

CalHR Test Item/KSAPC Linkage Sheet Carpenter I Written Examination

Examination Section #1

Carpentry Knowledge			
	CalHR's Job Analysis KSAPC Statement		Department's Job Analysis KSAPC Statement
1.	Ability to interpret and implement technical specifications (e.g., blueprints, drawings, instructions) to adhere to intended project plans and comply with applicable building regulations.	1.	
2.	Knowledge of construction process and methods used in the installation, maintenance, and repair of structures (e.g., wood and steel framing, concrete work, roofing) and fixtures to accomplish work assignments, and to provide direction/information, training, et cetera.	2.	
3.	Knowledge of carpentry process and methods used in the design and fabrication, installation, maintenance, and repair of structures and fixtures (e.g., furniture, cabinets) to accomplish work assignments, and to provide direction/information, training, et cetera.	3.	
4.	Knowledge of carpentry materials (e.g., grades, types, and uses of particular types of lumber) used in the installation, maintenance, and repair of structures and fixtures (e.g., wood and metal framework, roofing, woodworking) to accomplish work assignments and to provide direction/information, training, et cetera.	4.	

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5.	Knowledge of construction materials (e.g., piping, design mix of concrete) used in the installation, maintenance, and repair of structures and fixtures (e.g., concrete, metal framework, roofing) to accomplish work assignments and to provide direction/information, training, et cetera.	5.	
6.	Knowledge of materials used in the restoration and repair of various construction related projects.	6.	
7.	Knowledge of various roof coverings (e.g., shingles, flashings, weather proofing) and applications to repair or install roofs.	7.	
8.	Knowledge of floors (e.g., wood, concrete) and involved components and materials used to comply with building codes.	8.	
9.	Knowledge of rough framing (e.g., roof frame systems, floors, walls, ceiling) and involved components and materials used, to comply with building codes.	9.	
10.	Knowledge of State laws and regulations [e.g., California Code of Regulations, California Building Codes, Cal-Occupational Safety and Health Administration (OSHA), Cal-Environmental Protection Agency] to be in compliance.	10.	
11.	Knowledge of federal laws and regulations [e.g., Uniform Building Code (UBC), Federal Code of Regulations, Federal Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA) regulations, Americans with Disabilities Act (ADA) institutional operational procedures] to be in compliance	11.	

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12.	Knowledge of the rules and regulations (e.g., Uniform Building Codes [UBC], California Occupational Safety and Health Administration (OSHA), Safety Orders of the Division of Industrial Safety applicable to carpentry, California Code of Regulations) in order to safely and effectively complete work assignments, protect self and others in the workplace, and to provide direction/information.	12.	
13.	Knowledge of safe lifting and handling procedures when transporting building materials, tools, and other items used at project work sites to avoid injuries and comply with safe handling procedures.	13.	
14.	Ability to interpret architectural symbols, abbreviations, plans, and lines.	14.	
15.	Knowledge of raw materials, production processes, quality control, costs, and other techniques used in the construction or repair of building and structures to properly lay out a project.	15.	
16.	Knowledge of various codes (e.g., building, mechanical, electrical, plumbing) to select proper materials and have projects be in compliance.	16.	

Examination Section #2

Carpentry Tools			
	CalHR's Job Analysis KSAPC Statement		Department's Job Analysis KSAPC Statement
1.	Knowledge of the qualities, adaptability, and use of various woods and lumber grades and materials.	1.	
2.	Ability to recognize mechanical fasteners and their different uses in the construction of various projects.	2.	
3.	Knowledge of structural hardware and seismic hold downs to secure structures in compliance with building codes.	3.	
4.	Knowledge of finish hardware (e.g., locksets, door closers) and proper installation used in carpentry projects in compliance with State and federal fire codes and the Americans with Disabilities Act (ADA).	4.	
5.	Knowledge of tools (e.g., drill driver, table saws, band saw) used in the installation, maintenance, and repair of structures and fixtures (e.g., concrete, tile, wood and metal framework, roofing, woodworking) to accomplish a work assignment, and to provide direction/information, training, et cetera.	5.	
6.	Knowledge of construction equipment (e.g., forklift, scissor lifts, compressors, generator) used in the installation, maintenance, and repair of structures and fixtures to accomplish work assignments, and to provide direction/information, training, et cetera.	6.	
7.	Knowledge of machinery indicators (gauges, dials) to make sure a machine is working properly.	7.	

Carpentry Tools

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8.	Knowledge of machines used in carpentry projects, including their designs, uses, repair and maintenance.	8.	

Examination Section #3

Math and Measurement

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1.	Ability to confirm property boundary lines, location of utilities, and physical features to avoid damage and injury and to complete work within boundaries and setbacks.	1.	
2.	Ability to measure and mark for alterations (e.g., cutting, fastening) using a variety of tools (e.g., measuring tape, level).	2.	
3.	Ability to perform basic mathematical computations (e.g., addition, subtraction, multiplication, division, percentages, fractions) to evaluate specifications, determine equipment and material costs, and calculate labor, material and/or cost estimates for planned projects.	3.	