



Home Inspection Services Newsletter

June, 2008

Educational Section: **Water Pressure & Flow**

Here is what the 2006 IRC (International Residential Code) states about water pressure (note; your municipality may not have adopted this code or may have adopted it with modifications):

P2903.3 Minimum pressure. Minimum static pressure (as determined by the local water authority) at the building entrance for either public or private water service shall be **40 psi**.

P2903.3.1 Maximum pressure. Maximum static pressure shall be **80 psi**. When main pressure exceeds 80psi, an approved pressure-reducing valve conforming to ASSE 1003 shall be installed on the domestic water branch main or riser at the connection to the water-service pipe.

Functional flow: The functional flow (volume of water) is not as straight forward. The IRC calls for a minimum water service pipe of $\frac{3}{4}$ inch. The sizes of distribution pipes in the home are calculated based upon type of fixture (toilet, shower, etc) and length of pipe to reach the fixture.

Home Inspectors: Most home inspectors measure water pressure; few if any measure water flow rate but do make a subjective comment as to the adequacy of flow at the homes water fixtures as well a comment/concern if flow drops appreciably when multiple fixtures are in use.

Low Water Pressure: With municipal water providers, low pressure is not observed very often. When it is, the home is usually located much higher (estimate 10 psi pressure reduction for every 10 feet of elevation) than the other homes in the system and frequently “at the end of the line”. Heavy water usage in the area (open hydrant, morning showers, etc.) will also lower pressure. If low pressure is chronic and the water service provider will not correct the condition, a plumbing contractor can install a pressure tank in the homes water system.

High Water Pressure: This condition puts excess force on plumbing joints and plumbing fixtures and can ultimately result in a separated or burst pipe/hose. A pressure regulator should be installed when water pressure is above 80 psi. The typical regulator costs \$55 to \$80 with installation typically of \$200+/- . We recommend obtaining multiple quotes. Regulators are usually preset at 60psi.

Functional flow: Low flow at plumbing fixtures indicates restriction in piping or fixtures. This can be as simple as a clogged faucet screen or as ominous as

rust clogged galvanized distribution pipes. A plumber will probably be needed to figure this out.

Maintenance Item for June: Clean the house (Guys)

(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.)

Guys, I'm talking to you and yes I know that you are no longer talking to me! When I clean the home, problems that I was previously unaware of are observed especially in bathrooms. If you personally do a through cleaning every 6 months, you'll catch a lot of issues that need attention.

Question of the Month: What's the best Air filter?

Of course, I can't answer that. Every manufacturer claims to have the best. Many of the HVAC (heating, ventilating, and air conditioning) contractors I talk to recommend the \$3 pleated filter. This filter catches more air born particulates than the \$1 fiber spun filter but is not so tight that it causes the air handler to work harder. That's the one I use.

Safety Tip of the Month: GFCI testing

Consider inspecting the GFCI circuits: Before testing, know who will change the GFCI if it fails. When GFCIs fail, the circuit typically will be dead. This becomes especially critical if you have a freezer plugged into a garage GFCI outlet! **Note:** All electrical work should be performed by a qualified contractor. READY? Plug in a light, press the test button (light should go out); press reset and the light should go on. If either the test button does not shut-off the power or the GFCI will not reset, the GFCI outlet has failed and needs to be replaced. Don't forget to test the GFCI on the **pool light circuit**.

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). I promise that it will be educational and fun! Contact the Academy for dates and details. Ph# 623 505 5380

Let our experience work for you!



Daryl Gates



Mark Andrews



Lauren Andrews

H&A Services, LLC

(480) 614-0015 (623) 561-1709

www.hainspect.com

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