HVAC Notes

1) ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST MECHANICAL CODE & ALL LOCAL GOVERNING CODES.
2) COORDINATE PLACEMENT& LOCATION OF EQUIPMENT, DUCTS, & LINES WITH PLUMBING, ELECTRICAL & EQUIPMENT CONTRACTORS WHO WILL ALSO HAVE EQUIPMENT. WIRE, CONDUIT, PIPES, ETC. IN THE SAME AREAS.
3) NO DUCTWORK, PIPING, ETC. IS TO PENETRATE LOAD BEARING MEMBERS (BEAMS, COLUMNS, FLOOR JOISTS, TRUSSES, ETC.) EXCEPT THROUGH FACTORY FABRICATED OPENINGS.
4) ALL DUCTWORK DIMENSIONS SHOWN ON THE PLANS ARE OUTSIDE FOR RECTANGULAR DUCTS (TO ALLOW FOR 1/ 2" DUCT LINER) & INSIDE FOR ROUND DUCTS (WITHOUT LINER). THE AIR CONDITIONING DIFFUSER FLOW RATES ARE SHOWN IN CFM.
5) ALL THERMOSTATS TO BE 7 DAY PROGRAMMABLE WITH SUB-BASES AS REQUIRED FOR HVAC EQUIPMENT SERVED. MOUNTED AT 54" ABOVE FINISHED FLOOR AT LOCATIONS SHOWN ON PLANS.
6) MAINTAIN A MINIMUM OF 15'-0" BETWEEN EXHAUST OUTLETS & ALL FRESH AIR INLETS, WINDOWS, & DOORS (TYPICAL AT ALL LOCATIONS. MAINTAIN EXHAUST OUTLETS AT A MINIMUM OF 7'-0" ABOVE FINISH GRADE (AFG).
7) RESTROOM EXHAUST FAN TO EQUAL A NUTONE MODEL QT-80, 115V, 80 CFM @ 0.25" S.P. WITH 0.5 AMPS, 1.5 SONES, & 4" DIAMETER DUCT UP TO A MODEL 888-BWN WALL CAP.
8) ALL EXTERIOR VENTS, LOUVERS, FLUES, CAPS, PIPING, ETC. TO BE PREFINISHED (PAINTED) TO MATCH ADJACENT SURFACES. COORDINATE & VERIFY COLOR WITH OWNER (ARCHITECT).
9) PROVIDE A MINIMUM OF 4" CONCRETE HOUSE KEEPING PADS FOR EXTERIOR HEAT PUMP UNITS.
10) FIELD VERIFY EXISTING CONDITIONS AS DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION.
11) DUCTWORK LOCATIONS & ROUTING SHALL TAKE PRECEDENCE OVER CONDUIT LOCATIONS & ROUTING. LIGHT FIXTURE LOCATIONS SHALL TAKE PRECEDENCE OVER CEILING GRILLE LOCATIONS.

Grilles & Diffuser Schedule

MK	MFR	MODEL	SIZE	DESCRIPTION
A	H & C	16 W/ 12	6" DIA	S.A. DIFFUSER W/ BUTTERFLY DAMPER
B	H & C	HVS	22 X 22-6"	4-WAY T-BAR S.A. DIFFUSER WITH BUTTERFLY DAMPER
C	H & C	HVS	22 X 22-8"	4-WAY T-BAR S.A. DIFFUSER WITH BUTTERFLY DAMPER
D	H & C	HVS	22 X 22-10"	4-WAY T-BAR S.A. DIFFUSER WITH BUTTERFLY DAMPER
E	H & C	HVS	22 X 22-12"	4-WAY T-BAR S.A. DIFFUSER WITH BUTTERFLY DAMPER
F	H & C	650	10" X 6"	R.A. GRILLE
G	H & C	RES-T	22" X 22"	T-BAR R.A. GRILLE
H	H & C	RES-T	46" X 22"	T-BAR R.A. GRILLE

NOTES: HART AND COOLEY MFG. (H & C) UNLESS OTHERWISE NOTED

HVAC Symbols Legend

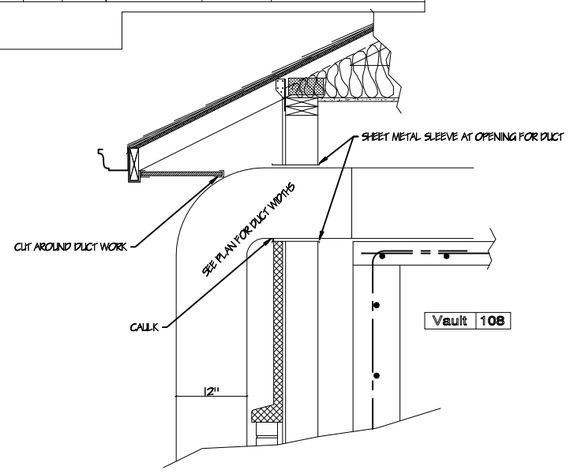
16 X 14 S.A.	SUPPLY AIR (SA) DUCT
16 X 16 R.A.	RETURN AIR (RA) DUCT OR EXHAUST DUCT
	FRESH AIR (FA) DUCT
⋈, ⋈, ⋈	VALVE (GATE, CHECK, BUTTERFLY / LUG WAFER)
Ⓟ	CIRCULATING PUMP
Ⓣ3	THERMOSTAT (ROUGH-IN ONLY BY ELECT. CONTR.)
Ⓕ, Ⓕ, Ⓜ	EXHAUST FAN, PUMP, OR MOTOR
CR, CS	CONDENSER RETURN & SUPPLY

NOTE: ALL ITEMS SHOWN ON LEGEND NOT NECESSARILY ON THIS PROJECT

Unit	Single Package Heat Pump HVAC Units														Remarks
MK	TONS	MODEL	CFM	S.P.	COOLING		HEATING		ELEC HEATER		ELECTRIC			ECONOMIZER	MIN. CFM FRESH AIR	ALL EQUIPMENT TO EQUAL CARRIER W/ HEAT PUMP UNITS SPECIFIED.
					BTUH	SEER	BTUH	COP	BTUH	KW	SUPPLY	MCA	MOCP			
1	4.0	50SZ-048-301	1600	0.5"	47,000	13	47,000	3.6	34,130	10	240V, 1PH, 60Hz	80.6	90	STANDARD	160	HORIZONTAL DISCHARGE
2	2.5	50SZ-030-301	1000	0.5"	30,000	13	29,000	3.0	24,575	7.20	240V, 1PH, 60Hz	57.9	60	STANDARD	100	HORIZONTAL DISCHARGE
3	3.0	50SZ-036-501	1200	0.5"	36,000	13	35,000	3.2	34150	10	240V, 1PH, 60Hz	76.1	80	STANDARD	120	HORIZONTAL DISCHARGE

NOTES

1. ALL UNITS TO HAVE ECONOMIZERS, PRESSURE RELIEF DAMPERS, PREASURE CONTROLS, TIME GUARD CONTROLS AND SENSOR CONTROLS.

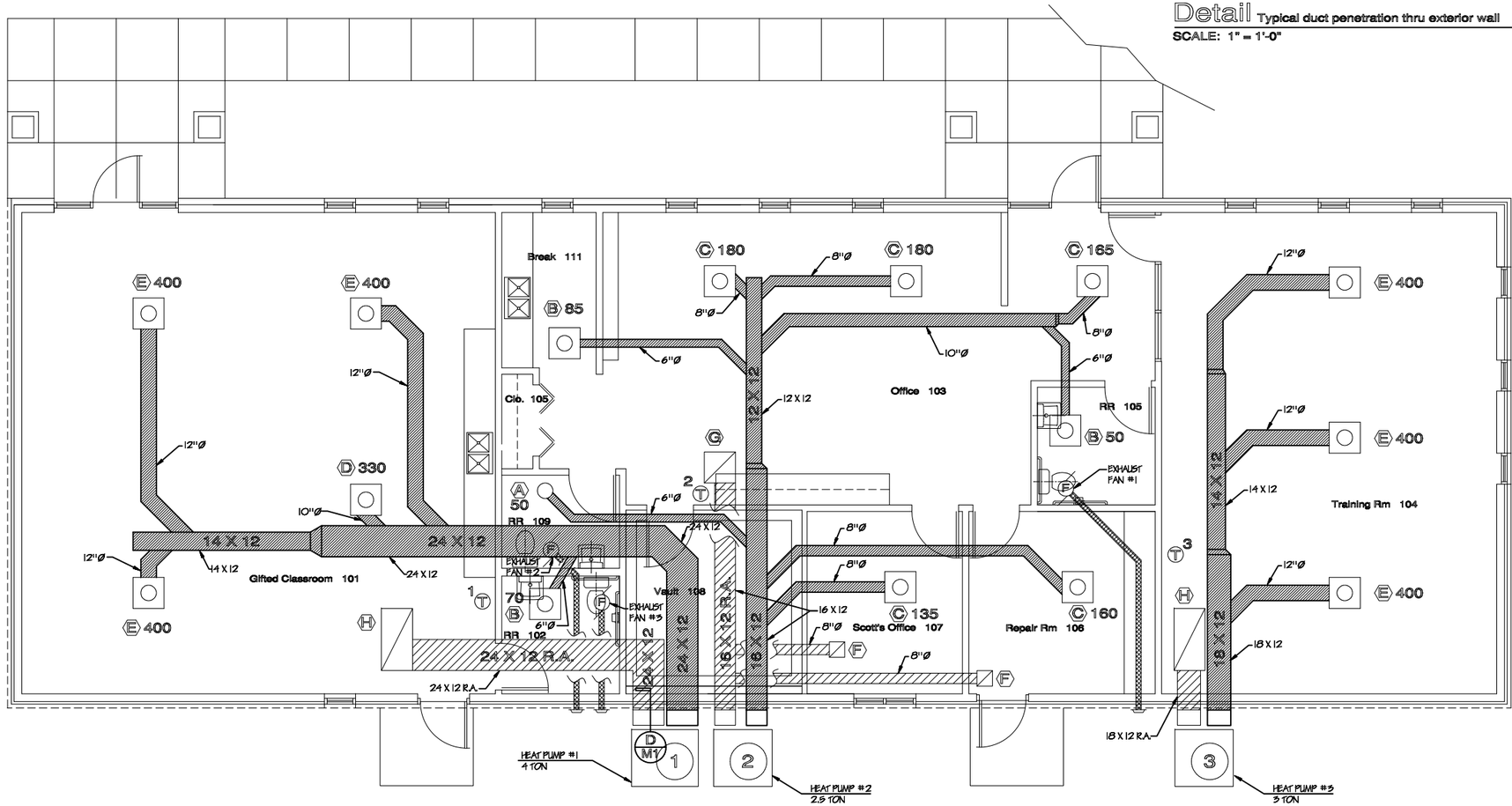


Detail Typical duct penetration thru exterior wall

SCALE: 1" = 1'-0"

D / M1

EDUCATIONAL PURPOSES ONLY
NOT FOR CONSTRUCTION



HVAC Plan

SCALE: 1/4" = 1'-0"

Revisions	By
Last Modification	
DATE	INIT'LS

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Proposed New Building
Technology Service Center
Miami Public Schools
Miami Independent School District No. 23
16th & 'E' Streets NW Miami, Ok

Drawn By	slw
Checked By	
Date	August 25, 2007
Scale	1/4" = 1'-0"
Job Number	735
HVAC Plan	

M1