



Structural Inspection

July 30, 2024

Jack Tolley
228 St Mary Ct
Abita Springs, La. 70420

Construction:

One-story home partially slab on grade & partially on wood frame. This house was constructed on a sloped property where a chain wall was used to transition between slab on grade to wood frame. There is a brick façade around the house.

Scope:

This inspection is limited to a visual inspection of the foundation where the steps begin outside on the southeast side the house. No inspection of the mechanical or electrical systems was performed. This report is as outlined by the National Academy of Building Inspection and is not an explanation of cause, effect, or engineering.

History:

Dammon Engineering was contacted to perform an inspection of the referenced home due the homeowner having to make multiple repairs to the side of the house next to the stairs.

Findings:

Upon inspection, it was visibly noted that the concrete next to the top step has been repaired and has started to fail again. The location of the concrete having issues is located at the connection between the slab on grade and the wood frame connection. During the construction or during a previous repair one or more of the weep holes at the base of the brick façade has been closed. Typical construction is to put a space between the brick façade and the structure to allow for moisture to fall to the bottom ledge on the foundation; weep holes are installed to let this moisture escape.

This house does not use gutters and rainfall hits the sidewalk next to the house, on this side of the house. There are stains and growth on the foundation where the water appears to have collected. The connection between the sidewalk and the foundation appears to have been caulked in the past but needs to be repaired.

Conclusion:

Rainfall from the roof falls on the sidewalk on the southeast side of the house and ponds in the area where the sidewalk abuts the foundation. This water then seeps between the sidewalk and foundation and down to the top step where it meets with a solid brick chain wall is absorbed into the concrete. Also, any rainwater that was absorbed into the brick façade has nowhere to go since one or more weep holes have been covered.

Once moisture has been absorbed into the concrete, then expansion and contraction weaken the concrete and chips start falling off. This area where the concrete has chipped off is not a structural concern.

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.

Recommendation:

- 1) Install gutters and downspouts to move rainwater away from the house foundation.
- 2) Install a long-term durable moisture resistant expansion joint material between the sidewalk and the house.
- 3) Repair the cracked concrete at the top step using non-shrinking grout.
- 4) Remove the concrete that was placed into the brick façade weep hole(s).

Sincerely,



Brian Mistich, P.E.

See attachments:

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Beginning of solid Chain-Wall

End of Slab on Grade



Weep hole covered.



Expansion joint

A photograph showing the base of a brick wall where it meets a concrete foundation. The concrete is heavily cracked and crumbling, with a significant portion missing, exposing the brickwork underneath. An orange arrow points from a text box to the damaged area. A metal pipe is visible in the upper left corner.

Cracked Concrete

A close-up photograph of a concrete surface showing a significant crack. The crack runs diagonally from the upper left towards the lower right. The concrete above the crack is a light grey color with a pebbled texture. The concrete below the crack is darker and appears more weathered. An orange arrow originates from a red-bordered box containing the text 'Retaining moisture' and points directly into the crack. The overall scene suggests a technical or educational context related to concrete maintenance or repair.

Retaining moisture