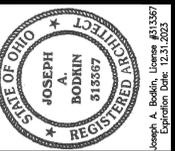


# The Formica Building

120 E. 4th Street  
Cincinnati Ohio 45202

## Roof Clubhouse & Terrace

Architectural Permit Set  
10.02.2023

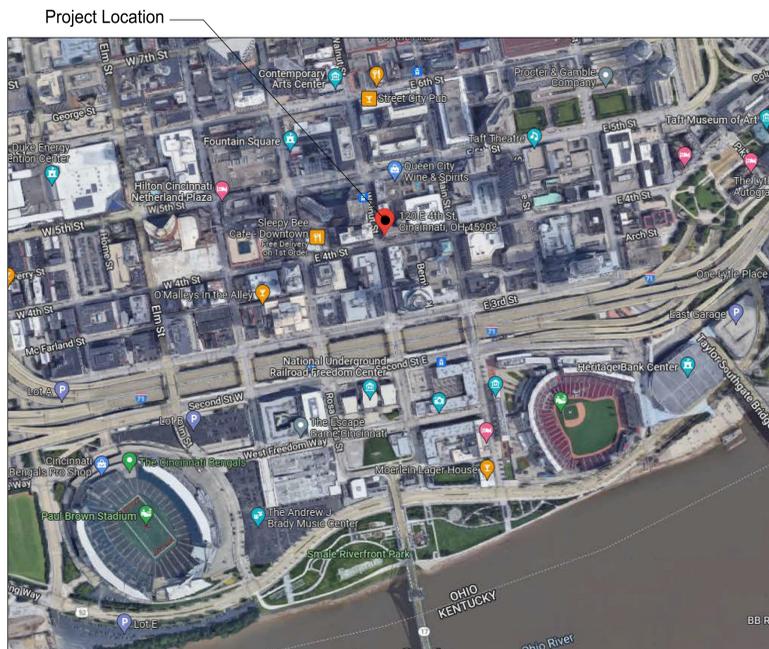


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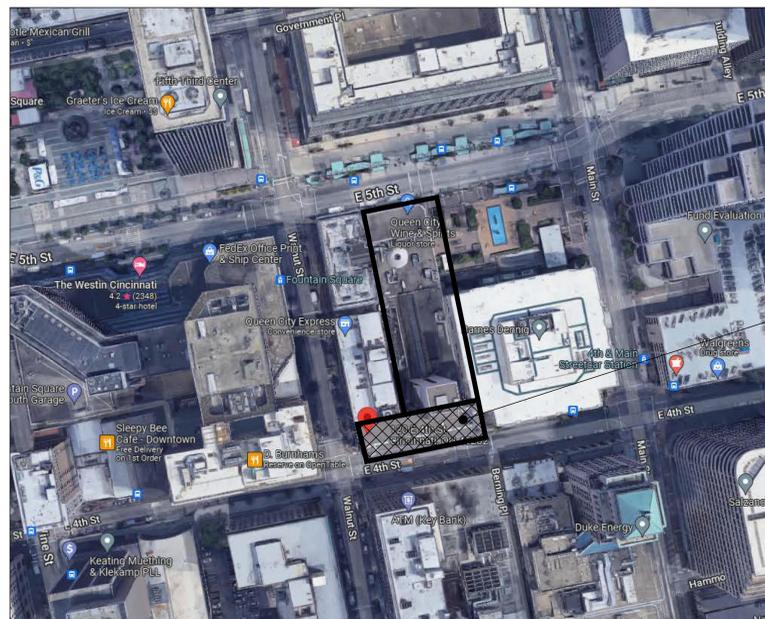
**Formica Building**  
Tenant Roof Club Room & Terrace  
120 e 4th street  
Cincinnati OH 45202

Owner	Project Architect	Structural Engineer	Historic Consultant	Code Consultant	Contractor	Interiors
MCA, LLC 1826 Race Street Cincinnati Ohio 45202	The Model Group 1826 Race Street Cincinnati, Ohio 45202	Advantage Structural Engineers 1527 Madison Road Cincinnati, Ohio 45206	Common Bond Consulting, LLC 4232 Florida Ave. Cincinnati, Ohio 45223	Dabdoub & Associates, LLC 7357 E. Kemper Rd, Suite A Cincinnati, Ohio 45249	Model Construction 1826 Race Street Cincinnati, Ohio 45202	Indio 1208 Sycamore Street Cincinnati, Ohio 45202

### LOCATION MAP



### VICINITY MAP



### PROJECT INFORMATION

#### PROJECT SCOPE:

PROJECT IS THE CONVERSION OF AN EXISTING 1460SF MECHANICAL ROOM/FLOOR INTO A 1100SF TENANT CLUB ROOM WITH ACCESS TO A 2350SF ROOF TERRACE. THE CLUB ROOM AND DECK ARE FOR RESIDENTS ONLY.

NOTE: ALL MECHANICAL, PLUMBING, ELECTRICAL, FIRE SUPPRESSION, ALARM SYSTEMS ARE DESIGN/BUILD

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Project	Formica Building: Roof Club Room & Terrace	Date	
120 E 4th Street	No. Revisions		
Cincinnati, Ohio 45202			
Sheet	TS-14	Scale	As Noted
Construction	Model Group	Drawn	
Project No.	2022-259-E	Issued for Permit	10.02.2023
Scale	As Noted	Checked	

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# GENERAL NOTES

- All Mechanical, Electrical, Plumbing, Sprinkler, Fire Alarms (MEPS) are Design Build and under the General Contractor (GC).
- It is the General Contractor's responsibility to adhere to the Submitted/Approved National Park Service (NPS) Historic Part 2's for this project. This includes all requirements for HVAC, Electric, Plumbing, Sprinkler systems as well. These are to be a part of the MEPS contracts. GC is to review with the architect if any of the Part 2 is unclear. ALL MEPS for this project are to be concealed.
- Contractor shall comply with all applicable Local, State, and Federal Building Codes. Contractor is responsible for verifying requirements prior to installing work. All Federal, State And Local Codes, Ordinances, and Regulations; Etc. shall be considered as part of the Specifications of this building; and are to be adhered to even if they are in variance with the plan.
- All wood used in this building is to be FRT.
- The following outlines the general qualities of the work expected. All materials used are required to be good quality and meet or exceed all applicable industry standards. Where specific products or manufacturers are not noted, the Contractor is required to notify Architect to obtain a standard of quality.
- All work is to be done with the appropriate tools and materials. The Architect or Owner has the right to reject any work not done appropriately.
- The Contractor may elect to offer opinions, advice or alternate materials or details. All will be reviewed and discussed with the Owner/Architect to determine merits. Any savings of materials or details will be credited to the Owner, while any additions, billed to the Owner.
- The Contractor is responsible for the installation and removal of all temporary services required during the work. Energy bills for electricity and temporary heat, and water usage bills are to be paid for by the Owner.
- In accordance with generally accepted construction practices, the Contractor shall be solely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. When on site, the Owner & Architect are responsible for their own safety but has no responsibility for the safety of other personal safety conditions at the site. Provide and maintain all necessary temporary barricades, shoring and lighting. Contractor is to erect dust barricades to protect occupied areas of the building during demolition and construction. Coordinate with Owner for approval of barrier locations prior to erection of barriers. Building will be occupied during construction. Maintain access to all egress routes and exits.
- If, in the Contractor's opinion, any work is indicated on the drawings or is specified in such a manner as will make it impossible to produce first class work, or if the work of a previous trade should make first class work impossible for another trade, the Contractor shall refer the problem to the Architect for interpretation before proceeding with the work. All dimensions on the drawings are to be confirmed by the Contractor. Any discrepancies are to be resolved by Architect prior to execution of work.
- The Contractor is responsible for obtaining and paying all fees, permits, licenses, and inspections including Health Department & MSD applications/permits for the MEPS work.
- Remove all unused materials, trash debris, tools and equipment from the site on a daily basis.
- The Contractor is responsible for obtaining and maintaining liability insurance and worker's compensation. File Certificates with owner prior to commencing work.
- The Contractor is responsible for all security of their materials, equipment and tools.
- All cutting, patching, fire-stopping, refinishing and repainting of all work is the responsibility of the Contractor.
- All work shall be warranted for a minimum period of one year from the date of substantial completion. Provide longer warranties where specified for individual components. Contractor to assemble an Owner's Manual containing all product & warranty info and turn over a hard and electronic copy to the Owner.
- The Contractor is to protect all finished surfaces from dirt and damage until final acceptance by Owner. Materials damaged during construction are to be repaired/replaced at contractor's cost to the satisfaction of the Owner.
- Substitutions of specified materials are to be approved by Owner/Architect prior to executing work. Substitutions installed prior to receiving approval in writing are performed at the Contractor's risk.
- Provide and install all necessary and required draft stopping, fire stopping, fire blocking, etc. in order to meet the building code.
- All systems are to be installed neatly, orderly and in a workmanlike manner. Verify clearances and coordinate the work of all trades including ducts and lights. In case of conflict, notify Owner/Architect for resolution prior to installation. All devices are to be arranged logically (i.e. centered, aligned horizontally/vertically). All final device locations are to be coordinated with Owner on site prior to installation. All electrical, plumbing and HVAC runs are to be concealed.
- Contractor is to coordinate all MEPS drawings with the architectural plans.
- Performing work means acceptance of existing conditions and substrate work and this set of drawings and specifications. Do no work until conditions are acceptable.
- Contractor is to coordinate with Owner for use of dumpster or schedule for placing separate dumpster in location designated by Owner.
- Contractor is to provide Owner with a list of subcontractors and personnel to be on site during the work.
- Contractor is to submit SDS sheets for all materials used in construction to the Owner.
- Perform final cleaning at the end of each phase of work. Remove all trash and debris from the site. Wash all tile, laminate and glass surfaces, plumbing fixtures, etc. Dust and sweep to remove all dirt. Remove all temporary labels. Project is to be completed, clean and in move-in condition.
- The Contractor is to maintain record documents on ProCore throughout the course of the work. Note all changes on drawings and provide an electronic copy of As-Built Drawings to the Owner. ProCore Software is by the Contractor.
- Upon acceptance of the contract, the Contractor is to prepare a schedule for the proposed work. This schedule must be reviewed and accepted by the Owner. All long order items must be called to Owner's attention as soon as possible.
- Contractor shall verify all information and dimensions in these drawings. Contractor shall verify all existing conditions, including existing building and site conditions. Any errors, omissions, and inconsistencies are to be reported to the Architect before proceeding with the work. Failure to do so will release the Architect of all responsibility. Any changes from these documents are the responsibility of the Contractor. Drawings are not to be scaled. If insufficient information exists, contact the Architect for clarification before proceeding with work.
- Architect/Owner shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor.
- Contractor is responsible for bracing the structure as required to maintain structural stability until complete and functioning as the designed unit.
- Lighting shown for placement reference only. Design/Build Electrical contractor to install all electric per local/state code and responsible for all permits, electrical drawings and fees. Electrical plans are to be reviewed and coordinated with the Owner prior to submitting for permits.
- The contractor is solely and completely responsible for verifying that all construction is completed to provide a watertight structure. The architect shall have no responsibility for such issues or resulting damages caused by water infiltration.
- The plans and specifications are "Design Intent" drawings and not intended to depict each and every detail.

## MEPS:

- All Sprinkler, Fire Alarm, HVAC, Electric, and Plumbing work will be Design/Build (D/B) and are under separate permits and by each of the SubContractors. The D/B contracts are held under the General Contractor.
- Contractor is responsible for verifying & providing adequate services to the new space.
- Contractor is responsible for installing all new sprinkler, ductwork, electric, plumbing and related services for the entire project.
- Provide shop drawings, submittals, samples, etc. for all Lighting and Plumbing components for approval by Owner prior to installation. Installing prior to receiving written approval are performed at contractor's risk.
- The MEPS contractors are responsible for adhering to the Submitted/Approved National Park Service (NPS) Historic Part 2's for this project.

## SECTION 01000 GENERAL CONDITIONS

### 1.1 CONTRACT RESPONSIBILITIES

The AIA document A201 General Conditions, current edition, shall apply to the project. A copy is available from the Architect.

### 1.2 FIELD CONDITIONS

A. The General Contractor (GC) is to verify all dimensions and field conditions in compliance with overall wall dimensions, ceiling heights, conditions of ceilings, capacity of electrical systems, interference such as existing duct work, HVAC equipment, sprinkler lines and mains, roof down-spouts, electrical equipment or other obstructions which will come in conflict with the new construction. The G.C. shall notify the Owner/Architect in written form of any variances prior to commencing work. Failure to report discrepancies shall make any costs incurred arising from the conditions the sole responsibility of the Contractor. Any hidden or uncovered conditions shall be reported in the same manner and with the same restrictions.

B. The G.C. shall verify size and location of all floor, roof and wall penetrations, equipment etc. and coordinate with mechanical, electrical, plumbing, sprinkler engineers.

C. Prior to excavation or trenching the G.C. shall determine and verify location of utility services in all areas to be excavated.

D. The G.C. shall coordinate all millwork installation with electrical, plumbing and mechanical work.

### 1.3 FIELD REVISIONS

A. If any substitutions are proposed and approved for specific equipment, the G.C. and his subcontractors shall be responsible for all coordination including HVAC, electrical, plumbing & sprinkler.

B. All materials specified are to be installed in accordance with manufactures instructions and specifications. The G.C. is to construct the project in accordance with the documents. Any deviations from the intent of the documents without the Owner's written approval is at the contractor's own risk and may result in the work being redone at the contractor's expense.

C. In the event that the quality or grade of material or work is not clearly specified, The G.C. shall request clarification from the Architect. Under no circumstances shall the contractors shall assume grade or quality.

D. In the event when the discrepancy occurs from one drawing or specification to another, the general quality or higher quality shall prevail.

### 1.4 PERMITTING / CODE COMPLIANCE

A. The G.C. and or their subcontractors shall apply and pay for all MEPS permits that involve drawing submittal and processing (i.e. HVAC, electrical, sprinkler, and plumbing). Architectural permits are by the Owner.

B. The G.C. shall assure that all work is done in accordance with all applicable national, state and local codes, ordinances and requirements by governing agencies, whether or not said codes, ordinances, requirements, etc. are specifically shown on drawings and or specifications.

C. Construction materials, assemblies and procedures are to comply with all applicable codes and supplementary ordinances. When a conflict occurs between such codes and information shown on the drawings, the G.C. shall consult with the Architect for resolution prior to commencing work.

D. The G.C. shall be responsible for scheduling inspections by code officials and shall pay inspection fees associated with the work.

### 1.5 G.C. / COORDINATION

A. The G.C. is to become familiar with the owner criteria, special working conditions pertaining to barricades, noise, dust, trash removal, etc. and shall coordinate with Owner. Any work which is required to take place at night or during off hours shall be verified with the Owner. Any associated costs shall be included in the bid.

B. The G.C. shall be responsible for the cost of any damage arising from their work.

C. The contractor shall provide a storefront barricade that shall be erected in accordance with all applicable regulations. Verify with owner. In addition, the G.C. shall provide any safety or warning devices required to protect the public from any damage arising from the contractors' work. Site security is the responsibility of the G.C.

D. The G.C. shall provide a dumpster or other trash device as required and shall coordinate with the Owner and City for location. G.C. to obtain permit for dumpster.

### 1.6 MATERIAL HANDLING

NOT USED

### 1.7 GENERAL CONSTRUCTION

A. Each contractor shall be responsible for repair of damage to the work of other trades caused by his operations. The nature of such repair work must receive the prior approval of the owner's representative.

### 1.8 PROJECT CLEAN UP / COMPLETION

A. The G.C. shall be responsible for overall construction site cleanliness, including provisions of a dumpster with weekly servicing, removal of all contractor/subcontractor refuse and debris and sweeping of the entire site at the completion of the work.

B. The premises shall be turned over clear of all debris, packing, boxes, wrappings and excess materials and left in broom swept condition.

C. All mirrors and glass are to be cleaned of protective pads, mastics and markings.

D. All electrical panels and breakers are to be properly marked with type written labels.

### SECTION 02850.300 SELECTIVE DEMOLITION

#### PART 1 - GENERAL

A. Materials Ownership: Except for items or materials indicated to be reused, salvaged, reinstalled or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

B. Storage or sale of removed items or materials on-site will not be permitted

C. Existing warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during selective demolition by methods and with materials so as not to void existing warranties.

#### PART 2 - PRODUCTS

A. Repair Materials: Use repair materials identical to the existing materials.  
1. If identical materials are unavailable or cannot be used for exposed surfaces use materials that visually match existing adjacent surfaces to the fullest extent possible.

B. Use materials of which installed performance equals or surpasses that of existing materials.

#### PART 3 - EXECUTION

A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

B. When unanticipated mechanical, electrical, plumbing, sprinkler or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to the Owner.

C. Where required The GC is to engage a professional structural engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

D. Perform surveys as the work progresses to detect hazards resulting from selective demolition activities.

E. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations, i.e. Telephone Service Lines.

F. Utility Requirements: Locate, identify, disconnect, shut off and seal or cap off indicated utilities serving areas to be selectively demolished.

G. If utility services are required to be removed, relocated or abandoned before proceeding with selective demolition provide temporary utilities that bypass areas of selective demolition and will maintain continuity of service to other parts of the building or adjacent buildings.



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# Formica Building

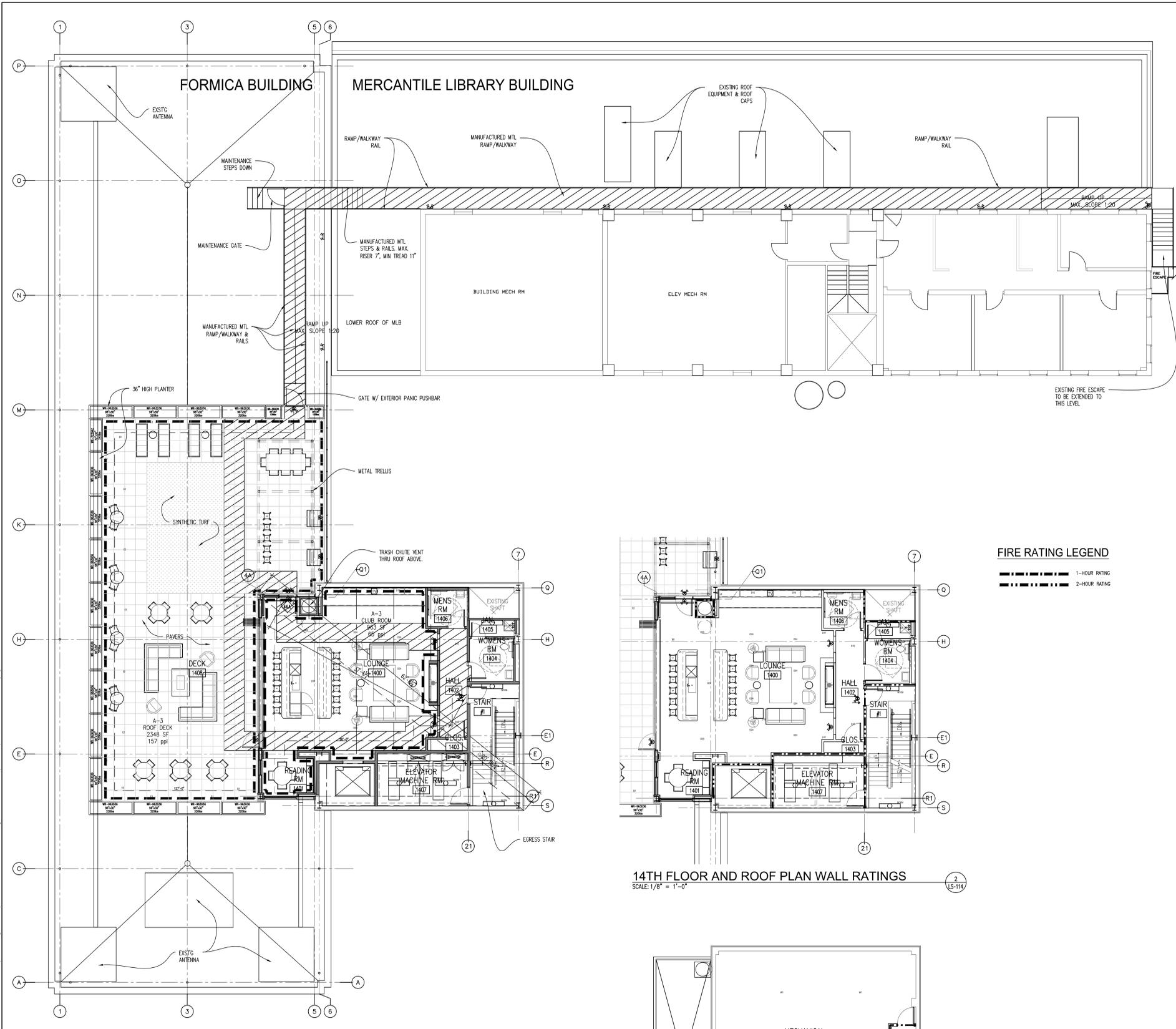
## Tenant Roof Club Room & Terrace

120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date
Address	120 E 4th Street	
City/State	Cincinnati, Ohio - 45202	
Sheet	Final Floor Plan	
Scale	As Constructed	
Project No.	2022_259_E	Issue Date
Scale	As Noted	Issued for Permit 10.02.2023
Drawn		Checked

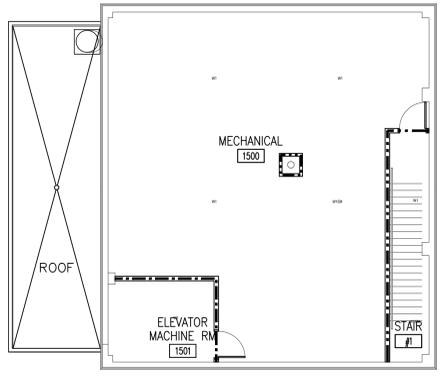
# GN-14





14TH FLOOR AND ROOF PLAN  
SCALE: 1/8" = 1'-0"

14TH FLOOR AND ROOF PLAN WALL RATINGS  
SCALE: 1/8" = 1'-0"



15TH FLOOR AND ROOF PLAN WALL RATINGS  
SCALE: 1/8" = 1'-0"

**FIRE RATING LEGEND**  
 - - - - - 1-HOUR RATING  
 ······· 2-HOUR RATING

**CODE SUMMARY**

**The Formica Building - Roof Top Room Deck**  
 120 E 4th Street  
 Cincinnati, Ohio 45202

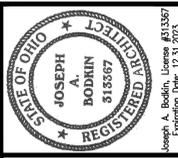
09.27.2023

Project description: PROJECT IS THE CONVERSION OF AN EXISTING 1460sf MECHANICAL ROOM/FLOOR INTO A 1100sf TENANT CLUB ROOM WITH ACCESS TO A 2350sf ROOF TERRACE. EGRESS WILL BE THROUGH AND EXISTING INTERNAL FIRE STAIR AND FIRE ESCAPE ON MLB. AN EASEMENT IS WILL BE IN PLACE FOR ACCESS TO THE FIRE ESCAPE. THE ROOF CLUB ROOM & DECK ARE FOR RESIDENTS ONLY AND NOT OPEN TO THE PUBLIC.

Design code:	OBC 2017 (Based on IBC 2015)
Applicable regulations:	Ansi A117.1
Zoning Code:	TITLE XIV ZONING CODE OF THE CITY OF CINCINNATI
Applicable zoning district:	DD-A subdistrict
Maximum building height:	Allowable: 105' ASL, No change → (Existing building)
Minimum yard setbacks:	No change → (Existing building)
Building occupancy classification:	Existing Groups U, Proposed A-3
Mixed occupancy separations:	Yes
High-rise building:	Yes, 13th Floor 171' above 4th street
Type of Construction:	IA
Building height and areas	Allowable Existing & Proposed
Building area: 506.2	UL UL
Building height: 503.1.3/Table 504.3	UL UL
Building Stories: Table 504.4	UL UL
Area	
Total floor area (all 14 stories):	216,366 sf
	Existing Proposed
14th Floor	1408 sf 963 sf
Roof Deck	0 sf 2349 sf
Total	1408 sf 3311 sf
Fire suppression:	Yes - existing
Standpipes:	Yes - existing
Fire Alarm:	Yes - existing
Occupant loads:	
	Current Proposed Notes
Club Room	5 65 963sf/15sf = 65
Patho	0 157 2349sf/15sf = 157
Total	5 222 2348sf/15sf = 157
Maximum common path of travel:	A = 75' allowable
Table 1006.2.1	
Number exits required:	2 exits required, 2 exits provided.
1006.2.1	
Stair enclosure:	2hr - Existing to Remain & New
Stair Pressurization:	Yes
Maximum exit access travel distance:	Assembly 250-feet, table 1017.2
Stair width:	44-inches, existing
1009.3	
Corridors fire resistance rating:	N/A No corridors
Minimum corridor width:	N/A No corridors
Dead Ends	20 Feet, No Dead End
Exit and exit access door locations: 1007.1.1	(Separation distance, not less than 1/3 the overall diagonal of the area served)
1020.4	20'-11" Required, 37'-4" Provided
Finishes: Table 803.11	A3 Walls & Ceilings Class C Interior Stairways & Exits Class B Corridors Class B Rooms & Enclosed Spaces Class C Floors Class II Interior Trim Class C Vinyl Wall Covering Class A
804.4.2	
806.7	

**LEGEND**

- EMERGENCY HEADS
- ILLUMINATED EXIT SIGN
- COMBO EXIT SIGN/EMERGENCY LIGHT
- EMERGENCY LIGHT REMOTE HEAD
- SURFACE MOUNTED LED UTILITY LIGHT
- SURFACE MOUNTED LED UTILITY LIGHT W/ BATTERY BACKUP
- EXTERIOR EMERGENCY HEADS
- EXTERIOR EMERGENCY LIGHT POLE, TIE TO EMERGENCY POWER

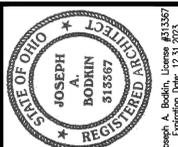


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**Formica Building**  
 Tenant Roof Club Room & Terrace  
 120 e 4th street  
 Cincinnati OH 45202

Project: Formica Building: Roof Club Room & Terrace  
 120 E 4th Street  
 Cincinnati, Ohio 45202  
 Scale: AS NOTED  
 Date: 10.02.2023  
 Issued for Permit  
 Project No: 2022\_259\_E  
 Scale: AS NOTED  
 Drawn: [Name]  
 Checked: [Name]





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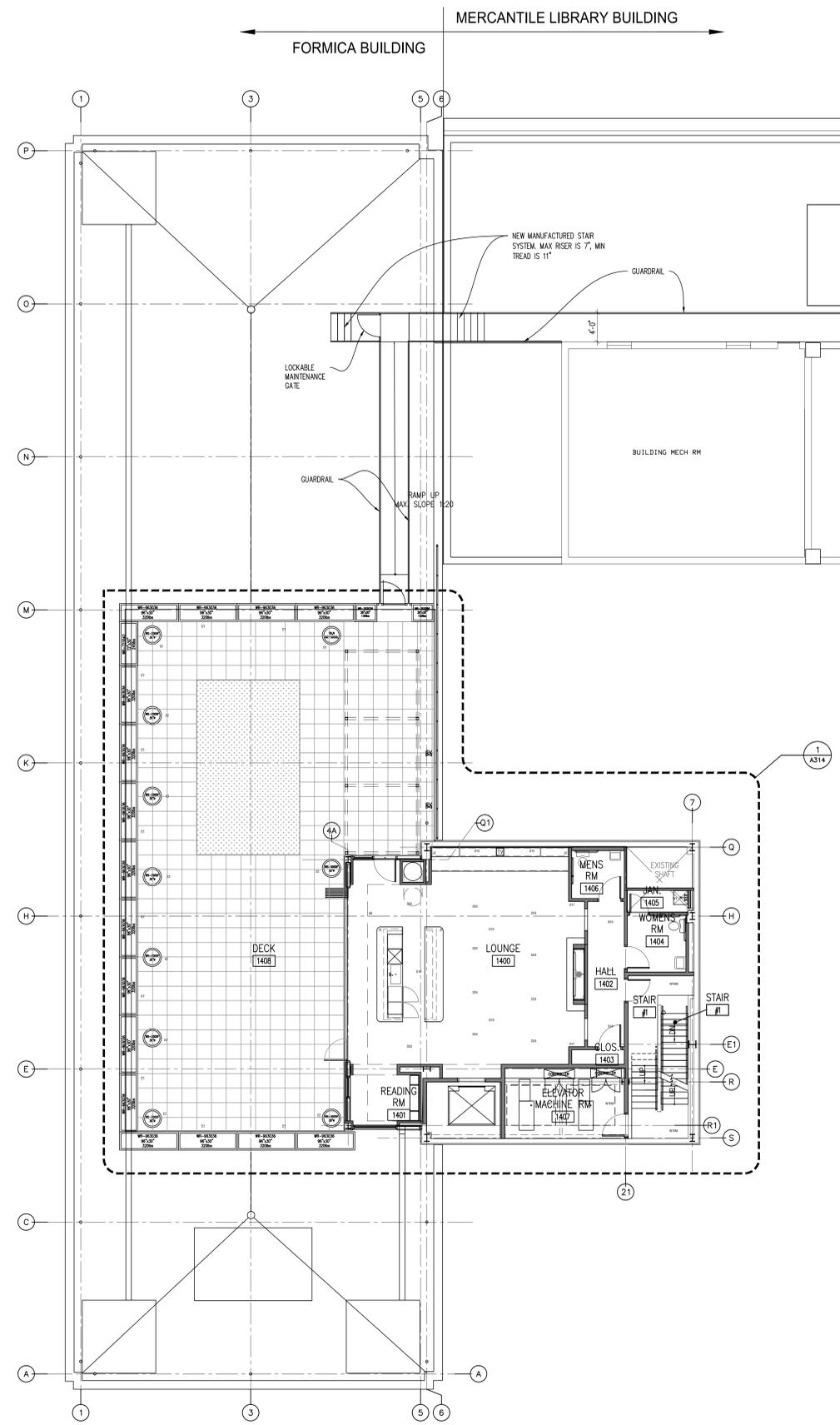
# Formica Building

## Tenant Roof Club Room & Terrace

120 e 4th street  
 Cincinnati OH 45202

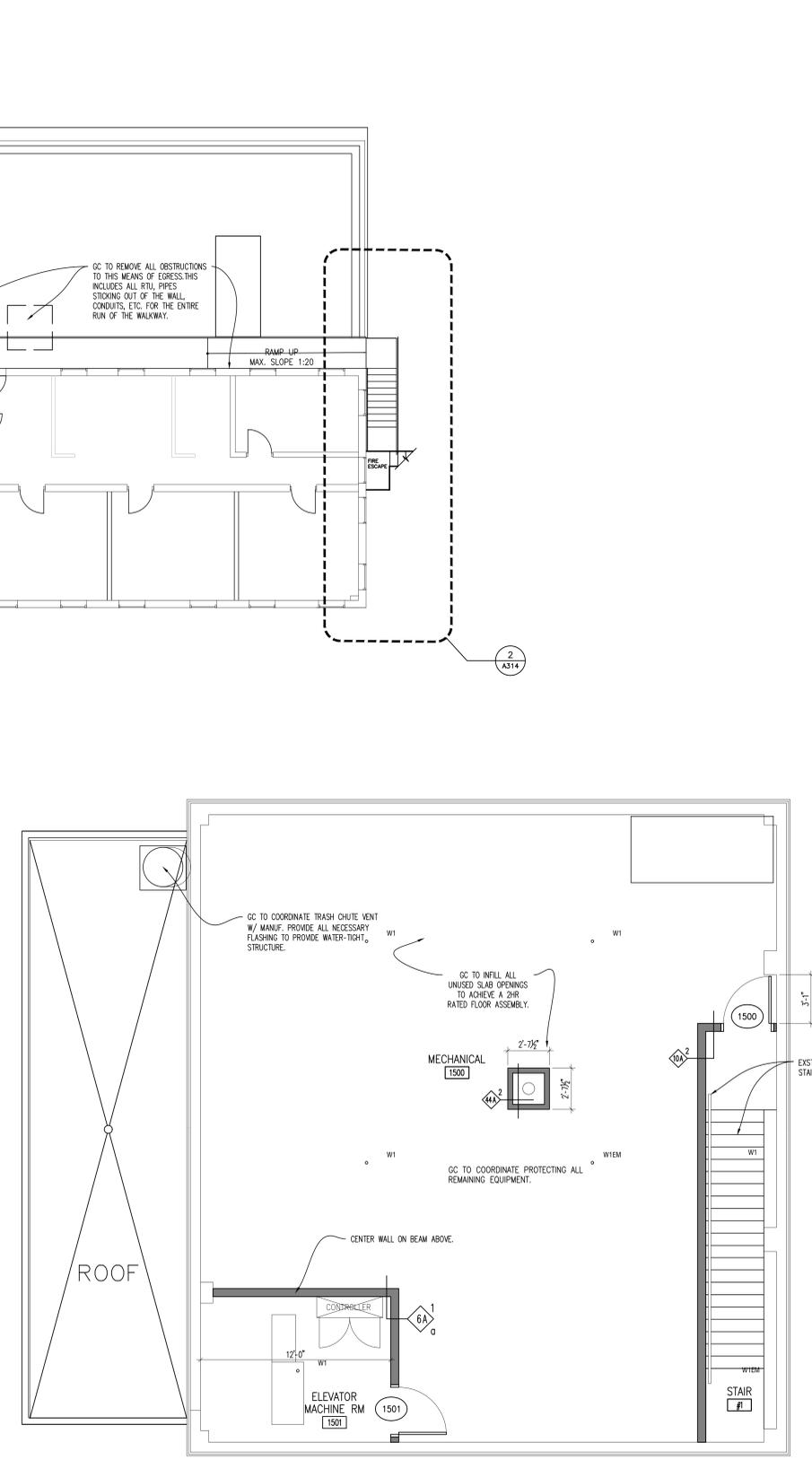
Project	Formica Building: Roof Club Room & Terrace	Date	
Location	120 E 4th Street	No. Revisions	
City	Cincinnati, Ohio 45202		
Client	ROOF DECK - CLUBHOUSE		
Construction	Construction	Issue Date	10.02.2023
Project No.	2022_259_E	Issued For Permit	
Scale	As Noted	Drawn	Checked

**A214**



**14TH FLOOR AND ROOF PLAN**  
 SCALE: 1/8" = 1'-0"

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A214

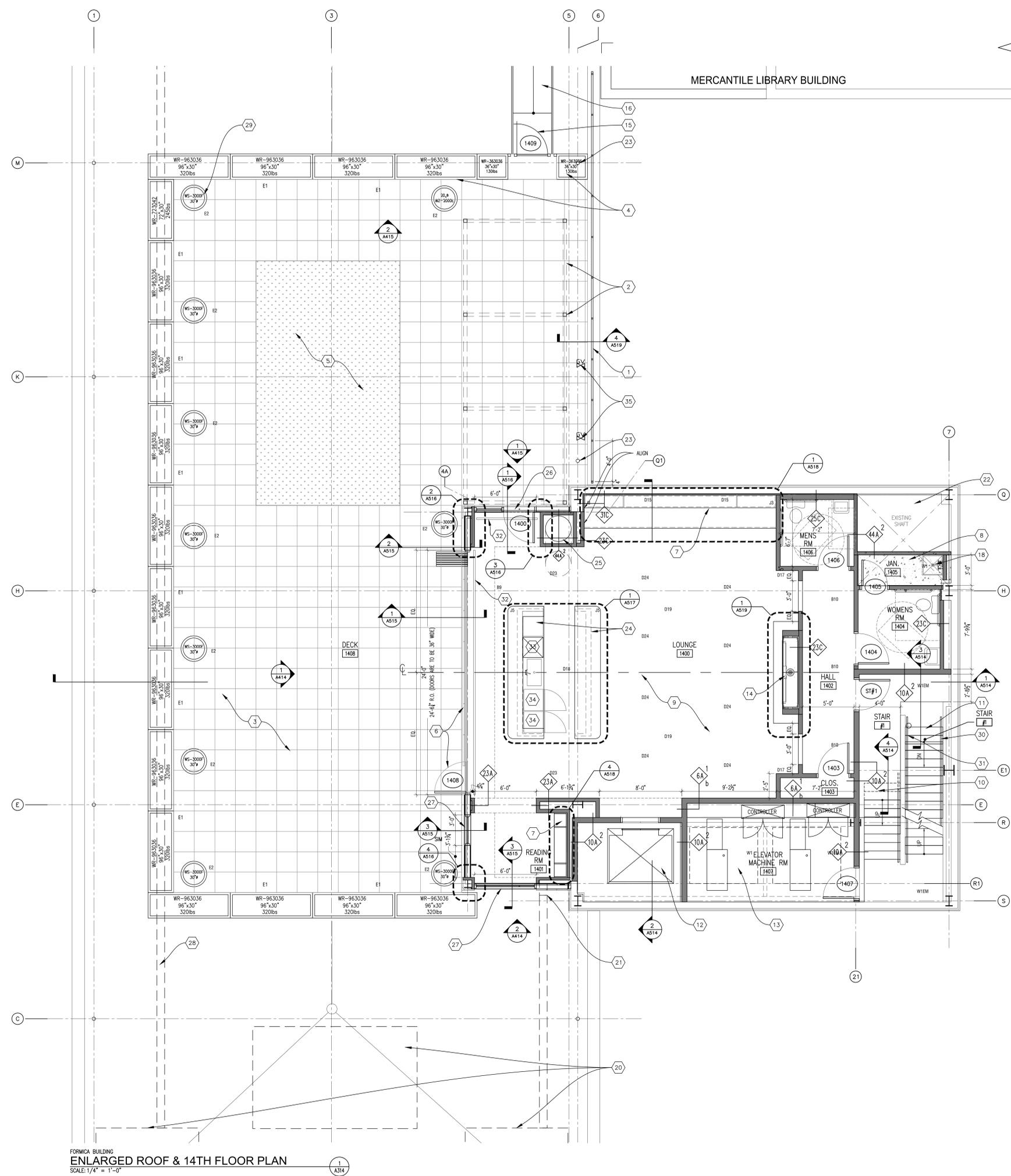


**15TH FLOOR AND ROOF PLAN**  
 SCALE: 1/4" = 1'-0"

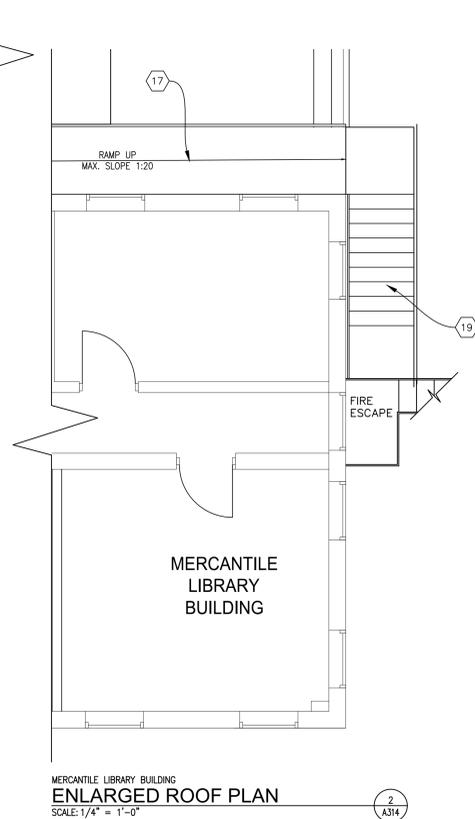
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A214

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FORMICA BUILDING  
ENLARGED ROOF & 14TH FLOOR PLAN  
SCALE: 1/4" = 1'-0"



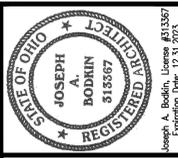
MERCANTILE LIBRARY BUILDING  
ENLARGED ROOF PLAN  
SCALE: 1/4" = 1'-0"

**GENERAL CONSTRUCTION NOTES:**

- A. ALL WALLS ARE TYPE 3 U.N.O.
- B. DRYWALL IS TO BE LEVEL 4 FINISH.
- C. ALL PAINTED METAL STAIR GUARDS & HANDRAILS ARE TO BE REPAIRED, CLEANED, PREPPED, PRIMED & PAINTED. U.N.O.
- D. ALL FR&E BY OWNER.
- E. REWORK SPRINKLERS AS REQUIRED FOR NEW WALLS & CEILINGS. SPRINKLER CONTRACTOR TO SUBMIT PERMITS FOR THEIR WORK. COORDINATE WITH ALL OTHER TRADES. ALL SPRINKLER LINES ARE TO BE CONCEALED. USE CONCEALED HEADS.
- F. ALL EXPOSED CONCRETE FLOORS THAT ARE TO REMAIN ARE TO BE CLEANED AND SEALED.
- G. ALL EXISTING EGRESS STAIRS ARE TO REMAIN FREE AND CLEAR.
- H. REPAIR ANY DAMAGE DONE TO THE WALLS THAT AFFECT IT'S RATING. ALL SPRAY-ON FIREPROOFING IS TO REMAIN. ANY DAMAGED FIREPROOFING IS TO BE REPAIRED/REPLACED TO AN EQUIVALENT FIRE RATING.
- I. ALL APPLIANCES ARE TO BE ELECTRIC.
- J. ALL DUCTS ARE TO BE CONCEALED.
- K. ANY DUCTS PENETRATING RATED ASSEMBLIES WILL HAVE FIRE DAMPERS OR MEETS MECHANICAL & BUILDING CODES.
- L. GC IS RESPONSIBLE FOR COORDINATING ALL ELECTRIC & GAS REQUIREMENTS AND CONSTRUCTION TYPE.
- M. ALL EXISTING SLAB PENETRATIONS ARE TO BE IN-FILLED TO MATCH ADJACENT MATERIALS AND CONSTRUCTION TYPE.
- N. ANY CONC WALLS OR CURBS THAT WILL INTERFERE WITH THE RAISED PLATFORM NEEDS TO BE REMOVED TO ALLOW FOR THE NEW FLOORING SYSTEM.
- O. ANY WORK THAT CONFLICTS WITH THE EXISTING ANTENNA SYSTEM NEEDS TO BE COORDINATED WITH ANTENNA COMPANY THROUGH THE BUILDING OWNERS REPRESENTATIVE PRIOR TO ANY WORK BEING PERFORMED.
- P. EXIST'G STONE COPING TO REMAIN. GC TO INSPECT AND REPAIR ANY LOOSE COPING AND REPLACE CAULKING AS REQ'D FOR WATER-TIGHTNESS. TYP OF ALL.
- Q. EXIST'G ROOF TO REMAIN. GC TO INSPECT AND REPAIR AS REQ'D FOR WATER-TIGHTNESS.
- R. ANY WOOD BLOCKING, FRAMING, ETC IS REQ'D TO BE FRIT AND IDENTIFIED ACCORDINGLY. USE METAL STUDS WHERE POSSIBLE.
- S. USE MIN 20GA MIL INTERIOR FRAMING STUDS.
- T. GC TO COORDINATE WITH FRAMING CONTRACTOR ON REQUIREMENTS FOR EXTRA LONG STUDS. THESE MAY REQUIRE A HEAVY GAUGE STUD OR MD SPAN SUPPORTS.
- U. FOR FINISHES/PLUMBING FIXTURES/LIGHT FIXTURES SEE ROOF TOP INTERIORS PACKAGE.
- V. SEE A914 FOR FURNITURE/FINISH PLAN.

**CONSTRUCTION PLAN NOTES:**

1. GUARD RAIL. SEE SECTION DETAIL 4/A519
2. MANUFACTURED PERGOLA. B.O.D. LOUVERED PERGOLA BY STRUXURE OUTDOOR. <https://www.cincinnati-pergola.com/struxure-outdoor.html>. ENGINEERING AND CONNECTIONS ARE TO BE BY PERGOLA MANUFACTURER. COLOR & STYLE ARE TO BE SELECTED BY INTERIOR DESIGNER/OWNER. GC TO COORD AND AND ALL POWER REQUIREMENTS. MANUFACTURER IS RESPONSIBLE FOR OBTAINING PERMITS FOR THE PERGOLA.
3. PAVERS: B.O.D. MANUF TILE-TECH, PORCE-PAVE, 24"x24". COLOR TO BE SELECTED BY INTERIOR DESIGNER/OWNER. INSTALL ON TILE-TECH HYBRID PEDESTAL SYSTEM.
4. PLANTERS: B.O.D. MANUF JOURNESOL SITE WORKS. SEE PLAN FOR SIZE AND TYPE. INSTALLED ON TOP OF EXIST'G ROOF. PROVIDE RUBBER MAT PROTECTION UNDER PLANTER. INSTALL LEVELING SPACERS AS REQUIRED TO MAINTAIN LEVEL. INSTALLATION. TYP OF ALL SYNTHETIC TURF: B.O.D. MANUF TILE-TECH, SYNTHETIC TURF SYSTEM. INSTALL ON TILE-TECH HYBRID PEDESTAL SYSTEM. TURF TO BE SELECTED BY INTERIOR DESIGNER/OWNER.
5. WIDE WINDOW WALL SYSTEM. SEE WALL SECTIONS, INTERIOR ELEVATIONS & FINISH SCHEDULES. DOORS MUST BE 36" WIDE MIN.
6. MILLWORK: SEE INTERIOR ELEVATIONS
7. INFIL SHAFT WITH CONCRETE FLOOR TO MATCH ADJACENT SLAB. SEE STRUCTURAL DWGS.
8. TILE ON RAISED FLOOR OVER ENTIRE EXIST'G SLAB & CURBS. SEE WALL SECTIONS & FINISH DWGS. SEE STRUCTURAL FOR FLOOR DETAILS.
9. INSTALL FLOOR OVER EXIST'G STEPS. SEE SECTION DETAILS
10. ADD STEPS FOR NEW RAISED FLOOR. SEE SECTION DETAILS
11. EXTEND ELEVATOR TO THIS FLOOR.
12. EXIST'G MACHINE ROOM EQUIPMENT TO BE MODIFIED AS REQ'D FOR NEW LAYOUT. REWORK METAL FLOOR EXTENSION AS REQ'D.
13. GAS FIREPLACE: B.O.D. MANUF HEAT&GO, MCZ072. INSTALL PER MANUF INSTRUCTIONS. VENT UP THROUGH ROOF ON FLOOR 15.
14. EXTERIOR GATE TO FIRE ESCAPE. SEE DOOR SCHED.
15. PRE-MANUFACTURED RAMP/GUARD RAIL EGRESS PATH. B.O.D. KEE WALK SYSTEM.
16. WALKWAY & RAIL: B.O.D. MANUF KEE WALK SYSTEM, 4' WIDE. PROVIDE AND INSTALL FLOOR MOUNTED MOP SINK & FAUCETS.
17. EXIST'G FIRE ESCAPE TO BE EXTENDED TO ROOF AT THIS LOCATION. FIRE ESCAPE TO BE EXT. CITY OF CINCINNATI FIRE ESCAPE REQUIREMENTS.
18. EXIST'G ANTENNAS TO REMAIN AND BE PROTECTED.
19. ANTENNA CONDUIT INTO BUILDING LOCATION. PROTECT AT ALL TIMES.
20. EXIST'G SHAFT TO REMAIN.
21. CUT OFF WINDOW WASH DAVIT BELOW THE PAVERS. CAP PIPE. COORDINATE WITH OWNER.
22. BIR: SEE INTERIOR ELEVATIONS & FFE PLANS FOR ADDL DETAILS
23. 30" TRASH CHUTE ENCLOSURE AND DUCT VENT TO ROOF. OFFSET VENT FROM BELOW TO THIS LOCATION. GC TO MODIFY THE VENT DUCT AS NECESSARY THROUGH THE ROOF.
24. DOOR/WINDOW SYSTEM: SEE WALL SECTIONS, INTERIOR ELEVATIONS & FINISH SCHEDULES. DOOR MUST BE 36" WIDE MIN.
25. FIXED WINDOW: SEE WALL SECTIONS, INTERIOR ELEVATIONS & FINISH SCHEDULES.
26. GC TO COORDINATE ANTENNA DUCT RUNS WITH OWNERSHIP IF THESE LINES NEED TO BE RELOCATED FOR DECK & PLANTERS.
27. TREE PLANTERS: B.O.D. MANUF JOURNESOL SITE WORKS. SEE PLAN FOR SIZE AND TYPE. INSTALLED ON TOP OF PAVERS. AREA UNDER PAVERS MUST BE BLOCKED DOWN TO ROOF TO SUPPORT THE WEIGHT OF THE PLANTERS WHEN FULL OF SOIL & TREES PLANTED. TYPICAL OF TEN (10)
28. INSTALL NEW CODE COMPLIANT HANDRAIL ON OUTBOARD WALL.
29. REWORK EXIST'G HANDRAIL FOR ALTERED STAIRS DUE TO THE NEW RAISED FLOOR.
30. FLOOR DRAIN. SEE SECTION DETAILS FOR ADDL INFO.
31. DISHWASHER: B.O.D. - GE PDP715SVPS
32. BEVERAGE COOLER: B.O.D. - ZEPHR PREPAC010C.
33. PROVIDE GAS GRILL HOOK UP. TYP FOR TWO (2) LOCATIONS. GC TO COORDINATE TYPE & SIZE OF GAS LINE WITH OWNER PROVIDED GRILL. COORDINATE GRILL LOCATION WITH FINISH PLAN/OWNER.



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# Formica Building

## Tenant Roof Club Room & Terrace

120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	45202	Revisions	
City	Cincinnati, Ohio		
Site	120 E 4th Street		
Plan	ENLARGED PLAN		
Scale	AS NOTED		
Project No.	2022_259_E	Permit Issued For	Permit 10.02.2023
Scale	AS NOTED	Drawn	Checked

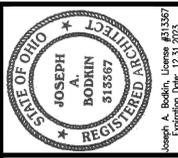
**A314**

**GENERAL EXTERIOR ELEVATION  
CONSTRUCTION NOTES:**

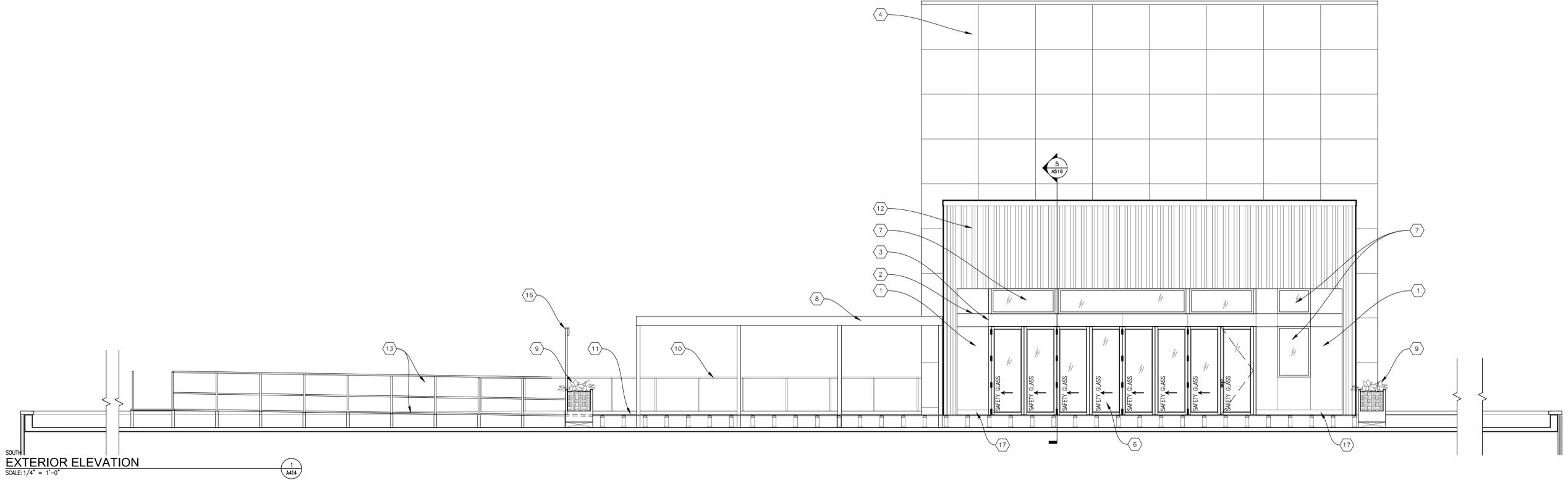
- A. ALL FF&E/PLANTS ARE BY OWNER.
- B. ANY WORK THAT CONFLICTS WITH THE EXISTING ANTENNA SYSTEM NEEDS TO BE COORDINATED WITH ANTENNA COMPANY THROUGH THE BUILDING OWNERS REPRESENTATIVE PRIOR TO ANY WORK BEING PERFORMED.
- C. EXIST'G STONE & METAL COPINGS ARE TO REMAIN. GC TO INSPECT AND REPAIR ANY LOOSE/DEFECTIVE COPING/FLASHING/CAULKING AND REPLACE AS REQ'D FOR WATER-TIGHTNESS, TYP OF ALL.

**EXTERIOR ELEVATION CONSTRUCTION NOTES:**

- 1. CEMENT PANEL: SEE WALL SECTIONS
- 2. HORIZONTAL JOINT: SEE WALL SECTIONS
- 3. VERTICAL REGLET: MANUF FRY, TYPE V8 T-PIECE
- 4. EXIST'G STONE VENEER TO REMAIN. GC TO INSPECT FOR TIGHTNESS.
- 5. MODIFY MTL PANELS AS REQUIRED FOR NEW DOOR & WINDOW OPENING
- 6. NEW WINDOW WALL SYSTEM ON EXIST'G LOWER GRN'G
- 7. NEW FIXED WINDOW. SEE WALL SECTION FOR ADD'L INFORMATION.
- 8. NEW PERGOLA: SEE PLAN FOR ADD'L INFORMATION.
- 9. NEW PLANTER: SEE PLAN FOR ADD'L INFORMATION.
- 10. NEW GUARD RAIL: SEE DETAILS FOR ADD'L INFORMATION.
- 11. NEW PAVER & TURF SYSTEM: SEE PLAN FOR ADD'L INFORMATION.
- 12. EXIST'G INSULATED METAL PANELS ARE TO REMAIN. SCRAPE, PREP, PRIME & PAINT. COLOR TBD. USE ONLY PAINT & PRIMER MADE FOR THIS TYPE OF METAL.
- 13. PRE-MANUFACTURED MTL RAMP & RAIL SYSTEM. SEE PLAN FOR ADD'L INFORMATION.
- 14. ANTENNA CONDUIT LOCATION. PROTECT AT ALL TIMES.
- 15. MODIFY MTL PANELS AS REQUIRED FOR NEW WINDOW OPENING
- 16. STEEL EMERGENCY EXIT GATE & FRAME W/ PANIC HARDWARE, EXTERIOR SPRING CLOSERS & EXIT SIGN. FASTEN TO EXIST'G CONC DECK. GC PROVIDE & INSTALL FLASHING AS REQ'D TO PROVIDE WATER-TIGHT CONNECTION. GC TO COORDINATE SIGN POWER REQUIREMENTS WITH ELECTRIC SUBCONTRACTOR.
- 17. SEE DOOR SCHEDULE.
- 18. PVC BASE, PTD.

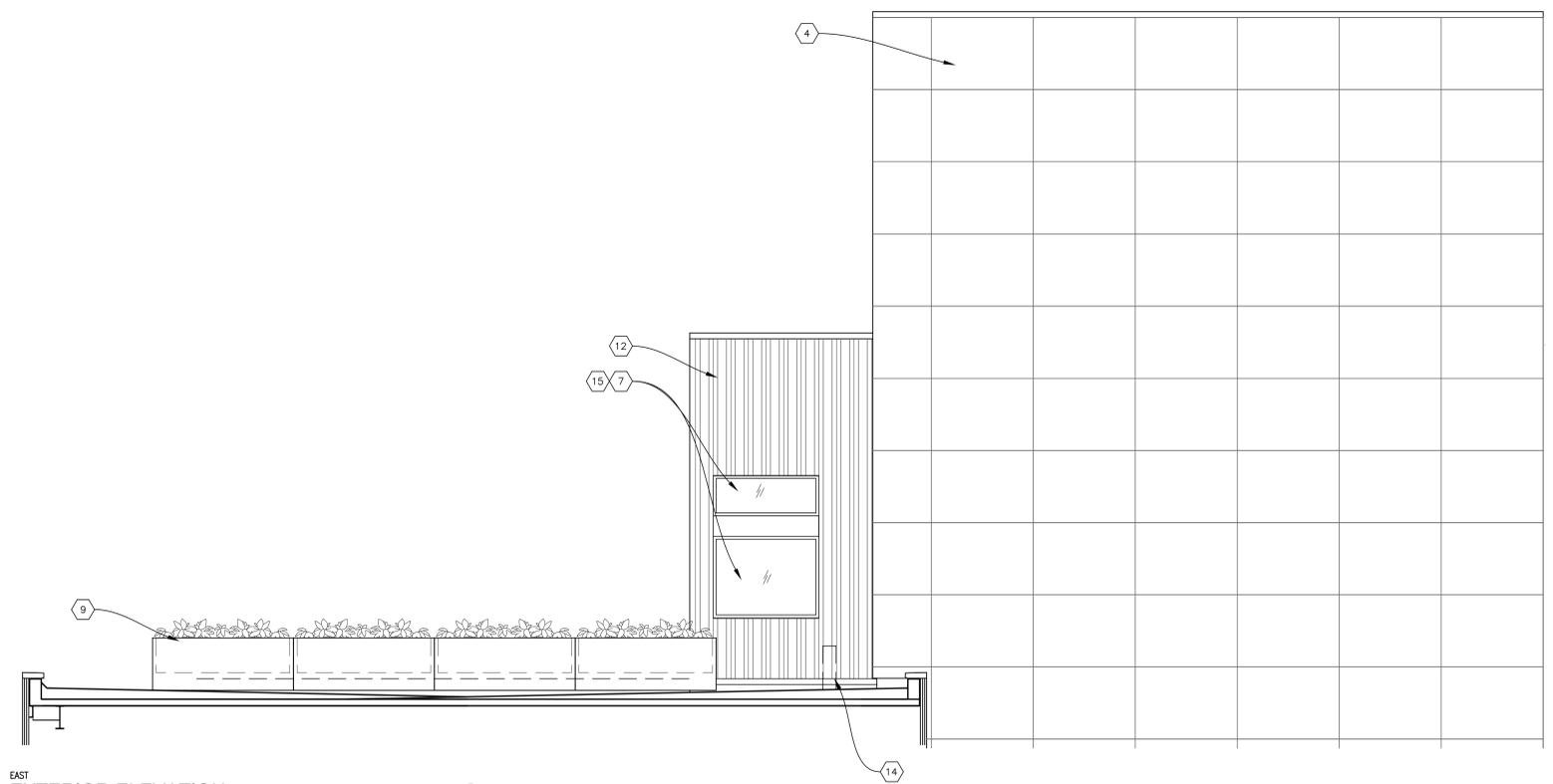


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**SOUTH  
EXTERIOR ELEVATION**  
SCALE: 1/4" = 1'-0"

1  
A414



**EAST  
EXTERIOR ELEVATION**  
SCALE: 1/4" = 1'-0"

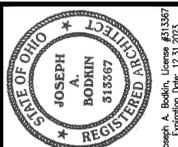
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A414

**Formica Building**  
Tenant Roof Club Room & Terrace  
120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
Location	120 E 4th Street	Revisions	
City	Cincinnati, Ohio - 45202		
Sheet	EXTERIOR ELEVATIONS		
Project No.	2022_259_E	Issue Date	10.02.2023
Scale	As Noted	Drawn	Checked

**A414**

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# Formica Building

## Tenant Roof Club Room & Terrace

120 e 4th street  
 Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
Location	120 E 4th Street	No.	Revisions
City	Cincinnati, Ohio - 45202		
Sheet	EXTERIOR ELEVATIONS		
Construction	Construction		
Project No.	2022_259_E	Issue Date	10.02.2023
Scale	As Noted	Drawn	Checked

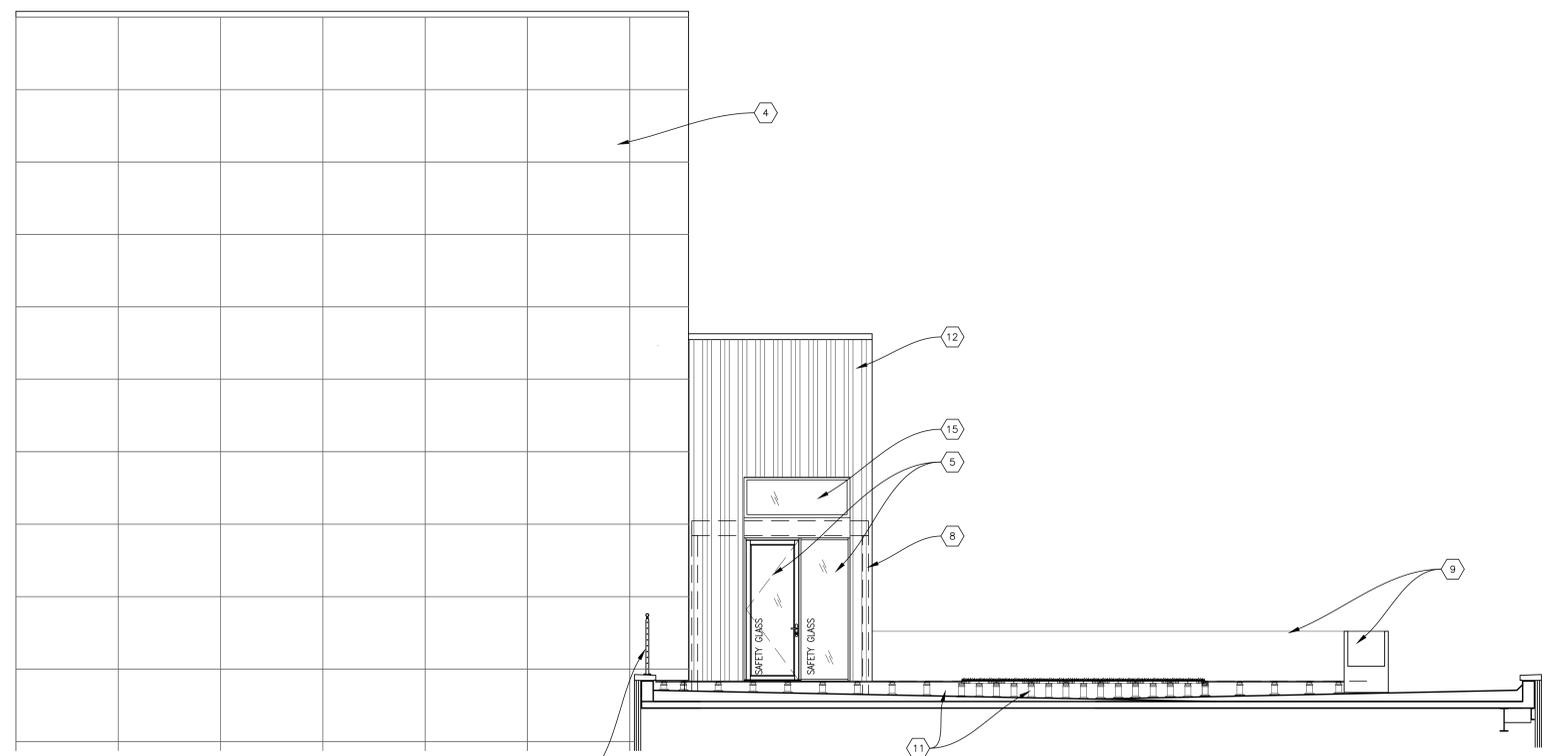
**A415**

**GENERAL EXTERIOR ELEVATION CONSTRUCTION NOTES:**

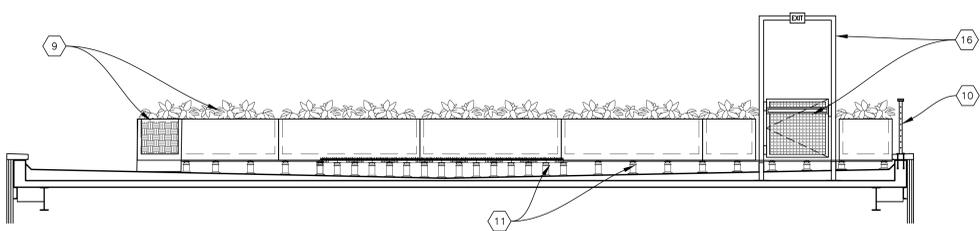
- ALL FF&E/PLANTS ARE BY OWNER.
- ANY WORK THAT CONFLICTS WITH THE EXISTING ANTENNA SYSTEM NEEDS TO BE COORDINATED WITH ANTENNA COMPANY THROUGH THE BUILDING OWNERS REPRESENTATIVE PRIOR TO ANY WORK BEING PERFORMED.
- EXIST'G STONE & METAL COPINGS ARE TO REMAIN. GC TO INSPECT AND REPAIR ANY LOOSE/DEFECTIVE COPING/FLASHING/CAULKING AND REPLACE AS REQ'D FOR WATER-TIGHTNESS. TYP OF ALL.

**EXTERIOR ELEVATION CONSTRUCTION NOTES:**

- CEMENT PANEL: SEE WALL SECTIONS
- HORIZONTAL JOINT: SEE WALL SECTIONS
- VERTICAL REGLET: MANUF FRY, TYPE; VS T-PIECE
- EXIST'G STONE VENEER TO REMAIN. GC TO INSPECT FOR TIGHTNESS.
- MODIFY MTL PANELS AS REQUIRED FOR NEW DOOR & WINDOW OPENING
- NEW WINDOW WALL SYSTEM ON EXIST'G LOWER OPNG
- NEW FIXED WINDOW. SEE WALL SECTION FOR ADD'L INFORMATION.
- NEW PERGOLA: SEE PLAN FOR ADD'L INFORMATION.
- NEW PLANTER: SEE PLAN FOR ADD'L INFORMATION.
- NEW GUARD RAIL: SEE DETAILS FOR ADD'L INFORMATION.
- NEW PAVER & TURF SYSTEM: SEE PLAN FOR ADD'L INFORMATION.
- EXIST'G INSULATED METAL PANELS ARE TO REMAIN. SCRAPE, PREP, PRIME & PAINT; COLOR TBD. USE ONLY PAINT & PRIMER MADE FOR THIS TYPE OF METAL.
- PRE-MANUFACTURED MTL RAMP & RAIL SYSTEM. SEE PLAN FOR ADD'L INFORMATION.
- ANTENNA CONDUIT LOCATION. PROTECT AT ALL TIMES.
- MODIFY MTL PANELS AS REQUIRED FOR NEW WINDOW OPENING.
- STEEL EMERGENCY EXIT GATE & FRAME, W/ PANIC HARDWARE, EXTERIOR SPRING CLOSERS & EXIT SIGN. FASTEN TO EXIST'G CONC DECK. GC PROVIDE & INSTALL FLASHING AS REQ'D TO PROVIDE WATER-TIGHT CONNECTION. GC TO COORDINATE SIGN POWER REQUIREMENTS WITH ELECTRIC SUBCONTRACTOR.
- SEE DOOR SCHEDULE.
- PVC BASE, PTD.

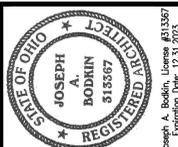


LOOKING EAST  
**EXTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0"



LOOKING WEST  
**EXTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0"

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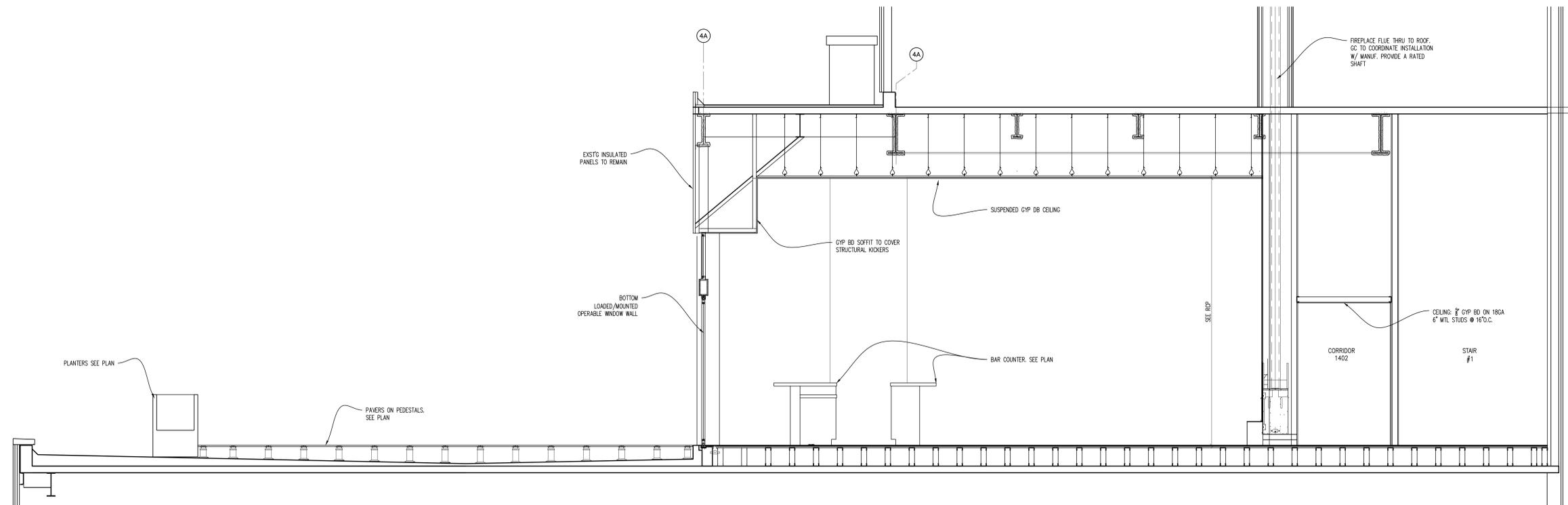


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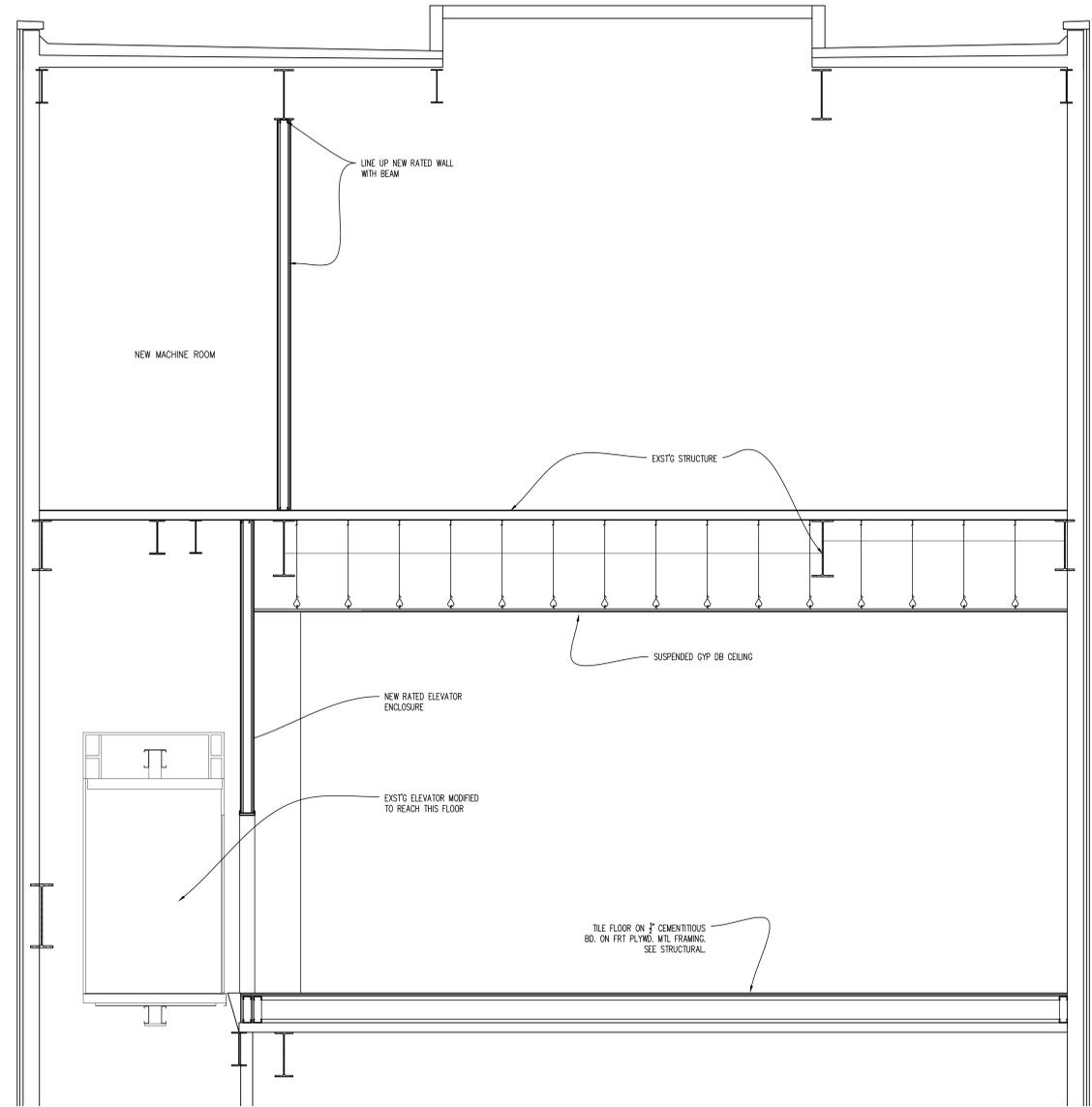
# Formica Building

## Tenant Roof Club Room & Terrace

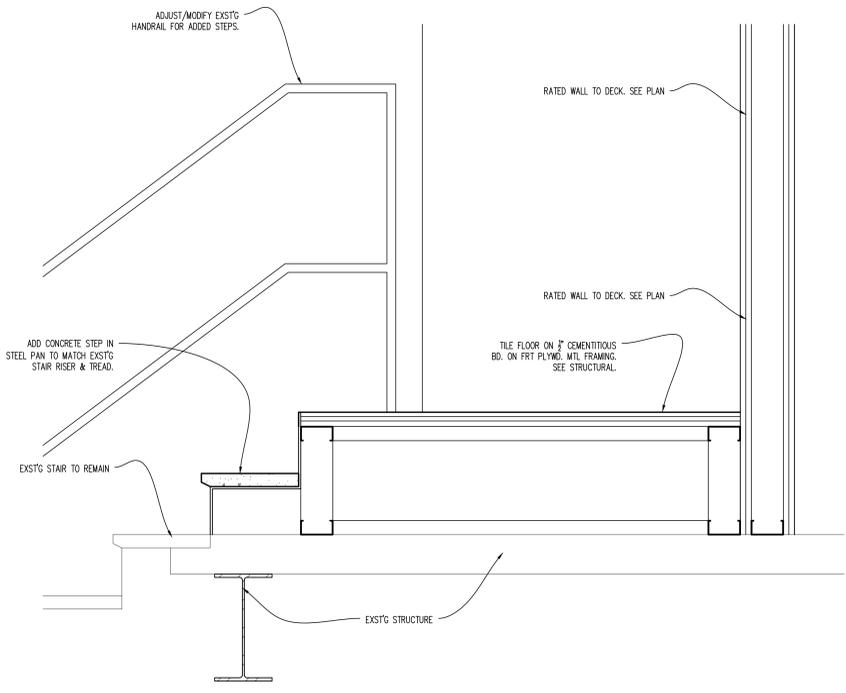
120 e 4th street  
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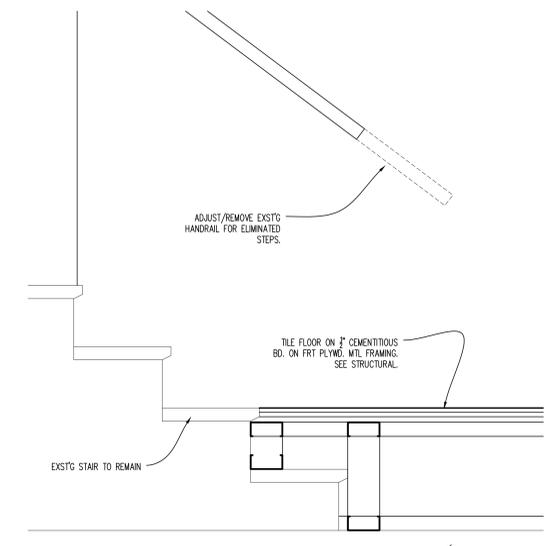
**SECTION 1**  
 SCALE: 3/8" = 1'-0"  
 1 AS14



**THRU ELEVATOR SECTION 2**  
 SCALE: 3/8" = 1'-0"  
 2 AS14



**SECTION DETAIL 3**  
 SCALE: 1-1/2" = 1'-0"  
 3 AS14

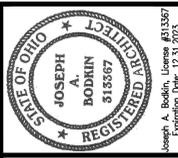


**SECTION DETAIL 4**  
 SCALE: 1-1/2" = 1'-0"  
 4 AS14

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Project	Formica Building: Roof Club Room & Terrace	Date	
No.	45202	Revisions	
Location	Cincinnati, Ohio	Scale	As Noted
Client	Formica Construction	Drawn	
Permit No.	2022-259-E	Checked	
Issued For	Permit	10.02.2023	

**A514**



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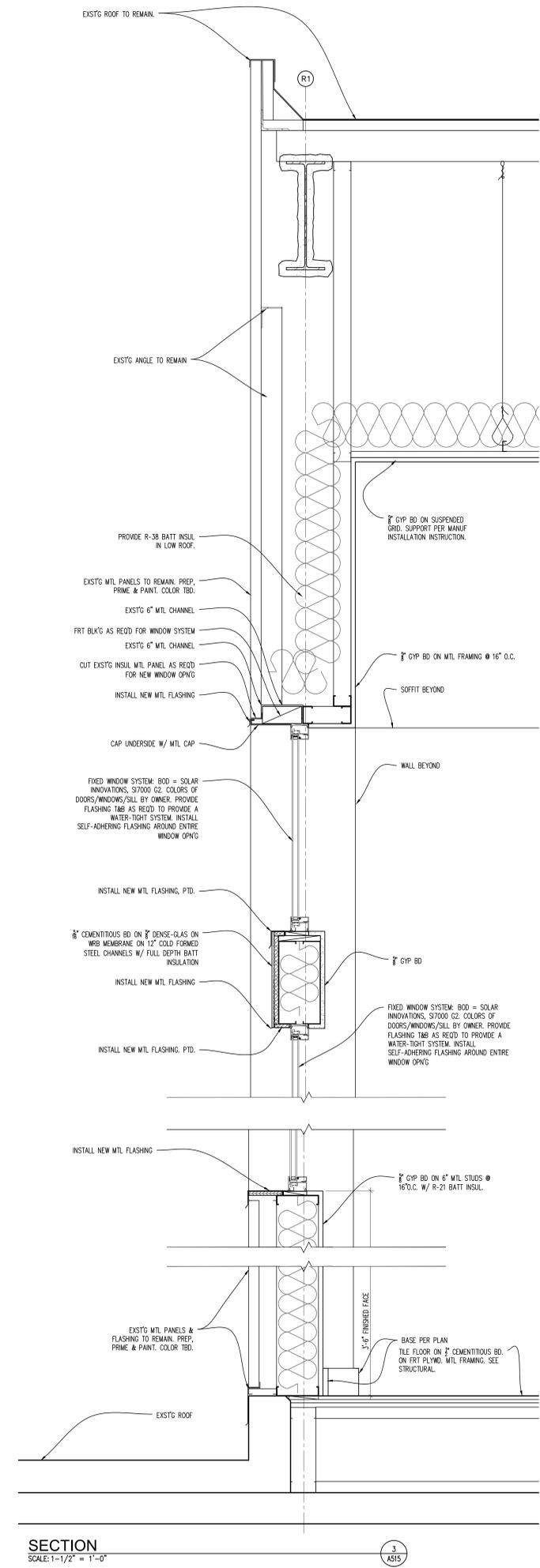
# Formica Building

## Tenant Roof Club Room & Terrace

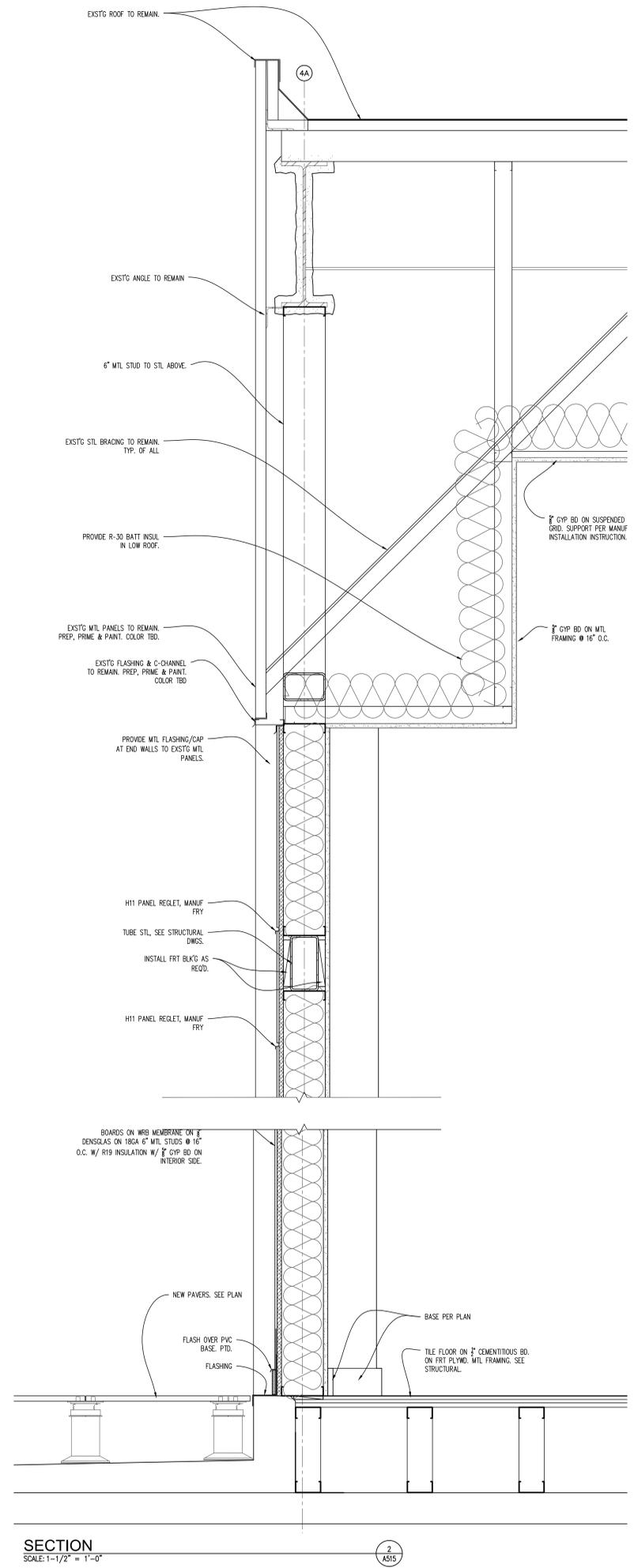
120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	Revisions		
120 E 4th Street			
Cincinnati, Ohio 45202			
Scale	As Noted	Drawn	Checked
Project No.	2022_259_LE	Issue No.	10.02.2023
Scale	As Noted	Drawn	Checked

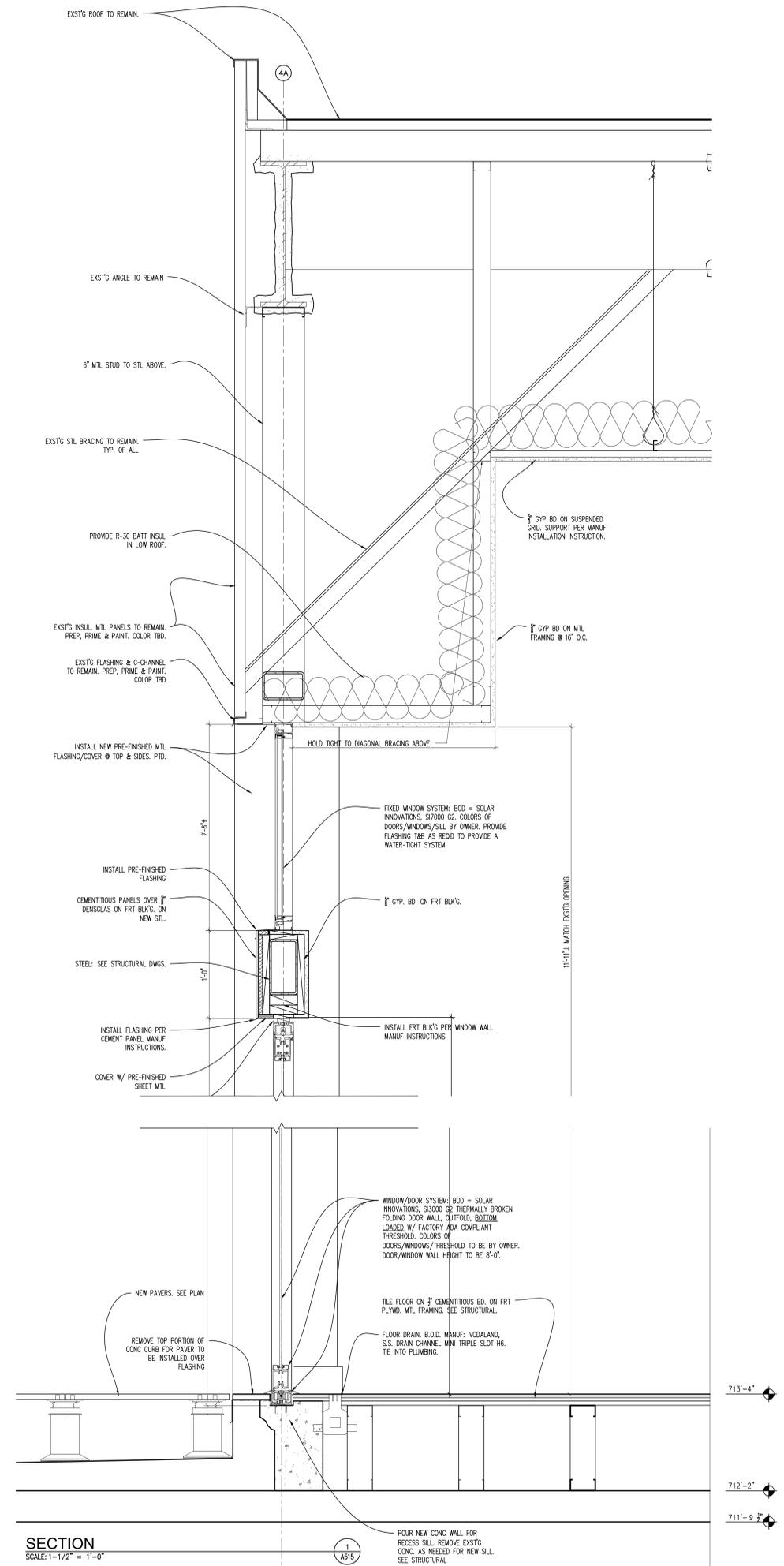
**A515**



**SECTION 3**  
SCALE: 1-1/2" = 1'-0"  
A515

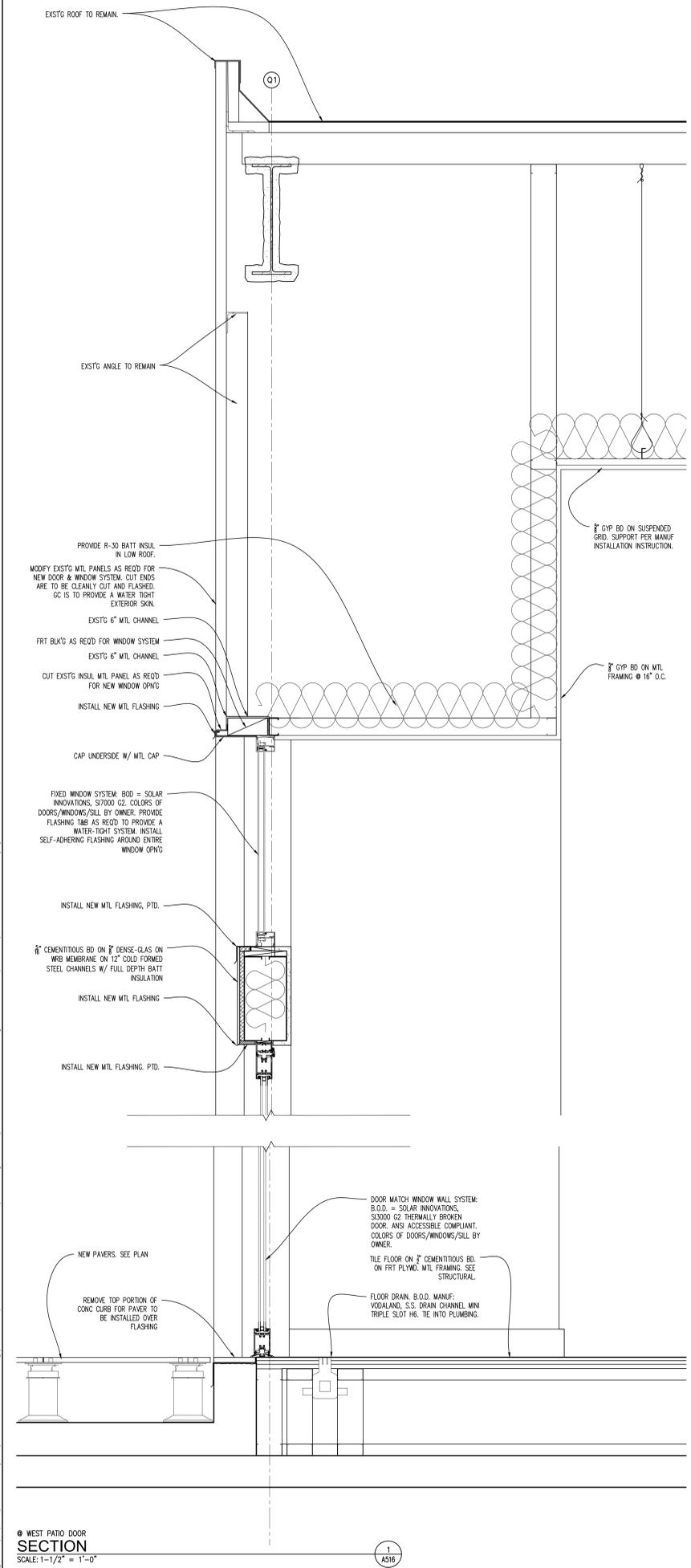


**SECTION 2**  
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A515

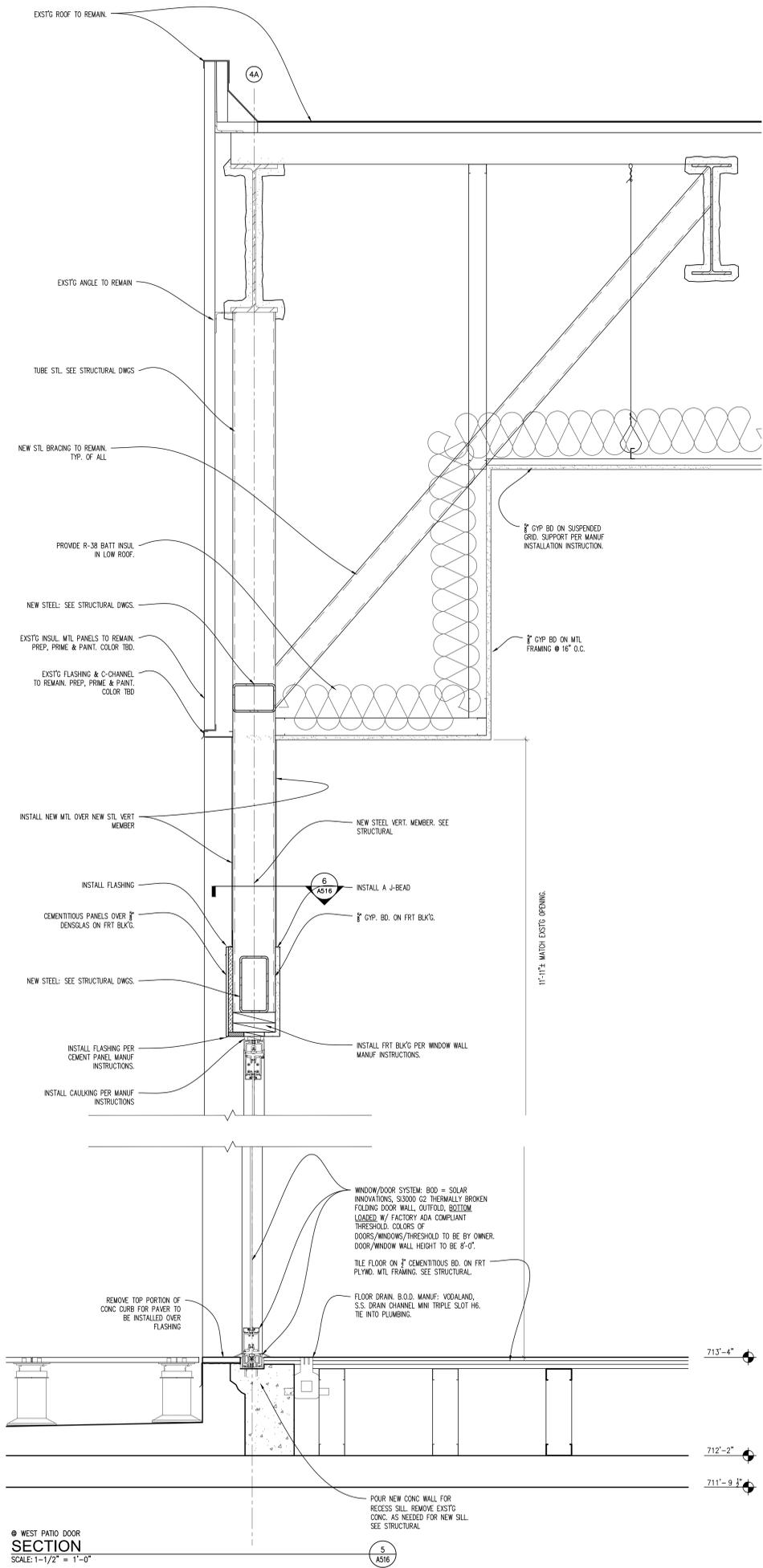


**SECTION 1**  
SCALE: 1-1/2" = 1'-0"  
A515

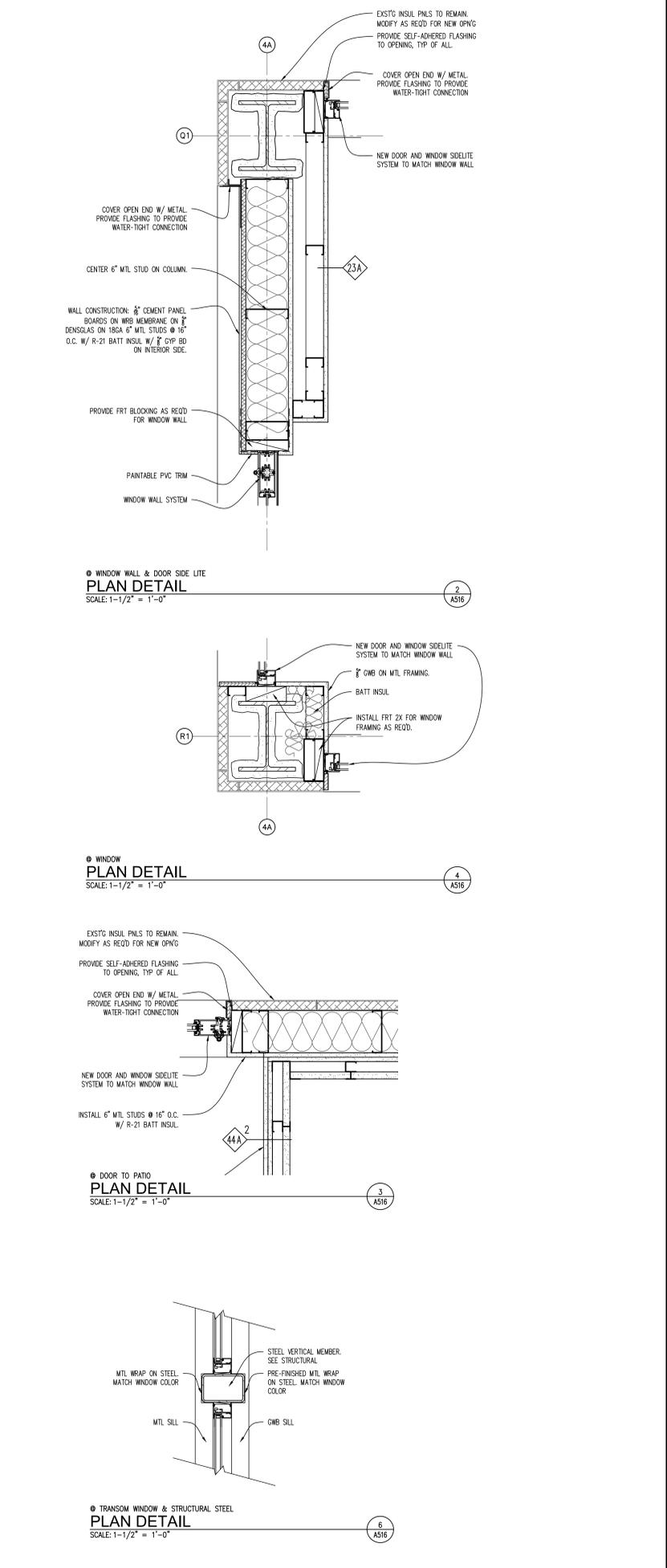
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● WEST PATIO DOOR  
SECTION  
SCALE: 1-1/2" = 1'-0"

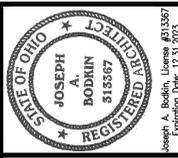


● WEST PATIO DOOR  
SECTION  
SCALE: 1-1/2" = 1'-0"



● TRANSOM WINDOW & STRUCTURAL STEEL  
PLAN DETAIL  
SCALE: 1-1/2" = 1'-0"

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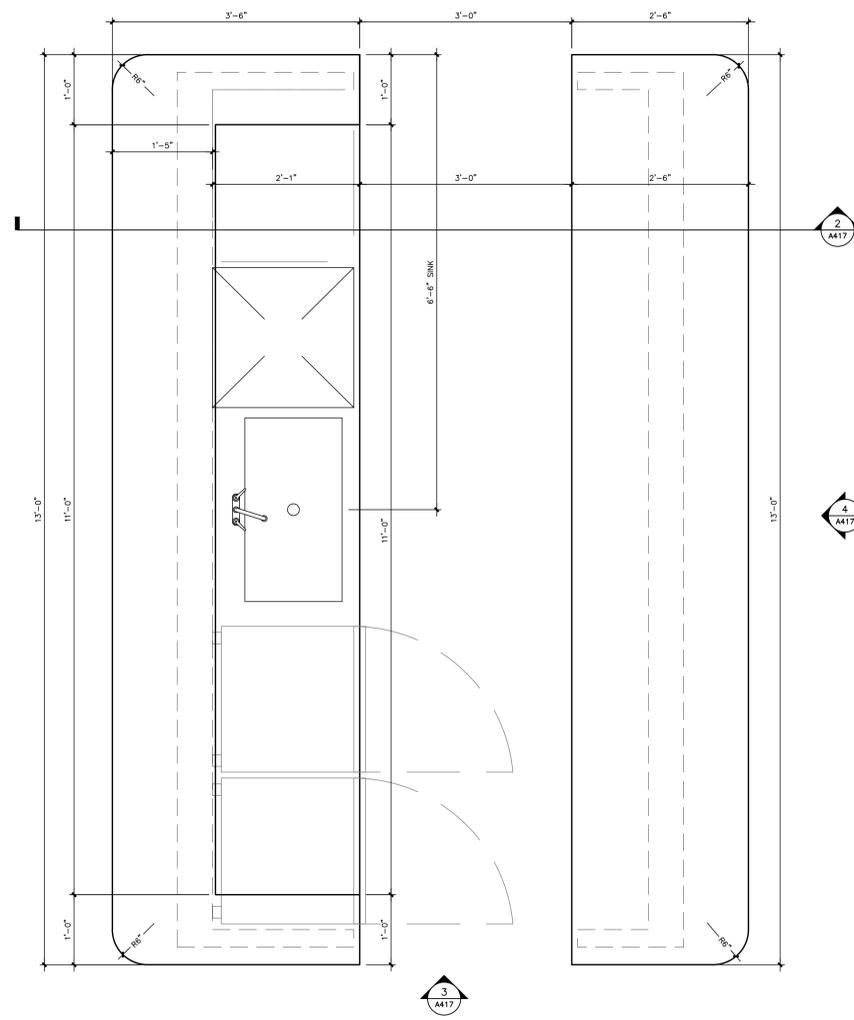
# Formica Building

## Tenant Roof Club Room & Terrace

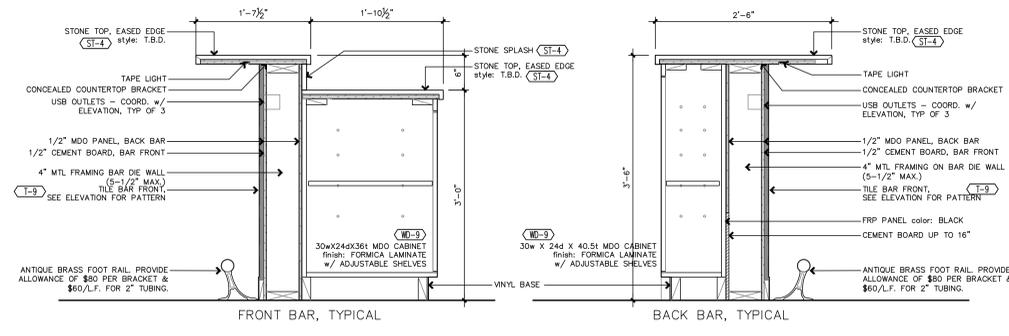
120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	120 E 4th Street	Revisions	
City	Cincinnati, Ohio 45202		
Sheet	A516	Scale	As Noted
Construction	As Noted	Drawn	
Project No.	2022_259_E	Issue	10.02.2023
Scale	As Noted	Checked	

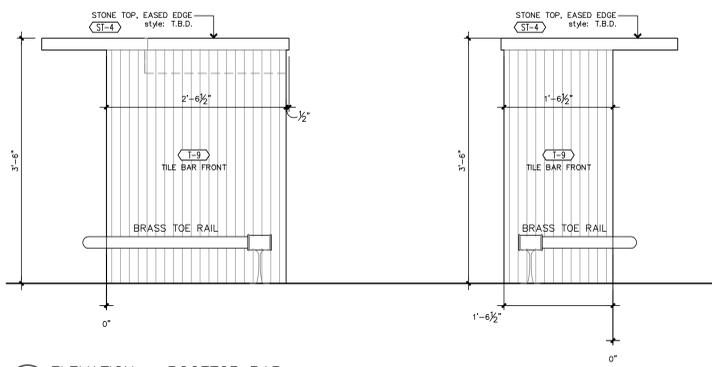
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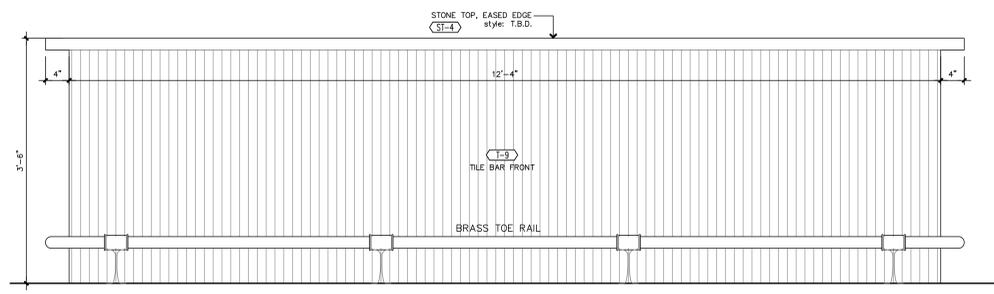
1 ENLARGED PLAN - ROOFTOP BAR  
 scale: 1" = 1'-0"



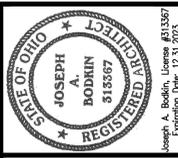
2 DETAIL - ROOFTOP BAR NOTE: ALL FRAMING & BLK'G TO BE FRT  
 scale: 1" = 1'-0"



3 ELEVATION - ROOFTOP BAR  
 scale: 1" = 1'-0"



4 ELEVATION - ROOFTOP BAR  
 scale: 1" = 1'-0"



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# Formica Building

## Tenant Roof Club Room & Terrace

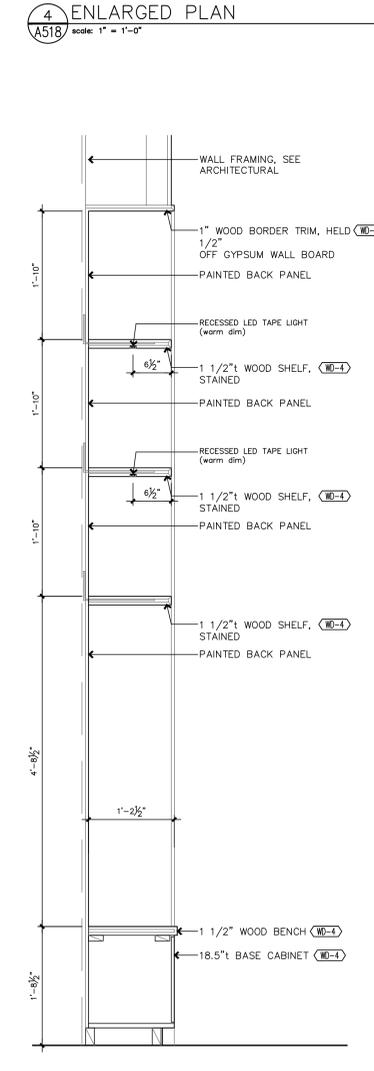
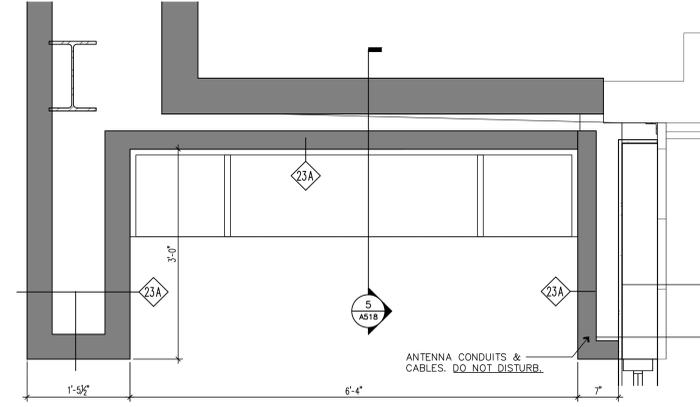
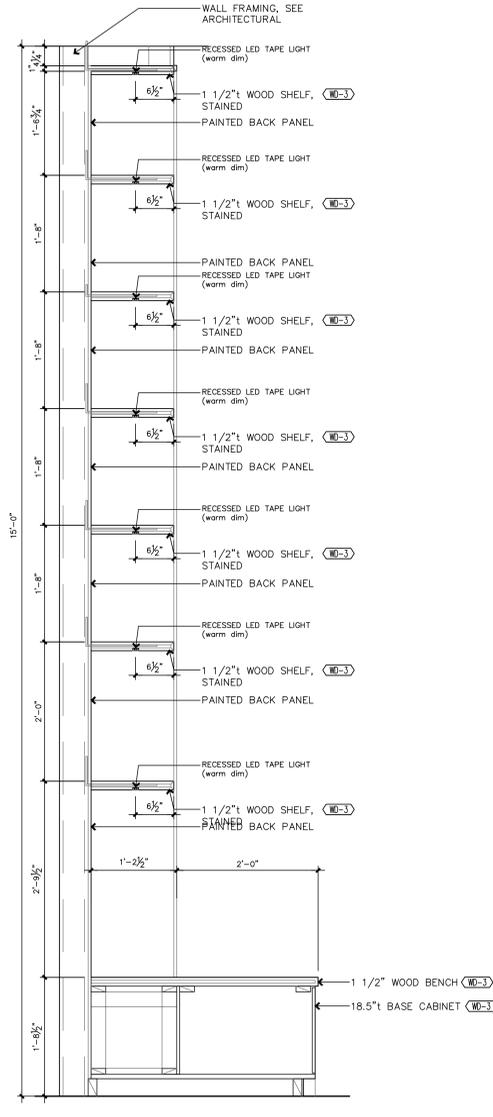
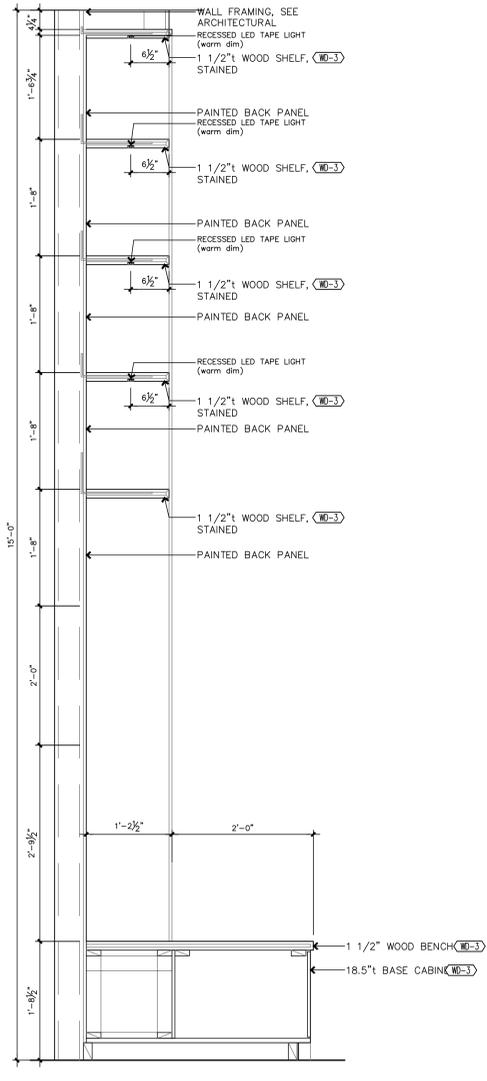
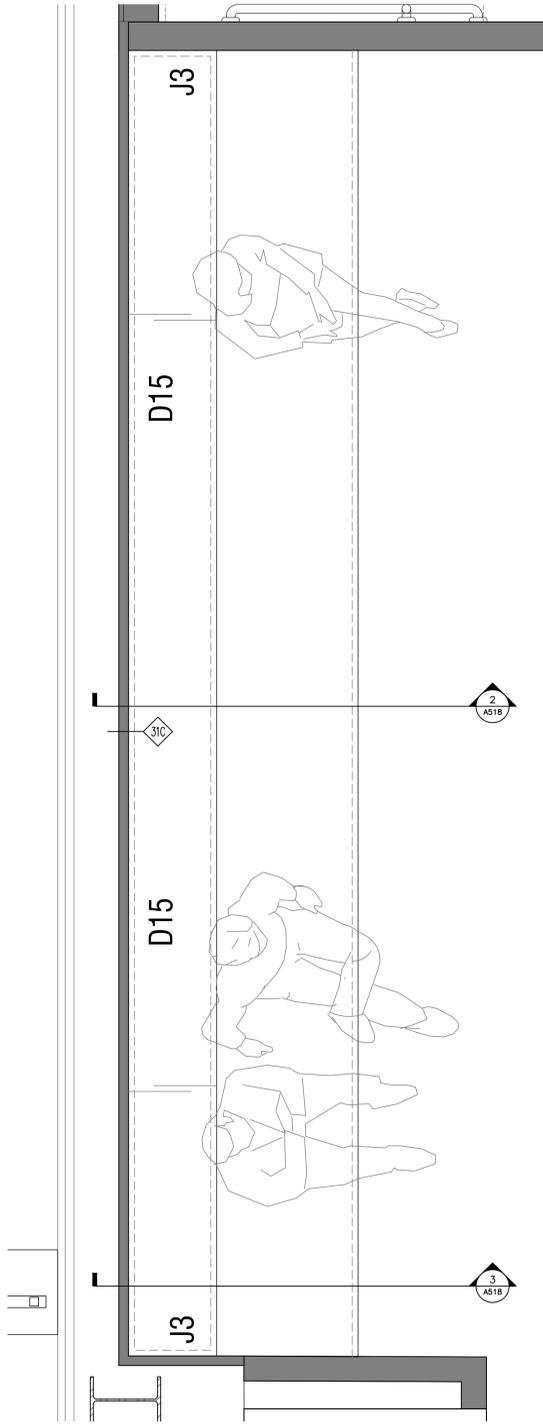
120 e 4th street  
 Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
Location	120 E 4th Street	No.	Revisions
City	Cincinnati, Ohio 45202		
Site	Formica Building		
Construction	Construction	Scale	As Noted
Project No.	2022_259_E	Issue No.	10.02.2023
Scale	As Noted	Drawn	Checked

**A517**

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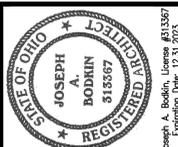
# Formica Building

## Tenant Roof Club Room & Terrace

120 e 4th street  
Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	120 E 4th Street	Revision	
City	Cincinnati, Ohio 45202		
Scale	AS NOTED	Drawn	
Checked		Issued For Permit	10.02.2023
Project No.	2022_259_E		

**A518**



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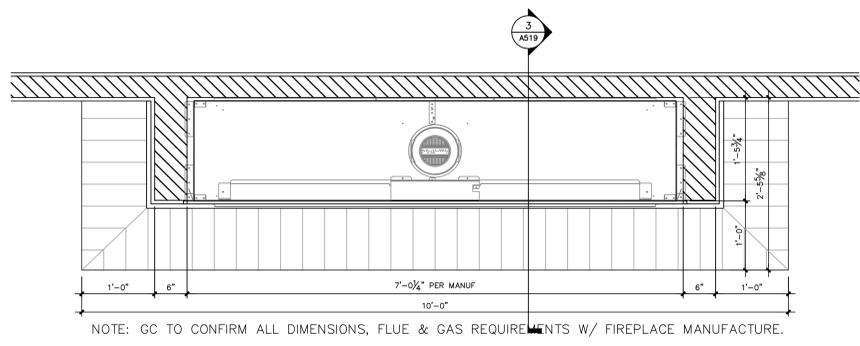
# Formica Building

## Tenant Roof Club Room & Terrace

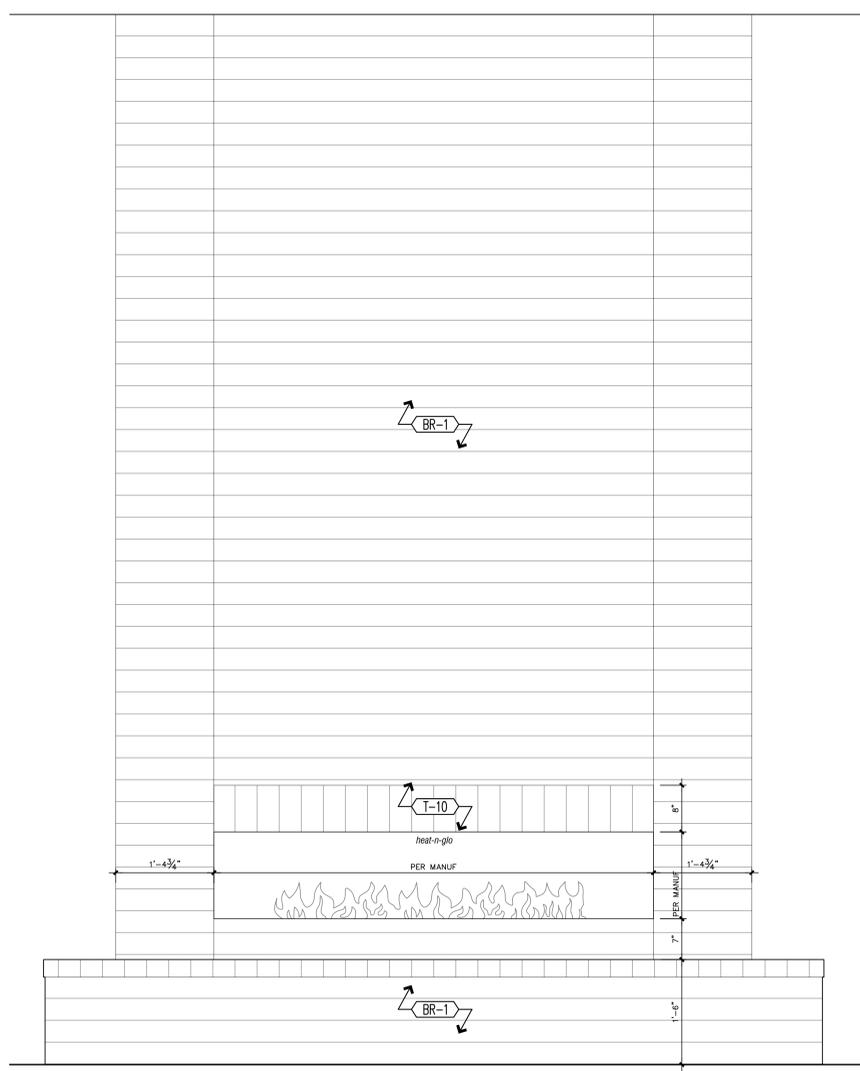
120 e 4th street  
 Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	Revisions		
Location	Cincinnati, Ohio 45202		
Scale	As Noted		
Drawn		Checked	
Project No.	2022_259_E	Issue No.	10.02.2023
Scale	As Noted	Issued For Permit	

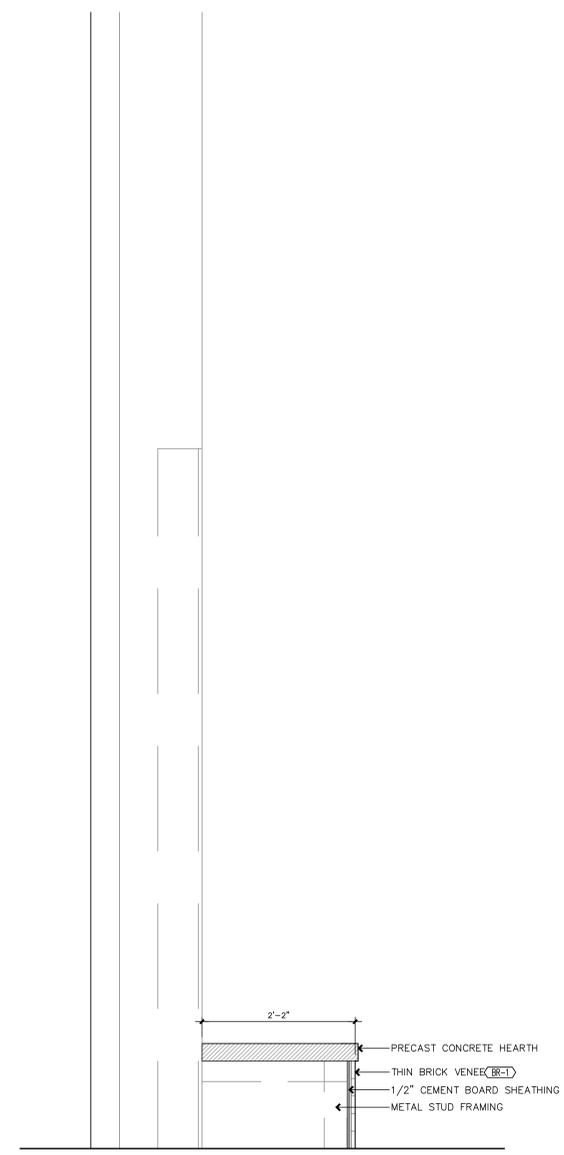
**A519**



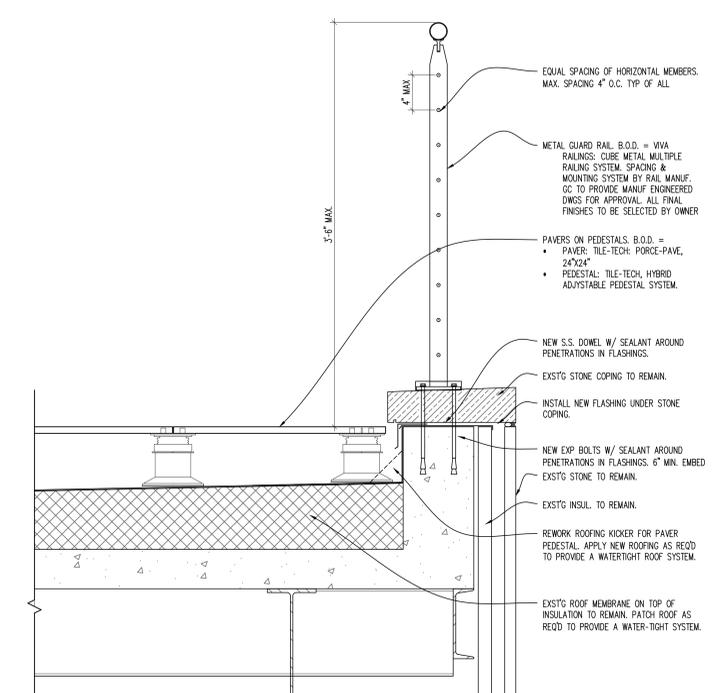
**1 ENLARGED PLAN – ROOFTOP FIREPLACE**  
 scale: 1" = 1'-0"



**2 ELEVATION – ROOFTOP FIREPLACE**  
 scale: 1" = 1'-0"

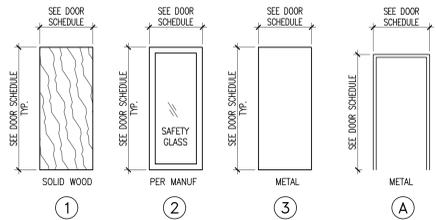


**3 SECTION – ROOFTOP FIREPLACE HEARTH**  
 scale: 1" = 1'-0"



**4 SECTION**  
 SCALE: 1-1/2" = 1'-0"

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DOOR STYLES FRAME TYPES

DOOR HARDWARE SCHEDULE

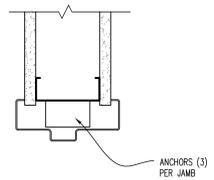
ITEMS	HARDWARE SET				
	1	2	3	4	5
RATED HARDWARE			●	●	
(3) HINGES	●	●	●	●	
(6) HINGES					
POCKET DOOR TRACK - HWY DUTY					
ENTRANCE LOCKSET					
PRIVACY LOCKSET	●				
EXIT LOCKSET					
PASSAGE LOCKSET			●		
CLOSET LOCKSET					
STORAGE LOCKSET		●			●
OFFICE LOCKSET					
PULL, PUSH PLATE, KICK PLATE					
ELECTRIC STRIKE					
KEYLESS ENTRY (KEY FOB)					
ELECTRONIC KEY CARD DEADBOLT					
DEAD BOLT					
SPRING CLOSER				●	
CLOSER			●		●
PAIR CLOSER					
SMOKE SEAL					
WIDE ANGLE VIEWER					
PAIR WALL / FLOOR STOP					
WALL / FLOOR STOP	●	●	●	●	
MAGNETIC HOLD OPEN					
PANIC HARDWARE			●		
PANIC HARDWARE - RATED FOR EXTERIOR				●	
THRESHOLD					
RUBBER THRESHOLD - LOW PROFILE					
WEATHER SEALS					
DOOR SWEEP					
DRIP					

TILET ROOM	
CLOSET	
EGRESS STAR DOOR	
EGRESS GATE	
ELEVATOR MACHINE/MECH RM	

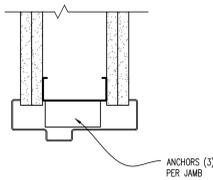
GENERAL HARDWARE NOTES:  
 A. ALL HOLLOW METAL FRAMES TO HAVE A MINIMUM OF 3 SILENCERS (6 IF DOOR PAIR)

DOOR MARK	DOOR INFORMATION			FRAME INFORMATION				HDW. SET	FIRE RATING	REMARKS			
	SIZE			STYLE	DOOR MATERIAL	TYPE	DETAIL						
	WIDTH	HEIGHT	THICK				HEAD				JAMB	OTHER	
ST#1	3'-0"	7'-0"	1-3/4	1	WD	A	HM	2/A600	2/A600	-	3	90 MIN.	RATED STAIR
1400	3'-0"	8'-0"	PER MANUF	2	MTL	PER MANUF	MTL				PER MANUF	-	PATIO, SAFETY GLASS
1403	3'-0"	7'-0"	1-3/4	1	WD	A	HM	1/A600	1/A600	-	2	-	
1404	3'-0"	7'-0"	1-3/4	1	WD	A	HM	1/A600	1/A600	-	1	-	
1405	2'-6"	7'-0"	1-3/4	1	WD	A	HM	1/A600	1/A600	-	2	-	
1406	3'-0"	7'-0"	1-3/4	1	WD	A	HM	1/A600	1/A600	-	1	-	
1407	3'-0"	7'-0"	1-3/4	3	MTL	A	HM	2/A600	2/A600	-	5	90 MIN.	FLR 14 ELEVATOR MACHINE ROOM
1408	3'-0"	8'-0"	PER MANUF	2	MTL	PER MANUF	MTL				PER MANUF	-	PATIO WINDOW WALL, SAFETY GLASS
1409	3'-0"	42"	PER MANUF	-	MTL	PER MANUF	MTL				4	-	PATIO EGRESS GATE, NOTE 1
1500	3'-0"	7'-0"	1-3/4	3	MTL	A	HM	2/A600	2/A600	-	5	90 MIN.	MECHANICAL ROOM
1501	3'-0"	7'-0"	1-3/4	3	MTL	A	HM	1/A600	1/A600	-	5	20 MIN.	FLR 15 ELEVATOR MACHINE ROOM

NOTES:  
 1. STEEL EMERGENCY EXIT GATE & FRAME W/ PANIC HARDWARE, EXTERIOR SPRING CLOSERS & EXIT SIGN. FASTEN TO EXIST'G CONC DECK. GC PROVIDE & INSTALL FLASHING AS REQ'D TO PROVIDE WATER-TIGHT CONNECTION. GC TO COORDINATE SIGN POWER REQUIREMENTS WITH ELECTRIC SUBCONTRACTOR.



1 HEAD & JAMB - WELDED FRAME  
 3" x 1'-0"



2 HEAD & JAMB - WELDED FRAME  
 3" x 1'-0"

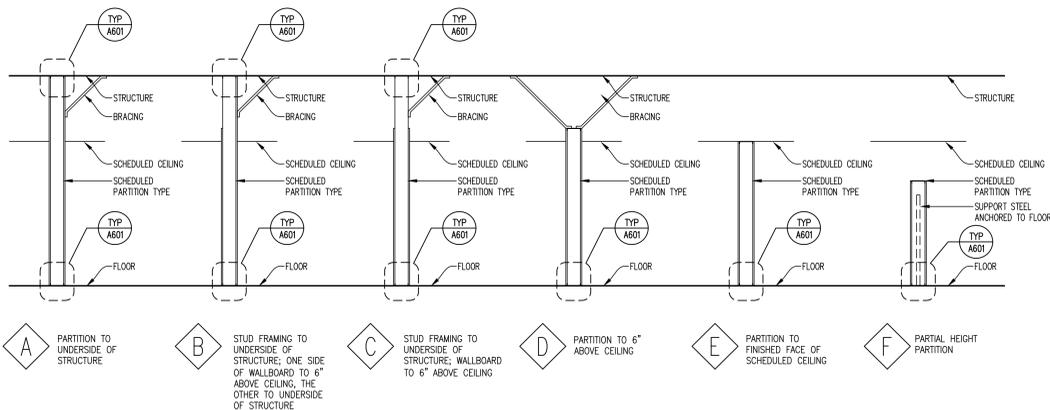
- GENERAL NOTES
- IF A DOOR IS NOT DIMINISHED OR NOT CENTERED IN A ROOM, THE DOOR SHOULD BE MOUNTED SO THAT THE FACE OF THE FRAME IS 4" MINIMUM (IN STUD WALLS).
  - IF A DOOR IS GRAPHICALLY SHOWN GENERALLY CENTERED IN A ROOM OR SPACE, THE CENTER OF THE DOOR SHOULD BE AN EQUAL DISTANCE BETWEEN ADJOINING WALLS.
  - HM DOORS TO BE PAINTED TO MATCH ADJACENT WALLS, SEMI-GLOSS UNLESS OTHERWISE NOTED.
  - REFER TO APARTMENT PLANS FOR APARTMENT INTERIOR DOOR SCHEDULE.
  - ALL EXISTING HARDWARE TO BE REMAIN ON EXISTING HISTORIC DOORS.
  - ALL NEW DOOR HANDLES TO BE ADA COMPLIANT.
  - COORDINATE KEYING OF ALL DOORS WITH OWNER, THIS INCLUDES ALL KEY PADS, KEY FOBs, SECURED ACCESS POINTS, ETC.
  - ALL NEW AND EXISTING RATED DOORS ARE TO RECEIVE NEW CLOSERS.
  - EGRESS DOORS WILL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT.

Professional Engineer Seal for Joseph A. Bodin, License #313367, State of Ohio, Registered Professional Engineer. Includes logo for modelgroup DEVELOPMENT • CONSTRUCTION • MANAGEMENT.

Formica Building  
 Tenant Roof Club Room & Terrace  
 120 e 4th street  
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Project: Formica Building: Roof Club Room & Terrace  
 120 E 4th Street  
 Cincinnati, Ohio 45202  
 Sheet: DOOR SCHEDULES & DETAILS  
 Construction  
 Project No: 2022-259-E  
 Scale: As Noted

**PARTITION CONFIGURATION:**



- A** PARTITION TO UNDERSIDE OF STRUCTURE
- B** STUD FRAMING TO UNDERSIDE OF STRUCTURE; ONE SIDE OF WALLBOARD TO 6" ABOVE CEILING, THE OTHER TO UNDERSIDE OF STRUCTURE
- C** STUD FRAMING TO UNDERSIDE OF STRUCTURE; WALLBOARD TO 6" ABOVE CEILING
- D** PARTITION TO 6" ABOVE CEILING
- E** PARTITION TO FINISHED FACE OF SCHEDULED CEILING
- F** PARTIAL HEIGHT PARTITION

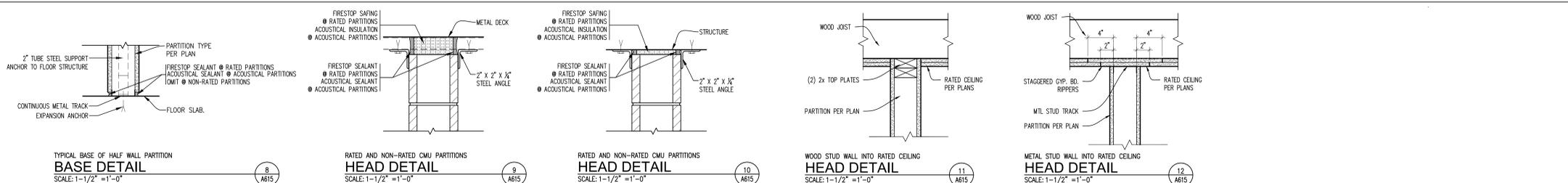
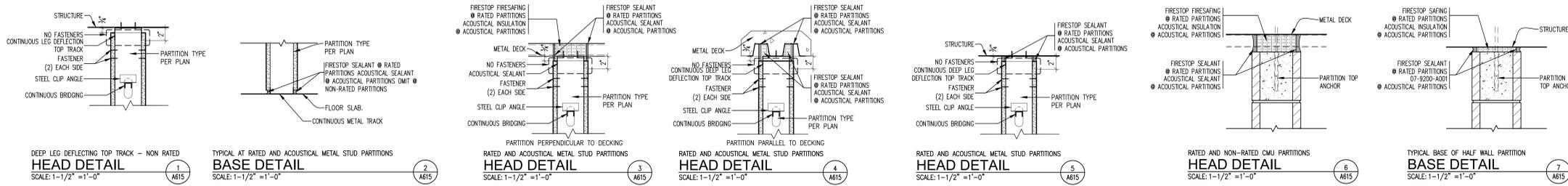
**PARTITION WALL MODIFICATIONS:**

- PARTITION TYPE - NO MODIFICATION
- THERMAL INSULATION BATS: PROVIDE AND INSTALL THERMAL INSULATION BATS AT STUD PARTITIONS.
- ACOUSTIC INSULATION: PROVIDE AND INSTALL ACOUSTIC INSULATION, ACOUSTIC SEALANT AT HEAD AND SILL, & ACOUSTIC SEALANT AROUND ALL PENETRATIONS.

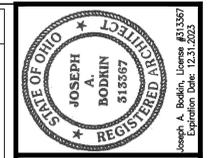
**GENERAL NOTES:**

- A. THE PARTITION TYPE DESIGNATION INCLUDES THE PARTITION TYPE, A FIRE RATING OR SMOKE PARTITION REQUIREMENT (WHERE APPLICABLE), A PARTITION CONFIGURATION, AND PARTITION WALL MODIFIERS (WHERE APPLICABLE).
- B. PARTITION TYPE INDICATORS ARE NOTED ON FLOOR PLANS. SEE LIFE SAFETY PLANS OR FLOOR PLANS FOR LOCATION AND EXTENT OR LIMITS OF FIRE AND SMOKE RATED PARTITIONS.
- C. PARTITION TYPE NUMBERS ARE NOT SEQUENTIAL AND CERTAIN NUMBERS MAY NOT BE USED.
- D. ALL PARTITION TYPE DETAILS ARE PLAN VIEW, UNLESS NOTED OTHERWISE.
- E. ALL METAL STUDS AT TO BE 20GA MIN.

**TYPICAL END CONDITION DETAILS:**



FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 1HR UL U419 (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 1HR UL U404 (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 2 HRS UL U419 (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 2 HRS UL U419 (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 1 HR UL U415-SYSTEM A (IF INDICATED BY TAG ON PLANS)
<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>43</b>
FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 1 HR UL U415-SYSTEM A (IF INDICATED BY TAG ON PLANS)	FIRE RESISTANCE: 2 HRS UL U415-SYSTEM B (IF INDICATED BY TAG ON PLANS)
<b>21</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>31</b>	<b>41</b>	<b>44</b>



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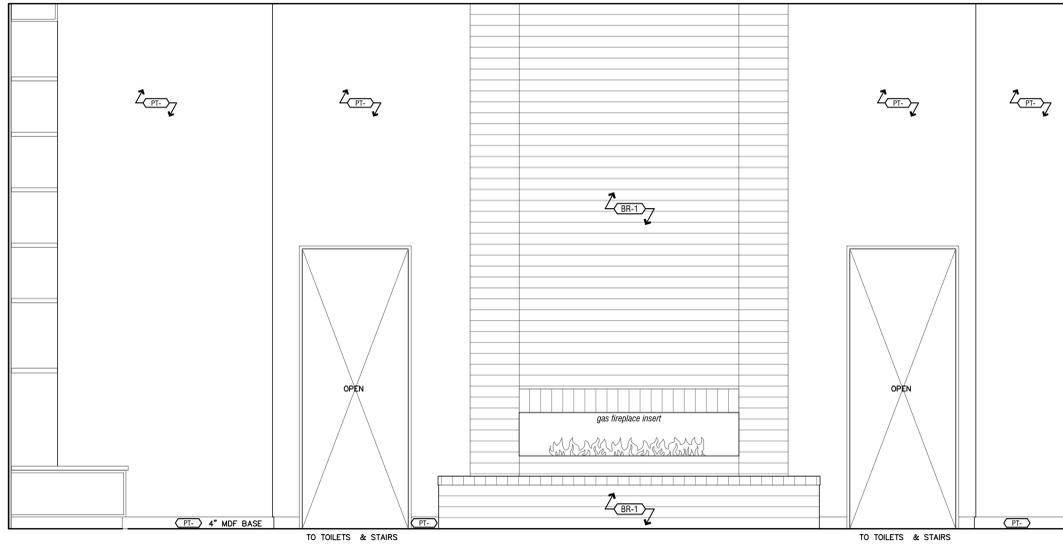
**Formica Building**  
Tenant Roof Club Room & Terrace  
120 e 4th street  
Cincinnati OH 45202

Project: Formica Building: Roof Club Room & Terrace  
120 E 4th Street  
Cincinnati, Ohio 45202  
Scale: As Noted  
Date: 10.02.2023  
Issued for Permit: 10.02.2023  
Checked: [Signature]  
Drawn: [Signature]  
Scale: As Noted

**A615**

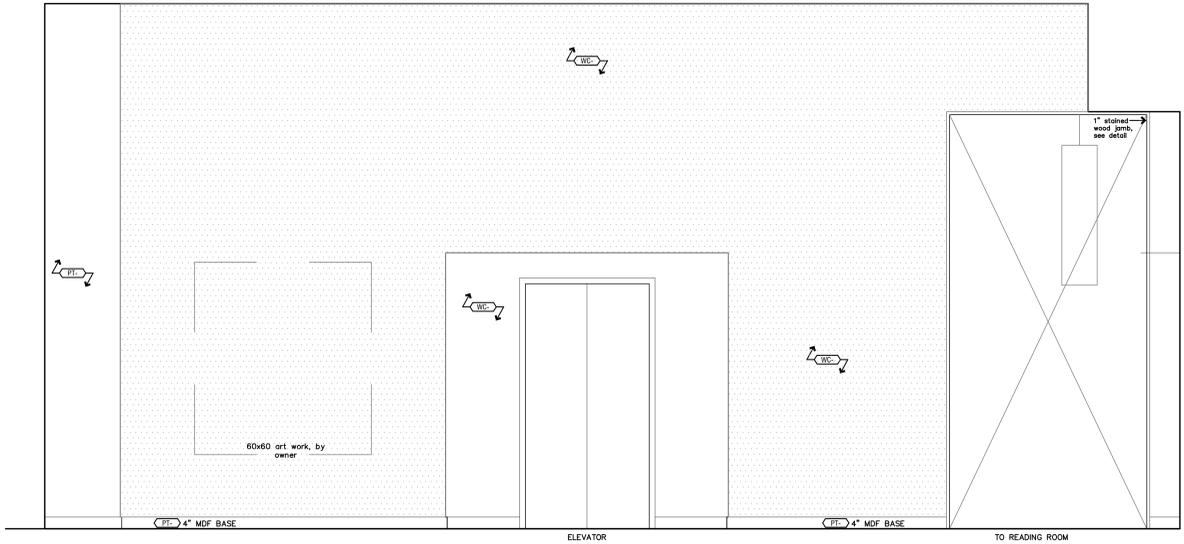






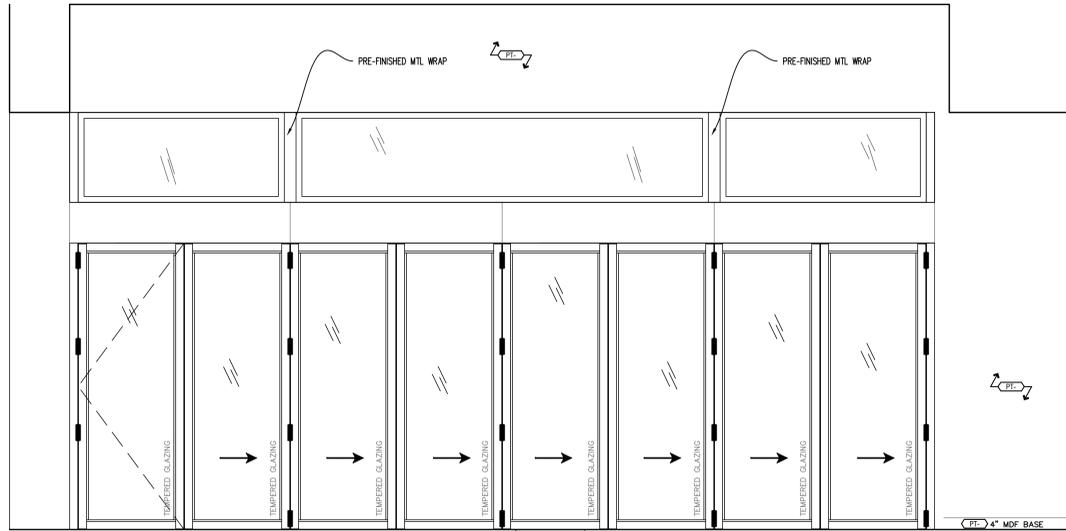
**1 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOUNGE



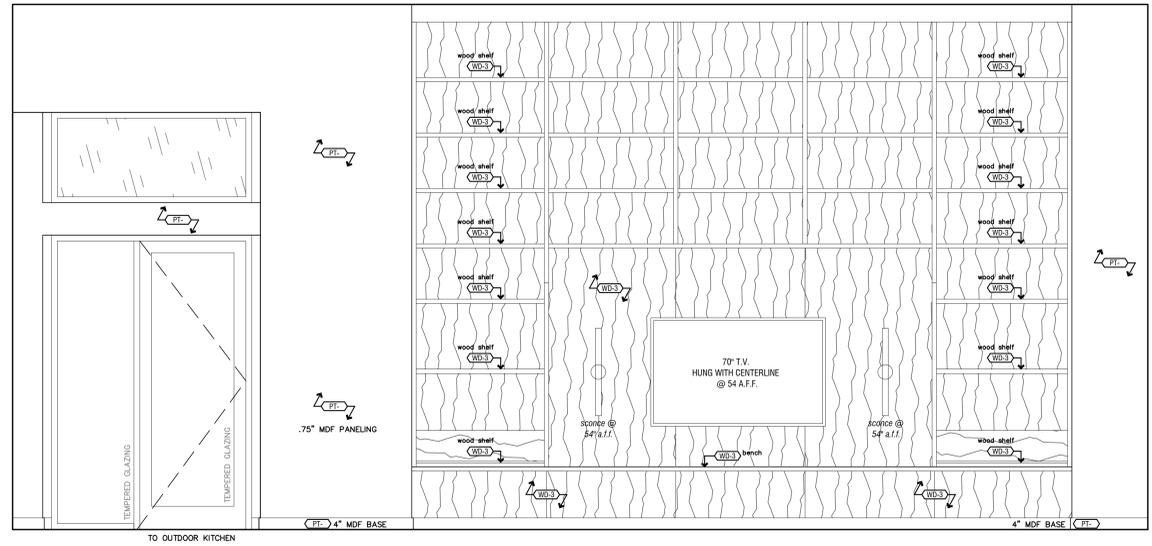
**2 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOUNGE



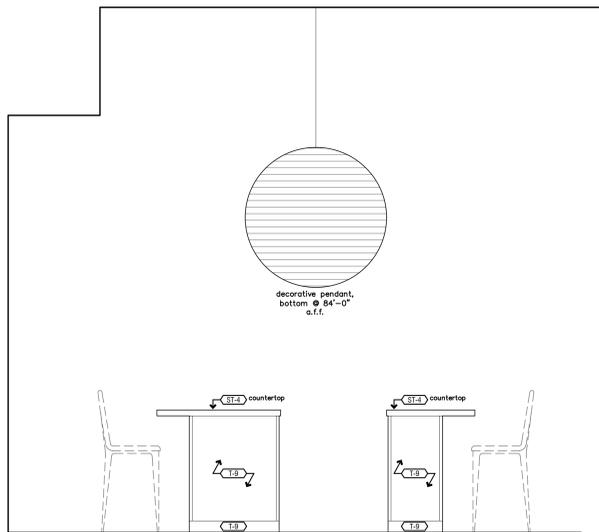
**3 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOUNGE



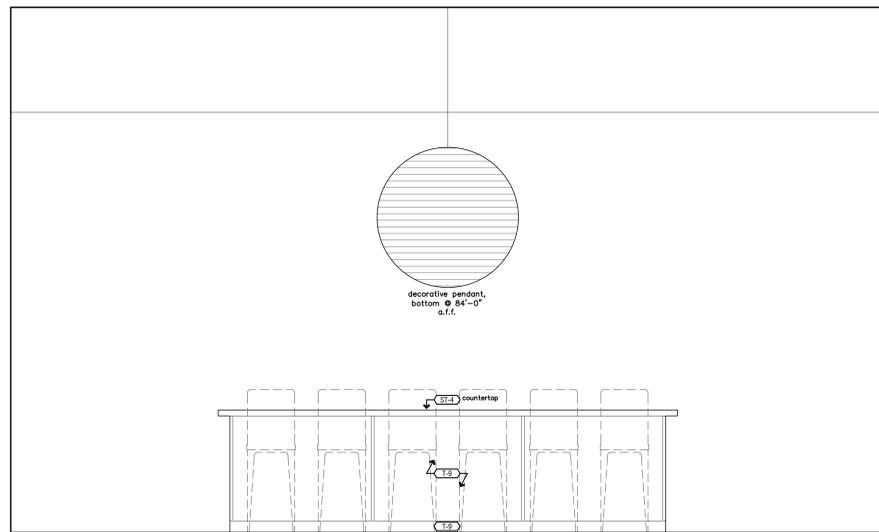
**4 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOUNGE



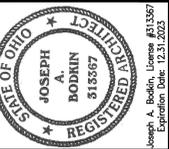
**5 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOU



**6 INTERIOR ELEVATION**  
**A814** 1/2" = 1'-0"

SKY LOUNGE



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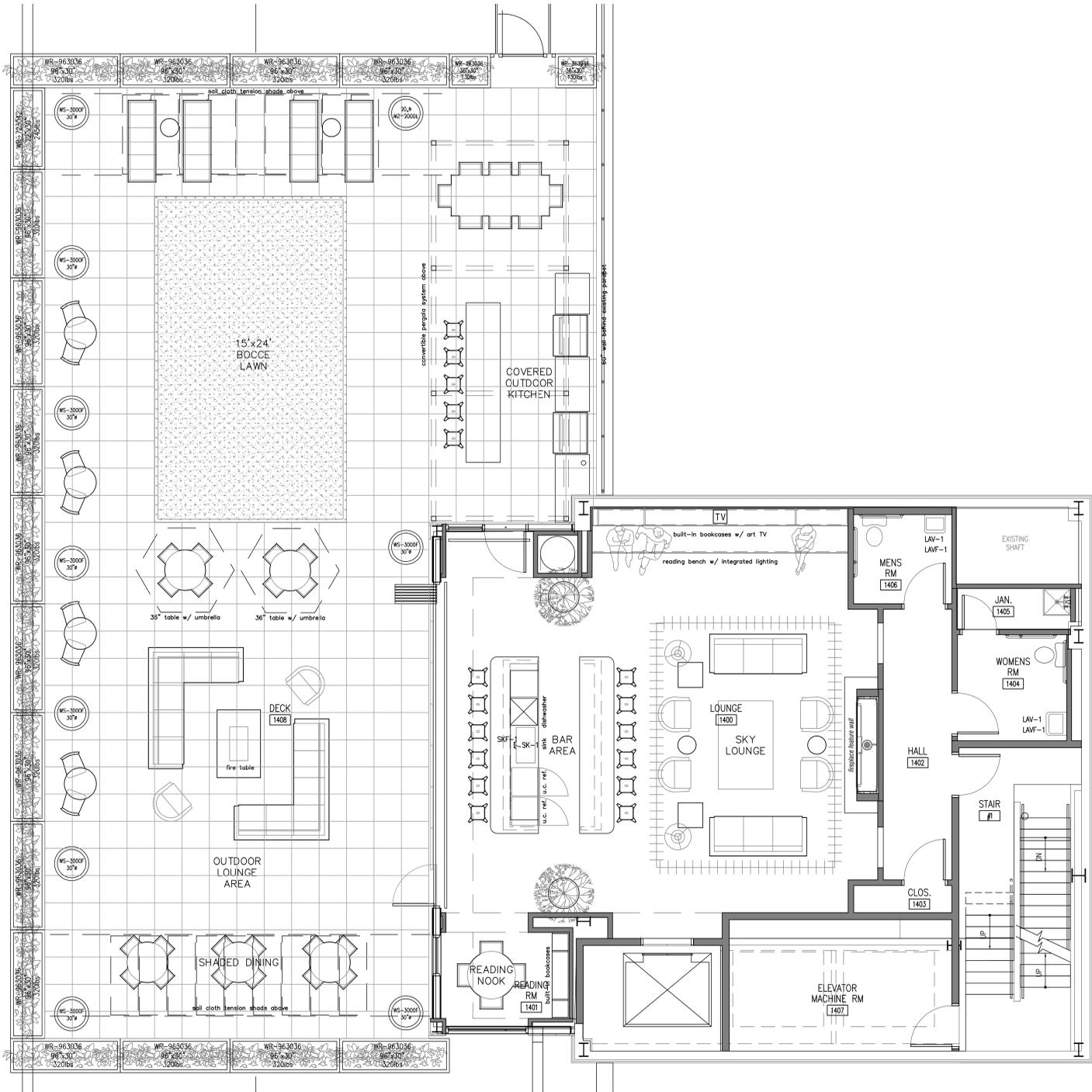
# Formica Building

Tenant Roof Club Room & Terrace  
 120 e 4th street  
 Cincinnati OH 45202

Project	Formica Building: Roof Club Room & Terrace	Date	
No.	120 E 4th Street	Revisions	
City	Cincinnati, Ohio - 45202		
Sheet	INTERIOR ELEVATIONS		
Construction	Construction		
Project No.	2022_259_E	Issue Date	10.02.2023
Scale	As Noted	Drawn	
Checked			

**A814**





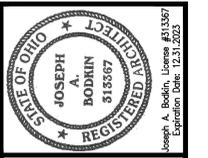
**14TH FLOOR AND ROOF FINISH & FURNITURE PLAN**  
 SCALE: 1/4" = 1'-0"

NOTE: PROVIDE PHYSICAL CONTROL SAMPLES OF ALL MATERIALS FOR APPROVAL PRIOR TO PURCHASE.

KEY	MANUFACTURER	DESCRIPTION
ACT-1	ARMSTRONG	SIZE: 24" x 24" x 5/8", WHITE, OPTIMA REGULAR, 9/16" SUSPENSION GRID, GRID COLOR TO MATCH TILE COLOR, ALUMINUM
B-1	-	PAINTED MDF WALL BASE, SEE ELEVATIONS FOR HEIGHTS (PROFILES TO FOLLOW)
VB-1	JOHNSONITE	4" RUBBER COVE BASE, MATCH ADJACENT WALL FINISH
BR-1	ARTO TILE	WALNUT SPICE GLAZED BRICK; GROUT: MAPEI COLOR T.B.D.
CPT-1	-	SUNKEN LOUNGE CARPET (PROVIDE MATERIAL ALLOWANCE \$45/YD)
CPT-2	BENTLEY	BKR420630R KINGS ROAD BROADLOOM, CUSHION BACK, COLOR: CUSTOM TBD
CPT-3	BENTLEY	CUSTOM PATTERN EDGEBOUND BROADLOOM "AREA RUG", PATTERN/COLOR TBD OVER ST-1
CPT-4	BENTLEY	BKR420630R KINGS ROAD BROADLOOM, CUSHION BACK, COLOR: CUSTOM TBD OVER ST-1
CPT-5	LEASING	CARPET TILE "AREA RUG" OVER T-1
F-1	KVADRAT	DIVINA UPHOLSTERY (COLOR T.B.D.)
F-2	JAMES DUNLOP	VIENNA 12575, ELM 110
F-3	MICA LOBBY DRAPERY	"VELVET" DRAPERY FABRIC, PROVIDE \$150/YARD MATERIAL ALLOWANCE
FRP-1	MARLITE	RECESSED CURTAIN TRACK: CURTAINTRACKS/COMMERCIAL ROLLER TRACK 16 GAUGE FT. SKU 18RT-96 TO BE INSTALLED IN RECESSED CHANNEL APPLIED TO WALLS
FRP-2	MARLITE	GLASS III/C COLOR P-207 BLACK or EQUAL - INSTALL FULL HEIGHT WHERE APPLIED TO WALLS
MIR-1	BENHEIM OR SIM.	LAMINATED MIRROR GLASS, ARCHITECTURAL "BRONZE", FRAMELESS, FLOOR TO CEILING
MTL-1	-	RUBBED BRONZE HANDRAILS TO MATCH EXISTING
SS-1	-	STAINLESS STEEL PANELS
PT-1	BENJAMIN MOORE	SWISS COFFEE OC-45, CEILING: FLAT, WALLS: EGGSHELL, TRIM: SATIN U.O.N.
PT-2	PORTOLA PAINTS	SPECIALTY FINISH: ROMAN CLAY, COLOR: SHINING
PT-3	PORTOLA PAINTS	SPECIALTY FINISH: ROMAN CLAY, COLOR: LUMIERE
PT-4	PORTOLA PAINTS	SPECIALTY FINISH: ROMAN CLAY, COLOR: MARLOWE
PT-5	-	-
PT-6	-	-
PT-7	-	-
PT-8	-	-
PT-9	-	-
PT-10	-	-
PT-11	-	-
PT-12	-	-
ST-1	-	EXISTING TRAVERTINE TO REMAIN/MATCH EXISTING IN KIND
ST-2	CORIAN	IRONSTONE QUARTZ SLAB
ST-3	-	PRECAST HONED CONCRETE HEARTH & SIDE WALLS (PROVIDE ALLOWANCE)
ST-4	MATERIAL	3mm NERO MARBLE SLAB, HONED
ST-5	-	3mm MARBLE FOR COUNTERTOPS - TO BE SELECTED BY CLIENT (HONED)
T-1	-	EXISTING HISTORIC MOSAIC TILE, PROVIDE ALLOWANCE OF \$20 SQ.FT. REPAIR AS REQUIRED.
T-2	NASCO AGGLO	DUCA/HONED 24x24 TILES; GROUT: MAPEI COLOR T.B.D.
T-3	JAPANESE TILE WORLD	MOSAIC 2X1 BLACK; GROUT: MAPEI COLOR T.B.D.
T-4	ANN SACKS	SAVOY LG STACKED LINEN; GROUT: MAPEI COLOR T.B.D.
T-5	JAPANESE TILE WORLD	MOSAIC 2X1 WHITE; GROUT: MAPEI COLOR T.B.D.
T-6	TERRA Y FUEGO	12X12 TERRACOTTA FLOOR TILE (\$20 SQ.FT.)
T-7	I COCO	CALCE SPACCATO / SPACCATO; GROUT: MAPEI COLOR T.B.D.
T-8	JAPANESE TILE WORLD	MOSAIC 2X1 BLACK; GROUT: MAPEI COLOR T.B.D.
T-9	INAX	YUKI BORDER, BLACK; GROUT: MAPEI COLOR T.B.D.
T-10	ROOKWOOD TILE	SPECIALTY TILE INSERT @ ROOFTOP HEARTH (\$70 SQ.FT. MATERIAL ALLOWANCE)
VCT-1	ARMSTRONG	DESERT DUST: 52128
VCT-2	ZANDUR	FLEX RUBBER FLOORING, 9MM, ER1022 CORVINO
WC-1	-	PROVIDE \$35/YD. MATERIAL ALLOWANCE
WC-2	-	PROVIDE \$50/YD. MATERIAL ALLOWANCE
WC-3	DESIGNTEX	DWG3 ARTISTS CANVAS WALLCOVERING SUBSTRATE WITH CUSTOM DIGITAL PRINT, DESIGN TBD.
WC-4	WOLFGORDON	KERRY / LINEN WALLCOVERING
WD-1	WOLFGORDON	WHITE POPLAR FC, WOOD WALLCOVERING
WD-2	FORMICA	06996-26 PECAN WALNUT
WD-3	FORMICA	06996-26 PECAN WALNUT
WD-4	FORMICA	08793-58 GREEN SLATE, MATTE
WD-5	FORMICA	08793-58 GREEN SLATE, MATTE
WD-6	-	STAINED OAK MILLWORK QUARTERSAWN, STAIN: MATCH WD-1 TONE
WD-7	ARMSTRONG	WOODWORKS REGULAR WARM OAK w/ PERFORATED SLAT
WD-8	-	STAINED RED OAK MILLWORK QUARTERSAWN, STAIN: GUNSTOCK
WD-9	FORMICA	B244 NIGHT FOREST, MATTE

KEY	MANUFACTURER	DESCRIPTION
CH-1	T.B.D.	
CH-2	T.B.D.	
CH-3	T.B.D.	
CH-4	T.B.D.	
CH-5	T.B.D.	
CH-6	T.B.D.	
CH-7	T.B.D.	
CH-8	T.B.D.	
CH-9	T.B.D.	
CH-10	T.B.D.	
CH-11	T.B.D.	
CH-12	T.B.D.	
CH-13	T.B.D.	
CH-14	T.B.D.	
TA-1	T.B.D.	
TA-2	T.B.D.	
TA-3	T.B.D.	
TA-4	T.B.D.	
TA-5	T.B.D.	
TA-6	T.B.D.	
TA-6	T.B.D.	
F-1	T.B.D.	
F-2	T.B.D.	
F-3	T.B.D.	
F-4	T.B.D.	
F-5	T.B.D.	
F-6	T.B.D.	
F-7	T.B.D.	
F-8	T.B.D.	
F-9	T.B.D.	
F-10	T.B.D.	
F-11	T.B.D.	
F-12	T.B.D.	
F-13	T.B.D.	

KEY	MANUFACTURER	DESCRIPTION: SEE INTERIOR DOCUMENT
SK-1	KRAUS OUTDOOR	KITCHEN SINK
SKF-1	KRAUS OULETTED	KITCHEN FAUCET, BLACK
LAV-1	AMERICAN STANDARD	TOILET ROOM SINK, BOULEVARD PEDESTAL
LAF-1	KOHLER	TOILET ROOM FAUCET



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 1826 Race Street  
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# Formica Building

## Tenant Roof Club Room & Terrace

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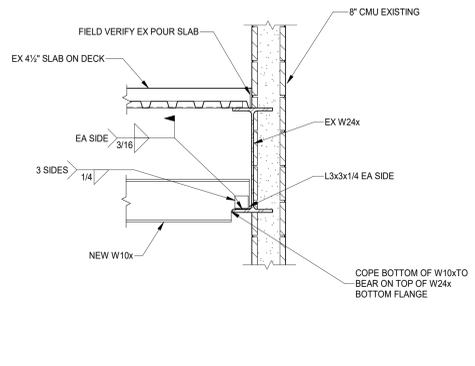
Project: Formica Building: Roof Club Room & Terrace  
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 Project No: 2022\_259-E  
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 Checked: As Noted



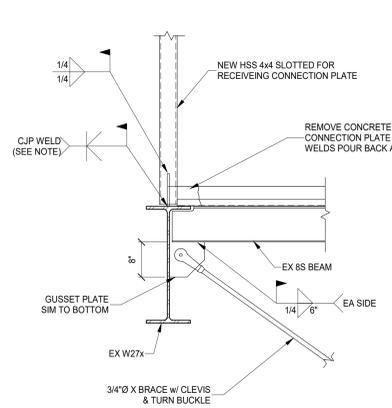




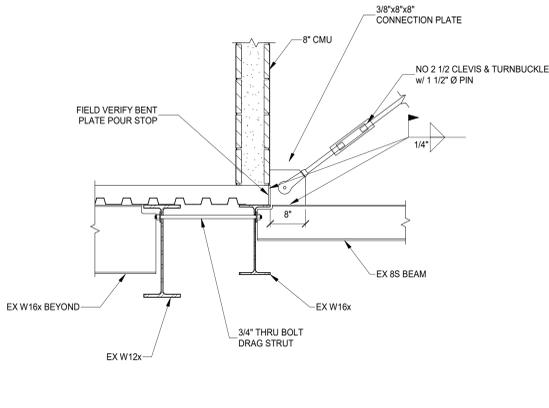
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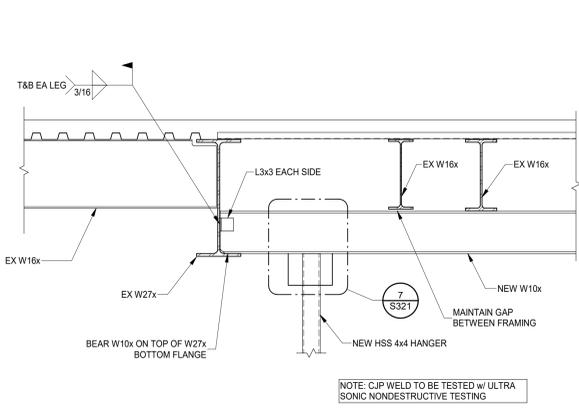
**SECTION 1**  
SCALE 3/4" = 1'-0"  
S321



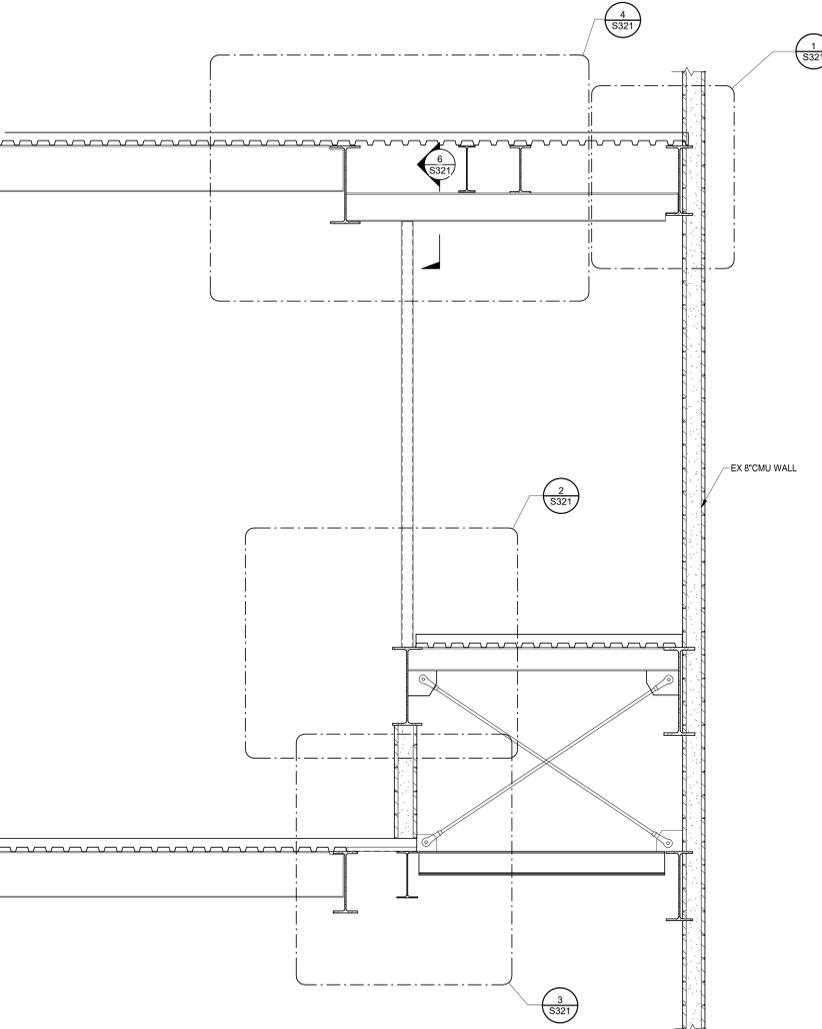
**SECTION 2**  
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S321



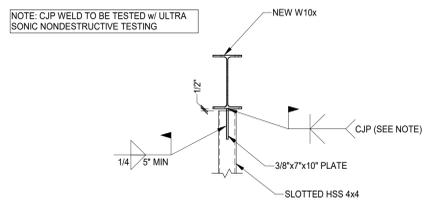
**SECTION 3**  
SCALE 3/4" = 1'-0"  
S321



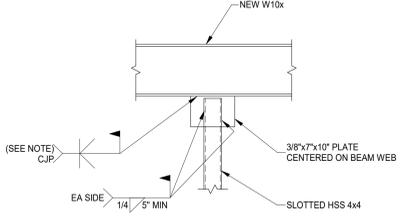
**SECTION 4**  
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S321



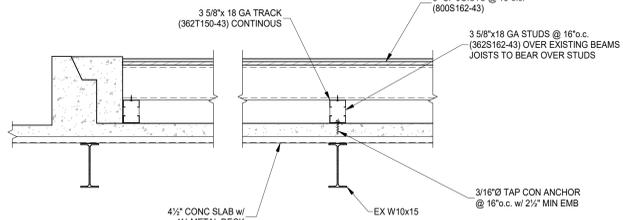
**SECTION 5**  
SCALE 1/2" = 1'-0"  
S321



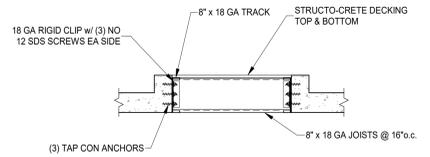
**SECTION 6**  
SCALE 3/4" = 1'-0"  
S321



**SECTION 7**  
SCALE 3/4" = 1'-0"  
S321



**SECTION 8**  
SCALE 3/4" = 1'-0"  
S321



**SECTION 9**  
SCALE 3/4" = 1'-0"  
S321

PREPARED FOR: MODEL GROUP  
**Formica Building**  
Tenat Roof Club Room & Terrace  
120 EAST 14TH STREET  
CINCINNATI, OH 45202



# Revision/Submission	Date
For Permit	10/02/2023

Project Number: 22482.04  
Design Team: ACL

**FRAMING SECTIONS**  
**S321**



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### HVAC CODES AND STANDARDS

MECHANICAL CODE - IMC (2015) (INTERNATIONAL MECHANICAL CODE)  
 VENTILATION STANDARD - ASHRAE 62.1 (2019)  
 ENERGY CODE - IECC (2012) (INTERNATIONAL ENERGY CONSERVATION CODE)

PERMIT #2023XXXXXX

### MECHANICAL LEGEND

SYMBOL	DESCRIPTION
<b>PLAN-VIEW LINE TYPES</b>	
	WORK SHOWN FAGED INDICATES EXISTING WORK TO REMAIN OR NEW WORK BY OTHERS AS APPLICABLE
	WORK SHOWN BOLD-DASHED INDICATES SELECTIVE DEMOLITION WORK
	WORK SHOWN BOLD-CONTINUOUS INDICATES NEW WORK
<b>DRAWING SET APPEARANCE</b>	
TO BETTER COMMUNICATE SCOPE TO PERMIT AGENCIES AND CONTRACTORS, EACH DRAWING IN THIS DRAWING SET HAS BEEN CREATED IN BOTH "COLOR" AND "BLACK AND WHITE". THERE EXISTS A COLOR LAYER WITHIN EACH DRAWING WHERE VISIBILITY IS CONTROLLED THROUGH THE PLOT LAYER MANAGER. THIS LAYER VISIBILITY CAN BE TOGGLED DISPLAYING EITHER "COLOR" OR "BLACK AND WHITE". TO MAINTAIN SCOPE BASED SHADING WHEN PRINTING TO PAPER, BLACK AND WHITE NEEDS TO BE VISIBLE. FOR FURTHER INSTRUCTIONS, REFER TO CONTRACTOR RESOURCES ON OUR WEBSITE AND DOWNLOAD "DRAWING COLOR INSTRUCTIONS". WWW.KLHENGERS.COM - CONTRACTOR RESOURCES (RIGHT HAND SIDE OF PAGE).	
<b>MECHANICAL STATS &amp; SENSORS</b>	
	TEMPERATURE SENSOR
	LOW VOLTAGE THERMOSTAT
	LOW VOLTAGE THERMOSTAT WITH LOCKABLE GUARD
<b>MECHANICAL DUCTWORK ACCESSORIES</b>	
	DUCT WITH MANUAL VOLUME DAMPER
	MOTOR OPERATED DAMPER - LOW VOLTAGE
	BAROMETRIC DAMPER
	FIRE DAMPER - 1.5 HR
	COMBINATION FIRE/SMOKE DAMPER - 1.5 HR
	COMBINATION FIRE/SMOKE DAMPER - 3 HR
<b>MECHANICAL AIR DEVICES</b>	
	SUPPLY REGISTER
	RETURN REGISTER
	EXHAUST REGISTER
	SUPPLY GRILLE
	RETURN GRILLE
	CEILING DIFFUSER
	2'x2' SQUARE CEILING DIFFUSER WITH 10" NECK
	LINEAR SLOT DIFFUSER
<b>MECHANICAL DUCTWORK</b>	
	SUPPLY DUCT WITH ELBOW TURNED UP
	SUPPLY DUCT WITH ELBOW TURNED DOWN
	RETURN DUCT WITH ELBOW TURNED UP
	RETURN DUCT WITH ELBOW TURNED DOWN
	EXHAUST DUCT WITH ELBOW TURNED UP
	EXHAUST DUCT WITH ELBOW TURNED DOWN
	SUPPLY DUCT
	RETURN DUCT
	EXHAUST DUCT
	OUTSIDE AIR DUCT
	FLEXIBLE DUCTWORK CONNECTION
	BRANCH TAKEOFF
	REDUCER, CONCENTRIC
	REDUCER, NONCONCENTRIC

### STANDARD HVAC ABBREVIATIONS

AAV	AUTOMATIC AIR VENT	HD	HEAD	RO	REVERSE OSMOSIS
ACCESS	ACCESSORIES	HQA	HAND-OFF/AUTOMATIC	RPM	REVOLUTIONS PER MINUTE
AD	ACCESS DOOR	HP	HORSEPOWER	RS	REFRIGERANT SUCTION
AFF	ABOVE FINISHED FLOOR	HPR	HIGH PRESSURE RETURN	SA	SUPPLY AIR
AMP	AMPERE	HSC	(STEAM CONDENSATE)	SAT	SUPPLY AIR TEMPERATURE
AP	ACCESS PANEL	HSTAT	HUMIDISTAT	SC	SHADING COEFFICIENT
APD	AIR PRESSURE DROP	HTG	HEATING	SCD	SMOKE CONTROL DAMPER
ARI	AIR CONDITIONING AND REFRIGERATION INSTITUTE	HWR	HEATING HOT WATER RETURN	SD	SMOKE DETECTOR
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	HWS	HEATING HOT WATER SUPPLY	SENS	SENSIBLE HEAT
BAS	BUILDING AUTOMATION SYSTEM	HZ	HERTZ	SP	STATIC PRESSURE
BD	BACKDRAFT DAMPER	IO	INPUT/OUTPUT	TAB	TESTING, ADJUSTING, BALANCE
BHP	BRAKE HORSEPOWER	IAQ	INDOOR AIR QUALITY	TDH	TOTAL DYNAMIC HEAD
BTU	BRITISH THERMAL UNIT	IN HG	INCHES OF MERCURY	TDS	TOTAL DISSOLVED SOLIDS
BTUH	BRITISH THERMAL UNIT PER HOUR	IN WC	INCH WATER COLUMN	TSP	TOTAL STATIC PRESSURE
CD	CEILING DIFFUSER	IN WG	INCH WATER GAUGE	TS/STAT	THERMOSTAT
CFH	CUBIC FEET PER HOUR	IRLV	INTERGRADED PART LOAD VALUE	UL	UNDERWRITERS LABORATORY
CFM	CUBIC FEET PER MINUTE	INST	INSTALLED	VAV	VARIABLE AIR VOLUME
CHWR	CHILLED WATER RETURN	KW	KILOWATT	VFD	VARIABLE FREQUENCY DRIVE
CHWS	CHILLED WATER SUPPLY	KWH	KILOWATT HOUR	WB	WET-BULB (TEMPERATURE)
CI	CAST IRON	LAT	LEAVING AIR TEMPERATURE	WG	WATER GAGE
CLG	COOLING	LB/HR	POUNDS PER HOUR	WPD	WATER SIDE PRESSURE DROP
CO	CARBON MONOXIDE	LF	LINEAR FOOT (FEET)	WIRE	WIRED
CO2	CARBON DIOXIDE	LPR	LOW PRESSURE RETURN		
COP	COEFFICIENT OF PERFORMANCE	LPS	(STEAM CONDENSATE)		
CV	CONSTANT VOLUME	LWT	LOW PRESSURE STEAM		
CWR	CONDENSER WATER RETURN	LWV	LEAVING WATER TEMPERATURE		
CWS	CONDENSER WATER SUPPLY	MAX	MAXIMUM		
DB	DECIBELS	MBH	1000 BTUH		
DB	DRY-BULB TEMPERATURE	MCA	MINIMUM BRANCH CIRCUIT AMPACITY		
DC	DISCONNECT	MERV	MINIMUM EFFICIENCY REPORTING VALUE		
DDC	DIRECT DIGITAL CONTROLS	MIN	MINIMUM		
DEG	DEGREE DELTA(CHANGE IN TEMPERATURE)	MOD	MOTOR OPERATED DAMPER		
DIA	DIAMETER	MPR	MEDIUM PRESSURE RETURN		
DW	DEIONIZED WATER	MPS	(STEAM CONDENSATE)		
DP	DEW POINT TEMPERATURE	MPS	MEDIUM PRESSURE STEAM		
DX	DIRECT EXPANSION	MVD	MAGNETIC RESONANCE IMAGING		
EA	EXHAUST AIR	NA	NOT APPLICABLE		
EAT	ENTERING AIR TEMPERATURE	NC	NOISE CRITERIA		
EER	ENERGY EFFICIENCY RATIO	NC	NOT APPLICABLE		
EG	EXHAUST GRILLE	NC	NORMALLY CLOSED		
EMERG	EMERGENCY POWER	NO	NORMALLY OPEN		
ESP	EXTERNAL STATIC PRESSURE	NTS	NOT TO SCALE		
EWT	ENTERING WATER TEMPERATURE	OA	OUTSIDE AIR		
EX	EXISTING	OC	OVER CURRENT PROTECTION		
F	FAHRENHEIT	PD	PRESSURE DROP		
F&T	FLOAT AND THERMOSTATIC	PPM	PARTS PER MILLION		
FA	FREE AREA	PRS	PRESSURE REGULATING (VALVE) STATION		
FD	FIRE DAMPER	PRV	PRESSURE REGULATING VALVE		
FLA	FULL LOAD AMPERES	PSI	POUNDS PER SQUARE INCH		
FLM	FEET PER MINUTE	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE		
FPS	FEET PER SECOND	PSIG	POUNDS PER SQUARE INCH - GAGE		
FT	FEET	RA	RETURN AIR		
FURN	FURNISHED	RAT	RETURN AIR TEMPERATURE		
GA	GALVE	RH	RELATIVE HUMIDITY		
GAL	GALLONS	RL	REFRIGERANT LIQUID LINE		
GPM	GALLONS PER MINUTE	RLA	RUN LOAD AMPERE		

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**MECHANICAL COVER SHEET**

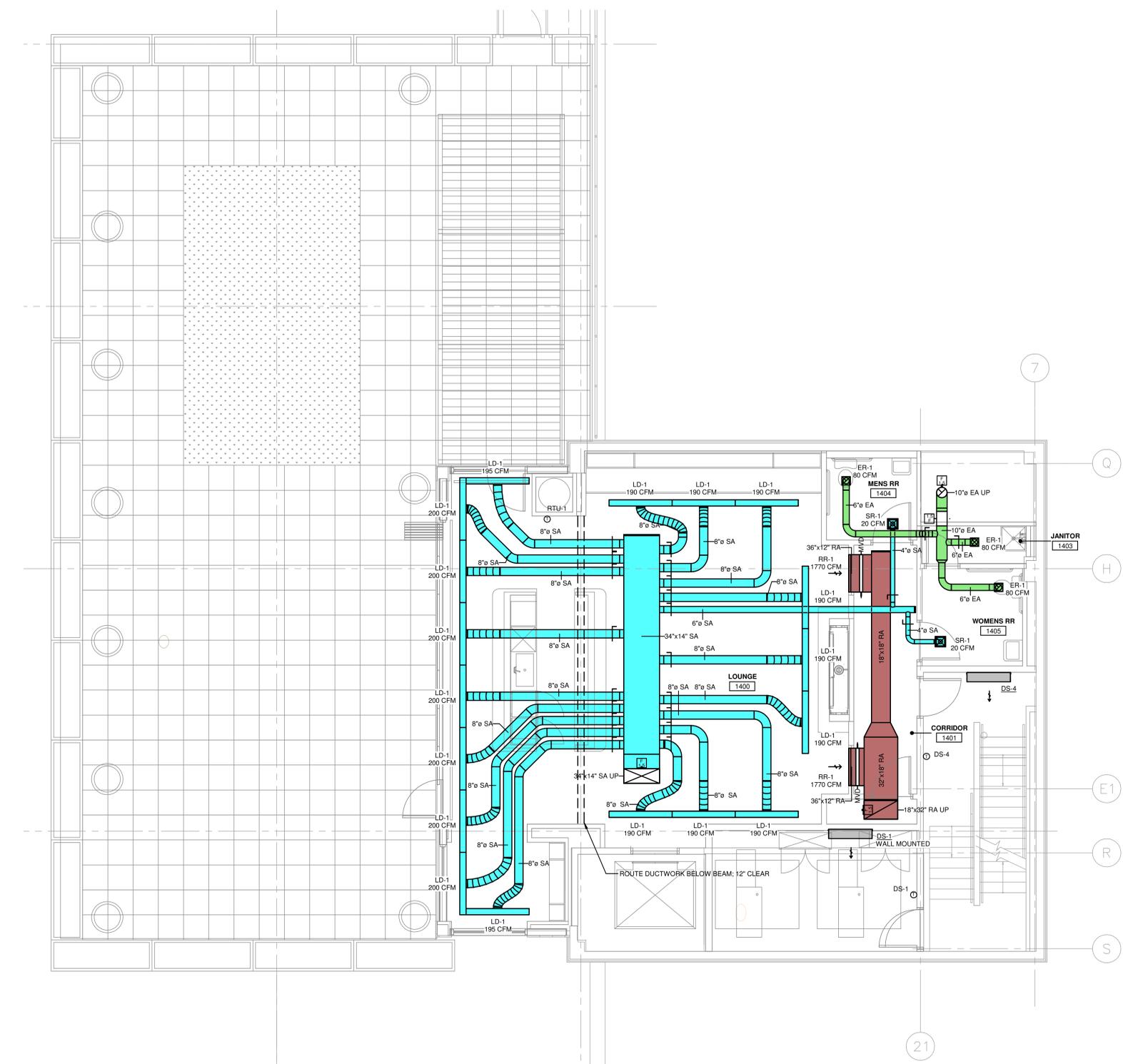
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1 MECHANICAL PLAN - LEVEL 14 - LOUNGE  
 1/4" = 1'-0"



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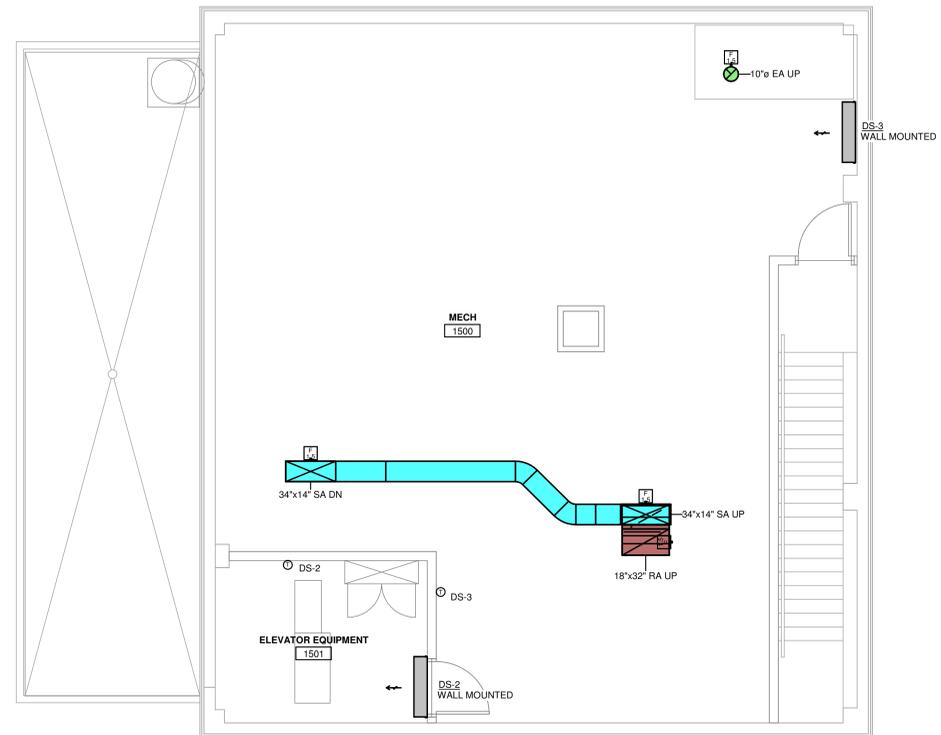
MECHANICAL DUCTWORK  
 LEVEL 14 PLAN

**M3-102**  
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MECHANICAL PLAN - LEVEL 15 - LOUNGE  
1/4" = 1'-0"



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E-77432  
REGISTERED PROFESSIONAL ENGINEER  
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MECHANICAL DUCTWORK LEVEL 15 PLAN

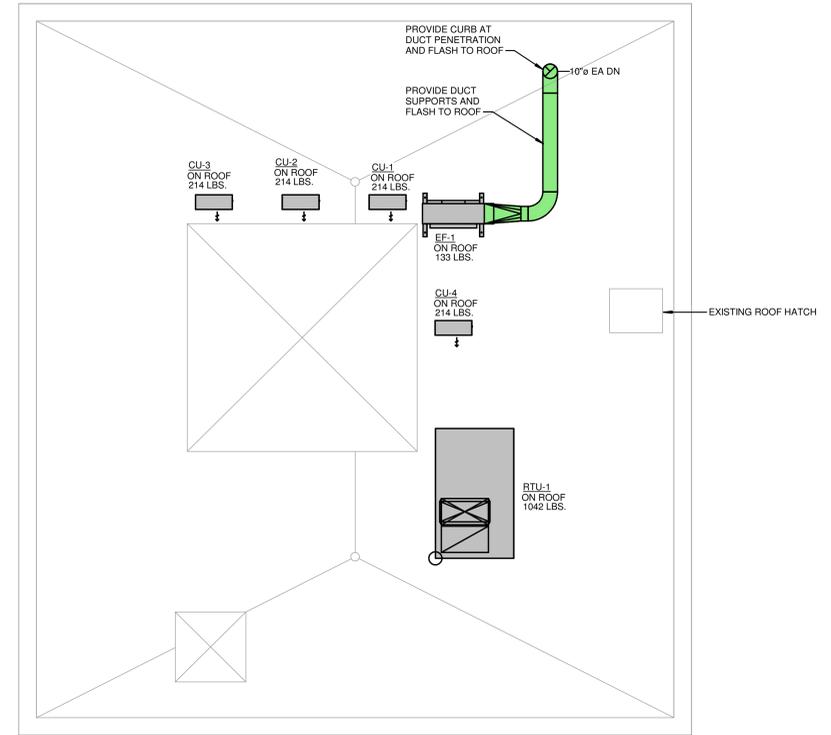
**M3-103**

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1 MECHANICAL PLAN - LEVEL 16 - LOUNGE  
 1/4" = 1'-0"



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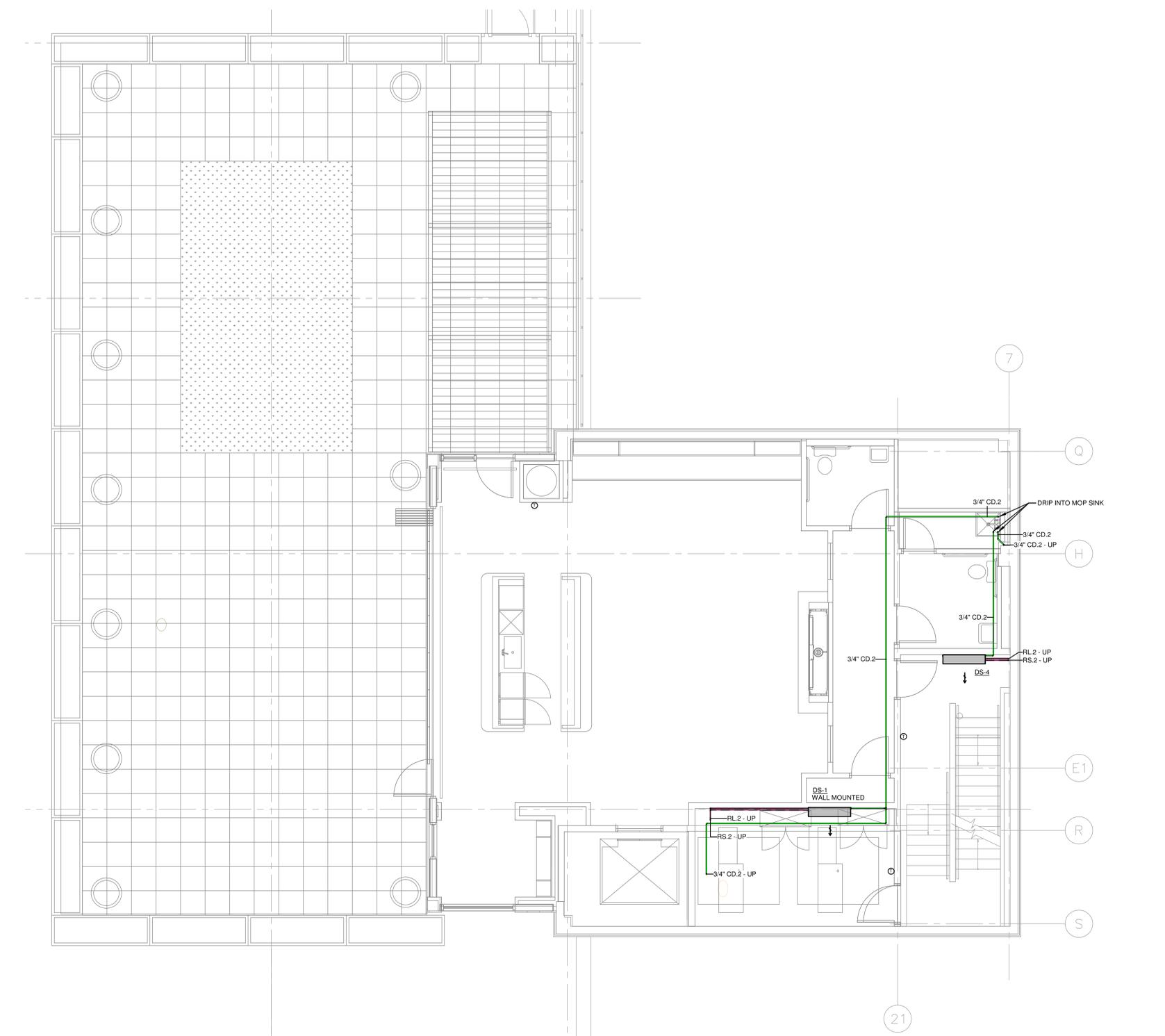
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MECHANICAL  
 DUCTWORK  
 LEVEL 16 PLAN

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1 MECHANICAL PIPING PLAN - LEVEL 14 - LOUNGE  
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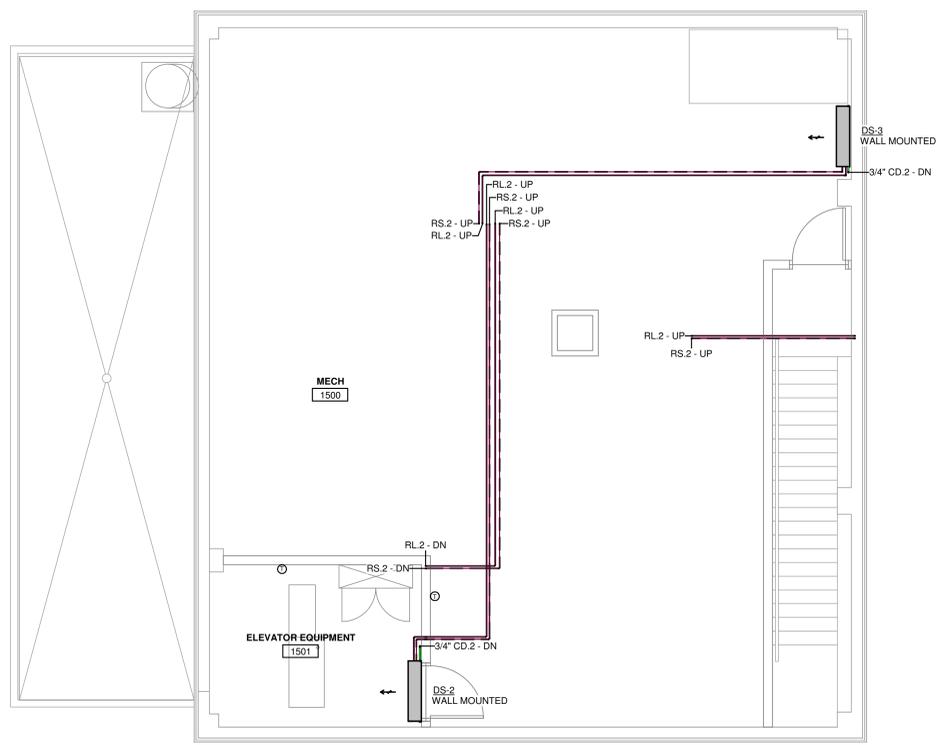
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MECHANICAL PIPING LEVEL  
14 PLAN

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1 MECHANICAL PIPING PLAN - LEVEL 15 - LOUNGE  
1/4" = 1'-0"



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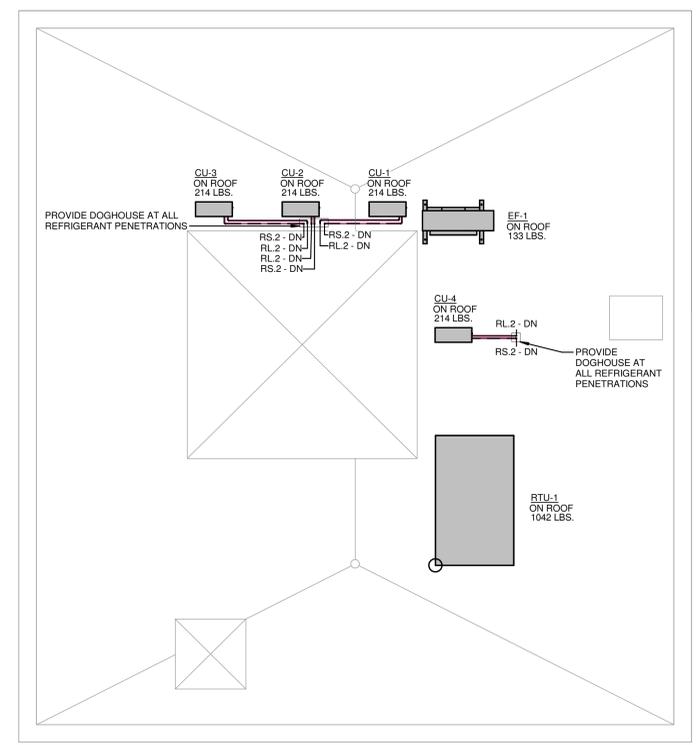
MECHANICAL PIPING LEVEL  
15 PLAN

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① MECHANICAL PIPING PLAN - LEVEL 16 - LOUNGE  
 1/4" = 1'-0"

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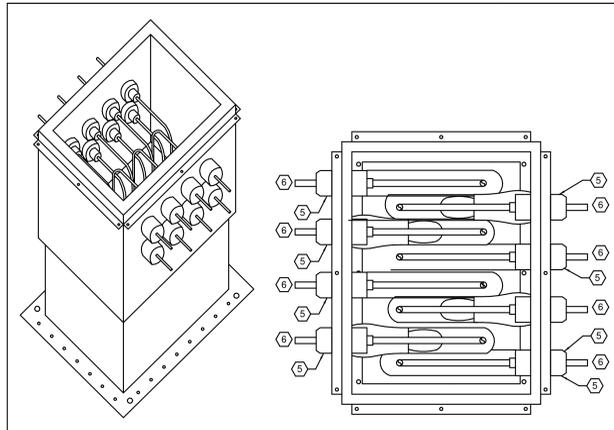


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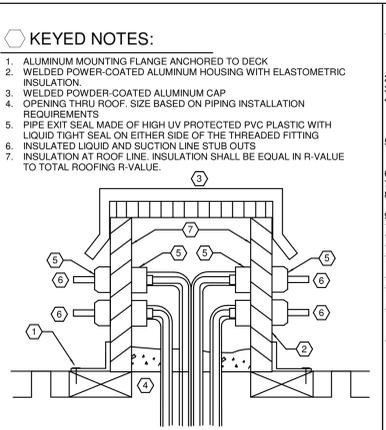
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MECHANICAL PIPING LEVEL 16 PLAN

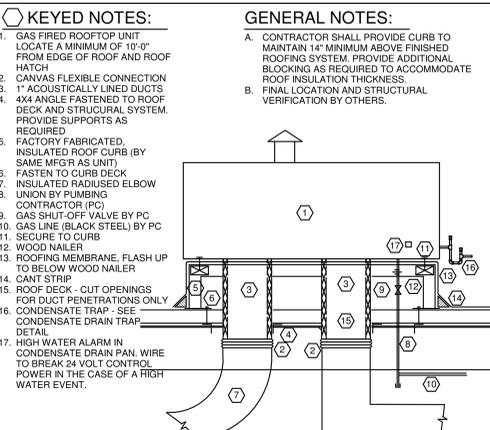
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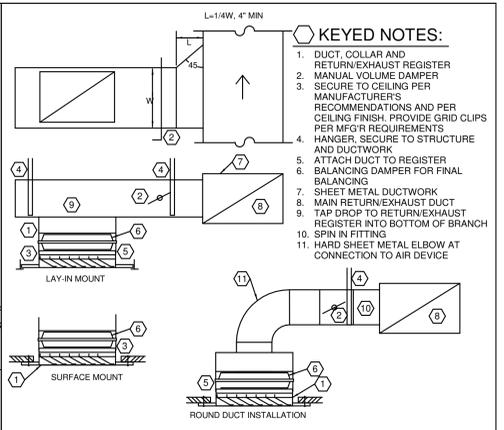


- KEYED NOTES:**
1. ALUMINUM MOUNTING FLANGE ANCHORED TO DECK
  2. WELDED POWER-COATED ALUMINUM HOUSING WITH ELASTOMETRIC INSULATION.
  3. WELDED POWDER-COATED ALUMINUM CAP
  4. OPENING THRU ROOF, SIZE BASED ON PIPING INSTALLATION REQUIREMENTS
  5. PIPE EXIT SEAL MADE OF HIGH UV PROTECTED PVC PLASTIC WITH LIQUID TIGHT SEAL ON EITHER SIDE OF THE THREADED FITTING
  6. INSULATED LIQUID AND SUCTION LINE STUB OUTS
  7. INSULATION AT ROOF LINE, INSULATION SHALL BE EQUAL IN R-VALUE TO TOTAL ROOFING R-VALUE.



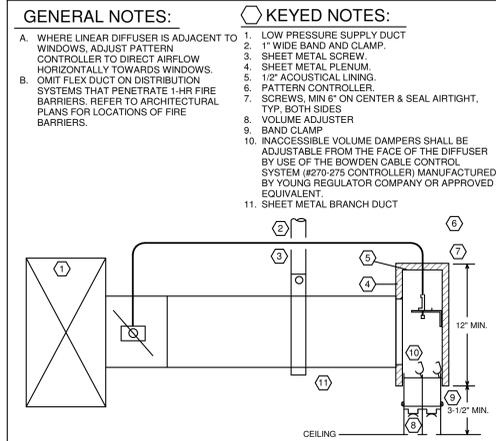
- KEYED NOTES:**
1. GAS FIRED ROOFTOP UNIT LOCATE A MINIMUM OF 10'-0" FROM EDGE OF ROOF AND ROOF HATCH
  2. CANVAS FLEXIBLE CONNECTION
  3. 1" ACOUSTICALLY LINED DUCTS
  4. 4X4 ANGLE FASTENED TO ROOF DECK AND STRUCTURAL SYSTEM. PROVIDE SUPPORTS AS REQUIRED
  5. FACTORY FABRICATED, INSULATED ROOF CURB (BY SAME MFG'R AS UNIT)
  6. FASTEN TO CURB DECK
  7. INSULATED RADIUS ELBOW
  8. UNION BY PUMPING CONTRACTOR (PC)
  9. GAS SHUT-OFF VALVE BY PC
  10. GAS LINE (BLACK STEEL) BY PC
  11. SECURE TO CURB
  12. WOOD NAILER
  13. ROOFING MEMBRANE, FLASH UP TO BELOW WOOD NAILER
  14. GANT STRIP
  15. ROOF DECK - CUT OPENINGS FOR DUCT PENETRATIONS ONLY
  16. CONDENSATE TRAP - SEE CONDENSATE DRAIN TRAP DETAIL
  17. HIGH WATER ALARM IN CONDENSATE DRAIN PAN. WIRE TO BREAK 24 VOLT CONTROL POWER IN THE CASE OF A HIGH WATER EVENT.
- GENERAL NOTES:**
- A. CONTRACTOR SHALL PROVIDE CURB TO MAINTAIN 14" MINIMUM ABOVE FINISHED ROOFING SYSTEM. PROVIDE ADDITIONAL BLOCKING AS REQUIRED TO ACCOMMODATE ROOF INSULATION THICKNESS.
  - B. FINAL LOCATION AND STRUCTURAL VERIFICATION BY OTHERS.

237433.00-04 - ROOF CURB & MOUNTING C  
 SCALE: NONE



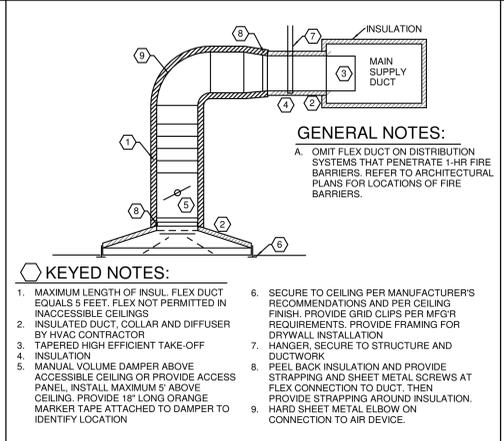
- KEYED NOTES:**
1. DUCT COLLAR AND RETURN/EXHAUST REGISTER
  2. MANUAL VOLUME DAMPER
  3. SECURE TO CEILING PER MANUFACTURER'S RECOMMENDATIONS AND PER CEILING FINISH. PROVIDE GRID CLIPS PER MFG'R REQUIREMENTS
  4. HANGER, SECURE TO STRUCTURE AND DUCTWORK
  5. ATTACH DUCT TO REGISTER
  6. BALANCING DAMPER FOR FINAL BALANCING
  7. SHEET METAL DUCTWORK
  8. MAIN RETURN/EXHAUST DUCT
  9. TAP DROP TO RETURN/EXHAUST REGISTER INTO BOTTOM OF BRANCH
  10. SPIN IN FITTING
  11. HARD SHEET METAL ELBOW AT CONNECTION TO AIR DEVICE

237173.00-21 - RETURN/EXHAUST REGISTER INSTALLATION  
 SCALE: NONE



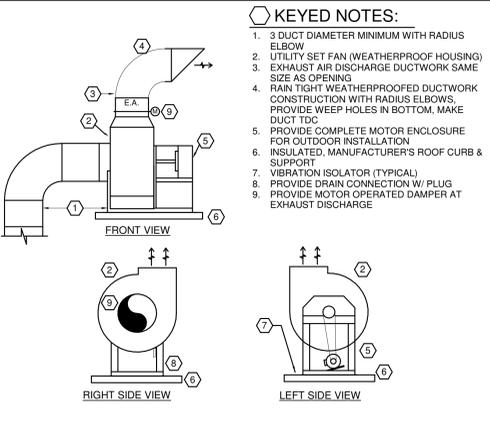
- GENERAL NOTES:**
- A. WHERE LINEAR DIFFUSER IS ADJACENT TO WINDOWS, ADJUST PATTERN CONTROLLER TO DIRECT AIRFLOW HORIZONTALLY TOWARDS WINDOWS.
  - B. OMIT FLEX DUCT ON DISTRIBUTION SYSTEMS THAT PENETRATE 1-HR FIRE BARRIERS. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE BARRIERS.
- KEYED NOTES:**
1. LOW PRESSURE SUPPLY DUCT
  2. 1" WIDE BAND AND CLAMP
  3. SHEET METAL SCREW
  4. SHEET METAL PLENUM
  5. 1/2" ACOUSTICAL LINING
  6. PATTERN CONTROLLER
  7. SCREWS, MIN 6" ON CENTER & SEAL AIRTIGHT, TYP. BOTH SIDES
  8. VOLUME ADJUSTER
  9. BAND CLAMP
  10. INACCESSIBLE VOLUME DAMPERS SHALL BE ADJUSTABLE FROM THE FACE OF THE DIFFUSER BY USE OF THE BOWDEN CABLE CONTROL SYSTEM (#270-275 CONTROLLER) MANUFACTURED BY YOUNG REGULATOR COMPANY OR APPROVED EQUIVALENT.
  11. SHEET METAL BRANCH DUCT

233713.00-12 - PLENUM/LINEAR DIFFUSER W/ YOUNG REG.  
 SCALE: NONE



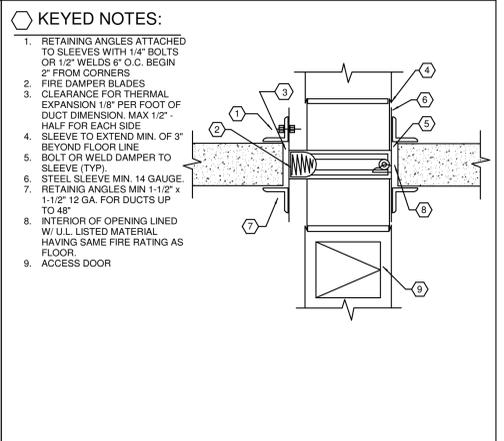
- GENERAL NOTES:**
- A. OMIT FLEX DUCT ON DISTRIBUTION SYSTEMS THAT PENETRATE 1-HR FIRE BARRIERS. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE BARRIERS.
- KEYED NOTES:**
1. MAXIMUM LENGTH OF INSUL. FLEX DUCT EQUALS 5 FEET. FLEX NOT PERMITTED IN INACCESSIBLE CEILING
  2. INSULATED DUCT, COLLAR AND DIFFUSER BY HVAC CONTRACTOR
  3. TAPERED HIGH EFFICIENT TAKE-OFF INSULATION
  4. INSULATION
  5. MANUAL VOLUME DAMPER ABOVE ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL, INSTALL MAXIMUM 5' ABOVE CEILING. PROVIDE 18" LONG ORANGE MARKER TAPE ATTACHED TO DAMPER TO IDENTIFY LOCATION
  6. SECURE TO CEILING PER MANUFACTURER'S RECOMMENDATIONS AND PER CEILING FINISH. PROVIDE GRID CLIPS PER MFG'R REQUIREMENTS. PROVIDE FRAMING FOR DRYWALL INSTALLATION
  7. HANGER, SECURE TO STRUCTURE AND DUCTWORK
  8. PEEL BACK INSULATION AND PROVIDE STRAPPING AND SHEET METAL SCREWS AT FLEX CONNECTION TO DUCT. THEN PROVIDE STRAPPING AROUND INSULATION.
  9. DOUBLE THICKNESS TURNING VANES (TYPICAL)

233713.00-05 - DIFFUSER INSTALLATION HARD ELBOW  
 SCALE: NONE



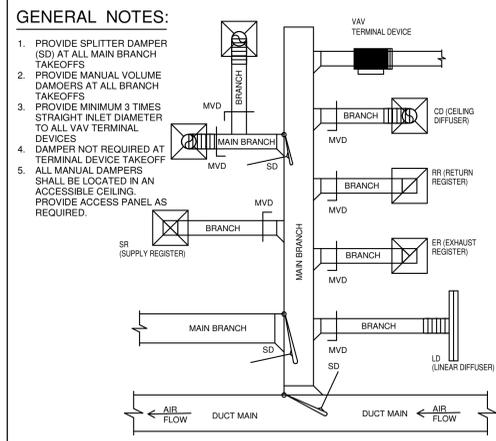
- KEYED NOTES:**
1. 3 DUCT DIAMETER MINIMUM WITH RADIUS ELBOW
  2. UTILITY SET FAN (WEATHERPROOF HOUSING)
  3. EXHAUST AIR DISCHARGE DUCTWORK SAME SIZE AS OPENING
  4. RAINTIGHT WEATHERPROOFED DUCTWORK CONSTRUCTION WITH RADIUS ELBOWS, PROVIDE WEEP HOLES IN BOTTOM. MAKE DUCT TOC
  5. PROVIDE COMPLETE MOTOR ENCLOSURE FOR OUTDOOR INSTALLATION
  6. INSULATED, MANUFACTURER'S ROOF CURB & SUPPORT
  7. VIBRATION ISOLATOR (TYPICAL)
  8. PROVIDE DRAIN CONNECTION W/ PLUG
  9. PROVIDE MOTOR OPERATED DAMPER AT EXHAUST DISCHARGE

233400.00-03 - UTILITY SET EXHAUST FAN  
 SCALE: NONE



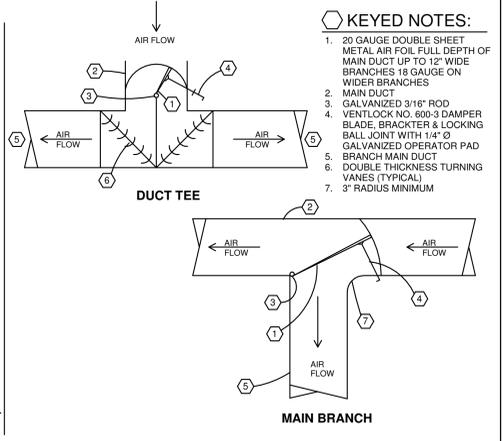
- KEYED NOTES:**
1. RETAINING ANGLES ATTACHED TO SLEEVES WITH 1/4" BOLTS OR 1/2" WELDS 6" O.C. BEGIN 2" FROM CORNERS
  2. FIRE DAMPER BLADES
  3. CLEARANCE FOR THERMAL EXPANSION 1/8" PER FOOT OF DUCT DIMENSION, MAX 1/2" - HALF FOR EACH SIDE
  4. SLEEVE TO EXTEND MIN. OF 3" BEYOND FLOOR LINE
  5. BOLT OR WELD DAMPER TO SLEEVE TYP.
  6. STEEL SLEEVE MIN. 14 GAUGE
  7. RETAINING ANGLES MIN 1-1/2" x 1-1/2" 12 GA. FOR DUCTS UP TO 48"
  8. INTERIOR OF OPENING LINED W/ U.L. LISTED MATERIAL HAVING SAME FIRE RATING AS FLOOR
  9. ACCESS DOOR

233313.00-15 - FIRE DAMPER FLOOR PENETRATION  
 SCALE: NONE



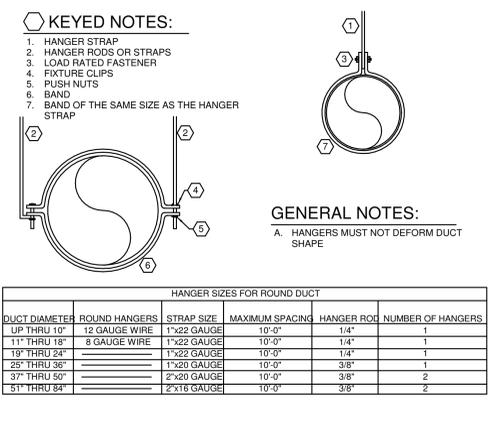
- GENERAL NOTES:**
1. PROVIDE SPLITTER DAMPER (SD) AT ALL MAIN BRANCH TAKEOFFS
  2. PROVIDE MANUAL VOLUME DAMPERS AT ALL BRANCH TAKEOFFS
  3. PROVIDE MINIMUM 3 TIMES STRAIGHT INLET DIAMETER TO ALL VAV TERMINAL DEVICES
  4. DAMPER NOT REQUIRED AT TERMINAL DEVICE TAKEOFF
  5. ALL MANUAL DAMPERS SHALL BE LOCATED IN AN ACCESSIBLE CEILING. PROVIDE ACCESS PANEL AS REQUIRED.

233300.00-01 - MANUAL DAMPER DETAIL  
 SCALE: NONE

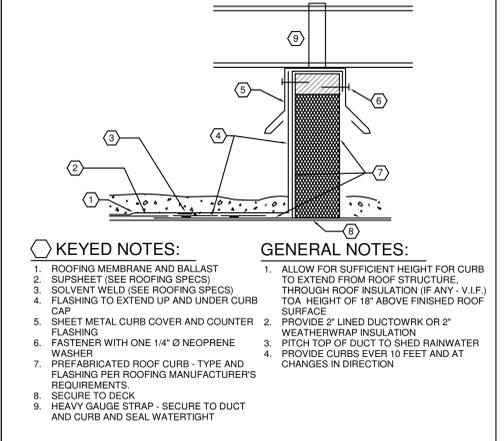


- KEYED NOTES:**
1. 20 GAUGE DOUBLE SHEET METAL AIR FOIL FULL DEPTH OF MAIN DUCT UP TO 12" WIDE BRANCHES 18 GAUGE ON WIDER BRANCHES
  2. MAIN DUCT
  3. GALVANIZED 3/16" ROD
  4. VENTLOCK NO. 600-3 DAMPER BLADE, BRACKET & LOCKING BALL JOINT WITH 1/4" Ø GALVANIZED OPERATOR PAD
  5. BRANCH MAIN DUCT
  6. DOUBLE THICKNESS TURNING VANES (TYPICAL)
  7. 3" RADIUS MINIMUM
- GENERAL NOTES:**
1. HANGER STRAP
  2. HANGER RODS OR STRAPS
  3. LOAD RATED FASTENER
  4. NUTS OR WASHERS
  5. PUSH NUTS
  6. BAND
  7. 1/2" OF THE SAME SIZE AS THE HANGER STRAP
- GENERAL NOTES:**
- A. HANGERS MUST NOT DEFORM DUCT SHAPE

233113.00-09 - ROUND DUCT HANGERS  
 SCALE: NONE



233113.00-09 - ROUND DUCT HANGERS  
 SCALE: NONE



- KEYED NOTES:**
1. ROOFING MEMBRANE AND BALLAST
  2. SUPSHEET (SEE ROOFING SPECS)
  3. SOLVENT WELD (SEE ROOFING SPECS)
  4. FLASHING TO EXTEND UP AND UNDER CURB GAP
  5. SHEET METAL CURB COVER AND COUNTER FLASHING
  6. FASTENER WITH ONE 1/4" Ø NEOPRENE WASHER
  7. PREFABRICATED ROOF CURB - TYPE AND FLASHING PER ROOFING MANUFACTURER'S REQUIREMENTS.
  8. SECURE TO DECK
  9. HEAVY GAUGE STRAP - SECURE TO DUCT AND CURB AND SEAL WATERTIGHT
- GENERAL NOTES:**
1. ALLOW FOR SUFFICIENT HEIGHT FOR CURB TO EXTEND FROM ROOF STRUCTURE THROUGH ROOF INSULATION (IF ANY - V.I.F.) TO A HEIGHT OF 18" ABOVE FINISHED ROOF SURFACE
  2. PROVIDE 2" LINED DUCTWORK OR 2" WEATHERWRAP INSULATION
  3. PITCH TOP OF DUCT TO SHED RAINWATER
  4. PROVIDE CURBS EVERY 10 FEET AND AT CHANGES IN DIRECTION

233113.00-04 - DUCTWORK ON ROOF CURB  
 SCALE: NONE



**REVISIONS**

NO.	DESCRIPTION	DATE

DWNAuthor CChecker  
 DATE: 09/29/23  
 PROJECT #: 24166.03

**MECHANICAL - DETAILS**  
**M6-501**  
 1" REFERENCE  
 KLH PROJECT #  
 24166.03

### HVAC FANS SCHEDULE

Equipment shall be braced and labeled by the equipment manufacturer to withstand the minimum scheduled available fault current value for listed equipment.

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lbs)	MANUFACTURER	MODEL	CFM (cfm)	ESP (in WC)	FAN RPM (rpm)	BHP (hp)	EMERGENCY	ELECTRIC CONNECTION SUMMARY
EF-1	HVAC FAN	FORMICA ROOF	NEW	133	COOK	70CPV-EC	240	0.4	1725	0.25	NO	EF-1 - 120V/1PH, 0.25 HP

### HVAC LOAD SCHEDULE

THE HEATING AND COOLING LOAD CALCULATIONS ARE BASED ON THE CLTD/CLF (COOLING LOAD TEMPERATURE DIFFERENCE-COOLING LOAD FACTOR) METHOD. ASSUMPTIONS AND EXECUTION OF THESE METHODS ARE PER ASHRAE 183-2007 STANDARD FOR PEAK COOLING AND HEATING LOAD CALCULATIONS IN BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS.

COOLING LOAD BREAKDOWN										HEATING LOAD BREAKDOWN																																					
CROOF	SENSIBLE HEAT GAIN FROM ROOF	CSSENS	TOTAL SENSIBLE HEAT GAIN TO SPACE	HROOF	HEAT LOSS FROM ROOF	CPART	SENSIBLE HEAT GAIN FROM EXTERIOR WALLS	CFAN	SENSIBLE HEAT GAIN FROM AIR HANDLER FAN	HPART	HEAT LOSS FROM EXTERIOR WALLS	CGLASS	SENSIBLE HEAT GAIN FROM PARTITIONS	COAS	SENSIBLE HEAT GAIN FROM OUTDOOR VENTILATION AIR	HGLASS	HEAT LOSS FROM PARTITIONS	CCLGLASS	SENSIBLE HEAT GAIN FROM GLAZING	CTSENS	TOTAL SENSIBLE HEAT GAIN	HGLASS	HEAT LOSS FROM GLAZING	CSOLAR	SENSIBLE HEAT GAIN FROM SOLAR GAIN THROUGH GLAZING	CPLAT	LATENT HEAT GAIN FROM PEOPLE	HSLAB	HEAT LOSS FROM SLAB	CLIGHTS	SENSIBLE HEAT GAIN FROM INTERIOR LIGHTING	COAL	LATENT HEAT GAIN FROM OUTDOOR VENTILATION AIR	HSPACE	TOTAL HEAT LOSS FROM SPACE	CEQUIP	SENSIBLE HEAT GAIN FROM PLUG LOADS, COMPUTERS, ETC.	CTLAT	TOTAL LATENT HEAT GAIN	HOA	HEAT LOSS FROM OUTDOOR VENTILATION AIR	CPSENS	SENSIBLE HEAT GAIN FROM PEOPLE	CTOT	TOTAL HEAT GAIN (SENSIBLE + LATENT)	HTOT	TOTAL HEAT LOSS

### HVAC VENTILATION SCHEDULE

NUMBER	NAME	AREA	LEVEL	PEOPLE	OA PER PERSON	OA PER SQ FT.	REQ SUP	ACT SUP	REQ OA	ACT OA	ACT RET	ACT EXH	CRIT OA	PRESSURE	PCT OPERABLE	NATURAL VENTILATION
1400	LOUNGE	988 SF	Level 14	65	7.2	0.18	3725	3500	10	350	3500	0	0	Neutral	0	True
1401	CORRIDOR	104 SF	Level 14	0	0	0.06	30	30	0	3	30	0	26.2	Neutral	0	False
1403	JANITOR	25 SF	Level 14	0	0	0	10	5	0	0	5	0	Neutral	0	False	
1404	MENS RR	48 SF	Level 14	0	0	0	20	20	0	2	0	80	0	Negative	0	False
1405	WOMENS RR	64 SF	Level 14	0	0	0	25	20	0	2	0	80	0	Negative	0	False
TOTAL		1228 SF														

### HVAC ROOFTOP UNITS SCHEDULE

Equipment shall be braced and labeled by the equipment manufacturer to withstand the minimum scheduled available fault current value for listed equipment.

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lbs)	MANUFACTURER	MODEL	MIN EER	CFM (cfm)	ESP (in WC)	BHP (hp)	OACFM (cfm)	NOMINAL TONS	OA EAT WB (Deg F)	MAT CLG DB (Deg F)	MAT CLG WB (Deg F)	CLG MBH (mbh)	CLG SENS (mbh)	LAT DB (Deg F)	LAT WB (Deg F)	MAT HTG (Deg F)	HTG MBH (mbh)	MIN HTG AFUE	GAS HTG IN (mbh)	GAS HTG OUT (mbh)	MIN GAS PRESSURE (in WC)	MAX GAS PRESSURE (in WC)	EMERGENCY	ELECTRIC CONNECTION SUMMARY	ACCESSORIES
RTU-1	PACKAGED ROOFTOP UNIT, GAS HEAT	ROOF	NEW	1042	TRANE	YSJ120A4SOL	11.0	3575	1	3	358	10	54	78	65	109	86	55	54	64	56	80	150	121	7	14	NO	RTU-1 - 480V/3PH, 29 MCA, 40A OCP	ENTHALPY ECONOMIZER, BAROMETRIC RELIEF, STAGED FANS, COOLING, AND GAS HEAT, 1/4" FACTORY ROOF CURB, HAIL GUARDS

### HVAC AIR COOLED CONDENSING UNIT SCHEDULE

Equipment shall be braced and labeled by the equipment manufacturer to withstand the minimum scheduled available fault current value for listed equipment.

Equipment Mark	DESCRIPTION	LOCATION	STATUS	FED FROM	WEIGHT (lbs)	MANUFACTURER	MODEL	EER	SEER	NOMINAL TONS	CLG MBH (mbh)	CLG SENS (mbh)	EMERGENCY	ELECTRIC CONNECTION SUMMARY	ACCESSORIES
CU-1	AIR SOURCE OUTDOOR CONDENSING UNIT	ROOF	NEW	DS-1	214	TRANE	TRUZA0361KA70A	10.8	18.8	3	36	29	NO	CU-1 - 208V/1PH, 25 MCA, 30A OCP	ROOF RAILS FOR EQUIPMENT
CU-2	AIR SOURCE OUTDOOR CONDENSING UNIT	ROOF	NEW	DS-2	214	TRANE	TRUZA0361KA70A	10.8	18.8	3	36	29	NO	CU-2 - 208V/1PH, 25 MCA, 30A OCP	ROOF RAILS FOR EQUIPMENT
CU-3	AIR SOURCE OUTDOOR CONDENSING UNIT	ROOF	NEW	DS-3	214	TRANE	TRUZA0361KA70A	10.8	18.8	3	36	29	NO	CU-3 - 208V/1PH, 25 MCA, 30A OCP	ROOF RAILS FOR EQUIPMENT
CU-4	AIR SOURCE OUTDOOR CONDENSING UNIT	ROOF	NEW	DS-4	214	TRANE	TRUZA0361KA70A	10.8	18.8	3	36	29	NO	CU-4 - 208V/1PH, 25 MCA, 30A OCP	ROOF RAILS FOR EQUIPMENT

### HVAC DUCTLESS SPLIT SYSTEMS (INDOOR UNITS) SCHEDULE

Equipment shall be braced and labeled by the equipment manufacturer to withstand the minimum scheduled available fault current value for listed equipment.

EQUIPMENT MARK	DESCRIPTION	STATUS	FED FROM	WEIGHT (lbs)	MANUFACTURER	MODEL	CFM (cfm)	NOMINAL TONS	MAT CLG DB (Deg F)	MAT CLG WB (Deg F)	CLG MBH (mbh)	CLG SENS (mbh)	LAT CLG DB (Deg F)	LAT CLG WB (Deg F)	MAT HTG (Deg F)	HTG MBH (mbh)	LAT HTG (Deg F)	EMERGENCY	ELECTRIC CONNECTION SUMMARY
DS-1	DUCTLESS SPLIT INDOOR UNIT	NEW	CU-1	46	TRANE	TPKAD0361KA70A	900	3	75	62	36	23	50	50	38	38	81	NO	DS-1 - 208V/1PH, 0.75A FLA, 1 MCA
DS-2	DUCTLESS SPLIT INDOOR UNIT	NEW	CU-2	46	TRANE	TPKAD0361KA70A	900	3	75	62	36	29	50	50	38	38	81	NO	DS-2 - 208V/1PH, 0.75A FLA, 1 MCA
DS-3	DUCTLESS SPLIT INDOOR UNIT	NEW	CU-3	46	TRANE	TPKAD0361KA70A	900	3	75	62	36	29	50	50	38	38	81	NO	DS-3 - 208V/1PH, 0.75A FLA, 1 MCA
DS-4	DUCTLESS SPLIT INDOOR UNIT	NEW	CU-4	46	TRANE	TPKAD0361KA70A	900	3	75	62	36	29	50	50	38	38	81	NO	DS-4 - 208V/1PH, 0.75A FLA, 1 MCA

### HVAC DIFFUSERS AND REGISTERS SCHEDULE

TAG	MANUFACTURER	MODEL	FACE	MOUNTING	MATERIAL	FINISH	DAMPER TYPE	BORDER STYLE	REMARKS
ER-1	TITUS	50P	8"x8"	CEILING	STEEL	STANDARD WHITE	OPPOSED BLADE	SURFACE MOUNT	
ER-1	TITUS	FL10T	8"x8" (2) 1" SLOTT	CEILING	STEEL	STANDARD WHITE	OPPOSED BLADE	SURFACE MOUNT	PROVIDE FIELD PLENUM BOX TO RAISE ABOVE SOFFIT DEPTH. PROVIDE WITH CABLE OPERATED DAMPER PER DETAIL.
RR-1	TITUS	350RL	36"x12"	SIDEWALL	STEEL	STANDARD WHITE	OPPOSED BLADE	SURFACE MOUNT	
SR-1	TITUS	300RL	8"x8"	CEILING	STEEL	STANDARD WHITE	OPPOSED BLADE	SURFACE MOUNT	

MECHANICAL ELECTRICAL ENGINEERS  
WWW.KLHENGINEERS.COM  
LEAVINGTON, KENTUCKY  
LOUISVILLE, KENTUCKY  
FT THOMAS, KENTUCKY 41075  
855-446-8558 FAX  
855-446-8558

## Formica Building

120 E 4th Street  
Cincinnati OH 45202



#### REVISIONS

NO.	DATE	DESCRIPTION

DWNAuthor CChecker  
DATE: 09/29/23  
PROJECT #: 24166.03

MECHANICAL - SCHEDULES

## M6-601

1" REFERENCE  
KLH PROJECT #  
24166.03



Table with 2 columns: DWNAuthor, CChecker, DATE: 09/29/23, PROJECT #: 24166.03, MECHANICAL - SPECIFICATIONS

Table with 2 columns: DWNAuthor, CChecker, DATE: 09/29/23, PROJECT #: 24166.03

SECTION 23 05 01.00 - COMMON REQUIREMENTS

For HVAC General Requirements for services and equipment for maximum 15 deg. change of direction per General Provisions of the Contract including General and Supplementary Conditions and General Requirements apply to work of this section.

Provide trap at drain piping connection to unit sized per manufacturer's recommendations. Access: Provide access space around and over mechanical equipment for service and maintenance.

23 05 01.00 - COMMON REQUIREMENTS. Provide trap at drain piping connection to unit sized per manufacturer's recommendations. Access: Provide access space around and over mechanical equipment for service and maintenance.

23 07 13.00 - AIR COOLED CONDENSING UNITS. Installation shall have smooth full radius turns down to diffuser. Installation not permitted above inaccessible ceilings.

23 07 33.00 - PACKAGED OUTDOOR ROOFTOP UNITS. Submit Requirements: Product Data: For each type of product indicated. Warranties: Provide complete warranties with requirements, product data, and performance data.

23 09 03.00 - SEQUENCE OF OPERATIONS FOR HVAC CONTROLS. Submit Requirements: Product Data: Provide written sequences of operation for each controlled system and piece of equipment.

23 09 30.00 - TESTING, ADJUSTING AND BALANCING FOR HVAC. Submit Requirements: Certified Reports: Submit testing, adjusting, and balancing reports bearing the seal and signature of the Test and Balance Engineer.

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OWNERSHIP OF INSTRUMENTS OF SERVICE  
All data, notes and other documents and instruments prepared by the Consultant as instruments of service shall remain the property of the Consultant. The Consultant shall retain all common law, statutory and other reserved rights, including, without limitation, the copyright thereto.

9/29/2023 11:14:00 C:\Users\mthum\Documents\Revit\24166.03 - 23 - Mechanical-4th & Walnut Arcade Bldg HVAC - Cincinnati.mthum.rvt

media encased in fiberboard cell sides having perforated metal grids on each side to provide media support.  
Filters: Provide .85% efficient filters.  
Provide filters with clean resistance not exceeding 0.10" w.g. at face velocity of 300 fpm, and ASHRAE weight areistance efficiency of 70-82%, based on final operating resistance of 0.5" w.g.  
**Options:**  
Hall guards protecting the condenser fins.  
**Controls:**  
Self Contained - Programmable Electronic Night Setback Thermostat - Shall provide heating setback and cooling setup with 7-day programming capability. Optional remote sensor available.  
Compressor Lockout - Temperature control contractor shall provide a 24 volt compressor lockout relay. The relay shall have normally closed contacts which will open when energized.  
**Manufacturers:**  
**Subject to compliance with requirements, provide rooftop units of one of the following:**  
**Aeon**  
**Carrier Air Conditioning, Div of Carrier Corp.**  
**Lennox**  
**Trane; a division of Ingersoll Rand.**  
**Daikin**  
**Johnson Controls**

**23 81 29.00 - DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNITS**

Submital Requirements  
Product Data: For each type of product indicated.

Warranty:  
Warranty on Motor/Compressor: Provide written warranty, signed by manufacturer, agreeing to replace/repair, within warranty period, motors/compressors with inadequate or defective materials and workmanship, including leakage, breakage, improper assembly, or failure to perform as required, provided manufacturer's instructions for handling, installing, protecting, and maintaining units have been adhered to during warranty period. Replacement is limited to component replacement only, and does not include labor for removal and reinstallation.  
Warranty Period: 5 years from date of owner acceptance  
Manufacturer: Subject to compliance with requirements, provide ductless split system air conditioning units of one of the following manufacturers:  
Carrier  
Mitsubishi  
Sanyo  
EMI  
Fujitsu  
LG  
Daikin  
Samsung  
Johnson Controls  
Outdoor Condensing Units  
General: Factory assembled, single piece, air-cooled outdoor unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, full charge of HFC refrigerant, and special features required prior to field start-up.  
Unit Cabinet: Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a baked-enamel finish.  
Unit access panels shall be removable with minimal screws and shall provide full access to the compressor, fan, and control components.  
Outdoor compartment shall be isolated and have an acoustic lining to assure quiet operation.  
Fans: Outdoor fans shall be direct-drive propeller type, and shall discharge air horizontally. Fans shall below air through the outdoor coil.  
Outdoor fan motors shall be totally-enclosed, single-phase motors with Class B insulation and permanently-lubricated sleeve bearings. Motor shall be protected by internal thermal overload protection.  
Shaft shall have inherent corrosion resistance.  
Fan blades shall be corrosion resistant and shall be statically and dynamically balanced.  
Outdoor fan openings shall be equipped with PVC coated protection grille over fan and coil.  
Compressor  
Compressor shall be fully hermetic reciprocating or scroll type.  
Compressor shall be equipped with oil system, operating oil charge, and motor. Internal overloads shall protect the compressor from overtemperature and overcurrent. Scroll compressors shall also have high discharge gas temperature protection if required.  
Motor shall be NEMA rated Class F, suitable for operation in a refrigerant atmosphere.  
Reciprocating compressors shall be equipped with crankcase heaters to minimize liquid refrigerant accumulation in compressor shutdown and to prevent refrigerant dilution of oil.  
Compressor assembly shall be installed on rubber vibration isolators and shall have internal spring isolation. Compressors shall be single-phase or 3-phase as specified on the contract drawings.  
Outdoor Coil: Coil shall be constructed of aluminum fins mechanically bonded to internally enhanced, seamless copper tubes which are cleaned, dehydrated, and sealed.  
Refrigeration Components: Refrigerant circuit components shall include brass external liquid line service valve with service gage port connections, suction line service valve with service gage connection port, service gage port connections on compressor suction and discharge lines with Schrader-type fittings with brass caps, accumulator, pressure relief, and a full charge of refrigerant.  
Controls and Safeties: Operating controls and safeties shall be factory selected, assembled, and tested. The minimum control functions shall include the following:  
Controls:  
Time delay restart to prevent compressor reverse rotation on signal-phase scroll compressors.  
Automatic restart on power failure.  
Safety lockout if any outdoor unit safety is open.  
A time delay control sequence provided through the fan coil board, thermostat, or controller.  
High-pressure and liquid line low-pressure switches.  
Automatic outdoor fan motor protection.  
Start capacitor and relay (single phase units without scroll compressors).  
Safeties  
System diagnostics.  
Compressor motor current and temperature overload protection  
High pressure relief.  
Outdoor fan failure protection.  
Electrical Requirements  
Unit electrical power shall be a single point connection.  
Unit control voltage to the indoor-fan coil shall be 24 volt  
All power and control wiring must be installed per NEC and all local building codes.  
High and low voltage terminal block connections.  
High Wall Units  
General: Indoor, direct-expansion, wall-mounted fan coil. Unit shall be complete with cooling/heating (heat pump systems only) coil, fan, fan motor, piping connectors, electrical controls, microprocessor control system, and integral temperature sensing. Unit shall be furnished with integral wall-mounting bracket and mounting hardware.  
Unit Cabinet: Cabinet discharge and inlet grilles shall be attractively styled, high-impact polystyrene. Cabinet shall be fully insulated for improved thermal and acoustic performance.  
Fans: Fan shall be tangential direct-drive blower type with air intake at the upper front face of the unit and discharge at the bottom front. Automatic, motor-driven vertical air sweep shall be provided standard.  
Air sweep operation shall be user selectable. Horizontal direction may be manually adjusted (using remote controller) and vertical air sweep may be manually set.  
Coil: Coil shall be copper tube with aluminum fins and galvanized steel tube sheets. Fins shall be bonded to the tubes by mechanical expansion. A drip pan under the coil shall have a drain connection for hose attachment to remove condensate. Condensate pan shall have internal trap and auxiliary drip pan under coil header.  
NOTE: The 40QN009,012 units use capillary tubes in the outdoor unit for refrigerant control, and the

40QN018,024 units use the AccuRater piston refrigerant metering device in the indoor unit.  
Motors: Motors shall be open drip-proof, permanently lubricated ball bearing with inherent overload protection. Fan motors shall be 3-speed.  
Controls: Controls shall consist of a microprocessor-based control system, which shall control space temperature, determine optimum fan speed, and run self diagnostics. The temperature control range shall be from 64F to 84F. The unit shall have the following functions as a minimum. An automatic restart after power failure at the same operating conditions as at failure.  
A timer function to provide a minimum 24-hour time cycle for system Auto. Start/Stop.  
Temperature-sensing controls shall sense return air temperature. Indoor air high discharge temperature shutdown shall be provided.  
Indoor coil freeze protection.  
Wireless infrared remote control to enter set points and operating conditions.  
Auto Stop features shall have integral setback control.  
Automatic air-sweep control to provide on or off activation of air-sweep louvers.  
Dehumidification mode shall provide increased latent removal capability by modulating fan speed and set point temperature.  
Fan only operation shall provide room air circulation when no cooling is required.  
Diagnostics shall provide continuous checks of unit operation and warn of possible malfunctions. Error messages shall be displayed at the unit and at the remote controller.  
Fan speed control shall be user-selectable: high, medium, low or microprocessor automatic operation during all operating modes.  
A time delay shall prevent compressor restart in less than 3 minutes.  
Filters: Unit shall have filter track with factory-supplied cleanable filters.  
Electrical Requirements: Unit shall operate on voltage as specified on the equipment schedule. Power and control connections shall have terminal block connections.  
Operating Characteristics: The unit shall be matched with an outdoor unit. The combination of the outdoor unit and the indoor fan coil unit shall be sized as scheduled  
The system shall have a minimum listed SEER (seasonal energy efficiency ratio) of 10.0 at ARI conditions.  
Outdoor unit shall be rated at low decibels at ARI conditions.  
Refrigerant Lines: The 009 and 012 units shall have rotatable refrigerant lines for penetration through the wall using flare connections. All units shall have flare connections and a 90-degree suction elbow shall be provided for rear connection.

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Cincinnati OH 45202



REVISIONS

DWNAuthor CChecker  
DATE: 09/29/23  
PROJECT #: 24166.03  
MECHANICAL - SPECIFICATIONS

**M6-603**  
1" REFERENCE  
KLH PROJECT #  
24166.03

9/29/2023 11:14:30C:\Users\mthum\Documents\Revit\24166.03 - Mechanical-4th & Walnut Arcade Bldg HVAC - Cinc OH\_mthum.rvt

# COMcheck Software Version 4.1.1.0 Mechanical Compliance Certificate

**Project Information**  
Energy Code: 90.1 (2010) Standard  
Project Title: [Blank]  
Location: Cincinnati, Ohio  
Climate Zone: 4a  
Project Type: Alteration  
Construction Site: Owner/Agent: Designer/Contractor:

**Mechanical Systems List**  
**Quantity System Type & Description**  
1 RTU-1 Heating 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE) Cooling 1 each - Single Package DX Unit, Capacity = 123 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.00 EER, Required Efficiency: 11.00 EER Fan System: FAN SYSTEM 1 - Compliance (Motor nameplate HP method) : Passes  
Fans: FAN 1 Supply, Single-Zone VAV, 3575 CFM, 3.0 motor nameplate hp  
SYSTEM VERIFICATION REQUIRED.  
4 DS-1 Split System Heat Pump Heating Mode: Capacity = 38 kBtu/h Proposed Efficiency = 9.20 HSPF, Required Efficiency = 7.70 HSPF Cooling Mode: Capacity = 38 kBtu/h Proposed Efficiency = 18.80 SEER, Required Efficiency: 13.00 SEER Fan System: FAN SYSTEM 2 - Compliance (Motor nameplate HP method) : Passes  
Fans: FAN 2 Supply, Constant Volume, 920 CFM, 0.5 motor nameplate hp  
SYSTEM VERIFICATION REQUIRED.

**Mechanical Compliance Statement**  
Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

Project Title: Report date: 09/28/23  
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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.4.1.4 [ME41] <sup>2</sup>	Thermally ineffective panel surfaces of insensible heating panels have rating >= R-3.5.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.4.2.1 [ME10] <sup>2</sup>	Ducts and plenums sealed based on static pressure and location.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.4.2.2 [ME11] <sup>2</sup>	Ductwork operating >3 in. water column requires air leakage testing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.4.4.2.2 [ME11] <sup>2</sup>	Ductwork operating >3 in. water column requires air leakage testing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.5.1.6.5.1 [ME12] <sup>2</sup>	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.2.3 [ME19] <sup>2</sup>	Dehumidification controls provided to prevent reheating, recirculating, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.3.3 [ME42] <sup>2</sup>	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. See the Mechanical Systems list for values.
6.5.3.3 [ME42] <sup>2</sup>	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. See the Mechanical Systems list for values.
6.5.4.1 [ME25] <sup>2</sup>	HVAC pumping systems >10 hp designed for variable fluid flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Systems with three or fewer control valves.
6.5.6.1 [ME56] <sup>2</sup>	Exhaust air energy recovery on systems meeting Table 6.5.6.1.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.7.1.1 [ME32] <sup>2</sup>	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)  
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# COMcheck Software Version 4.1.1.0 Inspection Checklist

Energy Code: 90.1 (2010) Standard  
Requirements: 95.0% were addressed directly in the COMcheck software  
Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2.6.4, 4.2.1.6.7, 2 [PR2] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
4.2.2.6.4, 1.1.8.4.1, 2.8.7 [PR6] <sup>2</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder conductors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.4 [PR5] <sup>1</sup>	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 R2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.

**Additional Comments/Assumptions:**

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.5.7.1.2 [ME46] <sup>2</sup>	Conditioned supply air to space with a kitchen hood shall not exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.5.7.1.2 [ME46] <sup>2</sup>	Conditioned supply air to space with a kitchen hood shall not exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.5.7.1.5 [ME49] <sup>2</sup>	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.5.7.2 [ME33] <sup>2</sup>	Fume hoods exhaust systems >=15,000 cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.5.8.1 [ME34] <sup>2</sup>	Unenclosed spaces that are heated use only radiant heat.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.9 [ME35] <sup>2</sup>	Hot gas bypass limited to: <=240 kBtu/h - 50% >240 kBtu/h - 25%			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

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Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
6.4.3.8 [F09] <sup>2</sup>	Freeze protection and snow/ice melting system sensors for future connection to controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
6.4.2 [EL10] <sup>2</sup>	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
10.4.1 [EL9] <sup>2</sup>	Electric motors meet requirements where applicable.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4.6, 4.1.5 [ME1] <sup>2</sup>	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency: _____	Efficiency: _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
6.4.3.4.1 [ME3] <sup>1</sup>	Stair and elevator shaft vents have motorized dampers that automatically close.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.4.3.4.2, 6.4.3.4.3 [ME4] <sup>1</sup>	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.4.5 [ME39] <sup>2</sup>	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
6.4.3.4.4 [ME5] <sup>1</sup>	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.9 [ME6] <sup>1</sup>	Demand control ventilation provided for spaces >500 R2 and >40 people/1,000 R2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.10 [ME40] <sup>2</sup>	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. See the Mechanical Systems list for values.
6.4.3.10 [ME40] <sup>2</sup>	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. See the Mechanical Systems list for values.
6.4.4.1.1 [ME7] <sup>1</sup>	Insulation exposed to weather protected from damage, insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.4.1.2 [ME8] <sup>2</sup>	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	R: _____	R: _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.4.1.3 [ME9] <sup>2</sup>	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	_____ in.	_____ in.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
6.4.3.1.2 [F13] <sup>1</sup>	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.2 [F20] <sup>2</sup>	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.3.1 [F121] <sup>1</sup>	HVAC systems equipped with at least one automatic shutdown control.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.3.2 [F122] <sup>1</sup>	Setback controls allow automatic restart and temporary operation as required for maintenance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.5 [F15] <sup>1</sup>	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.7 [F16] <sup>2</sup>	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.1 [F17] <sup>2</sup>	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.2 [F18] <sup>2</sup>	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.3 [F19] <sup>2</sup>	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 R2 of conditioned area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.4 [F10] <sup>1</sup>	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
10.4.3 [F14] <sup>2</sup>	Elevators are designed with the proper lighting, ventilation power, and standby mode.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.

**Additional Comments/Assumptions:**

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STATE OF OHIO  
KRIS T. SCHNITGEN  
E-77432  
REGISTERED PROFESSIONAL MECHANICAL ENGINEER  
9/30/2023

REVISIONS


DWNAuthor CChecker  
DATE: 09/29/23  
PROJECT #: 24166.03  
MECHANICAL - COMCHECK  
M6-604  
1" REFERENCE  
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