Check for continuous fire rated party wall in all attached dwellings as well as fire rated barrier between attached garage and house.

ROOFS

Often the best view of the roof is from inside the house. Attics tell many stories.

Look for signs of light through the roof. This is a good indication that you better check the condition of roofing materials a bit closer. Even wood shake roofs, which may admit some light, do wear out. Staining on sheathing may indicate past or active leaks.

Wood shingles applied over tar paper or other composition materials tend to rot out faster. Thin, worn and brittle shakes are indicative of wear.

Asphalt shingle roofs will generally give 15-20 years of service, on average. Cupping, curling, cracking and brittleness are signs of aging. South and west slopes of roofs exposed to more direct sunlight will generally age faster than more shaded areas. Contrary to many opinions, second layers of shingles often attain their maximum life expectancy, provided flashing materials are upgraded and the condition of the first roof allows good installation.

FLAT ROOFS (Two four-letter words back-to-back!!!)

There are various types of low slope roof systems: built-up roofing (also called tar and gravel, slag or rock roofing), rolled mineral, and single ply rubberized systems are the most common.

Ponding water on a roof is likely to shorten its life and create serious leakage problems. Sagging and ponding areas may also lead to structural problems. Signs of frequent patching may also tell you something about the vulnerability of the roof.

Blisters or "alligatoring" surface coating are indications of BUR roof problems.

EXTERIOR

Siding material material and gutters should be evaluated for visible defects.

Condition of the chimney should also be evaluated during a check of the exterior. Be especially careful to check for any separation between chimney and house.

Any plumbing pipes in unheated areas such as garages or against uninsulated interior walls may be vulnerable to freezing.

Septic systems and wells must be thoroughly evaluated to determine effectiveness and safety.

BASEMENT/CRAWLSPACES

Water seepage into basement and crawlspace areas are important to note but often difficult to evaluate. Occasional seepage in basements of older homes is common. Trying to completely cure this type of condition may be very expensive and sometimes futile.

Most basement water problems (about 98%) are caused by surface water, roof and yard runoff. High water tables and underground springs are generally the cause of water problems in 2% of cases.

Look for evidence of water signs in basement: dampness or staining on walls, efflorescence, swelled materials, rotted wood, loose flooring, raised or rusted appliances, mold or mildew.

If standing water symptoms are evident during dry or very moderate weather conditions, evaluate for ground water problems. The only sure way of evaluating the cause of water seepage is observation and, unfortunately, unless you plan on moving in, your ability to see the house under most weather conditions are limited.

INTERIOR

Older thermal pane windows and doors are subject to deterioration of the seals between panes leading to condensation and a loss of thermal properties. Check for signs of problems with thermal glass.

For the past several years many builders have been using a product called Fire retardant plywood for roof sheathing in townhouse units when the fire wall does not pass through the roof line. Much of this FRT plywood has shown signs of premature deterioration leading to replacement of entire roof systems. Millions of dollars in lawsuits are pending due to this issue and it is going to be an increasingly more visible issue during the next few years.

Reversing mechanisms on automatic garage doors are important to check as a safety feature.

Wood stoves are rarely installed properly. Look especially for proper clearances between the stove and the chimneys and any combustible surfaces. Whenever in doubt, an evaluation by the local mechanical building inspector is a good idea.

Underground oil storage tanks are becoming an increased environmental issue and must be considered a heightened risk item.

Exposed or-friable asbestos is also considered a potential major problem and must be disclosed.

PLUMBING

Focus on materials. Look for old lead main and clogged galvanized supply pipes. Beware of old gas lighting systems and lead connection in old DWV systems. First generation crimped polybutylene supply systems are known to be problematic. Supply mains from the street which are unsupported through the backfill are known to shear and split.

Plumbing leaks that occur after the inspection are one of the most common complaints heard from consumers. While it is impossible to predict all future occurrences, some general tips may be helpful.

Gravity has proven to be one of the inspectors best allies when it comes to plumbing. Rather than resist it, let it work for you. Begin all plumbing inspections on the upper floors.and work your way down. Turn on multiple fixtures upstairs and let them run simultaneously to note any significant drop in pressure. While doing so, go downstairs and turn on fixtures to see if upper floor pressure drops. (Don't get distracted and forget the water is running. Things do overflow).

Fill up sink and tub (a few inches will do) and then drain to determine adequate drainage.

Stall showers are a particular concern due to the expense involved if the pan leaks. Fill up shower with 2-3 inches of water or until water level is above the floor/wall join point. Let water stand as long as possible and check for leaks below. This will help pinpoint any leaks due to faulty shower pans. Always check walls and ceilings directly beneath stall showers carefully. Use a flashlight and/or moisture meter.

After checking upstairs plumbing, go down to the basement and check for any signs of leaks in supply and waste lines. Remember, water flows down so checking basements first is a real mistake! Many inspectors have found this out the hard way.

HEATING

There are numerous types of heating systems used conventionally today. Furnaces that use combustible materials as fuels are of the most concern due to the potential creation of carbon monoxide as a potential by-product.

Cracks or holes in heat exchangers may allow carbon monoxide to enter interior air supply. Most inspectors will perform a visual check of the heat exchanger using a flashlight and a mirror. Due to the inaccessibility of the heat exchanger, however, it is very difficult to detect many cracks or holes that may exist in the exchanger.

Often, by viewing the main flame and turning the blower on, you can sometimes tell a faulty exchanger by the action of the flame when the blower comes on. A flame that demonstrates vigorous changes or slants in any direction may indicate a break or perforation in the exchanger.

Use of a gas tracer may be the most conclusive test but most home inspectors do not possess specialized equipment reliable enough to make such determinations.

In the winter it is easier to check hot water and steam systems. Many steam systems are "laid-up" for the summer.

Unless the temperature has been 55-60 degrees or above for the previous 24 hour period, air conditioning systems are generally not run due to the increased probability of damage to the compressor.

Unsafe and backdrafting flues are always worth discovering. They may be fire hazards by being too close to combustible materials or leak and allow dangerous levels of carbon monoxide to enter the home.

Sufficient combustion air is also an important factor in evaluating the heating system. Furnaces in closets or other confined spaces may not provide enough air to maintain the flame.

Older unvented gas space heaters are always a potential hazard and compete for oxygen with occupants. They are recommended for disconnection or removal.

Rooms without heating are more common in remodeled homes. Always check for heat source and supply and complete distribution. Older houses with hot water/steam systems frequently see radiators removed from kitchens.

Relative to adequacy, it is not uncommon to find old houses with 60 amp or even 30 amp service. Most would consider 30 amp service inadequate in this day and age, given modern demands on electrical systems. Upgrade is almost always warranted.

The presence of an older 60 amp service may be more subjective. By today's standards, a 60 amp service will only marginally meet demands of most occupants. In houses where most of the utilities are gas, 60 amp service may be adequate for small appliances and lighting. Very frequently, you will find these systems to have fuses which are too large relative to conductor size. As more demands are made on circuits and fuses blow, occupants find it easier to replace the 15 amp fuse with a 20 or even 30 amp. This overfusing directly defeats the safety factor of the fuse and creates potential fire hazards.

Overfusing and multiple tapping is a problem frequently found in distribution panels. If circuit breakers continue to trip, larger breakers are sometimes installed. This, again, defeats the purpose of the breaker and creates a heightened fire and safety risk. Circuit breakers and fuses should always be compatible with gauges of wires. Multiple tapping often effectively extends existing service.

Knob and tube wiring is invariably old. Many individual code surveyors consider this type of system the best ever installed because of the clearance between conductors, etc. Some will allow it to stay and some will insist that any remodeling work be accompanied by a new system. These systems have almost always been extended to provide increased service. Normally the insulation was scraped away and a new run of wiring was twisted around the bare spot and taped in position. These splices and the extension of the circuitry make it very suspect. If there is no intention of upgrading the electrical system or increasing the usage on the system, it is recommended that a professional electrical contractor completely check out the system. Most consider the lack of grounding, etc. to cause knob and tube systems to be considered obsolete.

Electrical systems should always be checked for proper grounding.

The existence of aluminum wiring in the home is generally only discernible by inspecting the interior of the panel. Aluminum wiring serving general lighting circuits are of considerable concern due to the increased risk of fire.

Check for water or rust inside the panel box.

Your Home Inspection Professionals

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HOMEPRO ADVISORY

THE 15 MINUTE WALK-THROUGH-(A VERY, VERY BRIEF SUMMARY)

The following is by no means a comprehensive list of those items that should be checked when doing a home inspection. This summary is only meant to provide a very brief outline of some of those issues that should be considered during the inspection process.

STRUCTURE

Hairline cracks in foundation walls are common and generally no major cause for concern. "V" cracks, wider at the top than at the bottom, are more indicative of possible problems. Cause may be due to poor bearing, insufficient footings, or lack of reinforcing rods. Look for other signs.

Horizontal cracks or bulges in foundations are of concern. Cause could be anything from tree roots, too aggressive backfilling, hydrostatic pressure, etc.

Significant slab heave may indicate soil problems beneath the house or pressure from water beneath.

Stoop rotation or settlement may affect other structural components if the stoop is attached to the foundation.

Look for bulges in walls and signs of chimney settlement.

Frequently, additions to houses are built on unreinforced slabs which were once patios or carports. These may not have a continuous footing retrofitted under them. Check for voids on walls, floors or slabs of these structures for any signs of movement.

ELECTRIC

In inspecting older homes, expect to find some electrical problems. The major issues of concern are the adequacy of power to the home and the safety of the system.