LOSS PREVENTION

CONTROLLING THE RISKS OF ALUMINUM WIRING

A relic of a bygone era, aluminum wiring has not been approved for use in buildings since before 1980. Still found in some buildings from that period, it may be safe, but only if it was installed by an electrician using the methods, equipment and terminations recommended in the Canadian Electrical Code.

Good practice for prevention

To ensure the safety of aluminum wiring, the system should be checked and inspected at least every five years by a certified electrician knowledgeable in aluminum wiring systems and testing. Every circuit should be examined to make sure all connections remain in good condition.

Possible problems and warning signs

Aluminum wiring problems are created when:

1. The insulation on the wire has been stripped or nicked
2. The wire gets kinked
3. Mixed with copper wire or connectors (oxidation)

Warning signs include:

1. Warm outlets or ones that don't work
2. Burning odour or inoperative electric heaters
3. Frequently tripping circuit breakers or blowing fuses
4. Unusually warm switch or receptacle faceplates

If any defects are found on an Insured's premises, they are strongly advised to call in a certified electrician.

To be prepared to answer any questions your customers may have, please see the attached FAQ.

Brief History

Aluminum wiring was installed in residential and commercial buildings in the mid 1960s to the late '70s. It became popular because copper was very expensive, so contractors and builders started using aluminum wiring as a cost-effective alternative.

Damaged Electrical Outlets

Wire Connector Designed for Copper Wiring Only

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Frequently Asked Questions

1. It's been received confirmed that the building's electrical system contains aluminum wiring. What now?

Ask the customer for confirmation of a recent (last 12 months) inspection report on the wiring. If no such report is available, we recommend that the system be inspected by a certified electrician.

2. What needs to be verified?

Article 12-118 of the Canadian Electrical Code provides the steps required for the inspection and maintenance of the system by a certified electrician. After the inspection, obtain a copy of the report confirming the system is in good operating condition, for our file. If any deficiencies were noted, written confirmation of corrective actions is required.

3. What is the scope of this inspection and maintenance?

Depending on the size of the building, lengths of aluminum wires and number of connection boxes, inspection and maintenance may involve a substantial amount or work. Each circuit must be tested to ensure conductivity is within limits established by the Canadian Electrical Code. All terminations and connections throughout the building must be examined for signs of any deficiency or overheating. If any issues are found, they must be repaired using processes and materials that comply with the Canadian Electrical Code. A certified contractor can provide the owner with a better understanding of what is required.

4. What must the inspection report contain?

The report must confirm that the aluminum wiring system was verified and has been maintained according to code, and that there are no signs of overheating or other stress on the cables that could lead to undue damage.

5. How often are inspection and maintenance required?

We recommend that all electrical systems with aluminum wiring be inspected every five years.

Don't hesitate to contact a loss prevention specialist if you have any additional inquiries.

NOTE : This document is produced and distributed to the brokerage network for loss prevention purposes only and it must not be provided to customers. This type of electrical installation could be subject to stricter standards in terms of risk acceptability during the underwriting.

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