

Reduce Fire and Electrical Breakdown by Updating Aluminum Wiring

Because of a shortage of copper, many homes and buildings were wired with solid aluminum wire in the 1960s and 70s. We now know that solid aluminum branch circuit wire connections (switches, outlets) deteriorate over time, causing overheating and an increased risk of fire.



Red flags

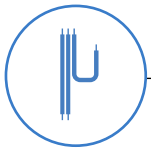
Your building was constructed in the 60s and 70s

Warm-to-touch outlets or switches

Flickering lights or circuits that don't function

The smell of burning plastics

Visual signs of arcing, cracking, excessive heat or corrosion



Wire labeled AL, ALUM, ALUMINUM or variations

Hazards resulting from aluminum wiring

Electrical breakdown of equipment

Electrical arcing

Electrical fire originating in building walls

Recommended solutions*

BEST OPTION

1. If financially feasible, have aluminum wiring completely replaced by a licensed electrician.

NEXT BEST OPTION

2. Have a licensed electrician install "pigtailed" (an approved connector and a short copper connecting wire) between the aluminum wire and the connected receptacle, switch, breaker or fixture.

ACCEPTABLE PIGTAIL CONNECTIONS:

- COPALUM crimp connector
- KING Innovation® AlumiConn®

Pigtails must be installed by a licensed electrician who has been trained by one of the above manufacturers.

Maintain complete records including:

- Company and installer's names
- Authorization to install applicable product
- Their Certificate of Insurance including Completed Operations coverage
- Documentation that all circuit connections have been inspected and all updates made



NOT ACCEPTABLE:

- Installing pigtailed with "wire nuts" even if they are UL listed
- Replacing old fixtures or receptacles with those marked Cu/Al or CO/ALR
- 3M Scotchlock® Connectors
- Using a crimp-connector hand tool



Additional resources

- AlumiConn: kinginnovation.com
- COPALUM: te.com/usa-en/products/application-tooling/intersection/copalum.html

*Source: <https://www.cpsc.gov/s3fs-public/516.pdf>

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