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**Federal Wage System
Job Grading Standards**



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**FEDERAL WAGE SYSTEM
JOB GRADING
STANDARD
FOR
WOOD WORKING,
4604**



**Workforce Compensation
and Performance Service**



WOOD WORKING, 4604

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WORK COVERED

This standard is for use in grading nonsupervisory work involved in the construction, installation, and repair of shipping and storage containers and material handling items such as boxes, crates, skids, pallets, and storage bins made from wood or wood substitute materials. The work requires skill in using hand and power tools and machines to measure, cut, install, and fasten wood and wood substitute materials, and the knowledge and ability to follow, select, or adapt patterns, templates, and procedures to make, install, and repair wood and wood substitute items.

This standard cancels and supersedes the Job Grading Standard for Wood Worker, 4604, issued in June 1972.

WORK NOT COVERED

This standard does not cover work that primarily involves:

- Constructing, installing, repairing, and modifying wood and wood substitute structures and items and related carpentry work. (See [Job Grading Standard for Carpentry, 4607.](#))
- Making and repairing high grade wood and wood substitute items such as fine cabinetry, furniture, and other items requiring shaping and contouring of surfaces, precise and intricate joining, and decorative features. (See [Job Grading Standard for Wood Crafting, 4605.](#))
- Packing and repacking various loose and packaged materials, equipment, parts, etc., in various types of containers and affixing labels. (See [Job Grading Standard for Packing, 7002.](#))
- Blocking, bracing, staging, and securing cargo for shipment by surface or air transportation. (See [Job Grading Standards for Blocking and Bracing, 4602](#), or [Rigging, 5210.](#))
- Applying preservative materials to items for storage and shipment. (See [Job Grading Standard for Preservation Servicing, 7006.](#))
- Operating production machines involved in fabricating cardboard boxes, carton liners, and bags for packing items. (See [Carton/Bag Making Machine Operating Series, 5435.](#))

TITLES

Jobs covered by this standard are titled *Wood Worker*.

GRADE LEVELS

This standard does not describe all possible grade levels for this occupation. If jobs differ substantially from the skills, knowledge, and other work requirements described for the jobs in the standard, they may be graded above or below these grades based on the application of sound job grading methods.

4604-5**Wood Worker, Grade 5****4604-5**

General: Grade 5 wood workers make, repair, and install storage and shipping items such as boxes, small crates, pallets, dividers, and storage bins using wood, wood composites and substitutes, steel bracing, and appropriate packing materials. Work products at this level typically consist of basic rectangular shapes with construction features such as straight in-line and diagonal bracing. Grade 5 wood workers follow specific instructions and established work procedures. They use common carpentry tools such as hammers, saws, screwdrivers, and power tools such as portable circular saws, nailing machines, drill presses, and table and radial arm saws. They use carpentry squares to align corners and simple joints, such as butt-on-edge and basic end lap joints. They assist higher grade wood workers in building or repairing specialized containers for equipment or materials which typically require unique configurations and complex framing.

Skill and Knowledge: Wood workers at the grade 5 level have knowledge of a limited range of woodworking techniques and processes. They are able to make and repair items having standard shapes and sizes using guidelines, specifications, and illustrations. Wood workers at this level have skill in basic layout procedures for repetitive assignments. They have skill in the use of a variety of hand and power tools such as drills, hammers, circular saws, banding equipment, pneumatic nailers, and drill presses to cut, drill, band, and assemble work products. They have skill in using measuring devices such as tapes and folding rules to measure boards, bracing pieces, and panels accurately for maximum usage and minimal waste.

Grade 5 wood workers have skill in following basic blueprints to construct and assemble various types of shipping and storage containers and protective bracing and framing supports. They can select proper fasteners for routine work requirements such as the correct size and type of nails, bolts, and metal braces. Workers at this level are able to use a variety of basic assembly and fastening procedures to measure, cut, nail, staple, band, screw, bolt, and join wood framing boards, panes, sheets, and parts used in making and repairing containers.

Wood workers at the grade 5 level apply skill and knowledge of basic woodworking techniques to measure, cut, connect, square, and fasten wooden parts, attach metal hardware, align corners and simple joints, and cut wood and composite material to specified lengths and widths. They have skill in identifying and selecting a limited variety of frequently used wood and wood substitute materials such as soft and hard woods for appropriate use in preparing frames, supports, and container panels. In some work situations, workers at this level repair and salvage storage and shipping containers.

Responsibility: Grade 5 wood workers receive specific guidance and technical instructions from a supervisor or higher grade worker in the form of plans, sketches, work orders, and oral instructions. Instructions are generally complete and deviations from established procedures require approval. Routine work assignments may be performed independently. Assignments

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typically consist of repetitive and routine work sequences involving preparing, constructing, and assembling standard containers, material handling devices, and assemblies requiring limited measuring, cutting, and joining. Grade 5 wood workers follow established safety procedures and practices when using hand and power equipment. Work is spot-checked in progress and upon completion for compliance with instructions, objectives, and adherence to quality standards.

Physical Effort: Grade 5 wood workers use power and manual tools and devices that typically involve continuous physical effort and extended periods of standing, bending, and stooping while building or repairing containers and material shipping devices. They lift and carry items weighing up to 18 kilograms (40 pounds) unassisted and frequently lift and move heavier items with the assistance of other workers or with lifting devices such as floor hoists or cranes.

Working Conditions: Grade 5 wood workers work in warehouses or other enclosed areas that may be drafty, cold, or overheated. They are occasionally required to work outside for short periods of time where they are subject to prevailing weather conditions. They are subject to noise and dust from power saws, hammers, nailing machines, and related equipment. Workers at this level are exposed to the possibility of cuts, bruises and scrapes, splinters, muscle strains, and other injuries from using hand and power tools. Safety equipment and protective devices including safety glasses, ear plugs, gloves, and proper clothing are used to minimize hazards.

4604-7**Wood Worker, Grade 7****4604-7**

General: Unlike grade 5 wood workers that construct a limited variety of containers and shipping items under close guidance, grade 7 wood workers plan, construct, and repair a full range of standardized shipping and storage containers and similar items. They use specialized woodworking skills and knowledge. Grade 7 wood workers use judgment in applying plans and layouts to determine types, sizes, shapes, and measurements when fabricating a wide range of containers and shipping devices. Many of the items constructed at this level lack exact measurements or complete patterns, and require workers to plan construction details based on similar past work, or to make minor changes in plans or patterns. Grade 7 wood workers construct and encase items in standard containers. They cut and assemble wood framing, install shock mounts, and cradle or cushion fragile items such as radar housings, electronic assemblies, and gyroscopes. They construct containers with weathertight corners and seals as specified. Grade 7 wood workers use item specifications and container requirements to construct blocking and bracing required for equipment or machinery. They use metal bracing along with wood supports to secure specially sized or fragile parts such as aircraft wings and armament assemblies for shipment. They cover bracings with composite linings using various adhesives.

Skill and Knowledge: Grade 7 wood workers apply a full range of knowledge of woodworking techniques to plan, construct, and repair standardized shipping and storage containers. They have skill in measuring, developing, and laying out changes to existing container plans where specially shaped items require unconventional cradles, blocks, braces, or cushioning. They are able to make standard joints and grooves such as dado, lap, rabbet, tongue and groove, miter cuts, and doweled edge joints required for secure and weathertight containers. Grade 7 wood workers have knowledge of a wide range of packing methods and techniques to determine materials and methods required for standard container construction. They have skill in using woodworking, measuring, and layout devices. Wood workers at this level have skill in combining and modifying existing plans for conventional containers to construct irregular shaped containers. They have skill in using standard woodworking tools, both manual and power, as well as pneumatic sealers, heat sealing and vacuum equipment, nail guns, and strapping tools.

Grade 7 wood workers have a working knowledge of various types and properties of hard and soft woods and wood composite materials enabling them to select appropriate material for fabrication, modification, or repair of containers and container components such as bracing supports, yokes, and saddles. They are able to determine wood and wood composite material strengths and nail holding and splitting tendencies. They use this knowledge and a familiarity with various types and properties of fastening devices to select, cut, and construct weather tight and other containers with appropriate bracing and protective devices.

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Responsibility: Grade 7 wood workers receive general assignments from their supervisor or a higher grade worker. Assignments may be incomplete in terms of size, shape, materials to be used, and the specific procedures and techniques to be followed. They independently construct containers with appropriate bracing and sealing components. They use judgment in selecting materials and procedures, and adapting plans to special requirements. Grade 7 wood workers plan work sequences, lay out work, select appropriate tools and materials, and complete assignments with limited supervision. They may provide technical guidance to lower level workers on basic projects. They receive technical guidance through item specifications, illustrations, and blueprints. Grade 7 wood workers are responsible for following established safety procedures. Work at this level is subject to spot-checking while in progress and upon completion for compliance with requirements and quality standards.

Physical Effort: Physical effort required at this level is the same as that described at [grade 5](#).

Working Conditions: Working conditions at this level are the same as those described at [grade 5](#).

4604-8**Wood Worker, Grade 8****4604-8**

General: By comparison with grade 7 wood workers, who primarily construct and repair a wide range of general use containers, grade 8 wood workers plan and construct custom shipping and storage containers for items of irregular size and shape. Containers constructed at this level typically involve complex construction problems and bracing requirements for large and unbalanced equipment, sensitive electronic equipment, delicate instruments, and heavy items such as industrial equipment. They use shop plans, blueprints, and item specifications to develop bracing points based on weight of the item or equipment, gravity center, and method of shipment to prevent shifting or damage in transit or storage. Wood workers at this level may prepare containers with appropriate bracing for shipment of hazardous materials such as flammables, caustics, and corrosives.

Grade 8 wood workers prepare and construct the full range of standard and nonstandard containers with complex bracing to ship or store assemblies for items such as aircraft wings, radar antennas, and turbine engines. They construct small and specialized containers for delicate instruments and other such items. They construct, lay out, and repair a variety of specialized and custom wood and wood substitute containers. In some work situations, they may lay out and cut plastic and related materials using woodworking tools and equipment.

Skill and knowledge: Grade 8 wood workers have a thorough knowledge of woodworking techniques to improvise or modify construction plans and patterns to construct custom containers and storage devices from wood and wood substitute materials. They have skill in making nonstandard containers that incorporate several irregular shapes, sizes, and features. Grade 8 wood workers have skill in operating woodworking machines to make more varied and complex construction features than described at the grade 7 level. They are able to machine open, blind, stub mortise and tenon, box, half-lap, cross-lap joints, and other joints of similar complexity. They have skill to make triangular, beveled, circular, and other odd-shaped components for containers on a regular basis. Grade 8 wood workers have a thorough knowledge of the characteristics of hard and soft woods and wood substitutes used in container construction and repair. They are able to determine the type and extent of construction or repair necessary to modify and restore standard and nonstandard containers.

Grade 8 wood workers are skilled in modifying construction plans and developing rough sketches for use in revising standardized container plans for unconventional items or equipment. They are skilled in bracing and structural alterations for specialized containers. Workers at this level have skill in determining the weight supports of large, heavy, unbalanced, and irregularly shaped items to make and place supports to prevent such items from shifting during transit or storage.

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Responsibility: Grade 8 wood workers receive assignments orally or through work orders from their supervisor. Grade 8 wood workers work independently. They make technical judgments based on their knowledge of specialized woodworking techniques within the framework of accepted practices and general instructions. At the grade 8 level, wood workers determine or recommend the extent of repairs required and construction alterations necessary to modify or rework containers. Work is spot-checked upon completion by a supervisor for quality of work and compliance with specifications. Grade 8 wood workers may provide technical guidance to lower level workers in the operation of power equipment and in the construction of specialized and standard containers and storage items.

Physical Effort: Physical effort required at this level is the same as that described at [grade 5](#).

Working Conditions: Working conditions at this level are the same as those described at [grade 5](#).