

— APPLIED



RESEARCH LABORATORIES OF SOUTH FLORIDA, LLC —

5371 N.W. 161st Street • Miami, Florida 33014-6223
www.arl-test.com • info@arl-test.com
Tel: 305.624.4800 • Fax: 305.624.3652

**OVERVIEW
OF
ARL'S
SAFETY STANDARDS
CONFORMANCE
TESTING, LISTING
AND FOLLOW-UP
INSPECTION
SERVICES**

Document # LSc001-01



OVERVIEW OF ARL'S SAFETY CONFORMANCE TESTING, LISTING AND FOLLOW-UP INSPECTION SERVICES

Applied Research Laboratories of South Florida, LLC (ARL) is a full service, accredited testing and certification agency which provides testing for compliance to industry accepted safety standards for a wide variety of consumer products. We are independent of any government or manufacturing organization and have been engaged in testing for consumer safety for more than seventy (70) years. What makes us truly distinctive is our exceptional, personalized service and fast turn-around times.

ARL's has a broad base of testing capabilities and experts who can help you throughout the process. ARL specializes in heating, ventilation, air conditioning products, household appliances, electrical and electronic equipment.

Safety conformance testing is performed to assure compliance with current, nationally recognized, industry accepted safety standards within ARL's scope of accreditation. The scope of ARL's listing, labeling, and follow-up inspection services includes various types of electrical products including household & commercial equipment and industrial & specialty equipment. To view descriptions of the individual product categories and standards under ARL's scope please go to ARL's website, arl-test.com.

ARL's is a nationally recognized testing laboratory under OSHA's NRTL program recognized as meeting the legal requirements in 29 CFR 1910.7 to perform testing and certification of products using consensus based test standards including:

- The capability to test and evaluate equipment for conformance with appropriate test standards;
- Adequate controls for the identification of certified products, conducting follow-up inspections of actual production;
- Complete independence from users (i.e., employers subject to the tested equipment requirements) and from any manufacturers or vendors of the certified products; and
- Effective procedures for producing its findings and for handling complaints and disputes.



ARL is also accredited with IAS (International Accreditation Service) as a testing laboratory (TL-222) to ISO/ IEC 17025- 2017, *General requirements for the competence of testing and calibration laboratories* and as a certification body (PCA-120) to ISO/IEC 17065- 2012, *Conformity assessment- Requirements for bodies certifying products, processes and services*. ARL's Listing, Labeling and Follow-Up Services follows scheme type 6 of ISO/IEC 17067, *Conformity assessment- Fundamentals of product certification and guidelines for product certification schemes*.

A product tested by ARL which meets the applicable industry accepted safety requirements will receive:

- a certificate of conformance identifying the certified product or product family, date of issuance, client to whom it is being issued, factory location, client's trademark (if any), model numbers and the applicable standard(s)
- a Certification Report indicating that the product is eligible for ARL's comprehensive Listing, Labeling, and Follow-Up Inspection Program
- a Follow-Up Service Procedure for the Certification Report

This program is designed to assure interested parties that products listed in our Listed Products Directory have been tested and were found to comply with current nationally recognized, industry accepted standards and are under a continuing inspection program.

WHY DO I NEED A LISTING FOR MY PRODUCT?

Most cities and municipalities in the United States currently require equipment installed to be "Listed" and "Labeled" by an approved testing agency certifying its safety in regards to fire, shock, and personal injury in accordance with minimum industry accepted safety requirements.

If your equipment is installed and an inspector from the authorities having jurisdiction notes that there is no required listing mark from an approved testing agency, that inspector has the authority to reject the equipment and deny approval of any installation containing that equipment. At that time, the equipment must either be removed, replaced by a listed piece or be tested and labeled by an approved agency.



Therefore, the lack of a listing mark on a small inexpensive piece of equipment can easily delay completion of a multimillion dollar project. At that point, your customer's satisfaction would be severely compromised.

APPLYING TO ARL FOR A LISTING

To become eligible for ARL's Listing, Labeling and Follow-Up Inspection Services, the product in question must undergo extensive testing related to the applicable safety standard(s). All inquiries should be submitted to ARL on ARL's Request for Quote Form (available upon request at 1-305-624-4800 or www.arl-test.com) and must include all the applicable information pertaining to the product or family of products to be tested.

When evaluating the initial information supplied, an impartial ARL Engineer will contact the potential client to discuss the project and attempt to establish a testing plan that will reference "families" of units based on similarities of models within the same listing. The ARL Engineer will determine the appropriate safety standard(s) (using its most current version). The decision to continue with the testing program will be made once it has been determined that the product can be adequately tested within ARL's scope of accreditation, capabilities and resources.

A Product Submission Package to assist in the submission of items essential to do the testing and completing the lab report is sent to the client which includes when applicable is sent to the prospective client containing:

- an Application for Investigation, Listing, Labeling and Follow-Up Service (detailing the testing services being offered and responsibilities of both parties),
- a Product Submission Guide
- a Sample Submission Form
- a Test Procedure Submission Application or Test Plan
- the estimated testing fee (quote)

After reviewing the Application for Investigation, Listing, Labeling and Follow-Up Service from ARL, the client must then sign and return it along with the required check in prepayment to establish an ARL project file. Items required by ARL for the test program are:

- the test sample(s) indicated on the Sample Submission Form



- other items as detailed in the Product Submission Guide and/or the applicable standard as requested by the Project Engineer or Director of Engineering on the Test Procedure Submission Application or Test Plan.

More details about ARL's conformity assessment program, its documentation and/or the contents of ARL's applications and agreements are available upon request by contacting ARL by phone or throughout or website.

PRODUCT EVALUATION AND TESTING

Following receipt of both the signed Application, pre-payment, the required client supplied information, materials and samples, the project will be scheduled. The Project Engineer will oversee all aspects of the product evaluation including the engineering review, component acceptability and testing to determine if the product meets all applicable safety requirements.

All components will be checked to ensure they are "listed or recognized" by an NRTL and suitably rated for their application. If components are not recognized, the client will have the option of replacing those components with recognized ones or testing the unrecognized component for use in their product. If it is within ARL's scope, ARL can perform the testing at an additional cost to the client.

The client will be notified in writing of any variances requiring correction, additional information needed or components requiring further investigation. Operational tests outlined in the standard can then be performed or put on hold, at the Project Engineer's discretion, depending on how variances may affect the product's operational test results.

Upon successful, satisfactory completion of testing, evaluation, correction of variances and review of all related information, the file will be forwarded to our Technical Writing Department. A Certification Report and a Follow-Up Service Procedure are prepared reflecting the construction of the product and any production line tests required by the manufacturer. At that time the product is eligible for the next step in the process, ARL's preliminary factory inspection.



PRELIMINARY FACTORY INSPECTION

In order to qualify for a listing, a preliminary factory inspection of the manufacturing facility must be performed for all new clients; a new manufacturing facility for an existing client; or product manufacturing varies significantly from an ARL listed product. If more than one manufacturing facility is used, all manufacturing sites must undergo a preliminary factory inspection.

A Work Authorization Form (WAF) will be sent to the client to authorize the preliminary inspection. The WAF must be signed and returned along with a check in prepayment which includes the preliminary inspection fee plus travel expenses. The product tested is not approved for listing and/or labeling until it appears on-line in ARL's Listed Product Directory.

The purpose of the preliminary factory inspection is to ensure that the manufacturer is producing replicas of the test samples originally submitted for certification. The inspection also determines that the client is performing the required production tests, has an adequate quality management system and is capable of using of the ARL Listing Mark within the terms stated in the Service Agreement. If a proper system is not in place at that time, ARL's Inspection Team will work with the client to help establish a system that meets ARL's minimum requirements.

The preliminary factory inspection will encompass:

- Production Control
 - Manufacturing Facility Evaluation
 - Incoming Raw Material Evaluation
 - Production Line Evaluation
 - Manufacturing and Production Test Requirements
 - Identification Requirements (Date Code)
- Quality Control /Assurance Evaluation
 - Evidence of an adequate Quality Management System
 - Complaint Handling
 - Test Report and Safety Standard Information
- Record and Documentation System
 - ARL Listing Mark Label Usage and Documentation
 - Document Control



- Component Examination
- Photographic Documentation of the Production Line Procedure
- Sampling of Data Plates and Product Labels

PRODUCT LISTING, LABELING AND FOLLOW-UP SERVICE

Once all the following criteria have been met, and a listing follow-up service agreement is signed by both parties (detailing the follow-up services being offered and responsibilities of both parties), the product will appear on-line in ARL's Listed Product Directory located at arl-test.com:

- A satisfactory engineering review and the appropriate safety testing for the product has been successfully completed
- The client has supplied required information to accurately document the product and has added ARL as an "additional insured" to their product liability insurance.
- The final certification reports have been signed and issued to the client
- A satisfactory preliminary factory inspection has been conducted
- The manufacturing site is approved for production of the listed product or product family
- A certificate of conformance to the applicable standard(s) for the product or product family has been signed and issued by the President of ARL/designee.

Only **after** all the above steps have been satisfactorily completed can ARL's Listing Mark:

- Labels be purchased. Labels are purchased directly from ARL. Label pricing is available upon request.
- Appear on exact replicas of the product tested by ARL.
- Appear in any marketing information associated with the listed product.

ARL'S LISTING MARK AND LABEL

The manufacturer, through written agreement with ARL, is authorized to apply the ARL mark only to products found eligible for Listing, Labeling and Follow-up Inspection Services. Generally, the mark is affixed in the form of a non-separable serialized label. The mark may also be imprinted or made a permanent part of the



listed product as approved by ARL.

The ARL label is purchased directly from ARL and all label orders are prepaid. The ARL label will generally specify the exact models to which the label may be affixed and by whom the product is manufactured or distributed. Pricing is dependent upon the quantity of labels ordered.

ARL labels are issued to be affixed to each unit of the product certifying it as in compliance with the safety standards. After that time, a minimum of four (4) no-notice follow-up factory inspections will be performed annually to ensure proper procedures are being followed and the ARL label is being affixed only to manufactured replicas of samples submitted to ARL. Under certain predetermined criteria and two years of compliance, the number of inspections may be reduced to two (2) per year at the discretion of ARL.

FOLLOW-UP FACTORY INSPECTIONS

Follow-Up inspections are designed to assure the public, authorities having jurisdiction and other interested parties that listed products which bear the ARL label are manufactured replicas of the products ARL tested and continue to meet qualifying criteria.

Unannounced factory inspections are conducted periodically by ARL listing compliance inspectors. Manufacturer must agree to inspector's unobstructed access to the manufacturing facility. From time to time, ARL personnel may also acquire products on the open market or from inventory/production line to forward to ARL for re-evaluation.

During the follow-up factory inspections our representatives will examine aspects of the manufacturing of the listed product as was done in the preliminary factory inspection including but are not limited to the following items as they relate to the listed product: the actual product being manufactured, comparison of component parts to those listed in the ARL certification report, calibration of equipment used for production, adequacy of quality management system, customer complaints, review of applicable standard(s) to verify that it is the most current edition/revision, production and test logs, ARL label logs and your ARL Certification and Follow-Up Service Procedure Reports.

After all inspections the client will receive a “Inspection Summary Report” detailing each variance (non-conformance), if any. All variances are required to be cleared within a specified time from the date of the inspection in order to maintain the product listing. The amount of time allowed to correct the variances is determined by ARL’s Director of Engineering and/or Director of Quality Assurance.

In the unlikely, rare event that a product becomes suspended or delisted, either voluntarily or in-voluntarily, the client will turn over the applicable Certification Reports, unused labels and a copy of the last page of the label log to ARL. The client also agrees to perform a product recall and/or public notification, if deemed necessary by ARL. Complaints and appeals can be sent to ARL by mail, through our website or by calling ARL directly and will be addressed in a timely manner.

CHANGES TO ARL LISTED PRODUCTS

Any changes made to a product or alternate components, must be submitted to ARL for approval on a “Component Parts List” along with the required information before their inception. Charges may or may not apply depending on the change, engineering evaluation and testing required.

A Work Authorization Form (WAF) will be sent to the client specifying the change requested and the fee involved. The signed WAF, a check in prepayment and any other material required must be submitted to ARL to complete the requested change.

Client agrees to maintain compliance to the most current version and revision of the applicable safety standard. If additional testing is to be performed, a new application for Investigation, Listing, Labeling and Follow-Up Service and quote will be issued.

Until the updated pages of the Certification Report and Follow-Up Service Procedure Report are issued and inserted in place properly in the reports, the change is not approved.

ARL will maintain the documentation related to your listed product for a minimum of five (5) years after the product has been delisted.

APPLIED



RESEARCH LABORATORIES OF SOUTH FLORIDA, LLC

5371 N.W. 161st Street • Miami, Florida 33014-6223
www.arl-test.com • info@arl-test.com
Tel: 305.624.4800 • Fax: 305.624.3652

NO WORRIES OUR EXPERTS WILL HELP YOU EVERY STEP OF THE WAY

Our small business atmosphere allows our clients direct access to our engineers and support staff, providing that one-on-one personal contact and attention that larger corporations cannot share with their clients.

CONTACT US TODAY TO DISCUSS YOUR PROJECT



Applied Research Laboratories of South Florida, LLC
5371 N. W. 161st Street
Miami, FL 33014
T 305•624•4800 F 305•624•3652
info@arl-test.com
www.arl-test.com