

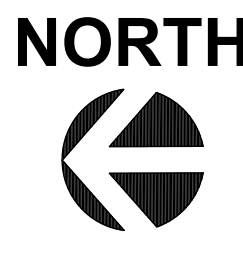
**GENERAL NOTES:**

- DUCT SYSTEMS SERVING REMOVAL OF GREASE LADEN AIR (TYPE 1 HOOD) SHALL BE CONSTRUCTED AND INSTALLED SO THAT GREASE WILL NOT ACCUMULATE IN DUCTWORK. DUCTWORK SHALL SLOPE AT 2% TOWARD HOOD OR GREASE RESERVOIR. PROVIDE DUCT CLEAN OUTS AT ALL CHANGES OF DIRECTION WITH GREASE TIGHT ACCESS DOORS.
- DUCTWORK SERVING KITCHEN AND WORK ROOM AREAS SHALL NOT BE LINED. DUCTWORK SERVING THESE AREAS SHALL UTILIZE EXTERNAL DUCT WRAP INSULATION.
- MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTDOOR AIR INTAKES AND EXHAUST FANVENT TERMINATIONS.
- KITCHEN HOODS ARE PROVIDED BY KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
- REFER TO HOOD MANUFACTURER SHOP DRAWINGS FOR HOOD SUPPORT INFORMATION.
- CEILING SPACE IS LIMITED. COORDINATE WORK WITH OTHER TRADES.
- EXPOSED DUCTWORK SHALL BE CLEAN AND FREE OF DEFECTS.
- EXPOSED DUCTWORK SHALL BE CONSTRUCTED OF PAINT LOCK SHEETMETAL AND PAINTED AS DIRECTED BY ARCHITECT.

**PLAN NOTES:**

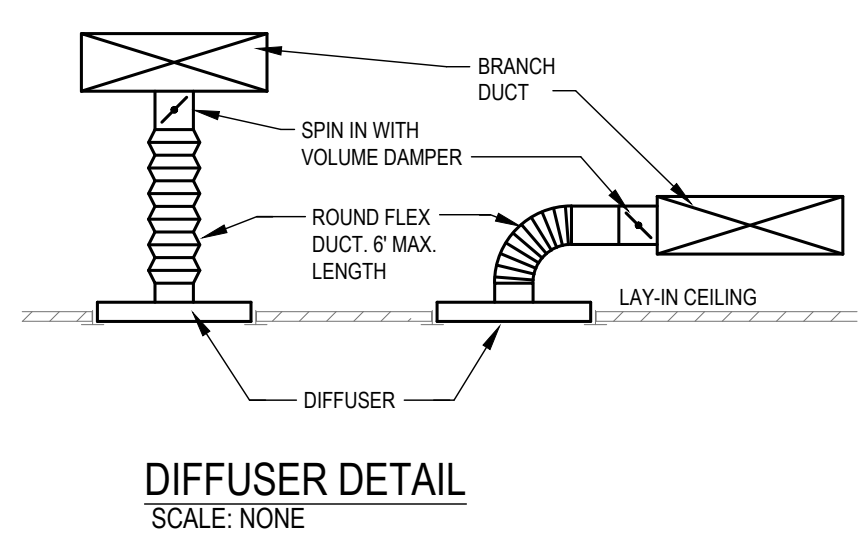
- RETURN AIR DUCT LOCATED BETWEEN ROOF TRUSSES. OPEN DUCTWORK UP TOWARDS STRUCTURE. COVER OPENING WITH 1/2" EXPANDED MESH.
- LOCATION OF MANUAL PULL STATION. INSTALL PER MANUFACTURER INSTRUCTIONS.
- EXISTING RTU THERMOSTAT TO BE RELOCATED AS INDICATED. COORDINATE REQUIREMENTS.
- CONNECT MAKE UP AIR DUCT TO EXHAUST HOOD SUPPLY PLENUM PER MANUFACTURER INSTRUCTIONS. SEE SHEET M3 FOR CONNECTION SIZE. PROVIDE BALANCE DAMPER AND BALANCE SUPPLY CFM EQUALLY AMONG RISERS.
- CONNECT AIR CONDITIONING DUCT TO EXHAUST HOOD A/C SUPPLY PLENUM PER MANUFACTURER INSTRUCTIONS. SEE SHEET M3 FOR CONNECTION SIZE. PROVIDE BALANCE DAMPER AND BALANCE SUPPLY CFM EQUALLY AMONG RISERS.
- EXHAUST HOOD PROVIDED BY OTHERS. INSTALLED BY MECHANICAL CONTRACTOR. INSTALL PER MANUFACTURERS INSTRUCTIONS.
- TRANSITION AND CONNECT 10" GREASE DUCT TO EXHAUST HOOD AS SHOWN. ROUTE DUCT UP AND CONNECT TO EXHAUST FAN. OFFSET AS REQUIRED TO AVOID ROOF STRUCTURE AND TO MAINTAIN 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES. REFER TO DETAIL ON SHEET M-2. ALL GREASE DUCT SHALL BE INSTALLED WITH DUCT WRAP AND ACCESS DOORS AS DETAILED AND PER MANUFACTURER INSTRUCTIONS. SEE CAPTIVE AIRE DRAWING.
- TRANSITION AND CONNECT 14" GREASE DUCT TO EXHAUST HOOD AS SHOWN. ROUTE DUCT UP AND CONNECT TO EXHAUST FAN. OFFSET AS REQUIRED TO AVOID ROOF STRUCTURE AND TO MAINTAIN 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES. REFER TO DETAIL ON SHEET M-2. ALL GREASE DUCT SHALL BE INSTALLED WITH DUCT WRAP AND ACCESS DOORS AS DETAILED AND PER MANUFACTURER INSTRUCTIONS. SEE CAPTIVE AIRE DRAWING.
- COORDINATE DUCT ROUTING WITH ELECTRICAL GEAR. DO NOT ROUTE DUCTWORK ABOVE ELECTRICAL GEAR.
- EXISTING DUCTWORK BETWEEN TRUSSES. FIELD VERIFY EXISTING CONDITIONS. MODIFY EXISTING DUCTWORK AS REQUIRED TO MAKE FINAL CONNECTIONS.
- ROUTE DUCTWORK THROUGH OR BETWEEN ROOF TRUSSES. COORDINATE WITH EXISTING STRUCTURE.
- SUPPORT EXHAUST FAN FROM STRUCTURE AS REQUIRED BY THE MANUFACTURER.
- ROUTE DUCT AS HIGH AS POSSIBLE OVER OFFICE AREA TO ALLOW FOR ROUTING OF CABLES.
- MOUNT CONDENSING UNIT ON ROOF AS DETAILED AND AS REQUIRED BY THE MANUFACTURER. CONNECT REFRIGERANT PIPING PER MANUFACTURER RECOMMENDATIONS. SEE ARCHITECTURAL PLANS FOR MOUNTING DETAIL.
- EXPOSED DUCTWORK SHALL BE DUAL WALL PAINTLOCK CONSTRUCTION AND PAINTED AS PER DIRECTION OF ARCHITECT (TYP.).
- COORDINATE DUCT ROUTING WITH LIGHTING.
- HOOD SHALL BE PROVIDED WITH FACTORY PRE-WIRE PACKAGE AND A PRE-ENGINEERED UL-300 FIRE SUPPRESSION SYSTEM. SYSTEM SHALL BE PROPERLY SIZED FOR THE HOOD. DUCT PLENUM AND ALL EQUIPMENT BELOW (VERIFY EXACT REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER). HOOD EXHAUST, MAKE-UP AND LIGHTS SHALL BE SWITCHED FROM CONTROL PANEL THAT IS INTEGRAL TO FRONT OF UTILITY CABINET. UTILITY CABINET SHALL SERVE ALL HOODS.
- EXTEND AND CONNECT DUCTWORK TO EXISTING. FIELD VERIFY EXISTING CONDITIONS AND REQUIREMENTS.
- PROVIDE LOCKING QUADRANT BALANCE DAMPER. ENSURE ACCESS.
- PROVIDE CAPTIVE AIRE WBE WINDBAND EXTENSION FOR KEF-1 AND KEF-2.
- PROVIDE LOCKING QUADRANT BALANCE DAMPER AND SQUARE TO 16" ROUND TRANSITION FOR DUCT CONNECTION TO RETURN GRILLE
- BALANCE EXISTING DIFFUSER TO INDICATED CFM.

**A MECHANICAL PLAN**  
 SCALE: 1/4" = 1'-0"



NOTE:  
 PROVIDE SHORT RADIUS ELBOWS (1 TIMES CENTERLINE 90° ELL) FOR ELBOW DOWN TO DIFFUSER ON EXPOSED DUCTWORK IN DINING ROOM. DIFFUSER SHALL BE MINIMUM OF 9'-0" A.F.F. SEE DETAIL.

NOTE:  
 DURING DEMOLITION PHASE, GENERAL CONTRACTOR TO PROVIDE TEMPORARY OPENING(S), IF NECESSARY IN EXISTING BUILDING WALL TO FACILITATE INSTALLATION OF NEW HVAC DUCTWORK IN THE DINING AREA. HVAC DUCTWORK IS TO BE INSTALLED WITHIN THE ROOF TRUSS SPACE AND TO BE INSTALLED BETWEEN TRUSSES AND/OR THRU THE EXISTING TRUSS WEB OPENINGS. GENERAL CONTRACTOR TO COORDINATE SIZE AND LOCATION OF TEMPORARY OPENING(S) WITH THE MECHANICAL CONTRACTOR.



SPECIFICATION SECTION 230593 TESTING, ADJUSTING, AND BALANCE REQUIRES AN INDEPENDENT TAB CONTRACTOR (NEBB OR AABC) TO TEST ALL EQUIPMENT TO ENSURE COMPLIANCE WITH DRAWINGS. OWNER'S REPRESENTATIVE SHALL RECEIVE REPORT / VERIFICATION.

MECHANICAL LEGEND							
HVAC:		HVAC:		HVAC:		MISC. SYMBOLS:	
	SUPPLY AIR DIFFUSER		ELBOW ROUND DUCT		ECCENTRIC TRANSITION		EQUIPMENT IDENTIFICATION
	RETURN AIR GRILLE		ROUND DUCT DROP / DOWN		DUCT OFFSET - RISE OR DROP		PLAN NOTE
	RETURN AIR GRILLE WITH SOUND BOOT		ROUND DUCT RISE / UP		FLEX DUCT (5'-0" MAX. LENGTH)		ABOVE FINISHED FLOOR
	SIDE WALL REGISTER / GRILLE		FLEXIBLE CONNECTION		OPPOSED BLADE DAMPER		SUPPLY AIR
	SUPPLY AIR DUCT RISE / UP		DUCT SIZE / DIMENSIONS FIRST SIZE, TOP DIMENSION		PARALLEL BLADE DAMPER		RETURN AIR
	SUPPLY DUCT DROP / DOWN		45° HIGH EFFICIENCY TAKE-OFF		THERMOSTAT / SENSOR		EXHAUST AIR
	RETURN OR EXHAUST DUCT RISE / UP		45° HIGH EFFICIENCY TAKE-OFF WITH LOCKING QUAD. DAMPER		HUMIDISTAT / SENSOR		OUTSIDE AIR
	RETURN OR EXHAUST DUCT DROP / DOWN		CONCENTRIC TRANSITION		FIRE SMOKE DAMPER		RETURN AIR GRILLE
	ELBOW WITH TURNING VANES		RECT. TO ROUND TRANSITION		FIRE DAMPER		

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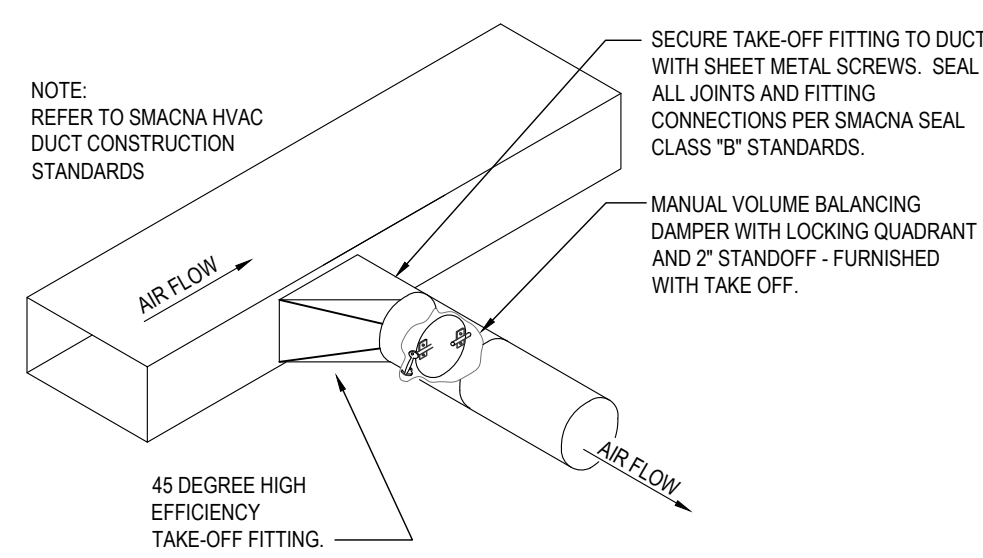
RODGER W. BAKER, AIA

**MECHANICAL PLAN**

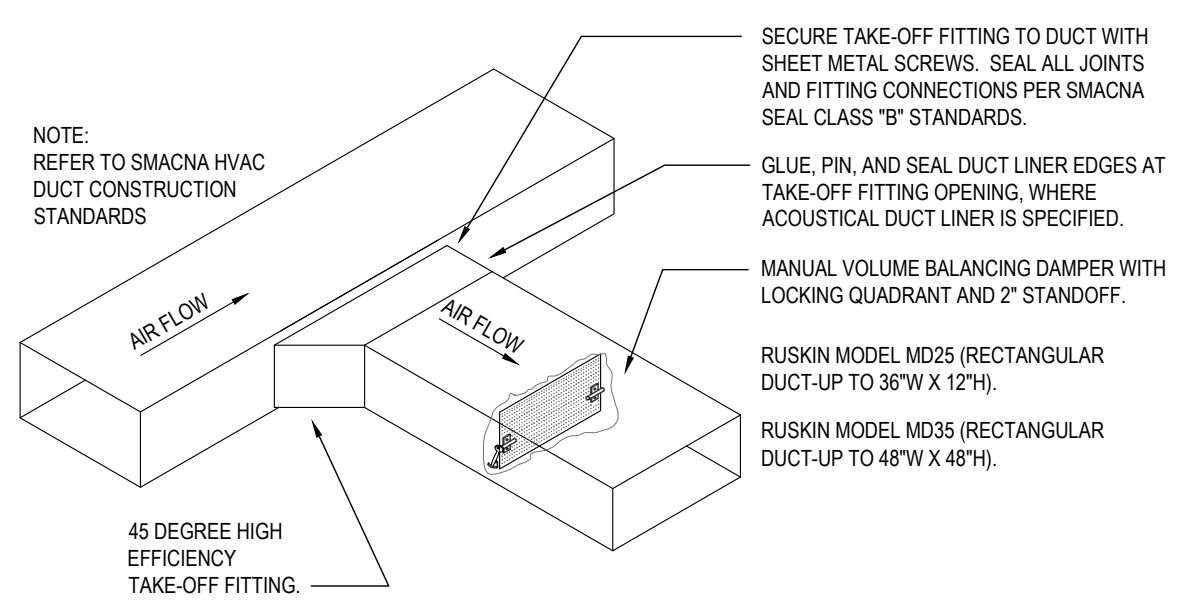
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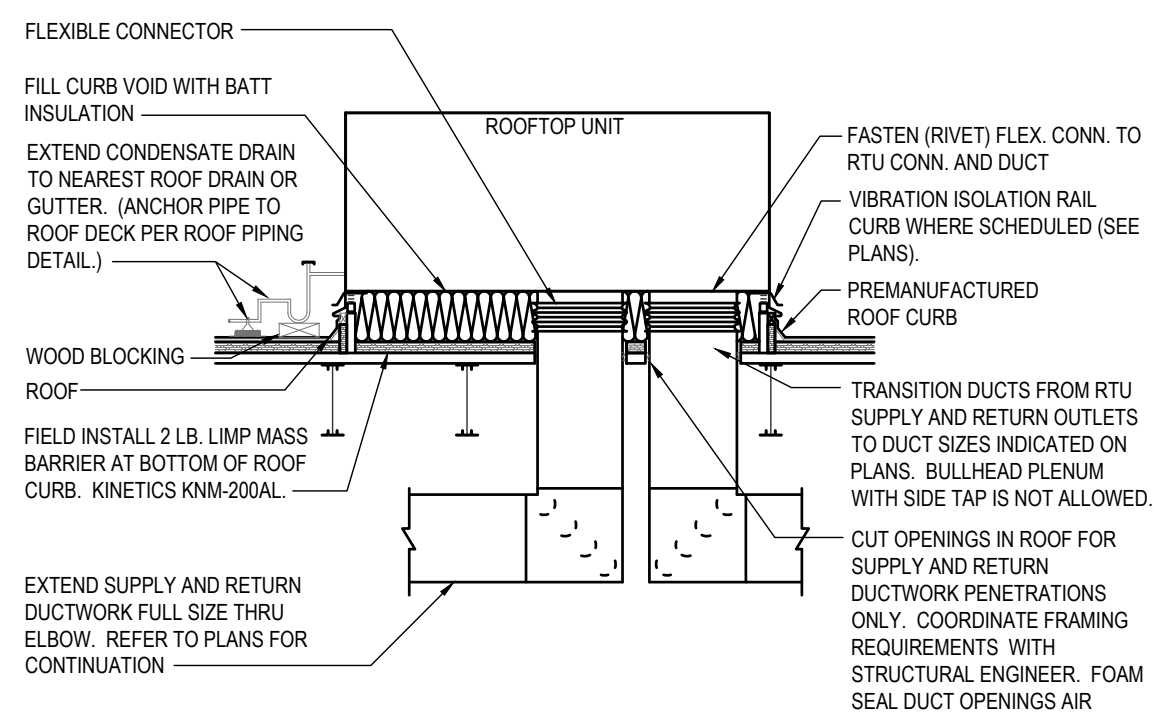
SHEET NO.  
**M1**



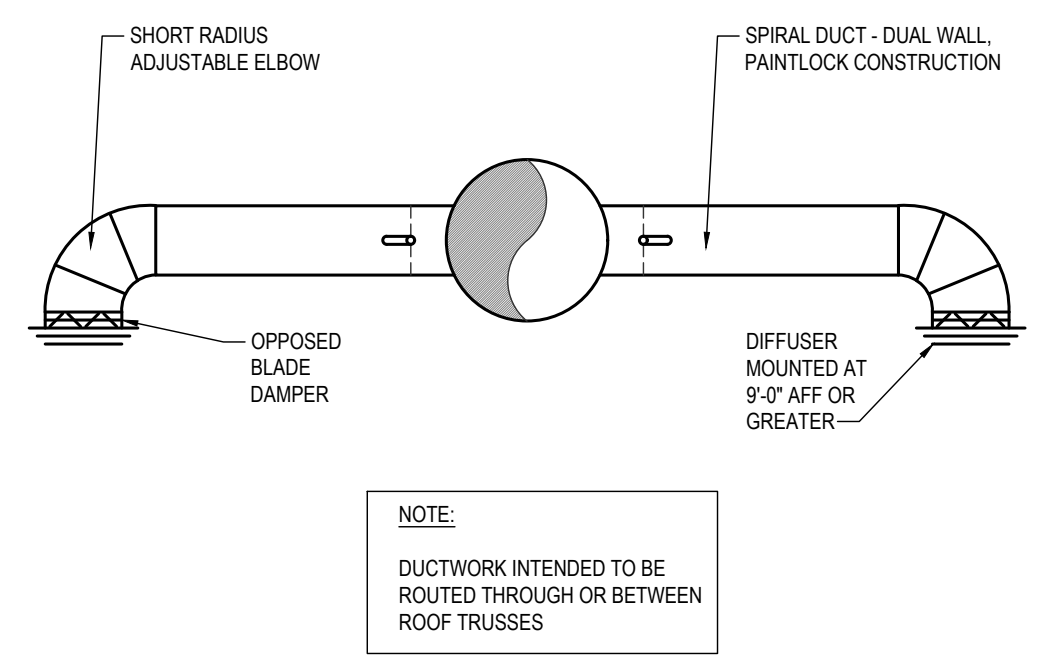
**1** ROUND DUCT TAKE-OFF  
NO SCALE



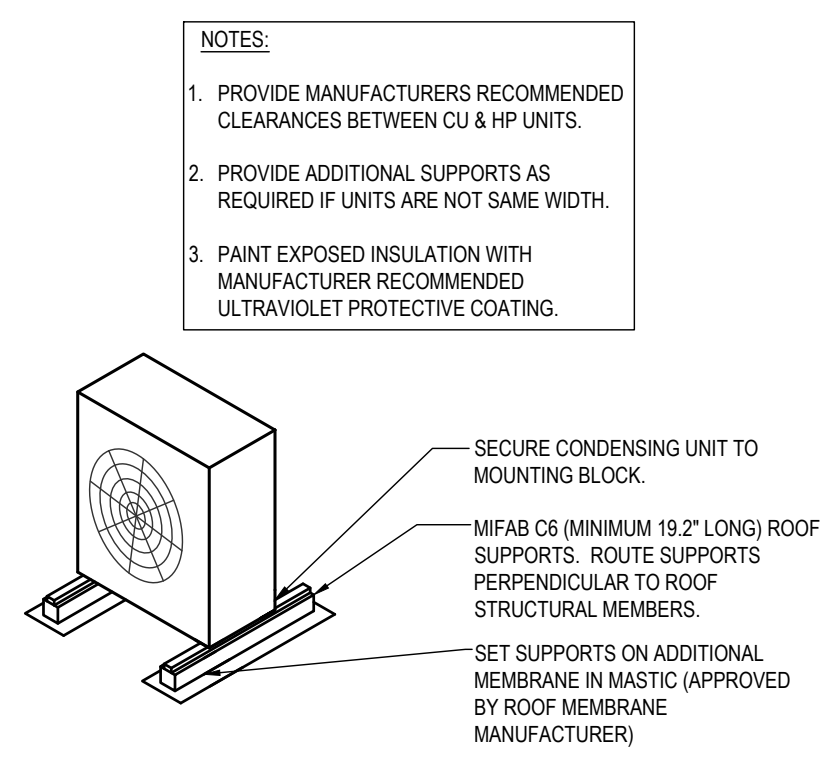
**2** RECTANGULAR DUCT TAKE-OFF  
NO SCALE



**3** DOWNFLOW ROOF TOP UNIT DETAIL  
NO SCALE

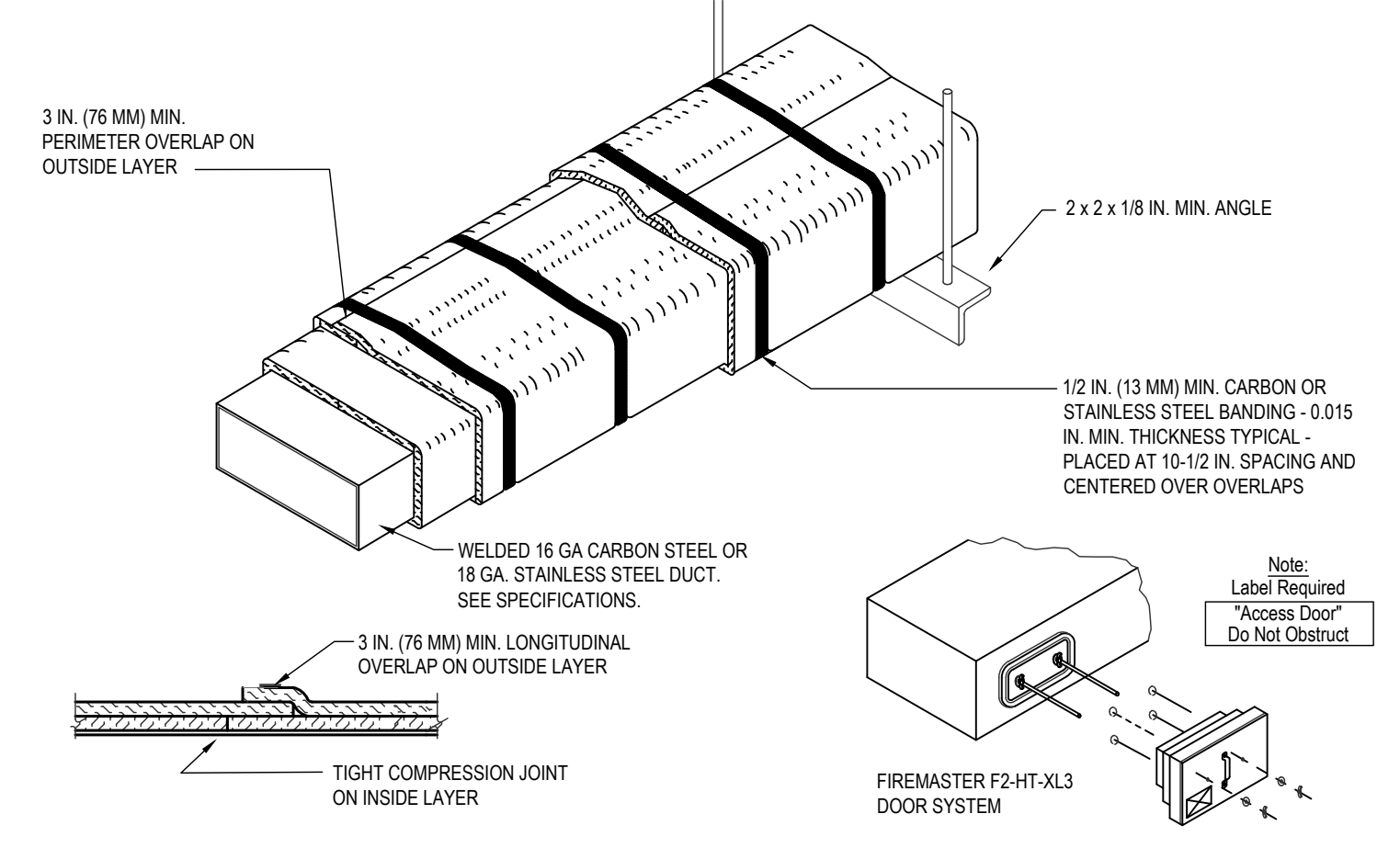


**4** DINING ROOM DIFFUSER DETAIL  
NO SCALE

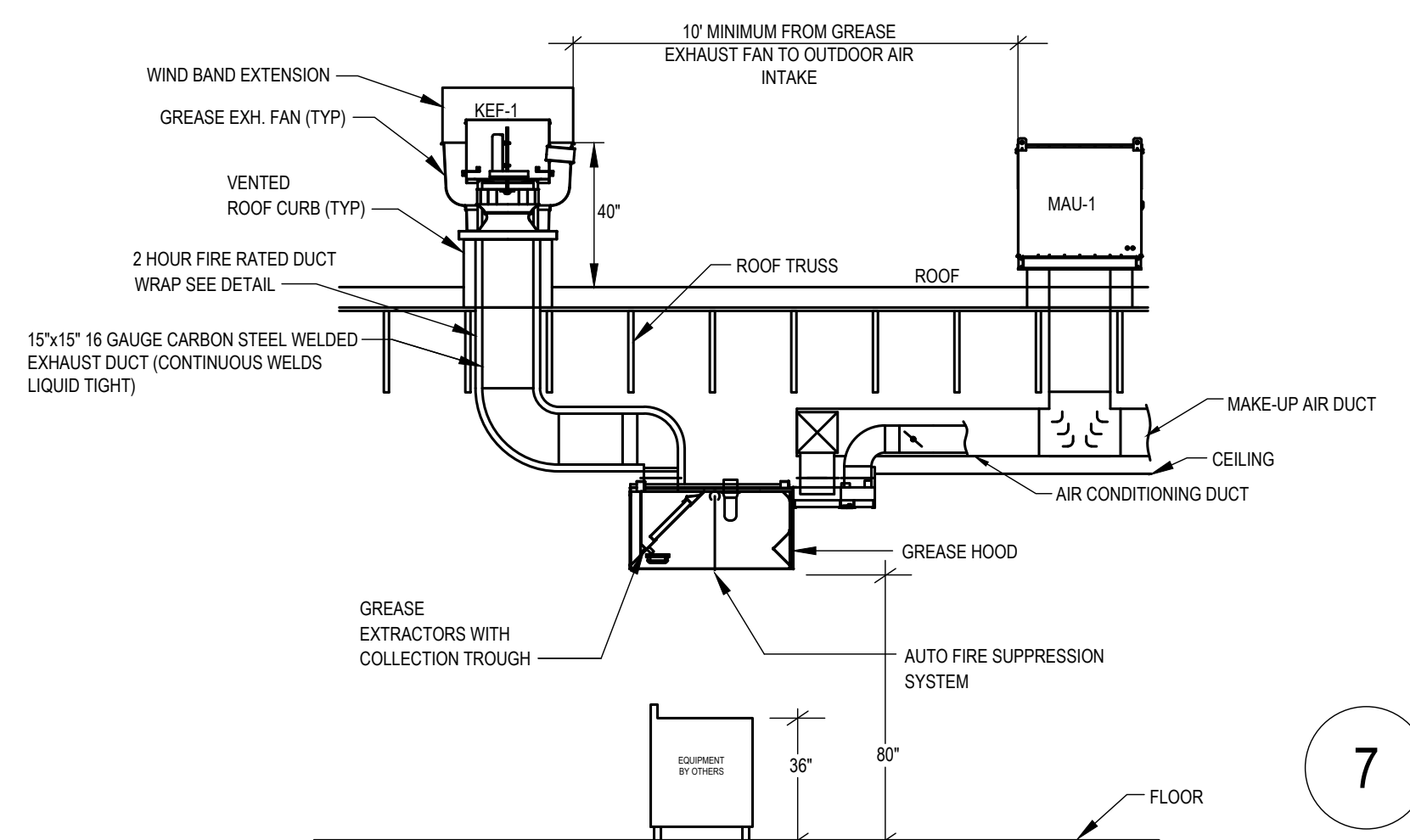


**5** ROOF CONDENSING UNIT MOUNTING  
NO SCALE  
CONDENSER ON ROOF

- NOTES:
1. THERMAL CERAMICS FIREMASTER FASTWRAP XL OR PYROSCAT XL HAS BEEN TESTED IN ACCORDANCE WITH ASTM E2336 TO PROVIDE ZERO CLEARANCE TO COMBUSTIBLES AND MEETS THE REQUIREMENTS FOR ONE OR TWO HOUR ENCLOSURES. THROUGH PENETRATIONS FIRESTOP SYSTEMS ARE TESTED IN ACCORDANCE WITH EITHER ASTM E 814 OR UL 1479. ICC-ES APPROVAL PER REPORT ESR 2213 OR ESR 2832. UNDERWRITERS LABORATORIES (UL) LISTINGS SHOW COMPLIANCE TO UL 1479 FOR THROUGH PENETRATION FIRESTOP SYSTEMS.
  2. COMPLIANT TO THE FOLLOWING CODES: NFPA 96 2003 AND 2006 INTERNATIONAL MECHANICAL CODES 2006 UNIFORM MECHANICAL CODE.
  3. INSULATION APPLIED IN TWO LAYERS WITH TIGHT COMPRESSION JOINT ON INSIDE LAYER AND 3 INCH MINIMUM OVERLAPS ON BOTH PERIMETER AND LONGITUDINAL OVERLAPS ON OUTSIDE LAYER.
  4. GREASE EXHAUST DUCT RUNS FROM THE HOOD EXHAUST CONNECTION UP TO THE EXHAUST FAN ON THE ROOF WITH MINIMAL TURNS OR BENDS AND MAINTAINING MINIMUM 1/4 UNIT VERTICAL RISE PER 12 UNITS HORIZONTAL RUN. NFPA 96 COMPLIANT ACCESS DOORS LOCATED AS REQUIRED BY CODE.
  5. THERMAL CERAMICS FIREMASTER ACCESS DOORS AS SPECIFIED IN ICC-ES BUILDING CODE REPORTS ESR 2213 OR ESR 2832.
  6. ROOF MOUNTED EXHAUST FAN IS MOUNTED ON A HINGED BASE WHICH ALLOWS ACCESS TO THE DUCT FROM THE ROOF.
  7. SUPPORT HANGER SYSTEMS DO NOT NEED TO BE WRAPPED PROVIDED THE HANGER RODS ARE AT LEAST A MINIMUM OF 3/8 IN. DIAMETER. USE MINIMUM 2 X 2 X 1/8 IN. STEEL ANGLE OR SMACNA EQUIVALENT SUPPORT SYSTEM.
  8. THERMAL CERAMICS DUCT ENCLOSURE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
  9. THERMAL CERAMICS DUCT WRAP SHALL BE INSTALLED ON THE DUCT FROM THE HOOD CONNECTION TO THE CONNECTION TO THE FAN.



**6** COMMERCIAL KITCHEN GREASE DUCT SYSTEM  
NO SCALE



**7** GREASE HOOD DETAIL  
NO SCALE

DIFFUSER SCHEDULE						
MARK	MFR	MODEL	NECK SIZE	FACE SIZE	FINISH	REMARKS
SD-1	TITUS	TMR	12"Ø	22"Ø	WHITE	WITH OPPOSED BLADE DAMPER, FIELD PREP FOR PAINTING
SD-2	TITUS	TBD1	10"Ø	--	WHITE	(2) SLOT - 1.5" SLOT WIDTH
SD-3	TITUS	PAS3	12"Ø	24"x24"	WHITE	
SD-4	TITUS	T3SQ4	8"Ø	24"x24"	WHITE	THERMAL VAV DIFFUSER
SD-5	TITUS	TMS3	6"Ø	12"x12"	WHITE	WITH OPPOSED BLADE DAMPER AND TRM KIT
SD-6	TITUS	TMS3	10"Ø	24"x24"	WHITE	
SD-7	TITUS	TMS3	8"Ø	12"x12"	WHITE	WITH OPPOSED BLADE DAMPER AND TRM KIT
SD-8	TITUS	300FS	8"x8"	8"x8"	WHITE	WITH OPPOSED BLADE DAMPER
RG-1	AMER. LOUVER CO.	STRATUS	20"x20"	24"x24"	WHITE	SEE NOTE 1.
RG-2	TITUS	330RL	8"x8"	--	WHITE	
RG-3	TITUS	50F	10"x22"	24"x12"	WHITE	

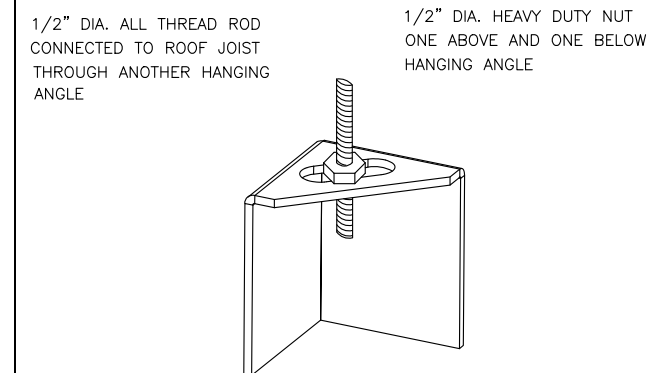
NOTES: 1. RETURN GRILLE TO BE PLASTIC FILTER RETURN, FILTER TO BE AMERICAN AIR FILTER (AAF) FRONTLINE GREEN 1", WITH AAF AMERIFRAME SIZE 20x20x1.

BUILDING AIR BALANCE SCHEDULE						
MARK	SPACE OR AREA	EXHAUST AIR CFM	OUTSIDE AIR CFM	RETURN AIR CFM	SUPPLY AIR CFM	REMARKS
(E)RTU-1	DINING	--	450	2,550	3,000	--
(E)RTU-2	DINING	--	600	3,400	4,000	--
(E)RTU-3	COOKLINE / OFFICE / COUNTER	--	300	3,700	4,000	--
MAU-1	COOKLINE / OFFICE / COUNTER	--	1,900	--	1,900	--
KEF-1	RANGE - KITCHEN HOOD	1,600	--	--	--	--
KEF-2	FRYERS - KITCHEN HOOD	775	--	--	--	--
KEF-3	DISWASHER - KITCHEN HOOD	525	--	--	--	--
(E)EF-1	WOMENS RESTROOM	75	--	--	--	--
(E)EF-2	MENS RESTROOM	75	--	--	--	--
TOTALS	BUILDING TOTALS	3,050	3,250	9,650	12,900	NOTE: AREA IS 200 CFM POSITIVE

PUMP SCHEDULE											
MARK	SERVICE	GPM	HEAD	EFFICIENCY	MOTOR			PIPE INCHES		REMARKS	
					HP	RPM	ELECTRICAL	SUCTION	DISCHARGE		FLOW
RCP-1	DOMESTIC HW	10	6	-	1/2	3250	115/60/1	-	-	CONST	1

REMARKS: 1. SELECTION BASED ON BELL & GOSSETT INLINE PUMP MODEL PL-30. ALL BRONZE CONSTRUCTION. COORDINATE REQUIREMENTS WITH EXISTING WATER HEATER.

**ND-2 HANGING ANGLE DETAIL**



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

**HANGING ANGLE LOCATIONS**

HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24\"/>	
CANOPY ND2	4.166"	2.246"	2.246"
ND2-PSP-F	4.166"	2.246"	2.246"
BACKSHELF BD-2	4.166"	2.246"	-
VHB/VHB-G	36"X36"	42"X42"	48"X48"
FRONT/BACK DIMS BY SIZE	2.246"	2.246"	2.246"

**CALCULATIONS UTILIZED**

EXHAUST CFM=LENGTH OF HOOD X CFM/INCH (LOAD)  
 SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED  
 TOTAL DUCT AREA=144 X \_\_\_\_\_  
 DUCT LENGTH= \_\_\_\_\_

**BUILDING CODES**

**CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:**  
  
 ETL LISTED UNDER ETL FILE NUMBER 3054804-001/002  
 LISTED UNDER ETL FILE NUMBER 3054804-001/002

**CLEARANCE TO COMBUSTIBLES**

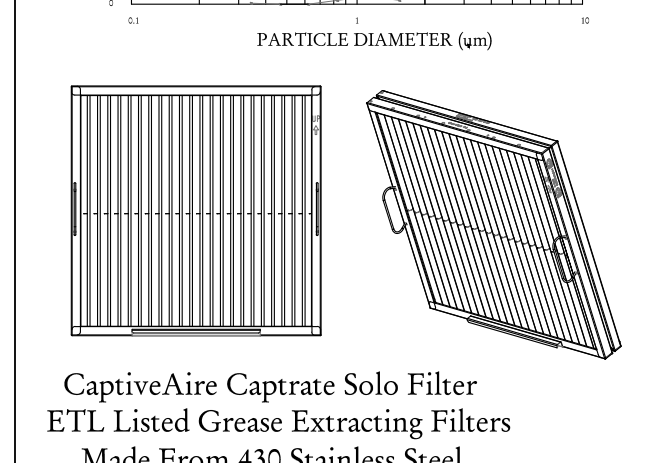
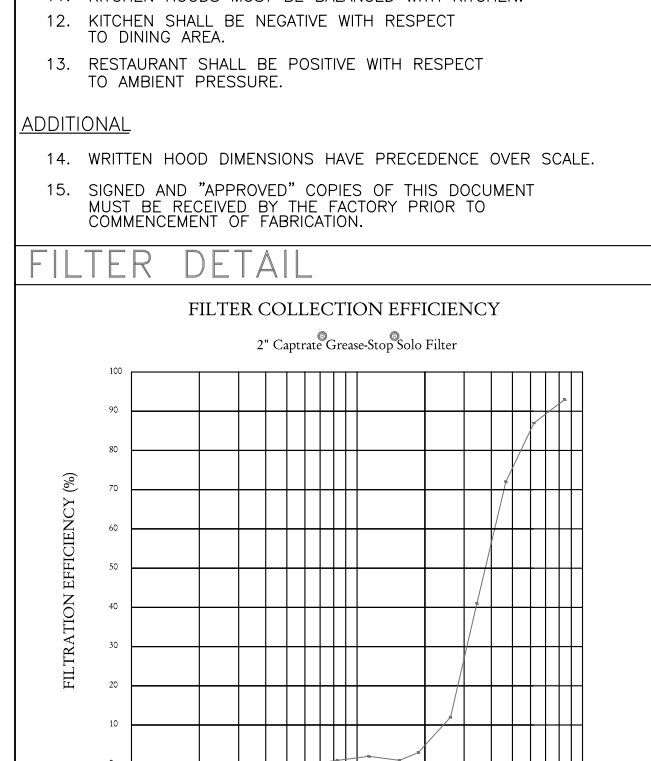
**CAPTIVE-AIRE HOODS HAVE OPTIONAL CLEARANCE REDUCTION SYSTEMS AVAILABLE AS FOLLOWS:**

MATERIAL	CLEARANCE REDUCTION SYSTEM
NON-COMBUSTIBLE	NONE REQUIRED
LIMITED-COMBUSTIBLE	3" UNSULPHATED STANDOFF
COMBUSTIBLE	1" INSULATED STANDOFF

**GENERAL NOTES**

- 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 CAPTIVE-AIRE DUCT PER MECHANICAL CONTRACTORS' PLANS.
  - COOKING EQUIPMENT TO SHUT/OFF IN EVENT OF FIRE.
  - EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
  - ALL LIGHTS/ FIXTURE SHOWN INSTALLED BY CAPTIVE-AIRE ARE FACTORY PROVIDED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.
  - LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.
  - SEISMIC RESTRAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.
  - INSTALLING CONTRACTORS ASSUME ALL RELATED RESPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.
- BALANCE**
- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
  - KITCHENS 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.

**FILTER DETAIL**



**HOOD INFORMATION - JOB#5977190**

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLNCE DUTY	DESIGN CFMFT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)		MUA CFM	AC CFM	HOOD CONSTRUCTION	HOOD CONFIG	PATENT NUMBERS		
										WIDTH	DEPTH							
1	ITEM 33A	5424 ND-2-ACPSP-F	CAPTIVEAIRE	8' 0"	450 DEG	I	MEDIUM	200	1600	12"	256	0.084"	0	0	430 SS WHERE EXPOSED	ALONE	FRONT	AC-PSP (UNITED STATES) - US PATENT 7963830 B2 AC-PSP WALL (CANADA) - CA PATENT 2025009 AC-PSP ISLAND (CANADA) - CA PATENT 2520330
2	ITEM 33B	5424 ND-2-ACPSP-F	CAPTIVEAIRE	5' 0"	450 DEG	I	MEDIUM	155	775	12"	256	0.084"	620	309	430 SS WHERE EXPOSED	ALONE	ALONE	
3	ITEM 75	4224 VHB-G	CAPTIVEAIRE	3' 6"	700 DEG	II	N/A	150	525	12"	256	0.084"	0	0	304 SS 100%	ALONE	ALONE	

HOOD NO	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	LIGHT(S)		UTILITY CABINET(S)			FIRE HOOD SYSTEM HANGING PIPING WEIGHT	
								TYPE	WIRE SQUARE	LOCATION	SIZE	TYPE		SIZE
1	ITEM 33A	CAPTRATE SOLO FILTER	5	18"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO	LEFT	12"x54"x24"	DCV 2111	1 LIGHT 1 FAN	NO
2	ITEM 33B	CAPTRATE SOLO FILTER	3	18"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO				NO	
3	ITEM 75						0						NO	

**HOOD OPTIONS**

HOOD NO	TAG	OPTION
1	ITEM 33A	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT. RIGHT END PANEL 27" TOP WIDTH, 24" BOTTOM WIDTH, 39.5" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RISER SENSOR INSTALL ON PLENUM.
2	ITEM 33B	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.
3	ITEM 75	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.

**PERFORATED SUPPLY PLENUM(S)**

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENGTH	SP	
1	ITEM 33A	Front	108"	24"	6"	MUA	12"	256	0.084"	
							MUA	12"	256	0.084"
							MUA	12"	256	0.084"
							MUA	12"	256	0.084"
							AC	8"	101	0.033"
							AC	8"	101	0.033"
							AC	8"	101	0.033"
							AC	8"	101	0.033"
							MUA	10"	155	0.047"
							MUA	10"	155	0.047"
							AC	8"	103	0.034"
							AC	8"	103	0.034"
2	ITEM 33B	Front	60"	22"	6"	MUA	12"	256	0.084"	
							MUA	12"	256	0.084"
							MUA	12"	256	0.084"
							MUA	10"	155	0.047"
							AC	8"	103	0.034"
							AC	8"	103	0.034"
							AC	8"	103	0.034"
							AC	8"	103	0.034"

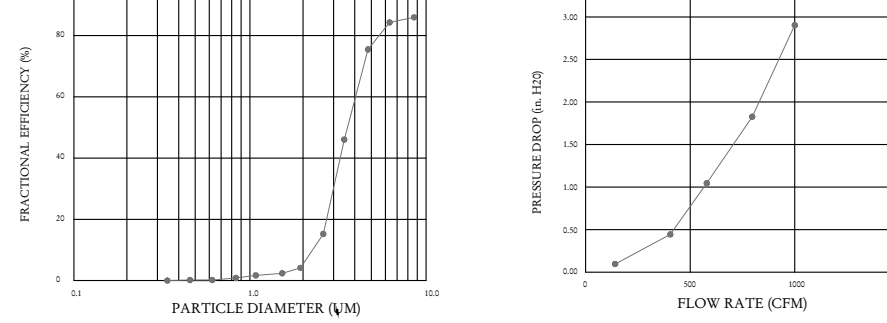
**SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER**

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.

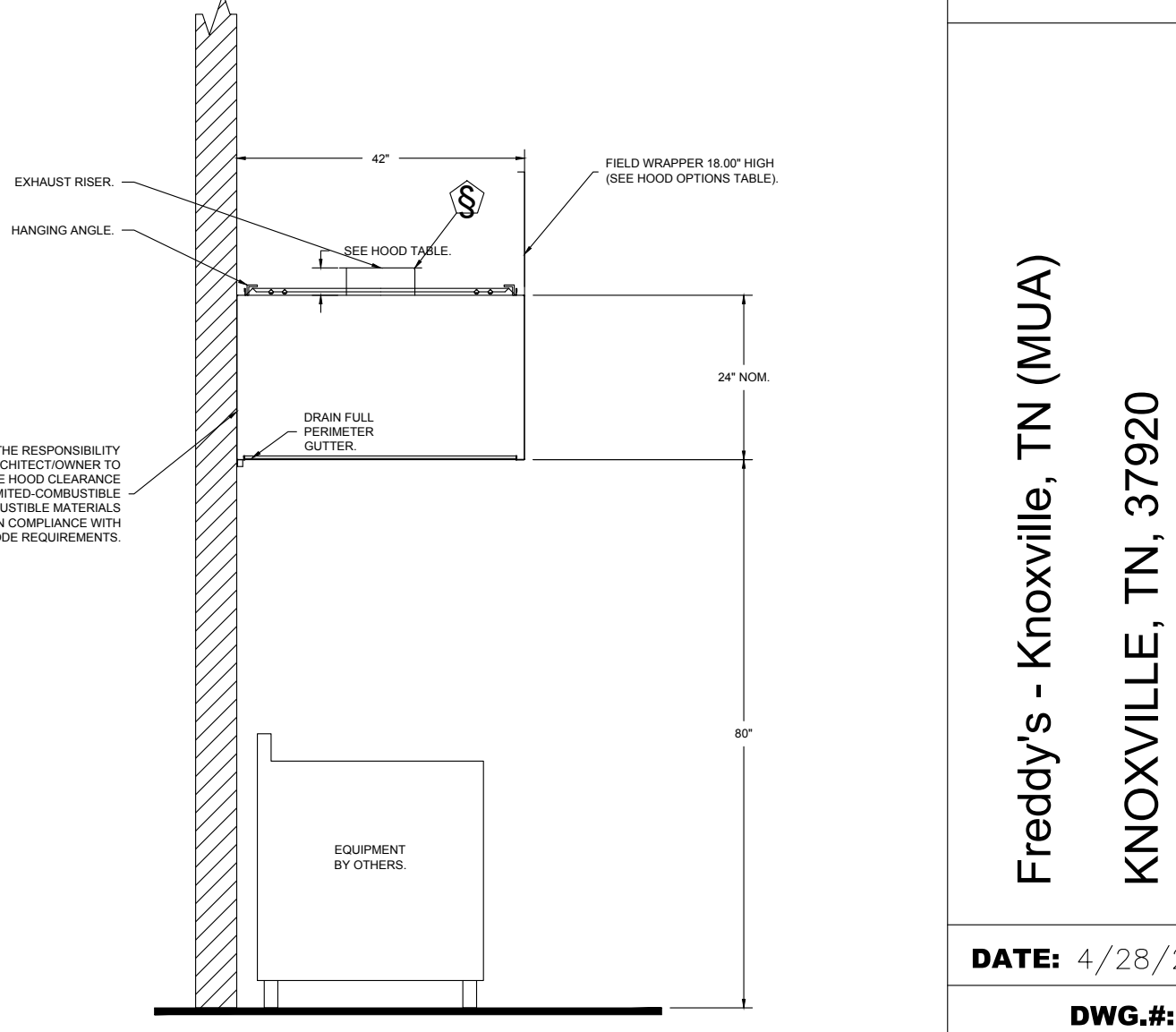
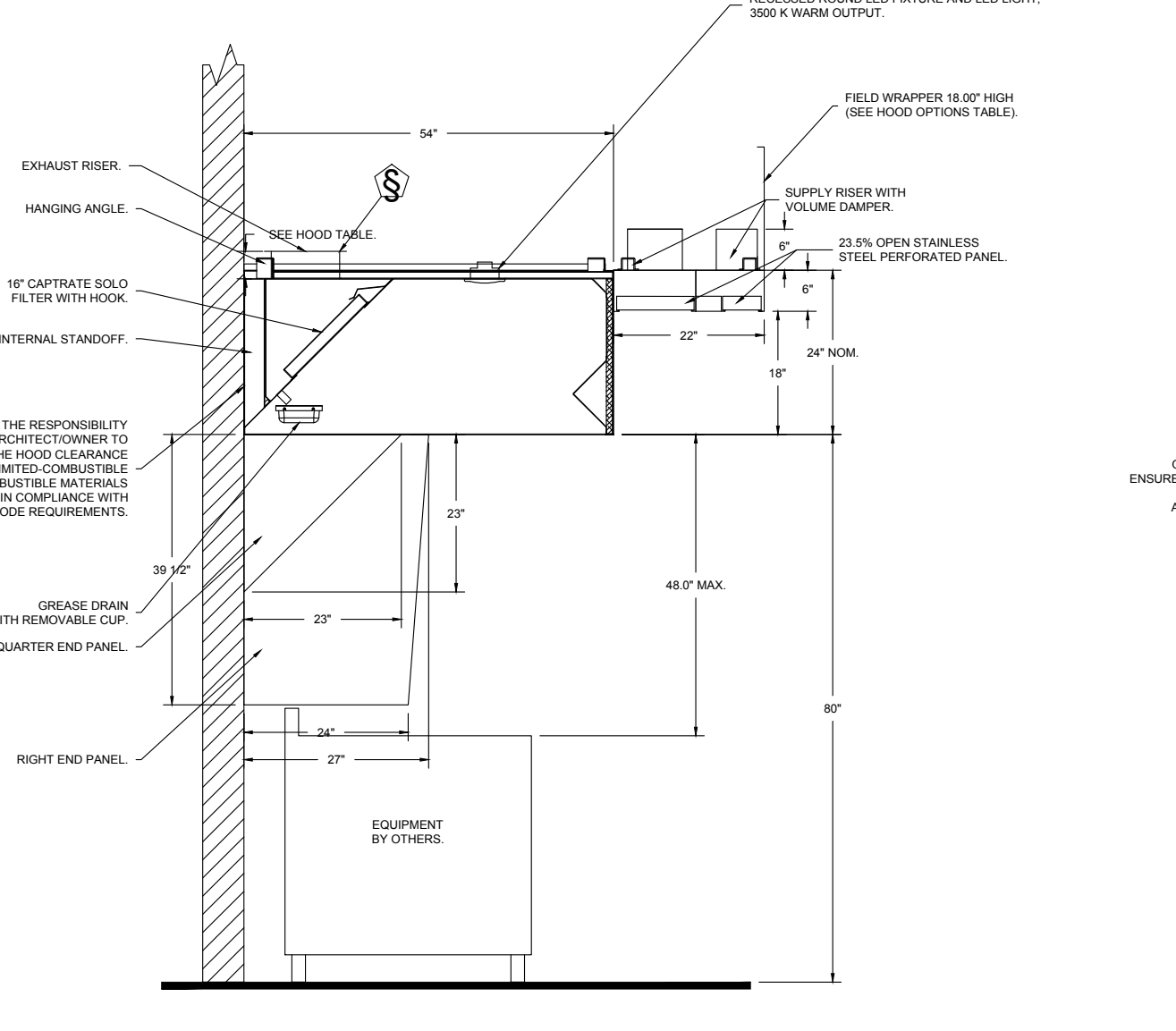
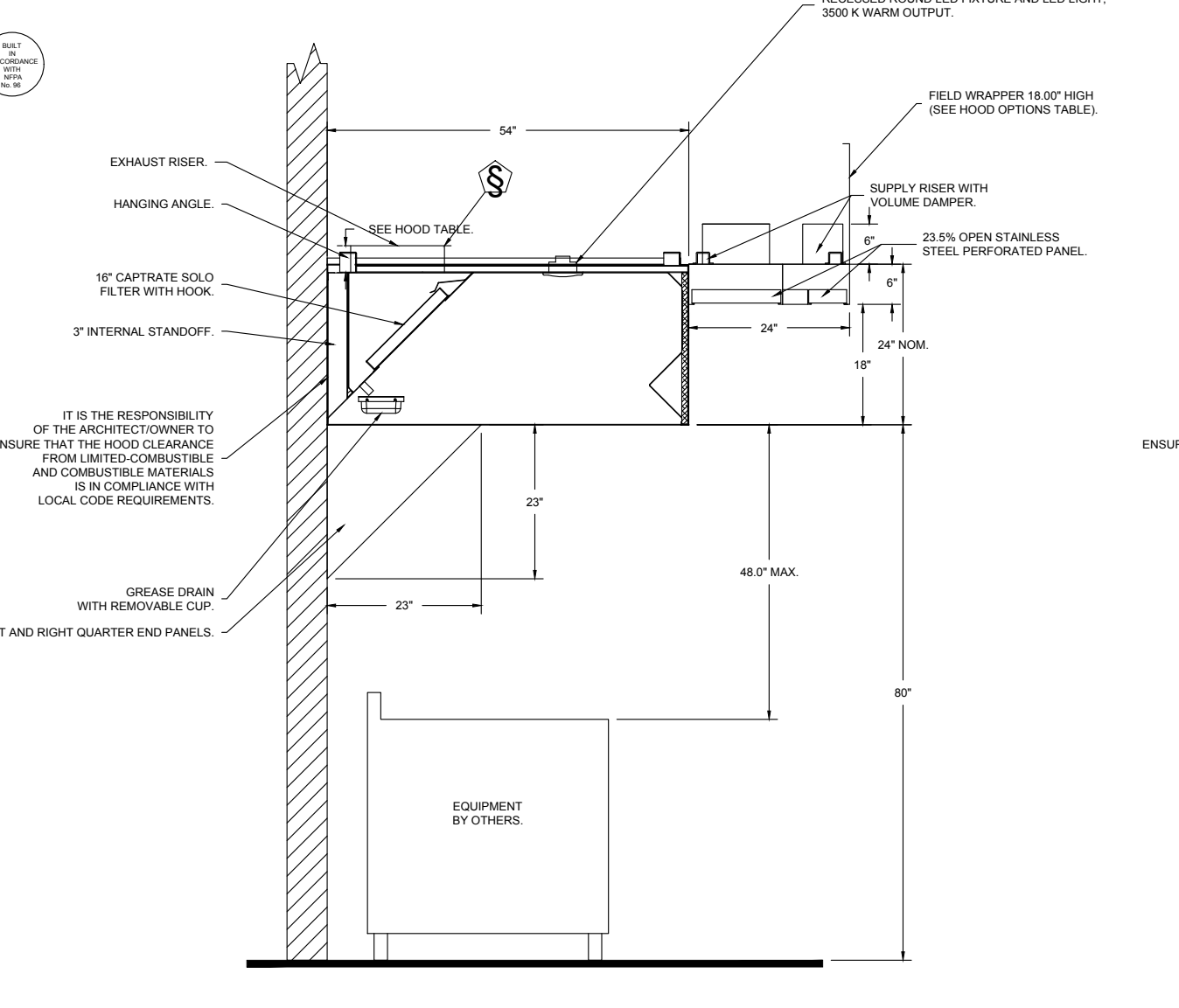
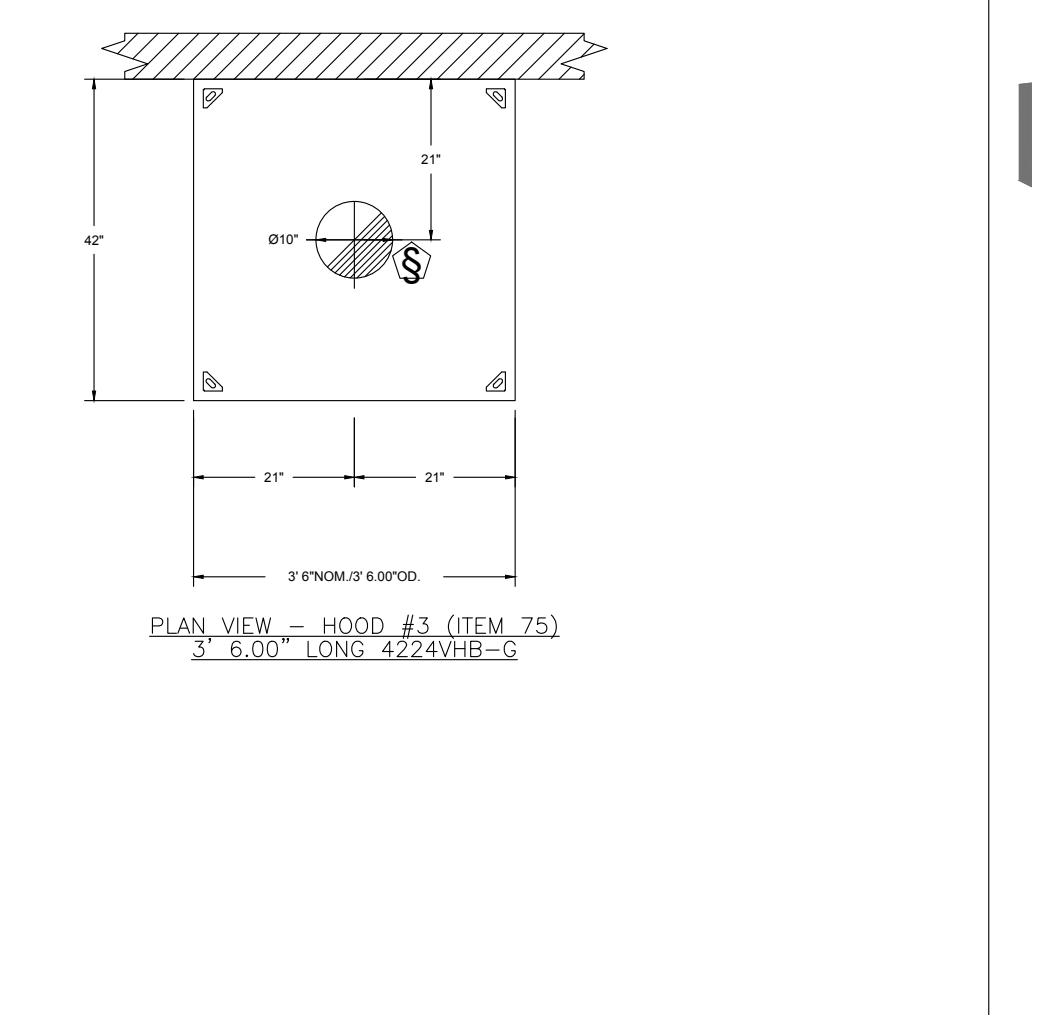
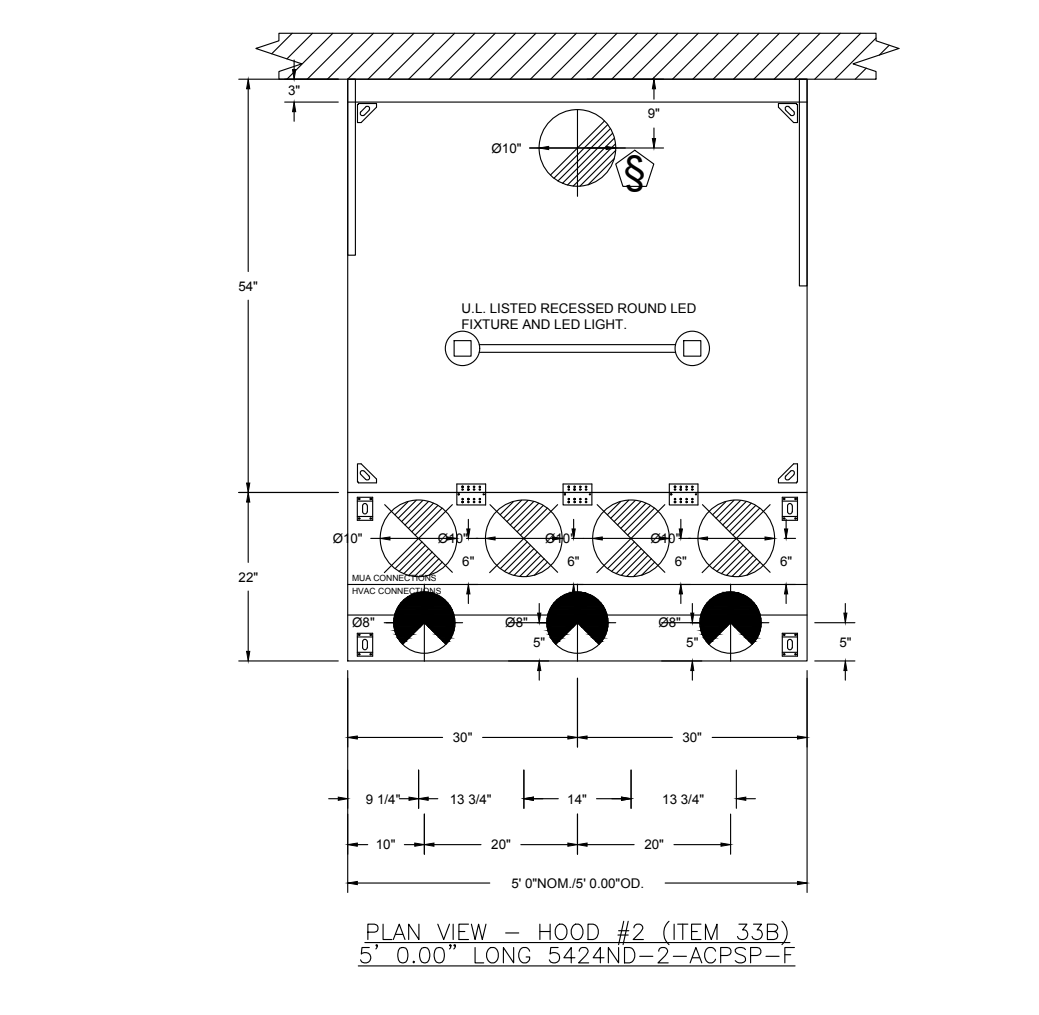
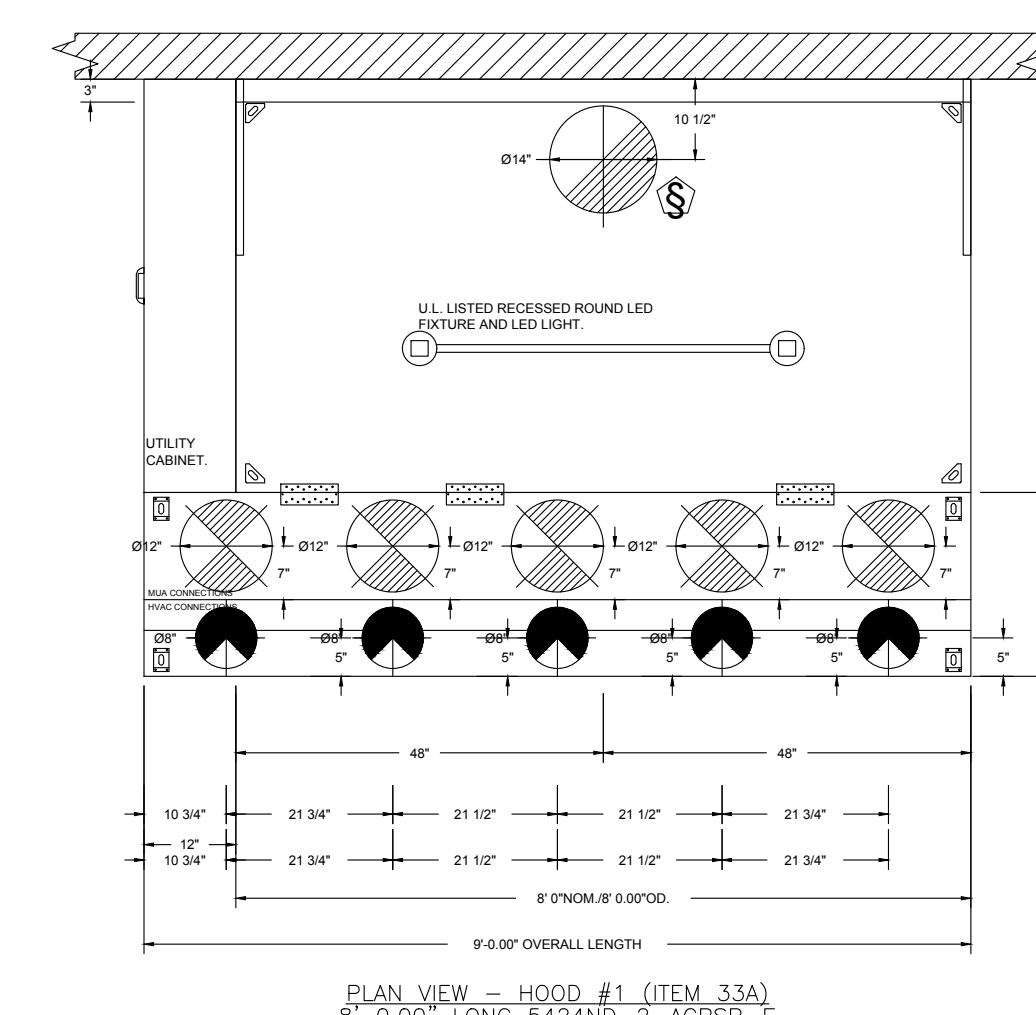
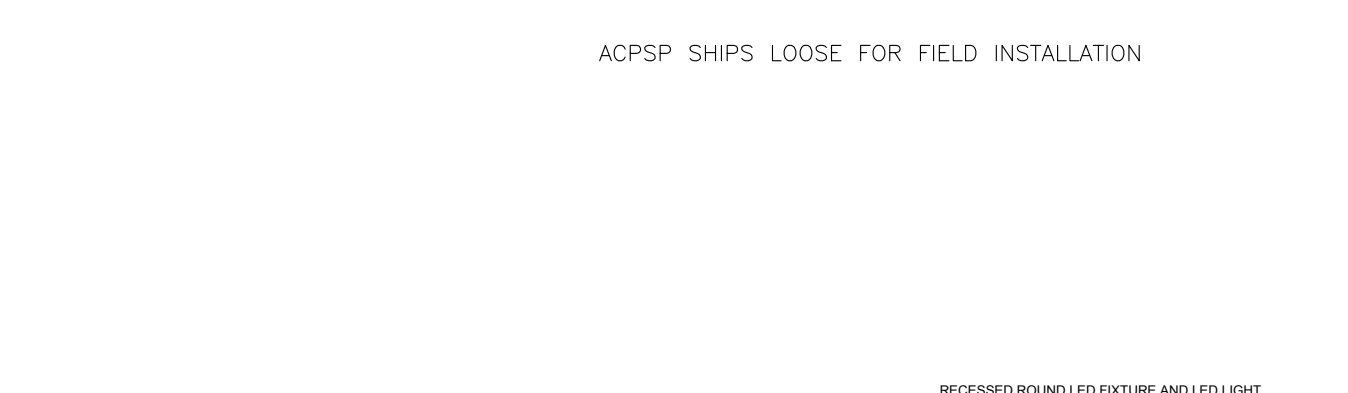
UNIT(S) SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 80% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



FOR QUESTIONS, CALL THE:  
 KANSAS CITY REGIONAL OFFICE  
 1126 SWIFT STREET, KANSAS CITY, MO 64116  
 PHONE: (816) 221-8575  
 FAX: (816) 221-8311

**CUSTOMER APPROVAL TO MANUFACTURE:**

Approved as Noted \_\_\_\_\_   
 Approved with NO Exception Taken \_\_\_\_\_   
 Review and Resubmit \_\_\_\_\_   
 SIGNATURE \_\_\_\_\_  
 Your Title \_\_\_\_\_ Date \_\_\_\_\_

\*\*\* NOTE \*\*\*  
 ALL WALLS AND STRUCTURES THAT COME WITHIN 18" OF HOOD MUST BE METAL STUDS AND SHEETROCK, WOOD STUDS OR ANY OTHER COMBUSTIBLE MATERIAL WITHIN 18" OF HOOD NOT ALLOWED.

\*\*\* NOTE \*\*\*  
 HOOD MANUFACTURER RECOMMENDS NO RETURNS OR 4-WAY DIFFUSERS WITHIN 10 FEET OF HOOD IN ALL DIRECTION.

\*\*\* NOTE \*\*\*  
 MAKEUP AIR SHALL BE DELIVERED INTO SPACE IN MANNER THAT WILL NOT DISRUPT HOODS ABILITY TO CAPTURE AND CONTAIN.

REVISIONS	
DESCRIPTION	DATE

www.captiveaire.com  
 www.captiveaire.com  
 EMAIL: reg8@capiveaire.com

**HBT Foodservice**  
 104 W 9th St Suite 204, Kansas City, MO, 64105 PHONE: (816) 221-8575 FAX: (816) 221-8311

**Freddy's - Knoxville, TN (MUA)**  
**KNOXVILLE, TN, 37920**

**DATE: 4/28/2023**

**DWG.#: 5977190**

**DRAWN BY: michael.co**

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

**MASTER DRAWING**

**SHEET NO. 1**

**BDS**  
 BAKER DESIGN GROUP, PA  
 RODGER W BAKER ARCHITECT AIA NCARB  
 135 N. Main St. Wichita KS 67202 316.267.7142  
 rodr@bakerdsgroup.com

**FREDDY'S FROZEN CUSTARD**  
 6502 KINGSTON PIKE  
 KNOXVILLE, TN.

THE DESIGN AND DETAILS DISCLOSED HEREIN ARE THE EXCLUSIVE PROPERTY OF RODGER W. BAKER, AIA AND SHALL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT HIS PRIOR WRITTEN CONSENT.

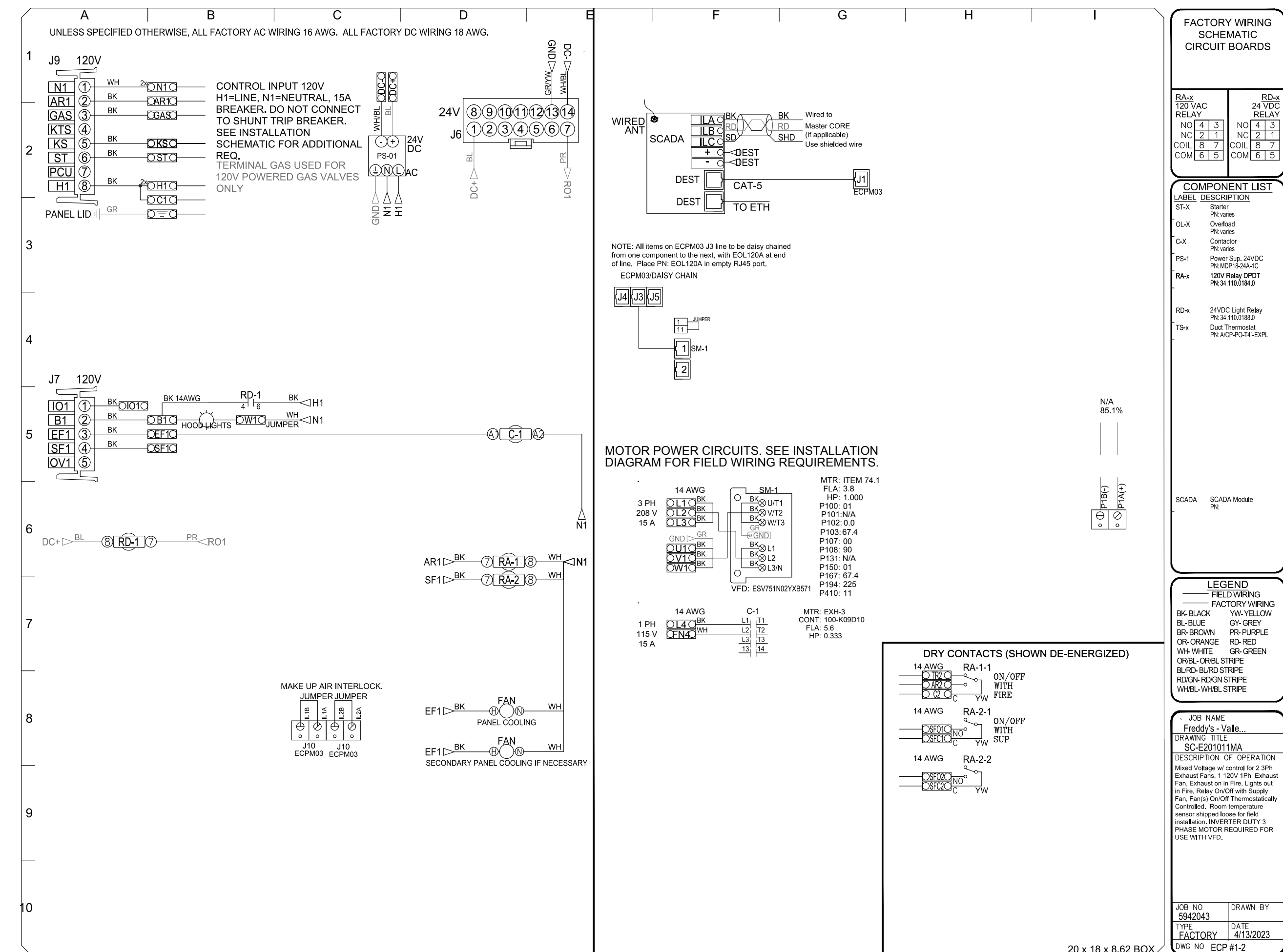
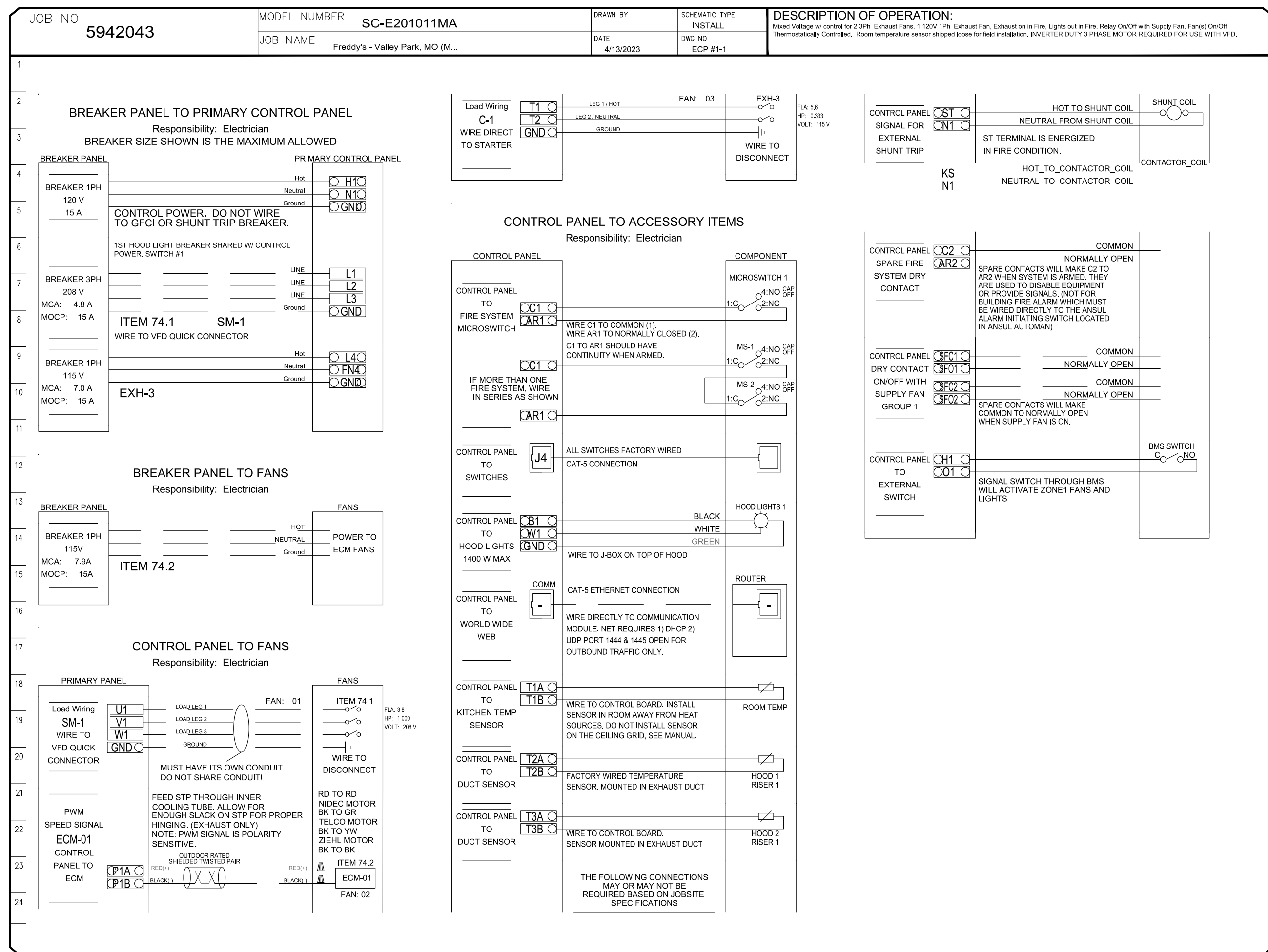
RODGER W. BAKER, AIA

DATE
5/23/2023
5/26/2023
DRAWN BY:
CHECKED BY:
SHEET NO.
M3



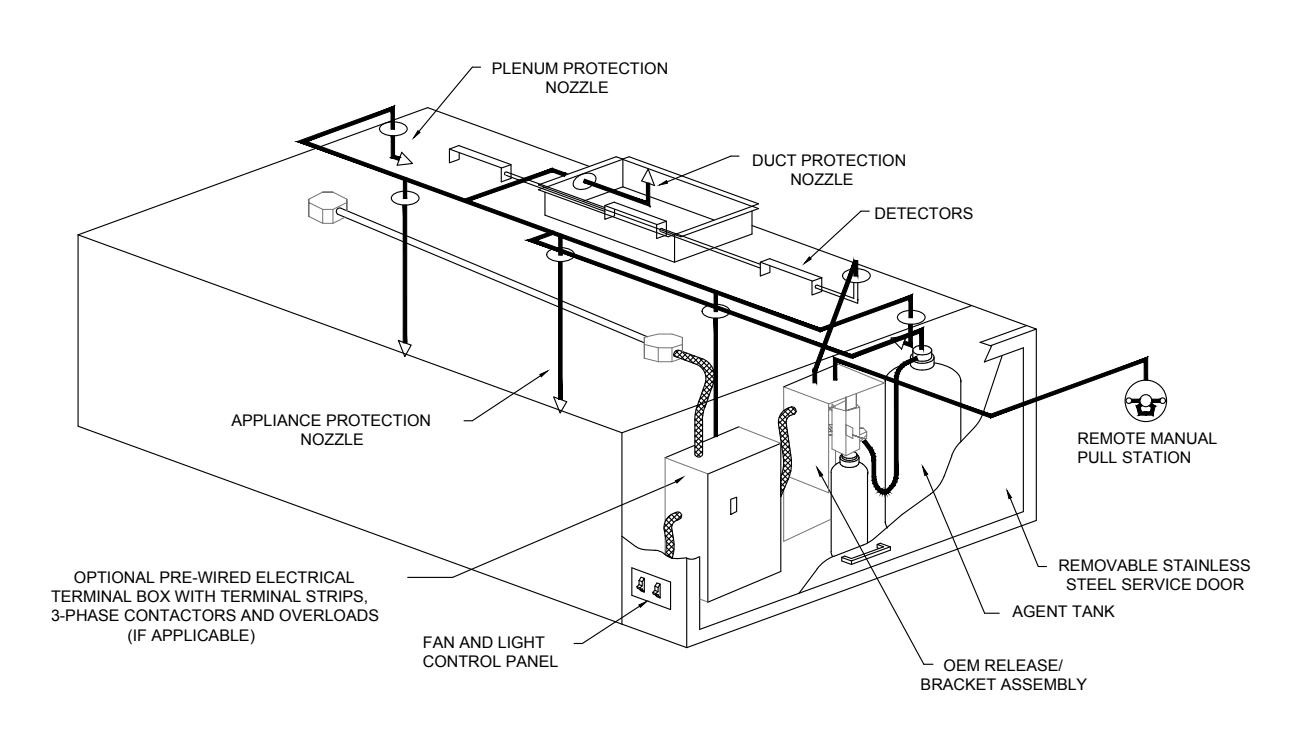
ELECTRICAL PACKAGE - JOB#5942043			
NO	TAG	PACKAGE #	LOCATION
1	EDM	SC201011MA	UTILITY CABINET HEIGHT

LOCATION	QUANTITY	OPTION	FANS CONTROLLED				
			FAN TAG	TYPE	HP	FLX1	
UTILITY CABINET HEIGHT	1 LIGHT	SMART CONTROL THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	ITEM 74.1	EXHAUST	3	1.000	3.8
HOOD # 1	1 FAN		ITEM 74.2	EXHAUST	1	0.000	1.5
			EXHAUST	1	0.003	1.5	5.8



REVISIONS	
DESCRIPTION	DATE

**www.captiveaire.com**  
**HBT Foodservice**  
 104 W 9th St Suite 204, Kansas City, MO, 64105 PHONE: (816) 221-8575 FAX: (816) 221-8511 EMAIL: reg@captivaire.com



**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 REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/LINKAGE ASSEMBLY.

**Freddy's - Valley Park, MO**  
**VALLEY PARK, MO, 63088**

**DATE:** 4/13/2023  
**DWG.#:** 5942043  
**DRAWN BY:** michael.co  
**SCALE:** 1/2" = 1'-0"  
**MASTER DRAWING**

**SHEET NO.**  
 3

**BDS**  
 BAKER DESIGN GROUP, PA  
 RODGER W BAKER ARCHITECT AIA NCARB  
 138 N. Main St. Wichita KS 67202 316.267.7142  
 rod@bakergroup.com

**FREDDY'S FROZEN CUSTARD**  
 6502 KINGSTON PIKE  
 KNOXVILLE, TN.

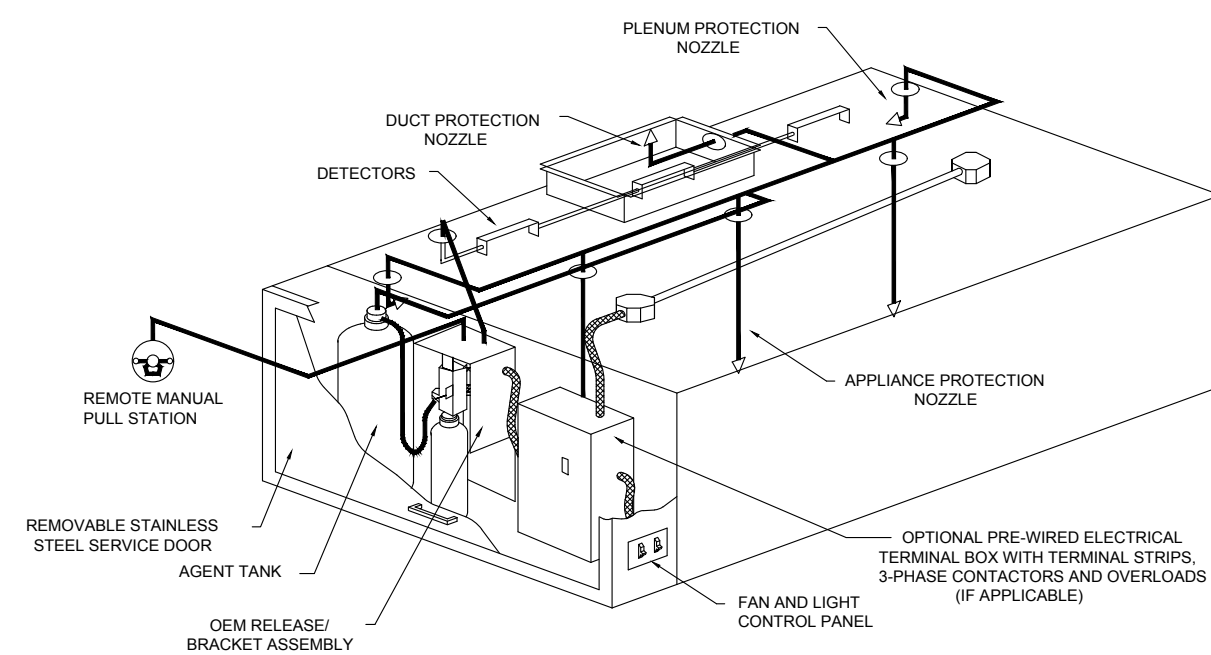
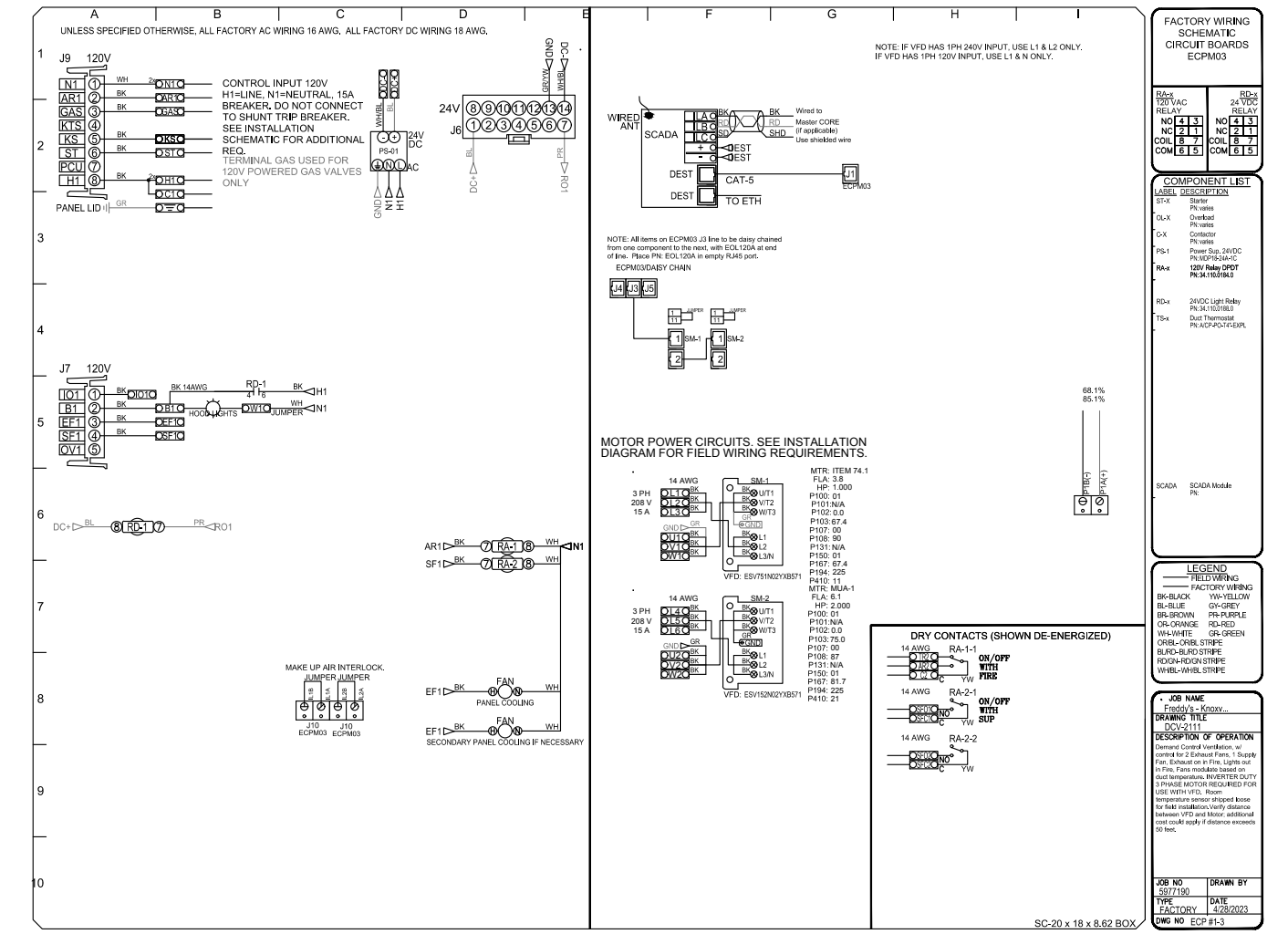
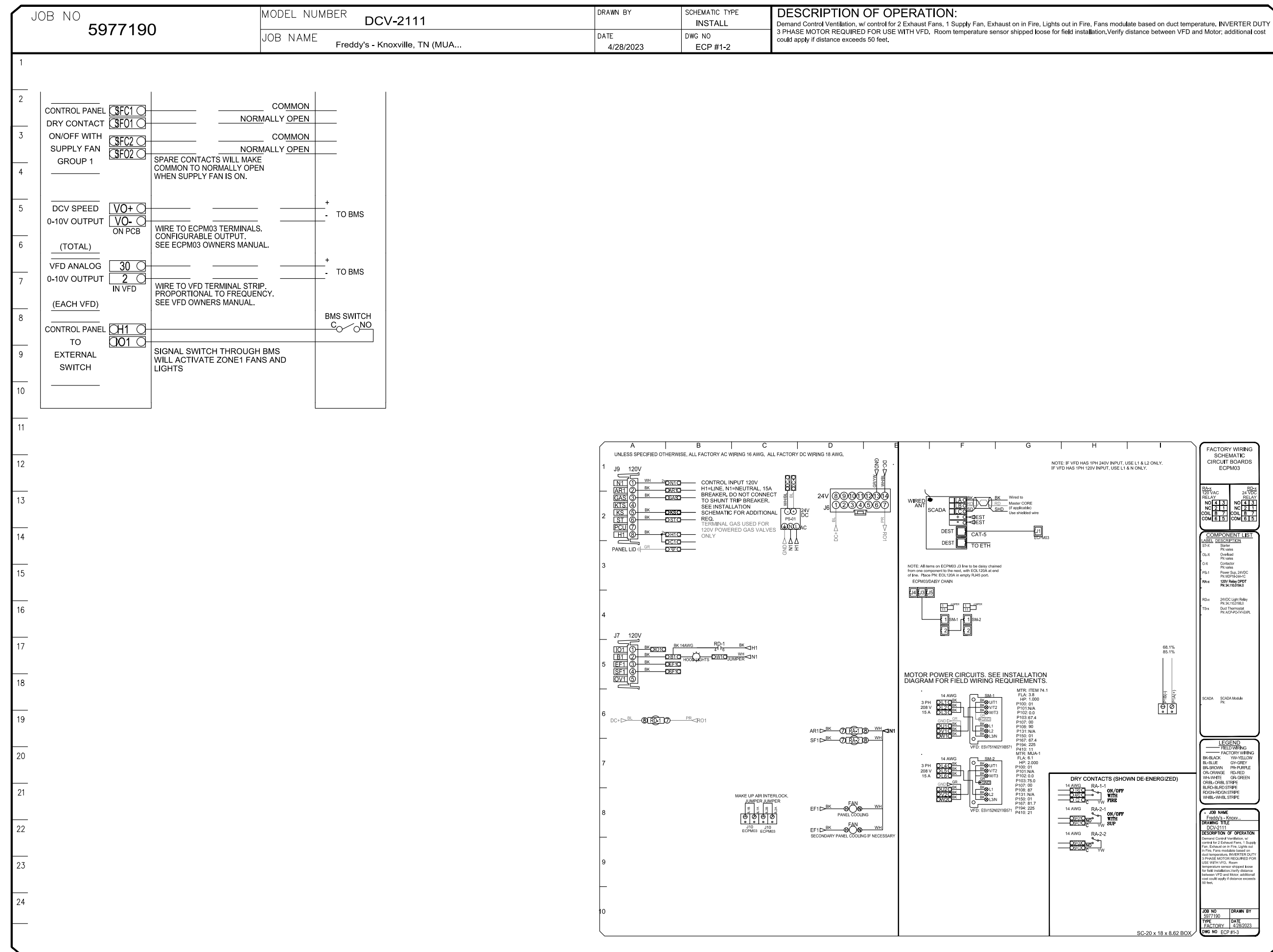
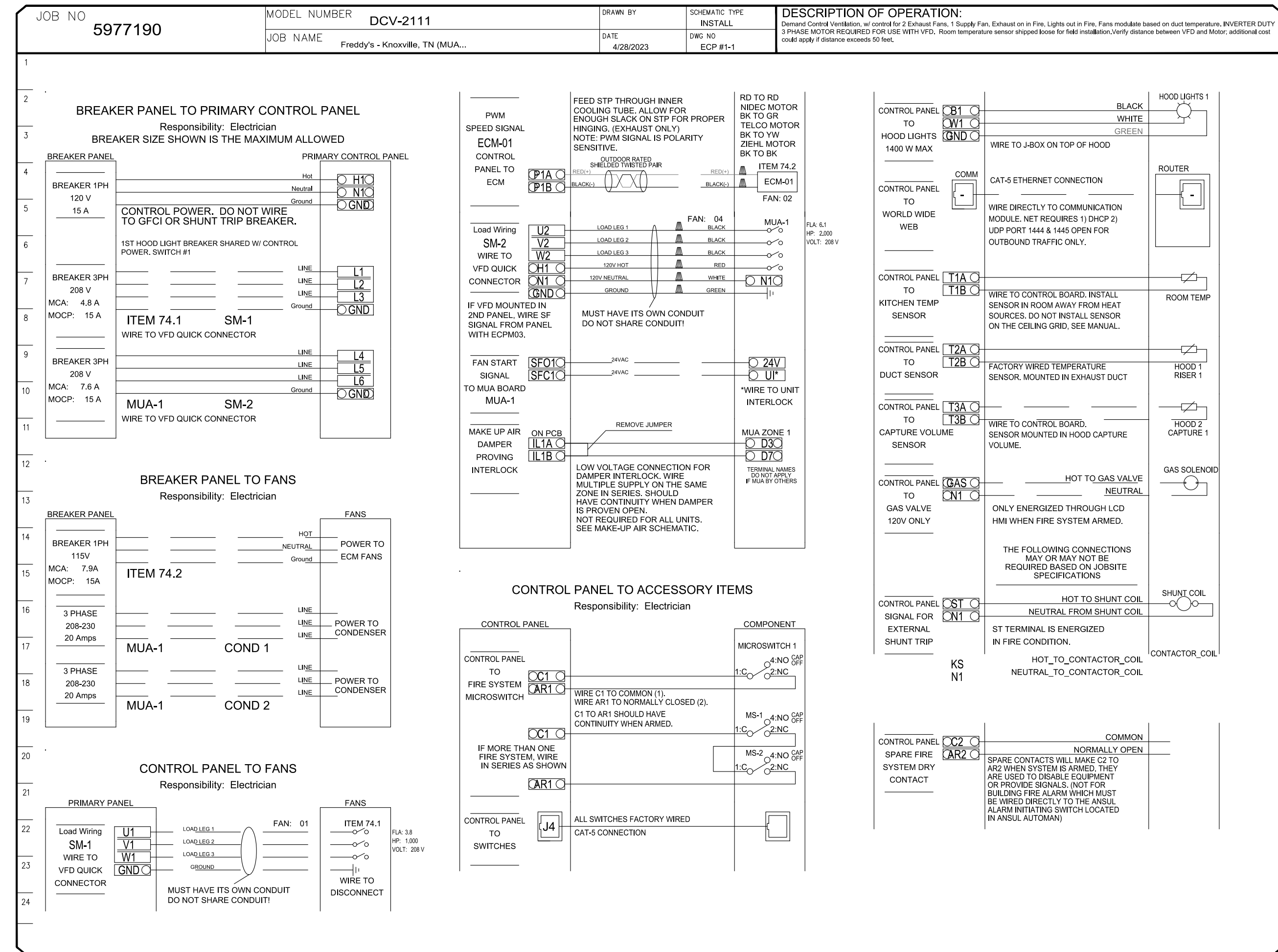
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RODGER W. BAKER, AIA

DATE  
 5/23/2023  
 5/26/2023

DRAWN BY:  
 CHECKED BY:  
 SHEET NO.  
 M5

ELECTRICAL PACKAGE - JOB#5977190					
NO	TAG	PACKAGE #	LOCATION	SWITCHES	OPTION
1	EDM	DCV211	UTILITY CABINET LEFT	UTILITY CABINET LEFT HOOD #1	1 LIGHT 1 FAN SMART CONTROLS DCV



**SPECIFICATIONS**

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**REVISIONS**

NO.	DESCRIPTION	DATE

**CAPTIVE**

HBT Foodservice  
 104 W 9th St Suite 204, Kansas City, MO 64105 PHONE: (816) 221-8575 FAX: (816) 221-8511 EMAIL: reg@captivetrade.com

Freddy's - Knoxville, TN (MUA)  
 KNOXVILLE, TN, 37920

**DATE:** 4/28/2023  
**DWG.#:** 5977190  
**DRAWN BY:** michael.co  
**SCALE:** 1/2" = 1'-0"  
**MASTER DRAWING**

**SHEET NO.**  
 4



**FREDDY'S FROZEN CUSTARD**  
 6502 KINGSTON PIKE  
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RODGER W. BAKER, AIA

**DATE**  
**5/23/2023**  
**5/26/2023**

**DRAWN BY:**  
**CHECKED BY:**

**SHEET NO.**  
**M6**