

# BuildND.org

## Plumber, Pipefitter & Steamfitter

### Job Description

Layout, assemble, install, or maintain pipe systems, pipe supports, or related hydraulic or pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, or industrial production or processing systems.

### Work Conditions

Plumbers, pipefitters, and steamfitters work in factories, homes, businesses, and other places where there are pipes or septic systems. They have a higher rate of injuries and illnesses than the national average. Plumbers are often on call for emergencies, so evening and weekend work is common.

### How to Become a Plumber, Pipefitter or Steamfitter

Although most plumbers, pipefitters, and steamfitters learn on the job through an apprenticeship, some start out by attending a technical school. Most states and localities require plumbers to be licensed.

- **Education**

- A high school diploma or equivalent is required.
- Technical schools offer courses on pipe system design, safety, and tool use.
  - They also offer welding courses that are considered necessary by some pipefitter and steamfitter apprenticeship training programs.

- **Training**

- Most plumbers, pipefitters, and steamfitters learn their trade through a 4- or 5-year apprenticeship.
  - Each year, apprentices must have at least 1,700 to 2,000 hours of paid on-the-job training and a minimum of 246 hours of related technical education.
  - Apprentices learn safety, local plumbing codes and regulations, and blueprint reading.
  - They also study mathematics, applied physics, and chemistry.
- After completing an apprenticeship program, plumbers, pipefitters, and steamfitters are considered to be journey workers, qualifying them to perform duties on their own.
- With additional courses and several years of plumbing experience, plumbers are eligible to earn master status. Some states require a master plumber to get a plumbing contractor's license.
- Apprenticeship programs are offered by unions and businesses. Although most workers enter apprenticeships directly, some start out as helpers. To enter an apprenticeship program, a trainee must meet the following requirements:
  - Be at least 18 years old
  - Have a high school diploma or equivalent
  - Pass a basic math test
  - Pass substance abuse screening
  - Know how to use computers
- Some plumbers, pipefitters, and steamfitters learn on the job through specific task-oriented training. Employers provide training that enables workers to complete a variety of tasks.



Associated General Contractors of North Dakota  
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- **Licenses, Certifications, and Registrations**
  - Most states and localities require plumbers to be licensed.
  - Although licensing requirements vary, most states and localities require workers to have 2 to 5 years of experience and to pass an exam that shows their knowledge of the trade and of local plumbing codes before they are permitted to work independently.
  - Several states require a special license to work on gas lines.
  - A few states require pipefitters to be licensed.
  - Obtaining a license requires taking a test, gaining experience through work, or both.
  - For more information, check with your state's licensing board.
- **Important Qualities**
  - **Business skills**  
Plumbers who own their own business must be able to direct workers, bid on jobs, and plan work schedules.
  - **Customer-service skills**  
Plumbers work with customers on a regular basis, so they should be polite and courteous.
  - **Mechanical skills**  
Plumbers, pipefitters, and steamfitters use a variety of tools to assemble and repair pipe systems. Choosing the right tool and successfully installing, repairing, or maintaining a system is crucial to their work.
  - **Physical strength**  
Plumbers, pipefitters, and steamfitters must be strong enough to lift and move heavy pipe.
  - **Troubleshooting skills**  
Plumbers, pipefitters, and steamfitters find, diagnose, and repair problems. For example, pipefitters must be able to perform pressure tests to pinpoint the location of a leak.

## Wage Information:

The table below shows the estimated Employment Wage Statistics for individuals in North Dakota employed as Plumber, Pipefitters and Steamfitters in 2013.

Rate Type	Entry level	Mean	Experienced
Annual Wage	\$31,060	\$45,210	\$52,280
Hourly Wage	\$14.93	\$21.73	\$25.13

For more information [click here](#).



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