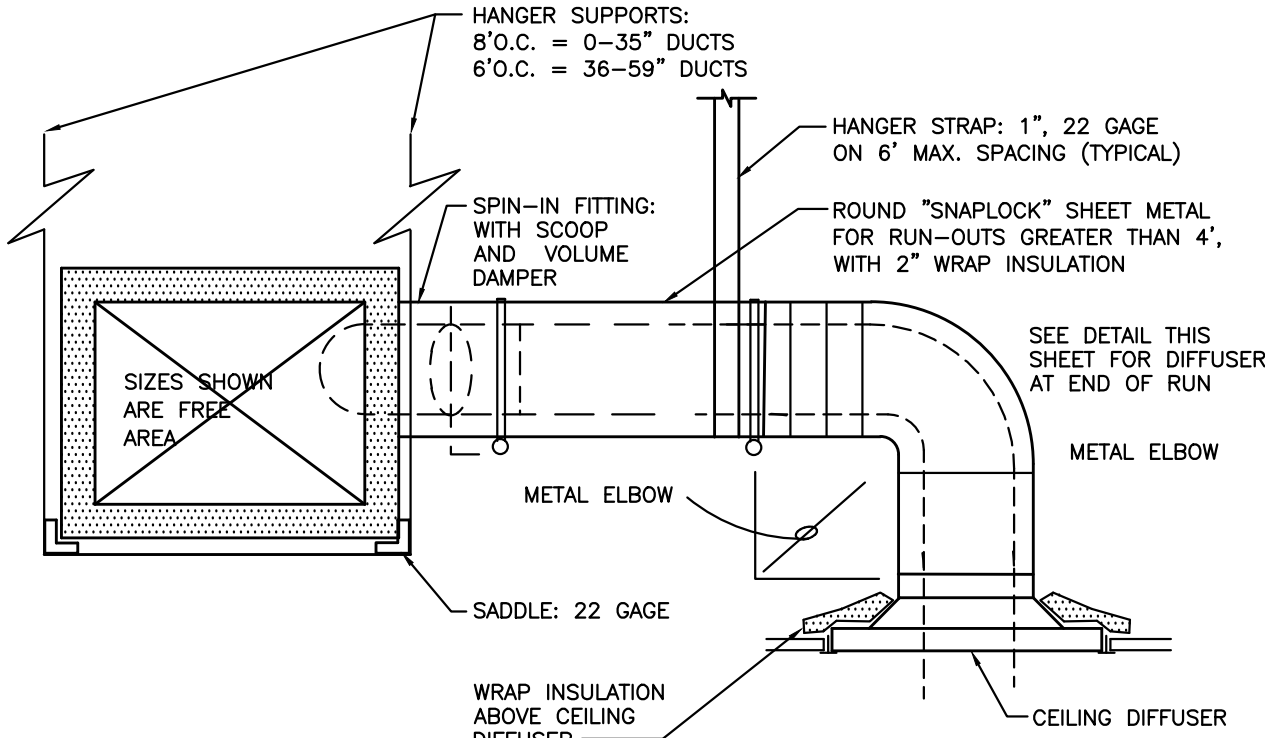


MAKE-UP AIR UNIT SCHEDULE

MARK	MFR. & MODEL	TOTAL CFM	TOTAL COOLING	SENSIBLE COOLING	ENT AIR		LVG AIR		HEATING INPUT	HEATING OUTPUT	AIR TEMP		E.S.P.	H.P.	FRPM	VOLTAGE	COMP. R.L.A.	EVAP FAN F.L.A.	COND FAN F.L.A.	M.C.A.	MAX FUSE	WEIGHT
					DB	WB	DB	WB			ENT	LVG										
MUA-1	AAON RN-015-B-0-BA02-3F9	2100	194,050	72,500	83.4	78.75	52.76	52.56	195,000	156,000	15.0	79.3	2"	2.0	1170	208/3/60	2025	7.5	2 0 6.3	76	100	1850
MUA-2	AAON RN-015-B-0-BA02-3F9	2100	194,050	72,500	83.4	78.75	52.76	52.56	195,000	156,000	15.0	79.3	2"	2.0	1170	208/3/60	2025	7.5	2 0 6.3	76	100	1850

NOTES:

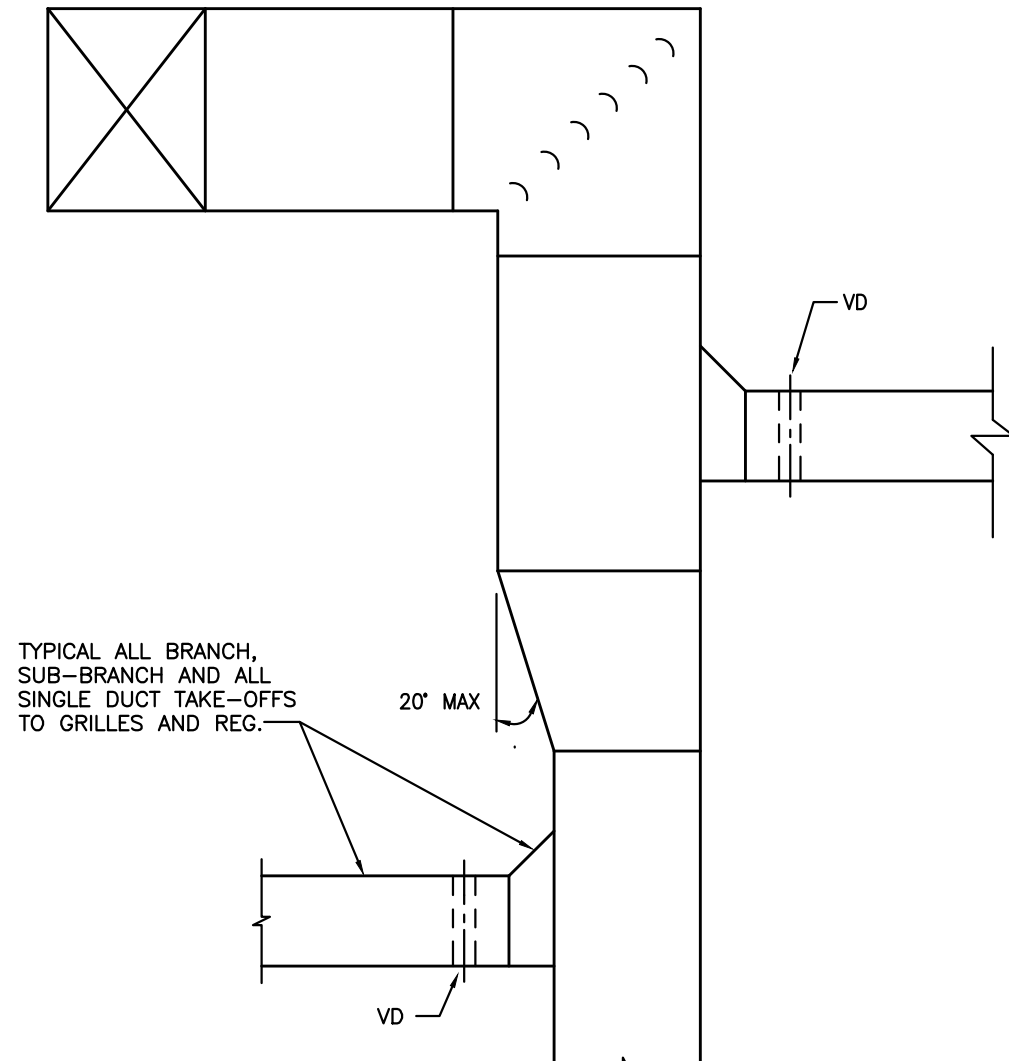
- FACTORY ASSEMBLED, PIPED, WIRED AND TESTED AS A SINGLE PACKAGE.
- UNIT SHALL INCLUDE A 100% OUTSIDE AIR HOOD WITH 2-POSITION MOTORIZED DAMPER
- UNIT SHALL INCLUDE DUAL CIRCUIT COOLING; 2-COMPRESSOR CIRCUITS WITH INTERLACED-CIRCUIT DX COIL. (HORIZONTAL SPLIT NOT ACCEPTIBLE)
- UNIT SHALL INCLUDE MANUAL RESET HIGH PRESSURE SWITCHES, AUTO RESET LOW PRESSURE SWITCHES.
- R410A REFRIGERANT
- UNIT SHALL INCLUDE MODULATING NATURAL GAS HEATING WITH STAINLESS STEEL HEAT EXCHANGER.
- UNIT SHALL INCLUDE COPELAND DIGITAL SCROLL MODULATING CAPACITY COMPRESSOR ON FIRST CIRCUIT.
- UNIT SHALL INCLUDE HOT GAS BY-PASS ON SECOND CIRCUIT. (FROST-STAT COMPRESSOR CYCLING NOT ACCEPTABLE).
- UNIT SHALL INCLUDE SIGHT GLASS AND STAINLESS STEEL DRAIN PAN.
- 2 INCH, 30% PLEATED FILTERS.
- 115V FACTORY WIRED SERVICE OUTLET; NON-FUSED DISCONNECT; PHASE MONITOR; FACTORY PROVIDED SA SMOKE DETECTOR.
- CONTROLS: WATMASTER/ORION VCM CONTROLLER WITH AMBIENT DEWPOINT SENSOR; ELECTRONIC SEQUENCING OF COMPRESSORS, HEATING AND MODULATING HOT GAS RE-HEATING, FIELD MOUNTED CONTROLS INCLUDE A DUCT MOUNTED LEAVING AIR STAT AND A WALL MOUNTED STAT.
1. THE INTENTION OF THIS UNIT IS TO PROVIDE CONTINUOUS DEHUMIDIFICATION OF OUTSIDE AIR WHILE ALSO PROVIDING TEMPERATURE CONTROL TO THE SPACE IT SERVES. IF THIS CAUSES OVERCOOLING OF THE SPACE, THE MODULATING HOT GAS RE-HEAT VALVE SHALL OPEN TO SATISFY THE CONDITIONED SPACE REQUIREMENT. FIELD MOUNTED CONTROLS SHALL INCLUDE A DUCT MOUNTED LEAVING AIR STAT AND A WALL MOUNTED STAT. ALL UNIT MOUNTED CONTROLS SHALL BE INSTALLED BY THE EQUIPMENT MANUFACTURER.
13. INTEGRAL NON-FUSED DISCONNECT SWITCH.
14. 2" FOAM INJECTED INSULATED DOUBLEWALL CABINET CONSTRUCTION.
15. 30" HIGH FACTORY ASSEMBLED AND INSULATED ROOF CURB/PLENUM, INCLUDE VIBRATION ISOLATION RAIL SYSTEM MODEL CMB BY MASON INDUSTRIES.
16. COMPRESSORS SHALL HAVE 5 YEAR WARRANTY. (PARTS ONLY)
17. HEAT EXCHANGER SHALL HAVE 25 YEAR WARRANTY.
18. CONTACT, GORHAM/SCHAFFLER 1-901-345-6100. FOR INFORMATION.



DUCT DETAIL
NO SCALE

NOTES:

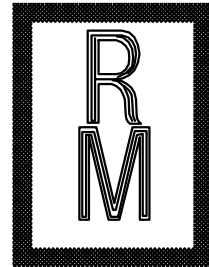
- HANGER SUPPORTS SHALL BE AS NOTED ABOVE FOR DUCTS UP TO 24", AND WITH TRAPEZE HANGERS FOR DUCTS 25" AND ABOVE.
- ELBOWS SHALL BE SQUARE NECK (SAME IN AND OUT DIMENSION) WITH 2" DOUBLE THICKNESS TURNING VANES.
- OFFSETS SHALL NOT EXCEED 30 DEGREE ANGLE, AND SHALL NOT REDUCE THE FREE AREA OF THE DUCT.
- TRANSITIONS SHALL NOT EXCEED 1:3 RATIO (4" TRANSITION PER FOOT SINGLE SIDED TRANSITION, AND 8" PER FOOT DOUBLE SIDED TRANSITION).
- RECTANGULAR BRANCH CONNECTIONS SHALL BE 45 DEGREE ENTRY TYPE, WITH METAL SLEEVE AND CLINCH LOCK CONNECTION. ENTRY LENGTH SHALL BE 25% OF BRANCH DUCT WIDTH.
- ROUND BRANCH DUCT CONNECTIONS SHALL BE WITH "FLEXMASTER" FLDE SPIN-IN FITTINGS, WITH SCOOP, DAMPER AND HANDLE. WHERE ROUND BRANCH DIA. EQUALS VERTICAL DIM. OF DUCT USE FLEXMASTER STO OR STOCK FITTING.
- FLEXIBLE ROUND DUCT SHALL INCLUDE: HELIX COIL FLEXIBLE DUCTING, A 1-1/2" BLANKET INSULATION WITH MINIMUM 6.0 R VALUE, AND A ALUMINUM FOIL OUTER VAPOR BARRIER, AND BE UL-181 APPROVED, 25 OR LESS FLAME SPREAD AND 50 OR LESS SMOKE DEVELOPED. EQUAL TO "FLEXMASTER" TYPE 3M.



TYPICAL DUCT
NO SCALE

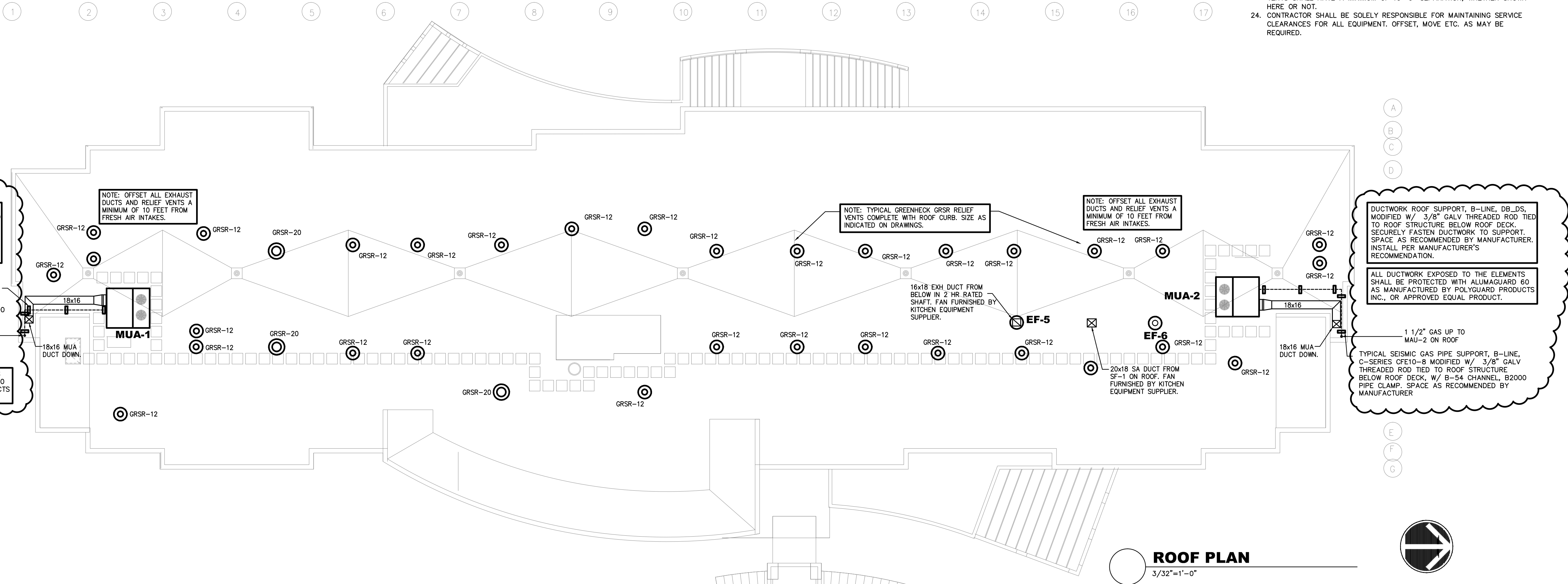
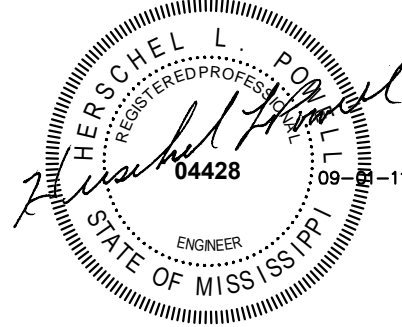
MECHANICAL NOTES

- THIS CONTRACTOR SHALL EXAMINE ALL OTHER SPECIFICATIONS, DRAWINGS, AND ALL FEATURES ON SITE OF CONSTRUCTION WHICH MAY AFFECT HIS WORK AND SHALL BE GOVERNED BY THESE OTHER SPECIFICATIONS, INCLUDING THE GENERAL CONDITIONS AND PARTICULAR INSTRUCTIONS TO ALL BIDDERS AND SUPPLIERS.
- ALL WORK SHALL BE EXECUTED AND INSPECTED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND/OR STATE CODES, LAWS, ORDINANCES, RULES AND REGULATIONS APPLICABLE TO THIS PARTICULAR CLASS OF WORK, & EACH CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL APPLICABLE MATERIAL, TOOLS, LABOR, CHARGES, FEES, PERMITS, ROYALTIES, TAXES AND OTHER SIMILAR COSTS IN CONNECTION THEREWITH.
- PRIOR TO FABRICATION OF DUCTWORK, CONTRACTOR SHALL EXAMINE AND VERIFY ALL CONDITIONS ABOVE AND BELOW THE CEILING WHICH MAY INTERFERE WITH THE DUCT SYSTEM AND NOTIFY THE ARCHITECT OF ANY CONFLICT ENCOUNTERED. CONTRACTOR SHALL PROVIDE ALL OFFSETS, ETC. WHICH MAY BE REQUIRED, WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL SHEETMETAL DUCT CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS FOR DUCT DOWN STREAM OF BOXES & MEDIUM PRESSURE CONSTRUCTION STANDARDS FOR PRIMARY AIR DUCT.
- ALL DUCTS SHALL BE SUPPORTED WITH 1" WIDE, 16 GAUGE NON-PERFORATED GALVANIZED STEEL BANDS.
- MAXIMUM LENGTH OF FLEXIBLE ROUND DUCT SHALL NOT EXCEED 3'-0" HORIZONTALLY, AT DIFFUSERS ONLY.
- ALL DUCT DIMENSIONS SHOWN ON PLANS ARE NET FREE AREA, INCREASE SHEETMETAL SIZE AS REQUIRED FOR INTERNAL INSULATION.
- ALL RECTANGULAR DUCTWORK SHALL BE INSULATED w/ MINIMUM 1 1/2", 1 1/2 LB. DENSITY INTERNAL DUCT LINER. ALL ROUND DUCTWORK SHALL HAVE MINIMUM 2" BLANKET TYPE INSULATION w/ FOIL BACK & ALL JOINTS LAPPED AND TAPED.
- ALL METAL DUCT SHALL BE GALVANIZED SHEET STEEL. ALUMINUM IS NOT ACCEPTABLE. GAUGE OF METAL AND CONSTRUCTION OF DUCT SHALL BE IN ACCORDANCE WITH "SMACNA" MEDIUM & LOW VELOCITY DUCT STANDARDS.
- ALL WORK SHALL BE WARRANTED FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY ARCHITECT. LOSS OF REFRIGERANT SHALL BE DEEMED DUE TO DEFECTIVE MATERIAL OR WORKMANSHIP.
- CONTRACTOR SHALL PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCT CONNECTIONS TO HEATING AND AIR CONDITIONING EQUIPMENT AND SHALL PROVIDE VIBRATION ISOLATION ON ALL MECHANICAL EQUIPMENT PER EQUIPMENT MANUFACTURERS' RECOMMENDATIONS.
- CONTRACTOR SHALL COORDINATE LOCATION OF ALL SUPPLY AND RETURN AIR REGISTERS, DUCTS, GRILLES AND DIFFUSERS WITH LIGHTING AND CEILING PATTERNS.
- INSULATE TOP OF DIFFUSERS/REGISTERS WITH 3-1/2" THICK BATT INSULATION. SECURE INSULATION TO DIFFUSERS IN SIMILAR FASHION AS ROUND DUCT INSULATION.
- ALL FIRE DAMPERS SHALL BE U.L. LISTED. PROVIDE ACCESS PANELS AS REQUIRED FOR SERVICE.
- PROVIDE ARCHITECT WITH COMPLETE SET OF TEST AND BALANCE OF AIR DISTRIBUTION SYSTEM DOCUMENTATION UPON COMPLETION OF INSTALLATION.
- CONTRACTOR SHALL FIRE STOP ALL PIPING PENETRATIONS OF FIRE, SMOKE, OR COMBINATION WALLS/PARTITIONS TO MEET THE LATEST NATIONAL BUILDING CODE REQUIREMENTS.
- CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDDING TIME AND SHALL FAMILIARIZE HIMSELF W/ ALL EXISTING CONDITIONS.
- THERMOSTATS AND ALL CONTROL DEVICES SHALL BE MOUNTED 48" A.F.F.
- PAINT INSIDE OF RETURN AIR DUCTS BLACK BEHIND ALL RETURN AIR GRILLES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ARCHITECTURAL DRAWINGS ALL FIRE RATED WALLS & CEILINGS AND SHALL FURNISH ALL FIRE DAMPERS/RADIATION DAMPERS REQUIRED.
- ALL DETAILS AND NOTES ON THESE DRAWINGS SHALL BE APPLIED TO ALL OF THE DRAWINGS FOR THIS PROJECT.
- COORDINATE WITH ELECTRICAL ALL OF THE POWER NEEDS, WIRING DEVICES ETC. AND FURNISH ALL ITEMS NOT FURNISHED UNDER THE ELECTRICAL.
- ALL OUTSIDE AIR INTAKES, EXHAUST LOUVERS AND FANS AND PLUMBING VENTS SHALL HAVE A MINIMUM OF 10'-0" SEPARATION, WHETHER SHOWN HERE OR NOT.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING SERVICE CLEARANCES FOR ALL EQUIPMENT. OFFSET, MOVE ETC. AS MAY BE REQUIRED.



Richard Molenaar

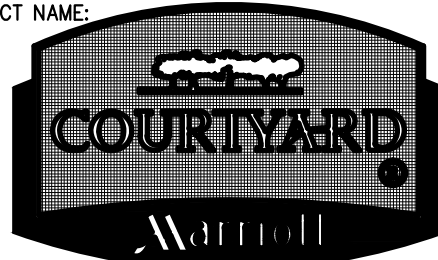
ARCHITECT



ROOF PLAN

3/32"=1'-0"

PROJECT NAME:



Riverwind Drive Pearl, Mississippi

SHEET TITLE:

HVAC
DETAILS

PROJECT NO.

PROJ#

DRAWN BY:

RHP

DATE:

09-01-11

LATEST REVISION:

10-05-11

SHEET NUMBER:

M104