



The Modern Tools

you should expect in your home inspection and environmental professional's "toolbelt"



By Dan Howard
for TRIB TOTAL MEDIA

Picture 50 years ago when Dick Tracey was in the Sunday Comic section. If you are about my age, you will remember when his communication equipment was upgraded from a wrist radio to a wrist TV. That was science fiction then and old news now. If you don't remember back that far, take yourself back to the Star Trek Communicator. The modern wrist TV (Apple Watch) does everything Dick Tracy's wrist TV did and a whole lot more. Tools to understand our buildings have come every bit as far.

The leap in testing and inspection technology is nothing short of amazing. The good news is that we can check, test and know so much more about health and safety issues than ever before. The bad news is that these new "magic of modern science" tools require much more training and education to use properly. The other real problem is the misuse of these instruments. Every tool has its use and limitations. A chisel can be used to carve an angel in a wooden casket. In the wrong hands, it can also gouge and ruin a beautiful piece of wood. Owning a tool is not enough.

When talking tools for inspection today, the flashlight, screwdrivers, level and ladder are still basic essentials. Additional entry level tools for today are digital cameras, combustible gas detectors, carbon monoxide detectors, and radon monitors.

Not all inspectors have these tools, and you should consider finding another inspector if the one you contact doesn't even have the basics.

Now for the really neat and very important tools that you want your environmental and home inspector to have in their tool box. If they don't have these tools and the proper training in their use, consider finding another inspector.

Infrared (IR) Cameras

This is an amazing tool. It is important enough to carry on all inspections. A few years ago this tool was so large that it came with an "over the shoulder" harness to hold the weight of the camera. Those cameras made the old VHS Camcorders look small. They had a grainy picture resolution to boot.

Now I carry a high quality infrared camera in my pocket. The only thing that is bigger on my modern Infrared camera than the old cameras is the screen. The screen on my latest IR camera is about double the screen size on the heavy old infrared beast of days gone by.

The IR camera differentiates temperature differences. It does not directly detect moisture, air leaks or mold, which is often the consumer's misinformed

interpretation. It simply tells surface temperature differences. It is the understanding of how each of the possible factors that can result in temperature differences are occurring that makes it a useful tool. As a parallel example, a medical x-ray measures density variations. It is understanding "why" there are density variations that makes it a useful tool in the hands of an expert.

Having a Infrared camera in my hand at an inspection provides another layer of information that can get to the root of problems. It can show problems from moisture issues to electrical systems overheating. In dishonest or unqualified hands, it has been pulled out to convince customers of serious problems that are not really there.



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New Listing!



Ford City Boro

Spacious 2 bedroom home w/2 car garage. Beautiful woodwork around the pass through into the kitchen from the large dining room. Covered front & back porches. Nice yard leading to the garage.

New Listing!



Boggs Twp.

This home is in the quiet area of Mosgrove & surrounded by natural beauty & bordered by Pine Creek. The enclosed front porch w/granite bar for entertaining leads to a convenient main level layout including the master bedroom/impressive view of the outdoors & 1st floor laundry room. Main house fully updated in 2003. Large 2 car garage w/2nd story guesthouse.

New Listing!



South Bend Twp.

Beautiful 2 story house on 1.5 acre corner lot, with shed and playhouse. Master bedroom on upper floor has private full bath, 2nd and 3rd bedroom on main floor. Large living room, finished game room, mud/den room on lower level. Dining room has hardwood floor, nice deck attached to house off of kitchen, central air, move in ready.

Reduced!



Worthington

A golden oldie with exciting potential!! This sprawling ranch is just waiting for your personal touch & a little imagination. Custom made oak cabinets, plastered walls, no shortage of closets & storage space, first floor laundry & a fantastic patio are just a few of this 3 bedroom home. There's a 2 car attached garage with an additional extra large detached building makes for a great workshop, shed or additional auto storage.

Reduced!



Kittanning

Charming three bedroom brick tuor home located on N Water Street. Beautiful view of the Allegheny River and River front Park. The covered side porch makes a delightful sitting area to enjoy the view. The home has been updated with a new kitchen and appliances. Call Greg for new quotes on flood insurance



Kittanning Boro

At 74 yrs. old she still has a lot to offer. 4 bedrooms one being captive, use as a den, large second floor bath, original wood work, nice quiet neighborhood, close to all amenities, back yard for gardening.

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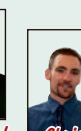
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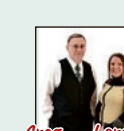
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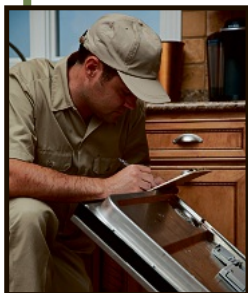
Fiber Optic Cameras

These can look in small openings to see hidden areas. It is really a tool similar to (forgive the image that this analogy may bring you) the scope used for a colonoscopy. It is easy to use this tool to see inside of a heat exchanger on a mid efficiency furnace. Another example of a good use for this tool is after drilling a 1/2 inch hole, the fiber-optic tube to be used to look into hidden wall and ceiling areas.



Moisture Meters

This is essential in many cases when the level or source of moisture is uncertain. This is great for levels of moisture that are elevated, but too low to tell by using our senses. There are pin, surface and air testing



moisture meters. They each have their use and at times are essential tools.

The good news is that we can check, test and know so much more about health and safety issues than ever

Luminometer

This is the amazing tool you have seen on TV news segments to prove that a cell phone has more germs than a toilet seat. Yep, that disgusting observation is often true. I should know, I have used my Luminometer in one of those TV news segments.

The Luminometer is in essence a DNA reader. It tells us the relative amount of material in the tested area that is living cells. The cells can be mold, skin cells, dust mites, pollen or dog drool. If it is organic, it registers on the screen.

Its original use was in the food industry as an economical and accurate way to determine if a food preparation area is clean. If there isn't any organic material on a surface, there is not E.coli, Coliform, MRSA,

Legionella or any other contaminants. If there is organic material on the samples area, It could be any of the contaminants mentioned above. The conclusion would be that the surface still needed to be sanitized. Other uses of the instrument are to confirm a clean operating room, ice maker, medical device or a host of other areas that must be clean of any and all organic material.

In the hands of an unscrupulous mold salesman, the Luminometer is brought out and a spot where any organic material would settle is tested. This is done with the specialized swab being rubbed across the surface and then placed into the device. A number of Relative Light Units (RLU) appears on the



screen and they give you a sales pitch to do a mold cleanup. A reading on a Luminometer is not a mold test. You could rub the swab on your refrigerator handle or a light switch and get sky high readings from the oil on your skin.

Modern science has brought us new tools to help us know and understand health and safety risks and exposures in our homes and businesses. The old tools and knowledge are also critical for understanding building science. When the full range of tools and education are put into the right hands, they are an important part of understanding our buildings.

For additional information go to: www.envirospect.info/InspectionTools

Dan Howard is the owner of EnviroSpect. For environmental consultation call 724-443-6653.

For more information visit their website at www.EnviroSpect.com Email questions to: Dan@EnviroSpect.com. Facebook or connect @DanHoward251.



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128 Sarvers Mill Drive

Must see, spacious home features an updated kitchen w/cherry cabinets, Corian counters & SS appliances. GR features catn cell & a FP. 1st flr MBR w/walk-in closet & cstm wood blinds. Desired Sarver's Mill neighborhood, spend time at the pool, hiking or biking trails, community center or fishing lake.

DIR: Rt. 28 to exit 17, R (north) 356, R Sarver Rd., R into Sarver's Mill.
Hutterer/Stahl
\$328,000
724.996.2647
MLS#1054141

Open Sun. 1-3 PM



658 Vance Drive

Beautifully maintained home features gleaming HW flrs, WB FP & an abundance of sunlight All 5 BRs on the 2nd flr w/lots of closet space. Kit offers ample counter space w/renew SS appliances. LR, DR & FR have all been tastefully painted. LL could easily be converted to a GR that walks-out to the back yard.

DIR: Leechburg Rd. To Craigdell, Left on Braddock, Right on Vance.
Brenda Berger
\$195,000
724.448.3988
MLS#1061441

New Listing!



Lower Burrell

Oversized split-entry offers EIK, LR w/FP, DR w/sliders to deck, MBR w/full bath, additional room on lower level could be 4th BR, & a spacious FR which leads to the patio. Large level back yard w/privacy fence & shed. With a little TLC this could be your home. Furnace '12.

724.448.3988
MLS#1063942
Brenda Berger
\$159,900

Open Sun. 1-3 PM



Winfield Township

Come & enjoy this country setting. Features include a nice size LR open to the DR w/sliding door leading to the cov. 16x10 deck overlooking the 24ft. pool w/deck, & 1.97 acre lot. Plastered walls & ceilings, thermal pane twin windows, main BR has double closet & full bath, huge FR w/wood burner, bar, & sliding door to a 16x10 deck, cov. 17x13 concrete patio, & a 28x24 2 story workshop.

724.816.2386
MLS#1057411
Jon Doerr
\$194,900

New Listing!



Winfield Township

This home has so many possibilities. Move-in condition and in South Butler School District. Also zoned commercial. All of the work/permits have been already completed for you. Have your home and separate business in one location, or rent the office for additional income. Ample parking. House is adorable and move-in ready. Great country location. Commercial occupancy conversion has been completed with all permits and approvals as per implementation of '11 uniform construction codes. 28x40 workshop.

724.816.3576
MLS#1062921
Linda Biernesser
\$174,000

New Price!



Harrison Township

Great price reduction! Welcome home to a lovely 3 BR. Clean, freshly painted, & includes stove, fridge, AND Washer & dryer. Convenient location makes a commute to Pittsburgh easy & quick. Huge rear deck tailor made for hosting back yard picnics. Don't forget the 1 car garage ready for your daily ride or any mechanical by you might have. Shed is also included. Just move in.

724.996.6139
MLS#1035935
Stephanie Oswald

