



**City of Laguna Niguel  
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# **ELECTRIC METER PANEL REPLACEMENTS**

# **128**

## **ELECTRIC METER PANEL REPLACEMENTS**

### **PLEASE NOTE, THE NEW CALIFORNIA CODES ARE IN EFFECT**

Replacement or upgrades of a residential Meter panel typically consist of changing from a 100 amp to a 200-amp panel. Contact the SDG&E or SCE service planner for their requirements and to set up the job coordination. Generally, the utility will disconnect in the morning and re-connect the same afternoon provided the panel passes preliminary panel inspection. After inspection the city will release the meter to the utility company. Call in your inspection request the day before your scheduled date from the utility.

The new panel must be installed per the 2025 CEC (2025 NEC) and be listed for outdoor use if installed on the exterior. Changes in location must be approved by the utility company and working clearances shall be provided. If replacement of the underground service conduit is required, this conduit is inspected by the utility company. New service or re-construction in excess of 50% require an under-ground service. Laguna Niguel is served by two electric utilities – Southern California Electric and San Diego Gas & Electric.

***A COPY OF THE SDG&E OR SCE SERVICE ORDER IS REQUIRED PRIOR TO PERMIT ISSUANCE***

### **MINIMUM REQUIREMENTS**

- Electrical Permit required and Inspection card posted on site.
- Electric meter panel secured to framing member
- Dead front installed, secure, and all circuits labeled on inside cover
- Proper phasing for multi-conductor Romex. (Red & Black conductors to separate legs)
- 240 v circuit breaker handles and DW / GD circuit breaker handles tied together with listed handle tie.
- Interior of panel for multi-conductors landed.
- Single wire to each breaker (no double wires allowed)
- Neutrals and grounds to be landed and a single lug per wire per panel listing
- Proper wire size. See wire size schedule
- Minimize splices in panel box enclosures
- Anti-oxidant on all aluminum conductors and proper splice nuts for al/cu connections (purple)
- Clear working space of 36" required in front and 30" in width
- No open knockouts. Plug empty holes
- Spare or future circuits not landed to a circuit breaker shall be capped(wire nut) and space must be available on the bus bar for the future breaker/s
- Grounding conductor to be sized according to panel data plate rating
- Run grounding electrode through a knock out with a clamped connector. Not the 5/16" drain hole.
- Ground bonds to include Water pipe & Gas pipe
- Ufer ground or ground rod clamp secure and accessible. Exposed rod clamps to be acorn type.
- Grounding conductor exposed on the outside of the building to be shielded
- Meter height 4' 6" minimum – 6' 3" maximum from finish grade
- Non metallic cable (Romex) to be clamped and/or stapled and proper guard strips (nail plates)
- J boxes and LB boxes to be secured and sealed
- Stucco lath repair requires inspection for proper flashing and stucco wire. Minimum 4" vertical lap and 2" horizontal lap on stucco lath paper

### ***SINGLE FAMILY RESIDENTIAL CONDUCTOR / CONDUIT SIZE CHART***

Service Main Amps	Entrance Conductors Thhn / thwn	Rigid metal Conduit Mast/Riser	Grounding Electrode Conductor	Cold water/Gas bond	Grounding Electrode (Ufer)	Grounding Electrode (Ground rod)
<b>100</b>	<b>4 AWG</b>	<b>1"</b>	<b>8 AWG</b>	<b>10 AWG</b>	<b>8 AWG</b>	<b>8 AWG</b>
<b>125</b>	<b>2 AWG</b>	<b>1"</b>	<b>8 AWG</b>	<b>10 AWG</b>	<b>8 AWG</b>	<b>8 AWG</b>
<b>200</b>	<b>2/0 AWG</b>	<b>1-1/2"</b>	<b>4 AWG</b>	<b>8 AWG</b>	<b>4 AWG</b>	<b>6 AWG</b>
<b>400</b>	<b>400 KCMIL</b>	<b>2-1/2"</b>	<b>1/0 AWG</b>	<b>8 AWG</b>	<b>4 AWG</b>	<b>6 AWG</b>