



Replacement of Residential Main Electrical Service Requirements

Rohnert Park Municipal Code Section 15.16.010 modifies the 2019 California Electrical Code Sections 230.79(C) - Amended - One- or Two-Family Dwelling to include additional requirements for residential main electrical service replacement.

“For a one-family *or two-family* dwellings, the service disconnecting means, enclosure and bus bar rating of not less than 100 amperes, 3-wire. The service disconnecting means, enclosure and bus bar combination may be required to be upgraded with any of the following:

1. When any other permit is applied for and the existing main service enclosure was manufactured by Federal Pacific or Zinsco, including such panels that have been rebranded (Sylvania).
2. When any other permit is applied for and the enclosure contains disconnecting means on the load side of the service disconnect was manufactured by Federal Pacific or Zinsco, including such panels that have been rebranded (Sylvania).
3. When five (5) or more circuits are modified.
4. When any secondary power source is added.
5. When an addition increases the existing gross floor area by 50% or more.
6. When a remodel, alteration or repair to an existing building includes demolition, removal or repair of more than 50% of the structure (including walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, foundations or similar components). For the purpose of applying this section, the following criteria shall be considered in the 50% threshold evaluation:
 - a. The removal or demolition of more than 50% of the exterior or interior load bearing walls.
 - b. Removal of the roof structure or ceiling thereby permitting installation of new circuits.

Note: The rating requirements of the bus bar and enclosure for the service disconnecting means do not require the main service entrance conductors to be upgraded as long as the main service disconnect is rated to match the rating and sizing of the existing main service entrance conductors.

Additionally electrical equipment chosen must be listed/approved for use as “service” equipment. The installation of the new electrical service must be done by a qualified person (one who has skills and knowledge related to the construction, installation, operation and hazards of the electrical equipment). The Building Department may require that the qualified person be a licensed California electrical contractor.



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When replacing a residential electrical main service pane (MSP), there are additional considerations. Please be aware of the following requirements.

- The premises electrical system shall be grounded by one of the methods specified in California Electrical Code (CEC) 2019 edition, Article 250.52. An existing concrete encased electrode may be reused if it complies with CEC Article 250.52(A)(3) and is verifiable/accessible by Building Inspector at time of Electric Meter Release inspection.
- The installation shall include bonding of the existing water and gas piping as required by CEC Article 250.104.
- An intersystem bonding termination will be provided as per CEC Article 250.94 (A) or (B)
- It is the policy of Rohnert Park Building Department when a residential electrical service is replaced to require arc-fault circuit interrupter protection for all outlets as required by CEC Article 210.12(A) and (B).

Exception: AFCI protection shall not be required where the extension of the existing conductors is not more than 1.8 m (6 ft) and does not include any additional outlets or devices.