

Loss Prevention Safety Tip



Loss Prevention
Program

By Red River Mutual

KNOB & TUBE WIRING

Knob and tube electrical wiring was installed in homes from the 1920's right up into the 1970's in some jurisdictions. The fire safety of knob and tube wiring relied on the fact that the wires were generally routed through the air, suspended by knobs and protected by heavy ceramic tubes where passing through wood.

CAUSES OF FIRE:

No Electrical Ground - Knob and tube circuits are less safe than modern electrical circuits as there is no ground wire. Appliances and devices that use a grounded plug should not be connected on an ungrounded circuit.

Damage Over Time - Knob and tube wiring may become damaged by age, deterioration of the cloth wrapping or from chewing rodents. Wiring in attics is often damaged by being accidentally stepped-on.

Building or Wiring Modifications - The safety of the knob and tube circuit may be affected by building changes such as adding insulation or incorrectly extending the original electrical circuit.

Insulation: Suspended wiring in wall cavities or attic floors that have had insulation applied over top of them may overheat and become a fire hazard.

Extension of Circuit: Often the knob and tube circuit has been modified or extended by subsequent building occupants - an improper practice that is not permitted in most areas. Adding load to the knob and tube circuit risks increasing the temperature of the wiring and possibly causing a fire.

IMPROVING SAFETY OF KNOB & TUBE WIRING:

Inspect All Wiring - A licensed electrician should inspect the condition of all wires, connections, receptacles, switches and overcurrent protection by fuses or circuit breakers.

Replace Bad Circuits - Knob and tube circuits that have been modified, damaged or covered with insulation should be replaced with a modern grounded electrical circuit.

Add Ground Fault Protection - GFCI circuit protection and possibly arc fault protection can be added on two-wire un-grounded electrical circuits to reduce the chances of electrical shock or fire.

Rewire - Many problems with knob and tube wiring are buried behind walls and in ceilings. The best option is to rewire the entire home using current materials and standards.

See more loss prevention tips at
www.preventingloss.com

While the safety recommendations in this report are based on apparent and obvious conditions that were found at the time of inspection, the report does not purport to identify all hazards or guarantee compliance with any standards, codes, ordinances or regulations. It is not legal or expert advice, and should not be used in place of consultation with appropriate professionals. Any person relying on this information does so entirely at their own risk. Red River Mutual denies all responsibility for any liability, loss, injury or risk which is incurred as a direct or indirect result of the use of any of the recommendations in this report.

