

**HOOD INFORMATION - JOB#4711225**

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	HD 1	5424 ND-2-PSP-F	CAPTIVEAIRE	6' 0"	600 DEG	I	HEAVY	175	1050			4'	10'	1050	1925	-0.377'	1000	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.

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 INFORMATION**

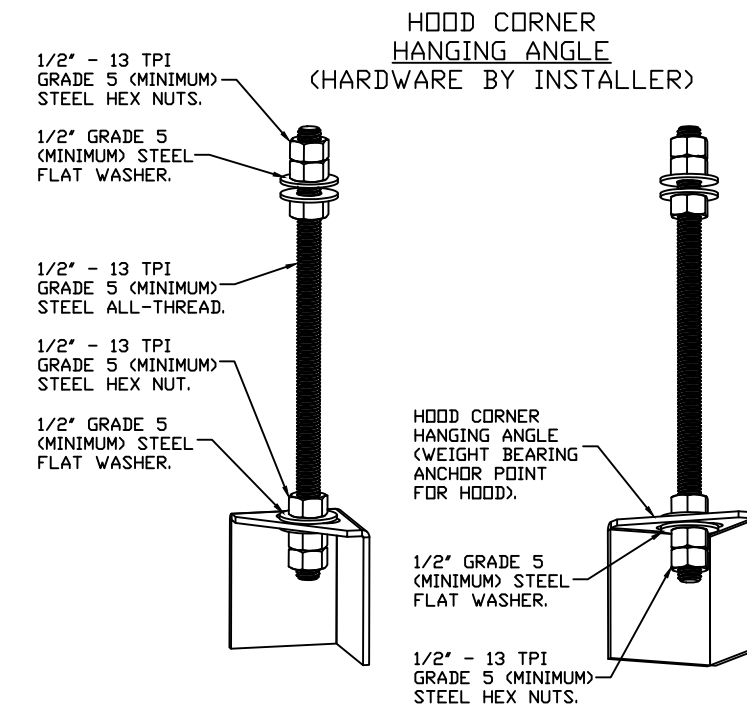
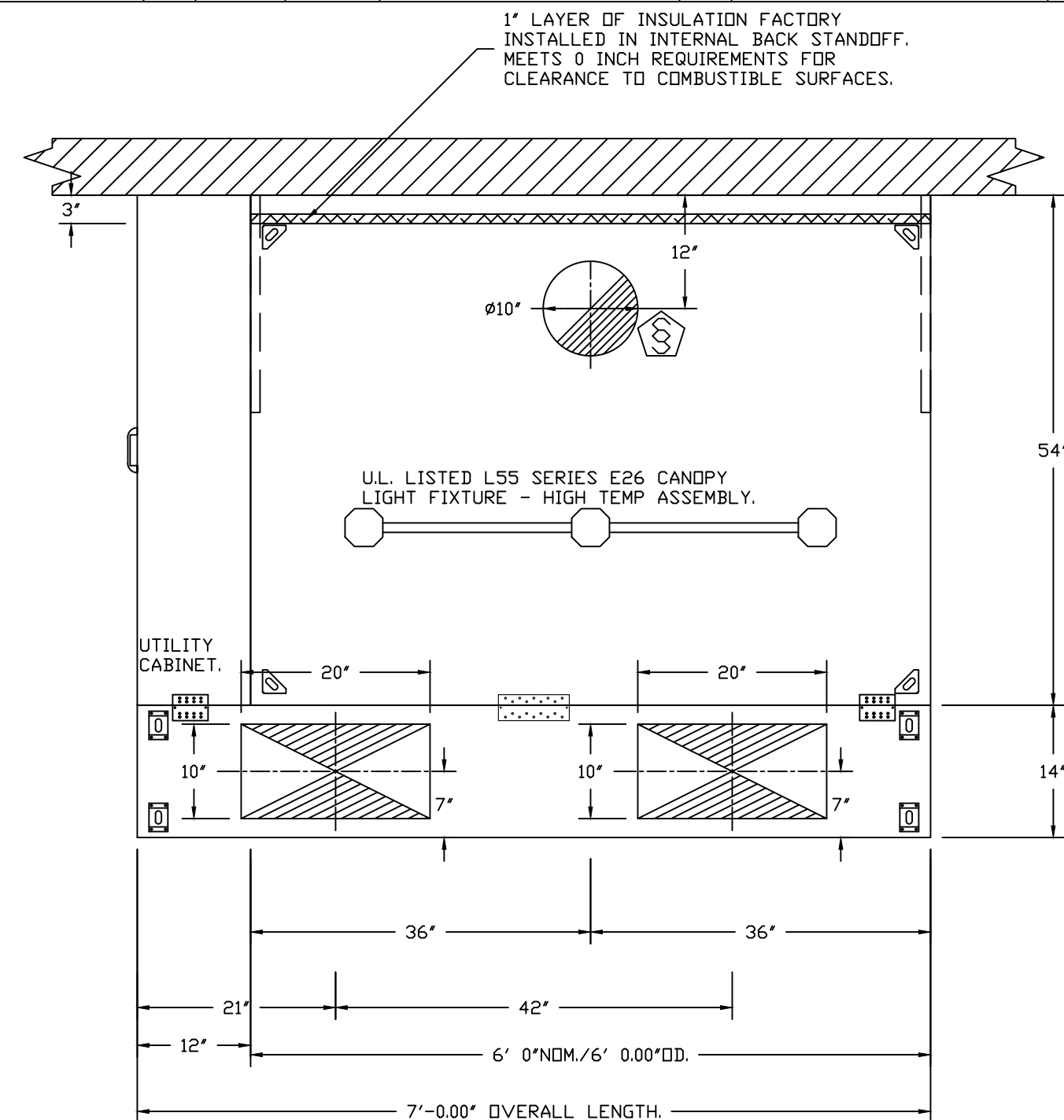
HOOD NO	TAG	TYPE	FILTER(S)			LIGHT(S)			UTILITY CABINET(S)			ELECTRICAL	SWITCHES	FIRE SYSTEM	HOOD HANGING WEIGHT
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE				
1	HD 1	SS BAFFLE WITH HANDLES	4	16"	16"	30%	3	L55 SERIES E26	NO	LEFT	12"x54"x24"	SC-111110FP	1 LIGHT 1 FAN	NO	449 LBS

**HOOD OPTIONS**

HOOD NO	TAG	OPTION
1	HD 1	FIELD WRAPPER 7.00' HIGH FRONT, LEFT, RIGHT. BACKSPLASH 80.00' HIGH X 84.00' LONG 430 SS VERTICAL. BACKSPLASH 120.00' HIGH X 18.00' LONG 430 SS VERTICAL. BACKSPLASH 120.00' HIGH X 18.00' LONG 430 SS VERTICAL. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. INSULATION FOR BACK OF HOOD. SENSOR-CV.

**PERFORATED SUPPLY PLENUM(S)**

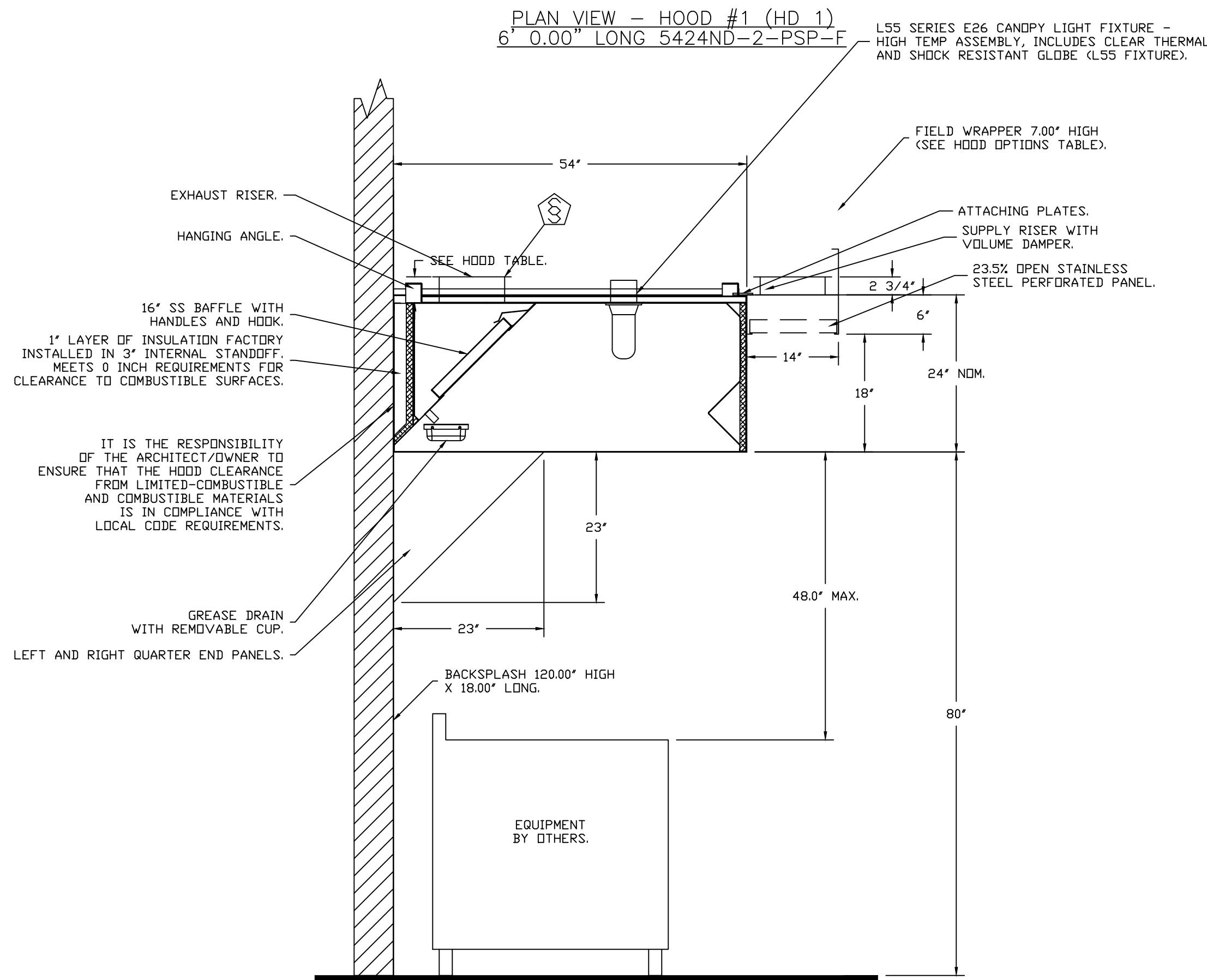
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	HD 1	Front	84'	14'	6'	MUA	10'	20'	500	0.166'	
						MUA	10'	20'	500	0.166'	



**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.

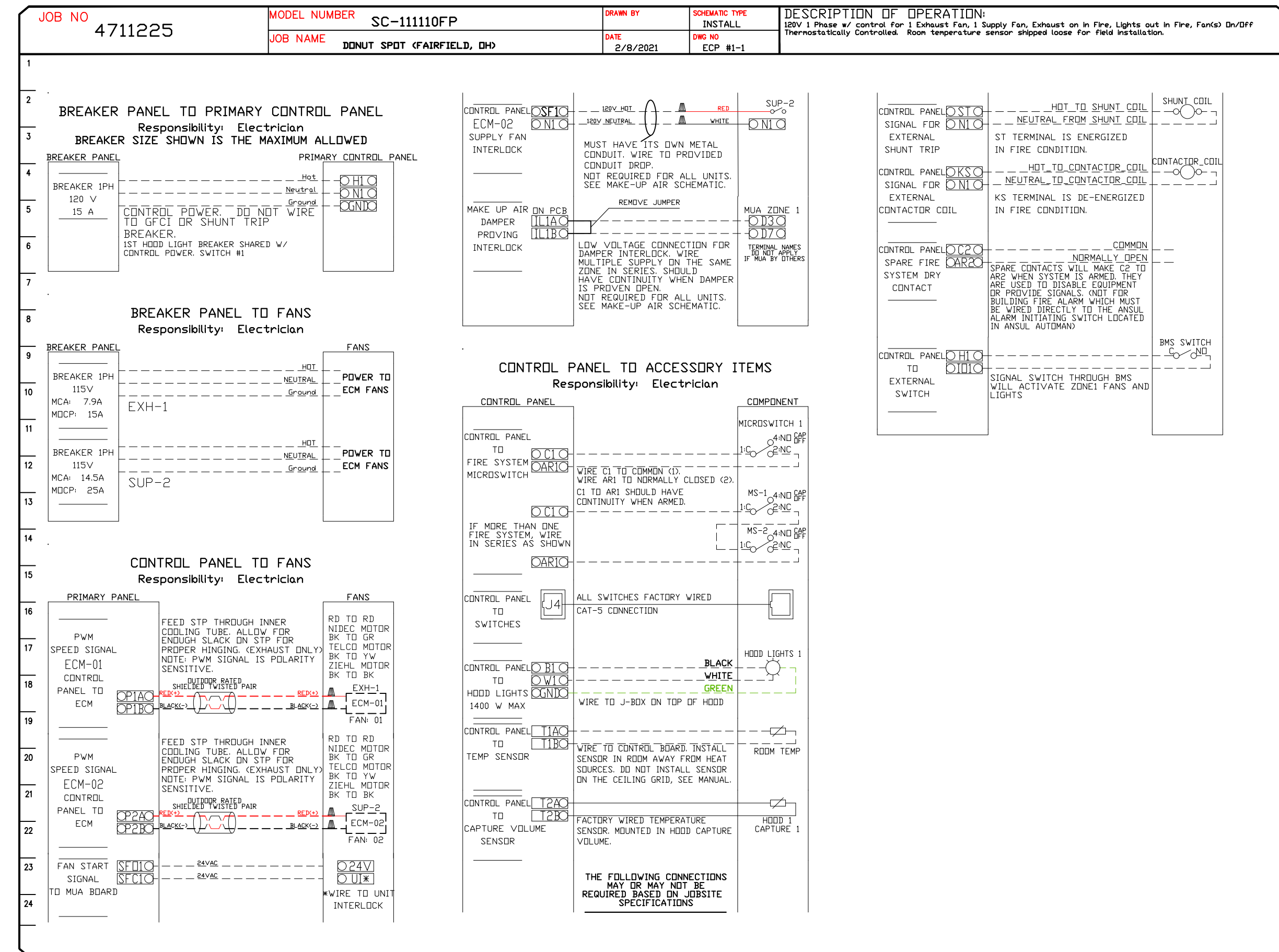
**PLAN VIEW - HOOD #1 (HD 1)**  
 6' 0.00" LONG 5424ND-2-PSP-F



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

**ELECTRICAL PACKAGE - JOB#4711225**

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED							
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT	FLA			
1	EPI	SC-111110FP	UTILITY CABINET LEFT	US - UTILITY CABINET LEFT HOOD # 1	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL								



**REVISIONS**

DESCRIPTION	DATE

**CAPTIVE**

1329 East Kemper Rd., Ste. 4210, Cincinnati, OH, 45246 PHONE: (513) 860-5555 EMAIL: reg12@captivaire.com

www.captivaire.com

**Air Solutions**

DONUT SPOT (FAIRFIELD, OH)  
 FAIRFIELD, OH, 45018

**DATE:** 2/8/2021

**DWG.#:** 4711225

**DRAWN BY:** jcirilli

**SCALE:** 3/4" = 1'-0"

**MASTER DRAWING**

**SHEET NO.**  
1

**EXHAUST FAN INFORMATION - JOB#4711225**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	KEF1	1	DU50HFA	CAPTIVEAIRE	1050	0.900	1485	TEAD-ECM	0.500	0.3310	1	115	6.3	399 FPM	78	15.6

**MUA FAN INFORMATION - JOB#4711225**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	Ø	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SONES
2	KMUA	1	D76	G7D	D.6	600	1000	0.400	1754	TEAD-ECM	1.000	0.5290	1	115	11.6	14.5A	25A	321	22

**GAS FIRED MAKE-UP AIR UNIT(S)**

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2	KMUA	71420	65706	63°F	7 IN. W.C. - 14 IN. W.C.	NATURAL

**FAN OPTIONS**

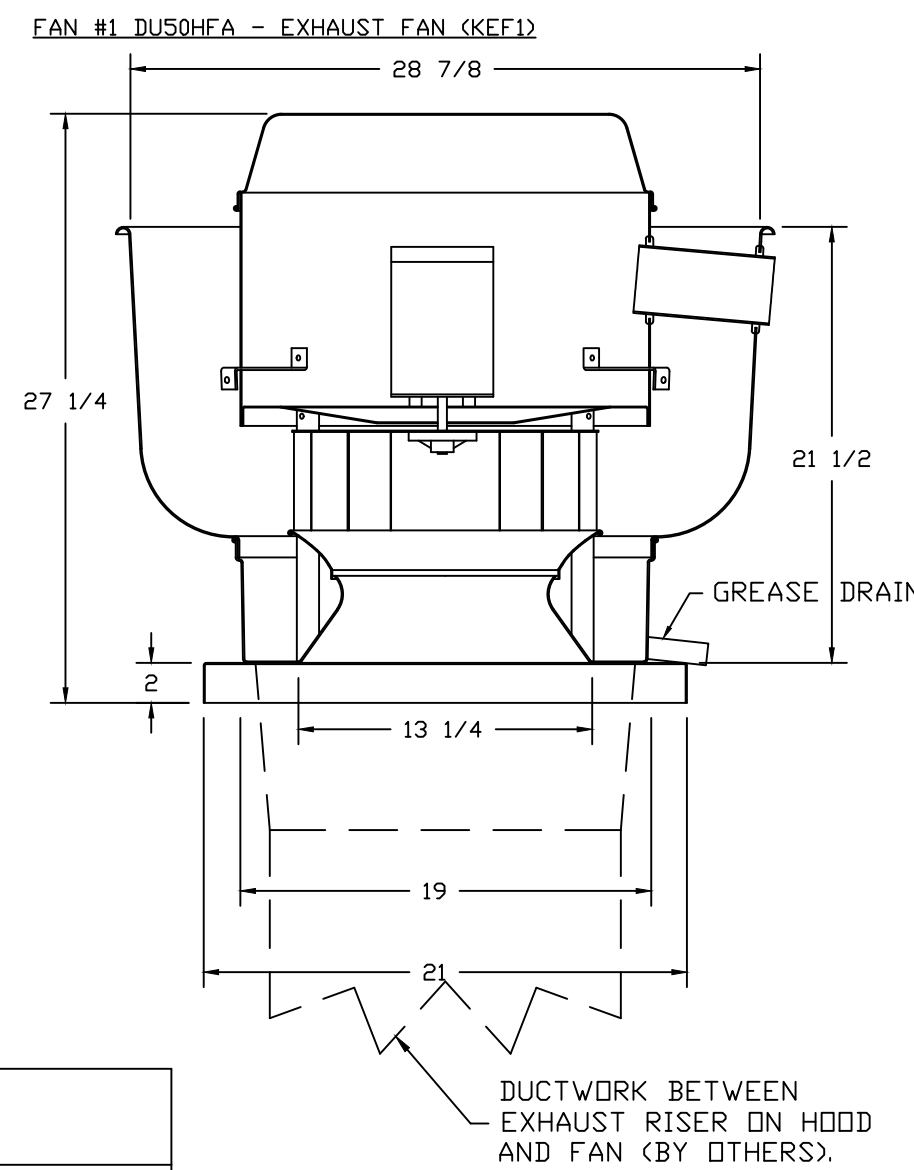
FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF1	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
2	KMUA	1	INLET PRESSURE GAUGE, 0-35".
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	MOTORIZED INTAKE DAMPER (D76).
1	ECM WIRING PACKAGE-SUPPLY - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CW ROTATION.		

**FAN ACCESSORIES**

FAN UNIT NO	TAG	EXHAUST				SUPPLY		
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	KEF1	YES						
2	KMUA						YES	

**CURB ASSEMBLIES**

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF1	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H 4.000-12.000 PITCH VENTED HINGED.
2	# 2	KMUA	50 LBS	CURB	19.500"W X 52.000"L X 16.000"H 4.000-12.000 PITCH ALONG WIDTH, RIGHT INSULATED.



**FEATURES:**

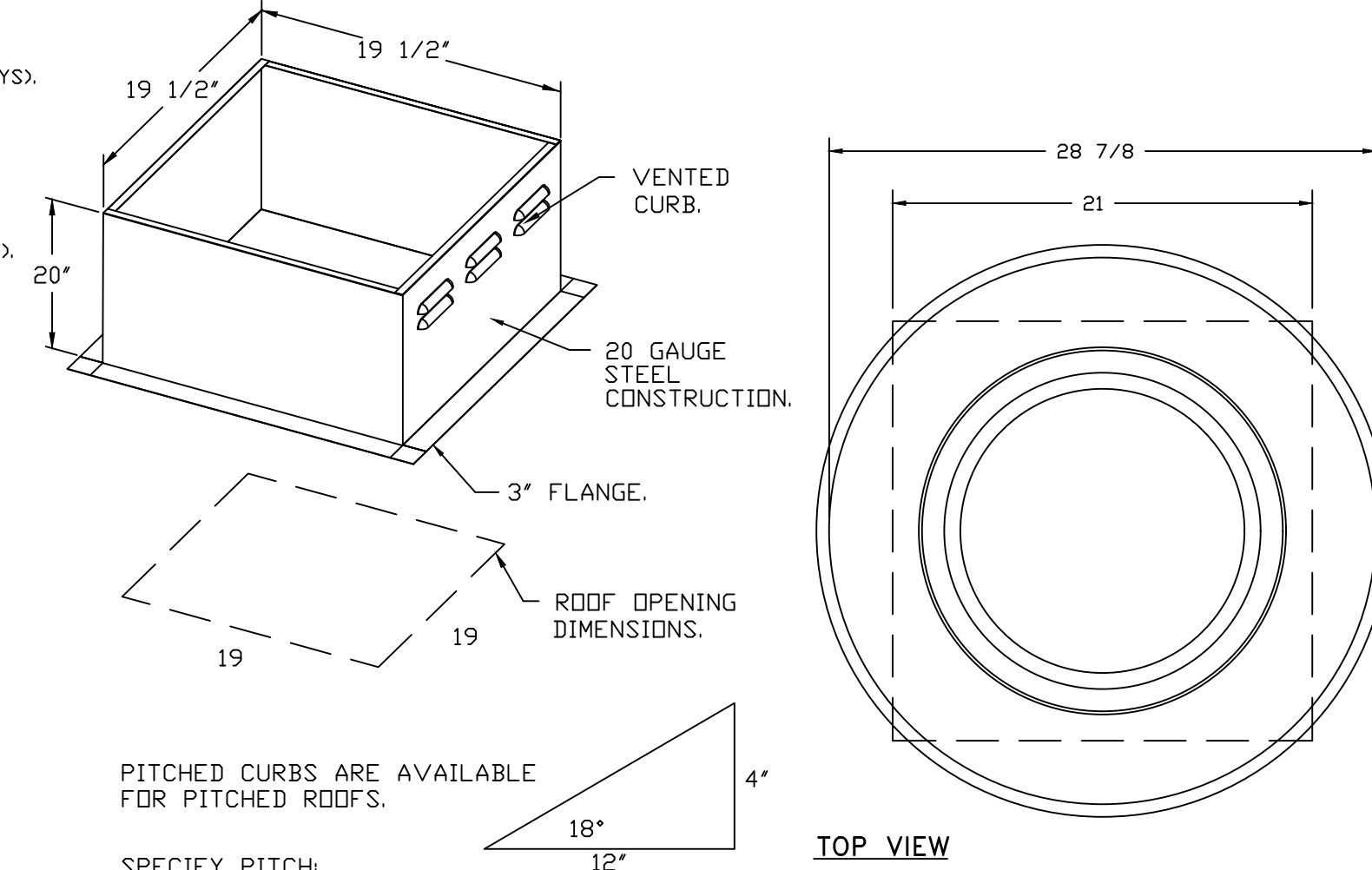
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT 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.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.



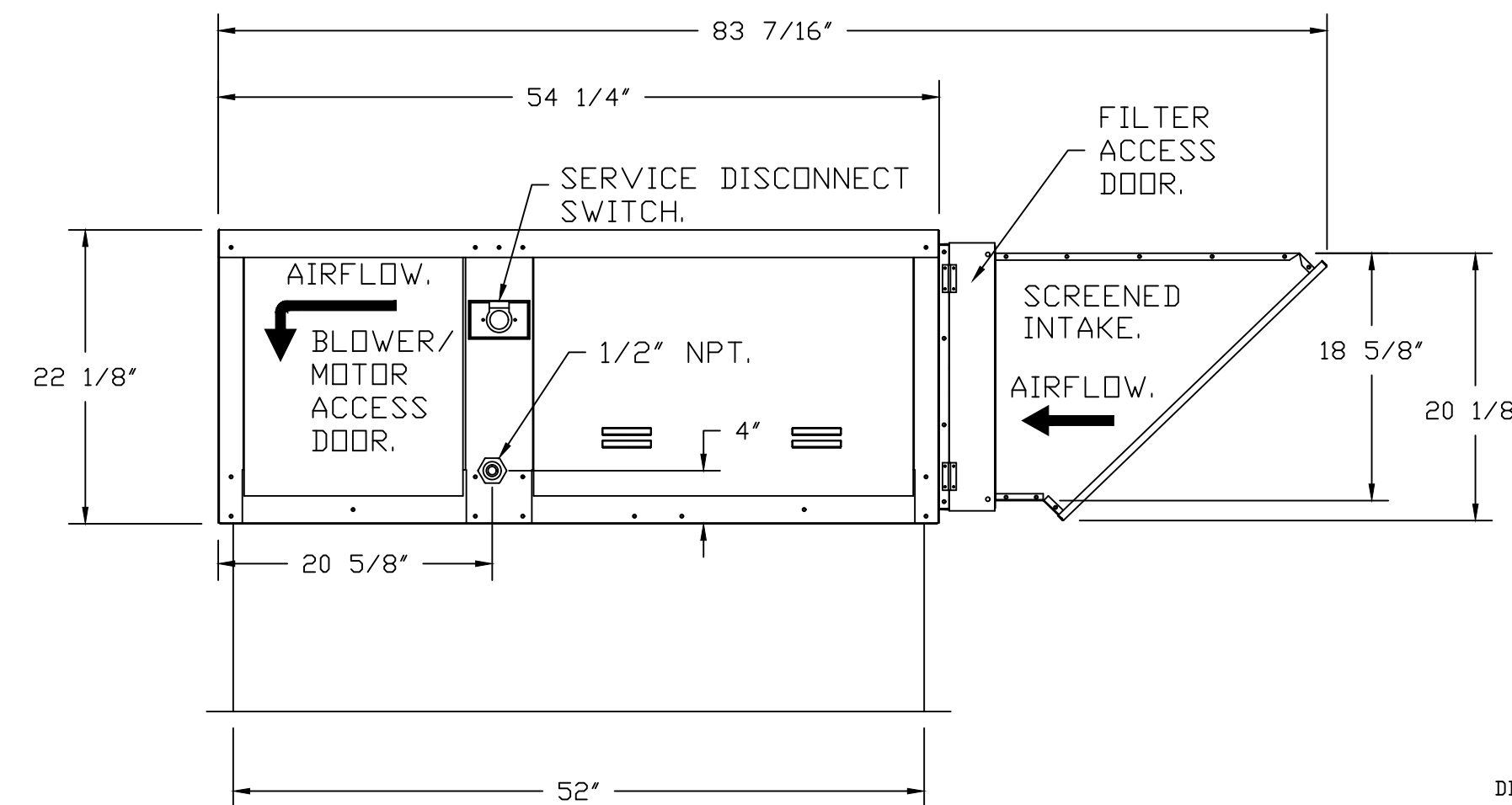
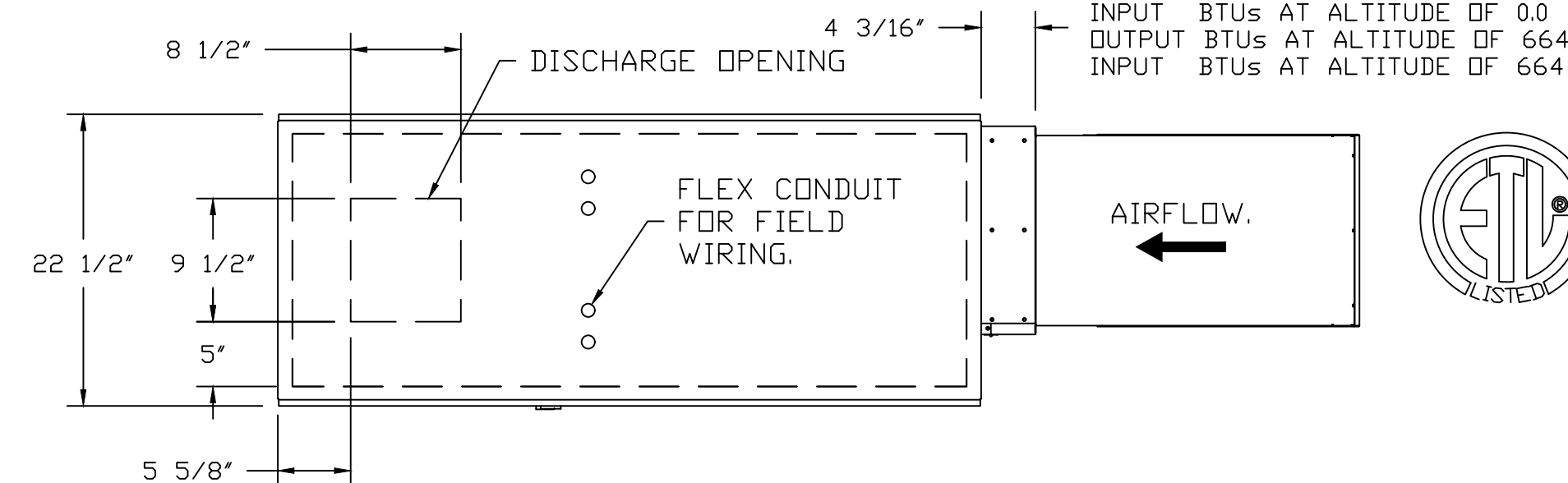
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.

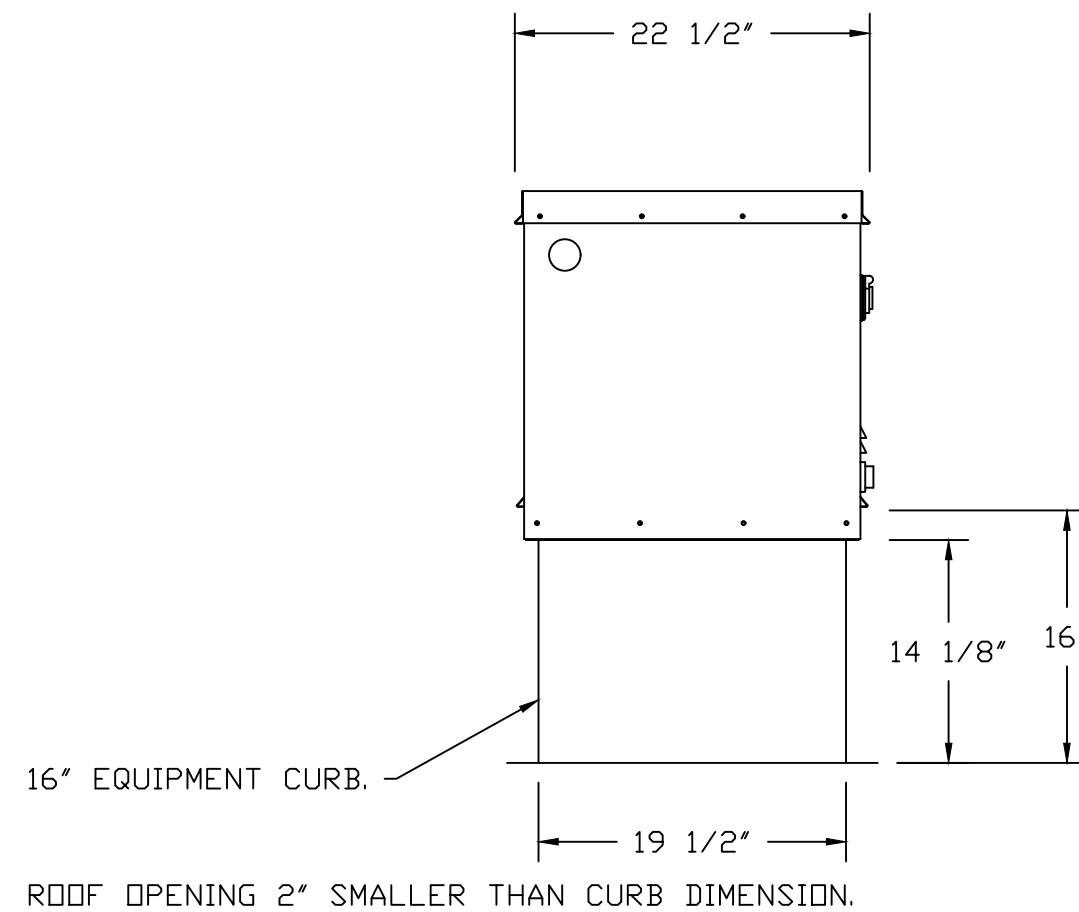
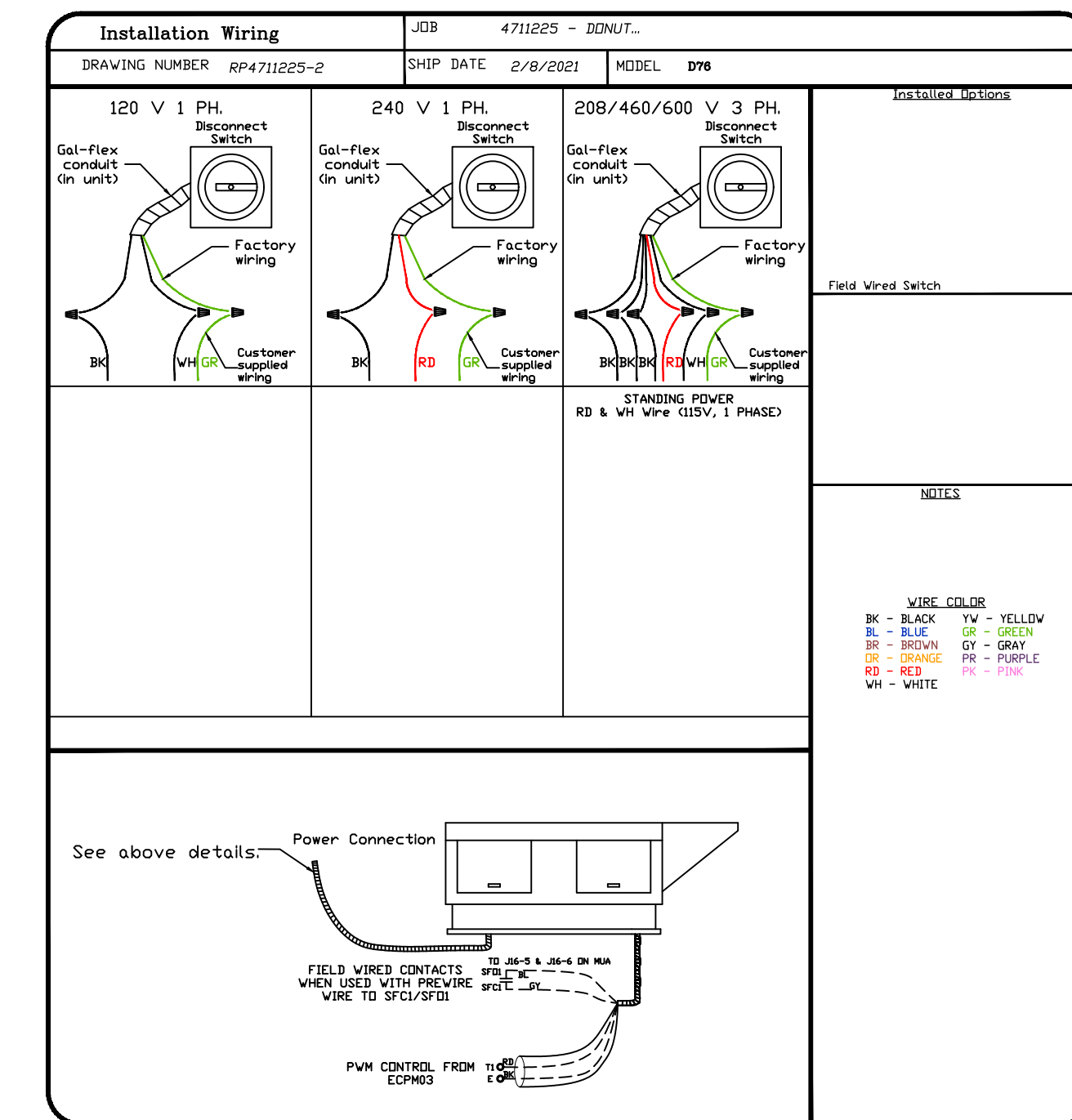
**SUPPLY SIDE HEATER INFORMATION:**

WINTER TEMPERATURE = 12°F. TEMP. RISE = 63°F.  
BTUs CALCULATED OFF ACTUAL AIR DENSITY.  
OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 67305.  
INPUT BTUs AT ALTITUDE OF 0.0 FT. = 73158.  
OUTPUT BTUs AT ALTITUDE OF 664 FT. = 65706.  
INPUT BTUs AT ALTITUDE OF 664 FT. = 71420.

- FAN #2 D76D - HEATER (KMUA)
- LOW CFM DIRECT FIRED HEATER. DIRECT DRIVE.
  - INTAKE HOOD WITH EZ FILTERS.
  - DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
  - GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
  - GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE.
  - CASLINK BUILDING MONITORING SYSTEM COMMUNICATIONS MODULE. REQUIRES INTERNET & FIELD WIRED ETHERNET CONNECTION OR 3G CELLULAR SERVICE. INCLUDES REV 3 COMM MODULE, RJ45 TO MODBUS CONVERTER, 3 FT CAT5 CABLE, AND 1 FT OF SHIELDED TWISTED PAIR.
  - MOTORIZED BACK DRAFT DAMPER 13" X 17" FOR D76 COMPACT DIRECT FIRED HEATERS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, TF120S ACTUATOR INCLUDED.
  - ECM WIRING PACKAGE FOR SUPPLY MOTORS WITH PWM SIGNAL FROM ECPM03 PREWIRE.



DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY



**REVISIONS**

DESCRIPTION	DATE

**CAPTIVEAIRE**

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