



Home Inspection Services Newsletter

April/May, 2007

Educational Section: **Aluminum Wiring**

Item 8.2.B of the **Standards of Practice for Arizona Home Inspectors** states: **“The inspector shall report any observed aluminum branch circuit wiring”**. Why?

Aluminum wiring used in some homes from the mid 1960s through the early 1970s has the potential to cause fires. Partly as a result of copper shortages during the Vietnam War, aluminum wiring was introduced as residential circuit wiring. Within a few years, arcing at connections (related to expansion and corrosion) caused **overheating sufficient enough to result in fires**. Due to the type of failure, **circuit breakers did not trip**. The connections in question are at circuit breakers, splices, in electrical junction boxes, at receptacles, and switches.

The electrical industry scrambled to develop risk reduction strategies such as copper to aluminum connectors (Tyco's COPALUM), Cu-AL circuit breakers, anti-oxidant paste on panel board connections, etc. Most Aluminum wiring installed after 1972 is considered safer if the appropriate safeguards were utilized. Since the late 1970s, Aluminum wiring is permitted only for specific applications such as residential service entrance wiring and single-purpose higher amperage circuits such as 240V air conditioning, clothes dryers, and electric ranges.

The Bottom line: If your home has Aluminum wired “non-dedicated” branch circuits, get educated by googling “safety aluminum residential electrical wiring”. There are many informative web sites. Once you are familiar with the issues and solutions, contract with an electrical contractor (with significant experience with Aluminum wiring) to review the wiring. For future resale, insist that the contractor outline the scope of work performed along with the invoice. Provide these documents to the purchaser of the property.

Note: Do not attempt to do electrical work yourself unless you are a qualified electrical contractor.

Inspection Item for April/May: AC & Heat Pumps

(Each month, we select appropriate items so that over a 12 month period you are reminded to attend to most common household maintenance/inspection items.) HVAC contractors are not frantic this time of year which makes it a good time to have your AC unit or heat pump serviced. **The typical life for an AC compressor is 12 years.** Consider a **home warranty** with a company that will upgrade your unit to a 13 SEER in the event of failure.

Question of the Month: What water hammer?

When water is turned **OFF** suddenly and the pipes **KNOCK, BANG,** or **CLANG**, this condition is called water hammer. Dishwasher, clothes washer, irrigation & drip system, and toilets are valves that can close quickly causing water hammer. Modern homes have **water hammer arresters**. For more info: *Google* “plumbing water hammer”.

Safety Tip of the Month: CPR and First Aid

Did you know that CPR protocol has changed? Consider certifying in current CPR technique (and first aid) by investing **6 hours** of your time and about **\$40 dollars**. Statistically, when you utilize these skills, it will be with a family member!

For more information, visit: www.arizonaredcross.org

Drawing for April/May: Bottle of Red wine

To enter, send a reply email with “April Drawing” in the subject along with your name and Ph# to Lauren@hainspect.com Fred L of Peoria was March’s winner.

Let our experience work for you. Over 10,000 inspections performed!



Daryl Gates



Mark Andrews



Lauren Andrews

H&A Services, LLC (480) 614-0015 (623) 561-1709 www.hainspect.com

To opt out of receiving our monthly newsletter, please send a reply email to lauren@hainspect.com with “please remove” in the subject line.