

NEW SERVICE INSTALLATION

ELECTRICAL DETAILS

Flush or Semi-Flush Mounted

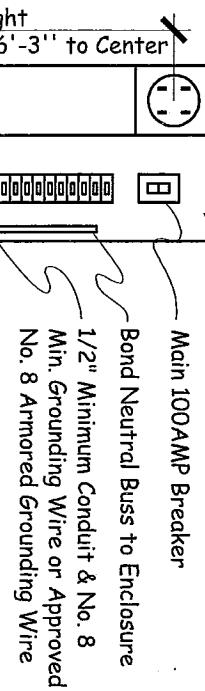
Meter and Switch

Main 100AMP Breaker

1/2" Minimum Conduit & No. 8

Min. Grounding Wire or Approved

No. 8 Armored Grounding Wire



Approved Accessible
Grounding Clamp

Cold Water Pipe bond within
5' from point of entrance

Grounding Electrode Required

in Addition to Cold Water Pipe
For Driven Ground See Note 15

Minimum Grounding Electrode

Requirements for 100 AMP Service

1/2" Rebar Rod or No. 4 AWG

Copper Wire 20' Horizontally

in Concrete Footing

For Size, Type, Depth, and
Location of Conduit and Meter
Consult Southern Cal. Edison

TYPICAL SERVICE CONVERSION FROM OVERHEAD TO UNDERGROUND

Remove

Semi-Flush Mounted
Meter and Switch

Plug in Type Meter Adapter

For Size, Type, Depth, and
Location of Conduit and Meter
Consult Southern Cal. Edison

RESIDENTIAL ELECTRICAL PANEL UPGRADE

This drawing is intended to illustrate
the requirements not the arrangement.



HELP FOR THE HOMEOWNER
CITY OF RANCHO SANTA MARGARITA

Paul Melby
Building Official
Date: 1/1/08 Sheet 1 of 2 E-1
11/23/09
Dated:

- Approved weatherproof service head, 10'-0" min. height above grade and the drip loop shall be 18" min. above roof.
- Service drop to have single point of contact to riser.
- Provide 18" of free conductor from service head for attaching to service drop.
- Clearance for service head and service drop.
Areas above one and two family residences-8'
Above areas or sidewalks accessible to pedestrians-10'
- Service heads for dwellings need not be located on the wall nearest the pole from which the service drops are to be run, but shall be so located that the service drop may be installed with only one point of attachment without crossing over adjacent premises.
Dwellings having a 100 AMP service require 1-1/4" conduit, 3-# 4 min. copper, 200 AMP requires 1-1/2" conduit, 3-2/0 copper.
- If service conduit is installed with lock nuts, install a ground bushing or device and bond to the enclosure.
- For location, height, and type of meter socket consult utility company.
- Switches, panel boards, etc., installed outdoors shall be of a type approved for outdoor installation.
- Main breaker or fusible switch required.
- Neutral bus bond to include 1/2" minimum conduit, and #8 AWG minimum grounding wire or approved #8 AWG minimum armoured grounding cable
- Approved accessible grounding clamp.
- Grounding electrode required in addition to cold water pipe.
See note 15.
- Neutral conductors must be white. Non-metallic sheathed cable with grounding conductor permitted for single family dwellings where concealed in walls.
- Where driven ground rods are used, two rods are required or a verification the system meets the 25 ohm test is required. The rods shall be separated by 6 feet.
- Minimum required branch circuits:
1-15 or 20 AMP for lights
2-20 AMP for Kitchen receptacles
1-20 AMP for Laundry receptacle
1-20 AMP for Bathroom
#2/0 or #3/0
For Larger Conductors Consult the Building Department

Size of Grounding and Bonding Wires

Largest Service
Entrance Conductor

Bonding or
Grounding
Conduit
Size

#2 or Smaller

#8 AWG

1/2"

#2/0 or #3/0

#4 AWG

1/2"

