



## STRUCTURAL INSPECTION IN A TOWN HOME.

Review Commenced

Date: **11.25.2021**

Signature: \_\_\_\_\_

Review Completed:

Print Name: Antonio Canelas P.E.

Date: **12.03.2021**

Title: **Professional Engineer**

**REFERENCE:** Inspection about Structural Conditions

To: Mr. Javier Avila.  
1258 Obispo Ave.  
Coral Gables, FL 33134

Mr. Avila

As requested by you a structural field inspection of the property located at the above referenced address, was completed. The purpose of this inspection, was to assess the current state of the Residence. The structural evaluation and professional analysis are based on visual observation of the exposed shell elements. The structural components concealed behind the stucco or wood columns covers can't be observed or validated. The inspection completed by the engineer led to the conclusions presented below.

### Observations.

- In general the structural shell of the house is in poor conditions. Can be observed water intrusion damage in some roof areas. In many places had been necessary to remove portions of the ceilings.
- The house was infested by termites. It was observed in many places traces of termites. For example wood ceiling joists, wood joist or rafters, wood floors planks, wood floor joists, and windows and doors wood framings.
- As results of the termites infection, the water intrusion and the house aging, the stability and carrying capacity of some structural wood elements were affected and the deterioration can continue increasing.
- Some previous wood joists repairs were done there without comply with the minimum code requirements.
- The exterior windows are in very bad conditions. The metal frames are rusted and some glass panel broken.
- The exterior CMU walls are not braced at ground floor and doesn't have any steel reinforcing.

1258 OBISPO AVE.



### **Recommendations:**

1-The roofing system and tiles, the roof plywood sheathing, and around the 50% of the roof wood joists, the ceiling wood joists, must be removed and replaced. Also, we strongly recommend to cover the whole house with a tent and fumigate in order to eliminate any possibility of alive termites and avoid any future deterioration of the wood elements.

2-The wood floor and subfloor and maybe a significant portion of the wood joists at ground floor need to be replaced, also we recommend to brace the exterior CMU walls to the ground floor wood joists (above the crawl space) w/ some connectors, in order to reduce the wall slenderness for lateral wind suction.

3-All the exterior windows and doors must be replaced.

### **Conclusions.**

It is our opinion, that the costs of the necessities repair works in this property to restore the structural integrity of the house, can be similar to the total cost of a similar new construction.

If you should have any questions regarding this matter, please do not hesitate to contact us.

*“As a routine matter, in order to avoid possible misunderstanding, nothing in this report should be construed directly or indirectly as a guarantee for any portion of the structure. To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the building based upon careful evaluation of observed conditions, to the extent reasonably possible”.*

Respectfully,

Antonio Canelas, P.E.

See Attached some Pictures.

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**STRUCTURAL DESIGN**

TC ENGINEERING, INC. CA LIC. No 30288  
CONSULTING ENGINEERS

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Picture 1  
Area of the roof previously affected by water intrusion.



Picture 2

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Roof joists not properly repaired



Picture 3  
Roof joists damaged by termites.



Picture 4  
Previously damaged wood floor by water intrusion, not properly repaired. Wood joists supported by unstable blocks and wood posts

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Picture #5  
Exterior window rusted and glass panel broken.



Picture #6  
A/C unit not properly encased into the wall.

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Picture #7 Exterior door very damaged



Picture #8 Front widow, very damaged

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Picture #9 Wood floor damaged by termites.



Picture #10 Ridge joist broken.

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