



Home Inspection Services Newsletter

January, 2009

Educational Section: Older Home Issues

It's not possible to cover all of the issues related to older homes but the following are frequent concerns:

Foundation: Homes built in the 1920s and prior were frequently built on "sleepers" (wood timbers were frequently laid directly on the ground). Perimeter foundations show signs of deterioration and piers for columns & attachment of bearing walls to foundations are typically not visible. Even without obvious problems it is prudent to have these foundations inspected by contractor that specializes in these period foundations.

Galvanized water pipe: Home built prior to 1960 (and sometimes up to 1970) frequently utilized galvanized water pipe which is routed in the attic and walls. Galvanized piping has a typical life of 50 to 60 years and fails from the inside out. Failure mode is water leakage.

Polybutylene (PB) water pipe: Utilized from mid 1970s to mid 1990s, PB piping had a high failure rate resulting in class action law suits. PB piping is routed in attic and walls with leakage as the failure mode.

Orangeburg or clay main underground sewer piping. Utilized in the 1950s and prior, these materials have a typical life of 50 years. Water leakage makes these sewer pipes prone to penetration by tree roots.

Solid Aluminum wiring: Utilized as branch circuit electrical wiring from the mid 1960s to the late 1970s, connections & splices are prone to oxidation which results in hot spots, arcing, and (potentially) fires.

Small electrical services: 60 amp main services are common in 1940s and prior homes. These services are small for today's electrical demand (AC, microwaves, dryers, stoves, etc). Current standard is 200 amps.

Obsolete electrical technology: Fused electrical panels, two-wire (ungrounded) electrical receptacles and switches, knob and tube wiring, suspect electrical panels are common in homes built prior to 1960.

AC Systems: The most expensive component is the compressor. The typical life is 12/14 years. Units manufactured prior to 1990 are only 60% as efficient as those manufactured after 2006.

Gas Furnaces: Although older units may be operational, they frequently are not as efficient and do not meet current safety standards for gas piping, exhaust flue clearance from combustibles, and supply of combustion air.

Additions and enclosures: These were frequently completed without a building permit. Some don't have proper foundations, heating and cooling, electrical receptacles, etc.

Maintenance Item for January: **Gas Furnace**

Many gas furnaces are in the attic (out of sight & mind). These units should be inspected and serviced by a professional on an annual basis.

Question of the Month: **Why is my home slow to heat?**

You probably have a heat pump. A heat pump typically heats the air a maximum of 24 degrees (and frequently 16 to 18). If the home is 50 degrees, air coming out of the vents will be around 70 degrees. It just takes time to slowly raise the temp of the air, walls, and floors. A typical gas furnace is pumping out 110 + degree air.

Safety Tip of the Month: **Caulk and Grout**

These very inexpensive materials are utilized to prevent moisture from penetrating behind tubs, bathroom and kitchen sinks, shower stalls, and bathroom floors (proximate to toilets and tubs). Take a few minutes and examine these areas. Caulk or grout as needed. This is so much less expensive than tearing out moisture damaged and mold prone materials.

CAUTION: Don't seal areas that you suspect are wet; concealed areas must be clean and dry.

Inspection class for realtors: Arizona Academy of Real Estate (Bell and 99th Ave) offers a **3 credit hour course** "lowering risk through inspection". This course is taught by Mark Andrews (yours truly).

Contact the Academy for dates and details. Ph# 623 505 5380

Let our experience work for you!



Daryl Gates



Mark Andrews



Lauren Andrews