

Electrical risk of heritage homes

by Brian Cook, PowerCheck

Simply put:

“It is not the old wiring that is the concern, but the *lack* of old wiring”.

Homes built pre-1950 had a limited number of outlet and lights installed at time of build. A kitchen for example typically had one outlet for the ironing board, usually no counter outlets, but usually one outlet in the nook for an electric toaster on the kitchen table. Outlets did not become prominent on kitchen counters until the 1960s, with the advent of the kitchen electrical appliances, such as the electric frying pan and electric kettle. Basements were unfinished with few or no outlets. Garages were rarely wired, as with attics. Bedrooms typically had one outlet, located on the inside of an exterior wall, closets had none. Bathrooms had none.

Today all these older houses are found wired top to bottom with added electrical outlets and lights. Basements now have numerous lights plus outlets for washing machine and dryer; rec rooms have outlets for entertainment systems; and if there is a basement suite, even more outlets have been added. Electric baseboard heaters are now commonplace, particularly in rec rooms and attic bedrooms. Nearly all kitchens today have multiple additional outlets, including a wired-in range-hood exhaust fan. Attics now have outlets and have often been converted into a bedroom with additional outlets, and garages are now nearly always wired including an outlet for the garage door opener. Nearly every older home today has at least one outdoor add-on sensor light.

Are all those electrical additions safe? If any one of those additions was done by a person not qualified, fire hazards are sure to be present. Legally, all electrical additions can only be done by a licensed electrical contractor under permit. However this is rarely to be found the case. In the 2000 plus old home inspections that I have personally undertaken, I have never seen



a house without some degree of “hazardous add-ons” being present. Seemingly innocuous, nearly always wired with modern cables, hazardous add-ons accumulate over the years putting house at increased risk of electrical fire. Hazardous add-ons are the leading cause of electrical fires.

Over the years as the codes changed with the times, new lights and outlets were required to be installed at time of house construction. Therefore the degree of hazardous add-ons can be expected to decrease as houses become newer (unless there has been a new suite added or a renovation). Knob-and-tube can certainly be a problem. For example, knob and tube fed outlets nearly always require GFCIs for ground protection—but that is an inexpensive fix. Old services are sometimes found overloaded and abused, and need to be checked. However the predominant problem in older houses are the hazardous add-ons that have accumulated over the years.

CONCLUSION:

The older the house, the higher the probability of electrical fire. The cause of the fire will most likely be due to hazardous add-ons—work done with modern cable, without electrical permit.

To assure your old house is at minimum risk of electrical fire, have a PowerCheck electrical risk assessment today.

1-800-517-3630 or 604 684-3630
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