

Water – Kill’r Cure

By Stephen Ruback, *Professional Inspector* [TREC License #6030]

It is estimated that five days without water, and for most people it is the end of the line, life is kaput, finished, over. The opposite is true of the homes we live in. They don’t respond well to water. Of course it doesn’t help that we build them out of fungus food [wood] and the prime food source for wood devouring insects [cellulose]. From the main structural components to the wall surfaces, it’s one big potential banquet – just add water. Fortunately all those wood destroying organisms need water too. All we have to do is keep the water away from the house and it’s OK.

That’s actually more difficult than it sounds. Over 75% of the Earth’s surface is covered with water. that means a lot of evaporation. What goes up must come down, which means lots of rain. Water tends to run down hill except when it hits cracks and crevices where capillary action can suck it up, like around the edges of roof covering, windows and doors. Or, it may find some absorbent material that will soak it up, like siding too close to the roof covering. You can’t be too careful about construction and design details that direct water off your home. Think like water and imagine where you would go when surveying your home. How often do you do a visual maintenance check around your home? The first principle is to *keep water off*.

Once the water flows off, you need somewhere for it to go. Without good drainage, it can pile up and sneak inside. Dirt around the house sloping toward it, low spots, and decorative dams that block drainage are all common problems. Lots of vegetation close to the walls helps keep them moist too. Wet spots draw insects. They may come for the water and stay for the banquet. It only takes about two days with humidity above 70% to have a full scale fungus factory. Once inside the walls, moisture can take a long time to leave. Favored destruction zones are at the bottom of wood or fiber siding, behind some bushes. By the time you get around to repainting, one blast from the pressure washer blowing away rotted wood shows you what you have been missing. It’s real easy to forget or ignore that second principle – *keep water away*

The third principle can be more insidious. You don’t do yourself any favors when you close off an unused room in warm humid weather. Even worse, an empty house in humid weather, all closed with the AC off [or set too high] to save electricity, can sport new wall decoration and smells in a matter of days.

We are our own worst enemy. The human body is typically more than half water. Each person exudes several quarts of water every day. We also keep dragging wet things inside, like food. Meat is

about 60% water. Vegetables and fruits are about 90% water. We drink and cook with lots of water. Not only do we pipe water into our houses, we splash it around all the time, using as much as 50 quarts per person each day. In the “good old days” with loose, energy inefficient construction, open windows and a good breeze it was pretty much “easy come, easy go” for most of the water. Today we seal ’em up tight and hold it all in. That makes the AC system more important than ever for the third principle – *Keep the water out*.

Just to make it more interesting, we run pipes all over the house which are kept filled with water under 50 psi pressure or more. Then we run some more pipes to drain most of it away. Of course we tend to keep all that stuff hidden in walls and under cabinets so we don’t observe its condition until something breaks. Meanwhile, those little dribbles can add up. That drip, drip, drip is more expensive than most people realize. One drop per second produces 0.57 gallon per day, 17 gal per month, 205 gallons per year. Leaks work two ways. You get to pay for the wasted water itself, then you get to pay for the damage it causes when you ignore the fourth principle – *keep the water in*.

To keep water from killing your house or your pocketbook, follow the four principles:

- Keep water off.
- Keep water away.
- Keep water out.
- Keep water in.

Stephen Ruback is a licensed Professional Inspector; member of TAREI [Texas Association of Real Estate Inspectors] and HAR [Houston Association of Realtors]; approved by TREC [Texas Real Estate Commission] as a Professional Home Inspection Instructor, and teaches home inspection at ITA-Leonard-Hawes, Real Estate School.

In addition, he has earned a BS in engineering from Trinity University, is an author of several books and teaches a variety of self empowerment courses through Leisure Learning. For more information, he can be reached at 832-489-1071.