EXHAUST FAN INFORMATION – JOB#6784502

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-K1A	1	DU50HFA	CAPTIVEAIRE	750	0.750	1273	TEAO-ECM	0.500	0.2110	1	115	6.3	285 FPM	78	11
2	EF-K1B	1	DU33HFA	CAPTIVEAIRE	690	0.600	1391	TEAO-ECM	0.333	0.1650	1	115	4.3	342 FPM	64	13.4
3	EF-K2A	1	DU50HFA	CAPTIVEAIRE	750	0.750	1273	TEAO-ECM	0.500	0.2110	1	115	6.3	285 FPM	78	11
4	EF-K2B	1	DU33HFA	CAPTIVEAIRE	690	0.600	1391	TEAO-ECM	0.333	0.1650	1	115	4.3	342 FPM	64	13.4
5	EF-K3	1	DU80HFA	CAPTIVEAIRE	2400	1.250	1142	ODP,PREMIUM	1.500	1.0380	3	208	6.6	554 FPM	177	13.3
6	EF-K4	1	DU80HFA	CAPTIVEAIRE	2400	1.250	1142	ODP,PREMIUM	1.500	1.0380	3	208	6.6	554 FPM	177	13.3
7	EF-K5A	1	DU50HFA	CAPTIVEAIRE	750	0.750	1273	TEAO-ECM	0.500	0.2110	1	115	6.3	285 FPM	78	11
8	EF-K5B	1	DU50HFA	CAPTIVEAIRE	900	0.600	1228	TEAO-ECM	0.500	0.1890	1	115	6.3	342 FPM	71	10.2

MUA FAN INFORMATION – JOB#6784502

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SONES
9	MUA-K3	1	A1-D250-16Z	16Z-1-MOD	A1-D250	1000	2050	0.375	2186	ODP-ECM	2.500	1.2640	3	208	5.7	8.3A	15A	489	23
10	MUA-K4	1	A1-D250-16Z	16Z-1-MOD	A1-D250	1000	2050	0.375	2186	ODP-ECM	2.500	1.2640	3	208	5.7	8.3A	15A	489	23

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
9	MUA-K3	147846	136018	63°F	7 IN. W.C. – 14 IN. W.C.	NATURAL	92
10	MUA-K4	147846	136018	63°F	7 IN. W.C. – 14 IN. W.C.	NATURAL	92

DOAS/RTU FAN SCHEDULE – JOB#6784502

FAN UNIT NO	TAG	QTY	FAN INFORMATION: DOAS/RTU MODEL #	MANUFACTURER	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ESP	ELECTRICAL INFORMATION: HP	PHASE	VOLT	MCA	MOCP	GAS HEAT INFORMATION: GAS TYPE	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	NOTES
11	MUA-SPACE	1	CAS-HVAC3-1500-24	CAPTIVEAIRE	24P-3	0	5200	5200	1923	0.750	10.00	3	208	36.3A	60A	NATURAL	482846	391105	63°F	7 IN. W.C. – 14 IN. W.C.	1,2,3,4,5,6,7,8

NOTES:
1. DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE
2. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
3. FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER
4. 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 20GA EXTERIOR W/ 14GA BASE
5. 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE. 6:1 TURNDOWN WITH NG AND 5:1 TURNDOWN WITH LP
6. SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE
7. STATIC PRESSURE CONTROLLED BLOWER
8. SIDE DISCHARGE/SIDE RETURN

ELECTRICAL PACKAGE – JOB#6784502

NO	TAG	PACKAGE #	LOCATION	SWITCHES: LOCATION	SWITCHES: QUANTITY	OPTION	FANS CONTROLLED: FAN TAG	TYPE	Φ	HP	VOLT	FLA
1	K1	SC-110110MA	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT HOOD # 1	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-K1A	EXHAUST	1	0.500	115	6.3
2	K2	SC-110110MA	UTILITY CABINET LEFT	UTILITY CABINET LEFT HOOD # 2	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-K2A	EXHAUST	1	0.500	115	6.3
3	K3	DCV-1111	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT HOOD # 3	1 LIGHT 1 FAN	SMART CONTROLS DCV	EF-K3 MUA-K3	EXHAUST SUPPLY	3 3	1.500 2.500	208 208	6.6 5.7
4	K4	DCV-1111	UTILITY CABINET LEFT	UTILITY CABINET LEFT HOOD # 4	1 LIGHT 1 FAN	SMART CONTROLS DCV	EF-K4 MUA-K4	EXHAUST SUPPLY	3 3	1.500 2.500	208 208	6.6 5.7
5	K5	SC-110110MA	WALL UTILITY CABINET LEFT	SHIP LOOSE W/ PREWIRE	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-K5A	EXHAUST	1	0.500	115	6.3

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-K1A	1	GREASE BOX
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
2	EF-K1B	1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
3	EF-K2A	1	GREASE BOX
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
4	EF-K2B	1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
5	EF-K3	1	GREASE BOX
		1	2 YEAR PARTS WARRANTY
6	EF-K4	1	GREASE BOX
		1	2 YEAR PARTS WARRANTY
7	EF-K5A	1	GREASE BOX
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
8	EF-K5B	1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
9	MUA-K3	1	SIZE 1 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	MOTORIZED BACKDRAFT DAMPER FOR AI-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	ECM WIRING PACKAGE-SUPPLY - PWM SIGNAL FROM ECPM03 PREWIRE (3 - PHASE ZIEHL MOTOR)
		1	2 YEAR PARTS WARRANTY
		1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET
10	MUA-K4	1	SIZE 1 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	MOTORIZED BACKDRAFT DAMPER FOR AI-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	ECM WIRING PACKAGE-SUPPLY - PWM SIGNAL FROM ECPM03 PREWIRE (3 - PHASE ZIEHL MOTOR)
		1	2 YEAR PARTS WARRANTY
		1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET
11	MUA-SPACE	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
		1	TOTAL CFM MONITORING
		1	INTAKE FIRESTAT SET TO 135°F
		1	FREEZESTAT
		1	DISCHARGE FIRESTAT SET TO 240°F
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
		1	OVERHEAT STAT
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
		1	SIZE 3 RTU NO COOLING OPTION
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	OCCUPIED SCHEDULING
		1	CLOGGED FILTER SWITCH - NOTIFICATION ON HMI
		1	VAV PACKAGE W/ BUILDING STATIC PRESSURE CONTROL- MUA -0.25" TO +0.25" OF WC. (57) VFD INCLUDED)
		1	RTU INTAKE/RETURN DAMPER - OA PERCENTAGE CONTROL
		1	RTU3 SIDE DISCHARGE
		1	RTU3 SIDE RETURN
		1	RTU3 CURB DUCT HANGER
		1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)
		1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-K1A	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED HINGED.
2	# 2	EF-K1B	27 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED.
3	# 3	EF-K2A	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED HINGED.
4	# 4	EF-K2B	27 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED.
5	# 5	EF-K3	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
6	# 6	KEF-3	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
7	# 7	KEF-1A	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED HINGED.
8	# 8	KEF-1A	27 LBS	CURB	19.500"W X 19.500"L X 20.000"H VENTED.
9	# 9	MUA-K3	65 LBS	CURB	21.000"W X 71.000"L X 20.000"H INSULATED.
10	# 10	MUA-K3	65 LBS	CURB	21.000"W X 71.000"L X 20.000"H INSULATED.
11	# 11	MUA-SPACE	215 LBS	CURB	59.500"W X 91.000"L X 20.000"H INSULATED 16 GAUGE.

GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.
PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".
DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

REVISIONS
DESCRIPTION | DATE

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Peekskill Firehouse Kitchen Incubator R2
701 Washington Street,
Peekskill, NY, 10566

DATE: 7/30/2024
DWG.#: 6784502
DRAWN BY: billy.gast
SCALE: N.T.S.
MASTER DRAWING
SHEET NO. 3

NOTE ON NAME EQUIVALENCES:

THE FOLLOWING PIECES OF EQUIPMENT ARE SHOWN BY (2) NAMES:

KEF-1A – EF-K1A
KEF-1B – EF-K1B
KEF-2A – EF-K2A
KEF-2B – EF-K2B
KEF-3 – EF-K3
KEF-4 – EF-K4
KEF-5A – EF-K5A
KEF-5B – EF-K5B
DOAS-1 – MUA-SPACE

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SEAL
ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER
NO. 073084-1
ISSUED 1995 EXP. 8/25

PEEKSKILL FIREHOUSE KITCHEN INCUBATOR

City of Peekskill (Owner)
701 Washington Street
Peekskill, New York 10566
S-B-L: 32.20-9-1
City of Peekskill - Westchester County

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RW	JCL	EDF	23-369

⅛" ¼" ½" 0 1" 2"
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Date: September 17, 2024
Revisions:

H4.03

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