Bricklayer / Stonemason

At a Glance

Bricklayers build houses and other structures by stacking bricks, stones, or concrete blocks. They secure the corners to make sure the bricks are straight, and use mortar to bind them together.

16 Career Clusters

Architecture & Construction

Earnings

Earnings Range: 11 - 37/hr

Level of Education

- · High School
- · 2-Year College or Technical Training

Core Tasks

- · Work out the amount of mortar and bricks needed
- · Use a hammer and chisel or a saw to cut bricks or stones to size
- · Stack bricks, stones, or blocks in rows to build walls
- · Spread mortar between bricks to bond them together
- Make sure walls are straight using levels and plumb lines

Attributes & Abilities

- · Physically fit
- · Hand-eye coordination
- · Able to read blueprints
- · Safety conscious

Workplace

- · Work for construction companies or as self-employed contractors
- · Work outdoors most of the time
- · A lot of exposure to mud, mortar, and dust
- · Wear safety boots and hard hats

Job Description

Bricklaying is one of the oldest building methods. From the pyramids to the Great Wall of China, people have been stacking bricks for tens of thousands of years. This is truly an ancient trade! Today, bricklayers build more modern structures for everyday use. The materials and tools may have changed, but the basic principles remain the same.

Bricklayers build just about anything that can be made by stacking concrete bricks or blocks. They often construct the walls of houses and other buildings. But, they may also make smaller elements of houses such as chimneys and fireplaces. They install firebrick linings, too. These are special bricks that can withstand a lot of heat. Firebrick linings are used in furnaces and chimneys.

In some cases, these tradespeople use bricks and other materials to build outdoor elements. A patio or a low wall can improve a garden or yard.

There is planning to be done before bricklayers start stacking bricks. First, they use blueprints to estimate the amount of materials required. Measurements of the area will help them decide how many bricks and how much mortar they'll need.

Mortar is a type of cement used to bind the layers of bricks together. It is spread using a small tool called a trowel. It joins each new brick to the previous row, forming a new layer with each brick.

When any structure is built, the corners are secured first. This is to ensure the layers of bricks are properly lined up. A plumb line and level are used to guarantee the layers are evenly stacked. If this work is not done carefully, the structure can end up lopsided. And nobody wants a crooked house! Stonemasons do similar jobs. For some jobs, bricks need to be cut to fit in irregular spaces. These tradespeople use a masonry saw or a hammer and chisel to shape the stones.

Working Conditions

Bricklayers either work for construction companies or as self-employed contractors. They work outside on construction sites most of the time. For some jobs, they work in people's homes.

Bricklayers spend most of the day on their feet. They must often kneel, bend, or crouch for long periods. They may also work on scaffolding hung from walls at great heights.

There is a high risk of injury in this job. Since bricklayers may work at heights, there is a risk of falling off of scaffolds. They have to watch for falling bricks, too. To avoid these threats, they follow safety rules and wear protective gear. This includes safety boots and hard hats, which are usually supplied by their employer.

This is a dirty job! Bricklayers are usually covered in mud, mortar, and dust. Laying bricks can be hard on the back, as it involves a lot of heavy lifting. It's important for workers to learn the right way to lift. Lifting with the legs and not the back can help prevent injuries.

Most bricklayers work regular 40-hour weeks, Monday to Friday. Some overtime may be required to meet deadlines, but they are paid extra for this work. People who own a business often work extra hours to deal with paperwork.

One downside to dealing with mortar is that it doesn't dry in wet conditions. So, most bricklayers do not work when the weather is bad. This means bricklayers do not work in the winter in certain parts of the country.

Earnings

Bricklayers and stonemasons are often employed on contract. This means they work a fixed amount of time for a fixed rate. Others work for a single employer, either on a full or part-time basis. Some people in this trade have their own contracting business. In all cases, they are usually paid by the hour.

Earnings for bricklayers range from \$14 to \$40 an hour. The national median is \$24 an hour. For those who work full time, this translates to a range of \$30,000 to \$84,000 a year. The median is \$49,000.

Wages for stonemasons range from \$11 to \$32 an hour. The median wage is \$19 an hour. For full-time workers, this translates to a range of \$24,000 to \$66,000 a year. The median earnings are \$40,000 a year.

Fully qualified people in this trade are called journeypersons. When they start out, they work as apprentices. These workers usually start out earning 50% of the journeyperson wage. This wage increases each year, as they gain experience.

Hourly wage rates depend on experience, employer, and location. Annual earnings for bricklayers also depend on the economy and construction activity. In good economic times, there is lots of building going on. There is a greater demand for bricklayers, and they can make a good living. However, there are downtimes in the industry as well. It can be hard for bricklayers to find enough contracts during these periods.

Since the work is unpredictable, bricklayers must make sure to plan their finances. They need to budget so they have enough money for the off-season. For example, not much construction work is done in the winter in some parts of the US due to bad weather. Bricklayers save the money they earn during busy seasons to use in this downtime.

Many bricklayers belong to a union. This means the wage rates are set by union leaders on behalf of the whole group. Full-time employees may get benefits along with their income. These can include paid vacation time, help with a pension plan, and health coverage.

Massachusetts Wages

Occupation: Stonemasons

Level of Experience	Hourly	Annual
Entry Wage	\$23.73	\$49,360
Median Wage	\$39.69	\$82,550
Experienced Wage	\$49.36	\$102,660

Source: U.S. Department of Labor, Bureau of Labor Statistics http://www.bls.gov

Occupation: Brickmasons and Blockmasons

Level of Experience	Hourly	Annual
Entry Wage	\$23.14	\$48,140
Median Wage	\$35.03	\$72,870
Experienced Wage	\$48.71	\$101,330

Source: U.S. Department of Labor, Bureau of Labor Statistics http://www.bls.gov

Massachusetts Outlook

Occupation: Stonemasons

Employment

Linploymone	
2014	550
2024	560
Change	
Number	10
Percentage	1.3

Annual Average Openings

Annual Average Openings

Total	Growth	Replacement
10		

Occupation: Brickmasons and Blockmasons

Employment

2014	2,170
2024	2,200
Change	
Number	30

Annual Average Openings

Total	Growth	Replacement
20		

1.2

Source: Projections Central http://www.projectionscentral.com

Education

Percentage

The best way to become a bricklayer is through an apprenticeship. These programs combine classroom instruction and hands-on training. They take 3 to 4 years to complete.

The hardest part of an apprenticeship program is finding an employer to train you. It is a good idea to get your high school diploma before applying, since this is required by many employers. Otherwise, you must be at least 17 or 18 years old to apply. You must be in good physical condition to get into this career.

During an apprenticeship, you learn all sorts of subjects. For example, you'll study:

- · blueprint reading
- math
- · layout work
- sketching

Another way to enter the field is to complete a masonry program. These programs are offered at technical schools and 2-year colleges. You can also get training from industry-based programs. These are available throughout the country.

Some bricklayers learn their skills without any formal training. They learn the trade by working as helpers under experienced workers.

Related College Programs

- Mason/Masonry
- · Construction Trades, General

Other Suggested Qualifications

Masonry work is very physical, so if you're interested in being a bricklayer, you must be physically fit. You should also possess accurate hand-eye coordination. It's a good idea to be familiar with other aspects of building, such as carpentry. In addition to being able to read blueprints, you should be able to interpret building codes. It's also important to be knowledgeable about industry safety requirements and guidelines for handling hazardous materials. A good knowledge of geometry and math is a definite asset.

Sample High School Program of Study

This Program of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals.

Construction Architecture & Construction

Grade 9	Grade 10	Grade 11	Grade 12
English/Language Arts			
English/Language Arts I	English/Language Arts II	English/Language Arts III Technical Writing	English/Language Arts IV
Math			
Algebra I	Geometry	Algebra II	Construction Math Statistics
Science			
Earth or Life or Physical Science	Biology	Physics	Chemistry
Social Studies/Science	Social Studies/Sciences		
State History Civics or World History	U.S. History	Economics Psychology	
Career & Technical Courses			
Introduction to the Built Environment	The Language of Architecture and Construction	Safety, Health and the Workplace Environment	Applications in Construction

Grade 9	Grade 10	Grade 11	Grade 12	
	Information Technology Applications	Principles of Construction		

States' Career Clusters Initiative, 2008, www.careerclusters.org.

Important

- Check with your advisor to make sure that your course selections satisfy your graduation requirements.
- Courses available may vary from school to school.

Sample Career Path

People take different pathways through their careers, but no one starts at the top. This is an example of how the earnings, education and experience requirements, and responsibilities might progress for someone in this occupation.

Level 1

Earnings

\$30 to \$37 an hour

Sample Title	Apprentice
Earnings	\$11 to \$22 an hour
Requirements	Preferably a high school diploma Enrolled in an apprenticeship program
Responsibilities	Cutting bricks; mixing mortar; carrying equipment and supplies; learning to lay bricks under the supervision of a journey-level mason.
Level 2	
Sample Title	Journey-Level Bricklayer or Mason
Earnings	\$22 to \$30 an hour
Requirements	Completion of apprenticeship training
Responsibilities	Interpreting blueprints and calculating materials needed; spreading mortar; laying bricks; making corner blocks; training apprentices.
Level 3	
Sample Title	Foreperson / Supervisor

Level 3

Requirements	Years of experience as a bricklayer or masonSome supervisory experience
Responsibilities	Setting schedules; assigning tasks to crew members; inspecting masons' work; liaising between the construction manager or clients and the crew; ensuring safety protocols are followed on site; ordering supplies and materials; helping spread mortar and lay bricks as needed.

Related Careers

Here are some other occupations that you might be interested in. Click on an occupation name to learn more.

- Carpenter
- · Chimney Sweep
- · Concrete Mason
- · Construction Tradesperson
- Drywaller
- · Flooring Installer
- Construction Manager
- Glazier
- · Home Inspector
- Insulator
- Ironworker
- Landscaper
- Plasterer
- Roofer
- Tilesetter

Related Military Careers

· Construction Specialist

Career Clusters

Career Clusters are groups or families of occupations that share common characteristics such as knowledge requirements, skill sets, and/or goals.

Architecture & Construction

National Employment by Industry

Industry	% Employed
Construction	68
Self-Employed	29

Source: O*Net Online, Browse by Industry, US Department of Labor http://online.onetcenter.org/find/industry

Other Resources

Mason Contractors Association of America (MCAA)

A national trade organization for masonry contractors and suppliers. Scroll over Careers and click on Career Information to get great information about masonry and becoming a mason. http://www.masoncontractors.org

International Union of Bricklayers and Allied Craftworkers (BAC)

A union representing masons, bricklayers, and others working in related areas across the US and Canada. Scroll over About Us and then click on Local BAC Links to find your local BAC. http://www.bacweb.org

Masonry Magazine

An online magazine about masonry in general. Scroll over Magazine on the left to find access to the archives or to the current issue.

http://www.masonrymagazine.com

Building Advantage – Apprenticeship Program

This organization aims to raise awareness about construction and trade unions. Here you can find excellent career videos to help you learn more about a variety of careers. http://www.buildingadvantage.org/apprenticeship

International Masonry Institute (IMI)

This organization offers masonry training through an alliance with the BAC and their contractors. Click on Training for more information.

http://www.imiweb.org

Brick Industry Association (BIA)

An association representing people involved in the brick industry. Scroll over Resources and click on Why Choose Brick to find out about constructing with bricks. http://www.gobrick.com

Choose Construction

This is a career and education guide for students focusing on the construction industry in the US. Click on Career Options to discover different careers.

http://www.chooseconstruction.org

Home Builders Institute (HBI)

HBI provides training for careers in the building industry. Scroll over Programs and click on Career & Certification Services to learn more about the services they offer. http://www.hbi.org

Build Your Future - Choose Your Career Path

This program of the National Center for Construction Education and Research (NCCER) aims to promote careers and education in the construction industry. Here you can find out more about getting started in construction.

http://byf.org/path

United States Department of Labor – Employment & Training Administration

Visit this website to learn more about apprenticeships. Search the site for more information on apprenticeship opportunities.

http://www.doleta.gov/oa

Occupational Outlook Handbook - Brickmasons, Blockmasons, and Stonemasons

Career information from the US Department of Labor.

http://www.bls.gov/ooh/Construction-and-Extraction/Brickmasons-blockmasons-and-stonemasons.htm