



Professional Engineering Services
Structural Engineering Inspections

Structural Inspection Report

Report Submitted to: Tracy Levar, tleva@hayatrx.com

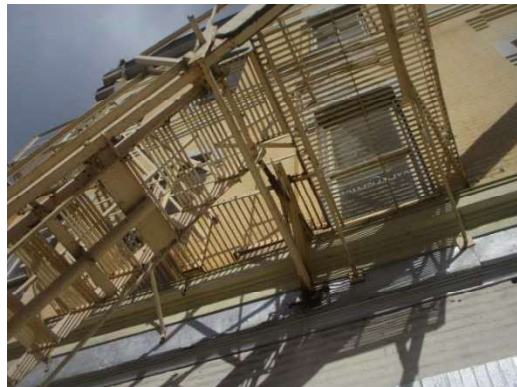
Property Inspected	
Address: 1673 N Farwell Ave	
Age Info: built in: according to online information	
Problem Description: <input type="checkbox"/> Water <input type="checkbox"/> Foundation Structural <input checked="" type="checkbox"/> Other Structural (Fire Escape)	
Inspection Date: 9/1/2021	Report Date: 9/15/2021

Observations
<p>(Description): <u>Critical examination of fire escape</u></p> <p>The noted concern is the condition of the exterior fire escape.</p> <p>The landing at the third floor shows some signs of deterioration due to the elements. The anchor points to the building appear to be imbedded into the building.</p> <div data-bbox="186 1228 1226 1612"></div>

The staircase to the second-floor landing also shows some deterioration and rusting due to exposure to the elements. Some of the hardware attaching the treads to the rest of the structure are also rusted.



The second-floor landing shows some increased deterioration, as well as past repair. There is evidence of material being welded on as repair patches. Some of the material has twisted and shifted from its original position.



There is an egress window on the second floor to access the platform. The egress window was very difficult to operate and could not be opened all the way.



There is a steel rod that supports the counterweight mechanism for the last flight of stairs. This rod has become bent due to proximity with the railing. The flight of stairs has also twisted, making egress difficult.



The counterweight system worked properly, except for the interference of the bent rod (see above). The stairs lowered at an appropriate pace and raised back up with minimal assistance once weight was removed.



There is observed deterioration and rusting on the final flight of stairs as well. The hardware also shows deterioration.



Opinion/Recommendations

My opinion is that:

1. The fundamental cause of the problems is the steel becoming exposed to the elements. The exposed steel then begins to rust, weakening the material. The fire escape should be scrapped and re-painted to protect the steel.
2. It is recommended that all the hardware be replaced, as even a small amount of deterioration can cause a large loss of strength. The hardware observed showed some deterioration.
3. The repairs completed to the counterweighted stairs look amateurish and have not succeeded in adequately supporting the structure. This is evident in the twist of the staircase and of some of the supporting members. A new patch/supporting system should be designed and installed. The design of such a system is a service Zerreon Inc. can provide, however falls outside of the scope of this report.
4. The window egress on the second floor should be repaired or replaced to ensure proper egress paths.

This report is limited to an independent, impartial opinion, and is rendered to a reasonable degree of engineering certainty. This report is intended to help you understand the risks associated with these specific building components. It is not a warranty. My opinion is based on what was visible, and therefore what was visible, at the particular point in time that I was there.

Submitted by:
Zerrecon, Inc.



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President
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