

IS IT SAFE?

By

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Well, I'm not going to tell you what "it" is right away, but you certainly will know fairly quickly. You see, as home inspectors, we evaluate "them" every day.

"It" usually stands on stilts, looks like a partially open box and rests against a bigger box. In years gone by, "it" was the place for old time neighborly conversation, for courting, for snooping or for rocking away a summer's day.

Now up here in Yankee land, we have very "old ones" for sure. In fact, "they" were built using hand tools, native materials and colonial craftsmanship to exhibit pride and a first impression of grandeur. Understand that idle time was rare and to own "one" and have the time to use "it" was both a sign of stature and a place to snooze after a long hard day of work.

This "thing" I am describing always has a foundation of some kind. In New England, the foundation for this "object" may be hundreds of years old or of new design. To support the colonial variety of this "item," fieldstone, brick or granite stones were gathered and placed in shallow holes in the ground, and at strategic corner points or four-point spacing to serve as footings for the stilts. I call them stilts, but in reality they were usually cedar logs, bark and all, erected as vertical columns and resting on the fieldstone footings. If you were to view the home from the front lot line, you would surely encounter this "entity."

By now you should have an inkling where this yarn is headed, but lets continue anyway. With the stilts in place, lets build a rectangular box floor frame out of timbers, rest it on the stilts and somehow fasten it to the larger box mentioned earlier – the other box being the house. Now divide the box frame into two equal grids by installing a center beam across the short dimension running perpendicular to the center of the house floor frame. Next, attach a few floor joists running the long dimension of the rectangle, parallel to the front of the house and rest it on the center beam, then throw in a few stick braces and you are ready to build upwards. Or, if the spirit moves you, reverse the entire scenario. Almost forgot, "it" needs a skirt to trim out the crawl space around the bottom!

Still with me? Sounds like we are building a platform. Cover the platform with fir or pine boards and then go out to the barn and fire up then lathe. You see, we need to turn at least four long and decorative posts to hold up the shed roof and to provide a secure anchor for the guardrails. Got the posts in place yet? Great! Lets build a shed roof complete with rafters, ceiling joists and top it off with a tongue & groove wood ceiling. Now add some decorative corner brackets, trim and oh yea – we need a set of stairs. Darn if I didn't forget the most important thing of all, we need a rocking chair!

Yes, this article is about a *colonial front porch or a farmer's porch* and we have to inspect "it." Perhaps "it" is only a porch to you, but its condition may represent a major defect - a disclosure that your client needs for intelligent purchase consideration.

Logical inspection skills must be applied to both old and new porches, but old porches require a little extra

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attention. You see, old porches may have associated age defects, maintenance may have been neglected for years or alterations may have occurred. The older porch may even have been converted into a 3-season porch or a heated room, complete with mechanical systems. Which ever the case may be, the techniques used to perform a porch inspection are worth a little review.

The thrust of the article is geared toward inspecting the older colonial front porch and identifying "red flags" that require documentation for the client. The old porch may be a box on stilts resting against the house, but it could also be a "can of worms" if you fail to inspect it adequately.

Where to start? I like to inspect the house and the porch from a distance and from each side. After a while, you can view a porch without ever stepping on the property and through experience you can sense suspected structural problems, decay, moisture or improper alterations. Next, I sight down the building lines from each corner to check for signs of misalignment. By sighting along the porch from the corners, I can determine if the frame is racked, if settlement is evident or if the columns are not plumb indicating that I should get "up close and personal" with my porch inspection. . Conduct your investigation with a suspicion of problems to be found.

"Is it safe?" Many old porches pose a red flag when it comes to safety. I evaluate the safety, plus the entire porch by answering several key questions:

- What holds it up?
- How is it fastened to the building?
- Are there signs of decay or infestation?
- Are the steps, handrails and guardrails safe?
- How will the water drain away?
- Do roof frame and roof coverings exhibit any problems?
- Has the porch been altered?
- Are there any signs of major repairs that warrant my client's attention?

Lets start with the thought: "***what holds it up?***" Certainly a good home inspector will walk around each side of the porch, sight down the building lines for signs of misalignment and look underneath when possible; but don't forget to evaluate the footings and piers.

Starting on the outside, you should evaluate the drainage along the porch. I find many porches suffer from years of faulty drainage control, resulting in years of soil erosion, the loss of stable earth and resultant footing movement and building settlement. You will find loose stones, missing stones, eroded mortar joints and a host of remedial amateur repairs to be documented in your report when you inspect an older porch foundation.

Older porches frequently have untreated wood in soil contact. Crunchy critters can easily be found waving red flags in the infestation parade. So make sure you document wood / soil contact and probe those lower trim boards, stair stringers and posts, and then alert your client that carpentry repairs are needed and perhaps further evaluation by a pest control company.

Squeeze in behind the shrubs, have your flashlight & probe ready and look through the lattice to inspect the piers at each support point. If there is access and clearance to the crawl space, then by all means get in there and get dirty. If there is no access beneath the porch or the crawl space is filled with debris or is unsafe to enter, then document the facts in your report. Ask yourself the question, what holds it up? Wood columns should automatically be suspect for decay and pest infestation so probe each one from outside or beneath the porch as access allows. Are the piers decayed, have they shrunk, compressed or shifted? Did you notice that missing

support column?

While inspecting the underside of the porch, you should compare the methods & materials used to assemble the floor frame and compare them to modern construction practices. In other words, are the joists undersized or over spanned? Do the beams and joists have adequate end bearing and fastening? Is the porch floor frame composed of treated or untreated lumber? Don't forget to use the diagnostic skills of "probing & sounding" of each accessible joist - who knows if the bugs sent out for lunch! Oh yes, don't forget to inspect for decay at the underside of the floorboards. Finally, walk inside the porch and do a little bounce test.

"What holds it to the house"? This question is a critical one in terms of safety, as every now and then you hear a horror story about a porch collapsing and people getting hurt. I find numerous porches that exhibit signs of movement away from the house, signs lead me to question how or if the old porch is fastened to the house. Red flags indicating a problem in this area are readily apparent as you view the porch from the exterior. For example, telltale signs of problems can be seen at the guard railings, posts and roof frame where they attach to the house. If guard railings exhibit signs of having pulled from the house, or if the roof frame or post brackets exhibit signs of movement, then you should suspect faulty anchoring to the house frame and proceed with a closer inspection.

Take a close look and you may notice toe-nails pulling free between the railings and the siding or gaps between the siding and roof frame. Such movement usually causes stress to other parts of the porch frame and can easily be recognized when ornamental brackets and door or window frames go out of square. If you look beneath the porch, you will most likely discover that the porch ledger joist is not secured to the house. As in new deck construction, suitably sized and spaced lag bolts should be present through the ledger joist and into the house frame. Unfortunately, older porches are only nailed to the house and totally lack a means of anchoring, proper end bearing or lateral bracing. If I find a porch that does not exhibit any signs of movement but lacks the above items, then I make suggestions for optional improvement.

"Are there any signs of decay or infestation?" Predominantly, old porches were constructed with untreated lumber, lumber that is now in direct soil contact or close proximity. Such conditions equate to "ringing the dinner bell" for decay and pest infestation. Resultant porch problems are commonplace. As with any other part of the exterior inspection, wood in ground contact is automatically suspect and requires that you probe carefully for decay. A good inspector will evaluate the lower trim boards, wood columns, stair stringers, floor frame, decking, railings and every accessible part of the porch for signs of decay or infestation and document each observation in a final report. Don't forget to look up, for water damaged porch ceilings, fascia and trim can easily be overlooked.

"Are the steps, handrails and guardrails safe?" **"WARNING** – in my opinion, the..... is **UNSAFE** and may cause a personal injury by accidental slip, trip or fall. **Urgent safety repair is needed.**" If you write nothing else, be sure to document unsafe steps, handrails and guardrails using upper case warnings or bold type to alert your client (C.Y.A.). The porch serves as part of the egress and must be maintained by the owner in a safe condition at all times. Ask yourself a question, is the exitway safe? Is there a light at the door? Are the floorboards sound? Are there splinters or nail pops that are unsafe? Are the guardrails high enough and are the balusters properly spaced? Are there any tripping hazards? Apply lateral pressure to the guardrails and handrails at the steps to check for movement and record loose components as being **UNSAFE**. Is a handrail required? Is a handrail present? Does the handrail comply with modern construction practices? Examine the stairs for uniform tread & riser dimensions, decayed wood and the presence of a landing where required. Does the porch staircase make a safe transition to grade level and a walkway? Do the exterior outlets have GFCI protection?

"How will the water drain away?" There may be a shed roof overhead, but water will still enter a porch laterally during wind driven rain or snowstorms. Water that gets into the porch will seek its lowest level and may cause decay to components such as the floorboards or the floor frame if a means of drainage is not provided. You should check the floorboards for a drainage gap between boards or drainage scuppers built into the porch walls. Be especially suspicious of hidden decay if you see indoor / outdoor carpeting on the porch floor as the carpeting will retain water and prevent the wood from drying. Renovations or excessive layers of paint on floorboards may also be responsible for drainage problems.

Water problems and decay may also derive from overhead. The flashing at the roof / house wall intersection could be faulty or the roof itself may leak. Even faulty or missing gutters may contribute to moisture caused decay.

What ever the source of the water may be, remember that "moisture is public enemy #1, as moisture and moisture related problems are the most prevalent defects encountered by home inspectors.

Do the roof frame and roof covering exhibit problems? As stated earlier, a distant observation of the roof frame and roof covering may provide valuable clues indicative of problems that require closer scrutiny. Viewed from afar, a roof frame may exhibit sagging problems or signs of movement away from the house. You may even determine that a center post that once supported the roof structure was removed during a stairway repair or renovation. When the roof frame is examined from below or from on the roof itself, missing or altered supports and moisture damage may be apparent. Wood columns may have decayed or compressed in length causing the roof frame to settle.

Time to get on the porch roof. While climbing on a roof is not required, in my opinion, it is the best method for inspecting the area. Regardless of your methodology, be sure to document "how the roof was viewed". (Roof viewed from on the roof, roof viewed from ladder at eaves, roof viewed by binoculars, etc.) I'm not going to go into length regarding roof coverings here, suffice to say the porch roof inspection & documentation are just as important as the house primary roof.

Remember that porch roofs are readily accessible for the homeowner or tradesman to alter and to use as a base of support when painting the house. Be on the lookout for roof covering mechanical damage, ice damage from above roofs and flashing defects. If the porch needs a new roof, no problem for the do-it-yourselfer, just add a 3rd or 4th layer of shingles and don't worry about the weight on the structure! Even a porch roof will sag with age and excess weight.

Has the porch been altered? Think back to how many times you have seen a former front or rear porch that has been converted for 3-season use or year round habitation. Enter the scrutiny of the all-knowing home inspector and the sweat equity of Mr. Do-it-yourselfer and you have grounds for potential conflict. You may be wise to suggest that your client research whether or not a local building permit was obtained and also use a little diplomacy in questioning the owner yourself when possible.

At this point, the porch may be considered as a min-house, complete with mechanical systems that require your inspection. The porch conversion is now interrelated with the entire house systems, all of which have been expanded to accommodate the added living space. Now you have to inspect wall, floor & ceiling coverings, a heat source, windows, insulation, ventilation and wiring – all of which may be substandard workmanship.

Are there signs of major repairs that warrant my client's attention? Your client has basic expectations as a consumer. Mr. Buyer expects a professional inspection and a professional report that will alert him that there are major repairs in the area of the porch and the entire home so don't treat the porch lightly. Document any

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porch defects that require repair and fulfill your client's expectations.

In closing, a porch is a porch of course of course, but it is also an important part of any home inspection. Give the porch inspection your best effort and keep thinking, "**is it safe**".

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