

Who Does What in Construction?

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Boilermakers Apprenticeship

What is a Boilermaker?

Boilermakers are involved in building very large tanks, heavy pipework and pressure vessels for nuclear power plants, refineries and chemical manufacturers. As a Boilermaker, one assembles, erects and maintains boilers, tanks, pressure vessels, heat exchangers, calandrias, pollution control systems, furnaces, condensers, water towers, penstocks and scroll casings using hoisting, rigging, welding equipment, tools and hardware as required by drawings, specifications and the applicable codes and standards.

Bricklayers Apprenticeship

What Is A Bricklayer?

Bricklayers build walls, chimneys and other structures from masonry units such as brick, block, glass block or stone. They also line industrial kilns and furnaces and may work in sewers. Generally, the Bricklayer's technique is to spread the bottom and side of each unit with mortar and position it by hand, cutting off excess mortar and later trimming it to achieve a neat appearance. Work is kept level by use of a tightly stretched line and must be checked frequently for level and plumb. Some units must be cut to fit. Bricklayers often work from scaffolding. The work, especially block work, is often strenuous. In a related trade, the Pointer-Cleaner-Caulker (PCC) patches weathered masonry, replaces old mortar and does caulking, waterproofing and cleaning of both new and old masonry. They often work on swing scaffolds twenty (20) stories or more.

Carpenters Apprenticeship

What is a Carpenter?

Carpenters work on commercial and public structures such as office buildings, schools, hospitals, stadiums and bridges. The work ranges from single story to high rise and includes foundation and reinforced concrete framing, layout, structural wood and metal framing, timber framing, finish work and fixture installation. Today's Carpenters make good use of modern technology, using computers and lasers as tools of their trade.

Cement Masons Apprenticeship

What is a Cement Mason?

This program is designed for individuals interested in pursuing a career as a cement mason. Training consists of finishing sidewalks, curbs and gutters, floor slabs, architectural concrete as well as patching and repair of concrete.

Construction Inspectors Apprenticeship

What is a Construction Inspector?

The Operating Engineer Construction Inspector monitors materials and workmanship on construction sites. They assure that relevant codes and approved building plans are being followed. They perform all tests and job related duties required to carry out quality inspections. They communicate and work closely with contractors, engineers, owners and city building departments.

Drywall/Lathers Apprenticeship

What Is A Drywall/Lather?

Drywall/Lathers install metal stud framing, drywall and lath according to layout plans, blueprints and specifications. They frame and construct walls and ceilings using hammers, electric screw guns, electric drills, electric saws, laser leveling and plumbing devices, power actuated tools, arc welders, routers and door planners as needed for the construction of a building including the heavy gauge framing and application for the exterior of the project.

Electricians Apprenticeship

What is an Electrician?

An Electrical Apprentice works directly under the supervision of a qualified Journeyman Electrician when installing or maintaining a variety of approved wiring methods for distribution of electrical light, heat, power, radio, and signaling utilization systems. The work is performed in existing or new residential, commercial and industrial buildings and includes street and highway lighting, traffic signals and other out door above and below grade installations. The trade requires considerable physical effort on the part of the apprentice to do lifting, climbing, crouching, and working in cramped areas.

Floor Covering Installers Apprenticeship

What is a Floor Covering Installer?

Floor Cover Installers install Carpet, Linoleum, Soft Tile, Rubber Tile, Laminate Flooring, Vinyl Composition Tile, Sheet Vinyl and a variety of specialized Flooring. Floor Cover Installers work with many sharp knives and other cutting tools, so there is always the danger of serious cuts. Lifting heavy loads such as rolls of carpet or sheet vinyl, bending, stretching and reaching in awkward positions can cause back problems. Training (called Hazardous Communication) teaches apprentices how to work with hazardous substances, found in some adhesives, safely.

Glaziers Apprenticeship

What is a Glazier, Architectural Metal and Glass Worker?

An individual who works with glass and architectural metal, he/she is a fabricator of aluminum (or other related metals) that are used in the construction of buildings or storefronts. From the sill flashing to the top of the parapet cap on high rise buildings is where you will find us. If there are glass or glass products used, a glazier has been there.

Heat & Frost Insulators and Asbestos Workers Apprenticeship

What is a Heat and Frost Insulator?

The function of an insulator is to insulate mechanical structures, whether hot or cold, from ambient temperatures. Any surfaces having low, medium or high temperatures, such as boilers, refrigeration units, furnaces, heat exchangers, many pipes, tanks, etc., found in powerhouses, refineries, aboard ships, in high-rise buildings, will be insulated by our mechanics for process control, fire protection, personnel protection or sound reduction. After the insulation has been applied, protective covers, coatings and jacketing are also fabricated and installed.

Ironworkers (Field) Apprenticeship

What is a Field Ironworker?

Reinforcing-Ironworkers place reinforcing steel bars in forms that will be filled with concrete. The bars must be lifted, carried and placed by hand. They are then held in position by wrapping and tying wire at the intersections of steel.

Structural-Ironworkers assemble, erect and install prefabricated iron shapes to form the framework for buildings, towers, bridges and other structures.

Ironworkers (Shop) Apprenticeship

What is a Shop Ironworker?

A Shop Ironworker mechanic fabricates the individual steel components, which form the structural steel framework for buildings and bridges. Other areas of metal fabrication include building metal stairs, handrails and various ornamental metal products using steel, aluminum, copper and brass which are manufactured by the shop ironworker mechanic.

Laborers Apprenticeship

What is a Laborer?

The skills required are varied. A Construction Craft Laborer will do some or all of the following: pour concrete, pave roads with asphalt, lay pipe for sewers, work on demolition projects, perform environmental abatement and other tasks as required. The work is physically demanding and the hours can be long but the rewards are plentiful.

Landscape Irrigation Fitters/ Underground Utility Fitters Apprenticeship

What is a Landscape Irrigation Fitter/Underground Utility Fitter?

A Landscape Irrigation Fitter services the Landscape Industry in irrigation and landscaping for commercial, residential and government projects. An Underground Utility Fitter performs water, sewer, storm drain and gas pipe installations in streets and roads as well as site preparations.

Mill & Cabinet Makers Apprenticeship

What is a Mill & Cabinet Maker?

Mill & Cabinet Makers cut, shape and assemble wood products, including moldings, panels and furniture. They also fabricate store fixtures, which includes the use of metal, plastics and glass. Many work on exhibits and display cases. Mill & Cabinet Makers operate a number of machines, including power saws, planers, joiners and shapers. Take a look around you. Notice the details and fine craftsmanship that go into creating the woodwork, cabinetry and decor in shopping malls, bank buildings, hotels and office buildings. This cabinetry and millwork is the creation of craftspeople who like to work with their hands and take pride in working with the finest materials and tools money can buy.

Millwrights Apprenticeship

What is a Millwright?

Millwright work includes erecting, installing and maintenance of equipment and machinery. Typical systems are conveyors, processing equipment, bulk material handling, pumps and compressors. Millwright work is often technical, requiring a high degree of precision.

Operating Engineers Apprenticeship

What is an Operating Engineer?

The Operating Engineers Apprenticeship Program trains Construction Equipment Operators (CEO) and Heavy Duty Repairmen (HDR). Construction Equipment Operators may operate a wide variety of machines, including those that hoist, dig, pave and compact materials. The Heavy Duty Repairman is responsible for maintenance and repair of the equipment on the job site.

Painters Apprenticeship

What is a Painter?

Painting is the application of paint, varnishes, lacquers, sealers, stains, etc. Painters also apply all types of wallpaper, vinyl wall fabrics and all types of coverings or coatings. Painters make all of the necessary preparations prior to application. Work will be performed on all types of buildings, both interior and exterior.

Piledrivers Apprenticeship

What is a Piledriver?

Piledrivers construct the heavy foundations for buildings, factories and other large structures. They are experts in marine construction, building projects such as docks, piers and bridges. Some specially trained Piledrivers also work underwater as construction deep-sea divers.

Plasterers Apprenticeship

What is a Plasterer?

A person with the art or skill of applying materials over surfaces producing both interior and exterior walls, ceilings and other surfaces in the construction or remodeling of buildings, homes and other structures. Another occupation within the Plasterers apprenticeship is Fire Proofing Plasterers.

Plumbers, Steamfitters and HVAC Apprenticeship

What is a Plumber?

Plumbers work with the various materials and fixtures used in installation, removal, maintenance, extension and alteration of a plumbing system. Plumbing systems include all sanitary drainage, storm drainage facilities, special wastes, vent systems, medical piping for hospitals, public or private water systems and gas piping within or adjacent to any building.

What is a Steamfitter?

Steamfitters (Pipefitters) are employed for the installation of piping on new construction and existing plant maintenance or modernization projects in all types of industrial plants, office/commercial buildings, hospitals, research facilities and other projects. Steamfitters install piping of all sizes and in a variety of materials including carbon steel, copper, cast iron, plastic, fiberglass, stainless steel and other special alloys and types.

What is a Heating, Ventilation, Air Conditioning (HVAC) Mechanic?

HVAC Mechanic Apprentices work for Air Conditioning & Refrigeration contractors. Training for the services involves maintenance and repair of refrigeration and/or air conditioning units for commercial and industrial uses

Roofers/Waterproofers Apprenticeship

What is a Roofer/Waterproofer?

Roofers apply a variety of products, including hot asphalt, rubberized asphalt, shingles, tile, EPDM (rubber) membrane systems, PVC systems and Modified Bitumen to prevent water intrusion into a building. Waterproofers perform a similar function to the vertical surfaces of the building both above and below ground level.

Sheet Metal Workers Apprenticeship

What is a Sheet Metal Worker?

Sheet Metal Workers are part of the building and construction trades. In shops, Sheet Metal Workers perform layout work, fabricates and assembles sheet metal products to be installed in buildings and construction projects. The primary work is heating, ventilating and air conditioning. Sheet Metal Workers also fabricate and install kitchen equipment, blowpipe systems, conveyors, chutes and hoppers.

Sound and Communication Systems Installers Apprenticeship

What is a Sound & Communications Systems Installer?

A Sound and Communication Systems Installer is a low voltage electronic and control systems equipment technician. Duties include but are not limited to: construction and installation, servicing and maintaining sound, pro-audio/video, fire/burglar, security/CCTV, access control, telephone/data and computer systems integration.

Sprinkler Fitters Apprenticeship

What is a Sprinkler Fitter?

The responsibilities and work of the Sprinkler Fitter consists of the knowledge and ability to install all types of fire protection systems, including the layout and installation of underground fire mains. A Sprinkler Fitter is able to read blue prints and layout and install hangers and overhead piping in all types of buildings and all types of construction. Fire sprinklers are found in schools, high-rises, warehouses, aircraft hangers, hotels, motels, office buildings and homes.

Surveyors Apprenticeship

What is a Surveyor?

A Surveyor performs field measurements to assist in the determination of the proper location of property lines and various field and construction survey work. A survey crew makes accurate field measurements, utilizes equipment such as global position systems and other high tech equipment to determine the topography of the surface of the earth. This information is used to design various types of public works projects and private construction projects. The work of a Surveyor is to measure elevations and distances for preparation of topographic maps showing characteristics of the land surface, boundaries of tracts of land and to prepare legal descriptions of property. A Surveyor may also perform triangulation, mineral, railroad, pipeline, tunnels, high-rise structures and heavy or light construction surveys. Most work is outdoors, often requiring commuting to distant job sites. Occupational hazards are sunburn, poison oak, natural wildlife, heavy construction equipment and falling objects.

Tapers Apprenticeship

What is a Taper?

A taper apprentice is employed in the application of taping, topping and texturing with instruction in the use of automatic tools, spray texture, hand texture, hand tools, product knowledge, safety and estimating. Work will be performed on all types of buildings, both old and new.

Tile Finishers & Tile Layers Apprenticeship

What is a Tile Finisher?

Tile Finishers work together with Tile Layers to create installations of ceramic or stone tile. The Finisher fills joints and cleans and polishes finished surfaces, which may include showers, tubs, countertops, floors, stairs, building exteriors, ceilings and others. The Finisher does most of the setting up of materials at the job and cleans up afterwards. They mix all mortars, by machine or by hand using a mixing hoe. Tile Finishing is very active work, and is often strenuous. It may involve scaffolding.

What is a Tile Layer?

Tile Layers install ceramic or stone tile floors, walls, ceilings, countertops, building exteriors, etc., according to blueprints or other instructions. They are responsible for layout, mortar bed installation, cutting tiles and bonding the tile with cement or epoxy mortars or mastic. Work may involve scaffolding. Job sites are located over a wide geographic area, so that personal transportation is a practical necessity. Tile Layers are generally expected to have experience as Tile Finishers.

