GENERAL MECHANICAL SYMBOLS

- REVISION NUMBER - SHOWN ON PLANS
- POINT WHERE NEW CONNECTS TO EXISTING
- NUMBER OF DETAIL ON SHEET / NUMBER OF SHEET WHERE DETAIL APPEARS
- KEYNOTE
- CONTINUATION SYMBOL
- Room 5 — ROOM NAME AND NUMBER
- ITEM TO BE DEMOLISHED
- AREA NOT IN CONTRACT
- 2" — PIPE SIZE TAG (DIAMETER)
- ABOVE GROUND PIPING
- 1/8" / 12" SLOPE — PIPE SLOPE TAG
- BELOW GROUND PIPING
- INVERT: -105'-1" — PIPE INVERT ELEVATION TAG
- (E) — EXISTING PIPE TAG
- PIPING BEING DEMOLISHED

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY
FL	FLOOR	RL/A	RELIEF AIR
FO	FUEL OIL	RM	ROOM
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
FOR	FUEL OIL RETURN	RW	RAIN WATER
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FS	FLOOR SINK	SAN	SANITARY
FT	FOOT/FEET	SF	SQUARE FOOT
FTR	FIN TUBE RADIATION	SD	SMOKE DAMPER
GAL	GALLON	SM	SURFACE MOUNT
GF	GAS-FIRED	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	THERMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTR	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

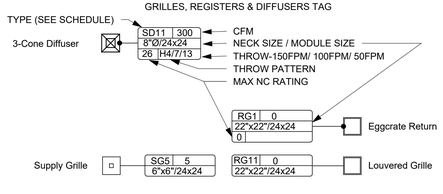
AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *

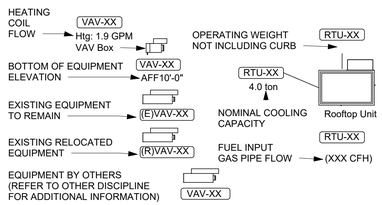
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

HVAC SYMBOLS

- 18"x12" — SQUARE DUCT SIZE TAG (WIDTH x HEIGHT)
- 18"/12" — OVAL DUCT SIZE TAG (WIDTH / HEIGHT)
- 18"Ø — ROUND DUCT SIZE TAG (DIAMETER)
- (E) — EXISTING DUCT TAG
- DUCT BEING DEMOLISHED
- 18"x18" S/A — SUPPLY AIR
- 18"x18" S-O/A — CONDITIONED OUTSIDE AIR
- 18"x18" O/A — OUTSIDE AIR
- 18"x18" R/A — RETURN AIR
- 18"x18" T/A — TRANSFER AIR
- 18"x18" E/A — EXHAUST AIR
- 18"x18" L/A — RELIEF AIR
- 18"x18" GE/A — GREASE EXHAUST AIR
- 18"x18" CE/A — CONDENSATE EXHAUST AIR
- 18"x18" SE/A — SMOKE EXHAUST AIR
- 6"Ø FLUE — EXHAUST GAS FLUE
- 6"Ø C/A — COMBUSTION AIR
- DROP — RECTANGULAR SUPPLY/OUTSIDE AIR DUCT RISE
- DROP — ROUND SUPPLY/OUTSIDE AIR DUCT RISE
- DROP — RECTANGULAR RETURN/TRANSFER AIR DUCT RISE
- DROP — ROUND RETURN/TRANSFER AIR DUCT RISE
- DROP — RECTANGULAR EXHAUST/RELIEF AIR DUCT RISE
- DROP — ROUND EXHAUST/RELIEF AIR DUCT RISE
- GRILLES, REGISTERS & DIFFUSERS TAG



MECHANICAL EQUIPMENT TAGS

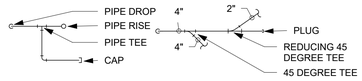


DAMPER TAGS

- SD — Smoke Damper
- FD — Fire Damper
- FSD — Comb. Fire/ Smoke Damper
- B — Manual Damper
- M — Motorized Damper
- BDD — Backdraft Damper

PIPING SYMBOLS

- CHWR — CHILLED WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CD — CONDENSATE DRAINAGE
- CWR — CONDENSER WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- GWR — GEOTHERMAL WATER RETURN
- GWS — GEOTHERMAL WATER SUPPLY
- HWR — HEATING WATER RETURN
- HWS — HEATING WATER SUPPLY
- G — NATURAL GAS
- PG — PROPANE GAS
- REF-L — REFRIGERANT-LIQUID
- REF-S — REFRIGERANT-SUCTION
- REF-HG — REFRIGERANT-HOT GAS
- STM — STEAM
- CDR — CONDENSATE RETURN



PIPE ACCESSORY TAGS

- 2" SHUTOFF BALL VALVE
- 2" BALANCING BALANCING VALVE
- 2" BUTTERFLY BUTTERFLY VALVE
- 2" CHECK CHECK VALVE
- (ALTERNATE CHECK VALVE SYMBOL)
- 3" CIRC CIRCUIT SETTER
- 2" GATE GATE VALVE
- 2" GLOBE GLOBE VALVE
- 2" LOCKED LOCK SHIELD VALVE
- 2" PRV DOM. PRV
- 2" QUICK QUICK OPENING VALVE
- 2" STRAINER
- SOLENOID VALVE
- 1" PLUG PLUG VALVE
- 1" GAS COCK GAS SHUTOFF COCK
- 1" REG GAS REGULATOR
- 2" M-CNTRL ELEC. CONTROL VALVE
- 4" 3-WAY CNTRL 3-WAY ELEC. VALVE

MECHANICAL GENERAL NOTES

1. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
2. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE MECHANICAL SYSTEMS.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DIFFUSERS.
4. INSTALL ALL DUCT, PIPE, ETC. AS HIGH AS POSSIBLE.
5. DUCT SIZES SHOWN ARE ACTUAL SHEET METAL SIZES AND INCLUDE AN ALLOWANCE FOR DUCT LINER WHERE APPLICABLE.
6. PROVIDE FLEXIBLE CONNECTION BETWEEN DUCTWORK AND ROOFTOP UNITS, EXHAUST FANS, AND OTHER MOTORIZED EQUIPMENT.
7. NO DUCT SHALL BE ROUTED OVER THE TOP OF ELECTRICAL PANELS.
8. ALL MECHANICAL SYSTEMS SHALL BE BALANCED BY A CERTIFIED BALANCING CONTRACTOR. REFER TO SPECIFICATIONS FOR DETAILS.

Mechanical Sheet Schedule

CONTRACTOR TO INCLUDE 1 YEAR SERVICE CONTRACT FOR ALL MECHANICAL EQUIPMENT IN BID.

CONTRACTOR TO INCLUDE 1 YEAR WARRANTY FOR PARTS AND LABOR IN BID.

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PEDIATRIC DENTAL OFFICE - TENANT FINISH

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Revisions

No.	Description	Date

Project Number:	24843
Scale:	1/8" = 1'-0"
Date:	1.15.25

MECHANICAL TITLE SHEET

M0

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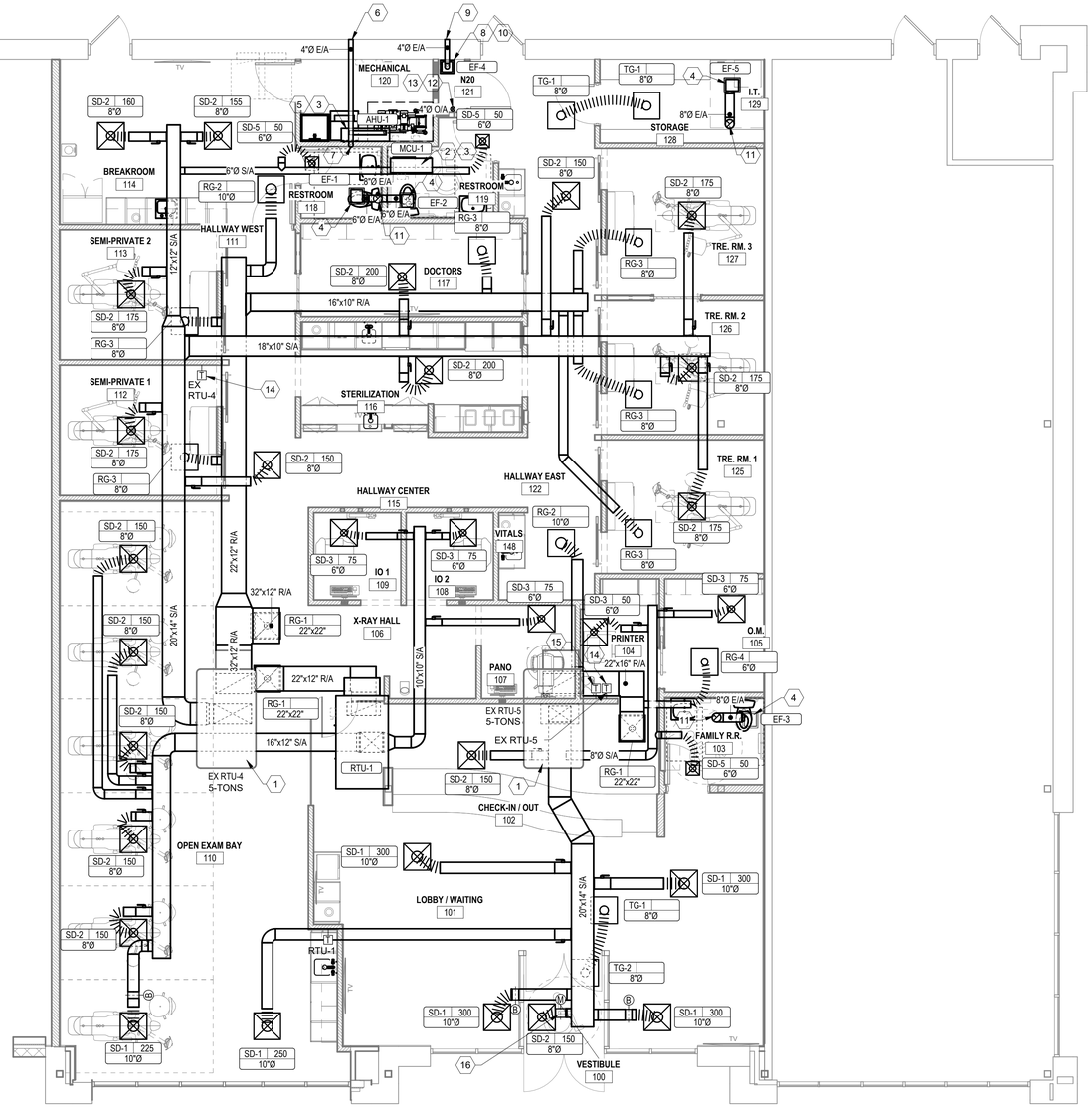

1 M1 MECHANICAL FLOOR PLAN
3/16" = 1'-0"

PLAN NOTES

Key Value	Keynote Text
1	EXISTING RTU TO REMAIN. BALANCE OUTDOOR AIR TO 215 CFM.
2	REFRIGERANT PIPING THROUGH ROOF. SEAL PENETRATION WEATHERTIGHT. ROUTE INSIDE WALL TO AS HIGH AS POSSIBLE AND ROUTE TO UNITS.
3	CONNECT REFRIGERANT PIPING TO CONDENSING UNIT & COIL AS REQUIRED BY THE MANUFACTURER. PROVIDE AND INSTALL REFRIGERANT PIPING FOR CONDENSING UNIT AS REQUIRED BY THE MANUFACTURER.
4	SUPPORT EXHAUST FAN FROM STRUCTURE AS REQUIRED BY MANUFACTURER.
5	SUPPORT WALL MOUNTED MINI SPLIT 8'-0" AFF. PER THE MANUFACTURERS REQUIREMENTS.
6	DRYER VENT. PROVIDE 4" DRYER EXHAUST DUCTS THROUGH WALL. PROVIDE WEATHERPROOF WALL VENT CAP WITH BACKDRAFT DAMPER. MOUNT AS HIGH AS POSSIBLE. MAINTAIN 10' CLEARANCE FROM ALL OUTDOOR AIR INTAKES.
7	CONNECT 4"Ø FLEX DUCT TO DRYER AS REQUIRED BY THE MANUFACTURER.
8	SUPPORT INLINE FAN FROM WALLS PER MANUFACTURER'S SPECIFICATION.
9	ROUTE 4"Ø EXHAUST DUCT OUT EXTERIOR WALL WITH WALL VENT CAP.
10	ROUTE 4"Ø DUCT DOWN FROM FAN TO WITHIN 12" OF F.F.E.
11	PROVIDE WEATHERHEAD WITH BACKDRAFT DAMPER FOR EXHAUST FAN. SEAL PENETRATION WEATHERTIGHT. MAINTAIN MIN. 10'-0" CLEARANCE FROM ALL OUTDOOR AIR INTAKES.
12	PROVIDE WEATHERHEAD FOR INTAKE WITH BIRD SCREEN. SEAL ROOF PENETRATIONS WEATHERTIGHT. ROUTE 4" DIAMETER SUPPLY DUCT DOWN FROM ROOF IN FIRE RATED CHASE INTO MED GAS CLOSET. WRAP DUCT WITH 2" OF INSULATION. TERMINATE OPEN DUCT 6" BELOW MED GAS ROOM CEILING.
13	CUT EXISTING ROOF AND FLASH INTO ROOF AS REQUIRED. ALL ROOFING WORK SHALL BE PERFORMED BY BUILDING OWNER'S ROOFING CONTRACTOR (AT THIS CONTRACTOR'S EXPENSE) TO MAINTAIN EXISTING ROOF WARRANTY. VERIFY APPROVED ROOFING CONTRACTOR WITH BUILDING OWNER PRIOR TO PERFORMING WORK. SEAL GYP LID PENETRATION AIR TIGHT.
14	REPLACE EXISTING THERMOSTAT WITH PELICAN THERMOSTAT PROVIDED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR. THERMOSTAT SHALL BE 7-DAY PROGRAMMABLE HEAT/COOL/AUTO CHANGEOVER, OPTIMUM START CONTROLS, ECONOMIZER OUTPUT FAULT DETECTION INPUT, AND BUILT IN HUMIDITY SENSOR. INSTALL THERMOSTAT IN LOCATION SHOWN.
15	LOCATION OF STAND ALONE CONTROLLER FOR VVT DAMPER. THE VESTIBULE SHALL NOT BE HEATED WHEN THE OUTDOOR AIR TEMPERATURE IS GREATER THAN 45 DEG F. THE CONTROLLER SHALL LIMIT HEATING IN THE VESTIBULE TO A TEMPERATURE NOT GREATER THAN 60 DEG F AND COOLING TO A TEMPERATURE NOT LESS THAN 85 DEG F. THE INTENT IS TO PROVIDE OUTDOOR AIR TEMPERATURE SENSOR LOCATED ON ROOF, DUCT TEMPERATURE SENSOR IN EX RTU-5 SUPPLY DUCT, AND ROOM MOUNTED TEMPERATURE SENSOR IN VESTIBULE. THE VVT DAMPER SHALL FULLY CLOSE WHEN OUTDOOR AIR TEMPERATURE IS GREATER THAN 45 DEG F AND DUCT AIR TEMPERATURE IS GREATER THAN 85 DEG F. THE DAMPER SHALL OPEN WHEN EITHER THE OUTDOOR AIR TEMPERATURE IS LESS THAN 45 DEG F OR THE DUCT AIR TEMPERATURE IS LESS THAN 70 DEG F. THE DAMPER SHALL CLOSE WHEN THE ROOM MOUNTED TEMPERATURE SENSOR IS GREATER THAN 60 DEG F AND LESS THAN 85 DEG F. THE DAMPER SHALL OPEN WHEN THE ROOM MOUNTER TEMPERATURE SENSOR IS LESS THAN 60 DEG F OR GREATER THAN 85 DEG F.
16	PROVIDE VVT CONTROL DAMPER ON VESTIBULE SUPPLY BRANCH. PROVIDE WITH CONTROLLER AND TEMPERATURE SENSORS AS REQUIRED.

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Revisions

No.	Description	Date

Project Number:	24843
Scale:	3/16" = 1'-0"
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MECHANICAL FLOOR PLAN

M1

NOT FOR CONSTRUCTION

ROOFTOP UNIT SCHEDULE

Mark	Manufacturer	Model	Supply Fan Airflow Rate	Design Supply Fan ESP	Cooling						Heating (Gas)			Electrical							Unit Controls	Supply Fan Drive Type	Economizer & Barometric Relief		Min Outdoor Air	SEER2	EER2	Weight	Notes
					Stages	Total Capacity	Sensible Capacity	Design Amb Summer DBT	Cooling Coil EAT(db)	Cooling Coil EAT(wb)	Include DX Hot Gas Reheat Coil	Input	Output	Stages	Voltage	Phases	Frequency	Motor Power	Include Power Exhaust	MCA	MOCP			Controller	Type					
RTU-1	Lennox	LGT036H5E	1,200 CFM	1.00 in-wg	2	35,000 Btu/h	25,900 Btu/h	105.0 °F	80.0 °F	67.0 °F	Yes	108,000 Btu/h	87,000 Btu/h	2	208 V	3	60 Hz	0.50 hp	No	19.0 A	25.0 A	Digital	MSAV	Sensible	Standard	85 CFM	17.5	13.5	925 lb	1,2,3,4,5,6,7,8

NOTES:
1. PROVIDE HINGED ACCESS DOORS, SCROLL COMPRESSORS WITH CRANKCASE HEATER, HIGH PRESSURE SWITCHES, FREEZESTAT, HAIL GUARDS. STANDARD COOLING DOWN TO 30°F. OUTDOOR AIR DAMPER TO FULLY CLOSE W/ FAN SHUTDOWN FOR ALL UNITS.
2. EXTERNAL STATIC PRESSURE LISTED REPRESENTS STATIC PRESSURE REQUIRED FOR DUCTWORK AND DIFFUSERS OUTSIDE THE HVAC UNIT COMPLETELY INDEPENDENT OF ANY PRESSURE DROP THROUGH THE HVAC EQUIPMENT INCLUDING BUT NOT LIMITED TO FILTERS, COILS AND ECONOMIZERS. THE FAN AND MOTOR SHALL BE SIZED APPROPRIATELY TO MEET THIS DEFINITION OF EXTERNAL STATIC PRESSURE.
3. UNIT TO BE EQUIPPED WITH DEHUMIDIFICATION PACKAGE INCLUDING REHEAT COIL AND ALL REQUIRED ACCESSORIES FOR COMPLETE INSTALLATION.
4. PELICAN THERMOSTAT TO BE PROVIDED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR. THERMOSTAT SHALL BE 7-DAY PROGRAMMABLE HEAT/COOL/AUTO CHANGEOVER, OPTIMUM START CONTROLS, ECONOMIZER OUTPUT FAULT DETECTION INPUT, AND BUILT IN HUMIDITY SENSOR.
5. ECONOMIZER/OUTDOOR AIR DAMPER IS TO CLOSE DURING UNOCCUPIED HOURS.
6. PROVIDE 18" HIGH (AT LOWEST POINT) PRE-FABRICATED INSULATED ROOF CURB WITH SLOPE TO MATCH SLOPE OF ROOF FOR EACH UNIT.
7. PROVIDE NEW 2" MERV 8 FILTERS UPON COMPLETION OF CONSTRUCTION.
8. MECHANICAL CONTRACTOR SHALL COORDINATE ALL UNIT MOCP'S OF ACTUAL INSTALLED EQUIPMENT WITH ELECTRICAL CONTRACTOR.

MINI SPIT SYSTEM AC INDOOR UNIT SCHEDULE

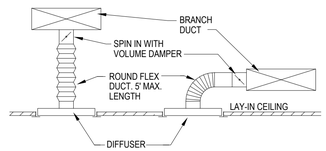
Mark	Manufacturer	Model No.	Supply Fan Airflow Rate	Nominal Tons	Electrical				Product Weight	Outdoor Unit	Min Outside Airflow	Notes
					Voltage	Phases	Frequency	MCA				
AHU-1	Mitsubishi	PKA-A36KA7	920 CFM	3.0	208 V	1	60 Hz	1.0 A	46 lb	MCU	0 CFM	1

NOTES:
1. PROVIDE #MHK2 WIRED THERMOSTAT CONTROL. #PAC-UKPRC001-CN-1 PROCON BACNET AND MODBUS INTERFACE, REFRIGERANT LINESETS, ELECTRICAL WHIPS, AND INTEGRAL CONDENSATE PUMP. COORDINATE UNIT MOCP WITH ELECTRICAL CONTRACTOR.

MINI SPLIT CONDENSING UNIT HEAT PUMP SCHEDULE

Mark	Manufacturer	Model Number	Cooling Total Capacity	Rated Heating Capacity	Electrical				SEER	HSPF	Weight	Notes
					Voltage	Phase	Frequency	MOCP				
MCU-1	Mitsubishi	PUZ-A36NHA7	36,000 Btu/h	38,000 Btu/h	208 V	1	60 Hz	31.0 A	18	10.8	214 lb	1,2

NOTES:
1. MECHANICAL CONTRACTOR SHALL COORDINATE ALL UNIT MOCP'S OF ACTUAL INSTALLED EQUIPMENT WITH ELECTRICAL CONTRACTOR.
2. PROVIDE HAIL GUARDS AND EQUIPMENT STAND FOR EACH UNIT.



1 / M2 DUCT TAKE-OFF DETAIL
NO SCALE

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

ID	Manufacturer	Model	Material	Finish	Description	Product Size	Neck Size	Notes
RG-1	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	22"x22"	-
RG-2	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	10"Ø	-
RG-3	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	8"Ø	-
RG-4	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	6"Ø	-
SD-1	Titus	OMNI	Steel	White Enamel	Plaque Face Diffuser	24x24	10"Ø	-
SD-2	Titus	OMNI	Steel	White Enamel	Plaque Face Diffuser	24x24	8"Ø	-
SD-3	Titus	OMNI	Steel	White Enamel	Plaque Face Diffuser	24x24	6"Ø	-
SD-5	Titus	OMNI	Steel	White Enamel	Plaque Face Diffuser	12x12	6"Ø	PROVIDE WITH GYP FRAME AND O.B. DAMPER IN NECK
TG-1	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	8"Ø	-
TG-2	Titus	PAR	Steel	White Enamel	Perforated Diffuser	24x24	8"Ø	PROVIDE WITH GYP FRAME

FAN SCHEDULE

Mark	Manufacturer	Model NO.	Type	Airflow	Fan External SP	Motor Speed (RPM)	Electrical				Controls	Notes
							Power	Voltage	Phase	Frequency		
EF-1	Cook	GC-146	Ceiling Exhaust	75 CFM	0.25 in-wg	816	31 W	120 V	1	60 Hz	Light Switch	1
EF-2	Cook	GC-146	Ceiling Exhaust	75 CFM	0.25 in-wg	816	31 W	120 V	1	60 Hz	Light Switch	1
EF-3	Cook	GC-146	Ceiling Exhaust	75 CFM	0.25 in-wg	816	31 W	120 V	1	60 Hz	Light Switch	1
EF-4	Cook	GN-126	Inline Exhaust	25 CFM	0.15 in-wg	433	16 W	120 V	1	60 Hz	Continuous	3
EF-5	Cook	GC-186	Ceiling Exhaust	150 CFM	0.25 in-wg	882	67 W	120 V	1	60 Hz	Thermostat	1,2

NOTES:
1. PROVIDE CEILING GRILLE, INTEGRAL BACK DRAFT DAMPER, VARI-SPEED CONTROLLER (NEAR FAN AND ABOVE CEILING), AND FACTORY MEANS OF DISCONNECT.
2. PROVIDE LINE VOLTAGE COOLING ONLY THERMOSTAT FOR CONTROL OF FAN, SET TO 80 DEG F.
3. PROVIDE VARI-SPEED CONTROLLER NEAR FAN.

OUTDOOR AIR CALCULATIONS

UNIT	Area (sqft)	OCCUPANCY CLASSIFICATION	Occupant Density #/1000 sqft	People outdoor airflow rate in breathing zone, (Rp) cfm/person	Area outdoor airflow rate in breathing zone, (Ra) cfm/sqft	Exhaust airflow rate cfm/sqft	Breathing zone outdoor airflow (Vbz)	Zone air distribution effectiveness (Ez)	Zone outdoor airflow (cfm)
RTU-1	626	Office spaces	5	5	0.06		53	0.8	67
	201	Corridors	0	0	0.06		12	0.8	15
								Total	82
EX RTU-4	1009	Office spaces	5	5	0.06		86	0.8	107
	557	Corridors	0	0	0.06		33	0.8	42
	71	Storage rooms	0	0	0.12		9	0.8	11
	224	Break Room	25	5	0.06		41	0.8	52
								Total	211
EX RTU-5	355	Office spaces	5	5	0.06		30	0.8	38
	50	Storage rooms	0	0	0.12		6	0.8	7
	821	Main entry lobbies	10	5	0.06		90	0.8	113
								Total	158

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MECHANICAL SCHEDULES

M2

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