

HOOD INFORMATION - JOB#5126207

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT	DIA		CFM	VEL	SP	END TO END	ROW
1	HD1-Grill	3650 BD-2	CAPTIVEAIRE	6' 0"	600 DEG	I	HEAVY	175	1050	10"	10"	4"		1050	1512	-0.662"	430 SS WHERE EXPOSED	ALONE	ALONE
2	HD2-Oven	4412 PS-Ovn		1' 9.25"	300 Deg.	I	Light	200	600	8"	8"	4"		600	1500	-0.376"	430 SS 100%	ALONE	ALONE
3	HD3-Fry	3650 BD-2	CAPTIVEAIRE	4' 2"	600 DEG	I	HEAVY	192	800	9"	8"	4"		800	1600	-0.706"	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@captivaire.com

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 #
1	HD1-Grill	CAPTRATE SOLO FILTER	4	16"	16"	85% SEE FILTER SPEC	3	L55 SERIES E26	NO						249 LBS	
2	HD2-Oven	SS Baffle w/ Handles	2	10"	20"	30%	0							248 LBS		
3	HD3-Fry	CAPTRATE SOLO FILTER	3	16"	16"	85% SEE FILTER SPEC	2	L55 SERIES E26	NO	WALL MNT	12"x48"x24"	ANSUL R102	3.0/3.0	SC-130220MA_MA4	2 LIGHT 2 FAN	226 LBS

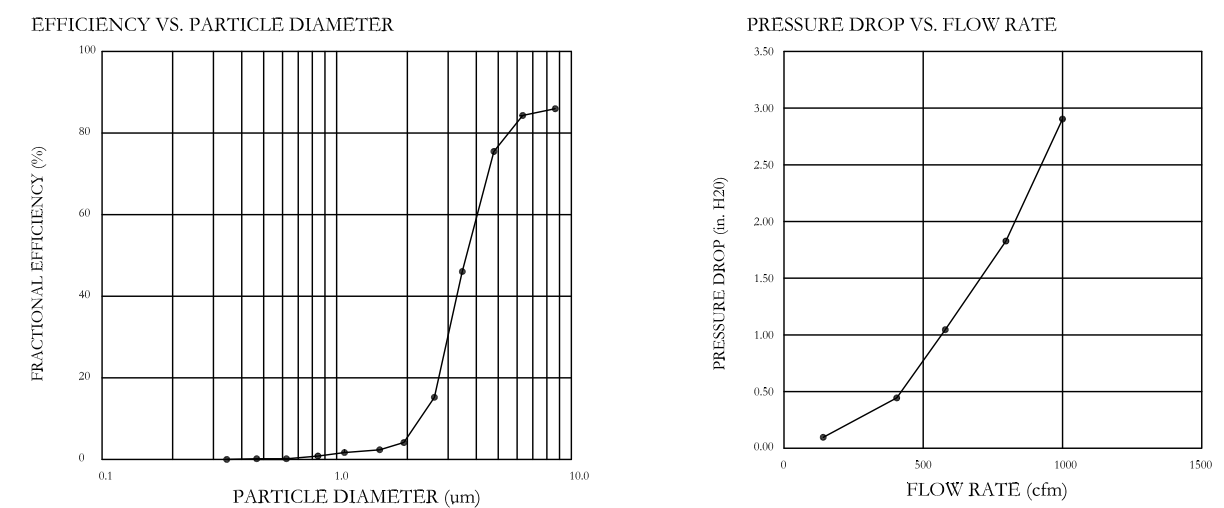
HOOD OPTIONS

HOOD NO	TAG	OPTION
1	HD1-Grill	FIELD WRAPPER 14.50" HIGH FRONT, LEFT, RIGHT.
		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.
2	HD3-Fry	FIELD WRAPPER 14.50" HIGH FRONT, LEFT, RIGHT.
		RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS.
		LEFT VERTICAL END PANEL 26" TOP WIDTH, 26" BOTTOM WIDTH, 61" HIGH INSULATED 430 SS. SENSOR-CV.

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 75% 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.



CAPTIVE FILTERS ARE BUILT IN COMPLIANCE WITH:
 NFPA #66
 NSF STANDARD #2
 UL STANDARD #1046
 INT. MECH. CODE (MC)
 ULC-5649



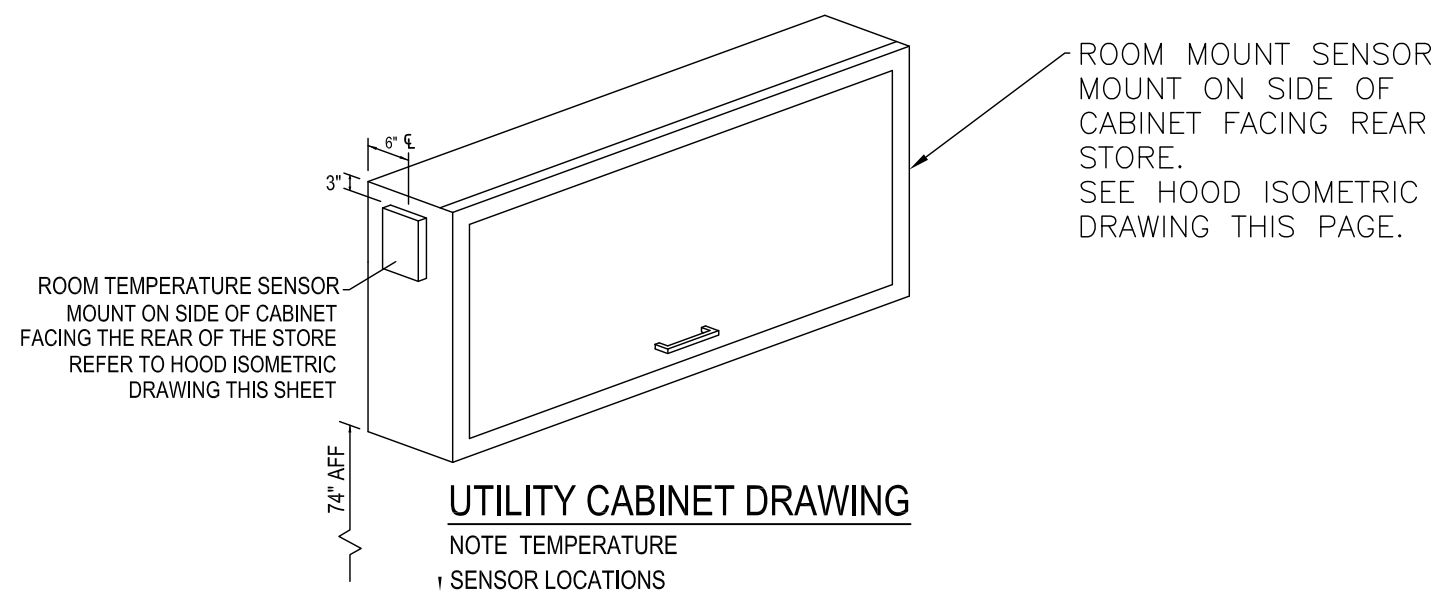
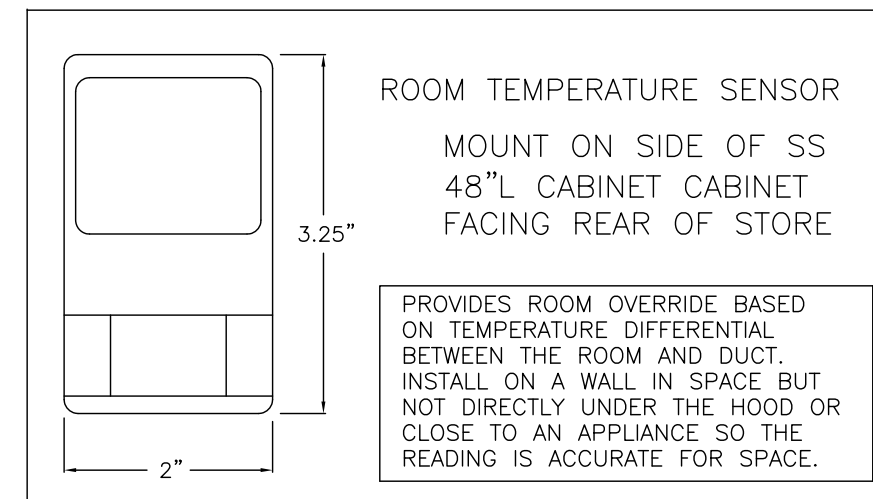
WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S)				WEIGHT
			TYPE	SIZE	MODEL #	SWITCHES QUANTITY	
2	WALL MNT	12"x48"x24"	ANSUL R102	3.0/3.0	SC-130220MA_MA4	2 LIGHT 2 FAN	254.00 LBS

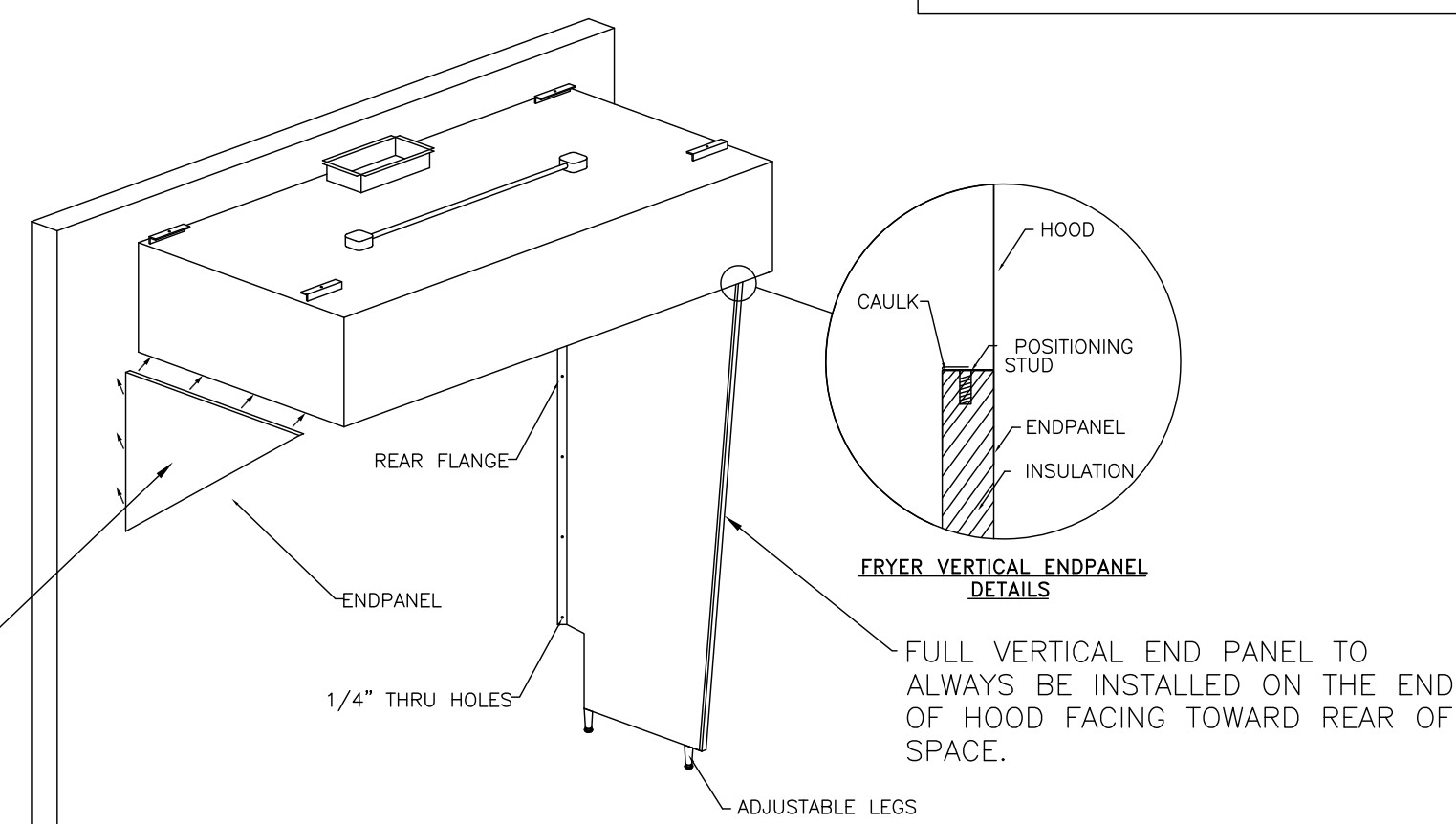
GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1	FS-1	MECHANICAL	1.250	CAPTIVEAIRE SYSTEMS

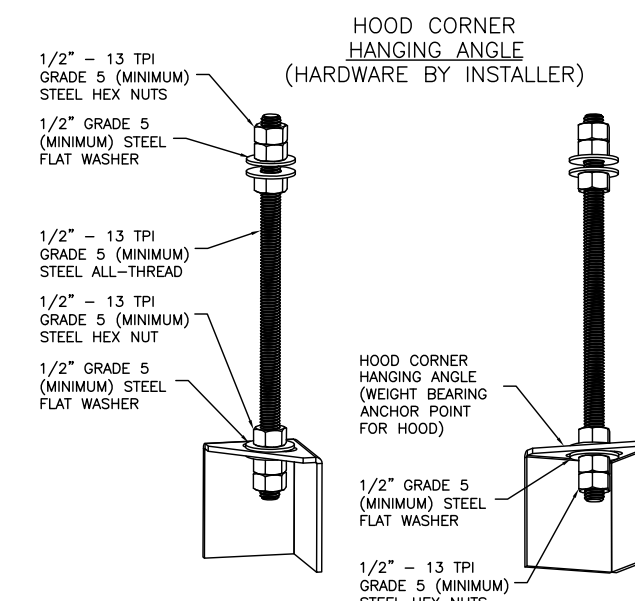
LOCATED IN 48"L X24"H 12" SS CABINET MOUNTED NEXT TO GRILL HOOD



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



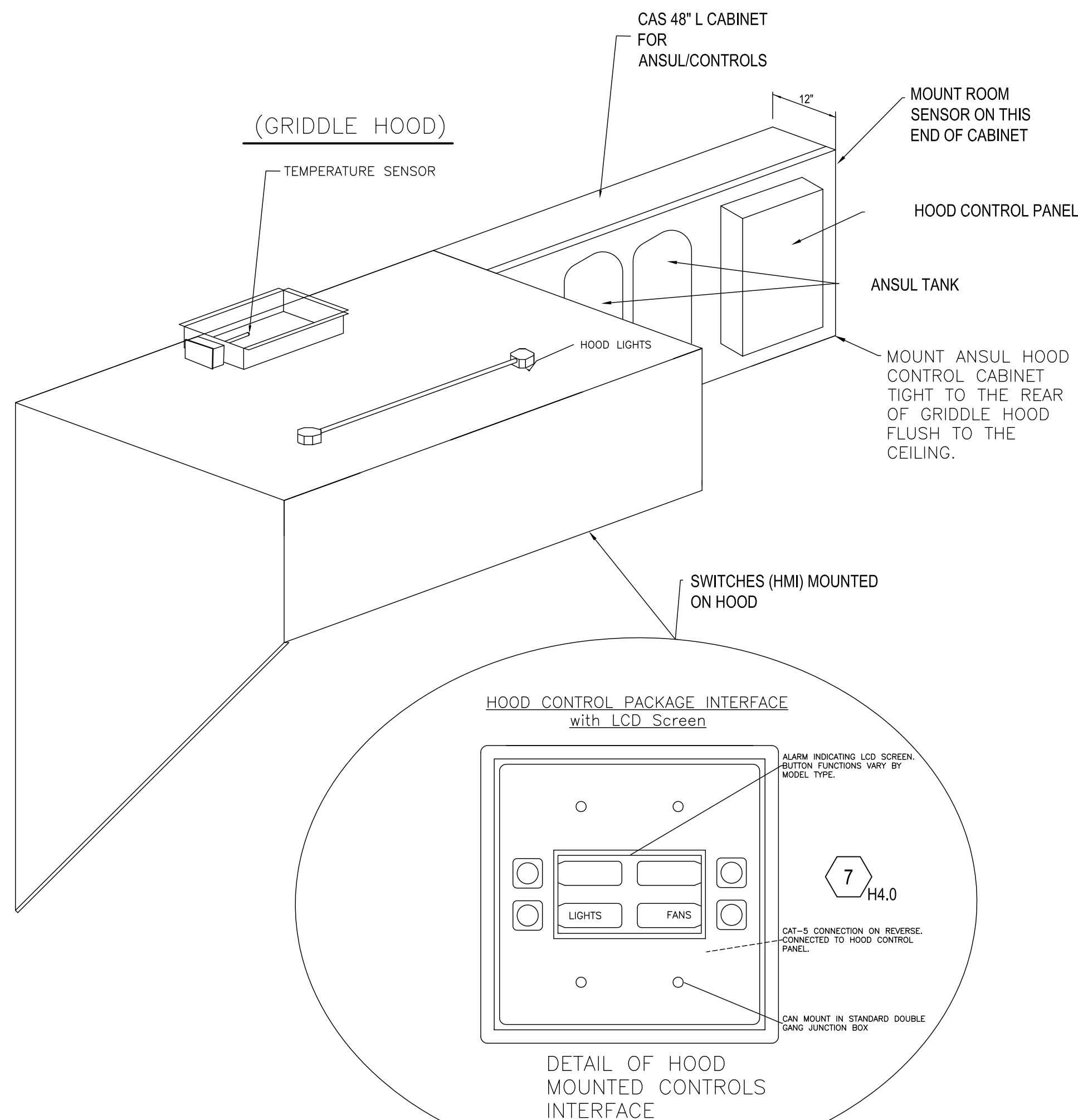
(FRYER HOOD)



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.

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



REVISIONS

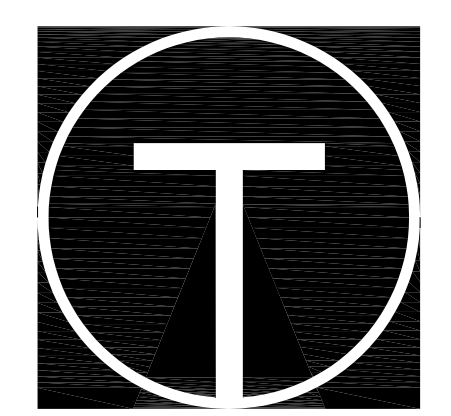
NO.	DESCRIPTION	DATE:

CAPTIVEAIRE

Penn Station V2BRD2
 SHELBYVILLE, KY, 40065

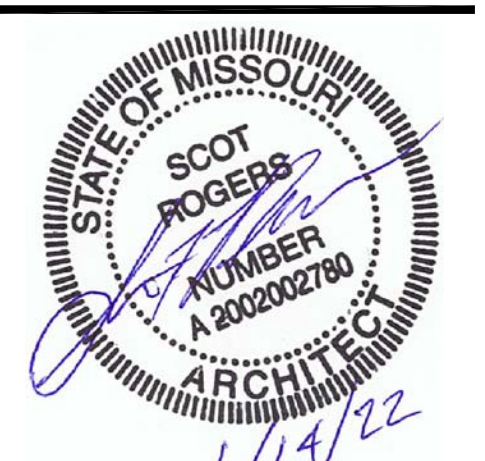
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 DWG.#: 5126207
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 SCALE: 3/4" = 1'-0"
 MASTER DRAWING

SHEET NO. 1



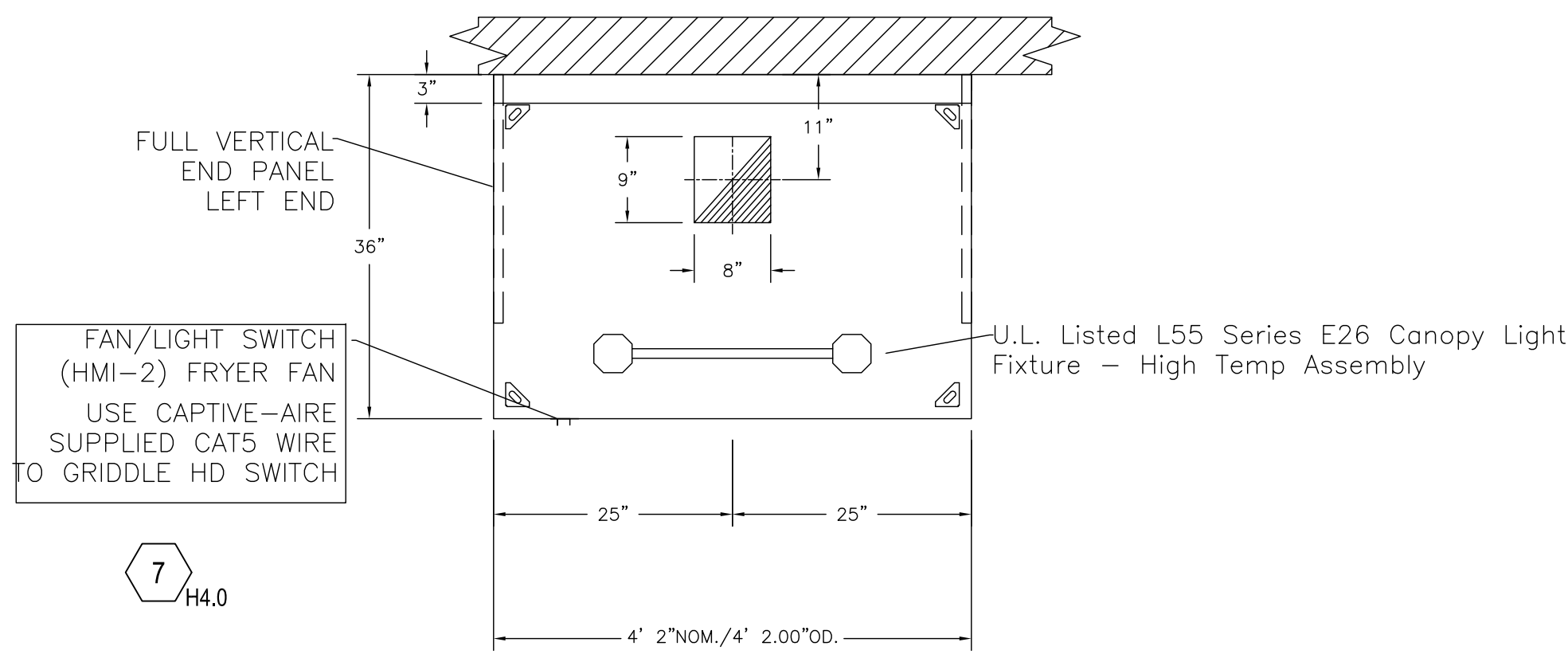
TILSLEY ARCHITECTS
 1140 SAINT GREGORY ST. CINCINNATI, OH 45202
 TEL: 513.651.4300
 WWW.TILSLEYARCHITECTS.COM

A New Penn Station Restaurant
 6424 Ronald Reagan Dr.
 Lake St, Louis, MO 63367



NO.	ISSUE DESCRIPTION	DATE

Sheet Title: Captiveaire Shop
 Drawings Issued For Permit: 01-14-2022
 Scale: Drawn By: S. Rogers
 As Noted PS Hawk Ridge
 Checked by: 21052

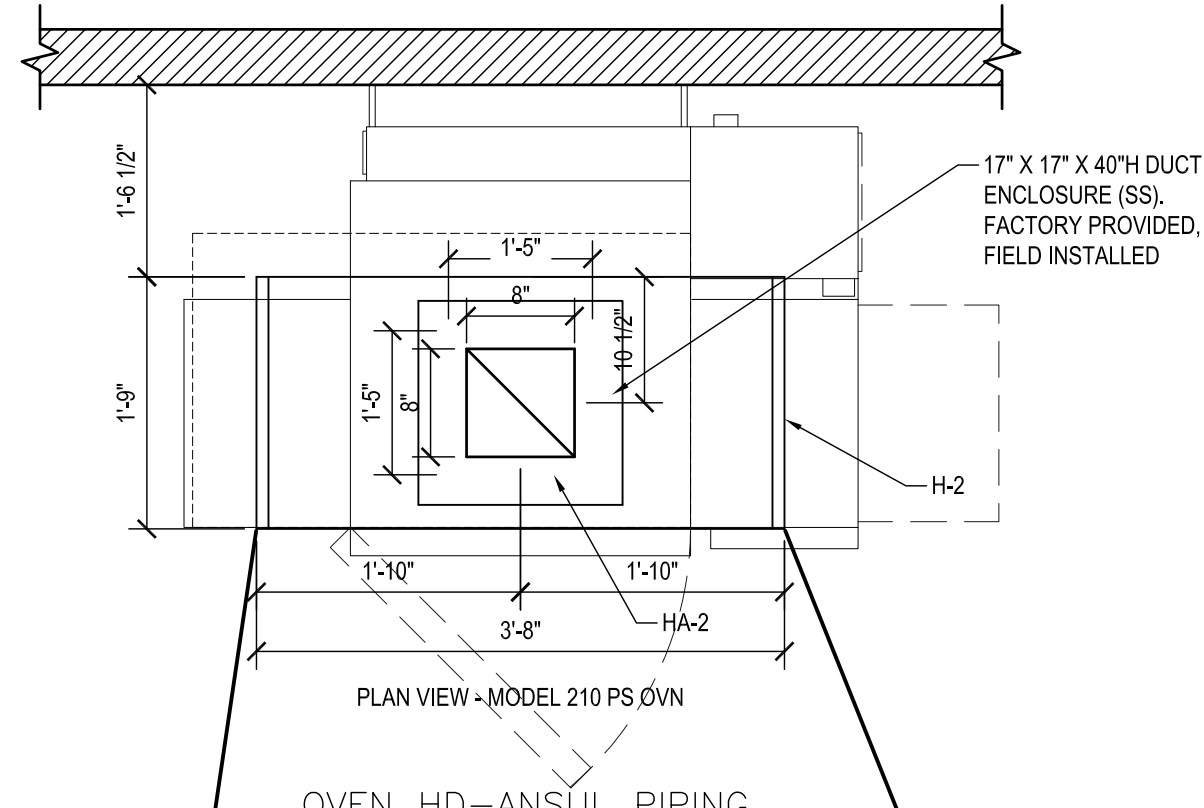


PLAN VIEW - (Hood #3-Fry)
4' 2.00" LONG 3650BD-2
4' 2.00" LONG 246ACPSP-PLENUM

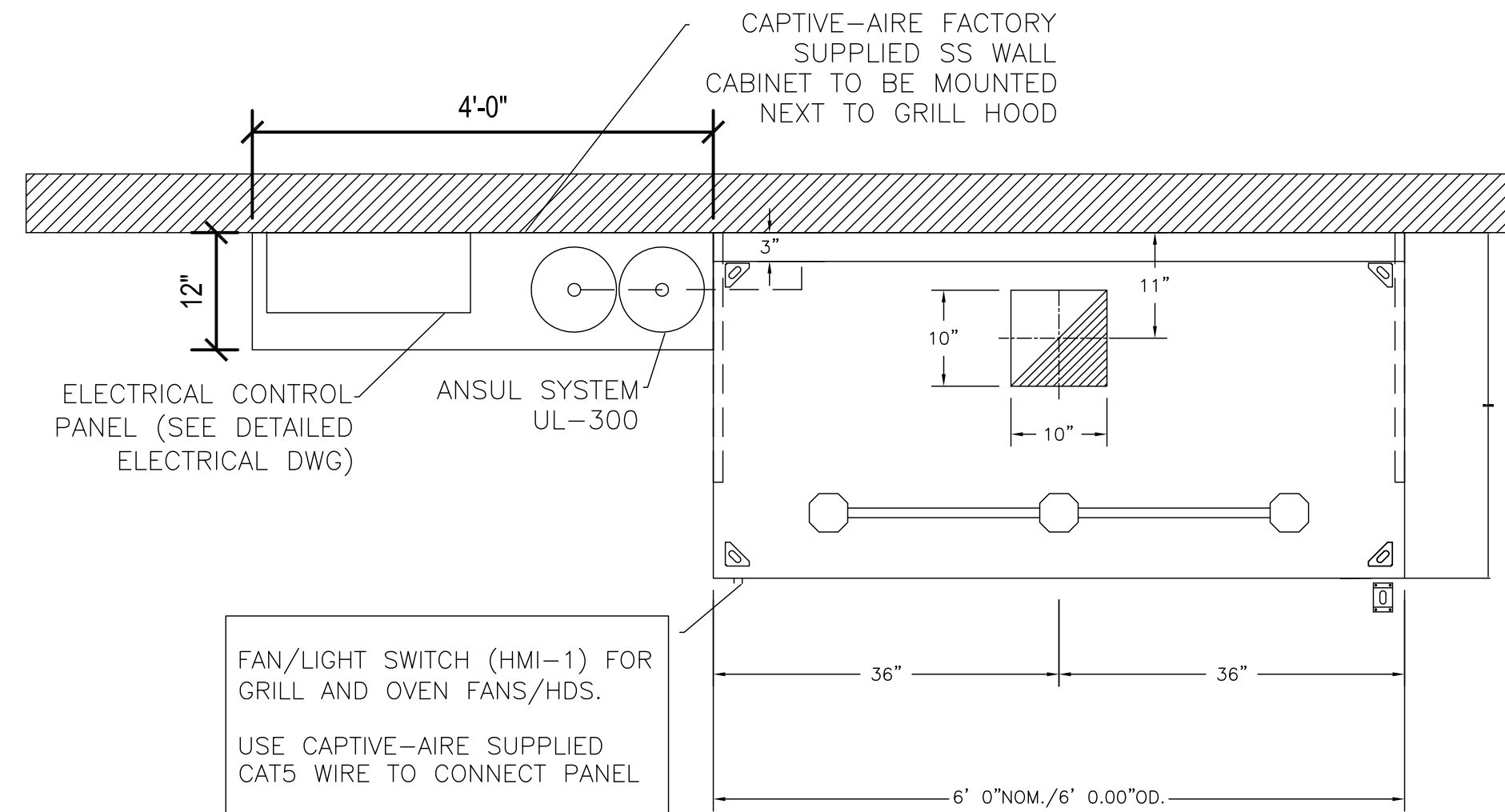
AIR BALANCE SCHEDULE			
TAG	ROOMS SERVED	O.A. CFM	EXHAUST CFM
KEF-1	HD1 (GRILL)	-	- 1050
KEF-2	HD2 (OVEN)	-	- 600
KEF-3	HD3 (FRYER)	-	- 800
RTU-DOAS1	KITCHEN + HOODS	+ 1475	-
EF 4/5	TOILETS	-	- 225
RTU-DOAS2	BUILDING	+ 1275	-
NET		+ 75 CFM	

KITCHEN TO MAINTAIN A SLIGHTLY NEGATIVE PRESSURE. OVERALL BUILDING PRESSURE TO BE BETWEEN -0.02" TO +0.02" WC PER IMC COMMENTARY RECOMMENDATIONS

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



NOTE: PIPING MUST BE INTERNAL TO HOOD AND APPLIANCE. NOZZLES MUST BE PIPED TOWARD THE FRONT (OPERATORS SIDE) TO ALLOW OVEN TO BE PULLED OUT. NOZZLES LEFT AND RIGHT OF THE EYEBROW HOOD SHALL BE HELD TIGHT TO THE TOP FRONT CORNER OF THE OVEN CANOPY AS POSSIBLE.

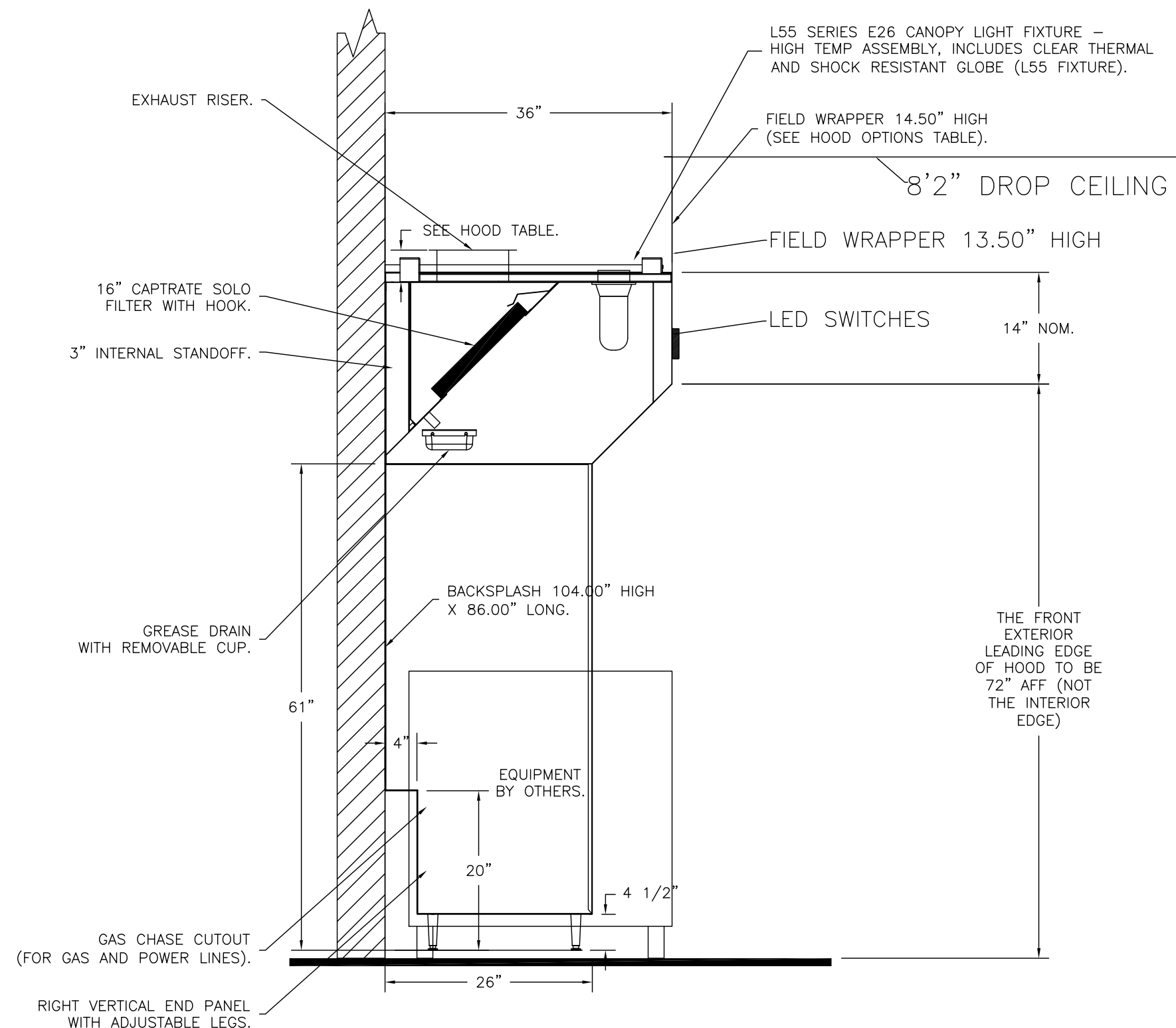


FAN/LIGHT SWITCH (HMI-1) FOR GRILL AND OVEN FANS/HDS.
USE CAPTIVE-AIRE SUPPLIED CAT5 WIRE TO CONNECT PANEL

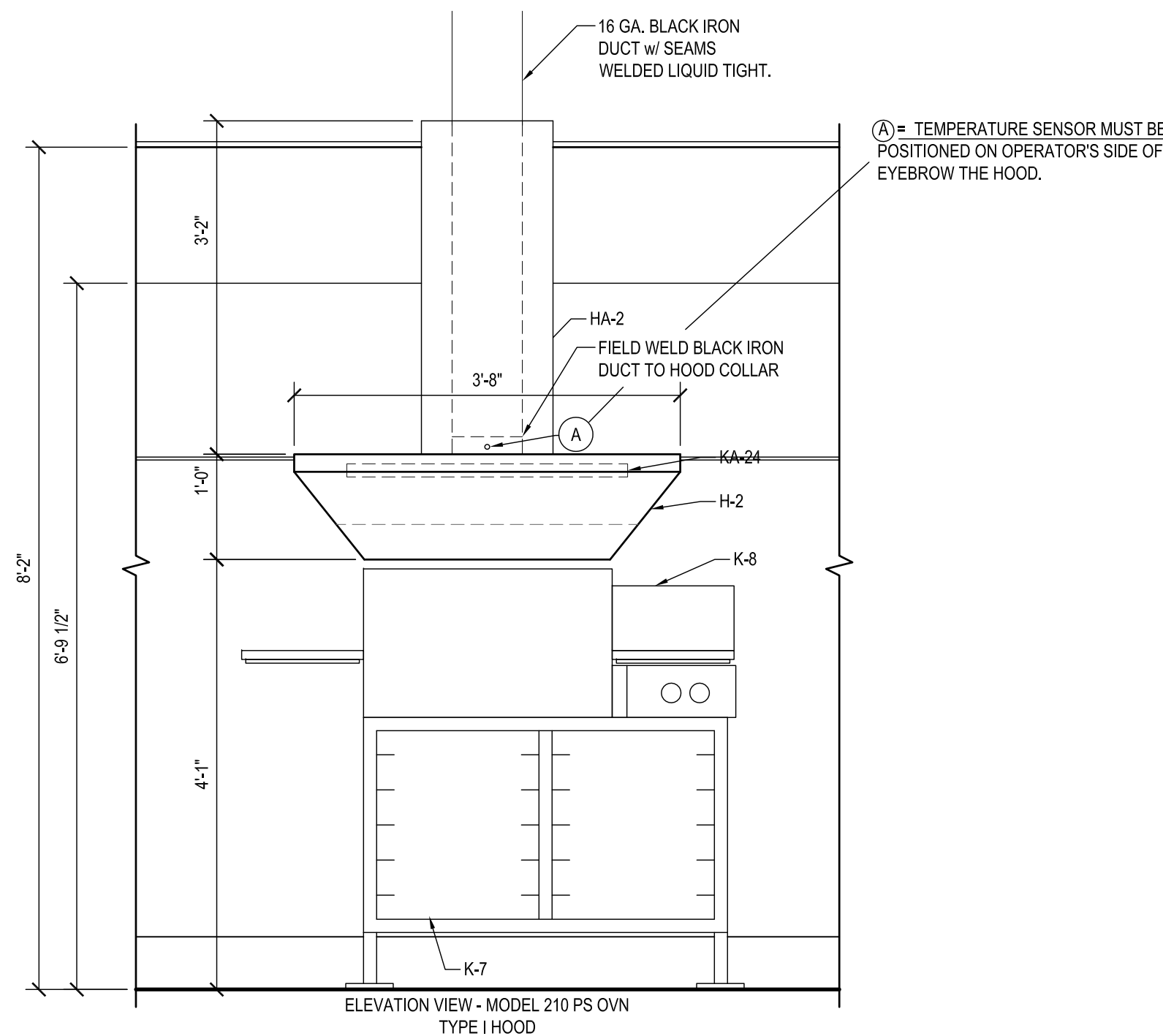
PLAN VIEW - Hood #HD1-Grill
6' 0.00" LONG 3650BD-2

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

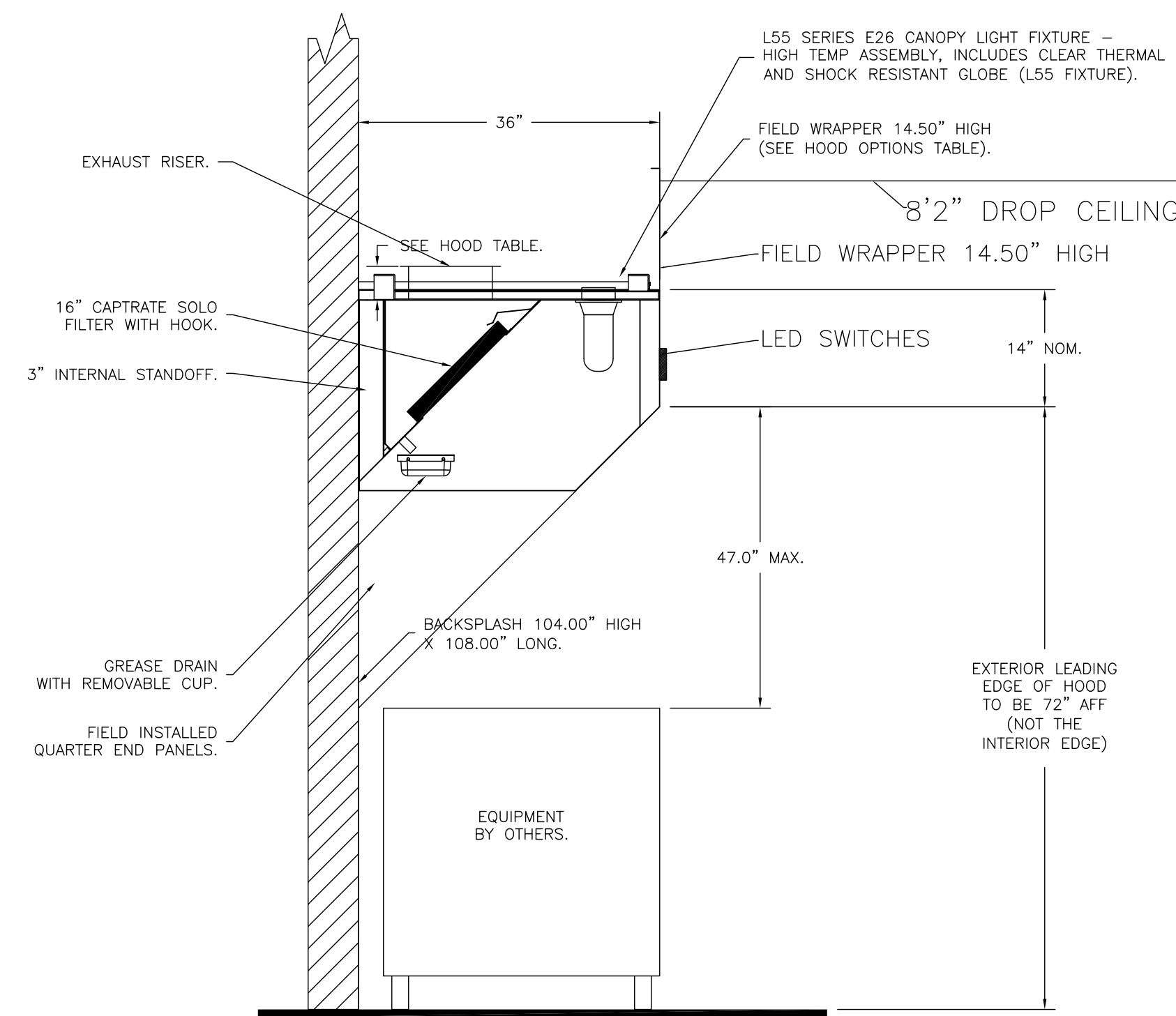
HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS



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



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



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

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REVISIONS

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www.captiveaire.com

CAPTIVE-AIRE

Air Solutions

1329 East Kemper Rd., Ste. 4210, Cincinnati, OH, 45246 PHONE: (513) 860-5556 EMAIL: reg.120@captiveaire.com

Penn Station v2BRD2

SHELBYVILLE, KY, 40065

DATE: 10/7/2021

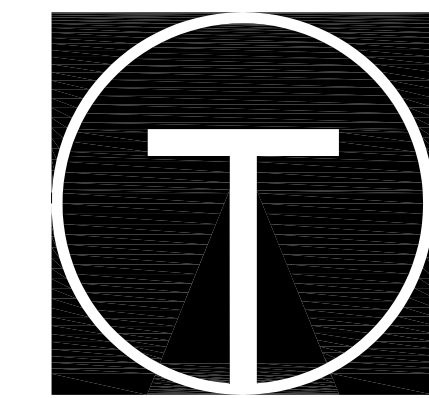
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SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 2



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EXHAUST FAN INFORMATION — JOB#5126207

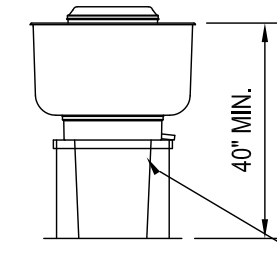
FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-1 (GRILL)	1	DUB5HFA	CAPTIVEAIRE	1050	1.150	1199	TEAO-ECM	0.750	0.3280	1	115	8.9	332 FPM	89	9.9
2	KEF2 (OVEN)	1	DU33HFA	CAPTIVEAIRE	600	0.600	1296	TEAO-ECM	0.333	0.1420	1	115	4.3	297 FPM	70	11.5
3	KEF3 (FRY)	1	DUB5HFA	CAPTIVEAIRE	800	1.200	1210	TEAO-ECM	0.750	0.3090	1	115	8.9	253 FPM	89	10.1

CURB ASSEMBLIES

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE	LOCATION
					(D) x (D) x (E)	
1	# 1	KEF1 — GRIDDLE	44 LBS	Curb	23.000"W x 23.000"L x 30.000"H	Vented Hinged Grill Hood Curb
2	# 2	KEF2 — OVEN	38 LBS	Curb	19.500"W x 19.500"L x 30.000"H	Vented Hinged Oven Hood Curb
3	# 3	KEF3 — FRYER	44 LBS	Curb	23.000"W x 23.000"L x 30.000"H	Vented Hinged Fryer Hood Curb

FAN ACCESSORIES

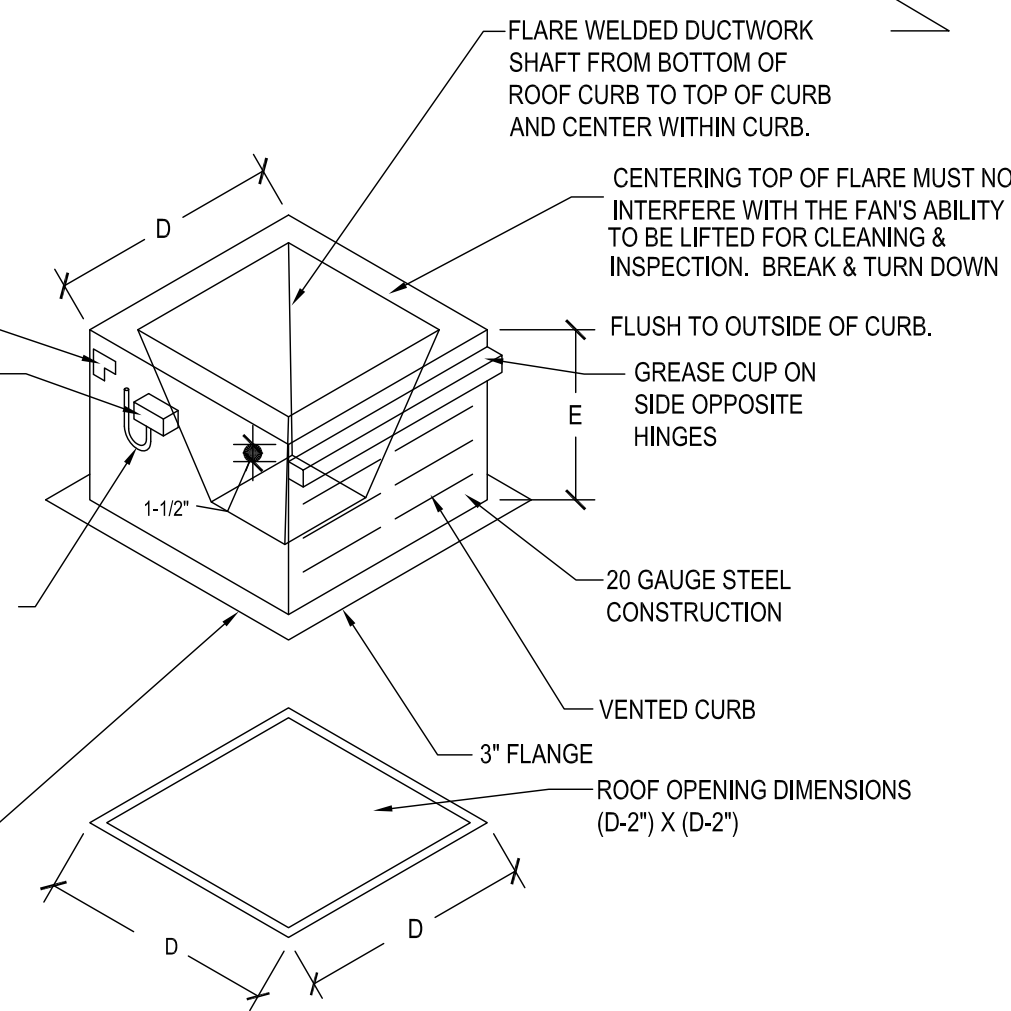
FAN UNIT NO	TAG	EXHAUST				SUPPLY		
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1 (GRILL)	YES						
2	KEF2 (OVEN)	YES						
3	KEF3 (FRY)	YES						



CONTRACTOR, USE S.S. BOLTS FOR ATTACHING CURB AND EXHAUST FAN TO CURB HINGE (DO NOT USE SCREWS). MAKE SURE THAT HINGE KIT IS INSTALLED PRIOR TO BOLTING ON THE FAN.

INSTALL SEAL-TIGHT ELECTRICAL FEED WITH ENOUGH SLACK TO SWAG 3" MIN. AND STILL ALLOW FULL OPERATION OF THE FAN HINGE. ALL ELECTRICAL CONDUITS & DISCONNECT ON FAN TO BE ON THE SAME SIDE AS THE FAN HINGES ON CURB TO ALLOW FAN TO BE TILTED BACK.

MOUNT ROOF CURBS DIRECTLY TO ROOF DECK, (TYP. ALL HVAC CLEANING). SCREW BOTTOM FLANGE OF CURB INTO EACH HIGH RIB OF ROOF DECK WHEN INSTALLING.



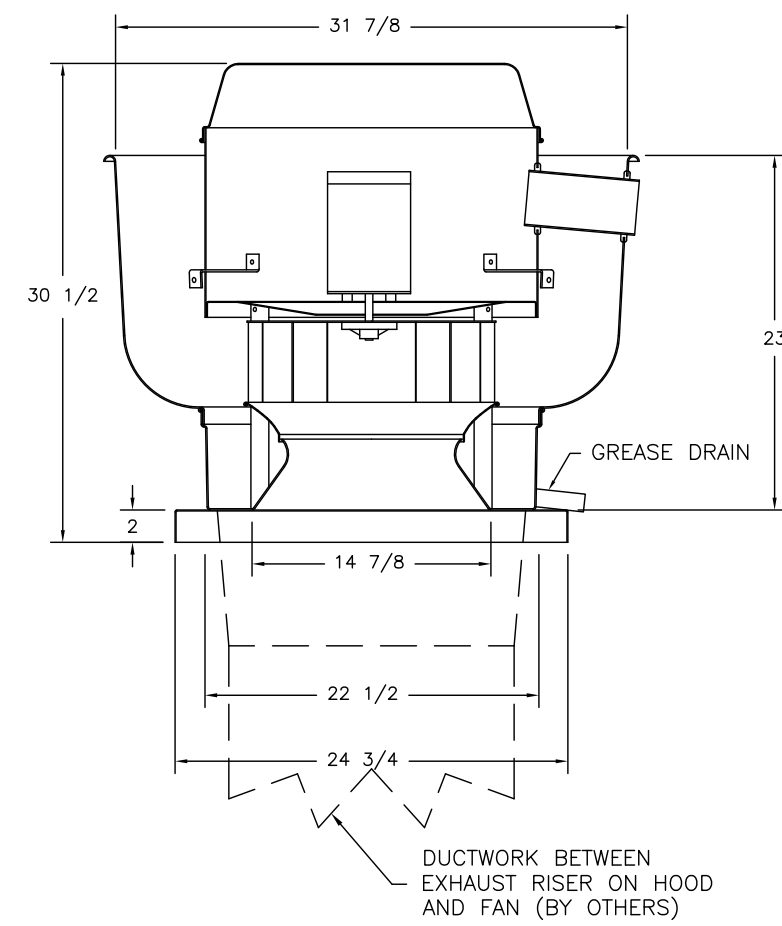
TYPICAL ROOF CURB DETAIL

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1 (GRILL)	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
2	KEF2 (OVEN)	1	ECM WIRING PACKAGE — PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
		1	GREASE BOX.
3	KEF3 (FRY)	1	EXHAUST FAN HEAT BAFFLE.
		1	ECM WIRING PACKAGE — PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.

6 H4.0
6 H4.0
6 H4.0

FAN #1 DUB5HFA — EXHAUST FAN (KEF1)



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-8645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

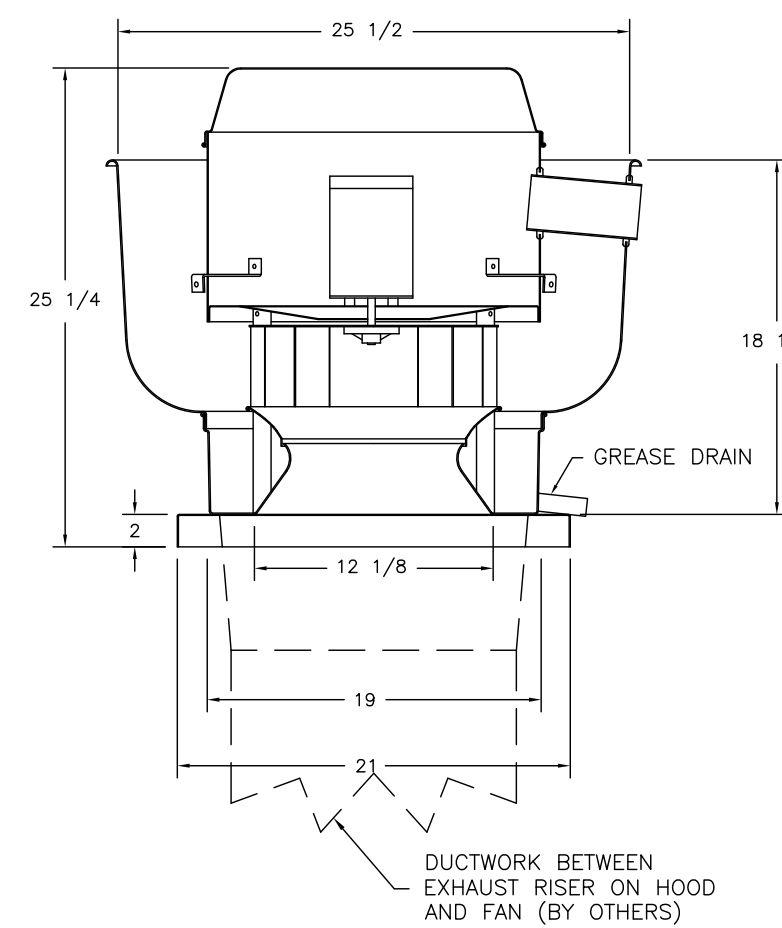
NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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. 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 ULC-8645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
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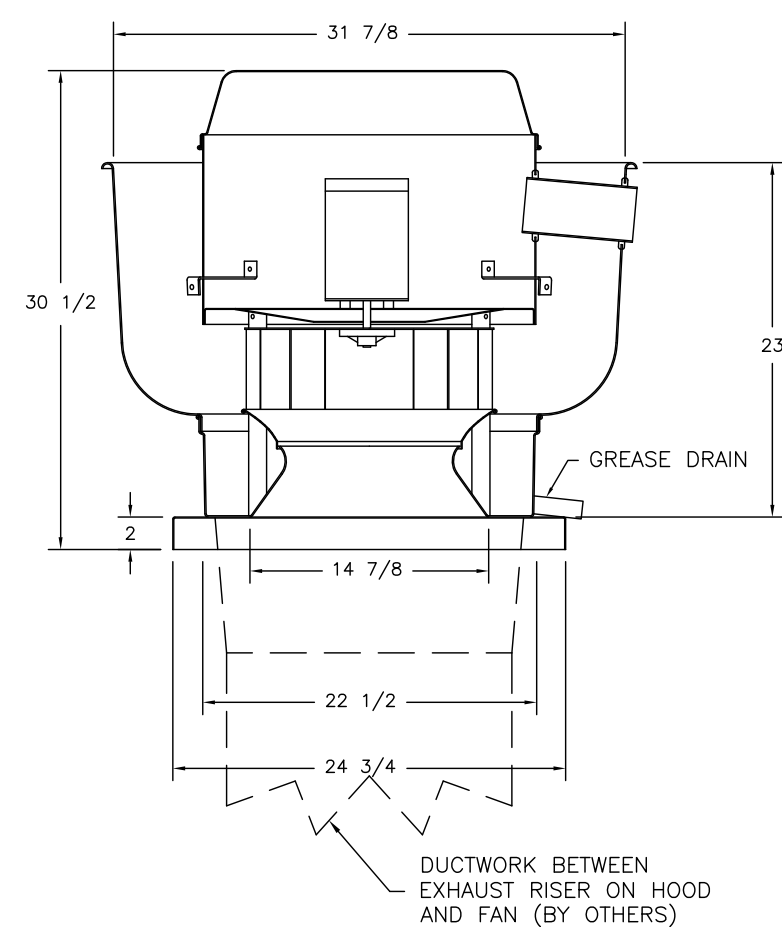
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FAN #1 DUB5HFA — EXHAUST FAN (KEF1)



FEATURES:

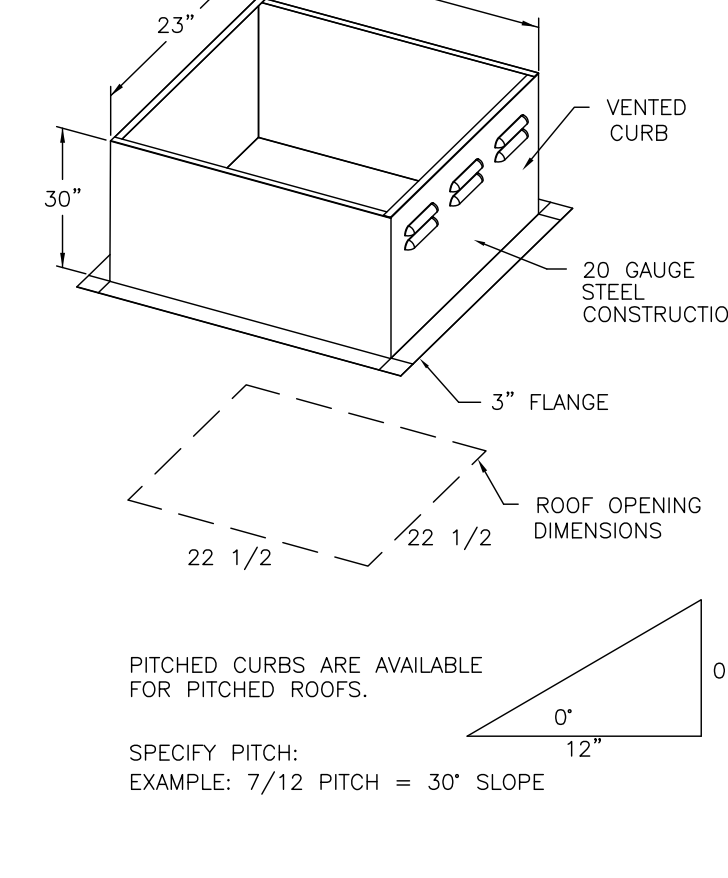
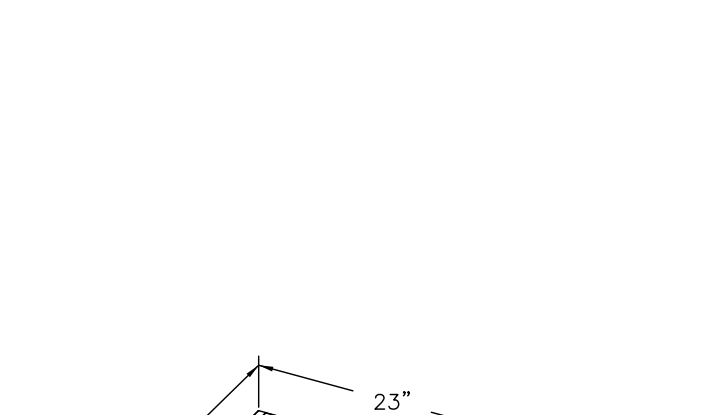
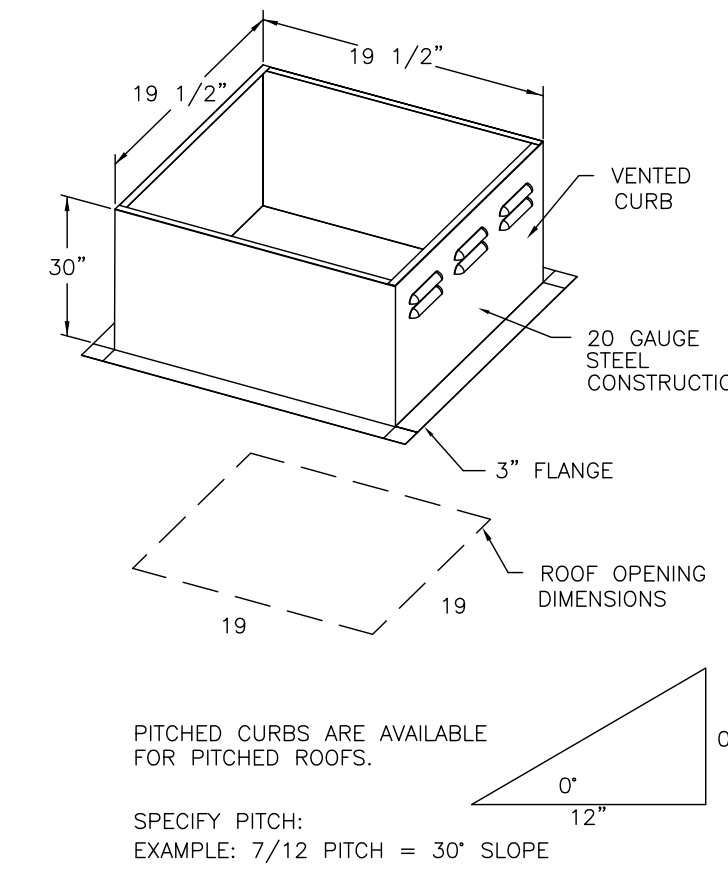
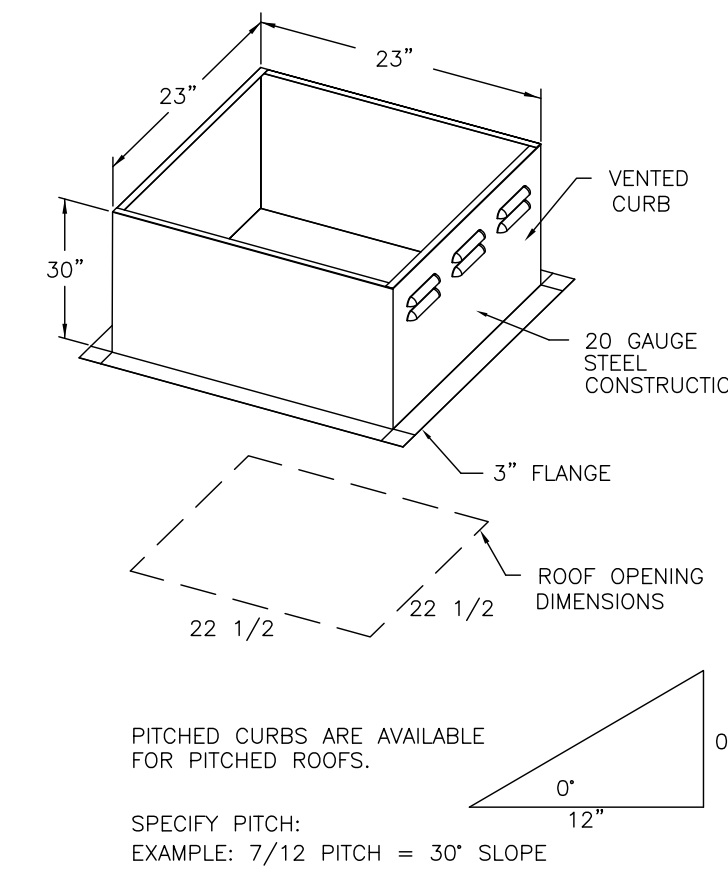
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REVISIONS

DESCRIPTION	DATE

CAPTIVE Air Solutions
www.captiveaire.com

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Penn Station V2BR2D
SHELBYVILLE, KY, 40065

DATE: 10/7/2021
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DRAWN BY:
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 3

FOR QUESTIONS, CALL THE CAPTIVE-AIRE (TRI-STATE) OFFICE
1329 E. KEMPER RD. SUITE 4210
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TEL 513.651.4300 WWW.TILSLEYARCHITECTS.COM

A New Penn Station Restaurant
6424 Ronald Reagan Dr.
Lake St, Louis, MO 63367

STATE OF MISSOURI
SCOT ROGERS
ARCHITECT
NUMBER A200202700
1/14/22

No. ISSUE DESCRIPTION DATE

Sheet Title
Captiveaire Shop

Drawings
Issued For Permit: Date
01-14-2022

Scale Drawn By
As Noted S. Rogers

Checked by PS Hawk Ridge

H3.0

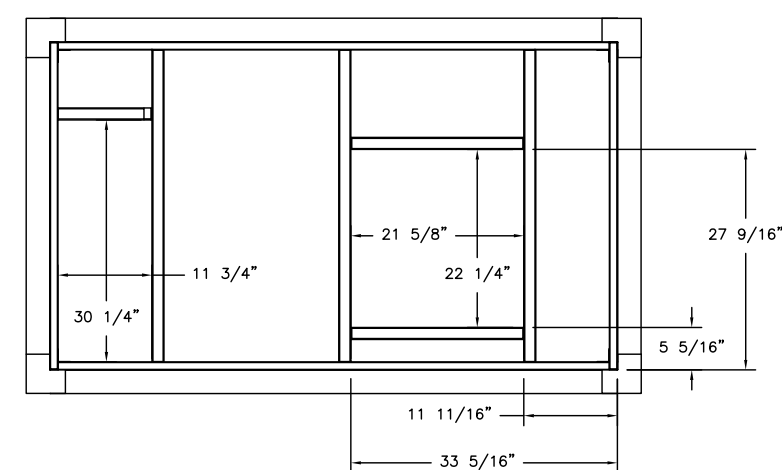
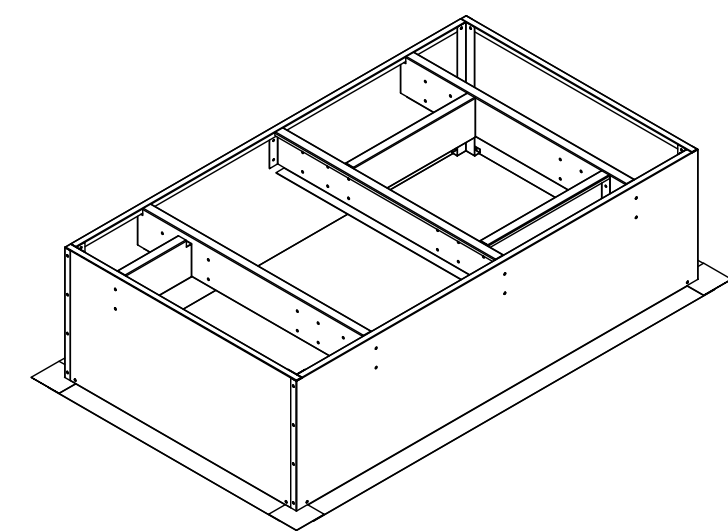
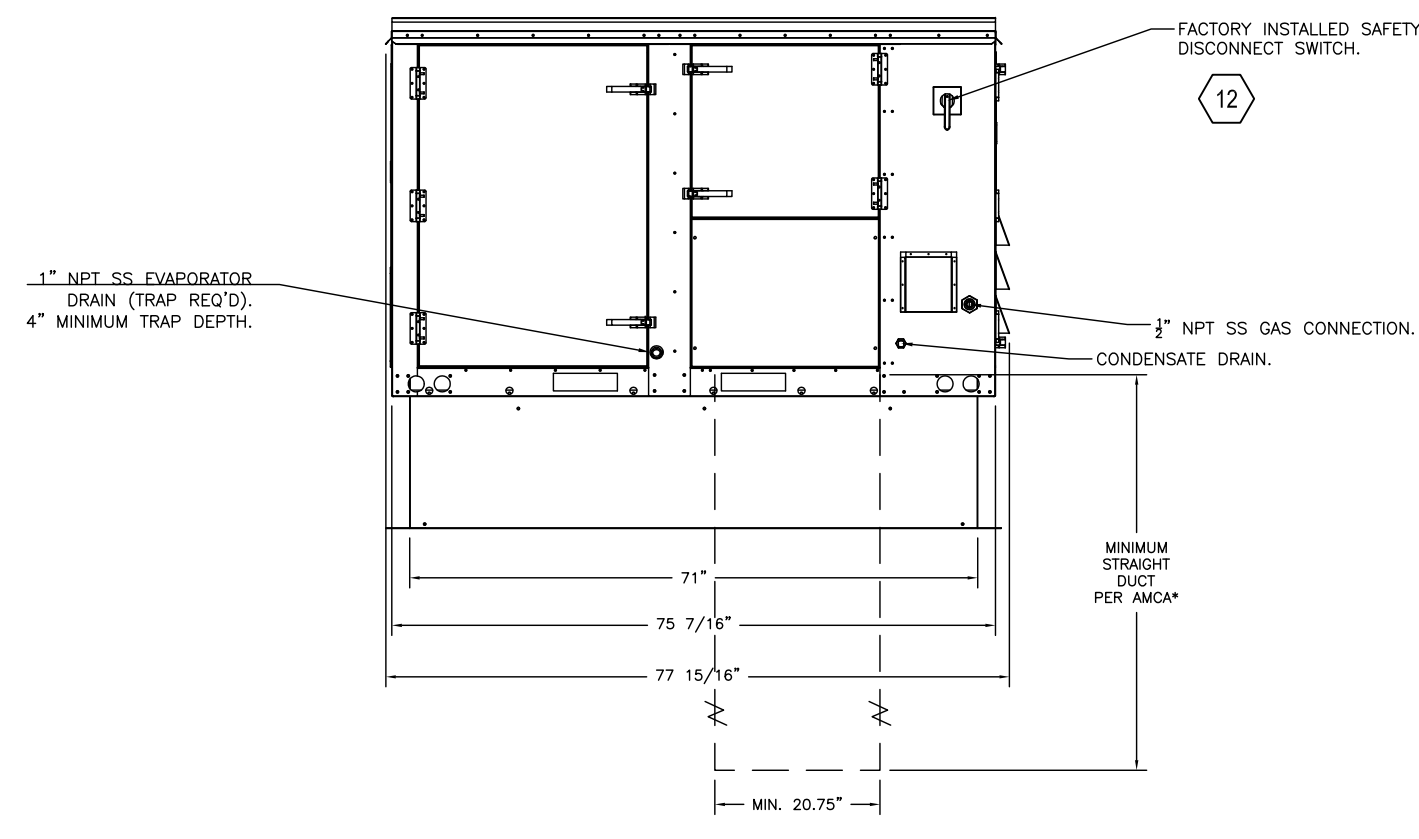
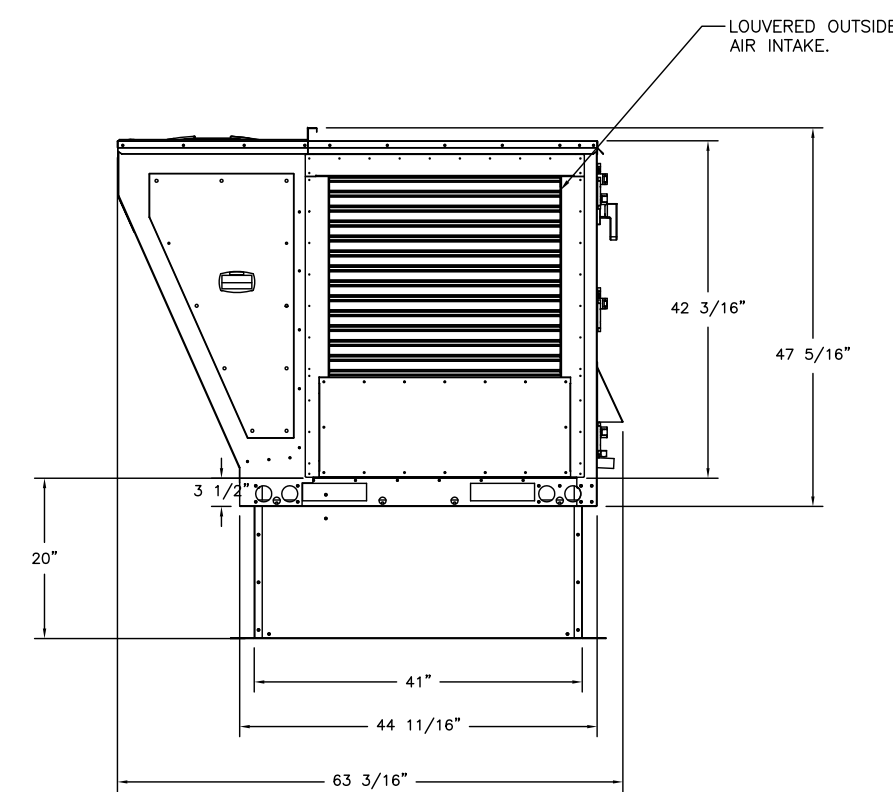
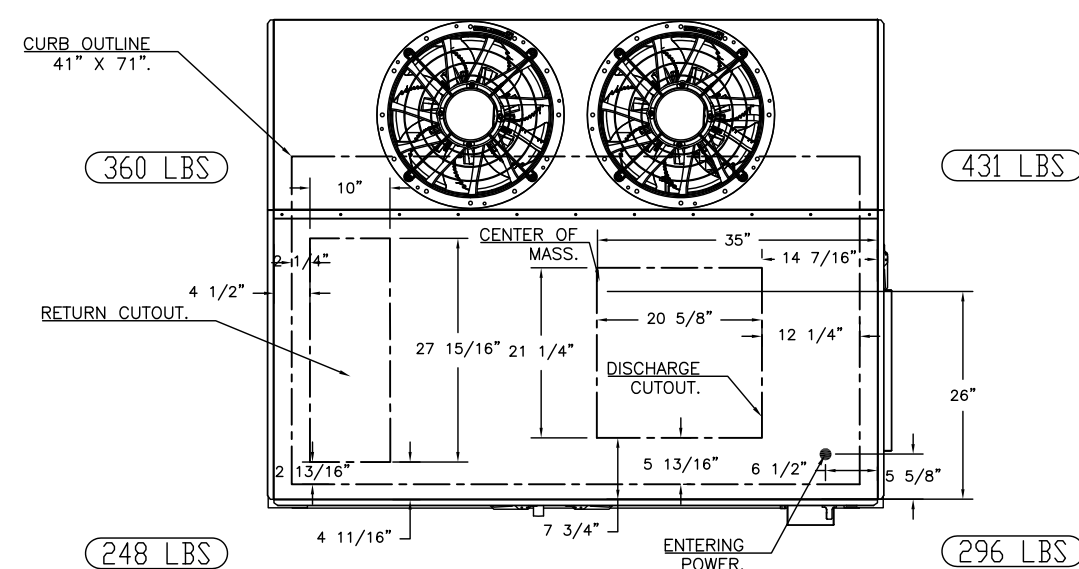
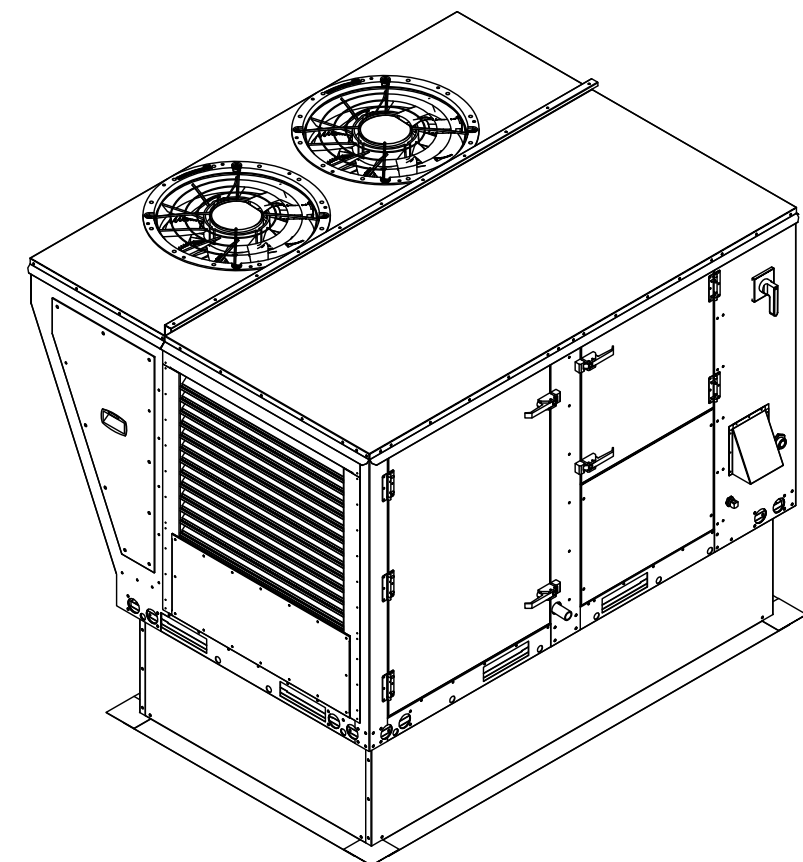
DETAILS OF (DOAS-RTU-KITCHEN) & (DOAS-RTU2-DINING) UNITS

NOTES:

- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
- DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.

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

*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 20.75" x 21.5".

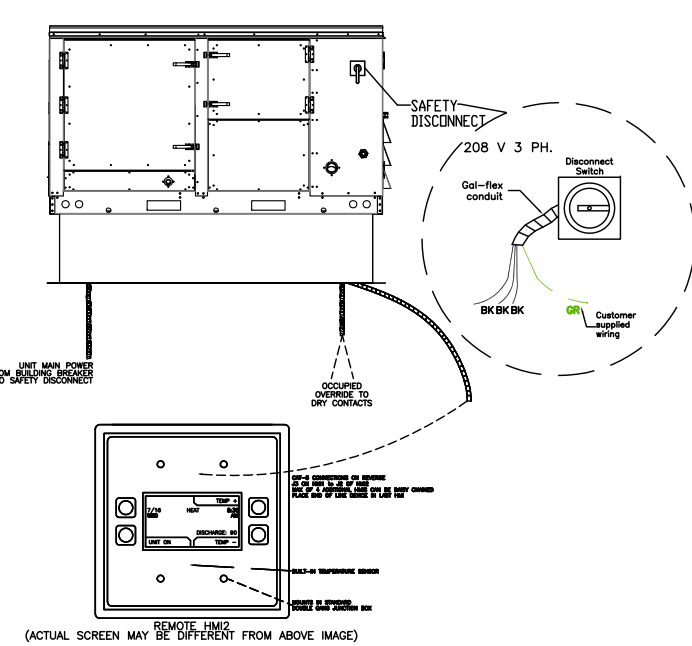
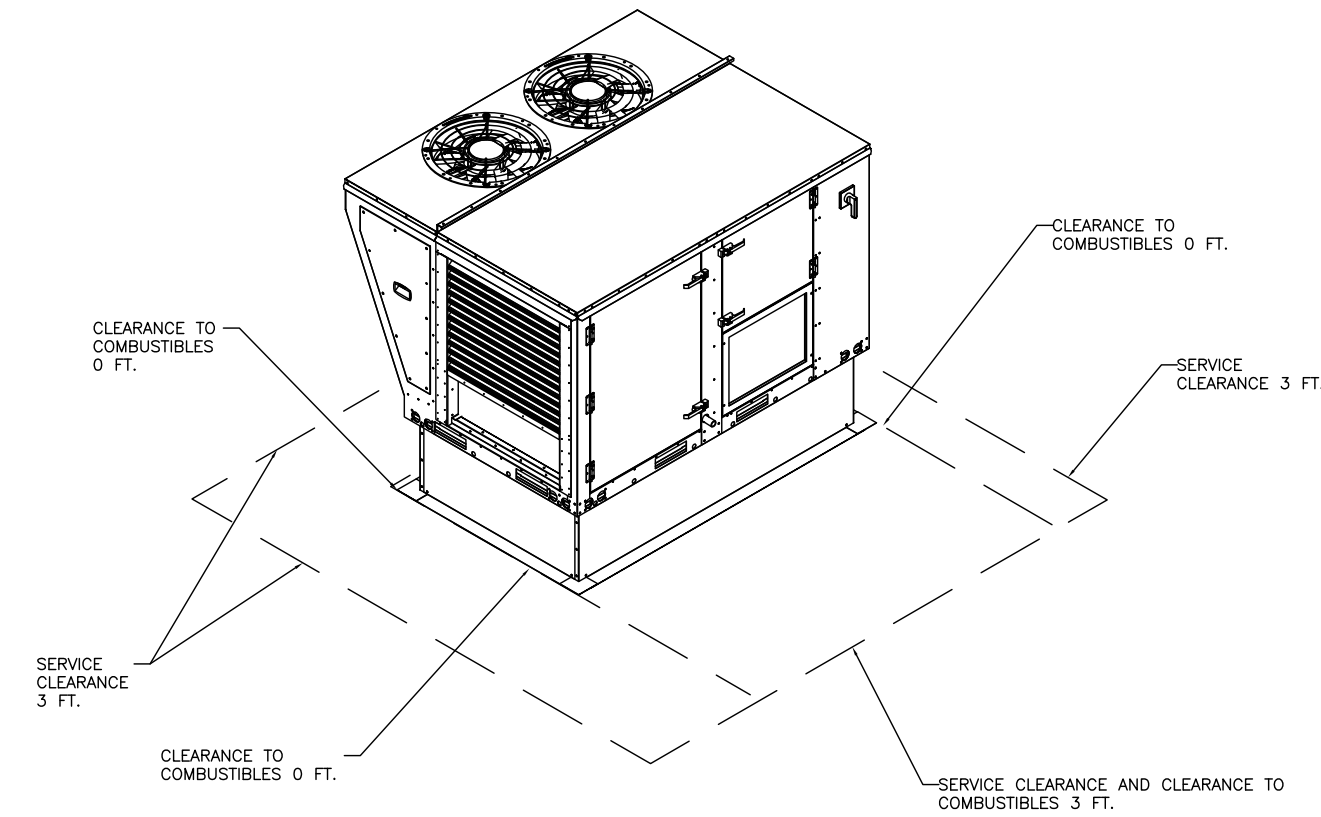


OPTIONS

- INLET PRESSURE GAUGE, 0-35".
- MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.
- TOTAL CFM MONITORING FOR DOAS.
- SINGLE POINT ELECTRICAL CONNECTION FOR RTU. QNTY 1 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" OPTION PREWIRE MUST BE SELECTED. DO NOT PROVIDE SUPPLY STARTER IN PREWIRE.
- CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
- LOW AMBIENT COOLING OPERATION.
- 2" MERV 13 FILTERS FOR SIZE 1 RTU. QTY. 4.
- 2" MERV 8 FILTERS SIZE 1 RTU. QTY 4.
- OVERHEAT STAT.
- VFD FACTORY MOUNTED AND WIRED IN COMMERCIAL CONTROL VESTIBULE FOR RTU.
- RTU SIZE 1 DOWN DISCHARGE.
- 7.5 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS.
- 7.5 TON MODULATING REHEAT OPTION. SPACE DEWPOINT CONTROL.
- SIZE 1 RTU CURB DUCT HANGER.
- RTU SIZE 1 DOWN RETURN.
- VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED).
- LINE REACTOR MOUNTED IN FAN.
- RTU MANUAL INTAKE/RETURN DAMPER CONTROL VIA HMI.
- CONNECTION POINT IN UNIT FOR HVAC CONTRACTOR TO SUPPLY SMOKE DETECTOR & INSTALL IN RETURN & CONNECT TO UNIT.
- 120V CONVENIENCE OUTLET (POWER BY ELECTRICIAN)
- 5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).

FAN OPTIONS

FAN UNIT NO.	TAG	QTY	DESCRIPTION
4	DOAS-RTU1	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.
		1	RTU TOTAL CFM MONITORING.
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	LOW AMBIENT COOLING OPERATION - DOWN TO 15F AMBIENT.
		1	2" MERV 13 FILTERS FOR RTU1 (QTY. 4).
		1	2" MERV 8 FILTERS FOR RTU1 (QTY. 4).
		1	OVERHEAT STAT.
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE.
		1	RTU1 DOWN DISCHARGE.
		1	7.5 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS.
		1	7.5 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL.
		1	RTU1 CURB DUCT HANGER.
		1	RTU1 DOWN RETURN.
5	DOAS-RTU2	1	VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED).
		1	LINE REACTOR MOUNTED IN FAN.
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI.
		1	OCCUPIED SCHEDULING.
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS.
		1	RTU1 CONVENIENCE OUTLET (GPO), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J BOX.
		1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.
		1	RTU TOTAL CFM MONITORING.
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	LOW AMBIENT COOLING OPERATION - DOWN TO 15F AMBIENT.
		1	2" MERV 13 FILTERS FOR RTU1 (QTY. 4).
		1	OVERHEAT STAT.
1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE.		
1	RTU1 DOWN DISCHARGE.		
1	RTU1 CURB DUCT HANGER.		
1	RTU1 DOWN RETURN.		
1	VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED).		
1	LINE REACTOR MOUNTED IN FAN.		
1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI.		
1	OCCUPIED SCHEDULING.		
1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS.		
1	RTU1 CONVENIENCE OUTLET (GPO), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J BOX.		
1	2" MERV 8 FILTERS FOR RTU1 (QTY. 4).		
1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).		



TAG	ROOMS SERVED	O.A. CFM	EXHAUST CFM
KEF-1	H01 (DRILL)	-	- 1050
KEF-2	H02 (OVEN)	-	- 600
KEF-3	H03 (FRYER)	-	- 800
RTU-DOAS1	KITCHEN + HOODS	+ 1475	-
EF 4/5	TOILETS	-	- 225
RTU-DOAS2	BUILDING	+ 1275	-
NET		+75 CFM	

KITCHEN TO MAINTAIN A SLIGHTLY NEGATIVE PRESSURE. OVERALL BUILDING PRESSURE TO BE BETWEEN -0.02" TO +0.02" WC PER IAC COMMENTARY RECOMMENDATIONS

DOAS/RTU FAN SCHEDULE - JOB#5126207

FAN UNIT NO.	TAG	QTY	DOAS/RTU MODEL #	MANUFACTURER	BLOWER AIR CFM	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	ESP	HP	BHP	PHASE	VOLT	MCA	MOCIP	WEIGHT (LBS)
4	DOAS-RTU1	1	CASRTU1-1,200-15-7.5T-DOAS	CAPTIVEAIRE	15P-1	525	1475	2000	0.700	2,000	1,275.0	3	208	37.7A	40A	1335
5	DOAS-RTU2	1	CASRTU1-1,200-15-7.5T-DOAS	CAPTIVEAIRE	15P-1	925	1275	2200	0.700	2,000	1,578.0	3	208	37.7A	40A	1335

DOAS/RTU COOLING SCHEDULE

FAN UNIT NO.	TAG	COMPRESSOR			OUTDOOR FAN			INDOOR COIL			OUTSIDE AIR DB TEMP	OUTSIDE AIR WB TEMP	MIXED AIR DB TEMP	MIXED AIR WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	LEAVING DP TEMP	TOTAL CAPACITY	SENSIBLE CAPACITY	LATENT CAPACITY	REHEAT LEAVING DB TEMP	REHEAT LEAVING WB TEMP	DESIRED REHEAT CAPACITY	MAX REHEAT CAPACITY	REHEAT LEAVING RELATIVE HUMIDITY	MOISTURE REMOVAL RATE	IEER
		TONNAGE	VOLTAGE	PHASE	MOTOR VOLTAGE	MOTOR Ø	MOTOR FREQUENCY	MOTOR QTY	ROWS	FACE AREA																	
4	DOAS-RTU1	7.5	190-240	3	200-240	3	60	2	5	6.2 SQFT	82.8°F	76.9°F	80.0°F	72.0°F	58.7°F	58.1°F	57.8°F	102.0 MBH	45.3 MBH	56.7 MBH	71.0°F	62.6°F	27 MBH	60 MBH	63	51.3 LBS/HR	18.6
5	DOAS-RTU2	7.5	190-240	3	200-240	3	60	2	5	6.2 SQFT	82.8°F	76.9°F	79.5°F	70.0°F	57.4°F	56.9°F	56.6°F	102.0 MBH	51.7 MBH	50.3 MBH	71.0°F	62.0°F	32.9 MBH	60 MBH	61	45.5 LBS/HR	18.6

DOAS/RTU HEATING SCHEDULE

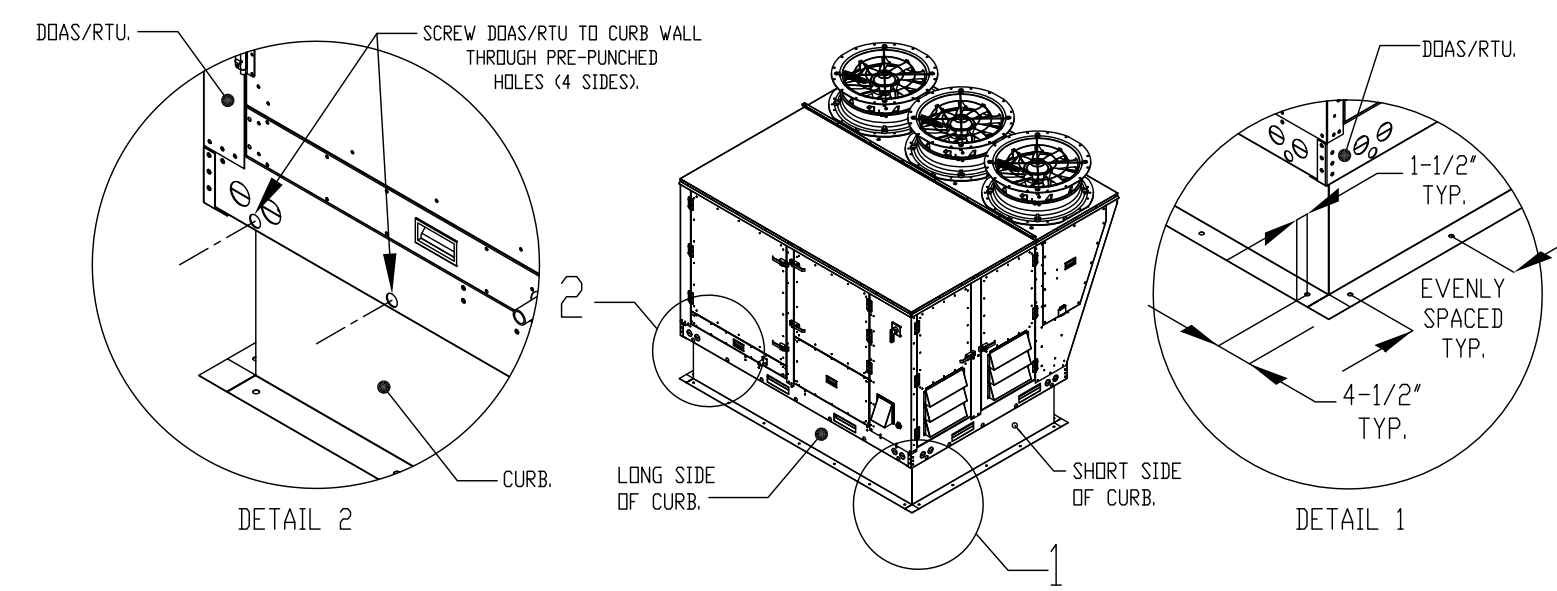
FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
4	DOAS-RTU1	197729	158183	67°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	80
5	DOAS-RTU2	197195	157756	61°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	80

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
4	# 4	DOAS-RTU1	59 LBS	CURB	41.000"W X 71.000"L X 20.000"H ALONG WIDTH, RIGHT INSULATED.
5	# 5	DOAS-RTU1	59 LBS	CURB	41.000"W X 71.000"L X 20.000"H ALONG WIDTH, RIGHT INSULATED.

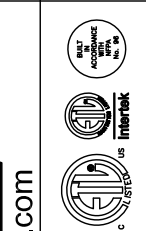
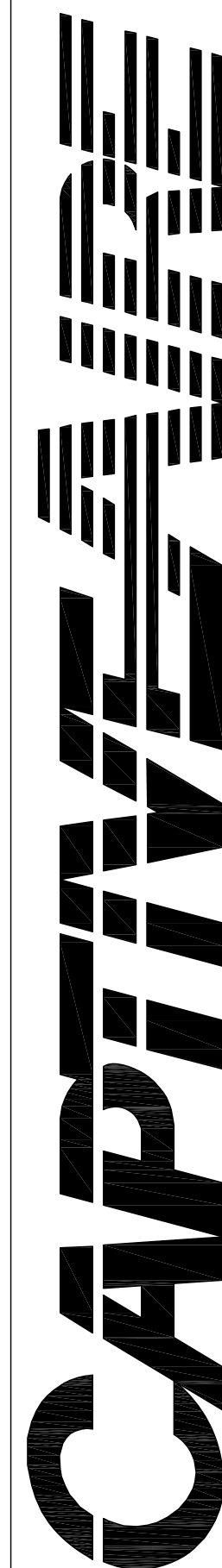
TYPICAL DOAS/RTU ROOF MOUNTING INSTALLATION INSTRUCTIONS

- SECURE THE CURB TO THE ROOF FRAMING MEMBERS BY DRILLING 1/4" PILOT HOLES IN THE CURB FLANGES AT LOCATIONS SHOWN IN THE DIAGRAM BELOW. USING 3/8" X 2" ZINC PLATED STEEL LAG BOLTS AND ZINC PLATED WASHERS, SCREW THROUGH THE CURB FLANGES AND INTO THE ROOF FRAMING MEMBERS. A MINIMUM OF 3" LAG BOLTS ON EACH SHORT SIDE, AND 17" LAG BOLTS ON EACH LONG SIDE IS REQUIRED.
- SECURE THE UNIT BASE TO THE SIDE WALLS OF THE CURB USING G40 1/4"-14 X 2" SELF-DRILLING, STEEL ZINC PLATED SCREWS. PRE-PUNCHED HOLES HAVE BEEN PROVIDED FOR EACH SCREW LOCATION.



REVISIONS

NO.	DESCRIPTION	DATE



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

Penn Station v2BRD2 (Shelbyville, Ky)
SHELBYVILLE, KY, 40065

DATE: 10/7/2021

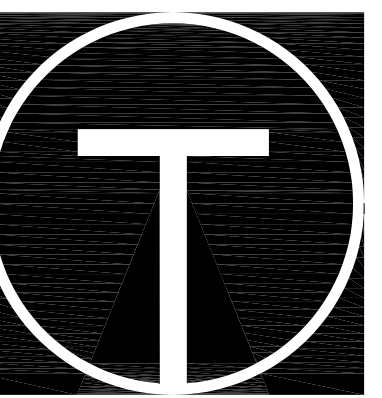
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DRAWN BY:

SCALE: 1/2" = 1'-0"

MASTER DRAWING

SHEET NO. 5



TILSLEY ARCHITECTS
1140 SAINT GREGORY ST. CINCINNATI, OH 45202
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WWW.TILSLEYARCHITECTS.COM

A New Penn Station Restaurant

6424 Ronald Reagan Dr.
Lake St, Louis, MO 63367



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Captiveaire Shop

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01-14-2022

Scale Drawn By
As Noted S. Rogers

Checked By PS Hawk

PS Hawk

H5.0