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S. M. COPPA, AIA
AI-08322

EXHAUST FAN INFORMATION - Job#2773015

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SKIDS
1	KET-1	USB3000-RM	7250	2.250	876	10.000	4.3330	3	208	28.4	1392 FPM	786	28
2	KET-2	USB3000-RM	6000	2.000	1184	7.500	3.5430	3	208	21.1	1715 FPM	572	28

MUA FAN INFORMATION - Job#2773015

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	WEIGHT (LBS.)	SKIDS	BURNS (ELECTROVICS)	
3	KMA-1	AS-0750-018	E18-F8	AS-0750	6000	0.750	803	5.000	3.0860	3	208	15.0	1014	14	92
4	KMA-2	AS-0500-018	E18-F8	AS-0500	5400	0.750	763	5.000	2.5130	3	208	15.0	999	13.9	92

GAS FIRED MAKE-UP AIR UNITS)

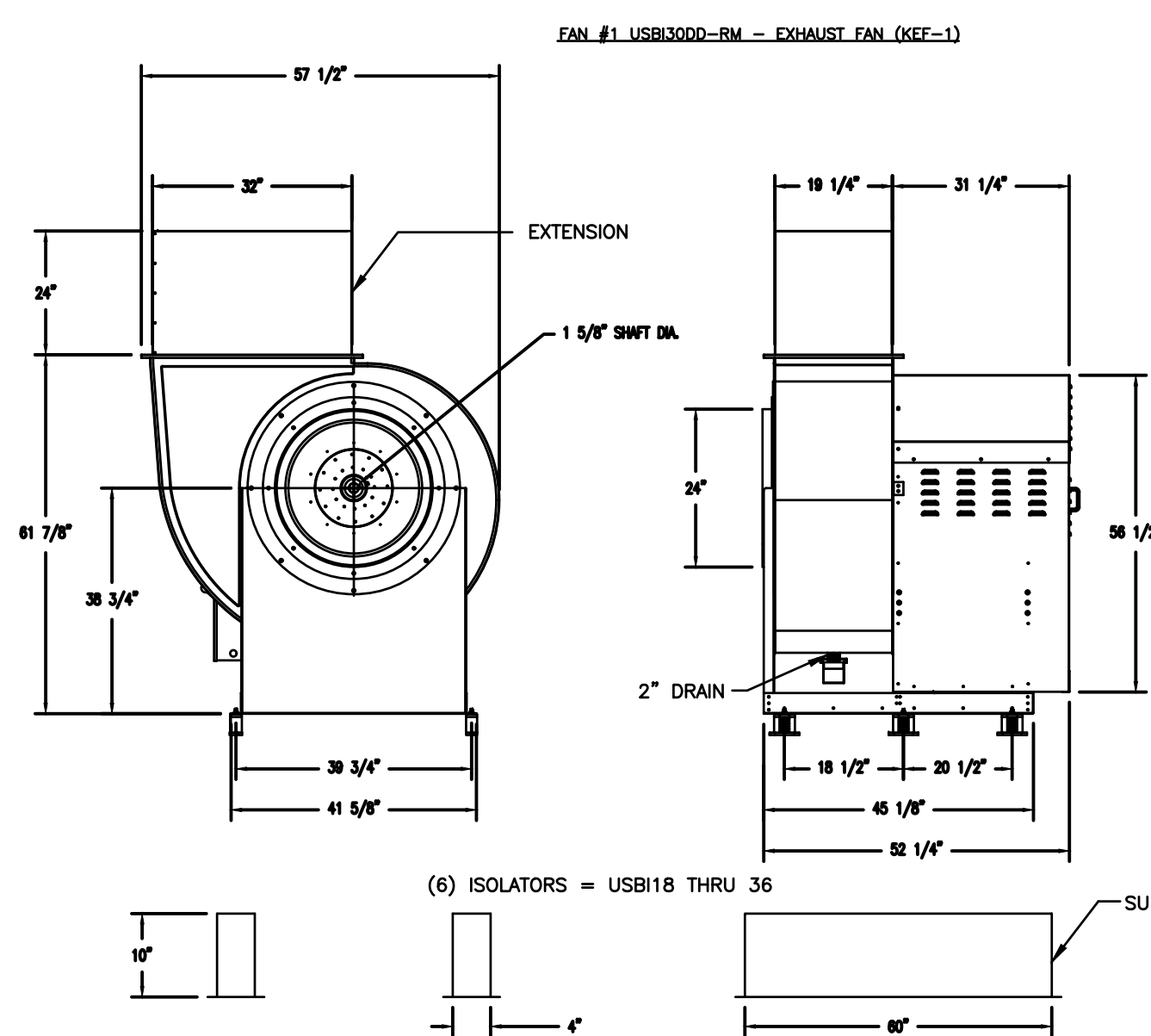
FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
3	KMA-1	422000	388000	60 deg F	7 in. w.c. - 14 in. w.c.	Natural
4	KMA-2	380348	346920	60 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KET-1	1 - B30 - 24" Discharge Extension.
		1 - B - Discharge Orientation Vertical Upper Left - CW Inlet Side.
		1 - B30 - Inlet Connection Standard 24" Flanged Grease Duct.
		1 - Utility Set Grease Cup
2	KET-2	1 - B30 - 24" Discharge Extension.
		1 - B - Discharge Orientation Vertical Upper Left - CW Inlet Side.
		1 - B30 - Inlet Connection Standard 24" Flanged Grease Duct.
		1 - Utility Set Grease Cup
3	KMA-1	1 - Low Fan Start
		1 - Inlet Pressure Gauge, 0-30"
		1 - Separate 120V Wiring Package (Required and used only for DCV or Pressure with VFD) - Three Phase Only
		1 - Motorized Backdraft Damper for AS-D Housing
4	KMA-2	1 - Low Fan Start
		1 - Inlet Pressure Gauge, 0-30"
		1 - Separate 120V Wiring Package (Required and used only for DCV or Pressure with VFD) - Three Phase Only
		1 - Motorized Backdraft Damper for AS-D Housing

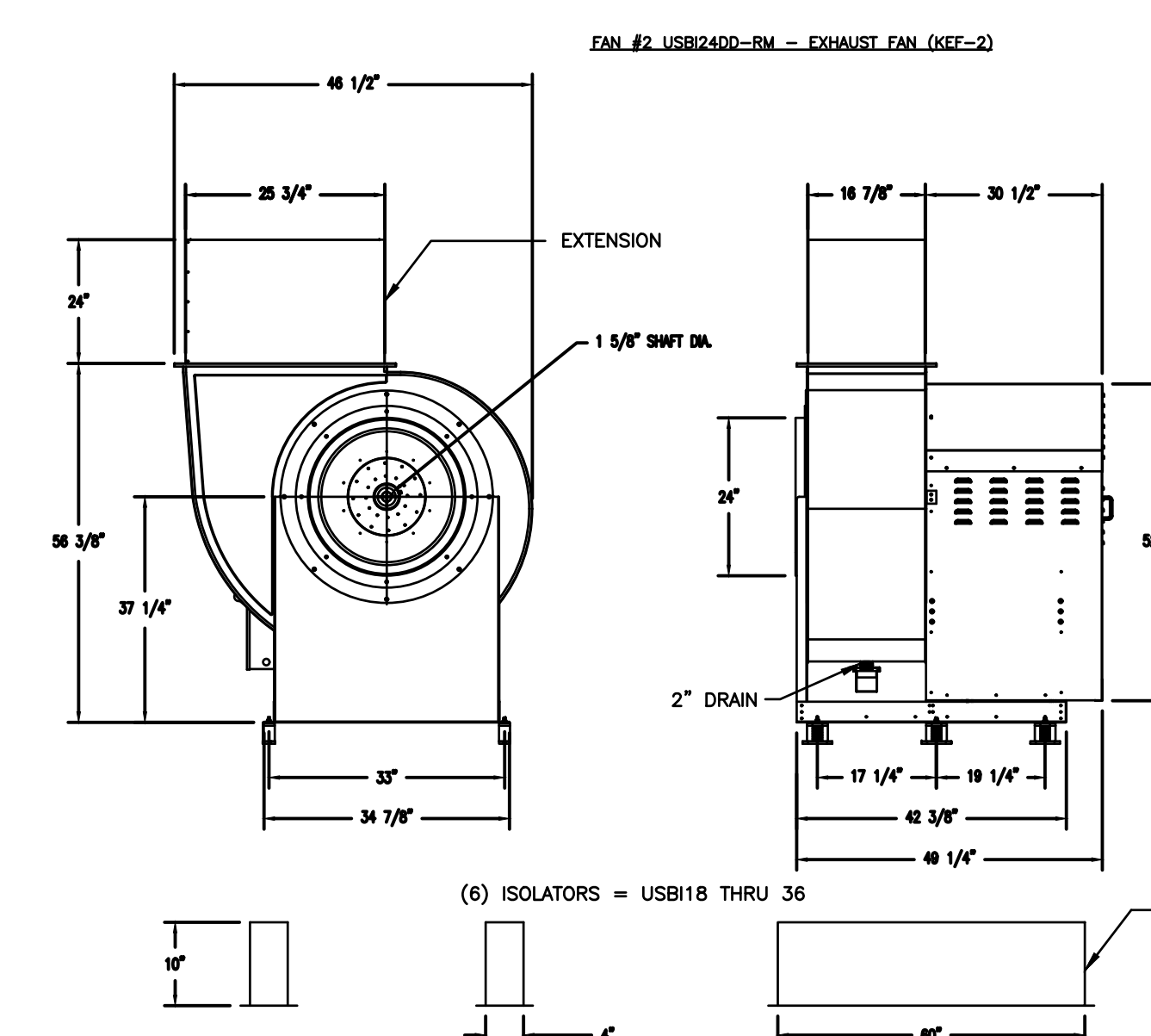
CURB ASSEMBLIES

NO.	ON FAN	HEIGHT	ITEM	SIZE
1	# 1	31 LBS	Curb	4.000" x 60.000" x 10.000"
2	# 2	31 LBS	Curb	4.000" x 60.000" x 10.000"
3	# 3	82 LBS	Curb	30.000" x 64.000" x 20.000" Insulated
4	# 4	82 LBS	Curb	30.000" x 64.000" x 20.000" Insulated



- FEATURES:**
- ROOF MOUNTED FANS
 - RESTAURANT MODEL
 - UL705
 - UL702
 - HIGH HEAT OPERATION DIRECT DRIVE 3500F (176°C)
 - HIGH HEAT OPERATION BELT DRIVE 3500F (176°C)
 - HEAT SLINGER
 - GREASE CLASSIFICATION TESTING
 - 2" DRAIN
 - MOTOR WEATHER COVER
 - FULLY SEALED SCROLL HOUSING
 - SCROLL ACCESS DOOR
 - FLANGE 1 1/4" - 11 THRU 20.
 - FLANGE 2" - 24 THRU 36.

- OPTIONS:**
- B30 - 24" DISCHARGE EXTENSION.
 - B - DISCHARGE ORIENTATION VERTICAL UPPER LEFT - CW INLET SIDE.
 - B30 - INLET CONNECTION STANDARD 24" FLANGED GREASE DUCT.
 - UTILITY SET - SPRING VIBRATION ISOLATORS - B27 THRU B30 / EQUIVALENT SIZED UTILITY SET - INDOOR/OUTDOOR USE.
- NOTE:** NORMAL TEMPERATURE TEST DIRECT DRIVE EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 3500F (176°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM AND WITHOUT ANY DETRIMENTARY EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

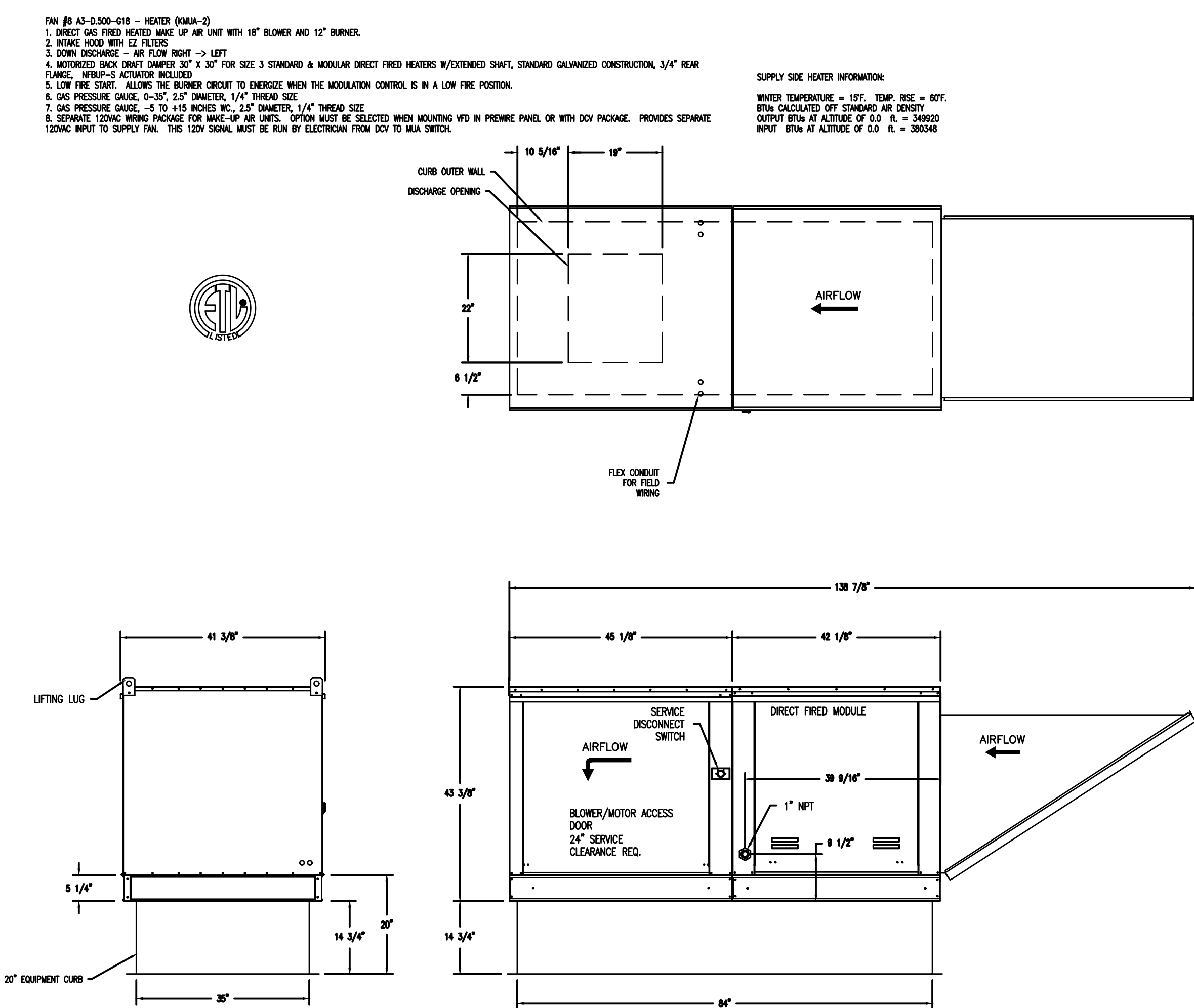
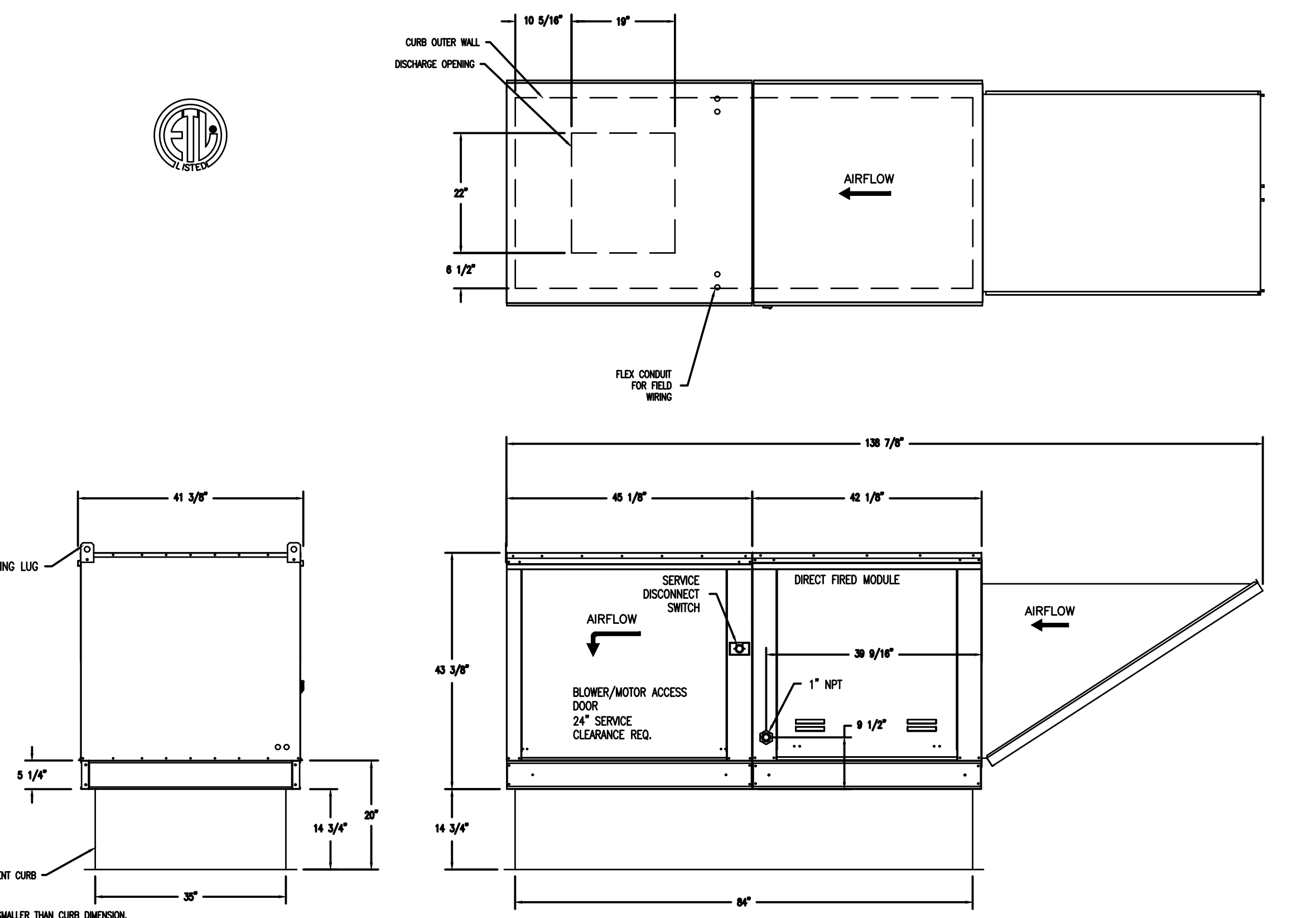


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FAN #1 AS-0750-018 - HEATED (MUA-1)

1. DIRECT GAS FIRED HEATER BURNER OF 48 INCH WITH 1/2" BURNER AND 1/2" BURNER.
2. BURNER WITH 1/2" BURNER.
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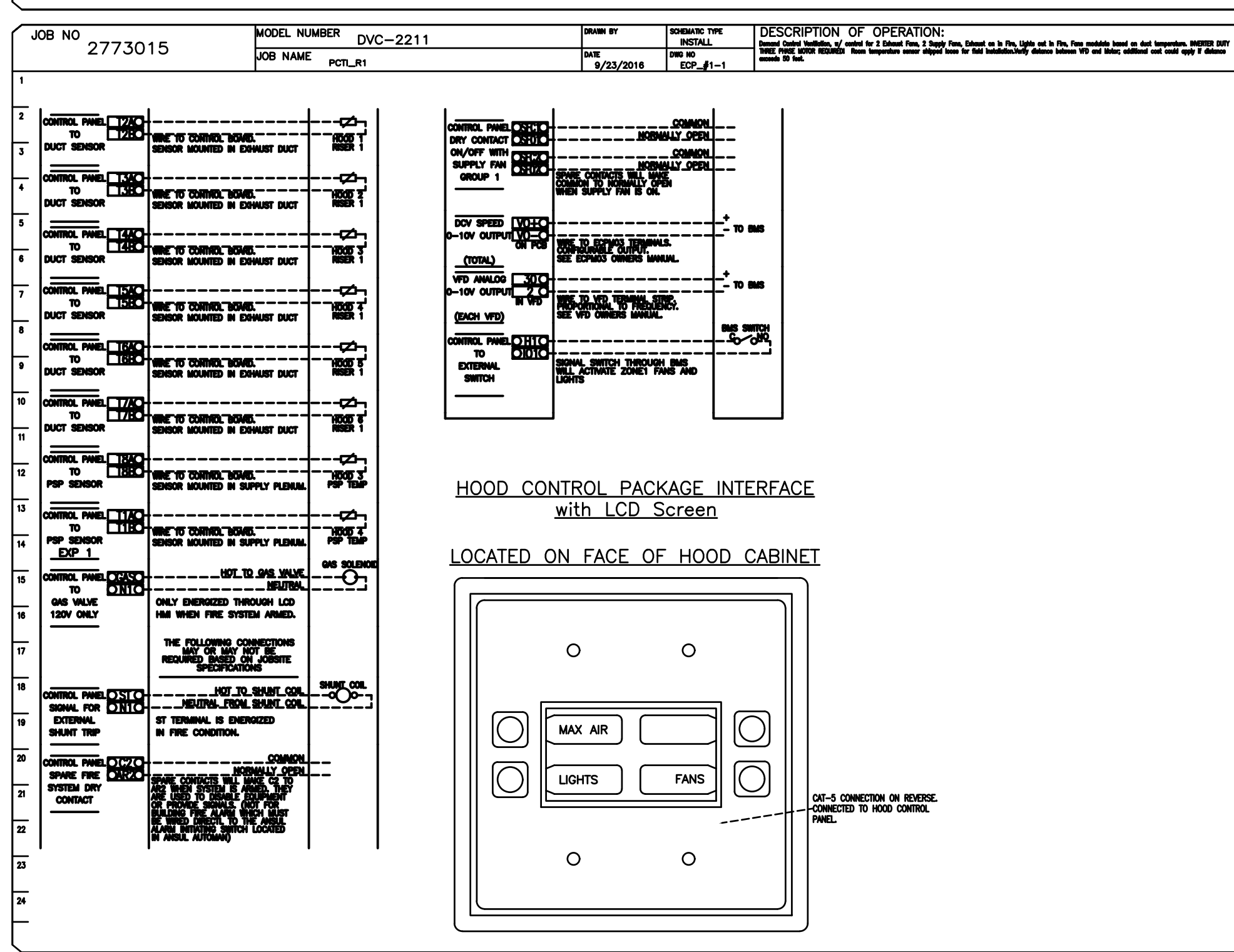
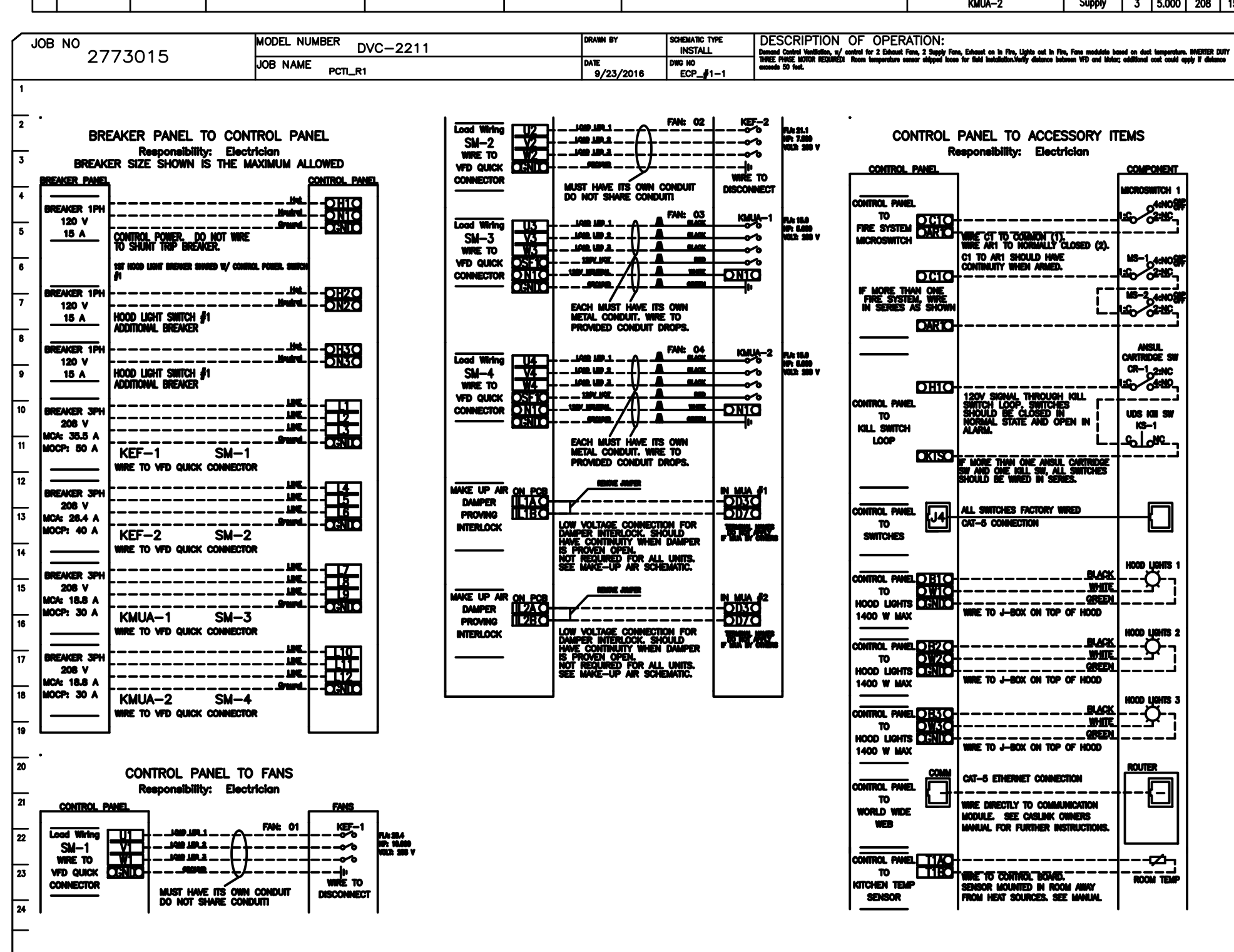


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ELECTRICAL PACKAGES - Job#2773015

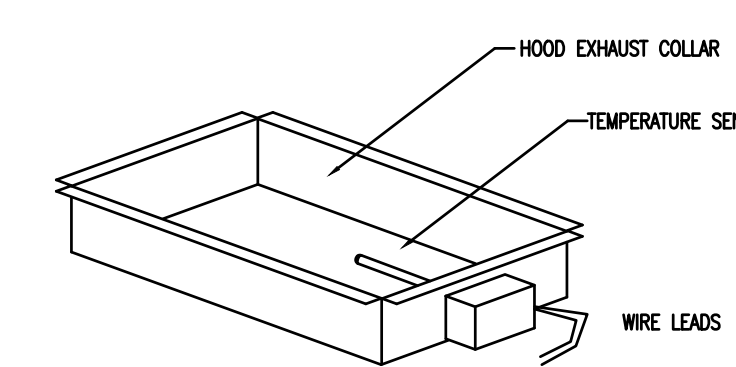
NO.	NO.	PACKAGE #	LOCATION	QUANTITY	OPTION	FAN TAG	TYPE	#	H.P.	VOLT	FLA
1	200-201	Rel Start & SS Box	10 Rel Start Box	1 Unit	Small Control Box	KET-1	Control	3	10.000	208	28.4
						KET-2	Control	3	7.500	208	21.1
						KMA-1	Motor	3	5.000	208	15.0
						KMA-2	Motor	3	5.000	208	15.0



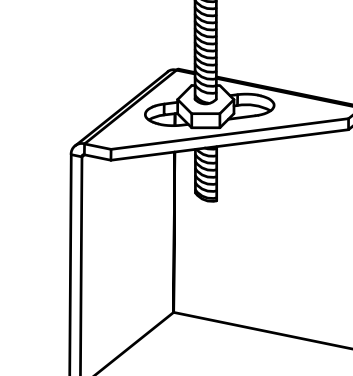
DEMAND CONTROL VENTILATION SYSTEM

Controls shall be capable of reducing exhaust and supply airflow quantities by 20% using a modulating speed control system. High and low speeds shall be adjustable by variable frequency drives. A temperature switch in the exhaust duct shall control airflow set point. A MAX airflow override button shall be supplied with an adjustable timer.

Control shall be used in kitchen exhaust applications to reduce exhaust and supply air volumes while cooking appliances are idling. The Demand Control Ventilation System complies with IMC 2009 507.2.1.1 by interlocking with cooking appliances through means of a heat sensor to automatically activate exhaust fans during cooking operations.



1/2" DIA. ALL THREAD ROD CONNECTS TO ROOF DUCT THROUGH ANOTHER HANGING ANGLE



*ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-PUNCHED AT FACTORY

ND-2 HANGING ANGLE DETAIL

HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24" H)	DIM FROM FRONT (30" H)
CANOPY ND2	4.166"	2.246"	2.246"
ND2-PPS-F	4.166"	2.246"	2.246"
BACKSHELF 2847BD	2.00"	14.25"	-
VHB/VHB-G	36"x36"	42"x42"	48"x48"
FRONT/BACK DIMS BY SIZE	2.246"	2.246"	2.246"

HANGING ANGLE LOCATIONS

EXHAUST CFM/LENGTH OF HOOD x CFM/ALFUT. (LOAD)
SUPPLY CFM/EXHAUST CFM x PERCENTAGE REQUIRED
TOTAL DUCT AREA=144 x CFM
DUCT LENGTH= TOTAL DUCT AREA / DUCT DEPTH

CALCULATIONS UTILIZED

CAPTIVE-AIR HOODS ARE BUILT IN COMPLIANCE WITH:
ETL LISTED
UL 710
Intertek
3054804-001
EMERSON 710
Listed under ETL File number 3054804-001/002

BUILDING CODES

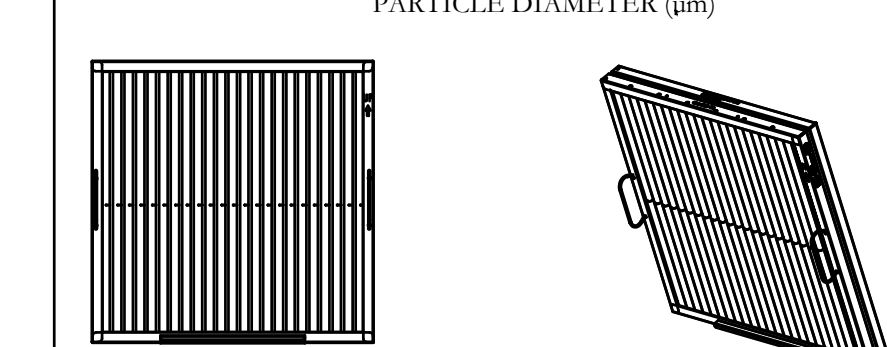
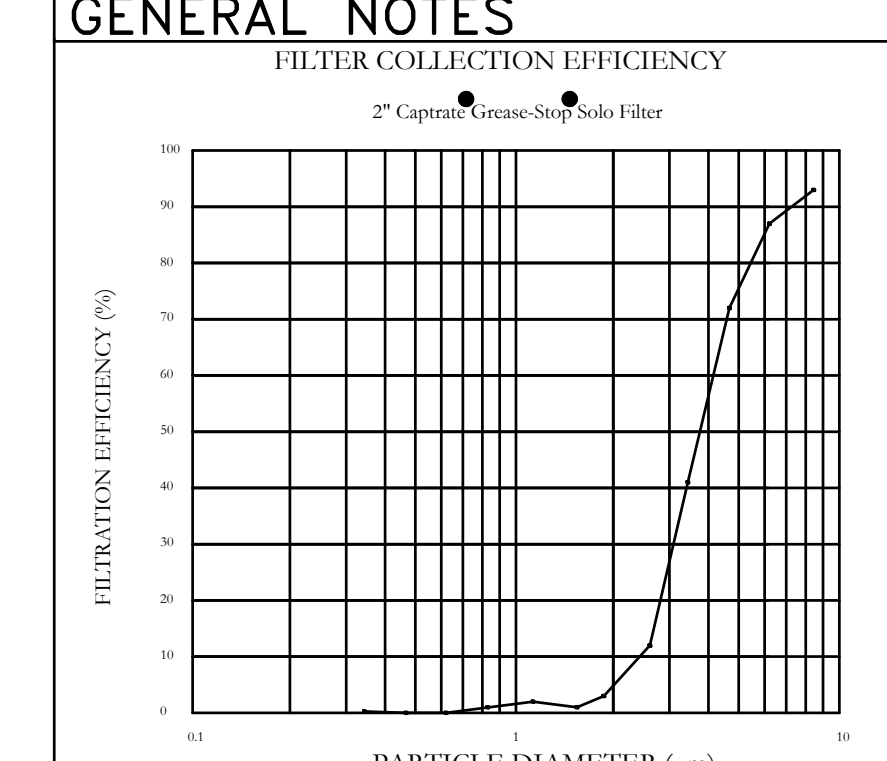
CAPTIVE-AIR HOODS HAVE OPTIONAL CLEARANCE REDUCTION SYSTEMS AVAILABLE AS FOLLOWS:
MATERIAL CLEARANCE REDUCTION SYSTEM
NON-COMBUSTIBLE NONE REQUIRED
LIMITED-COMBUSTIBLE 3" UNINSULATED STANDOFF
COMBUSTIBLE 1" INSULATED STANDOFF

CLEARANCE TO COMBUSTIBLES

INSTALLATION

- ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS.
 - ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS.
 - HANGING BRACKETS LOCATED AND WELDED AS SHOWN ON PLANS. ALL OTHER HANGING MATERIALS PROVIDED BY INSTALLING CONTRACTORS.
 - ALL CONNECTIONS FROM CAPTIVE-AIR HOOD DUCT PER MECHANICAL CONTRACTORS'S PLANS.
 - COOKING EQUIPMENT TO SHUTOFF IN EVENT OF FIRE.
 - EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
 - ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE-AIR HOOD FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.
 - LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.
 - SEISMIC RESTRAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.
 - INSTALLING CONTRACTORS ASSUME ALL RELATED RESPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.
- BALANCE**
- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
 - KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DINING AREA.
 - RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.
- ADDITIONAL**
- WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.
 - SIGNED AND "APPROVED" COPIES OF THIS DOCUMENT MUST BE RECEIVED BY THE FACTORY PRIOR TO COMMENCEMENT OF FABRICATION.

GENERAL NOTES



Captate Solo UL Listed Grease Extracting Filters Made From 430 Stainless Steel

FILTER DETAIL

PASSAIC COUNTY TECHNICAL INSTITUTE
NEW S.T.E.M. BUILDING
WAYNE, NEW JERSEY

REVISION DATE
DRAWING TITLE
FOOD SERVICE EXHAUST HOOD DETAILS, SCHEDULES AND NOTES
DATE 1-11-2017
SCALE AS NOTED
DRAWN T/JF/RA/TJN
CHECKED SMC/MBM
DRAWING # FS-3
PROJECT # 1422