



FUStart: Preparing for your Follow-up Services inspections

2023 | UL Solutions



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In a hurry?

- If you don't have time to review the entire FUStart tool today, please click on the links below for information on some of the key elements of UL Solutions Follow-Up Services program:
- Obtaining [UL Certification Marks](#)
- [Initial Production Inspections \(IPIs\)](#)
- Checking the [Follow-Up Services webpage](#) for more information on UL Mark surveillance requirements, traceability guidelines, information about variation notices (VNs) and calibration information
- Contacting the [UL Solutions Customer Service team](#)
- Review and share the entire FUStart presentation with your company for complete information about preparing for UL Solutions Follow-Up Services inspections.

myUL[®] client portal

With myUL[®], you will be able to:

- View inspection reports and variation notices
- Download your latest UL Solutions files/reports
- Access and download UL Standards
- Order UL Labels
- View the status of UL Solutions samples
- Accept UL Solutions quotes

If you are having any difficulties, please feel free to reach out to your local field engineer for assistance.

myUL[®] is a secure, online source for increased visibility into your UL Solutions project files, product information, documents, samples and services. You will need your Party Site Number during the registration. This will be provided by your UL Solutions field engineer.



About FUStart



About FUStart

- FUStart is a resource for manufacturers to help you prepare for the UL Solutions Follow-Up Services program.
- FUStart will:
 - Introduce you to the UL Solutions Follow-Up Services program
 - Prepare you for your first Follow-Up Services inspection
 - Help you understand your role and responsibilities regarding Follow-Up Services





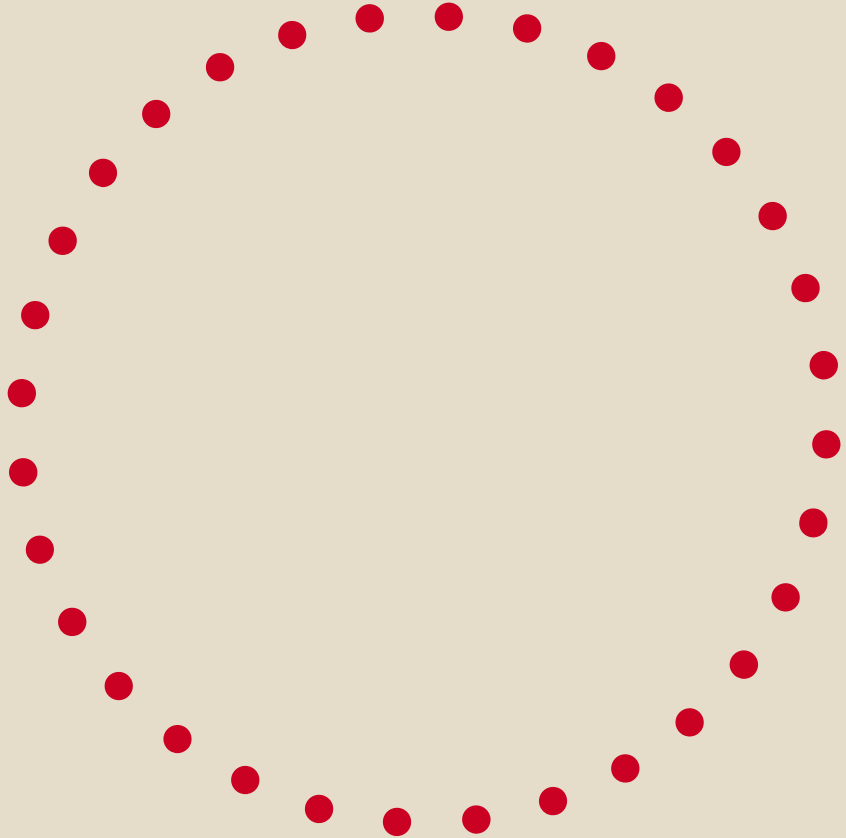
About FUStart

FUStart provides customers with an introduction to the production of products covered by the Follow-Up Services Procedure, such as Listed, Classified, Certified or Recognized products. Additional information can be obtained from the field engineer assigned to your account.

How you benefit

- Knowing the required traceability, marking, testing and other requirements will allow you to incorporate these in your factory's manufacturing process controls and quality management system
- FUStart helps you plan for your production and documentation needs
- Knowing and addressing these requirements will speed up the inspection and instill confidence in your factory's ability to produce compliant products
- All of this can help you avoid unnecessary delays in your use of UL Marks
- FUStart will help you understand the role of Follow-Up Services in the certification process and understand what takes place during a Follow-Up Services inspection

About UL Solutions



About UL Solutions

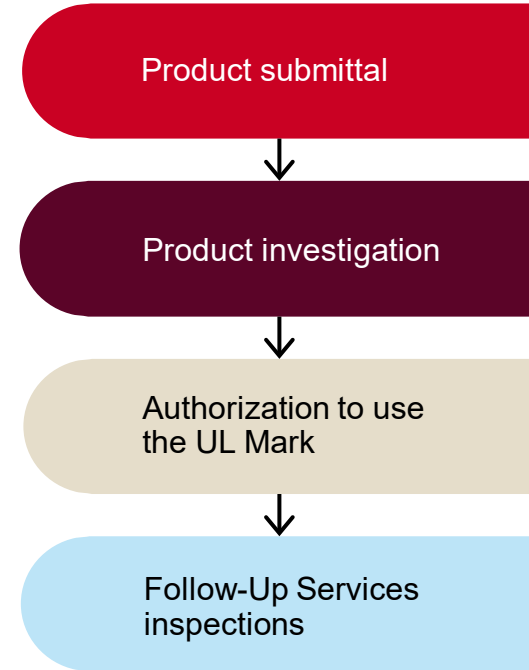
- Each year, UL Marks appear on tens of billions products globally
- Our ongoing involvement serves as protection for your investment, benefitting you by easing the journey to compliance and helping earn increased consumer trust
- UL Solutions gives customers, regulators, retailers and consumers peace of mind about the products you use

Visit [UL.com](https://www.ul.com) for more information.



The UL Certification process

- Product submittal
 - Applicant sends the product to UL Solutions for initial assessment
- Product investigation
 - UL Solutions engineers thoroughly test and inspect the product to determine compliance with requirements
- Authorization to use the UL Mark
 - Once the project and any required Initial Product Inspections (IPIs) are complete, the manufacturer is authorized to apply the UL Mark in most cases. More information can be found [here](#).
- Follow-Up Services inspections
 - Throughout the lifetime of the UL certification, products undergo regular inspections at the manufacturing facility to verify continued compliance with requirements



Authorization to apply the UL Mark

Notice of Authorization (NoA) revises the Follow-Up Service Procedure and provides authorization to apply the UL Mark for existing manufacturing locations when an Initial Production Inspection (IPI) is not required.

Notice of Completion (NoC) provides a notice that the investigation is completed and that an Initial Production Inspection is required prior to authorizing the use of the UL Mark.

Initial Production Inspection (IPI) is a check on the means that the manufacturer has in place to produce a product in accordance with applicable requirements as defined in the Follow-Up Service Terms. The manufacturer shall not ship products incorporating Marks until the IPI has been successfully completed.

Authorization to apply the UL Mark to a product is provided by:

- Issuance of an NoA; or
- issuance of an NoC AND the successful completion of the required IPI; or
- When neither a NoA or NoC is issued, the UL Solutions Follow-Up Service procedure.

Follow-Up Services details



Field services overview

- This required program is designed to verify that the manufacturer continues to produce UL Certified products in compliance with UL Solutions requirements
- Services take place through inspections of locations where UL Certified products are manufactured, assembled, fabricated, processed, finished or where products are stored or labeled
- Inspections are conducted by UL Solutions field engineers at a frequency appropriate for the UL Certified product or system
 - Normally, inspections are unannounced
 - During each factory visit, a field engineer is looking for products with a UL Mark*

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- Occasionally, UL Solutions may select samples from the factory, the open market or elsewhere for further determination of compliance

*There may be occasions when no UL Marks are being used when a UL Solutions field engineer is present. In these cases, a UL Solutions field engineer will conduct a Production Ready visit.

UL Solutions Agreement

Mark Integrity – UL Mark surveillance requirements

UL defines responsibilities, duties and requirements for both manufacturers and UL Solutions field engineers involved with inspection programs associated with UL/C-UL/ULC Mark product certification programs.

Global Services Agreement and follow-up services terms

Sets the service terms and conditions for the specific services requested and provided to UL Solutions customers. These include, but are not limited to:

- Controlling the use of the UL Certification Mark
- Follow-Up Service inspections
- Unannounced inspections
- Confidentiality



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[Click here](#) for more information about UL Mark Surveillance requirements. [Click here](#) to review the Follow-Up Service Terms Agreement. [Click here](#) to review the GSA.

The full Mark Surveillance requirements are provided in the Follow-Up Services Procedure including additional links in the Authorization page to the UL Solutions website.

Types of UL Solutions Labels

Type L

Primarily intended for life safety products or products where the manufacturing process is susceptible to some level of customization

Visits are scheduled as unannounced inspections and may be based on the number of UL Marks actually used by the manufacturer

Typically, manufacturers purchase UL Marks on labels from UL Solutions or a UL Solutions Authorized Label Supplier

[Click here](#) for more information on Authorized Label Suppliers



Types of UL Solutions Labels

Type R

Primarily intended for electrical appliances, components and other products

Visits will normally be unannounced and usually at least four times per year

Manufacturers may produce their own UL Marks using artwork approved by UL Solutions, or have the UL Marks printed by a [UL Solutions Authorized Label Supplier](#)

UL Certification marking can be applied using several methods, such as an adhesive label or through a molding, stamping, etching or silk-screening process

Types of UL Solutions Follow-Up Services

Initial Production Inspection (IPI)

- Takes place at the same time as the first production run of UL Certified products
- Conducted whenever a new factory is added to the Authorization Page and whenever UL Solutions staff determines that it is necessary to assess the actual production of the certified product before marked products can be shipped from the factory
- Verifies that a manufacturer of a UL Certified product is producing the product in accordance with the requirements of the Follow-Up Services procedure
- In some situations, when an IPI is required, but there is no production, a successful pre-production visit (PPV) visit could satisfy the IPI requirement

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- Very similar to other inspections, except that it's scheduled with the customer
 - If the product complies with the requirements described in the Follow-Up Services Procedure, a UL Solutions field engineer may release labels for use on subsequent production

Types of UL Solutions Follow-Up Services

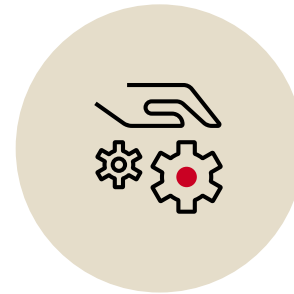
Critical notes



Products should not be shipped with the UL Mark until the IPI has been completed and UL Solutions has found that representative products at the factory comply with the Follow-Up Service Procedure and associated documents.



If an IPI is required, a UL Solutions field engineer will visit the factory in approximately two months if no prior inspection has been scheduled. This visit is required to verify control of the UL Certification Mark.



Following an Initial Product Inspection, regular inspections will take place. If no UL Marks are being applied to products, a UL Solutions field engineer may perform Production-ready visit

Types of UL Solutions Follow-Up Services

- Production-ready visits – May occur when there are no products available for a complete inspection that bear the UL Mark or are intending to bear the UL Mark
- During the production-ready visit, UL Solutions will:
 - Determine/validate when UL Mark product was last produced
 - Review future production plans including orders, schedules, production records, forecasts
 - Follow-Up on open variation notices (VNs) if applicable
 - More information on VNs [here](#)



Types of UL Follow-Up Services

At the customer's request UL Solutions may determine production readiness by reviewing such items as:

- Follow-Up procedure
- Testing capability
- Test equipment
- Traceability of components and subassemblies
- UL Mark control



Types of UL Solutions Follow-Up Services

Split inspections

Inspections to verify compliance of components, materials or testing for products assembled in stages at multiple manufacturing locations

Example: An appliance manufacturer with multiple locations consolidates the manufacturing of printed wiring boards to a single location. The completed boards will be inspected by a UL Solutions field engineer only at the factory location where they were built.

Frequency of UL Follow-Up inspections

Frequency of inspections varies depending upon the product, production volume (for some products), and the manufacturer's ability to manufacture products in accordance with requirements.



Responsibilities of UL solutions

A UL Solutions field engineer is responsible for performing each element of the inspection to verify manufacturer's compliance with UL Solutions requirements. At the end of the inspection, a UL Solutions field engineer will issue an inspection report to document the inspection and identify the models inspected. If necessary, a Variation Notice will be issued to document and communicate any nonconformances identified during the inspection.

[Click here](#) for more information on inspection reports. [Click here](#) for more information on variation notices.



Responsibilities of UL Solutions

UL Solutions is responsible for:

- Reviewing product compliance using the Follow-Up Services Procedure during inspections
- Documenting the type of product reviewed during an inspection
- Verifying manufacturer's control of UL Certification Marks
- Verifying manufacturer's compliance with factory test programs
- Documenting nonconformances with UL Solutions requirements
- Reviewing effectiveness of corrective actions when it is needed to address nonconformances
- Selecting follow-up testing samples and providing mailing instructions to the manufacturer when instructed by the Follow-Up Services procedure



Responsibilities of a manufacturer producing UL Certified products



A manufacturer producing UL Certified products must...

- Maintain traceability of components and materials required by the Follow-Up Services procedure
- Determine that only products fully meeting all UL Solutions requirements carry UL Marks
- Assure no references are made to UL Certification for products that are not authorized or do not fully comply with UL Solutions requirements, including all advertising materials (guidelines [here](#)), electronic references (websites, email) and all promotional products
 - Grant immediate access to the UL Solutions field engineer
 - Initiate corrective action on nonconformances
 - Current inspection documents are accessible at the [myUL](#)® portal, or maintain a hard copy
 - Apply UL Certification Marks only at locations authorized by UL Solutions
 - Acquire UL Marks only from UL Solutions or UL Solutions Authorized Label Suppliers



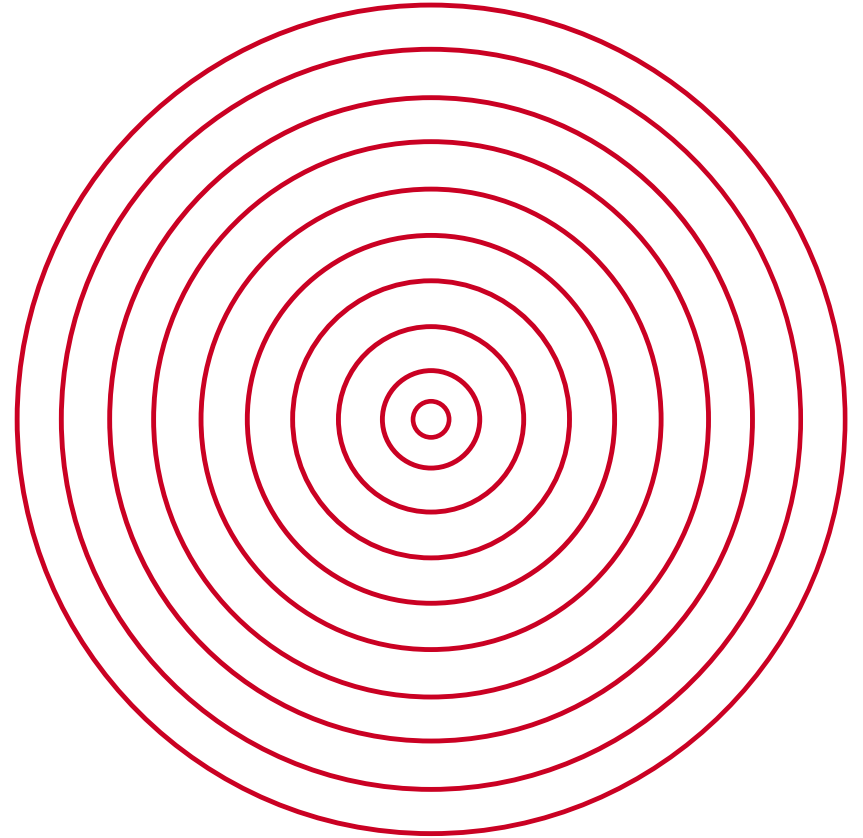
Test records

Test records for most required tests, conducted by the manufacturer on UL Certified products, need to be retained for specified periods of time to confirm:

- Calibration of testing and measuring equipment
- Methods of testing
- Frequency and date of testing
- Disposition or corrective action for testing failures.
- The specified periods of time will be clarified in the Follow-Up Services Procedure.



Field services tools



Follow-Up Services Procedure overview

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- Describes the authorized construction of a product
 - Products that meet the requirements outlined in the Follow-Up Services Procedure are eligible to carry the UL Mark specified in the UL Solutions Procedure, which is the only way to identify a UL Certified product
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- Contains requirements the manufacturer must follow and the requirements that UL Solutions will use to assess ongoing compliance with UL Solutions requirements
 - Sent to the manufacturer before the first inspection or initial production inspection
 - Applicant and manufacturer must understand the purpose, requirements and accuracy of the Follow-Up Services procedure
-
- The manufacturer shall inform the UL Solutions Customer Experience Center or the project handler of any errors they notice in the UL Solutions Procedure
 - If you have any questions, contact the project handler issuing the Follow-Up Services Procedure or reach out via our website

Follow-Up Services Procedure – key elements

- Authorization page – identifies the manufacturing facilities authorized by UL Solutions to apply UL Marks to products complying with UL Solutions requirements and any required Factory ID marking assigned when there is more than one manufacturing location
- Listing Mark data page/UL Marks Hub – identifies the UL Certified Mark elements
- Appendix – Contains instructions for the manufacturer and UL Solutions, outlining responsibilities and tests for UL Certified products; also, describes tests required on Follow-Up Service samples forwarded to UL Solutions facilities
- Follow-Up inspection instructions/Standardized Appendix Pages – contains specific instructions and responsibilities applicable to the UL Solutions program. These instructions are the same for all manufacturers within a particular product category
- Section general – contains instructions, construction details and marking information related to multiple products
- Procedure sections – normally sequenced numerically, describing the product(s) evaluated for certification by UL Solutions

Follow-Up Services Procedure recommendations

Carefully review the contents of the Follow-Up Services Procedure and any new or revised pages as soon as they become available

Not doing so could cause delays in authorizing use of UL Marks on products

For access to a current version of your Follow-Up Services Procedure and other documents, [register for a free myUL® account](#)

If printed, keep the Follow-Up Services Procedure in good condition, readily accessible and up-to-date as revised or additional pages become available

It is the manufacturer's responsibility to maintain the Follow-Up Services Procedure

Maintaining an up-to-date Follow-Up Services Procedure will help avoid nonconformances that lead to additional expenses and increased inspection time



Applicants and/or manufacturers will receive a copy of the inspection report which can also be accessed on the [myUL[®]](#) portal.

Inspection reports

Inspection reports are used by UL Solutions field engineers to document factory inspections

An inspection report identifies:

- Basic information about the visit, the name of the UL Solutions field engineer, the manufacturer's name, location, factory representative, etc.
- The type of visit (regular inspection, IPI or special inspection)
- All models examined during the visit
- Information about any product samples that need to be sent to a UL Solutions testing laboratory for additional Follow-Up testing

Variation notices

A variation notice (VN) is a document issued by a UL Solutions field engineer to record any nonconformances with the requirements. A product inspection will typically include a review of these aspects of the production process:

- Test equipment calibration
- Manufacturers' tests
- Document control
- Components and materials
- Product construction
- Markings and manuals
- Traceability



Resolving a VN

When a VN is issued, the manufacturer has three options for handling nonconforming UL Marked products:

- Bring products into compliance with the Follow-Up Services procedure
- Remove or obliterate any markings on the product referring to UL Solutions
- Scrap the products that are not in compliance with UL Solutions requirements



Additional information on tools

Alternate Construction Evaluation:

If the field engineer provided a VN disposition of alternate construction – Please contact UL to submit the alternate construction for evaluation and you wish to continue production with the alternate construction you must contact [UL Solutions Customer Service](#) and submit the variation as an alternate construction. This action requires involvement of the Applicant. If you choose to ship product during the review period, you do so at your own risk.

Maintaining Compliance and

Corrective Action: It is the manufacturer's responsibility to maintain compliance to UL requirements. In order to prevent future nonconformances, the manufacturer should perform a root cause analysis and create a corrective action plan. See the "Variation Notices and Corrective Action" document on the [Follow-Up Service webpage](#) for more information.

VN Follow-Up: The UL Solutions field engineer will follow-up on all VN items to verify that the disposition was followed and variation resolved.

Additional information on tools

Sample Tag

If samples are to be sent to a testing laboratory for follow-up testing, in most cases a UL Solutions field engineer will complete and secure a sample tag to each set of samples. A manufacturer is responsible for seeing that the selected samples are sent to the correct testing laboratory in a timely manner. UL Solutions field engineer will provide mailing instructions.

The results of this testing are also used to determine continued compliance with UL Solutions requirements.

myUL[®]

[myUL[®]](#) provides secure access to online tools and databases that can simplify your compliance activities. Once your account is established you will have access to UL Solutions reports, progress on projects, variation notices, inspection reports, UL Solutions staff directory, and technical data for components such as plastics, appliance wiring material and printed circuit boards.

Key elements of a follow-up services inspection



Key elements of a Follow-Up Services inspection

Construction requirements



If product bears a UL Mark, the manufacturer must be able to provide verification that the product is constructed to meet the Follow-Up Service Procedure requirements



Components may be verified through the UL Solutions Component Recognition program or through other means such as split inspections and other options covered [here](#).



Required product markings and instructions described in the Follow-Up Services Procedure must be verifiable by the UL Solutions field engineer

Key elements of a Follow-Up Services inspection

Component and material traceability documentation

A key element in verifying compliance with UL Solutions requirements is determining that materials and components used in UL Certified products are consistent with their descriptions in UL Solutions Follow-Up Services procedures.

It is a manufacturer's responsibility to assure that all components and materials are as described in the UL Follow-Up Services procedure and to maintain all required records so they are readily available for review by UL Solutions.

- During visits, UL Solutions will verify that a manufacturer maintains traceability, meaning the ability to determine if the components are UL Certified.
- This includes, but is not limited to: UL Recognized Components, the fabricated parts program, the processed wire program, the wiring harness program, printed wiring board assemblies, high technologies equipment subassemblies, repackaged product program, split inspection program, or document audit (where applicable)

[Click here](#) to view the UL Solutions Traceability requirements

Key elements of a follow-up services inspection

- Required production line testing
- Many products are required to have production line testing to determine compliance with applicable safety requirements
 - In these situations, manufacturers are required to perform tests and maintain test records for non-conforming test results and the disposition of nonconforming products
- In addition to manufacturer production line testing, Follow-Up testing at a test laboratory or testing witnessed by UL Solutions is required for some products
 - UL Solutions Follow-Up Services procedure describes sample requirements, test methods and acceptable criteria.
 - UL Solutions randomly selects production or stock produced since the last product inspection for shipment by the manufacturer to the test laboratory.

Key elements of a Follow-Up Services inspection

Calibration of inspection, measuring and test equipment

- All manufacturer inspection, measuring and test equipment required as part of the Follow-Up Services procedure or used by UL Solutions during inspections at a factory must be calibrated at least annually to a traceable national standard.
- Instruments used as part of processing equipment, i.e., equipment used in the manufacturing of the product, generally are not affected by this requirement unless specifically identified in the Follow-Up Services procedure.

[Click here](#) to view the UL Solutions calibration requirements



Appeals process

If a manufacturer disagrees with UL Solutions on Follow-Up Services matters and a satisfactory resolution cannot be reached, the manufacturer can, without prejudice, present views to supervisory levels of UL Solutions for resolution. Please contact us if you need to appeal a UL Solutions Follow-Up Services decision.



Making changes to UL Certified products

- Submit changes for UL Solutions acceptance prior to implementing those changes on products bearing UL Marks.
- UL Solutions will evaluate the changes and, if acceptable, issue authorization for the changes and revise the Follow-Up services procedure.
- Revised pages for the Follow-Up Services Procedure will be sent to the manufacturer or available at [myUL®](#). The revised pages become part of the Follow-Up Services procedure used to maintain UL Mark integrity.



If you need to make construction changes to your UL Certified product, please contact us to implement the changes to your Follow-Up Services procedure.

UL Certification Marks



UL Certification marks

Types of certifications

- **Listing** – UL Solutions has determined that a product complies with UL Solutions requirements and that the product has been manufactured under UL Solutions Listing and Follow-Up Services program
- **Classification** – A manufacturer has demonstrated the ability to produce a product that complies with UL Solutions requirements with respect to a specific product attribute
- **Component Recognition** – Used for parts or subassemblies intended for use in products Listed or Classified by UL Solutions

[Click here](#) for a complete list of UL Certification Marks.



Composition and design of UL Marks

The UL Marks appearing on products are composed of four key elements

-
- 1** Appropriate UL symbol, e.g., CERTIFIED, LISTED, CLASSIFIED or RECOGNIZED COMPONENT

 - 2** Product name (may include ancillary information as required for the product category)

 - 3** File number or control number (consisting of four alphanumeric characters), or serial number, lot number, or issue number

 - 4** In addition, the manufacturer may include other information on the UL Mark label including company name, electrical ratings, warning markings, date codes, place of manufacture, etc.

Composition and design of UL Marks

Critical notes

- Use [downloadable UL Mark artwork](#) rather than composing your own version of the UL Mark
- The Enhanced UL Mark may be available for your product. For more information on the Enhanced Mark, visit the [Marks Hub](#).
 - The Enhanced Certification Mark includes information to assist in verifying the product is Certified and describes the scope of the Certification.
- UL Solutions may require additional information on a product that can be displayed on the same label containing the elements of the UL Mark
- See [marking requirements](#) for more information.



Sourcing UL Marks

Ordering UL Labels

- For Type L Marks, [click here](#). For Type R Marks, [click here](#).
- Items to be considered when sourcing UL Marks

Elements, composition, location and methods of application

- Is the label material rated appropriately for the conditions it will be exposed to? (temperature, type of surface, environment)
- Limit UL Label orders (paper or hologram) to your immediate needs since the shelf life is limited to three years. After three years, UL labels must be replaced with new stock
- For answers to questions about what UL Mark should appear on your product or what UL Mark should appear on UL Recognized Components, contact the [UL Solutions Customer Service team](#). For more information about the meaning of UL Marks, please visit the [UL Marks and Labels website](#).

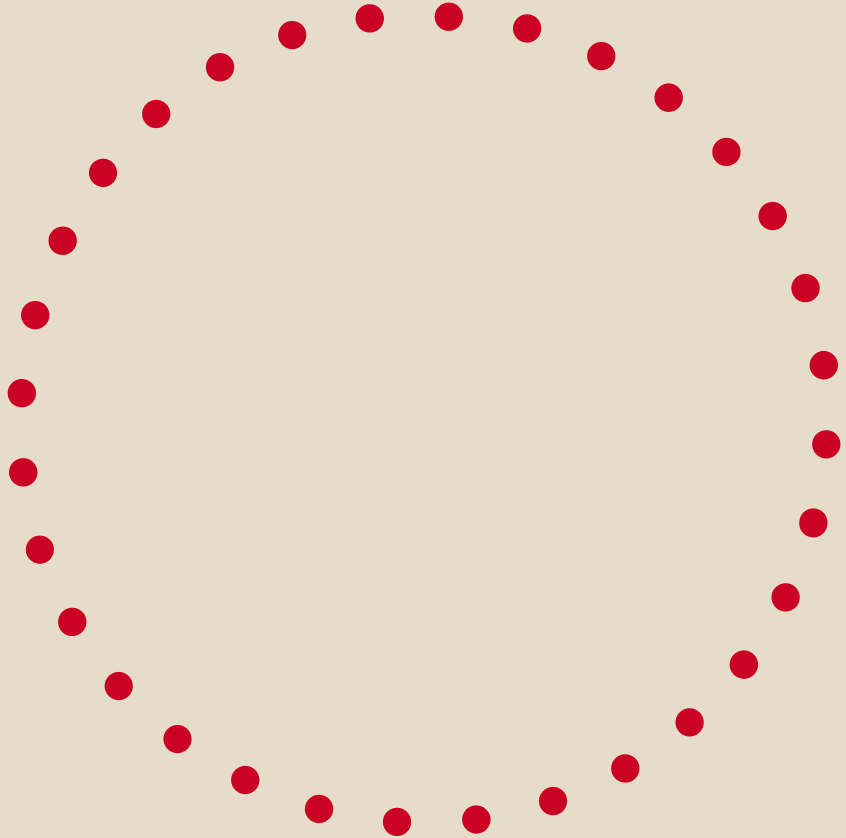


Misuse of the UL Mark

Use of the UL Mark is a privilege available only to those complying with UL Certification requirements. If a manufacturer does not comply with UL Solutions requirements, UL Solutions may withhold the use of the Mark or increase frequency of inspections at the manufacturing facility.

- Normal inspection schedules may be reinstated once appropriate control of the use of UL Marks has been demonstrated.
- Any additional inspection and administrative costs associated with the monitoring and implementation of additional controls are the applicant's responsibility unless arrangements have been made to invoice the manufacturer.
- Future occurrences of unauthorized use of UL Marks may result in more severe actions up to withdrawal of UL Certification.
- If you are aware of a misuse of the UL Mark, please [let us know](#).

Resources





Additional resources

[Contact us](#) for a cost estimate
and to schedule your on-site visit

UL Solutions offers customized on-site support and training to help you prepare for your first Follow-Up Services inspection benefits.

- Prepare for Follow-Up Service inspections
- Effectively plan production to achieve compliance
- Eliminate unnecessary delays in the use of UL Marks
- Eliminate repeat inspections

Additional resources

The global UL Solutions customer service team

- This team is available to answer questions, provide information and assist customers during the certification and compliance process.
- These professionals are an excellent resource for helping customers understand the compliance process, identifying project engineers and explaining additional compliance services.

Contact the [UL Solutions Customer Service team](#) for more information.



Additional resources

UL Solutions Knowledge Services

UL Knowledge Services recognizes that individuals and companies vary widely in their capabilities, learning styles and needs when it comes to how knowledge and training is best delivered. As a result, UL Solutions Knowledge Services offers an array of delivery methods and training programs that are available to participants.

UL Solutions Knowledge Services partners with customers to provide customized seminars to aid in the understanding the product requirements for their UL Certification. UL Knowledge Services also provides variety of seminar topics in various locations. More specific information may be obtained from the field engineer assigned to the account.

Contact [UL Solutions Knowledge Services](#) for more information.

Additional resources

UL Certification Marks are to be placed on products only during the manufacturing process. However, UL Solutions recognizes that there are some instances in which UL Marks may be needed for products in the field. In these cases, UL Solutions offers two special field programs:

- Field evaluation services – Through field evaluations, UL Solutions can assess the safety compliance of installed products for acceptance by local regulatory authorities. Products are typically not Certified or have been modified since Certification.
- Field inspections – Field inspections are reserved for recently installed UL Certified products that are missing the proper UL labels and can help you avoid costly removal and replacement of products, saving both time and money

For more information, see our webpages on [field evaluation](#) and [field inspection](#).

Additional resources

[Product iQ](#)

Product iQ is UL Solutions' product directory, containing information on all UL Certified products.

[Marks](#)

Find digital files of UL Marks in a variety of formats

[UL Label Centers](#)

Get answers to questions about UL Labels

[Marks Hub](#)

Design artwork and submit for approval

[Marketing Guidelines](#)

Learn the guidelines for marketing your certification

[Glossary of terms](#)

Contains definitions of many of the terms used in the product Certification.

For secure, online access to your UL Solutions reports and procedures, please sign up for a [myUL®](#) account.



Thank you

[UL.com/Solutions](https://www.ul.com/Solutions)

Safety. Science. Transformation.™