

CHAPTER ELEVEN

Tools

When you have completed this section you will understand which tools may be used to perform an inspection.

An inspection for wood destroying insects requires some pre- inspection preparation. The following list of tools will be helpful to the inspector in the performance of his/her inspections.

- Coveralls
- Screwdrivers (Slot/Phillips)
- Knee pads
- Ladder
- Bump hat
- Jug of potable water
- Soap / paper towels
- Work shoes
- Waterless hand soap
- Water-proof Boots
- Shovel
- Probing tool
- Work gloves
- Flash light (extra batteries & extra bulb)
- Inspection Mirror
- Crawl bag
- Dust Mask
- Clip board
- Safety Glasses
- Graph paper
- Digital camera
- Measuring device
- Tape recorder

Since our inspection is a visual inspection, the use of any of these tools, all of these tools, or none of these tools is not part of the standard of inspections. The equipment used to assist the inspector will vary from company to company and inspection to inspection.

OTHER TOOLS AVAILABLE TO INSPECTORS:

Other tools and equipment are available for specific inspections. These tools are not recommended for routine use in WDI inspections. Standard WDI inspection procedure encompasses a visual inspection for visible evidence only. This visible

evidence is aided by striking the wood and listening for sounds and feeling for weakness in the wood. The use of the mechanical aids listed below would change the character of the inspection process. The use of these tools might be required when visual inspection methods have been unsuccessful in locating the source of a problem whose existence has been located by structural changes made by the home owner, or by an annual movement of reproductive insects from a previously hidden area.

A moisture meter may provide mechanical evidence of a suspected high moisture situation within the wood of a structure. Confirming the existence of a high moisture area will assist the inspector in choosing areas for further, more probing inspection. Since moisture meters are calibrated for specific uses, and since the readings are affected by temperature and hydrophilic salts on the wood surface, their utility as a tool for these inspections has been questioned. They are inaccurate testing anything other than the item they have been calibrated to check.

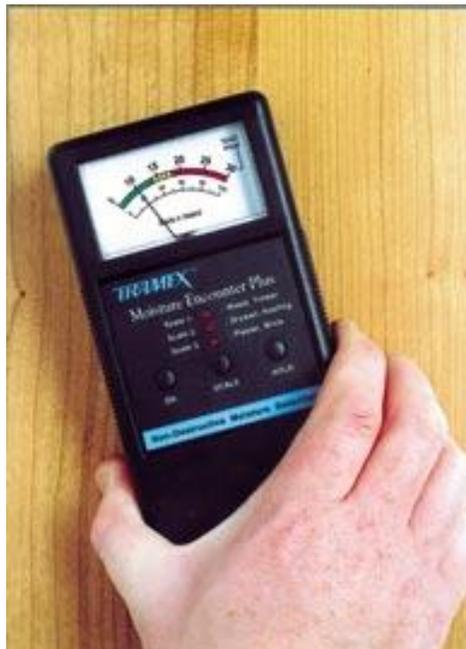


Figure 11 - 1

Several manufacturers have developed illuminated periscopic devices, sometimes called borescopes, that can be inserted through holes drilled into wall coverings, foundations, or other constructions, which cover suspected pest activity. The usefulness of these devices has been questioned by some, and the interpretation of the results from the use of these tools has not yet been systematized. The limited field of vision results in the extensive opening of walls, floors, etc. to confirm suspicions developed by the periscope. These devices may be combined with fiber optics to a still or video camera to permanently record the findings.



Figure 11 - 2

Mechanical stethoscopes currently available to the industry are very sensitive to extraneous sounds. Even an experienced inspector has difficulty quantifying the sounds. The limited range of the microphones is a specific problem. The hearing ability of the user is an important factor in its usefulness. Newer, digital read-out devices and devices which filter out all but certain ranges of sounds are currently in development and may be beneficial as technology improves.



Figure 11 - 3

Devices that detect the methane gas emitted by termites as they digest cellulose are available. These tools too have received poor response from industry because of the questionable nature of the information received by the inspector when they are used. Inspectors with many years of termite locating experience, along with extensive training in the use of these tools, coupled with an understanding of the tool's limitations and how to control these limitations have found these tools useful. Persons involved in a real estate transaction are reluctant to invest large sums to open finished areas of the structure for further inspection based solely on positive methane readings.



Figure 11 - 4

Termite inspecting dogs have been trained to “sniff- out” termite infestations. The high level of training for both dog and handler, including two weeks of annual retraining, limit the dog’s value. Considering the importance of the dog’s health and mental condition, along with the health, condition, and attitude of the handler makes this tool more subjective. People with pets that mark their territory may get more “false alerts” from the dog. Air movement in the home may pull odors away from certain areas. Termites in outside walls may not be detected if the air pressure is flowing out of the house. The major termite activity may not be occurring at the floor level, so the dog search may be of no benefit to the property that has a secondary colony. Ceramic tile and floors may seal the odors away from the dog. The dog cannot locate inactive conditions, which have prior damage in place. The extensive opening of areas “sniffed” by the dog to confirm

existence of activity makes this an impractical tool for inspections for real estate transactions.



Figure 11 - 5

Few, if any, of these new tools have been offered for study by the accepted researchers in our industry. No independent research studies are available for peer review. The inspector must rely on testimonial evidence when deciding when to use these tools in his daily work, and how to report the evidence they develop. These newly developing, high tech inspection tools are not tools we rely on for proper inspections. The information in our WDI reports is based upon the results of VISUAL inspections.

SUGGESTED EXERCISES:

Prepare a list of 15 tools an inspector may use to perform an inspection. If possible, choose things not in the text.

Discuss some advantages to using moisture meters, termite sniffing dogs, and stethoscopes.