



Building & Safety Information Bulletin-03/07/2023

Surge Protection Requirements for Residential Dwelling Electrical Service Upgrades/Change-outs.

Please be advised of the new code section found in the 2022 California Electrical Code, section 230.67 for Surge Protection Requirements. This requirement is effective as of 01/01/2023 with the adoption of the 2022 California Codes. This is required effective immediately, and will be verified at all service panel change-out final inspections. This is also required on all new residential dwellings with permits applied after 01/01/2023.

New Requirements:

Section 230.67 (A) – Dwellings

All services supplying dwelling units shall be provided with a surge protection device (SPD).

Sensitive electronics and systems found in modern appliances, safety devices (IE: GFI outlets), smoke alarms, and other equipment in homes, apartments, and other dwellings warrant protection by surge protection devices. If compromised by surges, these systems may be damaged or fail to operate, posing economic and safety concerns. A Type 1 or Type 2 SPD must be installed at or near the service entrance panel.

Code Exception 230.67 (B): SPD is not required at service entrance panel if you install an SPD at the downstream sub-panels towards the load.

Explanation of Type 1 and Type 2 Surge Protective Devices:

- Type 1 devices are typically intended to be installed before the main breaker in the load center.
- Type 2 devices are installed after the main breaker in the load center.
- Type 1 SPDs are intended for installation between the secondary of the service transformer (utility) and the line side of the service equipment overcurrent device, as well as the load side — including watt-hour meter socket enclosures — and are intended to be installed without an external overcurrent protective device.
- Type 1 devices are dual-rated for Type 2 applications as well, providing the highest ratings available for installation at the service entrance.
- Type 2 SPDs are intended for installation on the load side of the service equipment overcurrent device, including SPDs located at the branch panel.

The diagram below shows an external SPD, but there are multiple products available to achieve compliance, including internal "circuit breaker" type SPD's.



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