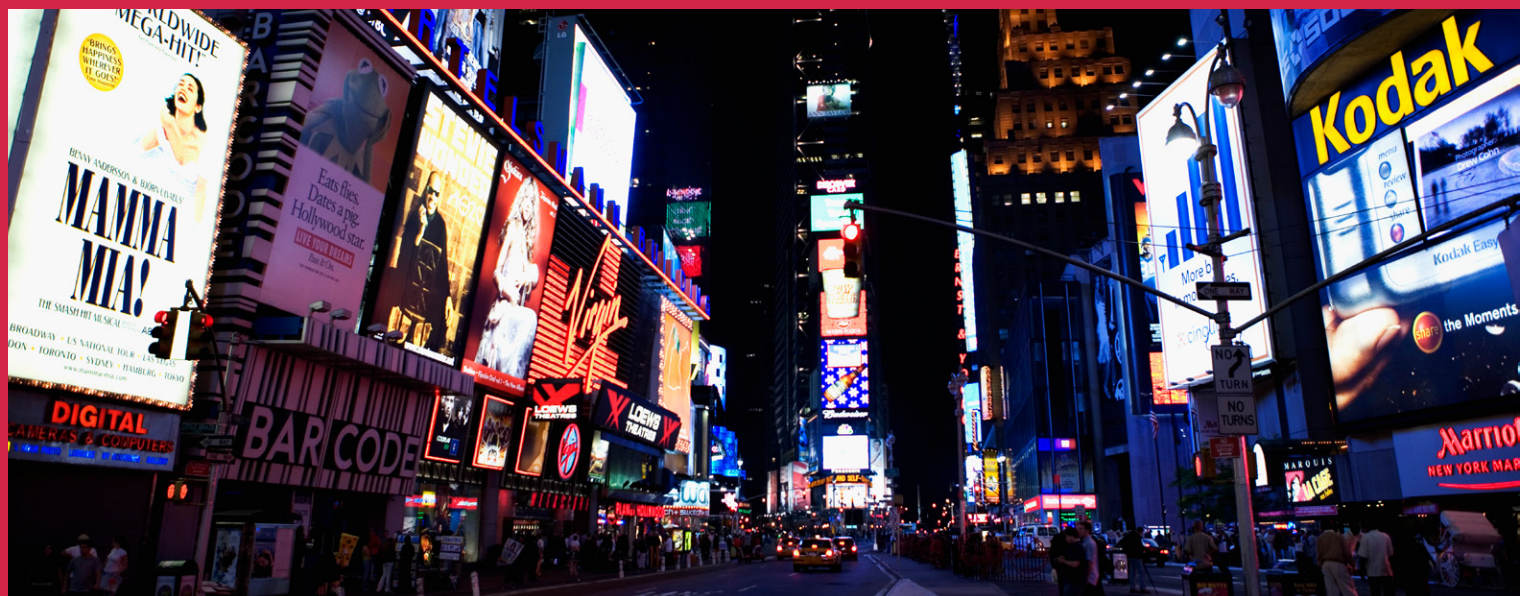




ELECTRICAL CONNECTIONS

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Listed Signs — Identifying UL Certification and Proper Use

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The National Electrical Code (NEC) Article 600 and the Standard for Safety for Electric Signs (UL 48) are used to evaluate the installation, conductors, equipment and field wiring of electric signs.

NEC Requirements for Electric Signs

Article 600 of the NEC covers the requirements for electric signs and outline lighting. Section 600.3 requires that electric signs, section signs and outline lighting be listed and installed in conformance with that listing. UL 48 provides the basis for listing by providing requirements for evaluation of the construction and performance as well as requirements for proper field installation. The UL product category for signs (UYXT) and for

changing message signs (UYFS) includes all types of electrically-operated and/or illuminated signs regardless of voltage, including, but not limited to; incandescent, fluorescent, high intensity discharge (HID), neon, light-emitting diode (LED), cold cathode and electroluminescence.

Marking Requirements

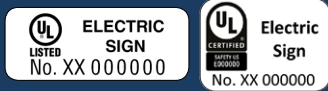
Certified (Listed) signs follow the marking requirements of NEC Section 600.4 and UL 48. A sign must be marked with the identification of the manufacturer or an identifying trade name or trademark,

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Listed Signs (continued)

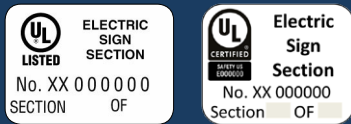
Examples of UL Sign Labels



For a single sign certified to U.S. requirements only



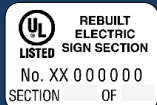
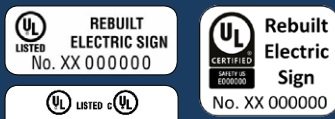
For single signs certified to both U.S and Canadian requirements



For multiple section signs certified to U.S. requirements only



For multiple section signs certified to both U.S. and Canadian requirements



Examples of labels applied to signs that have been rebuilt by the manufacturer and determined to comply with the REBUILT sign program by UL



The word INDOOR may be included to distinguish a sign intended for indoor applications only

along with electrical voltage and current ratings. Signs must also be marked to show any restrictions on where the sign can be properly installed. Indoor only signs are to be marked “Dry Locations Only.” Outdoor signs that are evaluated for a damp location are marked “Suitable for Damp Locations” or, for a wet location, are marked “Suitable for Wet Locations.” Signs that have a damp or wet location marking are evaluated for compliance with applicable performance testing before they can be marked as suitable for installation in these types of environments. All required markings and the UL Certification (Listing) Mark are to be permanently applied and are permitted to be affixed to any exterior surface of the sign, except the sign face, or the interior of the sign where the markings are available for inspection without uninstalling the sign.

Often, signs are shipped and installed as several subassemblies to make up the overall sign. UL 48 identifies these as Section Signs and requires that each section be marked to identify the splice enclosure, the conductors to be spliced during installation, the voltage rating of the splice insulation and the marking “Installation and Assembly Required – See Installation Instructions.” In addition, each sign section is individually marked with a section number to indicate that it is part of the overall sign.

UL Listing (Certification) Mark

UL has received numerous questions on how to determine that a sign bearing the UL Listed mark is authentic. This question can be separated into two issues – that of an unauthorized UL Mark and the application of a counterfeit UL Mark. An unauthorized UL Mark is considered to be a UL label placed on

Examples of UL Energy Conservation Sign Labels

On January 2011, UL began offering energy verification services for electric signs. This resulted from UL working with the California Energy Commission and sign industry representatives to develop a program for sign manufacturers to demonstrate compliance with the energy conservation requirements within Title 24 of the California Energy Commission’s Building Energy Efficiency Standards. Signs found by UL to comply with the energy requirements are affixed with special labels having a holographic background. Although the holographic label cannot be duplicated for this article, the basic configuration appears as shown.



Examples of labels that include the words ENERGY VERIFIED to show signs that have been found to comply with environmental energy requirements in addition to the standard safety certification.



The above is an example of the new Enhanced Certification Mark which includes a badge to communicate specific attributes to which a sign may be certified. In the label shown here, the sign includes safety and energy certifications. These labels are also provided with a special holographic background.



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Listed Signs (continued)



a sign by a company without authorization by UL. Counterfeit marks are signs with false labels, often a copy of real label or otherwise falsified to suggest UL certification when no such certification exists. In either situation, the UL Mark is not authorized and should not be affixed to the sign.

Authorities Having Jurisdiction (AHJ's) should look for the UL Certification (Listing) Mark to ensure compliance with NEC Section 600.3. UL Certified (Listed) signs are affixed with a UL Listing Mark consisting of the offset UL in a circle along with the word "LISTED," a control number and the product name, such as "Indoor Electric Sign," "Electric Sign" or "Electric Sign Section." There are several variations of the label that may be applied depending upon the type of sign and the requirements to which it is certified. Samples of standard UL labels available for Electric Signs are shown on page 2 (see sidebar "Examples of UL Sign Labels"). Manufacturers are permitted to order the labels from UL in

a quantity not exceeding a three month supply. All labels shown (see sidebar "Examples of UL Sign Labels") are black ink on a white polyester surface with a special high temperature permanent adhesive.

Issue Numbers

Every UL Listed (Certified) electric sign label includes an imprinted issue number as part of the label. The issue numbers are sequential in order. No two signs or sections of a sign certified (Listed) by UL, regardless of manufacturer, will bear a label with the same issue numbers.

Application of the Label

UL Certified (Listed) labels can only be affixed by the manufacturer at the manufacturing facility. This is the manufacturer's declaration of compliance and must be done only at the place of production. UL labels cannot be shipped and applied to a sign at a field location. The application of a UL Mark in the field is only permitted when an inspection is

performed by one of UL's Field Engineering Services, such as by a UL Field Evaluation. Any UL label applied in the field by UL Field Engineering staff will include a written report to the AHJ. Also, it is prohibited to remove UL labels from an existing sign and reapply to a different sign.

Additional Information

Marking and installation requirements are located in both NEC Article 600 as well as UL 48. AHJs should verify that all required markings are present and review those markings to determine that they contain the information required by both the NEC and UL 48. Additional information on signs can be found in the UL White Book under UL product category UXYT or by referring to the [UL Online Certification Directory](#).

For additional information on signs or to verify the authenticity of a sign label, please contact Rich Berman at: Richard.J.Berman@ul.com or at +1.847.664.2554 or email UL Regulatory Services at ulregulatoryservices@ul.com