

HOOD INFORMATION – JOB#4823876

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				MUA CFM	AC CFM	HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT	DIA				CFM	VEL	SP	END TO END	ROW
1	HDIL	5424 ND-2-ACSP-F	CAPTIVEAIRE	9' 4"	600 DEG	I	HEAVY	220	2053			4'	16'	2053	1470	-0.437'	1725	600	430 SS WHERE EXPOSED	LEFT	ALONE
2	HDIR	5424 ND-2-ACSP-F	CAPTIVEAIRE	8' 8"	450 DEG	I	MEDIUM	175	1517			4'	14'	1517	1419	-0.330'	1350	600	430 SS WHERE EXPOSED	RIGHT	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

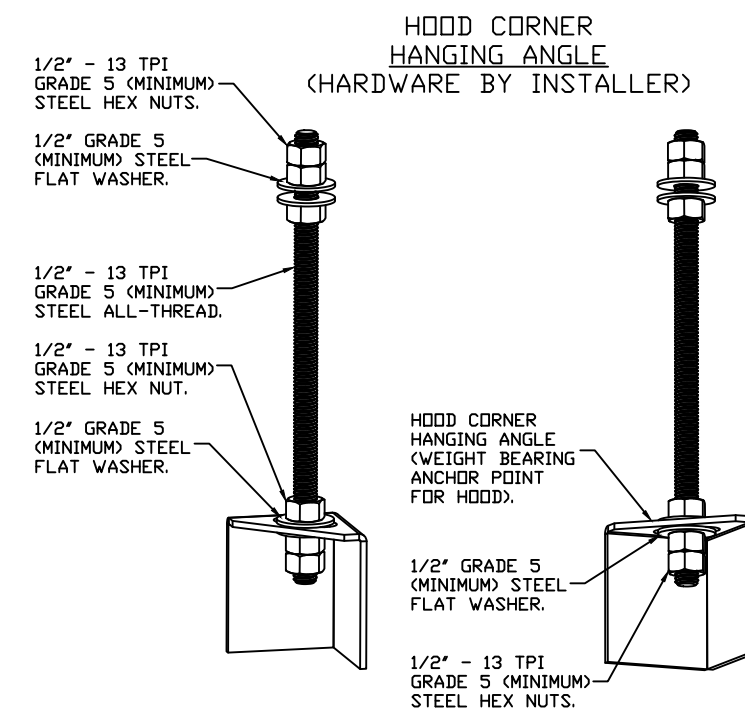
HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT	
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	SIZE			ELECTRICAL MODEL #
1	HDIL	SS BAFFLE WITH HANDLES	7	16"	16"	30%	4	L55 SERIES E26	NO						YES	556 LBS
2	HDIR	SS BAFFLE WITH HANDLES	6	16"	16"	30%	4	L55 SERIES E26	NO						YES	500 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	HDIL	BACKSPLASH 80.00" HIGH X 216.00" LONG 430 SS VERTICAL.
		BACKSPLASH 82.00" HIGH X 4.00" LONG 430 SS VERTICAL.
		BACKSPLASH 82.00" HIGH X 4.00" LONG 430 SS VERTICAL.
		LEFT SIDESPLASH 80.00" HIGH X 54.00" LONG 430 SS VERTICAL.
		BACKSPLASH – INSIDE CORNER 80.00" HIGH X 2.00" LEG LENGTH 430 SS VERTICAL.
		BACKSPLASH – OUTSIDE CORNER 80.00" HIGH X 2.00" LEG LENGTH 430 SS VERTICAL.
		BACKSPLASH – OUTSIDE CORNER 82.00" HIGH X 2.00" LEG LENGTH 430 SS VERTICAL.
		BACKSPLASH – OUTSIDE CORNER 82.00" HIGH X 2.00" LEG LENGTH 430 SS VERTICAL.
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		BACKSPLASH – OUTSIDE CORNER 82.00" HIGH X 2.00" LEG LENGTH 430 SS VERTICAL.
2	HDIR	SENSOR-CV.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	PDS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	HDIL	Front	112'	26'	6'	MUA	12'	28'		862	0.237'
						MUA	12'	28'		862	0.237'
						AC	8'	16'		300	0.084'
2	HDIR	Front	104'	26'	6'	MUA	12'	24'		675	0.202'
						MUA	12'	24'		675	0.202'
						AC	8'	16'		300	0.099'

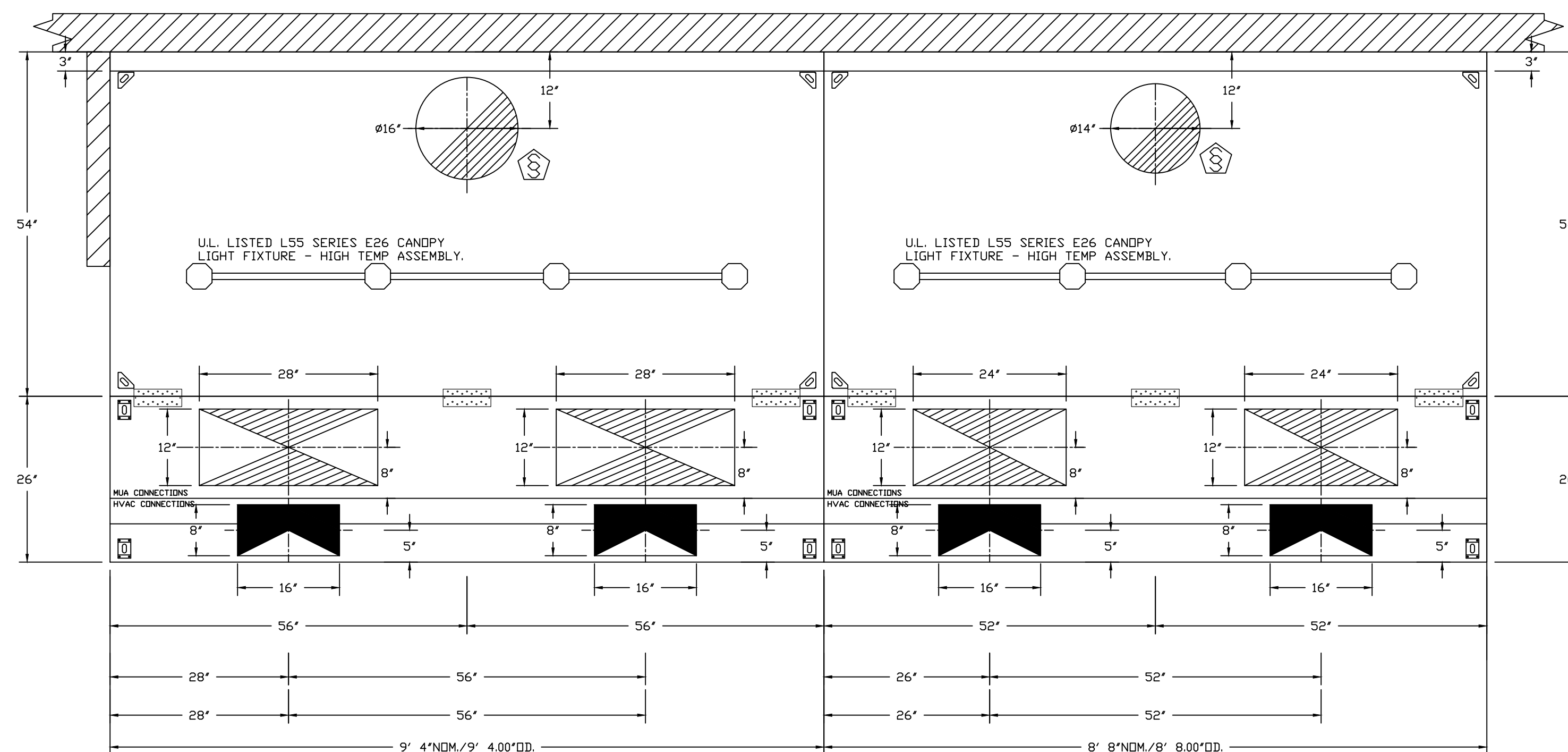


ASSEMBLY INSTRUCTIONS

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.

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

Hoods, Fans, fire system, Controls, Exhaust & Supply Duct to be supplied by Owner direct. To include Installation of hood system.

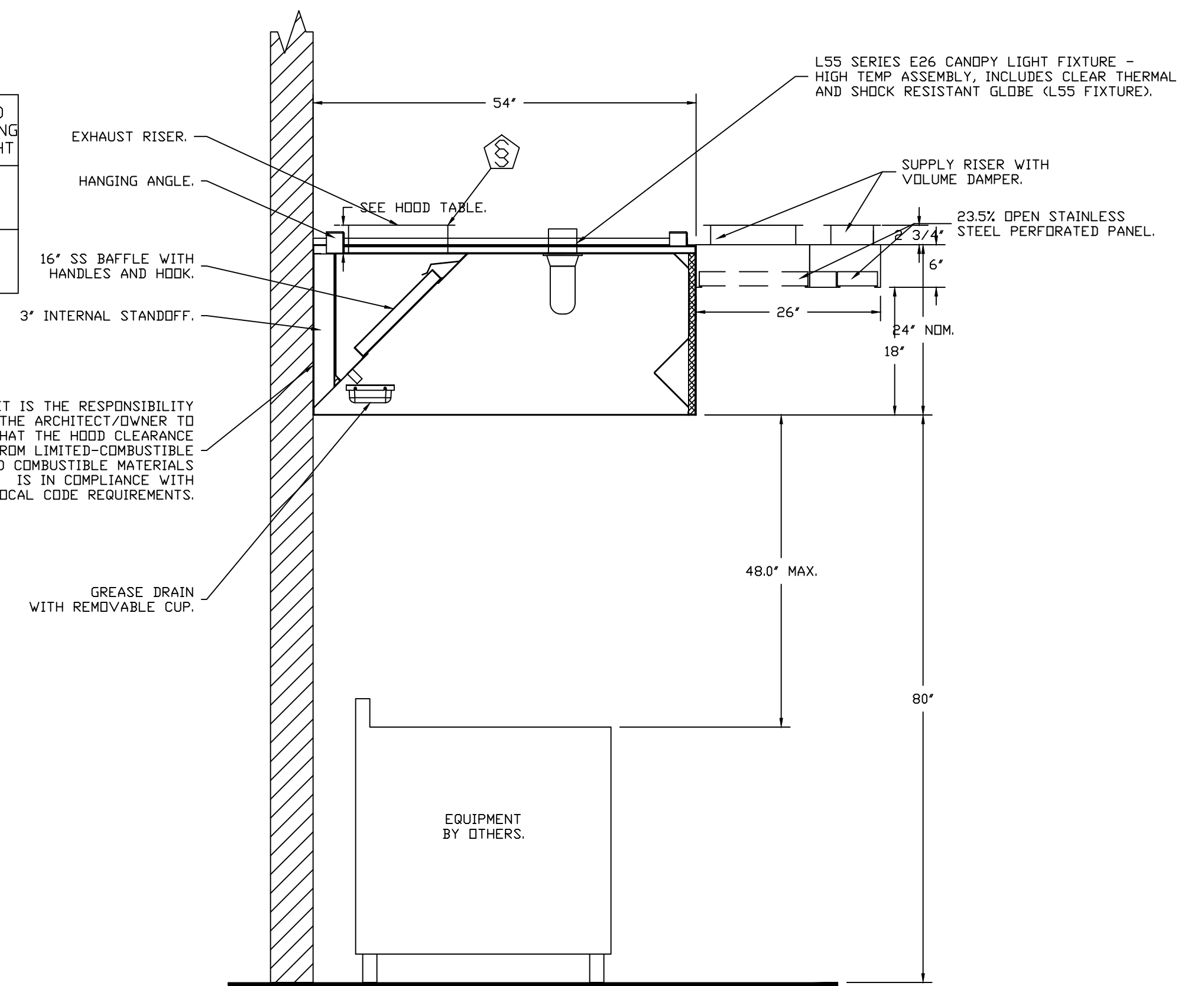


PLAN VIEW – HOOD #1 (HD1L)
 9' 4.00" LONG 5424ND-2-ACSP-F

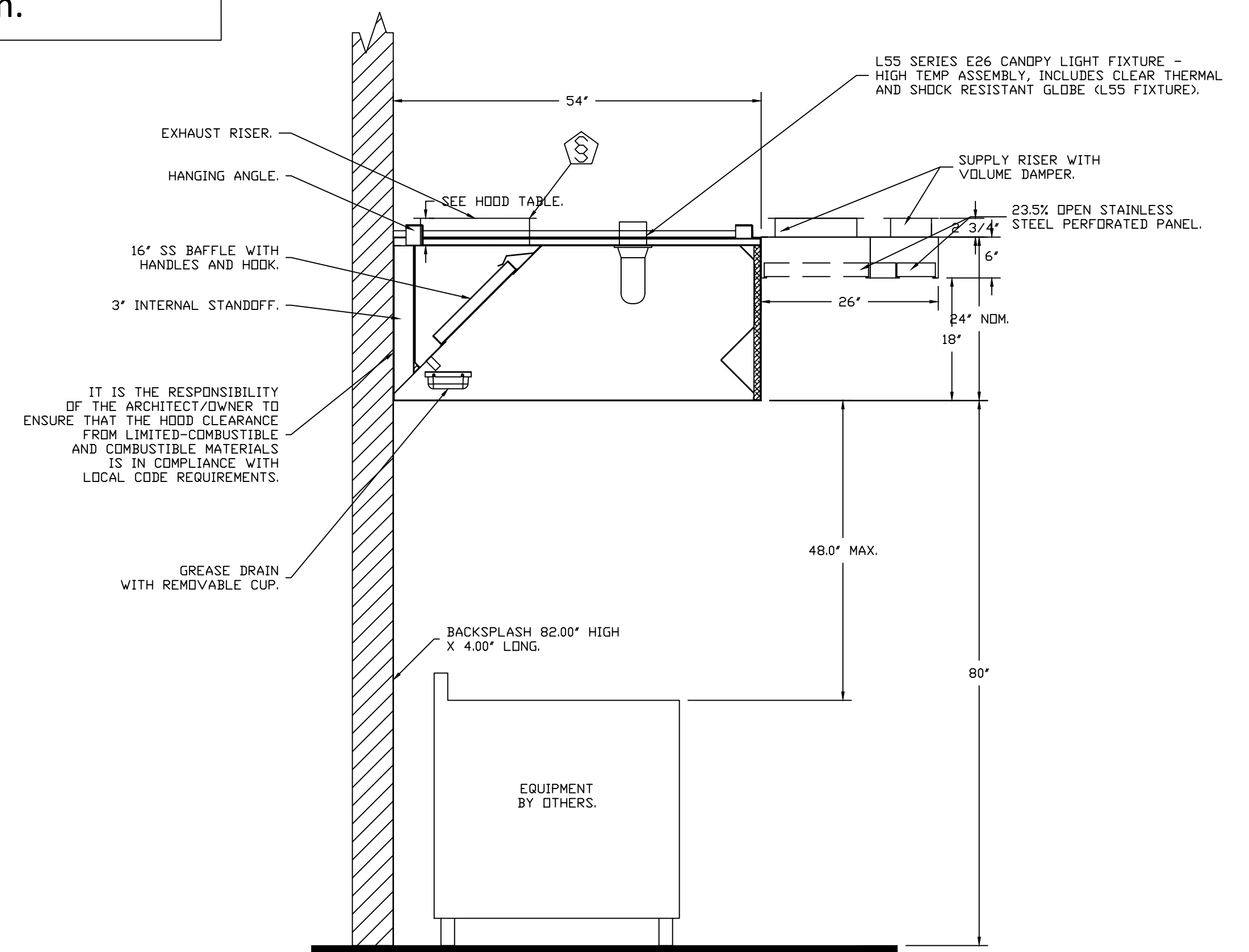
PLAN VIEW – HOOD #2 (HD1R)
 8' 8.00" LONG 5424ND-2-ACSP-F

ACPSH SHIPS LOOSE FOR FIELD INSTALLATION

ACPSH SHIPS LOOSE FOR FIELD INSTALLATION



SECTION VIEW – MODEL 5424ND-2-ACSP-F
 HOOD – #2 (HD1R)



SECTION VIEW – MODEL 5424ND-2-ACSP-F
 HOOD – #1 (HD1L)

REVISIONS	
DESCRIPTION	DATE

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

Genki 2 (w Chester, OH)
 WEST CHESTER, OH, 45069

DATE: 5/17/2021
 DWG.#: 4823876
 DRAWN BY: jcirilli
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING

SHEET NO. 1

EXHAUST FAN INFORMATION - JOB#4823876

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	KEF1	1	DU240HFA	CAPTIVEAIRE	3570	1.300	825	DDP, PREMIUM	3.000	1.5480	3	208	10.2	811 FPM	304	15.6

MUA FAN INFORMATION - JOB#4823876

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	KSF1	1	A2-D250-20D	20MF-2-MDD	A2-D.250	2000	3312	0.421	1305	DDP, PREMIUM	2.000	1.2750	3	208	6.1	7.7A	15A	625	11.7

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	KSF1	209138	192407	55°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF1	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
2	KSF1	1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
		1	2 YEAR PARTS WARRANTY.
		1	LDW FIRE START.
		1	MOTORIZED BACKDRAFT DISCHARGE DAMPER FOR SIZE 2 HOUSING- SHIPPED LOOSE TO BE FIELD INSTALLED.
		1	INLET PRESSURE GAUGE, 0-35".
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC.
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY.
		1	SIZE 2 DIRECT FIRED HEATER LOW CFM PROFILE PACKAGE. USED ON HEATERS UNDER 2500 CFM.
		1	2 YEAR PARTS WARRANTY.

FAN ACCESSORIES

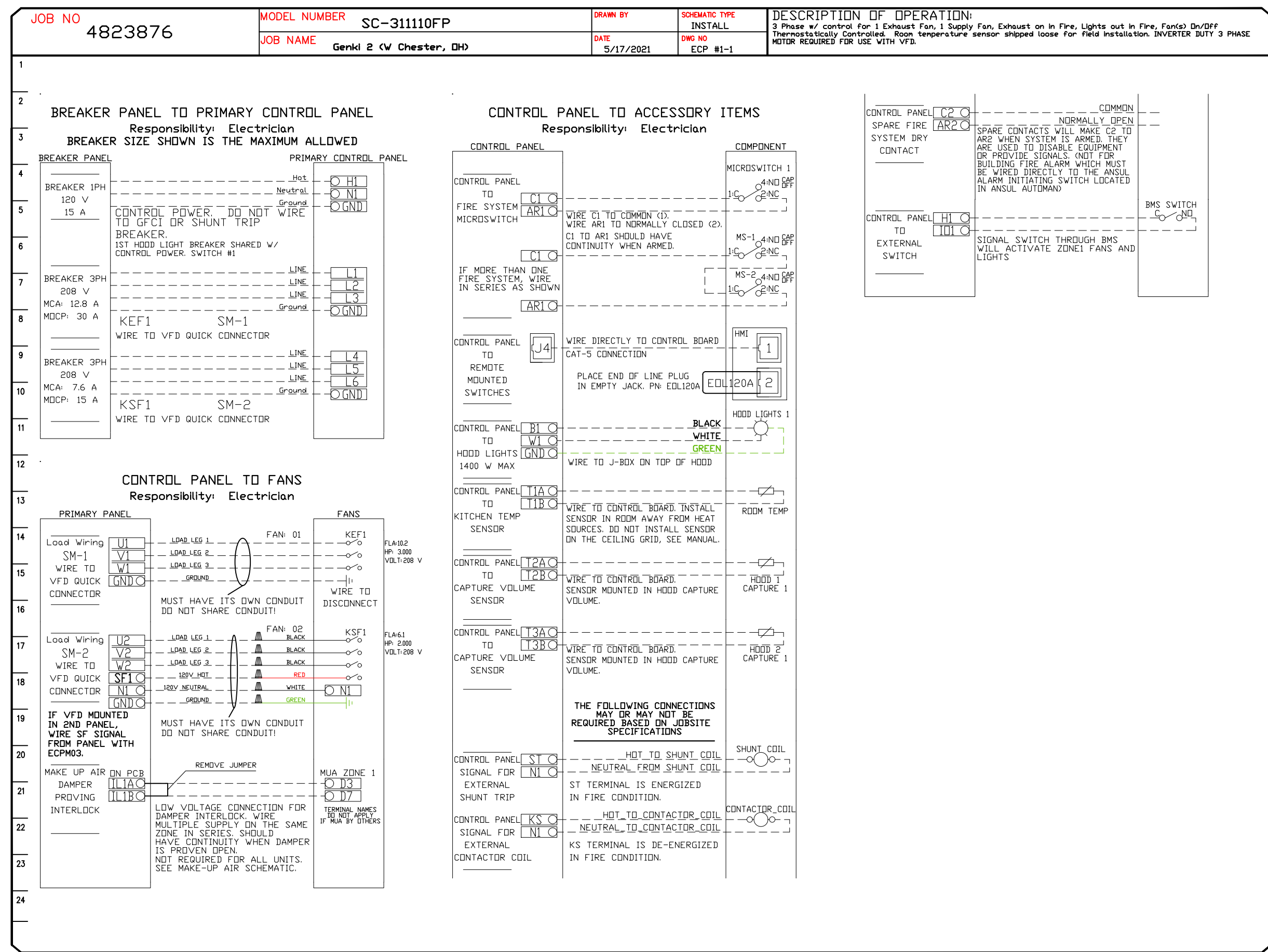
FAN UNIT NO	TAG	EXHAUST				SUPPLY		
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	KEF1	YES						
2	KSF1						YES	

CURB ASSEMBLIES

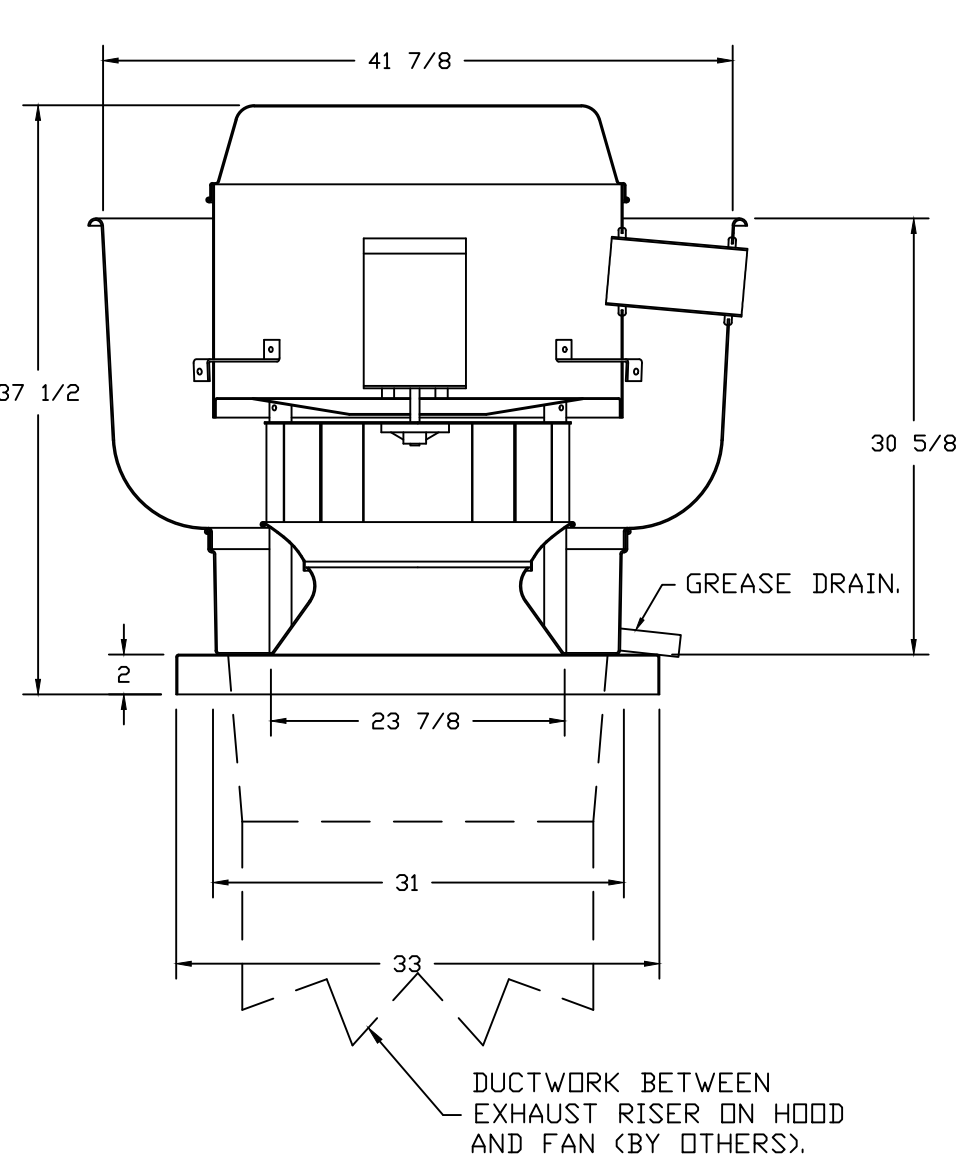
NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF1	48 LBS	CURB	31.500"W X 31.500"L X 24.000"H VENTED HINGED.
2	# 2	KSF1	76 LBS	CURB	31.000"W X 79.000"L X 16.000"H INSULATED.

ELECTRICAL PACKAGE - JOB#4823876

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED											
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT	FLA							
1	KEP1	SC-31110FP	WALL MOUNT IN SS BDX	01 - FACE MOUNT LEFT SIDE OF HOOD HOOD # 1	1 LIGHT	SMART CONTROLS THERMOSTATIC CONTROL	KEF1	EXHAUST	3	3.000	208	10.2	KSF1	SUPPLY	3	2.000	208	6.1



FAN #1 DU240HFA - EXHAUST FAN (KEF1)



TOP VIEW

FEATURES:

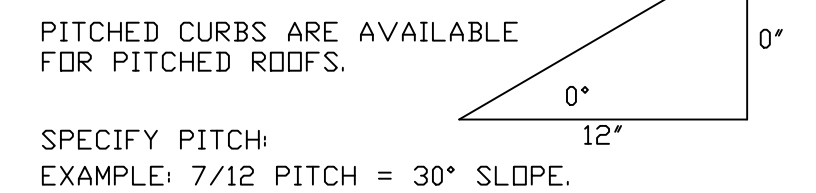
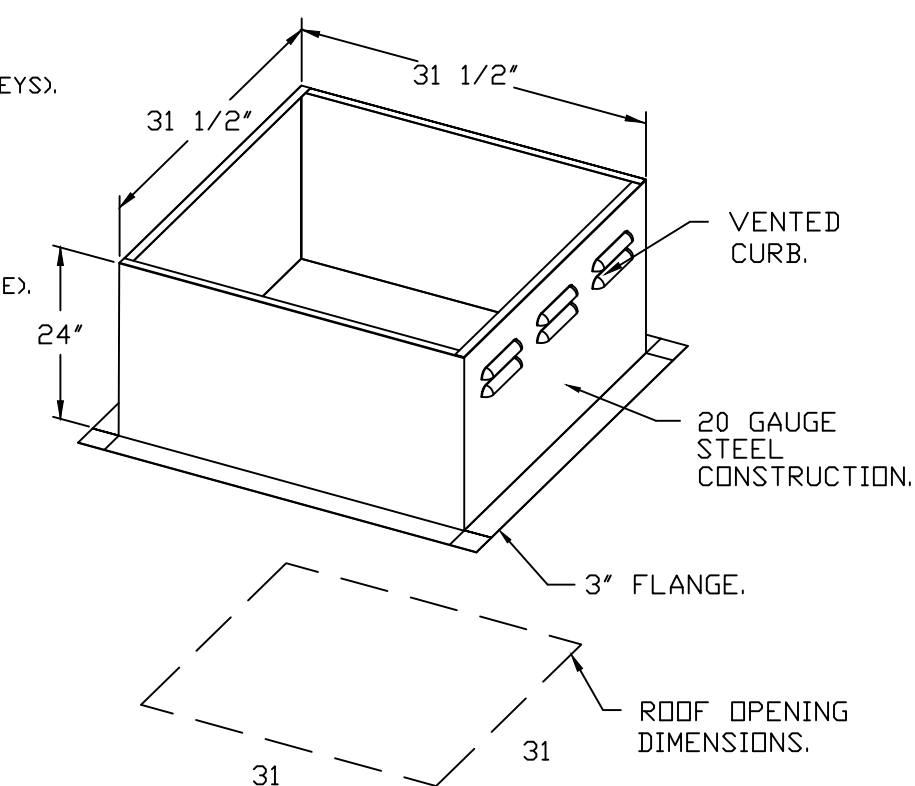
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT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

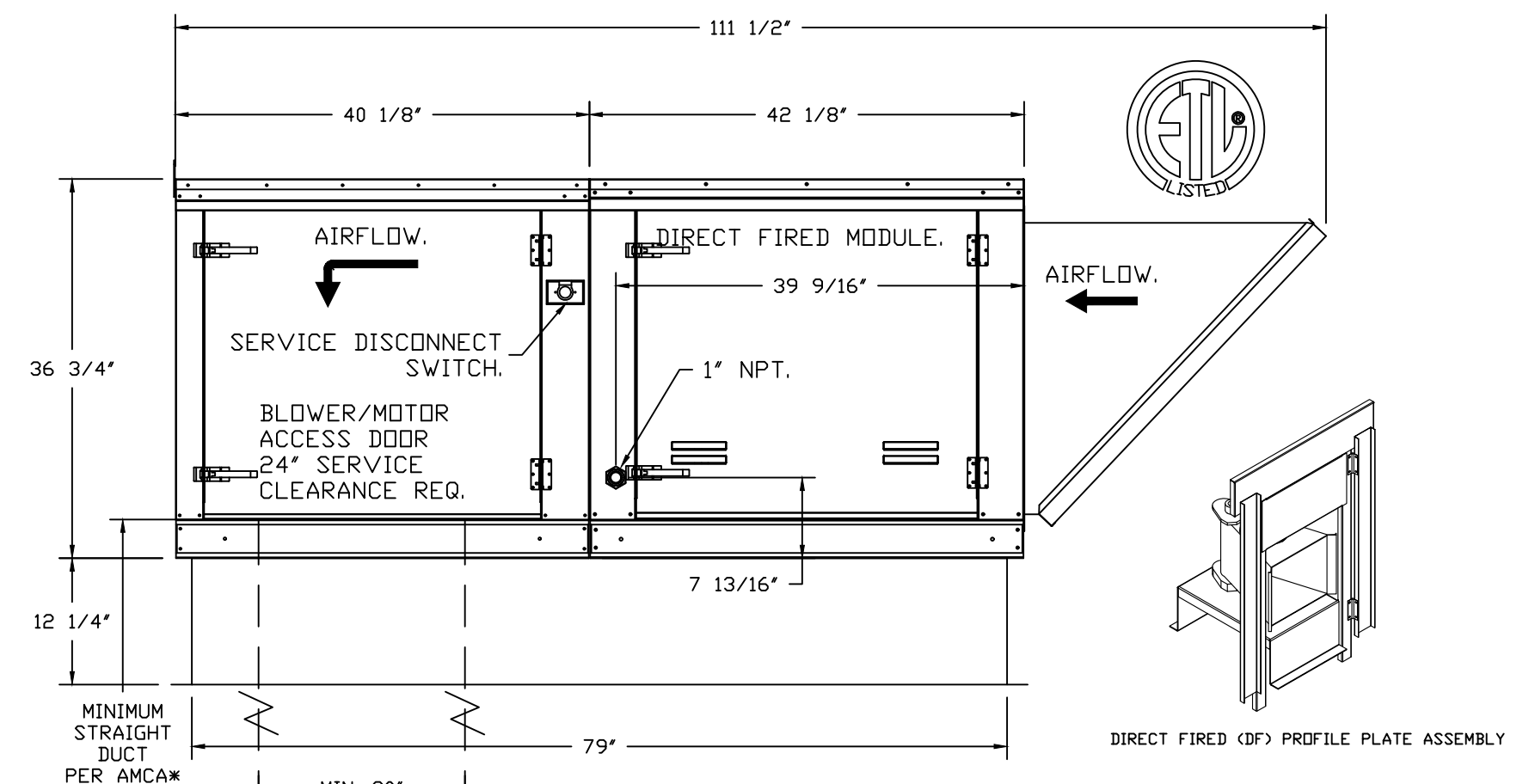
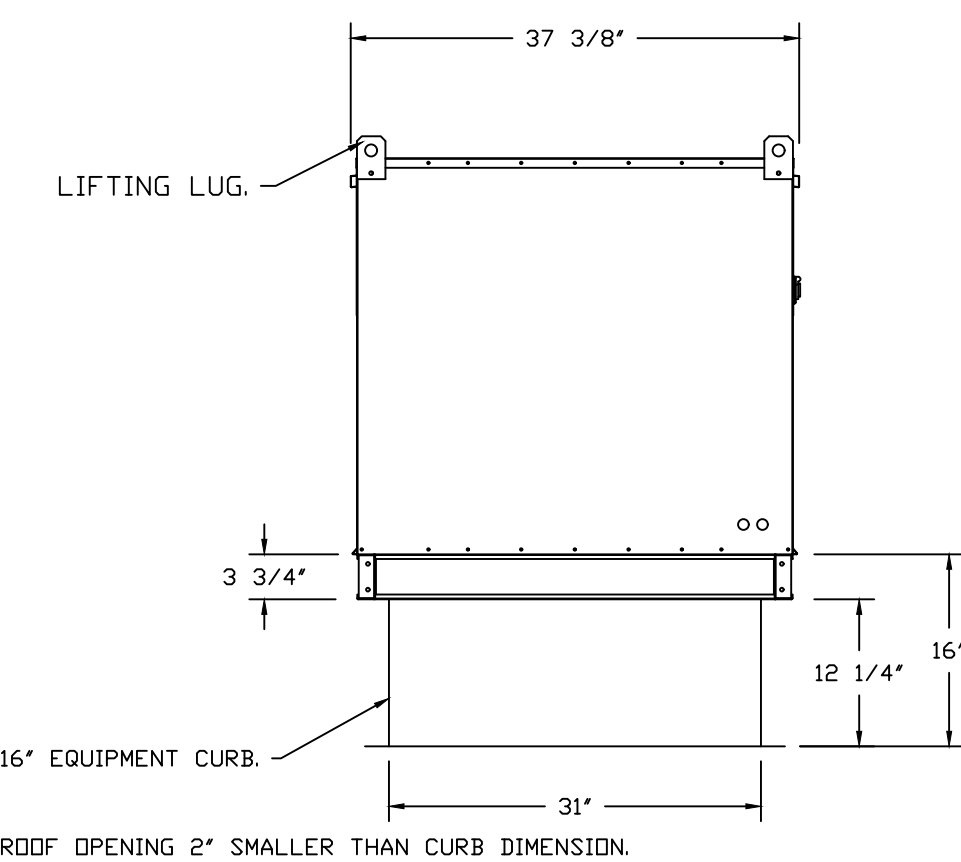
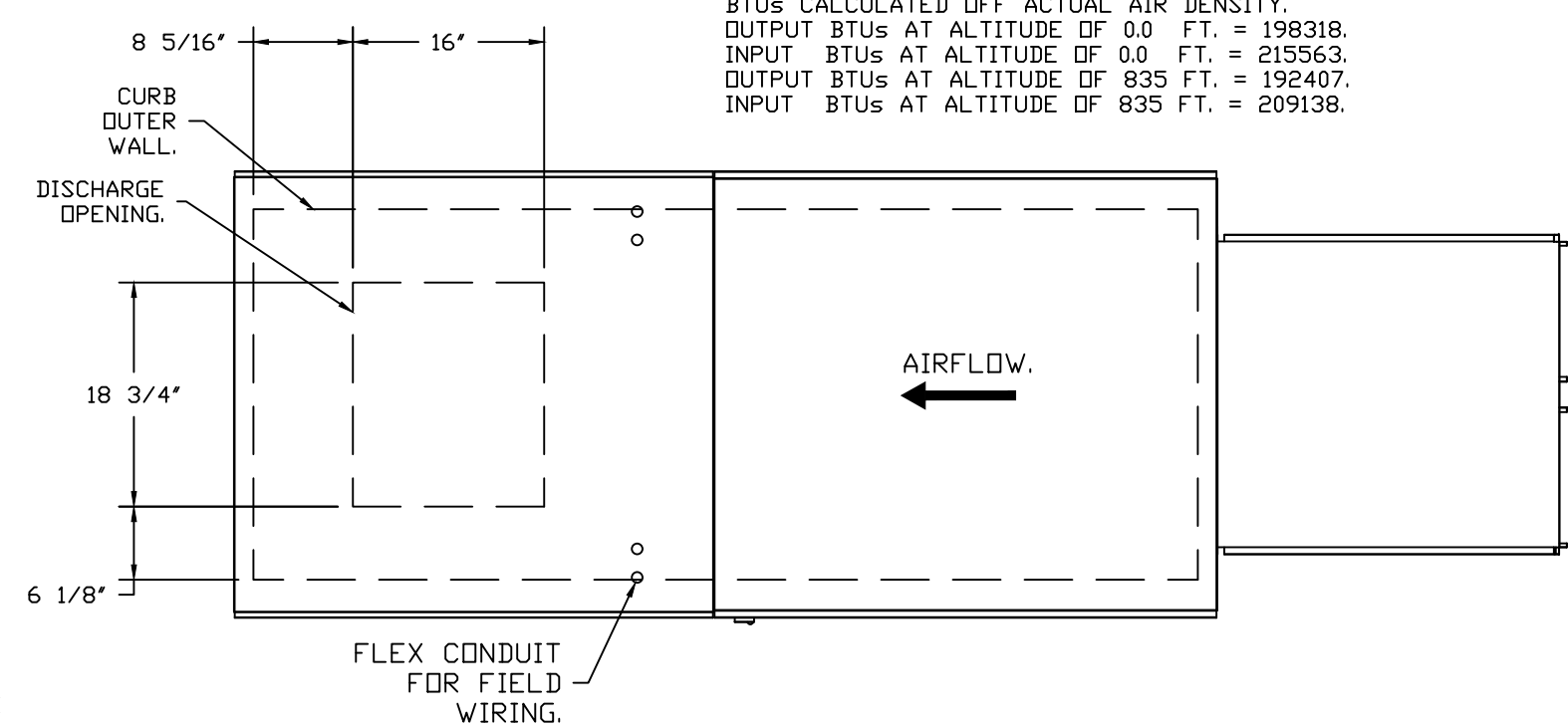


Hoods, Fans, fire system, Controls, Exhaust & Supply Duct to be supplied by Owner direct. To include Installation of hood system.

- FAN #2 A2-D250-20D - HEATER (KSF1)**
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 20" MIXED FLOW DIRECT DRIVE FAN.
 2. INTAKE HOOD WITH EZ FILTERS-LOW CFM.
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
 4. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
 5. MOTORIZED BACK DRAFT DISCHARGE DAMPER SHIPPED LOOSE 30" X 30" FOR SIZE 2 UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, NF-BUP-S ACTUATOR INCLUDED, FIELD INSTALLATION REQUIRED. DAMPER, ACTUATOR & ACTUATOR COVER (P/N ACTOVD000) FACTORY ASSEMBLED.
 6. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
 7. GAS PRESSURE GAUGE, -5 TO +15 INCHES W.C., 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. PROFILE PLATE CONFIGURATION FOR SIZE 2 DIRECT FIRED UNIT FOR LOW CFM APPLICATIONS.
 10. HINGED DOUBLE WALL INSULATED DDDR ASSEMBLY (BURNER/BLOWER SECTION).
 11. 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 801. 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 20" X 20".**

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 10°F. TEMP. RISE = 55°F.
 BTUS CALCULATED OFF ACTUAL AIR DENSITY.
 OUTPUT BTUS AT ALTITUDE OF 0.0 FT. = 198318.
 INPUT BTUS AT ALTITUDE OF 0.0 FT. = 215563.
 OUTPUT BTUS AT ALTITUDE OF 835 FT. = 192407.
 INPUT BTUS AT ALTITUDE OF 835 FT. = 209138.



REVISIONS

NO.	DESCRIPTION	DATE

CAPTIVEAIRE
 Air Solutions
 www.captiveaire.com

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Genki 2 (w Chester, OH)
 WEST CHESTER, OH, 45069

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