



## Structural Inspection

August 17, 2018

For: Vanessa Lyles  
DC Manager  
American Tire Distributors  
512 Johnny F. Smith Ave.  
Slidell, La. 70460

### Construction:

Approximately 50,000.00 Sq. Ft. Warehouse, tilt up concrete wall panels with structural steel roof framing on a conventional foundation.

### Scope:

This inspection is limited to a visual inspection of the shell of the building. 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 bldg due to an on-site inspection dated 07-18-18 that noted cracks in the veneer of the bldg.

### Findings:

Upon inspection of the exterior of the building, several items were noted.

The roof of the bldg is sloped to the front, this allows rainwater to sheet flow to the front of the building and into a gutter system and down into down spouts that drain directly onto the concrete paving area and then sheet flows across the concrete loading zone area into a swell located outside the fence on the west side of the property. Two of the downspouts on the northwest side of the bldg drain directly onto a concrete swell which is directed to the concrete paving area of the loading zone but also slope back to the bldg. The rear and sides of the bldg, the rainwater flows down the tilt up walls onto the ground and out to the swells on the sides of the property.

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.

The tilt up concrete walls has several areas that have surface cracks in them around the personal doors/windows and the flat side of the walls. In several areas of the tilt up walls, rust was noted running down the wall due to exposure of the reinforcing in the panels.

It was also noted that the seals in between the tilt up concrete panels are failing and allowing water to enter between the two panels and run down into the foundation. The area between the tilt up walls and the sidewalks/loading zone have lost its seal due to the sealant failing.

The rear and sides of the bldg allow the rainwater to flow to the swells, but the first 8 to 10 inches of the earth next to the bldg have sloped back towards the bldg allowing rainwater under the foundation.

The tilt up walls on the interior of the bldg wasn't noted to have any cracks in them.

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.

Recommendation:

The cracks in the tilt up walls do not appear to have compromised the structural integrity of the bldg. It is my opinion that the structural integrity of this bldg is currently sound, but the foundation will expand and contract with the ground movement and any standing water. See the attached pictures.

It is recommended to have the following items addressed:

- 1) Reseal all the tilt up wall panels.
- 2) Reseal between the sidewalks and concrete paving areas.
- 3) Adjust the concrete swell on the northwest side of the bldg to slope away from the bldg and reseal it.
- 4) Slope the earth away from the bldg on the rear and sides of the bldg.

Sincerely,

Brian Mistich, P.E.

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