Chronicle Guidance Publications

Fence Erectors

Occupational Brief Title Codes:
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Occupational Subtitles:
- Fence-Erector Supervisors

Work Classification Based Related D.O.T. Occupations:
- Construction Workers
- House Movers
- Sign Erectors
- Swimming Pool Installers
- Venetian-Blind Installers

Interests Based Related G.O.E. Occupations:
- Carpenters
- Floor Layers
- Insulation Workers
- Roofers
- Siders

Skills Based Related O*NET Occupations:
- Brickmasons and Blockmasons
- Pipelayers
- Reinforcing Iron and Rebar Workers
- Ship Carpenters and Joiners
- Stonemasons

Noteworthy Quote:

"Building fences is good, clean work that allows me to be outside most of the time. It also gives me the opportunity to serve people and fill a need, whether it be for security or appearance reasons. [The work] is always interesting because I work with a variety of materials, and every job is different."

– Fred Whitmore, Whitmore Fence, Dryden, New York

Fence erectors (`fence e`rec-tors) build and repair metal and wooden fences and fence gates around industrial establishments, residences, or farms, using both power tools and hand tools.

Fences and gates, also called perimeter systems, serve many purposes and come in all types of styles. They may be made of chain link, vinyl, aluminum, ornamental iron, or wood fences of spruce, cedar, cypress, or pressure-treated wood. The fences may be around or along homes, farms, highways, railways, or factories. Fences also surround schools and other institutions, playgrounds, tennis courts, gardens, and parks. Fences separate properties and provide privacy and security. They help keep pets and young children in, and help keep unwanted animals and outsiders out. Fences around swimming pools (required by law in many states) prevent children or others from falling into them.

Farmers erect fences around their lands and within their lands. Electric fences keep animals from straying and confine them to certain fields or pastures. Fences also define farm property lines. Fences along thruways and railways keep people and animals off these thoroughfares. Snow fences along rural highways keep snow from drifting onto the highways. Fences around construction sites and building sites protect those passing-by from injury. The fences also discourage the theft of supplies from the sites. Many factories with government contracts, for example, have fences equipped with electronic sensory systems to discourage entry by unauthorized individuals.

Work Performed

Fence erectors or ***assemblers*** may be unskilled workers, skilled workers, supervisors, or owner/operators. They may do any or all of the tasks of fence erection and assembly. Most fence construction and assembly jobs, however, generally require the same basic procedures.

The first step in erecting a fence is the plans, called blueprints, and an estimate. When a client orders a fence to be erected, ***fence specialists*** or ***fence-erector supervisors*** examine the area to be fenced, and note the client's needs and other specifications, what work will need to be done, the time and materials required, and the costs. They may draw-up blueprints and other data, and estimate worker requirements to complete the job.

When the erectors and assemblers arrive at the jobsite, they begin by laying out a fence line and marking the positions for postholes. For this task, they may use a transit or theodolite (a surveyor's instrument that looks like a small telescope, used to measure horizontal and vertical angles). After completing the layout, they dig the postholes, using a posthole digger or a power- or pneumatic-driven auger (a drill that digs into the earth and pulls out soil). The kind of tool they use depends on the size of the job. If the ground contains rock formations, fence erectors may use drilling equipment or dynamite to blast out the postholes.

After digging the postholes to the right depth and diameter, the workers place wooden or metal fence posts upright in the holes. They secure the fence posts in place by pouring concrete around the base of the posts or filling the postholes

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back-in with soil. When using concrete, they may mix the concrete by hand or with a cement mixer. On very large jobs, a truck may deliver the cement to the job. If they do not use concrete, they must pack soil in place around the base of the posts with a tamping tool, or with a machine called a jumping jack that is similar to a jackhammer.

Before and after pouring the concrete or filling the holes with soil, the workers align the posts both vertically and in line with each other. If they use a level, they hold the level against the post and move the post until a floating bubble on the level shows that the post is vertical.

When the fence posts are in place, the fence erectors attach the fence railings. On some fences, wood or metal rails may fit into slots in the upright posts. On others, workers may set fence rails in place and nail them to the posts. To build wooden fences, fence erectors use a hand or a power saw to cut the lumber for the rails. They may nail the top and bottom rails to the fence posts, or they may insert the rails in slots in the posts.

If making a picket fence, the fence erectors nail upright slats to the cross rails to make the pickets. They may cut pickets to size with a hand saw or a power saw. Wooden fences may also take the pattern of basket weave, louvers, or similar designs.

In metal fence work, the fence rail is metal tubing. Using a hacksaw or a pipe cutter, fence erectors measure the tubing and cut it the right length. The tubing may slide through some posts and attach to others with metal fittings called sleeves. The rails run along the top and bottom of the posts to form a frame. Fence erectors stretch and attach wire, mesh, or chain link fencing to the frame of posts and rails. Some metal fences have parts welded together. Fence erectors use portable gas welding equipment for this work.

At points of exit and entry through a fence, fence assemblers install attaching fasteners and gates. For some gates, they install electronic sensing systems, access control systems, or gate operating devices such as card entry systems.

Fence erectors use many different hand and power tools including hammers, woodcutting saws, metal cutting saws, pliers, wire cutters, pipe cutters, and shovels. They may also use picks, posthole diggers, rules, transits, levels, plumb lines, squares, and welding gear.

Erecting and assembling fences may require several skills including woodworking, metalworking, concrete working, and welding. Exact duties, however, vary with the employer. Fence erectors and assemblers working for large fence firms, for example, may specialize in wooden or metal fencing. Others may do special tasks. They may weld metal, dig holes and insert posts, assemble or install gates, or install rails. Workers in small companies often do all the tasks required to erect fences.

In addition to planning and estimates, supervisors also coordinate fence assembly activities. They direct and lead workers, and assign tasks. They oversee work progress, examine and inspect work, and analyze and resolve any problems or delays. They verify that safety procedures are being followed, and ensure that all work meets client, construction, and regulatory specifications.

Owner/operators of fencing firms, or independent contractors, have additional management and administrative tasks required to run a successful business. Responsibilities generally include customer and supplier relations; advertising; booking clients and scheduling work; and maintaining personnel, inventory, and financial records.

Working Conditions

Fence erectors work outdoors. Those individuals employed in this field perform fairly strenuous work in all terrains and climates. They may erect fences along beaches or on sandy soil, across streams or swamps, along major highways or quiet lanes, in woods and rock formations, and often in rich farmland. They work in whatever climate is normal for the region. They may work in heat, cold, snow, and rain. Exposure to dust and mud is also part of the work.

Most of the work is manual, but fence erectors also use tools. Fence erectors lift, bend, stoop, kneel, pound, and dig. One or two persons may do small jobs. A team may do large jobs. These workers may travel locally, but they seldom travel great distances.

Hazards in this work may include cuts, burns, strains, and other injuries from tools and equipment. Serious accidents, however, are avoided by following established safety measures, and wearing safety equipment such as steel-toed shoes, hard hats, safety glasses, gloves, and safety belts for added back support.

Hours and Earnings

Fence erectors may work from five to ten hours a day. A normal workweek is generally forty hours. More than forty hours is overtime. Weather, completion date of the job, and the number of jobs under contract, however, may affect the number of working hours a day and a week. In bad weather, for instance, erectors may work fewer than forty hours a week. When the weather is good, or when a deadline is near, on the other hand, they may work more than forty hours a week. In some areas such as the northeast, this work may even be seasonal. Self-employed fence erectors often work 60 or more hours a week.

Wages cover a wide range and vary with experience, skills, responsibilities, employer, and geographic location. Most workers are paid an hourly rate and get time and a half for overtime. Skilled workers, such as welders or cement masons, get paid the prime rate for their trades. Independent contractors get paid by the job, or by the amount of fence they install. They hire and pay their own workers and furnish the supplies and tools.

According to the Bureau of Labor Statistics, in 2002, wages for fence erectors ranged anywhere from just under $7 an hour to well over $19 an hour. Half earned between $8.79 and $14.46 an hour. Overall, earnings averaged around $640 a week. For supervisors and independent contractors earnings ranged anywhere from $30,000 to $75,000 a year or more. Roughly half earned from $40-60,000 a year.

Fringe benefits depend on the policies of the employer. In general, most employers offer health insurance, paid sick and vacation time, paid holidays, and a retirement plan.

Education and Training

Fence erectors must have the capacity to use the tools of the trade and perform the work. Employers of fence erectors prefer high school graduates. Workers with a high school diploma are more apt to know how to measure distances and use tools. They are also more likely to be able to do basic math. While in high school, students should be sure to take English and mathematics, wood shop, metal shop, drafting, and welding.

Fence erecting and assembly work requires a general knowledge of materials, methods, and the tools involved in basic construction and repair work. Generally, fence erectors learn their skills informally through on-the-job training from experienced workers or supervisors. When first beginning a job, they get instruction on safety procedures and rules. Most of this work is physical labor. With experience, workers may learn to operate equipment such as posthole diggers or other powered machinery.

Students can also go to a technical school or take home study courses to learn construction crafts. Useful skills include metalworking, woodworking, and concrete form work. Students may take courses that teach them how to use levels and power tools, and how to measure angles and set straight property lines. Students who wish to become supervisors or independent contractors will find postsecondary courses in drafting, blueprint reading, and similar studies extremely helpful. Business courses will also prove useful.

Training and educational opportunities for fence erectors are also available from professional and trade organizations. The American Fence Association (AFA), for example, offers educational programs, round table discussions, and indoor equipment demos at it's annual convention and trade exhibition. Topics include management and operations, installation techniques, deck and railing sessions, and new technologies. The AFA also offers Field Training School for foremen, superintendents, salesman, and future leaders. The school provides a combination of classroom and hands-on field instruction in eight critical areas of fencing: PVC fence products; bias cutting; chain-link; farm and ranch; gate operators; welding; wood fence; and ornamental metals.

Licensing, Certification, Unions and Professional Societies

Fence erectors need no license. However, independent contractors and owner/operators of fencing business may need a business or contracting license to operate in a certain locality.

Voluntary certification for manufacturers, suppliers, business owners, project managers, estimators, and internal office personnel is offered by the American Fence Association (AFA). A professional group consisting of more than 2,400 companies, AFA represents over 40,000 employers and employees in the fence industry. It promotes the highest levels of professionalism, ethics, and product standards through the dissemination of information, and education and certification of its members. To qualify for certification, candidates must meet experience and training requirements, and pass an examination and peer review process, including a signed affidavit and commitment to the AFA Code of Ethics.

Those who work for large fencing and construction firms may belong to a union. One such union is the Laborers' International Union of North America (AFL-CIO).

Personal Qualifications

Fence erectors should like outdoor work. Employers look for workers who are reliable and hardworking. Since physical activity is a major part of the job, workers must be physically able to do the work. Some employers may require applicants to pass a physical examination and drug testing. Workers must also be able to understand and follow instructions.

Fence erectors should get along with co-workers and be able to work effectively in a team effort. These workers should be able to talk easily with customers or clients they may see in the course of their work. Supervisors need additional leadership and organizational skills in order to effectively direct workers, and manage workloads and projects. Independent contractors also need good business and management skills to operate a successful business.

Occupations can be adapted for workers with disabilities. Persons should contact their school or employment counselors, their state office of vocational rehabilitation, or their state department of labor to explore fully their individual needs and requirements as well as the requirements of the occupation.

Where Employed

According to the Bureau of Labor Statistics, in 2002, fence erectors held roughly 27,000 positions. They worked throughout the United States for both large and small fence companies. Industries with the highest levels of employment include independent specialty trade contractors; building material and supplies dealers, such as Agway, Lowes, and Home Depot; heavy construction firms;

building foundation and exterior contractors; and highway, street, and bridge construction, including city, county, state, and federal government agencies.

Employment Outlook

The outlook for fence erectors is good. In fact, the Bureau of Labor Statistics expects employment to increase about as fast as the national average through the year 2012. Overall employment is projected to grow by 13.4 percent—that is an increase of around 4,000 positions. An additional 4,000 positions are also expected to open due to replacement needs.

Throughout the United States neighborhoods and industrial regions are shifting and expanding. The national emphasis on rebuilding the infrastructure of roads, bridges, tunnels, and communications installations may increase the demand for fence erectors. All these projects require fencing and security boundaries. The ever-increasing crime rate is also creating a growing need for security fencing.

Job openings should be plentiful because, like other occupations that require little formal training, the turnover rate in this work is fairly high. Furthermore, the installation of fencing does not rely on automated equipment, so fence erectors do not face the prospect of losing jobs because of automation.

Entry Methods

To enter this work, job seekers may answer newspaper want ads and visit local employment offices. Job seekers may also apply directly to fence erector companies. The Yellow Pages may list possible employers under "Fence," "Fence Posts & Fittings," and "Fence-Residential." Resumes and letters of application should mention experience or skills in construction work, metalworking, cement working, and/or welding. Any experience in erecting pole barns or silos will also be useful in this work.

Advancement

With time on the job, fence erectors become skilled in the measurement, layout, and assembly of fences. They may also learn skills such as welding and cement applications. Courses in a two-year college or adult education program will help them acquire skills in business management and sales.

After years of experience, fence erectors may become supervisors, who oversee crews of fence erectors. These workers may also join the sales staff of their employer, or they may become estimators. Others may start their own business or become independent contractors. The field is competitive, but those who work hard may succeed.

For Further Research

American Fence Association, 800 Roosevelt Road, Building C-20, Glen Ellyn, IL 60137. Web site: www.americanfenceassociation.com

Chain Link Fence Manufacturers Institute, 10015 Old Columbia Road, Suite B-215, Columbia, MD 21046. Web site: www.chainlinkinfo.org

Acknowledgments

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