

North American Regulatory & Safety Standards Agencies

UL “AWM” Recognized Components



Appliance Wiring Material better known under the abbreviation of “AWM” covers wire and cable intended for use as factory installed components of complete equipment. Appliance Wiring Material is not intended for use in direct separate installation in the field. Wire or cable indicating a UL AWM style marking is intended for applications that are unique to each individual style sheet. The usage statement of an individual style sheet will dictate specific end use limitations of the AWM wire or cable. **The NEC does not recognize AWM as an approved wiring method.**

Examples of AWM Use:

If a manufacturer desires to obtain UL Listing for their new piece of equipment they must submit their design to Underwriters Laboratories. The entire UL Listing process will move much more quickly and easily if all internal components used within the equipment design are UL Recognized. If the internal components are not UL Recognized then the UL Listing process will take much longer and cost more as the individual components now must be tested for compliance. AWM can also be used externally to interconnect two UL Listed components such as the data cable assembly that connects a computer to a printer.

UL Listed Wire and Cable Products



Wire and cable covered by this category are intended for use as fixed wiring for the three general building types: residential, commercial and industrial. Listed wire and cable must not only comply with the applicable individual UL standards but also with requirements indicated under specific Articles of the National Electrical Code. The National Electrical Code defines specific end use application and where a particular Listed wire or cable is installed.

Examples of Listed Wire and Cable Use:

A UL Listed wire or cable can be used inside a building where a connection is required from a circuit breaker box to a wall outlet or externally as a coaxial cable when a connection is required from a satellite dish to a television wall receptacle. UL Listed cable can also be used to supply power to a “UL Listed” piece of equipment, such as the flexible cord used in the cord set of your computer or appliance.



C- UL Listing Mark

This marking is represented by a lower case “c” appearing adjacent to the applicable UL symbol and indicate that a wire or cable has been tested by Underwriters Laboratories for conformance to standards from the Canadian Standards Association. These marks are applied to products that are intended for use in the Canadian marketplace.

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C-UL US Classification Mark

UL introduced this new classification mark in early 1998. It indicates compliance with both Canadian and U.S. requirements. The Canada/U.S. Mark is optional. UL encourages those manufacturers with products certified for both countries to use this new combined Mark, but they continue using separate UL Marks for the United States and Canada.



Recognized Component Mark for Canada and the United States

This new UL Recognized Component Mark, which became effective April 1, 1998, may be used on components certified by UL to both Canadian and U.S. requirements. Although UL had not originally planned to introduce a combined Recognized Component Mark, the popularity of the Canada/U.S. Listing and Classification Marks among clients with UL certifications for both Canada and the United States has led to the new mark.



UL Listed Component Mark for Canada and the United States

This Listing mark was introduced by UL in early 1998. This mark indicates compliance with both U.S. and Canadian requirements. The use of the combined Canada/U.S. UL mark is optional. UL encourages manufacturers with products certified for both countries to use this mark, but they may continue using separate UL Marks for Canada and the United States.



General Information

The local or state office of the Electrical inspector dictates regulations governing cables that are installed in conduit. These regulations can vary or fluctuate depending upon interpretation of the National Electrical Code in different states and local municipalities.

Canadian Standards Association (CSA)

Lapp USA offers the following type of Wire and Cable Certified by the Canadian Standards Association on a wide variety of different products.



Appliance Wiring Material (AWM) refers to wire and cable that is manufactured per the requirements specified in CSA Standard C22.2 No.210. AWM Wire and Cable is intended to be used internally within electrical and electronic equipment and can also be used for external interconnection between equipment. C22.2 No.210 defines AWM categories as follows:

Class I Internal

Group (A) – Where not subjected to mechanical abuse

Group (B) – Where may be subjected to mechanical abuse

(1) Wet Location

(2) Oil Resistant

Class II External

Group (A) – Where not subjected to mechanical abuse

Group (B) – Where may be subjected to mechanical abuse

(1) Wet Location

(2) Oil Resistant

In order to comply with CSA Certification requirements all AWM wire and cable must pass one of the following flame tests*