



ELTEK International Laboratories

EIU Course 102, Class 1: Information, Procedures and Policies for Interacting with Underwriters Laboratories

Section 1 – General Information

1.1 What is UL?

Underwriters Laboratories Inc. (UL) is an independent, for-profit product-safety testing and certification organization. Its main purpose is Testing for Public Safety: That is, to test Consumer and Commercial *end-products* for safe operation. End-products are any type of completely finished and ready-to-use product such as a TV set, kitchen appliances, computers, washing machine, etc.

To make end-product submittals easier, UL has an extensive series of Insulating Material and Electrical Insulation Systems Components Recognitions in place. Recognition programs enable end-product manufacturers to acquire UL Listing of their product or device with a reduced test program.

1.2 The UL Mark

When a product or component complies with UL's requirements and all of the documentation has been completed, the company producing the product / component will receive authorization to use the appropriate UL-Mark on their product / component.

UL issues one type of mark for Listed Products  (Listing Mark)

and a different mark for Recognized Components  (Component Mark)

UL can issue other Certification Marks, but in this document only Listing and Recognition will be discussed.

UL retains control of the use of the UL-Mark and can withdraw the right of a company to use the mark if the company fails to continue to produce to UL's Standards. Keep in mind that when a manufacturing company applies the UL-Mark, that company is utilizing UL's name and UL has the right, and obligation, to protect its name.

UL's display of Marks: <http://www.ul.com/mark/index.html>

1.3 UL Listed vs. UL Recognized vs. UL Approved

The terms UL issues to companies completing the process: (1) Listed, and (2) Recognized.

1.3.1 UL Listed – This phrase is synonymous with the word “Product” (UL-Listed Product), and is used to describe end-products that have been tested by UL to nationally recognized safety standards and found to be free from reasonably foreseeable risk of fire, electric shock and related hazards. A Listed product is a complete device which is ready for use. A Listed product is subjected to more testing than a Recognized Component. The testing of an end-product can be conducted by combining tests related to a component device with the tests of the end-product

1.3.2 UL Recognized – This word is used with the word “Component” (UL-Recognized Component). Components that are recognized by UL will eventually be used in UL-Listed Products. A component is a material, combination of materials or a device which by itself is most likely not a complete or ready-to-use device.

For example, a washing machine is a “Listed” product because it is ready to connect and use. The washing machine is made with a UL-Recognized motor which runs a UL-Recognized pump. The motor is a component which is made with a combination of UL-Recognized components such as magnet wire and ground insulation or from materials that make up a UL-Recognized Electrical Insulation System.

The individual components (motor, pump, wire, etc.) are incomplete by themselves, but when combined with other UL-Recognized components, they become a completed end-product.

1.3.3 UL Approved or UL Approval – The words “Approved” or “Approval” are NOT used by UL to describe a product’s compliance with UL’s requirements.

1.4 Locations

UL has several types of offices/centers. **(1) Engineering Services**, where testing and evaluation of components and end-products can be conducted. **(2) Local Engineering Service [LES’s]**, where local businesses can get information about UL’s services, **(3) Field Service Offices**, where the UL’s Field Representative [also known as UL Inspectors] are located. UL Representatives do not conduct any testing. UL Representatives conduct Follow-Up Service inspections which is the on-site inspection of a company’s end-product or component to confirm that the manufacturer’s UL-Recognized Components or UL-Listed Products are still be manufactured in accordance with the information in UL’s Follow-up Service Procedure file.

(1) Engineering Services: There are three Engineering Service Offices in the USA. The locations of these offices are:

- Northbrook, IL [NBK] (north suburbs of Chicago)
- Melville, NY [MEL] (on Long Island east of NYC)
- Camas WA [CA] (just across the border from Portland OR)

UL has established Engineering Service Centers in other countries. There are offices located in Canada, Asia, Europe, Scandinavia, South America, and Central America. For a complete and up- to-date list of international offices, please refer to UL’s website www.ul.com.

Not all of the UL Engineering Service Centers handle the same product evaluations. The total range of products evaluated by UL is large and it is not realistic to train all Engineers at all Engineering Service Centers in the full range of product evaluations.

(2) LES Centers: There are Local Engineering Service Offices [LES Centers] in the US and Canada. The purpose of these centers is to provide information about UL’s services. No testing is conducted at LES offices.

(3) Field Service Offices: These are located all across the United States and also in many other countries. No testing is conducted at Field Offices. These offices are for UL Field Representatives.

More details about all of the UL locations can be found by going to www.ul.com.

Section 2 – Essential UL Forms

2.1 The L-37 Form – Agency Authorization Notification Form

2.1.1 What is an L-37 Form?

The full name for this form is “Agency Authorization Notification Form”. The “L-37” is printed only in the upper left-hand corner. This is a Form originated by UL. It is a statement that our common customer agrees for all three parties to openly discuss the project. The three parties are as follows: (1) the customer (2) UL and (3) ELTEK International Laboratories.

2.1.2 How long does one last?

For Customers of ELTEK Labs, an L-37 Form lasts until the customer cancels it. For our customers, one form is valid for any number of projects; unless specifically limited by the customer. The L-37 form is not a legally binding document. It can be cancelled or modified at any time. The purpose of the L-37 form is for documentation of the customer’s desire to the interaction between UL and ELTEK Labs as their Agent.

2.1.3 When does a company use an L-37 form?

An L-37 form is needed when a company wants someone outside of their own company to interact with UL on the behalf of the company. Only one L-37 Form is needed for each company. A single form can be used by the customer to cover: (1) several product categories; (2) a single product category; or (3) a single UL project. At least one L-37 Form MUST be recorded for every customer using an Agent for UL interactions. The reason—UL Engineers cannot legally talk with any third party without authorization being on record at UL that an Agent.

2.1.4 How does ELTEK Labs use the L-37 Form?

We use the form only as confirmation that our customer wants us to interact with UL for a project. However, for tracking purposes, when an L-37 Form is sent to our customer, it is essential to make a photocopy of the form and place that copy into the Office Project Folder. Also, for tracking purposes, copy any correspondence which was sent with the form.

2.2 The L-40 Form – UL Services Agreement

2.2.1 This form is an agreement only between each UL customer and UL. This form is an agreement that UL's customer will pay all UL invoices. **Only one L-40 Form** is needed for a company since the agreement is not intended to be project specific or project limited. Once an L-40 Form has been submitted, there is no need for any future L-40 Forms to be processed—not for additional UL Files, nor UL Projects nor UL-Product Categories.

Section 3 – UL File vs. UL Project vs. Product Category

3.1 UL File Number – UL does not identify customers by company name; they use file numbers. Each customer must have a separate UL File for each UL Product Category. If a company has components in three product categories, that company must have a minimum of three files. However, a company can have any number of UL Files within a single product category. For example, a company can have a file for magnet wire coating and a separate one for varnishes. A plastics company may have one file for their polyamide products and a separate file for polyester resins with both being in the Plastics Product Category.

UL assigns file numbers in a sequential order without reference to any grouping into UL Product Categories. Most material categories start with the letter "E". For example: File *E123456*. Companies which have had UL Files for many years may have a file number with 4 or 5 digits. All new companies are now in the 6-digit file numbers.

3.2 UL Project Number – A project is a specific work item. A work item can be for a single test, a full product evaluation or simply a revision made to a report or procedure file. A project number is used by UL to identify the specific work which the customer has requested and UL has contracted to do. Many project numbers can be associated with a single file number.

UL assigns projects numbers in a pattern of:

- The first part consisting of **two digits** identifying the year UL opened the project.
- The second part of the UL Project number is **2-letters**.
- The third part of the project number is a **5-digit number** selected in a sequential pattern by UL beginning with a number representing the first UL customer project for the year, (i.e. 00001).
Example of a UL project number: **07ME12345**.

3.3 UL Product Category - A product category is a general group of common products or components such as tapes, varnishes, EIS, plastics, etc.

UL designations for categories consist of a 4-letter code followed by 1 digit. Example: OBJY2. The 4-letters *OBJY* are for Electrical Insulation Systems, the single digit 2 is for US Standards. If the digit was an "8" in place of the "2," the "8" represents Standards for Canada. A "3" is for an unpublished file status.

3.4 When is everything right and when is something wrong?

If UL File Numbers, Project Numbers or Category designations do not follow the above patterns, it should draw your attention to the break of pattern and generate an inquiry. Incorrect numbers can cause delays in response to inquiries. Obvious reasons for any difference of numbers are typos in the information or incorrect information.

Section 4 – Opening a new project for a new UL customer

4.1 Sequence to open a project

It is essential to understand the sequence of steps needed to open a project for a new UL Customer:

1. New work request is sent to UL's Customer Service group.
2. Customer Service checks to determine if the company is already an established customer.
3. If not a UL customer, an L-40 Form is issued and must be completed and returned before any other steps can be taken. [If an Agent is to be involved for UL interactions, an L-37 Form must also be processed.]
4. After receipt of the completed (signed) L-40 Form, the request is submitted to UL Engineering. Engineering prepares the UL quote. The UL Quote Number must be used in future correspondence for tracking purposes.
5. When accepted, the quote is returned to UL.
6. If necessary for processing payment, an invoice from UL can be required. In all cases, no work will move until UL receives payment in accordance to the conditions stated in UL's quote.
7. If samples or test specimens were requested in UL's quote, the samples or specimens must be received by UL (labeled in accordance with the instructions contained in the quote).
8. After UL has received the payment and samples, the project will be placed into the list of waiting projects for engineering. An engineer at any of the Engineering Centers can select the project.
9. After an engineer has been assigned, the project can be opened.
10. For new product categories a new UL File Number will be assigned.

For UL customers with a proven payment history, pre-payment may not be required. This is determined by UL internal policy.

4.2 Testing

4.2.1 The testing required for any project can be conducted by UL or by a certificated laboratory.

Laboratories not a direct part of UL are identified under the UL CAP program. When a laboratory is conducting testing for submittal to UL, that lab is referred to as a third party testing facility or as an Engineering Agent.