

ELECTRICAL EQUIPMENT (PRODUCT) APPROVAL REQUIREMENTS

PURPOSE

This information bulletin clarifies the Department of Building and Safety's (LADBS) requirement relating to the equipment (product) and wiring approval as delineated in Sections 110.2, 110.3, 93.0401, 93.0402, and 93.0403 of the 2017 edition of the City of Los Angeles Electrical Code (LAEC).

DEFINITIONS

Approved - Acceptable to authority having jurisdiction. {California Electrical Code (CEC), Article 100}

Authority Having Jurisdiction – An organization, office, or individual responsible (i.e., LADBS Electrical Testing Laboratory or Inspection) for enforcing the requirements of a code or standard, or for approving equipment, material, an installation, or a procedure. (CEC, Article 100)

Equipment - A general term, including material, fittings, devices, appliances, luminaires, apparatus, machinery, and the like used as part of, or in connection with, an electrical installation. (CEC, Article 100)

Identified - Recognizable as suitable for the specific purpose, function, use, environment, application, and so forth, where described in particular code requirement. (CEC, Article 100)

Labeled - Equipment or material to which has been attached a label, symbol, or other accepted identifying mark (i.e., embossed laboratory logo) of a recognized (approved) testing agency (see definition) and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with recognized national safety standards (see definition). (CEC, Article 100)

Listed - Equipment or material included in a list published by an organization that is acceptable to the authority having jurisdiction (i.e., a recognized testing agency) and concerned with evaluation of products, that maintains periodic inspection of production of listed equipment or material that the equipment or material complies with recognized safety standards provided that such equipment or material bears the symbol, label or other accepted identifying mark (i.e., embossed laboratory logo) of recognized testing agency. (CEC, Article 100)

Manufacturer Standards - Standards other than recognized safety standards, such as outline of investigation standards, National Electrical Manufacturer Association Standards, non-consensus based safety standards, etc.

Recognized (Approved) Testing Agency - Testing agencies that are approved by the LADBS. A list of these testing agencies can be found at:

<http://www.ladbs.org/docs/default-source/publications/misc-publications/list-of-recognized-electrical-testing-laboratories-for-listing-of-electrical-equipment.pdf?sfvrsn=26>

Recognized Safety Standards – Consensus based Electrical Safety standards that are recognized by Occupational Safety and Health Administration (OSHA) and/or the LADBS.

Tested - Equipment or material that is subjected to examination and safety tests as outlined in recognized safety standards.

EQUIPMENT LISTING, LABELING, AND IDENTIFYING

Sections 110.2, 110.3 of the CEC and 93.0401, 93.0402, 93.0403 of Los Angeles Electrical Code (LAEC) require that all equipment (including conductors) required or permitted by the electrical code can only be accepted for installation and use in local jurisdictions provided the following conditions are met:

1. All equipment (including conductors) must be tested and listed or certified by a recognized testing agency based on consensus per Recognized Safety (RS) standards, and conform to the electrical code requirements.

Equipment tested and listed or certified by a testing agency based on a manufacturer or non-recognized standard is not accepted.

2. All tested and listed or certified equipment must bear the label, symbol, or other accepted identifying mark of the approved testing agency to identify the equipment as “listed”, “certified” and/or “approved” when evaluated by the LADBS Electrical Test Lab (LADBS-ETL).
3. The equipment must be identified, so that it is recognizable as being suitable for the specific purpose, function, use, environment, application, and so forth as required by the CEC or LAEC.

FREQUENTLY ASKED QUESTIONS:

Below are some frequently asked questions and answers related to the LADBS-ETL:

1. Does electrical equipment require approval by the LADBS-ETL?

No, it does not if the electrical equipment is already tested and listed or certified according to approved RS standards by a recognized (approved) testing agency such as Underwriters Laboratory, Canadian Standards Association, FM Approvals LLC, Intertek Testing Services NA, Inc., TUV America Inc., and etc.

If the equipment is not already tested and listed or certified, or if it is only tested and listed or certified according to manufacturer standards, or if it is not code compliant or identified as required by the electrical code, then it needs to be retested according to RS standards, and comply with CEC, and LAEC requirements by the LADBS-ETL or any other recognized testing agency.

2. What are the different approvals I can obtain from the LADBS-ETL?

The LADBS-ETL offers three different types of approvals as follows:

- a. **Laboratory Approval** – This approval is intended for mass produced electrical products by manufacturers.
- b. **Field One-Time Approval** – This approval is intended for field installed products that may be one kind or a modified mass produced product. This type of approval is limited to the field conditions, intended for a specific job address.
- c. **General Approval** – This approval is intended for products that may have code violations, have no recognized national safety standards to test to, or tested only to manufacturer standards. This approval may be for mass produced products, one of kind products, or for a job at a specific address. This approval may be referred to as “Research Report”.

3. What is the process of obtaining an LADBS-ETL Approval?

Submit the following:

- a. A completed application form. Original signature is required.
- b. Application fee as marked on application form. Make check payable to “The Department of Building and Safety, City of Los Angeles.”
- c. Current product literature (brochure, operational instruction, maintenance manual, owner’s manual).
- d. Photographs or drawings showing the exterior views and internal views of the equipment.
- e. Schematic wiring diagrams. Diagrams should identify the sizes of wires, ratings of fuses, circuit breakers, and other components.
- f. The parts list for the components operating at or above 30 VAC or 24.8 VDC in dry locations or 15 VAC or 12.4 VDC in wet locations. Include the part's function, name of manufacturer, catalog number, electrical ratings, and testing agency component recognition or listing number.
- g. Production sample of the equipment as follows:
 - 1) For General or Laboratory Approval: Submit a current production sample (complete and operable) with all appurtenances to operate the equipment. If the equipment is too heavy or large to ship to the laboratory, arrange for a field location in the City of Los Angeles or at the factory where a complete testing can be performed without on-site restrictions (call the laboratory for a prior arrangement) and pay for the field trip charges.
 - 2) For One-Time Approval of field installed equipment: Provide the field location where the equipment is intended to be installed insuring that it can be evaluated and tested without on-site restrictions. Provide the complete address, phone number, and contact person. Pay for the field trip charges.
- h. For equipment with unlisted transformers, drivers or power supplies with a rating of less than 1KVA, provide two samples with schematic wiring diagrams and specification sheets.

4. How do I obtain an application form for equipment (or conductor) Approval?

There is one application form that is used for each type of submittal. You can obtain this from as follows:

- a. On the LADBS web site. Select “Form” from the web page and click on the “Test Lab”. From the top of the web page choose <http://www.ladbs.org/docs/default-source/forms/plan-check-2014/application-package-for-electrical-equipment-testing-evaluation-and-approval-pc-elec-app-12.pdf> to download the form. This form is used for all submittals. Or
- b. Contact City of Los Angeles Electrical Test lab at 323-224-2168.

5. How long does it take to obtain LADBS-ETL approval for a product?

Depending upon the labs backlog, it would take about 10 to 15 days for a lab application, and 15 to 20 days for a General Approval (Research Report) to be assigned. After assignment, it would generally take about one to two weeks to get a response. The overall completion of the evaluation and approval depends on the applicant. If the applicant is able to provide a test sample for initial and subsequent reevaluation, submit all the required information and documentations through the evaluation process, the complete process including the test lab evaluation and testing would generally be between 1 to 5 months to get an approval.

6. Who can apply for approval?

Equipment manufacturer or equipment distributor (for general or one-time approval) and end user of the equipment (for one-time approval) can apply for equipment approval.

7. How long is the approval good for, and where do I find it?

The general and laboratory approval is good for 12 months. The product approval letter indicates the duration and expiration date of the approved product. A copy of the approval letters can be found at:

<http://161.149.221.222/Rreports.nsf/Report%20Number?OpenView&Start=1&Count=1000&Expand=2#2>

One-time approval is good for the duration where the equipment is installed, provided that the equipment is not modified or relocated to another location in or outside of the building or facility.

8. Can I expedite the review process?

Yes. Pursuant to section 98.0422 of the Los Angeles City Municipal Code, expedite review process is available for the amount of the fee equal to one-half of the review fee, in addition to the normal review fee.

9. How can an approval be renewed?

Only products that have either a Laboratory or General Approval (no one-time approvals) may be subject to annual renewal. About 60 days before an approval expires, the original applicant needs to take the following actions:

- a. Submit a completed renewal application form. Original signature is required.

- b. Submit the application fee as marked on the application form. Make check payable to “The Department of Building and Safety, City of Los Angeles.”
- c. Submit a current production sample of the equipment along with an explanation if there were any changes to the equipment from the previous approval.

10. Is approved equipment or conductor required to have an approval label? If so, how can I get one?

All equipment approved by LADBS-ETL, with some exceptions for some of the equipment that have General Approvals, are required to bear the approval label of LADBS-ETL. This approval label would be different from equipment that is approved under Laboratory or General Approval vs. Field one-time approval.

For equipment that has Laboratory Approval or General Approval, the applicant is required to submit the following:

- a. A completed label application form. Original signature is required.
- b. Indicate the quantity of equipment that will be manufactured during the approval period.
- c. Indicate the quantity of labels.
- d. Application fee as determined based on unit fee cost for each label. Make check payable to “The Department of Building and Safety, City of Los Angeles.”

For equipment that has a Field one-time approval, the applicant is not required to submit a label application form. The test lab personnel will apply the approval label on the equipment in the field once approval is issued.