

## UNDERWRITERS' LABORATORIES OF CANADA (ULC)

UNDERWRITERS' LABORATORIES OF CANADA (ULC) is a not-for-profit organization incorporated in 1920 by letters patent issued by the Canadian Government. It maintains and operates laboratories and certification services for the examination, testing and classification of devices, constructions, materials and systems to determine their relation to life, fire and property hazards. Underwriters' Laboratories of Canada also develops and publishes, standards, classifications and Other Recognized Documents for products having a bearing on fire, accident, or property hazards.

ULC is accredited by the Standards Council of Canada as a Certification Organization, a Testing Organization, and a Standards Development Organization under the National Standards System of Canada, and is affiliated with Underwriters Laboratories Inc.

ULC Standards are prepared using the consensus principle by individuals who provide a balanced representation of interests relevant to the subject area on a national basis.

The headquarters of ULC is located in Toronto, Ontario. In addition, ULC is represented across Canada as well as many countries worldwide.

For further information on ULC services, please contact:

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For further Information on Standards Development activities at ULC please contact:

### STANDARDS DEPARTMENT AND GOVERNMENT RELATIONS OFFICE

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### IMPORTANT NOTICE

ULC Listings are on-line under our Listing Directories page. Listing Directories can be ordered in softcover or CD ROM (single and multi-user) as well. These can be ordered by going to the ULC Online Store at <http://www.ulc.ca>. ULC standards and ORDs can also be ordered from the same site by calling 1-866-937-3852 ext. 61744 or by e-mail at [publications@ulc.ca](mailto:publications@ulc.ca) (In subject line enter: Standards Order Request). ULC also has a number of resellers of its standards and ORDS. Contact the standards department for a current list.

# IMPORTANT INFORMATION FOR USERS OF THIS DIRECTORY

## HOW TO USE THIS DIRECTORY

**This directory contains important information to aid you in selecting and applying materials, designs etc.** Determine the classification under which you would expect the device to be listed.

**Refer to the index at the back of this directory for the page number on which the listing begins for the device you are checking.**

**Under the heading (Classification) of the device, there will usually be a description of what this listing covers. Read the explanation carefully to find out exactly what the listing means.**

For example, under "Laminated Panels", one sentence states: "The insulating, acoustical, structural and other properties of these products have not been investigated." *That limits the listing and is important. Check all explanations thoroughly.*

## ORGANIZATION OF UNDERWRITERS' LABORATORIES OF CANADA

UNDERWRITERS' LABORATORIES OF CANADA (ULC) was incorporated in 1920 as a not-for-profit organization without share capital by letters patent issued under the Seal of the Secretary of State of Canada to maintain and operate laboratories and an inspection service for the examination, testing and classification of devices, constructions, materials and systems to determine their relation to life, fire and property hazards. ULC also develops and publishes standards, classifications and specifications for products having a bearing on fire, accident, or property hazards. ULC is accredited by the Standards Council of Canada as a Certification Body, a Testing Organization and a Standards Development Organization under the National Standards System of Canada.

### Participants, Beneficiaries and Partners

The National Standards System (NSS) is Canada's network of people and organizations involved in the development, promotion and implementation of standards. Through the collaborative effort of the system's members, Canada's standards help advance the social and economic well being of the country and safeguard the health and safety of Canadians. ULC is a long standing member of this system.

The NSS consists of over 350 organizations and 15,000 volunteers. The Standards Council coordinates and oversees the efforts of the NSS. The NSS is Canada's network of people and organizations involved in standardization. Standardization encompasses the development of a standard (technical document) and the verification that the product or service meets the requirements of a standard.

## REPRESENTATIVES

Representatives delegated to conduct the factory follow-up programs are located throughout Canada and in other areas where ULC listed products are manufactured.

## ADVISORY COUNCILS

Issues relating to ULC Standards and Other Recognized Documents having a bearing on listings covered in this directory are brought to the Advisory Council of Underwriters' Laboratories of Canada for information, input and comment.

In addition to the above, Underwriters' Laboratories of Canada liases as appropriate with various federal, provincial, territorial and municipal regulatory authorities.

The foregoing advisory bodies are also consulted by the staff of Underwriters' Laboratories of Canada in connection with the development or revision of ULC Standards and Other Recognized Documents and with respect to special problems that may arise in connection with the Laboratories' engineering and listing services.

## CLASSIFICATIONS IN THIS DIRECTORY

The Fire Protection Equipment List of Equipment and Materials contains listings of products intended for Fire Protection (see Table of Contents for categories).

Users of this directory are urged to read carefully the following sections on Installation and Use, Follow-Up Programs, and How to Use This Directory, for an understanding of the extent of the services of Underwriters' Laboratories of Canada, and of the limits of its responsibility.

For ease of reference, the listings are arranged alphabetically by general classifications, alphabetically by subject and alphabetically by name of manufacturer under each subject.

Refer to the Indices at the back of this directory to look listings up by company name, CCN number, guide number and product type.

## OTHER DIRECTORIES PUBLISHED BY UNDERWRITERS' LABORATORIES OF CANADA

You can also order or view on-line the following directories:

- Building Materials
- Burglar and Fire Alarm Systems and Components
- Fire Resistance
- Firestop Systems and Components
- Heating and Ventilating Equipment and Flammable Liquids and Gases Equipment

**The label or Listing Mark on a product is evidence that such a device or material has been produced under the Listing Program of Underwriters' Laboratories of Canada. Such marking does not mean that products of the same classification are necessarily equivalent in quality or merit.**

## STANDARDS AND OTHER RECOGNIZED DOCUMENTS OF UNDERWRITERS' LABORATORIES OF CANADA

Underwriters' Laboratories of Canada develops and publishes standards and specifications for products having a bearing on fire, safety and security, crime prevention, thermal insulation and systems, live working and other areas. ULC is accredited by the Standards Council of Canada as a Standards Development Organization under the National Standards System of Canada.

If you are interested in taking part in Standards Developments please contact the Manager of Standards, Underwriters' Laboratories of Canada. If you are interested in having a standard developed please contact the Director of Standards, Underwriters' Laboratories of Canada. Underwriters' Laboratories of Canada has 16 Standards development committees covering the following areas.

Committee on Fire Tests –ULC- S100A

Committee on Security and Burglar Alarm Equipment and Systems – ULC-S300A

Committee on Physical Security Equipment – ULC-S300B

Committee on Automobile Theft Deterrent Equipment and Systems – ULC-S300V

Committee on Live Working – ULC – S400A

Committee on Portable Fire Extinguishers – ULC-S500A

Committee on Fire Fighting Apparatus and Equipment – ULC-S500B

Committee on Fire Alarm Equipment and Systems – ULC-S500F

Committee on Fire Fighting Foams – ULC-S500G

Committee on Stationary Steel Storage Containers for Flammable and Combustible Liquids – ULC-S600A

Committee on Stationary Non-Metallic Storage Containers for Flammable and Combustible Liquids – ULC-S600B

Committee on Factory-Built Fireplaces, Chimneys and Vents – ULC-S600E

Committee on Fittings for Flammable Fuels – ULC-S600H

Committee on Kitchen Exhaust Equipment and Systems - ULC-S600K

Committee on Oil-Water Separators – ULC-S600L

Committee on Thermal Insulation Materials and Systems – ULC-S700A

The Engineering Department of Underwriters Laboratories of Canada also develops and publishes Other Recognized Documents (ORDs) to deal with certification of products where standards do not yet exist or do not deal with the product.

A list of Standards and ORDs currently available may be obtained from our web site at <http://www.ulc.ca> or by contacting the Standards Department at the Ottawa office. In addition, the current standards work program of ULC's Standards Department can be found on the same web site as well as being linked through the web site of the Standards Council of Canada at <http://www.scc.ca>. This work program is updated every six months.

Where applicable, conformance of a product with pertinent requirements found in Canadian Codes and Standards and regulations published by other agencies is required before listing is established. For further details concerning the significance of the listing, reference should be made to the explanatory texts preceding each of the various classifications of products covered herein.

For judging acceptability of devices incorporating electrical features, reference is made to applicable requirements contained in the Canadian Electrical Code, Parts I and II, and compliance therewith is a prerequisite to listing.

## **INSTALLATION AND USE**

Local authorities having jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of the devices and materials listed. All listed devices and materials have been examined with a view to their proper installation in accordance with nationally recognized codes and standards.

## **HOW TO SUBMIT A PRODUCT**

**To submit a product for investigation and listing, Please contact our Customer Service Dept. at 1-866-937-3852 or by fax, to 416-757-8727. You can also email in your request to: [customerservice@ulc.ca](mailto:customerservice@ulc.ca); or you can visit our website and download our product submittal form located on the certification and testing page. Our website address is [www.ulc.ca](http://www.ulc.ca).**

**In order for us to provide you with information about the certification of your product please supply us with the following details:**

- 1. Product type.**
- 2. General description and application of product.**
- 3. The number of styles, designs, sizes and their model or catalogue designations.**
- 4. Where you would like to market your product.**
- 5. Schematics of the product.**

**NOTE: Most importantly please include your name, company name, phone number, fax number and email address in order for us to get back with you.**

**If you have any questions, please call our customer service team at the number listed above.**

## **FOLLOW-UP PROGRAMS GENERAL**

The promulgation of Listing is contingent upon the establishment of one of the several forms of follow-up services briefly described in the following sections. The selection of the service to be applied to a particular class of product or service rests with the Laboratories and is normally uniform for all Listings within each classification.

The follow-up programs are designed to serve as a formal check on the supervision which the manufacturer exercises to determine compliance of the product or service with the applicable requirements of the Laboratories.

Manufacturers, inspection authorities, and others are encouraged to report to ULC complete details concerning features of Listed products or services thought not to be in compliance with applicable requirements. ULC is prepared to undertake prompt and thorough investigation of such reports and, if the features involved are not in compliance, correction of subsequent production is required as a condition of continued Listing and Service.

The appearance of a Listee's name in this List does not signify that all of his products or services in the classification are covered by the Laboratories' service. Only those products bearing the appropriate ULC listing mark should be considered as covered by the ULC Listing and Follow-Up Service. The following sections describing the various services include instructions for identifying the portion of any Listee's output covered by the service.

Underwriters' Laboratories of Canada is established as a not-for-profit service organization. Accordingly, the charges for the follow-up programs are adjusted from time to time, and subscribers to the service are notified of the current charge and any subsequent changes.

These services represent in any case only the independent judgement of Underwriters' Laboratories of Canada, given with due consideration of the necessary limitations of their practical operation and in accordance with the declared objects and purposes of the Laboratories. Underwriters' Laboratories of Canada neither assumes nor accepts responsibility for the effect of these services, reports, listings, requirements, and labelling on relations between manufacturers or others, or on the sale of products, nor can Underwriters' Laboratories of Canada guarantee that its findings will be accepted or recognized in any individual case. Assurances of such acceptance or recognition can be obtained only from the authority having jurisdiction.

## **LABEL SERVICE**

Under the Label Service Program, the manufacturer attaches labels to such of his products as are found by the specified examinations and tests conducted, to be in compliance with the applicable requirements. The Laboratories' representatives make periodic visits to the factory in which the products are manufactured and labelled for the purpose of checking the efficiency of the manufacturer's own inspection program. Should the Laboratories' representative observe features not in compliance with the requirements, the manufacturer is required to correct such items before authorization to apply labels is given, or to remove labels from the product.

The basic types of FUS programs consist of Type L and Type R Follow-Up Service. The differences between these two types of service involve the frequency of factory visits and the method for obtaining ULC Marks.

At the beginning of the year, each manufacturing location is invoiced an annual maintenance fee. This fee is dependent on the total number of file numbers at the location. This annual maintenance fee covers the cost to administer and maintain a client's Listing, Classification, or Recognition, as well as other administrative support costs.

### Type L Follow-Up Service

Type 'L' Follow-Up Service is primarily for life safety products such as fire extinguishers, smoke alarms, fire doors, and for high volume products such as wire and circuit breakers. Frequency of inspection is determined by both the number of units labeled and the complexity of the product. The frequency of inspection for each Account, Class, and/or code is published in the "Guide for Establishing Inspection Frequency". For certain product categories, the fees for our Type L Follow-up Service inspection are covered by a service charge associated with each Listing or Classification Mark. There are also product categories under the Type L Follow-Up Service where the fee is based on a per visit (task) fee.

#### Identification of ULC Listed Products (Type L)

A separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include these four elements:

- ULC's symbol



- the word "LISTED,"
- the product or category name,
- and the issue or serial number assigned by ULC.

### Type R Follow-Up Service

Type 'R' Follow-Up Service covers electrical appliances such as fans, televisions, hair dryers, toasters, and other products normally produced on an assembly line in accordance with detailed specifications. Factory visits are scheduled during production of products bearing the ULC Mark and as specified in the "Guide for Establishing Inspection Frequency". The Applicant is invoiced at the end of the month in which the inspection(s) take place. In-plant inspection time is covered by a predetermined task rate applicable to each product category. Any charges for tests conducted at one of our offices on samples selected during factory visits will also be included on the monthly invoice.


#### Identification of ULC Listed Products (Type R)

A separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include these four elements:

- ULC's symbol



- the word "LISTED,"
- the product or category name,
- and a control number assigned by ULC.

The complete Listing Mark will appear on the smallest unit container in which the product is packaged when the product is of such a size that only the symbol  can be applied to the product, or when the product size, shape, material or surface texture makes it impossible to apply any legible marking to the product.

**Appearance of a Listee's name under a particular classification in this List does not signify that all his products of that classification are Listed. Only those devices and materials which actually bear the label are covered by the Label Service.**

### **CERTIFICATE SERVICES**

Under the Burglar and Fire Alarm System Certificate Service, Underwriters' Laboratories of Canada authorizes the issuance of the Laboratories' certificates to installations which the listed installing/monitoring company represents to be in compliance with requirements established for the class. The certificate indicates the classification, extent, location of equipment, period covered by the certificate, and name of the installing/monitoring or service company.

Underwriters' Laboratories of Canada conducts countercheck field examinations of representative installations of each listed installing company. If installations not in compliance with the Laboratories' requirements are found as a result of field examinations, they are subject to correction by the listed installing company or cancellation of the certificate.

Appearance of a listee's name in this Directory does not mean that all of the services of the Listed classification comply with the Laboratories' requirements. Only those field installations which actually bear the certificate are covered by the Certificate Service Program.

Reference should be made to the sections covering Burglary Protection Equipment and Systems along with Fire and Alarm Equipment and Systems listings for a description of the applicable Certificate Service.

### **SPECIAL SERVICES**

The Laboratories will undertake the development of an appropriate follow-up program for a new class of product found acceptable for Listing whenever one of the established forms of follow-up is not suitable.

### **LISTING SYMBOL**

Subscribers to the Listing services of Underwriters' Laboratories of Canada may secure authorization to use an official Listing Symbol in advertising and other printed matter covering Listed products or services. The symbol provides a convenient method whereby a manufacturer may inform the public that the product or service described in published advertisements, catalogues, and other literature, is Listed by Underwriters' Laboratories of Canada.

Use of the Listing Symbol is optional with the subscriber and can only be authorized upon the execution of a formal agreement between the subscriber and Underwriters' Laboratories of Canada. In order to prevent confusion between the Labels of Underwriters' Laboratories of Canada and the Listing Symbol, use of the Symbol on the actual product is prohibited under the agreement.

### **"APPROVED" – A DEFINITION**

The word "Approved", as normally used in the fields of fire protection and accident prevention, is intended to mean "acceptable to the authority having jurisdiction". Consequently, indiscriminate use of the term "Approved" in connection with products or services Listed by Underwriters' Laboratories of Canada can create misunderstandings as to the true significance of these Listings.

Underwriters' Laboratories of Canada exists to be of service to inspection authorities by supplying authoritative information on products or services. Its Listings are intended to provide data with respect to the degree of hazard present, if any, or the ability of a product to perform its required protective function. Review of such data enables the inspection authority to "approve" a Listed product or service for the specific purpose under consideration.

For this reason, Underwriters' Laboratories of Canada follows the long established policy of referring to products covered in this publication as being "Listed" rather than "Approved", since the two terms are not always synonymous.

## ACCEPTANCE OF ULC LISTINGS

The Listings of Underwriters' Laboratories of Canada are accepted quite generally by various federal, provincial, and municipal authorities, insurance inspection agencies, plant operators, architects, and users as a condition of their recognition of appliances, equipment, and materials having a bearing on life, fire and casualty hazards and crime prevention. The extent and conditions of such acceptance may be influenced by existing legislation or other local conditions. Consequently, prospective submitters requiring more specific details in this connection should direct enquiries to inspection authorities having jurisdiction.

## QUALITY SYSTEM REGISTRATION SERVICE

Underwriters' Laboratories of Canada - ULC's management registration services are available from our Toronto-based head office as well as from our Montreal and, Vancouver based regional offices. ULC is represented worldwide in Asia, Australia, Europe, North America, and South America.

In October 1995, ULC and Underwriters Laboratories, Inc. (UL) became affiliates. UL is currently the largest U.S.-based ISO 9000 registrar, and is accredited by four of the world's leading accreditation bodies: the American National Standards Institute - Registrar Accreditation Board (ANSI-RAB), the Standards Council of Canada (SCC), the Netherlands' Raad voor de Accreditation (RvA) and the United Kingdom Accreditation Service (UKAS). As UL's Canadian affiliate, ULC provide access to UL's international ISO 9000, QS-9000, ISO/TS 16949 and ISO 14001 registration programs with local, Canadian-based, UL-qualified auditors and audit resources.

For additional information, please contact ULC by phone at (416) 757-3611, toll free 1-866-937-3852 or contact us by fax at (416) 757-8915. Website: [www.ulc.ca](http://www.ulc.ca), e-mail: [qrd@ulc.ca](mailto:qrd@ulc.ca).