

# **42 Otis Condominiums**

42 Otis Street  
San Francisco, CA

## **Observation and Assessment Report**

March 27, 2023

Prepared by

Saida + Sullivan Design Partners, Inc  
EDesignC

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1. MEP Observation and Assessment from EDesignC

## **1.0 EXECUTIVE SUMMARY**

<b>Property Name:</b>	42 Otis Condominiums
<b>Property Address:</b>	42 Otis Street San Francisco, CA 94103
<b>Property Block / Lot:</b>	3505/020
<b>Property Type:</b>	Type I-A in 1 <sup>st</sup> Floor and Type V-A in 2 <sup>nd</sup> -5 <sup>th</sup> Floor (per permit set 03.23.2017 provided by building owner)
<b>Date of Construction:</b>	Per San Francisco Building Department Permit Records May 2, 2022
<b>Historic Resource:</b>	Per San Francisco Planning Department status Category C – No Historic Resource Present
<b>Lot Size:</b>	Per San Francisco Assessor's Block Map records 4,083.55 sq ft
<b>Building Area:</b>	Per San Francisco Assessor's Block Map records 6,124 sq ft
<b>Building Height:</b>	55'-0" Building Stories: 5 Stories
<b>Number of Units:</b>	Total of 24 units, 3 units in Second Floor, 7 units in Third Floor, and 7 units in Fourth Floor, 7 units in Fifth Floor (per permit set 03.23.2017 provided by building Owner)
<b>Amenities:</b>	Retail Professional Service Offices, Ground Floor Commercial Spaces, Roof Deck, Bicycle Parking
<b>Other Uses:</b>	Not applicable

**Site Description:** The 42 Otis site is relatively flat. The south east side of the lot faces Otis Street which has a bike lane and major transit services. It is between a two story building and nine story building.

**Overall Condition:** General building appears in very good condition.

### **Life Safety Issues and Code Compliance**

There is no retroactive requirement for code compliance based on only building repairs/ maintenance, therefore, the applicable building code for a particular structure is the one that was in force at the time of original construction (or subsequent remodel in the affected spaces only). All alterations will need to meet the current building code. A change of use/ occupancy is considered an alteration in the California Building Code. The current building code for the State of California is the California Building Code 2022.

Accessibility: The original construction was completed in 2022 would have been subject to the Fair Housing Act (June 1990) and Americans with Disabilities Act (ADA) enacted in 1990, as well as applicable accessibility code sections of the California Building Code. It is assumed that this building was designed and permitted to comply with the applicable Accessible code sections of the CBC 11A and/or 11B depending on the areas of different occupancies, as well as applicable code sections of the ADA.

The ADA requires that any alteration to a public accommodation performed after January 26, 1992 shall be made to ensure to the "maximum extent feasible" that the altered portions of the facility are readily accessible and usable by individuals with disabilities. For any proposed renovations, future meetings with

the San Francisco Mayor's Office on Disability and San Francisco Building Department would need to be conducted to determine the degree of current building and accessibility code compliance required for the site, any common use areas and the unit interiors. A fully code compliant future mobility unit or common use area will need to meet ADA and Chapter 11B California Building code.

**Health Code Article 38 - Air Pollutant Exposure Zone:** The Property is located in an area with elevated pollutant concentrations. Sensitive use buildings, as defined in the Applicability section of the Ordinance, must comply with Health Code Article 38.

**Flood Zone:** Not applicable.

**Health Code Article 22A - Maher Ordinance:** The Property is located on sites with known or suspected soil and/or groundwater contamination are subject to the provisions of Health Code Article 22A, which is administered by the Department of Public Health (DPH). Submittal of Maher Application to and coordination with DPH may be required if there will be any soil disturbance due to site or structural improvement.

**Zoning:** The Property is located in NCT-3 Moderate-Scale Neighborhood Commercial Transit District. These districts are mixed use districts that support neighborhood-serving Commercial Uses on lower floors and housing above. These districts aim to maximize residential and commercial opportunities on or near major transit services. NCT-3 districts are commonly located in high-density mixed-use neighborhoods of varying scale concentrated near transit services. Existing Residential Units are protected by limitations on demolitions and upper-story conversions.

### **Conclusions**

Per San Francisco Building Department Permit Records, the building was completed in May 2022. The overall condition of the Property is new and appears to be very good. Since this is a newly constructed building, it does not appear that much work needs to be done. Assuming any needs or confirmations described in the report are remedied and maintenance is sustained, the Property should remain in adequate condition to support its present and future use and occupancy. Note that if any public funding will be applied, attention needs to be paid to any requirements for CBC 11B compliant units. It is understood the units would have been permitted as CBC 11A compliant as originally built without public funding. Please see the report from EDesignC attached for MEP observations.

## **2.0 OBJECTIVES**

The purpose of our observation and the resulting report is to assess the general interior condition of the building and site accessibility. Separate consultants shall be hired by the Client to evaluate hazardous building materials (including asbestos, lead, and mold) and MEP/FP/ Fire alarm systems. The specific objectives of this architectural report are to:

- Identify and locate obvious defects, deficiencies, and items of deferred maintenance of building elements and make recommendations for repair or replacement.
- Identify obvious and significant deficiencies concerning common building and safety code compliance.
- Identify applicable San Francisco ordinances that could affect the building renovation/ alterations.
- Identify obvious/ possible elements that will be required to upgrade due to provide 5% accessible units, and accessible common areas.
- Provide a summary of the physical attributes of the Property and recommendations to create safe and sanitary permanent supportive housing.

## **3.0 PROCEDURES AND LIMITATIONS**

The Assessment Team consisting of: Saida + Sullivan Design Partners and EDesignC MEP Engineers conducted an on-site observations of the Property to determine the visible condition of the general interiors and structural system for this report. During the site visits on February 23, 2023, the Assessment

Team did not gain access to all areas, operate any specific equipment or perform any tests. The findings in the report are based only on visual observations as the Assessment Team did not remove any construction materials to inspect the underlying structure.

Significant damage may be present at hidden conditions that cannot be discovered without destructive testing which is beyond the scope of this evaluation. The observations and resulting report are, therefore, not intended to warrant or guarantee the performance of any building components or systems.

This report does not confirm the presence or absence of lead paint, asbestos, PCB'S, or toxic soils on this Property. Documents and data provided by the Client, designated representatives of the Client, or interested parties consulted in the preparation of this report have been reviewed with the understanding that consultant assumed no responsibility or liability for their accuracy. This evaluation is based on the Assessment Team's judgments of the physical condition of the existing building and site based solely on visual observations. The actual performance of individual components may vary from a reasonably expected standard and may be affected by circumstances, which occur after the date of evaluation.

No representation is made as to the statue of title, legality of lots or zoning of the project, nor is any representation made as to the advisability or inadvisability of the purchase of, investment in, or financing of the subject property.

Although it is assumed that the development was constructed in compliance with contemporary building codes and standard building practices at the time of construction, and while the Property remains in good condition for present day use, the assessment does not include a detailed review to determine compliance with all local Building Department Codes, Fire Department requirements, or Planning Department ordinances. A future meeting with San Francisco Planning Department & Building Department will be conducted to discuss the extent of compliance with current building codes that may be required depending on the finalized scope of work.

The conclusions represent professional judgments and are founded upon the findings of the investigations identified in the report and the interpretation of such data based on experience and expertise according to the existing standard of care.

#### **4.0 PROPERTY DESCRIPTION**

**The following elements are included in the property observation review:**

##### **4.1. SITE**

###### **Social/Community Identity**

The site is located near the intersection of Otis Street and Brady Street. The building faces Otis Street. The street address number for the 42 Otis Condominiums was observed on the front entry canopy to the residential building.

**Comments:** When considering site identity, we recommend including signage, site lighting, and exterior building treatments to create identity for the new community of the building.

###### **Pedestrian Access**

Pedestrian access is provided from the public sidewalk along Otis Street. A single automatic door actuator was observed at the residential lobby entrance.

**Comments:** Building entrances appears to be flat and accessible and given the age of the building this accessibility would have been required.

###### **Security System**

No security camera system was observed at the building exterior and throughout common areas.

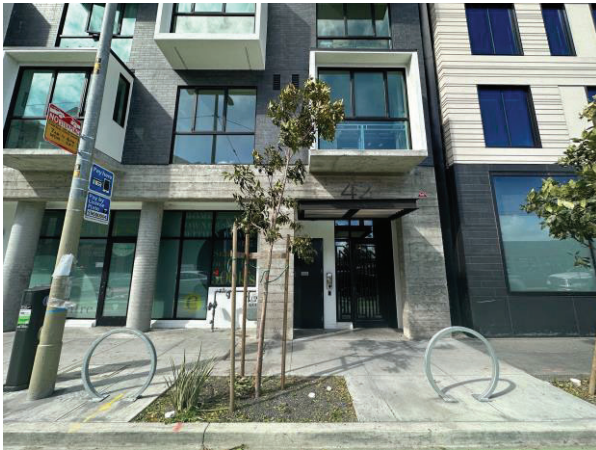
###### **Topography**

Visually, the property is on a flat site, no perceptible topography observed.

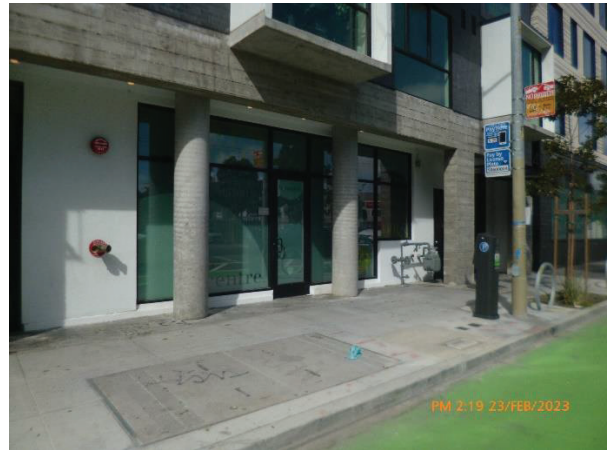
<b>Vehicular Parking</b>	No garage or vehicular parking was observed.
<b>Bicycle Parking</b>	A secured bike parking storage room on the first floor was observed. Wall hanging bicycle racks were observed in the secured room located adjacent to the trash room. It was stated these are reserved for residents. On the Otis Street sidewalk there are 2 bicycle loops.
<b>Exterior Lighting</b>	Recessed LED Down lights were observed along the entry of the building. The 6 <sup>th</sup> floor roof deck includes wall mounted sconces along the edge of the building perimeter as well as string lights. <b>Comments:</b> Further review of adequate lighting levels is recommended through photometric studies by a future electrical engineer.
<b>Landscaping</b>	Two young trees were observed on the Otis Street side of the site within the new paved area off of the public right of way. Planter box and plants were observed in the roof deck and appear well maintained and have an irrigation system.
<b>Outdoor Gathering</b>	6 <sup>th</sup> floor roof deck provides for some informal gathering. The rooftop is furnished with outdoor seating.
<b>Site Stairs, Handrails, Guardrails</b>	Existing stairs, handrails, and guardrails were observed throughout the Site and were in good condition.
<b>Exterior Signage</b>	The street address number (42) for the building was observed on the front entry canopy. <b>Comments:</b> When considering site identity, we recommend including signage, site lighting, and exterior building treatments to create identity for the new community of the building. Further review of the canopy is recommended by future structural engineer.
<b>Fire Department Connection</b>	Fire Department connections were observed at the exterior building façade and each floor in the corner of Stair #1 and Stair #2
<b>Site Amenities</b>	Retail Professional Service Offices, Ground Floor Commercial Spaces, Roof Deck, Bicycle Parking.



Building Exterior facing Otis Street



42 Otis Address Number, Residential Front Entrance



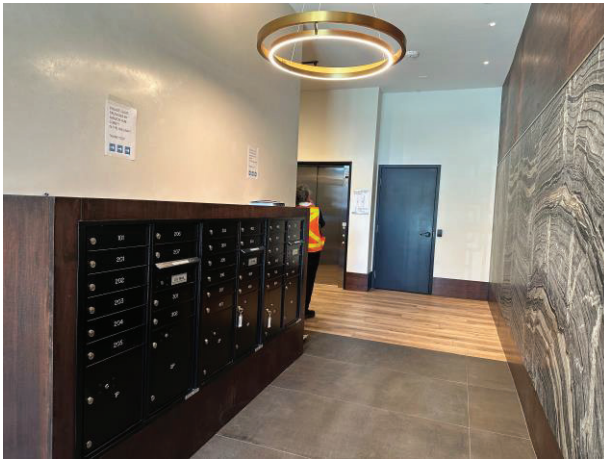
Commercial Space Entrance and FDC



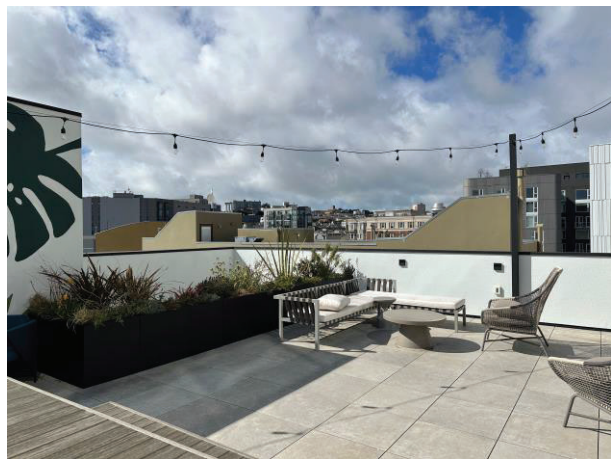
Bicycle Parking



Trash, Recycle, Compost Bins in Bicycle Parking



Lobby Interior, Mail and Parcel Boxes



Roof Deck: Outdoor Gathering and Planter boxes



Retail Professional Service Office Example



Retail Professional Service Office All Gender Accessible Bathroom



## 4.2. ARCHITECTURE

<b>Building Frame</b>	Per Permit Drawings provided by building Owner, the first floor is Type 1-A, and the upper four stories are Type V-A.
<b>Roofing</b>	There is one main roof level and this can be accessed by Stair #1, Stair #2, and elevator. Solar PV panels and other mechanical equipment were observed on the roof. <b>Comments:</b> Visible roofing area appears in good condition (less than 2 years old).
<b>Exterior Walls</b>	The exterior walls are comprised of various materials including: storefront systems, board formed concrete, brick veneer, aluminum frame window assemblies, metal cladding, and painted exterior cement plaster.
<b>Insulation</b>	Per Permit Drawings provided by building Owner, wall assembly details indicate insulation in exterior walls and some interior walls.
<b>Doors</b>	Storefront system with glazed doors are located at the residential building entrances and commercial space entries on Otis Street. Other service doors for Electrical and FACP rooms facing Otis Street are metal. <b>Comments:</b> All doors appear to be working and in very good condition.
<b>Windows</b>	The windows in the retail professional services spaces and units are aluminum framed double paned windows with both fixed and casement lites with lever hardware. <b>Comments:</b> Windows appear to be in very good condition.
<b>Storefront</b>	Exterior storefront was observed at the building residential and commercial entrances. <b>Comments:</b> The building exterior storefronts appeared to be in very good condition.
<b>Satellite Dish</b>	No satellite dishes were observed on the roof.
<b>Fire Escape</b>	No existing fire escape on-site.



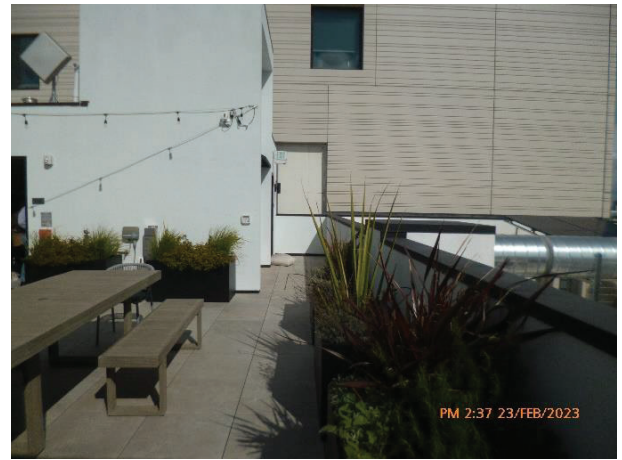
Solar PV Panel on Roof



Mechanical Equipment on Roof



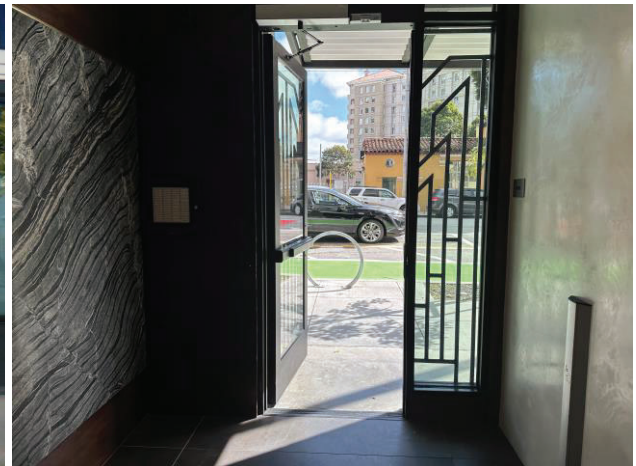
Outdoor Seating on Roof and Electrical/Battery Room



Roof Deck and Stair #1 Exit



Electrical/FACP Door and Residential Building Entry Door



Interior of Lobby, Residential Building Entry Door-Accessible



Interior of Electrical and FACP room



Unit Aluminum Window Assembly and ground floor Storefront System for Commercial Space

### 4.3. COMMON SPACES

#### Accessibility

The pedestrian access to the residential lobby is provided at Otis Street. The accessible path of travel to all common spaces and upper floors is through the residential entrance and then the elevator. A single automatic door hi low actuator was observed at the entrance on Otis Street.

**Comments:** Building entrance appears to be relatively flat and accessible. Given the building was completed in 2022, it is assumed that it was permitted and built to meet all applicable accessibility requirements. No dimensions were verified in this site visit.

#### Elevators

There is one elevator onsite which makes the building an “elevator building” for the purposes of accessibility. The elevator provides access from the ground floor lobby to the retail professional service offices, 2<sup>nd</sup>-5<sup>th</sup> floor units, and rooftop deck. The size of the elevator cab is not verified during the site visit, although the Permit Set provided by the building Owners indicates the elevator is large enough to accommodate a gurney.

**Comments:** The existing elevator cabs appears large enough to meet accessibility requirements and would have been required to do so given the building completion in 2022. The elevator cab interior is in very good condition.

#### Exit Stairs

There are two exit stairs in the building. Both stairs provide roof access.

**Comments:** The stairs observed appeared to be in very good condition.

#### Ground Floor

The ground floor houses the residential lobby, mailboxes/parcel boxes, Amazon hub lockers, elevator equipment, trash room, bicycle parking, and access to the vertical circulation (stairs and elevator).

**Comments:** The ground floor residential area interior finishes are in new and very good condition.

**Mailboxes**

Mailboxes and parcel boxes for each unit are observed along the wall of the ground floor lobby. There is also Amazon hub lockers located nearby.

**Laundry Room**

There is no laundry room. All units have a combo washer/ dryer.

**Commercial Space**

Currently the space is unoccupied and is a cold shell interior. There are plumbing stub ups for a future bathroom.

**Trash**

Residents dispose their own trash to the trash room. Trash, recycling, and compost bins are located in the trash room on the ground floor.

**Comments:** Trash pickup frequency would need to be reviewed with the collection agency.

**Residential Floor  
Corridors**

Wall-mounted lighting, exit lighting, smoke alarms, and smoke detectors, were observed in the corridors. Carpet and painted wood base was observed in the residential corridors.

**Comments:** The interior finishes of the corridors appear to be in very good condition. The corridor carpeting is a charcoal grey with black speckle pattern that helps to hide dirt. Hard surface flooring may be a consideration for corridors due to anticipated wear and tear.



Elevator at the Lobby



Amazon Hub lockers in Lobby near mail and parcel boxes



Exit Stairs



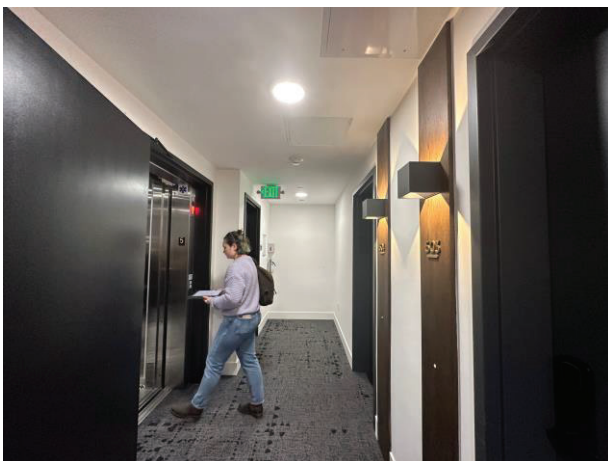
Exit Stairs with Carpet



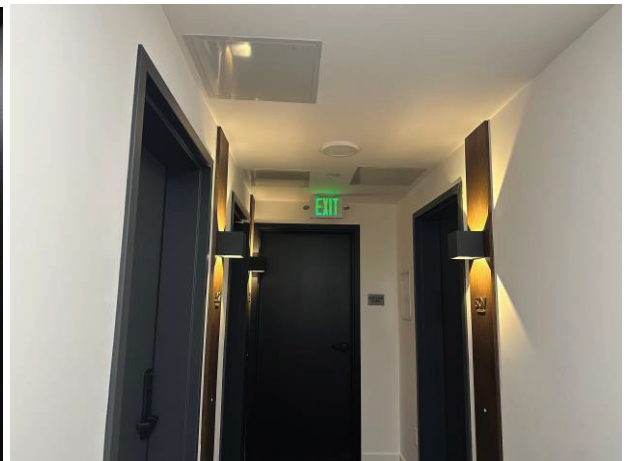
Unoccupied Commercial Space facing Otis



Unoccupied Commercial Space



Residential Corridor, Interior Finishes



Residential Corridor, Exit Signage to Exit Stair

#### 4.4. RESIDENTIAL UNITS

<b>General</b>	<p>There are two studio unit types ranging in size from 290 s.f. to 350 sf. One of each type was observed. All types have private bathrooms, compact kitchens, and washer and dryers. Unit ID signage and braille is integrated into a wood accent panel which includes wall mounted sconce and doorbell.</p> <p><b>Comments:</b> The units observed appeared to be in very good condition.</p>
<b>Accessibility</b>	<p>An accessible path of travel appeared to be provided to all units. Since this building was completed construction in 2022, it is fair to assume it was designed an permitted under Ch 11 A accessibility requirements. If alterations are made and only compliance with ADA and current CBC is pursued (and funding sources do not require more) then 5% mobility units, and 2% communication units are required.</p> <p><b>Comments:</b> There are a total of 42 units currently. 5% of 42 would then require 3 units (rounded up) to be provided as mobility units. Further study is needed to determine whether any of the existing units are designated accessible units. No grab bars were observed the unit bathrooms visited. The unit bathrooms may be large enough to accommodate mobility upgrades if needed. Unit kitchen layout will need to be modified to accommodate mobility requirements. Further study is needed to determine if it is feasible to provide 5% of mobility units on site. 2% communication units could be provided on site.</p>
<b>Private Open Space</b>	<p>Three units are provided with usable private open space patios.</p> <p><b>Comments:</b> One was observed and in good condition. Exterior sliding door thresholds to private patios appear to be accessible.</p>
<b>Flooring</b>	<p>LVP and painted wooden wall base were installed throughout the unit.</p> <p><b>Comments:</b> Flooring and baseboard appeared to be in good condition.</p>
<b>Doors</b>	<p>The unit entry door is metal door with aluminum frame and has a single high peep hole. Single motion lever handle with private code access at the unit entry door was observed. The interior bathroom door observed in two unit types are wood doors with lever handle, and the third unit type has wood a pocket door.</p> <p><b>Comments:</b> The unit doors observed were in very good condition. It is recommended to add a low peep-hole at any future designated mobility units.</p>
<b>Walls / Ceilings</b>	<p>Walls and ceilings are smooth textured and newly painted gypsum wallboard.</p> <p><b>Comments:</b> Paint appeared to be in clean and very good condition.</p>
<b>Window Coverings</b>	<p>Blinds were not observed in vacant units.</p> <p><b>Comments:</b> Vertical blinds are recommended for all unit windows.</p>
<b>Fire Protection</b>	<p>Sprinkler head and smoke detector were not observed in the residential unit visited.</p> <p><b>Comments:</b> It is recommended to place individual fire extinguishers inside units for greater fire safety if a kitchenette is added.</p>
<b>Kitchen/ Kitchenettes</b>	<p>Each unit has a compact kitchen. Kitchens are equipped with a microwave, dishwasher, 4 burner range, a sink and undercabinet refrigerator.</p> <p><b>Comments:</b> Kitchens observed were in very good condition. If future mobility units are needed, the kitchens would need to be studied for alterations for compliance.</p>
<b>Bathrooms</b>	<p>Each unit has a full bath consisting of a tub/shower combo with solid surface surround, a bathroom exhaust fan with light, a lavatory, mirror, towel bars and towel rings, robe hook, toilet, and toilet paper holder.</p>

**Comments:** The bathrooms observed were in clean and very good condition. Flooring, light fixture, plumbing fixtures, and bath accessories appear to be in very good condition. Further study is needed to verify the accessibility compliance if needed for any future designated accessible units.

**Mold**

Mold was not observed in units visited during the site visit from February 23, 2023.



Unit Doors



Living Space, Movable Furniture, Lighting, Baseboard Heater



In Unit Kitchen: Work surface, Combo Washer/ Dryer, Sink



In Unit Kitchen: Sink, Dishwasher, Microwave, Stove, Built in Refrigerator



Refrigerator



Bathroom Interior

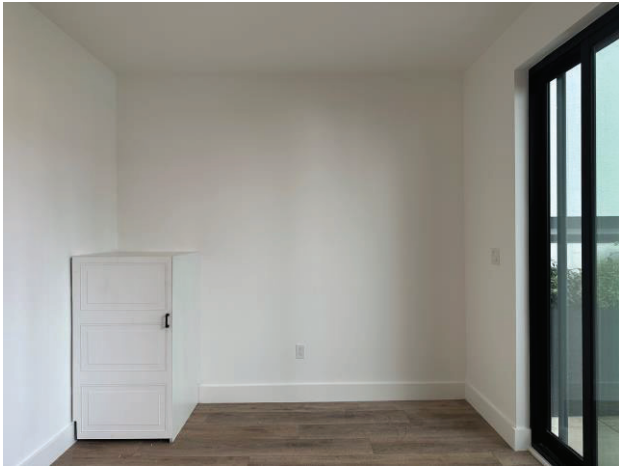


Bathroom Cabinet



Closet with Sliding Doors, in entry hallway





Smaller Unit Type: Living Space



Smaller Unit Type: Private Open Space



Smaller Unit Type: Kitchen



Smaller Unit Type: Dishwasher



Smaller Unit Type: Lighting, Cooktop, and Work Surface



42 OTIS ST

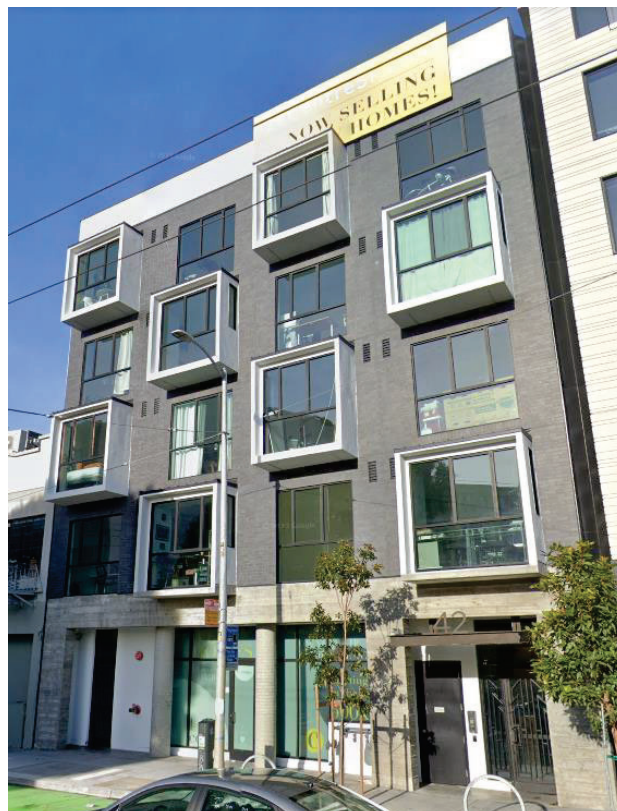
# MEP CONDITIONS NEEDS ASSESSMENT

MECHANICAL, ELECTRICAL, PLUMBING

42 Otis St, San Francisco CA

Prepared For:  
**Saida + Sullivan Design Partners**  
San Francisco, CA

March 11, 2023





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## EXECUTIVE SUMMARY

The property is a 24 micro unit urban building with 4 retail units, ground floor commercial space, and a roof deck. It is 16,013 SF and has 5 levels. Construction was recently completed in 2021. This report is being prepared for the due diligence phase of review by the City of San Francisco.

This report covers the ground floor, residential floors, commercial space, and roof of the building. On February 23, 2023, we inspected the ground floor common space, a sample of each residential unit type, the commercial space, and the roof. Our observations about conditions are based on limited observation. Building “as-built” drawings were available to us and reviewed for the preparation of this report.

## UTILITY SERVICES

### Main Electrical

The building is served by an underground transformer on Otis St side providing the building with 800A at 120/208V, 3phase, 4 wire service with AIC rating of 42,000A. There are 30 electric meters. 24 for dwelling units, a 200A house meter, 4 – 50A for the office/retail units and one 200A for the larger commercial space.

There is a 30KW UPS to provide emergency power for the elevator, lighting and other emergency circuits. It is located on the ground floor near the bike room. It has a resistive load bank located in the bike room.

The main electric room has the main fire alarm panels and the MPOE. The PV disconnect and inverters are also located in the room. The PV system is tied to the house panel with a 30A/2P breaker. As-builts do not show the PV system.

**Recommended:** Review main breaker settings and verify the net metering with the utility service and how the net metering is an offset for the house loads.

### Low Voltage System

The MPOE is located in the main electrical room. The building is served by AT&T Fiber.

Each unit has a data drop with a coax and (2) RJ45. The lobby has an amazon locker with data connection.

The building entry access system is a Mircom system with key pad and also a card reader for entry.

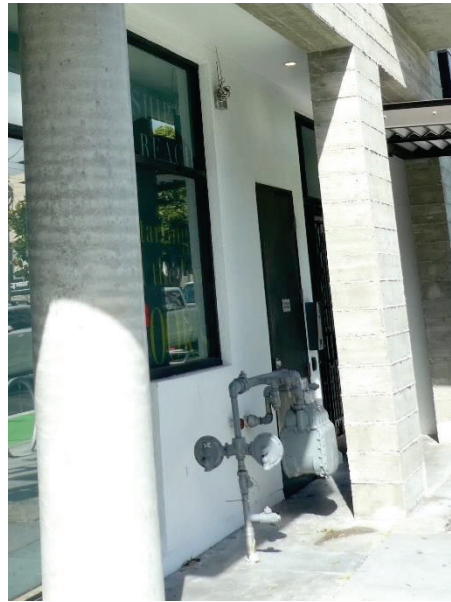
**Recommended:** If additional telecom vendors required additional space will be needed to accommodate the equipment.

### Main Gas

The residential and level 2 retail/professional services units do not have gas service. Gas is supplied to the common domestic hot water as well as an observed plumbed connection to the commercial tenant space.

No gas meter for the commercial tenant space has been installed, yet.

**Note:** Contrary to what is shown on the as-built plans, the central laundry room does not have gas dryers at the second floor. At the site it was observed that all appliances in the units were electric.

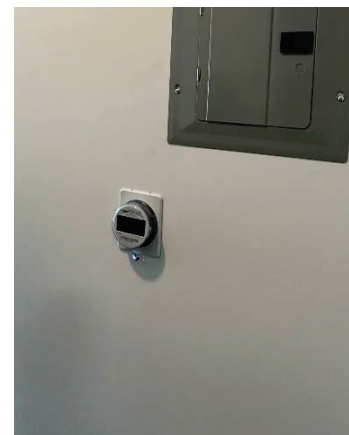


### Main Water

SFPUC water meters are located within boxes in the sidewalk at the front of building left side entrance next to underground transformer. We did not observe the separate commercial tenant space meter indicated on the as-built drawings. The level 2 retail/professional services units and residential units were observed to have the code required submeter with a read-out accessible to the tenant located on a wall in each apartment.

The plumbing plans showed separate water main connections to the building and stub out for the commercial tenant space. However, the civil plans showed only one water line.

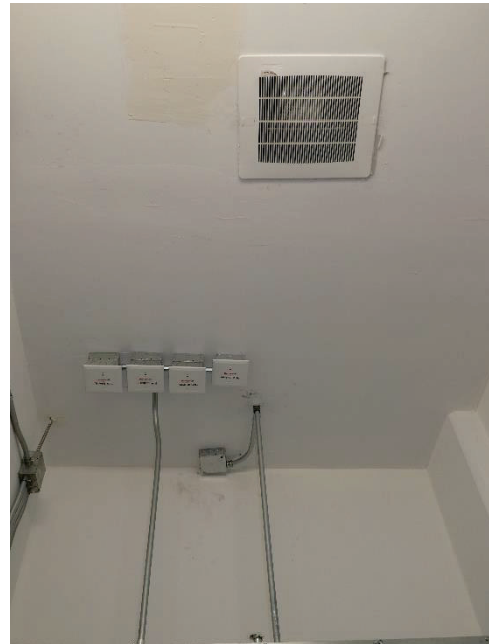
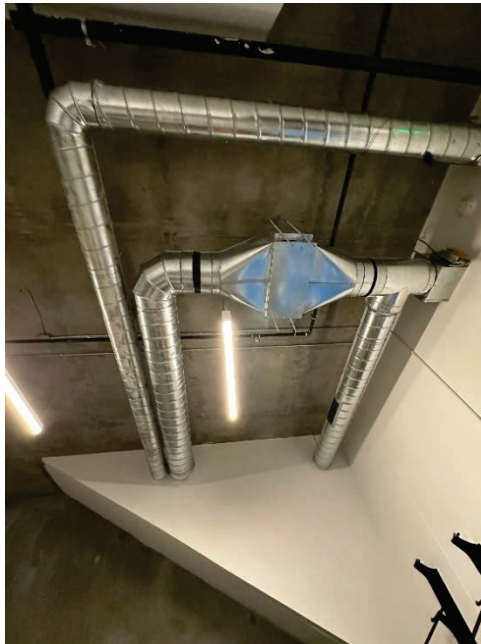
**Recommended:** Confirm water metering actually installed on site. We recommend reviewing any available tenant or owner's SFPUC water bills to confirm the separate metering for the ground floor commercial space.



## MECHANICAL

### Utility Spaces

There were ventilation systems observed in utility areas as required. We did not observe any symptoms of poor ventilation.



### Commercial

Commercial tenant space did not have HVAC installed. Appeared to be ready for tenant improvement with refrigerant lines to roof stubbed out. Tenant improvement installation of ventilation and exhaust is planned to terminate at the ground floor soffit at the face of the building.

### Common Areas

One rooftop filter/fan supply unit serves the entire building: The residential ground floor common entry space, trash room, electrical room, and bicycle room, the residential corridors, as well as the retail/professional services units and residential units.

**Recommended:** Confirm fire/smoke damper testing is current for all dampers noted in the approved plans. They are code required at duct shaft exits, and at duct penetration of smoke barrier rated walls and partitions.



### Units – Residential & Retail/Professional Services

Each level 2 through 5 unit has a ducted heat pump fan coil mounted in a soffitted ceiling with one wall mounted supply register and one return grille. Outside air is supplied to each fan coil return plenum via ducts through the corridor ceiling soffit from the central outside air riser. There is a wall mounted programmable thermostat located in each unit.

Kitchen hood/microwave combination units are located over electric ranges. The ducted kitchen hood and bath fan in each unit terminate at a sidewall louver. In-unit washer/dryer combo is ventless and does not require dryer vent.

**Recommended:** The condition of the terminations was not observed. They should have bird screen, and if they contain a flap backdraft damper that should be checked for free movement.

There are ceiling mounted bathroom exhaust fans. It was observed that the exhaust fan serving the bathroom is turned on and off by a wall switch. A humidistat control is noted to also be installed for the bath exhaust fan control.

**Recommended:** Recommend testing humidistat is operational to meet current T24 requirements that improve indoor air quality and prevent mold.



## ELECTRICAL

The residential unit load centers are provided with combination AFCI/ GFCI breakers, with GFCI for bathroom and kitchen receptacles. It was noted that the refrigerator is connected to a combination AFCI/GFCI breaker. This is not a code requirement but with dedicated circuit adds greater protection.

The lighting in the unit is all LED energy efficient with T24 lighting controls that include vacancy sensor in the bathroom.

The units have standalone smoke alarms tied to 120V and with battery backup.





## PLUMBING

### Utility Spaces

The four instantaneous water heaters are installed on a manufacturer-provided floor mounting rack. It was observed that the clearance for the back 2 water heater units that face the wall is not sufficient to provide clear maintenance access. 24" between the water heater and the wall is the recommended minimum for service clearance.

The hot water pipe insulation is not complete nor of sufficient insulating value.

We observed a hole in the floor apparently, apparently a floor drain, with no cover.

The DHW room also houses the ERRCS antenna system and the Next Century sub metering system. The sign at the door says "ELECTRICAL/BATTERY".

Each residential meter has CW and HW metering as required by code, with a read out in the apartment.

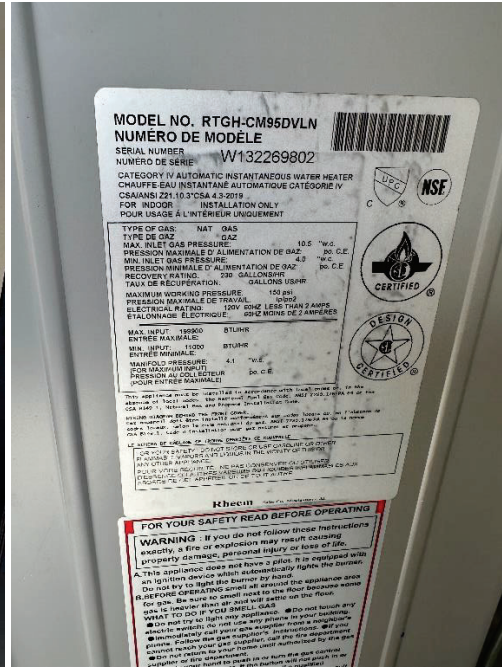
**Recommended:** Complete the hot water pipe insulation, with 1" thick insulation on pipes 1" diameter and under, and 1-1/2" thick insulation on pipes larger than 1" diameter. Be sure all insulation joints are tight and fastened.

Verify the floor drain connection, install cover on floor drain.

Replace door sign with "HOT WATER HEATER, WATER METERING & ERRCS".

Regular tankless water heater maintenance includes descaling the heaters with acid solution. Follow manufacturers instructions and recommended intervals, plan and schedule descaling the heaters.

Contract a full maintenance and retro-commissioning of the hot water and preheat system. Test the delivery time for hot water to apartments that are the most remote connections to the system. Hot water should reach 105F to 115F within 20seconds of turning on any hot water faucet.



### Commercial Tenant Space

The commercial tenant space did not have plumbing fixtures installed. Water and under-slab sanitary sewer stub outs and toilet flanges were observed.

## Residential Units

Each apartment had a kitchen sink with garbage disposal, a drop-in vanity lavatory, tank-type toilet, bathtub/shower, and in-unit washer/dryer combo. The ones we observed operate correctly. One residential unit we observed during the site walk had a dishwasher, but the drawings show dishwashers were planned for all residential units.

**Recommended:** No plumbing fixtures scheduled on drawings, confirm that the installed plumbing fixtures meet or exceed code required low flow rates. Check which apartments do not have a dishwasher installed.



## FIRE PROTECTION

The building is provided with a NFPA-13 complete coverage fire sprinkler system and a building fire alarm system as well as standalone required smoke detectors in each unit. There are concealed sprinklers in the apartments.

The detector check valve, fire sprinkler control riser, drain valve, hub drain and floor sink with trap primer are located on the ground floor in the commercial tenant space.

## FIRE ALARM

The fire alarm system is a Honeywell Model IFP-300 Farenhyt Series. The roof DWH room has the emergency communication equipment and the ERRCS system panels. The main electrical room also has the ERRCS annunciator panel.

**Recommend:** There is a smoke detector in the Water heater room that has duct tape covering it – remove duct tape and test the smoke detector unit.

