

NOTE:
MECHANICAL CONTRACTOR TO HAVE A REPRESENTATIVE ON SITE DURING THE PRE-OPENING (VIP PARTY) WITH ALL REQUIRED TOOLS TO ENSURE PROPER OPERATION OF MECHANICAL SYSTEM.

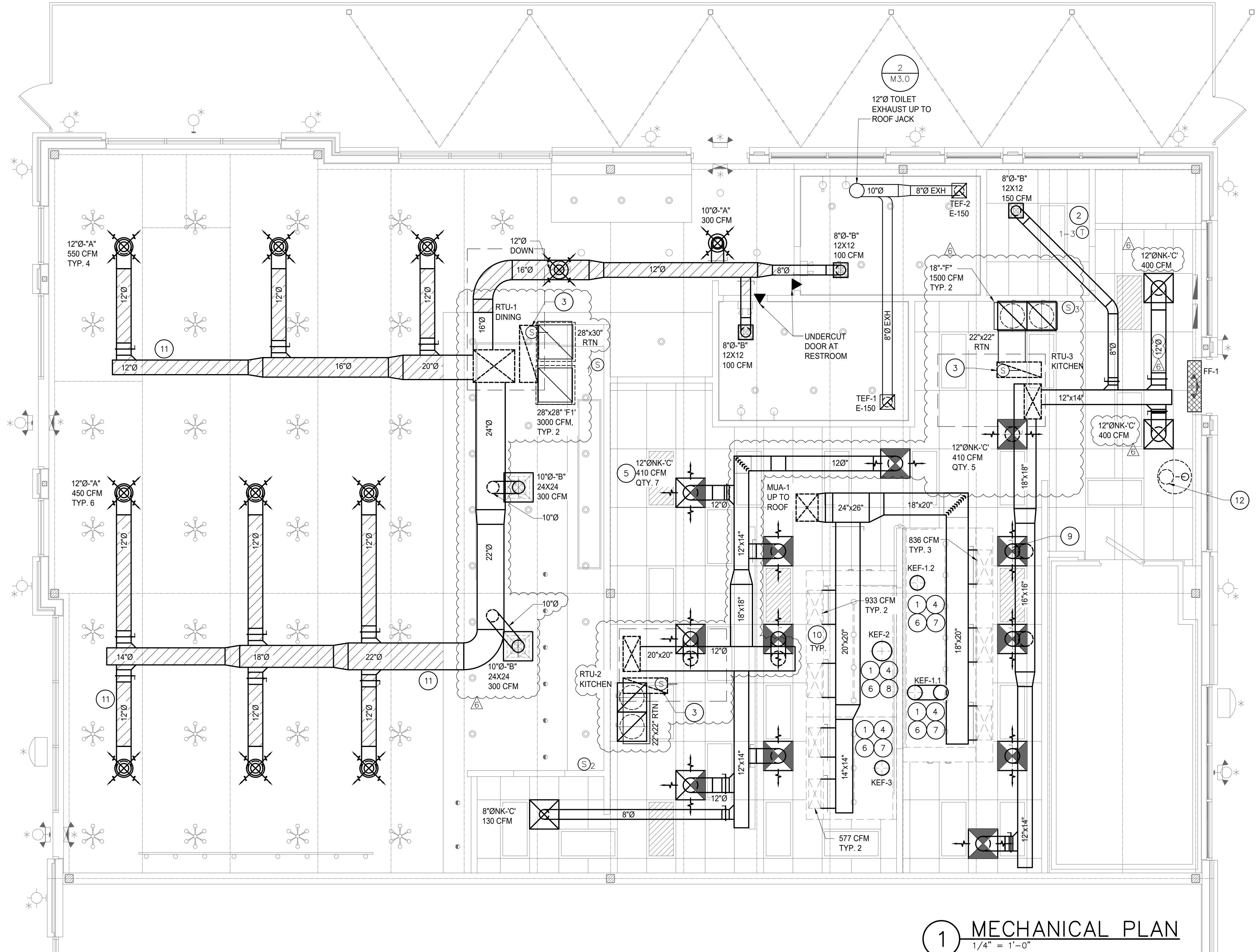
NOTE:
DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND REQUIRED EQUIPMENT. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. AS REQUIRED, REFER TO ARCHITECTURAL AND MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. FURNISH AND INSTALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND EQUIPMENT SHOWN ON PLANS.

MECHANICAL SYMBOLS	
	RECTANGULAR DUCT 18" WIDE BY 12" DEEP
	12" DIAMETER SPIRAL DUCT IN EXPOSED AREAS ONLY
	12" DIAMETER ROUND DUCT
	SUPPLY DUCT IN SECTION
	RETURN OR EXHAUST DUCT IN SECTION
	ELBOW WITH TURNING VANES
	TEE WITH TURNING VANES
	ROUND (OR OVAL) ELBOW
	SUPPLY AIR DIFFUSER WITH ROUND SUPPLY DUCT
	RETURN OR EXHAUST AIR DIFFUSER WITH ROUND DUCT
	T RTU# THERMOSTAT
	S RTU# REMOTE TEMPERATURE SENSOR
	▲ DOOR UNDERCUT
	FD FIRE DAMPER (FD)
	S SMOKE DETECTOR



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SEAL:

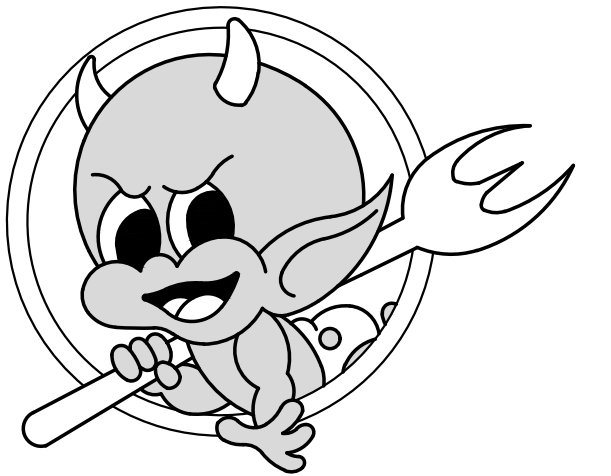


KEYED NOTES:

- ALL GREASE DUCT SHALL BE WELDED BLACK IRON OR WELDED STAINLESS STEEL WITH 2 LAYERS OF 1-HOUR Fyre-WRAP OR OTHER UL LISTED BARRIER TO PROVIDE ZERO CLEARANCE TO COMBUSTIBLE ENCLOSURE. SLOPE AT 1/4" PER FOOT BACK TO HOODS; GRIND INTERIOR SMOOTH TO ELIMINATE LOCATIONS FOR GREASE TO BUILD UP. DUCT SHALL BE FREE OF SAGS AND POOLING POINTS. REFER DETAIL 8 & 9/M3.0
- PROVIDE THERMOSTAT AND MATCHING REMOTE SENSOR, WITH 24-7 PROGRAMMABLE CAPABILITY AND LIGHTSTAY OVERRIDE FOR NIGHT SETBACK MODE. LOCATE THERMOSTATS IN MANAGER'S OFFICE / AT MANAGER'S AREA, WITH REMOTE SENSORS WALL MOUNTED AS INDICATED ON PLANS. COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE. SET HEAT AT @ 70° IN DINING, 70° IN KITCHEN. SET COOL AT @ 72° IN DINING, 78° IN KITCHEN.
- PROVIDE RETURN AIR DUCT SMOKE DETECTOR, WITH REMOTE ANNUNCIATOR/TEST SWITCH TO BE MOUNTED AT A CONSTANTLY ATTENDED LOCATION AS APPROVED BY THE AHJ. DUCT DETECTOR SHALL BE ABLE TO COMMUNICATE WITH BUILDING FIRE CONTROL SYSTEM WHERE REQUIRED.
- INTERLOCK KITCHEN EXHAUST FANS AND KITCHEN SUPPLY FAN TO RUN SIMULTANEOUSLY. INTERLOCK RTU-3 TO OPERATE ANYTIME EITHER KEF-1.1, KEF-1.2, KEF-2, KEF-3 ARE RUNNING.
- PLASTIC TYPE SUPPLY DIFFUSER. ALL KITCHEN AREA.
- PROVIDE SOLENOID SHUT-OFF FOR GAS LINE UNDER HOOD. WIRE TO AUTOMATICALLY SHUTOFF GAS SUPPLY (AND ELECTRIC SUPPLY - VIA SHUNT TRIPS OR CONTACTOR) TO EQUIPMENT UNDER HOOD WHEN FIRE IS DETECTED. SEE PLUMBING PLAN.
- 12" EXHAUST DUCT UP TO KEF-1.1, KEF-1.2 & KEF-3 ON ROOF. TRANSITION TO EXHAUST FAN AS REQUIRED. TRANSITIONS SHALL BE PREFABRICATED. DUCT SHALL BE WELDED AND GROUND SMOOTH, WITH NO SEAMS FOR GREASE TO ACCUMULATE ON. SLOPE CONTINUOUSLY BACK TO HOOD AT MINIMUM 1/4" PER FOOT.
- 16" EXHAUST DUCT UP TO KEF-2 ON ROOF. TRANSITION TO EXHAUST FAN AS REQUIRED. TRANSITIONS SHALL BE PREFABRICATED. DUCT SHALL BE WELDED AND GROUND SMOOTH, WITH NO SEAMS FOR GREASE TO ACCUMULATE ON. SLOPE CONTINUOUSLY BACK TO HOOD AT MINIMUM 1/4" PER FOOT.
- EACH SUPPLY AIR DEVICE SHALL BE EQUIPPED WITH A VOLUME DAMPER. FOR DIFFUSERS IN HARD CEILINGS, VERIFY WITH PROJECT OWNER IF GRILLES SHALL BE ORDERED WITH VOLUME CONTROL IN FACE OF DIFFUSER, OR IF NECK DAMPERS WITH BOWDEN CONTROLS ARE PREFERRED (TYPICALLY A QUIETER OPTION). PROVIDE LINE ITEM UPCHARGE PRICE TO USE BOWDEN CABLES OVER FACE-MOUNTED AIR DEVICE CONTROLS. TYPICAL
- EXTEND DUCT UP FROM HOOD COLLAR TO MAKE-UP AIR TRUNK DUCT. REFER TO M3.1-M3.6 FOR HOOD DRAWINGS AND ASSOCIATED COMPONENTS. TYPICAL
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS. TYPICAL
- WATER HEATER FLUE TO ROOF. OFFSET AS REQUIRED. REFER TO 3/M3.0.

1 MECHANICAL PLAN
1/4" = 1'-0"

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ISSUE LOG:

No.	Date	Description
1	10.18.23	RTU REVISION

MECHANICAL PLAN

PROJECT NUMBER:	2022-2
ISSUE DATE:	Sept. 2, 2022

M2.0

AIR DISTRIBUTION DEVICES						
MARK	DESCRIPTION	FACE SIZE (WxH)	O.D.B.	FINISH	MFR/MODEL	NOTES
A	CEILING S/A DIFFUSER	ROUND,SEE PLAN	YES	REFER ARCH	TITUS TMR-AA	1
B	CEILING S/A DIFFUSER	SEE PLAN	YES	WHITE	TITUS TDCA	1
C	CEILING S/A DIFFUSER	24X24	NO	WHITE	EGER EA3	4
D	NOT USED					
E	EXHAUST GRILLE- ALUM	12X12	YES	REFER ARCH	---	3
F	LAY-IN RETURN AIR GRILLE	24X24	NO	REFER ARCH	TITUS 8R	
F1	SURFACE RETURN AIR GRILLE	SEE PLAN	NO	REFER ARCH	TITUS 8R	

AIR DISTRIBUTION DEVICE NOTES:
1. PROVIDE GYP BOARD FRAME AND O.B.D. AT ALL GYP CONDITIONS-SEE PLANS.
2. PROVIDE WITH DAMPER/EXTRACTOR.
3. PROVIDE COOK ALUMINUM GRILLE OPTION WITH IN-CEILING FAN. CONTROL WITH LIGHTS.
4. PLASTIC TRADITIONAL AIR DIFFUSER/MULTIPLE AIR DISTRIBUTION OPTIONS.

FAN SCHEDULE							
MARK	MUA-1	KEF-1.1 KEF-1.2	KEF-2	KEF-3	TEF-1 TEF-2	FF-1	
TYPE	CENTRIF.	CENTRIF.	CENTRIF.	CENTRIF.	CENTRIF.	CENTRIF.	
MOUNT	ROOF	ROOF	ROOF	ROOF	CEILING	WALL	
SERVICE	HOOD	HOOD	HOOD	HOOD	PUBLIC TOILET	REAR DOOR AIR CURTAIN	
CFM	5531	1500	2475	1400	150	-	
E.S.P (IN W.C.)	.65"	1.0"	1.5"	1.0"	0.25"	-	
DRIVE	DIRECT DRIVE	DIRECT DRIVE	BELT	DIRECT DRIVE	DIRECT	DIRECT	
ELEC	HORSEPOWER	4.8	1.0	2.0	1.0	53 W	1/2
	VOLTS/PHASE	208/3	115/1	208/3	115/1	120/1	120/1
	MOTOR STARTER	X-LINE	X-LINE	X-LINE	X-LINE	SWITCH	SWITCH
MANUFACTURER/MODEL	CAPTIVEAIRE A3-D.500-25Z-MPU HEATING/COOLING	CAPTIVEAIRE DU85HFA	CAPTIVEAIRE CASRE18DD	CAPTIVEAIRE DU85HFA	COOK GC-168	MARS STD36-1U	
WEIGHT	1,936	128	316	128	30	55	
NOTES	1,2,4,9	1,2,4,9	1,2,4,9	1,2,4,9	3,5,6	7,9	

FAN NOTES:
1. DISCONNECT SWITCH TO BE PROVIDED AND INSTALLED BY E.C.
2. PROVIDED WITH STANDARD PREFAB ROOF CURB.
3. PROVIDE WITH BACKDRAFT DAMPER.
4. INTERLOCK OPERATION OF KEF-1.1, KEF-1.2, KEF-2 & KEF-3 WITH MUA-1.
5. CONTROLLED WITH LIGHTS BY ELECTRICAL CONTRACTOR.
6. PROVIDE ROOF JACK WITH BIRDSCREEN, ALUMINUM GRILLE & GEMINI ISOLATOR KIT
7. PROVIDE WITH DOOR SWITCH AND MOUNTING HARDWARE.
8. REFER TO CAPTIVEAIRE DRAWINGS FOR DETAILS AND INFORMATION.
9. G.C. TO INSTALL.
10. ADJUSTABLE TIME DELAY, HI-LOW HEAT, WALL BRACKET.

AIR BALANCE					
MARK	SERVICE AREA	SUPPLY AIR CFM	RETURN AIR CFM	OUTSIDE AIR CFM	EXHAUST AIR CFM
RTU-1	KITCHEN	3000	2250	750	--
RTU-2	KITCHEN	3000	2250	750	--
RTU-3	DINING	6000	5700	300	--
MUA-1	KITCHEN	--	--	5531	--
KEF-1.1	COOK LINE HOOD	--	--	--	1500
KEF-1.2	COOK LINE HOOD	--	--	--	1500
KEF-2	COOK LINE HOOD	--	--	--	2475
KEF-3	COOK LINE HOOD	--	--	--	1400
TEF-1	TOILET	--	--	--	150
TEF-2	TOILET	--	--	--	150
	TOTAL	12,000	10,200	7,331	7,175

BUILDING PRESSURE = +156 CFM

DRAWINGS SHOW RTU-1 SERVES DINING RM. USING 300 CFM OA
DRAWINGS SHOW RTU-2 & 3 SERVE KITCHEN. USING 750 CFM OA

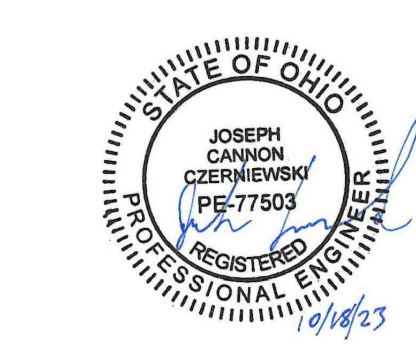
ROOF TOP UNIT SCHEDULE				
MARK	RTU 1	RTU 2	RTU 3	
FAN DATA	TOTAL CFM	3,000	3,000	6,000
	OUTSIDE AIR CFM (MIN/MAX.)	750	750	300
	EXT. STATIC PRES. (IN W.C.)	.50	.50	.50
	SUPPLY FAN HP W/ MSAV	1.61	1.61	4.7
COOLING DATA	ENTERING AIR DB °F	80	80	80
	WB °F	68	68	66
	NOMINAL TONS	7.5	7.5	15
	TOTAL CAPACITY (MBH)	90	90	181
	TOTAL SENSIBLE (MBH)	69	69	135
	AMBIENT TEMPAUER °F	90	90	90
HEATING DATA	INPUT (MBH)	125	125	350
	OUTPUT (MBH)	103	103	284
	EFFICEINCY (%)	80%	80%	80%
ELECTRICAL DATA	VOLTS	208V	208V	208V
	PHASE	3	3	3
	MCA	43	43	67
	MOCP (FUSE OR HACR BRKR)	50	50	80
	EER / IEER	11.00/12.8	11.00/12.8	10.8/14.5
MANUFACTURER & MODEL No.	CARRIER 48TCDD08A2M5	CARRIER 48TCDD08A2M5	CARRIER 48FCF16L2M5	
SERVES	KITCHEN	KITCHEN	DINING	
UNIT WEIGHT (LBS)	1,329	1,329	1,854	

NOTE / ACCESSORY DESIGNATION:
DRAWINGS SHOW RTU-1 SERVES DINING RM, RTU-2 & 3 SERVE KITCHEN
SUBMITTAL SHOWS ALL RTU'S ARE SAME MODEL @ 6000 CFM SA

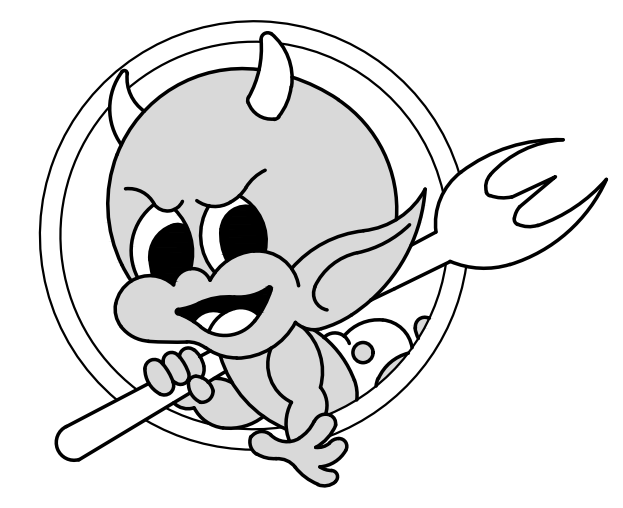
- 14" DOWNFLOW- HYBRID CURB FIELD INSTALLED
- ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF
- STANDARD CAP. STD PACKING
- UNIT ORIENTATION DOWNFLOW
- 208V/220V/230V/240V 3 PHASE
- 175 AMP TERMINAL BLOCK FACTORY INSTALLED
- HINGED ACCESS DOORS AND UNPOWERED CONVENIENCE OUTLET FACTORY INSTALLED
- GFCI FACTORY INSTALLED/FIELD WIRED
- PHASE MONITOR FIELD INSTALLED
- DIRTY FILTER SWITCH FIELD INSTALLED
- RETURN AIR SMOKE DETECTOR FACTORY INSTALLED
- ELECTROMECHANICAL CONTROLS W/W7200 ECONO CONTROLLER
- DRAIN PAN OVERFLOW SWITCH FACTORY INSTALLED
- HUMIDI-MIZER ADAPTIVE DEHUMIDIFICATION SYSTEM FACTORY INSTALLED
- 2" MERV8-FILTER FIELD INSTALLED
- A/CU - A/CU - LOUVERED HAIL GUARDS FACTORY INSTALLED
- REMOTE TEMP SENSOR WALL MOUNT 20K FIELD INSTALLED
- RH RETURN AIR DUCT FIELD INSTALLED
- UNIT SHALL BE FIELD LABELED WITH UNIT NUMBER AND AREA SERVED

- ### HVAC GENERAL NOTES
- DUCTWORK SHALL BE RUN ABOVE CEILING IN GENERAL LOCATIONS SHOWN, BUT SHALL CONFORM TO ALL STRUCTURAL AND FINISH CONDITIONS OF BUILDING, COORDINATE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS PRIOR TO ANY INSTALLATION.
 - LOCATE EQUIPMENT AND FIXTURES APPROXIMATELY AS SHOWN CONFORMING TO ALL ARCHITECTURAL AND STRUCTURAL ITEMS. PROVIDE ALL SUPPORT, HANGERS AND OPENINGS AS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR CLEARANCES, AND EXACT LOCATIONS OF EQUIPMENT. ALL EQUIPMENT AND FIXTURES SHALL BE INSTALLED PER MANUFACTURERS' RECOMMENDATIONS AND IN FULL ACCORDANCE WITH ALL APPLICABLE CODES HAVING JURISDICTION.
 - CEILING MOUNTED AIR DEVICES SHALL BE APPROXIMATELY AS SHOWN. FOR EXACT LOCATION AND FRAME MOUNTING TYPES, REFER TO ARCHITECTURAL REFLECTED CEILING PLAN. ALL CEILING DIFFUSERS TO BE 4-WAY UNLESS NOTED OTHERWISE BY AIRFLOW ARROWS, ON FLOOR PLAN. EXTEND FLEX DUCTWORK A MAXIMUM 5'-0" FROM DIFFUSERS, INSTALL STRAIGHT AS POSSIBLE WITH LONG RADIUS BENDS AND CLAMPS TO BE USED AT BOTH ENDS.
 - DUCTWORK WITH TURNING VANES INSTALLED IN ALL ELBOWS OF SUPPLY AIR DUCTS, AIR EXTRACTORS AT ALL RECTANGULAR TAKE-OFFS, AND TWIST-IN TAP WITH MANUAL VOLUME DAMPER AT ALL ROUND BRANCH TAKE-OFF'S TO AIR DEVICES.
 - SMOKE DETECTORS REQUIRED IN UNIT IN RETURN AIR PLENUM (FACTORY INSTALLED) AND SHALL BE AS LISTED BY UL OR FM. ACTIVATION OF A DUCT DETECTOR SHALL CAUSE SHUTDOWN OF ITS RESPECTIVE AIR CONDITIONING UNIT. CONTROL AND INTERLOCK WIRING SHALL RUN IN CONDUIT WHICH SHALL BE SIZED TO SUIT THE NUMBER, TYPE AND SIZE OF CONDUCTORS AND SHALL BE PROVIDED BY THE CONTROL CONTRACTOR. CONTROL AND INTERLOCK WIRING SHALL BE IN SEPARATE CONDUIT FROM POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS, PROVIDE ALL APPROPRIATE ACCESS PANELS.
 - BUILDING SYSTEMS SHALL BE BALANCED PER DATA INCLUDED ON THE DRAWINGS TO ACHIEVE RELATIVE AIR VOLUMES AS INDICATED ON THE DRAWINGS AND SCHEDULED HEREIN. OVERALL THE BUILDING MUST BE IN POSITIVE PRESSURE.
 - RETURN AIRFLOW VOLUME SHOWN ON PLANS IS FOR DUCTWORK SIZING PURPOSES WHEN THE UNIT IS IN RECIRCULATION (UNOCCUPIED) MODE.
 - ALL DUCT SIZES INDICATED ON DRAWING ARE CLEAR INSIDE DIMENSIONS.
 - WHERE SHOWN ON THE DRAWINGS, PROVIDE VOLUME DAMPERS WITH LOCKING QUADRANTS OR SPLITTERS WITH HINGE AND ROD THROUGH SIDE OF DUCT WITH SET SCREW. VOLUME DAMPER HANDLES SHALL BE INSTALLED ON THE BOTTOM OF THE SPIN-FITTING AND SHALL HAVE RING SET IN FULL OPEN POSITION.
 - KITCHEN EXHAUST HOODS. EXTEND EXHAUST AND MAKE-UP AIR DUCT AS SHOWN AND TRANSITION AS REQUIRED TO HOOD TAPS, REFER TO KITCHEN EQUIPMENT DRAWING FOR EXACT SIZES AND LOCATIONS. SLOPE EXHAUST DUCTS BACK TO KITCHEN EXHAUST HOOD, BOTTOM OF ALL EXHAUST DUCT TO BE THE FLAT. PROVIDE ACCESS DOORS AS REQUIRED FOR INSPECTION AND CLEANING. ENCLOSE KITCHEN EXHAUST DUCT IN FIRE RETARDANT CHASE AS REQUIRED BY CODE. KITCHEN HOOD SUPPLY AND EXHAUST FANS SHALL BE INTERLOCKED WITH THE FIRE SUPPRESSION SYSTEM.
 - DUCT INSTALLATION R-VALVES SHALL MEET THE REQUIREMENTS OF THE LOCAL CODES AND THE AUTHORITY HAVING JURISDICTION. INCREASE INSULATION THICKNESS AS REQUIRED TO MEET LOCAL REQUIREMENT.
 - MECHANICAL CONTRACTOR TO PROVIDE PROPER FITTINGS AND EQUIPMENT FOR KITCHEN EQUIPMENT FLUES. REFER TO KITCHEN EQUIPMENT DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - ALL ELBOWS TO BE RADIUS UNLESS SPECIFICALLY SHOWN OTHERWISE.
 - ALL DUCTWORK TO BE SHEET METAL AND FABRICATION SHOP DRAWINGS ARE REQUIRED. REFER TO SPECIFICATIONS.
 - ALL BRANCH DUCT TAKE-OFFS SHALL HAVE MANUAL BALANCING DAMPERS.
 - ALL A/C UNIT DUCTS AND PLENUMS SHALL BE CONSTRUCTED, INSTALLED, INSULATED AND SEALED AS PER THE GOVERNING MECHANICAL CODE & SMACNA.
 - ALL SUPPLY AND RETURN DUCTWORK INSULATION (DUCT LINER, DUCT WRAP) WITHIN BUILDING SHALL HAVE A MINIMUM R-VALUE MEETING THE REQUIREMENTS OF THE LOCAL CODES, SEE SPECIFICATIONS.
 - PROVIDE CLEANOUTS IN ALL KITCHENS EXHAUST DUCTWORK AT EVERY CHANGE OF DIRECTION AND AT EVERY 12' OF DUCT. PROVIDE ACCESS PANELS AT ALL GREASE DUCT CLEANOUTS.
 - GREASE LADEN EXHAUST DUCTS SHALL BE WELDED BLACK STEEL AND SHALL BE TESTED PER IMC REQUIREMENTS.
 - G.C. TO COORDINATE EQUIPMENT WEIGHTS FOR FINAL EQUIPMENT PURCHASED/ ACQUIRED FOR INSTALLATION WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO INSTALLATION TO ENSURE PROPER SUSPENSION HARDWARE IS USED. SUSPENDED LOADS FROM CEILING MUST NOT EXCEED STRUCTURAL CAPACITY. COORDINATE WITH ARCHITECT AND STRUCTURAL ENGINEER.
 - ALL UNEXPOSED SUPPLY AIR AND RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH 1 1/2" THICK FOIL FACE INSULATION. INTERNALLY LINED DUCTWORK SHALL BE USED (NOTED ON PLAN) FOR ACOUSTIC PURPOSES ONLY. NOT AS A SUBSTITUTE FOR EXTERNAL INSULATION.
 - ALL EXPOSED SUPPLY AIR AND RETURN AIR DUCTWORKS SHALL BE INTERNALLY LINED WITH A MINIMUM OF 1" THICK RIGID INSULATION.
 - CONTRACTOR SHALL PROVIDE DUCT LEAKAGE TESTING PER CITY REQUIREMENTS.
 - HOT GAS BY-PASS SHALL BE LIMITED TO 50% ON UNITS <= 240kbtuh AND TO 25% ON UNITS >240BUTH.

OUTDOOR AIR CALCULATION SCHEDULE												
OUTDOOR AIR RATE CALCULATIONS ARE BASED ON ASHRAE STANDARD 62.1. VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY. TABLE AND EQUATION REFERENCES ARE FROM THIS STANDARD.												
SYSTEM TYPE: SINGLE ZONE												
ZONE AIR DISTRIBUTION EFFECTIVENESS (TABLE 6-2)										DESIGN OUTDOOR AIR CFM (EQ. 6-3)		
POPULATION DIVERSITY USED? (EQ. 6-6, 6-7)										SYSTEM OUTDOOR AIR PROVIDED		
NO										1281		
NO										1800		
ZONE (SPACE)	FLOOR AREA	ASHRAE OCCUPANCY CATEGORY (TABLE 6-1)	OCCUPANTS PER 1000 SF	OUTDOOR AIR CFM PER OCCUPANT	TOTAL OCCUPANTS	OCCUPANT BASED OUTDOOR AIR CFM	AREA BASED OUTDOOR AIR PER SQ. FT.	AREA BASED OUTDOOR AIR CFM	BREATHING ZONE OUTDOOR AIR CFM (EQ. 6-1)	MINIMUM ZONE OUTDOOR AIR CFM (EQ. 6-2)	MIN. EXHAUST CFM (TABLE 6-4)	PROVIDED EXHAUST CFM
MAIN DINING	694	RESTAURANT DINING AREAS	70	7.5	49	368	0.18	125	493	616	0	0
HOSTESS/ENTRY	838	LOBBIES/PREFUNCTION	30	5	26	130	0.06	50	180	225	0	0
HALL	99	CORRIDORS	0	5	0	0	0.06	6	6	8	0	0
BEVERAGE	108	LOBBIES/PREFUNCTION	30	5	4	20	0.06	6	26	33	0	0
TOILET	207	TOILETS	0	0	0	0	0	0	0	0	300	300
BAR SERVICE	157	KITCHEN (COMMERCIAL)	20	7.5	4	30	0	0	30	38	110	0
BAR	96	BARS, COCKTAIL LOUNGES	100	7.5	10	75	0.18	17	92	115	0	0
KITCHEN	1211	KITCHEN (COMMERCIAL)	20	7.5	25	188	0	0	188	235	848	6875
OFFICE	60	OFFICE SPACE	5	5	1	5	0.06	4	9	11	75	0
TOTAL EXHAUST CFM REQUIRED										1333		
TOTAL SQ. FOOTAGE										3468		
TOTAL OCCUPANTS										119		
TOTAL EXHAUST CFM PROVIDED										7175		
TOTAL ZONE OUTDOOR AIR CFM										1281		



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ISSUE LOG:

No.	Date	Description
Δ	09.07.23	OWNER REVISION
Δ	10.18.23	RTU REVISION

MECHANICAL SCHEDULES

PROJECT NUMBER:	2022-2
ISSUE DATE:	Sept. 2, 2022

M4.0

NOTE:
ELECTRICAL CONTRACTOR TO
PROVIDE DISCONNECT SWITCHES,
CONDUIT, AND CONDUCTORS.

REFER TO SHEET E0.0 FOR
EQUIPMENT SCHEDULE,
ELECTRICAL INFORMATION,
AND CIRCUIT NUMBERS.
EQUIPMENT DESIGNATED WITH
A HEXAGON KEY TAG.

NOTE:
MECHANICAL CONTRACTOR TO
HAVE A REPRESENTATIVE ON
SITE DURING THE
PRE-OPENING (VIP PARTY)
WITH ALL REQUIRED TOOLS
TO ENSURE PROPER
OPERATION OF MECHANICAL
SYSTEM.

NOTE:
REFER TO GAS RISER ON
SHEET MEP1.1 FOR PIPE
SIZES.

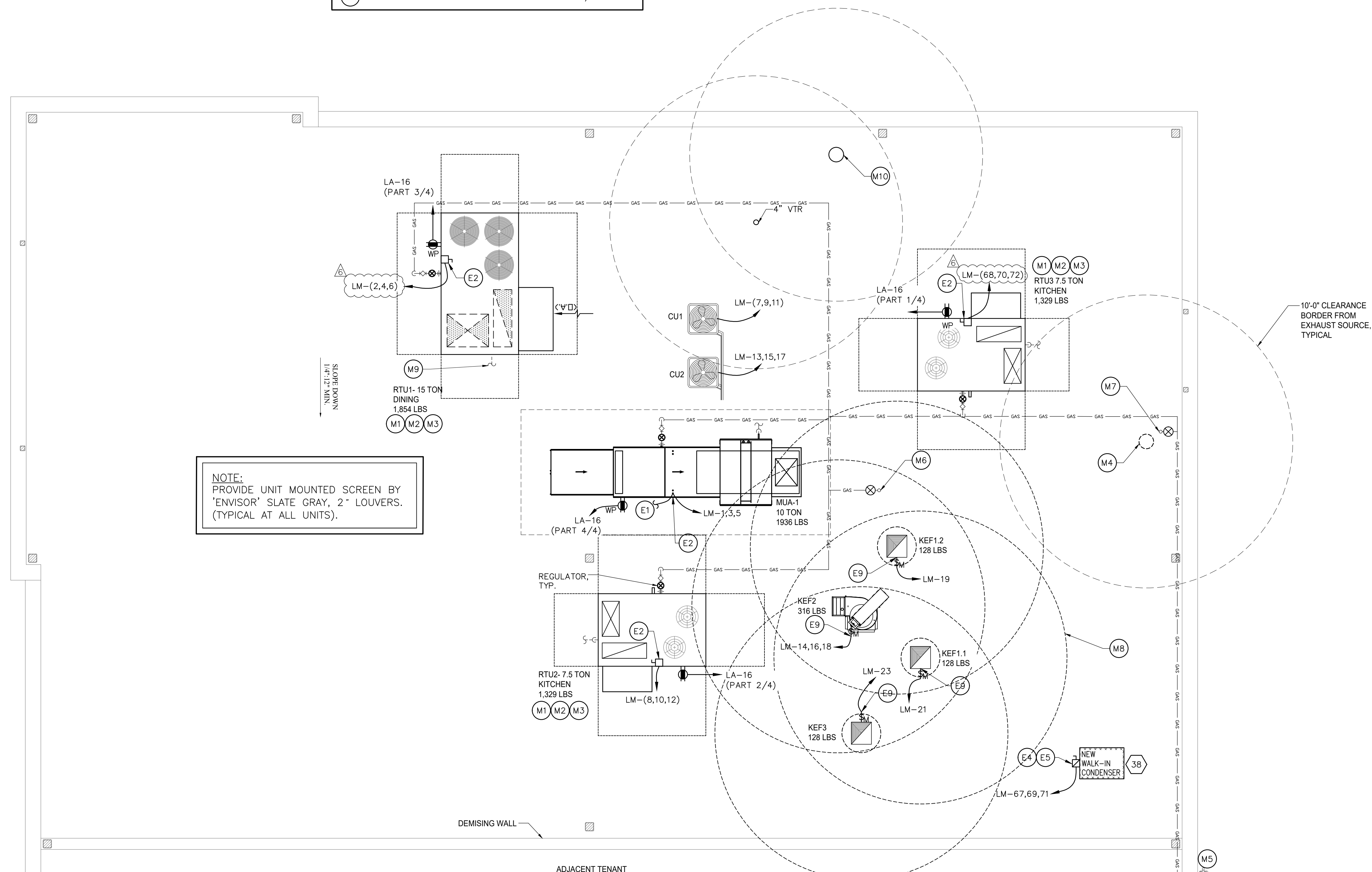
NOTE:
MINIMUM GAS PIPE SIZE 3/4".

MECHANICAL KEYNOTES

- M1 G.C. SHALL VERIFY EXACT PLACEMENT OF NEW ROOFTOP UNIT WITH A STRUCTURAL ENGINEER PRIOR TO PLACING UNITS. COORDINATE SUPPLY AND RETURN ROOF DROPS THROUGH EXISTING STRUCTURAL FRAMING IN FIELD. DO NOT CUT JOISTS OR TRUSSES.
- M2 ROOF-TOP EQUIPMENT IS DRAWN AND SHALL BE PLACED SUCH THAT THE DISTANCE BETWEEN SERVICEABLE HVAC EQUIPMENT AND BUILDING EDGE IS NOT LESS THAN 10'-0", UNLESS PARAPET IS 42" OR TALLER.
- M3 FACTORY MOUNTED SMOKE DETECTOR WITHIN RETURN AIR PLENUM OF RTU. PROVIDE A LINE VOLTAGE RELAY WITH WIRING CONFIGURED TO SHUT DOWN UNIT UPON DETECTION OF SMOKE. PROVIDE LOW VOLTAGE WIRING TO REMOTE ANNUNCIATOR.
- M4 CONCENTRIC FLUE UP THRU ROOF TO VENT CAP, FOR GAS WATER HEATER. INSTALL IN COMPLIANCE WITH ALL LOCAL CODES. REFER TO DETAIL 3/M3.0.
- M5 NEW GAS METER
1 1/4" GAS PIPE @ 2 PSI
TOTAL LOAD: 2,015 MBH
TOTAL DEVELOPED LENGTH: 150'-0" MAX
- M6 GAS DOWN TO COOKLINE, 854 MBH. REGULATOR IN CEILING SPACE. REFER TO SHEET MEP1.1.
- M7 GAS DOWN TO WATER HEATER, 199 MBH. REFER TO SHEET MEP1.2.
- M8 CIRCLE AROUND FAN DENOTES 10'-0" CLEARANCE BORDER FROM EXHAUST SOURCE, TYPICAL.
- M9 ROUTE CONDENSATE TO NEAREST ACCEPTABLE RECEPTAL, TYPICAL.
- M10 TOILET EXHAUST ROOF JACK. REFER TO DETAIL 2/M3.0.

ELECTRICAL KEYNOTES

- E1 CONTROLLED FROM THE HOOD CONTROL PANEL. REFER TO THE HOOD WIRING DRAWINGS FOR REQUIREMENTS AND DETAIL 2/E2.0 FOR CIRCUITING.
- E2 E.C. SHALL PROVIDE POWER THRU CURB TO NON-FUSED DISCONNECT SWITCH PROVIDED BY MANUFACTURER. REFER TO MECHANICAL SHEETS FOR INFORMATION ON CONTROLS.
- E3 NOT USED
- E4 WALK-IN CONDENSING UNIT - PROVIDE FUSED DISCONNECT SWITCH, 30A, 250V, 3P, NEMA 3R WITH 15A FUSE. REFER TO EQUIPMENT SCHEDULE ON SHEET E0.0 FOR CIRCUITING.
- E5 PROVIDE RACEWAY WIRING, ETC. AS REQUIRED FOR POWER AND CONTROL BETWEEN CONDENSING UNIT AND EVAPORATOR. COORDINATE WITH DIVISION 23.
- E6 PROVIDE NON-FUSED DISCONNECT SWITCH, 30A, 600V, 3P, NEMA 3R.
- E7 PROVIDE FUSED DISCONNECT SWITCH, 30A, 600V, 3P, NEMA 3R WITH 25A FUSE SIZED PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.
- E8 PROVIDE FUSED DISCONNECT SWITCH, 30A, 600V, 3P, NEMA 3R WITH 30A FUSE SIZED PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.
- E9 PROVIDE A MOTOR RATED SWITCH INSIDE EXHAUST FAN 30A, 120V, 1P. INSTALL IN NEMA 3R ENCLOSURE.



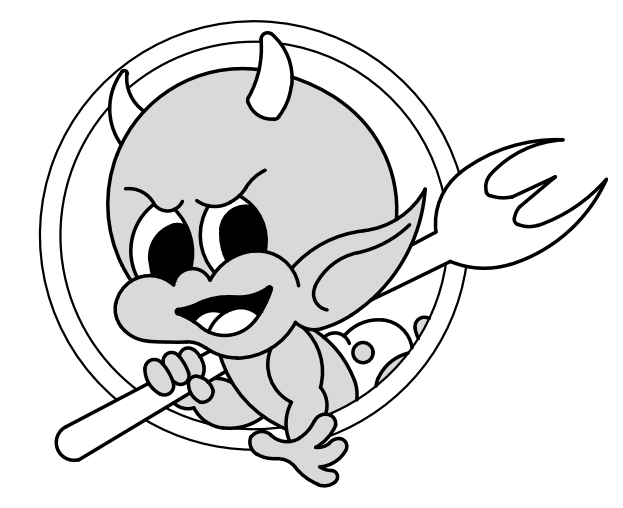
NOTE:
PROVIDE UNIT MOUNTED SCREEN BY
'ENVISOR' SLATE GRAY, 2" LOUVERS.
(TYPICAL AT ALL UNITS).

10'-0" CLEARANCE
BORDER FROM
EXHAUST SOURCE,
TYPICAL

1 MEP ROOF PLAN
1/4" = 1'-0"



TORCHYS TACOS
Liberty Way West
7673 Blake Street, Suite 100
Liberty Township, OH 45069



ISSUE LOG:

No.	Date	Description
⚠	12.05.22	ZONING COMMENT
⚠	01.12.23	COUNTY COMMENT
⚠	09.07.23	OWNER REVISION
⚠	10.18.23	RTU REVISION

MEP ROOF PLAN

PROJECT NUMBER:	2022-2
ISSUE DATE:	Sept. 2, 2022

MEP1.0