

1. IDENTIFY ALL HVAC AND REFRIGERATION EQUIPMENT AS TO THE AREA SERVED BY THE EQUIPMENT. IDENTIFICATION SHALL BE ENGRAVED PLASTIC TAGS PERMANENTLY AFFIXED TO EACH PIECE OF EQUIPMENT.
2. PROVIDE UL RATED FIRE OR FIRE/SMOKE DAMPERS WHERE INDICATED ON PLANS OR SCHEDULES. INSTALL PER BUILDING DEPARTMENT, UL, AND SMACNA REQUIREMENTS. INCLUDE LABELED ACCESS FOR DUCT AND CEILING/WALL STRUCTURES. ACCESS DOORS TO B UL RATED IN ALL FIRE RATED ARCHITECTURAL ASSEMBLIES. INCLUDE TRANSFORMERS FOR 115V/24V ELECTRICAL CONNECTION.
3. PROVIDE ALL CURBS, SUPPORTS, AND ANCHORS FOR MECHANICAL WORK. NO CHAIN, TAPE, OR WIRE MAY BE USED FOR HANGING OR SUPPORTING. PROVIDE AND INSTALL ALL NECESSARY SHIMS AND LEVELING DEVICES TO PROPERLY INSTALL ALL EQUIPMENT IN A LEVEL CONDITION.
4. RECEIVE, UNCRATE, ASSEMBLE, INSURE, AND INSTALL IN CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS ALL EQUIPMENT FURNISHED BY THIS CONTRACT AND FURNISHED BY THE OWNER.
5. THE NEW MECHANICAL SYSTEMS CONSISTING OF THE AIR DISTRIBUTION SYSTEM WITH: DUCTWORK, FLEXIBLE DUCT, DIFFUSERS, GRILLES, DAMPERS, CONTROL SYSTEMS, ETC. SHALL BE BY THE MECHANICAL CONTRACTOR.
6. DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. OVERALL OUTSIDE DUCT DIMENSIONS SHALL BE ADJUSTED TO ALLOW FOR ANY LINER THICKNESS.
7. ALL SHEET METAL TO BE MADE AND INSTALLED TO SMACNA SEAL CLASS B STANDARDS WITH 45-DEGREE MAXIMUM REDUCING, 30-DEGREE MAXIMUM EXPANDING TRANSITIONS. ALL EXPOSED RECTANGULAR DUCTS TO BE PAINT LOCK GALVANIZED. PROVIDE HOLLOW BLADE TURNING VANES ON 1.5 CENTERLINE RADIUS FOR ALL ELBOWS AND TEES. HVAC SUPPLY AND RETURN RECTANGULAR DUCTS TO HAVE A MINIMUM [1/2" THICK, R22 THERMAL PERFORMANCE 0.5 NRC SOUND ABSORPTION RATED] [1" THICK, R4.2 THERMAL PERFORMANCE, 0.7 NRC SOUND ABSORPTION RATED] [1-1/2" THICK, R6.3 THERMAL PERFORMANCE, 0.85 NRC SOUND ABSORPTION RATED] DUCT LINER. ALL OUTSIDE AIR DUCTS TO HAVE 2" THICK, R8 INSULATION, 0.9 NRC SOUND ABSORPTION RATED, UL 181 CLASS ONE FIBERGLASS DUCT LINER ATTACHED TURNING VANES 15' O.C. EACH WAY AND 100% COVERAGE OF FLAME PROOF ADHESIVE. INCREASE DUCT TO ALLOW FOR LINER. SEAL ALL DUCT AIR TIGHT WITH TWO COATS OF DUCT SEALANT. DUCT SEALANT TO BE CLEAR PAINTABLE SILICONE CAULK ON ALL EXPOSED DUCTWORK. ALL EVAPORATIVE COOLED SUPPLY AIR DUCTS SHALL HAVE 1-1/2", 3/4-LB DENSITY BLANKET INSULATION WITH FOIL SCRICRAFT FACING. FOIL TAPE ALL JOINTS. DO NOT USE ANY DUCT LINER ON EVAPORATIVELY COOLED SUPPLY AIR DUCTS.
8. CAULK ALL DUCT JOINTS AIR AND WATER TIGHT WITH PERMANENT COMMERCIAL CAULK PER MANUFACTURER'S RECOMMENDATIONS.
9. CONCEALED ROUND DUCTS SHALL BE LOW PRESSURE CONSTRUCTION, SEALED AIR TIGHT AND EXTERNALLY INSULATED WITH 1-1/2", 3/4-LB. DENSITY BLANKET INSULATION WITH FOIL SCRICRAFT FACING. SEAL ALL JOINTS WITH CAULK AIR TIGHT.
10. EXPOSED ROUND DUCTS SHALL BE PAINT LOCK SPIRAL ONE GAGE HEAVIER THAN SMACNA STANDARD. HARD PIPE TO DIFFUSERS (NO FLEX ALLOWED) AND SEAL WITH CLEAR, PAINTABLE SILICONE CAULK.
11. INTERIOR OF ALL DUCTS VISIBLE THROUGH GRILLES, DIFFUSERS, ETC. TO BE PAINTED WITH TWO COATS FLAT BLACK PAINT.
12. ALL FLEXIBLE DUCTWORK USED SHALL BE INSULATED SEMI-RIGID FLEXIBLE DUCT, FLEXMASTE 5M, OR THERMOFLEX XMK, AND SHALL CONFORM TO LOCAL CODES. MAKE FLEXIBLE DUCT CONNECTIONS WITH DRAW BANDS AND SHEET METAL SCREWS AT EACH END OF FLEX. ALL FLEXIBLE DUCT TO BE SAME SIZE AS DIFFUSER CONNECTION. LIMIT FLEXIBLE DUCTWORK TO 6-FT. MAXIMUM LENGTH. NO FLEX DUCT ALLOWED IN EXPOSED AREAS.
13. ALL ROUND DUCT TAKEOFFS SHALL BE CONICAL BELL MOUTH SPIN-IN FITTINGS WHERE DUCT DIMENSION ALLOWS.
14. PROVIDE CONDENSATE DRAIN PIPING FOR ALL SPLIT SYSTEM COOLING COIL UNITS (I.E. FAN COIL UNITS, FURNACES, AIR HANDLING UNITS, ETC.). ALL UNITS SHALL HAVE INTERNAL DRAIN PANS OR PROVIDE A DRAIN PAN CAPABLE OF CAPTURING ALL COOLING COIL CONDENSATION. PIPE DRAINS TO NEAREST PLUMBING FIXTURE OR AS SHOWN ON DRAWINGS. PROVIDE CONDENSATE PUMP IF PROPER SLOPING OF DRAIN PIPE IS NOT ADEQUATE. COORDINATE WITH PLUMBING CONTRACTOR.
15. THIS CONTRACTOR SHALL COORDINATE ALL DUCTWORK WITH OTHER TRADES PRIOR TO INSTALLATION.
16. WEATHERPROOF ALL MECHANICAL ROOF PENETRATIONS PER CODES AND ALL ROOFING MANUFACTURER RECOMMENDATIONS.
17. PROVIDE FIRE OR SMOKE DETECTORS ON RETURN FOR MECHANICAL SYSTEMS OVER 200 CFM AS REQUIRED BY CODES OR BUILDING STANDARDS. IF TWO OR MORE MECHANICAL SYSTEMS (I.E. ROOFTOP UNITS) SERVE THE SAME AREA AND WHEN COMBINED EXCEED 200 CFM, A FIRE OR SMOKE DETECTOR SHALL BE INSTALLED ON THE RETURN OF EACH UNIT WHEN REQUIRED BY LOCAL AUTHORITIES.
18. PROVIDE SLEEVES AND COLLARS FOR ALL DUCTWORK AND PIPES THROUGH WALLS, FLOORS, AND CEILINGS. SEAL ALL EXTERNAL PENETRATIONS WEATHER TIGHT WITH EXTERIOR COMMERCIAL GRADE CAULK. FIREPROOF ALL PENETRATIONS OF FIRE RATED WALLS, FLOORS AND CEILINGS.
19. CONFIRM VOLTAGE, PHASE, AND AMPACITY WITH ELECTRICAL CONTRACTOR PRIOR TO INSTALLING EQUIPMENT. AFTER CONFIRMATION, INTERFERING WITH MECHANICAL EQUIPMENT BY MECHANICAL CONTRACTOR. THREE PHASE MOTORS TO HAVE MAGNETIC STARTERS WITH PROTECTION ON ALL THREE LEADS. CONTROLS AND HEATING/COOLING EQUIPMENT TO AUTOMATICALLY RESTART AFTER POWER FAILURE. ALL WIRE TO BE IN CONDUIT WHERE REQUIRED BY CODE.
20. ALL RECIRCULATED AIR SHALL PASS THROUGH STANDARD 30% MERV 8, THROW AWAY FILTERS. PROVIDE ONE ADDITIONAL CLEAN SET FOR OWNER AT PROJECT COMPLETION.
21. A MINIMUM CLEARANCE OF 36 INCHES SHALL BE PROVIDED AROUND ANY EQUIPMENT OR COMPLY WITH MANUFACTURER'S REQUIREMENTS (I.E. FANS, PUMPS, BOILERS, AIR CONDITIONERS, ETC.) FOR SERVICE AND MAINTENANCE. GAS FIRED APPLIANCES SHALL BE VENTED PER THE MANUFACTURER'S LISTING. PROVIDE COMBUSTION AIR AS REQUIRED PER CODE.
22. TEMPERATURE CONTROLS - THE HVAC SYSTEM CONTROLS ARE TO BE FULLY AUTOMATIC. ALL CONTROLS ARE TO BE ELECTRIC. TEMPERATURE CONTROL SETUP AND SETBACK SHALL BE ACCOMPLISHED BY MEANS OF AN ELECTRIC THERMOSTAT WITH THE FOLLOWING FEATURES BEING STANDARD:
 - a. ADJUSTABLE HEATING AND COOLING SETPOINTS.
 - b. NIGHT AND WEEKEND PROGRAMMABLE SETBACK.
 - c. AUTOMATIC CHANGEOVER BETWEEN HEATING AND COOLING CYCLES.
 - d. MINIMUM JOB EIGHT (8) HOUR BATTERY BACKUPS DURING POWER FAILURE.
 - e. OPTIMAL SYSTEM STARTUPS TO ENSURE CORRECT TEMPERATURE AT OCCUPANCY.
 - f. SMOKE COVERS.
 - g. ALL CONTROL SYSTEMS SHALL BE DESIGNED AND PROVIDED BY A CONTROL MANUFACTURER WHO HAS BEEN IN THE BUSINESS OF MANUFACTURING, DESIGNING AND INSTALLING CONTROL COMPONENTS AND SYSTEMS FOR A MINIMUM OF TEN (10) YEARS.

1. AIR BALANCE SHALL BE BY NEBB CERTIFIED CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DRAWINGS. PROVIDE NEBB CERTIFIED REPORT TO OWNER (3 SETS).
2. MECHANICAL CONTRACTOR SHALL PUT HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS AND EQUIPMENT INTO FULL OPERATION AND SHALL CONTINUE THE OPERATION OF SAME DURING EACH WORKING DAY OF TESTING AND BALANCING.
3. BALANCING AGENCY SHALL INCLUDE AN EXTENDED WARRANTY OF 90 DAYS, AFTER COMPLETION AND ARCHITECT OR ENGINEER'S APPROVAL OF TEST AND BALANCE WORK, DURING WHICH TIME THE ARCHITECT OR ENGINEER AT THEIR DISCRETION MAY REQUEST A RECHECK, OR RESETTING OF ANY OUTLET, SUPPLY AIR FAN, OR EXHAUST FAN AS LISTED IN THE TEST REPORT.
4. THE BALANCING AGENCY SHALL PERFORM THE TESTS AND BALANCE THE AIR DISTRIBUTION FOR ALL SYSTEMS INCLUDING: SUPPLY AND EXHAUST FANS CFM, RPM, AND AMPERAGE; MAIN SUPPLY AND RETURN DUCTS PILOT TRAVERSE, SUPPLY DIFFUSERS AND REGISTERS, AND MAIN EXHAUST DUCTS.
5. TEST AND RECORD THE STATIC PRESSURE DROPS ACROSS ALL COMPONENTS OF THE AIR CONDITIONING SYSTEM INCLUDING: HEATING SECTION, COOLING COIL, AND FILTER SECTION.
6. IN COOPERATION WITH THE CONTROL MANUFACTURER'S REPRESENTATIVE, ADJUST AUTOMATICALLY OPERATED DAMPERS TO OPERATE AS SPECIFIED, INDICATED AND/OR NOTED. TESTING AGENCY SHALL CHECK CONTROLS FOR PROPER CALIBRATIONS AND LIST CONTROLS REQUIRING ADJUSTMENT BY CONTROL INSTALLERS.
7. AS A PART OF THE WORK OF THIS CONTRACT, THE CONTRACTOR SHALL MAKE ANY CHANGES IN THE PILE-UP, THE TRS, AND DAMPERS OR THE ADDITION OF DAMPERS AND MINIMUM POSITION SWITCHES REQUIRED FOR CORRECT BALANCE AS RECOMMENDED BY THE BALANCING AGENCY AT NO ADDITIONAL COST TO THE OWNER.

1. FOLLOW ALL APPLICABLE CODES AND ORDINANCES. PAY ALL FEES AND PERMITS AND ATTAIN THE SAME.
2. ALL EQUIPMENT, INSULATION, AND CONTROLS TO MEET LOCAL JURISDICTIONAL AUTHORITY'S ADOPTED ENERGY CODE.
3. VISIT SITE AND ASCERTAIN EXISTING CONDITIONS PRIOR TO BID.
4. THE INFORMATION PRESENTED ON THIS DRAWING IS DIAGRAMMATIC AND IS NOT TO BE SCALED. IT DOES NOT NECESSARILY REPRESENT ALL ELBOWS, DUCT EXTENSIONS, OFFSETS, HANGERS, ETC. REQUIRED FOR A COMPLETE WORKING SYSTEM.
5. AS-BUILT SCALE DRAWINGS SHALL BE SUBMITTED TO ARCHITECT/OWNER AT COMPLETION SHOWING ALL PIPING, DUCT, AND EQUIPMENT CHANGES.
6. SHOP DRAWINGS SHALL BE SUBMITTED ON ALL VALVES, FIXTURES, INSULATION, G.R.D.'S AND EQUIPMENT FOR RESPONSE PRIOR TO ORDERING. PROVIDE ELECTRONIC COPY OF SUBMITTAL DATA WITH SUBMITTAL ITEMS OF SIMILAR TYPES GROUPED TOGETHER WHENEVER POSSIBLE. CLEARLY NOTE ANY DEVIATION BETWEEN SUBMITTED ITEMS AND SPECIFIED ITEMS ON THE COVER SHEET OF THE SUBMITTAL. FAILURE TO SUBMIT MAY CAUSE SPECIFIED ITEMS TO BE REJECTED AND REPLACED AT CONTRACTOR'S EXPENSE.
7. EXTRA COSTS OR CHANGES ALLOWED ONLY IF APPROVED IN WRITING BY ARCHITECT/OWNER WITH DOLLAR AMOUNT PRIOR TO ORDERING. NO EXTENSIONS OF COMPLETION TIME ALLOWED WITHOUT WRITTEN AUTHORIZATION.

8. THIS CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS PRIOR TO THE PURCHASE OF ANY MATERIALS AND THE COMMENCEMENT OF ANY WORK AND IS TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
9. PROVIDE OWNER WITH 3 SETS OF TYPEWRITTEN AND BOUND "OPERATING INSTRUCTIONS" FOR ALL SYSTEMS AND EQUIPMENT, INCLUDING MANUFACTURER'S MAINTENANCE MANUALS. INCLUDE APPROVED EQUIPMENT SUBMITTALS, EQUIPMENT START-UP REPORTS, LUBRICATION FILTER TYPES AND SIZES, BALANCE REPORT, STARTING AND STOPPING PROCEDURES, AND LIST SERVICE CONTRACTOR'S 24 HOUR TELEPHONE NUMBERS.
10. CONCEAL ALL WORK IN FINISHED AREAS.
11. CUT AND PATCH TO MATCH ADJACENT AREAS. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED WITHOUT STRUCTURAL ENGINEER'S WRITTEN APPROVAL.
12. GUARANTEE ALL LABOR AND EQUIPMENT FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY OWNER.
13. PROVIDE FACTORY AUTHORIZED START-UPS AND WRITTEN START-UP REPORTS ON ALL EQUIPMENT.
14. FIREPROOF ALL PENETRATIONS OF RATED FLOOR/WALL/CEILING/ROOF ASSEMBLIES. FIREPROOFING AND INSTALLATION TO BE UL CLASSIFIED AND IBCO APPROVED, SUITABLE FOR MOISTURE AND VIBRATION. METAL/CALK/BY RETORSEAL OR EQUAL. INSTALL PER ALL MANUFACTURER RECOMMENDATIONS. SUBMIT FIRE STOP SCHEDULE BY MANUFACTURER.
15. PROVIDE NICKEL-PLATED FLOOR, WALL, AND CEILING ESCUTOCHONS OF ADJUSTABLE TYPE ON ALL PIPES PASSING THROUGH WALLS, PARTITIONS, AND FLOORS AFTER PAINTING IS COMPLETED.

Mark	Manufacturer Model No.	CFM	Fan Design S.P. (IN W.C.)	MCA/ MOCP	Voltage	Location	Weight (lbs)
EF-1	GREENHECK SP-B110ES	70	0.4	0.3/15	115/60/1	RR	10
EF-2	GREENHECK SP-B110ES	70	0.4	0.3/15	115/60/1	RR	10
EF-3	GREENHECK CSP-A700-VG	600	0.5	5.1/15	115/60/1	MECH	38
EF-4	GREENHECK SP-B110ES	70	0.4	0.3/15	115/60/1	RR	10
EF-5	GREENHECK SP-B110ES	70	0.4	0.3/15	115/60/1	RR	10
EF-6	GREENHECK SP-B150	150	0.5	2.2/15	115/60/1	LAB	10
EF-7	GREENHECK SP-B150	150	0.5	2.2/15	115/60/1	STAFF	10

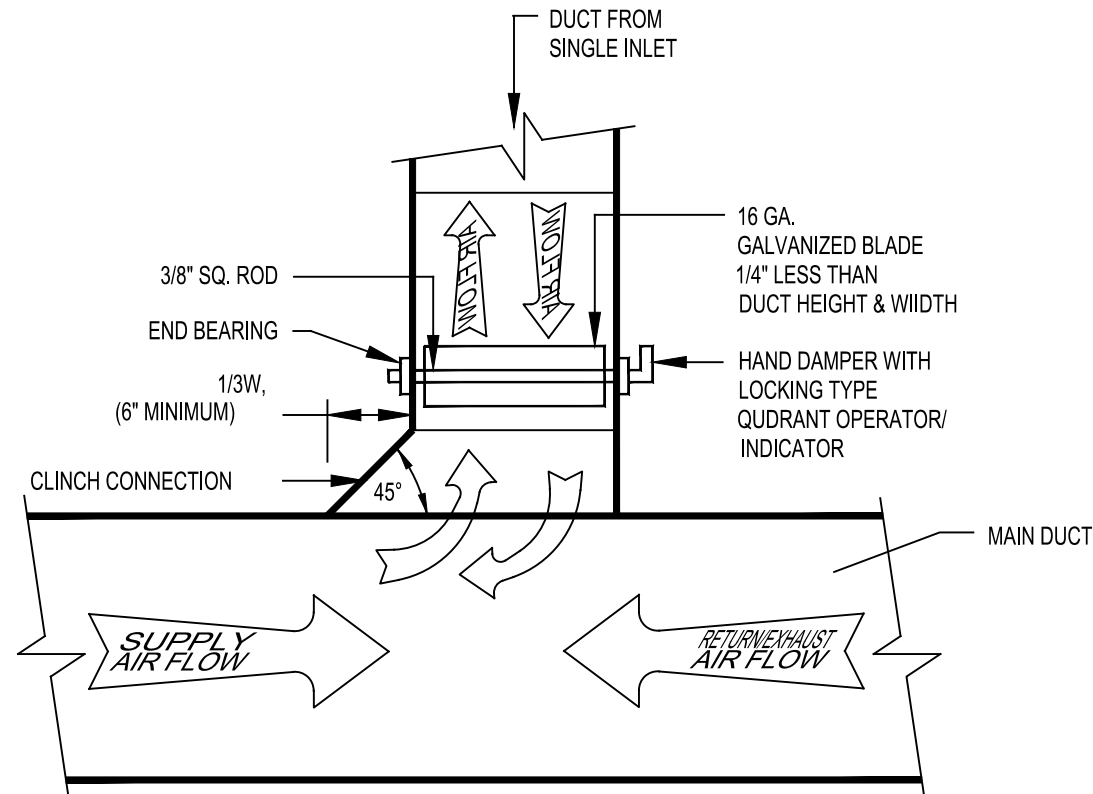
TABLE NOTES:

1. INSULATION IS NOT REQUIRED (UNLESS OTHERWISE NOTED) ON THE FOLLOWING DUCTS IN RESIDENTIAL APPLICATIONS:
 - A. EXHAUST DUCTS.
 - B. DUCTS LOCATED IN CONDITIONED SPACE.
 - C. RETURN DUCTS LOCATED IN RETURN AIR PLENUMS.
 - D. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY AND SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED SPACE BY A MINIMUM OF R-8 INSULATION.
2. INSULATION IS NOT REQUIRED (UNLESS OTHERWISE NOTED) ON THE FOLLOWING DUCTS IN COMMERCIAL APPLICATIONS:
 - A. EXHAUST DUCTS.
 - B. DUCTS LOCATED IN CONDITIONED SPACE.
 - C. RETURN DUCTS LOCATED IN RETURN AIR PLENUMS.
 - D. SUPPLY DUCTS IF TEMPERATURE DIFFERENCE BETWEEN THE INSIDE & OUTSIDE OF DUCT DOES NOT EXCEED 15°F.
 - E. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY AND SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED SPACE BY A MINIMUM OF R-8 INSULATION.

APPLICATIONS	DUCT LOCATION	DUCT SERVICE	INSULATION MIN. R-VALUE	NOM. INSULATION THICKNESS **
COMMERCIAL	EXPOSED TO WEATHER ON THE EXTERIOR OF THE BUILDING.	SUPPLY & RETURN	12	WRAP: 4" WITH PROTECTIVE COVER
				LINER : 3"
	IN UNCONDITIONED ATTICS, BASEMENTS, CRAWL SPACES, GARAGES, & OTHER UNCONDITIONED SPACES.	SUPPLY & RETURN	6	WRAP: 2"
				LINER : 1-1/2"

* - INSULATING OF RETURN DUCTWORK IN RESIDENTIAL BASEMENTS NOT REQUIRED.

** - ACTUAL INSULATION THICKNESS MAY VARY BY MANUFACTURER. THICKNESS LISTED IN TABLE & DESIGN BASED ON OWENS CORNING, QuietR DUCT LINER & OWENS CORNING, SOFTR ALL-SERVICE FIBER GLASS DUCT WRAP.



MANUAL BALANCING DAMPER, TYP.

15°

AIR FLOW

3 D2 DIA. MIN. TYP.

D2

D1

D1+3/4 D3 HEEL RADIUS

3/4 D3 THROAT RADIUS

DESIGNER NOTES:

1. USE THIS DETAIL WHEN BRANCHING THE MAIN. WHEN BRANCH IS TAKE-OFF.
2. SHOW SPLIT DIMENSIONS C

2 MAIN BRANCH TAKE-OFF

NO SCALE

1 SUPPLY/RETURN (EXHAUST) DUCT TAP
NO SCALE

Equipment	Supply Air	Return Air	Outside Air	Exhaust Air	Balance
(E) RTU-3	7000	5750	1250	0	+1250
EF-1	0	0	0	70	-70
EF-2	0	0	0	70	-70
EF-3	0	0	0	600	-600
EF-4	0	0	0	70	-70
EF-5	0	0	0	70	-70
EF-6	0	0	0	150	-150
EF-7	0	0	0	150	-150
TOTALS	7000	5750	1250	1180	+70
RESULTING BUILDING PRESSURIZATION (CFM)					+70

Tag	MFG.	Model	Type	Neck Size	Pattern	Damper	Mounting	Notes
①	Price	SPD	Supply	24X24	-	MVD	T-BAR, SURFACE	1,2
②	Price	SPD	Supply	12X12	-	MVD	T-BAR, SURFACE	1,2
③	Titus	300FL	Supply	6X6	-	MVD	SIDEWALL	1,2
Ⓐ	Titus	350RL	Return	24X12	None	None	T-BAR, SURFACE	1,2
Ⓑ	Titus	PAR	Return	24X24	None	None	T-BAR, SURFACE	1,2

1. FACTORY FINISH PER ARCHITECTURAL SET. REFERENCE ARCHITECTURAL SET FOR DESIRED COLORS.
2. SEE DIFFUSER SCHEDULE ON SHEET M1.0.

MECHANICAL LEGEND			*NOTE: ALL DASHED PLUMBING LINES INDICATE BELOW FLOOR ELEVATION UNLESS OTHERWISE NOTED ON DRAWINGS.		
SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	CWS	CONDENSER WATER SUPPLY			MOTORIZED GATE VALVE
	CWR	CONDENSER WATER RETURN			WATER BALANCE VALVE
	CHS	CHILLED WATER SUPPLY			VENTURI
	CHW	CHILLED WATER RETURN			REDUCED PRESSURE BACKFLOW PREVENTOR
	RS	REFRIGERANT SUCTION			GAS COOK
	RL	REFRIGERANT LIQUID			UNIONS
	RH	REFRIGERANT HOT GAS			PIPE REDUCER
	HWS	HEATING WATER SUPPLY			STRAINER
	HWR	HEATING WATER RETURN			STRAINER W/ BLOWOFF VALVE
	HPS	HIGH PRESSURE STEAM			
	HPSR	HIGH PRESSURE STEAM RETURN			
	LPS	LOW PRESSURE STEAM			
	LPSR	LOW PRESSURE STEAM RETURN			
	VAC	VACUUM			
	AR	AIR			
	N	NITROGEN			
	F	FIRE			
	DCW	COLD WATER			
	DHW	HOT WATER			
	DHC	HOT WATER RECIRCULATE			
	W	WASTE PIPE			
	V	VENT PIPE			
	ST	STORM PIPE			
	ST	OVER/LOW PIPE			
	GO	GREASE WASTE			
	GO	SAND OR WASTE GAS PIPE			
	G	GAS			
		PIPE UP			
		PIPE DOWN			
		PIPE TEE DOWN			
		GATE VALVE			
		GLOBE VALVE			
		CHECK VALVE			
		BALL VALVE			
		BUTTERFLY VALVE			
		PLUG VALVE			
		GAS PRESSURE REGULATOR GAS COOK (SHUT-OFF) AND UNION			
		STOP & DRAIN VALVE			
		AUTO FLOW CONTROL VALVE			
		BALANCING VALVE			
		TEMP. CONTROL - 2 WAY			
		TEMP. CONTROL - 3 WAY			
		3-WAY VALVE			
		PRESSURE REDUCING VALVE			
		SOLENOID VALVE			
		PRESSURE GAUGE			
		FLOW SENSOR			
		MOTORIZED GATE VALVE			
		WATER BALANCE VALVE			
		VENTURI			
		REDUCED PRESSURE BACKFLOW PREVENTOR			
		GAS COOK			
		UNIONS			
		PIPE REDUCER			
		STRAINER			
		STRAINER W/ BLOWOFF VALVE			
		FLOOR DRAIN			
		EQUIPMENT ROOM DRAIN			
		FLOOR SINK - HALF GRATE			
		FLOOR SINK - 14 GRATE			
		DRAIN VALVE			
		ROOF DRAIN			
		DOWNSPOUT NOZZLE			
		CLEANOUT - VERTICAL			
		CLEANOUT - HORIZONTAL			
		PIPE CAP			
		BREAK - MISC.			
		VENT THRU ROOF			
		WALL HYDRANT			
		HOSE BIBB			
		PUMP			
		PRESSURE/TEMP. RELIEF			
		AIR VENT			
		P-T TAP			
		PIPE GAUGE (SLEEVE)			
		PIPE EXPANSION JOINT			
		PIPE ANCHOR			
		SMOKE DETECTOR			
		BOILER DRAIN VALVE			
		BALL DRAIN W/ HOSE END CONNECTION			
	(N)	NEW			
	(E)	EXISTING			
	(R)	RELOCATED			
	(F)	FUTURE			
		VACUUM BREAKER			
		THERMISTOR			
		TEMPERATURE GAUGE W/ THERMOWELL			

TAG	MANUFACTURER MODEL	INLET SIZE	CFM		**MAX P.D.	MAX N.C.	ELEC. MOTOR VOLTS/PHASE	MOTOR HP	ELECTRICAL FLA	ELEC. HEAT VOLTS/PHASE	ELECTRIC COIL (KW)	ADDITIONAL FEATURES REQ'D.
			MAX.	MIN.								
(E) VAV 3-1	PRICE SDV	12	1750	875	0.75	30	-	-	-	-	-	1-6
(E) VAV 3-3	PRICE SDV	12	1750	875	0.75	30	-	-	-	-	-	1-6
(E) VAV 3-4	PRICE SDV	12	1750	875	0.75	30	-	-	-	-	-	1-6

FEATURES:

1. ALL VAV TERMINAL UNITS SHOWN ARE EXISTING TO REMAIN. CONTRACTOR SHALL FIELD VERIFY QUALITY, LOCATION, TAG, MANUFACTURER, MODEL, INLET SIZE, CONTROL TYPE, AND CONFIGURATION PRIOR TO BID AND PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THIS SCHEDULE.
2. FIELD VERIFY EXISTING SCHEDULED MAX AND MIN AIRFLOW SETPOINTS. REBALANCE AFFECTED UNITS TO THE DESIGN VALUES SHOWN AFTER DEMOLITION AND RECONNECTION OF DOWNSTREAM DISTRIBUTION.
3. CONTRACTOR SHALL INSPECT EACH AFFECTED BOX, VERIFY DAMPER AND ACTUATOR OPERATION, CLEAN, AND RECALIBRATE. REPLACE ANY ACTUATOR, CONTROLLER, FLOW SENSOR, OR LINKAGE FOUND DAMAGED OR INOPERABLE, MATCHING EXISTING MANUFACTURER AND CONTROL TYPE.
4. DEMOLISH AND RECONNECT DOWNSTREAM LOW-PRESSURE DISTRIBUTION PER PLANS, WHERE SHOWN, CAP AND CONNECT EXISTING SUPPLY TO THE NEIGHBORING VAV UNIT. NEW DOWNSTREAM DUCTWORK SIZED AT 0.8 TO 0.1 IN W.C. PER 100 FT, LOW-PRESSURE SMACNA CONSTRUCTION.
5. COORDINATE ALL CONTROLS MODIFICATIONS, SEQUENCE CHANGES, AND REBALANCING WITH THE BASE BUILDING EMS/BAS AND THE BUILDING ENGINEER PRIOR TO START OF WORK.
6. PROVIDE TEST AND BALANCE REPORT FOR ALL AFFECTED TERMINALS AFTER MODIFICATION. SUBMIT TAB REPORT TO ENGINEER FOR REVIEW.

MECHANICAL NARRATIVE:
NEW FIRST GENERATION TENANT IMPROVEMENT WITHIN AN EXISTING CORE AND SHELL SPACE. SCOPE INCLUDES NEW LOW PRESSURE DISTRIBUTION DUCTWORK, FLEXIBLE RUNOUTS, AND SUPPLY DIFFUSERS DOWNSTREAM OF THE EXISTING VAV TERMINAL UNITS TO SERVE THE NEW TENANT LAYOUT. RETURN AIR IS THROUGH THE CEILING PLENUM, AND ALL MATERIALS INSTALLED WITHIN THE PLENUM SHALL BE PLENUM RATED.

DESIGN CODES (WITH LOCAL AMMENDMENTS):

- 2021 INTERNATIONAL BUILDING CODE (IBC)
- 2014 ARKANSAS ENERGY CONSERVATION CODE (AECOC)
- 2018 ARKANSAS PLUMBING CODE (APC)
- 2021 ARKANSAS MECHANICAL CODE (AMC)
- 2018 ARKANSAS FUEL & GAS CODE (AFGC)
- 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
- 2020 NATIONAL ELECTRIC CODE (NEC)

MECHANICAL SHEET LIST	
Sheet Number	Sheet Title
M0.0	MECHANICAL COVER SHEET
M0.1	MECHANICAL DETAILS & SCHEDULES
M1.0	MECHANICAL FLOOR PLAN
M1.1	MECHANICAL ROOF PLAN
M2.0	COMCHECK

JOE
ARCHITECT



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#	Date	Description
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DATE: 18 Aug 2026

PROJECT NO: 26085

DRAWN BY: CM / JC

ISSUED FOR: Permit Set

MECHANICAL COVER SHEET

M 1.1