

**CLIFTON TOWN ARCHTECTURAL REVIEW BOARD
REGULAR MEETING
THURSDAY, SEPTEMBER 29, 2022, 7:30 PM
WAYNE H. NICKUM MEETING HALL
12641 CHAPEL ROAD
CLIFTON, VIRGINIA 20124**

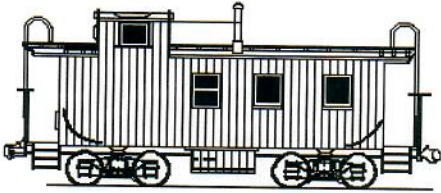
Present: Royce Jarrendt, Chair; Town Council Representative Member Regan McDonald; Phyllis Lovett; Jeff Stein; Geri Yantis.
Staff: Amanda Christman, Zoning Clerk.
Absent: Dwayne Nitz; Phoebe Peterson.

The Regular Meeting was called to order by Chair Jarrendt at 7:30 PM.

Order of Business:

1. Commercial Application:
 - a. Clifton Cafe
See attached application.
 - **Member Lovett move to approve the application as presented, seconded by Member Stein. The motion was approved by poll, 4-0.**
2. Approve August 25, 2022 Minutes.
 - **Member Stein moved to approve the August 25, 2022 meeting Minutes as presented, seconded by Chair Jarrendt. The motion was approved by poll, 3-0-1 (Member Lovett abstained).**
3. Adjournment.

The Meeting was adjourned by general acclamation.



CLIFTON ARCHITECTURAL REVIEW BOARD
TOWN OF CLIFTON, VIRGINIA
APPLICATION FOR CERTIFICATE OF
APPROPRIATENESS

DATE OF APPLICATION: 9-7-22
NAME OF APPLICANT OR AGENT: GIAN PIERO MAZZI
ADDRESS: 7144 MAIN STREET, CLIFTON, VA 20124
TELEPHONE: 703 901 0242 Email GIAN@PIEROSCORNER.COM
LOCATION OF PROPERTY INCLUDING STREET ADDRESS AND TAX MAP
NUMBER: _____

GENERAL DESCRIPTION OF PROPOSAL:
installing kitchen hood at the cafe, with exhaust
on the roof.

ATTACHMENTS:

- APPLICATION FEE*
- Two (2) HARD COPIES AND ONE ELECTRONIC COPY OF APPLICATION WITH PLATS, ARCHITECTURAL DRAWINGS, FLOOR PLANS, ETC.

I UNDERSTAND THAT ALL SUBMISSION REQUIREMENTS MUST BE MET BEFORE THE ARB WILL REVIEW AN APPLICATION

[Signature]
SIGNATURE OF APPLICANT OR AGENT _____ DATE _____

Is the applicant or owner a member of a homeowners' association (HOA)? Yes No If yes, please obtain the approval of the HOA prior to submission of the application.

HOA REPRESENTATIVE (NAME/SIGNATURE) _____ DATE OF HOA APPROVAL _____
CERTIFICATE ISSUED: YES NO

(When marked "YES" and signed, this document becomes the "certificate of Appropriateness")

BY: _____ DATE _____
CHAIRMAN, ARB

ARB MEMBERS' INITIALS: _____

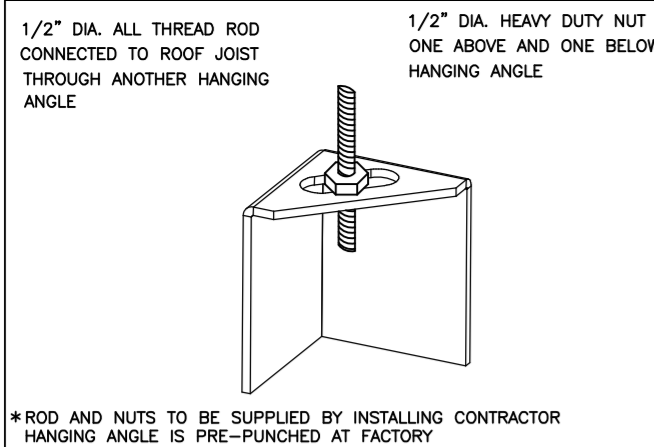
CONDITIONS: _____

IF CERTIFICATE IS NOT TO BE ISSUED, THE ARB SHALL STATE THE BOARD'S REASON: _____

*Application fee:

- Sign/Fence: \$10.00; if after installation: \$50.00
- Addition/remodeling project up to 200 SF: \$100.00
- Addition/remodeling project exceeding 200 SF \$250.00
- New home construction: \$250.00

The applicant shall also pay any actual costs of any review fees incurred by the ARB, including any consultant's fees and other costs set forth in Virginia State Code Section 15.2-2286.



1/2" DIA. ALL-THREAD ROD CONNECTED TO ROOF JOIST THROUGH ANOTHER HANGING ANGLE

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

HANGING ANGLE DETAILS

HOOD STYLE / MODEL	450 DEGREES cfm/ft.	600 DEGREES cfm/ft.	700 DEGREES cfm/ft.
CANOPY ND-2	150	200	250
CANOPY ND-2 W/ END PANELS	105	140	175
SLOPED SND-2	228	294	-
ISLAND ND-2WI	269	300	350
ISLAND ND-2I	346	422	475

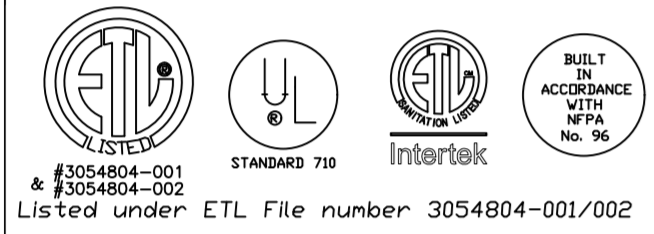
ETL HOOD LISTING DETAIL

EXHAUST CFM = LENGTH OF HOOD X CFM/LIN.FT. (LOAD)
 SUPPLY CFM = EXHAUST CFM X PERCENTAGE REQUIRED
 TOTAL DUCT AREA (sq. in.) = 144 X (CFM)² / (VELOCITY)³
 DUCT LENGTH = TOTAL DUCT AREA / DUCT WIDTH

*CAPTIVEAIRE VENTILATOR DUCT SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1500-1800 FPM AND A SUPPLY VELOCITY OF 1000 FPM.

CALCULATIONS UTILIZED

CAPTIVE-AIRE HOODS BUILT IN COMPLIANCE WITH:



BUILDING CODES

CAPTIVE-AIRE 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 HANGER MATERIALS PROVIDED BY INSTALLING CONTRACTORS.
- ALL CONNECTIONS FROM CAPTIVEAIRE HOOD PER MECHANICAL CONTRACTOR'S PLANS.
- COOKING EQUIPMENT TO SHUT OFF IN EVENT OF FIRE.
- EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
- ALL LIGHT FIXTURES SHOWN INSTALLED BY CAPTIVEAIRE ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES ARE BY ELECTRICAL CONTRACTOR.
- 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

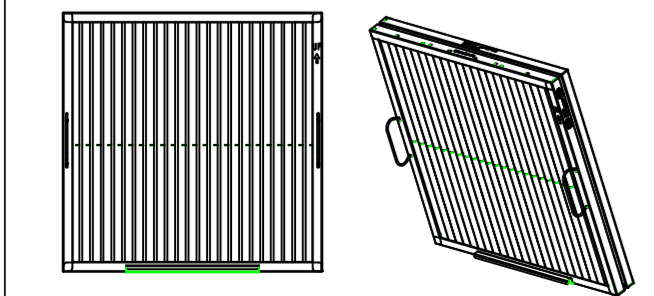
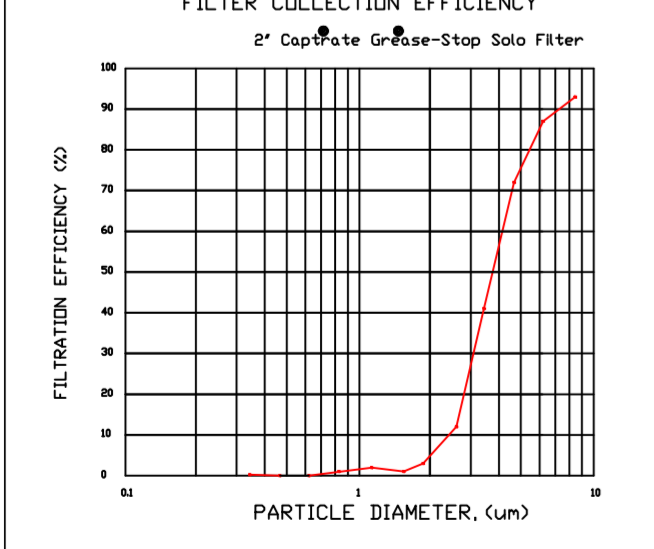
- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
- KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DINING AREA.
- RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

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

FILTER COLLECTION EFFICIENCY



CaptiveAire Captrate Solo Filter
 ETL Listed Grease Extracting Filters
 Made From 430 Stainless Steel

FILTER DETAIL

HOOD INFORMATION - JOB#5320438

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)						TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG		
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL			SP	END TO END	ROW
1	HD-1	5412 ESX-2-PSP-F	ECON-AIR	7' 6"	600 DEG	I	HEAVY	213	1598			4'	14'	1598	1495	-0.611'	1200	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

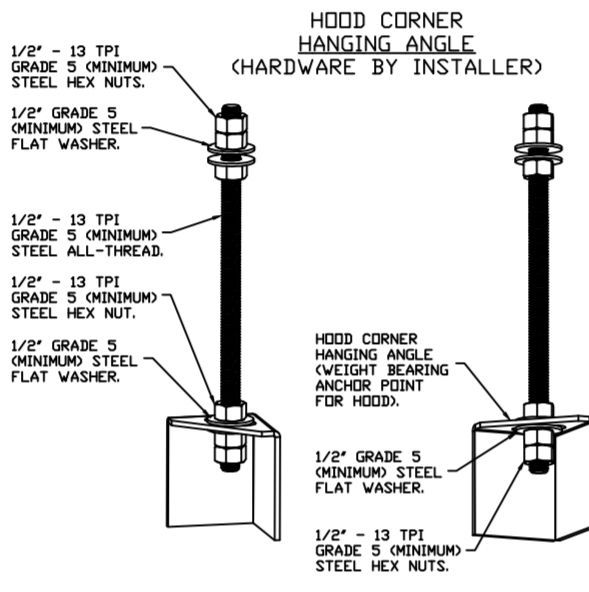
HOOD NO	TAG	TYPE	FILTER(S)			LIGHT(S)			WIRE GUARD	LOCATION	SIZE	UTILITY CABINET(S)		FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
			QTY	HEIGHT	LENGTH	QTY	TYPE	FIRE SYSTEM				SIZE	ELECTRICAL		
1	HD-1	CAPTRATE SOLO FILTER	5	20"	16'	4	RECESSED ROUND	NO	WALL MNT	12"x48"x24"	TANK FS	4.0	DCV-1111	1 LIGHT 1 FAN	YES 548 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	HD-1	FIELD WRAPPER 18.00' HIGH FRONT, RIGHT. BACKSPLASH 68.00' HIGH X 91.00' LONG 430 SS VERTICAL. LEFT SIDESPLASH 92.00' HIGH X 54.00' LONG 430 SS VERTICAL. LEFT END STANDOFF(FIN/SLP) 1" WIDE 54" LONG INSULATED. INSULATION FOR TOP OF HOOD. INSULATION FOR BACK OF HOOD. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 68" HIGH INSULATED 430 SS. LEFT WALL AS END PANEL.

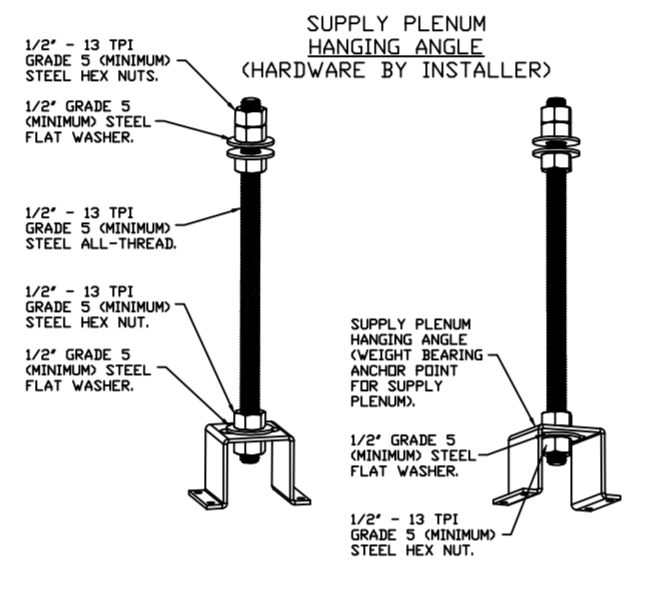
PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG	DIA	CFM
1	HD-1	Front	91'	20"	6"	MUA	12"	24"	600	0.162"
						MUA	12"	24"	600	0.162"



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.



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 ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

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

VERIFY CEILING HEIGHT

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

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.

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

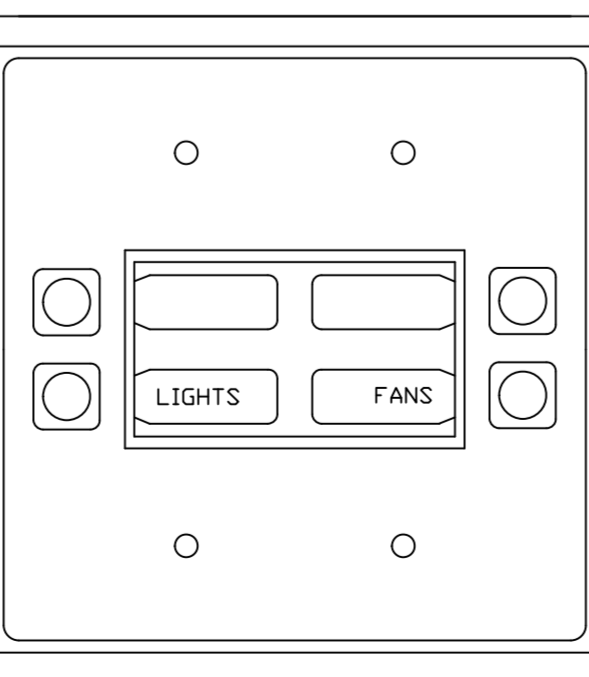
Approved with NO Exception Taken

Revise and Resubmit

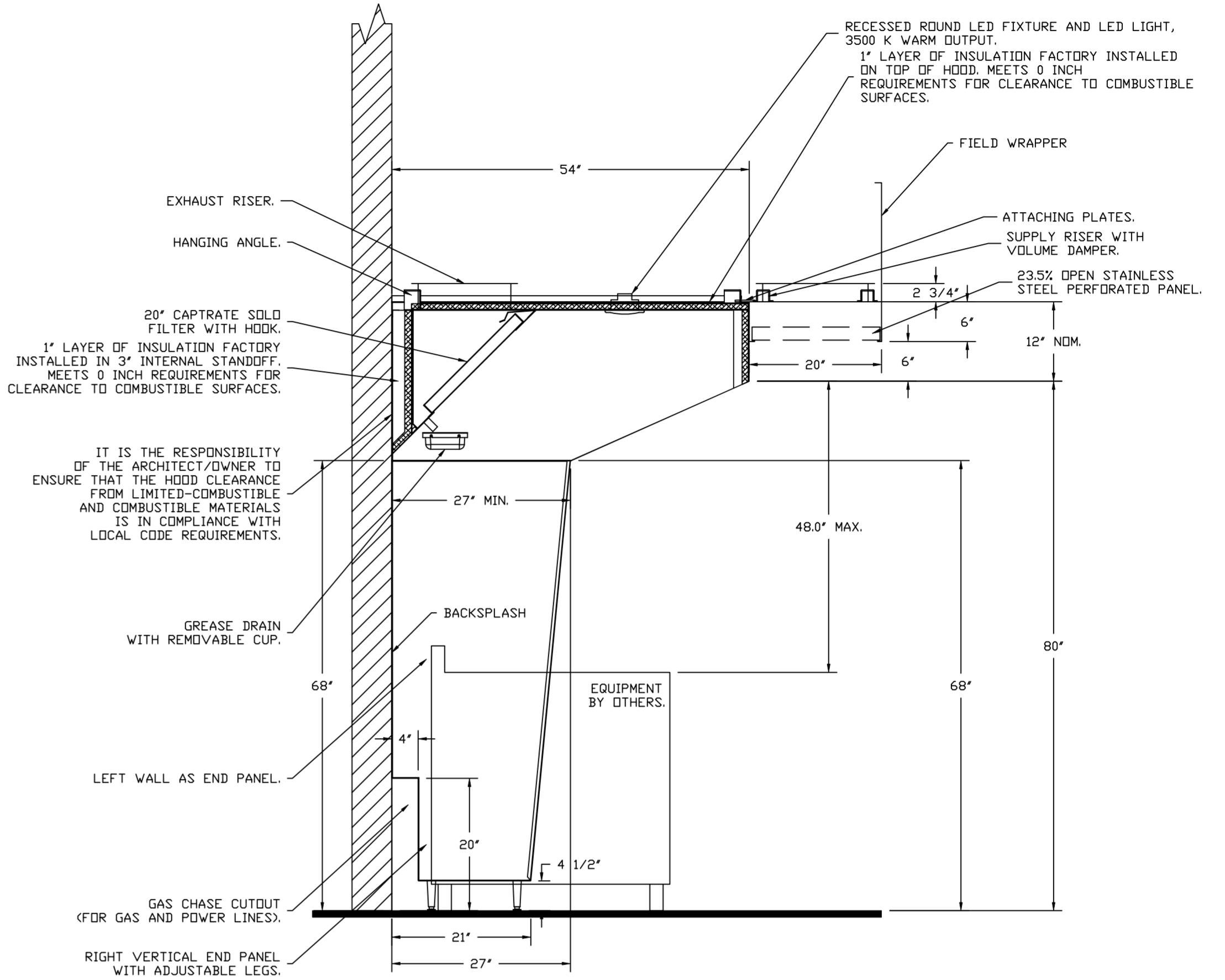
SIGNATURE _____

Your Title _____ Date _____

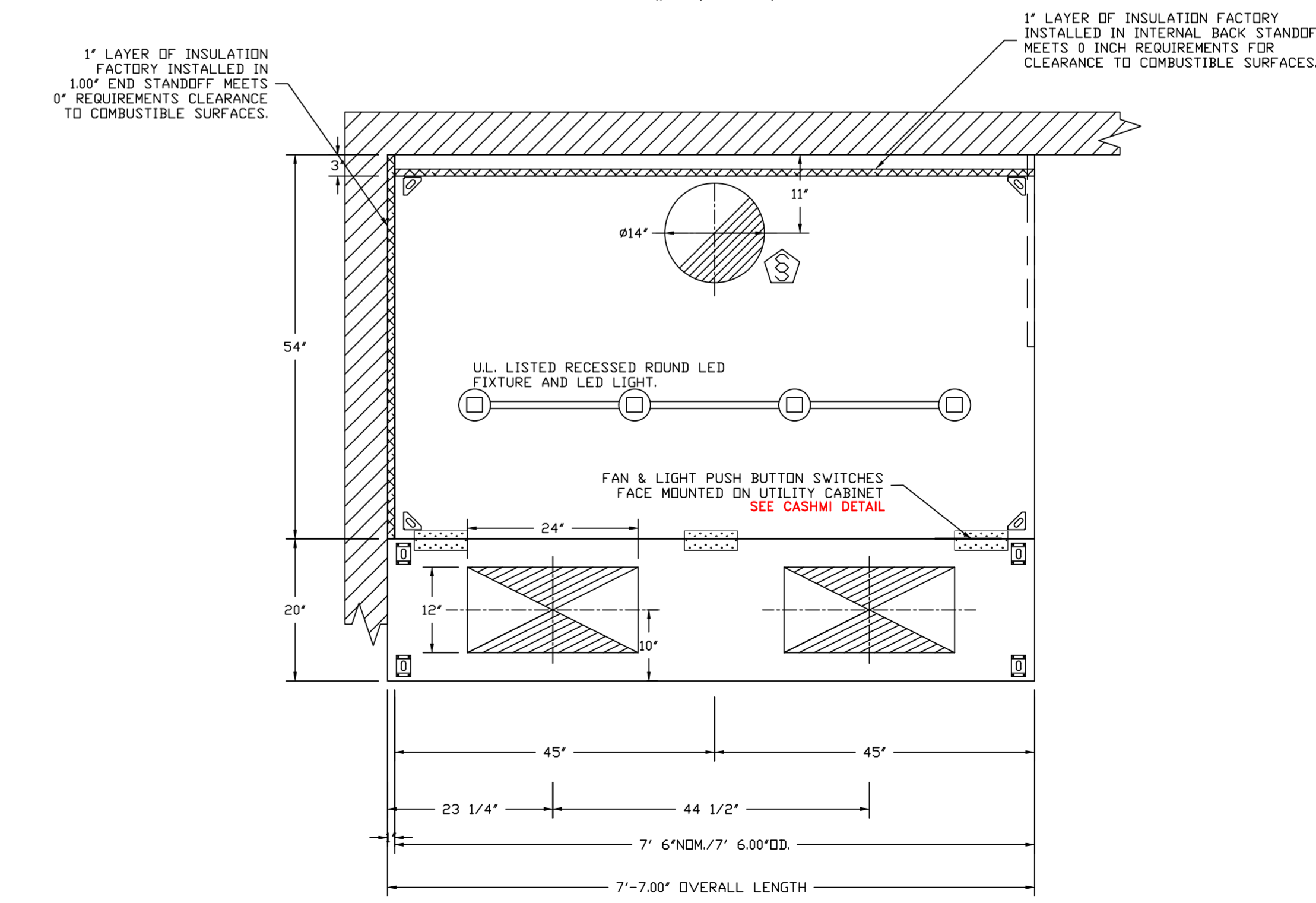
CASHMI DETAIL



FOR QUESTIONS, CALL THE
 Northern Virginia Mechanical
 Bryan Yates
 PHONE: (703) 214-2101
 EMAIL: reg121@captiveaire.com



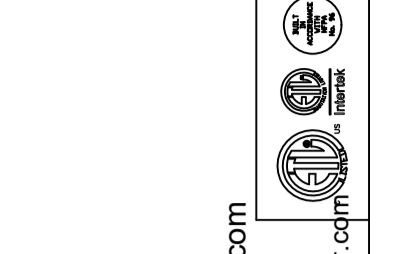
SECTION VIEW - MODEL 5412ESX-2-PSP-F
 HOOD - #1 (HD-1)



PLAN VIEW - HOOD #1 (HD-1)
 7' 6.00" LONG 5412ESX-2-PSP-F

REVISIONS

DESCRIPTION	DATE



econ·air
 Northern Virginia Mechanical
 www.econair.com
 1346 Old Bridge Rd., Suite 201-3, Woodbridge, VA, 22192
 PHONE: (703) 214-2101 FAX: (703) 214-2101 EMAIL: reg121@econair.com

CLIFTON CAFE - CLIFTON, VA_R2
 7144 Main St,
 Clifton, VA, 20124

DATE: 2/9/2022

DWG.#:
 5320438

DRAWN BY:
 BY-121

SCALE:
 NTS

SHEET NO.
 1

FIRE SYSTEM INFORMATION – JOB#5320438

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1	FS-1	TANK FS	4.0	20	WALL UTILITY CABINET LEFT	N/A

SPECIFICATIONS

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE FIRESTAT INSTALLED IN THE HOOD'S DUCT CONNECTION MEASURES TEMPERATURE. IF A TEMPERATURE HIGHER THAN THE SETPOINT (360DEG F) IS SENSED OR A RAPID RISE RATE OF RISE IS DETECTED, THE FIRESTAT CONTACTS WILL CLOSE AND ENERGIZE THE FIRE SYSTEM.

- NOTES**
- FIELD PIPE DROPS AS SHOWN
 - PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
 - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
 - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
 - IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
 - FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
 - APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH UL 300 REQUIREMENTS.
- MINIMUM 24" CLEARANCE ABOVE HOOD, REQUIRED FOR MAINTENANCE.
- FOR THE FIRST SET OF NOZZLES NEAREST THE TANK, PIPE TO THE END OF THE NOZZLE RUN THEN RETURN THE PIPE TO THE NEAREST NOZZLES TO TANK.

JOB #: 5320438.
JOB NAME: CLIFTON CAFE – CLIFTON, VA_R2.

SYSTEM SIZE: TANK-SP-1-WC TOTAL FP REQUIRED: 20.
HOOD # 1 7' 6.00" LONG x 54" WIDE x 12" HIGH.
RISER # 1 SIZE: 14" DIA.
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

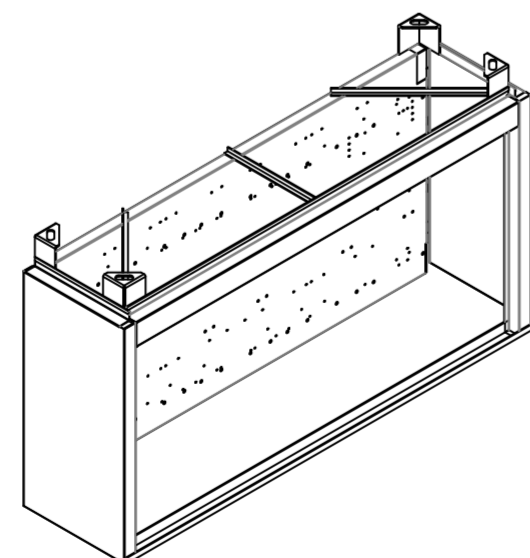
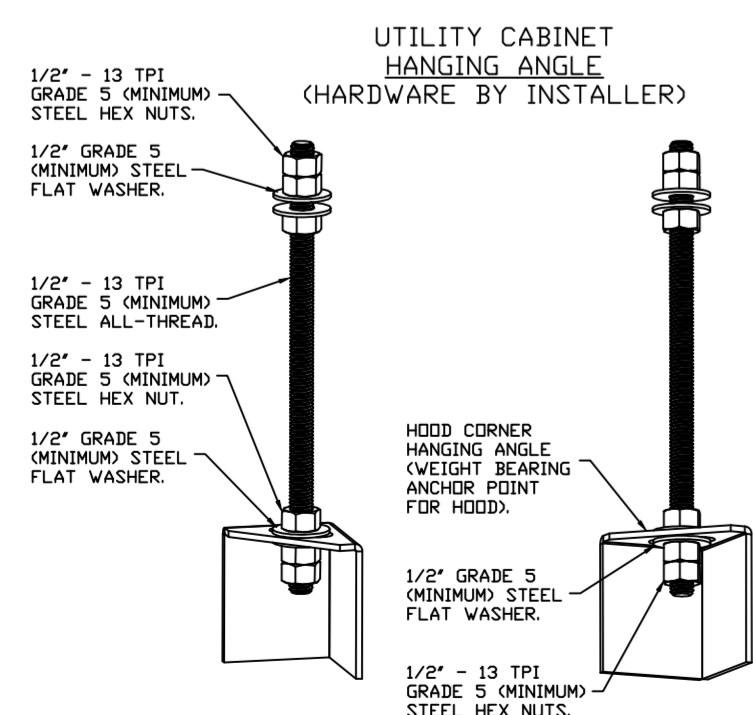
- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND – FIRE CABINET TANK SYSTEM

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.

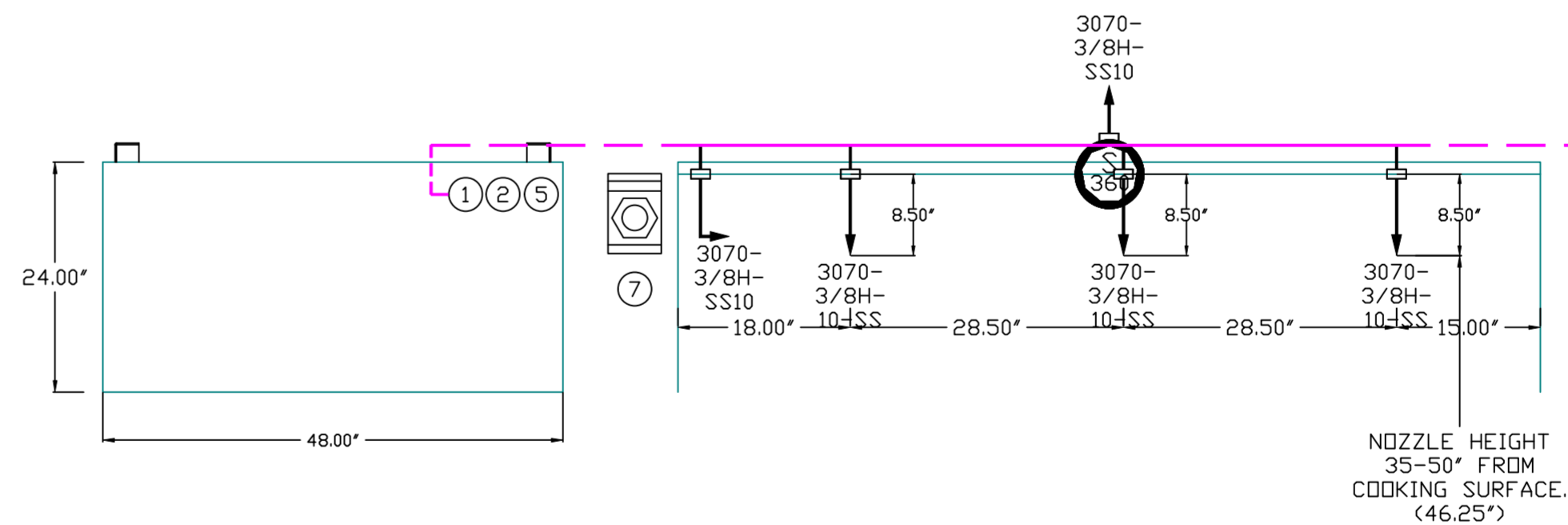
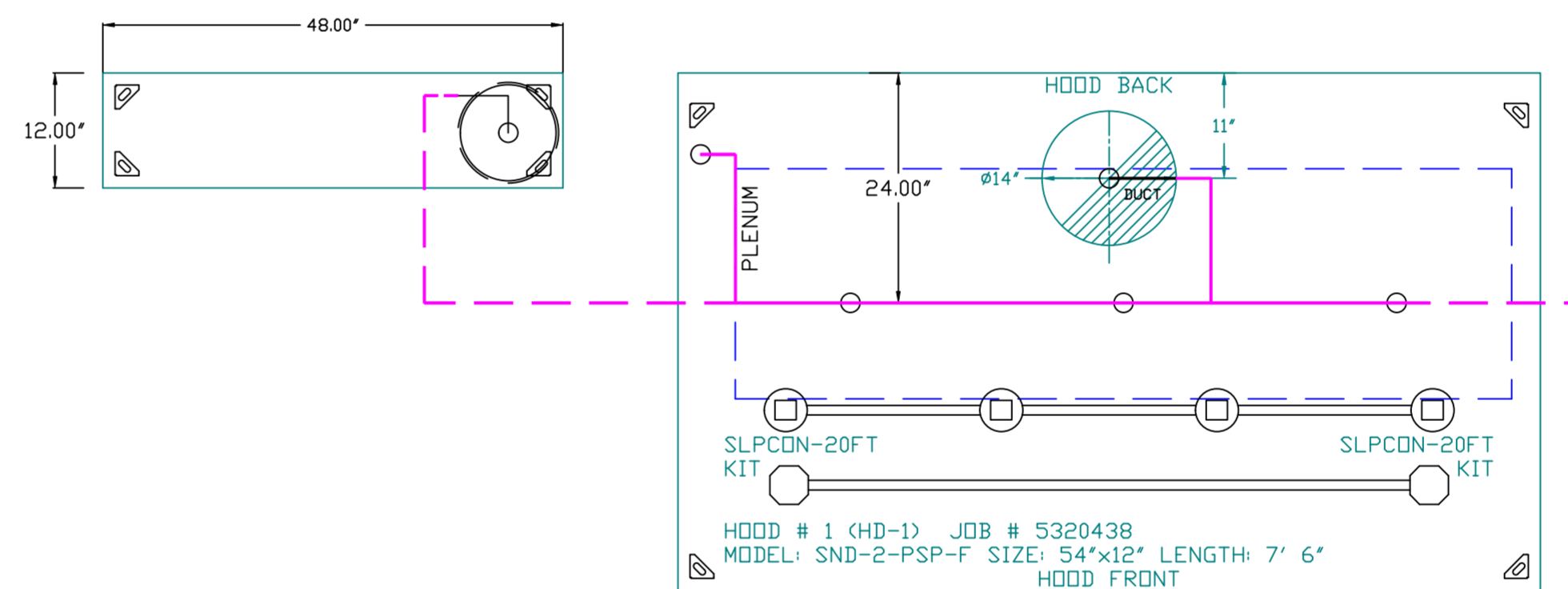
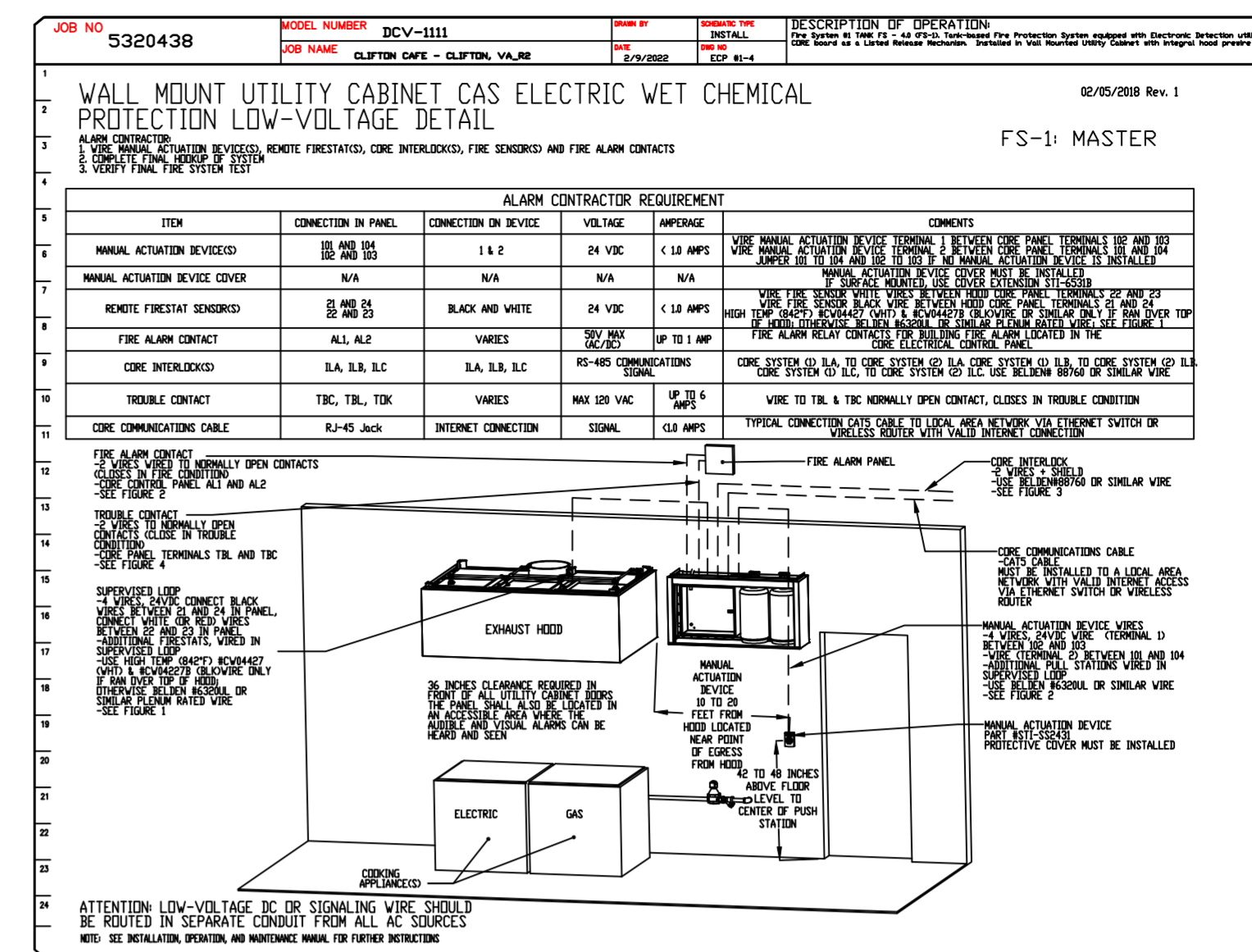
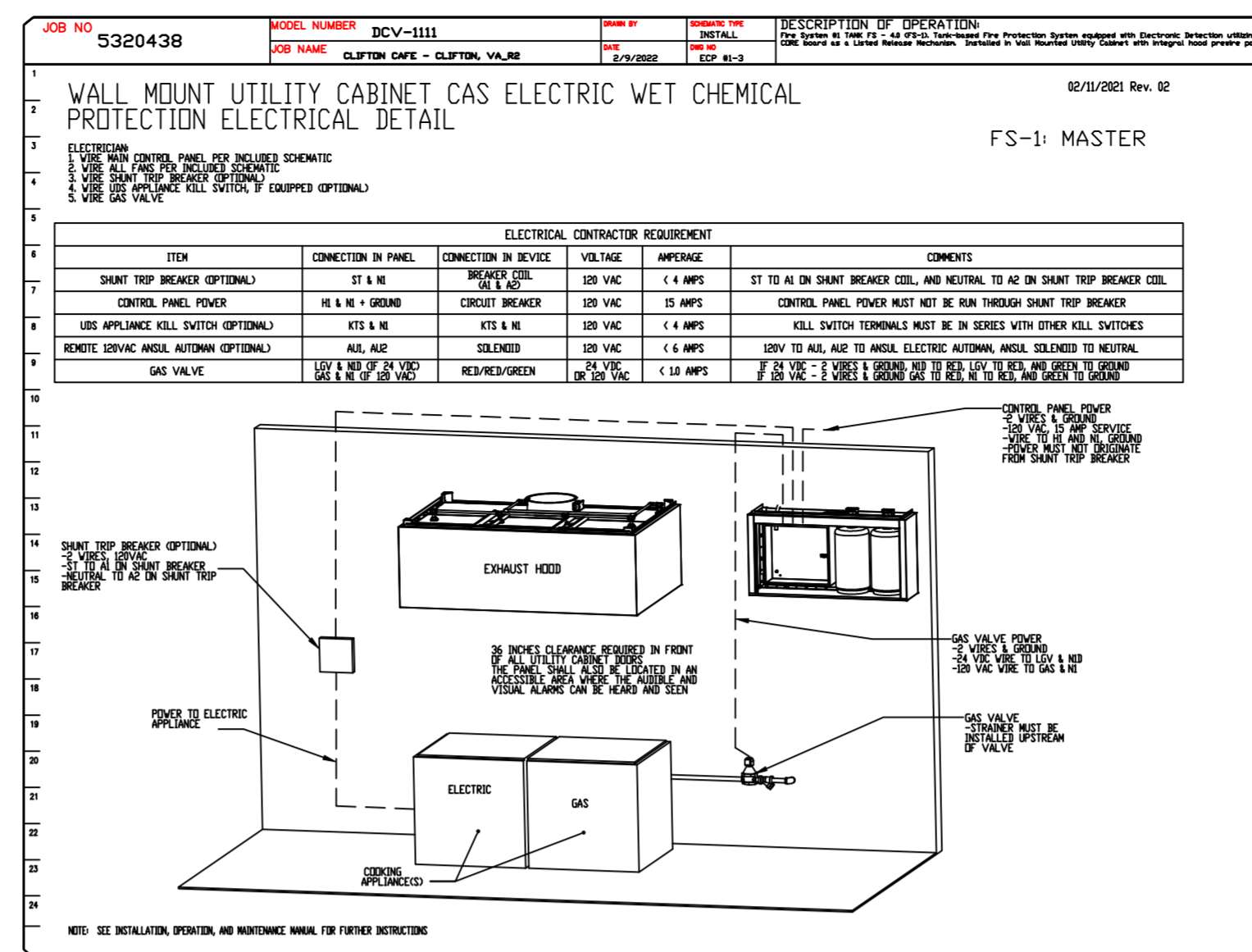
WALL-MOUNT UTILITY CABINET ASSEMBLY INSTRUCTIONS

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 UTILITY CABINET HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S)		ELECTRICAL	SWITCHES	WEIGHT
			FIRE SYSTEM	SIZE			
1	WALL MNT	12"x48"x24"	TANK FS	4.0	DCV-1111	1 LIGHT 1 FAN	240.00 LBS



TANK OVERLAPPING PROTECTION - 36 HIGH PROXIMITY 81.00" L X 24.00" D

REVISIONS

DESCRIPTION	DATE

CLIFTON CAFE – CLIFTON, VA_R2

DATE: 2/9/2022

DWG.#: 5320438

DRAWN BY: BY-121

SCALE: NTS

SHEET NO. 2

www.econair.com

Northern Virginia Mechanical

1346 Old Bridge Rd., Suite 201-3, Woodbridge, VA, 22192 PHONE: (703) 214-2101 FAX: (703) 214-9770 EMAIL: reg121@econair.com

EXHAUST FAN INFORMATION - JOB#5320438

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	EADU85H	ECON-AIR	1600	1.350	1444	TEAD-ECM	0.750	0.5410	1	115	8.9	506 FPM	88	14

MUA FAN INFORMATION - JOB#5320438

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)	SONES
2	MAU-1	1	EA1-D.250-15D	15MF-1-MDD	A1-D.250	1000	1200	0.500	1487	TEAD-ECM	1.000	0.4870	1	115	11.6	14.5A	25A	486	12.4

GAS FIRED MAKE-UP AIR UNITY(S)

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
2	MAU-1	94878	87288	70°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF-1	1	GREASE BOX
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCD MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
2	MAU-1	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	LOW FIRE START
		1	AC INTERLOCK RELAY - 24VAC COIL
		1	MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	ECM WIRING PACKAGE - DD SUPPLY - PWM SIGNAL FROM ECPM03 PREWIRE (TELCD MOTOR)
1	2 YEAR PARTS WARRANTY		

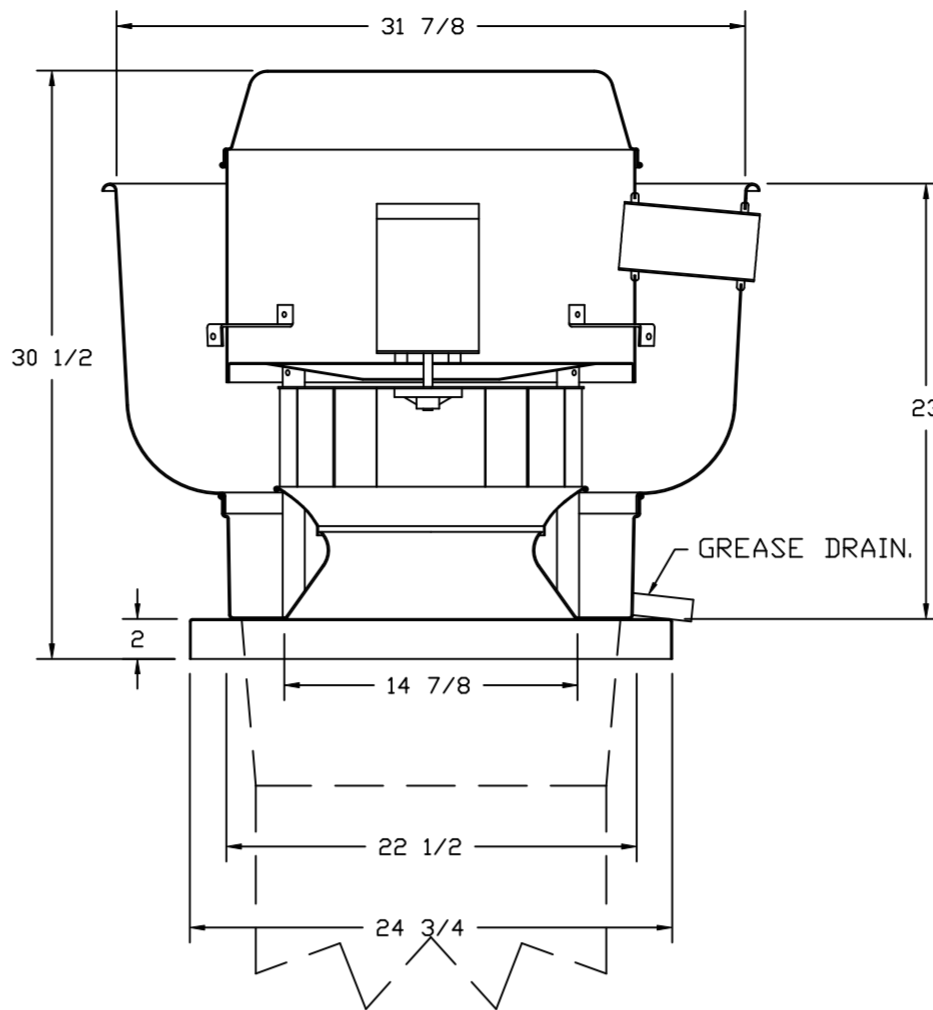
FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1	KEF-1	YES						YES	
2	MAU-1								

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	36 LBS	CURB	23.000"W X 23.000"L X 20.000"H 4.000:12.000 PITCH ALONG LENGTH, RIGHT VENTED HINGED.
2	# 2	MAU-1	63 LBS	CURB	21.000"W X 71.000"L X 14.000"H 4.000:12.000 PITCH ALONG WIDTH, RIGHT INSULATED.

FAN #1 EADU85H - EXHAUST FAN (KEF-1)



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

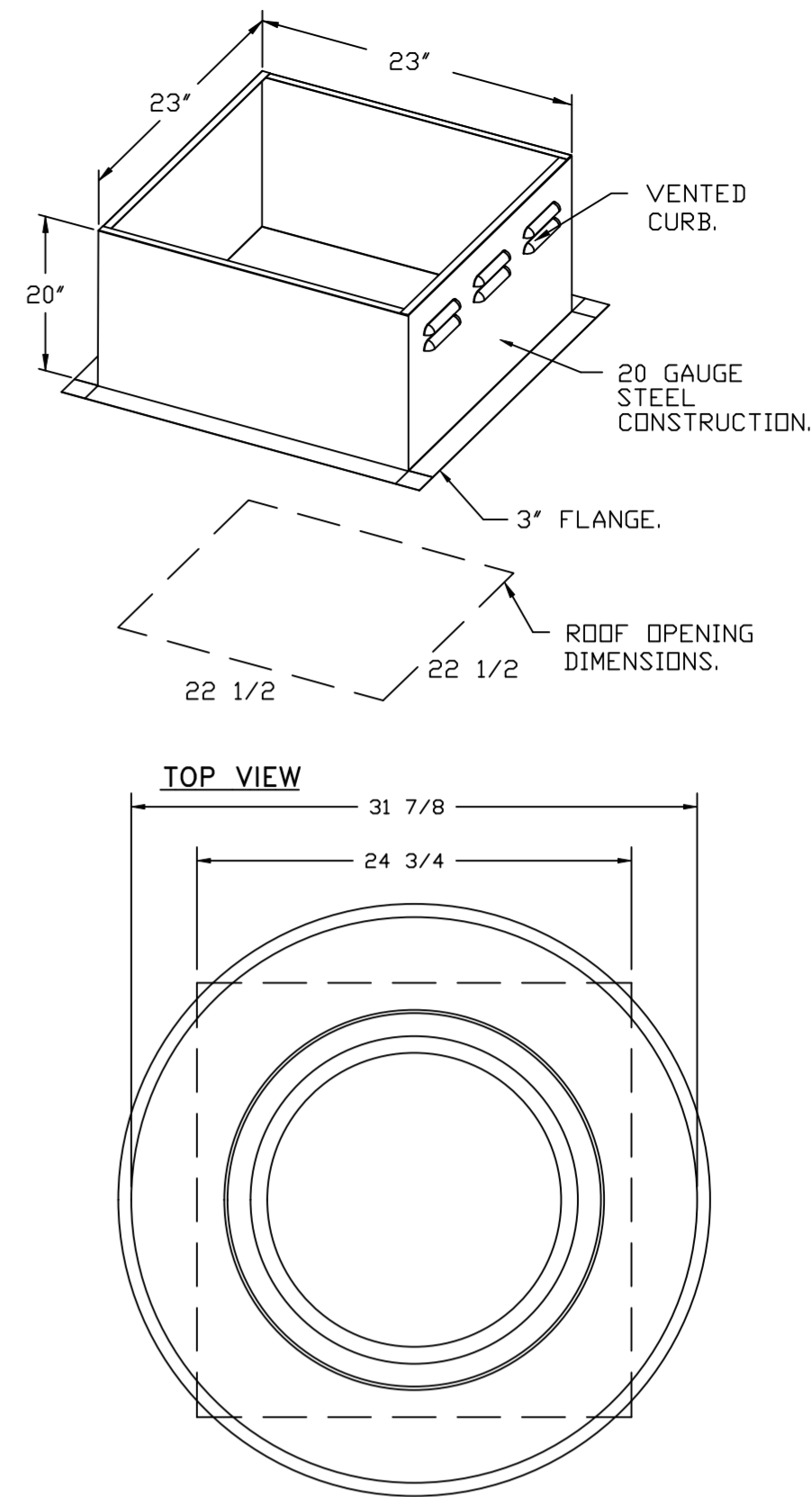
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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.
- SHIP LOOSE DISCONNECT FOR REMOTE MOUNT.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCD MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



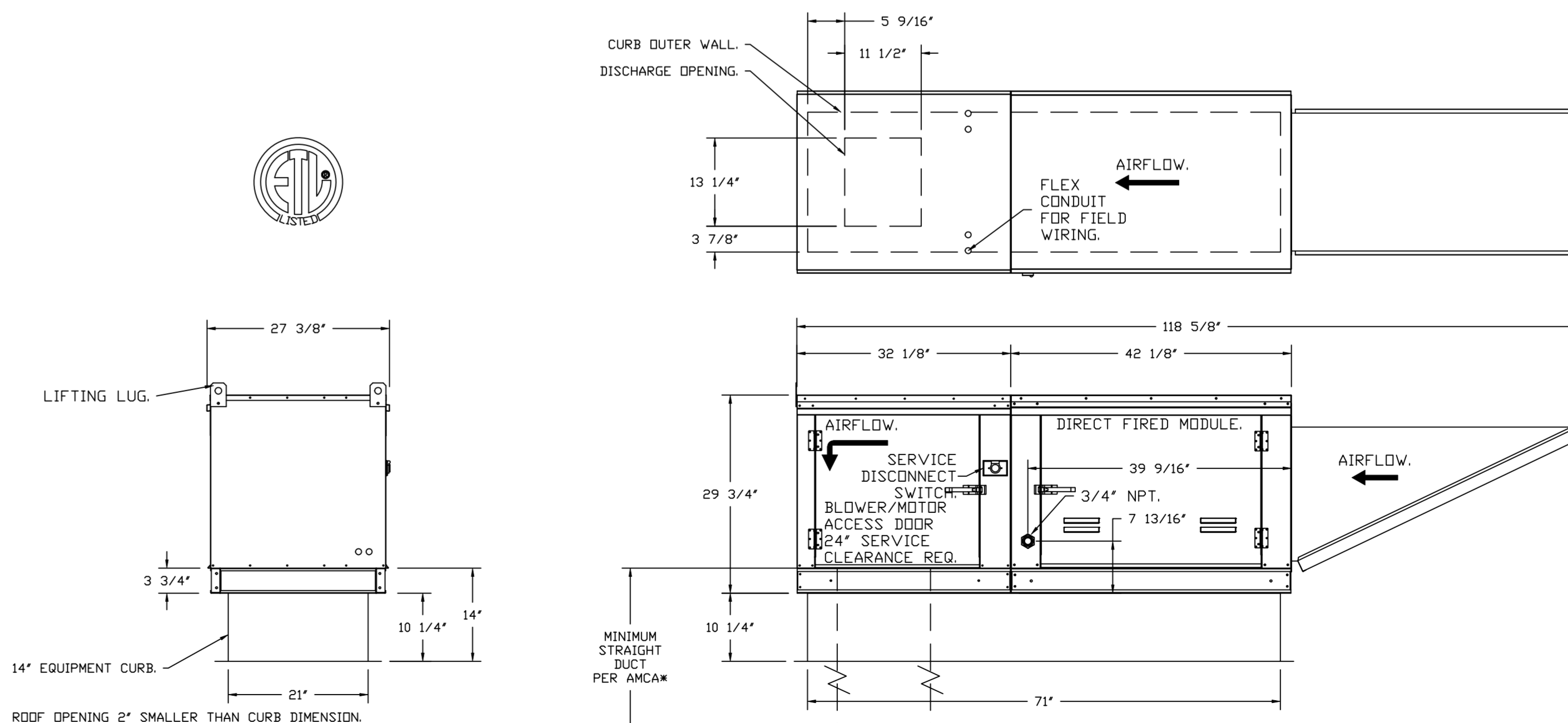
FAN #2 EA1-D.250-15D - HEATER (MAU-1)

- DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 15" MIXED FLOW DIRECT DRIVE FAN.
- INTAKE HOOD WITH EZ FILTERS.
- DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
- GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
- GAS PRESSURE GAUGE, -5 TO +15 INCHES W.C., 2.5" DIAMETER, 1/4" THREAD SIZE.
- LOW FIRE START - ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
- COOLING INTERLOCK RELAY, 24VAC COIL, 120V CONTACTS. LOCKS OUT BURNER CIRCUIT WHEN AC IS ENERGIZED.
- MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFB20S ACTUATOR INCLUDED.
- ECM WIRING PACKAGE FOR SUPPLY MOTORS WITH PWM SIGNAL FROM ECPM03 PREWIRE.
- HINGED DOUBLE WALL INSULATED DDDR ASSEMBLY (BURNER/BLOWER SECTION).
- 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 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 14" X 14".

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 16°F. TEMP. RISE = 70°F.
BTUs CALCULATED OFF ACTUAL AIR DENSITY.
OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 87932.
INPUT BTUs AT ALTITUDE OF 0.0 FT. = 95578.
OUTPUT BTUs AT ALTITUDE OF 203 FT. = 87288.
INPUT BTUs AT ALTITUDE OF 203 FT. = 94879.



FOR QUESTIONS, CALL THE
Northern Virginia Mechanical
Bryan Yates
PHONE: (703) 214-2101
EMAIL: reg121@captiveaire.com

REVISIONS

DESCRIPTION	DATE



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Northern Virginia Mechanical
www.econair.com
reg121@econair.com
1346 Old Bridge Rd., Suite 201-3, Woodbridge, VA, 22192 PHONE: (703) 214-2101 FAX: (703) 214-9770 EMAIL: reg121@econair.com

CLIFTON CAFE - CLIFTON, VA_R2
7144 Main St,
Clifton, VA, 20124

DATE: 2/9/2022

DWG.#:
5320438

DRAWN BY:
BY-121

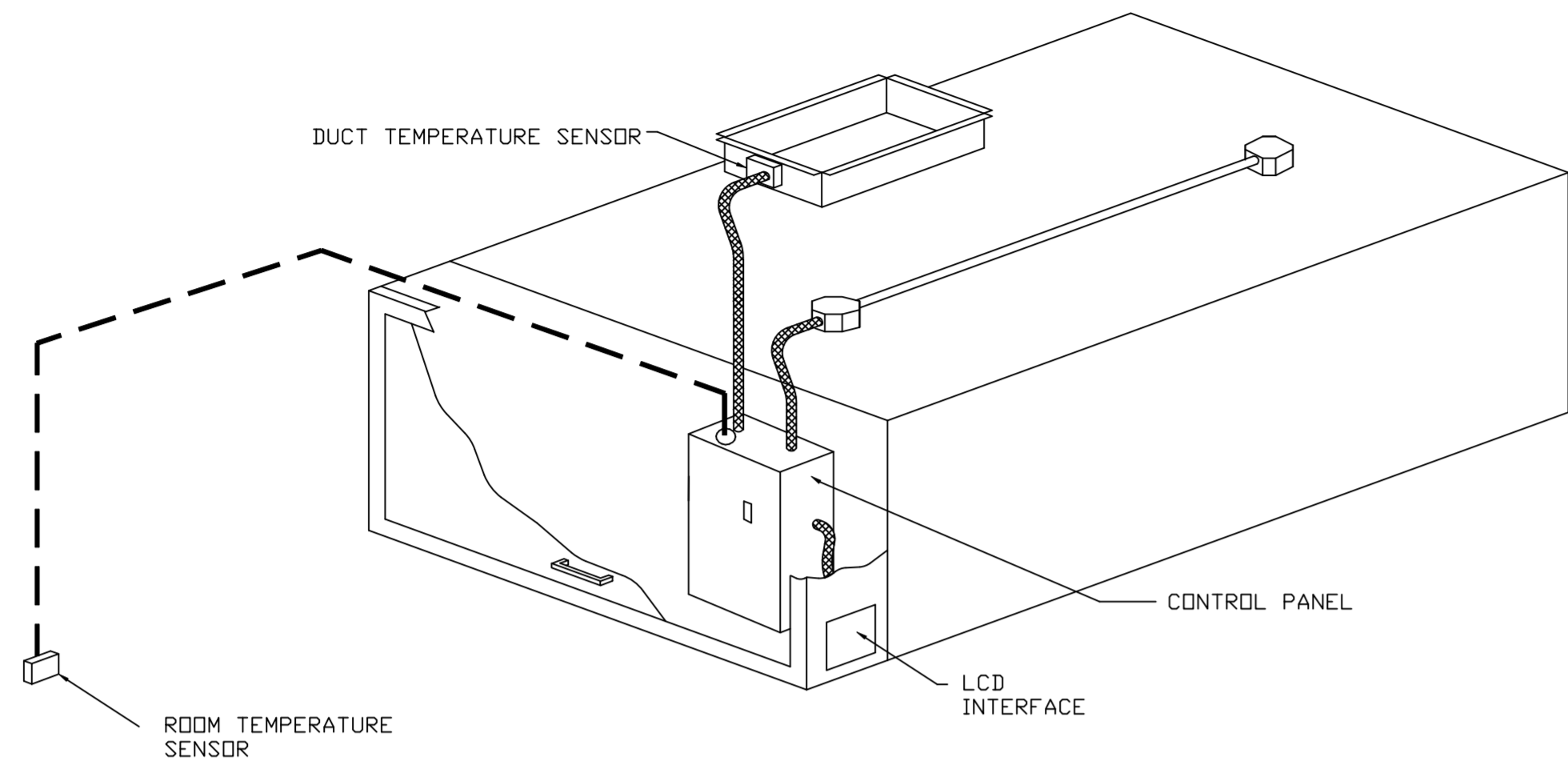
SCALE:
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SHEET NO.
3

ELECTRICAL PACKAGE - JOB#5320438

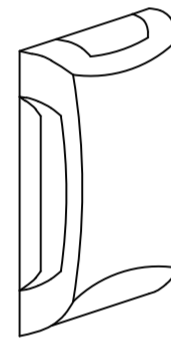
NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Φ	HP	VOLT	FLA
1	ECP-1	DCV-1111	WALL UTILITY CABINET LEFT	02 - FACE MOUNT RIGHT SIDE OF HOOD HOOD # 1	1 LIGHT 1 FAN	SMART CONTROLS DCV	KEF-1	EXHAUST	1	0.750	115	8.9
							MAU-1	SUPPLY	1	1.000	115	11.6

FOR QUESTIONS, CALL THE
Northern Virginia Mechanical
Bryan Yates
PHONE: (703) 214-2101
EMAIL: regi21@captiveaire.com



TYPICAL HOOD CONTROL PANEL INSTALLATION

ROOM TEMPERATURE SENSOR



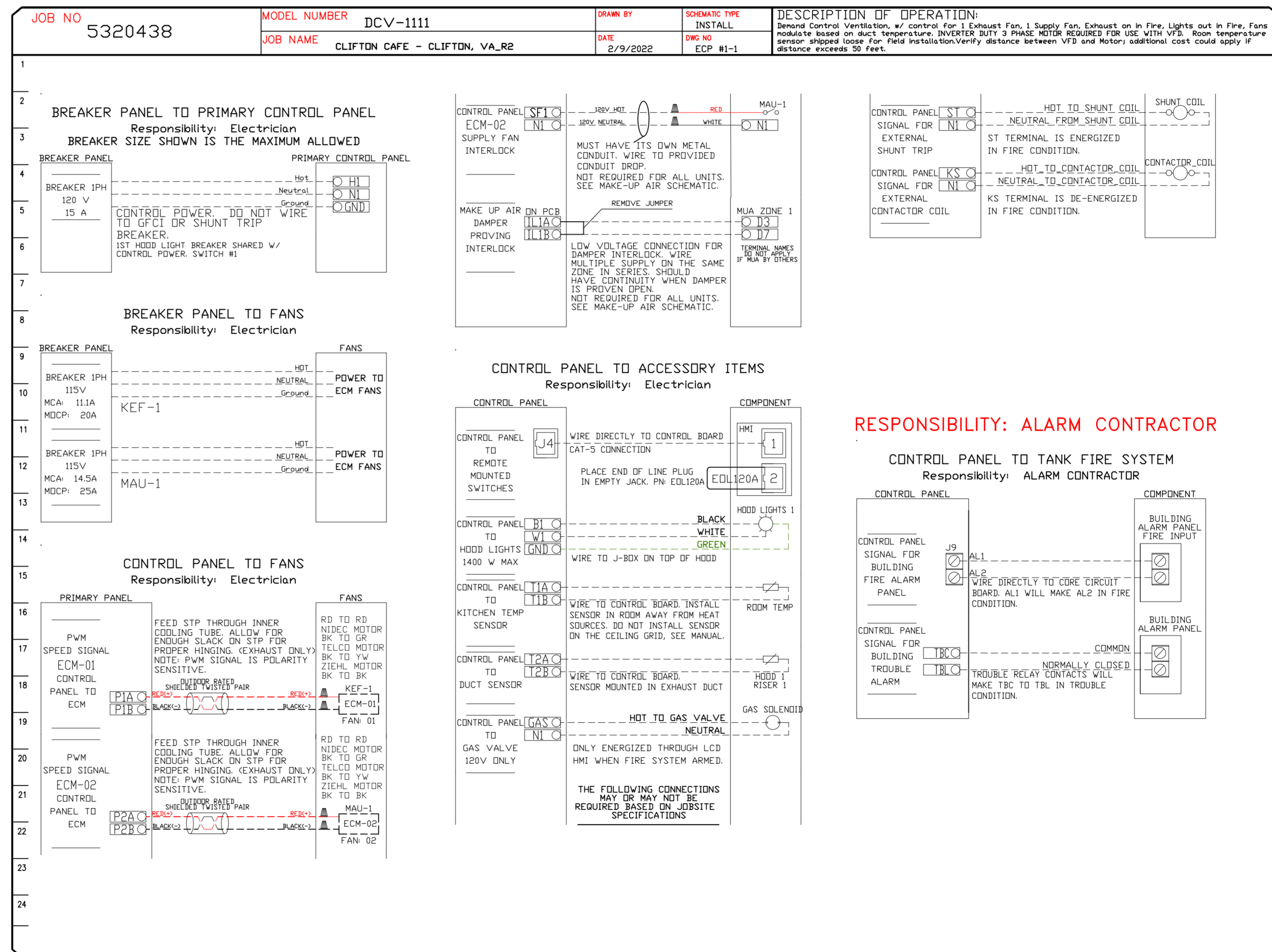
The Room Temperature sensor is a 10K Ohm Thermistor. The sensor provides constant room temperature to the controller. It should be installed on a wall somewhere in the space but not directly under the hood or close to an appliance so that the reading is not affected by heat.

Typically a system will have one room temperature sensor. However, systems configured with 2 fan zones have the option to be ordered with 2 room temperature sensors, one for each zone. They should be mounted in the space accordingly.

SEQUENCE OF OPERATIONS:

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

- **AUTOMATIC:** THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR. FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE. IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE. BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS OUTLINED IN IECC 403.2.8.
- **MANUAL:** THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.
- **SCHEDULE:** A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.
- **OTHER:** THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).
- **FIRE:** UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.



ELECTRICAL SCHEMATIC FOR COORDINATION PURPOSES ONLY
CAPTIVEAIRE ELECTRIC PRE-WIRE CONTROL PACKAGE FIELD WIRING DIAGRAM SHOWN ABOVE.
ALL FIELD WIRING BY ELECTRICAL CONTRACTOR. THE PRE-WIRE PANEL IS PROVIDED BY MECHANICAL CONTRACTOR.

REVISIONS

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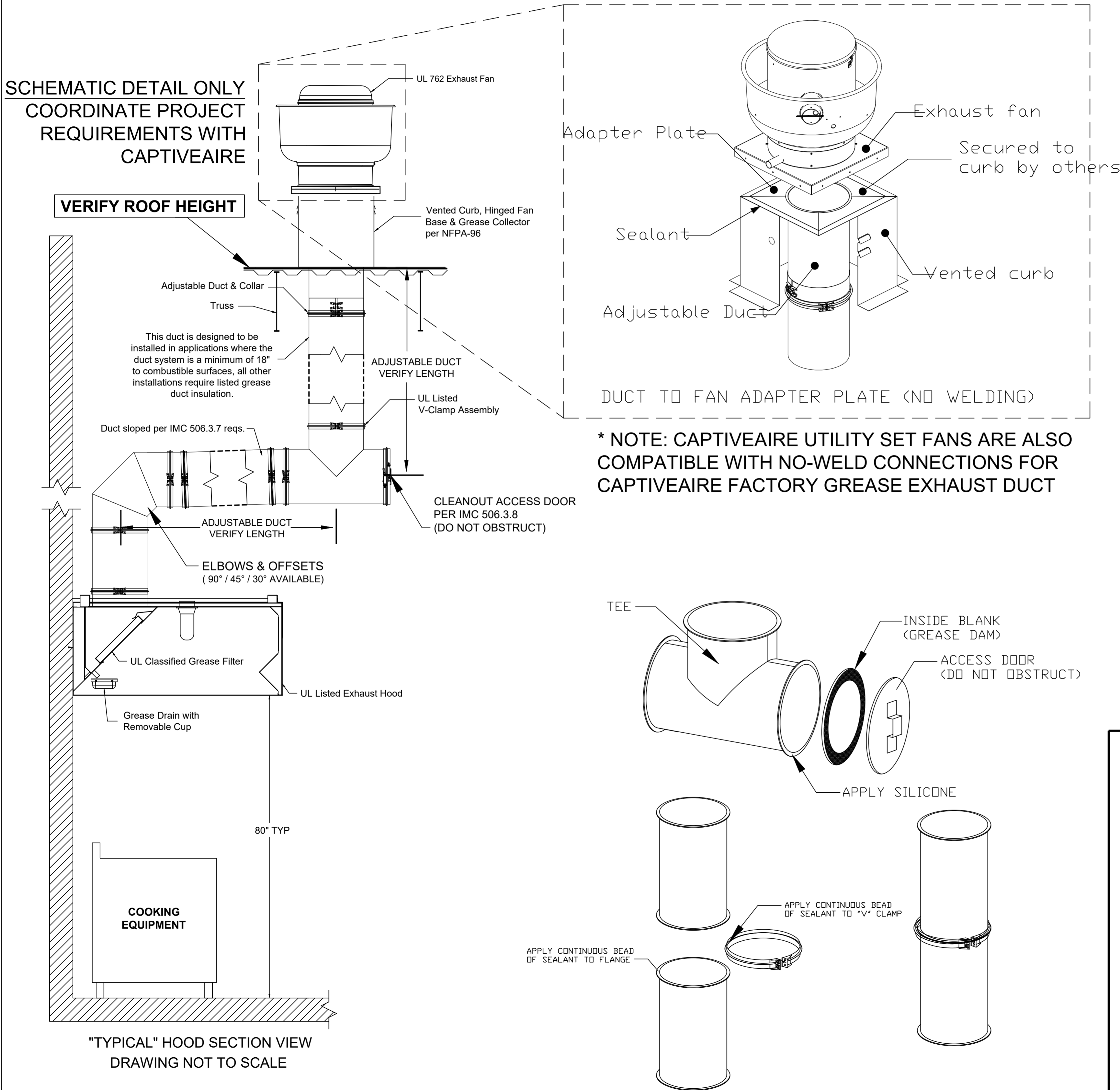
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DRAWN BY: BY-121
SCALE: NTS
SHEET NO.: 4

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GREASE EXHAUST DUCT DETAILS

- > CaptiveAire Grease Exhaust Duct is UL Listed and requires no field welding
- > Complies with IMC and NFPA96 requirements
- > Double-wall pre-insulated ductwork is also available



GREASE DUCT SPECIFICATION

Furnish single-wall, factory built, grease duct for use with Type I kitchen hoods, which conforms to the requirements of NFPA-96. Products shall be ETL listed to UL-1978 for venting air and grease vapors from commercial cooking operations as described in NFPA-96.

The duct wall shall be constructed of .036 thick type 430 stainless steel and be available in diameters 8" through 24". All supports, fan adapters, hood connections, fittings and expansion joints required to install grease duct shall be included.

Roof penetrations shall comply with listed clearance to combustibles, see "Clearance to Combustibles" guide for details. The grease duct will terminate at the fan adapter plate, will be fully welded to the fan adapter plate and the fan adapter plate will be fastened to the curb using a suitably sized fastener provided by others; see page 12 of the "Installation, Operation and Maintenance Manual" for details.

Grease duct joints shall be held together by means of formed vee clamps and sealed with 3M Fire Barrier 2000+. Screws used to secure the vee clamps shall be of the hex-head type with flanged stops and tapered "lead in" threads for easy starting. Nuts shall be retained by means of a free-floating cage to allow easy alignment.

Single-Wall Grease Duct shall be installed in accordance with the manufacturer's "Installation, Operation and Maintenance Manual", ETL listing and state and local codes. Grease duct installed outside of the building shall be protected against accidental damage or vandalism. Support vertically installed grease duct from the building structure using rigid structural supports. Anchor supports to the structure by welding or bolting steel expansion anchors or concrete inserts. Support horizontally installed grease duct from the building structure using above method or use Duct Mate, Wire Rope & Clutchers, part numbers WR20 & CL20. 1/2" Threaded rod and saddles may also be used for the support of horizontal grease duct. Fans shall be supported independently from the grease duct sections. Protect grease duct from twisting or movement caused by fan torque or vibration.

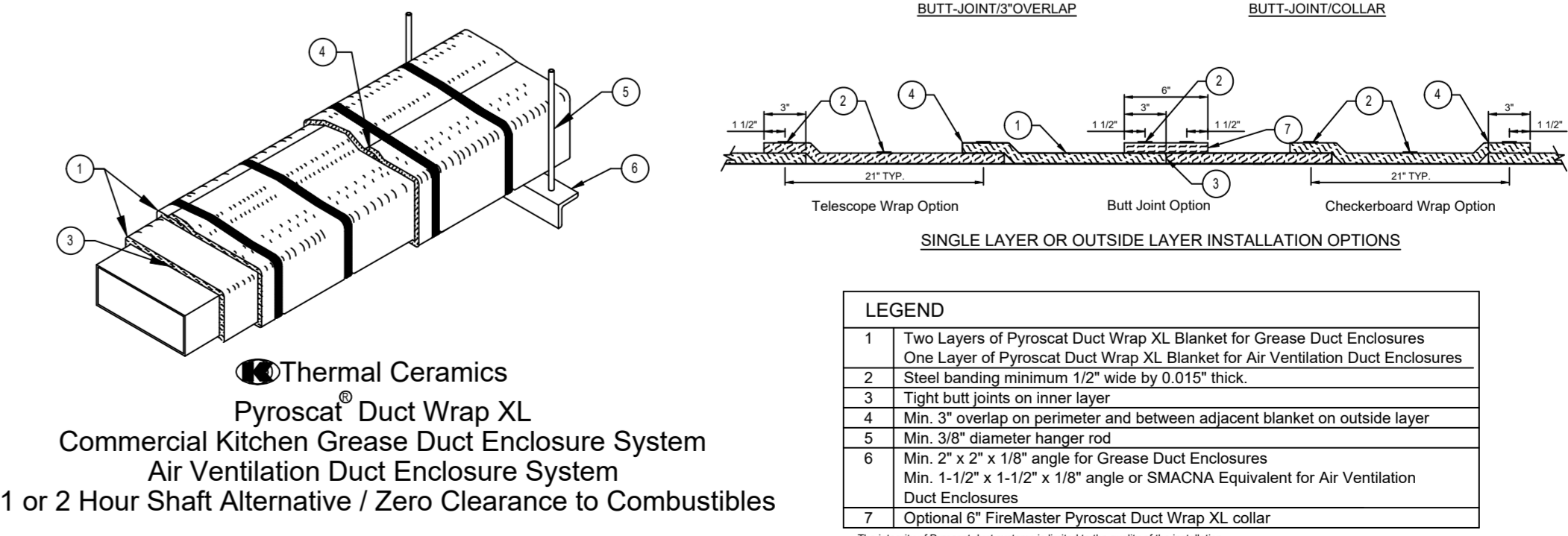
CLEARANCE TO COMBUSTIBLES			
DIAMETER	COMBUSTIBLES	LIMITED COMBUSTIBLES	NON COMBUSTIBLES
8" - 24"	18"	3"	0"

HORIZONTAL CLEANOUT MAXIMUM SPACING		HORIZONTAL SUPPORT MAXIMUM SPACING (FT)	
DUCT DIAMETER	MAXIMUM SPACING	DUCT DIAMETER	MAXIMUM SPACING (FT)
8" - 24"	12"	8" - 24"	10'

VERTICAL CLEANOUT MAXIMUM SPACING		VERTICAL SUPPORT MAXIMUM SPACING (FT)	
DUCT DIAMETER	MAXIMUM SPACING	DUCT DIAMETER	MAXIMUM SPACING (FT)
8" - 24"	ONE PER FLOOR	8" - 24"	10'

**CONTACT CAPTIVEAIRE FOR A
CUSTOMIZED DUCT SUBMITTAL
EMAIL: reg121@captiveaire.com
PHONE: (703) 214-2101**

DUCT INSULATION DETAIL (IF REQUIRED)



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SCALE: NTS
SHEET NO. 5



Clifton Clerk <clerk@cliftonva.gov>

ARB 9.29.22 MEETING

Royce Jarrendt <royce.jarr@yahoo.com>

Tue, Sep 27, 2022 at 3:09 PM

Reply-To: Royce Jarrendt <royce.jarr@yahoo.com>

To: "nucfamily@aol.com" <nucfamily@aol.com>, Clifton Clerk <clerk@cliftonva.gov>, Geri Yantis <gyantis@syaa.com>, Jeff Stein <jeffstein@cox.net>, Dwayne Nitz <dwaynenitz@gmail.com>, Phoebe Peterson <phoebetpeterson@gmail.com>, Regan McDonald <mcdonald.regan@gmail.com>

Hi All,

I apologize for the short notice but we have one application to review during the September 29 ARB meeting. I have attached the application for a roof mounted range hood vent for the Clifton Cafe. Please let me know if you will attend this meeting so I know if I have a quorum.

Regards,

*Royce Jarrendt*One Dwelling, Inc.
703 932-5762

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