



# From The Home Inspector

## Inspection of Wood Decks

As many of you know, in NC home inspectors are required to complete continuing education courses annually. Each year, we have a mandated course by the State North Carolina Home Inspector Licensure Board (NCHILB) in addition to approved elective courses. Last year, the mandatory course was on wood decks.

Prior to the early 90s, there were limited requirements (“code”) for deck construction. Therefore, many home inspectors have historically “treaded lightly” around old deck issues that do not meet commonly accepted building practices of today. However, in the mandatory course last year, the NCHILB State has directed home inspectors to address deficiencies in decks regardless of the year built. This is largely due to a number of high profile cases of deck failures around the country and the huge number of aging decks that become increasingly unsafe each year.

Suffice to say, if buyers haven’t already, they will have more issues on inspection reports on defective decks. The issues revolve around the following main points:

- General Condition and Workmanship
- Hand Railings – Includes proper height, attachment, spacing of balusters
- Steps and Stringers – Includes proper attachment, openings, tread depth, riser height, railings/height, grip able hand rails. Maximum spacing on stringers is 36” and maximum span between supports is 7’.
- Floor System – Includes joist size, spacing.
- Columns/Posts – Includes size, diagonal bracing, adequacy of footings
- Footings – Must be appropriately sized and spaced. Precast footings must be below the frost line and on undisturbed soil.
- Girder/Band/Post/Joist Attachment – Joists must be attached with bolts or direct bearing. Girders must be direct bearing only.
- House Attachment – must be free standing or bolted and nailed.
- Flashings – must be flashed (most cases) to prevent damage to the house band
- Stability
- Bracing and Fasteners – Fasteners must be galvanized to prevent corrosion. Diagonal bracing is required if >4’ high.

Enforcement of "new" construction practices will lead to improved safety and also fewer problems with decks that become porches, then sunrooms, then finished space as structural requirements are the same.

Following is recommended verbiage from the NCHILB State regarding deck attachment:

“The deck is nailed to the home with no other visible means of attachment. Nails can corrode and fail behind the deck band causing the deck to collapse. Unless it can be otherwise demonstrated that the deck attachment to the home is secure; the deck should be bolted to the home or directly supported from underneath. Have the deck attachment investigated and modified as deemed necessary by a licensed general contractor or structural engineer.”



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