

Electrical issues

We have been very fortunate to have had only a small number of fires at Aspenhof. However, as our cabins age and the electrical appliances and accessories multiply, our luck could run out. Here are some of the issues that are seen repeatedly. Aluminum wiring has been dealt with in a separate article.

Using indoor-rated connectors outdoors

Indoor-rated plugs and receptacles have no protection against weather or insect nests. Rain can run or blow into unsealed receptacles and junction boxes, corroding them and causing short circuits and fires. You may be able to see the burn marks caused by arcing around the right-hand plug in the top photo. A resulting failure to the printed circuit board inside the white enclosure could also be seen when this receptacle was closely examined. Nests can absorb moisture, and it is most uncomfortable to deal with angry wasps if you happen to open a box into a live nest.



Using indoor-rated cable outdoors

Indoor-rated cable deteriorates when exposed to weather and ultraviolet light. The external covering cracks and flakes exposing the wires inside. The insulation on those wires will also crack, thus exposing the energized conductors themselves. Few extension cords are outdoor-rated, and almost all have receptacles exposed to the weather.



Uncovered junction boxes

A junction box without a cover invites insects to nest, and it is all too easy a target for inquisitive young fingers. Note also the wires with no clamp or strain relief fed through punched holes having sharp edges.



Failure to properly support wires

Wire should never be supported solely by the junction box or end device. Wires should be properly supported within eight inches of each connection. Never run wires through any opening that has a sharp edge. Cable clamps, with and without weather sealers, are inexpensive. Wires may not be used as a support for junction boxes. Never let wires rest on the ground where they might be tripped over or played with by children. Ground level wiring is also an inviting target for rodents.

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