



CITY OF MISSION VIEJO
COMMUNITY DEVELOPMENT DEPARTMENT
Division of Building and Safety
200 Civic Center
Mission Viejo, CA 92691
Phone: (949) 470-3054

SIGN REQUIREMENTS

Application for a sign permit shall be made to the Community Development Department of the City of Mission Viejo and shall have attached two (2) sets of fully dimensional plans drawn to scale and shall contain the following information:

- A. The address, location of the building or structure, or lot to which or upon which the sign or advertising structure is to be attached or erected.
 - B. The location of the proposed sign or advertising structure on or near the building.
 - C. Frontage of lease space.
 - D. The locations, size, and type of all existing signage presently located on the building.
 - E. Electrical information containing the following:
 1. Installation instructions for standard-channel letter signs.
 2. Location of disconnect switch.
 3. Support of transformer.
 4. Number of transformers including voltage on secondary side.
 5. Type of conduit used.
 6. Elevation, plan view and cross section of sign showing wiring methods.
 7. Voltage and amperage of sign.
 - F. Method of attachment for wall signs; foundation plan with engineering for monument signs and freestanding signs.
 - G. Indicate type of wall construction for wall mounted signs.
- All signs must be submitted for plan check. Monument signs located in the public right of way must be approved by the Traffic Engineer.
 - All signs must be listed by Underwriters Laboratories (U.L.) and shall be installed in accordance with the installation instruction and with Article 600 of the 2001 California Electrical Code.
 - A \$300.00 deposit is required at the time of permit issuance. Said deposit shall be refunded to the applicant after final inspection of the sign by the City Building Inspector prior to commencement of use of the sign. Should a permit applicant fail to notify the City prior to commencing use of the sign, the deposit shall be forfeited per City Resolution No. 89-51.
 - Access to inspect the sign is the responsibility of the contractor (i.e. ladder, lift, etc).

INSTALLATION INSTRUCTIONS FOR STANDARD-CHANNEL LETTER SIGNS

1. All components (GTO, wiring, conduit, fittings, and receptacles) must be listed by Underwriters Laboratories and be installed per the instructions provided with that component. Exception: If the component has a sign section listing mark that is marked in the sequence of the sign's sections (example: sheet metal pull box or transformer boxes.)
2. The following minimum electrical spacings must be maintained during installation:
 - a) Between primary wiring and insulated high voltage wiring.
 - b) Between insulated high voltage wiring and dead metal.
 - c) Between neon tube (if over 7500 volt circuit) and dead metal.
 - d) Between uninsulated high voltage conductors or components. (Midpoint-grounded transformer) and dead metal (ground). Low voltage circuit conductors and high voltage conductors of opposite polarity.

| <u>VOLTAGE</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> |
|-----------------------|-----------------|-----------------|-----------------|-----------------|
| 1001 to 5000 | ½ in | ½ in | None | ¾ in |
| 5001 to 10000 | ¾ in | ¾ in | ¼ in if | 1 1/8 in |
| 10001 to 15000 | 1 in | 1 in | 7500V+ | 1 ½ in |

3. The following mechanical spacings must be maintained:
 - a) Wire off bottom of sign – minimum ½ in.
 - b) Transformer off bottom of sign (outdoor installation only) minimum ½ in.
 - c) Gaps in wire ways – maximum to 1/16 in.
4. All fittings and terminations must be secured and tightened.
5. If handy boxes are used in conduit runs to take up slack in GTO wirings, they must be listed (maximum size – a standard 2" X 4") and be secured to the structure of the building or sign.
6. All covers must be replaced and secured with supplied screws.
7. All sections must be bonded to a common point (usually the transformer box.)
8. If the transformer is not secured, secure it with the enclosed bolts and nuts to the pre-drilled holes in the transformer box (s).
9. If any knockouts are added during installation, the metal thickness at the point of connection of the permanent wiring system (conduit fitting) must be minimum of .032 in thick.
10. Replace and secure all covers and faces with supplied screws, being careful not to damage the internal wiring or reduce required spacings.
11. These instructions must be followed to ensure compliance to UL48 standard and maintain the significance of the section listing marks.

12. These instructions should remain with the sign for the installer, the building authorities, and future reference.
13. Disconnect required within sight of the sign.
14. Catwalks required in attic installations.

LISTING REQUIRED

1. Every electrical sign of any type shall be listed by an approved testing laboratory and shall be installed in conformance with this listing. CEC (600-4)
2. All "can" letters and transformer housings shall have section labels that are visible after installation. CEC (600-4)

INSTALLATION

1. Signs shall be grounded in the manner specified in Article 600 of the CEC (600-7)
2. A disconnect shall be installed within sight of the sign which it controls. CEC (600-6)
3. Enclosures exposed to the weather shall be weatherproof and shall have at least 2 drain holes. CEC (600-9)
4. A listed terminal or receptacle shall be installed for each electrode. The terminal shall be relieved from stress. NEC (600-34)
5. All boxes, fittings and conduits shall be supported independent of the terminals and as per the appropriate sections of the CEC (600-42(d)).
6. Live parts shall be enclosed or suitably guarded to prevent contact. CEC (600-8)
7. Transformers shall be located where accessible and shall be securely fastened in place. CEC (600-21)
8. A work space of at least 3 feet high and measuring at least 3 feet by 3 feet horizontally shall be provided about each transformer or its enclosure where not installed in a sign. CEC (600-21(d))
9. Transformers located in attics shall be provided with a suitable permanent walkway or catwalk extending from the point of entry into the attic to each transformer. CEC (600-21(e))

PORTABLE GAS-TUBE SIGNS

1. Portable gas-tube signs shall be for indoor use only. CEC (600-10)
2. Supply conductors shall consist of hard usage cord with a grounding conductor. It shall not exceed 15 feet in length. CEC (600-10)

3. Neither supply nor high voltage conductors may penetrate a wall, ceiling, or removable tile, without benefit of conduit approved for same.
4. Signs shall be held in place by not more than two hooks attached to the transformer case. CEC (600-21(a))

OPEN NEON OUTLINE OR HIGHLIGHT LIGHTING

1. To be treated as a sign by this Department.
2. A terminal (or receptacle) shall be installed for each electrode. (No exposed G.T.O. wire) CEC (600-42(d))
3. Receptacles to be mounted in metal backing. (grounded) CEC (250)
4. Open neon (interior) shall be installed at a height of not less than 8 feet above the floor.
5. Open neon not allowed in exterior installations.