

PACIFIC VIEW CONDOMINIUMS

Preliminary Building Envelope and Limited Structural Observations



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J2 Project Name: Pacific View Bldg

J2 Project #: 5631001

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EXPIRES: 12-31-2022



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EXECUTIVE SUMMARY

J2 Building Consultants, Inc. (J2) has performed a preliminary evaluation of the building envelope and exposed exterior structural components at the Pacific View Condominiums. The purpose of our preliminary evaluation was to review the exposure conditions and observe the existing assemblies to better understand the existing conditions and expected performance, which will assist with planning for future maintenance, repairs and/or replacement. Our review was limited to visual only observations at a sampling of locations, limited document review, and preliminary structural calculations. Based on this evaluation J2 concluded that there are water damaged structural components at decks that are causing life safety concerns and should be addressed immediately. The structural integrity of all posts and beams are in question due to water damage, over-stressed due to large span lengths, and an incomplete gravity load path at the roof gable framing. In addition, water damaged components and improper detailing of roofs, decks, windows and walls necessitate comprehensive building exterior repairs in the near future. J2 recommends temporary shoring to address the immediate life safety concerns. Further invasive investigation of siding, windows, doors, roofs, decks and entryways may be warranted prior to planning for comprehensive repairs.



BACKGROUND

Purpose

The Client has retained J2 to evaluate the existing condition of the building envelope to better understand the existing conditions and expected performance, which will assist with planning for future maintenance, repairs and/or replacement.

Scope

J2 visited the site on 10/21/22 to perform visual observations of the major building exterior components at a sampling of locations. This included roof, walls, windows/doors, decks, and entryways. The intent of our observations was to:

- Identify the majority of the pertinent building components and materials
- Understand the exposure conditions
- Identify possible life safety concerns, leaks, property damage, defects, and/or potential performance concerns
- Determine if maintenance, repairs, or replacement could be warranted
- Gather information so that a plan for further review and/or testing can be developed

During the inspection it became apparent that structural concerns were present. J2's scope was then increased to include a preliminary structural review limited to the exterior building components in addition to weatherization components.

Method & Techniques

The inspection process performed was in general conformance with the following industry standard guidelines:

- "Preliminary Condition Assessment" procedures outlined in ASCE 30-14, Guideline for Condition Assessment of the Building Envelope
- "Inspection" procedures outlined in ASTM E2128-20, Standard Guide for Evaluating Water Leakage of Building Walls
- "Preliminary Assessment" procedures of SEI/ASCE 11-99

Document Review

J2 was provided a limited amount of maintenance repair history documentation from the HOA. No plans, reports, or other information was available at the time of this report.

BUILDING DESCRIPTION

Building Type

Pacific View consists of a wood framed condominium building with 27 residential units. The building is made up of 3 floors with external hallways and open staircases. West facing elevation is comprised of private decks with iron guardrail system. The back lower level has a under building parking area.

Service History

The original building was constructed in 1967. A review of the maintenance history indicates the following repairs have been made in more recent years. The extent of the scope of these repairs has not been determined:

- Stairway rails – (8) Replaced on East parking lot (2007)
- East side beam replacement - Phases 1-3 (2014-2016)
- North end roof beam replacement (2/2022)
- Roof valley inspection with minor repairs (2/2022)

Building Assemblies

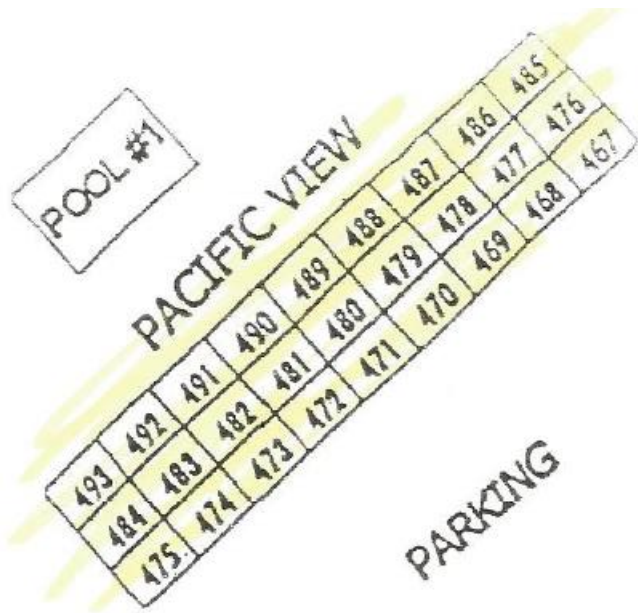
Roof- Roof assemblies consist of a mechanically fastened single ply membrane with through roof drains and perimeter stainless-steel edge metal. Insulation and ventilation have not been determined.

Walls- Exterior walls consist of T1-11 style panel siding with wood window trim, vertical cedar siding at the front elevator tower, and vinyl siding covering deck edges. Insulation and vapor retarders have not been determined.

Windows and Doors- The Windows and sliding glass doors are a mix of vinyl and aluminum framed systems. Storage closets located on resident decks have wood hollow core swing doors.

Decks and Walkways- Front walkways and back deck consist of wood beams and joists with steel columns. The front stairways are concrete treads attached to steel stringers. The deck surface is plywood sheathing with a waterproofing deck coating that is covered on the front with outdoor carpet. Some of the back waterproof decks are covered with tile.

SITE MAP



OBSERVATIONS

1.0 TEMPORARY SHORING REQUIRED

TEMPORARY SHORING REQUIRED Item #1.1 Decayed Beam

Description: Structural deck beams are severely water damaged and are unsafe to support code required loads.

Severity Rating: 1

Buildings(Units) with Issue: 1238(476, 479, 484, 493)



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Water damaged deck support beam.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Water damaged deck support beam.

Photo Date: 10/21/2022

TEMPORARY SHORING REQUIRED Item #1.1 Decayed Beam



Photo Information:

Building #1238, Unit #484

Elevation: West

Photo Notes: Water damaged deck support beam

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #493

Elevation: West

Photo Notes: Water damaged deck support beam

Photo Date: 10/21/2022

TEMPORARY SHORING REQUIRED Item #1.1 Decayed Beam



Photo Information:

Building #1238, Unit #476

Elevation: West

Photo Notes: Water damaged deck support beam

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #481

Elevation: West

Photo Notes: Water damaged deck support beam

Photo Date: 10/21/2022

TEMPORARY SHORING REQUIRED Item #1.2 Loose Guard Rails

Description: Guardrails are loosely attached to the building and may not support code required loading.

Severity Rating: 1

Buildings(Units) with Issue: 1238(480, 483)



Photo Information:

Building #1238, Unit #483

Elevation: East

Photo Notes: Loose guardrail connection at the walkway adjacent to unit #483.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #480

Elevation: East

Photo Notes: Loose guardrail connection

Photo Date: 10/21/2022

TEMPORARY SHORING REQUIRED Item #1.2 Loose Guard Rails



Photo Information:

Building #1238, Unit #483

Elevation: East

Photo Notes: Loose guardrail connection

Photo Date: 10/21/2022

2.0 ROOF

ROOF Item #2.1 Water Damage at Roof

Description: J2 observed water damaged building components and improper installation methods at critical integration areas with the membrane.

Severity Rating: 2

Buildings(Units) with Issue: Typical



Photo Information:

Photo Notes: Roofing membrane not properly lapped at roof access hatch.

Photo Date: 10/21/2022

ROOF Item #2.1 Water Damage at Roof



Photo Information:

Photo Notes: Water damage at roof access hatch.

Photo Date: 10/21/2022



Photo Information:

Photo Notes: Water damage at roof access hatch.

Photo Date: 10/21/2022

ROOF Item #2.1 Water Damage at Roof



Photo Information:

Photo Notes: Water damage on back side of sheathing below hatch.

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Elevated moisture levels in wall sheathing below roof penetration.

Photo Date: 10/21/2022

ROOF Item #2.1 Water Damage at Roof



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Elevated moisture levels and staining at beam to wall interface directly below roof penetration.

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Disconnected roof drain

Photo Date: 10/21/2022

ROOF Item #2.1 Water Damage at Roof



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Damaged drip edge flashing allows water underneath the roof membrane.

Photo Date: 10/21/2022



Photo Information:

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Failed sealant at valley termination, allows water on framing member. Damage documented below.

Photo Date: 10/21/2022

ROOF Item #2.1 Water Damage at Roof



Photo Information:

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Mortar joints failing at brick chimneys

Photo Date: 10/21/2022

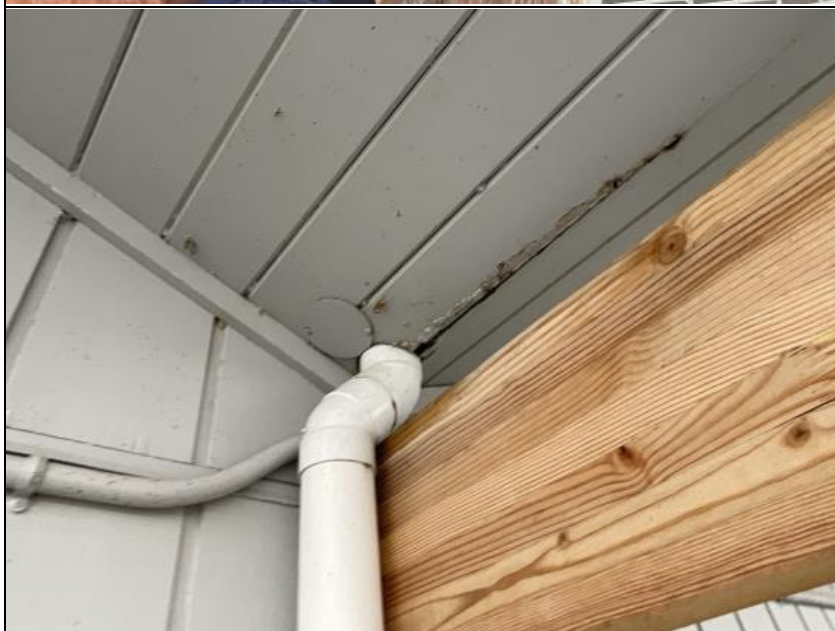


Photo Information:

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: water damaged roof deck at penetration.

Photo Date: 10/21/2022

ROOF Item #2.2 Damaged Roof Beams

Description: Mis-lapped and missing drip edge flashing at roof perimeter contributing to water damaged barge rafter and beams.

Severity Rating: 2

Buildings(Units) with Issue: Typical



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water damaged barge rafter.

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water damaged roof beam

Photo Date: 10/21/2022

ROOF Item #2.2 Damaged Roof Beams

**Photo Information:**

Building #1238, Unit #482

Elevation: West

Photo Notes: Water damaged roof beam and hardware

Photo Date: 10/21/2022

ROOF Item #2.3 Omitted Collar Tie at Roof Framing

Description: Incomplete/discontinuous vertical load path at roof framing; apparent unintended lateral load on the structural steel columns is required to support gravity loads.

Severity Rating: 1/2

Buildings(Units) with Issue: Typical

**Photo Information:**

Building #N/A, Unit #N/A

Elevation: N/A

Photo Notes: Ridge beam is not supported at the end. This requires a collar tie to complete the vertical load path and alleviate lateral force to the steel column.

Photo Date: 10/21/2022

ROOF Item #2.4 Improper Flashing at Roof

Description: J2 observed select areas where metal flashing were damaged, missing, and/or installed improperly.

Severity Rating: 3

Buildings(Units) with Issue: Typical



Photo Information:

Photo Notes: Missing flashing appears to have blown off.

Photo Date: 10/21/2022



Photo Information:

Photo Notes: Flashing improperly lapped, separating and not properly sealed.

Photo Date: 10/21/2022

ROOF Item #2.4 Improper Flashing at Roof



Photo Information:

Elevation: East

Photo Notes: Inadequate flashing overlap; flashing is top fastened

Photo Date: 10/21/2022



Photo Information:

Elevation: East

Photo Notes: Flashings surface mounted with no sealant. Nails are loose and starting to back out.

Photo Date: 10/21/2022

ROOF Item #2.5 Ponding/Roof Slope

Description: Ponding due to inadequate slope at valleys and waterways occurs at some locations

Severity Rating: 3

Buildings(Units) with Issue: Typical



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Ponding water and soil deposits at end of valley

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water build up at roof edge; inadequate slope to intended roof drainage location

Photo Date: 10/21/2022

ROOF Item #2.5 Ponding/Roof Slope



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water build up at roof edge;
inadequate slope to intended roof drainage location

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Roof valley appears to have
inadequate slope for proper drainage; soil build-up

Photo Date: 10/21/2022

ROOF Item #2.6 Failed Sealant at Roof

Description: Several penetrations and integration points are sealant dependent, and the sealant is deteriorating.

Severity Rating: 3

Buildings(Units) with Issue: Varies



Photo Information:
Building #N/A, **Unit #**N/A
Elevation: East
Photo Notes: Sealant is incorrectly used at mortar joints, as opposed to tuck pointing
Photo Date: 10/21/2022



Photo Information:
Building #N/A, **Unit #**N/A
Elevation: East
Photo Notes: Sealant is incorrectly used and is failing at mortar joints
Photo Date: 10/21/2022

ROOF Item #2.6 Failed Sealant at Roof



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: N/A

Photo Notes: Omitted roof membrane and/or metal saddle; sealant dependent joint

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Failed sealant at roof penetration

Photo Date: 10/21/2022

ROOF Item #2.6 Failed Sealant at Roof



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Failed sealant at base of brick counterflashing over roof membrane

Photo Date: 10/21/2022

ROOF Item #2.7 Detached Downspout

Description: Disconnected downspout allowing wind driven rain to saturate the buildings siding and trim.

Severity Rating: 3/5

Buildings(Units) with Issue: N/A



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: North

Photo Notes: Overview of disconnected downspout location

Photo Date: 10/19/2022

ROOF Item #2.7 Detached Downspout



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: North

Photo Notes: Close up of disconnected/missing downspout connection

Photo Date: 10/21/2022

3.0 WALLS

WALLS Item #3.1 Water Damaged Siding

Description: Water damaged cladding and components.

Severity Rating: 2/3

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, **Unit #**N/A

Elevation: South

Photo Notes: Water damaged bellyband at panel break.

Photo Date: 10/21/2022

WALLS Item #3.1 Water Damaged Siding



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Vinyl siding showing signs of deterioration and is likely hiding further damage.

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water damaged siding under cover by doorway

Photo Date: 10/21/2022

WALLS Item #3.1 Water Damaged Siding

**Photo Information:**

Building #N/A, **Unit #**N/A

Elevation: North

Photo Notes: Damage to panel siding in several locations.

Photo Date: 10/21/2022

WALLS Item #3.2 Improper Wall Penetrations

Description: Omitted flashings at wall penetrations. Dryer vents were also observed to not be tight lined and incorrectly have screens that trap lint.

Severity Rating: 3/6

Buildings(Units) with Issue: Typical

**Photo Information:**

Building #1238, **Unit #**482

Elevation: East

Photo Notes: Code prohibits screens on dryer ducts. Blocked lint can be a fire hazard.

Photo Date: 10/21/2022

WALLS Item #3.2 Improper Wall Penetrations



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Dryer vent terminates inside the wall cavity and traps lint presenting a potential fire hazard.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Dryer vent pipe is flexible and not hard pipe, so lint is easily trapped presenting potential fire hazard.

Photo Date: 10/21/2022

WALLS Item #3.2 Improper Wall Penetrations

**Photo Information:**

Building #1238, Unit #467

Elevation: East

Photo Notes: Sealant dependent wall penetration; note corrosion at fasteners.

Photo Date: 10/21/2022

**Photo Information:**

Building #1238, Unit #468

Elevation: East

Photo Notes: Penetrations are sealant dependent.

Photo Date: 10/21/2022

WALLS Item #3.3 Base of Wall Flashing Omitted

Description: Omitted base to wall flashing on walkways and unit decks. Wall cladding terminates at the floor line without a required 1"-2" separation of cladding to horizontal surface.

Severity Rating: 3

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #484

Elevation: West

Photo Notes: Cladding tight to walking surface; unknown deck-to-wall transition

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Cladding tight to walking surface; unknown deck-to-wall transition

Photo Date: 10/21/2022

WALLS Item #3.3 Base of Wall Flashing Omitted

**Photo Information:**

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Cladding tight to walking surface; unknown deck-to-wall transition

Photo Date: 10/21/2022

WALLS Item #3.4 Corroded Flashing at Panel Breaks

Description: Corrosion at sheet metal flashing located at siding panel breaks.

Severity Rating: 2

Buildings(Units) with Issue: 1238

**Photo Information:**

Building #1238, Unit #N/A

Elevation: South

Photo Notes: Corroded metal flashing

Photo Date: 10/21/2022

WALLS Item #3.4 Corroded Flashing at Panel Breaks



Photo Information:

Building #1238, Unit #N/A

Elevation: South

Photo Notes: Corroded metal flashing

Photo Date: 10/21/2022

4.0 WINDOWS & DOORS

WINDOWS & DOORS Item #4.1 Inadequate Window Ratings

Description: J2 observed several window AAMA Gold Labels in sliding glass door and window units. While there are many varying performance grades noted, in all cases the performance ratings appear to be significantly less than what is required to resist code required loading.

Severity Rating: 3/6

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #482

Elevation: West

Photo Notes: Slider is rated C-25

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.1 Inadequate Window Ratings

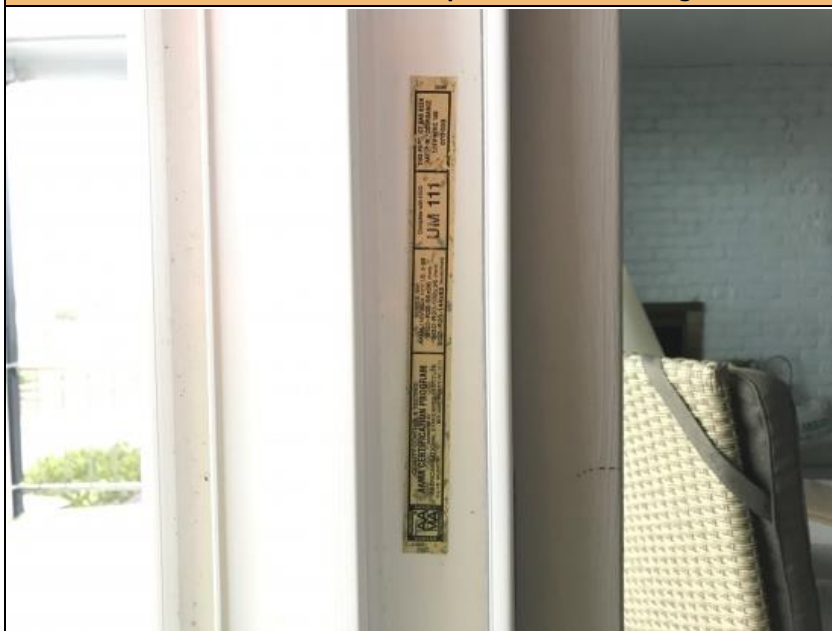


Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Slider is rated R-20

Photo Date: 10/21/2022

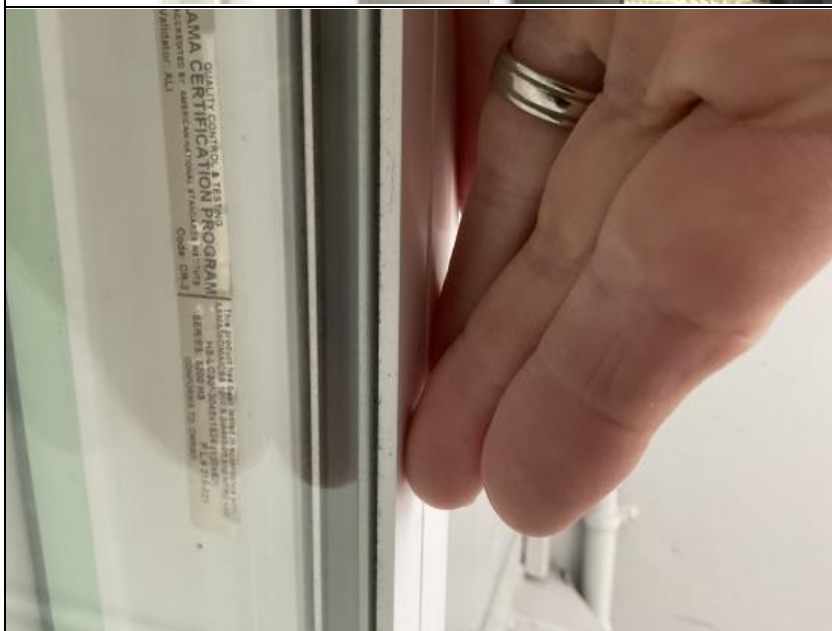


Photo Information:

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Slider is rated LC-30

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.1 Inadequate Window Ratings

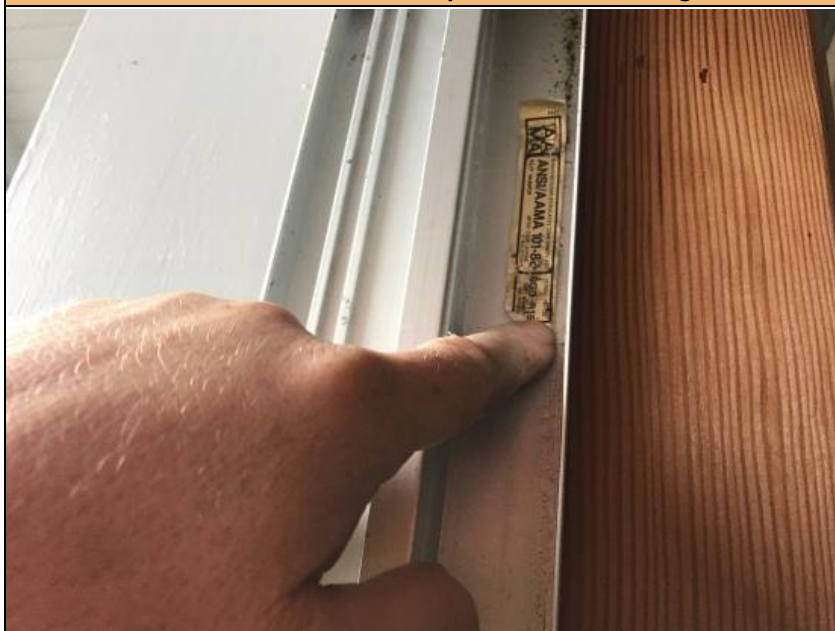


Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Slider is rated R-15

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.2 Omitted Head Flashing

Description: Omitted head flashing at windows. Some locations are sealant dependent, and others are or unsealed and open to above.

Severity Rating: 3

Buildings(Units) with Issue: Typical

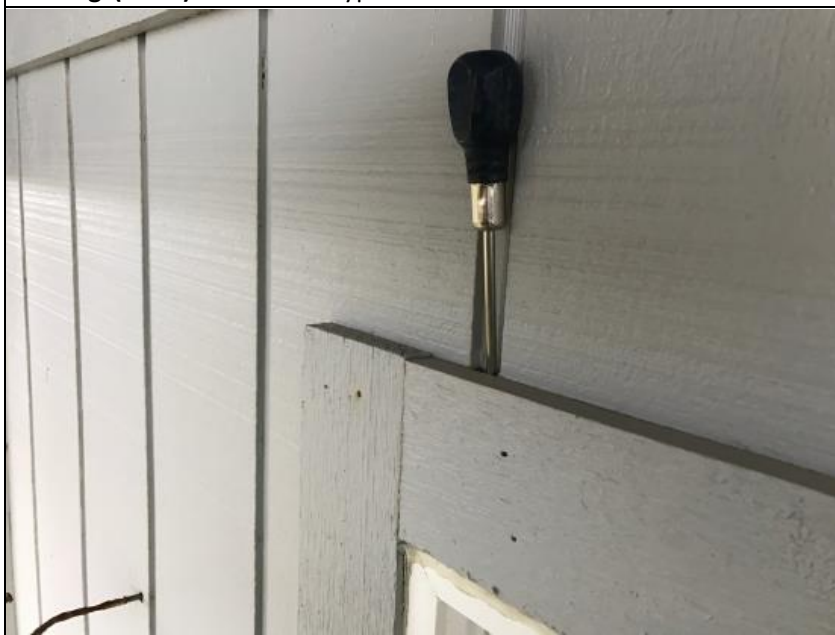


Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Omitted flashing above window head trim; open joint

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.2 Omitted Head Flashing



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Omitted head flashing and frame is sealed to trim and blocks water egress.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #467

Elevation: East

Photo Notes: Omitted head flashing

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.2 Omitted Head Flashing

**Photo Information:**

Building #1238, Unit #N/A

Elevation: South

Photo Notes: Omitted head flashing

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.3 Corroded Sill Pans at Sliding Glass Doors

Description: Corroded sill pans at sliding glass doors on the buildings West face.

Severity Rating: 2/3/6

Buildings(Units) with Issue: 1238(482, 485)

**Photo Information:**

Building #1238, Unit #479

Elevation: West

Photo Notes: Sill pan has completely corroded away.

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.3 Corroded Sill Pans at Sliding Glass Doors



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Sill pan has completely corroded away.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Sill pan has completely corroded away.

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.4 Failed Sealant

Description: Omitted dynamic sealant joints. Window frames are installed tight to wood trim which does not allow proper expansion/contraction. Sealant is failing.

Severity Rating: 2/3

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Failed sealant (however, as noted in item above, this gap should be open and should have head flashing directing water out)

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Failed sealant joint; window frame tight to trim

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.4 Failed Sealant



Photo Information:
Building #N/A, **Unit #**N/A
Elevation: East
Photo Notes: Failed sealant joint
Photo Date: 10/21/2022



Photo Information:
Building #1238, **Unit #**484
Elevation: West
Photo Notes: Failed sealant joint; window frame tight to trim
Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.5 Broken Seals at Window Internal Glazing Units

Description: Failed IGU (Insulated Glass Units); Moisture observed between window glazing panels.

Severity Rating: 3/6

Buildings(Units) with Issue: Varies



Photo Information:

Building #1238, Unit #482

Elevation: West

Photo Notes: Fogged windows (failed IGU)

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: South

Photo Notes: Fogged windows (failed IGU)

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.5 Broken Seals at Window Internal Glazing Units

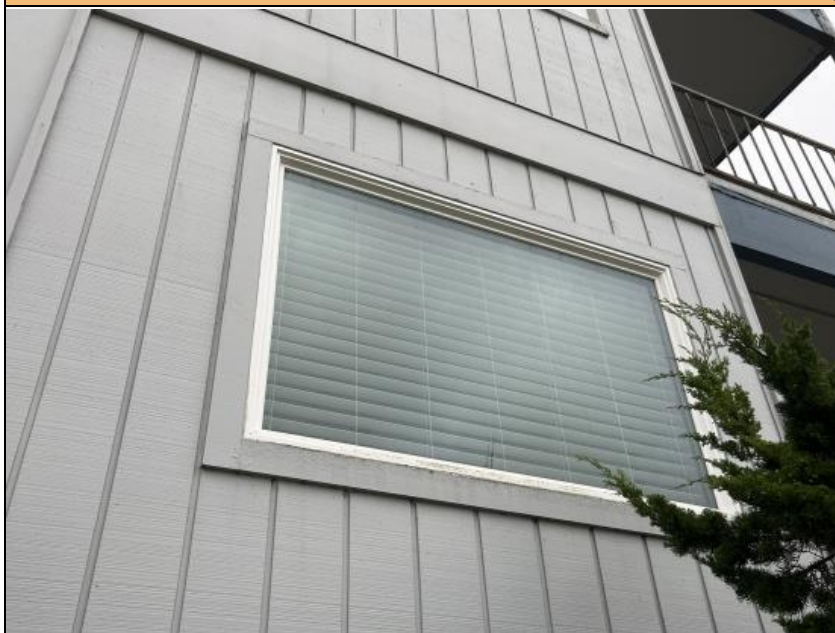


Photo Information:

Building #N/A, Unit #N/A

Elevation: North

Photo Notes: Fogged windows (failed IGU)

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.6 Water Damaged Trim

Description: Water damaged trim

Severity Rating: 2

Buildings(Units) with Issue: Varies



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Water damaged trim below window

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.6 Water Damaged Trim



Photo Information:

Building #1238, Unit #482

Elevation: West

Photo Notes: Water damaged window trim

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #484

Elevation: West

Photo Notes: Water damaged window trim

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.7 Damaged Swing Doors

Description: Water damaged and delaminating swing doors at several locations on the East & West building face.

Severity Rating: 2

Buildings(Units) with Issue: Varies



Photo Information:

Building #1238, Unit #468

Elevation: East

Photo Notes: Water damaged wood panel door

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #484

Elevation: West

Photo Notes: Water damaged wood panel door

Photo Date: 10/21/2022

WINDOWS & DOORS Item #4.7 Damaged Swing Doors



Photo Information:

Building #1238, Unit #476

Elevation: West

Photo Notes: Water damaged wood panel door

Photo Date: 10/21/2022

5.0 DECKS / ENTRYWAYS

DECKS / ENTRYWAYS Item #5.1 Water Damaged Glulam Deck Beams

Description: Water damage at deck and walkway beams.

Severity Rating: 1/2/6

Buildings(Units) with Issue: Typical



Photo Information:

Building #N/A, Unit #N/A

Elevation: West

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.1 Water Damaged Glulam Deck Beams



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #481

Elevation: West

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.1 Water Damaged Glulam Deck Beams



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.1 Water Damaged Glulam Deck Beams



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Water damaged wood beam

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.2 Corrosion at Structural Column

Description: Corrosion and damage in structural steel framing.

Severity Rating: 2

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Water damaged steel column

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.2 Corrosion at Structural Column



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Water damaged steel column and bracket

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged steel column and bracket

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.2 Corrosion at Structural Column

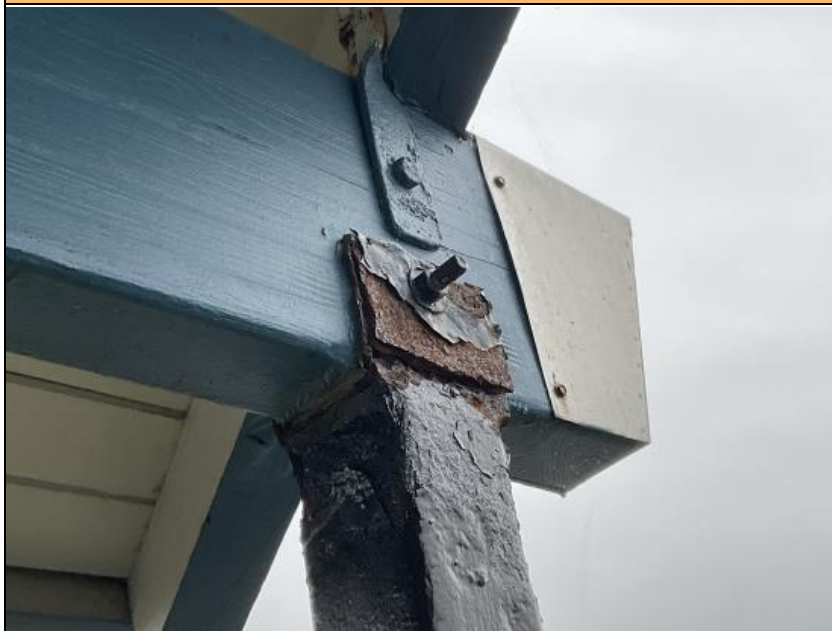


Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Water damaged steel column and bracket

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.3 Corrosion at Guard Rails

Description: Corrosion at guardrail components.

Severity Rating: 2

Buildings(Units) with Issue: Varies



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Split in steel tube rail

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.3 Corrosion at Guard Rails



Photo Information:
Building #N/A, **Unit #**N/A
Elevation: East
Photo Notes: Corrosion at metal railing
Photo Date: 10/21/2022



Photo Information:
Building #1238, **Unit #**N/A
Elevation: South East
Photo Notes: Corrosion at metal railing
Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.3 Corrosion at Guard Rails



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Corrosion at metal railing

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.4 Water Damaged Deck Assemblies

Description: Water damage to the wood structure was observed beneath the waterproofing at many deck and entryway locations.

Severity Rating: 2

Buildings(Units) with Issue: Varies



Photo Information:

Building #1238, **Unit #**479

Elevation: West

Photo Notes: Water damaged deck sheathing

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.4 Water Damaged Deck Assemblies



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged deck sheathing

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged deck soffit

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.4 Water Damaged Deck Assemblies



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged deck framing

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Water damaged deck sheathing

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.5 Concrete Damage

Description: Concrete damage was observed at footings supporting steel columns and at structural concrete columns.

Severity Rating: 2/6

Buildings(Units) with Issue: Varies



Photo Information:

Building #N/A, **Unit** #N/A

Elevation: East

Photo Notes: Omitted post base fasteners in steel column to footing

Photo Date: 10/21/2022



Photo Information:

Building #1238, **Unit** #N/A

Elevation: East

Photo Notes: Cracked concrete at base of steel column; apparent incorrectly detailed closure pour

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.5 Concrete Damage



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Cracked concrete at base of steel column; apparent incorrectly detailed closure pour

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Spalling and rebar corrosion at concrete column

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.5 Concrete Damage

**Photo Information:**

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Spalling and rebar corrosion at concrete column

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.6 Glulam Beams - Overstressed

Description: Preliminary structural analysis shows that the glulam beams at all locations are overstressed with respects to bending and deflection. This includes the front entry beams and rear deck beams spanning 25+ft.

Severity Rating: 1/3

Buildings(Units) with Issue: Typical

**Photo Information:**

Building #N/A, Unit #N/A

Elevation: West

Photo Notes: Overview of deck beam configuration

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.6 Glulam Beams - Overstressed



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Close up example of deck beam

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Tile deck surfaces have been added to several decks. This increases the dead load the deck beams must support.

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.6 Glulam Beams - Overstressed



Photo Information:

Building #1238, Unit #481

Elevation: West

Photo Notes: Tile deck surfaces have been added to several decks. This increases the dead load the deck beams must support.

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.7 Damaged Stair Tread

Description: Stair treads have cracking and/or exposed reinforcing steel.

Severity Rating: N/A

Buildings(Units) with Issue: Varies



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Cracking/spalling at concrete stair tread

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.7 Damaged Stair Tread



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Cracking/spalling at concrete stair tread

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.8 Deck Coating Damaged

Description: Cracked, failing and adhesion failures on deck coatings.

Severity Rating: 2

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, **Unit #**479

Elevation: West

Photo Notes: Failed coating at seam

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.8 Deck Coating Damaged



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Failed coating/no adhesion at deck edge

Photo Date: 10/21/2022



Photo Information:

Building #N/A, Unit #N/A

Elevation: West

Photo Notes: Sealant dependent joint; failed sealant at deck transitions

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.8 Deck Coating Damaged



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Open seam at deck membrane

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.9 Improper Flashing at Decks / Entryways

Description: Improperly lapped and unsealed drip edge flashing

Severity Rating: 2

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Omitted Diverters and no sealant at flashing lap; note water damaged deck beam.

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.9 Improper Flashing at Decks / Entryways



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Omitted coating and/or sealant at edge of deck and deck edge flashing. Top fasteners are also unsealed.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #481

Elevation: West

Photo Notes: Discontinuous edge metal and open void at deck edge.

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.9 Improper Flashing at Decks / Entryways



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Improper overlap and omitted sealant at deck perimeter flashing joint.

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: West

Photo Notes: Omitted coating/sealant at deck edge (left side of photo) and improper deck to wall flashing (center of photo)

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.10 Improper Wood Preservative

Description: Exposed glulam beams are unprotected/exposed and weathered. The wood preservative treatment is likely unsuitable for this application.

Severity Rating: 3/6

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Example of exposed GLB

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Example of exposed GLB

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.10 Improper Wood Preservative



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Example of exposed GLB

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Example of exposed GLB

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.11 Outdoor Carpet

Description: Front entryways are covered with outdoor carpet. This material is not suitable for this condition. It is wet, prevents drying, and is making it impossible to observe the condition of the deck structure.

Severity Rating: 6

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #482

Elevation: East

Photo Notes: Water stains at carpet

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Example of outdoor carpet on deck

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.11 Outdoor Carpet



Photo Information:

Building #1238, Unit #485

Elevation: West

Photo Notes: Water damaged carpet

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #N/A

Elevation: East

Photo Notes: Water damaged carpet

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.12 Guard Rail Dimensions

Description: Existing guards do not appear to meet current code standards for dimensional requirements. (2018 OSSC section 1015.3 states that guardrails be no lower than 42" measured vertically, with some exceptions. Section 1015.4 states that guardrails shall not have openings that allow for the passage of a 4" sphere.)

Severity Rating: 1/3

Buildings(Units) with Issue: Typical



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Existing guardrail height is 36".

Photo Date: 10/21/2022



Photo Information:

Building #1238, Unit #479

Elevation: West

Photo Notes: Picket spacing is 5.5"

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.12 Guard Rail Dimensions

**Photo Information:**

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Gap between stringer and bottom rail is over 4".

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.13 Stair Riser Hight

Description: Stair riser height appears to greatly exceed code maximum limitations in some locations. (Code requirements set forth in the 2018 OSSC, Section 1011.5.2, requires stair riser height to be 7". The 2018 OSSC, section 1101.5.4 Dimensional Uniformity states that the tolerance between the highest stair riser and the lowest shall be no greater than 3/8" or 9.5mm.)

Severity Rating: 1/3

Buildings(Units) with Issue: Varies

**Photo Information:**

Building #1238, **Unit #**N/A

Elevation: North East

Photo Notes: Stair riser height is over 10"

Photo Date: 10/21/2022

DECKS / ENTRYWAYS Item #5.13 Stair Riser Hight

**Photo Information:**

Building #1238, Unit #N/A

Elevation: North East

Photo Notes: Stair riser height is approx. 9"

Photo Date: 10/21/2022

6.0 MISC.

MISC. Item #6.1 Cracks in Concrete Flatwork

Description: Cracks in concrete slab on grade were observed at several locations.

Severity Rating: 3/6

Buildings(Units) with Issue: Varies

**Photo Information:**

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Concrete cracking starting at rain drain penetration

Photo Date: 10/21/2022

MISC. Item #6.1 Cracks in Concrete Flatwork



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Concrete cracking starting at rain drain penetration

Photo Date: 10/21/2022



Photo Information:

Building #N/A, **Unit #**N/A

Elevation: East

Photo Notes: Concrete cracking

Photo Date: 10/21/2022

MISC. Item #6.1 Cracks in Concrete Flatwork



Photo Information:

Building #N/A, Unit #N/A

Elevation: East

Photo Notes: Concrete cracking at entryway slab

Photo Date: 10/21/2022

PRELIMINARY CONCLUSIONS

The below items summarize our conclusions of the observed existing conditions of the building exterior weatherization and structural components. Refer to the Observation section of this report for photo examples and further clarification.

Immediate Concerns

The following items have been determined to be current life safety concerns:

- The deck glulam beams appear to be slightly undersized assuming they are in good condition. However, many of them are water damaged and are likely unsafe to support code required loading.
- Steel columns supporting the deck beams framing is damaged/corroded and may not be able to support code required loading. In addition, the discontinuity in the gravity load path is adding stress to the steel columns that was likely not originally intended.
- Guards are loose in some locations.

Performance Concerns

Water damage to the underlying structure was observed at some locations where finish materials were missing/open. However, most areas are covered with cladding/finish materials and cannot be observed with visual only observations. While invasive observations are needed to confirm underlying conditions, our observations concluded that the detailing of the following general building assemblies are not properly performing and/or are at risk for possible water intrusion and damage:

Roof

- Masonry at the chimneys is spalling in several locations and mortar joints are failing
- The masonry chimney should have a coating (sealer at a minimum) applied to block bulk water from entering the roof
- Sealant is improperly used and failing at roof penetrations
- Metal flashings are installed improperly and missing in some locations from wind blow-off
- Water intrusion was observed around the access hatch
- Roof membrane is not set/adhered properly to roof substrate
- Roof valleys/waterways are inadequately sloped, and debris/organic material is building up at “pinch points”
- Water damage was observed at roof drains, roof edge and framing below

Walls

- Water damage was observed in wood cladding and trim especially at the southern exposure
- Base of wall flashings were not observed, and claddings were in contact with walking surfaces (inadequate clearance and blocking water egress)
- Wall penetrations generally lack penetration flashing
- Dryer vents are not tight lined to the exterior and include screens
- Horizontal panel breaks were poorly flashed and sheet metal flashing is corroded in several locations

Windows/Doors

- Head flashings are omitted at all windows and doors
- Windows performance ratings are too low for the site exposure and wind design pressure for this region
- Sill pans at sliding glass doors appear to be omitted and/or severely corroded
- Window trim is sealant dependent, omitted, failing, and no dynamic joints were observed at windows
- Some window IGU's have failed

Decks/Entries

- Water damaged deck beams were observed in several locations across the back decks
- Certain decks have tile installed over the plywood substrates adding to the dead load placing additional stress on beams
- Structural steel columns and the steel buckets are corroded in several locations
- Deck coatings are failing, and damaged sheathing and framing was observed in several locations
- Metal flashings are improperly installed and/or omitted at the deck perimeter
- Outdoor carpet is covering plywood substrates at front walkways potentially masking damage
- Guard rails do not meet the code required height or picket spacing. While they may have met code at the time of construction, any repair will require current dimensional standards to be met
- Railing posts do not appear to provide adequate support to resist code required lateral load
- Loose grab rails were observed in several locations
- Corrosion and damage at guards/rails was observed in several locations
- Glulam beams at front walkways were apparently treated with a wood preservative that might not be recommended for the exposure and coastal application
- Damaged stair treads and concrete spalling was observed
- Stair riser heights were inconsistent and exceeded code maximum at some locations which can cause a trip hazard
- Damaged concrete slabs, footings, and structural pedestals were observed

Maintenance Concerns

It is assumed that a standard regularly scheduled maintenance plan is being followed. Therefore, it is not the intent of this report to identify maintenance tasks.

RECOMMENDATIONS

While further review is needed to confirm underlying conditions, J2 makes the following recommendations based on a limited document review and a preliminary visual only review of the roof, walls, windows/doors, decks, and walkways. Note that these recommendations are not intended to be a comprehensive repair scope. It is intended only as a conceptual guide to assist with decision making for a more specific plan of action.

Immediate Action

The following action is recommended to correct the identified life safety/active leaks concerns:

- Give notice to residents to limit the use of their decks until further review and/or repairs can take place
- Implement temporary shoring at the deck beam locations outlined in the Observation section of this report
- Secure loose guards as noted in the Observation section of this report

Short Term Action

Based on the observed existing conditions, the following building assemblies were identified as requiring repair, replacement, or planning for repair replacement in the very near future.

A summary is as follows:

- **Roofs:** While the roof membrane may be generally maintainable, repairs are currently needed at the roof perimeter flashing, penetration flashing, drains, and chimneys. It is expected that damage to the underlying substrate will also need repairs. Further invasive review is needed to confirm general performance and existing roof assembly conditions. The chimney should be tuck pointed and sealed with a coating or masonry sealer.
- **Siding and Trim:** Invasive observations are needed to confirm underlying conditions. However, based on the observed conditions, extensive repairs/replacement is needed to correct deficiencies that are causing damage. This is especially crucial at deck to wall locations and window and door openings as noted below.
- **Structural Beams and Columns:** The damaged deck beams and columns should be replaced along with damaged adjacent framing. Further review may be needed to confirm if newly installed beams can remain. Collar ties or some other means of correcting the vertical discontinuity at the back deck roofs should also be implemented. A structural design will be needed. Further evaluation may be warranted to determine the extent of structural steel replacement needed.
- **Decks and Entryways:** The deck weatherization systems including but not limited to deck coatings, perimeter flashing, sheathing, deck to wall flashings and door pans, is in current need of replacement. Structural repairs are anticipated. Outdoor carpet should not be used again in this application. Additional invasive observations may be warranted to determine the current extent of damage.
- **Windows and Doors:** The windows and doors lack proper weatherization detailing and repairs are recommended. If the windows had a proper rating, this could involve removal and reinstallation with proper detailing. However, most windows appear to be inadequately rated to resist structural and wind driven rain code requirements. Therefore, replacement is recommended. Damaged wood panel doors should also be replaced.

Next Steps

- 1) Implement temporary measures noted in the Immediate Action section above. (Contact J2 with questions).
- 2) Meet with J2 to discuss Observations, Conclusions and Recommendations noted in this report.
- 3) If deemed necessary after reviewing this report, conduct further invasive observations to confirm underlying conditions. J2 can provide a proposal for these services if desired.
- 4) Develop a comprehensive repair plan for building exterior repairs. While further review can help confirm the extent of damage, it has been determined that extensive repairs are needed. Implementing isolated repairs without a comprehensive plan is not recommended. J2 is available to provide weatherization and structural plans, details and specifications needed to properly repair the observed conditions.

LIMITATIONS

J2's scope of work was limited to visual observations of the building exteriors at a sampling of locations. Our focus was on the weatherization functions and limited structural review of the building exteriors only. It does not include a full review of structural or a review of life safety, mechanical, electrical, plumbing, or other systems not related to the building exteriors and structure. There are generally 3 levels of inspection: 1) Rapid Visual Screening, 2) Visual Observations, and 3) Evaluation Analysis. While no level of report can identify all known conditions for an existing structure, each level is more involved than the next. Since this was only a Visual Observation of a sampling of locations, J2 likely did not review all conditions and did not perform any testing or detailed analysis. Further evaluation may be needed to confirm any opinions in this report. This report is based on the information that we had at the time of report preparation. We may modify our opinion if more information becomes available. This report not intended to be a comprehensive assessment of the existing conditions or a repair scope.

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