HEAT PUMP VRF UNIT SCHEDULE (OUTDOOR)

TAG	LOCATION	STATUS	NO OF MODULES	INDOOR UNIT SERVED	TON	NOMINAL COOLING	NOMINAL HEATING	DIMENSIONS (HxWxD) (IN.)	WEIGHT (LBS)	REFRIGERANT	PIPE DIA. (IN.)		ELECTRICAL DATA			EER	IEER	COP	MANUFACTURER	MODEL
											LIQ.	GAS	VOLT/PH//HZ	MCA (A)	MOCP (A)					
HP-1(N)	SEE PLAN	NEW	2	AC-1(N) TO AC-8(N)	12.0	144 (72 + 72)	160 (80 + 80)	2 X (71 x 36 x 30)	2 X 591	R32	3/8	7/8	208/3/60	51 x 2	60 x 2	13.50	22.90	4.02	MITSUBISHI (OR EQUIVALENT)	PUHY-HM144TSXU-A (OR EQUIVALENT)

NOTES :-

1. UNIT SHALL HAVE TEN YEAR EXTENDED WARRANTY FOR COMPRESSORS/PARTS.
2. PROVIDE COMPRESSOR CYCLE PROTECTOR.
3. CONTRACTOR SHALL PROVIDE A LONG LINE SET FOR REFRIGERANT PIPING IN THE EVENT THAT TOTAL REFRIGERANT LENGTH EXCEED THE MANUFACTURER'S STANDARD RECOMMENDED LENGTH.
4. OUDOOR HEATPUMPUNITS TO BE LOCATED WITH PROPER CLEARANCES AND MUST PREVENT RE-CIRCULATION OF AIR. COORDINATE WITH MANUFACTURER AND ARCHITECT.
5. HEAT PUMP UNIT SHALL NOT PRODUCE NOISE LEVELS IN EXCESS OF 42 DECIBELS FOR A SINGLE AIR CIRCULATING DEVICE AND 45 DECIBELS FOR THE CUMULATIVE NOISE LEVEL OF MULTIPLE AIR CIRCULATING DEVICES AS MEASURED 3 FEET FROM THE NOISE SOURCE AT AN OPEN DOOR OR WINDOW OF A NEARBY RESIDENCE.

VRF INDOOR UNIT SCHEDULE

TAG	AREA SERVED	STATUS	TYPE	CAPACITY (TON)	QUANTITY	NOMINAL COOLING CAPACITY (MBH)	NOMINAL HEATING CAPACITY (MBH)	SUPPLY AIRFLOW (CFM)	OA AIRFLOW (CFM)	ELECTRICAL DATA			DIMENSIONS (WxDxH) (IN.)	REFRIGERANT PIPE SIZE (IN.)		WEIGHT (LBS.)	MANUFACTURER	MODEL NO.
										V/ PZ / HZ	MCA	MOCP		LIQUID	SUCTION			
AC-1(N) TO AC-5(N)	SEE PLAN	NEW	CEILING CASSETTE	0.5	5.0	6.7	6.7	494	50 EACH	208/1/60	0.24	15	33 x 33 x 10	1/4	1/2	46.0	MITSUBISHI (OR EQUIVALENT)	PLFY-EM06NEMU-A (OR EQUIVALENT)
AC-6(N)	SEE PLAN	NEW	CEILING CASSETTE	4.0	1.0	48.0	54.0	1236	130	208/1/60	1.26	15	33 x 33 x 12	3/8	5/8	57.0	MITSUBISHI (OR EQUIVALENT)	PLFY-EM48NEMU-A (OR EQUIVALENT)
AC-7(N) TO AC-8(N)	SEE PLAN	NEW	CEILING CONCEALED	4.0	2.0	48.0	54.0	1306	320 EACH	208/1/60	3.38	15	55 x 29 x 10	3/8	5/8	86.0	MITSUBISHI (OR EQUIVALENT)	PEFY-M48NMAU-A (OR EQUIVALENT)

NOTES :-

1. SUPPLY AIR CFM BASED ON HIGH SPEED.
2. REFRIGERANT R32 SHALL BE PROVIDED.
3. PROVIDE ALL ASSOCIATED ACCESSORIES.
4. ALL REFRIGERANT PIPING TO BE SIZED AS PER MANUFACTURERS RECOMMENDATIONS.
5. CONTRACTOR SHALL PROVIDE A LONG LINE SET FOR REFRIGERANT PIPING IN THE EVENT THAT TOTAL REFRIGERANT LENGTH EXCEEDS THE MANUFACTURER'S STANDARD RECOMMENDED LENGTH. CONTRACTOR TO FIELD VERIFY THE EXACT TOTAL REFRIGERANT LENGTH AND COORDINATE WITH THE MANUFACTURER PRIOR ORDERING UNIT.
6. PROVIDE DISCONNECT SWITCH.
7. CONNECT 3/4" CD FROM ALL UNITS TO NEAREST APPROVED PLACE OF DISPOSAL. PROVIDE CONDENSATE PUMP IF REQUIRED.

HUMIDOR HUMIDITY SYSTEM

TAG	AREA SERVED	QUANTITY	ELECTRICAL DATA		BASIS OF DESIGN		REMARK
			V/PH/HZ	MOCP	MANUFACTURER	MODEL	
HHS-1(N) & HHS-2(N)	SEE PLAN	2	115/1/60	15	CORRIGAN	PRESERVE	1,2,3,4

NOTES:

1. INSTALL UNIT AS PER MANUFACTUR'S RECOMMENADATION.
2. PROVIDE DISCONNECT SWTICH.
3. PROVIDE WITH ALL REQUIRED ACCESSORIES.
4. PROVIDE WITH 1/2IN POTABLE COLD WATER SUPPLY AND NEARBY DRAIN CONNECTION.

ELECTRONIC CEILING-MOUNT SMOKE EATER

TAG	AREA SERVED	QUANTITY	WEIGHT (LBS)	ELECTRICAL DATA			BASIS OF DESIGN		REMARK
				V/PH/HZ	MCA	MOCP	MANUFACTURER	MODEL	
ESE-1(N) & ESE-2(N)	SEE PLAN	2	64	115/1/60	3.4	15	PURE AND NATURAL SYSEMS	CASE 1000	1,2,3

NOTES:

1. INSTALL UNIT AS PER MANUFACTUR'S RECOMMENADATION.
2. PROVIDE DISCONNECT SWTICH.
3. PROVIDE WITH ALL REQUIRED ACCESSORIES.

MECHANICAL FAN SCHEDULE

TAG	AREA SERVED	FLOW RATE	STATIC PRESSURE EXTERNAL	ELECTRIC DATA				MAXIMUM LOUDNESS	BASIS OF DESIGN		REMARK
		CFM	IN W.G.	SPEED RPM	HP	V/PH/HZ	FLA	SONES	MANUFACTURER	MODEL	
OAF-1(N)	SEE PLAN	1240	1.0	1713	0.5	208/1/60	4.0	13.2	GREENHECK	SQ-12-M2-VG	2,3,4,5,7
EF-1(N)	SEE PLAN	1200	1.0	1592	0.5	208/1/60	4.0	10.3	GREENHECK	SQ-120-VG	1,2,3,6

NOTES:

1. INTERCONNECT WITH AC-7(N) & AC-8(N). REFER TO ELECTRICAL LIGHTING PLAN.
2. PROVIDE FACTORY MOUNTED AND INSTALLED DISCONNECT
3. PROVIDE THERMAL OVERLOAD PROTECTION, AMCA SEAL AND UL CERTIFIED, SPEED CONTROLLER.
4. INTERCONNECT WITH AC-1(N) TO AC-8(N). REFER TO ELECTRICAL LIGHTING PLAN.
5. PROVIDE MERV-8 FILTER.
6. PROVIDE BACKDRAFT DAMPER.
7. PROVIDE MOTORIZED DAMPER.

MECHANICAL AIR TERMINAL DEVICES SCHEDULE

TAG	SIZE	DESCRIPTION	CONSTRUCTION	BASIS OF DESIGN		NOTES
				MANUFACTURER	MODEL	
CDS	AS SHOWN	SUPPLY DIFFUSER	ALUMINIUM	TITUS	TMS-AA	ALL
CDR	AS SHOWN	RETURN DIFFUSER	ALUMINIUM	TITUS	56FL	ALL
CGS	AS SHOWN	SUPPLY AIR GRILLE	ALUMINIUM	TITUS	50FF	ALL
CGE	AS SHOWN	EXHAUST AIR GRILLE	ALUMINIUM	TITUS	50FF	ALL

NOTES:

1. COORDINATE WITH THE ARCHITECT FOR THE FINISH AND COLOUR.
2. PAINT ALL SURFACES VISIBLE THROUGH FACE OF RETURN AIR GRILLE FLAT BLACK. THIS SHALL INCLUDE PIPING, CONDUIT, DUCTWORK AND STRUCTURAL MEMBERS.
3. PROVIDE FRAME FOR MOUNTING AIR DEVICE IN LAY-IN GRID CEILING UNLESS REFLECTED CEILING PLAN INDICATES HARD CEILING. IN AREAS WITH HARD CEILINGS, PROVIDE FRAMES FOR SURFACE MOUNTING.
4. UNLESS OTHERWISE NOTED, BRANCH DUCTS SERVING AIR DEVICES SHALL BE SAME SIZE AS NECK OF AIR DEVICE.
5. AIR DEVICE SHALL BE OF GALVANIZED FINISH WHEN INSTALLED ON EXPOSED DUCTWORK.
6. CABLE OPERATED DAMPERS SHALL BE PROVIDED FOR ANY DIFFUSERS/GRILLES INSTALLED IN THE HARD CEILING AREA.

ELECTRIC DUCT HEATER SCHEDULE

UNIT ID	MANUFACTURER	MODEL	HEATER TYPE	LOCATION	DUCT HEATER DIMENSIONS (IN)		ELECTRICAL DATA				
					W	H	KW	V	PH	Hz	Amps (A)
EDH-1(N)	GREENHECK	IDHE	FLANGE	SEE PLAN	16	12	20.0	208	3	60	55.6

NOTES:-

1. INSTALL ELECTRIC DUCT HEATER AS PER MANUFACTUR'S RECOMMENADATION.
2. PROVIDE T-STAT AND WIRE TO DUCT HEATER.
3. PROVIDE DISCONNECT SWTICH, VAPOR BARRIER, DUST TIGHT BOX AND FAN INTERLOCK SWITCH.
4. PROVIDE DUCT HEATER WITH SCR CONTROL AND THERMOSTAT.

VENTILATION CALCULATION - 1 WEST FOREST AVE- 2021 INTERNATIONAL MECHANICAL CODE

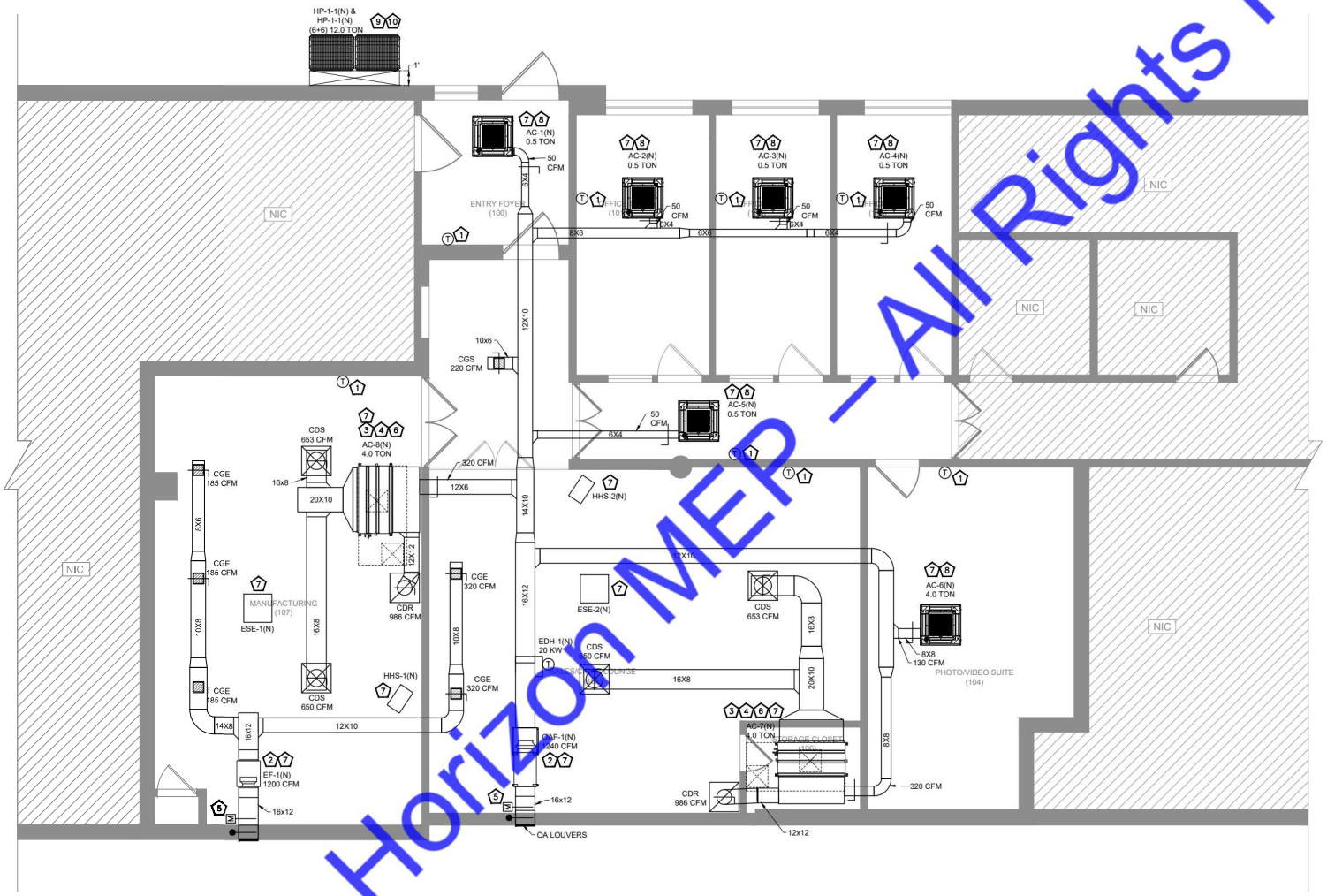
ROOM TAG	AREA	OCCUPANCY AS PER 2021 IMC/1000SQ.FT.	OCCUPANY AS PER 2022 NYMC	ARCHITECTURAL OCCUPANCY	FINAL OCCUPANCY	CFM/PERSON	CFM/SQ.FT	SUPPLY CFM	PROVIDED CFM	EXHUAST CFM/SQ.FT./FIXTURE	EXHAUST CFM	SELECTED EXHAUST CFM
1 ENTRY FOYER (100)	98	10	1	0	1	5	0.06	11		0	0	0
2 OFFICE 1 (101)	101	5	1	2	2	5	0.06	17		0	0	0
3 OFFICE 2 (102)	138	5	1	2	2	5	0.06	19		0	0	0
4 OFFICE 3 (103)	138	5	1	2	2	5	0.06	19		0	0	0
5 CORRIDOR	270	0	0	0	0	0	0.06	17	1240	0	0	0
6 PHOTO/VIDEO SUITE (104)	306	10	4	25	25	5	0.12	162		0	0	0
7 SALES/CIGAR LOUNGE (105)	634	15	10	43	43	5	0.12	399		1	634	640
8 STORAGE (106)	43	0	0	1	1	0	0.12	6		0	0	0
9 MANUFACTURING (107)	551	7	4	6	6	5	0.12	112		1	551	560
TOTAL	**2279**	-	**22**	**81**	**97**	-	-	**762**	**1240**	-	-	**1200**

AIR BALANCE

UNIT	AREA SERVED	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR
AC-1(N)	SEE PLAN	494 CFM	50 CFM	444 CFM	-
AC-2(N)	SEE PLAN	494 CFM	50 CFM	444 CFM	-
AC-3(N)	SEE PLAN	494 CFM	50 CFM	444 CFM	-
AC-4(N)	SEE PLAN	494 CFM	50 CFM	444 CFM	-
AC-5(N)	SEE PLAN	494 CFM	50 CFM	444 CFM	-
AC-6(N)	SEE PLAN	1236 CFM	130 CFM	1106 CFM	-
AC-7(N)	SEE PLAN	1306 CFM	320 CFM	986 CFM	-
AC-8(N)	SEE PLAN	1306 CFM	320 CFM	986 CFM	-
EF-1(N)	SEE PLAN	-	-	-	1200 CFM
	TOTAL:	6318 CFM	1020 CFM	5298 CFM	1200 CFM
	BUILDING PRESSURE:	.....	.....	-180 CFM	**NEGATIVE**

NOTES:

1. CONTRACTOR TO ADJUST MOTORIZED DAMPER ON FRESH AIR TAP TO PROVIDE OUTSIDE AIR AS MENTIONED IN ABOVE TABLE.



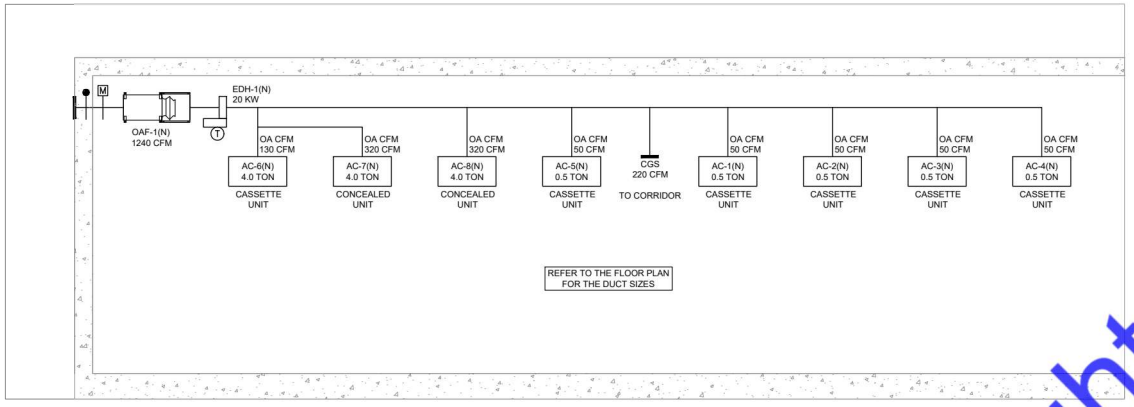
1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

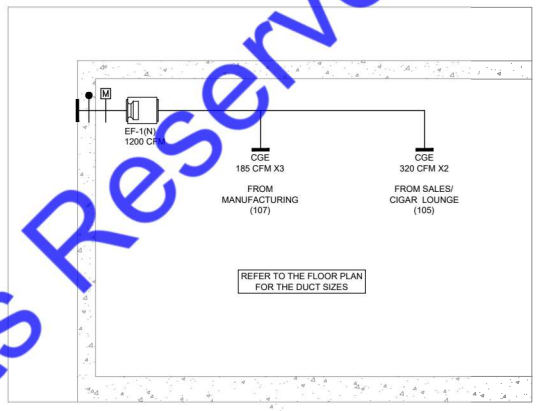
1. CONTRACTOR SHALL BALANCE EACH AIR DIFFUSER WITH THE CFM SHOWN PLAN.
2. DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR DUCTWORK ROUTING. OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
3. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
4. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
5. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
7. ALL EXPOSED DUCTWORK SHALL BE AS SHOWN,DOUBLE WALL, INSULATED METAL, PRIMED FOR PAINTING. ALL CONCEALED DUCTWORK SHALL BE INSULATED METAL RECTANGULAR AND CIRCULAR DUCT SHALL BE INSULATED INTERNALLY UNLESS OTHERWISE ALLOWED IN WRITING BY THE ENGINEER OF RECORD. COORDINATE FINAL FINISH WITH ARCHITECT.
8. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
9. ALL EXHAUST FANS SCHEDULED TO BE AUTOMATICALLY CONTROLLED BY MECHANICAL AIR HANDLERS SHALL BE CONNECTED BY MEANS OF AN AUXILIARY RELAY. PROVIDE AUXILIARY RELAY AS NEEDED.
10. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
11. MD TO INTERLOCK WITH RESPECTIVE INDOOR UNITS.
12. COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
13. CONTRACTOR SHALL DEMOLISH ALL EXISTING HVAC SYSTEMS INCLUDING FURNACE, DUCTWORK AND ALL ASSOCIATED ACCESSORIES.
14. BEFORE STARTING DEMOLITION, PROVIDE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED AND IN STRICT ACCORDANCE WITH OSHA AND ICRA REGULATIONS.
15. TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT MIGRATING TO OCCUPIED AREAS OF THE BUILDING. THIS INCLUDES BLANKING OFF ANY RETURN AIR GRILLES/ DUCTS IN THE WORK AREA. PROVIDE TEMPORARY EXHAUST FANS, DUCTED DIRECTLY TO OUTDOORS, TO MAINTAIN NEGATIVE PRESSURE WITHIN THE WORK AREA.
16. KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
17. ALL DEMOLISHED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFF SITE.
18. REPAIR/ REPLACE EXISTING EQUIPMENT/ MATERIALS NOT SCHEDULED OR NOTED TO BE DEMOLISHED BUT BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS, MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITIONS AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT NO ADDITIONAL COST TO THE OWNER.
19. PROVIDE WEATHER PROOF COATING FOR ALL EXTERIOR PIPING INSULATION.
20. MECHANICAL CONTRACTOR TO COORDINATE ALL DUCT WORK, CROSSINGS, OVERLAPPING AND PENETRATIONS WITH SITE CONDITIONS AND AS PER EXISTING JOIST LAYOUT AND SKYLIGHT IN FIELD. MODIFY DUCT WORK WHEREVER REQUIRED.
21. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS.

KEYED NOTES:

1. LOCATION OF DIGITAL PROGRAMMABLE THERMOSTAT. INSTALL AND WIRE NEW 7-DAY PROGRAMMABLE THERMOSTAT FOR THE RESPECTIVE UNITS. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. PROVIDE LOCKABLE COVER.
2. INLINE EXHAUST FAN. FAN SHALL BE SUSPENDED FROM STRUCTURE ABOVE. VERIFY EXACT LOCATION OF STRUCTURAL MEMBERS PRIOR TO INSTALLATION. INTERCONNECT WITH MECHANICAL SCHEDULE FOR MORE DETAILS.
3. EXTEND FULL SIZE SUPPLY & RETURN DUCTWORK FROM AC'S TO SPACE. EXTEND AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
4. PROVIDE REMOTE TEMP MOUNTED IN THE RETURN AIR DUCT AND WIRE BACK TO THE RESPECTIVE T-STAT.
5. INTERCONNECT THE MOTORIZED DAMPER WITH RESPECTIVE FAN.
6. PROVIDE SECONDARY DRIP PAN UNDER AC UNIT WITH WATER LEAKAGE SENSOR TO SHUT DOWN THE UNIT.
7. COORDINATE WITH ARCHITECT/ OWNER FOR THE FINAL LOCATION FOR THE UNIT. COORDINATE/ SUBMIT FINAL LOAD OF MECHANICAL UNITS, SUPPORT DETAILS WITH STRUCTURAL DRAWINGS. TAKE STRUCTURAL ENGINEER'S APPROVAL BEFORE CONSTRUCTION.
8. CONTRACTOR TO TERMINATE THE CONDENSATE DRAIN TO THE NEAREST APPROVED PLACE OF DISPOSAL WITH AN AIR GAP FITTING. COORDINATE WITH PLUMBING CONTRACTOR
9. COORDINATE WITH ARCHITECT/ OWNER FOR THE FINAL LOCATION FOR THE UNIT. INSTALL REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS AS PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE INSULATION TO REFRIGERANT PIPING AS PER 2019 ASHRAE 90.1. COORDINATE REFRIGERANT PIPE ROUTING WITH ARCHITECT/OWNER.
10. CONTRACTOR SHALL COORDINATE REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS AS PER THE MANUFACTURER'S RECOMMENDATIONS. MAXIMUM REFRIGERANT PIPING LENGTH SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDATION.

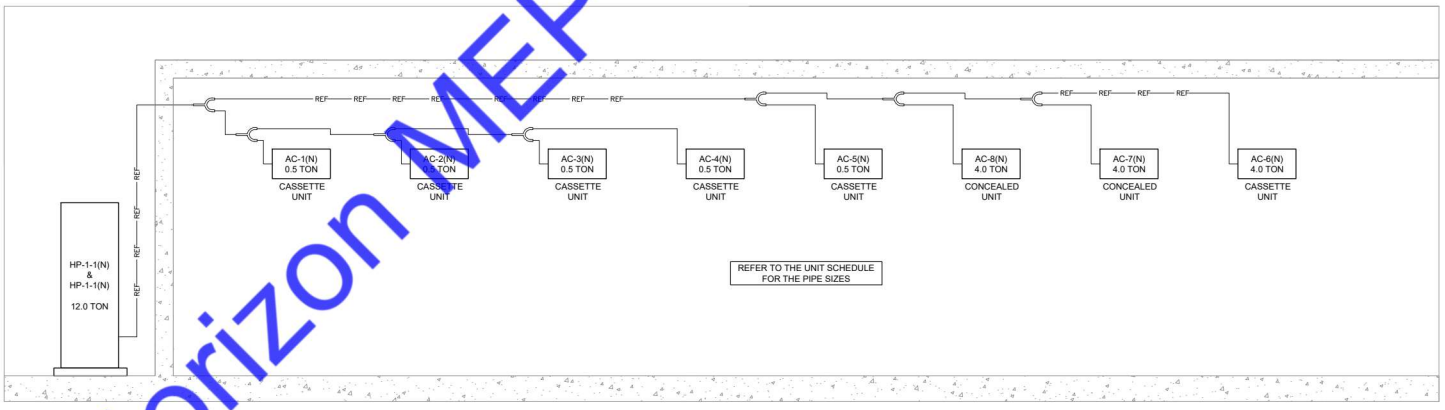


OUTSIDE AIR DUCT RISER



EXHAUST AIR DUCT RISER

1 VENTILATION DUCT RISER
SCALE: N.T.S



2 REFRIGERANT PIPING RISER
SCALE: N.T.S

Air System Sizing Summary for 0 TOTAL SUMMARY

Project Name: 1 West Forest
Prepared by: ADSP
11-08-2025
06:23PM

Air System Information

Air System Name	0 TOTAL SUMMARY	Number of zones	1
Equipment Class	SPLT AHU	Floor Area	2279.0 ft²
Air System Type	SZCAV	Location	Newark, New Jersey

Sizing Calculation Information

Calculation Months	Jan to Dec	Zone CFM Sizing	Sum of space airflow rates
Sizing Data	Calculated	Space CFM Sizing	Individual peak space loads

Central Cooling Coil Sizing Data

Total coil load	13.5	Tons	Load occurs at	Jul 1500	
Total coil load	161.9	MBH	OA DB / WB	92.6 / 74.1	°F
Sensible coil load	128.3	MBH	Entering DB / WB	77.6 / 64.7	°F
Coil CFM at Jul 1500	5540	CFM	Leaving DB / WB	56.2 / 54.8	°F
Max block CFM	5540	CFM	Coil ADP	53.3	°F
Sum of peak zone CFM	5540	CFM	Bypass Factor	0.120	
Sensible heat ratio	0.793		Resulting RH	50	%
CFM/Ton	410.7		Design supply temp.	56.0	°F
ft²/Ton	168.9		Zone T-stat Check	1 of 1	OK
BTU/(hr·ft²)	71.0		Max zone temperature deviation	0.0	°F
Water flow @ 10.0 °F rise	N/A				

Central Heating Coil Sizing Data

Max coil load	65.2	MBH	Load occurs at	Des Htg	
Coil CFM at Des Htg	5540	CFM	BTU/(hr·ft²)	28.6	
Max coil CFM	5540	CFM	Ent. DB / Lvg DB	63.3 / 74.2	°F
Water flow @ 20.0 °F drop	N/A				

Supply Fan Sizing Data

Actual max CFM	5540	CFM	Fan motor BHP	0.00	BHP
Standard CFM	5539	CFM	Fan motor kW	0.00	kW
Actual max CFM/ft²	2.43	CFM/ft²	Fan static	0.00	in wg

Outdoor Ventilation Air Data

Design airflow CFM	800	CFM	CFM/person	9.76	CFM/person
CFM/ft²	0.35	CFM/ft²			

Zone Sizing Summary for 0 TOTAL SUMMARY

Project Name: 1 West Forest
Prepared by: ADSP
11-08-2025
06:23PM

Air System Information

Air System Name	0 TOTAL SUMMARY	Number of zones	1
Equipment Class	SPLT AHU	Floor Area	2279.0 ft²
Air System Type	SZCAV	Location	Newark, New Jersey

Sizing Calculation Information

Calculation Months	Jan to Dec	Zone CFM Sizing	Sum of space airflow rates
Sizing Data	Calculated	Space CFM Sizing	Individual peak space loads

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/ft²	Reheat Coil Load (MBH)	Reheat Coil Water gpm @ 20.0 °F	Zone Htg Unit Coil Load (MBH)	Zone Htg Unit Water gpm @ 20.0 °F	Mixing Box Fan Airflow (CFM)
Zone 1	5374	5374	2.36	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (ft²)
Zone 1	110.2	Jul 1700	11.8	2279.0

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (ft²)	Space CFM/ft²
Zone 1							
1 ENTRY FOYER (100)	1	3.2	Jul 1700	154	2.1	98.0	1.57
2 OFFICE 1 (101)	1	3.6	Jul 1700	178	1.5	101.0	1.76
3 OFFICE 2 (102)	1	4.0	Jul 1700	194	1.4	138.0	1.41
4 OFFICE 3 (103)	1	4.0	Jul 1700	194	1.4	138.0	1.41
5 CORRIDOR	1	2.8	Jan 2300	134	0.0	270.0	0.50
6 PHOTO/VIDEO STE (104)	1	29.5	Jul 2000	1437	0.9	306.0	4.70
7 SALES/CIGAR LNGE (105)	1	36.8	Jul 2000	1795	1.9	634.0	2.83
8 STORAGE (106)	1	1.0	Jul 2000	49	0.7	43.0	1.14
9 MANUFACTURING (107)	1	25.4	Jul 2000	1239	1.7	551.0	2.25

Ventilation Sizing Summary for 0 TOTAL SUMMARY

Project Name: 1 West Forest
Prepared by: ADSP
11-08-2025
06:23PM

1. Summary

Ventilation Sizing Method	Sum of Space OA Airflows
Design Ventilation Airflow Rate	800 CFM

2. Space Ventilation Analysis

Zone Name / Space Name	Mult.	Floor Area (ft²)	Maximum Occupants	Maximum Supply Air (CFM)	Required Outdoor Air (CFM/person)	Required Outdoor Air (CFM/ft²)	Required Outdoor Air (CFM)	Required Outdoor Air (CFM/unit of supply)	Uncorrected Outdoor Air (CFM)
Zone 1									
1 ENTRY FOYER (100)	1	98.0	1.0	169.8	0.00	0.00	20.0	0.0	20.0
2 OFFICE 1 (101)	1	101.0	2.0	177.6	0.00	0.00	20.0	0.0	20.0
3 OFFICE 2 (102)	1	138.0	2.0	194.0	0.00	0.00	20.0	0.0	20.0
4 OFFICE 3 (103)	1	138.0	2.0	194.0	0.00	0.00	20.0	0.0	20.0
5 CORRIDOR	1	270.0	0.0	134.3	0.00	0.00	20.0	0.0	20.0
6 PHOTO/VIDEO STE (104)	1	306.0	25.0	1437.2	0.00	0.00	170.0	0.0	170.0
7 SALES/CIGAR LNGE (105)	1	634.0	43.0	1795.0	0.00	0.00	400.0	0.0	400.0
8 STORAGE (106)	1	43.0	1.0	48.8	0.00	0.00	10.0	0.0	10.0
9 MANUFACTURING (107)	1	551.0	6.0	239.2	0.00	0.00	120.0	0.0	120.0
Totals (incl. Space Multipliers)				5214.1					**800.0**

1 MECHANICAL LOAD CALCULATION
SCALE: N.T.S

COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate

Project Information

Energy Code:	90.1 (2019) Standard
Project Title:	1 WEST FOREST AVENUE
Location:	
Climate Zone:	5a
Project Type:	Alteration

Owner/Agent: Designer/Contractor:

Mechanical Systems List

Quantity System Type & Description

1 HP-1(N)
VRF Condensing Unit, Air Cooled Heat Pump
Heating Mode: Capacity = 160 kBtu/h,
Proposed Efficiency = 4.02 COP, Required Efficiency = 3.20 COP
Cooling Mode: Capacity = 144 kBtu/h,
Proposed Efficiency = 13.50 EER, Required Efficiency = 10.60 EER
Proposed Part Load Efficiency = 22.90 IEER, Required Part Load Efficiency = 13.90 IEER
Fan System: None

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 (2019) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

2 ENERGY ANALYSIS
SCALE: N.T.S