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# **Federal Wage System Job Grading Standards**



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# **FEDERAL WAGE SYSTEM JOB GRADING STANDARD FOR** CEMENT FINISHING, 3602





# **CEMENT FINISHING, 3602**

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#### WORK COVERED

This standard is used to grade all nonsupervisory jobs involved in construction and repair of cement and concrete surfaces and structures.

#### **TITLES**

Jobs covered by this standard at and above the Grade 8 level are to be titled *Cement Finisher*.

Jobs covered by this standard below the Grade 8 level are to be titled *Cement Worker*.

#### **GRADE LEVELS**

This standard does not describe all possible levels at which jobs might be established. If jobs differ substantially from the skill, knowledge, and other work requirements described in the grade levels of the standard, they may warrant grading either above or below those grades.

### 3602-6 Cement Worker, Grade 6

3602-6

*General:* Grade 6 cement workers receive assignments from a higher grade worker or supervisor in the form of oral or written instructions on the mixing, pouring, spreading, and leveling of cement and concrete surfaces and structures. These instructions cover the work to be done and material and methods to be used in accomplishing the work.

They work on such surfaces as sidewalks, steps, walls, curbs, ramps, roads, and runways. They build and set forms on projects of limited scope and difficulty such as sidewalks and steps which do not require precise measurements and involve only the setting of forms in straight lines. They mix, pour, spread, and level cement and concrete in preparation for final finishing. In repairing damaged areas, they remove broken concrete and prepares subsurfaces.

Skill and Knowledge: At this level, the cement workers must have a basic knowledge of the methods and techniques of cement work. In repairing damaged areas, they must have the ability to remove broken concrete and to prepare subsurface for repair including, leveling ground and tamping fill material, such as sand, dirt, or gravel. They must be able to mix and prepare concrete in accordance with specifications, insuring that the proper amount of cement, sand, stone, and water are used and that proper consistency is obtained. They must have the ability to pour concrete into forms and spread and level concrete. They must be ale to perform rough finishing of small areas.

Grade 6 cement workers must be skilled in use of a variety of tools common to the trade. They must be able to use a concrete paving breaker, pneumatic hammer, and concrete saw to remove broken concrete. They must be able to use a straight edge, trowel, screen, and float while leveling concrete. They must have the ability to use a hammer and saw when building or disassembling forms. They must be able to operate a cement mixer. They must have the ability to use a concrete vibrator to eliminate defects caused by bubbles and hollow spots.

Responsibility: A higher grade worker or supervisor assigns work orally or through written work orders. Grade 6 cement workers obtain the tools and material as required by instructions. On small repair jobs, they proceed to complete assigned tasks in accordance with instructions. When working as members of a crew, they receive the necessary instructions from a higher grade worker who is available for guidance and assistance. Their work is subject to check during progress for conformance with instructions and completed work is checked for acceptability.

*Physical Effort*: Grade 6 cement workers are frequently required to perform heavy lifting up to 46 kilograms (100 pounds) while carrying cement and other equipment and materials. Their work normally requires extensive standing, walking, kneeling and bending.

*Working Conditions*: Grade 6 cement workers work both inside and outside. They are frequently exposed to dust and dirt while mixing concrete.

#### 3602-8

#### **Cement Finisher, Grade 8**

3602-8

*General*: The work at this grade, in addition to work done at the Grade 6 level, involves the final finishing of cement and concrete, and work on difficult projects, requiring more precise measurements and setting forms in curved as well as straight lines.

In comparison with the Grade 6 level, Grade 8 cement finishers also must have a more comprehensive knowledge of the cement finishing occupation to plan work methods and sequences, lay out the work to be done, determine materials to be used, select proper tools, and accomplish the job in accordance with appropriate methods and accepted trade practices.

Grade 8 cement finishers work from oral instructions, blueprints, work orders, and rough sketches. The supervisor checks their work only to see that it meets accepted trade standards.

Skill and Knowledge: In comparison with the Grade 6 level, Grade 8 cement finishers must have a more comprehensive knowledge of the work methods, sequences, and techniques of cement work. They must have the ability to assemble and set forms to meet precise job specifications in accordance with type and shape of structures and material. Grade 8 cement finishers must know and determine when to use reinforcement steel or wire and must be able to install and arrange reinforcement material to obtain maximum strength. They must know when cement is sufficiently vibrated to eliminate bubbles. They must have a thorough knowledge of the properties and characteristics of materials in order to determine proper mixtures and setting time.

In addition to work requirements at the Grade 6 level, they must know when to accomplish preliminary and final finishing. They must be able to finish surfaces to specified desired finish and texture by such methods as rubbing with abrasive stone or applying a smooth coat of cement mortar. They must know how to apply special friction finishes. They must have the ability to apply special cement mixtures to walls to obtain desired finish or waterproofing. They must be able to perform finishing work such as rolling curbs and shaping drainage areas.

In addition to the kinds of applications described at the Grade 6 level, Grade 8 cement finishers must be skilled in use of floats, edgers, troweling machines, abrasives, and other cement finishing tools in performing final finishing and in shaping curbs and drains to proper grade and contour. On occasions, they may be required to use a mud pump or mud jack machine to raise sunken portions of road or runway.

Responsibility: At this level, the cement finishers receive assignments from their supervisor either orally or through written work orders. In comparison with the Grade 6 level, Grade 8 cement finishers have greater responsibility in reviewing work to be done, interpreting blueprints or sketches, determining work methods and sequences needed to complete work, selecting materials, and determining from specifications what is required in regard to the type of cement and the strength of the composition. Finished work is checked only to see that it meets accepted trade standards.

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Physical Effort: The physical effort is similar to that described at the Grade 6 level.

*Working Conditions*: The working conditions are similar to those described at the <u>Grade 6 level</u>.