

**HOOD INFORMATION - Job#6291537**

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	APPLIANCE DUTY	DESIGN CFM/ft	TOTAL EXH. CFM	EXHAUST PLENUM					TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.		
								WIDTH	LENG.	HEIGHT	DIA.	CFM			VEL.	S.P.	END TO
1	HD1-Grill	3650 ELPX-2	6' 0"	600 Deg.	Heavy	187	1120	10"	10"	4"	1120	1613	-0.754"	0	430 SS Where Exposed	ALONE	ALONE
2	HD1-PSP	4412 PS-Ovn MISC ACPS-ONLY	6' 0"	300 Deg.	N/A	0	0							1000	430 SS Where Exposed	ALONE	ALONE
3	HD2-Oven	3650 ELPX-2	1' 9.25"	300 Deg.	Light	200	600	8"	8"	4"	600	1590	-0.376"	0	430 SS 100%	ALONE	ALONE
4	HD3-Fry	3650 ELPX-2	4' 2"	600 Deg.	Heavy	189	850	9"	8"	4"	850	1631	-0.616"	0	430 SS Where Exposed	ALONE	ALONE
5	HD3-PSP	246 MISC ACPS-ONLY	4' 2"	300 Deg.	N/A	0	0							630	430 SS Where Exposed	ALONE	ALONE

FOR QUESTIONS, CALL THE CAPTIVE-AIRE (TRI-STATE) OFFICE  
1329 E. KEMPER RD., SUITE 4210  
PHONE: (513) 860-5555  
joe.hertenstein@captiveaire.com

**HOOD INFORMATION**

HOOD NO.	TAG	TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	UTILITY CABINET(S)		ELECTRICAL	SWITCHES	FIRE SYSTEM PIPING	HOOD HANGING WGT
												TYPE	SIZE				
1	HD1-Grill	Captrate Solo Filter	4	16"	16"	85% See Filter Spec.	3	L55 Series E26	NO							YES	250 LBS
2	HD1-PSP						0									NO	106 LBS
3	HD2-Oven	SS Baffle w/ Handles	2	10"	20"	30%	0									YES	248 LBS
4	HD3-Fry	Captrate Solo Filter	3	16"	16"	85% See Filter Spec.	2	L55 Series E26	NO	Wall Mnt	12"x60"x24"	TANK FIRE	4/4/4	SC-E013022MA	2 Light 2 Fan	YES	225 LBS
5	HD3-PSP						0									NO	68 LBS

**HOOD OPTIONS**

HOOD NO.	TAG	OPTION
1	HD1-Grill	FIELD WRAPPER 14.50" High Front, Left, Right BACKSPLASH 104.00" High X 108.00" Long 430 SS Vertical RIGHT QUARTER END PANEL 26" Top Width, 0" Bottom Width, 26" High 430 SS LEFT QUARTER END PANEL 26" Top Width, 0" Bottom Width, 26" High 430 SS SENSOR-CV
3	HD2-Oven	SENSOR-CV
4	HD3-Fry	FIELD WRAPPER 14.50" High Front, Left, Right BACKSPLASH 104.00" High X 78.00" Long 430 SS Vertical BACKSPLASH 48.00" High X 96.00" Long 430 SS Horizontal BACKSPLASH - INSIDE CORNER 96.00" High X 2.00" Leg Length 430 SS Vertical LEFT QUARTER END PANEL 26" Top Width, 0" Bottom Width, 26" High 430 SS RIGHT VERTICAL END PANEL 26" Top Width, 26" Bottom Width, 61" High Insulated 430 SS SENSOR-CV
6	Misc Items	OPTIONS ONLY: FIELD WRAPPER 40.00" High x 17.00" Long Back 430 SS OPTIONS ONLY: FIELD WRAPPER 40.00" High x 17.00" Long Right 430 SS OPTIONS ONLY: FIELD WRAPPER 40.00" High x 17.00" Long Left 430 SS OPTIONS ONLY: WRAPPER CHANNEL - 14.00" Long OPTIONS ONLY: WRAPPER CHANNEL - 14.00" Long OPTIONS ONLY: WRAPPER CHANNEL - 14.00" Long

**PERFORATED SUPPLY PLENUM(S)**

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)		CFM	S.P.
							WIDTH	LENG.		
2	HD1-PSP	Front	72"	10"	6"	AC	8"	24"	465	0.123"
		Back	72"	14"	6"	MUA	10"	24"	500	0.138"
5	HD3-PSP	Front	50"	10"	6"	AC	8"	16"	250	0.071"
		Back	50"	14"	6"	MUA	10"	24"	630	0.213"

**WALL-MOUNT UTILITY CABINET**

HOOD NO.	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL	SWITCHES	WEIGHT
			TYPE	SIZE			
2	WALL MNT	12"x60"x24"	TANK FS	4.0/4.0/4.0	SC-130220MA_MA4	2 LIGHT 2 FAN	440.00 LBS

**GAS VALVE(S)**

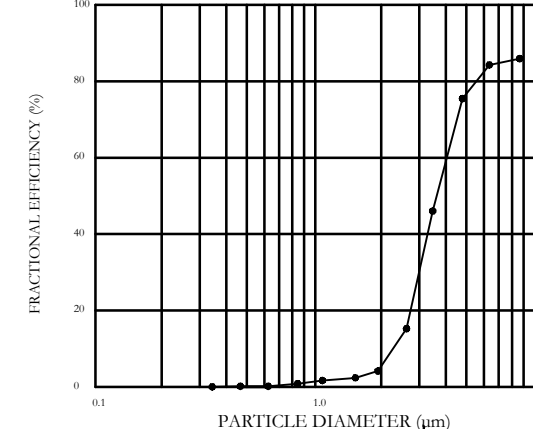
FIRE SYSTEM NO.	TAG	TYPE	SIZE	SUPPLIED BY
1	FS1	SC ELECTRICAL	2.000	ECON-AIR

**SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER**

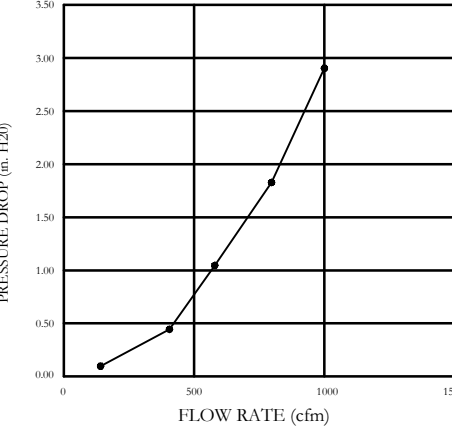
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-Baffle DESIGN IN CONJUNCTION WITH A SLOTTED REAR Baffle DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY. FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S). UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED. GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 70% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

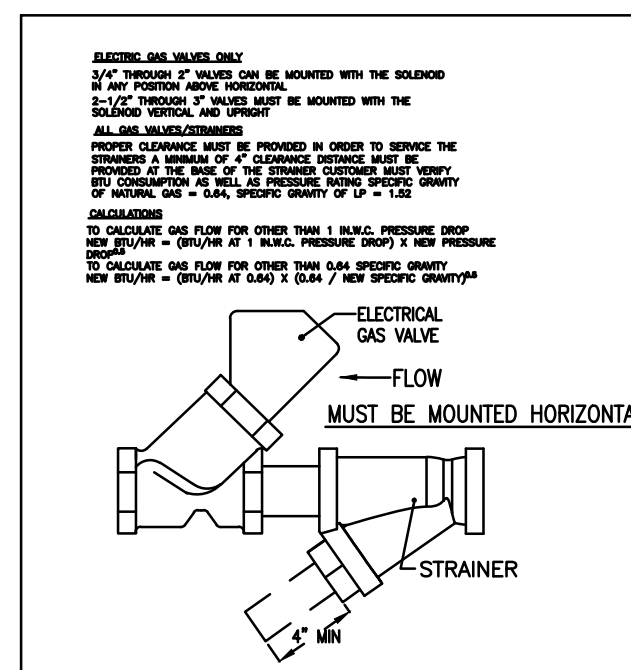
**EFFICIENCY VS. PARTICLE DIAMETER**



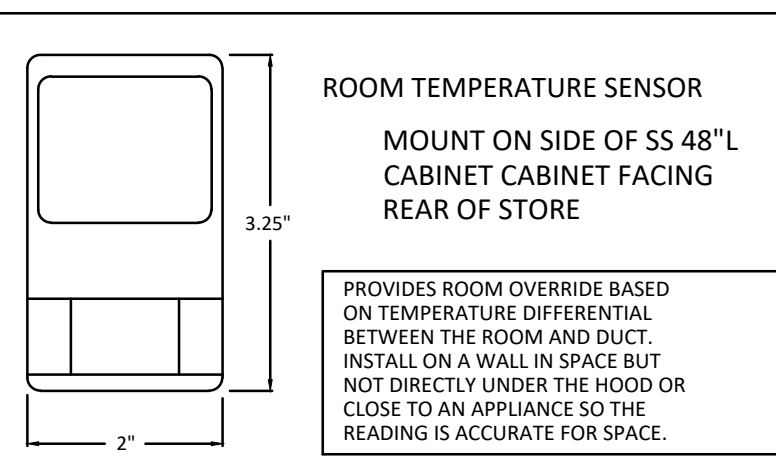
**PRESSURE DROP VS. FLOW RATE**



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
NFPA #96  
NSF STANDARD #2  
UL STANDARD #1046  
INT. MECH. CODE (IMC)  
ULC-S649

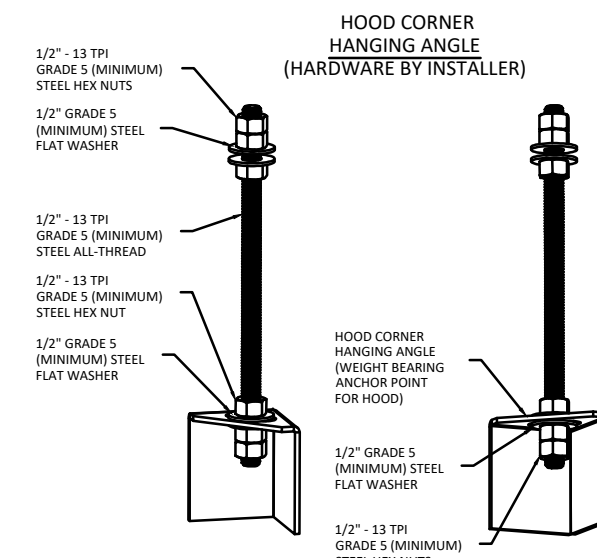


LOCATED IN 48"L X24"H 12" T SS CABINET MOUNTED NEXT TO GRILL HOOD



ROOM TEMPERATURE SENSOR MOUNT ON SIDE OF SS 48" CABINET CABINET FACING REAR OF STORE

PROVIDES ROOM OVERRIDE BASED ON TEMPERATURE DIFFERENTIAL BETWEEN THE ROOM AND DUCT. INSTALL ON A WALL IN SPACE BUT NOT DIRECTLY UNDER THE HOOD OR CLOSE TO AN APPLIANCE SO THE READING IS ACCURATE FOR SPACE.



**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.

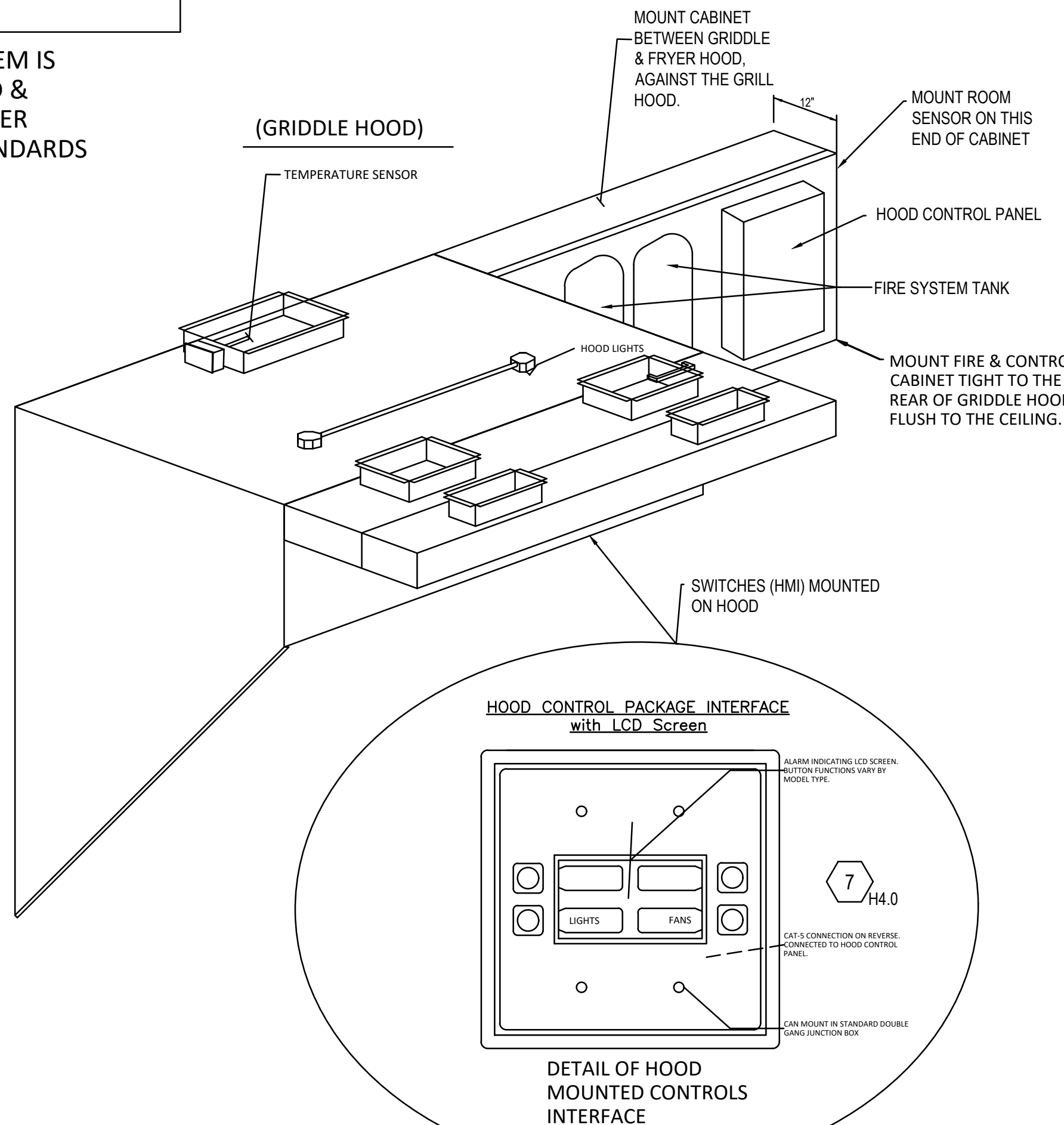
CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED  
ETL LISTED FILE# 3054804-001

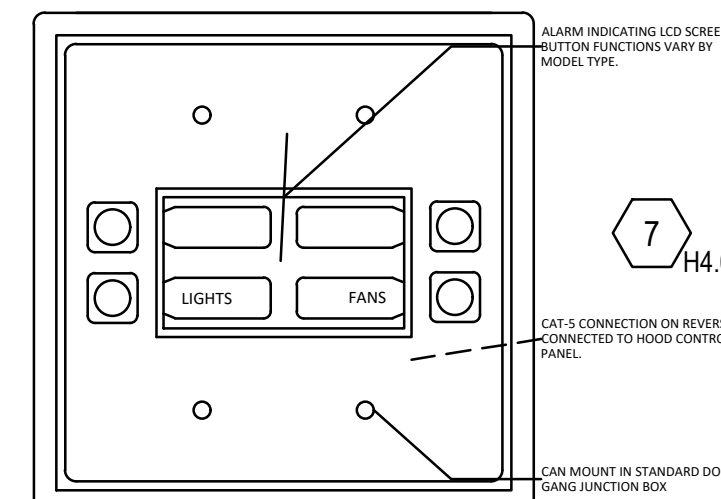
HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS

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

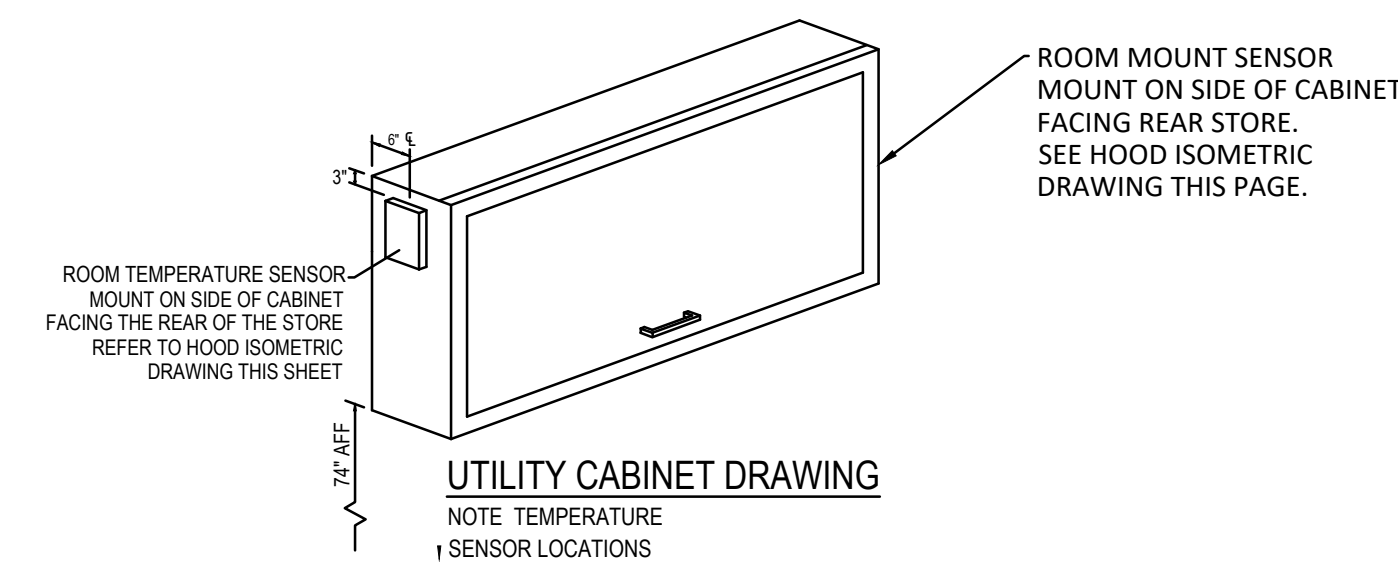
**GENERAL WIRING COMPONENTS ONLY (MUST READ ALL DETAILED DIRECTIONS ON THE CAPTIVE-AIRE ELECTRICAL DWG SHEET PROVIDED)**



**HOOD CONTROL PACKAGE INTERFACE with LCD Screen**

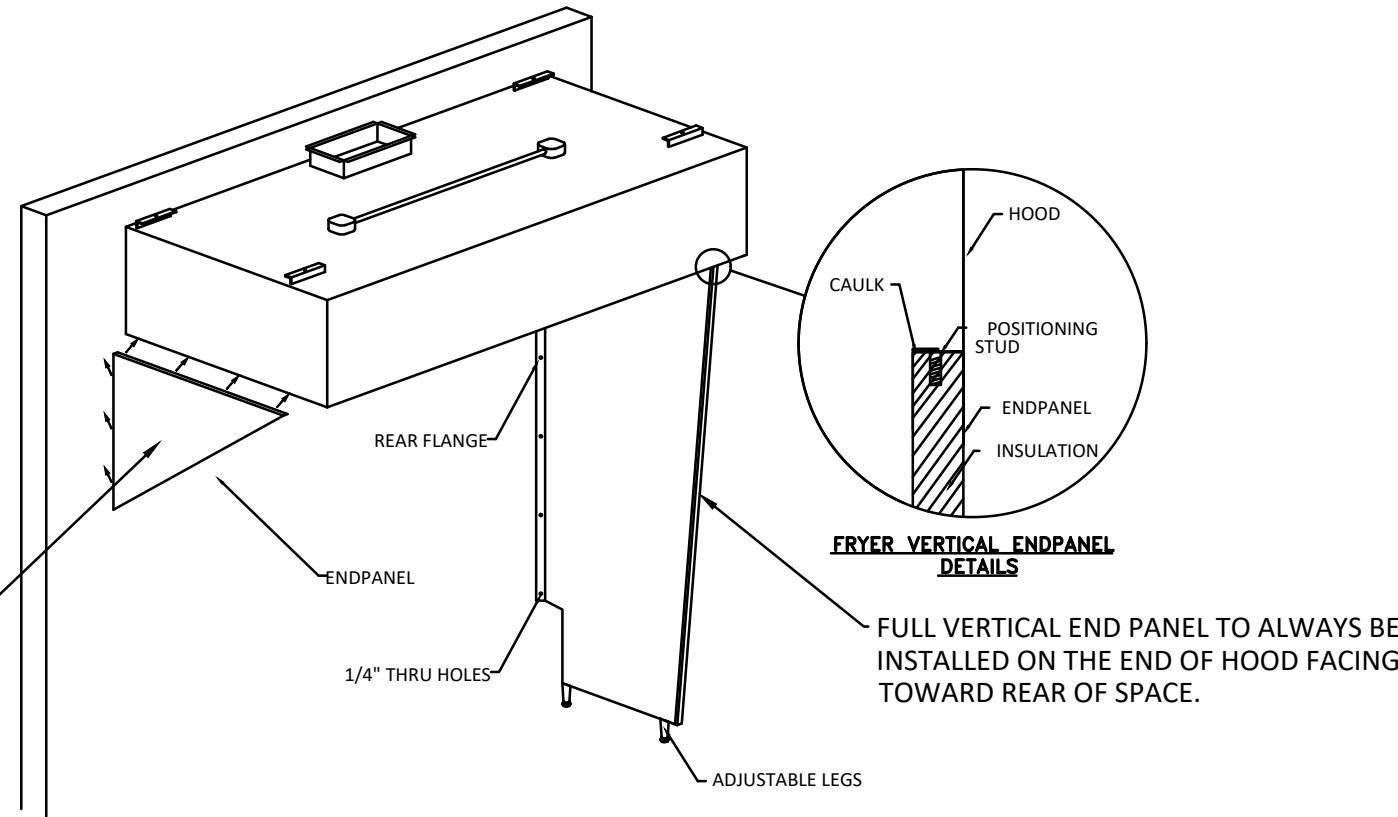


DETAIL OF HOOD MOUNTED CONTROLS INTERFACE



QUARTER END PANEL ON SIDE OF HOOD THAT FACES TO THE FRONT OF THE STORE.

**(FRYER HOOD)**



**REVISIONS**

DESCRIPTION	DATE

**CAPTIVE-AIRE**

**Air Solutions**

1329 East Kemper Rd., Ste. 4210, Cincinnati, OH 45246 PHONE: (513) 860-5555 EMAIL: reg120@captair.com

Penn Station V2B-R (Seymour, IN)  
Seymour, IN, 47274

DATE: 10/22/2023  
DWG.#: 6291537  
DRAWN BY:  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 1

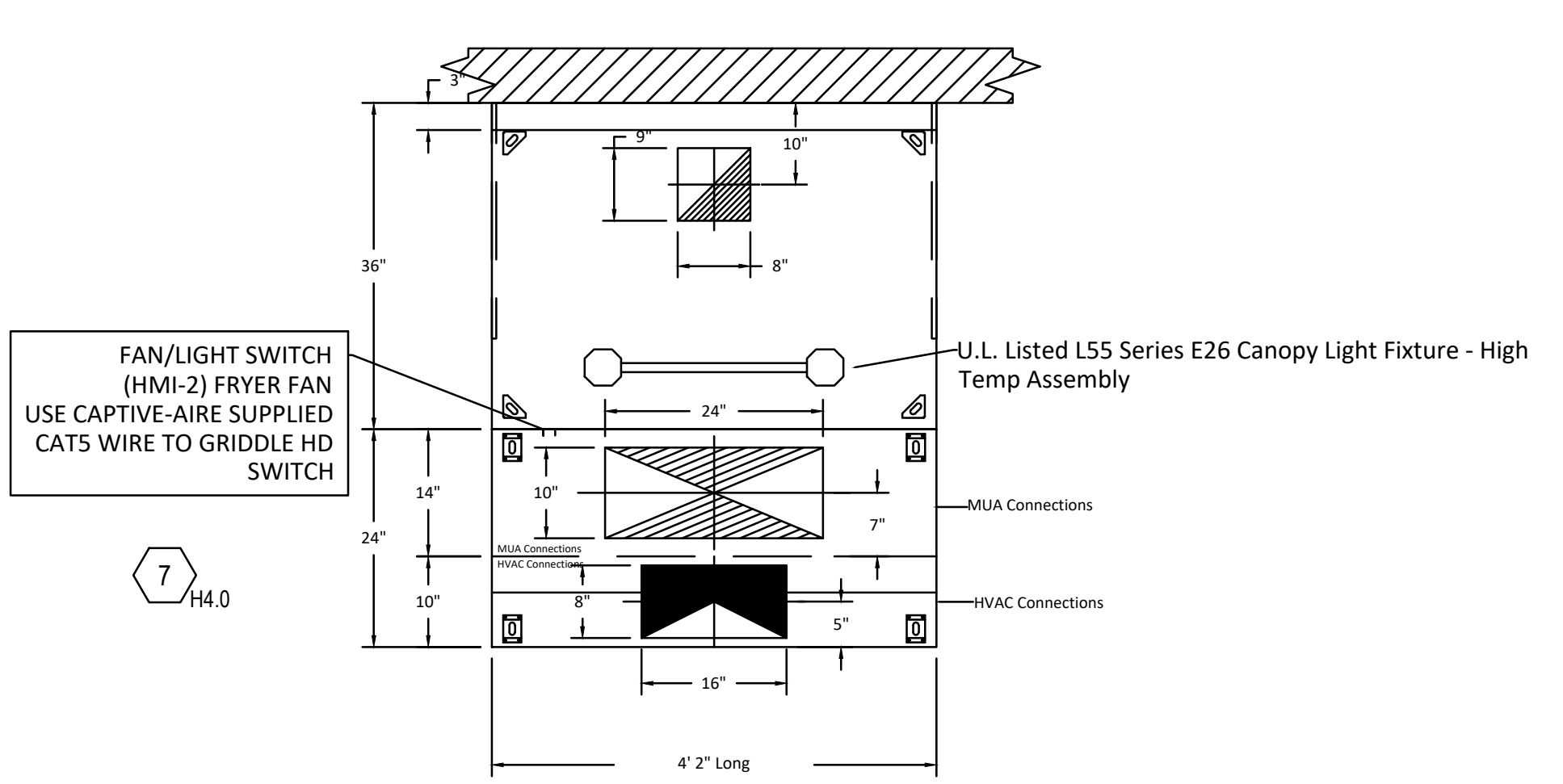
REVISIONS	
DESCRIPTION	DATE

**CAPTIVEAIRE**  
 Air Solutions  
 www.captiveaire.com  
 1329 East Kemper Rd., Ste. 4210, Cincinnati, OH, 45246 PHONE: (513) 860-5555 EMAIL: reg.120@econair.com

Penn Station V2B-R (Seymour, IN)  
 Seymour, IN, 47274

DATE: 10/22/2023  
 DWG.#: 6291537  
 DRAWN BY:  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

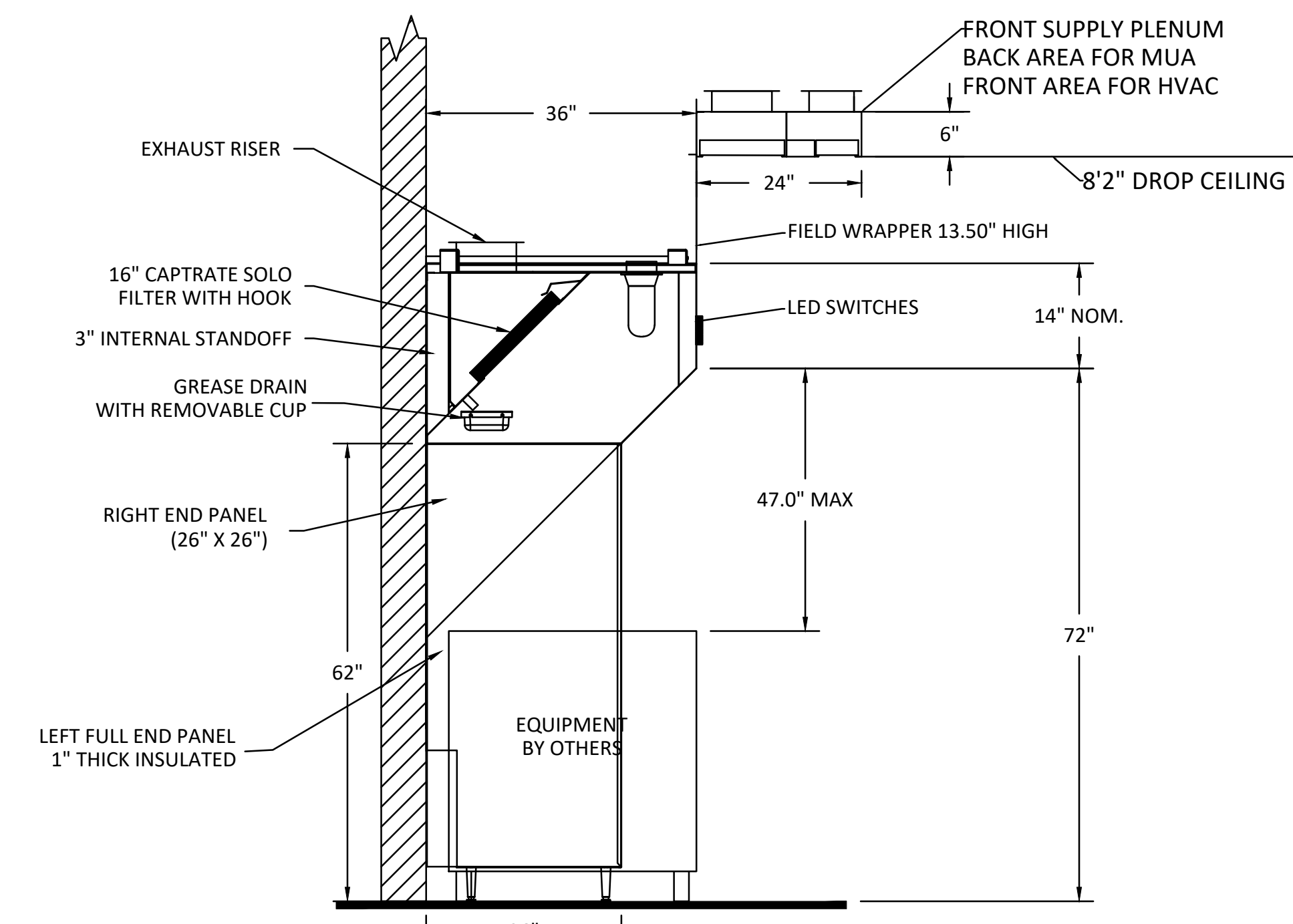
SHEET NO. 2



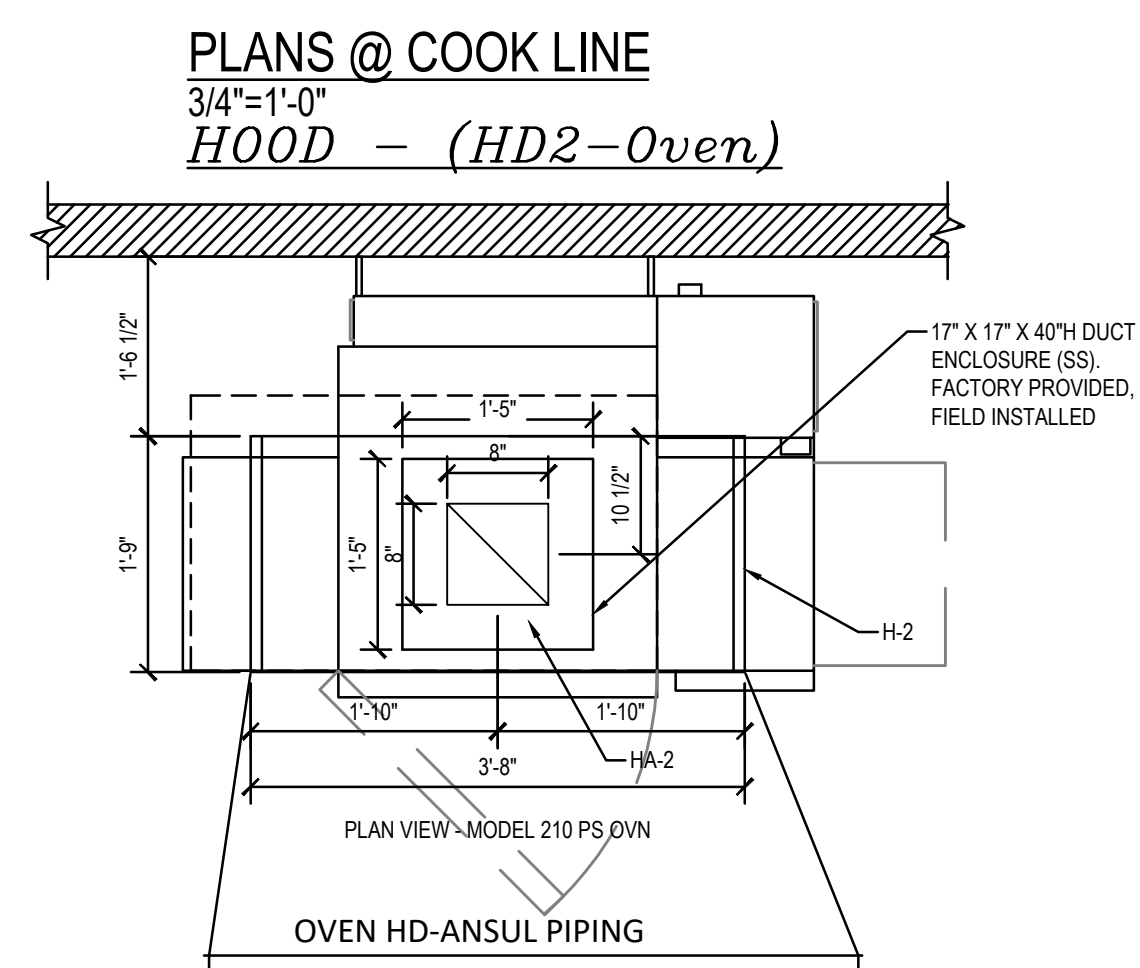
PLAN VIEW - (Hood #3-Fry)  
4' 2.00" LONG 3650BD-2  
4' 2.00" LONG 246ACPSP-PLENUM

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

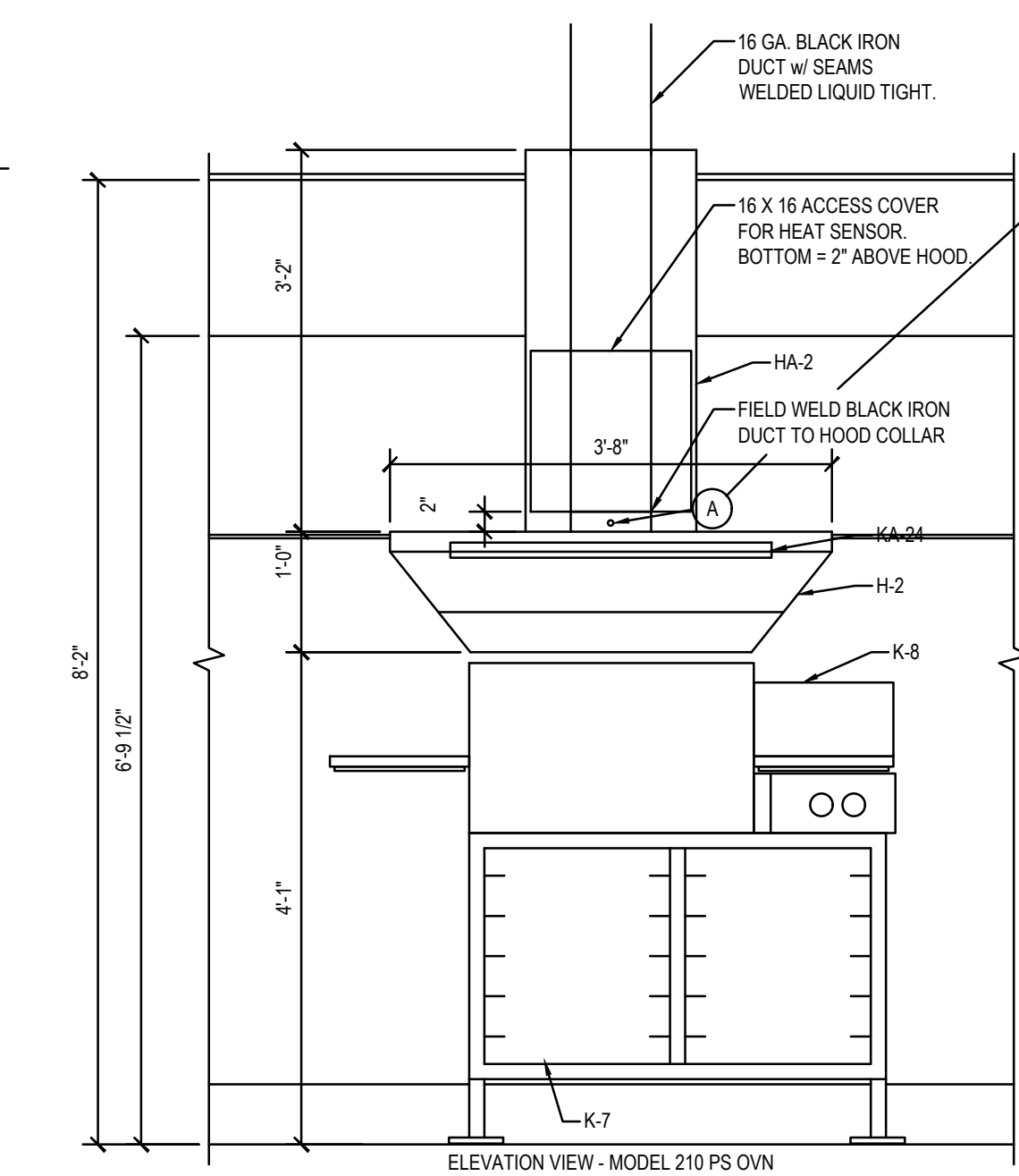
HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS



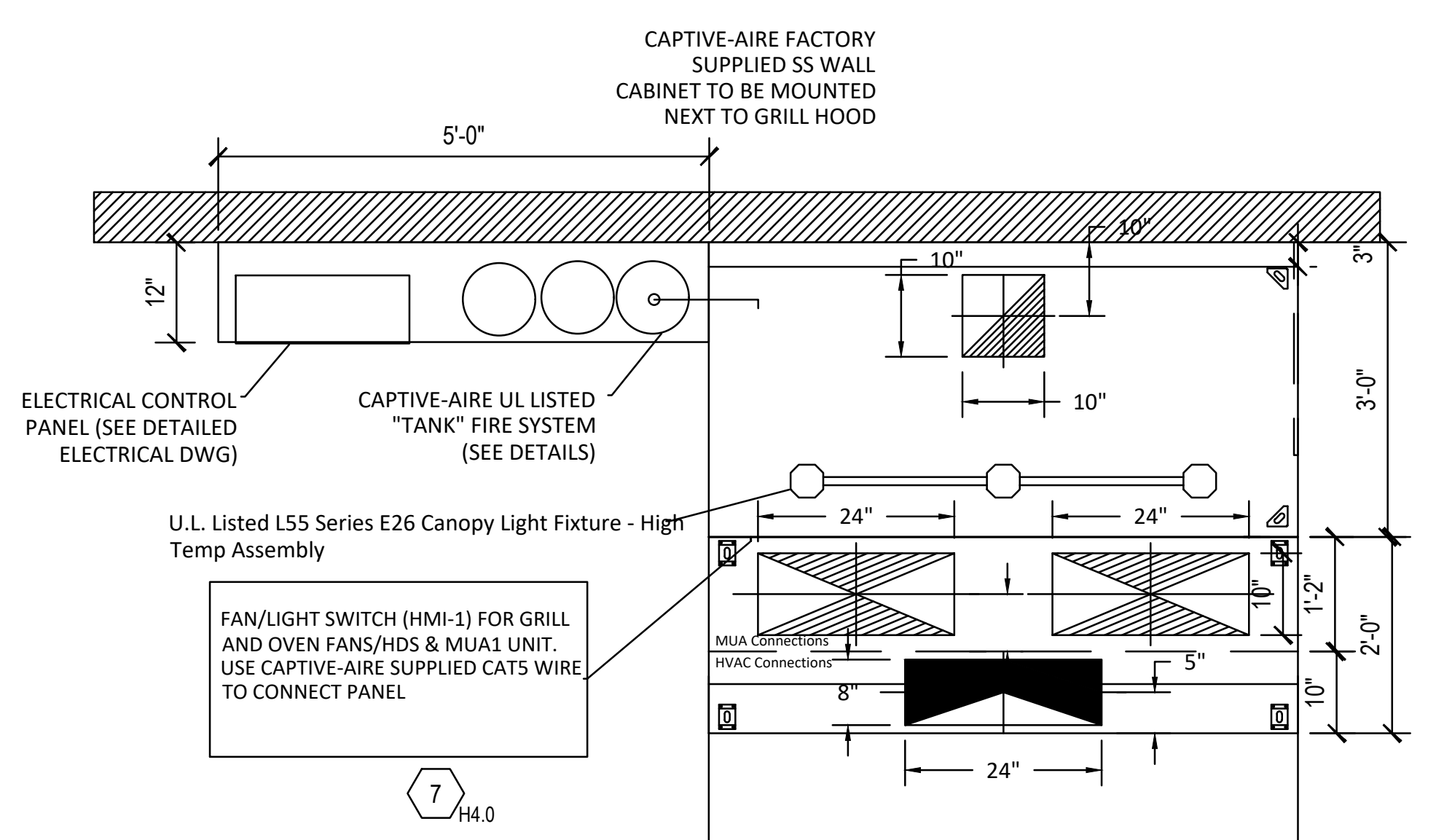
SECTION VIEW - MODEL 3650BD-2  
HOOD - (HD3-Fry)



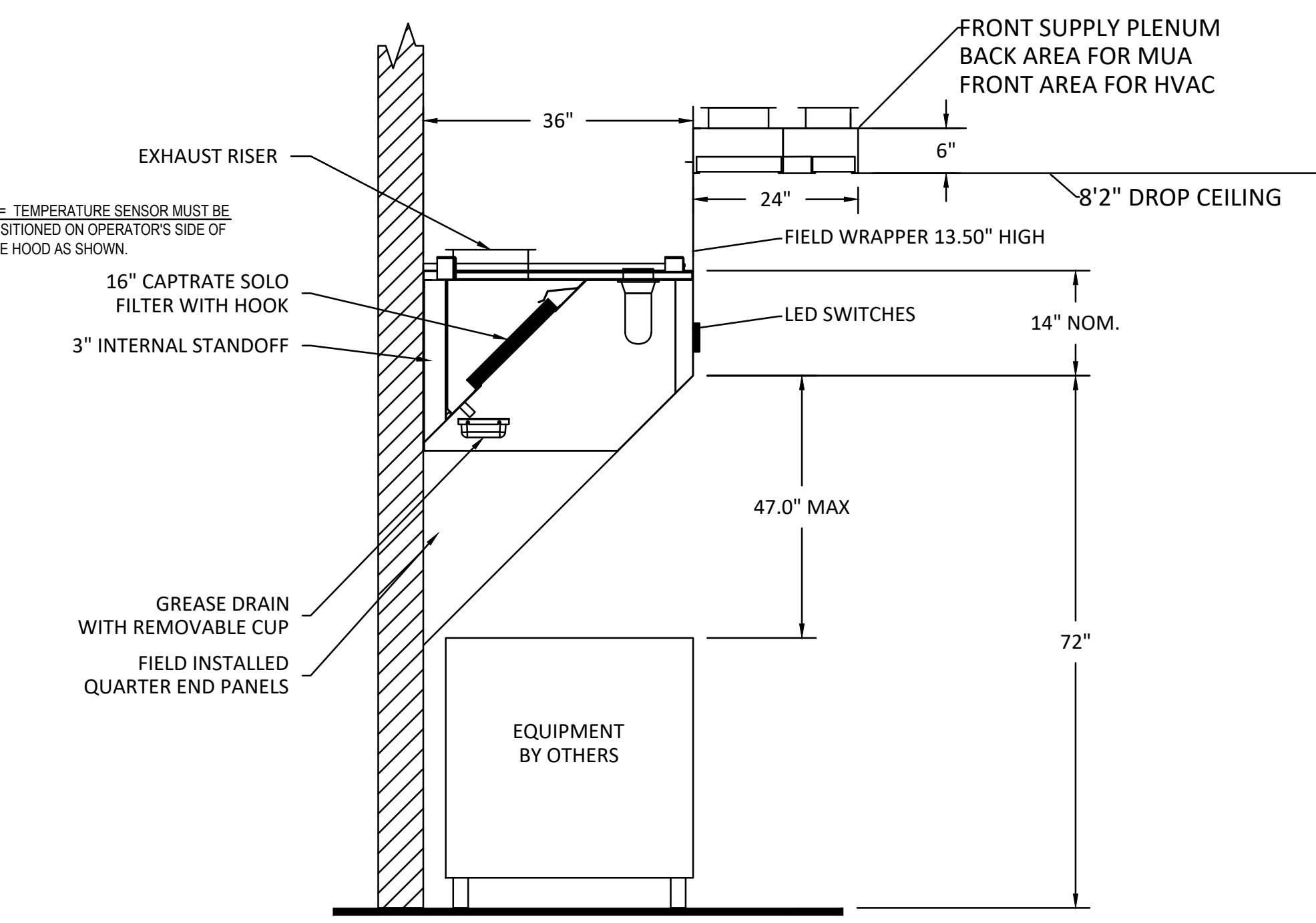
NOTE: PIPING MUST BE INTERNAL TO HOOD AND APPLIANCE. NOZZLES MUST BE PIPED TOWARD THE FRONT (OPERATOR SIDE) TO ALLOW OVEN TO BE PULLED OUT. NOZZLES LEFT AND RIGHT OF THE EYEBROW OVEN HOOD SHALL BE HELD TIGHT TO THE TOP FRONT CORNER OF THE OVEN CANOPY AS POSSIBLE. INSTALL DUCT WRAPPER SUCH THAT ACCESS PANEL FOR HEAT SENSOR IS ON THE SAME SIDE AS THE SENSOR ITSELF (OPERATOR SIDE).



ELEVATIONS @ COOK LINE  
3/4"=1'-0"  
HOOD - (HD2-Oven)



PLAN VIEW - Hood #HD1-Grill  
6' 0.00" LONG 3650BD-2  
6' 0.00" LONG 246MISC ACPSP-ONLY



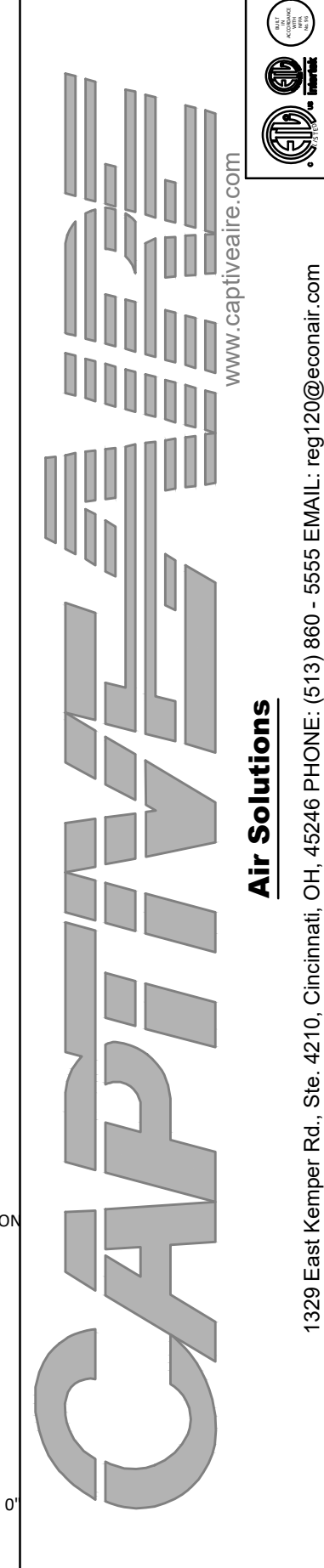
SECTION VIEW - MODEL 3650BD-2  
HOOD - #HD1-Grill

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**REVISIONS**

NO.	DESCRIPTION	DATE



<b>DATE:</b> 10/22/2023
<b>DWG.#:</b> 6291537
<b>DRAWN BY:</b>
<b>SCALE:</b> 3/4" = 1'-0"
<b>MASTER DRAWING</b>
<b>SHEET NO.</b> 3

**EXHAUST FAN INFORMATION - Job# 6291537**

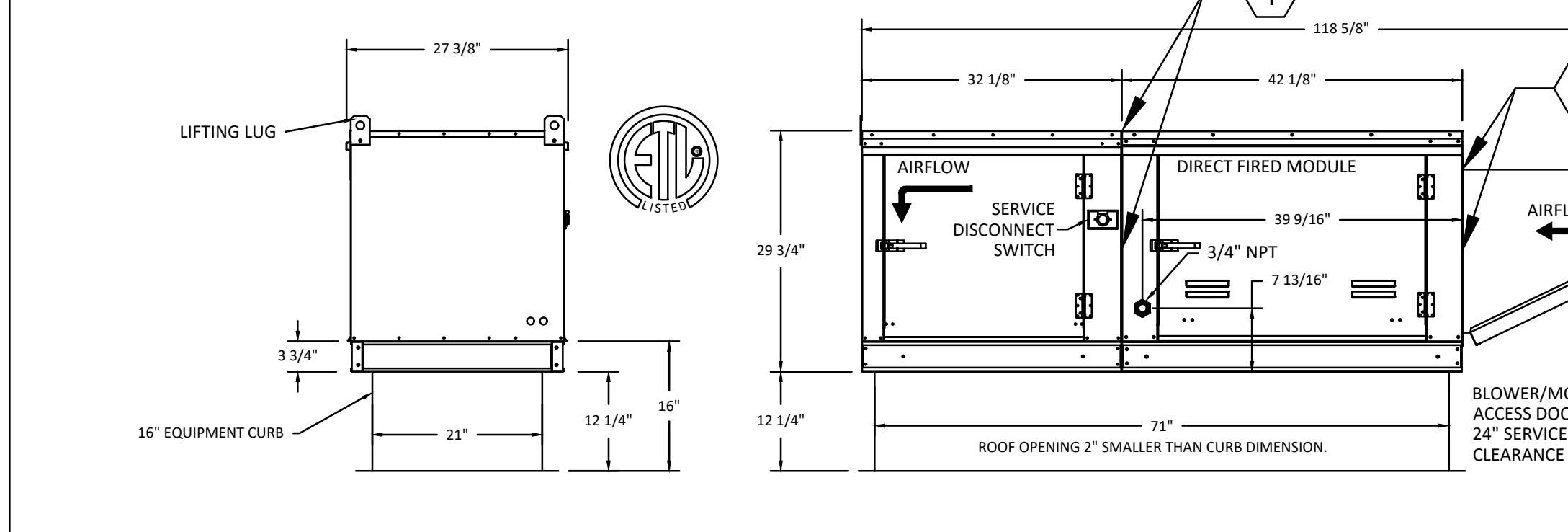
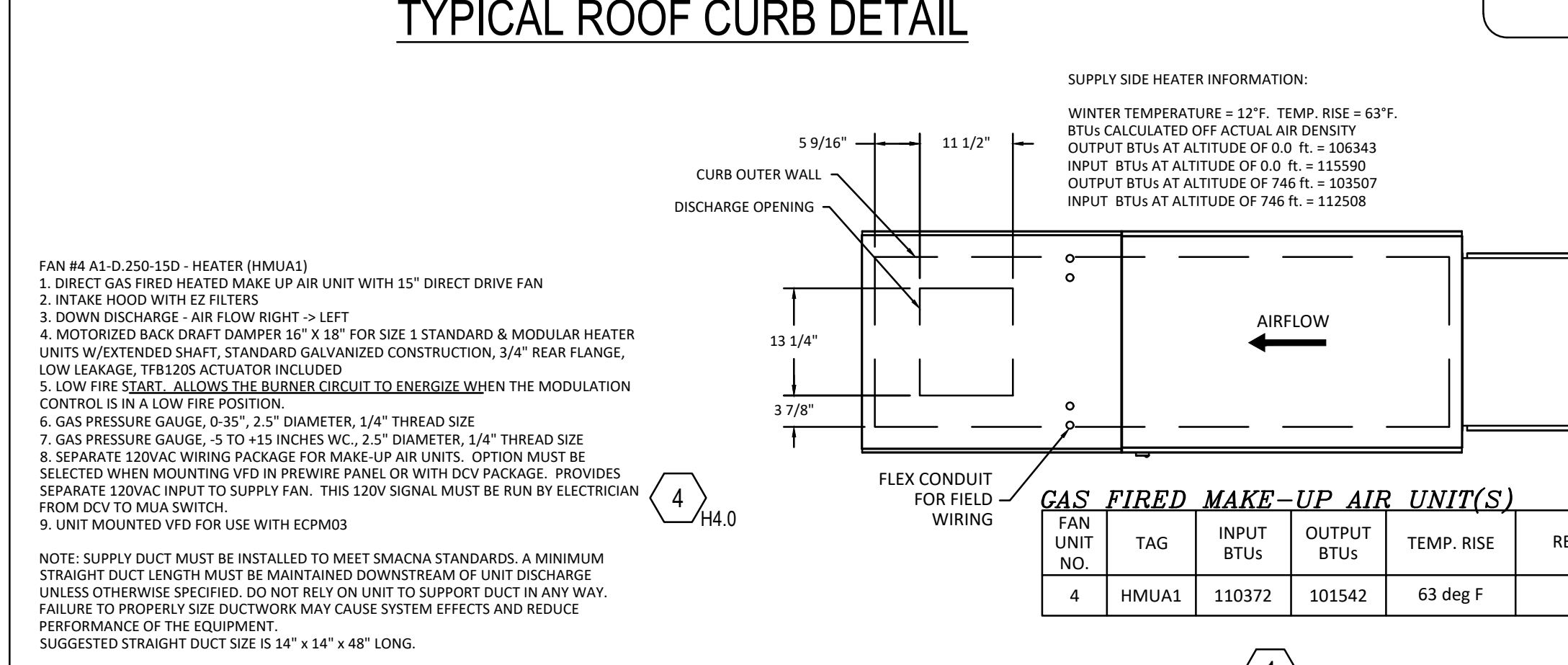
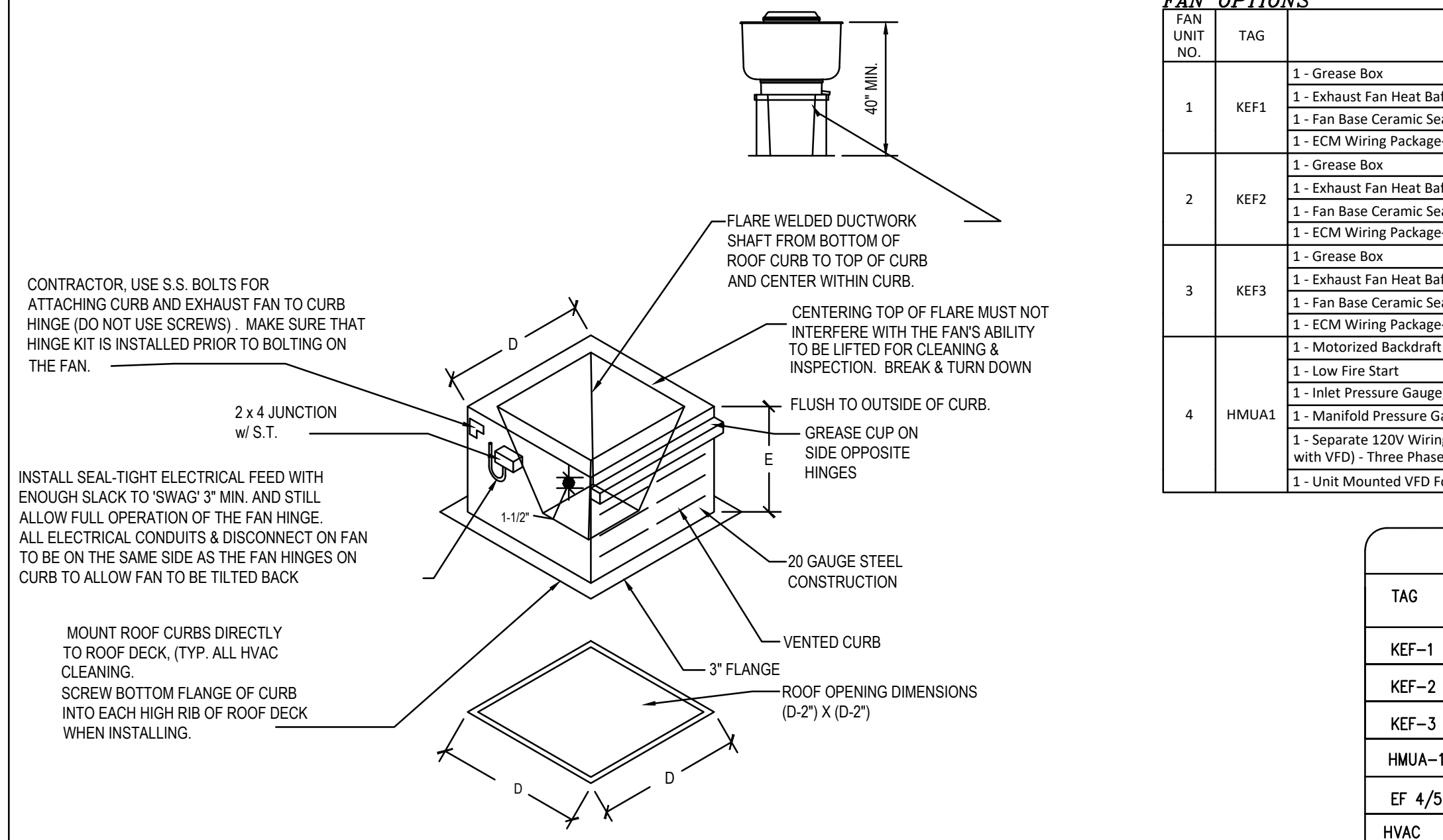
FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1	KEF-1 (GRILL)	DUBSHFA	1120	1.150	1215	0.750	0.3410	1	115	8.9	354 FPM	89	12.8
2	KEF2 (OVEN)	DU33HFA	600	0.600	1360	0.333	0.2030	1	115	4.3	396 FPM	70	14.1
3	KEF3 (FRY)	DUBSHFA	850	1.150	1144	0.750	0.3250	1	115	8.8	276 FPM	92	14.6

**MUA FAN INFORMATION - Job#4137855**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	MCA	MOCF	WEIGHT (LBS.)	SONES
4	HMUA1	A1-D.250-15D	15MF-1-MOD	A1-D.250	1000	1630	0.440	1855	1.500	0.9960	3	208	4.4		15A	648	15.6

**CURB ASSEMBLIES**

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE (D) x (D) x (E)	LOCATION
1	#1	KEF1 - GRIDDLE	44 LBS	Curb	23.000"W x 23.000"L x 30.000"H	Grill Hood Curb
2	#2	KEF2 - OVEN	38 LBS	Curb	19.500"W x 19.500"L x 30.000"H	Oven Hood Curb
3	#3	KEF3 - FRYER	44 LBS	Curb	23.000"W x 23.000"L x 30.000"H	Fryer Hood Curb
4	#4	HMUA1	63 LBS	Curb	21.000"W x 71.000"L x 16.000"H	Hood MUA Curb



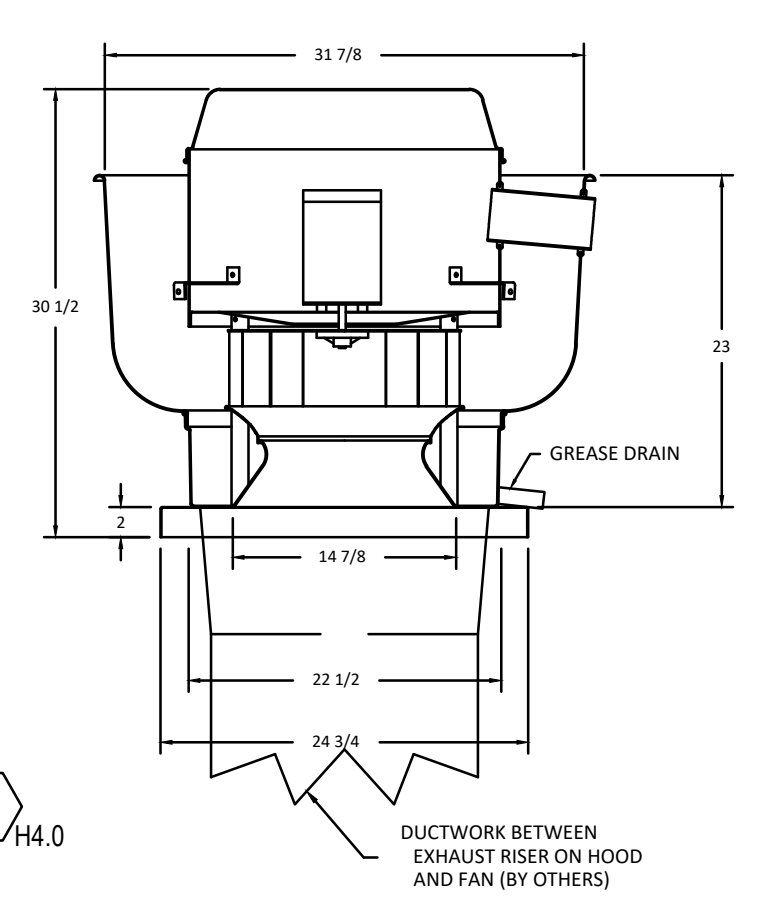
**FAN OPTIONS**

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEF1	1 - Grease Box 1 - Exhaust Fan Heat Baffle 1 - Fan Base Ceramic Seal - Installed At Plant - For Grease Ducts 1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
2	KEF2	1 - Grease Box 1 - Exhaust Fan Heat Baffle 1 - Fan Base Ceramic Seal - Installed At Plant - For Grease Ducts 1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
3	KEF3	1 - Grease Box 1 - Exhaust Fan Heat Baffle 1 - Fan Base Ceramic Seal - Installed At Plant - For Grease Ducts 1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
4	HMUA1	1 - Grease Box 1 - Inlet Pressure Gauge, 0-35" 1 - Manifold Pressure Gauge, -5 to 15" wc 1 - Separate 120VAC Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only 1 - Unit Mounted VFD For Use with ECPM03

**AIR BALANCE SCHEDULE**

TAG	ROOMS SERVED	O.A. CFM	EXHAUST CFM
KEF-1	HD1 (GRILL)	-	- 1120
KEF-2	HD2 (OVEN)	-	- 600
KEF-3	HD3 (FRYER)	-	- 850
HMUA-1	HDS 1 & 3	+ 1630	-
EF 4/5	TOILETS	-	- 225
HVAC	BUILDING	+ 1350 (MIN)	-
NET		+185 CFM	

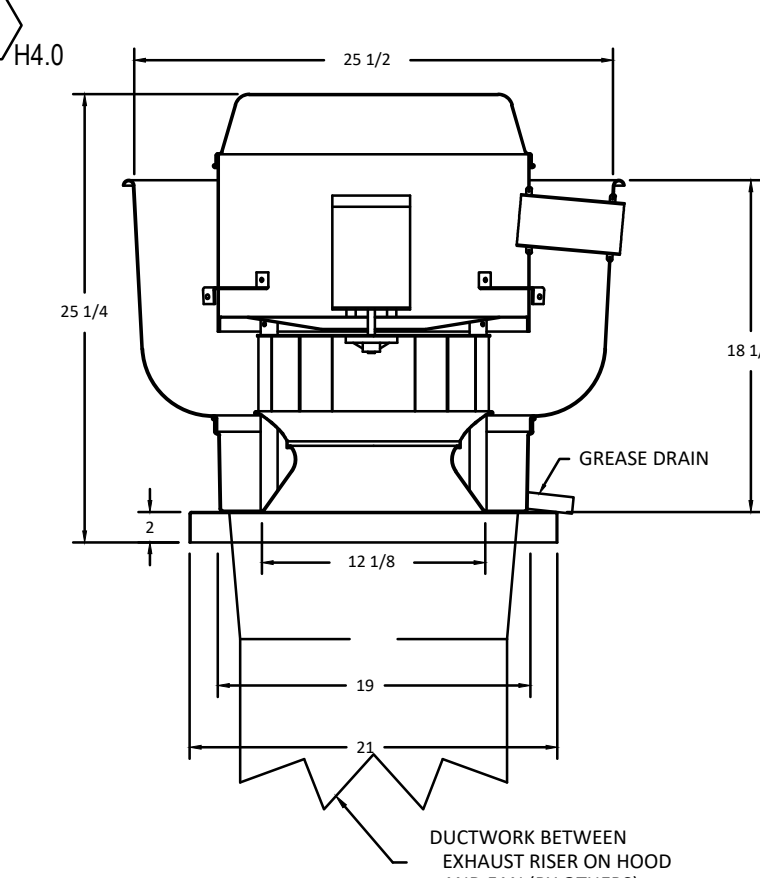
FAN #1 DU85HFA - EXHAUST FAN (KEF1)



- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
  - ROOF MOUNTED FANS
  - RESTAURANT MODEL
  - UL705 AND UL762 AND UL6-5645
  - VARIABLE SPEED CONTROL
  - INTERNAL WIRING
  - WEATHERPROOF DISCONNECT
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
  - HIGH HEAT OPERATION 300°F (149°C)
  - GREASE CLASSIFICATION TESTING
- NORMAL TEMPERATURE 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.
- 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.  
ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPM03 PREWIRE (NIDEC MOTOR).

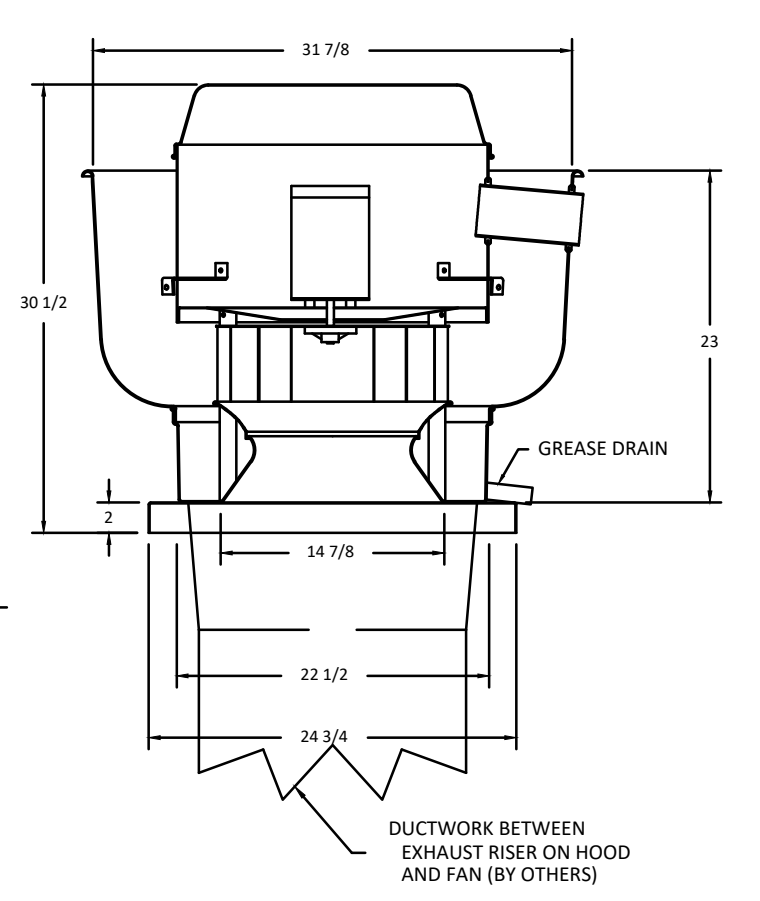
FAN #2 DU33HFA - EXHAUST FAN (KEF2)



- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
  - ROOF MOUNTED FANS
  - RESTAURANT MODEL
  - UL705 AND UL762 AND UL6-5645
  - VARIABLE SPEED CONTROL
  - INTERNAL WIRING
  - WEATHERPROOF DISCONNECT
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
  - HIGH HEAT OPERATION 300°F (149°C)
  - GREASE CLASSIFICATION TESTING
- NORMAL TEMPERATURE TEST**  
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FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.  
ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPM03 PREWIRE (NIDEC MOTOR).

FAN #1 DU85HFA - EXHAUST FAN (KEF1)



- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
  - ROOF MOUNTED FANS
  - RESTAURANT MODEL
  - UL705 AND UL762 AND UL6-5645
  - VARIABLE SPEED CONTROL
  - INTERNAL WIRING
  - WEATHERPROOF DISCONNECT
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
  - HIGH HEAT OPERATION 300°F (149°C)
  - GREASE CLASSIFICATION TESTING
- NORMAL TEMPERATURE 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.
- 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.

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EXHAUST FAN HEAT Baffle.  
FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.  
ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPM03 PREWIRE (NIDEC MOTOR).

**MUA NOTES:**

- URETHANE CAULK HORIZ. & VERT. CONNECTIONS BETWEEN BLOWER ASSEMBLY & CONTROL MODULE.
- URETHANE CAULK HORIZ. & VERT. CONNECTIONS BETWEEN CONTROL MODULE & OUTSIDE AIR HOOD.

FOR QUESTIONS, CALL THE  
CAPTIVE-AIRE (TRI-STATE) OFFICE  
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