

1. EXISTING FAN COIL UNIT TO BE RELOCATED TO NOT BE IN CONFLICT WITH NEW STORAGE ROOM WALL, CONTRACTOR SHALL RELOCATE EXHAUST PIPING TO EXISTING EXHAUST LOCATION TO EXISTING HORIZONTAL BRANCH PIPING. UNIT TO MOVE APPROXIMATELY 30" IN THE DIRECTION INDICATED TO EXISTING EXHAUST LOCATION. CONTRACTOR SHALL PIPING TO CONNECT UNIT BACK TO EXISTING CONDENSATE DRAIN PIPING. CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND COORDINATE FINAL LOCATION WITH ALL OTHER TRADES.
2. EXISTING FAN COIL UNIT TO BE RELOCATED TO NOT BE IN CONFLICT WITH KILN EXHAUST HOOD. CONTRACTOR SHALL REWORK EXHAUST PIPING TO EXISTING EXHAUST LOCATION. RECONNECT UNIT TO EXISTING HORIZONTAL BRANCH PIPING. UNIT TO MOVE APPROXIMATELY 30" IN THE DIRECTION INDICATED TO EXISTING EXHAUST LOCATION. CONTRACTOR SHALL PIPING TO CONNECT UNIT BACK TO EXISTING CONDENSATE DRAIN PIPING. CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND COORDINATE FINAL LOCATION WITH ALL OTHER TRADES.
3. EXISTING FAN COIL UNIT TO BE RELOCATED IN THE DIRECTION INDICATED TO NOT BE IN CONFLICT WITH NEW INSET ENTRY DOOR, CONTRACTOR SHALL RELOCATE UNIT TO EXISTING EXHAUST LOCATION AS REQUIRED TO RECONNECT UNIT BACK TO EXISTING HORIZONTAL BRANCH PIPING. CONTRACTOR SHALL REWORK CONDENSATE PIPING TO EXISTING EXHAUST LOCATION. CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND COORDINATE FINAL LOCATION WITH ALL OTHER TRADES.
4. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO BE RELOCATED. CONTRACTOR TO SEAL EXISTING FEDERATIONS AFTER FAN REMOVAL.
5. EXISTING FAN COIL UNIT TO REMAIN.
6. EXISTING KILN TO BE RELOCATED AS INDICATED. PROVIDE AND INSTALL "ENVIRONMENT Z" KIT KIT AND "EMVROLINK" KIT FROM KILN MANUFACTURER (SMITH) TO EXISTING EXHAUST LOCATION. RELOCATE EXTERIOR BELOW EXISTING WINDOWS. CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATION.
7. NEW CEILING MOUNTED EXHAUST GRILLE OVER KILN. INSTALL IN NEW LOCATION AS TIE CLING TO NEW KILN, AS INDICATED. CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATION, ROUTE EXHAUST DUCTWORK BACK TO EXISTING ROOF PENETRATION AND TIE TO NEW ROOF.
8. EXISTING FAN EXHAUST HOOD ROOF PENETRATION. CONTRACTOR TO REMOVE EXISTING KILN HOOD AND EXHAUST FAN. INSTALL NEW EXHAUST EXHAUST HOOD AS INDICATED. CONTRACTOR SHALL RELOCATE CONTRACTOR SHALL PROVIDE NEW CURB OR MODIFY EXISTING CURB, AS REQUIRED, TO INSTALL NEW FAN.
9. ALL EXISTING AND NEW HVAC EQUIPMENT SHALL BE TIED BACK TO EXISTING EXHAUST CONTROL SYSTEM. CONTRACTOR TO PROVIDE GASKETS, PROGRAMMING, CONTROLLER RELOCATION, UPDATES, ETC., NECESSARY TO HAVE A COMPLETE AND OPERATIONAL SYSTEM AT THE TIME OF COMPLETION.
10. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, CONTROLLERS AND LOGS FOR NEW EQUIPMENT. CONTRACTOR SHALL BE SURE IT WILL SMOOTHLY INTEGRATE INTO THE EXISTING SYSTEM.

Girls Jan. Ladies Men Boys

EXHAUST FAN VENTILATOR SCHEDULE										
MARK	CFM	RPM	S.P.	ELECTRICAL			CONTROLS	MODEL NO./DESCRIPTION	WEIGHT	NOTES
				VOLTAGE	MCA	MCCP				
EF-A	300	1,045	0.250	115 V	1.9 A	15 A	LOCAL SWITCH	GREENHECK NO. CUE-090-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	30 LBS	1-4

NOTES:

(1) MODEL NUMBERS NOTED ARE GREENHECK EQUIPMENT, UNLESS OTHERWISE NOTED. EXHAUST FANS MEETING OR EXCEEDING PERFORMANCE DATA MANUFACTURED BY COOK OR CARNES ARE ACCEPTABLE SUBSTITUTES. ALL FANS SHALL HAVE UL LISTED LABELS AND OPTIONAL MOTOR COVERS.

(2) FURNISH AND INSTALL MFR'S SPEED CONTROLLER OR EQUIVALENT & ALL ACCESSORIES INDICATED ON DETAILS

(3) PROVIDE MANUFACTURER'S HOUSING w/ OSHA APPROVED MOTOR GUARD AND BACK DRAFT DAMPER.

(4) PROVIDE AND INSTALL MANUFACTURER'S ROOF CURB ADAPTER.

ABBREVIATIONS:

BDD: BACK DRAFT DAMPER
 DPST: DOUBLE POLE SINGLE THROW SWITCH BY E.C.
 CFM: AIR FLOW (cu ft/min)
 NC : NOISE CRITERIA (sones)
 EMS: ENERGY MANAGEMENT SYSTEM

AIR DISTRIBUTION SCHEDULE						
MARK	FACE SIZE	NECK SIZE	MFR/MODEL	CFM/FPM	NC	REMARKS
R1	24"x24"	12"x12"	PRICE/80TB	550/650	<20	LAY-IN EGG CRATE FACE RETURN WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION

NOTES:

(1) ALL FINISHES TO BE WHITE EXCEPT WHERE NOTED.

(2) KRUEGER, METAL-MAIRE, TUTTLE & BAILEY, TITUS & CARNES ARE CONSIDERED EQUIVALENTS.

(3) PROVIDE SQUARE TO ROUND TRANSITIONS WHERE REQUIRED.

(4) VALUES LISTED ARE MAXIMUM VALUES.

ABBREVIATIONS:

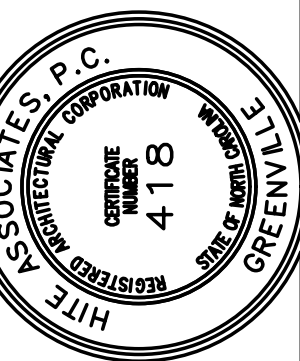
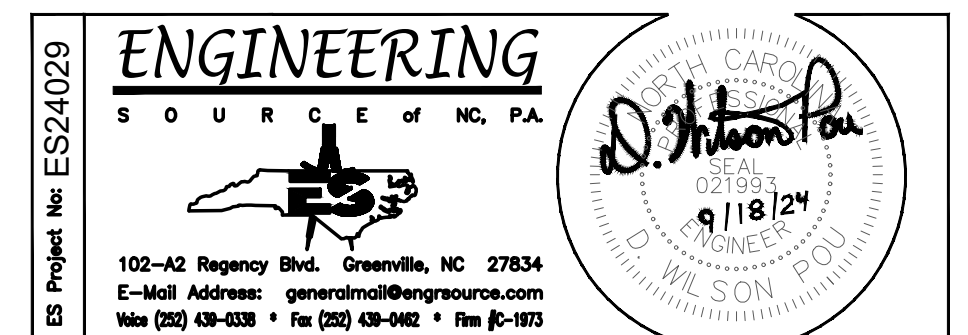
BDD: BACK DRAFT DAMPER
 OBD: OPPOSED BLADE DAMPER
 FPM: VELOCITY (ft/min)
 NC : NOISE CRITERIA

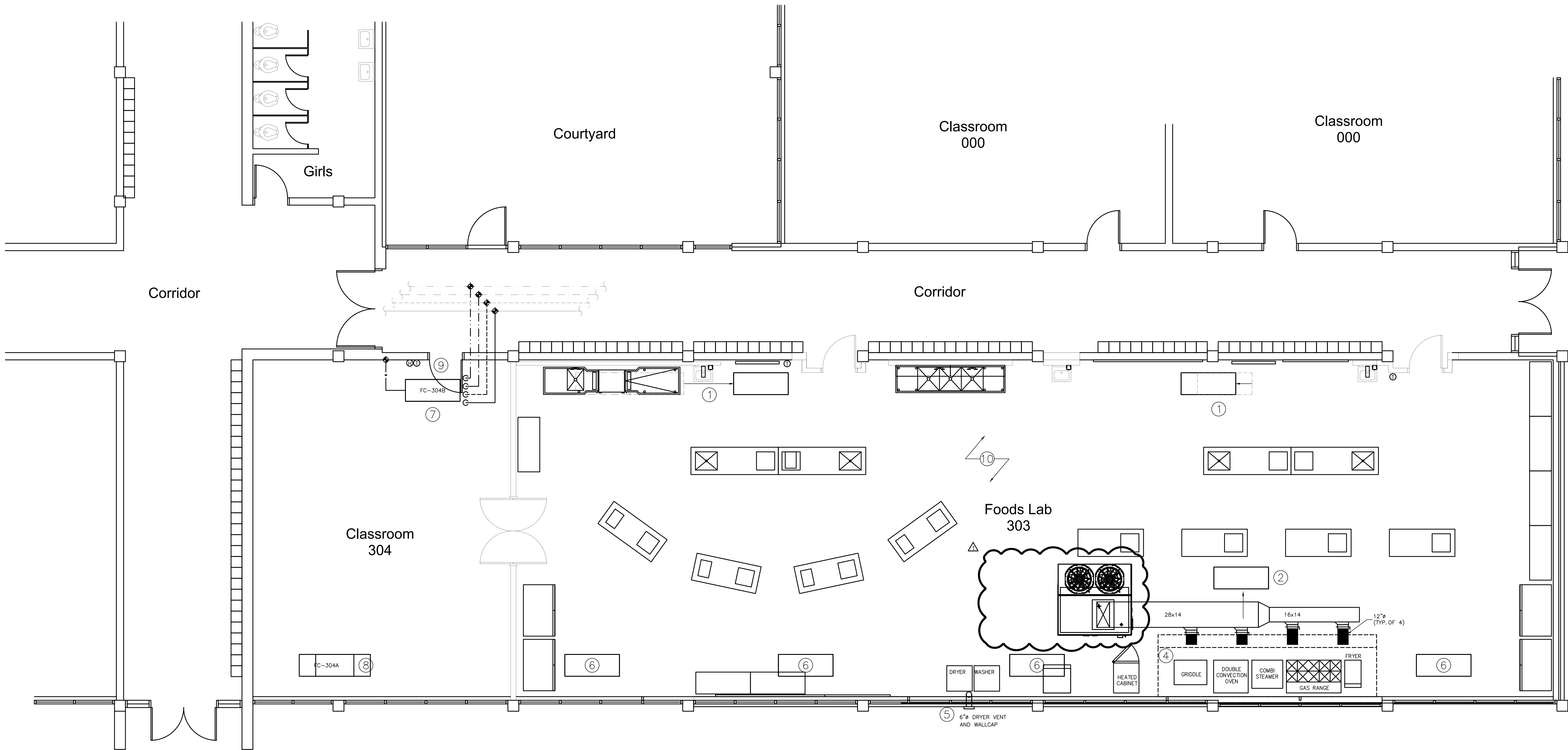
AIR DISTRIBUTION SCHEDULE						
MARK	FACE SIZE	NECK SIZE	MFR/MODEL	CFM/FPM	NC	REMARKS
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ABBREVIATIONS:
 BDD: BACK DRAFT DAMPER
 OOB: OPPOSED BLADE DAMPER
 FPM: VELOCITY (ft/min)
 NC : NOISE CRITERIA





MECHANICAL PLAN NOTES:

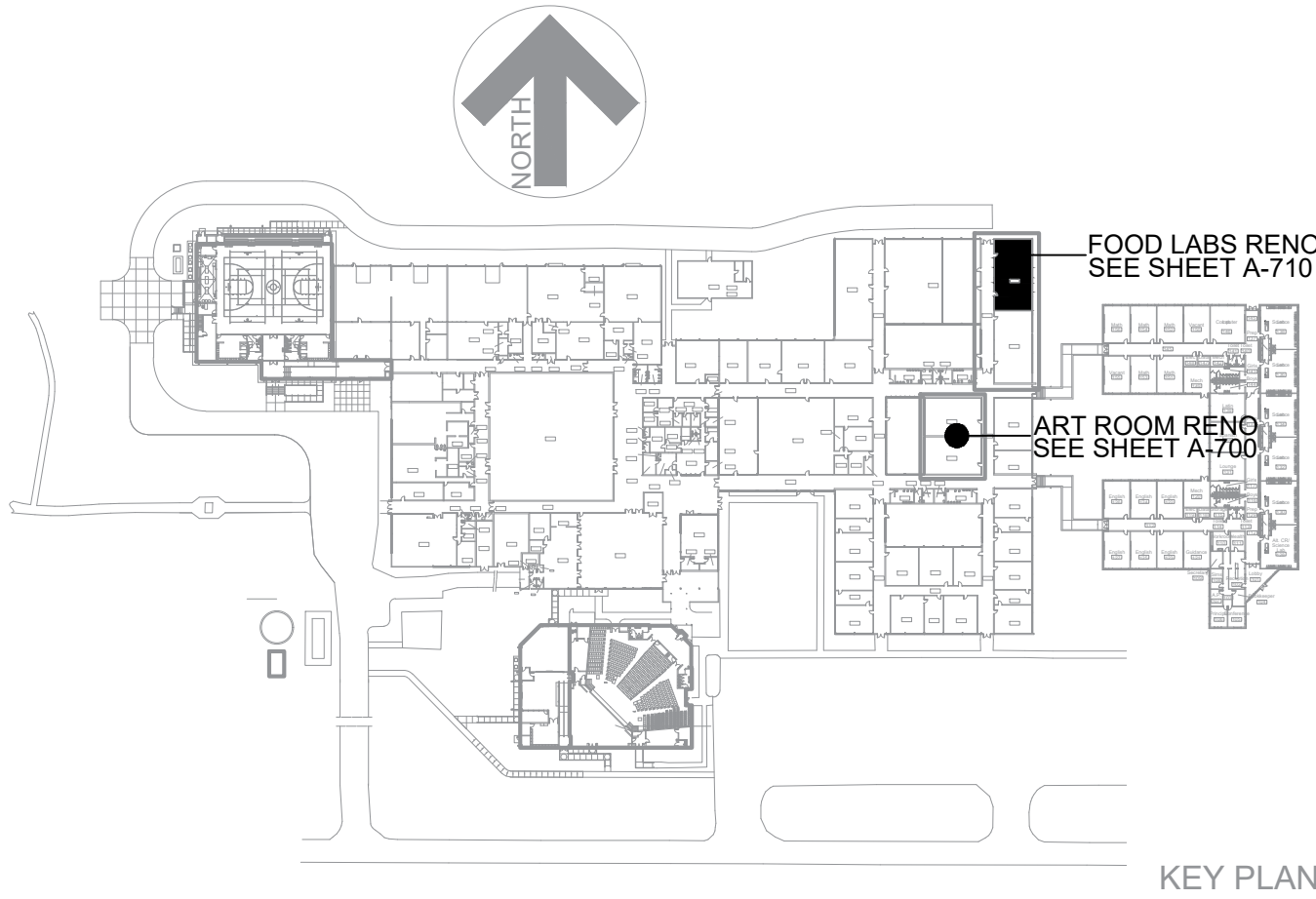
- EXISTING FAN COIL UNIT RELOCATED TO NOT BE IN CONFLICT WITH NEW DISHWASHER OR LIGHTS. CONTRACTOR SHALL REWORK HYDRONIC PIPING AND CONDENSATE PIPING AS REQUIRED TO RECONNECT UNIT TO EXISTING HYDRONIC BRANCH PIPING AND EXISTING CONDENSATE DRAIN PIPING. FIELD COORDINATE EXACT LOCATION WITH EQUIPMENT AND LIGHTS. COORDINATE LOCATION WITH ALL OTHER TRADES.
- EXISTING FAN COIL UNIT ELOCATED TO NOT BE IN CONFLICT WITH NEW FOODS LAB HOOD. CONTRACTOR SHALL REWORK HYDRONIC PIPING AS REQUIRED TO RECONNECT UNIT TO EXISTING HYDRONIC BRANCH PIPING. UNIT TO MOVE APPROXIMATELY 96" IN DIRECTION INDICATED. CONTRACTOR SHALL FIELD VERIFY EXACT DIMENSIONS AND COORDINATE FINAL LOCATION WITH ALL OTHER TRADES.
- TURN DUCTWORK UP TO MAKE-UP AIR UNIT ON ROOF ABOVE.
- NEW KITCHEN HOOD EXHAUST FANS MOUNTED ON ROOF ABOVE.
- INSTALL NEW DRYER DUCT AND MANUFACTURER'S WALLCAP IN EXTERIOR WALL BELOW WINDOWS.
- EXISTING FAN COIL TO REMAIN.
- NEW FAN COIL. CONTRACTOR TO INSTALL IN NEW CLASSROOM AS INDICATED AND CONNECT NEW HOT AND CHILLED WATER BRANCH PIPING BACK TO PIPING MAINS. PROVIDE AND INSTALL NEW MODULATING HOT AND CHILLED WATER CONTROL VALVES AND CONNECT TO EXISTING CONTROL SYSTEM. SEE FAN COIL EQUIPMENT SCHEDULE.
- REMOVE EXISTING FAN COIL AND REPLACE WITH NEW FAN COIL AND NEW CHILLED AND HOT WATER VALVES AS INDICATED IN THE FAN COIL EQUIPMENT SCHEDULE. COORDINATE LOCATION WITH LIGHTS. REWORK TRIM PIPING TO CONNECT BACK TO EXISTING CHILLED AND HOT WATER PIPING.
- PROVIDE AND INSTALL NEW TEMP-SENSOR AND HUMIDISTAT (CAN BE A COMBINATION UNIT) MOUNTED ON WALL NEAR CLASSROOM DOOR. CONNECT FC-304A AND FC-304B TO NEW SENSOR. TIE BACK TO EXISTING JOHNSON CONTROL SYSTEM.
- ALL EXISTING AND NEW HVAC EQUIPMENT SHALL BE TIED BACK TO THE EXISTING CONTROLS SYSTEM. PROVIDE ANY EXPANSION CARDS, PROGRAMMING, CONTROLLER RELOCATION, UPGRADES, ETC. NECESSARY TO HAVE A COMPLETE AND OPERATIONAL SYSTEM AT PROJECT COMPLETION. CONTROLS CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS, CONTROLLERS AND COORDINATING NEW EQUIPMENT WITH MC TO MAKE SURE IT WILL SMOOTHLY INTEGRATE INTO THE EXISTING SYSTEM.

711.1

FOOD LAB
MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

MECHANICAL LEGEND

- G.C. GEN. CONTR.
- E.C. ELEC. CONTR.
- P.C. PLUMB. CONTR.
- AFF ABOVE FINISH FLOOR
- AFG ABOVE FINISH GRADE
- 18x16 WRAPPED RIGID DUCT
- INSULATED FLEXIBLE DUCT
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- CEILING EXHAUST GRILLE OR FAN
- AHU-1 THERMOSTAT & UNIT SERVED.
- H AHU-1 HUMIDISTAT & UNIT SERVED.
- A-400 DIFFUSER TYPE-CFM
- MD MANUAL DAMPER
- SD DUCT MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SMOKE DETECTOR
- FIRE ALARM HORN/STROBE (SEE GENERAL NOTES)
- CONN. TO EXIST.
- G GAS PIPING
- FD SPRING LOADED FIRE DAMPER
- AHU-1 CO2 SENSOR (800 PPM) & UNIT SERVED.
- ST TWIST TIMER SWITCH
- M 120V MOTORIZED DAMPER
- AHU-1 CO SENSOR & UNIT SERVED.
- AHU-1 CO & NO SENSOR & UNIT SERVED. CONSPEC CN50-CO2



ES Project No. ES24029

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9/18/24
GREENVILLE
WILSON COUNTY

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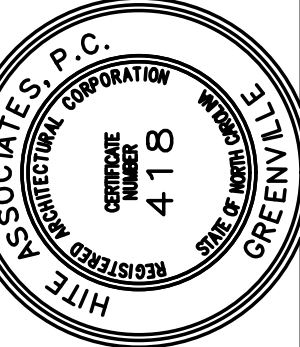
Food Lab And Art Room Renovation
East Carteret High School
3263 Hwy. 70, Beaufort, NC 28516
Carteret County Schools / North Carolina

Project No. 22111

Date: 28 AUGUST, 2024

Drawing No.

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711























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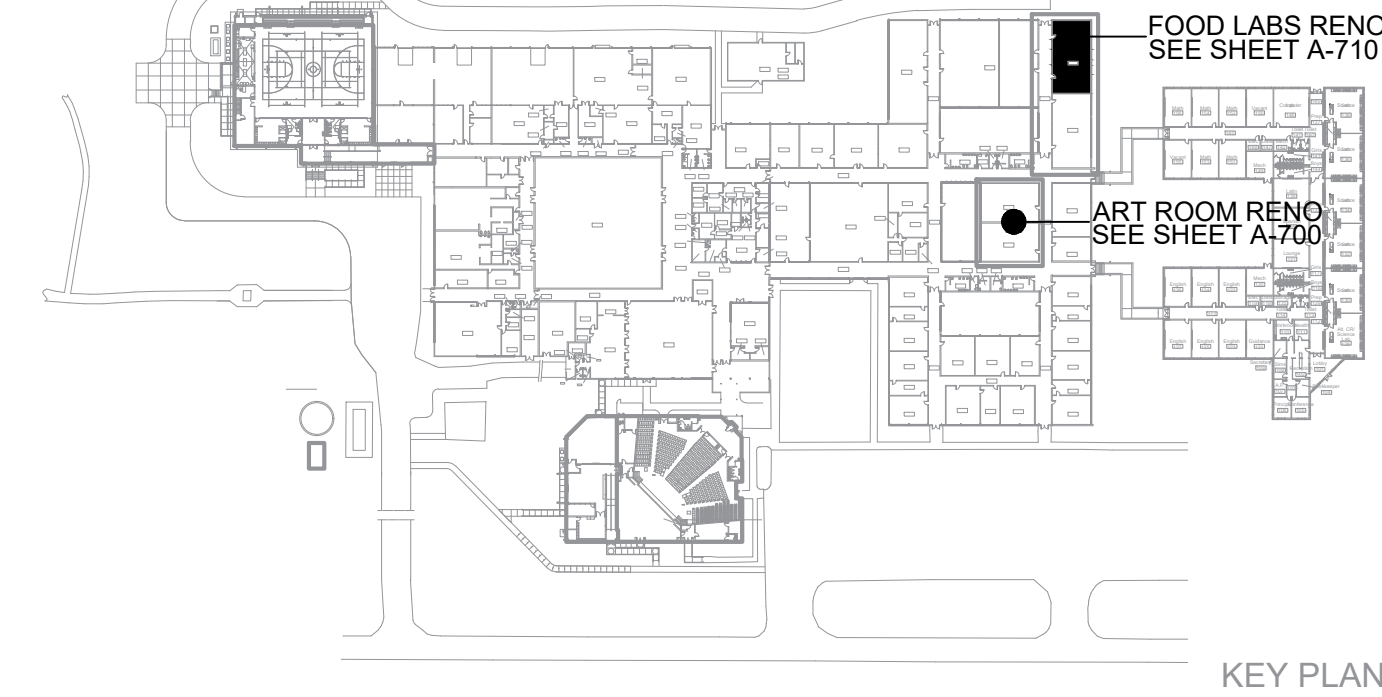
No.	Date	Revision
1	9/18/24	ADDENDUM #1 - REMOVE ART ROOM KILN HOOD




NOTE: CONNECTION SIZES ARE FOR BRANCH PIPE & EQUIP REGULATOR SIZE FROM 2PSI GAS MAIN PIPING. CONTRACTOR SHALL COORDINATE EXACT CONNECTION SIZE WITH EQUIPMENT. PROVIDE AND INSTALL ANY NECESSARY REDUCERS TO MAKE FINAL CONNECTIONS.

NOTE: ENGINEER SHALL BE NOTIFIED PRIOR TO INSTALLATION OF GAS PIPE IF ANY ONE OF THE ABOVE CALCULATIONS DIFFER FROM THE ACTUAL INSTALLATION REQUIREMENTS. ENGINEER SHALL HAVE OPPORTUNITY TO REVIEW ACTUAL INSTALLATION CONDITIONS AND RE-SIZE GAS SERVICE IF REQUIRED

- | | |
|---|--|
|  | WRAPPED RIGID DUCT |
|  | INSULATED FLEXIBLE DUCT |
|  | SUPPLY DIFFUSER |
|  | RETURN AIR GRILLE |
|  | CEILING EXHAUST GRILLE OR FAN |
|  AHU-1 | THERMOSTAT & UNIT SERVED. |
|  AHU-1 | HUMIDISTAT & UNIT SERVED. |
| A-400 | DIFFUSER TYPE-CFM |
|  MD | MANUAL DAMPER |
|  S | DUCT MOUNTED SMOKE DETECTOR |
|  S | CEILING MOUNTED SMOKE DETECTOR |
|  | FIRE ALARM HORN/STROBE
(SEE GENERAL NOTES) |
|  | CONN. TO EXIST. |
|  G | GAS PIPING |
|  FD | SPRING LOADED FIRE DAMPER |
|  AHU-1 | CO ₂ SENSOR (800 PPM)
& UNIT SERVED. |
|  T | TWIST TIMER SWITCH |
|  M | 120V MOTORIZED DAMPER |
|  AHU-1 | CO SENSOR & UNIT SERVED. |
|  AHU-1 | CO & NO SENSOR & UNIT SERVED. |
|  CN | CONSPIC. |




ES Project No: ES-102-A2



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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 - JOB#7048750																						
HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM						TOTAL SUPPLY CFM	HOOD CONSTRUCTION		HOOD CONFIG			
										RISER(S)							WIDTH	LENG	HEIGHT	DISA	CFM	VEL
1	KH-1	5424 ND-2-PSP-F	CAPTIVEAIRE	10' 0"	600 DEG	I	HEAVY	200	2000				4"	14"	2000	1871	-1.068"	1600	430 SS	WHERE EXPOSED	LEFT	ALONE
2	KH-2	5424 ND-2-PSP-F	CAPTIVEAIRE	10' 0"	600 DEG	I	HEAVY	200	2000				4"	14"	2000	1871	-1.068"	1600	430 SS	WHERE EXPOSED	RIGHT	ALONE

HOOD INFORMATION																			
HOOD NO	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)								FIRE SYSTEM RIFING	HOOD HANGING WEIGHT
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY ● 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL	SWITCHES				
												TYPE	SIZE	MODEL #	QUANTITY				
1	KH-1	CAPTRATE SOLO FILTER	7	16"	16"	85% SEE FILTER SPEC	5	RECESSED ROUND	NO								YES	590 LBS	
2	KH-2	CAPTRATE SOLO FILTER	7	16"	16"	85% SEE FILTER SPEC	5	RECESSED ROUND	NO	RIGHT	12"x54"x24"	TANK FS	4.0/4.0/4.0				YES	975 LBS	

HOOD OPTIONS				OPTION			
HOOD NO.	TAG	FIELD	WRAPPER	18.00" HIGH	FRONT, LEFT.		
1	KH-1	BACKSLASH		80.00" HIGH	X	252.00" LONG	430 SS VERTICAL.
		LEFT QUARTER END PANEL		23"	TOP WIDTH,	0"	BOTTOM WIDTH, 23" HIGH 430 SS.
		INSULATION FOR BACK OF HOOD					
2	KH-2	FIELD		WRAPPER	18.00" HIGH	FRONT, RIGHT.	
		RIGHT QUARTER END PANEL		23"	TOP WIDTH,	0"	BOTTOM WIDTH, 23" HIGH 430 SS.
		INSULATION FOR BACK OF HOOD.					

PERFORATED SUPPLY PLENUM(S)						RISER(S)					
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	WIDTH	LENG	DIA	CFM	SP
1	KH-1	Front	120"	14"	6"	MUA	12"	28"	800	0.206"	
						MUA	12"	28"	800	0.206"	
2	KH-2	Front	132"	14"	6"	MUA	12"	28"	800	0.191"	
						MUA	12"	28"	800	0.191"	

GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW"
ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW"
IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING
CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW"
DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER
THE MANUFACTURES INSTALLATION GUIDE.
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER
MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16"
PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".
DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE
ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED ☐

APPROVED WITH NO EXCEPTION TAKEN ☐

REVISE AND RESUBMIT ☐

SIGNATURE _____

YOUR TITLE _____ DATE _____

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

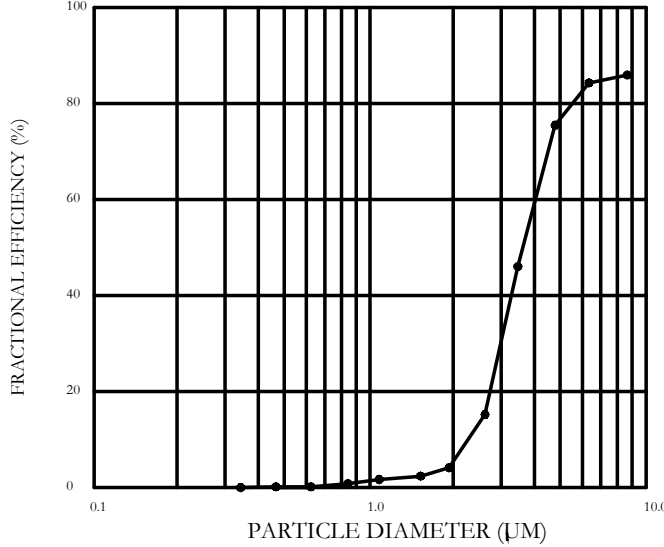
THE CAPRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

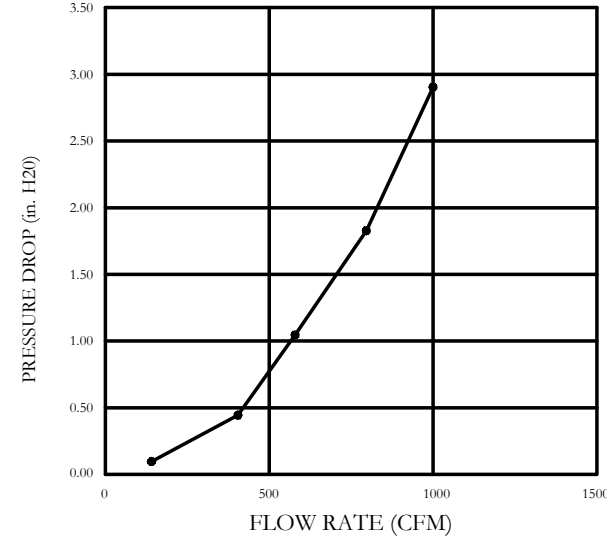
UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

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. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:

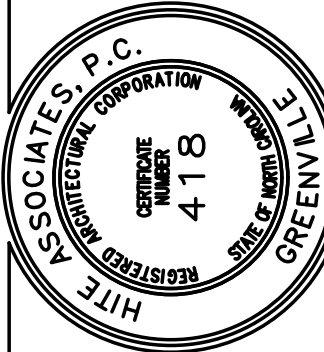
NFPA #96.
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.



NOTE: ALL INFORMATION AND DETAILS ON THIS SHEET WERE TAKEN FROM DRAWINGS PROVIDED BY CAPTIVE AIRE.

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Food Lab And Art Room Renovation
East Carteret High School
3263 Hwy. 70, Beaufort, NC 28516
Carteret County Schools / North Carolina

Project No.
22111

Date:
26 AUGUST, 2024


Drawing no.

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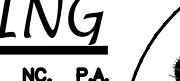
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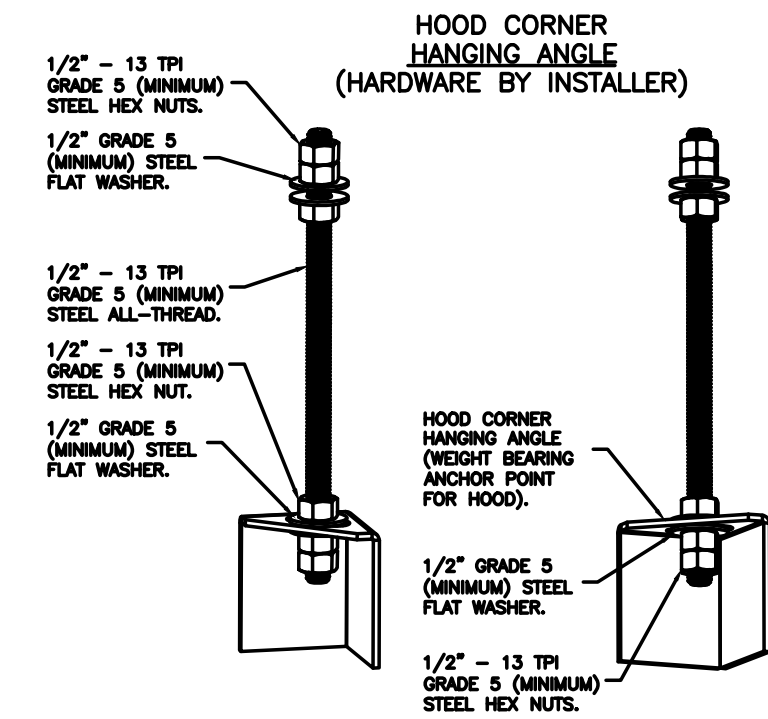
ENGINEERING

SOURCE OF NC, P.A.

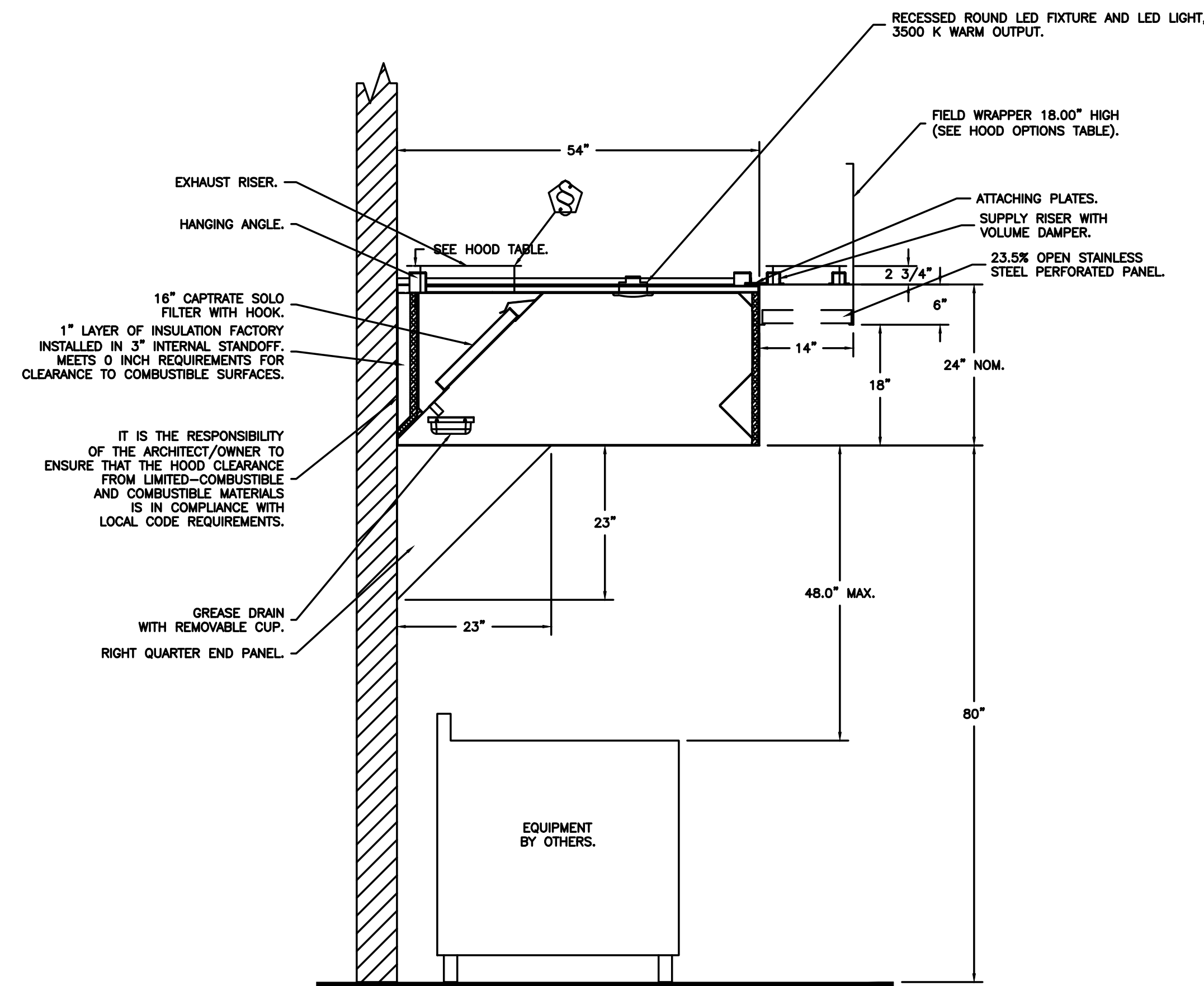


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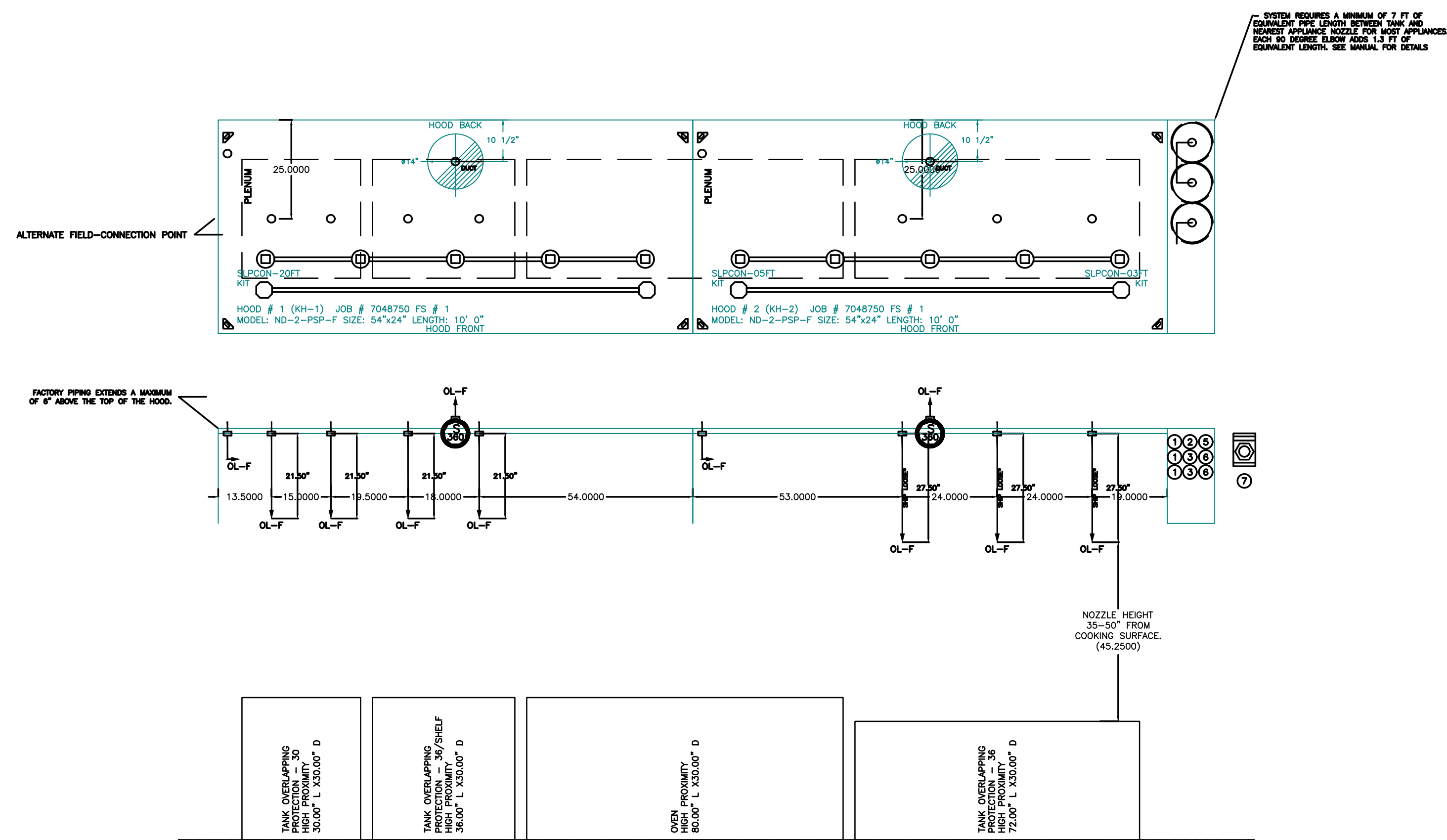




HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI
GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES
AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM)
STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5
(MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX
NUT CONFIGURATION BENEATH HOOK HANGING ANGLES AND
ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED
THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS
TO 57 FT-LBS.



SECTION VIEW - MODEL 5424ND-2-PSP-F
HOOD - #2 (KH-2)



NOTES

- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FACTORY INSTALLED DROG- FACTORY WILL PROVIDE QTY 2 BOIN LONG PIECES OF CHROME
- PLATED PIPING TO SHIPPER. FACTORY WILL PROVIDE 1/2" DIA. 12' LONG UNINSTALLED
- SHIP LOOSE DROG- FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING.
- 2 BLANDMERS (2) -
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLANCE WITH AN OBSTRUCTION.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
-
- APPLANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLANCE SIZE.
-
- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.
-
- OLF - NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

767850.

QOL NAME PART CARTERTER HS FOOD LAB - R3.

SYSTEM SIZE: TANK-SP-3 DESIGN FIP: 48. MAXIMUM FIP: 60.

RISER 1 1" 0.00" LONG X 54" WIDE X 24" HIGH.

RISER 1 1" SIZE: 1/4" DIA

RISER 1 1" METAL BLOW-OFF CAPS INCLUDED.

RISER 2 1" 0.00" LONG X 54" WIDE X 24" HIGH.

RISER 1 1" SIZE: 1/4" DIA

RISER 2 1" METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAY IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.

- NO LIGHT-DUTY APPLANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

AGENT DISTRIBUTION PIPING LIMITATIONS	
PIPE SECTION	MAX PIPE LENGTH (FT)
MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE	42
OVERLAPPING NOZZLE APPLIANCE BRANCH	10
DEDICATED NOZZLE APPLIANCE BRANCH	10

LEGEND - FIRE CABINET TANK SYSTEM

- 1 4 GALLON TANK.
2 PRIMARY ACTUATOR RELEASE.
3 SECONDARY ACTUATOR RELEASE.
4 PRESSURE SUPERVISION SWITCH.
5 PRIMARY HOSE ASSEMBLY.
6 SECONDARY HOSE ASSEMBLY.
7 REMOTE MANUAL ACTUATION DEVICE.

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH

CAPTIVE-AIRE HOODS ARE



FOR QUESTIONS
CONTACT: REGION 36
EASTERN NORTH CAROLINA
PHONE: (919) 825-3566
EMAIL: REG36@CAPTIVEAIRE.COM

UL 300 HOOD FIRE SUPPRESSION SYSTEM
TANK/CAS ELECTRIC WET CHEMICAL

The TANK / CAS-EWC Fire Suppression System has been tested and certified to the UL 1254 Standard for Pre-Engineered Chemical Extinguishing System Units and UL/ULC 300 Standard for Fire Extinguishing Systems for Protection of Commercial Cooking Equipment and is listed with Underwriters Laboratories (UL) under file number EX3559.

SEQUENCE OF OPERATIONS

The TANK / CAS-EWC fire system is a self-contained pressurized fire suppression system. TANK / CAS-EWC is activated when the electric firestat contacts close (at determined firestat setting and/or temperature rate-of-rise of 40F per minute) and/or the manual activation station is pushed, an electric signal is sent to the release solenoid of the fire system. When the release solenoid is opened, it allows stored pressure from the primary tank to travel through the primary actuator lift opening a pneumatic actuator. The pneumatic actuator forces the plunger in the tank valve body to open, allowing the liquid fire suppressant to be distributed throughout the fire system piping network over the protected hazard area.

NOTE: ALL INFORMATION AND DETAILS ON THIS SHEET WERE TAKEN FROM DRAWINGS PROVIDED BY CAPTIVE AIRE.

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE. TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST); ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES). ONE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2", PERMIT, AND SYSTEM TEST.

EXCLUDES: UNIFORM LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPEING DUE TO EQUIPMENT LAYOUT CHANGES.

GEN INFORMATION										COOLING INFORMATION						HEAT INFORMATION						GAS HEAT INFORMATION		NOTES												
TAN NO.	SAG	QTY	DWG/RTO MODEL #	MANUFACTURER	BLOWER	RETURN AIR FLOW MAX (CFM)	TOTAL CFM	WEIGHT (LBS)	ESP / HP	PHASE	VOLT	KVA	MOP	OUTSIDE AIR DB	MIXED AIR DB	WB DB	WB DP	TOTAL SENS.	ENTR EMMF	DISCHARGE RHMAL CAPACITY	WBT DESIRED	MBH	MOISTURE RHMAL CAPACITY		GAS TYPE	INPUT BTU/H	OUTPUT BTU/H	TEMP Rise	REQUIRED INPUT GAS PRESSURE							
3	NUMA-1	1	EARTLR2-120-180-10T-WPU	ECON-AIR	BMF-2-RTL	0	3200	3200	9955	0.000	3.00	3	208	60.3A	70A	85.27	85.27	80.37	70.17	89.37	68.07	+44.0 MBH	52.0 MBH	18.6	4.3	90.07	75.17	89.9 MBH	0.2 MBH	82.7 LBS/HYR	NATURAL	22343J	18017J	487	7 IN. W.C. - 14 IN. W.C.	1,2,3,4,5,6,7,8,9,10,11,12,13,14

REMARKS:

1. MANUFACTURER SUPPLIER COMPRESSION WITH INTEGRATED OIL SENSOR, DOWN OR STAGED SCROLL NOT AN APPROVED OPTION.
2. MANUFACTURER SUPPLIER INTEGRATED OIL MONITORING AND SHUTDOWN AVAILABLE AS AN ADDITIONAL OPTION.
3. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER.
4. MONITORING ON PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE.
5. ELEC MOTOR CONDENSING FANS.
6. ELECTRONIC EXPANSION VALVE, TXV NOT ACCEPTABLE.
7. Suction Line Accumulator.
8. FACTORY COMMENSURING WITH 5 YEAR PARTS WARRANTY, 25 YEARS WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
9. ALTERNATE HWT, EMW AND DISCHARGE TYPHOON/SHOCK VIBRATION (DYNAMIC SENSOR) TO BE FACTORY MOUNTED WITHIN UNIT.
10. CIP - PATTERNS PATTERN CONSTRUCTION BY 8-13 INSULATION-MATERIAL 200K EXTENDED BY 1/4" DIA. MIN.
11. CIP - PATTERNS PATTERN CONSTRUCTION BY 8-13 INSULATION-MATERIAL 200K EXTENDED BY 1/4" DIA. MIN.
12. SUPPLY CAM MONITORING INTERNAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
13. FULLY MODULATING HOT GAS REHEAT.
14. DOWN DISCHARGE/NO RETURN.

EXHAUST FAN INFORMATION - JOB#7049750																
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	KEF-1	1	DUESHA	CAPTEAIRE	2000	1.100	1471	TEAO-EDM	1.000	0.5786	1	115	11.6	633	PP	14.3
2	KEF-2	1	DUESHA	CAPTEAIRE	2000	1.100	1471	TEAO-EDM	1.000	0.5786	1	115	11.6	633	PP	14.3

1 1/2" DUCT
HANGER WIDTH, TYP.

1/2"

39 7/16"

36 1/4"

36 3/16"

24 3/16"

33"

11 1/4"

3 3/16"

12 1/4"

40 1/4"

48 1/16"

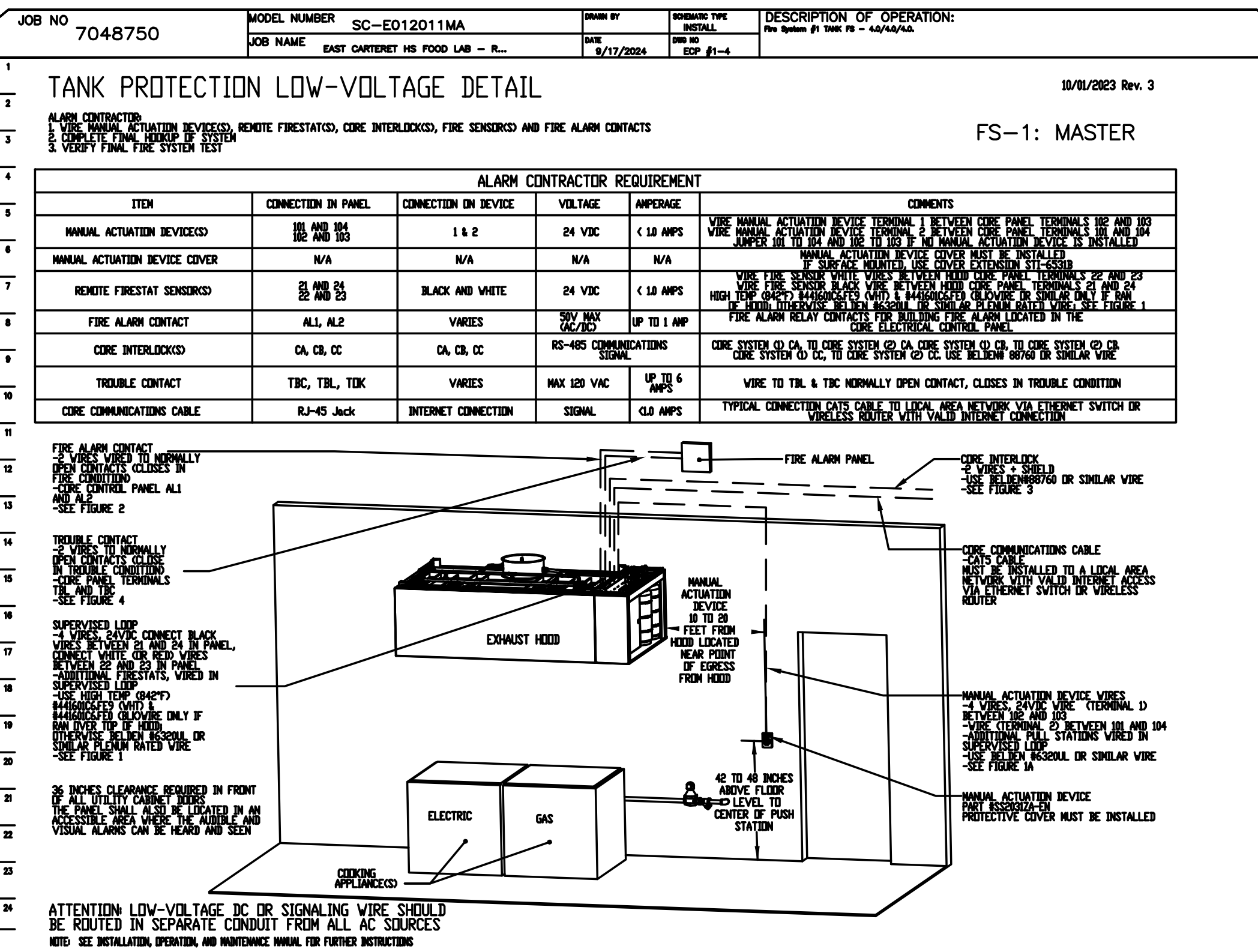
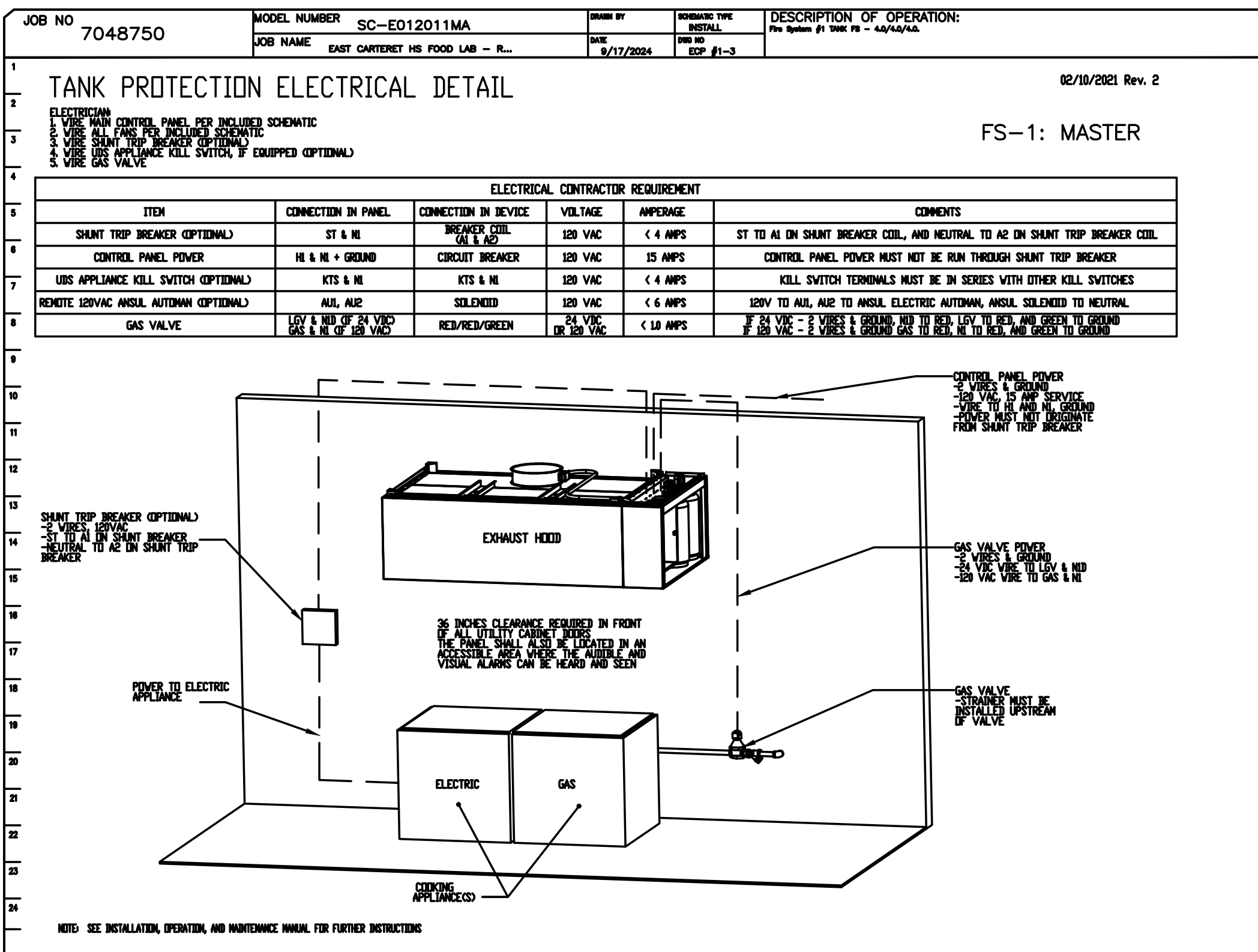
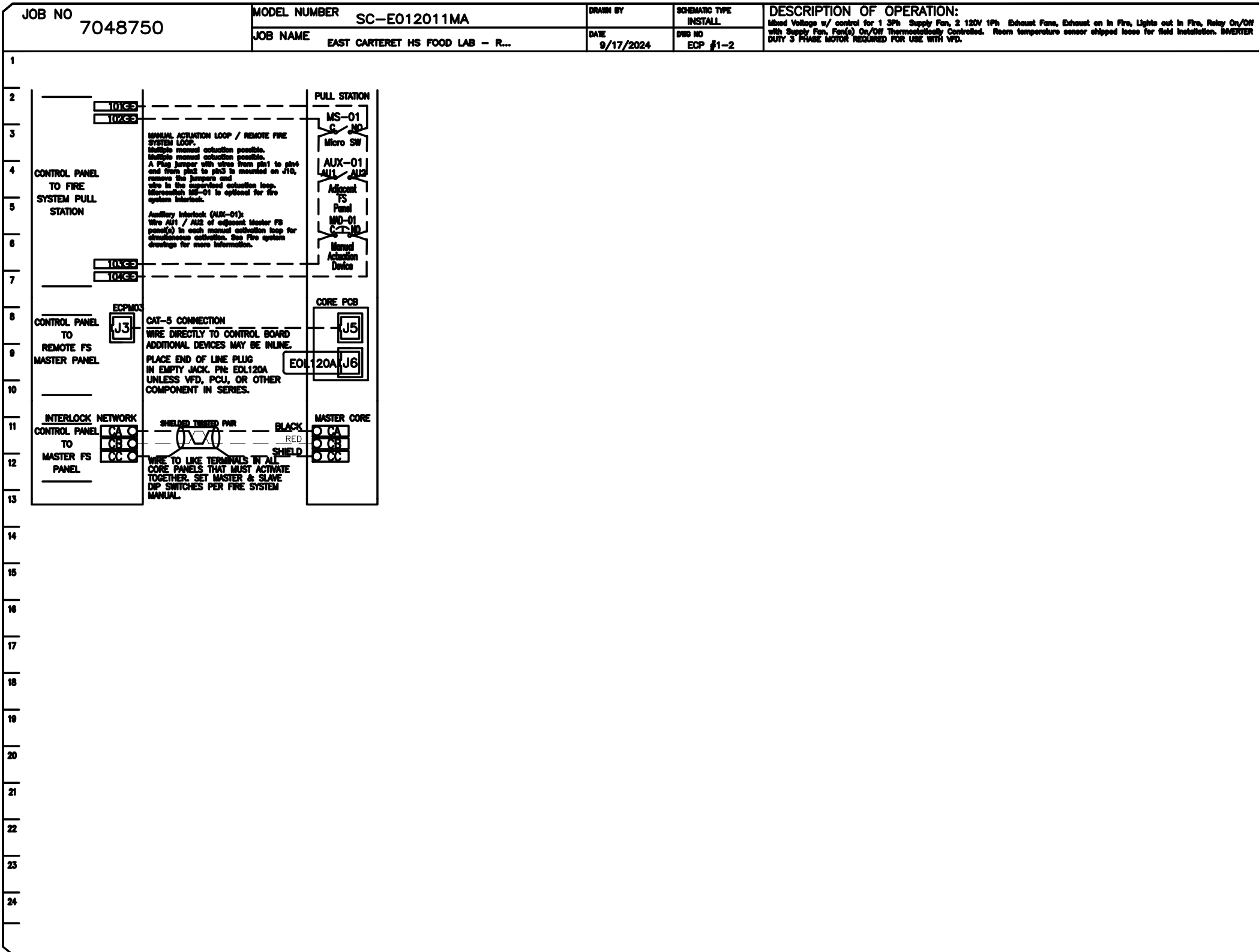
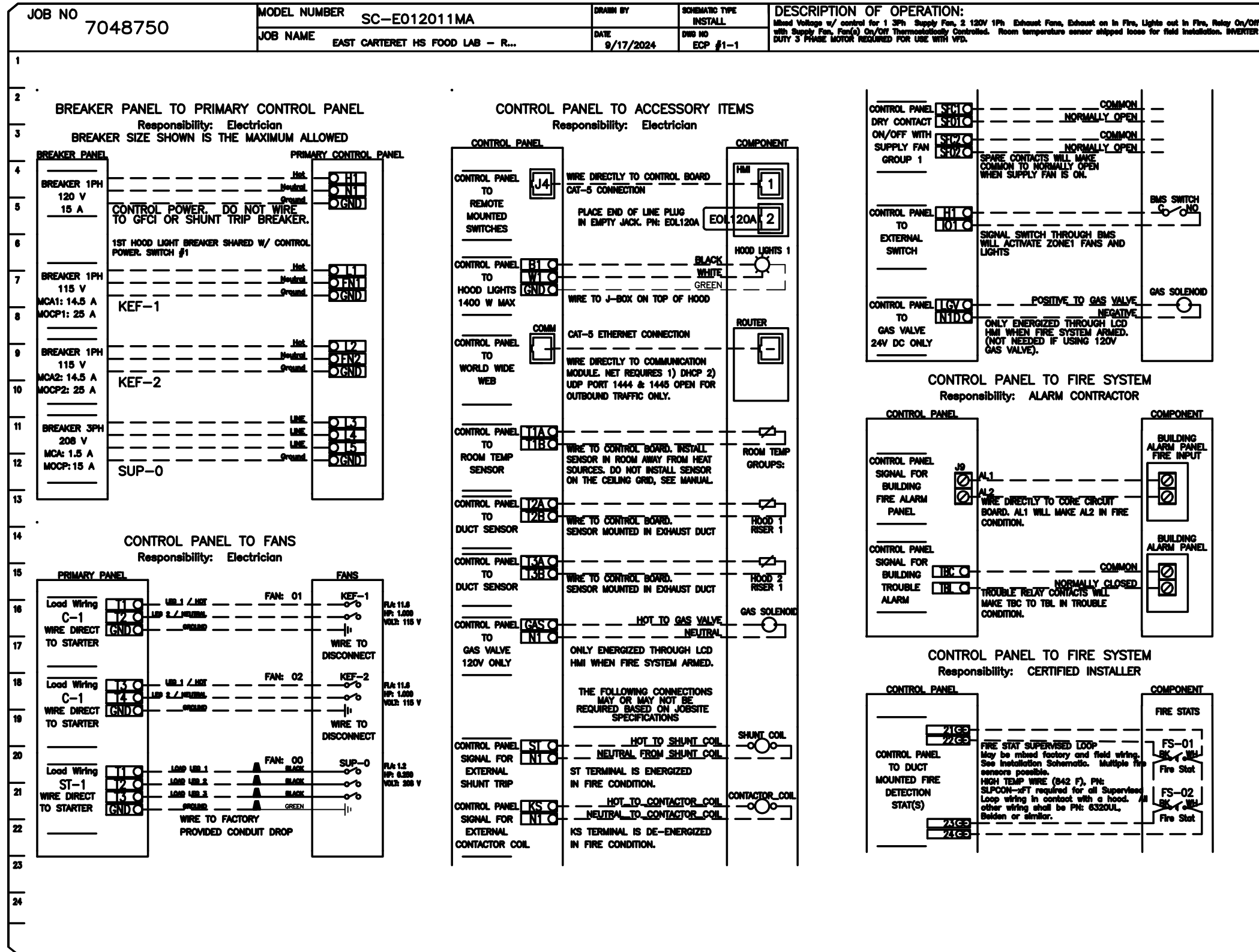
3 3/16"

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	#	HP	VOLT	FLA
1		SC-ED120111MA	WALL MOUNT IN SS BOX	UTILITY CABINET RIGHT	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	KEF-1	EXHAUST	1	1,000	115	11.6
							KEF-2	EXHAUST	1	1,000	115	11.6
								SUPPLY	3	0.250	208	1.2



- Hood control panel to support communications to cloud-based Building Management System.
- Hood Control Panel to allow cloud-based Building Management System monitor real time parameters outlined as MONITOR in the points list.
- Hood Control Panel to allow cloud-based Building Management System to control the hood system as CONTROL in the points list.
- Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.

MONITORING AND CONTROL POINTS LIST			
DOT Packages	Position	DOT Packages	Position
Room Temperature	ASST0070R	Room Temperature(s)	ASST0070R
Duct Temperature(s)	ASST0070R	Duct Temperature(s)	ASST0070R
Supply Return Temperatures	ASST0070R	ASHI Supply Return Temperatures	ASST0070R
Blowdown DTH Flow/Range Temperature	ASST0070R	Blowdown DTH Flow/Range Temperature	ASST0070R
Flow Speed	ASST0070R	Controlled Flow	ASST0070R
Flow Airports	ASST0070R	Flow Paths	ASST0070R
Flow Power	ASST0070R	Flow Status	ASST0070R
PTV Paths	ASST0070R	PTV Paths	ASST0070R
Flow Control Points	ASST0070R	DOT Flow Rate Permeability	ASST0070R
Flow Results	ASST0070R	Flow Condition	ASST0070R
Flow Status	ASST0070R	CONF Flow System	ASST0070R
CONF Paths	ASST0070R	Building Pressure	ASST0070R
CONF Flow Permeability	ASST0070R	Flow Status(s)	ASST0070R & CONTROL
Flow Condition	ASST0070R	Flow Rate(s) & CONTROL	ASST0070R & CONTROL
CONF Flow System	ASST0070R	Flow Status	ASST0070R & CONTROL
Building Pressure	ASST0070R		
Flow Flow Status	ASST0070R & CONTROL		
Flow Status	ASST0070R & CONTROL		
Alpha Status	ASST0070R & CONTROL		
Flow Status	ASST0070R & CONTROL		



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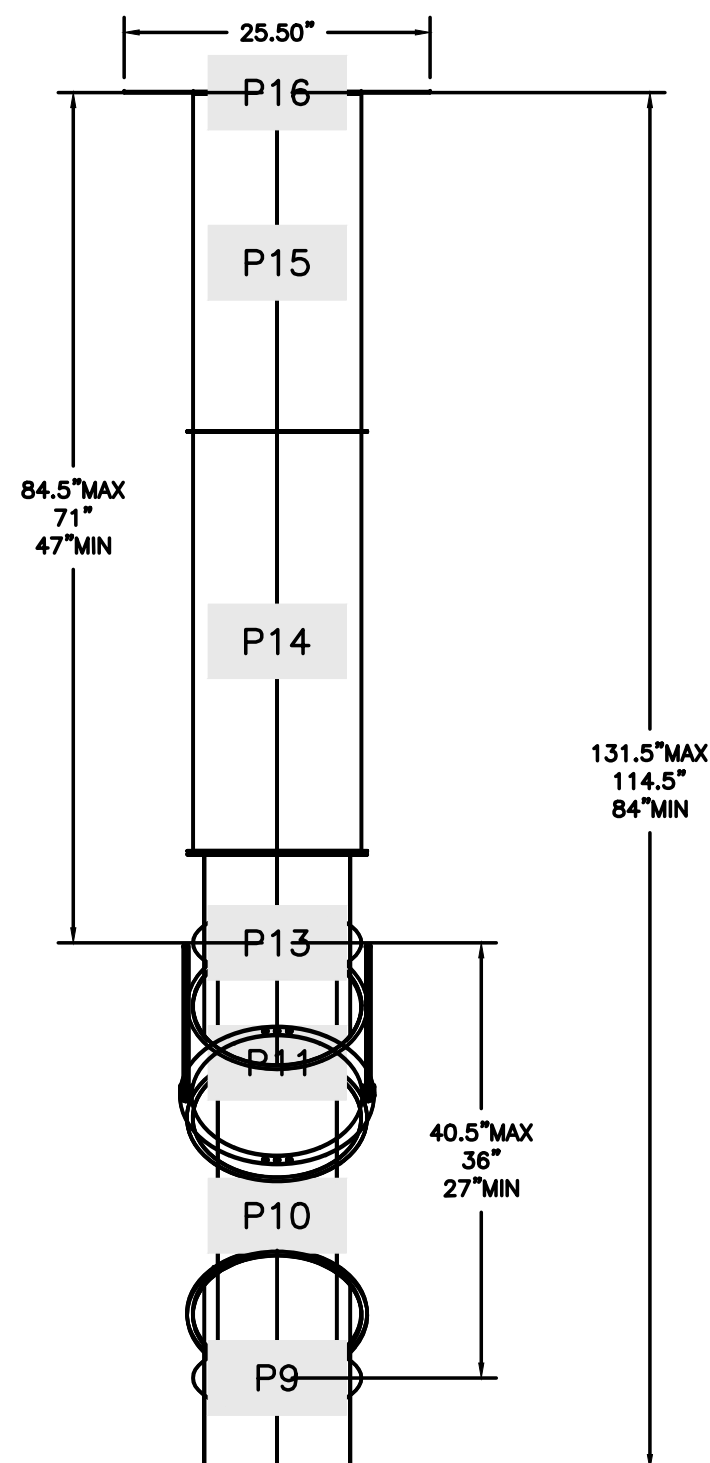
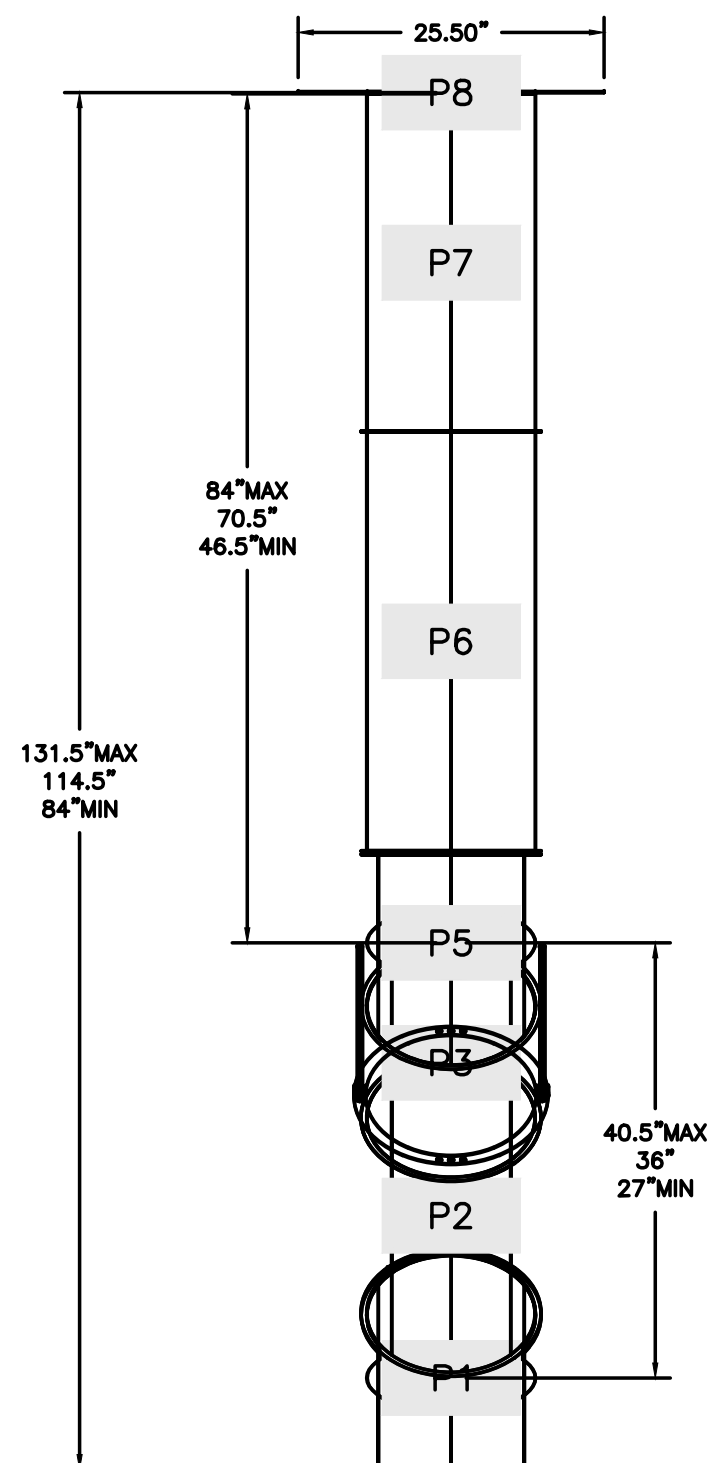
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Date: 26 AUGUST, 2024

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DUCTWORK #1 FRONT VIEW



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