

Work Processes Schedule

DRAFTER, ARCHITECTURAL (PROFESSIONAL & KINDRED)

RAPIDS: 0126N

O*NET/SOC: 17-3011.01

REVISION DATE: 12/2014

Prepare detailed drawings of architectural designs and plans for buildings and structures according to specifications provided by architect. Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following areas. Actual work time must be recorded in the Work Experience Log.

Applicable Ratings/MOS

USMC MOS 1361

USCG None

USN EA

Related Instruction

Any trade related schools/courses totaling 576 hours.

Additional Requirement

None

Total Hours: **8000**

Skill	Description	Hours
A	<p>CARE OF EQUIPMENT AND MATERIAL</p> <p>Filing of blueprints, shop drawings, catalogs. Inventory of supplies and equipment. Care of stockroom. Storage of equipment and material. Making blueprints. Perform unique safety requirements applicable to this trade. Conform to prescribed safety factors to include the proper use of and methods of handling chemicals, hand or power tools, ladders, air or hydraulic lines, or other materials to perform the task. Utilize, store, and dispose of hazardous or flammable materials in accordance with company standards and established safety procedures. Perform routine safety inspections in spaces or work areas looking for proper safety control devices such as; warning signs, high voltage locations or other electrical hazards, radiation hazards, wet floors, ear and eye protection, hot machines or rotating equipment; fall or trip hazards, flags, ropes, first aid kits, or other items. Maintain safety inspection records. Report and/or correct all safety discrepancies identified.</p>	200
B	<p>SIMPLE TRACING</p> <p>Tracing simple drawings. Use and care of material and equipment. Use and care of drafting instruments.</p>	400
C	<p>LETTERING</p> <p>Tracing. Use of lettering devices. Freehand lettering. Practical experience in various types of lettering.</p>	400
D	<p>SKETCHING</p> <p>Freehand sketching. Pictorial sketching. Orthographic sketching.</p>	600

E	<p>CONSTRUCTION DETAILING</p> <p>Roof detail drawing. Wall sections. Sheet metal detail drawing. Standard framing detail drawing. Electrical installation, heating and air conditioning. Plumbing and pipe fitting.</p>	800
F	<p>SIMPLE ARCHITECTURAL DRAWINGS</p> <p>Frame structural work. Masonry. Landscaping.</p>	800
G	<p>RESIDENTIAL DRAWINGS</p> <p>Plot plans. Basement plans. Floor plans. Elevations. Architectural renderings. Surveying.</p>	800
H	<p>COMMERCIAL AND PUBLIC STRUCTURES</p> <p>Preliminary considerations. Plot plans. Basement plans. Roof plans. Floor plans. Elevations. Foundation plans. Architectural renderings. Surveying.</p>	800
I	<p>ALTERATION WORK</p> <p>Field sketching and measuring. Structural surveying. Planning. Specification writing.</p>	400
J	<p>DETAIL WORK</p> <p>Millwork. Interior trim. Exterior trim. Steel Work.</p>	600
K	<p>SPECIFICATION WRITING</p> <p>Use of catalogs. Use of building code manuals. Use of builders manuals.</p>	600
L	<p>CHECKING</p> <p>Inspection of finished drawings. Checking for content. Checking for accuracy. Symbol checking. Checking specification. Checking shop drawings.</p>	200
M	<p>FIELD INSPECTION</p> <p>Surveying of sites under construction. Inspection of material. Inspection of completed structures. Inspection of structures in progressive stages of completion.</p>	200
	<p>CAD DRAWING</p> <p>Use computer assisted drafting (CAD) equipment and software. Operate computer-aided design (CAD) system and peripheral equipment to resize or modify architectural buildings and to generate a computer tape of the artwork for future use in building the structure. Review work orders and procedural manuals to determine critical dimensions of design. Calculate figures to convert design dimension to resizing dimensions specified for subsequent processes using conversion chart and calculator. Locate files relating to</p>	

N	<p>specified design projection data base library and load program into computer. Enter specified commands into computer using keyboards to retrieve design information from files and display design on CAD equipment display screen. Type commands on keyboard to enter resizing specifications into computer. Confer with engineering and design staff to determine design modifications and enter editing information into computer. Key in specified information using keyboard connected to on-line or off-line peripheral equipment (plotter) to produce graphic representations (hard copy) of design for review and approval by engineering and design staff. Enter specified information into computer to generate computer tape of approved design.</p>	800
O	<p>ARCHITECTURAL RENDERINGS</p> <p>Use of various media in making pictorial sketches. Use of air brush. Use of color. Drawing pictorial views in isometric, oblique, orthographic and perspective.</p>	400