



Structural Inspection

June 27, 2018

For: Frances Falcon
223 Debbie Dr.
Slidell, La. 70458

Construction:

Two-story, wood frame, brick veneer and vinyl, with a composition shingle roof on a conventional foundation with pilings. Home is approximately 48 years old.

Scope:

This inspection is limited to a visual inspection of the shell of the home, including the interior and exterior foundation of the home. No inspection of the mechanical or electrical systems was performed. This report is as outlined by the National Academy of Building Inspection Engineers and is not an explanation of cause, effect, or engineering.

History:

Dammon Engineering was contacted to perform a structural inspection of the referenced home due to some cracks in the brick veneer on the ground floor that the owner noted.

Findings:

An overall visual inspection of the exterior of the home was conducted and few items are noted on the front porch brick wall area. There is a 3/8" crack in the mortar of the brick that runs diagonally across the windows and stops at the entrance door and then starts back up at the bottom right of the door down to the foundation. The foundation was noted to have a hairline crack in the area of the cracked mortar wall.

A visual inspection of the interior first floor reveals that the foundation has settled and leaves a 3/8" gap between the base board and flooring in the foyer and office area. In the foyer area, there are several signs of settling in the crown molding and doors not opening. The exterior covered area in the rear of the home with bare pilings shows signs of settlement of the foundation around the pilings.

This inspection is limited to the apparent visual conditions of the structural components of this building. It does not cover, nor attempts to cover, any components, items, and/or conditions which, by their nature or location, are concealed or are difficult or hazardous to inspect, or which require the moving of furniture, flooring materials, rugs, fixtures, appliances, or any component-part nailed, bolted, or screwed down or shut. No opinions are expressed regarding conditions which could be discovered only by the disassembly of any component parts, special testing, or removal of any concealing objects.

Inspections are made under normal weather conditions, and are not opinions of the conditions of the property and/or structure which may exist under unusual weather conditions, such as, but not limited to floods, heavy rains or snows, high winds, temperature extremes, or any act of God. Specific hazardous wastes, toxic substances, toxic mold, air and water quality, communicable diseases, asbestos, soil, environmental, radon, carbon monoxide, formaldehyde, building code and termite conditions are not included in this report unless otherwise stipulated.

This report is not a warranty or guarantee of the property inspected, but it is our opinion of its condition at the time inspected. Our liability shall be limited to reimbursement of the total cost of inspection.

A visual inspection of the interior on the second floor did not reveal any signs of stress in the sheet rock or doors. It was noted however when walking around the second floor that you could feel the elevation changes in the floor.

For the inspection, a zip level was used to verify the floor height conditions on both floors.

The zip level was first set up on the first floor of the foyer. The slopes range in the house from 0.0" in the foyer to +1.3" in the rear kitchen.

The zip level was set up on the second floor at the stair landing. The slopes range in the house from 0.0" to +3.0" near the kitchen entering the entertainment room.

Conclusion:

It is important to note that all foundations settle. Usually, everything settles together and the fastest rate of settlement occurs in the first year after construction. By the fifth or sixth year the settlement has exponentially slowed to where there is little danger that something will happen unless caused by weather, expansion & contraction, tree roots, improper drainage, etc.

It appears that the foundation has settled due to earth washout under the first floor foundation as this foundation is not tied into the pilings. This settlement is being caused from rain water flowing to the rear of the property from the street and under minding the foundation.

Recommendation:

The cracks in the brick veneer do not appear to have compromised the structural integrity of the home. It is my opinion that the structural integrity of this home is currently sound, but the foundation will expand and contract with the ground movement and any standing water.

Items to be addressed are as follows:

- 1) Add proper drainage to carry the water around the house and to the rear to drain in the lake.
 - 2) Seal cracks in the brick veneer, mortar with a non-shrinking grout, to prevent insects from entering the home.
- A) As an option, the foundation can be raised back to its original height utilizing the either screw piles or foam.

Sincerely,

Brian Mistich, P.E.

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