



DAMMON
ENGINEERING, INC.

CHIEF ENGINEER
EMMETT
DAMMON, P.E.
CHIEF ARCHITECT
ROBERT
WILTSE

1095 FLORIDA AVENUE
SLIDELL, LA. 70458
OFFICE: 985-649-5632
FAX: 985-641-5950

WEBSITE:
WWW.DAMMONENGINEERING.COM

EMAIL:
DAMMONENG@BELLSouth.NET

ARCHITECTURE
ENGINEERING

STUDIES

PLANNING

INVESTIGATION

EXPERT WITNESS

PAUL MITCHELL
SCHOOL
3321 HESSMER AVE
METAIRIE, LA
70002

MECHANICAL
NOTES
AND
SCHEDULES

REV:

SCALE: AS NOTED

JOB#: 2051

DATE: 02-05-10

SHEET

M-4

OF

AIR BALANCE SCHEDULE

OUTSIDE AIR FLOW (CFM)	ZONE 1 AHU-1 FLOOR 1	ZONE 2 RTU-1 FLOOR 2	ZONE 3 AHU-2 FLOOR 2	ZONE 4 RTU-2 FLOOR 2	ZONE 5 RTU-3 FLOOR 2	ZONE 6 RTU-4 FLOOR 3	ZONE 7 DS-1 FLOOR 3	ZONE 8 RTU-5 FLOOR 3	ZONE 9 RTU-6 FLOOR 3	ZONE 10 RTU-7 FLOOR 3	ZONE 11 RTU-9 FLOOR 3	ZONE 12 RTU-10 FLOOR 3	ZONE 13 STAIRS-1 RTU-11 FLOOR 3	STAIRS-2 RTU-12 FLOOR 3	TOILET EXHAUST FANS	MAIL CLINIC EXHAUST FAN	COMMENTS
RETURN AIR FLOW (CFM)	157	929	513	1007	1182	162	198	206	247	284	485	240	100	102	90		
SUPPLY AIR FLOW (CFM)	1843	4071	687	3993	6818	1838	402	994	953	1716	5515	960	1500	1098	1110		
EXHAUST AIR FLOW (CFM)	2000	5000	1200	5000	8000	2000	600	1200	1200	2000	6000	1200	1600	1200			
BUILDING PRESSURE (CFM)	+157	+929	+0	+1007	+672	+162	+198	+206	+247	+284	+485	+240	+100	+102	+90	-75	-308
QUANTITIES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	
TOTAL PRESSURIZATIONS	+157	+929	+0	+1007	+672	+162	+198	+206	+247	+284	+485	+240	+100	+102	+90	-300	-308
UNIT SIZE	5 TON	12 1/2 TON	3 TON	12 1/2 TON	20 TON	5 TON	1 1/2 TON	3 TON	3 TON	5 TON	15 TON	3 TON	4 TON	3 TON	3 TON		
HEAT SOURCE	GAS	GAS	ELEC.	GAS	GAS	GAS	ELEC.	ELEC.	ELEC.	ELEC.	GAS	ELEC.	ELEC.	GAS	GAS		

(*) SEE MAIL CLINIC NOTES

SPUT SYSTEM AC (AHU) SCHEDULE

NO.	TOTAL BTU	CFM	O.A.	HEAT	VOLTAGE	ELECTRICAL	CKT BRKR	COMMENTS
AHU-1	60,000	2000	157	35,000 BTU/HR GAS	208V, 3Ø	40	PNL-1,2,4,6	ZONE 1 - FIRST FLOOR
AHU-2	36,000	1200	513	11.3 KW ELECTRIC	208V, 3Ø	30	PNL-1,3,5 & PNL-9-1,3,5	ZONE 3 - SECOND FLOOR

ROOFTOP AC (RTU) SCHEDULE

NO.	TOTAL BTU	CFM	O.A.	HEAT	VOLTAGE	ELECTRICAL	CKT BRKR	COMMENTS
RTU-1	150,000	5000	929	160,000 BTU/HR GAS	208V, 3Ø	100	PNL-9-2,4,6	ZONE 2 - SECOND FLOOR
RTU-2	150,000	5000	1007	110,000 BTU/HR GAS	208V, 3Ø	80	PNL-9-1,3,15,17	ZONE 4 - SECOND FLOOR
RTU-3	240,000	8000	1182	225,000 BTU/HR GAS	208V, 3Ø	125	PNL-9-1,4,16,18	ZONE 5 - SECOND FLOOR
RTU-4	60,000	2000	162	58,000 BTU/HR GAS	208V, 3Ø	40	PNL-9-19,21,23	ZONE 6 - THIRD FLOOR
RTU-5	36,000	1200	206	7.9 KW ELECTRIC	208V, 3Ø	35	PNL-9-20,22,24	ZONE 8 - THIRD FLOOR
RTU-6	36,000	1200	247	8.3 KW ELECTRIC	208V, 3Ø	35	PNL-9-25,27,29	ZONE 9 - THIRD FLOOR
RTU-7	60,000	2000	284	20 KW ELECTRIC *	208V, 3Ø	90	PNL-9-26,28,30	ZONE 10 - THIRD FLOOR
RTU-8	180,000	6000	485	114,000 BTU/HR GAS	208V, 3Ø	60	PNL-9-32,34,36	ZONE 11 - THIRD FLOOR
RTU-9	36,000	1200	240	6.3 KW ELECTRIC	208V, 3Ø	35	PNL10-1,3,5	ZONE 12 - THIRD FLOOR
RTU-10	48,000	1600	100	11.2 KW ELECTRIC	208V, 3Ø	50	PNL10-2,4,6	ZONE 13 - THIRD FLOOR
RTU-11	36,000	1200	102	24,000 BTU/HR GAS	208V, 3Ø	35	PNL10-7,9,11	STAIRS-1
RTU-12	36,000	1200	90	12,000 BTU/HR GAS	208V, 3Ø	35	PNL10-8,10,12	STAIRS-2

NOTES:
* 20 KW HEAT UNIT COMPOSED OF 2 EA. 10 KW HEATER ELEMENTS.
** CONTRACTOR SHALL ASCERTAIN & INSTALL CORRECT SIZE ELECTRICAL EQUIPMENT AND WIRING TO MEET REQUIREMENTS OF EQUIPMENT PURCHASED.

SPUT-DUCTLESS AC & HEATPUMP UNIT SCHEDULE

NO.	TOTAL BTU	CFM	O.A.	HEAT	VOLTAGE	ELECTRICAL	CKT BRKR	COMMENTS
DS-1	18,000	600	198	2.6 KW ELECTRIC	208V, 3Ø	30	PNL9-8,10,12	ZONE 7 - THIRD FLOOR CEILING MOUNT-DUCTLESS MR. SLIM (MITSUBISHI) *

(*VERIFY WITH OWNER)

MECHANICAL NOTES

1. CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 FPM & SECONDARY DUCTS TO 800 FPM. TO BE INSTALLED PER SMACNA STANDARDS.
2. ALL CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION. ALL EXPOSED DUCTWORK TO BE ROUND KE FIBRETEC PERFORATED FABRIC DUCT OR EQUAL, PER OWNER'S CHOICE.
3. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWN-STREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN. PROVIDE U.L. LISTED 125 F FIBRETEC IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
4. PROVIDE U.L. RATED FIRE DAMPERS WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
5. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
6. ALL THERMOSTATS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
7. EXHAUST FAN EQUAL TO BROWN MODEL NO. 1300 SERIES OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL AT FRONT OF STORE. PROVIDE BACK DRAFT DAMPER.
8. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FUTURE EXHAUST.
9. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
10. LOCATE OUTDOOR UNITS AS SHOWN ON ARCH. DWGS.
11. RERIGRANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
12. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
13. INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE RATED ASSEMBLIES. FIRE CALULED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM E814).
14. MECHANICAL PLANS ARE DRAWN SCHEMATICALLY. CONTRACTOR TO ROUTE DUCT SYSTEMS PER FIELD CONDITIONS.
15. AREA OF PERUJE SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 92A. TO INCLUDE STAIRWELL PRESSURIZATION SYSTEMS. PROVIDE PROPER ACTIVATION AND CONTROL SYSTEMS.

EXHAUST FAN SCHEDULE

NO.	LOCATION	CFM	VOLTAGE	TYPE	REMARKS
EF-1	WOMEN'S RESTROOM-SECOND FLOOR	75	120	VENT	
EF-2	MEN'S RESTROOM-SECOND FLOOR	75	120	VENT	
EF-3	MAIL CLINIC-SECOND FLOOR	513	120	VENT	SEE NOTES
EF-4	COLOR BAR AREA-SECOND FLOOR	502	120	VENT	
EF-5	MEN'S RESTROOM-THIRD FLOOR	75	120	VENT	
EF-6	WOMEN'S RESTROOM-THIRD FLOOR	75	120	VENT	
EF-7	PHONE/SERVER ROOM-THIRD FLOOR	75	120	VENT	

MAIL CLINIC NOTES:

1. PROVIDE SWITCH TO ACTIVATE NEW EXHAUST FANS. HVAC BLOWER MOTORS MUST ENGAGE WHEN EXHAUST FANS ARE RUNNING TO ENSURE PROPER AIR CIRCULATION AND VENTILATION.
2. NEW EXHAUST FANS AND PARTS OF EXHAUST SYSTEM IN CONTACT WITH EXPLOSIVE OR FLAMMABLE VAPORS, FLAMES, OR DUSTS SHALL BE OF NONFERROUS OR NONSPARKING MATERIALS. OR THEIR CASING SHALL BE LINED OR CONSTRUCTED OF SUCH MATERIAL IN ACCORDANCE WITH IMC 2006, SEC 503.2
3. FIELD VERIFY ALL PARTITION WALLS ARE CONSTRUCTED TIGHT TO ROOF DECK AND SEALED WITH AN APPROVED FIRE CALULX.

STAIRWELL INTAKE FAN SCHEDULE

NO.	LOCATION	CFM	VOLTAGE	TYPE	REMARKS
IF-1	TOP OF STAIRWELL-1 AT ROOF	3500	120	FAN	3/4 H.P. MOTOR
IF-2	TOP OF STAIRWELL-2 AT ROOF	3500	120	FAN	3/4 H.P. MOTOR

INTAKE FAN NOTES:

1. STAIRWELL INTAKE FANS SHALL BE CONNECTED TO THE BUILDINGS FIRE ALARM SYSTEM.
2. PROVIDE PROPER ACTIVATION AND CONTROL SYSTEMS FOR FANS TO ACTIVATE IN THE EVENT OF FIRE OR SMOKE TO KEEP STAIRWELLS SMOKE-FREE.