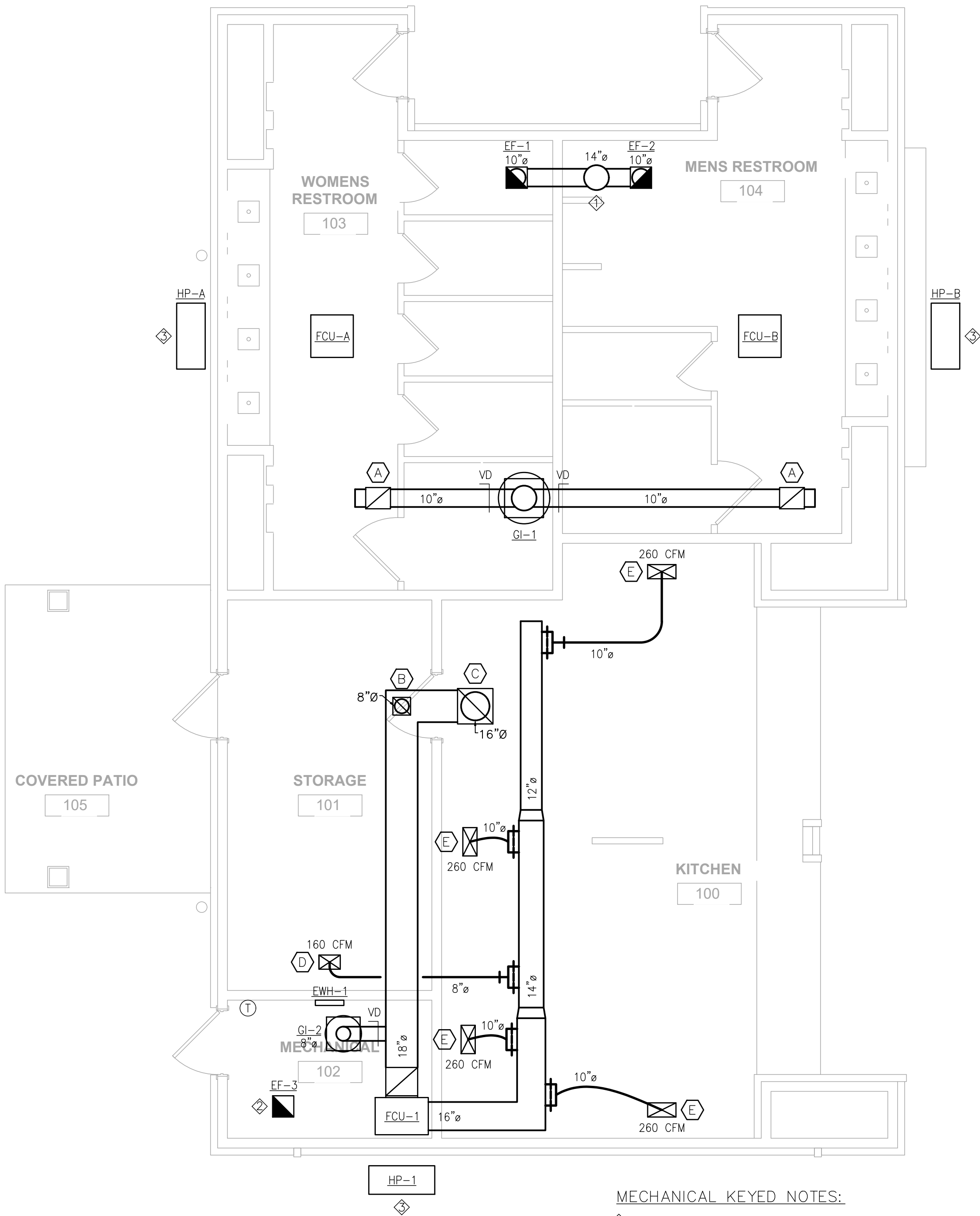


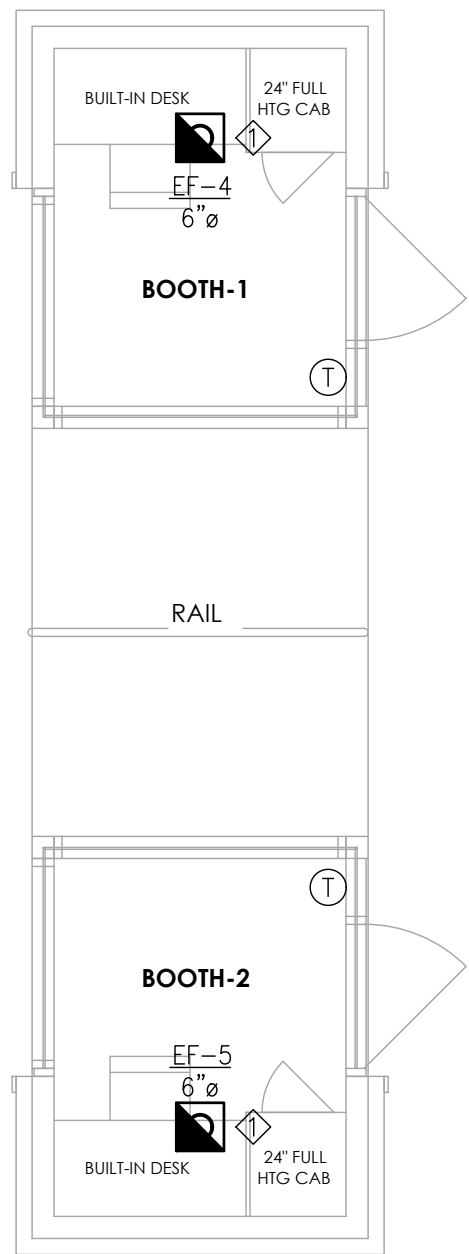
HVAC SYMBOLS	
	SUPPLY GRILL
	RETURN GRILL
	EXHAUST FAN
	SPIN-IN
	NEW DUCTWORK
	FLEX DUCTWORK
	PROGRAMMABLE THERMOSTAT
	VOLUME DAMPER
	FIRE DAMPER
	SIDEWALL AIR SUPPLY GRILLS
	SIDEWALL AIR TRANSFER GRILLS

- MECHANICAL NOTES
- THE TERMINATION POINT OF EXHAUST OUTLETS AND DUCTS FOR ALL ENVIRONMENTAL AIR EXHAUST SYSTEMS DISCHARGING TO THE OUTDOORS SHALL BE LOCATED A MINIMUM OF 3' FROM PROPERTY LINES, 3' FROM OPERABLE OPENINGS INTO BUILDINGS, AND 10' FROM MECHANICAL AIR INTAKES.
 - COORDINATE FINAL LOCATION OF ALL THERMOSTATS AND SENSORS WITH ARCHITECT AND OWNER.
 - ALL EXPOSED DUCTWORK SHALL BE DOUBLE WALL INSULATED GALVANIZED SHEET METAL.
 - SUPPLY: 0.08"/100FT.
 - RETURN: 0.06"/100FT.
 - ASPECT RATIO: LESS THAN 3 TO 1 WITHOUT CONCURRENCE WITH THE ENGINEER.
 - CONTRACTOR SHALL FIELD VERIFY SPACE REQUIREMENTS FOR DUCTWORK PRIOR TO MANUFACTURING. ADJUSTMENTS TO DUCT SIZES IS ACCEPTABLE AS LONG AS THE FOLLOWING FRICTION FACTORS ARE MAINTAINED:



1 HVAC Floor Plan
SCALE: 1/4" = 1'-0"

- MECHANICAL KEYED NOTES:
- ◇ EXTEND DUCT THROUGH THE ROOF AND TERMINATE WITH ROOF CAP.
 - ◇ EXHAUST FAN SHALL DISCHARGE INTO PLENUM SPACE.
 - ◇ HEAT PUMP UNITS TO BE LOCATED ON THE ROOF. COORDINATE EXACT LOCATION WITH ARCHITECT.



2 HVAC Floor Plan - Ticket Booth
SCALE: 1/4" = 1'-0"

ISSUED FOR CONSTRUCTION

MECHANICAL GENERAL NOTES:	
1. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT PROJECT AND REVIEW EXISTING CONDITIONS. NO ADDITIONAL MONIES WILL BE AWARD FOR "UNFORESEEN PROJECT CONDITIONS". CONTRACTOR SHALL INCLUDE IN HIS BID ALL MONIES REQUIRED FOR THE EXISTING PROJECT CONDITIONS. CONTRACTOR SHALL INFORM ARCHITECT AT TIME OF BID PROJECT CONDITIONS IN WHICH HE HAS DIFFICULTY IN WORKING AROUND.	20. ALL DUCTWORK INSTALLED IN THE ATTIC OR OTHER NON-CONDITIONED SPACE SHALL BE WRAPPED WITH R-6.0 INSULATION.
2. REFER TO ALL OTHER DRAWINGS IN THIS PROJECT, INCLUDING TO BUT NOT LIMITED TO THE ARCHITECTURAL, INTERIOR DESIGN, LIGHTING DESIGN, AND ELECTRICAL AND PERFORM ALL SCOPE ITEMS IDENTIFIED WITHIN THOSE DRAWINGS AS IF THEY ARE DIRECTLY INCORPORATED INTO THE MECHANICAL SET.	21. THE OWNER, OPERATOR, ARCHITECTURAL NOR ENGINEER ARE RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS, MEANS AND METHODS, WORK TECHNIQUES, CONSTRUCTION SEQUENCE OR PROCEDURES REQUIRED TO COMPLETE THE WORK.
3. FURNISH AND INSTALL ALL NECESSARY LABOR AND MATERIALS FOR A COMPLETE SYSTEM. ANY ITEMS AND MATERIALS OBVIOUSLY NECESSARY FOR A COMPLETE WORKING SYSTEM ALTHOUGH NOT SHOWN WITHIN THESE DOCUMENTS SHALL BE PROVIDED AS PART OF THE INITIAL BID.	22. ALL EXTERIOR WALL, AND ROOF PENETRATIONS SHALL BE SEALED WITH WATERPROOFING.
4. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.	23. ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR BARRIERS SHALL BE SEALED WITH FIREPROOFING.
5. OBTAINING PERMIT, INCLUDING LABOR AND FEES SHALL BE PROVIDED AS PART OF THE INITIAL BID.	24. PROVIDE FIRE DAMPERS (FD) IN ALL FIRE RATED WALLS AS IDENTIFIED ON ARCHITECTURAL DRAWINGS. THE RATINGS OF THE FIRE DAMPERS SHALL MEET OR EXCEED THE RATING OF THE WALL IN WHICH IT IS INSTALLED. FIRE DAMPERS SHALL BE UL LISTED AND SHALL BE TYPE B (BLADES OUT OF THE AIR STREAM) OR TYPE C (100% FREE AREA). PROVIDE AND INSTALL DUCT MOUNTED ACCESS PANEL FOR ALL NON-ACCESSIBLE FIRE DAMPERS.
6. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW FITTINGS AND OTHER SMALL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. INSTALL DUCTWORK, EQUIPMENT AND CONTROLS IN A MANNER TO MINIMIZE NOISE, PROVIDE APPROPRIATE MAINTENANCE CLEARANCE IN THE SPACE ALLOCATED.	25. PROVIDE RADIATION DAMPERS FOR ALL AIR DISTRIBUTION DEVICES LOCATED IN FIRE RATED CEILINGS.
7. MATERIALS AND LABOR SHALL BE WARRANTIED FOR ONE YEAR AFTER TAKEOVER.	26. ALL ACCESS PANELS REQUIRED FOR EQUIPMENT MAINTENANCE SHALL BE FIELD COORDINATED WITH ARCHITECT. THESE DRAWINGS SHALL APPROXIMATE LOCATIONS, FINAL LOCATIONS SHALL BE COORDINATED IN THE FIELD.
8. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, LATEST EDITIONS.	27. AT EACH BRANCH TAKEOFF, PROVIDE MANUAL VOLUME DAMPERS FOR BALANCING. FOR EACH DIFFUSER TAKEOFF, PROVIDE ADJUSTABLE SPIN-IN CONNECTION.
9. PRIOR TO ORDERING ANY EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE COORDINATION TO THE ELECTRICAL SUBCONTRACTOR AND STRUCTURAL REQUIREMENTS TO THE GENERAL CONTRACTOR. ANY COSTS DIFFERENCES WILL BE WORKED THROUGH THE GENERAL CONTRACTOR AT THIS TIME. PROVIDE TO THE ELECTRICAL SUBCONTRACTOR THE PHASE, AMPERAGE AND VOLTAGE OR EACH PIECE OF EQUIPMENT PRIOR TO ORDERING.	28. PROVIDE DUCT LINER FOR THE FIRST TEN FEET OF SUPPLY AND THE LAST 10 FEET OF RETURN DUCTWORK FROM THE HVAC EQUIPMENT. THE REMAINING DUCTWORK SHALL BE WRAPPED WITH INSULATION.
10. CONTRACTOR SHALL REFER TO THE ELECTRICAL DRAWINGS, LIGHTING DESIGN DRAWINGS AND THE REFLECTED CEILING PLAN (RCP) WHEN INSTALLING THE CEILING DIFFUSERS AND RETURN GRILLS.	29. ALL THERMOSTATS SHALL BE PROGRAMMABLE AND HAVE A 4 DEGREE DEADBAND.
11. COORDINATE WITH THE ELECTRICAL SUBCONTRACTOR IN REGARDS TO DISCONNECTS, BREAKERS, POWER WIRING, MOTOR CONTROL DEVICES, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS, TRANSFORMERS, ETC AND COORDINATE THE INSTALLATION WITH THE ELECTRICAL SUBCONTRACTOR.	30. INSTALL SMOKE DETECTOR IN THE SUPPLY AIR SYSTEM FOR ALL UNITS WITH CAPACITY GREATER THAN 2000 CFM. THE SMOKE DETECTOR SHALL BE INSTALLED DOWNSTREAM OF ANY FILTERS, FAN MOTORS, OUTDOOR AIR CONNECTIONS AND UPSTREAM OF ANY BRANCH CONNECTIONS.
12. PROVIDE UL LISTED, HEAVY DUTY FIBERGLAS CONNECTOR AT FAN, AIRHANDLERS, FAN COIL UNITS, ROOFTOP UNITS AND OTHER MECHANICAL EQUIPMENT WHERE THEY CONNECT TO SHEET METAL DUCTWORK. THE FIBERGLAS CONNECTOR SHALL BE INSTALLED WITH APPROPRIATE LENGTH TO ALLOW FOR VIBRATION AND NOISE TRANSMISSION.	31. ALL MATERIAL INSTALLED WITHIN A RETURN AIR PLENUM SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
13. DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH SMACNA GUIDELINES.	32. ALL WIRING INSTALLED WITHIN THE PLENUM SHALL BE PLENUM RATED OR INSTALLED WITHIN CONDUIT.
14. ROUND FLEXIBLE CONNECTORS SHALL BE PROVIDED BETWEEN MAIN DUCT AND DIFFUSERS. PROVIDE THERMAFLEX PRO SERIES. UTILIZE SPIN-IN CONNECTORS WITH SCOOP AND ADJUSTABLE DAMPER FOR AIR CONTROL.	33. ALL EQUIPMENT INSTALLED ABOVE THE CEILING SHALL BE ACCESSIBLE. CONTRACTOR SHALL SUPPLY ACCESS PANELS IN CEILING OR WALL AND SHALL COORDINATE WITH ARCHITECT FOR PROPER LOCATION. ACCESS PANELS IN CEILING SHALL BE A MINIMUM OF 24"x24" WITH HINGES. ACCESS PANELS SHALL HAVE SAME FIRE RATING AS CEILING IN WHICH THEY ARE INSTALLED.
15. FLEXIBLE DUCTWORK SHALL BE INSTALLED FREE OF KINKS AND SHALL BE LIMITED TO 8'-0" IN LENGTH. DIAMETER SHALL BE THE SAME AS THE DIFFUSER NECK.	34. EACH PIECE OF EQUIPMENT SHALL BE PERMANENTLY LABELED WITH A NAMEPLATE OF SUFFICIENT SIZE TO CLEARLY INDICATE THE EQUIPMENT DESIGNATION IN ACCORDANCE WITH THE DRAWINGS (IE PIU-1, RTU-1, ETC.). NAMEPLATES TO BE IBAKED ENAMEL OR ALUMINUM WITH STAMPED LETTERS.
16. ALL PORTIONS OF DUCTWORK VISIBLE THROUGH DIFFUSER AND RETURN GRILL OPENINGS SHALL BE PAINTED FLAT BLACK. ALL PORTIONS EXPOSED IN AREAS WITHOUT CEILING SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.	35. EACH DUCT OR PIPE WHICH PENETRATES ANY FIRE OR SMOKE PARTITION SHALL HAVE THE WALL OPENING SEALED WITH HILTI FIRE STOP TO PREVENT THE SPREAD OF SMOKE.
17. CONTRACTOR SHALL FIELD VERIFY SPACE REQUIREMENTS FOR DUCTWORK PRIOR TO MANUFACTURING. ADJUSTMENTS TO DUCT SIZES IS ACCEPTABLE AS LONG AS THE FOLLOWING FRICTION FACTORS/VELOCITIES ARE MAINTAINED: LOW-PRESSURE DUCTWORK SUPPLY: 0.08"/100FT. RETURN: 0.06"/100FT. ASPECT RATIO: LESS THAN 3 TO 1 WITHOUT CONCURRENCE WITH THE ENGINEER. MEDIUM-PRESSURE DUCTWORK SUPPLY: 2,000-2,500 FPM VELOCITY RETURN: 0.06"/100FT. ASPECT RATIO: LESS THAN 3 TO 1 WITHOUT CONCURRENCE WITH THE ENGINEER.	36. ANY EXISTING WALL, FLOOR, OR CEILING SURFACE DISTURBED DURING THE COURSE OF CONSTRUCTION, SHALL BE REPAIRED TO LIKE NEW OR PREVIOUS CONDITION TO THE SATISFACTION OF THE ARCHITECT.
18. ALL THERMOSTATS UNLESS OTHERWISE NOTED SHALL BE INSTALLED AT THE SAME HEIGHT AS THE EXISTING THERMOSTATS.	37. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN ON A DAILY BASIS AT THE PROJECT SITE A COMPLETE SET OF "RECORD DRAWINGS", REFLECTING AN ACCURATE DIMENSIONAL RECORD OF ALL BURIED OR CONCEALED WORK. THE "RECORD DRAWINGS" SHALL BE MARKED TO SHOW THE PRECISE LOCATION OF CONCEALED WORK, AND EQUIPMENT INCLUDING CONCEALED OR EMBEDDED PIPING AND VALVES AND ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DOCUMENTS. THIS REQUIREMENT SHALL NOT BE CONSTRUED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES WORK WITHOUT APPROVAL FROM THE ARCHITECT. THE "RECORD DRAWINGS" SHALL BE CLEARLY MARKED WITH "RECORD DRAWINGS" INDICATED IN THE LOWER RIGHT CORNER OF THE DRAWINGS.
19. ALL DUCT DIMENSIONS SHOWN IN THIS SET REFERS TO CLEAR INSIDE DIMENSION. IF DUCTWORK IS LINED, INTERIOR SHEET METAL SIZE SHALL BE INCREASED TO ACCOUNT FOR THE LINER THICKNESS.	38. UPON THE COMPLETION OF THE HVAC SYSTEM INSTALLATION, PROVIDE A COMPLETE TEST AND BALANCE. THE TEST AND BALANCE SHALL MEASURE AIR FLOWS FOR EACH PIECE OF EQUIPMENT, DIFFUSER AND RETURN GRILL. SUBMIT TO ARCHITECT TEST AND BALANCE PLAN THREE DAYS PRIOR TO INTENDED START DATE.

AIR CONDITIONING UNIT SCHEDULE														
FAN COIL UNIT									HEAT PUMP UNIT					
MARK	AIRFLOW (CFM)	OA CFM	ESP (WG)	FAN H.P.	MBH COOLING TOTAL	MBH COOLING SENSIBLE	HEATING (kW)	MODEL NO. CARRIER	MARK	MBH HEATING @47°F	MBH HEATING @17°F	MODEL NO. CARRIER	SEER2/HSPF2 (MIN)	NOTES
FCU-1	1200	130	0.5	1/2	35.57	27.07	8	FJ5ANXB36L	HP-1	36.08	21.80	27SCA536	14.3/7.5	①

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.
- ① 1. ROUTE CONDENSATE TO BUILDING EXTERIOR TURN DOWN SO CONDENSATE SPILLS INTO GRASSED AREA 18" ABOVE FINISHED GRADE. PROVIDE CONDENSATE PUMP, PROVIDE ADDITIONAL ELECTRIC HEAT AS SPECIFIED.
2. PROVIDE WITH REMOTE PROGRAMMABLE THERMOSTAT.
3. PROVIDE WITH REFRIGERANT THAT MEETS CURRENT EPA REGULATORY REQUIREMENTS (MAXIMUM 700GWP).
4. PROVIDE WITH A2L REFRIGERANT DETECTION AND DISSIPATION CONTROL.

DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE										
FAN COIL UNIT					HEAT PUMP UNIT					
MARK	CFM	FAN H.P.	MBUH COOLING	MODEL NO.	MARK	HEAT (MBUH) @47°F	@17°F	MODEL NO. CARRIER	SEER2/HSPF2 (MIN)	NOTES
FCU-A-B	547-706	-	24.0	CARRIER 45MBCAQ24	HP-A-B	25.0	20.4	CARRIER 37MARAQ24	22.1/10.5	①

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.
- ① 1. ROUTE CONDENSATE TO BUILDING EXTERIOR TURN DOWN SO CONDENSATE SPILLS INTO GRASSED AREA 18" ABOVE FINISHED GRADE. PROVIDE CONDENSATE PUMP.
2. PROVIDE WITH REMOTE PROGRAMMABLE THERMOSTAT.
3. PROVIDE WITH REFRIGERANT THAT MEETS CURRENT EPA REGULATORY REQUIREMENTS (MAXIMUM 700GWP).
4. PROVIDE WITH A2L REFRIGERANT DETECTION AND DISSIPATION CONTROL.

FAN SCHEDULE							
MARK	CFM	S.P. WG	HP	TYPE	BASIS OF DESIGN	LOCATION/SERVICE	NOTES
EF-1,2	375	0.25	146 W	CEILING	GREENHECK CSP-A390	RESTROOMS	①
EF-3	200	0.25	61 W	CEILING	GREENHECK CSP-A250	MECHANICAL ROOM	②
EF-4,5	30	0.25	15 W	CEILING	GREENHECK SP-B70	TICKET BOOTH 1&2	②

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.
- ① INTERLOCK WITH TOILET ROOM LIGHT SWITCH.
② PROVIDE WITH PROGRAMMABLE THERMOSTAT.

ELECTRIC UNIT HEATER SCHEDULE						
MARK	SERVICE	CFM	KW	TYPE	BASIS OF DESIGN	NOTES
EWB-1	MECHANICAL	160	1.5	WALL-MOUNTED	REZNOR EHC	① ②

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.
- ① PROVIDE WITH INTEGRAL THERMOSTAT AND DISCONNECT.
② PROVIDE WITH MANUFACTURER'S MOUNTING BRACKET.

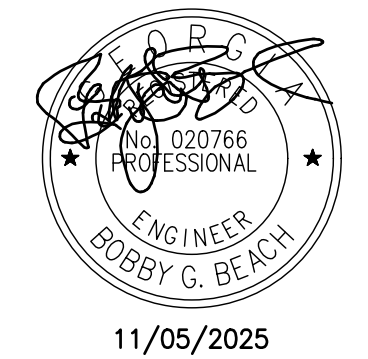
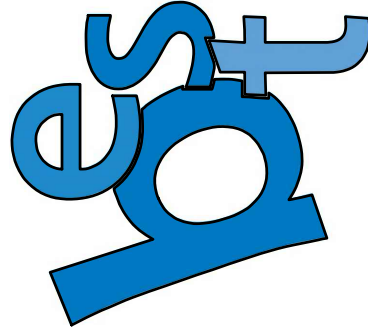
INTAKE SCHEDULE				
MARK	SIZE	OPENING	BASIS OF DESIGN	NOTES
GI-1	29"x29"	15"Ø	GREENHECK GRSI-15	① ②
GI-2	20.5"x20.5"	8"Ø	GREENHECK GRSI-8	① ②

- ① VERIFY FINAL COLOR AND FINISH WITH ARCHITECT.
② PROVIDE ALUMINUM BIRD/INSECT SCREEN.

AIR DISTRIBUTION SCHEDULE							
MARK	TYPE	SIZE IN INCHES		FINISH	O.B.D.	BASIS OF DESIGN	NOTES
		NECK	FACE				
A	RETURN	12"x10"	14"x12"	③	NO	TITUS 350RL	①
B	RETURN	8"x8"	10"x10"	③	NO	TITUS 350RL	①
C	RETURN	18"x18"	20"x20"	③	NO	TITUS 350RL	①
D	SUPPLY	10"x6"	12"x8"	③	NO	TITUS 300RL	① ②
E	SUPPLY	14"x6"	16"x8"	③	NO	TITUS 300RL	① ②

- AIR DISTRIBUTION MODEL SUPPLIES AND RETURNS MUST BE EQUIVALENT OR AS SPECIFIED.
- ① COORDINATE ACTUAL DIFFUSER / RETURN AIR GRILL LOCATION WITH REFLECTED CEILING PLAN AND LIGHTING LAYOUT.
② GRILL DISCHARGES AT 30° DOWNWARD TO THROW ACROSS ROOM.
③ GRILL SHALL BE PAINTED TO MATCH ADJACENT SURFACE IN WHICH IT IS INSTALLED.

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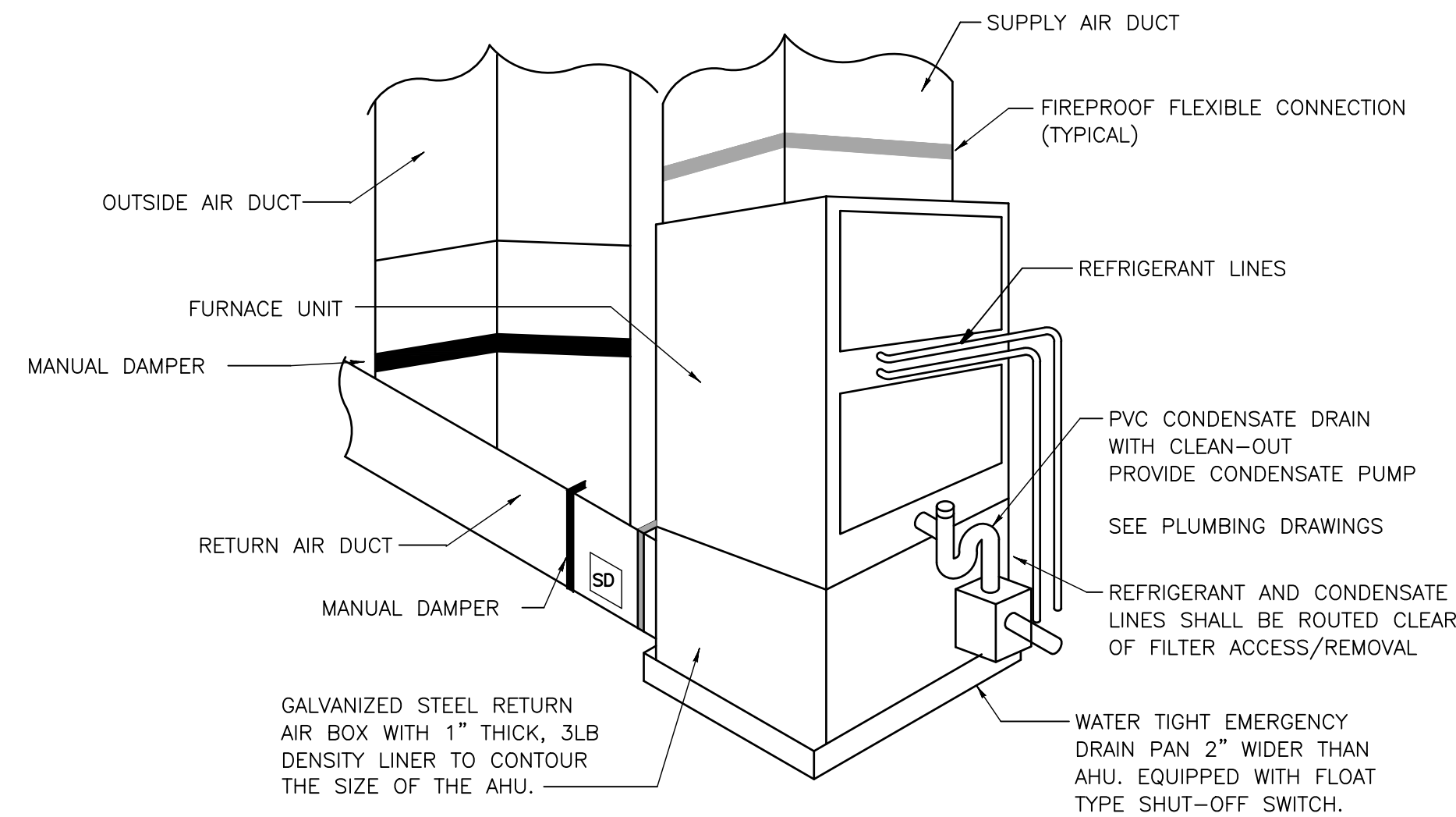


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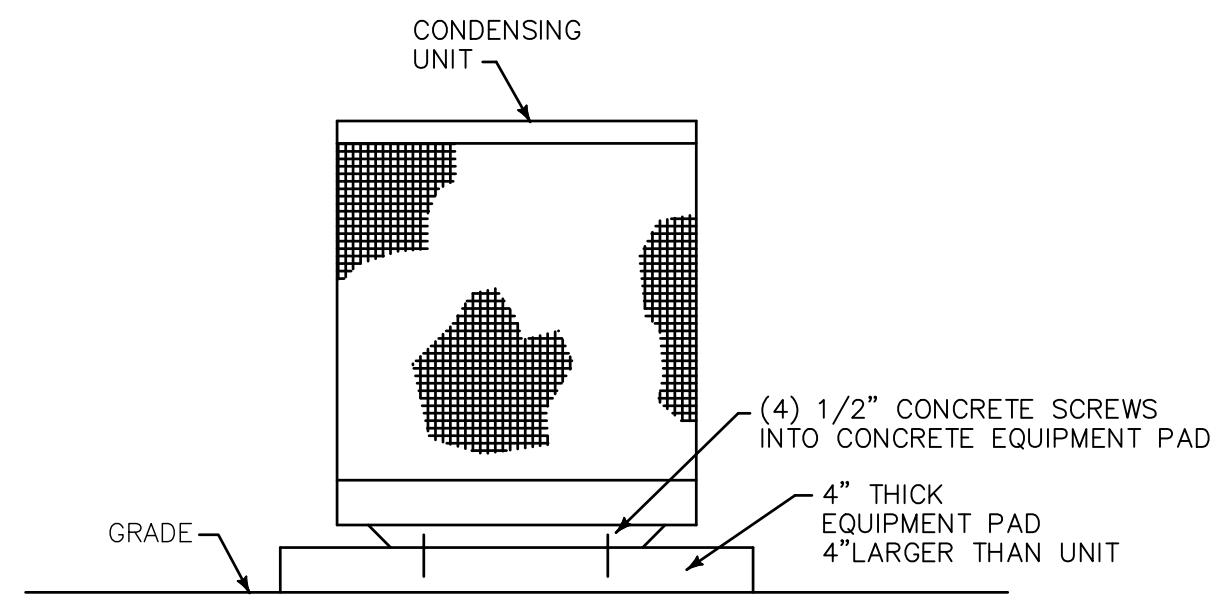
DUNWOODY
HIGH SCHOOL- CONCESSIONS
5035 VERMACK RD.
DUNWOODY, GA 30338

REVISIONS:
ISSUED DATE: 11/05/2025
HVAC - NOTES
& SCHEDULES

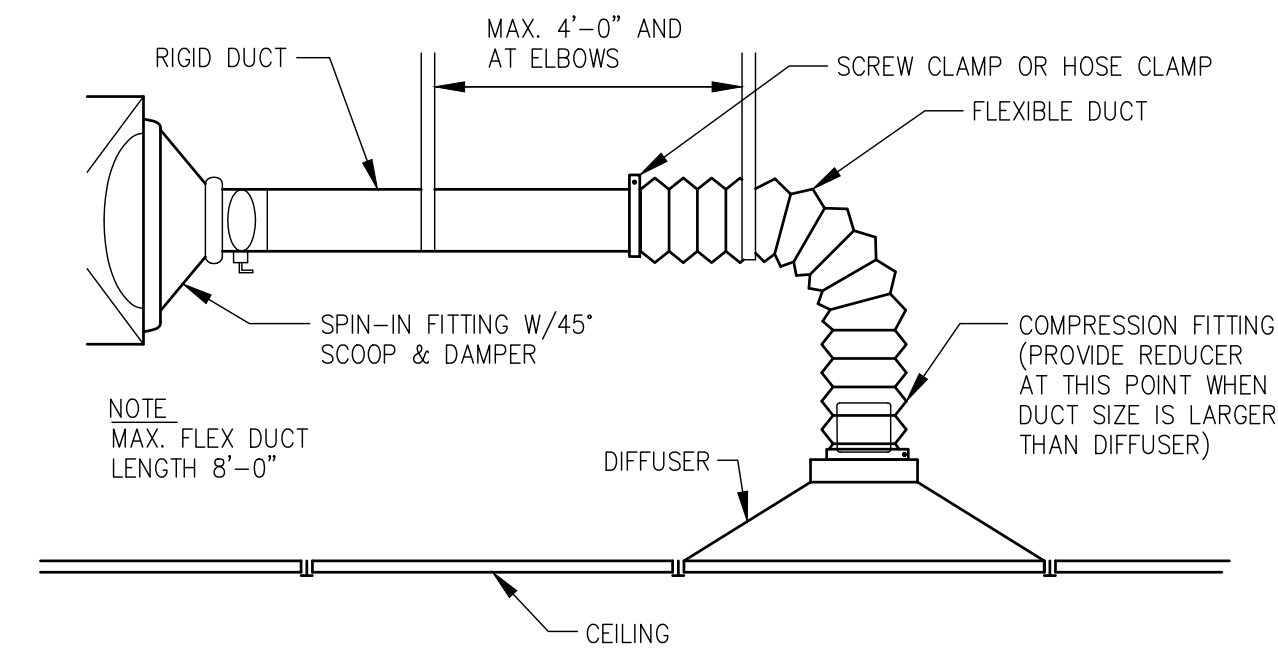
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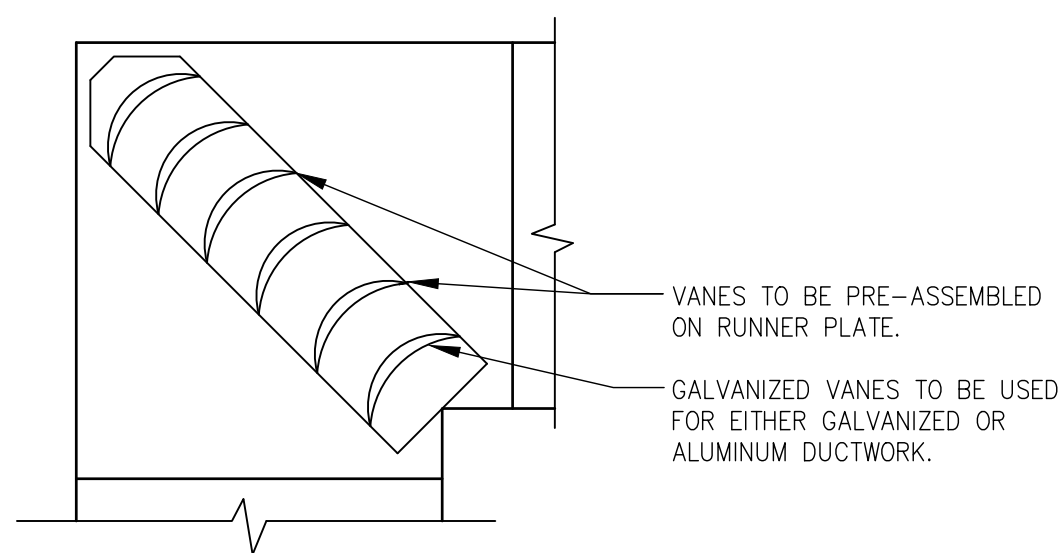
1 Vertical Furnace Unit Detail Scale: None



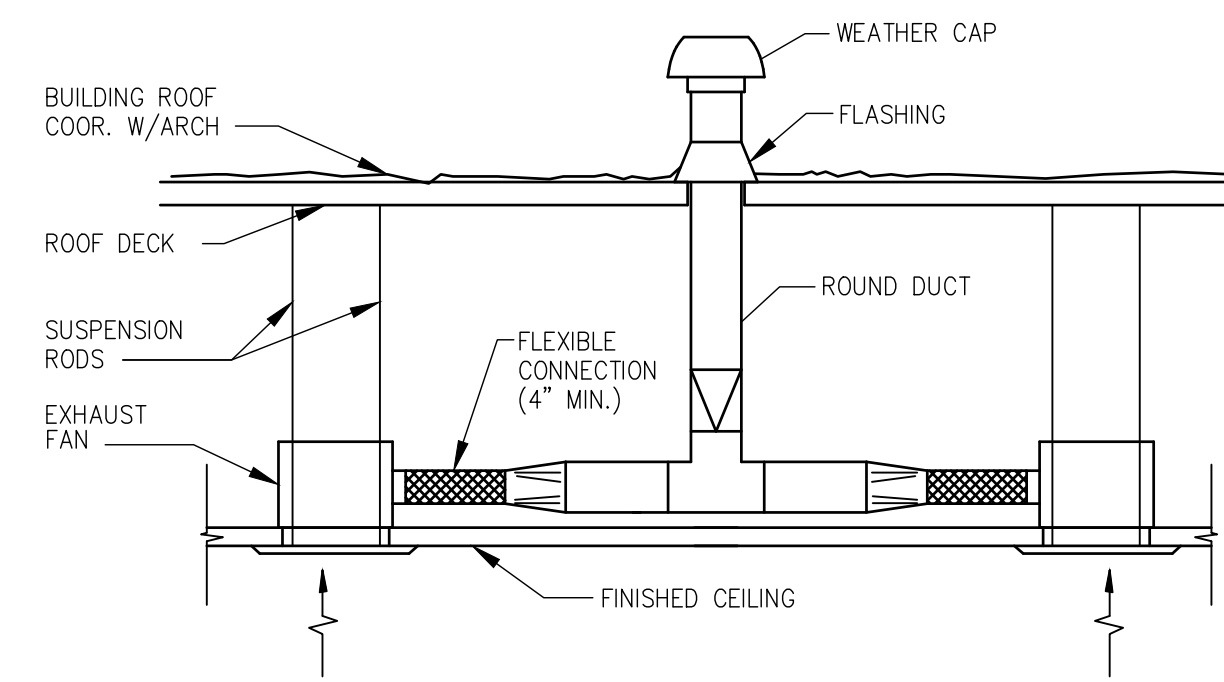
2 Heat Pump Unit Detail Scale: None



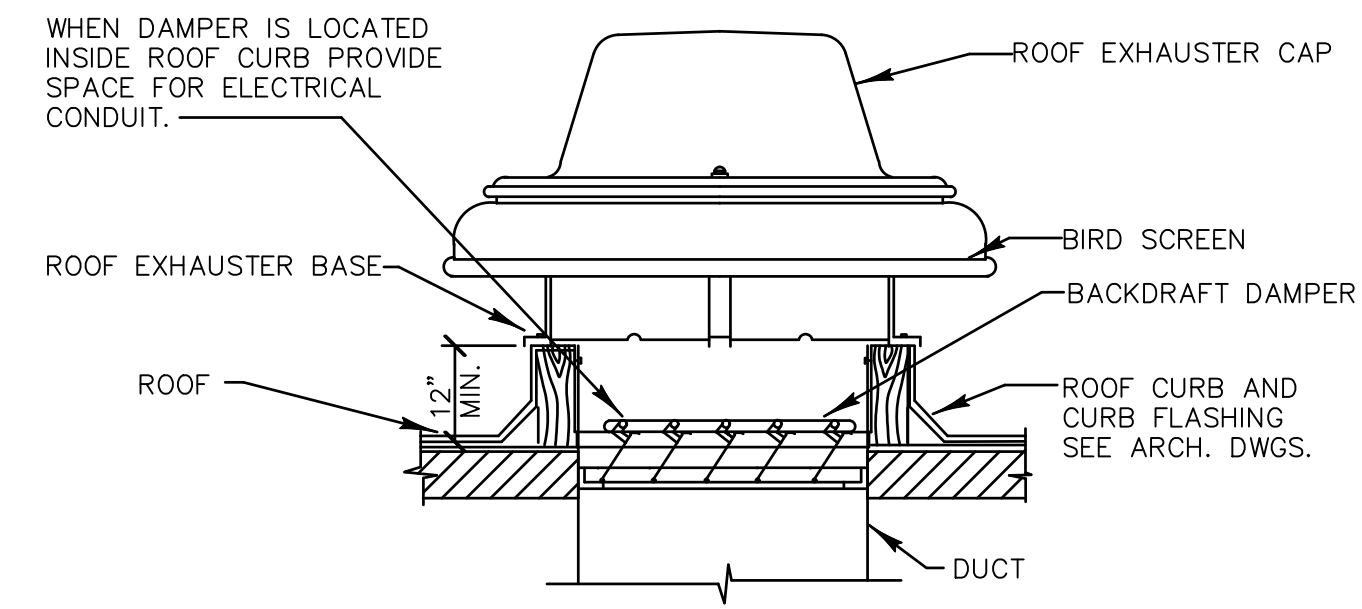
3 Duct Diffuser Detail Scale: None



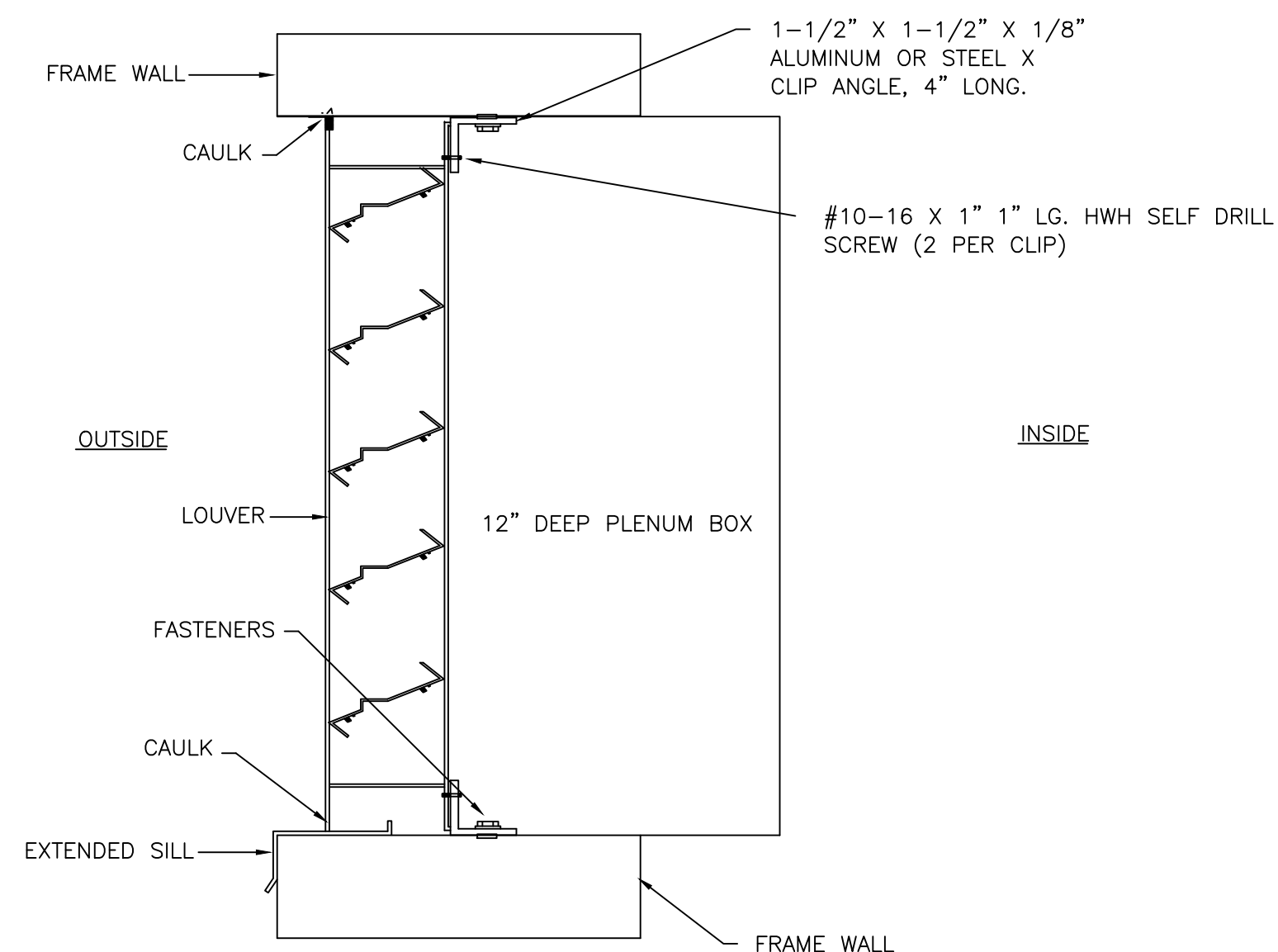
4 Double Thickness Turning Vanes Scale: None



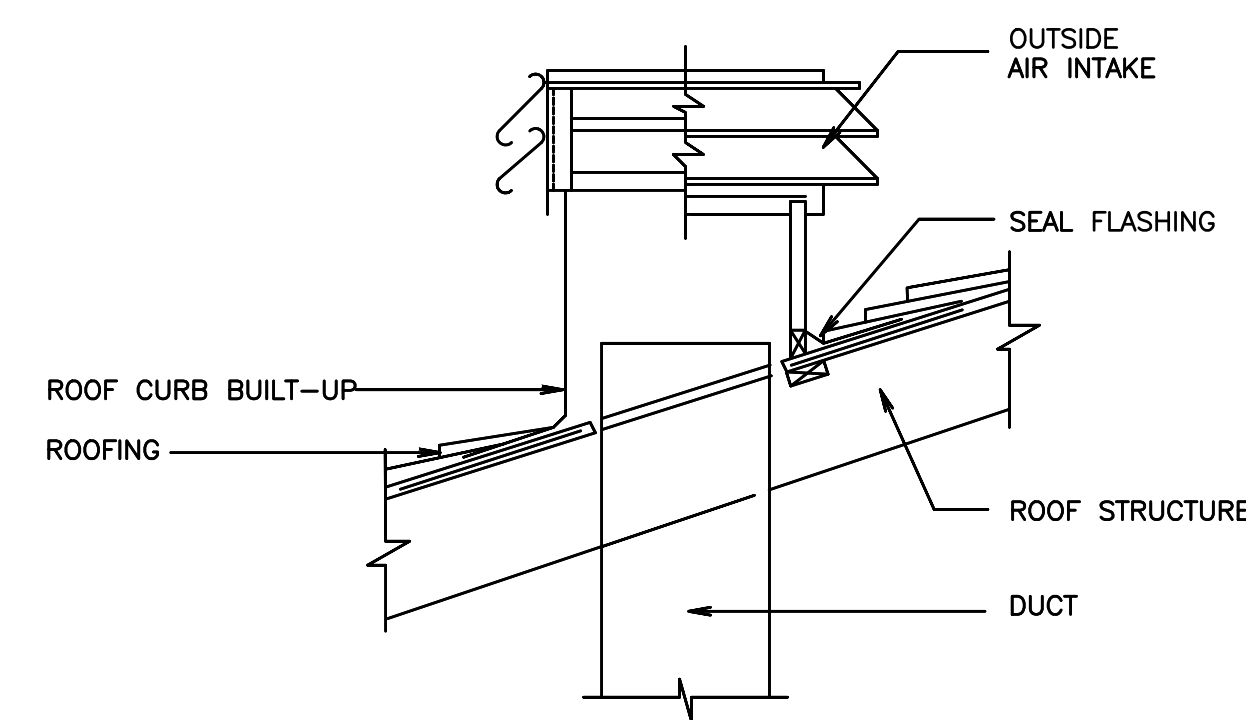
5 Exhaust Fan Thru Roof Detail Scale: None



6 Exhaust Fan Thru Roof Detail Scale: None



7 Outside Air Intake Louver Detail Scale: None



8 Outside Air Intake Detail Scale: None