

AIR BALANCE SCHEDULE

| | 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-8 FLOOR 3 | ZONE 12 RTU-9 FLOOR 3 | ZONE 13 RTU-10 FLOOR 3 | ZONE 14 RTU-11 FLOOR 3 | STAIRS-1 RTU-12 | STAIRS-2 RTU-13 | TOILET EXHAUST FANS | NAIL CLINIC EXHAUST FAN | COMMENTS |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|--------------------|--------------------|---------------------------|-------------------------------|--|
| OUTSIDE AIR FLOW (CFM) | 157 | 929 | 513 | 1007 | 1182 | 162 | 198 | 206 | 247 | 284 | 160 | 325 | 240 | 100 | 102 | 90 | | | |
| RETURN AIR FLOW (CFM) | 1843 | 5071 | 687 | 2993 | 6818 | 1838 | 402 | 994 | 953 | 1716 | 840 | 2275 | 960 | 1500 | 1098 | 1110 | | | |
| SUPPLY AIR FLOW (CFM) | 2000 | 6000 | 1200 | 4000 | 8000 | 2000 | 600 | 1200 | 1200 | 2000 | 1000 | 2600 | 1200 | 1600 | 1200 | 1200 | | | |
| EXHAUST AIR FLOW (CFM) | | | 513 | | 510 | | | | | | | | | | | | 75 | 308(*) | ZONE 3: E.F.=513 CFM, ZONE 5: E.F.=502 CFM # RTU EXHAUST=510 CFM |
| BUILDING PRESSURE (CFM) | +157 | +929 | +0 | +1007 | +672 | +162 | +198 | +206 | +247 | +284 | +160 | +325 | +240 | +100 | +102 | +90 | -75 | -308 | |
| QUANTITIES | 1 | 1 | 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 | +160 | +325 | +240 | +100 | +102 | +90 | -300 | -308 | |
| UNIT SIZE | 5 TON | 15 TON | 3 TON | 10 TON | 20 TON | 5 TON | 1 1/2 TON | 3 TON | 3 TON | 5 TON | 2 1/2 TON | 6 1/2 TON | 3 TON | 4 TON | 3 TON | 3 TON | | | |
| SUPPLY | GAS | GAS | ELEC. | GAS | GAS | GAS | ELEC. | ELEC. | ELEC. | ELEC. | GAS | GAS | ELEC. | ELEC. | GAS | GAS | | | |
| RESULTING BUILDING PRESSURIZATION (CFM) = +4361 | | | | | | | | | | | | | | | | | | | (*) SEE NAIL CLINIC NOTES |

| A/C SCHEDULE | | | | | | | |
|--------------|---------------------|------|------|------------|------------|-----|-----------------------|
| NO. | TOTAL BTU | CFM | O.A. | HEAT ELEC. | ELECTRICAL | | COMMENTS |
| | | | | | VOLTAGE | MCA | |
| 1 | 60,000 5 TON | 2000 | 157 | 20 KW * | 208V, 3Ø | - | ZONE 1 - FIRST FLOOR |
| 2 | 180,000 15 TON | 6000 | 929 | | 208V, 3Ø | - | ZONE 2 - SECOND FLOOR |
| 3 | 36,000 3 TON | 1200 | 513 | | 208V, 3Ø | - | ZONE 3 - SECOND FLOOR |
| 4 | 120,000 10 TON | 4000 | 1007 | | 208V, 3Ø | - | ZONE 4 - SECOND FLOOR |
| 5 | 240,000 20 TON | 8000 | 1182 | | 208V, 3Ø | - | ZONE 5 - SECOND FLOOR |
| 6 | 60,000 5 TON | 2000 | 162 | | 208V, 3Ø | - | ZONE 6 - THIRD FLOOR |
| 7 | 18,000 1 1/2 TON | 600 | 198 | | 208V, 3Ø | - | ZONE 7 - THIRD FLOOR |
| 8 | 36,000 3 TON | 1200 | 206 | | 208V, 3Ø | - | ZONE 8 - THIRD FLOOR |
| 9 | 36,000 3 TON | 1200 | 247 | | 208V, 3Ø | - | ZONE 9 - THIRD FLOOR |
| 10 | 60,000 5 TON | 2000 | 284 | | 208V, 3Ø | - | ZONE 10 - THIRD FLOOR |
| 11 | 30,000 2 1/2 TON | 1000 | 160 | | 208V, 3Ø | - | ZONE 11 - THIRD FLOOR |
| 12 | 78,000 6 1/2 TON | 2600 | 325 | | 208V, 3Ø | - | ZONE 12 - THIRD FLOOR |
| 13 | 36,000 3 TON | 1200 | 240 | | 208V, 3Ø | - | ZONE 13 - THIRD FLOOR |
| 14 | 48,000 4 TON | 1600 | 100 | | 208V, 3Ø | - | ZONE 14 - THIRD FLOOR |
| 15 | 36,000 3 TON | 1200 | 102 | | 208V, 3Ø | - | STAIRS-1 |
| 16 | 36,000 3 TON | 1200 | 90 | | 208V, 3Ø | - | 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.

MECHANICAL NOTES

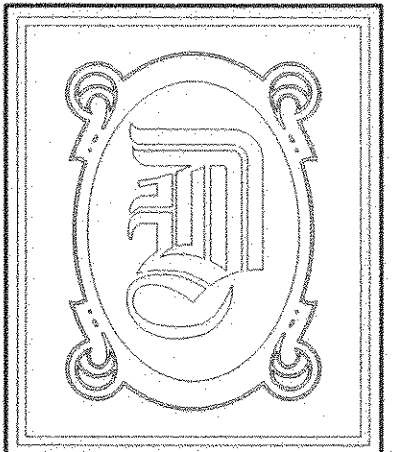
- CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 CFM & SECONDARY DUCTS TO 800 CFM. TO BE INSTALLED PER SMACNA STANDARDS.
- EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
- ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
- DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
- 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 DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
- PROVIDE U.L. LISTED 125 "F" FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
- PROVIDE U.L. RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
- CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
- ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
- ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
- EXHAUST FAN EQUAL TO BROAN MODEL NO. L300 SERIES OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL AT FRONT OF STORE. PROVIDE BACK DRAFT DAMPER.
- PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
- ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
- LOCATE OUTDOOR UNITS AS SHOWN ON ARCH. DWGS.
- REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
- FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
- INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE 1 HOUR RATED CEILINGS.
- ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CAULKED. (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-E8-14).
- MECHANICAL PLANS ARE DRAWN SCHEMATICALLY. CONTRACTOR TO ROUTE DUCT SYSTEMS PER FIELD CONDITIONS.
- AREA OF REFUGE 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 | WOMENS RESTROOM-SECOND FLOOR | 75 | 120 | VENT | |
| EF-2 | MENS RESTROOM-SECOND FLOOR | 75 | 120 | VENT | |
| EF-3 | NAIL CLINIC-SECOND FLOOR | 513 | 120 | VENT | SEE NOTES |
| EF-4 | COLOR BAR AREA-SECOND FLOOR | 502 | 120 | VENT | |
| EF-5 | MENS RESTROOM-THIRD FLOOR | 75 | 120 | VENT | |
| EF-6 | WOMENS RESTROOM-THIRD FLOOR | 75 | 120 | VENT | |

NAIL CLINIC NOTES:

- PROVIDE SWITCH TO ACTIVATE NEW EXHAUST FANS. HVAC BLOWER MOTORS MUST ENGAGE WHEN EXHAUST FANS ARE RUNNING TO ENSURE PROPER AIR CIRCULATION AND VENTILATION.
- NEW EXHAUST FANS AND PARTS OF EXHAUST SYSTEM IN CONTACT WITH EXPLOSIVE OR FLAMMABLE VAPORS, FUMES, 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
- FIELD VERIFY ALL PARTITION WALLS ARE CONSTRUCTED TIGHT TO ROOF DECK AND SEALED WITH AN APPROVED FIRE CAULK.



DAMMON ENGINEERING, INC.

CHIEF ENGINEER
EMMETT
DAMMON, P.E.

CHIEF ARCHITECT
ROBERT
WILTSE

1095 FLORIDA AVENUE
SLIDELL, LA. 70458
OFFICE: 985-649-5832
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: 01-04-10

SHEET

M-4

OF

REVIEWED FOR
STATE PROFESSIONAL
AS PER REQUIREMENTS
BY 01/04/10
375188