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# APPRENTICESHIP

After High School,  
What's Next?

How about a Career in the  
Unionized Skilled Trades





Building Trades Council of South Central Wisconsin is comprised of 17 local building trades unions representing more than 6,000 building trades members. The affiliated local unions represent skilled trades workers who are involved in all aspects of building and construction.

We build our workforce by fostering pride, performance and professionalism in the trades. Through apprenticeship programs, we offer opportunities to **“EARN WHILE YOU LEARN”**, providing our members life-long career opportunities.

# WHY UNION APPRENTICESHIP?

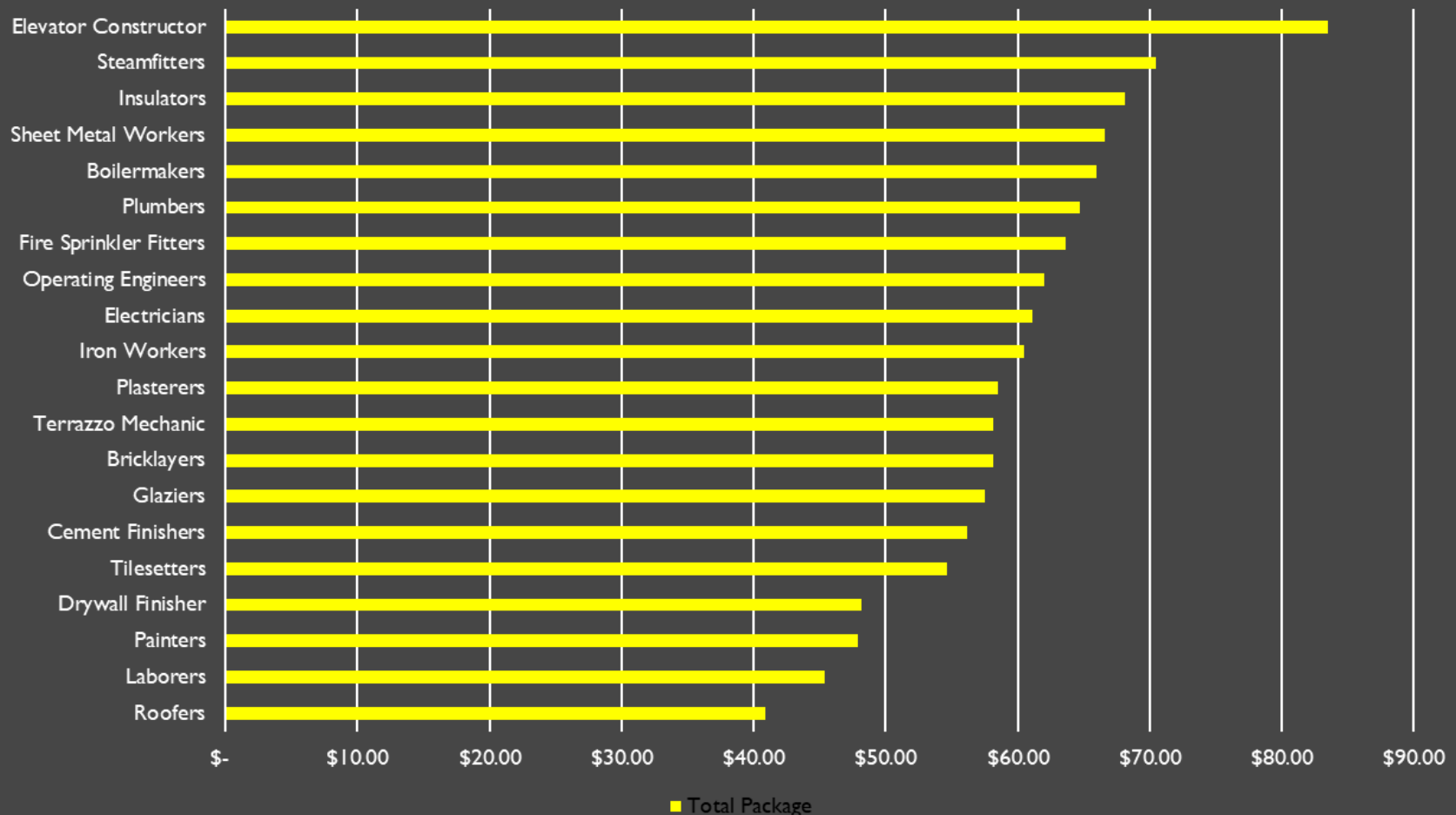
- Competitive Wages
- Medical Plan / Pension / 401K
- No College Debt
  - “Earn While You Learn”
- Room For Advancement
- A Career For Life

# REQUIREMENTS

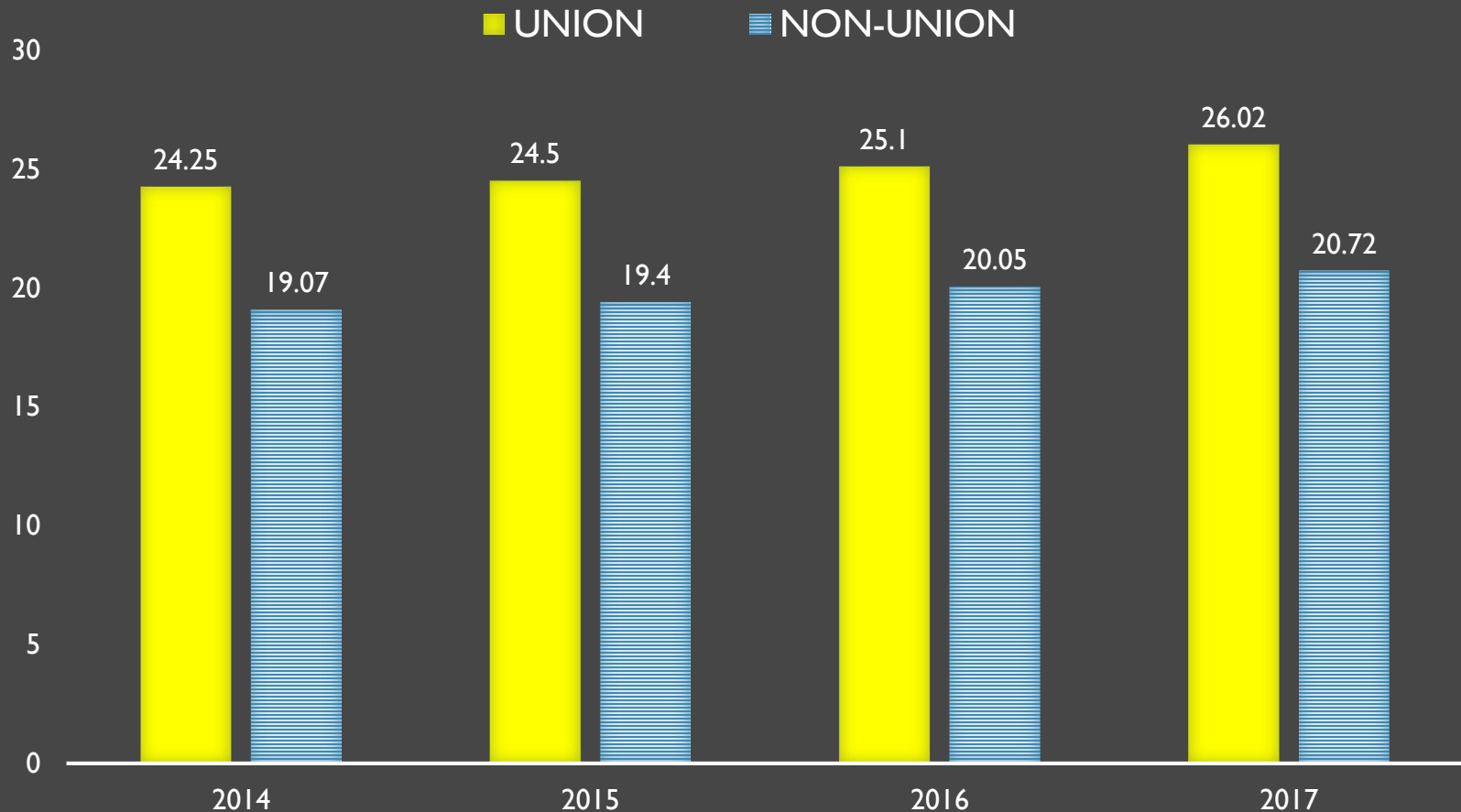
- Well rounded high school education
- English, Algebra, Arithmetic
- Ability to perform technical tasks
- Exercise good judgement
- Strong work ethics

# UNIONIZED SKILLED LABOR JOB'S PAY WELL.

The average salary of someone going through an apprenticeship program is:



# AVERAGE HOURLY WAGE OF UNION AND NON-UNION



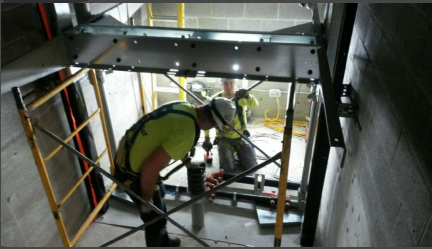
Source: Bureau of Labor Statistics  
U.S Department of Labor



# CAREERS IN THE TRADES

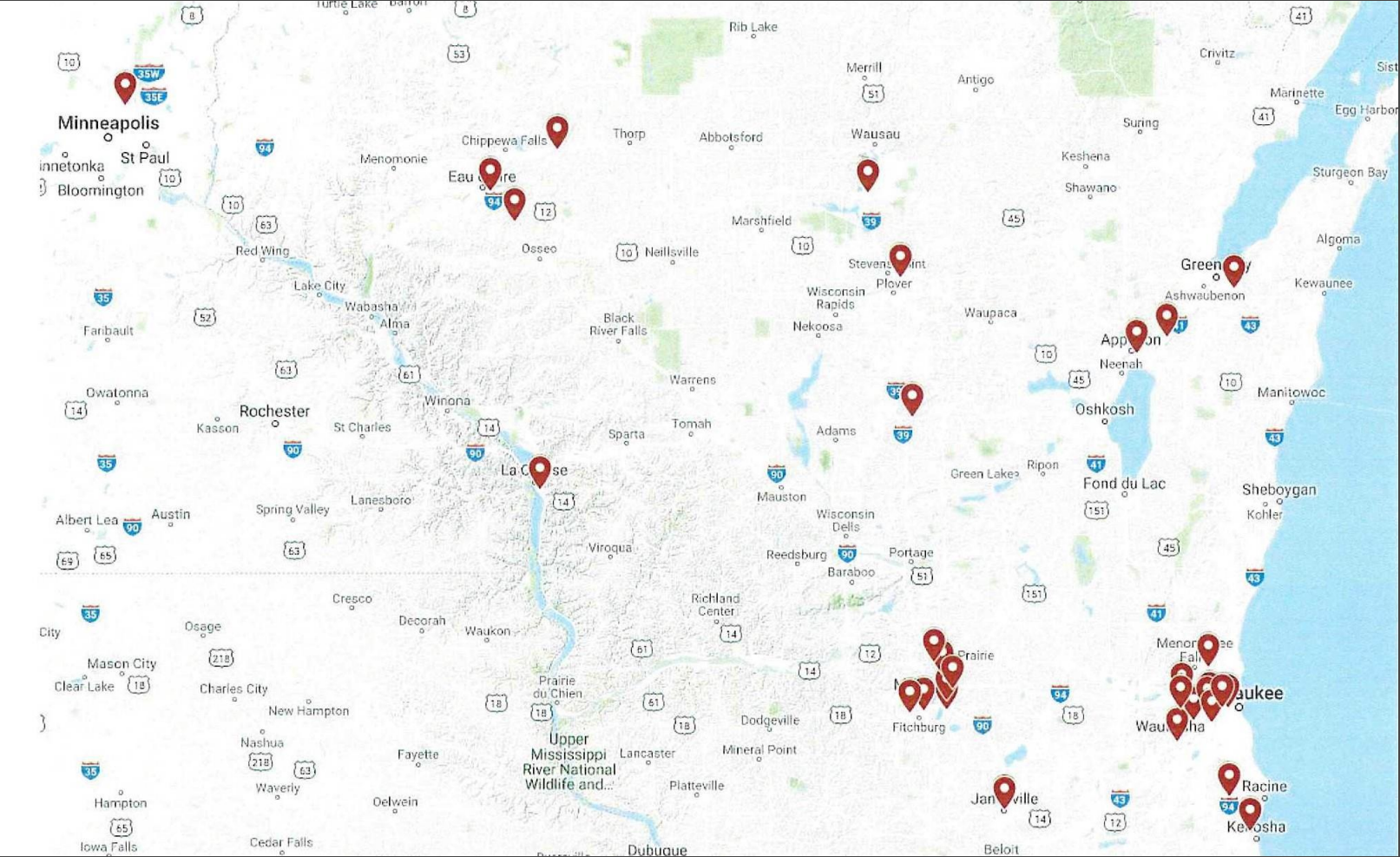
Wondering which trade is right for you ?

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# UNION BUILDING TRADES TRAINING CENTERS





# BOILERMAKERS

**Boilermakers and boilermaker mechanics** make, install, and repair boilers, closed vats, and other large vessels or containers that hold liquids and gases. Boilers heat water or other fluids under extreme pressure for use in generating electric power and to provide heat and power in buildings, factories, and ships. Tanks and vats are used to store and process chemicals, oil, beer, and hundreds of other products.

In addition to installing and maintaining boilers and other vessels, boilermakers also help erect and repair air pollution equipment, blast furnaces, water treatment plants, storage and process tanks, and smoke stacks. Boilermakers also install refractory brick and other heat-resistant materials in fireboxes or pressure vessels. Some install and maintain the huge pipes used in dams to send water to and from hydroelectric power generation turbines.





# BRICKLAYERS

*Brickmasons, blockmasons, and stonemasons* create attractive, durable surfaces and structures. For thousands of years, these workers have built buildings, fences, roads, walkways, and walls using bricks, concrete blocks, and natural stone. The structures that they build will continue to be in demand for years to come.



The work varies in complexity, from laying a simple masonry walkway to installing an ornate exterior on a highrise building. Workers cut or break the materials used to create walls, floors, and other structures. Once their building materials are properly sized, they are laid with or without a binding material. Workers use their own perceptions and a variety of tools to ensure that the structure meets the desired standards. After they finish laying the bricks, blocks, or stone, the workers clean the finished product with a variety of cleaning agents.

**Brickmasons and blockmasons**—who often are called simply **bricklayers**—build and repair walls, floors, partitions, fireplaces, chimneys, and other structures with brick, precast masonry panels, concrete block, and other masonry materials. Some brickmasons specialize in installing firebrick linings in industrial furnaces.





# CEMENT MASONS, CONCRETE FINISHERS

**Cement masons & concrete finishers** all work with concrete. Once set, concrete becomes the foundation for everything from decorative patios and floors to huge dams or miles of roadways. *Cement masons* and *concrete finishers* place and finish concrete. They also may color concrete surfaces, expose aggregate (small stones) in walls and sidewalks, or fabricate concrete beams, columns, and panels.



**Segmental pavers** lay out, cut, and install pavers. This masonry is typically installed in patios, sidewalks, plazas, streets, crosswalks, parking lots, and driveways.

**Terrazzo workers and finishers** create attractive walkways, floors, patios, and panels by exposing marble chips and other fine aggregates on the surface of finished concrete. Much of the preliminary work of terrazzo workers is similar to that of cement masons.



# CONSTRUCTION LABORERS

**Construction laborers** clean and prepare construction sites. They remove trees and debris; tend pumps, compressors, and generators; and erect and disassemble scaffolding and other temporary structures. They load, unload, identify, and distribute building materials to the appropriate location according to project plans and specifications. Laborers also tend machines; for example, they may use a portable mixer to mix concrete or tend a machine that pumps concrete, grout, cement, sand, plaster, or stucco through a spray gun for application to ceilings and walls. They often help other craftworkers, including carpenters, plasterers, operating engineers, and masons.

Construction laborers are responsible for the installation and maintenance of traffic control devices and patterns. At highway construction sites, this work may include clearing and preparing highway work zones and rights-of-way; installing traffic barricades, cones, and markers; and controlling traffic passing near, in, and around work zones. Construction laborers also dig trenches; install sewer, water, and storm drainpipes; and place concrete and asphalt on roads. Other highly specialized tasks include operating laser guidance equipment to place pipes; operating air, electric, and pneumatic drills; and transporting and setting explosives for the construction of tunnels, shafts, and roads.

Some construction laborers help with the removal of hazardous materials, such as asbestos, lead, or chemicals. (Workers who specialize in, and are certified for, the removal of hazardous materials.





# ELECTRICAL WORKERS

Electricians install and maintain all of the electrical and power systems for our homes, businesses, and factories. They install and maintain the wiring and control equipment through which electricity flows. They also install and maintain electrical equipment and machines in factories and a wide range of other businesses.

Electricians generally focus on either construction or maintenance, although many do both. Electricians specializing in construction primarily install wiring systems into factories, businesses, and new homes. Electricians specializing in maintenance fix and upgrade existing electrical systems and repair electrical equipment. All electricians must follow State and local building codes and the National Electrical Code when performing their work.







# ELEVATOR INSTALLERS AND REPAIRERS

***Elevator installers and repairers***—also called ***elevator constructors*** or ***elevator mechanics***—assemble, install, and replace elevators, escalators, chairlifts, dumbwaiters, moving walkways, and similar equipment in new and old buildings. Once the equipment is in service, they maintain and repair it as well. They also are responsible for modernizing older equipment.

To install, repair, and maintain modern elevators, which are almost all electronically controlled, elevator installers and repairers must have a thorough knowledge of electronics, hydraulics, and electricity. Many elevators are controlled with microprocessors, which are programmed to dispatch elevators in the most efficient manner. With these controls, it is possible to get the greatest amount of service with the smallest number of cars.



Elevator installers and repairers usually specialize in installation, maintenance, or repair work. Maintenance and repair workers generally need greater knowledge of electronics and electricity than do installers because a large part of maintenance and repair work is troubleshooting.





# GLAZIERS

**Glaziers** are responsible for selecting, cutting, installing, replacing, and removing all types of glass. They generally work on one of several types of projects.

Glazing involves work, such as replacing glass in home windows; installing glass mirrors, shower doors, and bathtub enclosures; and fitting glass for tabletops and display cases. On commercial interior projects, glaziers install items such as heavy, often etched, decorative room dividers or security windows. Glazing projects also may involve replacement of storefront windows for establishments such as supermarkets, auto dealerships, or banks. In the construction of large commercial buildings, glaziers, after reading and interpreting blueprints and specifications, build metal framework extrusions and install glass panels or curtain walls.





# HEAT / FROST INSULATORS

**Insulation workers, mechanical**, apply insulating materials to pipes and ductwork, or other mechanical systems, in order to help control and maintain temperature. When covering a steam pipe, for example, these insulation workers measure and cut sections of insulation to the proper length, stretch it open along a cut that runs the length of the material, and slip it over the pipe. They then fasten the insulation with adhesive, staples, tape, or wire bands. Sometimes, they wrap a cover of aluminum, plastic, or canvas over the insulation and cement or band the cover in place. Finally, mechanical insulation workers may screw on metal around insulated pipes to protect the insulation from the weather or physical abuse.

**Insulation workers, floor, ceiling, and wall**, apply or blow in insulation in attics and exterior walls. When blowing-in loose-fill insulation, a helper feeds a machine with fiberglass, cellulose, or rock-wool insulation, while another worker blows the insulation with a compressor hose into the space being filled. When covering a wall or other flat surface, these insulation workers may use a hose to spray foam insulation onto a wire mesh that provides a rough surface to which the foam can cling and that adds strength to the finished surface. Workers may then install drywall or apply a final coat of plaster for a finished appearance. In new construction or on major renovations, insulation workers staple fiberglass or rock-wool batts to exterior walls and ceilings before drywall, paneling, or plaster walls are put in place.



# IRON WORKERS

**Structural and reinforcing iron workers** place and install iron or steel girders, columns, and other construction materials to form buildings, bridges, and other structures. They also position and secure steel bars or mesh in concrete forms in order to reinforce the concrete used in highways, buildings, bridges, tunnels, and other structures. In addition, they repair and renovate older buildings and structures. Even though the primary metal involved in this work is steel, these workers often are known as **ironworkers** or **erectors**. Some ironworkers make structural metal in fabricating shops, which are usually located away from the construction site.





# OPERATING ENGINEERS

**Construction equipment operators** use machinery to move construction materials, earth, and other heavy materials at construction sites and mines. They operate equipment that clears and grades land to prepare it for construction of roads, buildings, and bridges, as well as airport runways, power generation facilities, dams, levees, and other structures. They use machines to dig trenches to lay or repair sewer and other utilities, and hoist heavy construction materials. They even may work offshore constructing oil rigs. Construction equipment operators also operate machinery that spreads asphalt and concrete on roads and other structures.

These workers also help set up and inspect the equipment, make adjustments, and perform some maintenance and minor repairs.

Construction equipment is more technologically advanced than it was in the past. For example, global positioning system (GPS) technology is now being used to help with grading and leveling activities.







# PAINTERS

**Painters** apply paint, stain, varnish, and other finishes to buildings and other structures. They select the right paint or finish for the surface to be covered, taking into account durability, ease of handling, method of application, and customers' wishes. Painters first prepare the surfaces to be coated, so that the paint will adhere properly. This may require removing the old coat of paint by sanding, wire brushing, burning, or water and abrasive blasting. Painters also fill nail holes and cracks, sandpaper rough spots, and wash walls and trim to remove dirt, grease, and dust. On new surfaces, they apply a primer or sealer to prepare the surface for the top coat. Painters also mix paints and match colors, relying on knowledge of paint composition and color harmony





# PLASTERERS

**Plasterers** work both indoors and outdoors—applying plaster to interior walls and cement or stucco to exterior walls. While most work is performed for functionality, such as fireproofing and sound dampening, some applications are intended purely for decorative purposes. Plasterers apply plaster to interior walls and ceilings to form fire-resistant and relatively soundproof surfaces. They also apply plaster veneer over drywall to create smooth or textured abrasion-resistant finishes. In addition, plasterers install prefabricated exterior insulation systems over existing walls—for good insulation and interesting architectural effects—and cast ornamental designs in plaster. Stucco masons apply durable plasters, such as polymer-based acrylic finishes and stucco, to exterior surfaces.

Plasterers can plaster either solid surfaces, such as concrete block, or supportive wire mesh called lath.



# PLUMBERS

**Plumbers** install and repair the water, waste disposal, drainage, and gas systems in homes and commercial and industrial buildings. Plumbers also install plumbing fixtures—bathtubs, showers, sinks, and toilets—and appliances such as dishwashers, waste disposers, and water heaters.

Plumbers lay clay, concrete, plastic, or cast-iron pipe for drains, sewers, water mains, and oil or gas lines. Before laying the pipe, prepare and grade the trenches either manually or with machines. After laying the pipe, they weld, glue, cement, or otherwise join the pieces together.







# ROOFERS

**Roofers** repair and install roofs made from a combination of some of the following: tar, asphalt, gravel, rubber, thermoplastic, metal, and shingles—all of which protect buildings and their contents from water damage. Repair and reroofing—replacing old roofs on existing buildings—make up the majority of work for roofers.



Some roofers specialize in waterproofing or dampproofing masonry and concrete walls, floors, and foundations.



# SHEET METAL WORKERS

**Sheet metal workers** make, install, and maintain heating, ventilation, and air-conditioning duct systems; roofs; siding; rain gutters; downspouts; skylights; restaurant equipment; outdoor signs; railroad cars; tailgates; customized precision equipment; and many other products made from metal sheets. They also may work with fiberglass and plastic materials. Although some workers specialize in fabrication, installation, or maintenance, most do all three jobs. Sheet metal workers do both construction-related work and mass production of sheet metal products in manufacturing.

In addition to installation, some sheet metal workers specialize in testing, balancing, adjusting, and servicing existing air-conditioning and ventilation systems to make sure they are functioning properly and to improve their energy efficiency.



# SPRINKLERFITTERS

*Sprinklerfitters* install automatic fire sprinkler systems in buildings.





# HVAC/REFRIGERATION SERVICE

**HVAC/Refrigeration** install, start-up, perform preventative maintenance, troubleshoot, diagnose and service heating, ventilation, air conditioning and refrigeration systems, equipment and controls in piping systems which carry water, steam, chemicals, compressed air, liquids gasses or fuel used in energy production, heating, cooling, food processing, manufacturing, lubricating and other process piping systems.





# STEAMFITTERS CONSTRUCTION

**Steamfitters** lay out, assemble, fabricate, troubleshoot, maintain and repair piping systems which carry water, steam, chemicals, compressed air, liquids, gases or fuel used in energy production, heating, cooling, food processing manufacturing, lubricating and other process piping systems.







# TEAMSTERS

**Heavy truck and tractor-trailer drivers** operate trucks or vans with a capacity of at least 26,001 pounds gross vehicle weight (GVW). The vast majority of these are *over-the-road* or *long-haul drivers*, meaning they deliver goods over intercity routes that may span several States. Some drivers have regular routes or regions where they drive the most, while others take on routes throughout the country or even to Canada and Mexico.

**Light or delivery services truck drivers**, often called *pick-up and delivery* or *P&D drivers* deliver goods within an urban area or small region. In most cases, they carry shipments from distribution centers to businesses or households.

**Specialized truck drivers** work with unusual loads. While most trucks carry freight loads in semi-trailers or vans, some carry liquids, oversized loads, or cars. Others carry hazardous materials, such as dangerous chemicals needed for industrial purposes, or waste from chemical processes that must be stored in approved facilities. Drivers who work with these types of loads must follow strict procedures to make sure their loads are delivered safely.



**THANK YOU**

The UNION Building Trades are always looking for men and women who demonstrate the best character, aptitude, motivation and personality to become skilled craft workers and keep unionized labor a part of American Culture.

**APPRENTICESHIP INFORMATION:**

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