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Construction

Construction workers often work outdoors and in physically demanding occupations. They typically work in teams to specifications and plans within a narrow range of tolerance for error. Workers are usually required to travel from one job site to another and must frequently travel out of their local area. Construction workers, while paid very well, are subject to layoffs, particularly in the winter months. It is important to be able to budget and prepare for potential periods of unemployment.

Apprenticeship

Occupational training that combines supervised on-the-job training experience with classroom instruction. Apprentices usually begin at half the salary of journey workers - those who have completed their training and have industry certification. Apprentices receive pay increases as they learn to perform more complex tasks. When they become journey workers, they increase their chances of finding a well-paying job in industry and may become supervisors or go into business for themselves. Apprenticeship committees, made up equally of employee and employer representatives from the specific industries and concerned trades, operate apprenticeship programs.

Ironworker

The Work

Ironworkers erect the structural framework for high rise buildings, bridges, power plants and towers, place reinforcing steel in concrete forms for roadways, foundations and structures, and put up aluminum facings on high rise window walls. They use wrenches, connecting bars, tape measures, levels, jacks, welding torches, oxy-acetylene torches.

The Working Conditions

Ironworkers work mostly outside and at heights. They often travel to job sites out of town or where no public transportation is available. A valid driver's license and reliable transportation are necessary.

Laborer – Construction

The Work

The construction laborer uses hand, air and gasoline powered tools to assemble, disassemble, clean, compact or settle wood, metal material, concrete and earth. The laborer works in and around all types of buildings, highway structures and utility ditches. Often the work involves carrying material to workers in another craft, for example, supplying mixed mortar to bricklayers.

The Working Conditions

Laborers work outdoors in all kinds of weather and conditions. They may work at heights or below the surface of the earth in ditches and holes. Lifting, carrying and moving around hazardous surfaces are common.

Laborer

The Work

Laborers range from unskilled to semi-skilled workers and work on all types of construction projects including highways, bridges, tunnels, high rise buildings and residential construction. They are usually employed on site for the duration of the project. Laborers must know how to work with their hands and with power tools run by gasoline, electricity and compressed air. They may work with pavement breakers, rammers, pumps, compressors, lasers, and vibrators. Laborers clear timber and brush, place and vibrate concrete, install pipe, landscape, and do a variety of other jobs.

The Working Conditions

Laborer's work is performed both indoors and outdoors, at heights, underground, or above or under water. Laborers lift, carry, climb, kneel, balance, and crawl. Because laborers work in varied conditions, they must be knowledgeable of the hazards and safety requirements of the job.

Carpenter

The Work

Carpenters construct and remodel almost every kind of structure, including houses, commercial buildings, bridges, churches, factories and highways. They build wood framing for houses, roofs, stairs, decks and sheaths, and forms for concrete and frame buildings, walls, footings, columns and stairs. Carpenters install doors, windows, store fronts and hand rails, build cabinets and counter tops and may work on drywall, wood flooring, metal jambs and ceilings. They are skilled in interior and exterior finish work and are able to read blueprints, measure accurately and calculate dimensions.

The Working Conditions

The work is physically demanding and involves a good deal of standing, climbing, kneeling, lifting and squatting. Work conditions vary with each job, either indoors or outdoors, and could include working either 100 feet below ground or on 100 foot high scaffolding. Locations on the job site generally changes several times during the year. Sometimes carpenters need to travel or relocate to take an available job. Carpenters must meet certain strength requirements, be agile and have good hand-eye coordination.

Operating Engineer

The Work

Operating engineers operate cranes, bulldozers, pavers, trench excavators and other heavy construction equipment used for the construction of buildings, dams, airports, highways and ports. Operating engineer apprentices can work in the mechanical field as heavy-duty truck and equipment mechanics and as technical engineers (surveyors).

The Working Conditions

Operating engineers work outdoors. The average operator works 1,200 to 1,500 hours per year, depending on weather conditions. Apprentices must be flexible and adaptable to different environments, job sites and requirements. They are sometimes required to commute long distances or to relocate for weeks or months to remain employed.

Mason: Bricklayer, Bricklayer Restoration, Marble Setter, Stone Mason, Terrazzo Worker, Tilesetter

The Work

Bricklayers construct walls, fireplaces, chimneys, industrial furnaces, kilns and other structures using brick, cement, cinder blocks, stone and marble. Tilers install ceramic tile, marble and granite. Terrazzo workers cover floors, stairways and cabinets with durable and decorative surfaces made of sand, cement, pigment and marble chips. Marble setters cut, tool, and set marble in interior and exterior walls and floors and repair and polish marble already set in buildings.

The Working Conditions

Bricklayers' work is usually performed outdoors, in all types of weather. Tilers generally work indoors. All mason jobs require bending and heavy lifting. Bricklayers must be able to lift 30+ pound concrete blocks with one hand. Workers often move to different job sites and may need to work away from home. There may be periods of unemployment between jobs.

Mason: Cement Mason

The Work

Cement masons install, repair, and finish surfaces of poured concrete by hand and machine. Apply cement, sand pigment or marble chips to floors, stairways and cabinet fixtures to finish and attain durable and decorative surfaces, according to specifications and drawings. Finish surfaces to remove imperfections from freshly poured concrete walls, roads, walkway sand ornamental stone facings of concrete structural products - including concrete rubbers.

Cement Mason includes finishing, hand chipping, patching, grouting, end pointing, screed setting, plugging filling bolt holes, dry packing, setting curb forms, planks, stakes, lines and grades. Also includes grinding of concrete done as preparatory to patching or when done to produce a finished concrete product.

Composition worker includes installation of epoxy systems and other resinous toppings (with a trowel down component) and power machine operation.

The Working Conditions

Finishers can work long, irregular hours many times traveling to work throughout the state. Work requires heavy lifting and repetitive strenuous tasks. Good Physical condition is a must. Most of this work is done outdoors. Cement Masons work on suspended, swinging and/or hanging scaffold.

Selection Process

The apprentice selection process for construction trades establishes a "pool of eligible applicants" consisting of those applicants who have met the minimum qualifications for the program. The qualified applicants are ranked in order to determine where a person is placed on the pool's list. Individuals are registered as an apprentice when the apprenticeship committee makes an assignment to a registered employer, called a training agent.

The most common method of selecting applicants for construction trades is by a ranked points system. The committee will evaluate applications assigning points based on past education, work history and an oral interview.