AIR BALANCE SCHEDULE

HVAC EQUIPMENT	DINING AREA				KITCHEN AREA			
	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR
RTU-1	+2,400 CFM	+550 CFM	-2,400 CFM					
RTU-2	+2,400 CFM	+550 CFM	-2,400 CFM					
RTU-3					+2,400 CFM	+200 CFM	-2,400 CFM	
RTU-4					+2,400 CFM	+200 CFM	-2,400 CFM	
KSF-1						+3,120 CFM		
KEF-1								-3,900 CFM
EF-1								-75 CFM
EF-2				-150 CFM				
EF-3				-150 CFM				
EF-4				-75 CFM				
TOTAL	+4,800 CFM	+1,100 CFM	-4,800 CFM	-375 CFM	+4,800 CFM	+3,520 CFM	-4,800 CFM	-3,975 CFM

DINING PRESSURIZATION:
(OUTSIDE AIR - EXHAUST AIR) = +725 CFM

KITCHEN PRESSURIZATION:
(OUTSIDE AIR - EXHAUST AIR) = -455 CFM

NET BUILDING PRESSURIZATION (DINING + KITCHEN) = +270 CFM

TABLE 403.3 OA REQUIREMENTS (RTU-1 & 2)

ZONE	AREA (Az, sf)	PEOPLE O.A. RATE (Rp, CFM/P)	OCCUPANT DENSITY (#P / 1,000sf)	ZONE POP. (Pz, #P) SEE NOTE #1	AREA O.A. RATE (Ra, CFM/sf)	O.A. FLOWRATE (Voz, CFM) SEE NOTE #2	ZONE AIR DIST. EFFECTIVENESS (Ez)	ZONE O.A. FLOWRATE (Vpz, CFM) SEE NOTE #3
DINING [101]	1227.2	7.5	70.0	78.9	0.18	794.7	0.8	993.3
SERVICE AREA [112]	156.7	7.5	15.0	2.4	0.12	36.4	0.8	45.5
TOTAL O.A. REQUIRED								1,038.8
TOTAL O.A. PROVIDED BY RTU-1 & 2								1,100.0

TABLE 403.3 OA REQUIREMENTS (RTU-3 & 4)

ZONE	AREA (Az, sf)	PEOPLE O.A. RATE (Rp, CFM/P)	OCCUPANT DENSITY (#P / 1,000sf)	ZONE POP. (Pz, #P) SEE NOTE #1	AREA O.A. RATE (Ra, CFM/sf)	O.A. FLOWRATE (Voz, CFM) SEE NOTE #2	ZONE AIR DIST. EFFECTIVENESS (Ez)	ZONE O.A. FLOWRATE (Vpz, CFM) SEE NOTE #3
DRY STORAGE [105]	238.7	-	-	-	0.12	14.4	0.8	18.0
VESTIBULE [109]	57.5	-	-	-	0.06	3.5	0.8	4.3
KITCHEN [111]	703.4	5.0	30.0	211	0.06	147.7	0.8	184.6
TOTAL O.A. REQUIRED								206.9
TOTAL O.A. PROVIDED BY RTU-3 & 4								400.0

VENTILATION RATE PROCEDURE NOTES

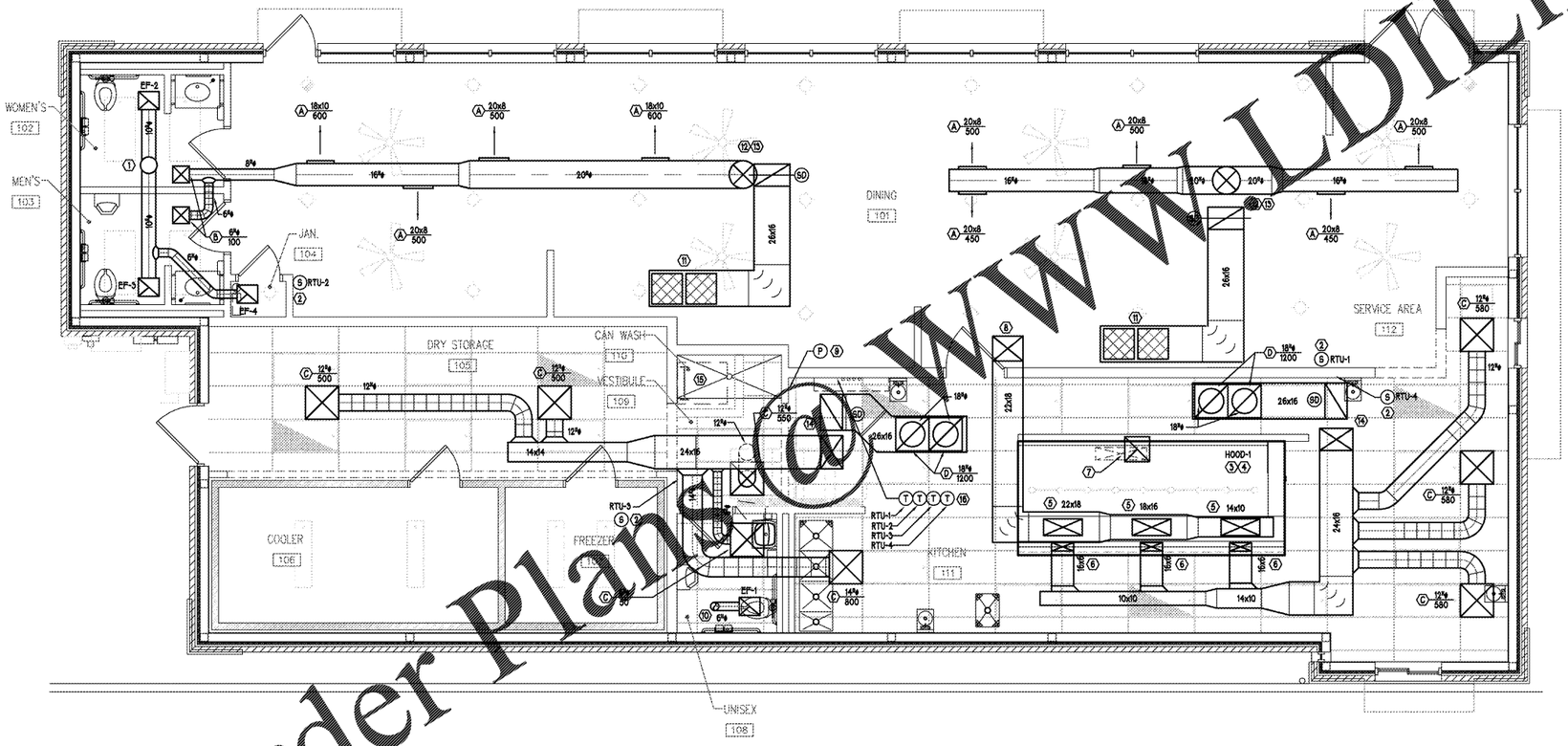
1. ZONE POPULATION BASED ON THE ZONE FLOOR AREA AND THE DEFAULT OCCUPANT DENSITY (TABLE 6-1).
2. ZONE POPULATION: Pz= Az x Occupant Density (#P/1,000sf)
3. OUTDOOR AIRFLOW: Voz= (Rp x Pz) + (Ra x Az)
4. ZONE OUTDOOR AIRFLOW: Voz= Voz / Ez

WORK NOTES

1. ROUTE 12" EXHAUST DUCT UP THROUGH ROOF AND TERMINATE W/ WEATHER CAP. WEATHER CAP TO BE GREENHECK MODEL SRSH-10 OR APPROVED EQUAL. PROVIDE W/ BIRDSCREEN AND CURB. COORDINATE FINISH W/ ARCHITECT. FIELD COORDINATE EXACT LOCATION. MAINTAIN 10'-0" FROM O.A. INTAKES.
2. COORDINATE EXACT LOCATION W/ OWNER/GC PRIOR TO INSTALLATION.
3. TYPE I KITCHEN HOOD, KEF-1, KSF-1 & ACCESSORIES TO BE PROVIDED BY OWNER; INSTALLED BY M.C.. HOOD1 TO BE INTERLOCKED W/ KEF-1, KSF-1, RTU-4 & KITCHEN EQUIPMENT UNDER THE HOOD. SEE M6 FOR TYPICAL DETAILS AND M5 & M7 FOR HOOD & FAN SCHEDULES, DIMENSIONS & NOTES. COORDINATE EXACT WIRING DIAGRAM REQUIRED WITH HOOD PROVIDER PRIOR TO INSTALLATION.
4. OWNER TO PROVIDE, M.C. TO INSTALL A COMPLETE UL-300 LISTED WET-CHEMICAL FIRE SUPPRESSION SYSTEM & ALL ACCESSORIES FOR HOOD #1.
5. SEE SHEET M6 FOR MAKE UP AIR RATES AND RISER DIMENSIONS AT EACH HOOD SUPPLY LOCATION. (TYPICAL OF 3)
6. SEE SHEET M6 FOR SUPPLY AIR RISER FLOW RATE, DETAILS AND DIMENSIONS. ADD TO DAMPER IF NECESSARY. (TYPICAL OF 3)
7. ROUTE 18"x24" GREASE EXHAUST DUCT UP THROUGH ROOF TO KEF-1. MAINTAIN 10'-0" FROM BUILDING INTAKES.
8. ROUTE 22x18 MAKE UP AIR DUCT THROUGH ROOF TO KSF-1. MAINTAIN 10'-0" FROM EXHAUST OUTLETS & PLUMBING VENTS.
9. HOOD PULL STATION SHALL COMPLY WITH THE IFC 904.11.1 MANUAL ACTIVATION DEVICE SHALL BE LOCATED A MINIMUM OF 10 FEET AND MAXIMUM OF 20 FEET FROM THE FIRE SUPPRESSION SYSTEM COOKING AREA. PULL STATION TO BE RECESS MOUNTED.
10. ROUTE 6"ø EXHAUST DUCT UP THROUGH ROOF AND TERMINATE W/ WEATHER CAP. WEATHER CAP TO BE GREENHECK MODEL RCC-7 OR APPROVED EQUAL. PROVIDE W/ BIRDSCREEN AND CURB. COORDINATE FINISH W/ ARCHITECT. FIELD COORDINATE EXACT LOCATION. MAINTAIN 10'-0" FROM O.A. INTAKES.
11. PROVIDE (2) 22"x22" OPENINGS ON TOP SIDE OF R.A. DUCT. COVER OPENINGS W/ 3/4" WIRE MESH.
12. FIELD COORDINATE ALL EXPOSED SPIRAL DUCTWORK TIGHT TO BOTTOM OF STRUCTURE WITH G.C..
13. 20"ø S.A. AND 26"x16" R.A. DUCT COMING DOWN FROM RTU ABOVE.
14. 24"x16" S.A. AND 26"x16" R.A. DUCT COMING DOWN FROM RTU ABOVE.
15. ROOF ACCESS LADDER.
16. M.C. TO COORDINATE EXACT LOCATION OF MANAGER'S OFFICE AREA W/ OWNER PRIOR TO INSTALLATION OF THERMOSTATS.

GENERAL NOTES

1. MAINTAIN MFG'S RECOMMENDED CLEARANCES, TYPICAL.
2. M.C. TO COORDINATE ALL TERMINATION POINTS WITH THE ARCHITECT/OWNER PRIOR TO PRICING AND INSTALLATION.
3. ALL THERMOSTATS TO BE LOCATED AT 48" A.F.F. M.C. TO COORDINATE EXACT LOCATION OF THERMOSTAT WITH OWNER/ARCHITECT PRIOR TO PERFORMING ANY WORK. THERMOSTAT TO BE HONEYWELL PRO 800 WITH CAGE LOCK.
4. ALL DUCTWORK TO BE MOUNTED AS HIGH AS POSSIBLE ABOVE SUSPENDED CEILING OR TIGHT TO JOIST (WHERE APPLICABLE). M.C. TO COORDINATE ALL DUCTWORK WITH OTHER TRADES.
5. MAINTAIN A MINIMUM 10'-0" BETWEEN OUTDOOR AIR INTAKES AND EXHAUST FAN DISCHARGE AND PLUMBING VENTS, ETC. FIELD COORDINATE.
6. PROVIDE GREASE DUCT CLEAN OUT PER SECTION 506.3.9 OF THE 2012 IMC.
7. ALL GREASE DUCT IS TO BE INSTALLED TO PREVENT THE ACCUMULATION OF GREASE AND SHALL BE SLOPED BACK TOWARDS THE HOOD NOT LESS THAN 1/4 UNIT VERTICAL PER 12 UNITS HORIZONTAL PER SECTION 506.3.7 OF THE 2012 IMC.
8. ALL MAKEUP AIR DUCT INSULATION INSTALLED WITHIN 18 INCHES OF A HOOD SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED FOR THE APPLICATION.
10. EXPOSED SPIRAL DUCTS TO BE DOUBLE WALL INSULATED GALVANIZED (NON-PAINT GRADE) WITH GASKETED SEALS (NO MASTIC).
11. HOOD MUST BE SUSPENDED USING 1-5/8"x1-5/8" UNISTRUT, NOT ANGLE IRON.



1 / M2 MECHANICAL FLOOR PLAN
1/4" = 1'-0"

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Mk Date Description
Revisions

MECHANICAL FLOOR PLAN AND NOTES

Date 06/13/19
Drawn By SRP
Check By NMP
Job No. 19-037
Sheet

M2