



City of San Dimas

Building and Safety Division

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ILLUMINATED SIGN REQUIREMENTS

1. Permits being requested for illuminated signs must include all electrical information on the plans. An application for the electrical portion of the work must be submitted to Building and Safety and the permit must be obtained by a California Licensed Electrical Contractor.
 - a. Provide specifics of the type and size of the conduits being proposed or existing.
 - b. Provide specifics as to the type and size of wiring proposed or existing.
 - c. Provide the size of the overcurrent device for the proposed or existing sign lighting circuit.

NOTE: An illuminated sign cannot be finalized without an electrical permit for the electrical work. If the electrical is existing, clearly show the information listed above (a, b, and c) on the plans and indicate that it is existing and not a part of this scope of work.
2. Provide specific information on how the sign will be attached to the building. NOTE: The fasteners used must be appropriate for the material supporting the sign.
3. Illuminated signs are required to meet California Energy standards (2025 energy forms must be utilized and provided with the submittal)
 - a. Provide a manufacturer cut sheet for the proposed time clock that will be used. Provide the make and model number. Please note that all time clocks for outdoor sign lighting must be listed in the **Title 20 Appliance Efficiency Regulations**. They must be certified and listed in, the California Energy Commission's Appliance Efficiency Database (see <http://www.appliances.energy.ca.gov/AdvancedSearch.aspx>).
 - b. Photo control sensor is required in addition to the time switch with the exception of an astronomical time clock. The photo sensor control is to be shown on plans.
 - c. Provide completed sign lighting energy forms (2025). If multiple parties are providing separate portions of the scope of work, completed forms from all parties are required for compliance.
3. Show the location of the transformer and how it will be accessed. Please read below for additional requirements.

Sign Installation Must Comply with the following:

1. **Listing (CEC 600.3):** Electric signs and outline lighting shall be listed, provided with installation instructions, and installed in conformance with that listing.
2. **Markings (CEC 600.4):** Signs and outline lighting systems shall be marked with the manufacturer's name, trademark, or other means of identification; and input voltage and current rating.
3. **Branch Circuits (CEC 600.5):** Branch circuits that supply signs shall be considered continuous loads and shall be rated:
 - a. 30-amperes maximum for neon signs.
 - b. 20-amperes maximum for all other signs.

4. **Disconnects (CEC 600.6):** Each sign and outline lighting system shall be controlled by an externally operable switch or circuit breaker that opens all ungrounded conductors and controls no other loads.
 - a. Location: The disconnect shall be located at the point the feeder or branch circuits supplying a sign or outline lighting system enters a sign enclosure or a pole that is used to support the sign (see CEC 600.5(c) and 410.30(B)).
 - b. Within sight of the Sign: The disconnecting means shall be within sight of the sign or outline lighting system that it controls. Where the disconnecting means is out of the line of sight from any section that is able to be energized, the disconnecting means shall be lockable in accordance with CEC 110.25.
5. **Grounding (CEC 600.7):** Metal equipment of signs, outline lighting, and skeleton tubing systems shall be grounded by connection to the equipment grounding conductor of the supply branch circuit or feeder.
 - a. Bonding: Metal parts and equipment of signs and outline lighting systems shall be bonded together and to the associated transformer or power supply equipment grounding conductor for the branch circuit or feeder supplying the sign or outline lighting system.
 - b. Exception: Remote metal parts of a section sign or outline lighting system only supplied by a remote class 2 power supply shall not be required to be bonded to an equipment grounding conductor.
6. **Wet Location (CEC 600.8 (D)):** Signs and outline lighting system equipment for wet location use, other than listed watertight type, shall be weatherproof and have drain holes, as necessary, in accordance with the following:
 - a. Drain holes shall not be larger than $\frac{1}{2}$ -inch or smaller than $\frac{1}{4}$ -inch.
 - b. Every low point or isolated section of the equipment shall have at least one drain hole.
 - c. Drain holes shall be positioned such that there will be no external obstructions.
7. **Ballasts, Transformers, Electronic Power Supplies, and Class 2 Power Sources (CEC 600.21):**
 - a. Accessibility: Ballasts, transformers, electronic power supplies, and Class 2 power sources shall be located where accessible and shall be securely fastened in place.
 - b. Location: Ballasts, transformers, electronic power supplies, and Class 2 power sources shall be installed as near to the lamps or neon tubing as practicable to keep secondary conductors as short as possible.
 - c. Working Space: A working space at least 3-feet high by 3-feet wide and 3-feet deep shall be provided at each ballast, transformer, electronic power supply and Class 2 power source or at its enclosure where not installed in a sign.
 - d. Attic and Soffit Locations: Ballasts, transformers, electronic power supplies, and Class 2 power sources shall be permitted to be located in attics and soffits, provided there is an access door at least 36-inches by 22 $\frac{1}{2}$ -inches and a passageway of at least 3-feet high and 2-feet wide with a suitable permanent walkway at least 12-inches wide extending from the point of entry to each component. At least one lighting outlet containing a switch or controlled by a wall switch shall be installed in such spaces. At least one point of control shall be at the usual point of entry to these spaces. The lighting outlet shall be provided at or near the equipment requiring servicing.
8. **Sign Lighting Controls (CNC 130.3):** All outdoor sign lighting shall be controlled with a photo control in addition to an automatic time-switch control, or an astronomical time-switch control.

All Lighting Controls: Lighting controls listed in Section 110.9(b) shall comply with the requirements listed below; and all components of the system considered together as installed shall meet all applicable requirements for the application for which they are installed as required in Sections 130.0 through 130.5, Sections 140.6 through 140.8, Section 141.0 and Section 150.0(k).

- a. Time-switch lighting controls. All controls that provide time-switch functionality, including all automatic and astronomical time-switch controls, shall have program back up capabilities

that prevent the loss of the device's schedule for at least 7 days, and the device's date and time for at least 72 hours if power is interrupted. In addition:

- i. Time-switch controls installed in nonresidential building shall:
 - a. For each connected load, be capable of providing manual override to each connected load and of resuming normally scheduled operation after a manual override is initiated within 2 hours; and
 - b. Provide an automatic holiday shutoff feature that turns off all connected loads for at least 24 hours and then resumes normally scheduled operation.
- b. Astronomical time-switch controls shall:
 - i. Has sunrise and sunset prediction accuracy within plus or minus 15 minutes and time-keeping accuracy within 5 minutes per year;
 - ii. Be capable of displaying date, current time, sunrise time, sunset time and switching times for each step during programming;
 - iii. Be capable of automatically adjusting for daylight savings time; and
 - iv. Have the ability to independently offset the on and off for each channel by at least 90 minutes before and after sunrise or sunset.