

HOOD INFORMATION - JOB#4519106

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT	DIA			CFM	VEL	SP	END TO END	ROW
1	HDI	5424 ND-2-PSP-F	CAPTIVEAIRE	13' 0"	600 DEG	I	HEAVY	200	2600			4'	16'	2600	1862	-0.605'	2080	430 SS WHERE EXPOSED	ALONE	ALONE

PATENT NUMBERS

AC-PSP (UNITED STATES) - US PATENT 7963830 B2.
 AC-PSP WALL (CANADA) - CA PATENT 2820509.
 AC-PSP ISLAND (CANADA) - CA PATENT 2520330.

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT		
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE	SIZE			ELECTRICAL MODEL #	SWITCHES QUANTITY
1	HDI	SS BAFFLE WITH HANDLES	9	16"	16"	30%	5	L55 SERIES E26	NO	RIGHT	12"x54"x24"			SC-311110FP	1 LIGHT 1 FAN	NO	741 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	HDI	FIELD WRAPPER 6.00' HIGH FRONT, RIGHT.
		BACKSPASH 80.00' HIGH X 97.50' LONG 430 SS VERTICAL.
		BACKSPASH 107.50' HIGH X 24.00' LONG 430 SS VERTICAL.
		BACKSPASH 80.00' HIGH X 20.50' LONG 430 SS VERTICAL.
		BACKSPASH 21.00' HIGH X 42.00' LONG 430 SS HORIZONTAL.
		BACKSPASH 107.50' HIGH X 14.50' LONG 430 SS VERTICAL.
		LEFT END STANDOFF 3' WIDE 54" LONG.
		LEFT SIDESPLASH 80.00' HIGH X 44.00' LONG 430 SS VERTICAL.
		BACKSPASH - INSIDE CORNER 80.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.
		BACKSPASH - OUTSIDE CORNER 87.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.
		BACKSPASH - OUTSIDE CORNER 43.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.
		BACKSPASH - OUTSIDE CORNER 54.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.
BACKSPASH - OUTSIDE CORNER 80.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.		
BACKSPASH - OUTSIDE CORNER 80.00' HIGH X 2.00' LEG LENGTH 430 SS VERTICAL.		
SENSOR-CV.		

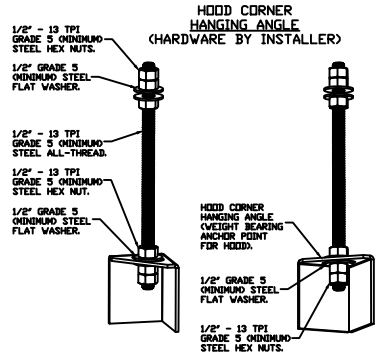
PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	HDI	Front	171'	14'	6'	MUA	10"	28"		693	0.188'
						MUA	10"	28"		693	0.188'
						MUA	10"	28"		693	0.188'

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED
ETL LISTED FILE# 3054804-001

HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

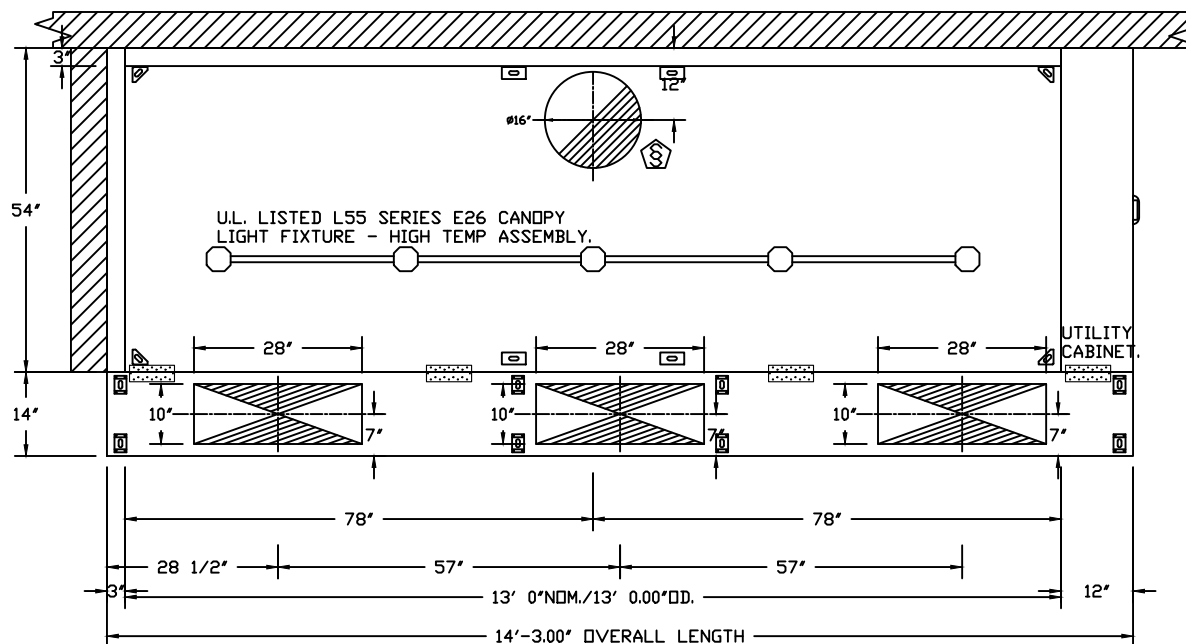


JOB Wills Sports Bar	
LOCATION Cincinnati, OH, 45212	
DATE 7/28/2021	JOB # 4519106
DWG # 1	DRAWN BY jcirilli
REV.	SCALE 3/8" = 1'-0"

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

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PLAN VIEW - HOOD #1 (HD1)
13' 0.00" LONG 5424ND-2-PSP-F
NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12' AND LONGER.

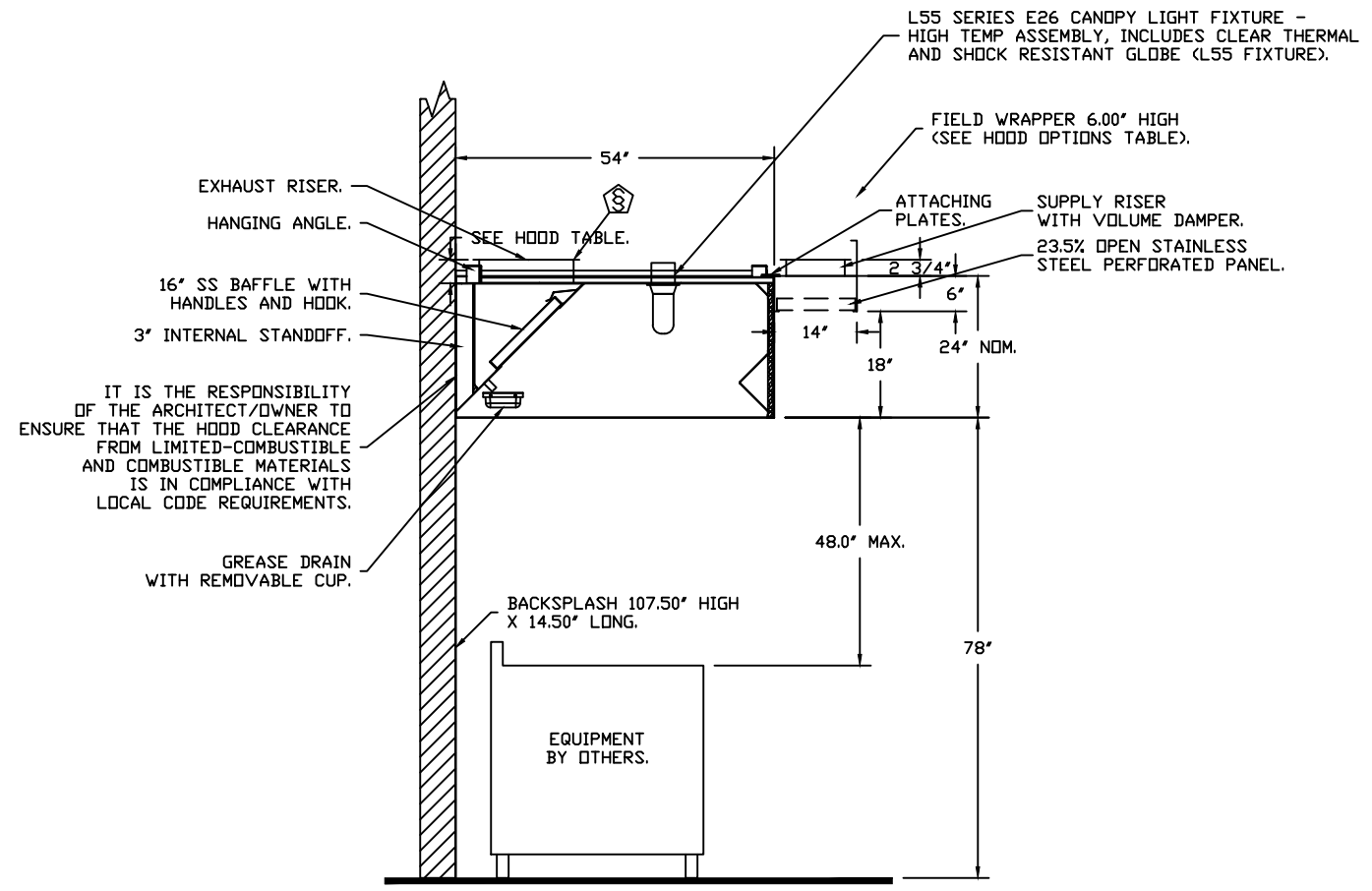


JOB Wills Sports Bar	
LOCATION Cincinnati, OH, 45212	
DATE 7/28/2021	JOB # 4519106
DWG # 2	DRAWN BY jcirilli
REV.	SCALE 3/8" = 1'-0"

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**SECTION VIEW - MODEL 5424ND-2-PSP-F
HOOD - #1 (HD1)**

  			JOB Wills Sports Bar	
			LOCATION Cincinnati, OH, 45212	
	DATE 7/28/2021	JOB # 4519106		
	DWG # 3	DRAWN BY jcirilli		
	REV.	SCALE 3/8" = 1'-0"		

EXHAUST FAN INFORMATION - JOB#4519106

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	EF1	1	DUI80HFA	CAPTIVEAIRE	2600	1.200	1161	DDP,PREMIUM	2.000	1.0920	3	208	6.1	600 FPM	162	14.5

MUA FAN INFORMATION - JOB#4519106

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MDCP	WEIGHT (LBS)	SDNES
2	HMUA1	1	A1-D.250-15D	15MF-1-MDD	A1-D.250	1000	2000	0.400	2064	DDP,PREMIUM	2.000	1.3830	3	208	6.1	7.7A	15A	474	21

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(%)
2	HMUA1	142839	131412	63°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

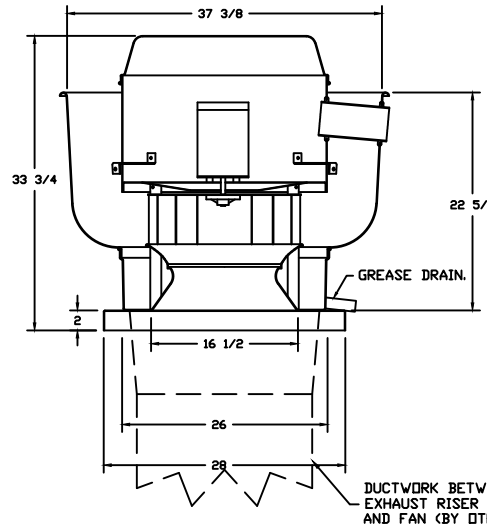
FAN #1 DUI80HFA - EXHAUST FAN (EF1)

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF1	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
		1	2 YEAR PARTS WARRANTY.
2	HMUA1	1	MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING. MEETS AMCA CLASS 1A RATING.
		1	LOW FIRE START.
		1	INLET PRESSURE GAUGE, 0-35".
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" W.C.
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY.
1	2 YEAR PARTS WARRANTY.		

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF1	YES						
2	HMUA1						YES	



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST

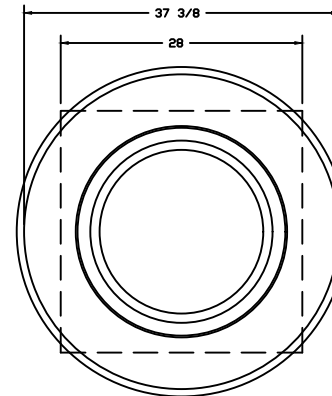
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST

EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

- GREASE BOX.
- EXHAUST FAN HEAT BAFFLE.
- FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
- 2 YEAR PARTS WARRANTY.



TOP VIEW

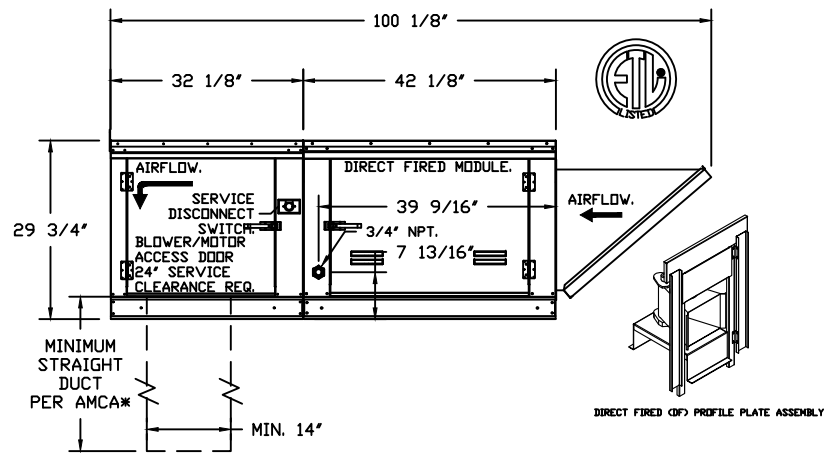
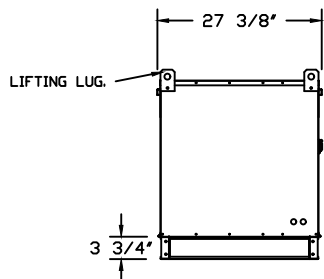
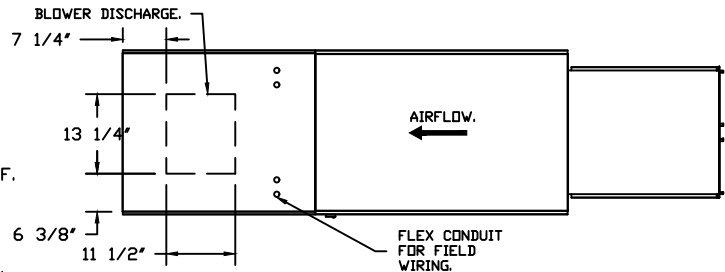


CAPTIVEAIRE

JOB Wills Sports Bar	
LOCATION Cincinnati, OH, 45212	
DATE 7/28/2021	JOB # 4519106
DWG # 4	DRAWN BY jcirilli
REV.	SCALE 3/8' = 1'-0'

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 12°F. TEMP. RISE = 63°F.
 BTUs CALCULATED OFF ACTUAL AIR DENSITY.
 OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 134611.
 INPUT BTUs AT ALTITUDE OF 0.0 FT. = 146316.
 OUTPUT BTUs AT ALTITUDE OF 664 FT. = 131412.
 INPUT BTUs AT ALTITUDE OF 664 FT. = 142839.



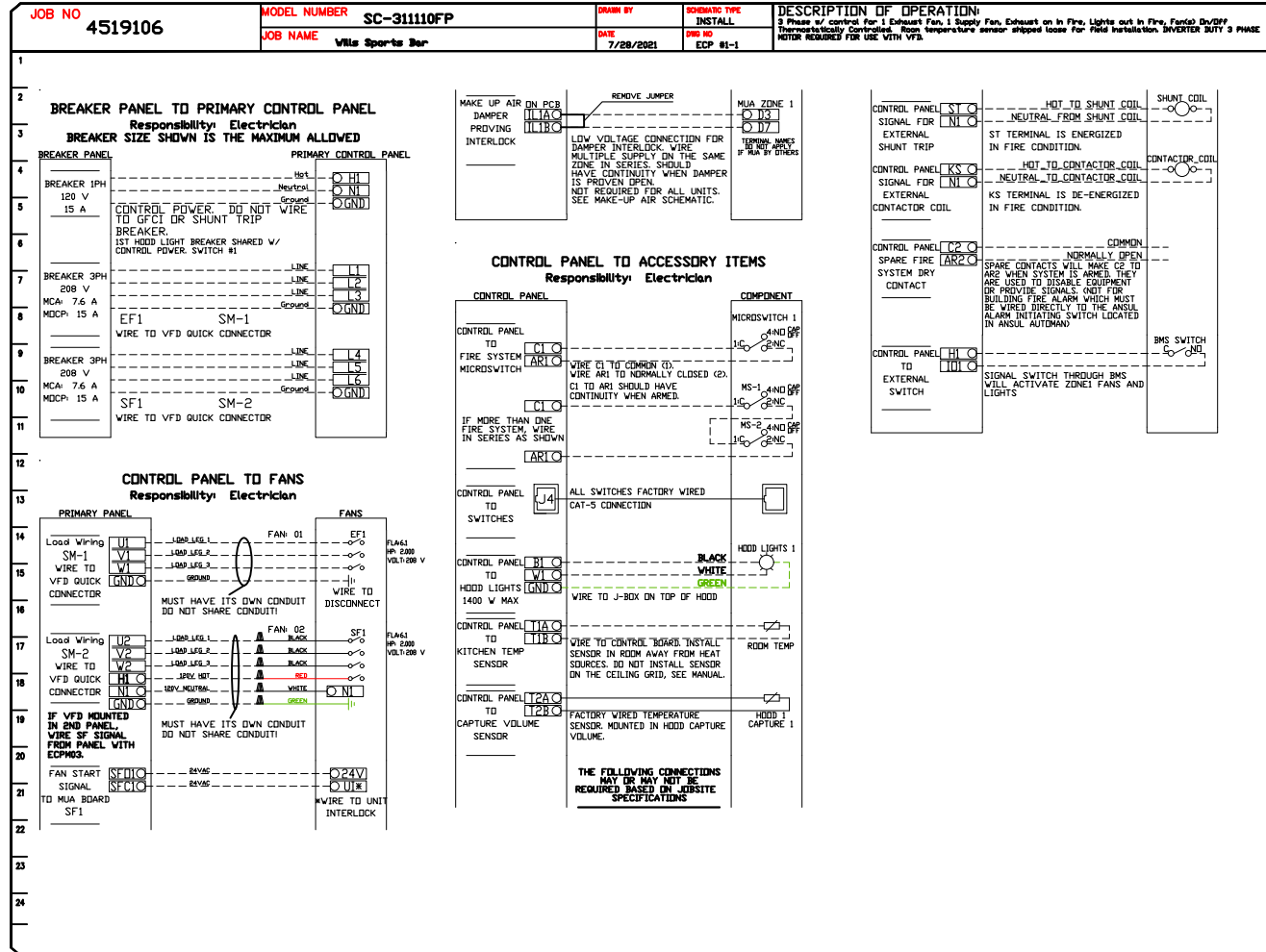
- FAN #2 A1-D.250-15D - HEATER (HMUA1)
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 15' MIXED FLOW DIRECT DRIVE FAN.
 2. INTAKE HOOD WITH EZ FILTERS-LOW CFM.
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
 4. MOTORIZED BACK DRAFT DAMPER 16' X 18' FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4' REAR FLANGE, LOW LEAKAGE, TFB120S ACTUATOR INCLUDED.
 5. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
 6. GAS PRESSURE GAUGE, 0-35", 2.5' DIAMETER, 1/4' THREAD SIZE.
 7. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5' DIAMETER, 1/4' THREAD SIZE.
 8. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.
 9. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION).
 10. 2 YEAR PARTS WARRANTY.

*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14' x 14'.

  		JOB Wills Sports Bar	
		LOCATION Cincinnati, OH, 45212	
DATE 7/28/2021		JOB # 4519106	
DWG # 5		DRAWN BY jcirilli	
REV.		SCALE 3/8' = 1'-0'	

ELECTRICAL PACKAGE - JOB#4519106

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	φ	HP	VOLTS	FLA
1	EP1	SC-311110FP	UTILITY CABINET RIGHT	04 - UTILITY CABINET RIGHT	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL	EF1	EXHAUST	3	2,000	208	6.1
				HOOD # 1			HMU1	SUPPLY	3	2,000	208	6.1



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DATE <i>7/28/2021</i>	JOB # <i>4519106</i>
DWG # <i>6</i>	DRAWN BY <i>jcirilli</i>
REV.	SCALE <i>3/8" = 1'-0"</i>