growth Rate, 2016-2026:	10.7%
Annual Openings:	108

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	40.5%	40.0%
237 Heavy and Civil Engineering Construction	23.4%	24.6%
Local Government, Excluding Education	13.5%	12.8%
236 Construction of Buildings	10.3%	10.5%
Self-employed Workers	3.0%	2.9%
423 Merchant Wholesalers, Durable Goods	n	n

47-2081 Drywall and Ceiling Tile Installers



Apply plasterboard or other wallboard to ceilings or interior walls of buildings. Apply or mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound. *Examples: Acoustical Carpenter; Sheet Rock Hanger*

Training Category: none | none | Moderate OJT

2017 Average Wage:	\$22.69
2016 Estimated Employment:	718
2026 Projected Employment:	704
Growth Rate, 2016-2026:	-2.0%
Annual Openings:	61

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	74.5%	72.0%
Self-employed Workers	19.8%	21.5%
236 Construction of Buildings	4.9%	5.7%
321 Wood Product Manufacturing	n	n
622 Hospitals	n	n

47-2082 Tapers



Seal joints between plasterboard or other wallboard to prepare wall surface for painting or papering. *Examples: Sheet Rock Taper; Wall Taper*

Training Category: none | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	228
2026 Projected Employment:	222
Growth Rate, 2016-2026:	-2.6%
Annual Openings:	18

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	74.6%	72.1%
	Self-employed Workers	19.7%	21.6%
236	Construction of Buildings	n	n
321	Wood Product Manufacturing	n	n

47-2111 Electricians



Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. *Examples: Electrical Sign Servicer; House Wirer; Chief Electrician*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$25.67
2016 Estimated Employment:	2,224
2026 Projected Employment:	2,376
Growth Rate, 2016-2026:	6.8%
Annual Openings:	266

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	76.1%	76.6%
	Self-employed Workers	7.1%	7.0%
6113	Colleges and Universities	2.5%	2.4%
622	Hospitals	1.5%	1.5%
236	Construction of Buildings	1.2%	1.2%
339	Miscellaneous Manufacturing	n	n

47-2121 Glaziers



Install glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops. *Examples: Window Glass Installer; Plate Glass Installer; Stained Glass Glazier*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$16.69
2016 Estimated Employment:	189
2026 Projected Employment:	205
Growth Rate, 2016-2026:	8.5%
Annual Openings:	24

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	81.5%	82.4%
811	Repair and Maintenance	12.2%	11.7%
	Self-employed Workers	4.8%	4.4%
321	Wood Product Manufacturing	n	n
444	Building Material and Garden Supply Stores	n	n

47-2131 Insulation Workers, Floor, Ceiling, and Wall



Line and cover structures with insulating materials. May work with batt, roll, or blown insulation materials. *Example: Fiberglass Insulation Installer*

Training Category: none | none | Short OJT

2017 Average Wage:	\$18.59
2016 Estimated Employment:	139
2026 Projected Employment:	135
Growth Rate, 2016-2026:	-2.9%
Annual Openings:	14

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	94.2%	94.1%
	Self-employed Workers	n	n
321	Wood Product Manufacturing	n	n

47-2132 Insulation Workers, Mechanical



Apply insulating materials to pipes or ductwork, or other mechanical systems in order to help control and maintain temperature.

Training Category: High School | none | Apprenticeship

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry		2016 Share	2026 Share
	Self-employed Workers	n	n
237	Heavy and Civil Engineering Construction	n	n
238	Specialty Trade Contractors	n	n

47-2141 Painters, Construction and Maintenance



Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May remove old paint to prepare surface prior to painting. May mix colors or oils to obtain desired color or consistency. *Examples: Bridge Painter; Traffic Line Painter; House Painter*

Training Category: none | none | Moderate OJT

2017 Average Wage:	\$19.04
2016 Estimated Employment:	1,296
2026 Projected Employment:	1,348
Growth Rate, 2016-2026:	4.0%
Annual Openings:	116

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	45.8%	44.1%
	Self-employed Workers	38.7%	39.5%
236	Construction of Buildings	7.5%	8.2%
6113	Colleges and Universities	n	n
622	Hospitals	n	n
531	Real Estate	n	n

47-2142 Paperhangers



Cover interior walls and ceilings of rooms with decorative wallpaper or fabric, or attach advertising posters on surfaces, such as walls and billboards. Duties include removing old materials from surface to be papered. *Examples: Billboard Poster; Wallpaperer*

Training Category: none | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	n	n
	Self-employed Workers	n	n

47-2151 Pipelayers



Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints. *Examples: Trench Pipe Layer; Pipe Liner; Sewer Connector*

Training Category: none | none | Short OJT

2017 Average Wage:	\$22.39
2016 Estimated Employment:	102
2026 Projected Employment:	117
Growth Rate, 2016-2026:	14.7%
Annual Openings:	13

Industry		2016 Share	2026 Share
237	Heavy and Civil Engineering Construction	52.9%	55.6%
238	Specialty Trade Contractors	25.5%	25.6%
	Self-employed Workers	9.8%	8.6%
	Local Government, Excluding Education	8.8%	7.7%
6111	Elementary and Secondary Schools	2.9%	2.6%

47-2152 Plumbers, Pipefitters, and Steamfitters



Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. *Examples: Gas Line Installer; Hot Water Heater Installer; Sprinkling System Installer*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$26.38
2016 Estimated Employment:	1,673
2026 Projected Employment:	1,906
Growth Rate, 2016-2026:	13.9%
Annual Openings:	208

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	69.0%	70.4%
	Self-employed Workers	11.1%	10.3%
237	Heavy and Civil Engineering Construction	6.8%	7.1%
333	Machinery Manufacturing	2.5%	2.3%
	Local Government, Excluding Education	2.0%	1.8%
6113	Colleges and Universities	1.9%	1.7%

47-2161 Plasterers and Stucco Masons



Apply interior or exterior plaster, cement, stucco, or similar materials. May also set ornamental plaster. *Examples: Dry Plasterer; Stucco Worker; Ornamental Plasterer*

Training Category: none | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry		2016 Share	2026 Share
	Self-employed Workers	n	n
236	Construction of Buildings	n	n
238	Specialty Trade Contractors	n	n

47-2181 Roofers



Cover roofs of structures with shingles, slate, asphalt, aluminum, wood, and related materials. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures. *Examples: Slater; Hot Tar Roofer; Terra Cotta Roofer*

Training Category: none | none | Moderate OJT

2017 Average Wage:	\$22.73
2016 Estimated Employment:	240
2026 Projected Employment:	260
Growth Rate, 2016-2026:	8.3%
Annual Openings:	26

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	80.0%	80.8%
	Self-employed Workers	18.8%	18.1%
321	Wood Product Manufacturing	n	n
6113	Colleges and Universities	n	n

47-2211 Sheet Metal Workers



Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. *Example: Tinsmith*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$23.07
2016 Estimated Employment:	509
2026 Projected Employment:	538
Growth Rate, 2016-2026:	5.7%
Annual Openings:	57

Industry		2016 Share	2026 Share
332	Fabricated Metal Product Manufacturing	46.8%	45.0%
238	Specialty Trade Contractors	39.5%	40.7%
	Self-employed Workers	1.6%	1.7%
333	Machinery Manufacturing	n	n
423	Merchant Wholesalers, Durable Goods	n	n
425	Wholesale Electronic Markets and Agents/Brokers	n	n

47-2221 Structural Iron and Steel Workers



Raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. *Examples: Bolter; Guard Rail Installer; Construction Ironworker*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$25.18
2016 Estimated Employment:	113
2026 Projected Employment:	130
Growth Rate, 2016-2026:	15.0%
Annual Openings:	15

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	62.8%	60.0%
237 Heavy and Civil Engineering Construction	n	n
332 Fabricated Metal Product Manufacturing	n	n
5416 Management and Technical Consulting Services	n	n

47-2231 Solar Photovoltaic Installers



Assemble, install, or maintain solar photovoltaic (PV) systems on roofs or other structures in compliance with site assessment and schematics. May include measuring, cutting, assembling, and bolting structural framing and solar modules. May perform minor electrical work such as current checks.

Training Category: High School | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	100.0%	100.0%

47-3011 Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters



Help brickmasons, blockmasons, stonemasons, or tile and marble setters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. *Examples: Brick Carrier; Brick Washer; Tile Layers Helper*

Training Category: none | none | Short OJT

2017 Average Wage:	\$19.16
2016 Estimated Employment:	106
2026 Projected Employment:	116
Growth Rate, 2016-2026:	9.4%
Annual Openings:	17

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	95.3%	94.8%
236 Construction of Buildings	3.8%	4.3%

47-3012 Helpers--Carpenters



Help carpenters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. *Examples: Carpenter's Mate; Joiner's Helper; Cabinetmaker's Helper*

Training Category: none | none | Short OJT

2017 Average Wage:	\$16.61
2016 Estimated Employment:	72
2026 Projected Employment:	80
Growth Rate, 2016-2026:	11.1%
Annual Openings:	11

Industry	2016 Share	2026 Share
236 Construction of Buildings	59.7%	61.3%
238 Specialty Trade Contractors	34.7%	33.8%
6113 Colleges and Universities	4.2%	3.8%

47-3013 Helpers--Electricians



Help electricians by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. *Examples: Utilities Ground Worker; Electrician's Assistant*

Training Category: High School | none | Short OJT

2017 Average Wage:	\$13.38
2016 Estimated Employment:	125
2026 Projected Employment:	133
Growth Rate, 2016-2026:	6.4%
Annual Openings:	19

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	89.6%	91.0%
333 Machinery Manufacturing	n	n
339 Miscellaneous Manufacturing	n	n
713 Amusement, Gambling, and Recreation	n	n
6113 Colleges and Universities	n	n

47-3014 Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons



Help painters, paperhangers, plasterers, or stucco masons by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Training Category: none | none | Short OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	100.0%	100.0%

47-3015 Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters



Help plumbers, pipefitters, steamfitters, or pipelayers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. *Examples: Pipe Cutter; Plumber's Assistant; Water Main Installer's Helper*

Training Category: High School | none | Short OJT

2017 Average Wage:	\$15.38
2016 Estimated Employment:	113
2026 Projected Employment:	133
Growth Rate, 2016-2026:	17.7%
Annual Openings:	19

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	74.3%	73.7%
237 Heavy and Civil Engineering Construction	24.8%	25.6%

47-3016 Helpers--Roofers



Help roofers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. *Example: Roofer's Assistant*

Training Category: none | none | Short OJT

2017 Average Wage:	\$12.66
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	100.0%	100.0%

47-3019 Helpers, Construction Trades, All Other



All construction trades helpers not listed separately. *Examples: Cement Mixer; Glazier's Helper; Surveyor's Helper*

Training Category: none | none | Short OJT

2017 Average Wage:	\$10.25
2016 Estimated Employment:	63
2026 Projected Employment:	67
Growth Rate, 2016-2026:	6.4%
Annual Openings:	9

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	54.0%	55.2%
5613 Employment Services	28.6%	28.4%
442 Furniture and Home Furnishings Stores	7.9%	7.5%
6113 Colleges and Universities	4.8%	4.5%
237 Heavy and Civil Engineering Construction	1.6%	1.5%
State Government, excl. Education and Hospitals	1.6%	1.5%

47-4011 Construction and Building Inspectors



Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing. *Examples: Highway Inspector; Electrical Inspector; Architectural Inspector*

Training Category: High School | 5+ yrs | none

2017 Average Wage:	\$26.41
2016 Estimated Employment:	335
2026 Projected Employment:	360
Growth Rate, 2016-2026:	7.5%
Annual Openings:	39

Industry	2016 Share	2026 Share
Local Government, Excluding Education	47.5%	46.4%
5413 Architectural and Engineering Services	26.9%	27.8%
Self-employed Workers	6.6%	6.7%
State Government, excl. Education and Hospitals	6.3%	5.8%
236 Construction of Buildings	4.2%	4.4%
624 Social Assistance	1.8%	1.9%

47-4031 Fence Erectors



Erect and repair metal and wooden fences and fence gates around highways, industrial establishments, residences, or farms, using hand and power tools. *Examples: Elevator Mechanic; Elevator Installer*

Training Category: none | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
238 Specialty Trade Contractors	n	n

47-4041 Hazardous Materials Removal Workers



Identify, remove, pack, transport, or dispose of hazardous materials, including asbestos, lead-based paint, waste oil, fuel, transmission fluid, radioactive materials, contaminated soil, etc. Specialized training and certification in hazardous materials handling or a confined entry permit are generally required. May operate earth-moving equipment or trucks. *Examples: Wire Fence Builder; Wood Fence Installer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$24.55
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
332 Fabricated Metal Product Manufacturing	n	n
336 Transportation Equipment Manufacturing	n	n
5613 Employment Services	n	n
562 Waste Management and Remediation Services	n	n
Local Government, Excluding Education	n	n

47-4051 Highway Maintenance Workers



Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement, repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road or plow snow from roadway. *Examples: Snow Plow Operator; Road Patcher; Road Sign Installer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$17.69
2016 Estimated Employment:	1,766
2026 Projected Employment:	1,829
Growth Rate, 2016-2026:	3.6%
Annual Openings:	185

Industry	2016 Share	2026 Share
Local Government, Excluding Education	52.6%	53.5%
State Government, excl. Education and Hospitals	46.4%	45.5%

47-4061 Rail-Track Laying and Maintenance Equipment Operators



Lay, repair, and maintain track for standard or narrow-gauge railroad equipment used in regular railroad service or in plant yards, quarries, sand and gravel pits, and mines. *Examples: Rail Maintenance Worker; Track Layer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$22.69
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
487 Scenic and Sightseeing Transportation	100.0%	100.0%

47-4071 Septic Tank Servicers and Sewer Pipe Cleaners



Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping. *Examples: Sewage Screen Operator; Septic Tank Cleaner; Electric Sewer Cleaning Machine Operator*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$18.21
2016 Estimated Employment:	124
2026 Projected Employment:	145
Growth Rate, 2016-2026:	16.9%
Annual Openings:	19

Industry	2016 Share	2026 Share
562 Waste Management and Remediation Services	79.0%	81.4%
Local Government, Excluding Education	8.1%	6.9%
Self-employed Workers	n	n
238 Specialty Trade Contractors	n	n

47-4099 Construction and Related Workers, All Other



All construction and related workers not listed separately. *Example: Waterproofer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$25.43
2016 Estimated Employment:	304
2026 Projected Employment:	321
Growth Rate, 2016-2026:	5.6%
Annual Openings:	34

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	36.2%	37.4%
517 Telecommunications	17.4%	14.6%
237 Heavy and Civil Engineering Construction	15.5%	17.5%
Self-employed Workers	14.5%	14.3%
444 Building Material and Garden Supply Stores	4.3%	4.4%
Local Government, Excluding Education	2.6%	2.5%

47-5021 Earth Drillers, Except Oil and Gas



Operate a variety of drills—such as rotary, churn, and pneumatic—to tap sub-surface water and salt deposits, to remove core samples during mineral exploration or soil testing, and to facilitate the use of explosives in mining or construction. May use explosives. *Examples: Earth Boring Machine Operator; Tunneling Machine Operator*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$22.23
2016 Estimated Employment:	140
2026 Projected Employment:	162
Growth Rate, 2016-2026:	15.7%
Annual Openings:	18

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	47.9%	45.7%
237 Heavy and Civil Engineering Construction	44.3%	46.9%
Self-employed Workers	n	n
5413 Architectural and Engineering Services	n	n

47-5031 Explosives Workers, Ordnance Handling Experts, and Blasters



Place and detonate explosives to demolish structures or to loosen, remove, or displace earth, rock, or other materials. May perform specialized handling, storage, and accounting procedures. *Examples: Blast Setter; Dynamiter; Explosive Technician*

Training Category: High School | < 5 yrs | Long OJT

2017 Average Wage:	\$30.49
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
213 Support Activities for Mining	n	n
238 Specialty Trade Contractors	n	n

47-5042 Mine Cutting and Channeling Machine Operators



Operate machinery such as longwall shears, plows, and cutting machines to cut or channel along the face or seams of coal mines, stone quarries, or other mining surfaces to facilitate blasting, separating, or removing minerals or materials from mines or from the Earth's surface. Includes shale planers.

Training Category: High School | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
327 Nonmetallic Mineral Product Manufacturing	100.0%	100.0%

47-5051 Rock Splitters, Quarry



Separate blocks of rough dimension stone from quarry mass using jackhammer and wedges.

Training Category: none | none | Short OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
327 Nonmetallic Mineral Product Manufacturing	100.0%	100.0%

47-5081 Helpers--Extraction Workers



Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area.

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$19.33
2016 Estimated Employment:	45
2026 Projected Employment:	54
Growth Rate, 2016-2026:	20.0%
Annual Openings:	8

Industry	2016 Share	2026 Share
213 Support Activities for Mining	n	n
237 Heavy and Civil Engineering Construction	n	n
5413 Architectural and Engineering Services	n	n

49-1011 First-Line Supervisors of Mechanics, Installers, and Repairers



Supervise and coordinate the activities of mechanics, installers, and repairers. *Examples: Marine Service Manager; Ground Crew Chief; Engine Repair Supervisor*

Training Category: High School | < 5 yrs | none

2017 Average Wage:	\$35.30
2016 Estimated Employment:	2,327
2026 Projected Employment:	2,485
Growth Rate, 2016-2026:	6.8%
Annual Openings:	218

Industry	2016 Share	2026 Share
441 Motor Vehicle and Parts Dealers	13.5%	13.8%
811 Repair and Maintenance	10.4%	10.7%
238 Specialty Trade Contractors	6.7%	7.0%
221 Utilities	4.6%	4.4%
423 Merchant Wholesalers, Durable Goods	4.4%	4.7%
517 Telecommunications	n	n

49-2011 Computer, Automated Teller, and Office Machine Repairers



Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines. *Examples: ATM Specialist; Computer Installer*

Training Category: Some College | none | Short OJT

2017 Average Wage:	\$22.07
2016 Estimated Employment:	883
2026 Projected Employment:	908
Growth Rate, 2016-2026:	2.8%
Annual Openings:	88

Industry	2016 Share	2026 Share
443 Electronics and Appliance Stores	29.6%	26.7%
423 Merchant Wholesalers, Durable Goods	19.4%	20.4%
Self-employed Workers	13.1%	13.0%
425 Wholesale Electronic Markets and Agents/Brokers	12.2%	12.7%
811 Repair and Maintenance	6.5%	6.3%
5415 Computer Systems Design and Related Services	4.9%	5.8%

49-2021 Radio, Cellular, and Tower Equipment Installers and Repairers



Test or repair mobile or stationary radio transmitting and receiving equipment and two-way radio communications systems used in ship-to-shore communications and found in service and emergency vehicles.

Training Category: Associate | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
517 Telecommunications	n	n
551 Management of Companies and Enterprises	n	n
811 Repair and Maintenance	n	n
5613 Employment Services	n	n
Local Government, Excluding Education	n	n