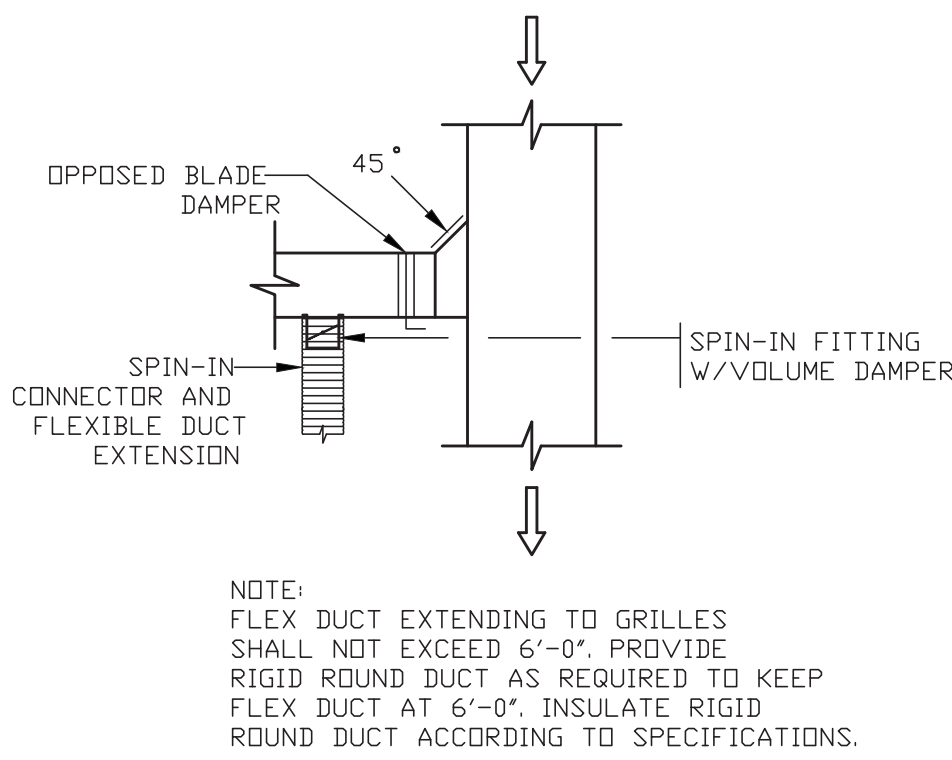
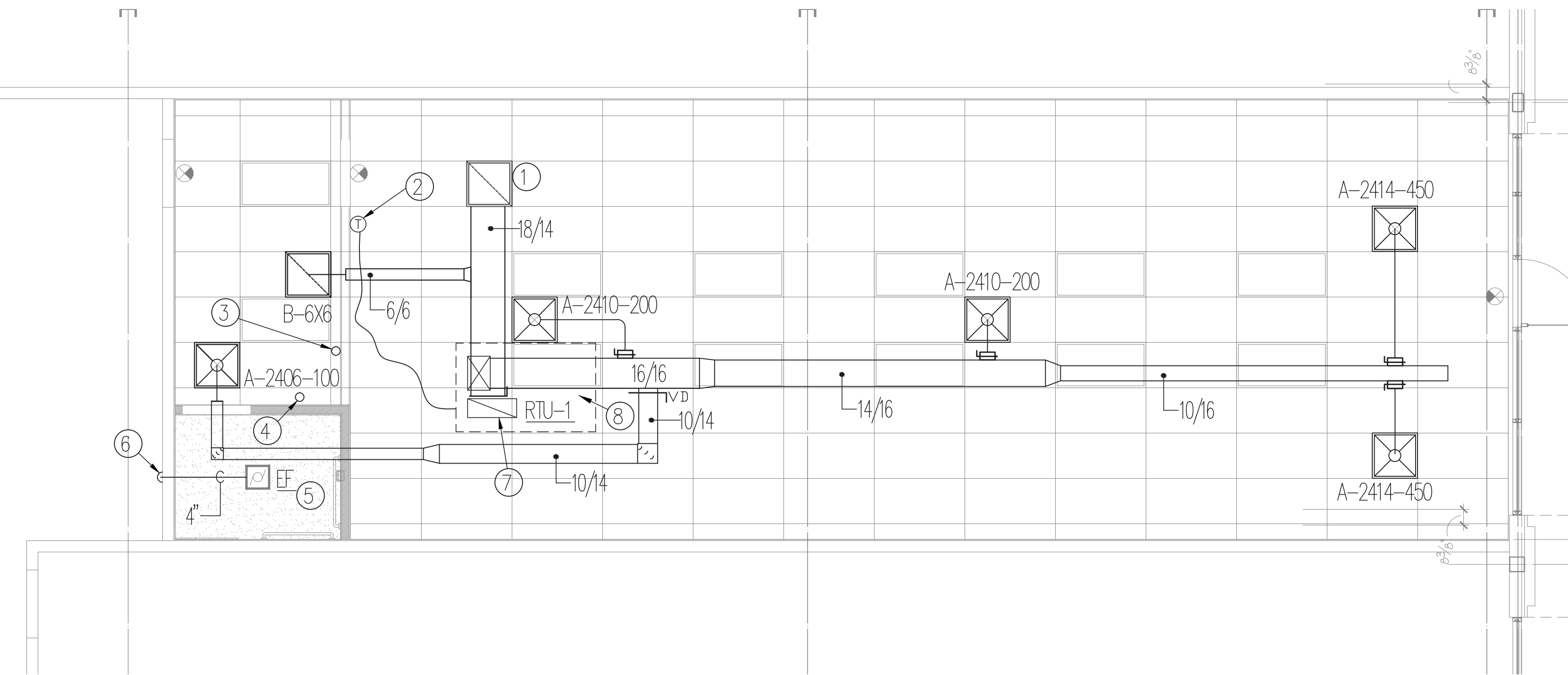


ROOFTOP PACKAGED UNIT	
MARK	RTU-1
MAKE	CARRIER
MODEL	59HC-ASASAS
NOMINAL TONS	4 TONS
SEER	15.20
MATCHING ROOF CURB	YES
DISCHARGE	VERTICAL
TOTAL CFM	1400
DA CFM	140
EXT. S.P. (IN W/D)	.75
FAN POWER (HP)	1
VOLT/PHASE/HZ	208/3/60
OPERATING WEIGHT (lbs.)	545
OUTSIDE AMBIENT	105
EVAP. ENT BB/WB (°F)	78/65
EVAP. LGV BB/WB (°F)	55.1/54.3
TOTAL CURB	45.070
SENSIBLE (BTUH)	34,550
HEATER FUEL	12 KW
ENTERING AIR TEMP.	70
CAPACITY (INPUT BTUH)	40800
NO. OF COMP./RLA	1/13.7
BLOWER FLA	5.2
CONDENSER FAN FLA	17.4
ELECTRIC HEAT FLA	33.4
UNIT MCA	4.9
UNIT MDCP	50
NOTES:	
1. PROVIDE UNITS WITH FACTORY MADE MATCHING ROOF CURBS.	
2. PROVIDE FILTER SECTION IN EACH UNIT EQUIPPED WITH 30X FILTER.	
3. EACH UNIT SHALL BE PROVIDED WITH A DIGITAL THERMOSTAT. TSTAT SHALL PROVIDE HEATING/COOLING/FAN CONTROLS AND SHALL BE MULTISTAGE WHEN COOLING AND HEATING ARE MULTISTAGE. THERMOSTAT SHALL BE EQUIPPED WITH A DEHUMIDIFICATION CYCLE TO DEHUMIDIFY SPACE.	
4. SPECIFIED UNITS ARE BASIS OF DESIGN UNITS MANUFACTURED BY TRANE OR YORK THAT FULLY MEET THE SPECS WILL BE CONSIDERED ACCEPTABLE.	
5. PROVIDE HUMIDIFIER (HOT GAS REHEAT) COILS TO CONTROL HUMIDITY IN THE SPACE.	

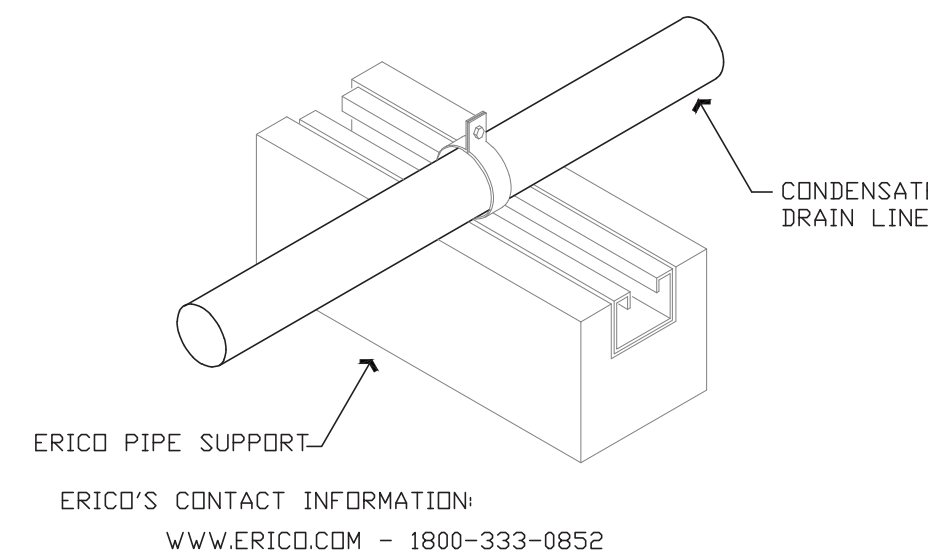
AIR DEVICES		
TYPE	MANUF/MODEL	DESCRIPTION
A	TITUS PAS-AA-03D	24X24 LAY IN CEILING DIFFUSER WITH PERFORATED FACE OFF WHITE FINISH. DUCT CONNECTION SIZE AS SHOWN ON DRAWING ALUMINUM CONSTRUCTION.
B	TITUS EGG CRATE	24X24 CEILING RETURN GRILLE. 1/2"X1/2"X1/2" EGG CRATE ALUMINUM CONSTRUCTION. DUCT CONNECTION SIZE AS SHOWN ON DRAWINGS. OFF WHITE FINISH. PROVIDE SQUARE TO ROUND ADAPTOR.



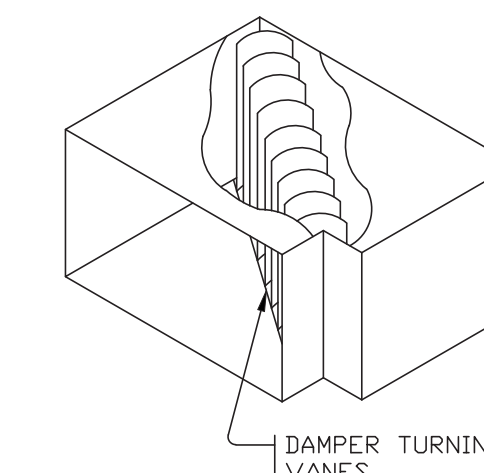
**4 BRANCH DUCT TAKE-OFF**  
SCALE: N.T.S.



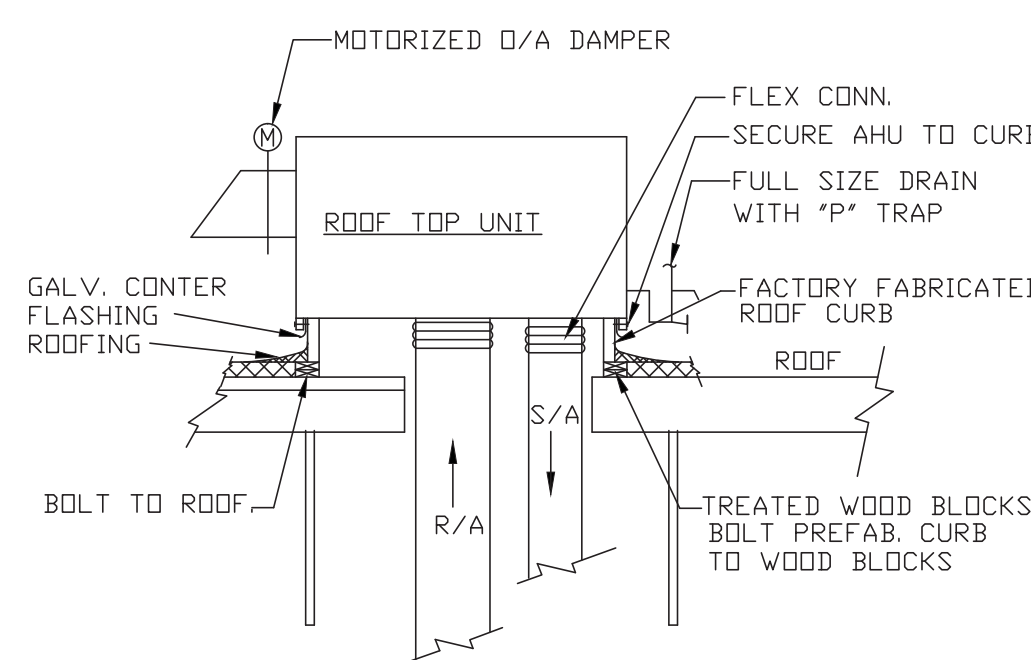
**1 FLOOR PLAN - HVAC**  
SCALE: 1/4" = 1'-0"



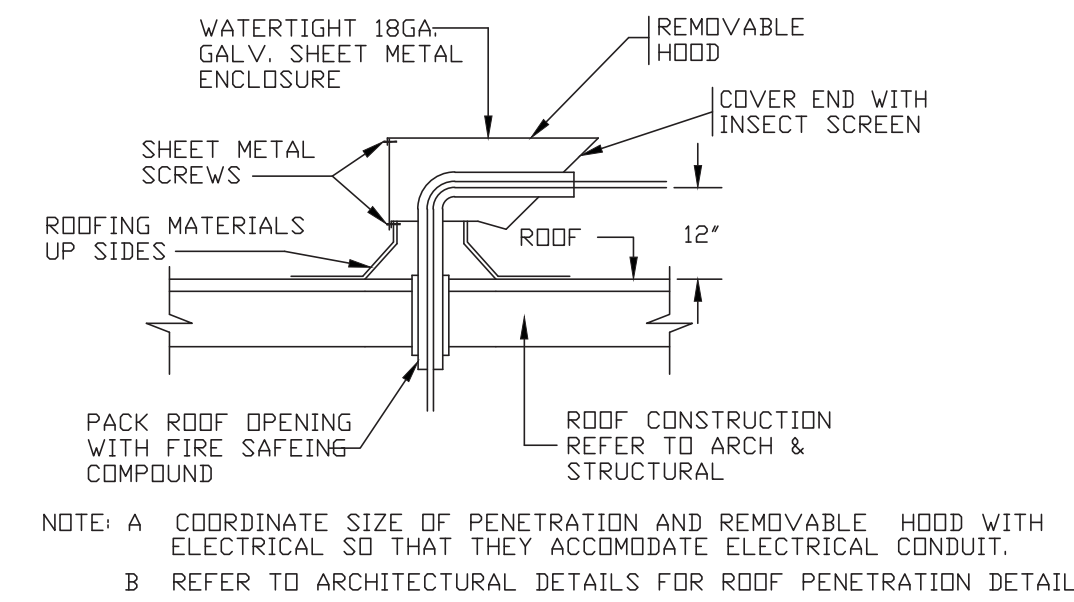
**3 ROOF PIPE SUPPORT**  
SCALE: N.T.S.



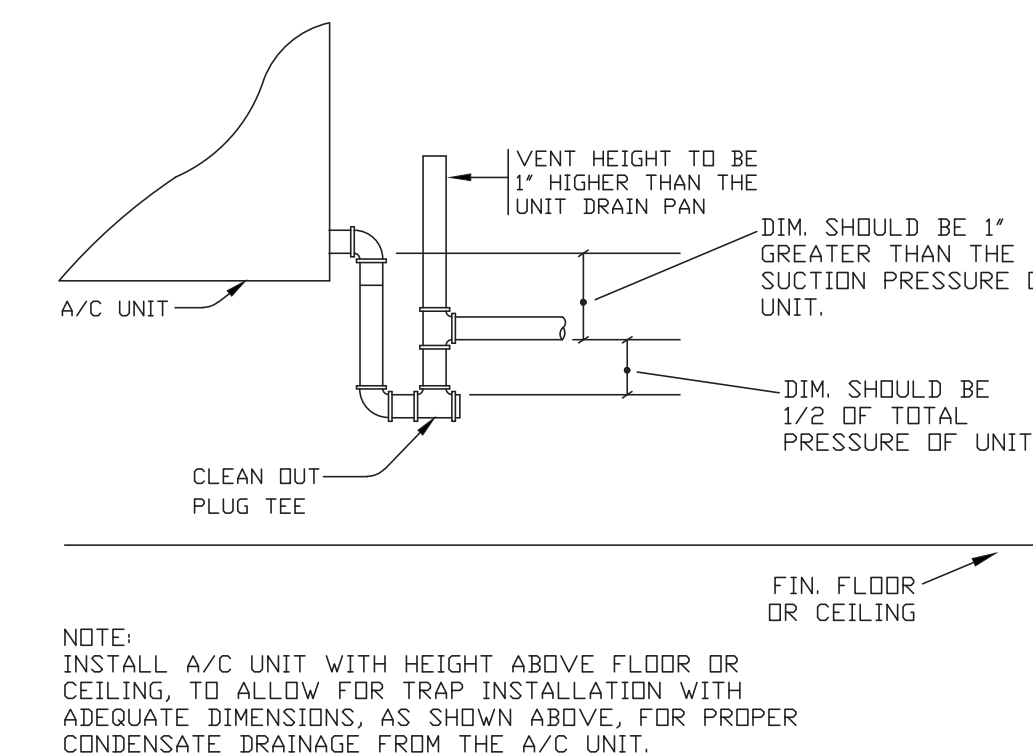
**2 DUCT ELBOW**  
SCALE: N.T.S.



**7 ROOFTOP A/C UNIT**  
SCALE: N.T.S.



**6 ROOF PENETRATION**  
SCALE: N.T.S.



**5 CONDENSATE DRAIN P-TRAP**  
SCALE: N.T.S.

**GENERAL NOTES: HVAC**

- ALL WORK SHALL BE PERFORMED AS PER THE LOCAL MECHANICAL CODE, THE LOCAL BUILDING CODES, ADA AND LOCAL ENERGY CONSERVATION CODE.
- PROVIDE ALL MATERIALS, LABOR, EQUIPMENT AND ANY OTHER INCIDENTALS ESSENTIAL FOR A COMPLETE AND OPERATIONAL INSTALLATION OF THE HVAC WORK SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL PAY FOR ALL FEES AND OBTAIN ALL PERMITS REQUIRED FOR WORK AS INDICATED IN THE PLANS.
- FOR EXACT LOCATION OF ALL CEILING DIFFUSERS REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
- ALL DUCT DIMENSIONS SHOWN ON PLANS ARE INTERNAL FREE AREA DIMENSIONS.
- ALL DUCTWORK SHALL BE GALVANIZED STEEL, FABRICATED PER THE LATEST SMACNA STANDARDS, EXCEPT NOTED OTHERWISE. ALL S/A, R/A AND O/A DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 FIBER GLASS DUCT INSULATION. REFER TO SPECIFICATIONS.
- REGISTER, GRILLES, AND CEILING DIFFUSERS SHALL BE FURNISHED WITH MOUNTING FRAMES AND FEATURES COMPATIBLE WITH THE CEILING TYPE AND DUCTWORK. PRIOR TO ORDERING SPECIFIED DIFFUSERS, VERIFY THAT THEY ARE COMPATIBLE WITH THE CEILING TYPE AND DUCTWORK.
- DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH FIELD CONDITIONS AND ALL OTHER TRADES.
- PROVIDE ACCESS DOORS AND PANELS FOR HVAC ITEMS/COMPONENTS THAT MAY REQUIRE SERVICE ABOVE NON-ACCESSIBLE CEILINGS. COORDINATE ALL PANEL LOCATIONS WITH THE ARCHITECTURAL ROOF.
- ALL SUPPLY AND RETURN AIR CEILING DEVICES SHALL BE INSULATED ON TOP OF DEVICES TO PREVENT CONDENSATION. INSULATE DEVICES WITH 1-1/2\"/>
- UPON COMPLETION OF MECHANICAL TRADE WORK ALL SYSTEMS SHALL BE TESTED, BALANCED AND LEFT IN WORKING ORDER. THE BALANCING SHALL BE DONE BEFORE THE CEILING IS INSTALLED.
- FURNISH AND INSTALL MECHANICAL HVAC TRADE WORK FOR COMPLETE OPERATIONAL SYSTEMS. COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCE AND TO PRESENT A NEAT, WORKMANLIKE APPEARANCE. MAKE MINOR ADJUSTMENTS REGD. DUE TO FIELD CONDITIONS. INTERFERENCE WHICH RESULT FROM POOR COORDINATION WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- ALL DUCTWORK ROUTING SHALL BE COORDINATED WITH STRUCTURE. CONTRACTOR SHALL VERIFY ALL ROUTING BEFORE FABRICATION OF DUCTWORK AND DETERMINE LENGTHS OF DUCTWORK REGD. FOR PROPER INSTALLATION AND FUNCTIONING OF THE SYSTEM. ANY DISCREPANCIES NOTED, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS/ENGINEERS AND CORRECTED BY THE CONTRACTOR TO AVOID CONFLICTS.
- CONDENSATE LINES SHALL BE SCHED 40 PVC. INSULATE ALL LINES IN THE BLDG.
- EQUIPMENT SHOWN ON THE PLANS AND DETAILS ILLUSTRATE THE GENERAL ARRANGEMENT AND SPACE ALLOCATIONS. THE CONTRACTOR SHALL VERIFY THE SPACE REGD. FOR EACH SYSTEM COMPONENT USING MANUFACTURERS CERTIFIED SHOP DRAWINGS AND MAKE THE NECESSARY ADJUSTMENTS IN EQUIPMENT PLACEMENTS AND CONNECTIONS IN ORDER TO ACCOMMODATE THE EXACT EQUIPMENT TO BE INSTALLED BASED ON FIELD CONDITIONS.
- ALL REFRIGERANT LINES SHALL BE TYPE 'K' COPPER. PROVIDE VALVES, FILTER DRYERS AND EXPANSION VALVES AS REQUIRED BY MANUFACTURER. INSULATE REFRIGERANT LINES WITH 1\"/>
- MOUNT ALL THERMOSTATS HUMIDISTATS 48\"/>
- MC SHALL PROVIDE AND INSTALL ALL WIRING, CONDUIT, STARTERS AND ETC. REQUIRED TO MAKE THE HVAC CONTROL SYSTEM FULLY OPERATIONAL. IN ACCORDANCE TO PLANS AND SPECIFICATIONS. WIRING SHALL INCLUDE 100V AND ALL LOW VOLTAGE WIRING REQUIRED FOR HVAC CONTROL SYSTEMS. PROVIDE TEMPERATURE AND DEHUMIDIFICATION CONTROLS FOR UNIT. COORDINATE WITH CONTROL SYSTEM MANUFACTURER AND PROVIDE CONTROLS CAPABLE OF CONTROLLING MULTI-STAGE HEATING AS SHOWN ON ELECTRIC DUCT HEATER SCHEDULE. SUBMIT CONTROL WIRING DIAGRAM TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OR INSTALLING CONTROL SYSTEM. ALL CONTROL COMPONENT AND MATERIAL SHALL BE COMPATIBLE WITH THE EQUIPMENT IT SERVES.
- MAINTAIN O/A INTAKES, A MIN. OF 10' FROM PLUMBING VENTS AND EXHAUST FANS.

**KEYED NOTES:**

- PROVIDE 28"x28"x18" DEEP PLENUM BOX FOR GRILLE. CONNECT DUCT TO PLENUM BOX.
- PROVIDE DIGITAL MULTISTAGE HEATING TSTAT WITH DEHUMIDIFICATION CYCLE. SEE GENERAL NOTES AND SPECIFIED UNITS. PROVIDE TSTAT COMPATIBLE WITH EQUIPMENT.
- ROUTE PRIMARY DRAIN DOWN INSIDE OF WALL, PENETRATE WALL 4" AFF AND ROUTE DOWN TO FLOOR DRAIN (FD). SEE PLUMBING FOR (FD) LOCATION.
- TURN DOWN 3/4" SECONDARY DRAIN THROUGH CEILING OVER SERVICE SINK. PROVIDE ESCUTCHEON.
- EXHAUST FAN SUPPLIED BY ELECTRICAL, HVAC TO PROVIDE AND INSTALL DUCT AND WALL CAP.
- PROVIDE WALL CAP FOR EXHAUST PENETRATION AS RECOMMENDED BY MANUFACTURER.
- ROUTE R/A DUCT DOWN BELOW S/A AND OVER R/A GRILLES AS SHOWN.
- COORDINATE WITH G.C. TO PROVIDE ADDITION BRACING AND ANGLE IRON SUPPORTS FOR HVAC EQUIPMENT



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GREENVILLE, TEXAS

DATE	6/17/2014
PROJECT NO.	06-14-01
DRAWN BY	

M-1  
FLOOR PLAN  
HVAC