

HVAC NOTES

1. THESE DRAWINGS ARE SEQUENTIAL IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR A COMPLETE HVAC SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
2. COORDINATE DUCTWORK AND PIPING WITH ARCHITECTURAL ELEMENTS, STRUCTURAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL WORK. COORDINATE WITH THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, PLUMBING ENGINEER, ELECTRICAL ENGINEER, AND MECHANICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
3. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATION OF ALL DUCTWORK AND PIPING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
4. COORDINATE ALL ROOF AND SLAB PENETRATIONS WITH THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
5. FLEXIBLE DUCT REQUIRED TO VIBRATE SHALL BE INSTALLED WITH VIBRATION ISOLATORS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
6. MAINTAIN DUCTWORK LEVEL AND AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
7. EQUIPMENT PIPING CONDUIT ON ANY PORTIONS OF DUCTWORK VISIBLE THROUGH FLAT BLACK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
8. ALL MOTORS 1/2 HP AND ABOVE SHALL HAVE A DISCONNECT SWITCH MOUNTED AT THE POINT OF INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
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10. ALL OPEN DUCTS SHALL BE COVERED WITH 1/2" X 1/2" X 1/2" GALVANIZED STEEL MESH SCREEN OR HONEY COMB SCREEN WITH 1/4" MESH SCREEN OVER THE DUCT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
11. WHEN EXISTING DUCTWORK IS TO BE RELOCATED OR REMOVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
12. ALL BRANCH DUCTWORK SHALL BE SIZED TO MATCH THE DIFFUSERS SERVED UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
13. ADJUST ALL DIFFUSERS IN CONFORMANCE WITH THE FOLLOWING: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
14. ALL LAY-IN DIFFUSERS SHALL HAVE 4-WAY FLOW UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
15. PROVIDE FIRE AND/OR SMOKE DAMPERS IN ALL FIRE AND/OR SMOKE RATED WALLS AND FLOORS AS DETAILLED ON ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
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18. ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES LOCATED IN UNACCESSIBLE AREAS SHALL HAVE FACE OPERABLE DIFFUSERS SUCH THAT AIR BALANCING OF THE SYSTEM CAN BE ACCOMPLISHED FROM THE CEILING IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
19. PROVIDE AN INDICATION TYPE SMOKE DETECTOR IN THE SUPPLY AIR DUCT OF EACH UNIT'S ROOM OR AREA AND PROVIDE A RETURN SMOKE DETECTOR AT SUPPLY AIR DUCT OF EACH UNIT'S ROOM OR AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
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21. CONCENTRATE DRAIN LINES RUNNING HORIZONTALLY SHALL BE SLOPED 1/4" PER FOOT IN THE DIRECTION OF FLOW AS INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
22. DUCT ACCESS DOORS SHALL BE INSTALLED WHERE REQUIRED FOR ACCESS TO VALVE, DAMPER, AIR FILTER, CLEANER, OR SHUTTER DEVICE. DOORS SHALL BE ACCESSIBLE FROM THE OUTSIDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
23. WHERE ACCESS PANELS ARE REQUIRED IN GYP BOARD CEILING, BLOW DUCT ACCESS DOORS AND AS INDICATED ON ARCH. DGS, REFER TO ARCH. DGS FOR DETAILS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
24. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH MECHANICAL CONTRACTORS REGARDING ACCESS DOORS AND CEILING ACCESS PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
25. CONCEALED AIR FILTERS SHALL BE INSTALLED IN THE SUPPLY AIR DUCT AS INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
26. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
27. ACCESS PANELS IN SUSPENDED CEILING ARE REQUIRED FOR ALL DUCTWORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
28. TOTAL STATIC PRESSURE NOTED IN SCHEDULES INCLUDES DUCT SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
29. FOR TYPICAL WATER IN REFRIGERANT PIPING CONNECTIONS TO TERMINAL UNITS, FILTERS, COILS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.
30. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE SO THERE WILL BE COUNTER FLOW BETWEEN WATER AND AIR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL PARTS OF THE SYSTEM.

	DETAIL NUMBER DRAWING WHERE SHOWN
	DUCT RISE IN DIRECTION OF ARROW
	SECTION NUMBER DRAWING WHERE SHOWN
	REVISION ARROW AND NUMBER
	THERMOSTAT
	HUMIDISTAT
	CONTROL PANEL
	ROUND DUCT SECTION
	EXHAUST DUCT SECTION
	SUPPLY DUCT SECTION
	RETURN AIR DUCT SECTION
	DUCT SIZE - FIRST FIGURE IS SIZE SHOWN
	LINED DUCTWORK
	ACCESS DOORS VERTICAL OR HORIZONTAL
	MANUAL VOLUME DAMPER OPPOSED BLADE
	FIRE DAMPER
	SMOKE DAMPER
	TWO HOUR ENCLOSURE AROUND DUCT (HORIZONTAL DUCT)
	TWO HOUR ENCLOSURE AROUND DUCT (VERTICAL DUCT)
	FLEXIBLE DUCT CONNECTION
	STATIC PRESSURE SENSOR
	DUCT MOUNTED SMOKE DETECTOR
	MEDIUM PRESSURE FLEXIBLE ROUND TO VAV
	TYPICAL 90° LOW PRESSURE DUCT ELBOW (TYPICAL 90° LOW PRESSURE DUCT ELBOW)
	STANDARD RADIUS ELBOW (STANDARD RADIUS ELBOW)
	VENTED SHORT RADIUS ELBOW (VENTED SHORT RADIUS ELBOW)
	TYPICAL 45° LOW PRESSURE DUCT ELBOW (TYPICAL 45° LOW PRESSURE DUCT ELBOW)
	TYPICAL LOW PRESSURE SUPPLY TAKE (TYPICAL LOW PRESSURE SUPPLY TAKE)
	TYPICAL LOW PRESSURE RETURN OR EXHAUST TAKE (TYPICAL LOW PRESSURE RETURN OR EXHAUST TAKE)
	HOT WATER COIL (HOT WATER COIL)

	DUCT MOUNTED ELECTRIC HEATING COIL
	TERMINAL OPEN-ENDED DUCT (TERMINAL OPEN-ENDED DUCT)
	CEILING DIFFUSER (24x24 UNO) (CEILING DIFFUSER (24x24 UNO))
	CEILING REGISTER OR GRILLE (24x24 UNO) (CEILING REGISTER OR GRILLE (24x24 UNO))
	EXHAUST CEILING REGISTER OR GRILLE (EXHAUST CEILING REGISTER OR GRILLE)
	SUPPLY TOP REGISTER OR GRILLE (SUPPLY TOP REGISTER OR GRILLE)
	EXHAUST OR RETURN TOP REGISTER OR GRILLE (EXHAUST OR RETURN TOP REGISTER OR GRILLE)
	DOOR GRILLE AND SIZE (DOOR GRILLE AND SIZE)
	HORIZONTAL CONCEALED FAN COIL UNIT (HORIZONTAL CONCEALED FAN COIL UNIT)
	VARIABLE VOLUME TERMINAL HEAT UNIT (VARIABLE VOLUME TERMINAL HEAT UNIT)
	LOUVER AND SCREEN (LOUVER AND SCREEN)
	WALL MOUNTED PROPELLER FAN (WALL MOUNTED PROPELLER FAN)
	MOTOR OPERATED DAMPER (MOTOR OPERATED DAMPER)
	ROOF MOUNTED CENTRIFUGAL FAN (ROOF MOUNTED CENTRIFUGAL FAN)
	ROOF MOUNTED CENTRIFUGAL FAN ABOVE (ROOF MOUNTED CENTRIFUGAL FAN ABOVE)
	ROOF MOUNTED RELIEF OR HYDRANT HOOD (ROOF MOUNTED RELIEF OR HYDRANT HOOD)
	ELEC. WALL HEATER - SURFACE MOUNTING (ELEC. WALL HEATER - SURFACE MOUNTING)

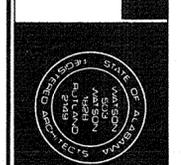
	VIBRATION ISOLATOR
	CHILLED WATER SUPPLY (CHILLED WATER SUPPLY)
	CHILLED WATER RETURN (CHILLED WATER RETURN)
	DRAIN (DRAIN)
	VENT (VENT)
	HOT WATER HEATING SUPPLY (HOT WATER HEATING SUPPLY)
	HOT WATER RETURN (HOT WATER RETURN)
	MAKE-UP WATER (MAKE-UP WATER)
	ATMOSPHERIC VENT (ATMOSPHERIC VENT)
	PRE ANCHOR (PRE ANCHOR)
	EXPANSION LOOP (EXPANSION LOOP)
	PRESSURE GAUGE AND COOK (PRESSURE GAUGE AND COOK)
	INVERTER OR DECREASER (CONCENTRIC) (INVERTER OR DECREASER (CONCENTRIC))
	ELBOW TURNED UP (ELBOW TURNED UP)
	ELBOW TURNED DOWN (ELBOW TURNED DOWN)
	TEE OUTLET UP (TEE OUTLET UP)
	TEE OUTLET DOWN (TEE OUTLET DOWN)

	UNION
	STRAINER
	STRAINER AND BLOWDOWN
	FLOW MEASURING DEVICE
	FLOW METER ORIFICE
	GATE VALVE
	GLOBE VALVE
	BALANCING VALVE
	CIRCUIT SETTER
	BUTTERFLY VALVE
	BALL VALVE
	GAUGE COOK
	PRESSURE REDUCING VALVE
	RELIEF VALVE
	SELENOID VALVE
	STRAIGHT-THRU MODULATING CONTROL
	NON-SLAM CHECK VALVE
	PLUG COOK
	PRESSURE REDUCING VALVE ASSEMBLY
	FLOOR DRAIN (REFER TO PLUMBING)
	PIPE TURNED DOWN OVER HUB DRAIN OR PANEL DRAIN
	PIPE (ARROW IN DIRECTION OF FLOW)
	METER AND METER INDICATORS PT. INLET TO METER SYSTEM
	METER AND METER INDICATORS PT. OUTPUT FROM METER SYSTEM

	ABBREVIATIONS
	AUTOMATIC AIR VENT
	AIR COOLED RECIPROCATING CHILLER UNIT
	ACCESS DOOR
	AIR FLOW CONTROL VALVE
	AIR FLOW MEASURING DEVICE
	AIR POLL. WHEEL
	AIR HANDLING UNIT
	ACCESS PANEL
	BELT
	BACKWARD INCLINED WHEEL
	BOTTOM REGISTER (WALL TYPE)
	COOLING COIL
	CEILING DIFFUSER
	CENTRIFUGAL FAN
	COILS FEET/MIN.
	CEILING GRILLE
	CLEAN OUT
	COMPRESSOR UNIT
	CHILLED WATER RETURN

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	CLEAN OUT
	COMPRESSOR UNIT
	CHILLED WATER RETURN

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General Notes, Abbreviations and Symbols

Project Title: Relocate Regional Office to Department Owned Grounds
Building Number: 42
Location: VMAC Montgomery, AL

Date: 27 JANUARY 92
Project No: 322-002
Drawing No: 42-H1
Drawing: 01/34

