



Code: 4434

Family: Construction, Maintenance, and Skilled Labor
Service: Operation and Construction
Group: Building Maintenance and Operation
Series: Masonry Trades

CLASS TITLE: CEMENT/CONCRETE FINISHER - APPRENTICE

The City of Chicago has partnered with the Cement Masons' Union Local 502 to establish a three (3) year cement finisher apprenticeship training program that combines 432 hours of classroom training and 6,000 hours of paid on-the-job training (OJT) and work experience. Positions are not paid by the City for the hours of classroom instruction.

Upon successful completion of the training program, positions are awarded a Certificate of Completion of Apprenticeship. The certificate grants journeyman status.

CHARACTERISTICS OF THE CLASS

Under direct supervision of a Foreman of Cement/Concrete Finisher, performs apprentice level work by assisting in the laying, floating and finishing of concrete for repair and construction projects, and performs related duties as required

ESSENTIAL DUTIES

Apprentice positions will be required to:

- Complete 432 hours of classroom instruction in a formal apprentice training program over a three (3) year period, or approximately 144 hours of class time per year
- Complete 6,000 hours of on-the-job training (OJT) over the three year period, or approximately 2,000 hours per year
- Learn how to read drawings, specifications, and work orders to assess work required and to measure and lay out work to restore, install or repair concrete
- Learn how to fill and level surface area with sub-grade materials to prepare work area for concrete pour
- Learn how to assemble and set formwork that holds concrete to required pitch and depth, and aligns forms
- Learn how to place reinforcement steel materials to ensure concrete reinforcement meets specifications
- Learn how to place concrete in the casting and spreading of concrete into forms or onto surfaces
- Learn how to finish freshly poured concrete, using specialized tools (e.g., screed, bull float, trowel) to level and smooth the surface
- Learn how to use powered or hand trowels to finish concrete to required lines and grades
- Learn how to check line and grade of concrete finishing work to ensure specifications are met
- Learn how to apply hardening and sealing compounds to cure surface of concrete, and waterproof or restore surface

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS**Education, Training and Experience**

- Must have a High School Diploma OR GED certificate
- Must be at least 18 years of age at the time of application
- Successful candidates must pass a drug screen, background investigation, physical and required pre-employment exams

Licensure, Certification, or other Qualifications

- A valid State of Illinois driver's license is required

WORKING CONDITIONS

- Exposure to outdoor weather conditions in performance of duties
- Exposure to noise, fumes, dust and other conditions on construction sites

EQUIPMENT

- Personal protective equipment (e.g., hard hat, rubber boots, glasses, gloves, face masks)
- Safety devices or equipment (e.g., cones, barricades, scaffolding, ropes)
- Two-way radio
- Standard tools and equipment of the cement masonry trade (e.g., hand and power trowels, floaters, screeds, edging tools, groover, basic curb tools, jointers)

PHYSICAL REQUIREMENTS

- Heavy lifting (up to 80 pounds) is required
- Ability to stand and walk for extended or continuous periods of time
- Ability to quickly bend, stretch, twist, or reach out with one's body, arms, and/or legs
- Ability to operate applicable hand tools, power tools, and equipment

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS**At the completion of apprenticeship, knowledge of:**

- *tools, materials, processes and techniques of concrete finishing and masonry
- *techniques and processes used in laying, smoothing and finishing concrete surfaces
- *techniques for constructing concrete and reinforced concrete structures
- *properties and characteristics of concrete and various types of concrete mixes
- *effects of concrete mixes on strength of concrete, setting and curing times, finish and durability
- *use of safety equipment and protective gear
- applicable safety and code standards specific to the cement finishing trade, including OSHA standards

Knowledge of applicable City and department policies, procedures, rules, and regulations

Skills

- ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making

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- ACTIVE LISTENING - Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- MATHEMATICS - Use mathematics to solve problems

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WORK WITH NUMBERS - Add, subtract, multiply, or divide quickly and correctly

Other Work Requirements

- STAMINA - Demonstrate energy and stamina to accomplish work tasks
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
April, 2017