METHODOLOGY FOR ATTIC INSPECTION

by

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While far from perfect, I find that I follow a repetitious pattern of inspection methodology from house to house. I'm sure that you do the same for reasons of efficiency. In this article, I will describe how I proceed when inspecting the attic. Experience and ASHI® training has taught me what to do and where to look for tell-tale signs of problems. Let me share an attic with you.

Firstly, how do you get there? I feel blessed when I find walk-up or pull-down stairs, but most of the time I am cursed with a small hatch above closet obstructions or one of those fun hatches within a staircase ceiling. When a hatch is encountered in a closet ceiling, I ask if the broker & buyer can remove a few items from the closet to clear an access (they like to be helpful), while I go get my step ladder. The challenge is always carrying the ladder through the house and up the stairs without damaging anything. Obstacles such as hanging lights are always a clear and present danger to avoid. So far in 15 years, I have not broken anything, but in all honesty, I did come close several times. Once I get the ladder in place, I stop and catch my breath, adjust the tool belt, mag light and suck in my stomach! I do wear a hat, but I'm guilty of not wearing a respirator.

At this point, I feel that it is best to reflect on the expectations of your client. As a professional, you know what to evaluate and what red flags pose major concerns, but most clients want answers to the following simple questions:

- Does the roof leak?
- Are there any signs of decay?
- Is the attic insulated?
- Is the ventilation adequate? etc.

You can gain a friend if you fulfill their expectations and you can gain the client's respect if you exceed expectations.

Of importance is the need to document how the attic was viewed. Tell the client what you could see, what you could not see, what you did and what you did not do. As briefly stated in checklist form:

[ ] Viewed from ladder with head through hatch.

[ ] Viewed by entering attic through hatch.

[ ] Entered via pull-down stairs, etc.

Following the attic inspection pathway, I knock to see if anyone is at home in the attic (you know what I mean), then I carefully lift the hatch cover to avoid any loose insulation hail. With my mag-light in hand, I look around briefly and turn on the attic light when lucky enough to find one.

My first order of business is to examine the structure. I start by shining my mag-light from one end of the ridge board to the other, and then up and down each rafter, observing roof sheathing at the same time and noting any water stains. Size, span, spacing, fastening, materials, condition, workmanship, decay and alterations are all evaluated as I form a mental opinion regarding the attic structure.

Perhaps most important, is the need to carefully examine the attic for signs of leakage or condensation. I start by viewing the weak links in the roofing system, namely the points of roof penetration: chimney, plumbing vent pipes, roof vents etc. Invariably, stains are observed, so the next order of business is to determine their source, to test them with a moisture meter if accessible and to document whether the stains tested as moist or dry at time of inspection. I educate my client that a dry reading is not a guaranty against future leakage. Usually I re-examine the rafters & roof sheathing for water stains, mildew and condensation and report any deficiencies accordingly. Especially documented are creative interior drainage control measures such as: buckets, plastic on floor, kiddy pools, caulking, roofing cement etc. Suspected roof leaks are carefully documented in my final report as leakage can cause interior water damage, decay, pest activity, mold, mildew and an irate telephone call if not disclosed by the inspector.

The shear volume of items within the attic that require inspection exceeds available space for a narrative article on the topic. Therefore, I will change to a topical punch-list of systems, components, deficiencies and questions that I ask myself while inspecting the attic: (I’m sure you can add to the list)

ACCESS:

Type of access: Hatch, pull-down stairs, stairs, eaves only.
Hatch: [ ] Missing [ ] Amateur nature [ ] Poor fit [ ] Not opened due to _____
How viewed: At hatch on ladder, entered by ladder through hatch, entered attic etc.
Areas not inspected: No attic access at _____
Stored goods restricted attic inspection: [ ] No [ ] Yes - re-inspection advised when empty.
Boards on attic floor: [ ] No [ ] Yes - partial [ ] Yes - full [ ] Unsafe floor boards
Light present: [ ] No [ ] Yes [ ] Not operational
Walls coverings present: [ ] No [ ] Yes - limited access
Ceiling coverings present: [ ] No [ ] Yes - limited access

STRUCTURE:

Type of roof frame:
Describe: size, spacing, span, rafters, ceiling joists, sheathing etc.
Document problems:
Ridge sag, ridge size, ridge movement, no ridge board, damaged, spliced.

Structural beam.
Rafter size, spacing, condition, cut, cracked, sag, fit at ridge & birds mouth, decay, bearing.
Ceiling rafters, size, spacing, bearing, nailing, condition, sagging, crown, warping.

Collar ties: present, not present, not needed, placement.
Amateur alterations, openings, cut rafter, cut truss, excess notching, etc.
Signs of previous fire.
Broken roofing boards, erupted plywood, de-lamination.
Improper nailing schedule, poor nailing workmanship.
Signs of collapse, decay, suspected pest infestation.
Fire stopping, firewall, chimney clearances, open chase

SIGNS OF LEAKAGE OR CONDENSATION:

Stains at chimney: [ ] Tested dry [ ] Tested moist
Stains at plumbing vent:
Stains at roof vent:
Stains at ridge vent
Stains at underside of roof:
Stains on attic floor:
Stains at attic window:
Stains at roofing nails:
Stains at eaves area:
Stains at: _____
Active leakage at: _____
Stains tested moist at: _____
Wet insulation: at: _____
Drip leaks noted at: _____
Frost on roofing nails
Frost on underside of roof
Stains indicative of suspected previous ice dam leakage

VENTILATION:

Means of:
Louvered gable vents
Ridge vent
Soffit vents
Drip edge vent
Roof vents
Roof automatic fan
Roof turbine

Windows
Whole house fan
Skylight
Other: _____
Ventilation problems:
Inadequate ventilation
Blocked vents
Imbalanced ridge vent system
Loose or lifted ridge vent
Damaged ridge vent
Ridge vent slots not properly cut or sized
Ridge vent end caps missing
Ridge vent leaks suspected
Damaged louver vent
Decayed louver vent
Power fan not functional
Amateur attic fan
Bathroom fan exits into attic
Kitchen range hood exits into attic
Insulation blocking air movement at eaves
Insulation directly on underside of roof
Slight mildew noted (respiratory & decay caveats)
Heavy mildew noted " " " "
Wet insulation
Whole house fan (back drafting warning)

INSULATION:

Types noted:
Suspected asbestos:
No insulation
Sparse insulation
Inadequate insulation
Compressed insulation
Poor installation workmanship
Loose or falling insulation
Disturbed insulation
Wet insulation
Deteriorated insulation
Wall insulation caveat
Suspected UFFI
Insulation upgrading advised at: [ ] attic [ ] basement [ ] walls [ ] crawl space [ ] other _____

VAPOR BARRIER:

Present
Partial
Not present
Reversed at: _____
Deteriorated
Doubled up at: _____
Torn or damaged
Missing at crawl space floor
Vapor barrier upgrading advised at: [ ] attic [ ] basement [ ] walls [ ] crawl space

CHIMNEY:

Fire stopping
Clearance to combustibles
Unplugged openings
Eroded mortar joints
Loose bricks
Cracks
Step cracks
Settlement
Water damaged bricks
Soft bricks
Stucco deteriorated
Decayed at roof line
Creosote leakage
Corroded metal chimney
Amateur chimney repairs
Flashing problems suspected

WIRING:

Amateur wiring visible
Open splice
Wires run across top of floor joists
Wires poorly run
Wires poorly supported
Open junction box
Damaged wire insulation
Signs of overheating
Amateur lighting
Tampering
Insulation placed over knob & tube wiring
WARNINGS: _____

CRITTERS:

Decay from wood boring insects suspected
Signs of mice
Squirrels
Birds nesting
Bees
Bats
Other _____

APPLIANCES:

Air handler:
Support
Electrical supply
Service switch
Safe pan
Trap & condensate line
Condensate discharge point
Operational condition
Filter & blower
Ducts & connections
Furnace:
Oxygen source
Venting
Clearance from combustibles
Automatic safety controls
Normal operating controls
Fuel supply
Filter & blower
Heat exchanger
Ducts & connections
Insulation

VENT PIPE:

Improper diameter
Does not extend through roof
Cast iron supported by plastic
Suspected leakage point

Amateur workmanship
Flashing problems suspected

Back HOME