



## WIRE AND CABLE

# Halogen Free (HF) and Low Smoke Halogen Free (LSHF) Cables

UL is pleased to offer Halogen Free (HF) and Low Smoke Halogen Free (LSHF) optional certification marks for wire and cable constructions. To obtain the HF and LSHF optional markings, cables and cable components are tested to the IEC 62821 series of standards.

In addition to the damage caused by fire, corrosive acid gases and smoke generated from non-low smoke halogen free cables could cause damage to electrical and electronic equipment during combustion.

UL offers the optional HF and LSHF markings for most wire and cable categories including, but not limited to:

- Appliance Wiring Material (AWM)
- Communications Cable
- Optical Fiber
- Flexible Cords
- Power and Control Tray Cable (TC)

It is important to note that UL listed cables that have received the optional “-HF” and “-LSHF” marks, also meet all other UL requirements for the general certification. All certifications will be covered under UL’s Follow-Up Service (FUS) program.

The FUS program is designed to monitor and test UL certified products to ensure that production is consistent and continually complies with certification requirements.

### Program Benefits

- Certification information is made publically available
- Product listing in UL’s Online Certifications Directory
- UL IQ™ Database listing
- Eliminate repetitive lot testing
- Enables differentiation in a highly competitive market
- Globally recognized standard / test methods

Individual combustible materials such as insulation, fillers and jackets that are used in HF and LSHF cables that have been certified under UL’s Recognized Component program have the advantage of being published in UL’s Online Certifications Directory ([www.ul.com/database](http://www.ul.com/database)). Cable manufacturers and designers can easily search the database to source halogen free wire and cable materials for use in their products.

UL’s Online Certifications Directory is used by customers globally, enabling material manufacturers to expand their reach.

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