

GENERAL NOTES:

- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. IT IS NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT; HOWEVER, CONTRACT DOCUMENTS REQUIRE COMPONENTS AND MATERIALS WHETHER OR NOT INDICATED OR SPECIFICALLY SPECIFIED TO MAKE THE SYSTEMS BEING INSTALLED COMPLETE, CODE COMPLIANT, TESTED AND OPERATIONAL.
- CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
- ALL MATERIALS, EQUIPMENT, METHODS OF INSTALLATION, REMOVALS AND DISPOSAL SHALL BE IN ACCORDANCE WITH THE STANDARDS, REGULATIONS, CODES, ORDINANCES, AND LAWS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS, AND OTHER AUTHORITIES THAT HAVE LAWFUL JURISDICTION.
- PERFORM WORK, PROVIDE MATERIALS AND EQUIPMENT FOR SYSTEMS SHOWN, SPECIFIED AND DESCRIBED ON DRAWINGS. COMPLETELY COORDINATE ALL TRADES OF THIS CONTRACT AND PROVIDE COMPLETE AND FULLY FUNCTIONAL INSTALLATION. ALL WORK IN THIS SET TO BE COMPLETED UNDER THIS CONTRACT, UNLESS OTHERWISE INDICATED.
- PROTECT ALL EXISTING AND NEW BUILDING ELEMENTS (INSTALLED BY OTHER CONTRACTS) FROM DAMAGE. CONTRACTOR SHALL RESTORE ALL DAMAGED ELEMENTS TO ORIGINAL OR BETTER CONDITION.
- . WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT NEAT, RECTILINEAR APPEARANCE WHEN COMPLETED. MAINTAIN MAXIMUM HEAD ROOM AT ALL TIMES. DO NOT RUN PIPES, DUCTS, AND CONDUIT EXPOSED UNLESS SHOWN AND NOTED TO BE EXPOSED ON DRAWINGS.
- MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN MANUFACTURER'S EQUIPMENT CLEARANCES.
- 8. CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATED TO ISOLATING, SHUTTING DOWN, DRAINING, FILLING AND TESTING SYSTEMS TO ALLOW FOR COMPLETION OF WORK. INTERRUPTIONS TO EXISTING SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE OWNER AND UTILITY AS APPLICABLE. INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTIONS. ALL SYSTEM INTERRUPTIONS SHALL BE SCHEDULED WITH OWNER, UTILITY AND COORDINATED WITH OTHER TRADE WORK.
- 9. ALL EQUIPMENT PIPING, WIRING, INSULATION ETC. INSTALLED IN HVAC AIR PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
- 10. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND FLOORS WITH UL RATED MATERIALS/METHODS EQUIVALENT TO FIRE RATING OF ASSEMBLY.

RING FOR EACH ABOVE GRADE PENETRATION (BOTH SIDES).

UNLESS OTHERWISE NOTED.

- 11. COORDINATE ALL WALL/FOUNDATION PENETRATIONS WITH GENERAL CONTRACT AND SEAL WEATHERTIGHT. PROVIDE STAINLESS STEEL ESCUTCHEON PLATE/TRIM
- 12. PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRES INSPECTION. REPLACEMENT OR REPAIR. ACCESS PANELS/DOORS SHALL BE A MINIMUM OF 12"x12",
- 13. DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILINGS. ALL SUPPORT SHALL BE FROM BUILDING STRUCTURE OR FROM CEILING SUSPENSION SYSTEM WHICH HAS BEEN REINFORCED. SUPPORTS SHALL BE SELECTED AND INSTALLED TO PROVIDE A VIBRATION FREE INSTALLATION.

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JUDGEMENT, THESE DRAWINGS ARE IN COMPLIANCE WITH APPLICABLE NEW YORK STATE BUILDING CODES INCLUDING THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

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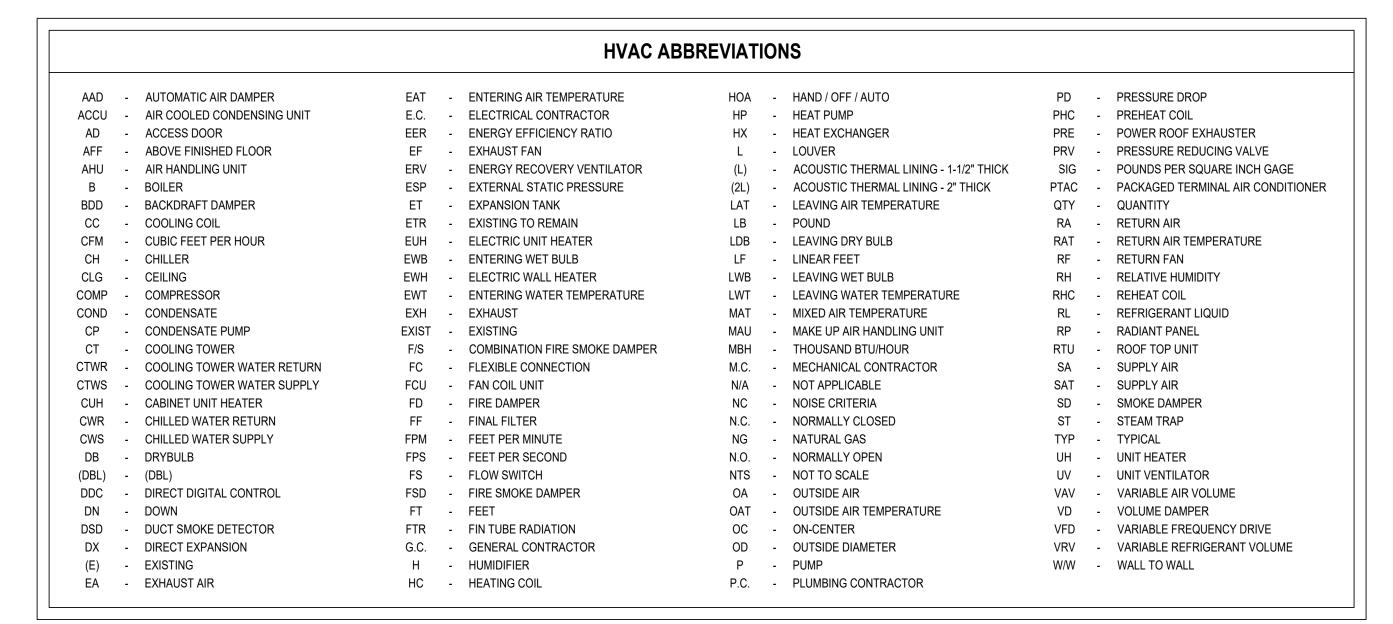
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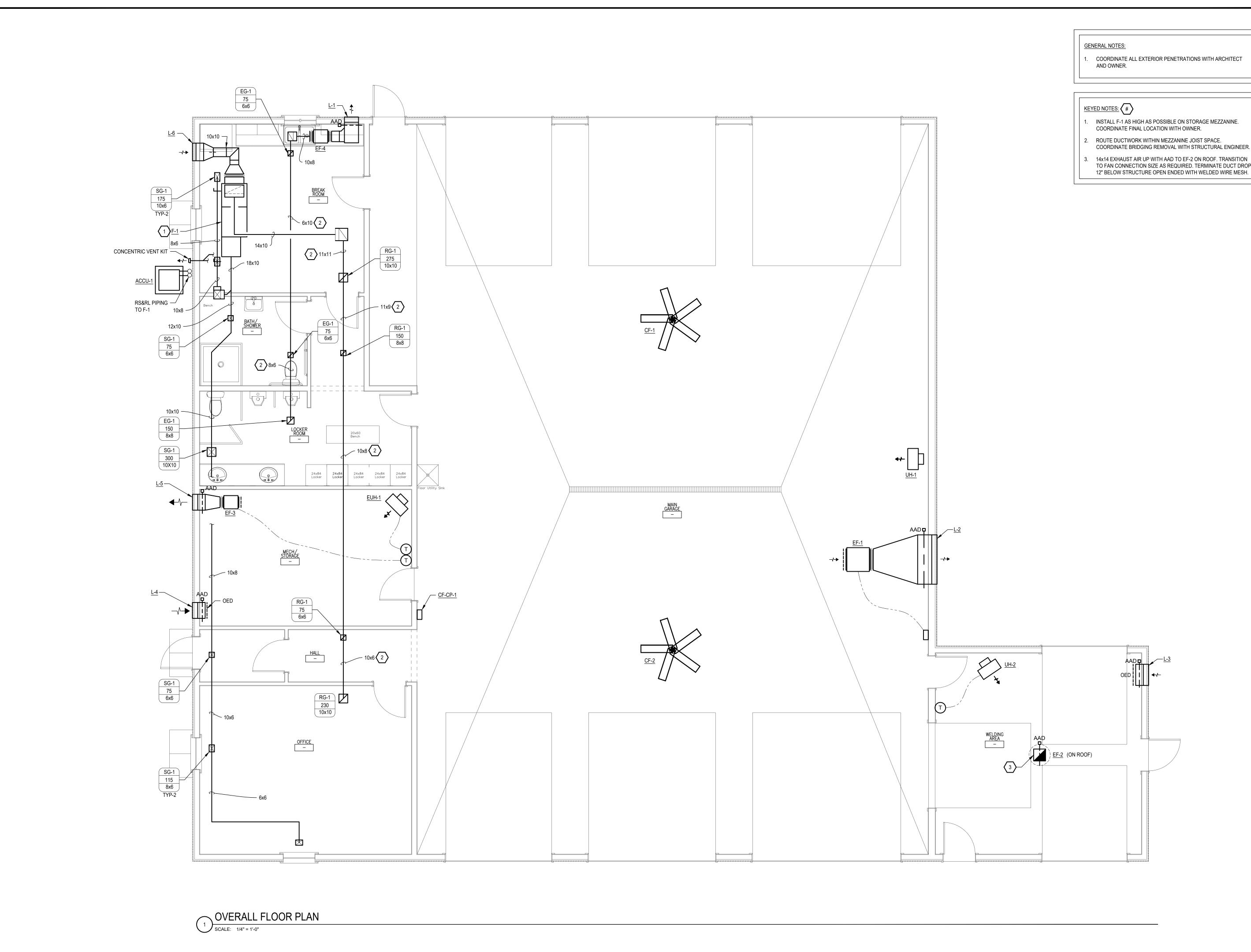
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SHEET TITLE

GENERAL INFORMATION

> SHEET NUMBER M-001





COORDINATE ALL EXTERIOR PENETRATIONS WITH ARCHITECT

- INSTALL F-1 AS HIGH AS POSSIBLE ON STORAGE MEZZANINE.
- ROUTE DUCTWORK WITHIN MEZZANINE JOIST SPACE.
- 14x14 EXHAUST AIR UP WITH AAD TO EF-2 ON ROOF. TRANSITION TO FAN CONNECTION SIZE AS REQUIRED. TERMINATE DUCT DROP





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TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE DRAWINGS ARE IN COMPLIANCE WITH APPLICABLE NEW YORK STATE BUILDING CODES INCLUDING THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

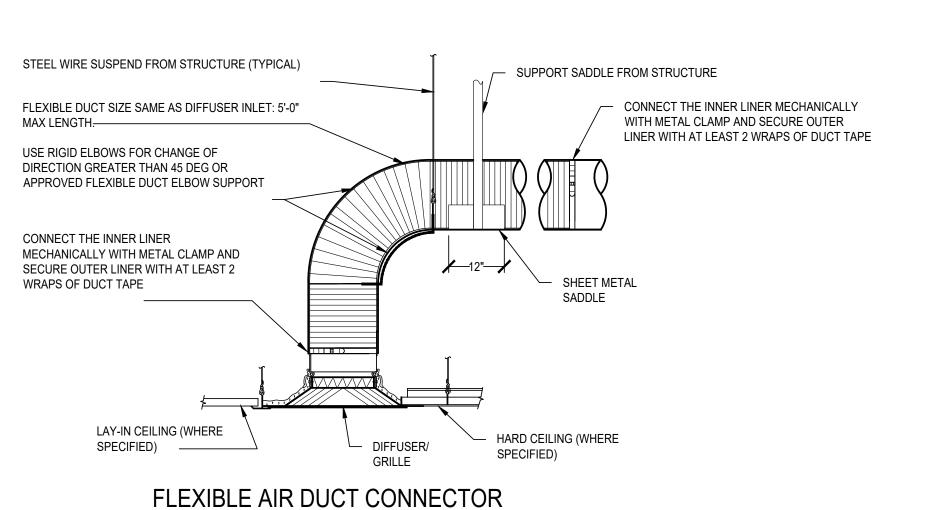
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FIRST FLOOR PLAN

> SHEET NUMBER M-101



SCALE: NOT TO SCALE

EXHAUST FAN -SPONGE RUBBER GASKET (TYPICAL 12" HIGH (MINIMUM) - FLASHING & COUNTER PRE-FAB INSULATED CURB -FLASHING FRAMING & BLOCKING - ROOF SEE CURB DETAIL EXHAUST DUCTWORK -— ELECTRICAL CONDUIT DAMPER ACTUATOR SOLDER BOTTOM & SIDE - AUTOMATIC AIR SEAMS TO 3" HIGH ALL DAMPER FULL SIZE AROUND TO MAKE WATERTIGHT -OF DUCT - INSULATED WATERTIGHT 1" COUPLING WITH PLENUM, FULL SIZE NIPPLE END CAPS — OF ROOF OPENING

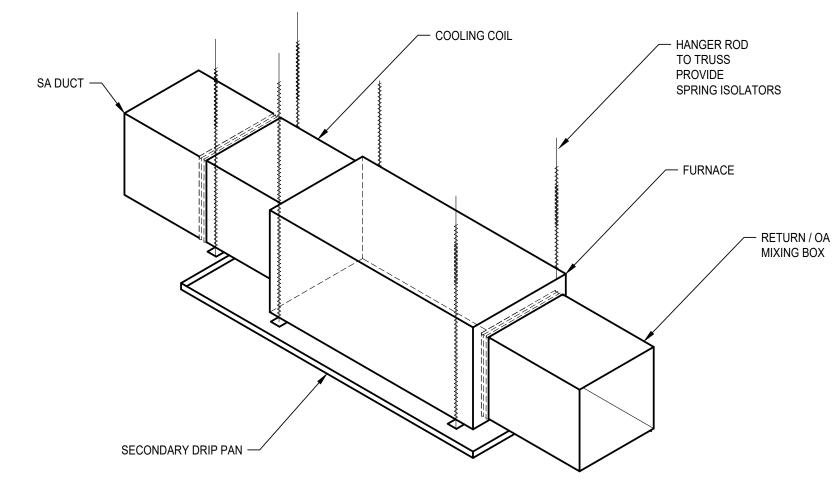
NOTES:

- 1. VERIFY EXACT ROOF OPENING DIMENSIONS WITH EQUIPMENT MANUFACTURER AND
- COORDINATE WITH GENERAL CONTRACTOR.

 2. INSTALL AUTOMATIC AIR DAMPER TIGHT TO ROOF OPENING.
- 3. SECURE FAN TO CURB WITH STAINLESS STEEL OR ALUMINUM FASTENERS WITH NEOPRENE WASHERS 8" ON CENTER.

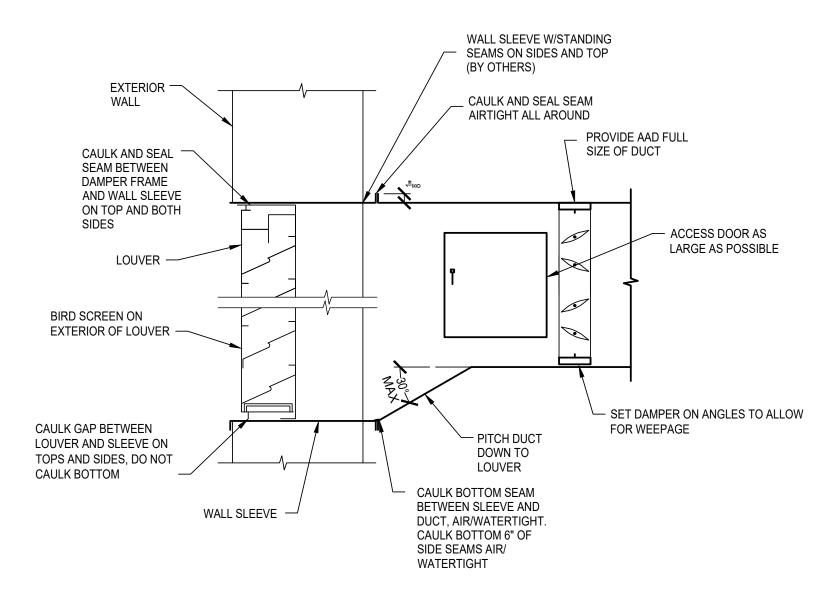
POWER ROOF EXHAUSTER

SCALE: NOT TO SCALE



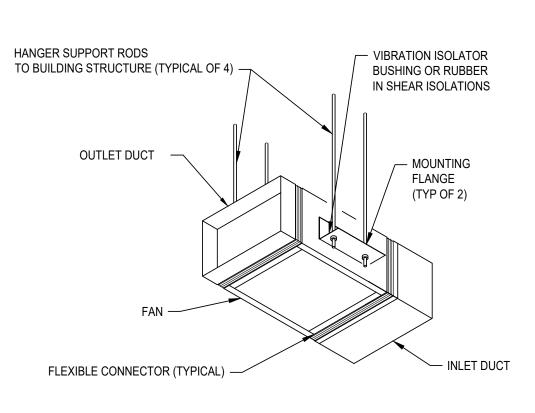
HORIZONTAL FURNACE AND A-COIL DETAIL

SCALE: NOT TO SCALE



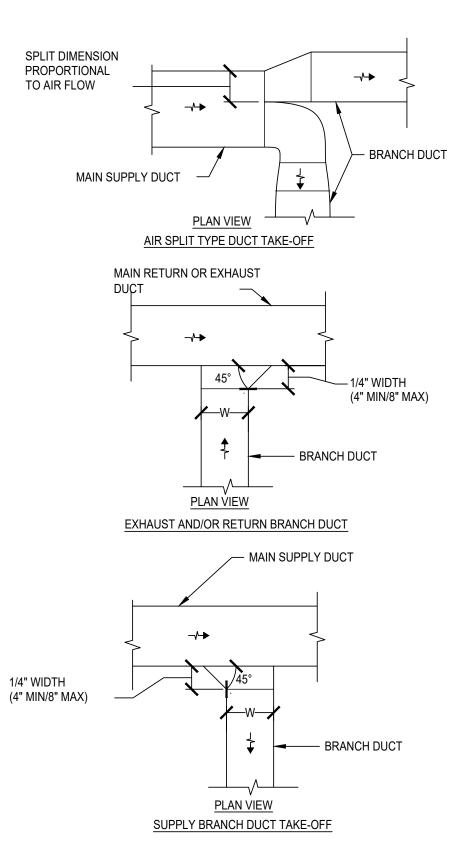
DUCTED LOUVER DETAIL

SCALE: NOT TO SCALE



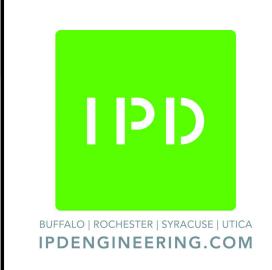
INLINE EXHAUST FAN DETAIL

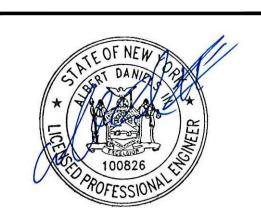
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DUCTWORK TAKEOFF DETAIL

SCALE: NOT TO SCALE





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SHEET TITLE

MECHANICAL DETAILS

M-501

						FURNACE SCHEDU	LE						
UNIT NO.	LOCATION	LOCATION CFM E.S.P. IN W.C. TYPE INPUT CAPACITY MBH	OUTPUT CAPACITY MBH	AFUE %			OTOR		DESIGN EQUIPMENT	REMARKS			
								RPM	HP	VOLTS	PHASE		
F-1	MEZZANINE	1100	0.9	HORIZ	40	38.8	96.0	1075	0.5	120	1	TRANE S9X2B040U3PSBA	1, 2, 3

REMARKS:

1. PROVIDE WITH 2-STAGE BURNER.

2. PROVIDE WITH DIRECT DRIVE BLOWER.

3. FIELD CONVERT TO LIQUID PROPANE.

	COOLING COIL SCHEDULE - DX													
UNIT NO.	LOCATION	SERVICE	FACE VEL FPM	ROWS AND CIRCUITS	E	AT	L	AT	PD IN W.G.	TOTAL TONS	DESIGN EQUIPMENT	REMARKS		
ONIT NO.	LOCATION	SLITTICL	FACE VEL FPINI	ROWS AND CIRCUITS	DB	WB	DB	WB	FD IN W.G.	TOTAL TONS	DEGIGIN EQUIT MIENT	NEWANNO		
CC-1	CC-1 MEZZANINE F-1 - 3 AND 1 78.1 64.5 55.0 54.5 0.4 3.0 TRANE 4TXCB003DS3 1													

NOTES

1. PROVIDE COOLING COIL FOR HORIZONTAL INSTALLATION.

	AIR COOLED CONDENSING UNIT SCHEDULE - 95 DEG F OAT.													
			CONE	ENSER FANS	3	COMPRESSOR			E	LECTRICAL				
UNIT NO.	LOCATION	CAPACITY TONS	NO. OF FANS	RPM	HP E.A.	NO.	HP E.A.	NO. OF STAGES	VOLTS	PHASE	MCA	DESIGN EQUIPMENT	REMARKS	
ACCU-1	AT GRADE	3.0	1	850	1/8	1	-	1	208	1	18	TRANE 4TTR4036N1000B	NONE	

							FAN SCHEDULE								
UNIT NO.	LOCATION	SERVICE	TYPE	CFM	ESP	FAN RPM	OUTLET VEL FPM	SONES	DRIVE		٨	MOTOR		DESIGN EQUIPMENT	REMARKS
ONIT NO.	LOOATION	SERVICE	1111	OT W	Loi	I AN IXI WI	OOTELT VEETT W	JONES	DIVIVE	RPM	HP	VOLTS PHASE		BEGIGIV EQUIT MENT	TALINI, II II I
EF-1	MAINTENANCE GARAGE	GENERAL EXHAUST	INLINE	4500	0.75	1540	1125	19.1	DIRECT	1750	2	208	1	GREENHECK SQ-16-VG	1, 2, 3
EF-2	WELDING AREA	GENERAL EXHAUST	ROOF	500	0.25	1157	431	5.2	DIRECT	1725	1/6	115	1	GREENHECK G-095-VG	2, 3, 4
EF-3	MECH / STORAGE	GENERAL EXHAUST	INLINE	200	.25	1209	200	4.8	DIRECT	1725	1/10	115	1	GREENHECK SQ-80-VG	2, 3, 8
EF-4	STORAGE MEZZANINE	GENERAL EXHAUST	INLINE	300	0.75	1529	229	10.8	DIRECT	1725	1/4	115	1	GREENHECK SQ-98-VG	2, 3
CF-1	MAINTENANCE GARAGE	DE-STRATIFICATION	HVLS	9,065	-	121	87	27 dBA	DIRECT	165	50(w)	115	1	GREENHECK - DC-5-6-3MV	5, 6, 7
CF-2	MAINTENANCE GARAGE	DE-STRATIFICATION	HVLS	9,065	-	121	87	27 dBA	DIRECT	165	50(w)	115	1	GREENHECK - DC-5-6-3MV	5, 6, 7

REMARKS

1. PROVIDE WALL SWITCH FOR MANUAL OVERRIDE.

2. PROVIDE EC MOTOR WITH SPEED DIAL CONTROL AT UNIT

3. PROVIDE INTEGRAL NON-FUSED DISCONNECT SWITCH.

4. PROVIDE 24" HIGH ROOF CURB

5. PROVIDE WITH 12" DROP LEG.

6. PROVIDE WITH CABLE CLAMP AND SAFETY CABLE KIT.

7. PROVIDE WITH TOUCHSCREEN CONTROLLER.

8. PROVIDE WITH LOW VOLTAGE THERMOSTAT.

	LOUVER AND PENTHOUSE SCHEDULE													
UNIT NO.	LOCATION	SERVICE	CFM	LOUVER OR THROAT FREE AREA	AF	PROXIMATE SI	ZE	MAX PD IN	BIRD SCREEN	DESIGN EQUIPMENT	REMARKS			
UNIT NO.	S. EGGATION GENVIOL		CFIVI	LOUVER OR THROAT FREE AREA	LENGTH	DEPTH	HEIGHT	W.G.	DIKU SCREEN	DESIGN EQUIPMENT	REWARKS			
L-1	STORAGE MEZZ.	EXHAUST	300	0.80	20	4	16	0.02	YES	GREENHECK - ESD-435	1			
L-2	MAINTENANCE	EXHAUST	4500	6.37	56	6	40	0.039	YES	GREENHECK - ESD-635	1			
L-3	WELDING AREA	INTAKE	500	1.10	24	6	18	0.031	YES	GREENHECK - ESD-635	1			
L-4	MECH. / STORAGE	INTAKE	200	0.47	18	6	14	0.027	YES	GREENHECK - ESD-635	1			
L-5	MECH. / STORAGE	EXHAUST	200	0.47	18	6	14	0.027	YES	GREENHECK - ESD-635	1			
L-6	STORAGE MEZZ.	INTAKE	300	0.57	16	6	16	0.037	YES	GREENHECK - ESD-635	1			
DEMARKO:	•			•		•		•		·				

REMARKS:

1. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL LINE OF COLORS AND FINISHES

DUCTWORK MATERIALS											
SERVICE	MATERIAL	JOINT CONSTRUCTION									
SUPPLY, RETURN, VENT, RELIEF, AND EXHAUST	LOCK FORMING QUALITY, GALVANIZED STEEL ASTM 525 OR 527	FLANGED WITH BUTYL GASKET, BRUSH ON, SEAL CLASS B									
AIR PLENUMS AT ROOF OR WALL, INTAKE OR EXHAUST	TYPE 304 STAINLESS STEEL OR GALVANIZED STEEL	BRAZE OR WELD WATERTIGHT									
ACCESSORIES, DAMPERS AND AIR TURNS	SAME OR BETTER AS PARENT DUCT										

	PIPING	MATERIALS	
SERVICE	PIPE MATERIALS	FITTINGS	CONNECTIONS
REFRIGERANT PIPING	TYPE ACR	WROUGHT COPPER FITTINGS	BRAZED

					INSULATIO	N SCHEDULE							
	EQUIPMENT OR	INS	SULATION CLASS (a)		J.	ACKETING CLASS (b)				THICKNES			
TYPE	SYSTEM SERVED						1		DUCTWORK				
		INTERIOR CONCEALED	INTERIOR EXPOSED	EXTERIOR INTERIOR CONCEALED		INTERIOR EXPOSED	EXTERIOR	LESS THAN 1	1 TO < 1.5	1.5 TO < 4	4 TO < 8	≥ 8	(c)
Α	RS, RL	FE	FE	FE	0	0	3	0.5	0.5	1	1	1	
		FG (d)			2								1.5(g)
В	DUCTWORK		FG (e)			1							2 (f)(g)
(a)	FG FIBROUS GLASS		(b)	0 NONE		(c)	SUPPLY AIR	•	(f)	EXCEPT DUCT	WORK WITHIN C	ONDITIONED	SPACE
	FE FLEXIBLE ELASTO	MERIC		1 ALL SERVICE			OUTSIDE AIR						
				2 ALUMINUM FOIL	_		MIXED AIR						
				3 POLYVINYL CHL	ORIDE		RETURN AIR		(g)	INSULATE EXH PENETRATION		FROM EXTER	RIOR
						(d)	BLANKET						
						(e)	RIGID BOARD						
						(e)	KIGID BUAKD						

	UNIT HEATER SCHEDULE - GAS													
UNIT NO.	LOCATION	TYPE	CFM	OUTPUT MBH	MIN. GAS PRESS BEFORE REGULATOR	EAT DEG F	LAT DEG F		F <i>F</i>	AN MOTOR		- DESIGN EQUIPMENT	REMARKS	
UNIT NO.	LOCATION	ITPE	CFIVI	OUTPUT WIBH	WIIN. GAS PRESS BEFORE REGULATOR	EAT DEG F	LAT DEG F	RPM	HP	VOLTS	PHASE	DESIGN EQUIPMENT	REWARNS	
UH-1	MAINTENANCE	HORIZONTAL	3,840	249.0	7" WC	65.0	125.0	1050	1/2	115	1	REZNOR - UDAP-300	1, 2	
UH-2	WELDING AREA	HORIZONTAL	450	24.6	7" WC	65	115.0	1550	.02	115	1	REZNOR - UDZ-030	2	

REMARKS:

1. PROVIDED BY OWNER, FOR REFERENCE ONLY.

2. PROVIDE HORIZONTAL VENT/COMBUSTION AIR KIT.

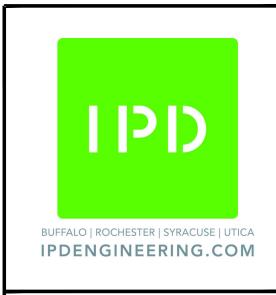
	UNIT HEATER SCHEDULE - ELECTRIC														
UNIT NO. LOCATION	TYPE	CFM	CAPACITY MBH	KW	VOLTS	PHASE	EAT DEG F	LAT DEG F	FAN MOTOR				DESIGN EQUIPMENT	REMARKS	
		THE OIM								RPM	HP	VOLTS	PHASE	·	
EUH-1	MECH / STORAGE	HORIZONTAL	350	10.2	3.0	208	1	65.0	92.0	1600	1/100	208	1	QMARK - MUH03-81	1, 2, 3

REMARKS:

1. PROVIDE WALL MOUNT BRACKET.

2. PROVIDE WITH DISCONNECT SWITCH.

3. PROVIDE WITH REMOTE THERMOSTAT.





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MECHANICAL SCHEDULES

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M-601