Structural Inspection

October 05, 2007

Location: 15115 Chickasaw Rd.
Kiln, MS

Mail Address: 22810 W. Airline Hwy.
Laplace, La 70068

Structure:

Two story wood frame, elevated on CMU piers, vinyl siding, with metal roof.

History:

Mr. Fred DeFrancesch initially contacted Dammon Engineering in November 2005 to request a structural inspection on his vacation home on the Jordan River to document damages done by Hurricane Katrina.

He has asked Dammon Engineering to perform another structural inspection to determine if the decking and flooring are showing additional signs of deteriorating.

Findings**:**

These findings are limited to the inspection performed on this date.

- The metal roof was inspected and found to have been lifted upward. When it rose, several of the 2x4 supports were still attached. This is indicative of strong winds pulling up on the roof. There are many areas where the screws were stripped out of the metal sheeting, and also areas where the screws were pulled out of the 2x4 runners that the metal was attached to. This roof will need to be removed, and replaced with new material. The felt underlayment should also be replaced. The entire roof framing may well have also become partially detached by the force of the wind. We were unable to gain access to the attic to inspect this possibility. This should be inspected when replacing the metal roof.
- All of the fascia and a large section of the soffit were also blown away and will need to be replaced.
- Large sections of the siding were blown away and the remaining siding is not to be trusted in its ability to function as a weather barrier. All remaining siding should be removed; new siding should be installed.
- Trusses under the main floor are showing signs of fatigue. The metal plates are seriously rusted and starting to lose their ability to hold the truss joints. Wooden sections of the trusses are developing soft spots, and will most probably fail at some time in the near future. Beams that have been placed along the perimeter

and in the center sections of the house are of inadequate size to support the 15' span where they are located and some sagging is evident.

- It was reported by the contractor performing emergency repairs, that the floors had buckled in some areas and were uneven where floor supports were sagging.
- Beneath the rear weight-bearing wall, Mr. DeFrancesch had Mr. Roy Skinner, a local contractor, build a beam consisting of three 2x12's placed horizontally with three 1x6", one each on the top and bottom.
- This beam has restored the level and stability to this section of the weight-bearing wall of the structure. This resolution may be short lived. It rests on one end of one of the beams spanning 15' and that beam is now showing signs of stress.

Analysis:

The roof is not strong enough to withstand another storm. The roof, along with reinforcing the foundation, requires prompt attention before further deterioration occurs.

All of the roofing material must be removed. The roof rafters should be inspected to determine if they have been compromised.

If the roof framing is not found to be in an acceptable condition a new roof may then be installed.

It appears that structurally, due to the results of water exposure and damage, the main floor support members are showing continued deterioration and sagging, and if not corrected in a reasonable period of time, will cause serious support problems.

Repairs to the buildings framing and support system should be designed by a competent Engineer or Architect.

Sincerely,

Emmett G. (Pete) Dammon, P.E.
Ms License #9652