MADOCKS
ARCHITECTURE

ASSESSMENT REPORT #1

Project Address: 189 Conover St., Brooklyn, NY 11231

Date of visits: 09/05/2024

Weather: Sunny, 77 F

Pages: 39

Conducted by: Edward Madocks, RA, and Bill Livingston



189 Conover St.

Executive Summary:

At the request of the Condominium Board (Board) and property manager (Gershfeld Management), Edward Madocks Architecture Corp. (EMA) met with building residents and employees of Hoek Partners to review the building's exterior components, apartment interiors, and some of the interior Basement mechanical systems. Only select and some available apartments were visited; further survey is needed.

The purpose of the assessment was to review the existing building conditions, and provide an estimated timeline on when any recommended repairs should be made.

189 Conover St. in Brooklyn is a three story, multi-unit, residential building in the Red Hook section of Brooklyn. The building finished construction and was occupied around 2021.

The façade of the building is mainly composed of a fiber-cement paneling with a pine wood beam frame on the front (west), south and north façades. EIFS constitutes the east, rear, façade. The main roof is a multi-ply modified bitumen membrane over tapered insulation. The roof is used for both mechanical units as well as public use space and some private terraces. The façades and roofs are in generally good condition, with signs of cracks in the fiber-cement paneling. The 6x6 wood beams framing the exterior appear untreated and vertical cracks are forming on many of them. EIFS stucco on the facades appears in good shape, although patches over the pipe scaffold anchor locations need repair. A wasp nest and several carpenter bee holes need to be addressed. In general, the windows and doors appear to be in good condition although gaskets on some door frame interiors are somewhat deteriorated, including at Unit 2A and PH 3B. Concrete canopies are not waterproofed and do not provide drainage routes for water, which falls directly over entryways. Some concrete canopies show signs of cracking and spalling.

Currently, there are three locations with reported leaks or water damage, one at Unit 3E, TH D, and in the 3rd floor hallway. Doorways with water infiltration require gaskets and sweeps generally.

The limited review of the basement mechanical systems showed that they appear to be in good condition, and will require some annual maintenance. Elevators and private HVAC units were not reviewed as part of this assessment. Stove top ventilation systems are incorrectly installed in the overhead cabinets and are not attached to ventilation ducts. Stove use regularly sets off smoke alarms.

The findings are listed below from the exterior ground level to the roof, and then the interior systems.

Findings:

Façade:

1. Photo 1: General view of the front (west) elevation of the building.

2. Photos 2-6: Views of splitting and deterioration of the joints in the untreated wood-beam frame on the façade.

3. Photos 7-10: Views of carpenter bee holes and wasp nests.

4. Photos 11-14: Views of untreated concrete canopies with drainage issues, cracks and spalling concrete.

5. Photos 15-18 Views of fiber concrete panels cracks and gaps in the façade.

6. Photos 19 & 20: Views incomplete patches in the EIFS stucco from pipe scaffold anchor points.

Roof:

7. Photos 21 & 22: Views of blown gaskets in glass guardrails.

8. Photos 23-25: Views of apparently unsealed gas line penetrations of the roof, to be further investigated.

9. Photos 26-29: Views of unfinished party walls with repairs needed to EIFS, un-capped wall tops, and an incomplete ventilation duct cut-out.

10. Photos 30 & 31: Views of HVAC refrigerant lines, junction boxes sealant, and effaced unit numbers.

11. Photos 33 & 34: Views of the gravel planter area at north with unsealed rebar penetrations.

12. Photos 35-38: Views of HVAC unit frame weighting or anchoring issues.

Doors:

13. Photos 39-41: Views of PH B roof door sweep with accumulating flowers.

14. Photos 43-45: Views of PH C, stair bulkhead and hallway ceilings.

15. Photos 46 & 47: Views of Garden C entrance.

16. Photos 48 & 49: Views of the main entrance door.

17. Photos 50 & 51: Views of the TH D south facing entrance.

Stove top ventilation:

18. Photos 52 & 54: Views of stove top fans installed in cabinets lacking ventilation.

Stairs & Halls:

19. Photos 55 & 56: Views of locations where water damage to be further investigated.

20. Photos 57-62: Views of apartment locations with other issues, including 2A window fittings and gaskets and 3E water damage and TH D).

Basement / mechanical:

21. Photos 63-65: Views of sprinkler head & roof drain.

Other:

22. Photos 66-67 & 32 & 42: Views of outlets and other exterior boxes installed on EIFS with no sealant.

23. Photo 68: Views of foundation wall at parking area exit with insulation exposed with no capping.

Recommendations:

1. The **WOOD BEAM CLADDING** appears to be untreated pine wood and has many visible splits. The wood requires to be sealed with a clear finish that will repel water and slow down the rate of cracks. Any visible screws at the joinery should be replaced with stainless steel screws and tightened to reduce gaps. Carpenter bee holes and wasp nest activity, which should be plugged and removed by a specialist, could also be addressed in the same context with an anti-insect treatment. The Board should make this repair in the next 6 months as conditions are likely to deteriorate.

2. The **FIBER CEMENT PANELS** require minor adjustments within the panel-to-panel joints, to allow for thermal expansion and contraction. The joints should be sealed with urethane sealant to match the color of the panels. Any panels that are cracked will require repair. The Board should make this repair in the next 6 months as more cracks are likely to develop. As in every case, EMA can help find a specialist and inspect on-going work quality.

3. The **EIFS walls** have a handful of cracks and gaps that should be repaired by a EIFS specialty contractor. It is best to treat these cracks so that they do not continue to open further. The façade should be checked annually for similar crack development as part of the building's maintenance plan. The Board should make this repair in the next 6 months.

4. **Concrete canopies** over doorways need to be waterproofed to prevent further cracking and deterioration, and drainage paths provided to channel water away from over the doors. The Board should make this repair in the next 3 months.

5. The **GRILL GAS PENETRATIONS** at the roof should be adjusted so that the piping is secured to the building in the event that a resident moves the grills. Board should make this repair in the next 6 months.

6. The **UNFINISHED CONCRETE MASONRY UNIT WALLS** must be finished and capped to prevent water penetration into the roof assembly. A metal coping should be installed at the top of the walls. Any unfinished CMU walls should be coated with an elastomeric coating. The Board should make this repair in the next 6 months.

7. The leaking **DOORS** at ground level and roof lack sufficient gaskets or sweeps to be installed by a contractor Board should make this repair in the next 3 months.

8. The **HVAC** lines at the penetration into the main roof should be sealed further. The box should be sealed with an appropriate roofing membrane to help prevent water infiltration. Board should make this repair in the next 6 months. HVAC units need to be adequately secured and have unit identification labels added.

9. Several apartments report **HVAC systems** that are unable to regulate temperature effectively. An HVAC specialist will need to review the units and balance them as necessary. Board should make this repair in the next 3 months.

10. The **NORTH PLANTER AREA REBAR** must be sealed. We recommend a PMMA patch or modified bitumen patch be applied at all exposed rebar. Additionally, the gravel needs to be removed to meet code. Board should make this repair in the next 6 months.

11. **DRAINS** under roof pavers and in the back should be identified and marked to facilitate maintenance. Board should make this repair in the next 1 month.

12. The **STOVE VENTILATION** currently vents within each kitchen cabinet above the stoves. All kitchen exhaust fans require to either be ducted to the exterior OR be replaced with self-venting units. EMA will be happy to work with the Board on design details and models for options. Board should make this repair in the next 3 months.

13. The hot water heater should be serviced on an annual basis as part of the building's maintenance program.

14. The sprinkler system should be reviewed and any sprinkler heads embedded in ceiling cutouts need to be provided with more space by a licensed professional. Board should make this repair in the next 1 month.

Photos: See next page - Photos 1 – 68



Photo 1

- General view of 189 Conover, West façade & Main entrance, towards Northeast.



Photo 2

- West Façade, pine wood framework.
- View to Northeast.
- View of Garden B façade wood frame.
- Note: Wood appears untreated and shows signs of splitting and gaps in joints.

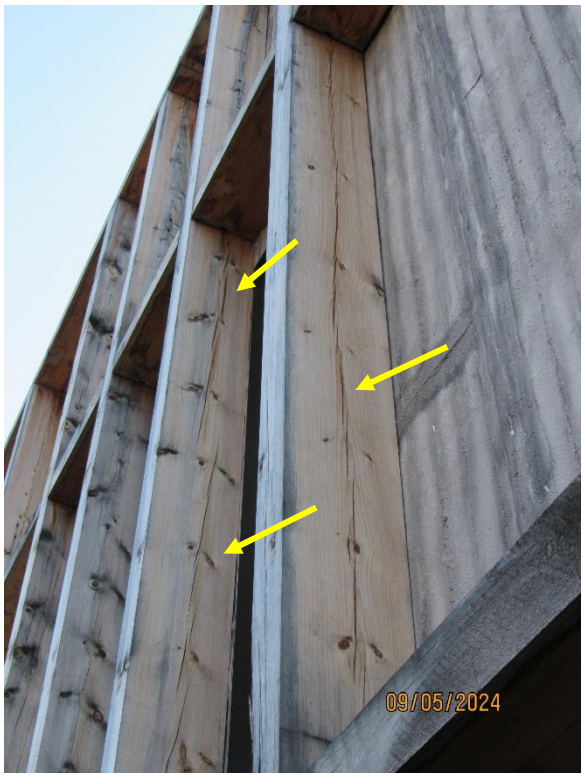


Photo 3

- West Façade, wood framework.
- View to Northeast.
- View of Garden B façade wood frame.
- Note: Wood appears untreated and shows signs of splitting.
- Note: *Representative of roughly 30-40% of vertical beams*.



Photo 4

- South Façade, wood framework.
- View to Northeast.
- View of Garden B façade pine wood frame.
- Note: Wood appears untreated and shows signs of splitting.
- Note: *Representative of roughly 30-40% of vertical beams overall*.

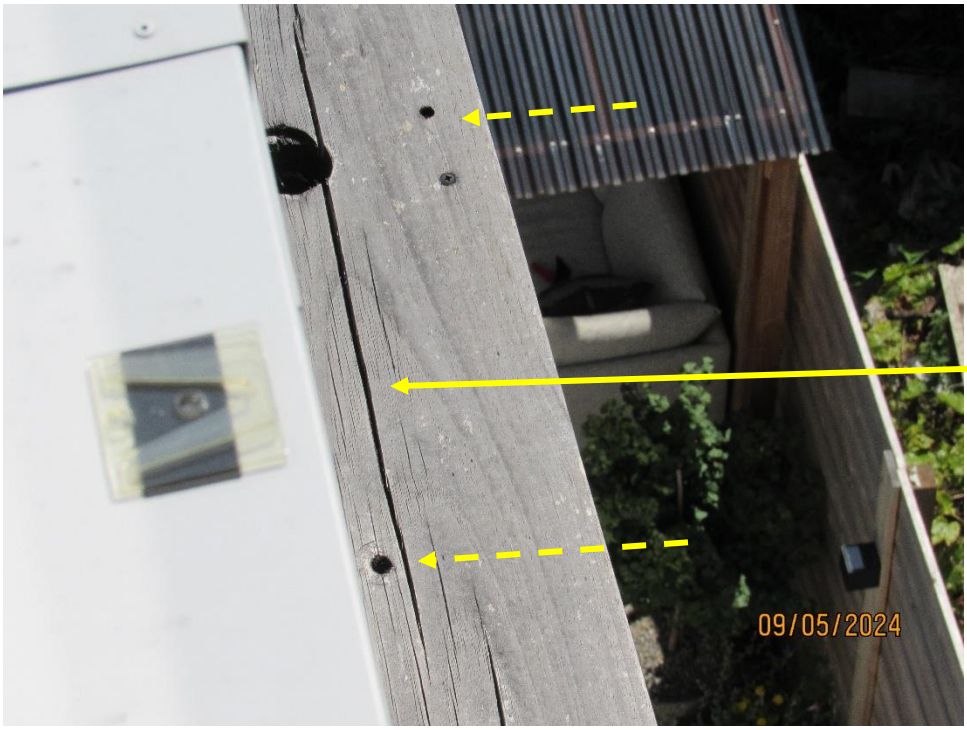


Photo 5

- South Façade, 3rd floor, wood framework.
- View to Southeast from roof.
- View of Garden B façade wood frame.
- Note: Wood beams show signs of horizontal splitting.
- Note: Carpenter bee holes (*dashed arrows*).

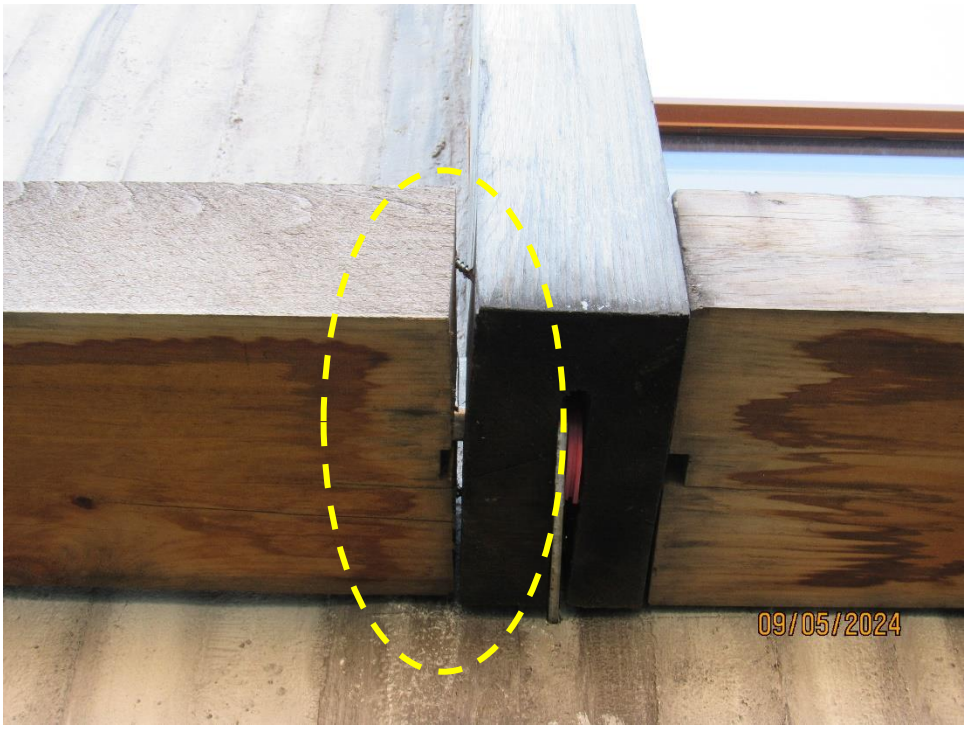
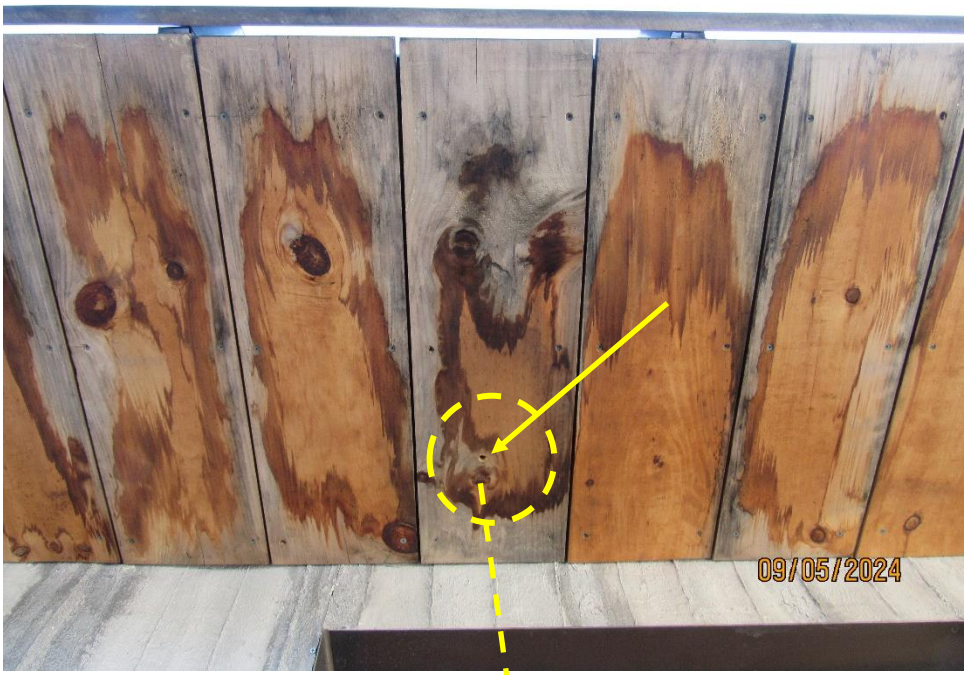


Photo 6

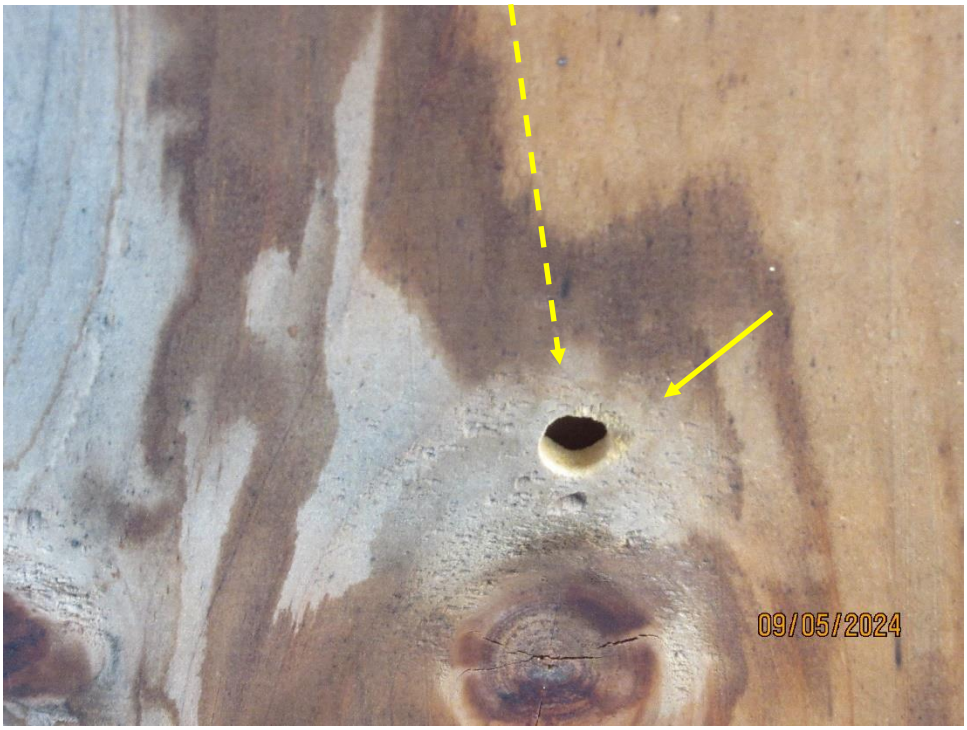
- West Façade, wood framework.
- View to East
- View of Garden B façade wood frame joint.
- Note: Pine wood beams show signs separation in several locations, *estimated 20% of joints*, exposing screws and anchors.

Photo 7



- South Façade, wood awning over Garden B entrance.
- View of Garden B awning.
- Note: Wood (pine) appears untreated and shows discoloration (representative).
- Note: Rain water from concrete canopies descends through wood slats and needs a drainage route (*representative*) .

Photo 8



- South Façade, wood awning over Garden B entrance.
- Enlarged view of Carpenter bee hole.
- Note: Carpenter bee holes should be plugged.



Photo 9

- East Façade, 3rd floor window.
- View to Southwest.
- Note: Wasp nest to be removed.



Photo 10

- East Façade, 3rd floor window.
- Enlarged view of wasp nest to be removed.



Photo 11

- North Façade, Garden A entrance.
- View to Southwest.
- Note: Concrete canopy allows water through.
- Concrete canopies within the wood frames are untreated concrete and need waterproofing and drainage paths (*representative*).

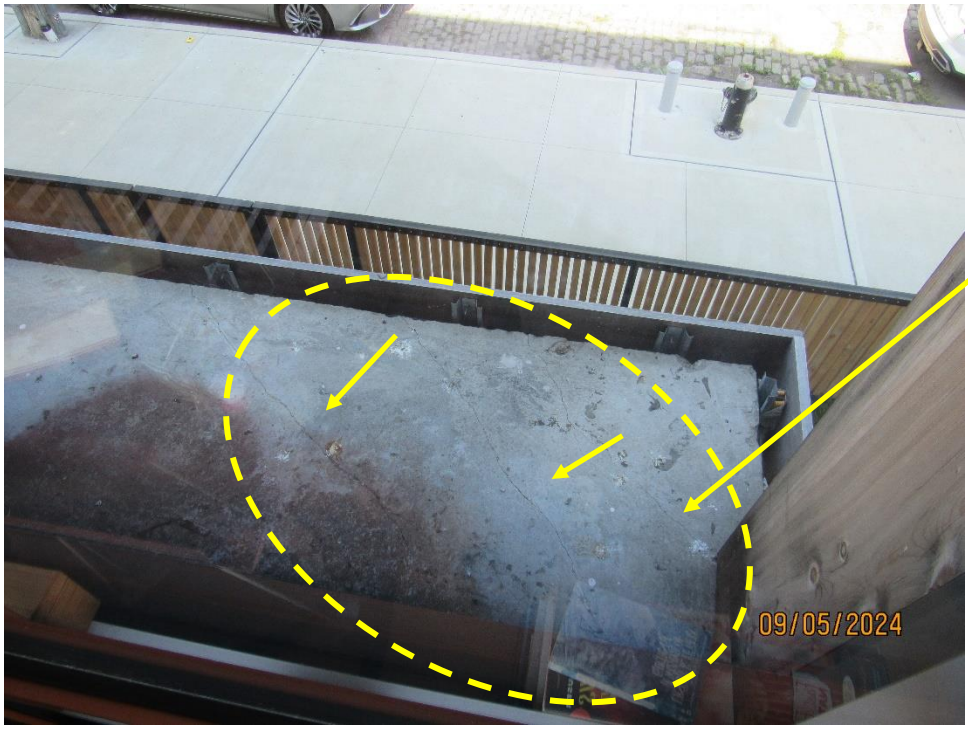


Photo 12

- Main entrance awning.
- View to West from unit 2A.
- Note: Cracks in the uncoated concrete.
- Concrete canopy, untreated concrete, need waterproofing and drainage paths (*representative*).

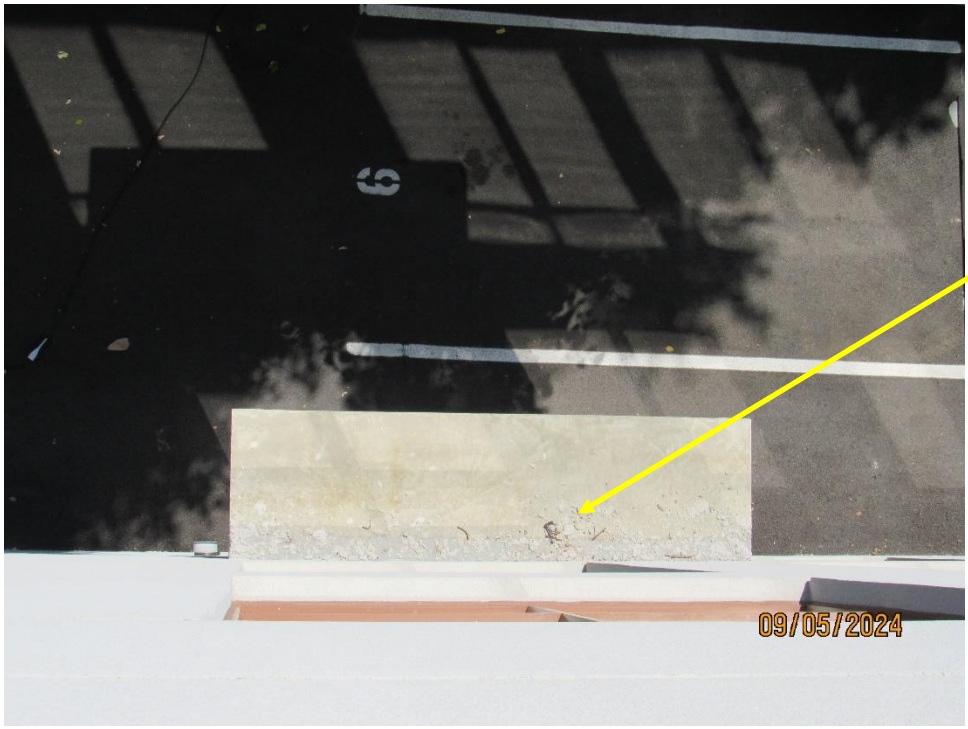


Photo 13

- East Façade, entrance awning.
- View from roof.
- Untreated concrete canopy shows spalling on the underside.
- Note: Concrete canopies need waterproofing and drainage paths (*representative*).



Photo 14

- East Façade, south facing TH F awning.
- View to Northeast from roof.
- Untreated concrete canopy with debris on top.
- Note: Concrete canopies need waterproofing and drainage paths (*representative*).

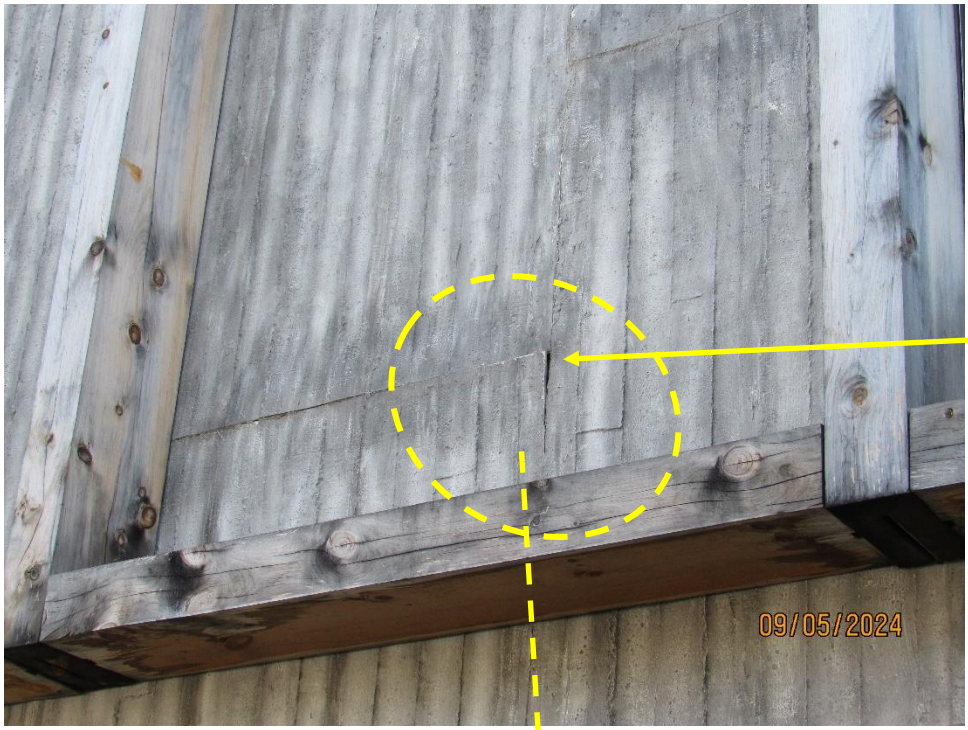


Photo 15

- North façade, Unit Garden A, 2nd floor.
- View to southeast.
- View of façade panel with gaps at seams.
- Note: Fiber Cement paneling shows cracks and separation at the seams in several locations (*representative*).

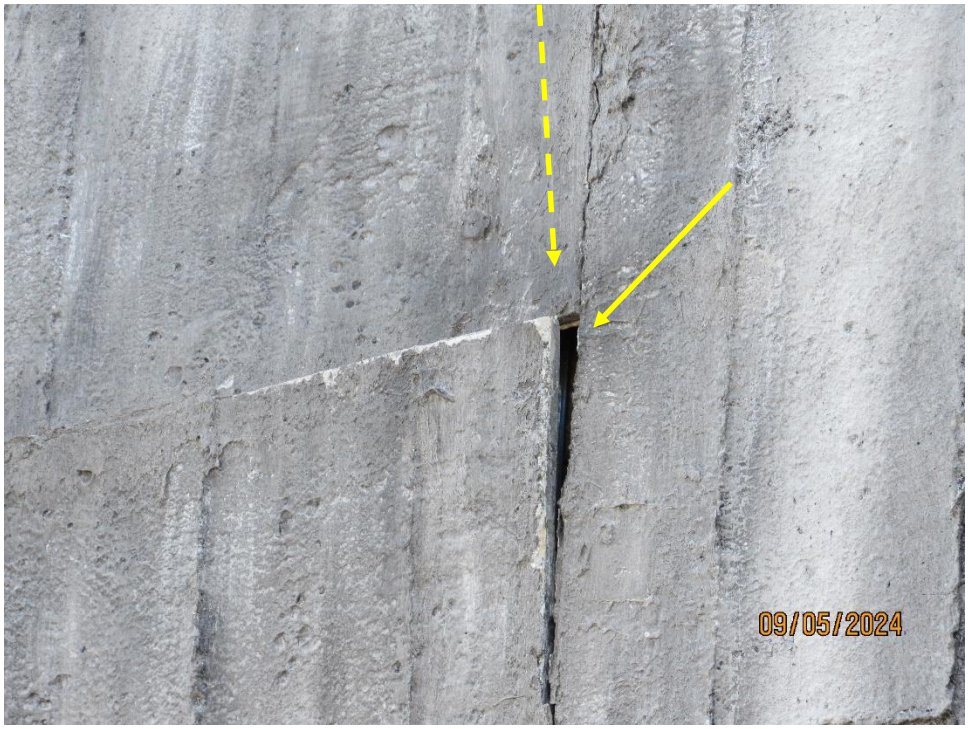


Photo 16

- North façade, Unit Garden A.
- Enlarged view of façade panel with gap at seams.

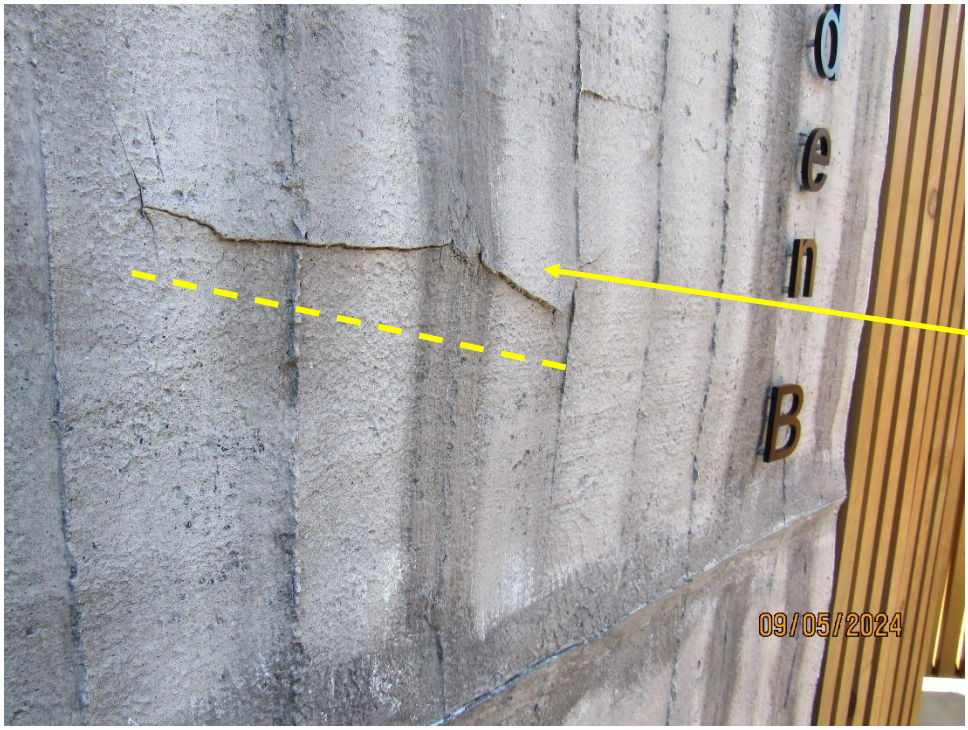


Photo 17

- North façade, Unit Garden B, 1st floor.
- View to northeast.
- View of cracked façade panel.
- Note: Fiber Cement paneling shows cracks and separation at the seams in several locations (*representative*).

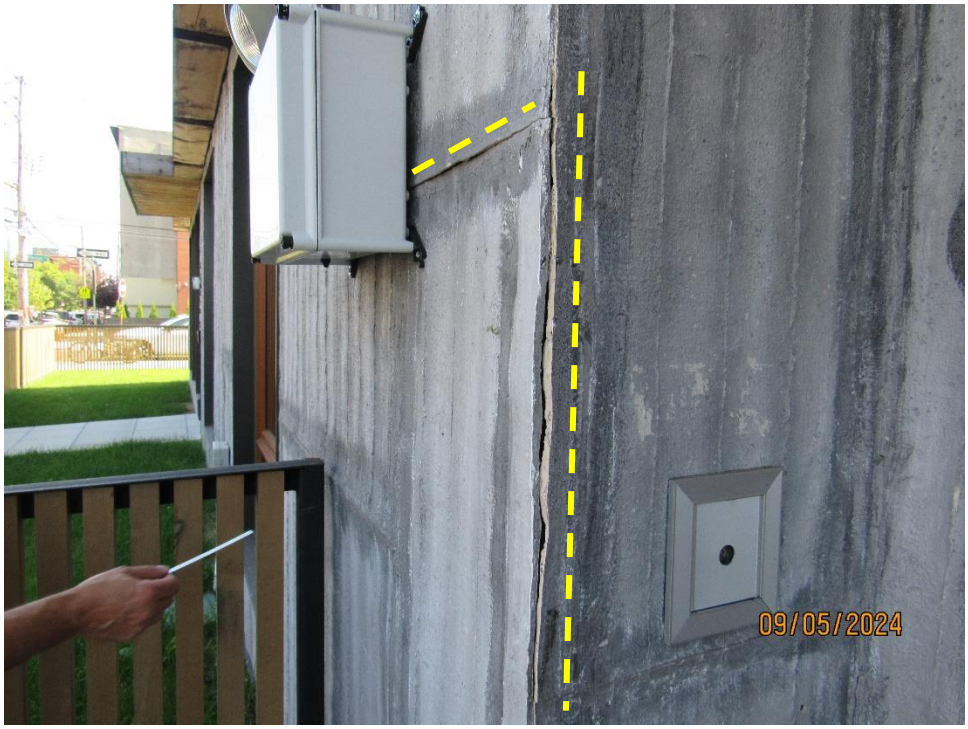


Photo 18

- North façade, Unit Garden B, entry area.
- View to northeast.
- View of gaps in the façade panels.
- Note: Fiber Cement paneling shows cracks and separation at the seams in several locations (*representative*).



Photo 19

- South façade, southeast corner.
- View to west.
- View of scaffold anchor patch in the EIFS.
- Note: Scaffold anchor patches insufficiently repaired in several locations (*representative*).

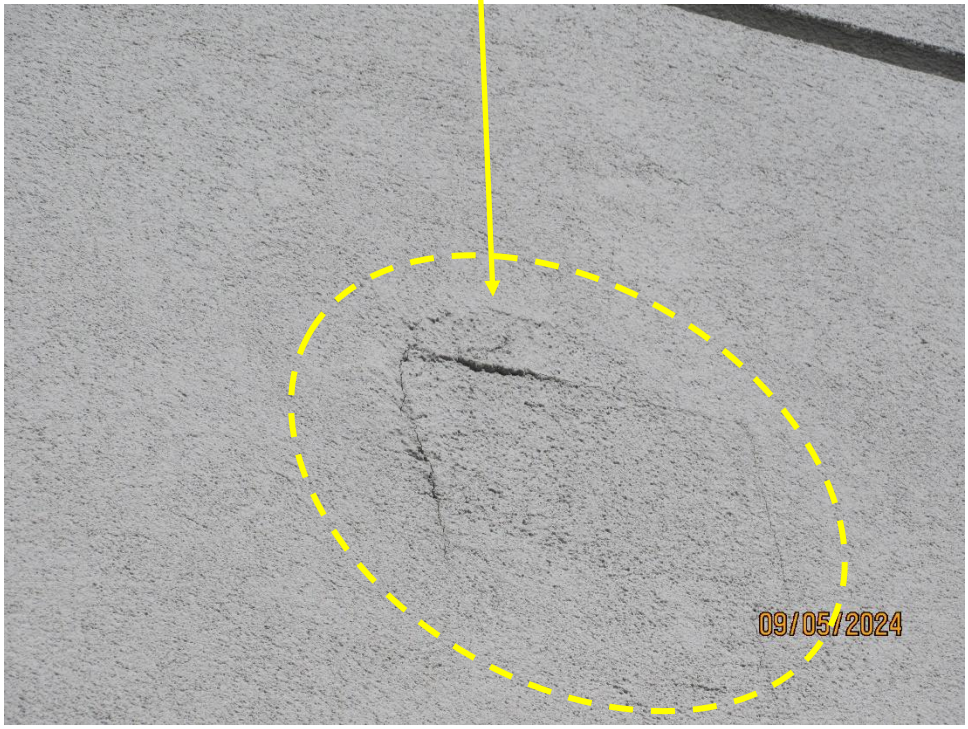


Photo 20

- South façade, southeast corner.
- Enlarged view of scaffold anchor patch in the EIFS.
- Note: Scaffold anchor patches insufficiently repaired in several locations (*representative*).

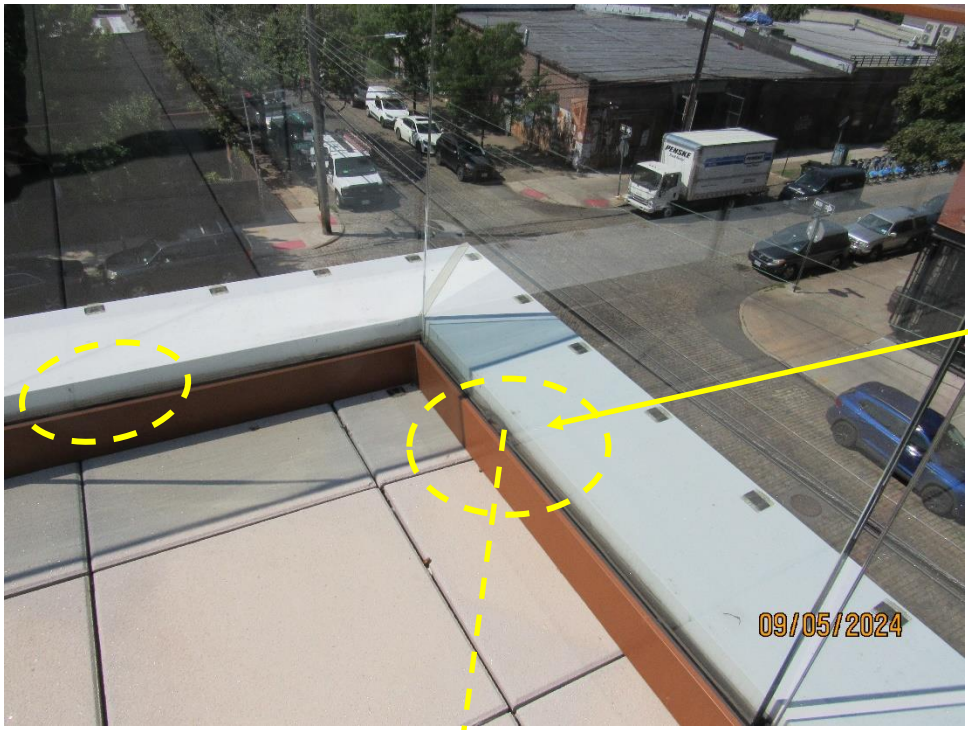


Photo 21

- Main roof.
- View to southwest.
- View of glass guardrail brackets.
- Note: The gaskets are blown in some locations – *circled here but a survey is needed*.



Photo 22

- Main roof.
- Enlarged view of a blown guardrail gasket.



Photo 23

- Main roof.
- View to east.
- View of a party wall and gas grill.

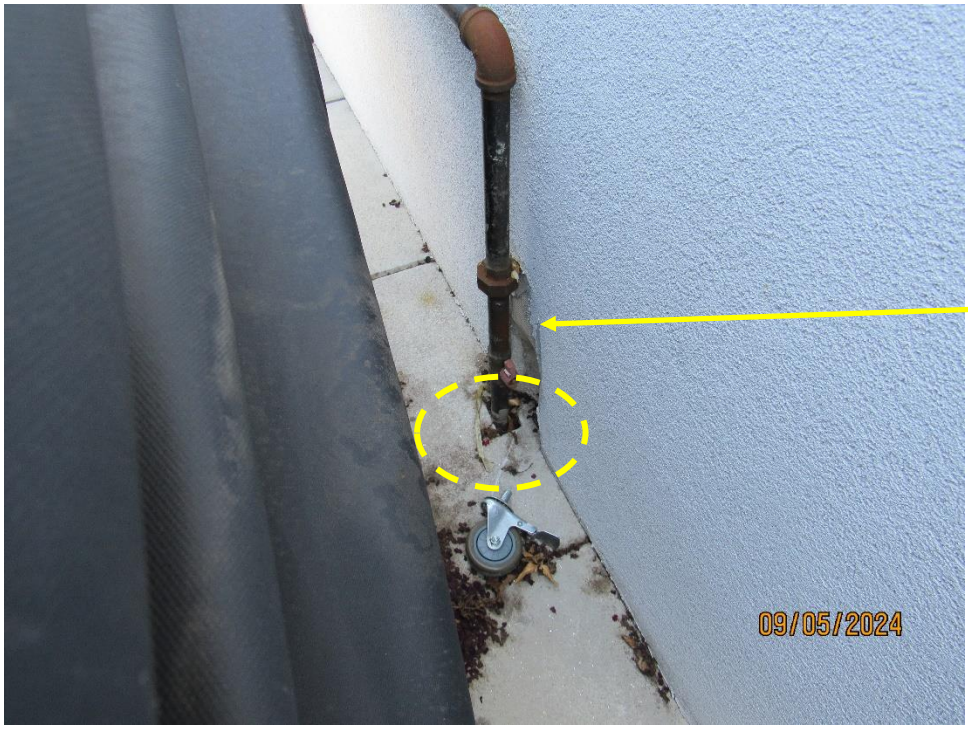


Photo 24

- Main roof.
- View to northeast.
- View of gas line penetration.
- Note: EIFS cut out to accommodate gas pipe is left untreated.
- Note: Penetrations need closer inspection regarding waterproofing (*circled - representative*).

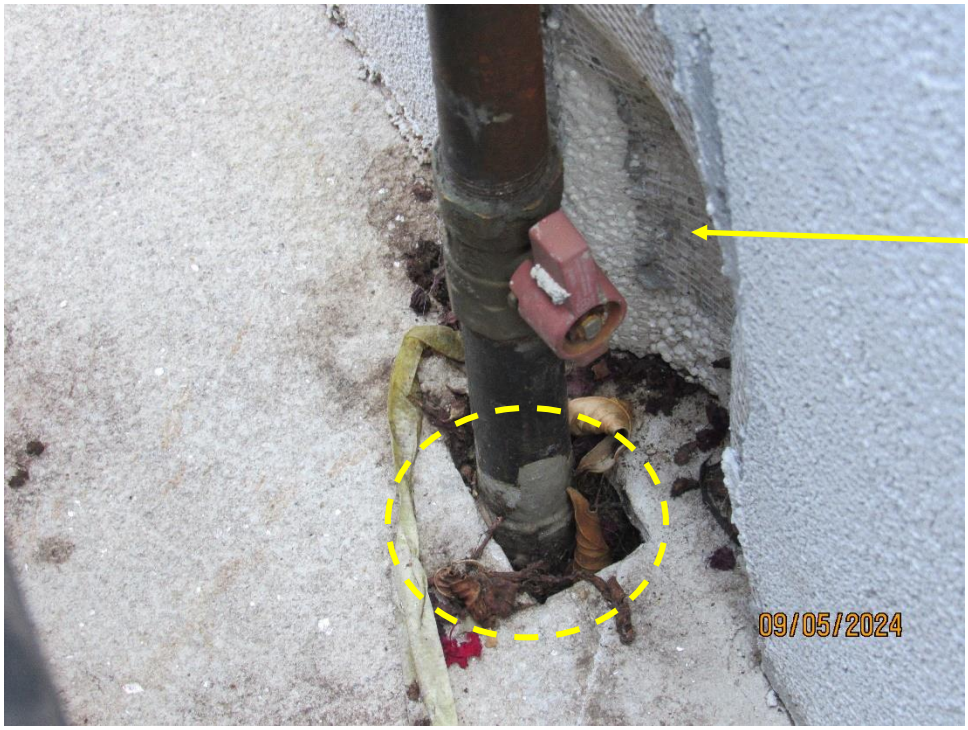


Photo 25

- Main roof.
- Enlarged view of gas line penetration.
- Note: EIFS cut out to accommodate gas pipe is left untreated with mesh visible behind.
- Note: Penetrations need closer inspection regarding waterproofing (*circled - representative*).

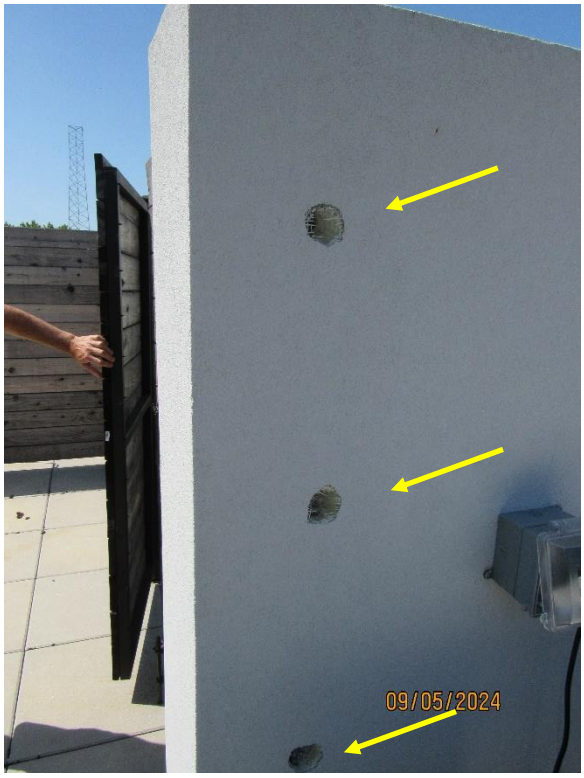


Photo 26

- Main roof.
- View to south.
- Unfinished party wall.
- Note holes in EIFS to repair.



Photo 27

- Main roof.
- View to southeast.
- Unfinished party wall separating HVAC equipment.
- Note: No coping or other finishing, and open metal post exposed.



Photo 28

- Main roof.
- View to south.
- Unfinished party wall separating HVAC equipment.
- Note: No coping or other finishing, and open metal post exposed.



Photo 29

- Main roof, party wall and HVAC equipment space.
- View to northwest.
- Note: Unfinished, no waterproofing, party wall saw cut opening to accommodate ventilation duct.

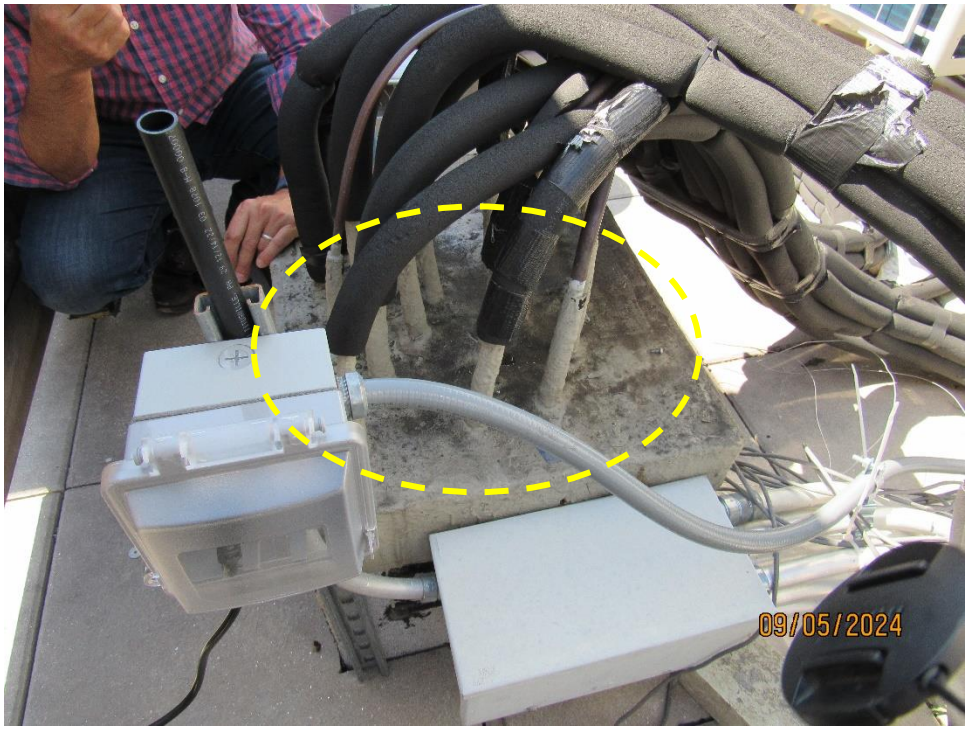


Photo 30

- Main roof.
- View to south.
- View of HVAC penetrations box.
- Note: HVAC refrigerant lines are insulated (*representative*).
- Note: Penetrations, coated but apparently with paint and not waterproofed, paint with poor adhesion in some locations (*circled*).

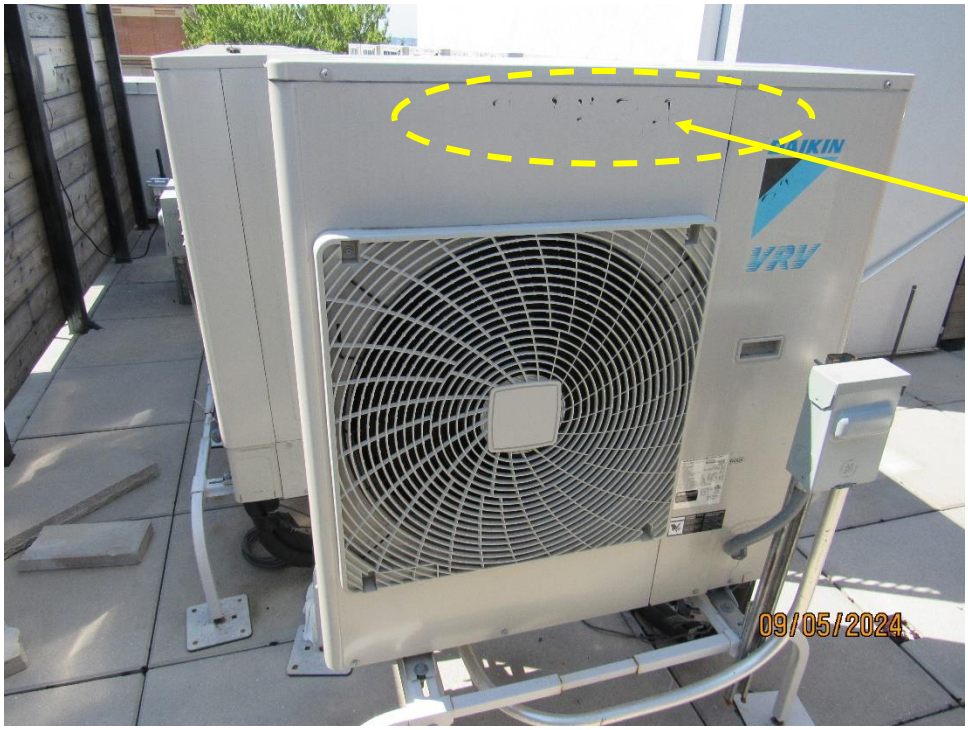


Photo 31

- Main roof.
- View to south.
- View of HVAC unit with deteriorated labelling (*representative*).
- HVAC equipment is well maintained.
- Note: All units should be clearly and permanently labelled.



Photo 32

- Main roof.
- View of unsealed water outlet penetration.
- Note: Penetrations need to be sealed at junctions with EIFS (*representative*).



Photo 33

- Main roof, North facade.
- View to west.
- Note: Rebar penetrations need to be sealed (*circled / representative*).

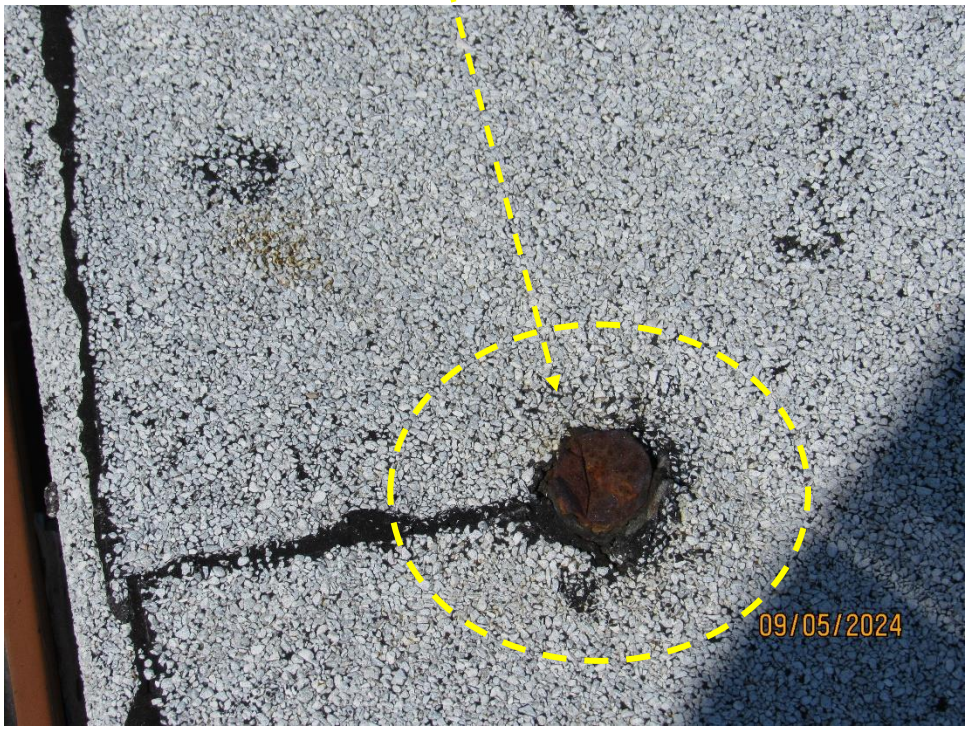


Photo 34

- Main roof, North facade.
- Enlarged view of an unsealed, cut rebar penetration (*representative*).



Photo 35

- Stair A bulkhead.
- View to southwest.



Photo 36

- Stair A bulkhead.
- View to southwest.
- View of HVAC units.
- Note: HVAC units are insufficiently anchored and could be moved by wind.



Photo 37

- Stair A bulkhead.
- Enlarged view of HVAC support and padding.
- Note: HVAC units are insufficiently anchored and could be moved by wind.



Photo 38

- Stair A bulkhead.
- View to west.
- View of HVAC support tie.
- Note: HVAC units are insufficiently anchored and could be moved by wind.



Photo 39

- Main roof.
- View to northeast.
- Stairs PH 3B stairs bulkhead.
- Note: Door lacks gaskets and sweeps and allows entry of leaves and water.



Photo 40

- Stairs PH 3B stairs door to roof.
- View to southwest.
- View of water stains on doorframe.
- Note: Door lacks gaskets and sweeps and allows entry of water.

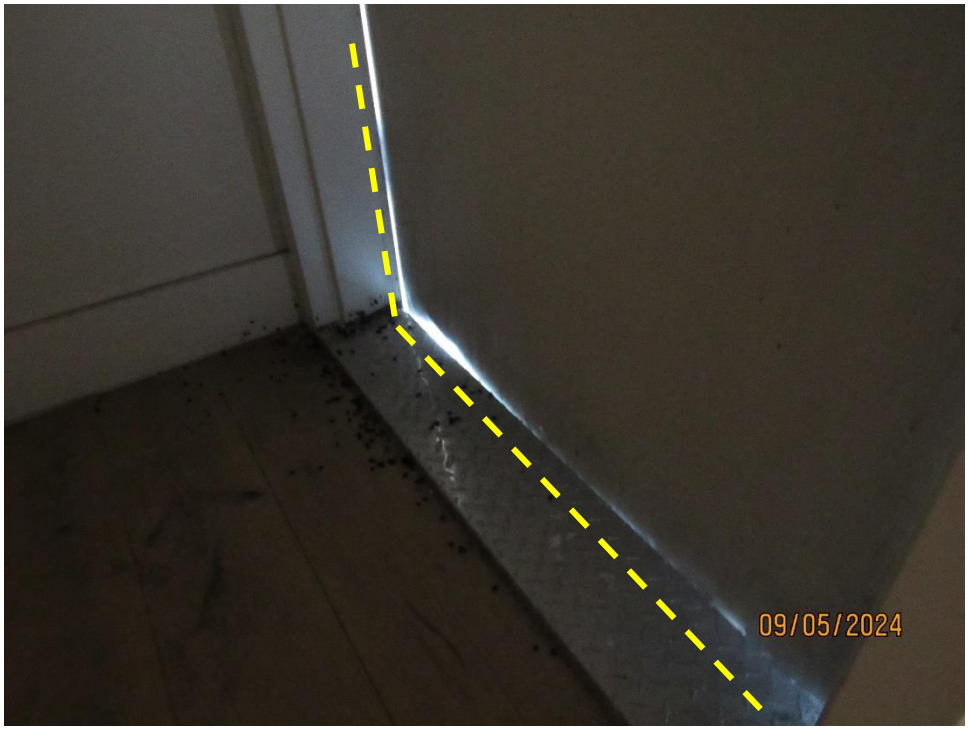


Photo 41

- Stairs PH 3B stairs door to roof.
- View to southwest.
- View of gap in door frame and leaves accumulated inside.
- Note: Install gaskets and sweeps.



Photo 42

- Garden B, ground level.
- View to northeast.
- View of unsealed hose outlet.
- Note: Demonstration of wall material exposed at the pipe.



Photo 43

- Main roof, stairs bulkhead, PH C.
- View to northwest.
- Spray testing recommended to identify the source of water infiltration in PH C.



Photo 44

- Main roof, stairs bulkhead, PH C.
- View of gas line penetration.
- Note: Recommend closer inspection of penetrations regarding waterproofing (*circled - representative*).



Photo 45

- PH 3C.
- View to southwest.
- View of water damage in the ceiling.
- Note: Water damage corresponds to the roof door, possibly influenced by the unsealed gas grill penetration – *further investigation of other possible leaks is needed*.

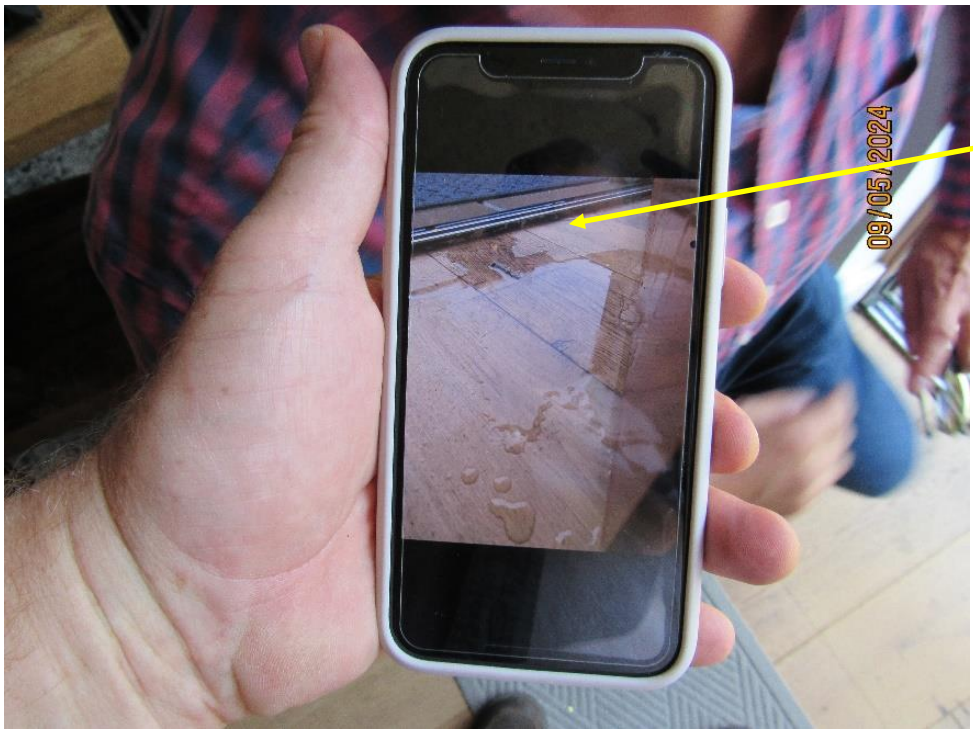


Photo 46

- Garden C entrance leak.
- View of owner's picture of pooling water at the door saddle.
- Recommend remove saw cut pavers and then seal.

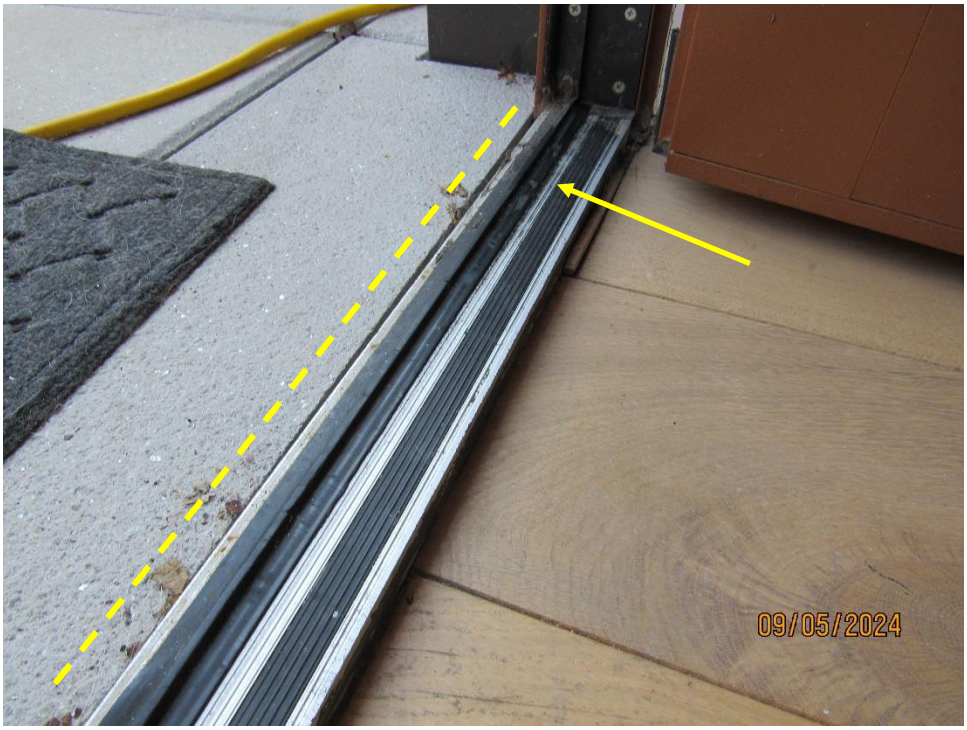


Photo 47

- Garden C
- View to northeast.
- View of leak location.
- Note: Pavers raised at saddle; gaskets showing some deterioration.
- Recommend remove saw cut pavers and then caulk.



Photo 48

- Main entrance.
- View to east.
- View of leak location.
- Note: Door saddle with gaps at pavers.

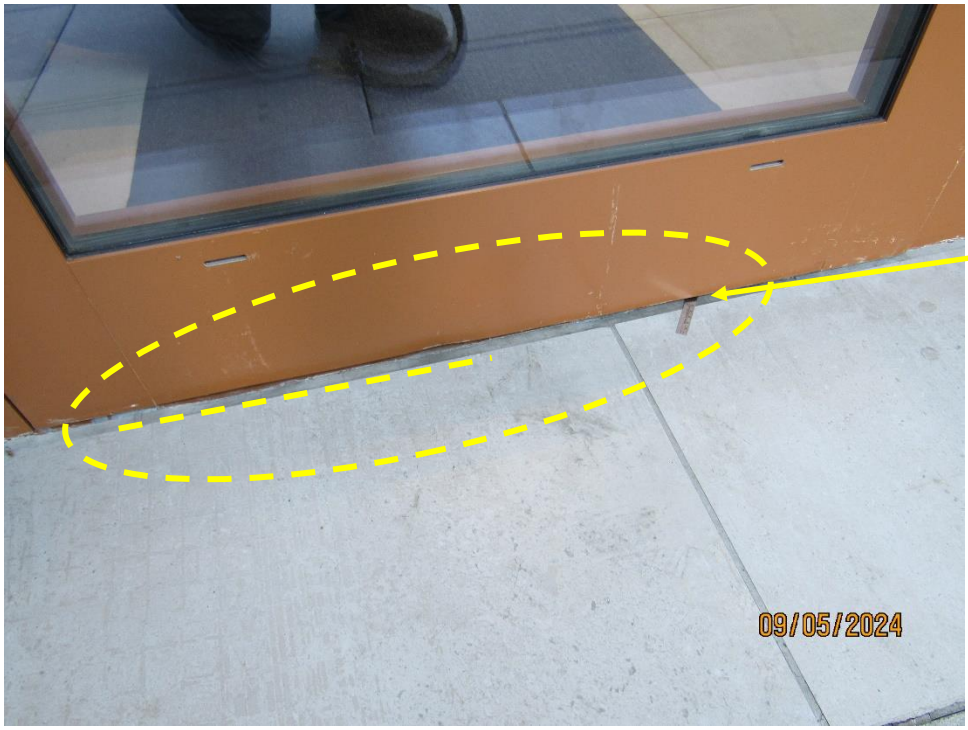


Photo 49

- Main entrance door.
- Enlarged view of leak location.
- Note: Door saddle with gaps at pavers.
- Note: Install gasket at interior bottom of door saddle.



Photo 50

- Entrance door TH D.
- Viewed to southeast.
- View of gap at the top of the door.
- Note: Door is heavy and has resisted re-positioning.
- Note: Install sweeps and replace gaskets.



Photo 51

- Entrance door TH D.
- Viewed to east.
- View of deteriorated gaskets due to mis-aligned door.
- Note: Door is heavy and has resisted re-positioning.
- Note: Install sweeps and replace gaskets.

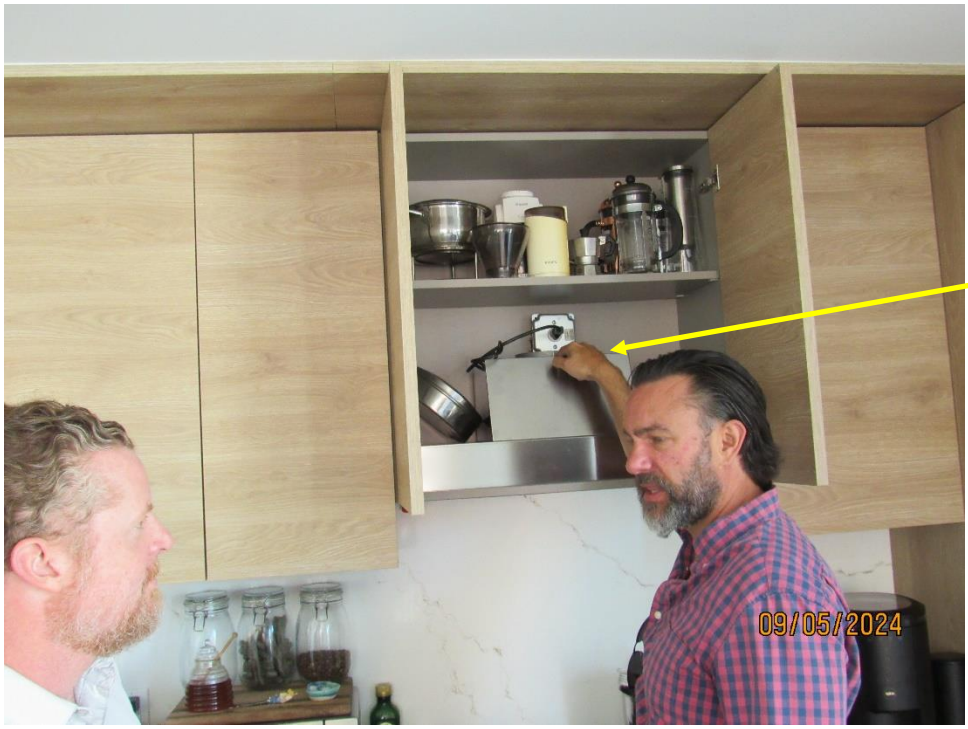


Photo 52

- Unit 2A stove vent.
- View of fan positioned to the rear against the wall.
- Note: Stove fans lack ventilation outlets (*representative*) – some fans are flush to the wall (*shown here*) and some face up – many vans push the cabinet doors open when operating.
- Note: residents reported that cooking often causes smoke alarms to sound.



Photo 53

- Cupboard doors width:
- 30”



Photo 54

- Unit 3E stove vent.
- View of stove fan lacking ventilation outlet.
- Note: Stove fans lack ventilation outlets (*representative*) – some fans are flush to the wall and some face up (*shown here*) – fan pushes cabinet doors open when operating.
- Note: residents reported that cooking often causes smoke alarms to sound.



Photo 55

- Stairs B, 3rd Floor
- Leak from below roof drainpipe or electric box.

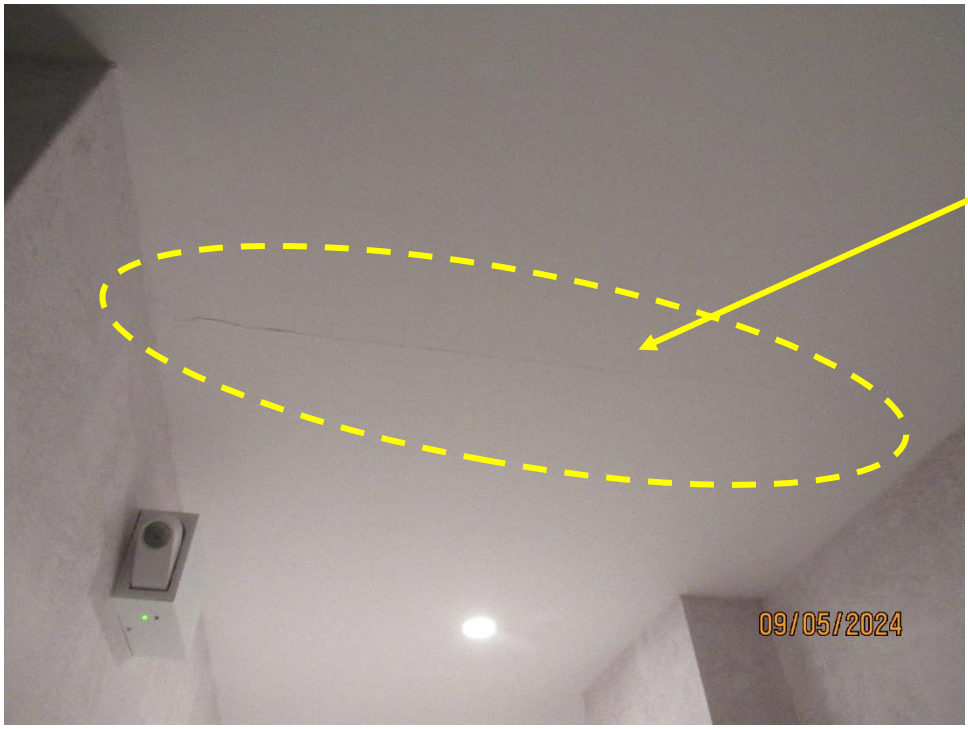


Photo 56

- Hallway ceiling near PH 3C, 3rd Floor.
- View of possible water damage to ceiling.

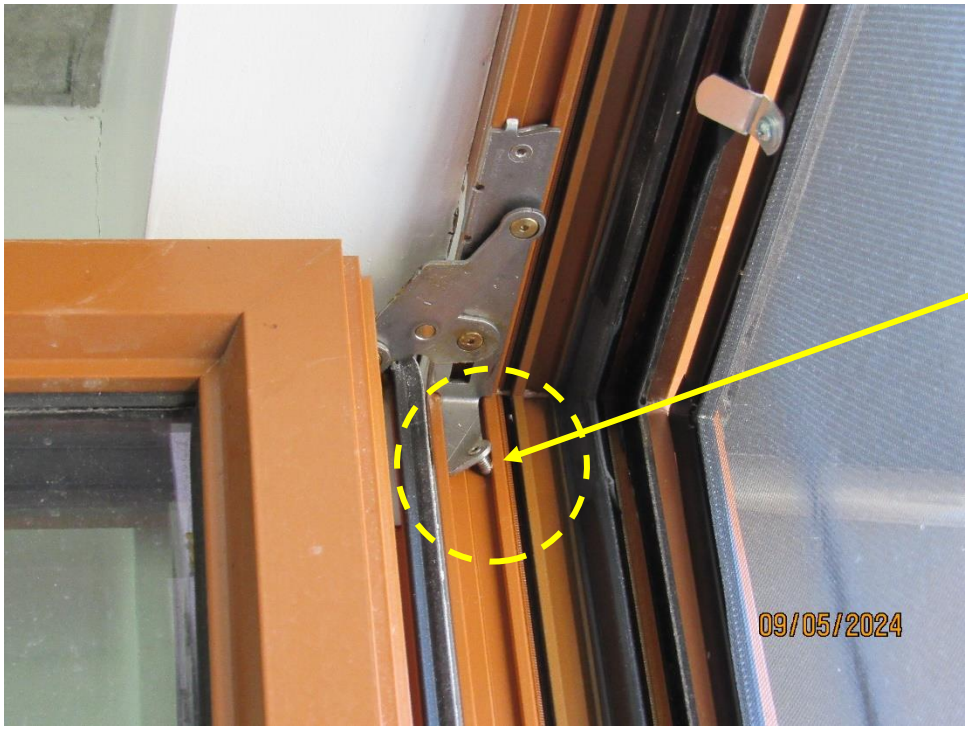


Photo 57

- Unit 2A living room window (adjacent to kitchen).
- View to south.
- View of a bent window fixture.
- Note: Window mechanisms in 2A need minor repairs.



Photo 58

- Unit 2A living room window (north corner).
- View to northwest.
- View of a displaced window gasket.
- Note: Window mechanisms in 2A need minor repairs.



Photo 59

- Unit 2A living room window (north corner).
- View to northwest.
- View of a window frame showing weathering below the blown gasket.
- Note: Window mechanisms in 2A need minor repairs.



Photo 60

- Unit 3E bathroom.
- View of apparent water damage location.



Photo 61

- Unit 3E bathroom.
- View of water damage around sprinkler head.

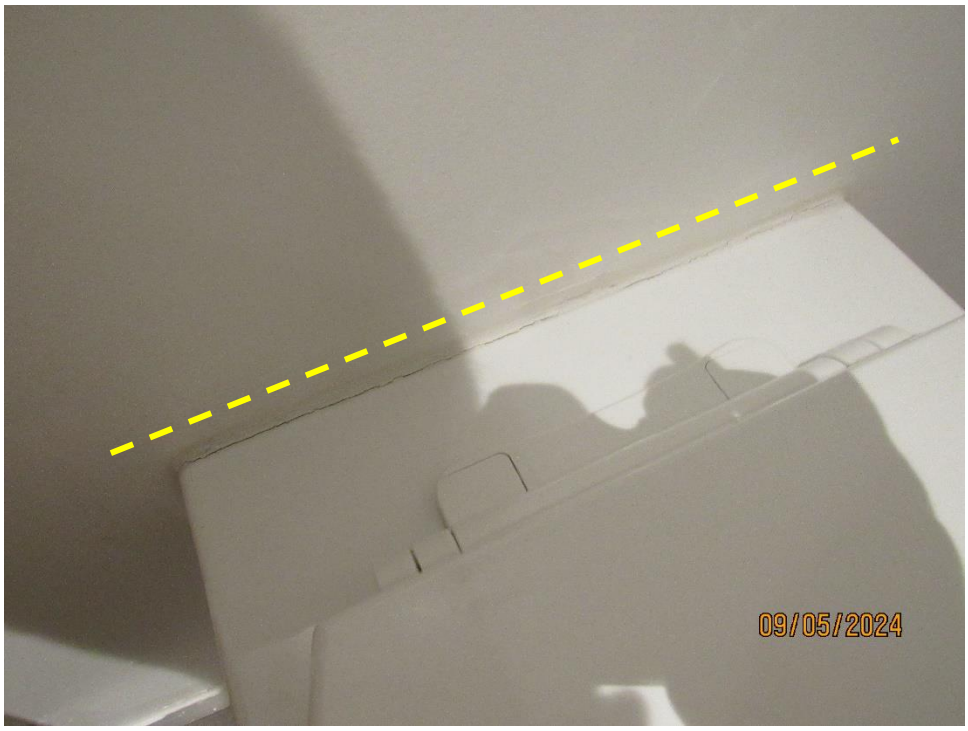


Photo 62

- Unit TH D, bathroom.
- View of crack at junction of toilet and wall.
- Note: Toilet is not well supported and can be moved manually.



Photo 63

- Basement
- View: Electrical room



Photo 64

- View: Electric room, roof drain.
- View of water stains from ceiling at drainpipe.
- Note: To investigate further.



Photo 65

- Roof water heater room, north side.
- View of sprinkler head.
- Note: Sprinkler head is embedded in ceiling cut-out.
- Note: Further survey sprinklers to develop repair detail.

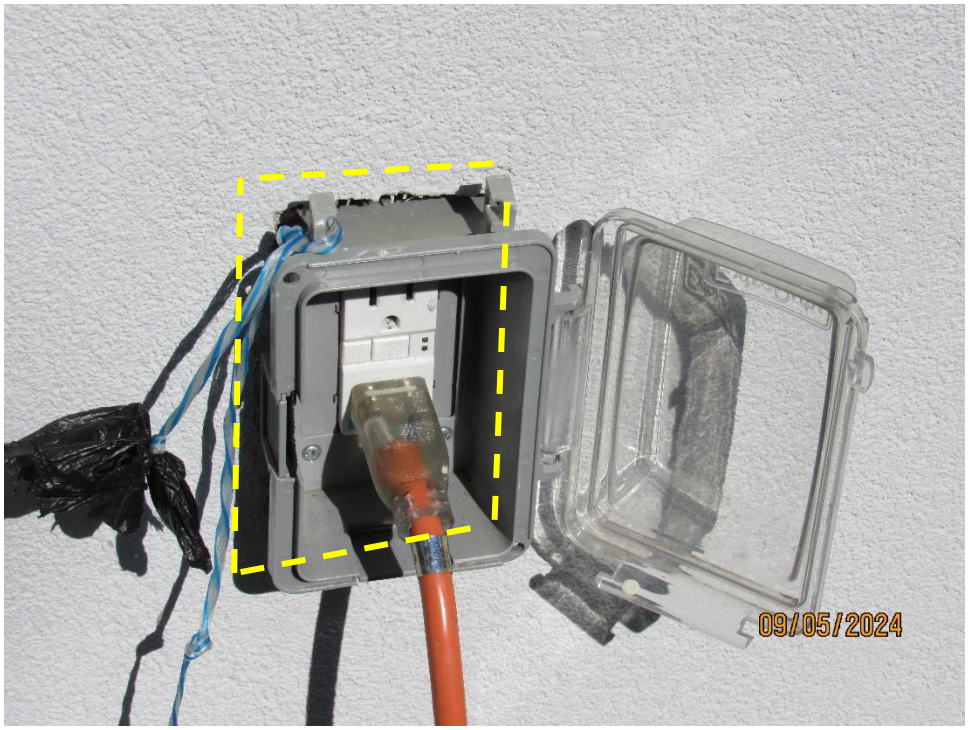


Photo 66

- Exterior power outlet box.
- View of unsealed wall box (*representative*).
- Outlets and other fixtures installed in the EISF façade, around the perimeter and on the roof, need to be sealed with Dow 790 or similar exterior, silicone sealant.

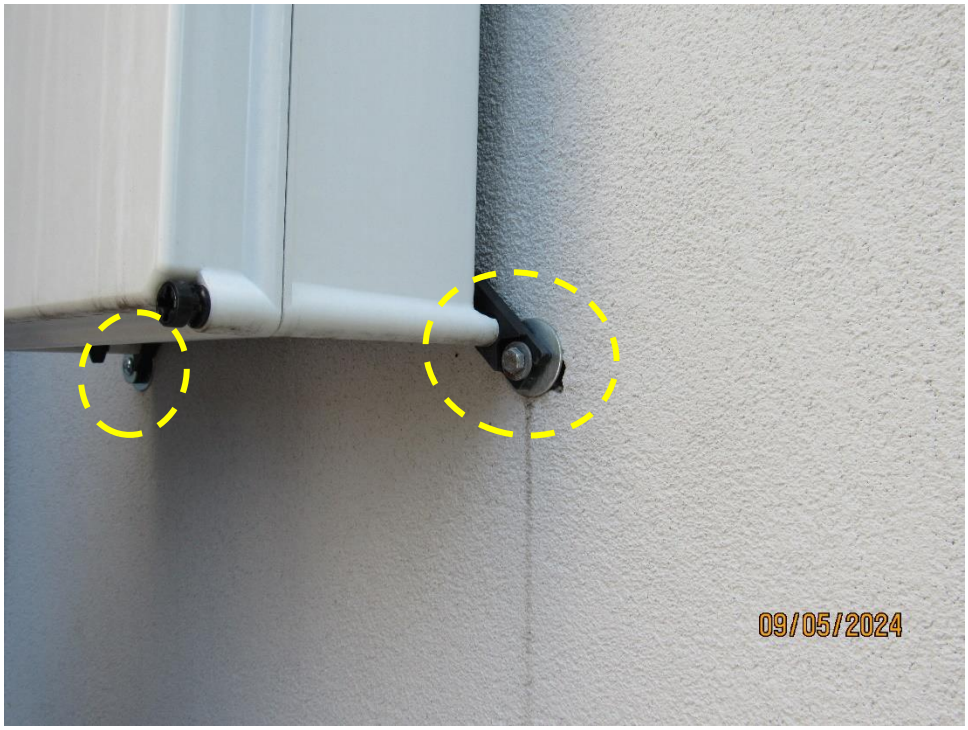


Photo 67

- Roof electric panel box.
- View of unsealed wall box (*representative*).
- Outlets and other fixtures installed in the EISF façade, around the Dow 790 or similar exterior, silicone sealant.

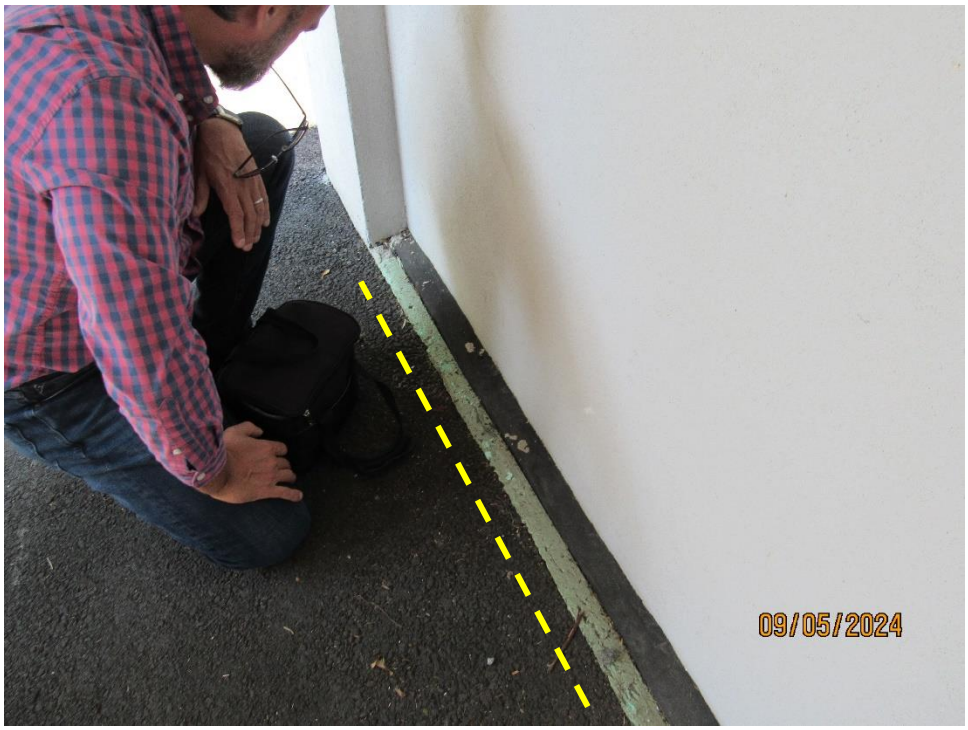


Photo 68

- View: East façade, driveway.
- View to southwest.
- View of foundation wall insulation with no capping – *est. 20 LF*.