

# Water Heater Alterations Individual Dwelling Units



2016 Title 24 Building Energy Efficiency Standards

Natural Gas Connected to the Building?	What type of water heater can I install prescriptively?	What type of water heater can I install using the performance method?
<b>YES</b>	<b>Natural gas</b> - tank or tankless § 150.2(b)1Giia	Any water heater that uses less energy than the standard design system (natural gas - tankless)  Compliance software must be used  This method can only be used for projects that use tradeoffs between two or more altered components  § 150.2(b)2
	<b>Propane</b> - tank or tankless § 150.2(b)1Giia	
	<b>Heat pump</b> (must meet UEF on back) § 150.2(b)1Giid	
	<b>Heat pump</b> - NEEA Tier 3* § 150.2(b)1Giid	
<b>NO</b>	<b>Electric</b> - tank (60 gallon or less) or tankless § 150.2(b)1Giib	§ 150.2(b)2
	<b>Heat pump</b> (does not need to meet the UEFs on back) § 150.2(b)1Giib	
	<b>Propane</b> - tank or tankless § 150.2(b)1Giia	
All accessible and newly installed hot water piping must be insulated § 150.2(b)2Gi		

UEFs for Heat Pump Water Heaters			
Climate Zone	Minimum UEF	Climate Zone	Minimum UEF
<b>1</b>	2.82	<b>9</b>	2.47
<b>2</b>	2.82	<b>10</b>	2.47
<b>3</b>	2.82	<b>11</b>	2.61
<b>4</b>	2.87	<b>12</b>	2.87
<b>5</b>	2.82	<b>13</b>	2.61
<b>6</b>	2.47	<b>14</b>	2.61
<b>7</b>	2.61	<b>15</b>	2.47
<b>8</b>	2.47	<b>16</b>	≥ 3, plus a solar water heating system with solar saving fraction ≥ 0.4

NEEA  
Northwestern Energy Efficiency Alliance

UEF  
Uniform Energy Factor

\* Climate zone 16 must also install a solar water heating system with solar saving fraction ≥ 0.4

Have questions? Contact the Energy Standards Hotline at:  
(800) 772-3300 (inside California) (916) 654-5106 (outside California) title24@energy.ca.gov

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CALIFORNIA ENERGY COMMISSION | EFFICIENCY DIVISION

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