

# Mason (Bricklayer) Apprenticeship

## Did you know?\*

- Job prospects are expected to be very good, especially for workers with restoration skills.
- Most entrants learn informally on the job, but apprenticeship programs provide the most thorough training.
- The work is usually outdoors and involves lifting heavy materials and working on scaffolds.
- About 24 percent were self-employed.

\*Statistics retrieved from the U.S. Bureau of Labor Statistics.

## What Does a Bricklayer Do?

Bricklaying masonry shall consist of the laying of brick made from any materials, in, under or upon any structure or form of work where brick are used, whether in the ground or over its surface, or beneath water, in commercial buildings, rolling mills, iron works, blast or smelter furnaces, lime or brick kilns; in mines for fortifications, and in all underground work; such as, sewers telegraph, electric and telephone conduits, including the installation of substitutes for brick; such as, all carbon materials, Karbate, Impervite, radiation block or mixtures and all acid-chidrine resistant materials. All terra cotta and porcelain materials, except where the foregoing materials are manufactured to substitute for tile. All cutting of joints, pointing, cleaning, and cutting of brick walls, fireproofing, blockarching, terra cotta cutting and setting, the laying and cutting of all tile, plaster, mineral-wool, cork blocks, and glass masonry joints of the same when such sewers or conduits are of any vitreous material, burnt clay or cement, or any substitute materials used for the above purpose, the cutting, rubbing and grinding of all kinds of brick and the setting of all cut stone trimmings on brick buildings, and the removal, preparation and erection of plastic, castables or any refractory materials is bricklayers work.

Cleaning, grouting, pointing, insulating and other work necessary to achieve and complete the work under the foregoing category shall be the work of the bricklayer. All waterproofing and black mastic waterproofing, air and vapor barriers, silicone and/or substitutes sandwiched between masonry units in the interior of the wall, including artificial masonry.

## Tasks:

- Care and use of tools and equipment including trowels, hammers, levels, rulers, saws, welding, equipment, transits, lasers, scaffolding, ladders, etc.
- Demolition and repair, including: toothing-out and replacement of all types of units, in all functions both structural and decorative, cleaning all units, new and old using water, acidic cleaners and water or sand blast, tuck pointing of all units new and old, including grinding out and replacement of joints; rehabilitation, rubbing and patching.
- Waterproofing; above and below grade, installing flashing, sealing, caulking; control and expansion joints, perimeters of openings, cleaning, preparing, priming applying sealants and tooling joints, installing backer road.
- Laying up plain brick work, straight wall work, veneer, load bearing brick work, decorative or pattern bonds, including building arches, piers, columns, corners, quoins.
- Miscellaneous work including:
  - Stonework; both natural and precast, including cutting and setting bonding, anchoring, welding and finishing joint; also rigging.
  - Firebrick, including fireplaces and chimney planning and layout including safety measures and building codes. Also smoke stack, foundry ovens, power plant chimneys.
  - Fireproofing; including laying up party walls, fire walls, plugging wall penetrations.
  - Specialties; including: glass block, glazed tile, artificial stone, Styrofoam, partition tile.
  - Planning and laying paving units in floor and stair construction.
- Sawing of all units; cleaning, point-waterproofing and caulking.

## What Are the Working Conditions?

The outdoor work requires prolonged standing, kneeling, climbing, stopping, squatting, bending and lifting heavy materials weighing 60-65 pounds. The physical activity is a very serious consideration since this is a daily requirement until retirement. Bricklayers must be able to tolerate loud noise, work in confined spaces, at heights, in all weather and high exposed areas, tolerate repetitive reaching, and handling motion.

## How is the Training Structured?

- 3 year training program
- 6,000 hours on-the-job training
- 144 hours of related instruction per year
- Individual program requirements may vary by sponsor

## What are the Application Requirements?

- Applicants must be at least 18 years of age
- High school diploma or equivalent
- Physically able to perform trade
- Valid driver's license and reliable transportation

## What Skills Should I Possess?

- **Active Listening**- Understanding verbal direction, giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times in order to complete tasks.
- **Coordination**- Adjusting actions in relation to others' actions.
- **Time Management**- Managing one's own time and the time of others.
- **Attention to Detail**- Job requires paying attention to detail, thorough in completing work tasks, and taking pride in craftsmanship.
- **Analytical Thinking**- Job requires analyzing information and using logic to address work-related issues and problems. Analyzing information and evaluating results to choose the best solution and solve problems.
- **Achievement/Effort**- Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.
- **Independence**- Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.
- **Visualization**- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged. Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects. The ability to tell when something is wrong or is likely to go wrong.
- **Dependability**- Job requires being reliable, responsible, and dependable, and fulfilling obligations. Job requires persistence in the face of obstacles.
- **Getting Information**- Observing, receiving, and otherwise obtaining information from all relevant sources. The ability to listen to and understand information and ideas presented through spoken words and sentences.
- **Initiative**- Job requires a willingness to take on responsibilities and challenges.
- **Problem Identification**- Information Ordering. The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- **Organizing, Planning, and Prioritizing Work**- Developing specific goals and plans to prioritize, organize, and accomplish your work.
- **Performing General Physical Activities**- Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- **Building and Construction**- Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures.
- **Mathematics**- Knowledge of arithmetic including: measuring, counting, basic addition, subtraction, multiplication and division, calculate ratios, percentages, and dimensions with and without the aid of a calculator, algebra, geometry, algebra and their applications.
- **Design**- Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- **Ability to read**- signs, blueprints/diagrams, technical manuals and specifications in order to construct buildings and other masonry structures, and ability to communicate orally and in writing.

## Additional Resources

The United States Bureau of Labor Statistics maintains information on all occupations. For more information on the Construction Electrician trade in the United States, visit:

<http://www.bls.gov/ooh/construction-and-extraction/brickmasons-blockmasons-and-stonemasons.htm>

## **Who to Contact in Mississippi**

For more information on becoming an Mason (Bricklayer) contact MCEF at 601-605-2989.