



City of La Puente

Division of Building and Safety

RESIDENTIAL ELECTRICAL PANEL REQUIREMENTS

INTRODUCTION

Replacement or upgrades of a residential Meter panel typically consist of changing from a 100 amp to a 200 amp panel. Contact the Southern California Edison (800) 655-4555 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 2007 CEC (2005 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 both the utility company and the City of La Puente Building and Safety Department.

A COPY OF THE 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 complete.
- All 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 30" required
- 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 (UFER only on new construction) 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 finish grade- 6'3" max from finished 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)
100	4 AWG	1"	8 AWG	10 AWG	8 AWG	8 AWG
125	2 AWG	1"	8 AWG	10 AWG	8 AWG	8 AWG
200	2/0 AWG	1-1/2"	4 AWG	8 AWG	4 AWG	6 AWG
400	400 KCMIL	2-1/2"	1/0 AWG	8 AWG	4 AWG	6 AWG