

Safety Notice # 97-04

Aluminum Wiring in Residential Installations

If your home has aluminum wiring and you suspect problems with the terminations you should consider the following:

Aluminum wiring extensively used in the residential market from 1965 to 1976 is no longer a popular wiring method for branch circuits. Problems have been reported from the overheating and failure of aluminum wiring terminations. These problems are evidenced by receptacle discolouration, flickering lights, or the smell of hot plastic insulation.

Aluminum wiring in your home will operate as safely as any other type of wiring if the proper materials are used and it is installed as per the manufacturer's instructions and the Ontario Hydro Electric Safety Code.

If your home has aluminum wiring and you suspect problems may exist we recommend that you hire a qualified electrical contractor experienced in repairing aluminum wiring.

An electrical contractor should:

1. Visually check terminations at devices without removing or disturbing the devices.
2. Cut back the damaged aluminum conductors and join these to a copper tail using a **connector approved for use with aluminum**. Such connectors are coloured brown or purple (depending on the manufacturer). The copper tail is then terminated at the terminal screws of an ordinary device (which includes approved receptacles, etc.)

OR

Cut back the damaged aluminum conductors and re-terminate at a new device bearing the marking CO/ALR. *Only devices bearing this marking are currently approved for use with aluminum wiring.*

3. Panelboard terminations should be checked for signs of overheating.
4. Where fuses are present for heavy loads they should be temperature sensitive type (*D* or *P*).

N.B. Circuits should never be overloaded or overfused regardless of wiring type.