MAINTENANCE WORKER WG-4749-07

OPERATIONS WORKCENTER

I. POSITION AND ORGANIZATION INFORMATION

Position:

Maintenance Worker, WG-4749-07

Purpose of position:

Job is established to perform facilities maintenance work primarily involving, in the same job, TWO OR MORE of the trades which perform maintenance and repair of facilities such as buildings, structures, grounds, and related fixtures and utilities.

Organization:

Mainenance Branch

Organization goals:

The purpose of this branch is to provide emergency and scheduled maintenance and repair services.

II. MAJOR DUTIES

A. Duty (Critical):

Measures, cuts, constructs, installs, repairs, and modifies wood, composite, and wood substitutes to produce usable items such as frame structures, decking, partitions, shelving, doors, forms, siding, and scaffolds. (9%)

Tasks:

1. Applies standard measurements, specifications, and instructions to produce a serviceable product or make repairs or modifications where specific fit and accuracy are within allowable limits.

2. Operates and maintains a variety of hand and power tools and equipment such as biscuit joiners, power nailers, and cordless drills to plan, lay out, measure, cut, construct, and install materials following established safety practices.

3. Applies specific standard woodworking techniques and a knowledge of materials to prevent splitting, chipping, and splintering of materials and uses appropriate nails, screws, specialized fasteners, bonding materials, and wood, composite, or wood substitutes.

4. Follows specific instructions such as sketches, work orders, and basic blueprints to determine materials and methods to be used.

Selected Staffing KSAs:

A1, A2, A3, A4, A5, A6, A7

B. Duty (Critical):

Prepares and paints wood, metal, concrete, and masonry surfaces of interior, exterior and components of buildings and other structures using brushes, rollers, spray guns and other means of application. (9%)

Tasks:

1. Obtains supplies from warehouse, loads and unloads equipment, and covers items with drop cloths and tape.

2. Rigs ladders, scaffolding, or other like equipment.

3. Performs necessary preparatory work prior to painting (i.e., scraping, filling holes, sanding, etc.).

4. Matches colors and mixes pigments according to specific instructions from higher graded painter or in accordance with manufacturer's directions.

5. Applies paint of various types (i.e., enamels, varnish, stains, etc.) by the use of brush, roller, spray gun, or other painting equipment.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

C. Duty (Critical):

Prepares surfaces, frames, and installs drywall using spackling, drywall compound, taping and sanding. (9%)

Tasks:

1. Obtains supplies from warehouse, loads and unloads equipment, and covers items with drop cloths and tape.

2. Completes necessary preparatory work prior to drywall finishing by spackling, taping, and sanding surfaces. Ensures surfaces not subject to treatment are covered and protected from finishing materials and equipment, such as drop cloths and tape.

3. Rigs ladders, stilts, or sets up and secures scaffolding for completing drywall work.

4. Using common materials (hammer, nails, etc.), frames drywall material for installation onto standard wall areas using measurement devices and shop mathematics to calculate appropriate measurements.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

D. Duty (Critical):

Prepares, protects, and paints metal surfaces (i.e., office furniture and chain link fences) using electronic and spray devices. (9%)

Tasks:

1. Assesses corrosion damage and determines appropriate treatment to correct corrosion problems. Selects proper equipment and materials to restore damaged metal surfaces to bring area back to original depth and color.

2. Uses appropriate preparation methods to ensure proper shaping, leveling, and smoothing of surfaces prior to painting. Utilizes surface preparation techniques (such as application of anti-corrosion or anti-growth agents) that

will protect the surface and result in proper adherence of coating materials.

3. Matches colors and mixes pigments according to specific instructions from higher graded painter or in accordance with manufacturer's directions.

4. Applies paint by the use of brush, roller, spray gun, or electronic painting equipment.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

E. Duty (Critical):

Prepares floor surfaces and applies finishing materials using floor sanders, hand tools, brushes, rollers, and other standard equipment. (9%)

Tasks:

1. Performs necessary preparatory work prior to floor finishing by stripping old finish, cleaning, scraping, filling holes, and sanding. Ensures surfaces not subject to treatment are covered and protected from finishing materials and equipment, using such items as drop cloths and tape.

2. Operates floor sander to ensure surface is smooth prior to applying finishing materials.

3. Mixes stains, sealers, and wood filler materials according to guidance from higher graded Painter or strict adherence to manufacturer's instructions.

4. Applies finishing material to floor, ensuring proper coverage, color, and evenness of stain.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

F. Duty (Critical):

Marks and stripes asphalt, concrete, and similar surfaces. (9%)

Tasks:

1. Performs surface preparation work. Removes previous markings using wire brush tools, milling or grinding devices, or sandblasting techniques.

2. Removes debris, ensuring surface is clean and ready for marking materials.

3. Conditions, thins, and blends pigments and other surfacing materials, as required by standards.

4. Stripes and marks designated areas such as airfields, streets, and walkways in accordance with established standards using line marking machines, brushes, rollers, spray guns or other standard means of application.

5. Applies sealers and reflective finishes. Ensures proper adherence and finish of coating materials.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

G. **Duty (Critical):**
Using applicable technical publications, assists in the detection, treatment, and control of corrosion on aircraft, vessels, components, ordnance, equipment, or other similar metal surfaces. (9%)

Tasks:

1. Assists in detecting and identifying metal corrosion by performing tests to identify type of corrosion present. Examines metal surfaces using magnifying equipment as well as chemical and mechanical checks.

2. Removes metal corrosion with mechanical equipment such as electric and pneumatic sanders, buffers, brushes, sand blasters, vacuum cleaners, scrapers, and grinders, as well as chemical substances such as acids, caustics, solvents, and alcohols.

3. Uses chemicals such as acids and caustics for passivation and etching to protect metal surfaces from oxidation.

4. Assists in applying primers and protective surface coatings. Uses conventional paint spray equipment, electrostatic spray equipment, and brushes to apply such coatings.

5. Stores and disposes of acids, caustics, alcohols, solvents, cleaners, primers, and surface coatings used for corrosion removal, treatment, and protection in accordance with applicable directives.

Selected Staffing KSAs:
A1, A3, A6, A7, A8, A9, A10

H. **Duty (Critical):**
Maintains and controls tools and equipment. (9%)

Tasks:

1. Maintains equipment being used to ensure its proper operation and readiness for future use.

2. Promptly reports missing, lost, found, or unattended tools to the supervisor.

3. Inventories and inspects tools on a regular basis and replaces work or broken tools.

4. Signs the tool control log.

Selected Staffing KSAs:
A1, A3, A6, A7, A8, A9, A10

I. **Duty (Critical):**
Complies with safety rules and procedures. Performs work in a manner that enhances the safety of the work area. (9%)

Tasks:

1. Maintains awareness of shop safety procedures and identifies any observed unsafe practices or procedures.

2. Wears and maintains required personal safety equipment.

3. Promptly reports accidents, injuries, safety violations, or unsafe practices or procedures to supervisor.

Selected Staffing KSAs:

A10

J. Duty (Critical):

Cleans tools and equipment, and returns work area to original condition upon completion of assignment. (9%)

Tasks:

1. Cleans work area, tools, and equipment, as required.

2. At end of shift, assures all flammable materials are properly stored.

3. Puts materials away in a timely manner when returned to the shop.

Selected Staffing KSAs:

A1, A3, A6, A7, A8, A9, A10

K. Duty (Critical):

The employee repairs and replaces traps, defective faucets and flushometers, sections of defective tile or pipe, and leaky drains. Performs similar plumbing work that involves removing, cleaning, replacing, and sealing defective parts and small sections of water, sewage, and similar utility systems. Learns journey level plumbing through training, practice, and guidance by journey plumbers. (10%)

Tasks:

1. Learns to perform the full variety of journey level plumbing, including the more complex installation, troubleshooting, modification and repair of water supply, sewage disposal, gas line, fire sprinkler, irrigation systems, and similar utility systems. For example, learns to plan and lay out the routing, placement, slant, slope, fall, and proper operation of utility system and equipment.

2. Learns to locate and tap main line, place and cut route openings, place hangers and supports for proper level and slope, and determine proper parts, materials, sizes, operating characteristics of parts and equipment needed for repairs, and test such completed work for proper system operation.

3. Independently performs plumbing work that involves removing, cleaning, replacing, and sealing defective parts such as dirty traps, sections of broken pipe, faucets, and leaky drains within existing systems, using existing routes, openings, hangers, and levels. Hooks up waters heaters, disposal units and similar equipment to existing systems.

4. Applies skill in using tapes, rules, hand and power pipe threaders, cutters, pipe wrenches, angle drills, hacksaws and power saws, and acetylene or propane torches to do plumbing such as that above.

5 Assists journey level plumbers in the full range of plumbing work, and assists other trades workers to accomplish the assigned jobs.

Selected Staffing KSAs:

A1, A2, A3, A5, A6, A10, A11, A12

III. KNOWLEDGES, SKILLS AND ABILITIES (KSAs)

A. Selected Staffing KSAs:

1. Ability to do the work of the position without more than normal supervision
2. Knowledge of equipment assembly, installation, and repair
3. Ability to apply technical practices in the performance of assigned work
4. Ability to interpret instructions, specification, etc. (including blueprint reading)
5. Ability to measure and lay out materials, tools, steps, etc., needed to perform assignments
6. Ability to use and maintain tools and equipment
7. Knowledge of the materials needed to complete assignments
8. Knowledge of construction and structural practices
9. Ability to interpret instructions, specifications, etc. (other than blueprints)
10. Ability to demonstrate dexterity and safe work practices
11. Ability to troubleshoot problems
12. Ability to work as a member of a team

B. Basic Training Competencies:

1. Ability to do the work of the position without more than normal supervision
2. Knowledge of equipment assembly, installation, and repair
3. Ability to apply technical practices in the performance of assigned work
4. Ability to interpret instructions, specification, etc. (including blueprint reading)
5. Ability to measure and lay out materials, tools, steps, etc., needed to perform assignments
6. Ability to use and maintain tools and equipment
7. Knowledge of the materials needed to complete assignments
8. Knowledge of construction and structural practices
9. Ability to interpret instructions, specifications, etc. (other than blueprints)
10. Ability to demonstrate dexterity and safe work practices
11. Ability to troubleshoot problems
12. Ability to work as a member of a team

IV. CLASSIFICATION FACTORS

Factor 1. Knowledge

1. - Skill in applying a knowledge of woodworking techniques to prevent splitting, chipping, and splintering of materials and to produce products for which finished appearance is not critical.

2. - Applies a basic knowledge of material strengths and applications to construct, install, repair, or modify items such as frame structures, decking, partitions, shelving, doors, forms, siding, and scaffolds.

3. - Skill to operate and maintain hand and power tools and equipment such as hammers, hand saws, drills, routers, power saws, power sanders, and planes to produce a serviceable product.

4. - Skill in applying a knowledge of basic shop mathematics to plan, lay out, measure, cut, construct, and install materials according to dimensional requirements and specifications where fit and accuracy are within specified tolerances.

5. - Skill in working from sketches, work orders, basic blueprints, and instructions to accomplish carpentry work.

6. - Knowledge of safety procedures.

7. - Ability to read and follow specific directions that explain how to apply and use prepared solvents, and how to thin and stir surface finishing materials.

- Skill in the use of standard painting tools and equipment such as brushes, rollers, spray guns, scrapers, wire brushes, heat guns, putty knives, sandpaper, or paint conditioners.

- Knowledge of standard surface finishing methods and techniques. Ability to apply materials so that the surfaces are free from skips, runs, drips, orange peel, and flecking.

- Skill to brush out, roll on, and spray coat materials, as well as the skill to apply other related methods and techniques (cutting-in and dip and overflow methods, magnetic applications, bake-on, or sponge techniques).

8. - Ability to learn to competently and productively perform the full range of journey level plumbing duties in addition to the knowledges and skills below.

- Practical knowledge of plumbing principles including a general knowledge of flow, drainage, slant, slope and sanitation.

- Knowledge of the design, materials, and operating characteristics of parts and equipment within small portions of water supply, sewage disposal, and similar utility systems; for example, traps, sections of pipe, drains, faucets, union joints and similar items.

- Skill in troubleshooting, installing and making repairs to small parts and equipment within portions of water and sewage systems, including skills such as those described in the remainder of this paragraph. Skill in measuring, cutting, bending and threading pipe to replace sections by following existing routes, hangers, and levels without change. Skill in joining and sealing plastic pipe, metal pipe, tile pipe, faucets, shower drains and similar items. Skill in removing, cleaning, and replacing joints and fixtures such as traps, faucets, and unions. Skill in hooking up water heaters, disposal units, and similar equipment to existing systems.

- Skill in using special tools such as acetylene and propane torches, leak detectors, plumb bob, various gauges and meters, and various drain cleaning devices.

- Skill in reading, interpreting, and applying building plans, sketches, blueprints, and technical manuals.

9. - Ability to work as a member of a team to assist other crafts and trades personnel during work assignments.

Factor 2. Responsibility

The employee accomplishes routine work following instructions and guides such as work orders, building plans, codes, shop sketches, blueprints and oral or written assignment instructions. Selects tools, methods, and techniques to use on routine work and completes and tests such work with little review during progress. Completed work assignments may be randomly checked for compliance with trade standards and instructions, or evaluated on the basis of timeliness and customer satisfaction. In addition, the plumber learns and performs more complex, journey level work under initially close guidance, but receives progressively less supervision as the work is learned and mastery is demonstrated.

Factor 3. Physical Effort

The employee lifts, carries, and handles equipment up to 40 pounds unassisted and over 40 pounds with assistance. Works from ladders, scaffolding platforms, cramped areas, or confined spaces where equipment, parts, or tools are hard to reach. Work requires frequent stooping, stretching, bending, kneeling, and working in tiring, uncomfortable positions for long periods.

Factor 4. Working Conditions

The employee works indoors and outdoors, on elevated structures, and in cramped areas or confined spaces. Conditions are often dirty, dusty, greasy, hot, wet, or cold. Exposed to blood-born pathogens. Subject to discomfort from face masks or other protective devices when these is a possibility of exposure to noxious gases, fumes, or acids. Subject to possible burns, cuts, and injury from falls. May be required to wear safety equipment, such as safety shoes, glasses, gloves, and hard hats and other personal protective equipment.

V. CLASSIFICATION SUMMARY

In this position:

Duty A. 9% WG-4607-07 Carpentry Worker
Intermediate and Journey Level

Duty B. 9% WG-4102-07 Painting Worker
Facility/Civil Engineering

Duty C. 9% WG-4102-07 Painting Worker
Drywall

Duty D. 9% WG-4102-07 Painting Worker
Magnetic

Duty E. 9% WG-4102-07 Painting Worker
Floors

Duty F. 9% WG-4102-07 Painting Worker
Roads and Airfields

Duty G. 9% WG-4102-07 Painting Worker
Corrosion Control

Duty H. 9% WG-4102-07 Painting Worker
Tools/Equipment Controls and Maintenance

Duty I. 9% WG-4102-07 Painting Worker
Safety Procedures

Duty J. 9% WG-4102-07 Painting Worker
Work Area and Equipment Cleanliness

Duty K. 10% WG-4206-07 Plumber
Worker/Intermediate Level

The classification criteria for the Plumber occupational menu is based on the OPM Job Grading Standards for Plumber, WG-4206 (TS-6; March 1969), Trades Helper Jobs (TS-3; November 1968), and Intermediate Jobs (TS-3; November 1968).

The classification criteria are based on the OPM Job Grading Standard for Painter, WG-4102 (TS-9, dated November 1969) and OPM Job Grading Standard for Trades Helper (TS-3, November 1968).

Classification criteria for positions in this menu are located in OPM Federal Wage System Job Grading Standard, Carpenter 4607, (TS-61) April 1991; Job Grading Standard for Trades Helper Jobs, (TS-3) November 1968; and Job Grading Standard for Intermediate Jobs, (TS-3) November 1968.

The job titling, coding, and grading information in this menu are based on the US Job Grading Standard for Maintenance Mechanic, 4749, May 1974 (TS-30), and other information in the US OPM Job Grading System for Trades and Labor Occupations, Part I, Explanation of Job Grading System.

Grade: WG-07