

## Construction Manager/Constructor

### *Job Description*

Construction managers plan and coordinate construction projects. They may have job titles such as construction superintendent, general superintendent, project engineer, project manager, general construction manager, or executive construction manager. *Constructor* is the title more commonly used today for a construction manager.

Constructors manage, coordinate, and supervise the construction process from the conceptual development stage through final construction on a timely and economical basis. They seldom take direct part in the actual construction of a project. Given designs for buildings, roads, bridges, or other projects, constructors oversee the organization, scheduling, and implementation of the project to execute those designs. They are responsible for coordinating and managing contractors, materials, and equipment, budgets, schedules, and contracts as well as for insuring safety of employees and the general public.

Construction managers may be owners or salaried employees of a construction management or contracting firm, or may work under contract or as a salaried employee of the owner, developer, contractor, or management firm overseeing the construction project. They often work with engineers, architects, and others who are involved in the construction process, and may have several subordinates, such as assistant managers or superintendents, field engineers, or crew supervisors, reporting to them.

### *Salary*

A construction manager's salary varies depending upon the size and nature of the construction project, its geographic location, and economic conditions. The U.S. Bureau of Labor Statistics reports that the median annual earning of construction managers in 2004 was nearly \$70,000. The lowest paid 10% earned less than \$42,000, and salaries for the highest paid 10% exceeded \$126,000. An entry-level salary for a person with a bachelor's degree in construction science/management was nearly \$43,000 in 2005, according to the National Association of Colleges and Employers.

CONSTRUCTION MANAGER



Because these salary figures are based on a national average, the salary ranges in different communities may vary from amounts mentioned above.

### *Education*

Construction managers or constructors need a background combining building science, business, and management, plus related work experience within the construction industry. They need to understand contracts, plans, and specifications, and to be knowledgeable about construction methods, materials, and regulations. Familiarity with computers and software programs for job costing, online collaboration, scheduling, and estimating also is important..

Traditionally, persons have advanced to construction management positions after gaining substantial experience as construction craft workers — carpenters, masons, plumbers, or electricians, for example — or after having worked as construction supervisors or as owners of independent specialty contracting firms. However, many employers now increasingly prefer individuals who combine industry work experience with a bachelor's degree in construction science, construction management, or civil engineering.

More than 100 colleges and universities offer bachelor's degree programs in construction management, construction science, and construction engineering. Several of these institutions also offer master's degrees. In addition, a number of two-year colleges have construction management or construction technology degrees.

Construction management programs include courses in project control and development, site planning, design, construction methods, construction materials, value analysis, cost estimating, scheduling, contract administration, accounting, business and financial management, safety, building codes and standards, inspection procedures, engineering and architectural sciences, mathematics, statistics, and information technology.

### *Skills and Abilities*

Constructors should be able to work well under pressure, particularly when faced with unexpected occurrences or delays. They also need to coordinate several major activities at once. In addition to technical



knowledge and experience, good oral and written communication skills are important because constructors must be able to establish good working relationships with many different people, including owners, other managers, designers, supervisors, and craft workers.

### *Job Opportunities*

According to the U.S. Bureau of Labor Statistics (BLS), construction managers held 431,000 jobs in 2004. More than half were self-employed, typically as owners of general or specialty trade construction firms. Most of the remaining constructors were employed in the construction industry.

The BLS predicts that good employment opportunities are expected. Through 2014 the employment of constructors is predicted to increase 9-17%. However, job prospects are sensitive to the short-term nature of many construction projects and to economic cycles of the construction industry.

### *Helpful High School Courses*

- ▶ Computer-assisted drafting
- ▶ Drafting/technical drawing
- ▶ Physics
- ▶ Calculus
- ▶ Algebra

### *Resources*

Several organizations provide information about the field of construction management.

#### ▶ **American Council for Construction Education**

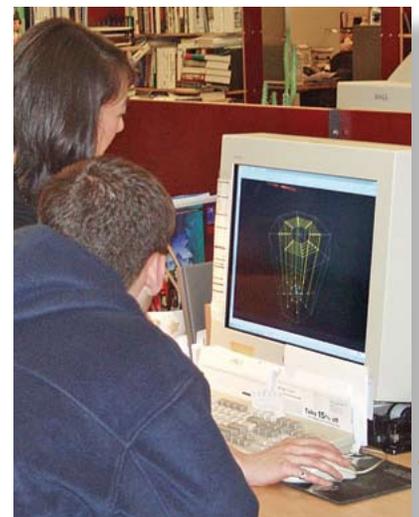
1717 North Loop 1604 East, Suite 320, San Antonio, TX 78232

Website: <http://www.acce-hq.org> – Contains information on accredited construction science and management educational programs and accreditation requirements.

#### ▶ **American Institute of Constructors**

466 94th Avenue North, St. Petersburg, FL 33702

Websites: <http://www.constructorcertification.org> or <http://www.aic-net.org> – Presents information about constructor certification.



► **Construction Management Association of America**

7918 Jones Branch Drive, Suite 540, McLean, VA 22102-3307

Website: <http://www.cmaanet.org> – Contains information about construction management and construction manager certification.

► **National Association of Women in Construction**

327 S. Adams Street, Fort Worth, TX 76104

Website: <http://naiwic.org> – This organization promotes the interests of women in all fields of construction. Its website describes educational programs and competitions as well as scholarships.

This Fact Sheet, with some additions and modifications, is taken from the National Building Museum's *Building Blocks: Design Apprenticeship Program* curriculum.

