Risky Business

What You Need To Know About...

Electrical Fires

Electrical fires are one of the leading ignition sources and causes for property damage regardless of occupancy. Defects in electrical systems or equipment may lead to overheating or arcing, both of which may cause a fire. Investing in professional inspections, using equipment correctly, and staying informed about electrical safety are key strategies for protecting property.

Stats and Trends:

$1.5 billion[1] in damages in 2023 from **31,640+ residential electrical fires**[2]

$354 million[3] in damages in 2023 from **7,400 commercial electrical fires**

46.8% **of electrical fires** are caused by **issues with electrical wiring**[4]

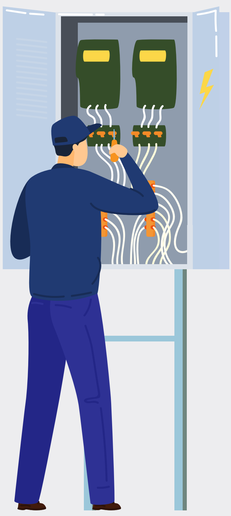
From 2014-2023 there has been a

2% increase in electrical fires and a **28% increase in dollar losses**[1]

Hazards & Risks

- Faulty wiring and outdated electrical systems
- Overloading circuits and power strips
- Appliance malfunction and misuse
- Improper use of extension cords
- DIY electrical work and code violations
- Lighting equipment and fixtures
- Power surges and lightning strikes
- Neglected maintenance and inspections

Loss Control



Regular inspection of electrical systems and equipment.

Cool Equipment and operating environments should be cool.

Clean Dirty electrical equipment and connections can increase heat, as well as provide fuel sources for fires. Remove all storage near electrical panels.

Dry Humid environments or exposure to water can lead to corrosion of metal parts in electrical systems leading to increased heat and breakdown.

Tight All electrical connections should be tight.

Use equipment properly.

Update older systems and equipment in poor condition.

Boiler Re

References

1 U.S. Fire Administration. "Residential Building Electrical Malfunction Fire Trends (2014–2023)." U.S. Fire Administration. Published February 14, 2025. Accessed November 7, 2025.
2 National Fire Protection Association. "Electrical Safety in the Home." NFPA. Accessed November 7, 2025.
3 U.S. Fire Administration. "Nonresidential Building Electrical Malfunction Fire Trends (2014–2023)." U.S. Fire Administration. Published February 14, 2025. Accessed November 7, 2025.
4 U.S. Fire Administration. "Residential Building Electrical Fires." U.S. Fire Administration. Published March 2008 (Volume 8, Issue 2). Accessed November 7, 2025.