



## Residential Electric Meter Installation

<p>1. Service Head</p> <p>SDG&amp;E 2017 Service Standards &amp; Guide &amp; CEC</p>	<p>Service head sized in accordance with riser size. Conductors passing over the overhang only may be a minimum of 12 inches above the overhang. Conductors passing over the roof must be 3 feet above the roof surface if the roof is 4 in 12 pitch or greater. 8 foot clearance is required for roof pitch of under 4 in 12. 10 foot clearance is required at decks, balconies and 12 foot above grade.</p>
<p>2. Flashing</p>	<p>Flashing must be installed on all roof penetrations</p>
<p>3. Riser and riser attachment to building. SG 105.1, 105.2</p>	<p>1-1/4 inch max. 30" above roof.        1-1/2 inch max. 40" above roof.</p> <p>Riser must be securely supported at the plate and immediately above the meter socket. 3/8"x 3"lag or 1/4" toggle bolts.</p>
<p>4. Service Entrance Conductors. Overhead &amp; Underground installations shown.</p> <p>CEC 310.106(A)</p>	<p>For overhead service drops min. 12 foot clearance above grade level is required. Required size of Service Entrance Conductors (and recommended size for neutral):</p> <ul style="list-style-type: none"> <li>#4 copper for 100 Amp service.</li> <li>#1 copper for 150 Amp service.</li> <li>2/0 copper for 200 Amp service.</li> </ul> <p>Required Size of Neutral Conductor:</p> <ul style="list-style-type: none"> <li>#8 for Service entrance size #2 or smaller</li> <li>#6 for Service entrance size up to 1/0</li> <li>#4 for Service entrance size up to 3/0</li> </ul>
<p>5. Neutral Bus bar</p>	<p>Neutral bus bar must be grounded to the service panel. Neutral service entrance conductor, neutral circuit conductors, grounding electrode conductor, and ground conductors must be attached to the neutral bus bar.</p>
<p>6. Circuit Conductors CEC 210.24</p>	<p>Circuit shall have hot conductor protected by circuit breaker sized as follows:</p> <ul style="list-style-type: none"> <li>#14 cu conductor – 15 Amp Breaker</li> <li>#12 cu conductor – 20 Amp Breaker</li> <li>#10 cu conductor – 30 Amp Breaker</li> <li># 8 cu conductor – 40 Amp Breaker</li> </ul> <p>If terminating in the main service panel both the neutral and ground conductor shall attach to the neutral bus bar. If terminating in a sub-panel the neutral and ground shall terminate at separate neutral and ground bus bars.</p>
<p>7. Main Disconnect</p>	<p>A main disconnect is required for more than 6 breakers</p>
<p>8. Grounding Electrode &amp; electrode Conductor</p> <p>See 250.52 250.66</p>	<p>Electrode shall be a concrete encased electrode (ufer) , or 2 driven copper ground rods 5/8 diameter by 8 foot long.* Electrode conductor must be the same size as the required neutral conductor size. Electrode conductors smaller than #6 or where subject to physical damage must be protected by conduit. When metal conduit is used it shall be bonded to the electrode at the bottom and to the service panel at the top. The electrode shall terminate at the neutral bus bar.</p>
<p>9. Water Pipe Bond</p>	<p>A water pipe bond wire must be provided and sized as a grounding electrode conductor. The bond wire shall terminate at the neutral bus.</p>

