

# What Is Aluminum Wiring?

New homes are constructed with copper electrical wiring, a safe and effective form of wiring. However older homes within Maryland Heights may have been constructed with aluminum electrical wiring, which could present safety issues. A shortage of copper in the mid 1960s caused builders to increase the use of aluminum wire in residential electrical systems. Homes built before 1965 are unlikely to have aluminum wiring. If your house was built or had electrical cables installed between 1965 and the mid 1970s, it may contain aluminum wiring.

When aluminum wiring is used, issues can occur at the connections. The U.S. Consumer Product Safety Commission reports that homes with aluminum wiring are fifty-five times more likely to have “fire hazard conditions” than homes wired with copper. Warning signs of hazardous conditions include: unusually worn or warped outlets or switch plate covers, smoke or sparks from outlets or switches, strange odors, periodic flickering of lights, or unexplained problems with plug-in fixtures and appliances. If you notice any signs of a problem, have a qualified electrician determine the cause.

Aluminum wiring can be identified by the letters “AL” or the word “Aluminum” and have a manufacturer’s name stamped on the plastic or cable covering. If you see “CU-clad” or “Copper-clad,” in addition to the “AL” or “Aluminum”, it means that the cable uses copper-coated aluminum wire, which is a safer alternative. If you have aluminum wiring, a qualified electrician can re-mediate it with one of several methods, including attaching a short section of copper wire to the ends of the aluminum wire at connection points using a special connector named COPALUM to join the wires, installation of AlumiConn connectors, or complete replacement with copper cable.

Permits for residential electrical work can be obtained through the City of Maryland Heights. Visit [www.marylandheights.com/MEP](http://www.marylandheights.com/MEP) for more information on when a permit is required and what items need to be submitted for review. If you have questions regarding electrical or other home improvement matters, call the Department of Community Development at 314-738-2240.