



Bock Consulting

Job Analysis

Job Title	<u>Carpenter and Pile Buck MM)</u>	Worker	_____
DOT Number	<u>860.381-022</u>	Claim Number	_____
Employer	<u>Port of Seattle</u>	Employer Phone #	<u>(206) 787-3000</u>
Employer Contact	<u>Kathleen Moriarty</u>	Date of Analysis	<u>6/21/11; 9/23/17</u>

Job of Injury
 Transferable Skills Job
 New Job
 40 Hours Per Week
 5 Days Per Week

Job Description, Essential Functions, Tasks and Skills:



The Port of Seattle is a municipal corporation created on September 5, 1911 by the voters of King County. The Port of Seattle is divided into operating divisions, plus other departments that support the divisions and the broad mission of the Port: 1) Aviation Division, 2) Maritime Division, and 3) Economic Development Division.

The Maritime Division owns and operates approximately 1,200 acres of moorage, cargo-related, and cruise ship facilities. The Maritime Division employs a maintenance staff, which is responsible for general facility upkeep, pier and moorage system repairs, and utility maintenance.

This job analysis is for Carpenters and Pile Bucks working for Marine Maintenance. Carpenters and Pile Bucks provide services to all of the various business groups within the Seaport Division.

Essential Functions:

In general, Carpenters and Pile Bucks complete a wide variety of tasks, from dock construction to detailed interior trim work. Carpenters may work in the shop (located at 25 S. Horton St. in Seattle), or may work in the field at one of the Port's Seaport properties. Pile Bucks may be assigned tasks to assist with repairing and maintaining pilings (made of wood, concrete or steel) used as support for docks, retaining walls, bulkheads, and foundations of structures. Carpenter and Pile Buck work may be performed on the land, various piers, or from a boat.



Tasks assigned to Carpenters and Pile Bucks:

- Obtain, read and review work orders, plans, and requests to understand the piling construction/repair/maintenance projects

11410 NE 124th Street #213, Kirkland, WA 98034

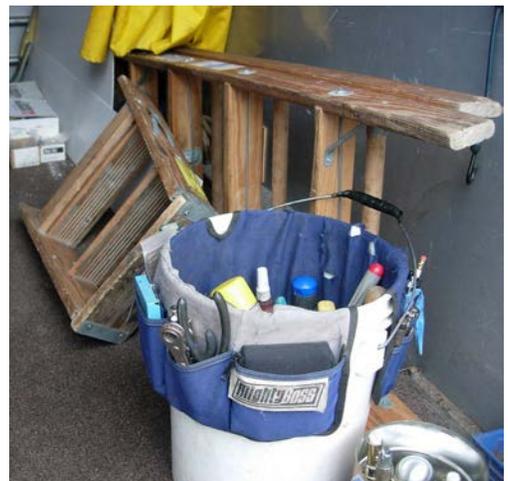
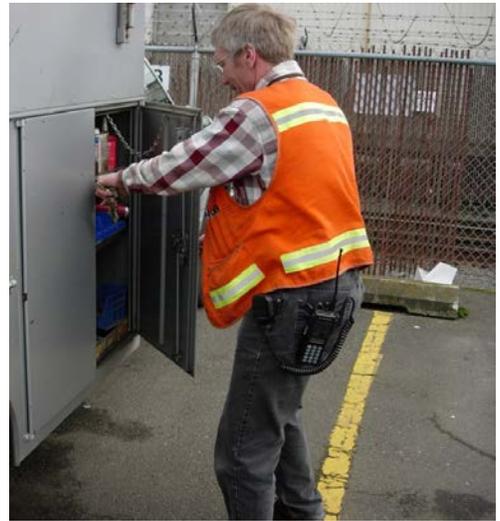
Telephone: 425-823-7115 • Fax: 425-823-7125

www.bockconsulting.com



***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
DOT #860.381-022***

- Request parts, supplies and or materials needed for projects.
- Prepare and or review site specific safety plan for each project. Review job plan. Ensure work is performed in a safe manner
- Completing tenant improvements for property lessees. Framing and installing panels of drywall.
- Building cabinets. Adjusting doors. Installing windows in doors.
- Fabricating, installing, or repairing fixtures.
- Re-keying locks on Port property. Maintaining a record of locks and keys.
- Installing drop-ceiling tiles.
- Constructing and removing concrete forms.
- Installing bollards/cleats on docks to tie up vessels ranging from cruise ships to kayaks.
- Constructing docks and piers on pilings. [Note: Carpenters do not do drive piles unless they have obtained the training necessary to be a Pile-Buck.]
- Patching flooring surfaces.
- Assembling/constructing platforms, decking, walkways, and other supporting structures to protect workers and structures in and around project sites.
- Demolishing items/structures when no longer needed.
- Positioning, repairing, and maintaining pilings.
- Inspecting pilings, retaining walls, bulkheads, and foundations of structures, to identify the cause of problems or defects and potential maintenance issues.
- They also may operate and maintain air compressors, pumps, and other power equipment at construction sites.
- Completing annual inspections of Port properties. Taking digital pictures and preparing preventative maintenance (“PM”) reports.
- Operating or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, or water craft to complete required construction and repairs.
- Work with outside vendors as needed to complete inspections.
- Enter time by work order on a daily basis into job tracking system (Maximo).
- Enter description of work completed in a work log.
- Send and respond to electronic mails.





***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
DOT #860.381-022***

- Meet/connect with Crew Chief on a daily basis.
- Attend periodic meetings during which training is provided and important safety issues are discussed.
- Assist other crafts as requested.
- Potentially supervise apprentices or mentor students.
- Complete all required forms and documents.



Necessary skills and abilities may include:

- Identifying the best methods to correctly complete the assigned task. Having the skills to complete the assigned tasks, and ability to read blueprints or sketches.
- Measuring boards, timbers, plywood, or drywall panels using square or measuring tape, and marking cutting lines on materials.
- Using hand and power tools to perform assigned tasks.
- Using nails and screws to fasten materials.
- Driving forklift to move or place materials in work truck.
- Having the physical abilities to perform all of the tasks assigned to a Carpenter and Pile Buck.
- Being able to follow directions closely and being detailed.
- Being able to work independently, but also within a team environment.
- Being able to work in any kind of weather, including working from a boat or float.
- Working knowledge of Windows-based computers and related accessories. Working knowledge of time tracking software, keyboarding and data input skills, and knowledge of electronic mail software

Machinery, Tools, Equipment, Personal Protective Equipment:

- Hand tools and power tools, including hammers, drills, circular saws, reciprocating saws, roto-hammers, nail guns, sanders, wrenches, squares and levels, chisels, hand saws, tape measures, utility knives, and routers.
- Tool boxes or tool buckets. Work/tool belts.
- Nails, screws, and other hardware. Containers holding fasteners.
- Table saw. Chop saw. Chain saw. Drill press. Planer.
- Burke bars. Pry bars.
- Portable generators.
- Air compressors.
- Work trucks with storage boxes and hoists.
- Scissor lifts and boom lifts. Forklifts.
- Work skiffs/boats (14 and 16 foot boats) with outboard engines (larger boat has center console steering). Floating platforms (ranging from 4'x8' to 8'x16' on Styrofoam billets/floats).





***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
DOT #860.381-022***

- 2-way radios. Cell phone/digital device.
- Nylon straps and ropes.
- Oxyacetylene torch.
- Concrete core drilling machines.
- Computers and related items/accessories.
- Job boxes. Wheeled carts.
- Computer, computer accessories, and project management software (Maximo).



Approved safety boots are required at all times. Workers are required to wear safety vests any time they are outside the main shop. Eye and ear protection, hard hats, and respirators are worn as needed. Carpenters may also wear gloves, kneepads, chainsaw chaps, fall arrest harnesses, and rain gear.

When working within 6 feet of an edge of the water, Carpenters and Pile Bucks must wear personal floatation devices (“PFDs”).

Education / Training:

Carpenters and Pile Bucks are represented by either the Carpenters’ or Pile Drivers’ unions. Union workers are divided into two categories: 1) Apprentices, and 2) Journeymen. Initial experience would be gained through an apprenticeship program, after which workers become Journeymen Carpenters and Pile Bucks.

The Carpenter apprenticeship program is a State approved program that is a cooperative effort of labor (The United Brotherhood of Carpenters), business, and the State of Washington. The program was designed to establish competency-based training, supplemented with on-the-job training, which would provide all of the skills necessary to become a journey level carpenter. The apprenticeship program combines a hands-on and classroom education, along with practical on-the-job experience. The program is designed to be completed in four years, but can be completed in less. The program requires that an apprentice come to school four times a year for one full week to receive formal instruction.

All Port of Seattle employees must have training and or enough hands-on experience with computers to have a working knowledge of Windows-based computers, related accessories, time tracking software, keyboarding, data entry, and electronic mail software.

A Boater’s Education Card is required for all employees who perform work while in a boat or standing on a work float.

Per the Dictionary of Occupational Titles (DOT): 860.381-022 Carpenter

Specific Vocational Preparation (SVP): 7 (From two to four years)



***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
 DOT #860.381-022***

COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS

Frequency Definitions:		
<p>Continuously = Occurs 66-100% of the time. Occasionally = Occurs 1-33% of the time Frequently = Occurs 33-66% of the time. Rarely = May occur less than 1% of the time. Never = Does not ever occur.</p>		
Comprehension		
	Articulating and comprehending information in conversations.	Continuously
	Reading, comprehending, and using written materials.	Occasionally
	Understanding and solving problems involving math and using the results.	Occasionally
	Using technology/instruments/tools & information systems.	Continuously
	Working with two and three dimensional formats.	Frequently
Remembering		
	Remembering spoken instructions.	Continuously
	Remembering written instructions.	Frequently
	Remembering visual information.	Continuously
	Recalling information incidental to task at hand.	Continuously
	Memorizing facts or sequences.	Frequently
	Remembering simple instructions.	Continuously
	Remembering detailed instructions.	Continuously
Learning & Processing		
	Effectively learning and mastering information from classroom training.	Occasionally
	Effectively learning and mastering information from on-the-job training.	Continuously
	Learning from past directions, observations, and/or mistakes.	Continuously
	Using common sense in routine decision making.	Continuously
	Recognizing and anticipating potential hazards and taking precautions.	Continuously
	Thinking critically and making sound decisions.	Continuously
	Integrating ideas and data for complex decisions.	Occasionally
	Determining and following precise sequences.	Frequently
	Coordinating and compiling data and information.	Occasionally
	Analyzing, synthesizing data and information.	Occasionally
Tasking and Planning		
	Performing repetitive or short-cycle work.	Frequently
	Working under specific instructions.	Frequently
	Completing complex tasks.	Occasionally
	Directing, controlling, or planning for others as necessary for basic tasks.	Occasionally
	Directing, controlling, or planning for others as necessary for complex tasks.	Rarely
	Multi-tasking.	Frequently
	Planning, prioritizing, and structuring daily activities.	Continuously



***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
 DOT #860.381-022***

Use Appropriate Behavior for Professional Work Environment	
Receiving criticism and accepting limits appropriately.	Frequently
Maintaining emotional control and organization under increased stress.	Continuously
Maintaining socially appropriate affect, temperament, and behavior.	Continuously
Monitoring own quality of performance and altering behaviors to correct mistakes or improve outcome.	Continuously
Working independently and/or unsupervised.	Continuously
Adapting to frequent interruptions, changes in priorities, or changes in work location.	Frequently
Responding effectively to emergency situations.	Rarely

Frequency Designations: Required Beneficial Not Necessary	
Maintaining Attendance and An Assigned Work Schedule	
Maintaining predictable and reliable attendance each work shift.	Beneficial
Being punctual.	Beneficial
Taking rest periods at set times or only at times determined by breaks in job responsibilities.	Not Necessary
Adjusting to a flexible schedule of work days and or shifts.	Beneficial



**Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
 DOT #860.381-022**

PHYSICAL DEMANDS

N/A: Not Applicable

S: Seldom (1-10% of the time)

O: Occasional (10-30% of the time)

STRENGTH: Sedentary Light

F: Frequent (30%-70% of the time)

C: Constant (Over 70% of the time)

WNL: Within Normal Limits (talking, hearing, etc.)

Medium Heavy Very Heavy

Frequency

Comments

Sitting	S	While driving to job sites or driving a forklift.
Standing	F	Interchange with walking. Frequency will depend on assigned tasks, and whether worker is in the shop or in the field.
Walking	F	Interchange with standing. Frequency will depend on assigned tasks, and whether worker is in the shop or in the field. May be over uneven, slippery surfaces/terrain – dirt, mud, pieces of lumber, and rebar.
Lifting (up to 25 pounds)	F	Hand and portable power tools. Small to medium pieces of material. Hardware and partial/smaller boxes of fasteners. Smaller tool bags.
Lifting (25 to 60 pounds)	O	Tool box/bucket. Medium to large pieces of material (or multiple pieces of material). Whole sheets of plywood (depending on thickness, 4x8 sheets weigh 40-60 pounds). Boxes of fasteners/nails weigh 40-60 pounds. Portable air compressors weigh 60 pounds.
Lifting (60 to 100 pounds)	S	Timbers, doors, large pieces of wood, and multiple pieces of lumber. Cabinets (est. 40-80 pounds). Portable generators (est. weight of a generator unit is approx. 100 pounds). Assistance from other workers is typically available to lift heavy items. NOTE: Heavy items can generally be lifted/moved using a forklift or hoist.
Carrying (up to 25 pounds)	F	Hand and portable power tools. Small to medium pieces of material. Carrying hardware and partial/smaller boxes of fasteners. Smaller tool bags.
Carrying (25 to 60 pounds)	O	Tool box/bucket. Medium to large pieces of material (or multiple pieces of material). Whole sheets of plywood (depending on thickness, 4x8 sheets weigh 40-60 pounds). Boxes of fasteners/nails weigh 40-60 pounds. Portable air compressors weigh 60 pounds.
Carrying (60 to 100 pounds)	S	Timbers, doors, large pieces of wood, and multiple pieces of lumber. Cabinets (est. 40-80 pounds). Portable generators (est. weight of a generator unit is approx. 100 pounds). Assistance from other workers is typically available to lift heavy items. NOTE: Heavy items can generally be lifted/moved using a forklift or hoist.
Pushing/Pulling (Up to 15 pounds of force).	F	Hammering, holding wood in place to nail, pulling nails with a claw hammer or nail bar, pushing a moving wheeled cart loaded with material, and opening and closing shop drawers.
Pushing/Pulling (15 to 50 pounds of force).	S	Hammering, pulling nails with a claw hammer or nail bar, initial push of wheeled cart loaded with material, using Burk bar to separate items, and pushing/pulling forms into place.
Climbing Stairs/Ladders	O	Workers may encounter stairs when working in the field. Carpenters climb ladders when necessary (ladders can range from stepstools to 20'+ extension ladders).



**Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
 DOT #860.381-022**

Working at Heights/ Balancing	O	Frequency depends on assigned tasks. Workers climb ladders, and walk on elevated scaffolding, walkways and decking. Carpenters in Marine Maintenance are also required to work from boats, which can take a significant amount of balancing.
Bending at Waist	F	Building and installing items, placing and securing materials and fixtures, and gathering materials and supplies.
Bending Neck	C	All of the assigned tasks involve neck movement: building items, placing and securing materials, climbing ladders, constructing forms, placing supports, gathering lumber and supplies, cutting material, and entering information in a computer.
Twisting at Waist	O	While maneuvering in tight areas, gathering materials, or placing materials or fixtures to install, and cutting materials.
Crouching/Kneeling	F	Working below waist level. NOTE: Workers may wear kneepads while working.
Crawling	S	Working below waist level. NOTE: Workers may wear kneepads while working.
Stooping	O	While entering and working in, or exiting from tight areas.
Reaching (up to Shoulder Height)	F	In general, most of the assigned tasks involve reaching movements: building items, placing and securing materials, , constructing forms, placing cabinets, gathering lumber and supplies, and cutting material.
Reaching (Above Shoulder Height)	O	Gathering items stored above shoulder height, climbing ladders, working under a dock.
Driving	O	Driving work trucks and forklifts.
Foot Controls	O	Driving work trucks and forklifts, and using safety switches on boom lifts and drill press.
Repetitive Motion	O	While using hand tools (e.g., screwdrivers), hammers/nail guns, shop tools (when producing multiple units of a required item).
Handling/Grasping	C	30 % Pinch Grasp 70 % Whole Hand Grasp
Fine Finger Manipulation	F	Using measuring tape, marking tools, holding nails and other fasteners, using wrenches, pulling triggers on power tools, and entering data in a computer.
Keyboarding	S	While entering time and work performed on a daily basis, creating and responding to electronic mail.
Talking	F	Communicating with supervisors and other co-workers.
Hearing	F	Communicating with supervisors and other co-workers.
Seeing	C	Within normal limits, with or without correction.
Writing	S	While marking measurements or taking notes.
Normal Job Site Hazards	C	Carrying large and/or heavy objects, working at heights, falling objects, striking head on overhead objects, moving/mechanical equipment, slippery walkways and decking, saws and other sharp tools, fumes, dust, noise, odors, vibrations, and capsizing while working in a boat.
Expected Environmental Conditions	C	Work may be performed inside a shop environment, temperature controlled office space, or outside exposed to the weather. Worker may be exposed to loud environments, wood dust, and fumes. Carpenters may work in tight spaces (although they are not trained for working in confined spaces).



Bock Consulting

Claimant:
Claim #:
6/21/11; 9/13/17
Page 9 of 10

***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
DOT #860.381-022***

The above job analysis represents the requirements of a specific job based on personal observations, discussions with employer representatives, and/or workers. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective quantifiable data. For this reason, a "best estimate" may have been used when reporting physical demand frequencies.

Analysis was done on the job site? Yes No

Job Analysis Reviewed By:	Kathleen Moriarty and Dan Fitzgerald
---------------------------	--------------------------------------

Completed by Vocational Provider Brice York, B.A., CDMS

Date September 13, 2017 Signature of Vocational Provider 



***Job Analysis: Carpenter and Pile Buck (Marine Maintenance) – Port of Seattle
DOT #860.381-022***

FOR PHYSICIAN'S/EVALUATOR'S USE ONLY

- The injured worker can perform the physical activities described in the job analysis and can return to work on _____
- The injured worker can perform the physical activities described in the job analysis on a part-time basis for _____ hours per day. The worker can be expected to progress to regular duties in _____ weeks/months.
- The injured worker can perform the described job, but only with the modifications/ restrictions in the attached report and/or listed below. These modifications/restrictions are (check one):
 - Temporary for _____ weeks _____ months
 - Permanent
- The injured worker cannot perform the physical activities described in the job analysis based on the physical limitations in the attached report and/or listed below. These limitations are (check one):
 - Temporary for _____ weeks _____ months
 - Permanent

COMMENTS:

Date _____ Physician's/Evaluator's Signature _____

Physician's/Evaluator's Name Printed _____

PLEASE RETURN COMPLETED FORM VIA FACSIMILE TO:

Port of Seattle Employee Health & Safety Department at (206) 787-3406