

Milestone Inspection Report Phase 1

The Tradewinds Apartments of Marco Island Inc.



**180 Seaview Ct.
Marco Island, FL 34145**

Prepared on:
7/31/2023



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Milestone Inspection Report Phase 1

REPORT SUMMARY

1 GENERAL

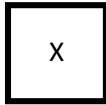
- 1.1 Consult Engineering, Inc. (Consult) has been retained by The Tradewinds Apartments of Marco Island Inc.(Association) to inspect the building located at 180 Seaview Ct. , Marco Island, FL 34145. The purpose of this inspection and subsequent report is to perform a Milestone Inspection of the building in accordance with Florida Statute 553.899(8).
- 1.2 This Milestone Inspection has been performed by the registered professional engineer indicated at the end of this report or one of his/her duly authorized representatives in accordance with Florida Statute Chapter 471. A copy of the full report has been provided to the local building official. Questions related to this report should be addressed to the Association board or the local building official.
- 1.3 The inspection performed is of the readily accessible and visible structural components of the building in both habitable and non-habitable spaces. Sampling has been utilized to extrapolate the findings contained in this report. The visual inspection performed should not be considered exhaustive or all-inclusive, nor is it required to be per Florida law.
- 1.4 Only components listed in this Report Summary and in the "Observations" Section of the full report exhibited any signs of substantial structural deterioration or possible substantial structural deterioration. Building components not listed in this report were either not available for visual inspection or did not exhibit any readily visible signs of substantial structural deterioration.

2 PROPERTY DESCRIPTION

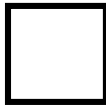
- 2.1 The building located at 180 Seaview Ct. , Marco Island, FL 34145, is a twelve (12) story building constructed of reinforced concrete and masonry with a flat membrane roof, parapet wall, and a concrete tile mansard around the perimeter. The primary structural components of the building consist of reinforced concrete columns, reinforced concrete beams, reinforced concrete walls, and reinforced concrete slabs.
- 2.2 Other structural life safety components of the building include guardrails at the open balconies and stair entrances. These components are constructed of steel and aluminum and are attached to the concrete slab using fasteners. During this report, all the private balcony railings were in the process of being replaced.

3 SUMMARY OF FINDINGS

3.1 SUBSTANTIAL STRUCTURAL DETERIORATION



WAS NOT FOUND on any of the building components observed visually. A Phase Two Milestone Inspection is not required at this time. Engineer recommends that this study be performed again within 5 years from the date of this report.



WAS FOUND on the following structural components of the building thus prompting a Phase Two Milestone Inspection to be performed in accordance with FS 553.899. This DOES NOT mean the building is unfit for habitation or inherently unsafe. Further study is required.

3.2 NON-SUBSTANTIAL STRUCTURAL DETERIORATION



WAS NOT FOUND and no further action is required at this time. Engineer recommends that this study be performed again within 5 years from the date of this report.



WAS FOUND and recommendations for repair are included in the full Phase 1 Milestone Report. Deterioration was discovered at the following locations:

1. Balcony Slab Corners
2. Exterior Doorways Overhead Flashing
3. Ground Level Wall Penetration
4. Ground Level Meter Room
5. Garbage Room
6. Aluminum Roof Railings
7. Rooftop HVAC Pump Room
8. Rooftop HVAC Boiler Room
9. Exterior Stair Balcony Barriers



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The undersigned reserves the right to amend this report at any time based on new information provided subsequent to preparation of this report. Please call or e-mail our office if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jude Feingold', is written over a light blue horizontal line.

Jude Feingold
Project Engineer



*This item has been digitally signed and sealed by
Joshua L. Porter, PE, SI on the date adjacent to the seal.*

*Printed copies of this document are not considered
signed and sealed and the signature must be verified
on any electronic copies.*

Joshua L. Porter, PE, SI 67430

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1 GENERAL

1.1 BACKGROUND

- 1.1.1 Florida Statute 553.899 requires that condominiums and cooperative buildings in Florida that have any building 3 stories or more in height be inspected by an engineer or architect licensed in Florida. Initial inspection deadlines and inspection cycles are specified in Florida Statute 553.899(3).
- 1.1.2 The inspection shall consist of two phases: a “Phase 1 Milestone Inspection” and a “Phase 2 Milestone Inspection.” Each building must have its own inspection and separate report.
- 1.1.3 The purpose of the inspections is to identify both “substantial” and “non-substantial” structural deterioration to any components of the building structure and to provide recommendations for repair or next steps.
- 1.1.4 These reports are to be prepared in 10-year intervals at a minimum, but close attention should be given to the recommendations of the engineer preparing the Phase 1 or Phase 2 Milestone Inspection Report for re-inspection periods which may be more frequent than the state requirements.
- 1.1.5 A report must be submitted directly from the engineer to the Building Official and the Association Board. Associations have certain obligations to post the summary report on the premises and provide the unit owners and residents with copies of the report. It is recommended that an Association contact an Attorney for more guidance on complying with the law.

1.2 DEFINITIONS

- 1.2.1 *Milestone inspection* - means a structural inspection of a building, including an inspection of load-bearing walls and the primary structural members and primary structural systems as those terms are defined in s. 627.706, by a licensed architect or engineer authorized to practice in this state for the purposes of attesting to the life safety and adequacy of the structural components of the building and, to the extent reasonably possible, determining the general structural condition of the building as it affects the safety of such building, including a determination of any necessary maintenance, repair, or replacement of any structural component of the building. The purpose of such inspection is not to determine if the condition of an existing building is in compliance with the Florida Building Code or the fire safety code. – Florida Statute 553.899(2)(a)

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- 1.2.2 *Non-Substantial Structural Deterioration* - any structural distress to any component of the building which does not support other components of the building and which presently does not cause an imminent life-safety risk. However, falling debris from stucco or concrete damage, for example, may still pose property damage and personal injury risks until the repairs outlined in the report can be carried out.
- 1.2.3 *Phase 1 Milestone Inspection Report* – a report outlining any observed substantial structural deterioration and non-substantial structural deterioration. This report is issued to both the Condominium or Cooperative Association and the Building Official in their area. Any substantial structural deterioration observed in the Phase 1 Milestone Inspection Report must be further investigated in a Phase 2 Milestone Inspection Report.
- 1.2.4 *Phase 2 Milestone Inspection Report* – a report outlining the findings of an engineer's investigation into any substantial structural deterioration identified in a Phase 1 Milestone Inspection Report. Non-destructive and limited destructive techniques are often employed to conduct a Phase 2 Milestone investigation.
- 1.2.5 *Primary Structural Members* - means a structural element designed to provide support and stability for the vertical or lateral loads of the overall structure. - Florida Statute 627.706(2)(d)
- 1.2.6 *Primary Structural Systems* - means an assemblage of primary structural members. – Florida Statute 627.706(2)(e)
- 1.2.7 *Substantial Structural Deterioration* - means substantial structural distress that negatively affects a building's general structural condition and integrity. The term does not include surface imperfections such as cracks, distortion, sagging, deflections, misalignment, signs of leakage, or peeling of finishes unless the licensed engineer or architect performing the phase one or phase two inspection determines that such surface imperfections are a sign of substantial structural deterioration. - Florida Statute 553.899(2)(b)

2 OBSERVATIONS

2.1 NON-SUBSTANTIAL STRUCTURAL DETERIORATION

2.1.1 BALCONY SLAB CORNER SPALLING

- 2.1.1.1 Consult observed two corners of private balconies to be cracked / spalled (Photos 01, 02 Typical). More may probably be present but a full inventory was not part of the scope of this report. Cracked concrete in this form indicates the carbonation has reached the rebar. The degradation will accelerate at these locations and spread from there.

2.1.2 MISSING / DAMAGED EXTERIOR DOORWAYS OVERHEAD FLASHING

- 2.1.2.1 Water damage was observed on the floor just inside the rooftop doors. The exterior doors had no (or damaged) overhead flashing which is supposed to prevent rain from getting behind the door from the top. The damage could also possibly result from improperly sloped door thresholds. (Photos 03, 04, 05 Typical). Water running along the back or sides of the door degrades the metal and if the water pools on the floor on the back side of the door, it can increase the carbonation rate of the concrete, resulting in spalling.

2.1.3 GROUND-LEVEL WALL PENETRATION

- 2.1.3.1 A penetration into the outside wall was observed just above grade (Photo 06). This penetration can allow the interior of the wall to chronically be exposed to moisture and water which can accelerate concrete carbonation around it.

2.1.4 GROUND-LEVEL METER ROOM WALL CRACK

- 2.1.4.1 A crack across a non-supporting wall was observed inside the ground floor meter room (Photo 07). This crack indicates some differential settling of the foundation.

2.1.5 GARBAGE ROOM CHRONIC LEAKING OR CONDENSATION

- 2.1.5.1 Standing water and traces of chronic standing water was observed between the trash dumpster and the closest wall. (Photo 08). Consult could not verify the source of the water leak but it looked to be occasional condensation on an overhead pipe or a leaking pipe or valve. Multiple pipes coming out of the ceiling and valves above showed signs of prolonged water exposure in the form of corrosion. One pipe looked as if

someone had attempted to patch it's ceiling penetration with duct tape. This standing water runs against the wall instead of to the local floor drain. This water will eventually degrade the base of the wall or any structural member that is adjacent to it.

2.1.6 FASTENERS FOR ALUMINUM ROOF RAILING

- 2.1.6.1 The aluminum railings on the roofs are anchored to the wall and to each other using corroded steel hardware (Photo 09 Typical). This hardware will fail prematurely for the railing and if it is embedded into the masonry wall, it will eventually push the concrete apart as it corrodes, creating a spall where more moisture can then enter the concrete and create more damage.

2.1.7 ROOFTOP HVAC PUMPROOM WINDOW COVERING

- 2.1.7.1 Water has been chronically entering the pump room past the window vent louvers resulting in cracking around the window penetration and spalling on the floor underneath the window (Photo 10, 11). The rain might be entering through the original concrete louvered grill at the area where the new louvered grill has been broken away.

2.1.8 BOILER ROOM LEAKING VENT STACK

- 2.1.8.1 Evidence of chronic water exposure was present on the floor of this room (Photo 12, 13, 14). It seems one of the water sources was from the ceiling penetration for the boiler exhaust stack. The floor drain was slightly corroded around it's perimeter as well.

2.1.9 EXTERIOR STAIR BALCONIES

- 2.1.9.1 Some of the fastening plates on the floor-to-ceiling round bars, along the exterior stair balconies, are loose (Photo 15). These fasteners also seem to be made from steel which will corrode and spall the concrete in which they are embedded.
- 2.1.9.2 The floors of these balconies have been stripped of any sealants, leaving the bare concrete exposed (Photo 16). This stripping of waterproofing may be part of a current project.

3 CONCLUSION AND RECOMMENDATIONS

- 3.1 The estimated remaining useful life of the non-substantial structural deterioration identified in this report is **2 YEARS**. This means that the Association should proceed as soon as possible with retaining an engineer and contractor and conducting the repairs as soon as is practicable.
- 3.2 The estimated remaining useful life of the substantial structural deterioration (if identified in this report) should be evaluated by the engineer performing the Phase Two Milestone Inspection.
- 3.3 Consult Engineering, Inc. (Consult) recommends the following actions be taken by the Association or Cooperative Board:
 - 3.3.1 Correct all concrete deficiencies including concrete cracks and spalls identified in this report.
 - 3.3.1.1 Concrete repairs should be completed per ICRI (International Concrete Repair Institute) and ACI (American Concrete Institute) standards following the specifications and details prepared by a Florida Registered licensed professional engineer specializing in structural restoration and strengthening of existing structures. These repairs are considered “structural” repairs and must be performed by a licensed General Contractor working under a permit issued by the municipality.
 - 3.3.2 Identify the type of waterproofing (if any) on the balconies exposed to the weather. Any topcoat failures should be addressed. If the slabs do not have a waterproofing membrane, waterproof all balconies exposed to the weather. This aids in water runoff and prevents water penetration into the concrete slabs. Spalled slab edges are common on balconies without waterproofing. Concrete and stucco repairs should be finalized beforehand.
 - 3.3.3 All exterior doorways not under an overhang should have flashing installed above them.
 - 3.3.4 All Aluminum railings should have stainless fasteners.
 - 3.3.5 Ensure Roof HVAC Boiler room vent stack is watertight.
 - 3.3.6 Ensure the HVAC Boiler room floor drain is watertight and that water is not seeping into the floor around the drain.
 - 3.3.7 Repair the exposed steel in the floor just inside the door of the HVAC Boiler room.

- 3.3.8 Find and repair the source of chronic water seepage next to the garbage dumpster.
 - 3.3.9 Ensure that rain is not currently entering the louvered window of the HVAC Pump room. If it is a current problem, repair or re-install the exterior louver.
 - 3.3.10 The wall penetration at grade should be evaluated and if it has no purpose, it should be excavated and plugged with masonry.
 - 3.3.11 The crack in the non-structural wall in the ground floor meter closet, should be monitored for further settling.
- 3.4 A registered Florida Professional Engineer experienced in restoring mid-rise and high-rise structures should prepare bid specifications and bid this work out to qualified contractors.
- 3.4.1 This engineer should also act as the Engineer of Records and prepare a Threshold Inspection Plan for the repairs to be conducted. This plan should be submitted with the permits in accordance with Florida Statutes.
 - 3.4.2 The Association will also need to obtain the services of a registered Florida Professional Engineer that also carries a "Threshold Inspector" or "Threshold Inspector Limited" certification to perform inspections of the work as it progresses in accordance with Florida Law.
 - 3.4.3 Consult Engineering, Inc. is a full-service engineering consulting firm capable of providing your Association with all of the above engineering services. Our construction administration team is very experienced as owner-representatives during Capital Projects, and we employ registered professional engineers and threshold inspectors alike.

4 PHOTOGRAPHS



Photo 01 Ref:2.1.1.1 – Slab Corner Cracks/Spalling (Typical)

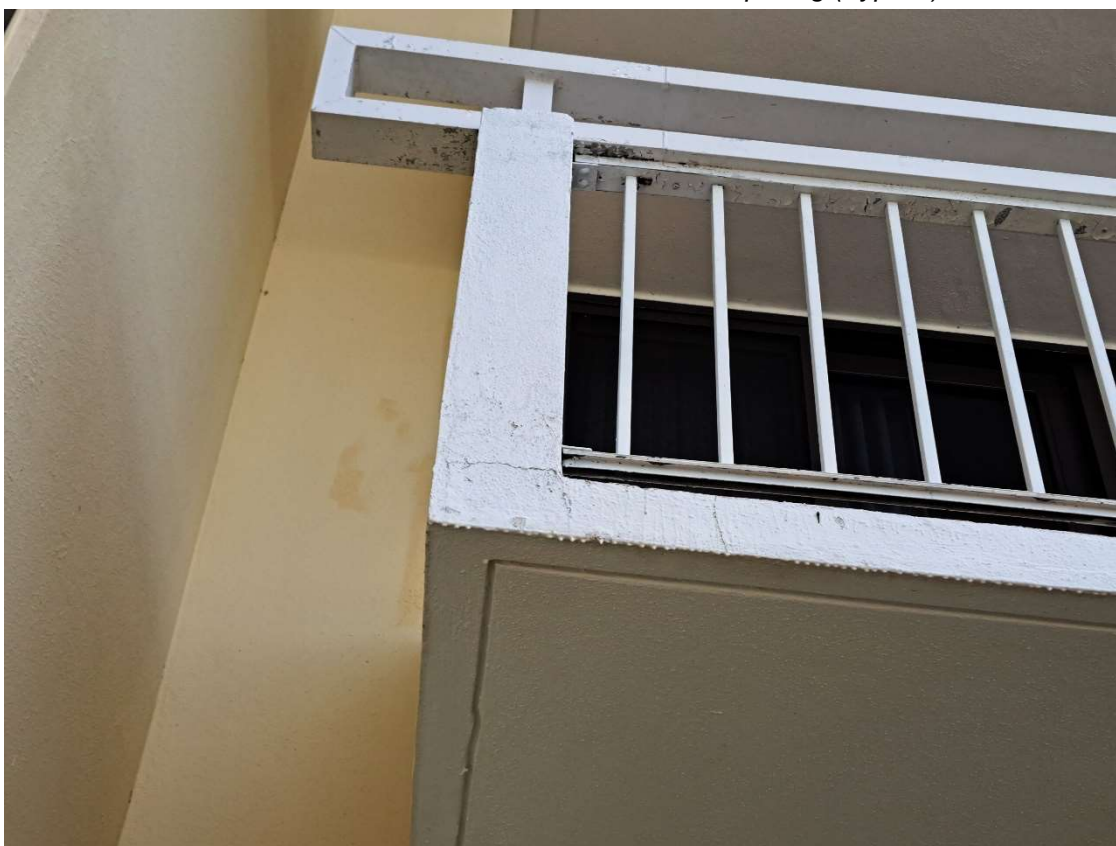


Photo 02 Ref: 2.1.1.1 – Slab Corner Cracks/Spalling (Typical)



Photo 03 Ref: 2.1.2.1 – Missing / Damaged Exterior Doorway Overhead Flashing (Typical)



Photo 04 Ref: 2.1.2.1 – Missing / Damaged Exterior Doorway Overhead Flashing (Typical)



Photo 05 Ref: 2.1.2.1 – Missing / Damaged Exterior Doorway Overhead Flashing (Typical)



Photo 06 Ref: 2.1.3.1 – Ground-Level Wall Penetration

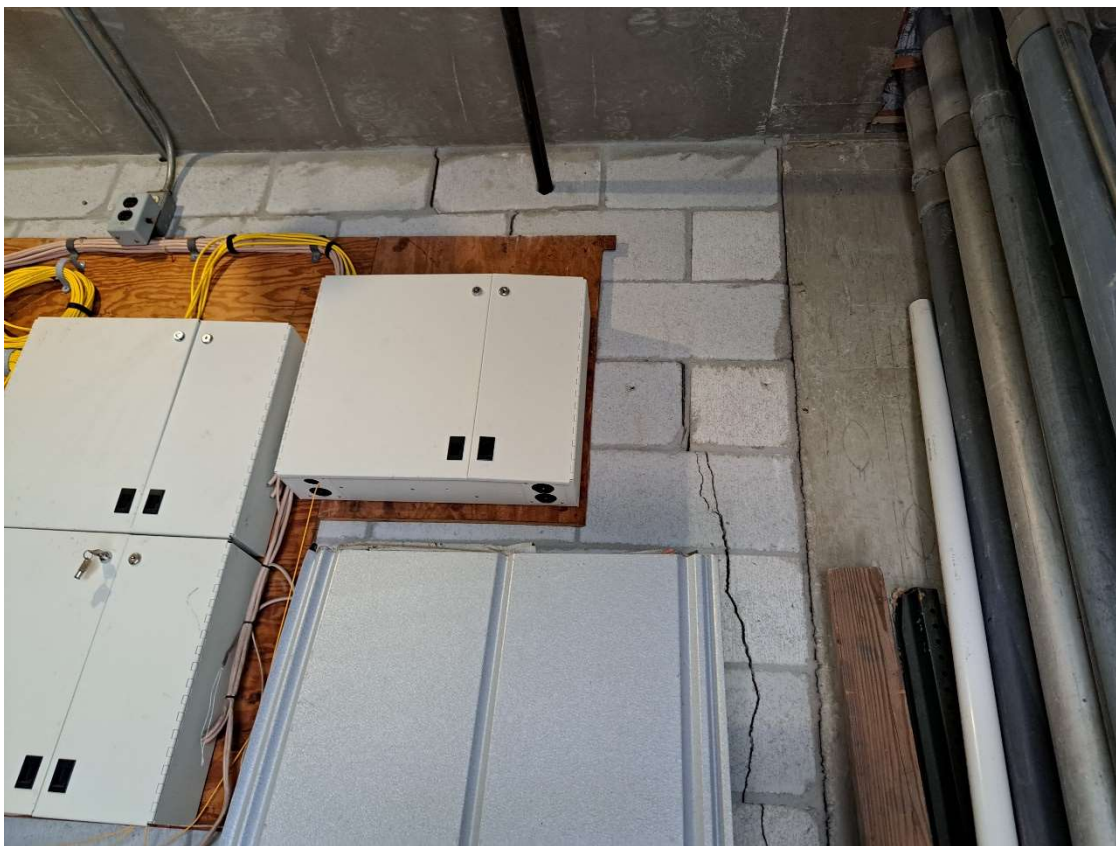


Photo 07 Ref: 2.1.4.1 – Ground-Level Meter Room Wall Crack

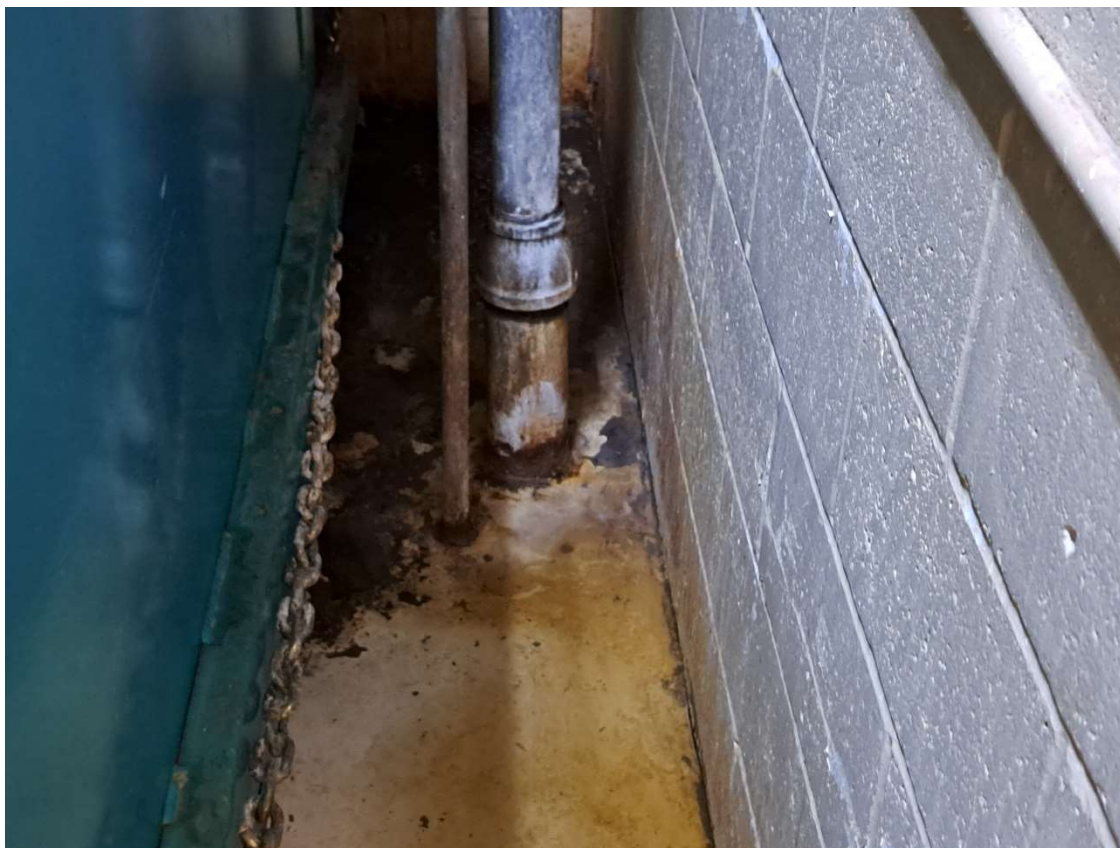


Photo 08 Ref: 2.1.5.1 – Garbage Room Chronic Leaking or Condensation

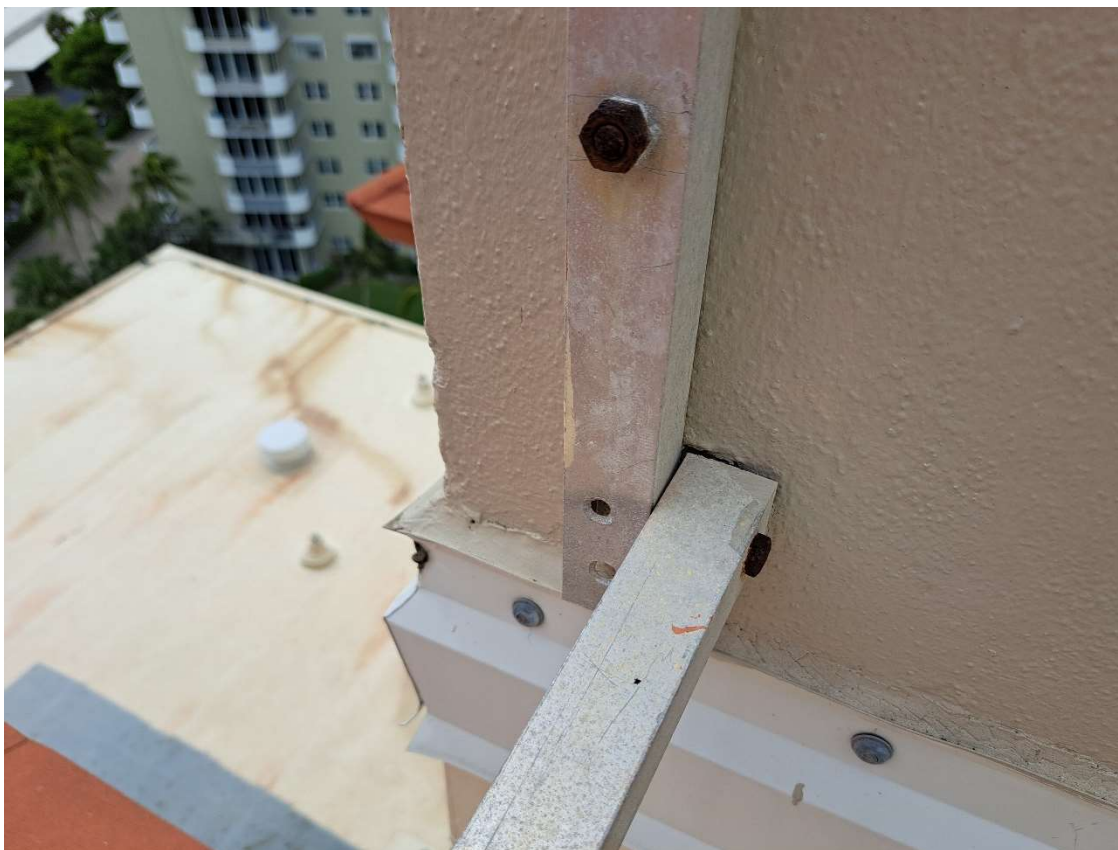


Photo 09 Ref: 2.1.6.1 – Fasteners for Aluminum Roof Railing (Typical)



Photo 10 Ref: 2.1.7.1 – Rooftop HVAC Pumphouse Window Covering



Photo 11 Ref: 2.1.7.1 – Rooftop HVAC Pumproom Window Covering



Photo 12 Ref: 2.1.8.1 – Boiler Room Leaking Vent Stack



Photo 13 Ref: 2.1.8.1 – Boiler Room Leaking Vent Stack



Photo 14 Ref: 2.1.8.1 – Boiler Room Leaking Vent Stack



Photo 15 Ref: 2.1.9.1 – Exterior Stair Balcony Barrier Anchors

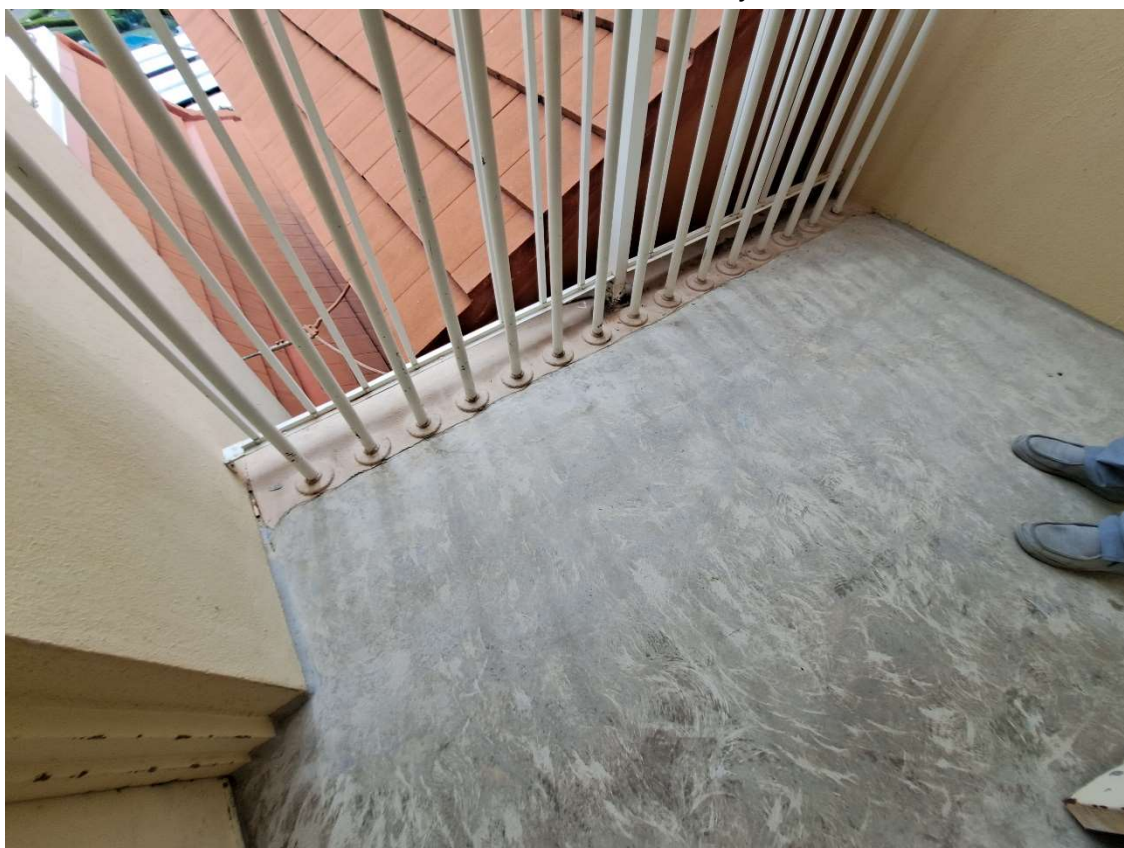


Photo 16 Ref: 2.1.9.2 – Exterior Stair Balcony Stripped Waterproofing