



Structural Inspection

October 25, 2018

For: Robert & Alison Condon
1604 Peninsula Dr
Slidell, La.

Construction:

Two-story, wood frame, stucco veneer, with a composition shingle roof on a post and pier foundation. The home is located in flood zone V.

Scope:

This inspection is limited to a visual inspection of the shell 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 request a structural inspection of the referenced home due to the owners concerns of flood vent count and breakaway wall installation.

Findings:

The home is elevated to meet the flood elevation in this area. The home sits on top of piling supported CMU columns distributed throughout the foot print of the home.

In-between the CMU columns there are CMU breakaway walls and wood framed breakaway walls with (6) 8x16 flood vents.

The CMU breakaway walls were originally installed with a gap in between the CMU columns and breakaway walls to fail in the event of a storm surge, since then the owner has installed foam insulation to seal the cracks to keep insets out.

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.

Results:

Venting;

The existing six vents are not adequate for this structure.

The equation for determining the amount vents needed is 1 square inch of vent area (this is the net open area) per 1 square foot of the enclosed home footprint.

This home has 1880 sq. ft. of enclosed area.

This home is required to 1880 sq. in. of venting.

This home currently has a possible maximum net vent area of 768 sq. in. in place.

Conclusion:

It is important to have some type of relief of flood water pressure in the enclosed area below the homes. This allows storm water to enter and exit the enclosed areas without causing a failure of the structure.

Recommendations:

Items to be addressed are as follows:

Provide 1880 sq. in. of flood water access for the enclosed area. This can be achieved by either adding additional vents or creating openings on opposite wall sides. If additional vents are added, the total net vent area should be 1880 sq.in. or more. The number of vents will depend on the specific vent purchased and its net vent open area. Be aware the vents are to be located no more than 1 foot above ground level.

The net vent area for the existing six (6) vents can be determined by identifying the vent manufacturer and reading the specifications regarding net vent open area or by physically measuring the net openings.

This requirement is outlined in FEMA *Technical Bulletin 1 / August 2008* “ **Openings in Foundation Walls and Walls of Enclosures Below Elevated Buildings in Special Flood Hazard Areas in accordance with the National Flood Insurance Program.**

The alternative to the vents is to create openings that will total 1880 sq.in or more. It is recommended that these openings be located on 2 sides of the structure to allow a flow thru configuration.

Should you have any questions or if further information is required, please feel free to contact us.

Respectfully,

Brian Mistich, P.E.

See attached.

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