

# CALIFORNIA RESIDENTIAL MECHANICAL INSPECTOR CONTENT OUTLINE

EXAM ID: J4

- 60 multiple-choice questions
- 2-hour time limit
- Open book

<b>01. GENERAL ADMINISTRATION</b>	<b>7%</b>
<b>0101. Project Administration</b>	<b>7%</b>
Verify that project information including approved plans and specifications is provided and is adequate. Verify that required permits are issued and valid. Verify that products not detailed in the code are approved by the building official and installed according to their listing.	
<b>02. HEATING AND COOLING EQUIPMENT AND WATER HEATERS</b>	<b>29%</b>
<b>0201. Heating Equipment</b>	<b>14%</b>
Verify that the installations of mechanical equipment and appliances comply with code requirements, the manufacturer=s instructions, and listing of the equipment and have proper access, clearances, supply air, return air, and connection to ducts and plenums.	
<b>0202. Water Heaters and Boilers</b>	<b>6%</b>
Verify that the installations of water heaters and boilers comply with code requirements, the manufacturer=s instructions, and listing of the equipment and have proper access and clearances.	
<b>0203. Cooling Equipment</b>	<b>7%</b>
Verify that the installation of cooling systems and cooling units comply with code requirements, the manufacturer=s instructions, and listing of the equipment and have proper access and clearances, supply air, return air, and connection to ducts and plenums.	
<b>0204. Other Systems</b>	<b>2%</b>
Verify that special systems utilizing fuel burning equipment such as interior open-flame grills, pool and sauna heaters, hydronic heating systems and Decorative Appliances comply with code requirements, the manufacturer’s instructions, and listing of the equipment and have proper access and clearances.	

<b>03. EXHAUST SYSTEMS</b>	<b>6 %</b>
0301. <b>Exhaust Fans, and Kitchen Range Hoods</b>	<b>3%</b>
Verify that the installation of exhaust fans and range hoods comply with code requirements. Verify that proper mechanical ventilation is provided where required.	
0302. <b>Clothes Dryer Exhaust</b>	<b>3%</b>
Verify that the installation of clothes dryer exhaust ducts comply with code requirements.	
<b>04. DUCT SYSTEMS</b>	<b>8%</b>
0401. <b>Duct Construction and Installation</b>	<b>4%</b>
Verify that ducts are constructed of acceptable materials and that installation methods, including support and insulation, comply with code.	
0402. <b>Duct and Plenum Use and Application</b>	<b>4%</b>
Verify the correct use and application of ducts and plenums with the mechanical system installed. Verify sizing of the supply and return air ducts.	
<b>05. COMBUSTION AIR</b>	<b>19%</b>
0501 <b>Combustion Air</b>	<b>19%</b>
Verify proper sources of air supply for fuel burning appliances; size and location of openings. Verify that materials and installation of combustion air ducts comply with code.	
<b>06. CHIMNEYS AND VENTS</b>	<b>20%</b>
0601. <b>Venting of Fuel Burning Appliances</b>	<b>8%</b>
Verify size, type, location, clearances, connections and terminations of vents and venting systems.	
0602. <b>Chimney and Vent Connectors</b>	<b>6%</b>
Verify size, type, location, and clearances of chimney and vent connectors for compliance with code.	
0603. <b>Factory-Built Chimneys and fireplaces</b>	<b>3%</b>
Verify clearances, bracing, listing and labeling of the installation of factory-built chimneys and connectors.	

0604. <b>Masonry Chimneys and Fireplaces</b>	<b>3%</b>
Verify proper construction of fireplace and chimney components.	
<b>07. FUEL SUPPLY SYSTEMS</b>	<b>11%</b>
0701. <b>Fuel Supply Installation and Sizing</b>	<b>6%</b>
Verify that gas piping systems are installed with proper materials, with proper supports and sized properly. Verify that fuel gas piping is tested for tightness.	
0702. <b>Fuel System Connections</b>	<b>4%</b>
Verify that fittings, valves, connections, and that transition of materials are in compliance with code.	
0703. <b>Oil Piping and Storage</b>	<b>1%</b>
Verify that the oil piping and storage are installed with proper materials, with proper supports and that it is sized properly. Verify that fuel supply system is properly sized.	