

## **Aluminum Wiring**

Due to the implication of numerous house fires during the 1970's, the once common practice of using aluminum wiring in branch circuits is no longer permitted in most jurisdictions. However, if your house has aluminum wiring, it is not necessarily a problem. Aluminum wiring can be just as safe as copper wiring as long as it has been installed correctly.

When installed incorrectly, aluminum wiring is very unforgiving. It expands when it warms up, and contracts when it cools down. Aluminum wire reacts differently than copper wire after several warming and cooling cycles. After each cycle aluminum tends to lose more of its tightness. This process is often referred to as "cold creep".

Combined with aluminum's tendency to oxidize when in contact with certain metals, these factors can lead to dangerous problems. When aluminum oxidizes, excessive heat may occur, which in turn causes more oxidation. If this cycle continues, eventually the wires may become extremely hot, melt the fixture that it attached to, and even possibly cause a fire.

If you are considering purchasing a home with aluminum wiring, or have discovered it after your purchase, it is recommended to hire a licensed electrician to evaluate the condition of the wiring for any potential problems.