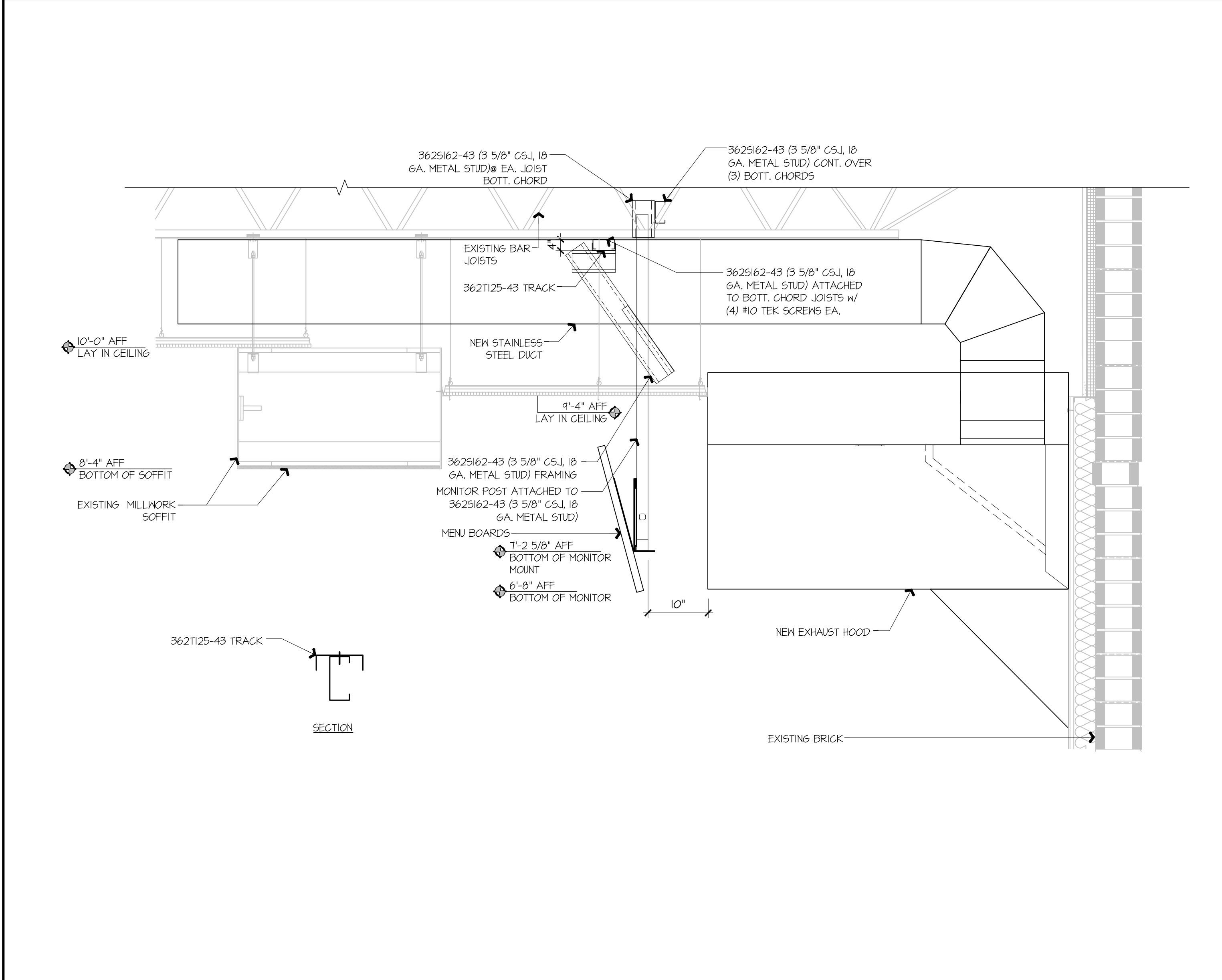


**K5 COMBI OVEN FAN EXHAUST DUCTWORK**  
 NOT TO SCALE A1-M102



**A1 KITCHEN EXHAUST HOOD SUPPORT DETAIL**  
 NOT TO SCALE

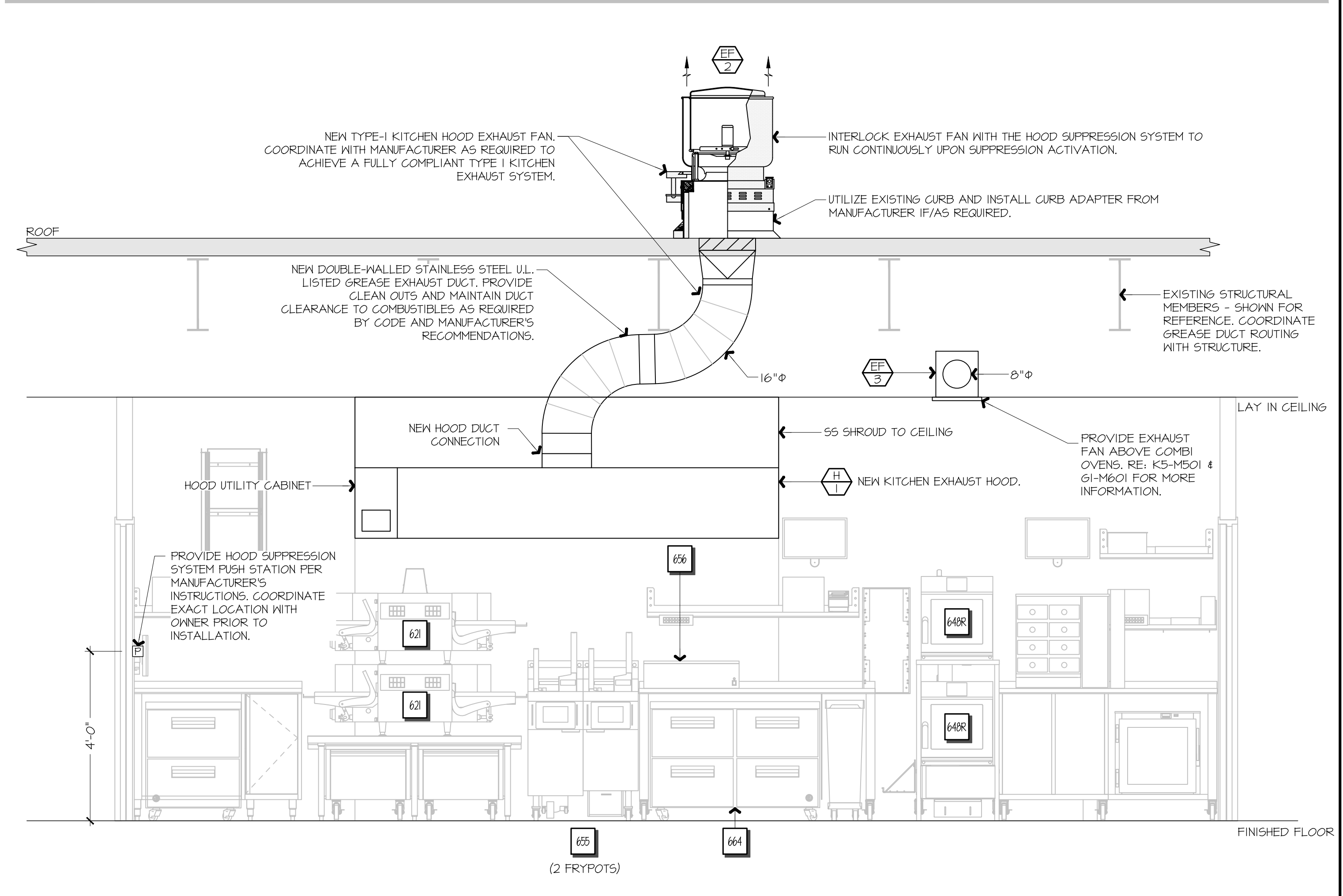
**GENERAL NOTES:**  
 KITCHEN EXHAUST HOOD SHALL BE TYPE-I RATED FOR MEDIUM DUTY COOKING APPLIANCES THAT PRODUCE GREASE OR SMOKE AS A RESULT OF THE COOKING PROCESS. HOOD SHALL BE PROVIDED WITH AUTOMATIC FIRE SUPPRESSION SYSTEM INTERLOCKED WITH EQUIPMENT SHUTDOWN CONTROLS. HOOD SHALL BE PROVIDED WITH UL 1046 GREASE FILTERS. HOOD SHALL BE LISTED AND LABELED FOR 0\"/>

**SEQUENCE OF OPERATION:**  
 THE FOLLOWING KITCHEN EQUIPMENT SHALL BE INTERLOCKED WITH CURRENT TRANSFORMERS THAT AUTOMATICALLY ACTIVATE THE HOOD EXHAUST FAN UPON THE KITCHEN EQUIPMENT BEING ENERGIZED: [62] PIZZA OVENS, [648] COMBI OVENS, [647] STEAM DRAWER, [655] FRYER, [656] FRY HOLDING STATION.

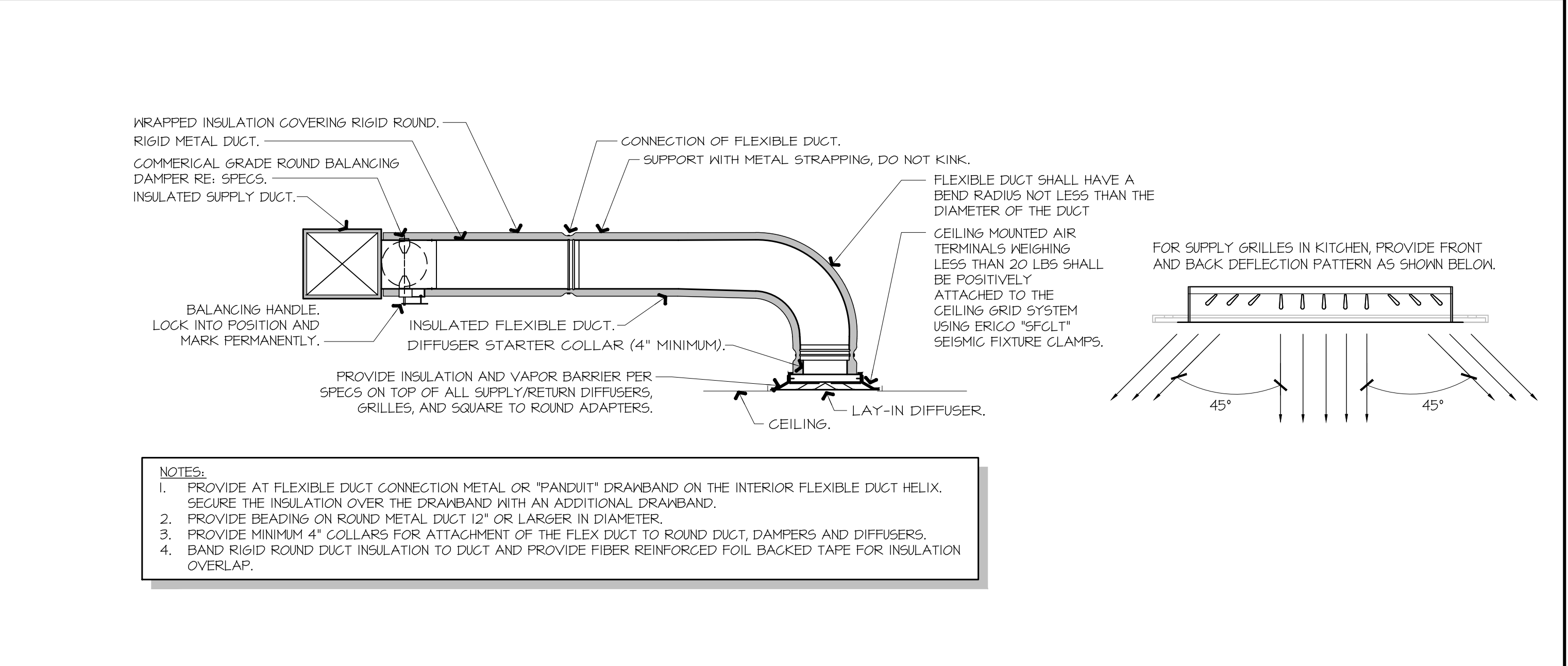
AS HOOD EXHAUST FAN ENERGIZES, RTU'S SHALL MODULATE OUTSIDE AIR TO MAINTAIN BUILDING PRESSURIZATION. RE: M601.

HEAT SENSORS SHALL BE PROVIDED WITHIN HOOD CANOPY FOR TEMPERATURE AND HUMIDITY MONITORING. RE: MANUFACTURER DRAWINGS.

UPON ACTIVATION OF THE FIRE SUPPRESSION SYSTEM, ALL EQUIPMENT LOCATED UNDER THE HOOD SHALL BE SHUTDOWN VIA CONTACTORS LOCATED WITHIN THE HOOD UTILITY CABINET, AND RTU SERVING KITCHEN SPACE SHALL BE AUTOMATICALLY SHUTDOWN. RE: A13-E601.



**F9 FSC REAR WALL ELEVATION - NEW**  
 1/2" = 1'-0" A1-M102



**A9 DIFFUSER CONNECTION DETAIL**  
 NOT TO SCALE A1-M102

**REGISTERED PROFESSIONAL ENGINEER**  
 ME. BENTLEY 2417  
 IOWA

SIGNATURE DATE: 10/10/2025

**H & B ENGINEERS**  
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 Iowa Certificate of Authority #354056

**QuikTrip No. 0560**  
 2300 MARTIN LUTHER KING JR PARKWAY  
 DES MOINES, IOWA

**QT**

PROTOTYPE Fryer  
 DIVISION Des Moines  
 VERSION 4000  
 DATE 06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 10/10/2025

SHEET TITLE:  
 MECHANICAL SECTIONS & DETAILS

SHEET NUMBER:  
**M501**

**HOOD INFORMATION - JOB#7284466**

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM
1		6030 ND-2	CAPTIVEAIRE	9' 0"	450 DEG	I	MEDIUM	150	1350

**FIRE SYSTEM INFORMATION - JOB#7284466**

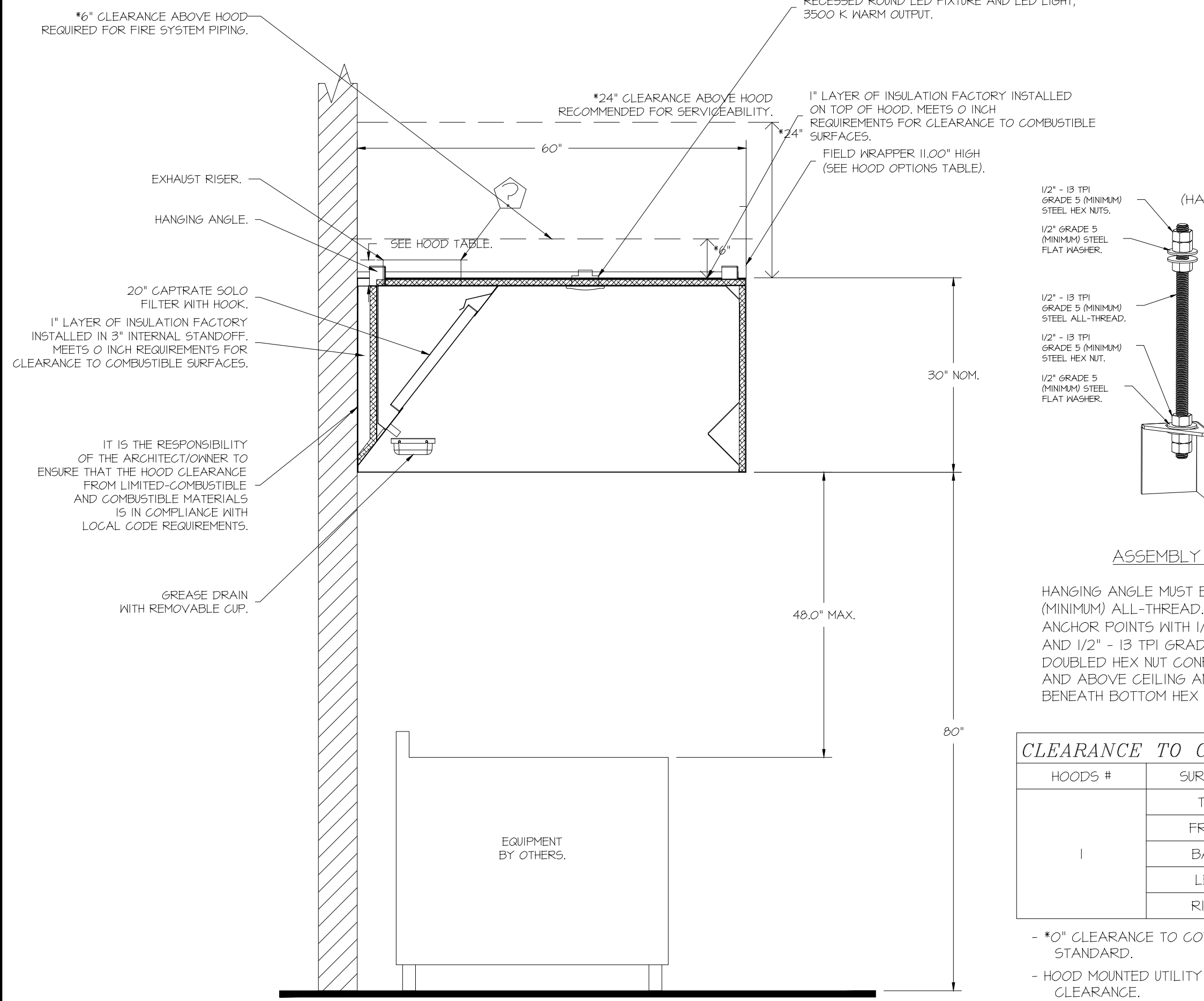
FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION
1		TANK FS	4.0	20	20	FIRE CABINET LEFT LEFT, HOOD I

**HOOD INFORMATION**

HOOD NO	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	AVERAGE FOOT CANDLES @ 36" AFF	LOCATION	SIZE	TYPE	UTILITY CABINET(S)	ELECTRICAL	SWITCHES	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1		CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	6	RECESSED ROUND	NO	66	LEFT	12"x6.0"x3.0"	TANK FS	4.0	DCV-1011	1 LIGHT 1 FAN	YES	88T LBS

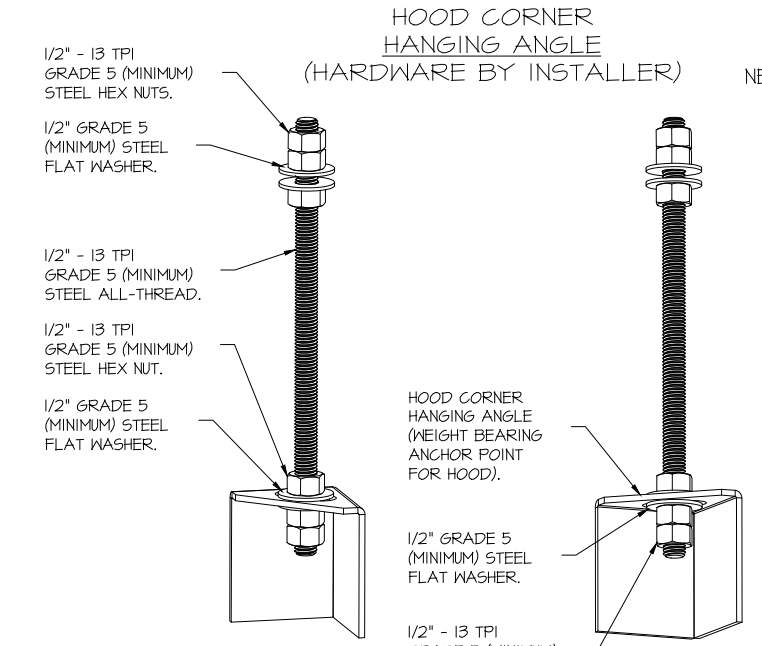
**HOOD OPTIONS**

HOOD NO	TAG	OPTION
1		FIELD WRAPPER 11.00" HIGH FRONT, LEFT, RIGHT, RIGHT END STANDOFF (FINISHED) 1" WIDE 60" LONG INSULATED. INSULATION FOR TOP OF HOOD. INSULATION FOR BACK OF HOOD. SENSOR-CV.



**CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH**

NSF NFPA #96 NSF E.T.L. LISTED 3054804-001 TO UL 710 & ULCT10 STANDARDS



**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.

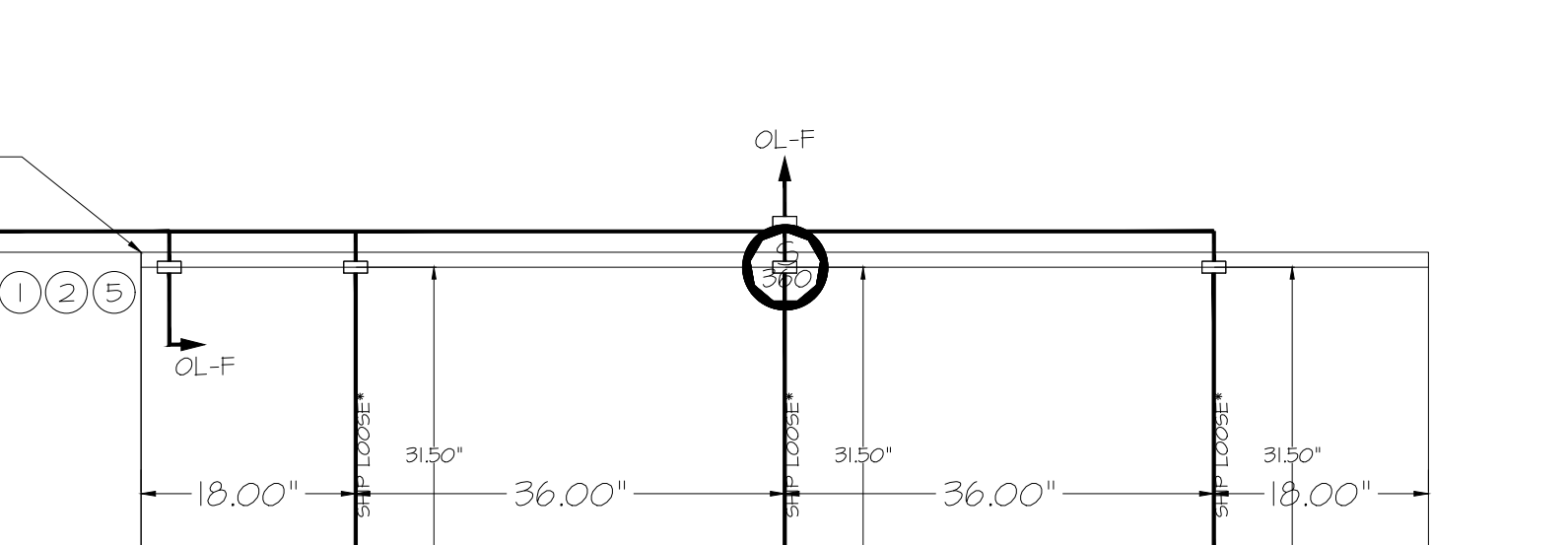
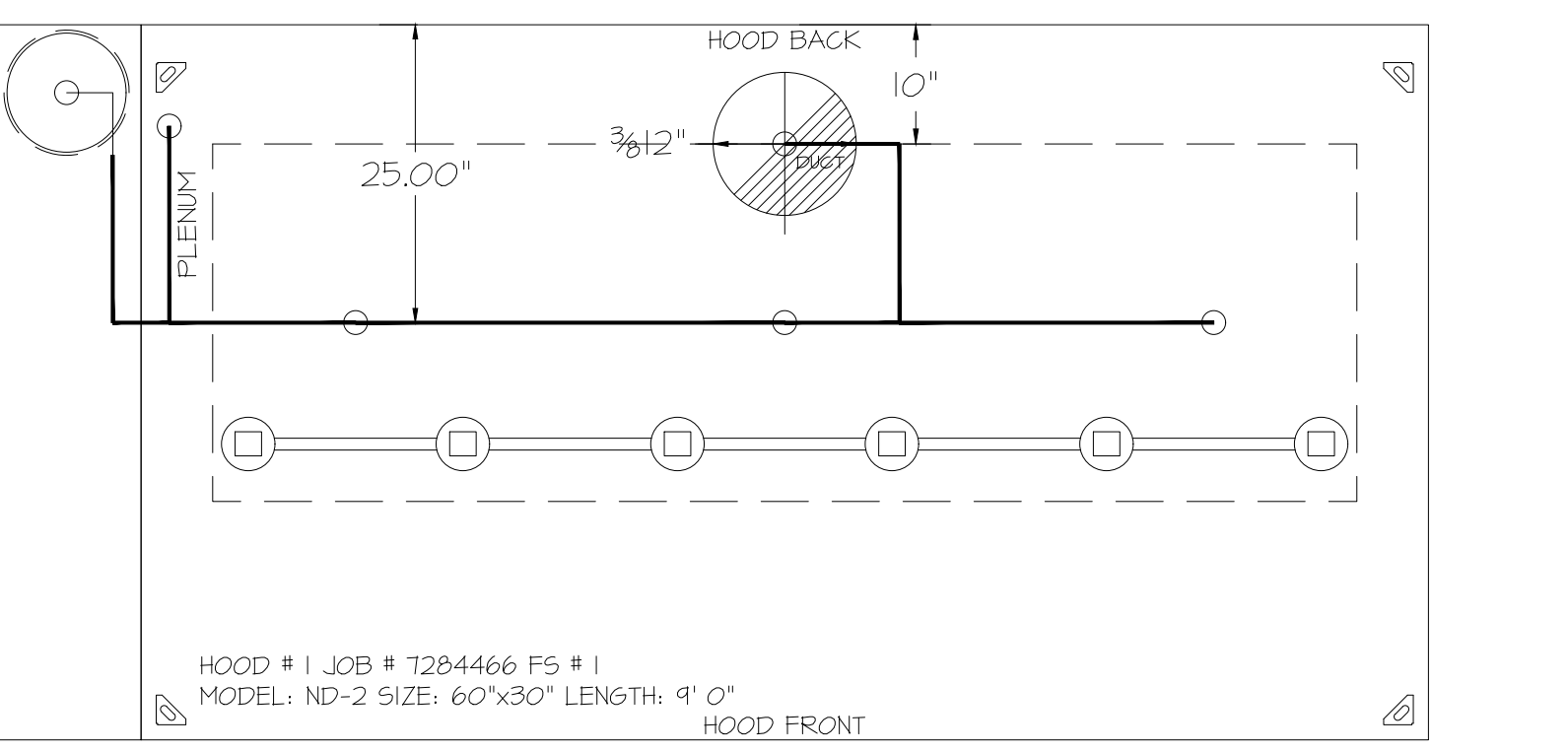
**CLEARANCE TO COMBUSTIBLES**

HOODS #	SURFACE	*CLEARANCE
1	TOP	0"
1	FRONT	0"
1	BACK	0"
1	LEFT	0"
1	RIGHT	0"

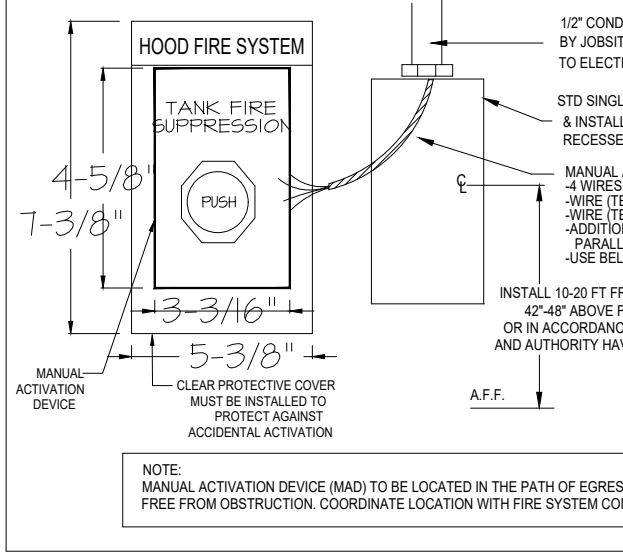
\*0" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL10 STANDARD.  
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.

**FIRE SYSTEM PARTS LIST KEY**

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
0	-	TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
0	-	TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
0	-	12-F28021-32144-01-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO. CLOSE ON TEMP RISE AT 360°F. (A0094B10).	1	0
0	-	32-00002 QUIK SEAL - 1/2" (UL)	1	0
0	-	442K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
0	-	78525 1/2" 40 PRO-PRESS ELBOW WITH 1/2" ANPT FEMALE CONNECTION, VIEGA.	1	0
0	-	78680 1/2" X 1/2" PRO-PRESS TEE X 1/2" ANPT FEMALE CONNECTION, VIEGA.	1	0
0	-	81-30001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	1	0
0	-	81-30003-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM SUPERVISED. TANK FIRE SUPPRESSION.	1	0
0	-	81-30003-001 DIN CONNECTOR, GANFIELD PART #5,560-201-EU0A, TANK FIRE SUPPRESSION, SUBMERSIBLE SOLENOID CONNECTION (SEE VENDOR 30371).	1	0
0	-	81-30003-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	4	0
0	-	4055455PC PRO PRESS 1/2 PRESS X PRESS 40 ELBOW LD.	4	0
0	-	401200PC PRO PRESS PC611 1/2 PRESS TEE LD.	4	0
0	-	48644A15 HARDWARE, DATANLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	2	0
0	-	A0024532 JUNCTION BOX FOR MANUAL PULL STATION, 15" DEEP BACK BOX, RED COLOR.	1	0
0	-	A31484 1/4" NPT SCHROEDER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
0	-	B145 3/8" BLACK IRON 40 ELL.	2	0
0	-	DATANLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
0	-	TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	3	0
0	-	TFS-UC1 TANK BRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
0	-	PK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	1	0
16	-	16 - 16 - 14210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	5	0
16	-	16 - OL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANTARD, USED WITH CHROME-PLATED PIPE).	5	0
26	-	26 - 26 - 05A-3/8 QUIK SEAL - 3/8" (UL)	5	0
34	-	34 - 34 - A003481P 2-WIRE SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT, RED COLOR.	1	0

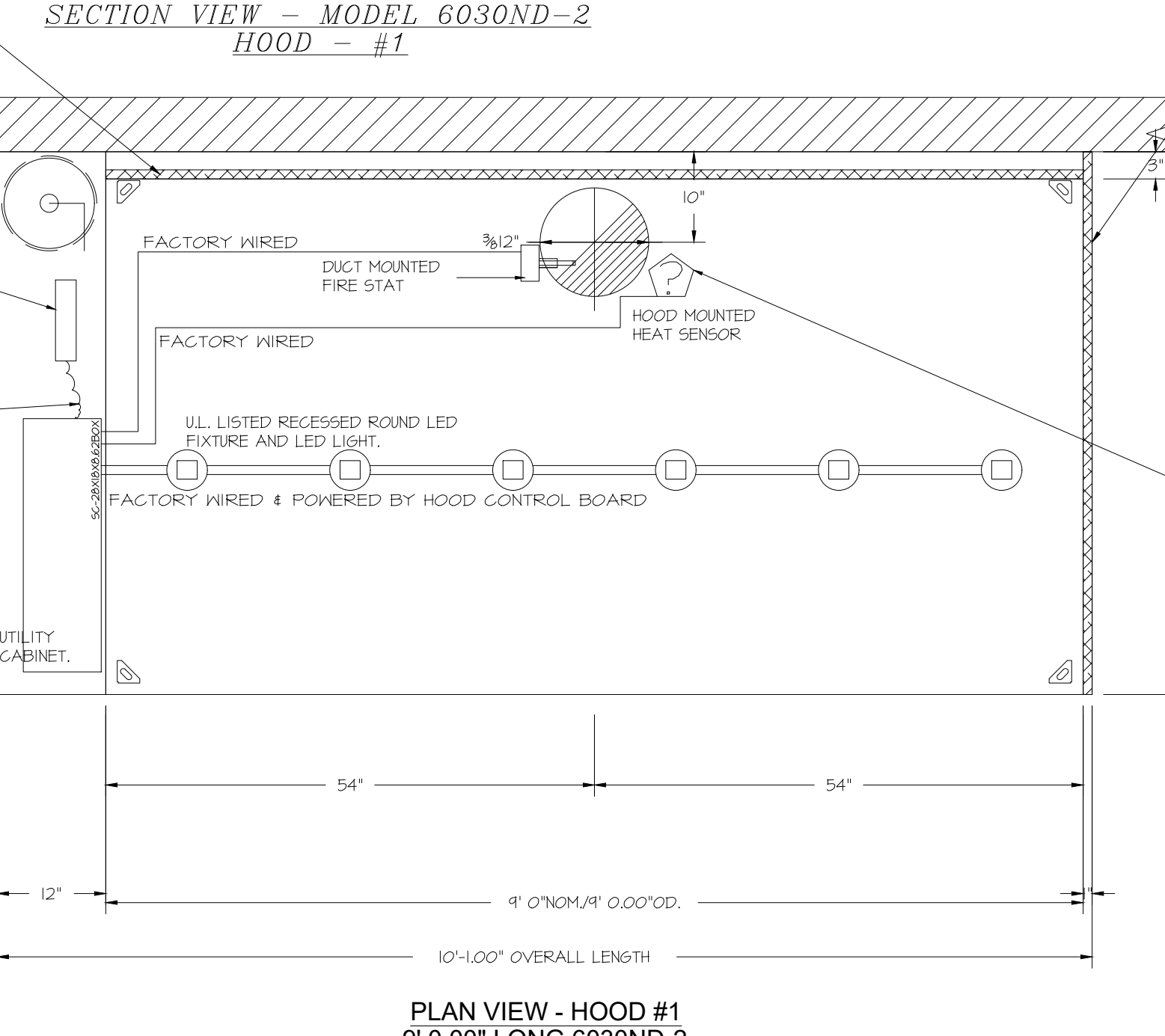
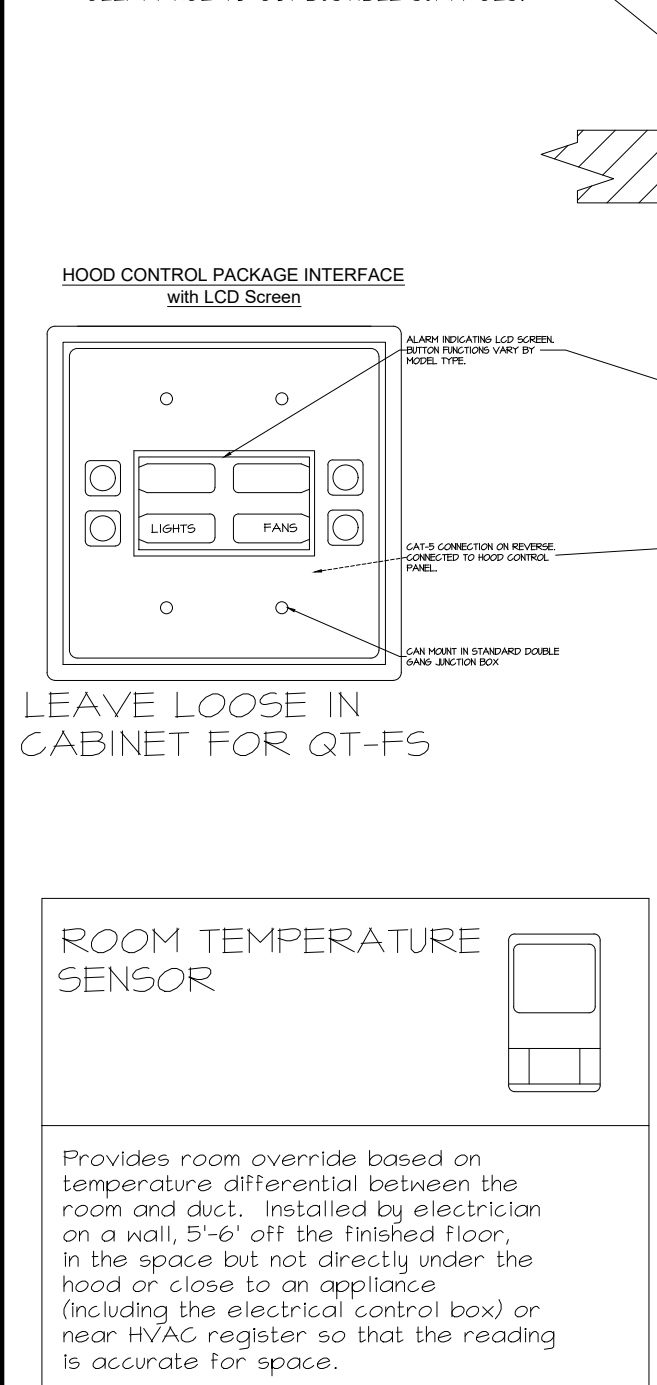


**TANK MANUAL ACTIVATION DEVICE DETAIL**



NOTES:  
- FIELD PIPE DROPS AS SHOWN  
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY GAS.  
- FIELD INSTALLED DROPS: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.  
- SHIP LOOSE DROPS: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.  
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAD BARRENDS, ETC.  
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.  
- IF APPLICABLE, EXTENDED FIRE-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 PRE-ENGINEERED FIRE SYSTEM COMPLIES WITH UL 300 REQUIREMENTS.  
- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS  
JOB #: 1284466.  
JOB NAME: QT - G3 NEW STORE PKG GOING FORWARD (DW) (450F).  
SYSTEM SIZE: TANK-SP-1 DESIGN FP: 20, MAXIMUM FP: 20.  
HOOD # 1 1' 0.00" LONG x 60" WIDE x 30" HIGH.  
RISER # 1 SIZE: 12" 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.

**SECTION VIEW - MODEL 6030ND-2 HOOD - #1**



**DUCT TEMPERATURE SENSOR (TYPICAL)**

Provides exhaust air temperature for proper hood control operation. For all installations excluding a single hood with factory riser and a hood mounted panel, duct mounted temperature sensors will need to be field wired. 2-wire 18 AWG plenum rated thermostat cable must be used.

**AGENT DISTRIBUTION PIPING LIMITATIONS**

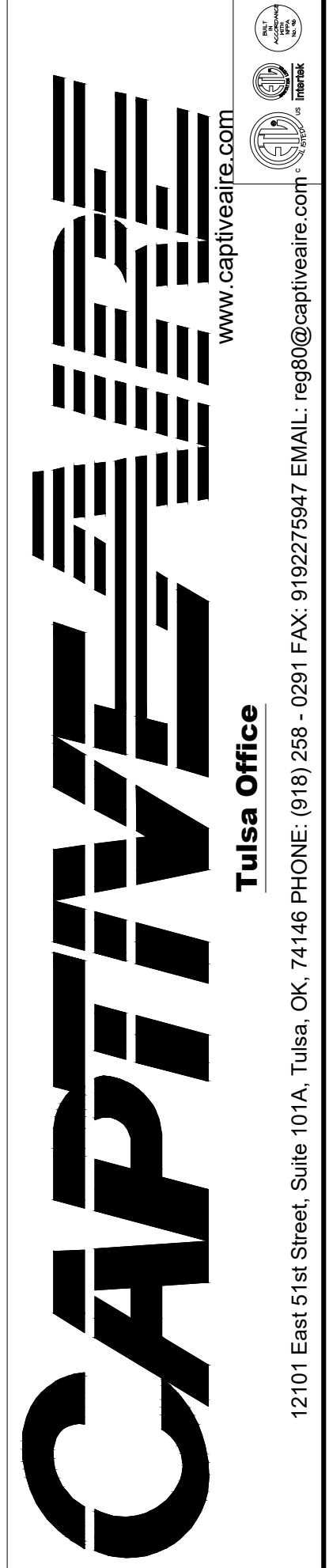
PIPE SECTION	MAX PIPE LENGTH (FT)
MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE	42
OVERLAPPING NOZZLE APPLIANCE BRANCH	10
DEDICATED NOZZLE APPLIANCE BRANCH	10

**LEGEND - FIRE CABINET TANK SYSTEM**

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

**REVISIONS**

NO.	DESCRIPTION	DATE



QT - Fryer Addition Remodel Pkg Going Forward (DW) (450F)  
Various Locations,  
Tulsa, OK, 74136

DATE: 4/29/2025  
DWG.#: 1284466  
DRAWN BY: RJH-80  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET TITLE:  
MECHANICAL HOOD DETAILS

SHEET NUMBER:  
M510

PROFESSIONAL ENGINEER  
LICENSED PROFESSIONAL ENGINEER  
ME, BUILDING  
IOWA

SIGNATURE DATE: 10/10/2025

**H & B**  
HOSS & BROWN ENGINEERS

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**QuikTrip No. 0560**

2300 MARTIN LUTHER KING JR PARKWAY  
DES MOINES, IOWA

PROTOTYPE: Fryer  
DIVISION: Des Moines  
VERSION: 4000  
DATE: 06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 10/10/2025

SHEET NO.  
1

**EXHAUST FAN INFORMATION - JOB#7284466**

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-3 (TYPE I)	1	DU50HFA	CAPTIVEAIRE	1350	0.750	1543	TEAO-ECM	0.500	0.3710	1	208	3.8	513 FPM	74	16.6
2	EF-1 - RR FAN	1	DR33HFA	CAPTIVEAIRE	600	0.500	1304	TEAO-ECM	0.333	0.1530	1	115	4.3	247 FPM	58	8.8
3	TF-1 - TRANS FAN	1	GFA 500CA	CAPTIVEAIRE	350	0.500	725	GENERAL PURPOSE	0.310	0.2220	1	115	2.2		35	N/A
4	VF-1 - CO2 FAN	1	DFA-300-CA	CAPTIVEAIRE	600	0.100	1846	GENERAL PURPOSE	0.333	0.1480	1	115	2.6		12	12.9

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-3 (TYPE I)	1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - DU/DR50HFA - SHIP LOOSE - FOR GREASE DUCTS
		1	ECM WIRING PACKAGE - EXHAUST - MODBUS CONTROL -M5C- (TELCO), CCM ROTATION
		1	2 YEAR PARTS WARRANTY
2	EF-1 - RR FAN	1	1 IS-BDD DAMPER
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTG- (TELCO MOTOR), CCM ROTATION
		1	2 YEAR PARTS WARRANTY
3	TF-1 - TRANS FAN	1	FAN CONTROL - 3 AMP FAN MOUNTED SPEED CONTROL FOR GFA CEILING FANS
		1	2 YEAR PARTS WARRANTY
4	VF-1 - CO2 FAN	1	FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR GFA CEILING FAN
		1	2 YEAR PARTS WARRANTY

**FAN ACCESSORIES**

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE DAMPER	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-3 (TYPE I)	YES						
2	EF-1 - RR FAN		YES					
3	TF-1 - TRANS FAN							
4	VF-1 - CO2 FAN							

**CURB ASSEMBLIES**

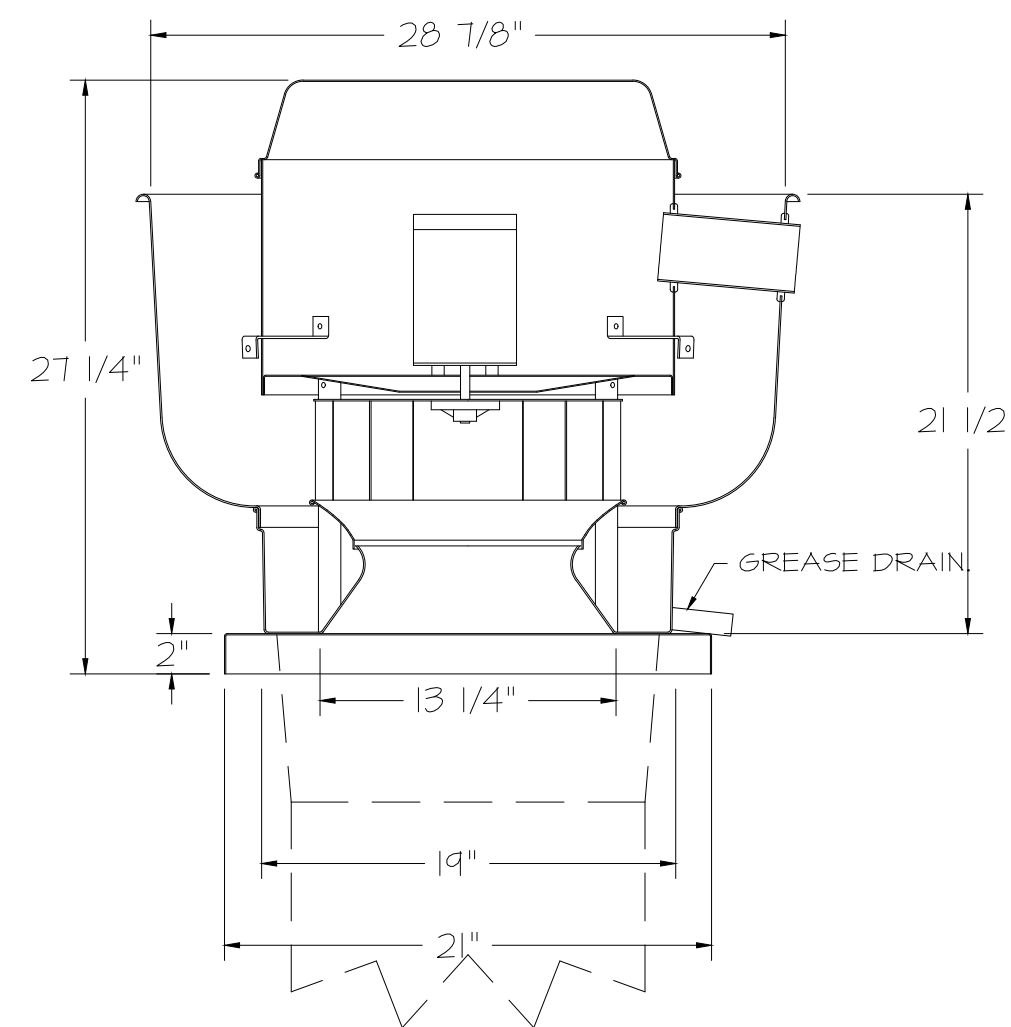
NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-3 (TYPE I)	34 LBS	CURB	14,500"W X 14,500"L X 24,000"H VENTED HINGED.
2	# 2	EF-1 - RR FAN	31 LBS	CURB	14,500"W X 14,500"L X 20,000"H HINGED.

**FAN SOUND DATA**

FAN UNIT NO	TAG	MOTOR	SOUND DATA			OCTAVE BAND SOUND DATA									
			LWA	SONES @ 5 FT	DBA @ 5 FT	DISTANCE (FT)	63 HZ	125 HZ	250 HZ	500 HZ	1 KHZ	2 KHZ	4 KHZ	8 KHZ	
1	EF-3 (TYPE I)	EXHAUST	80	16.5	126.5	68.5	5	76.6	78	85	76.5	71.9	69.8	66	57
2	EF-1 - RR FAN	EXHAUST	70.9	8.8	26.3	59.4	5	68.3	75.1	73.9	67.5	64.2	62.8	55.9	44.9
4	VF-1 - CO2 FAN	EXHAUST	76.4	12.4	25.3	64.9	5	65.8	74	74	72.2	69.8	68.5	68	68.2

FAN #3 GFA 500CA - EXHAUST FAN (TF-1 - TRANS FAN)

FAN #1 DU50HFA - EXHAUST FAN (EF-3 (TYPE I))



**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULG-5645
- 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.

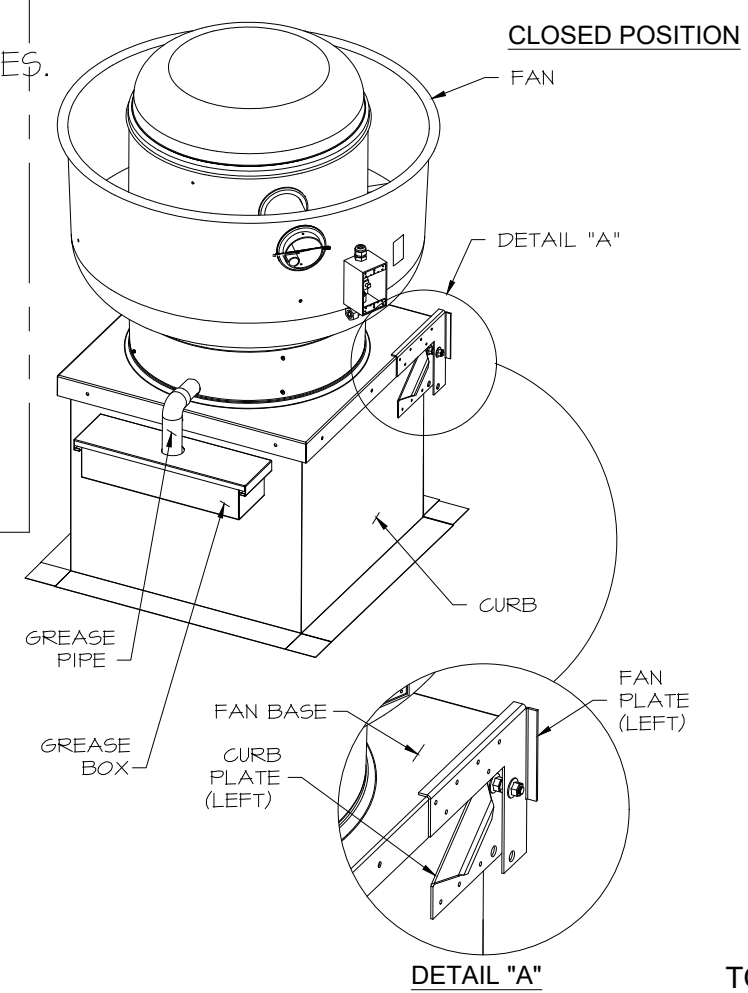
**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DEGRADING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**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.

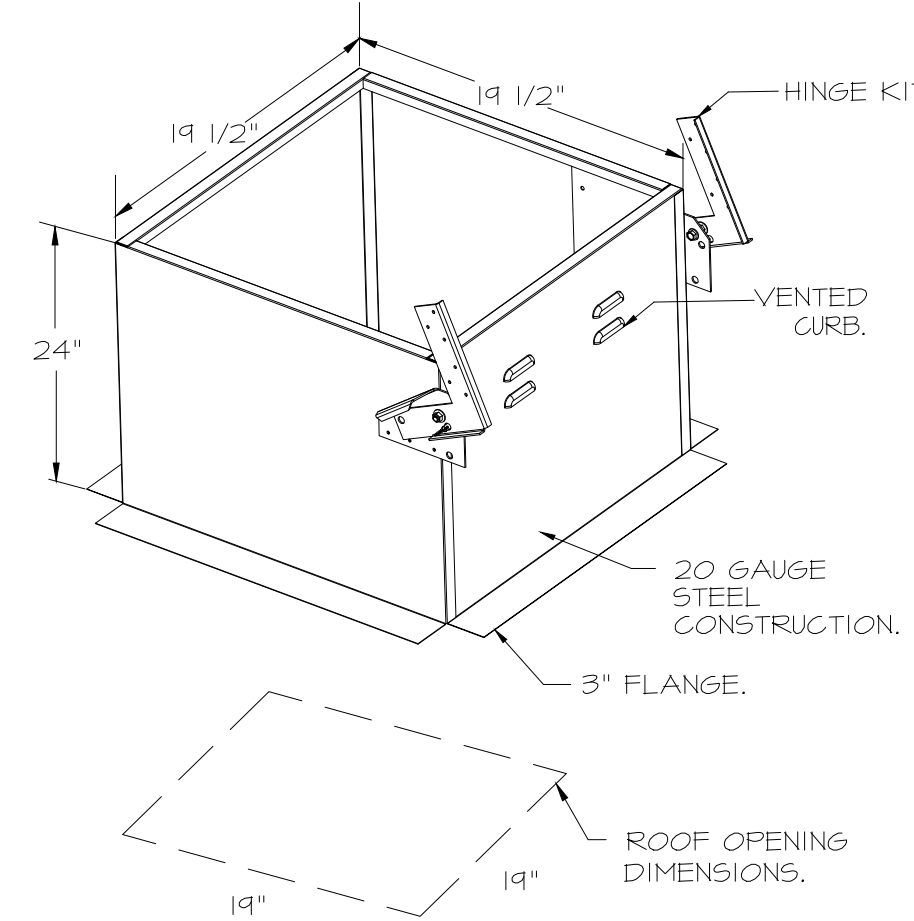
**OPTIONS**

- GREASE BOX.
- FAN BASE CERAMIC SEAL - DU/DR50HFA
- SHIP LOOSE - FOR GREASE DUCTS.
- ECM WIRING PACKAGE - EXHAUST - MODBUS CONTROL -M5C- (TELCO), CCM ROTATION
- 2 YEAR PARTS WARRANTY.

**HINGE KIT INSTALLATION**



\*22 AWG WHITE ROTATION WIRE BMN MOTOR ONLY. CONNECT TO POWER. LEG BLACK WIRE TO REVERSE ROTATION. JUMPER WIRE DISCONNECTED. TO REVERSE ROTATION CONNECT JUMPER FOR CKEC MOTOR ONLY.



FAN #2 DR33HFA - EXHAUST FAN (EF-1 - RR FAN)

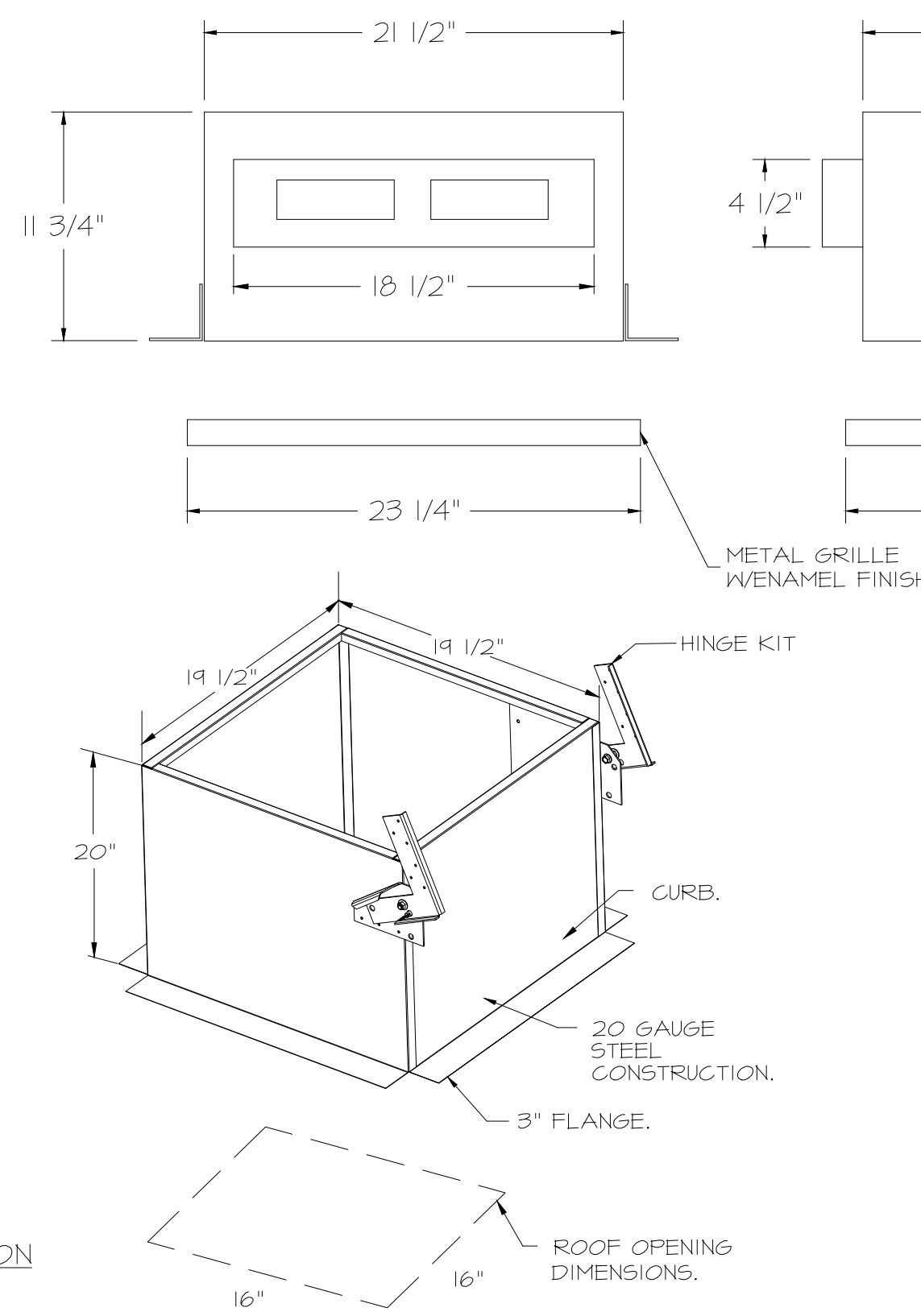
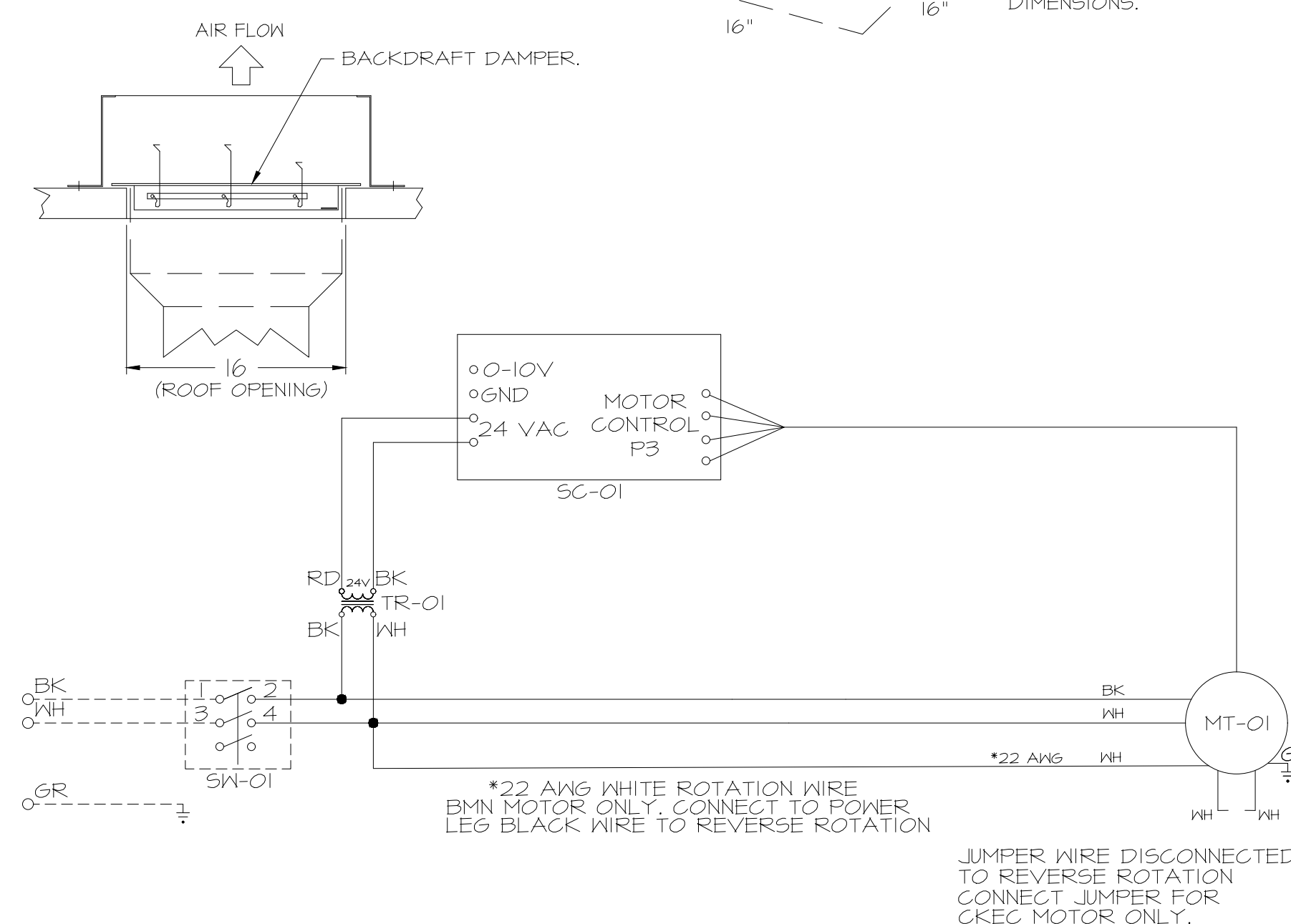
**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

**OPTIONS**

- 1 IS-BDD DAMPER.
- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTG- (TELCO MOTOR), CCM ROTATION.
- 2 YEAR PARTS WARRANTY.

**BACKDRAFT DAMPER INSTALLATION**



**FEATURES:**

- 1/2" ACOUSTIC HOUSING INSULATION.
- 20 GA. GALVANIZED STEEL HOUSING.
- PLUG TYPE DISCONNECT.
- BUILD IN AUTOMATIC BACKDRAFT DAMPER.
- AMCA SOUND & AIR CERTIFIED.
- UL LISTED.
- CAN BE INSTALLED IN CEILING OR WALL.
- 8 POSITION MOUNTING BRACKETS.

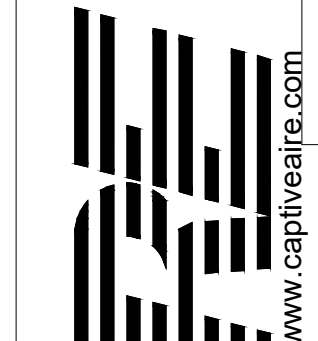
**OPTIONS**

- FAN CONTROL - 3 AMP FAN MOUNTED SPEED CONTROL FOR GFA CEILING FANS.
- 2 YEAR PARTS WARRANTY.

**REVISIONS**

NO	DESCRIPTION	DATE

SIGNATURE DATE: 10/10/2025



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**QuikTrip No. 0560**

2300 MARTIN LUTHER KING JR PARKWAY  
DES MOINES, IOWA



PROTOTYPE	Fryer
DIVISION	Des Moines
VERSION	4000
DATE	06-18-2025

REV	DATE	DESCRIPTION

QT - Fryer Addition Remodel Pkg Going Forward (DW) (450F)

Various Locations,  
Tulsa, OK, 74136

DATE: 4/29/2025

DWG.#: 7284466

DRAWN BY: R-JH-80

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

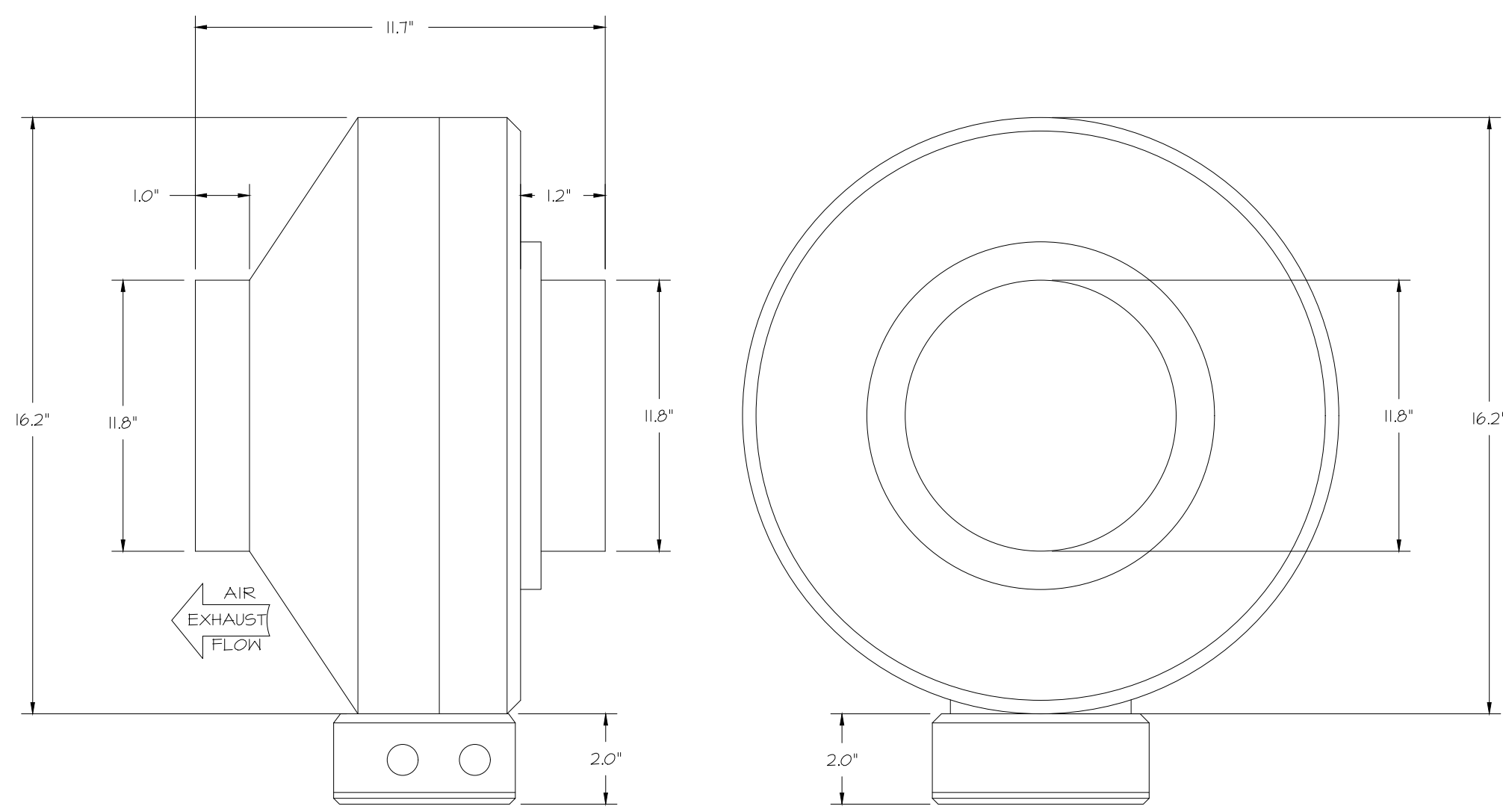
MASTER DRAWING

SHEET NO. 2

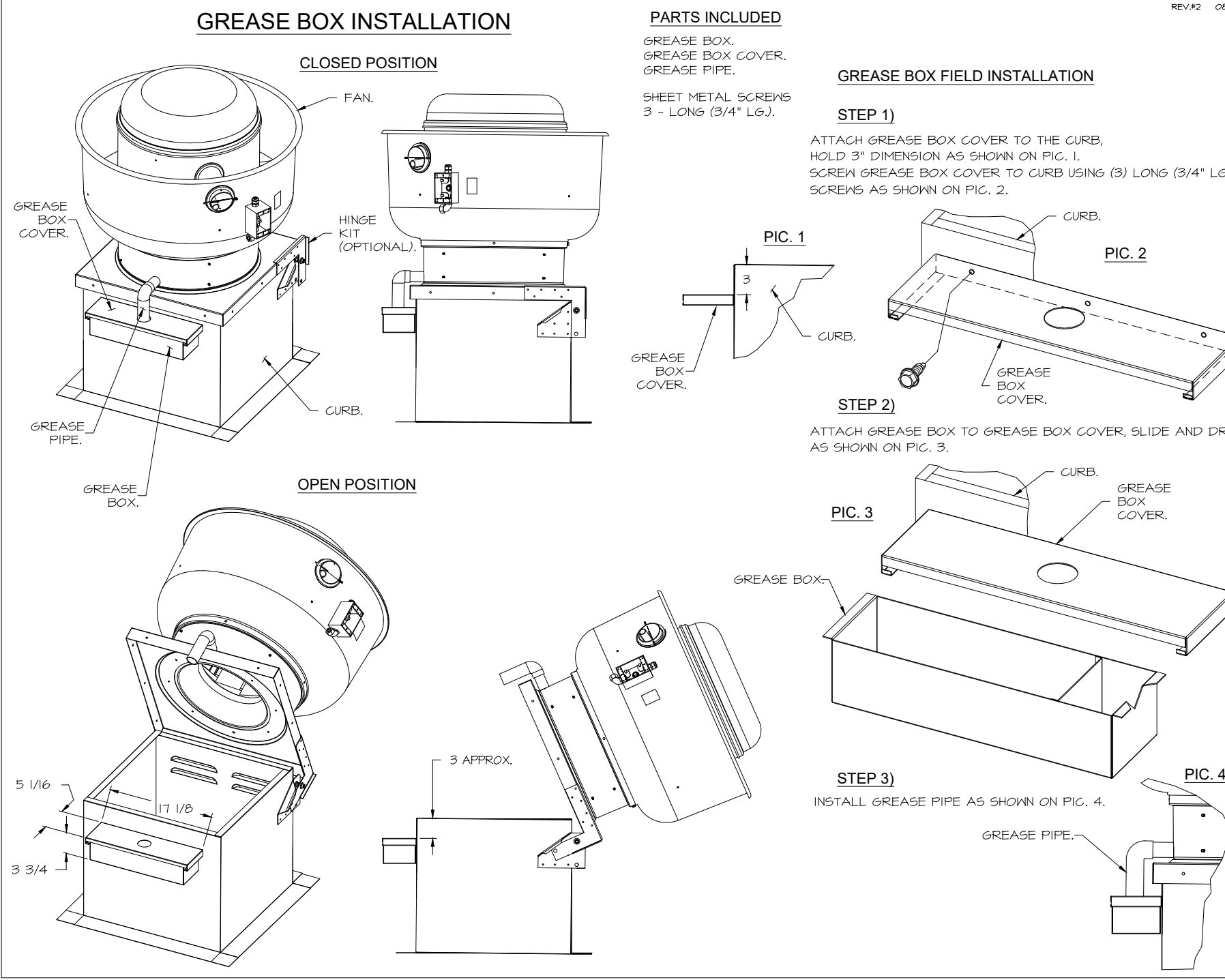
SHEET TITLE:  
MECHANICAL HOOD  
DETAILS

SHEET NUMBER:  
M511

FAN #4 DFA-300-GA - EXHAUST FAN (VF-1 - G02 FAN)

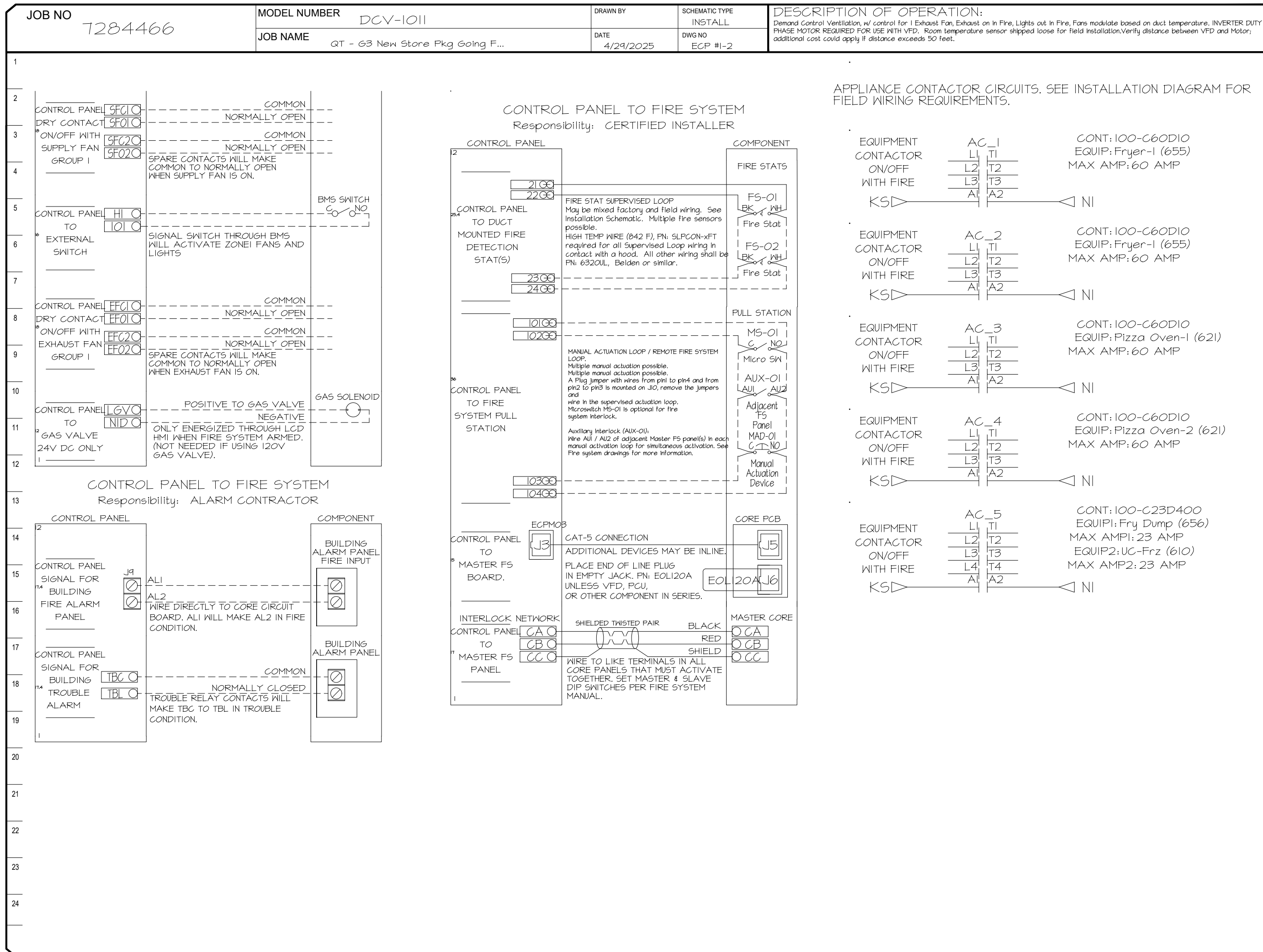
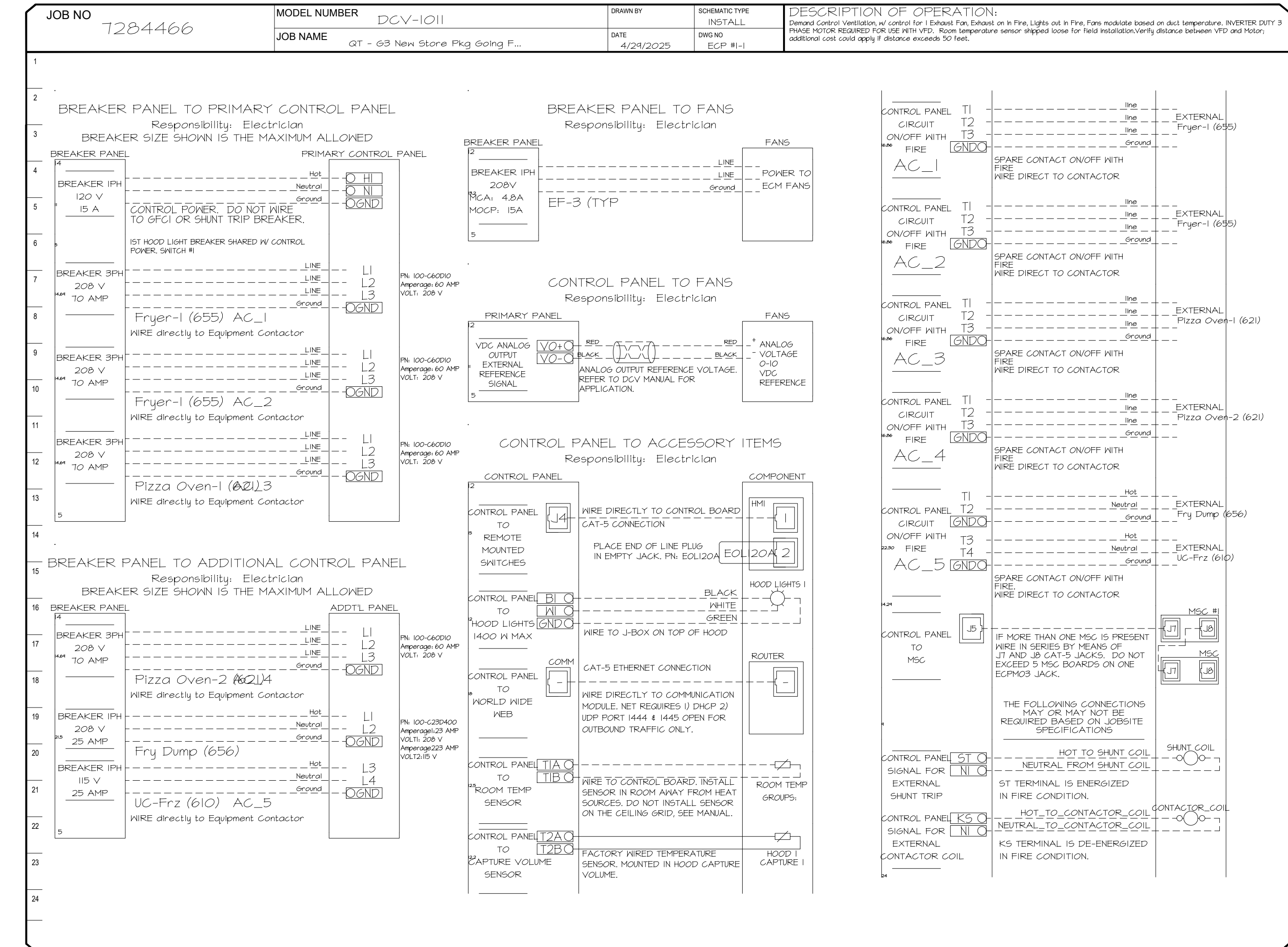


- FEATURES:**
- 20 GA. GALVANIZED STEEL HOUSING.
  - STANDARD 4" - 12" ROUND DUCT CONNECTIONS.
  - EASILY ACCESSIBLE J-BOX.
  - UL507 LISTED.
  - EXTREMELY QUIET OPERATION.
- OPTIONS:**
- FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN.
  - 2 YEAR PARTS WARRANTY.



**ELECTRICAL PACKAGE - JOB#7284466**

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Φ	HP	VOLT	FLA
1	TYPE I ECP	DCV-1011	UTILITY CABINET LEFT	SHIP LOOSE W/ PREWIRE	1 LIGHT 1 FAN	SMART CONTROLS DCV	EF-3 (TYPE I)	EXHAUST	1	0.500	208	3.8



**REVISIONS**

NO.	DESCRIPTION	DATE

**CAPTIVE**

Tulsa Office  
www.captiveire.com  
www.captiveire.com  
www.captiveire.com

12101 East 51st Street, Suite 101A, Tulsa, OK, 74146 PHONE: (918) 258-0281 FAX: 9182275947 EMAIL: reg@captivair.com

**H & B ENGINEERS**

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Iowa Certificate of Authority #354056

**QuikTrip No. 0560**

2300 MARTIN LUTHER KING JR PARKWAY  
DES MOINES, IOWA

**QT**

PROTOTYPE Fryer  
DIVISION Des Moines  
VERSION 4000  
DATE 06-18-2025

REV	DATE	DESCRIPTION

QT - Fryer Addition Remodel Pkg Going Forward (DW) (450F)

Various Locations,  
Tulsa, OK, 74136

DATE: 4/29/2025  
DWG.#: 7284466

DRAWN BY: RJH-80  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

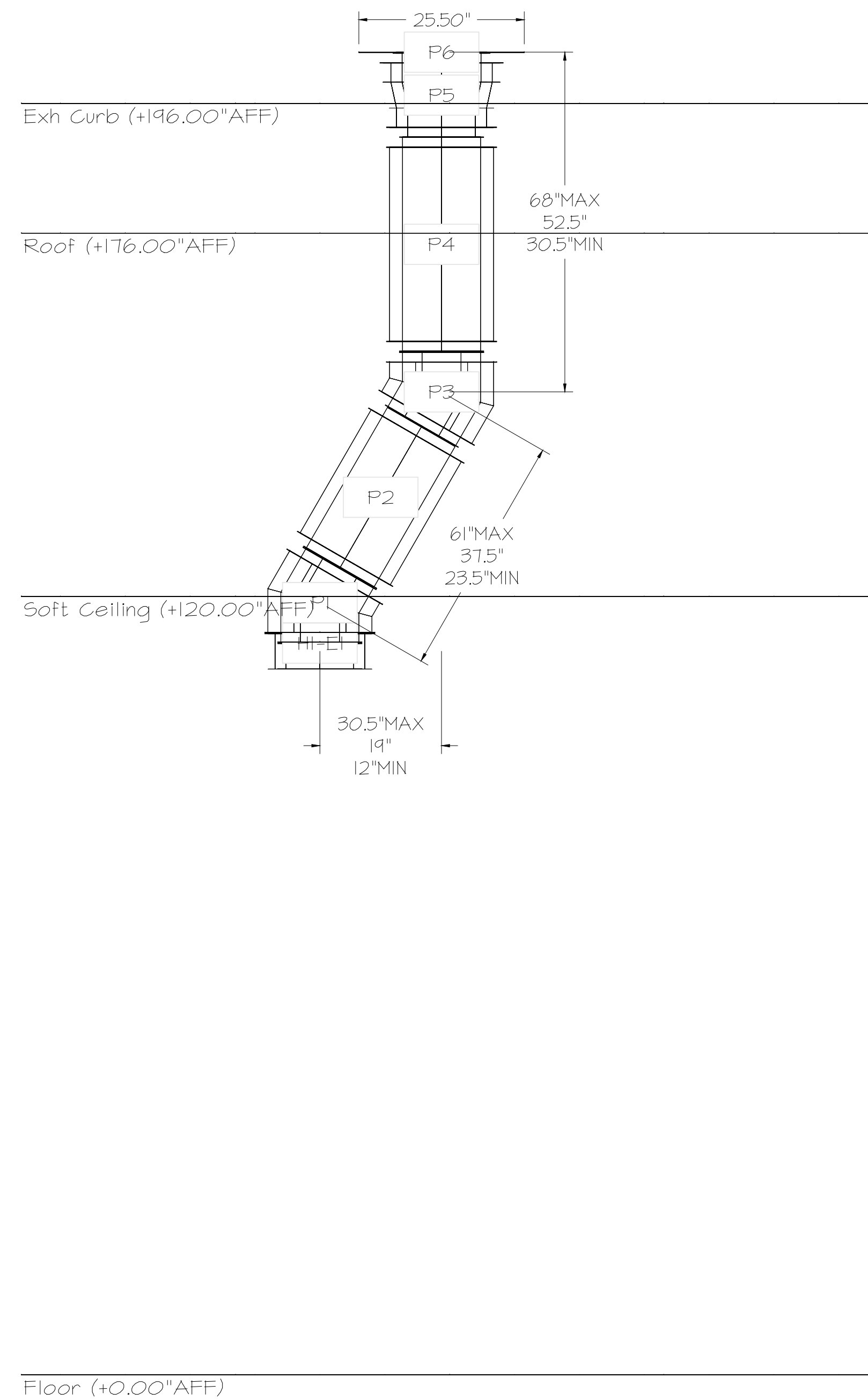
SHEET NO. 3

SHEET TITLE:  
MECHANICAL HOOD  
DETAILS

SHEET NUMBER:  
M512



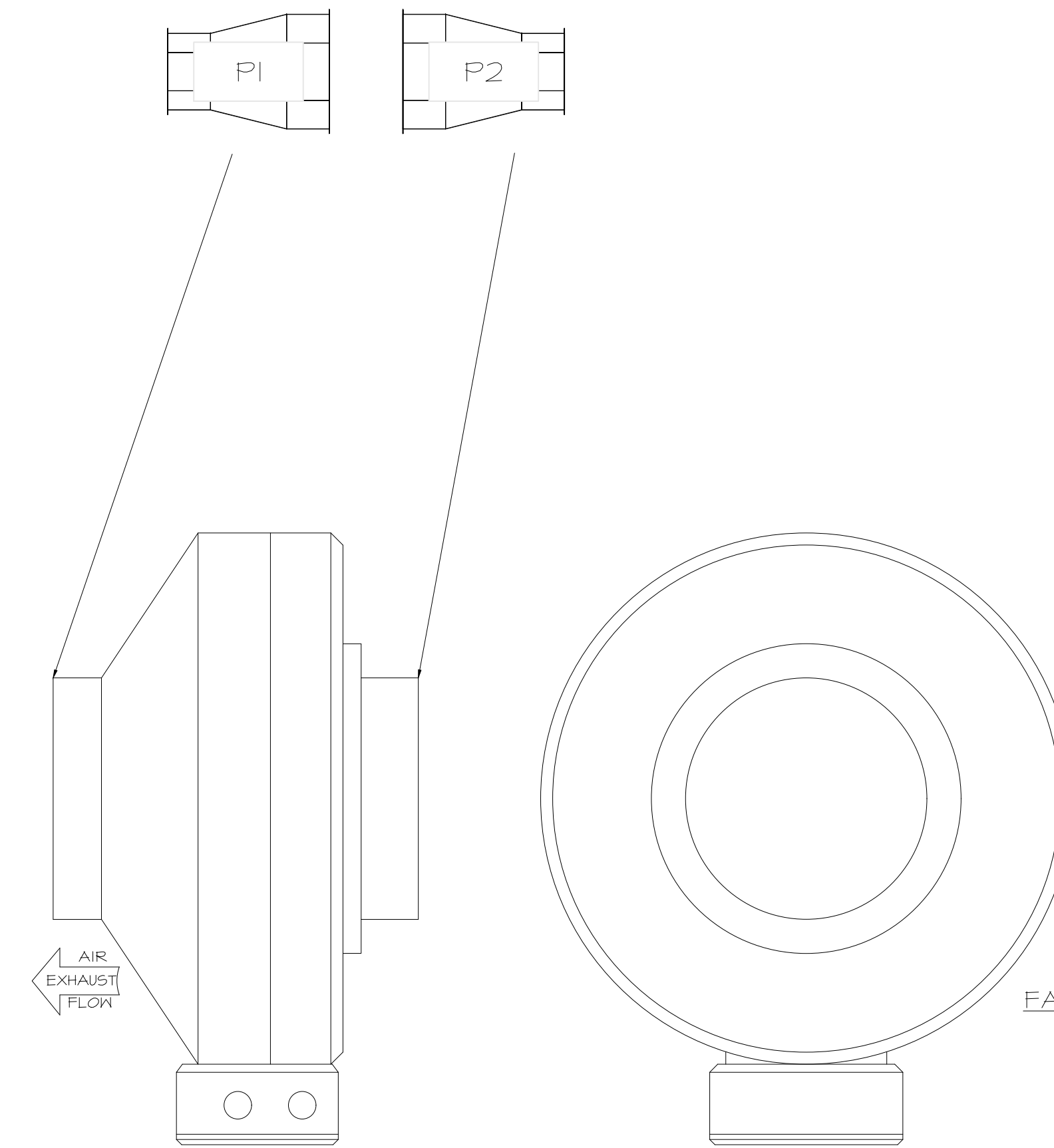
DUCTWORK #1 SIDE VIEW  
OFFSET



DUCTWORK #2 PARTS - JOB#7284466

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW08I2ADPIT						6.74		1	SINGLE WALL DUCT ADAPTER, 8" DUCT DIA TO 12" DUCT DIA, ASSEMBLY - 430 STAINLESS STEEL.
P2	DW08I2ADPIT						6.74		1	SINGLE WALL DUCT ADAPTER, 8" DUCT DIA TO 12" DUCT DIA, ASSEMBLY - 430 STAINLESS STEEL.
TOTAL WEIGHT							13.48			

DUCTWORK #2 FRONT VIEW



FAN #4 DFA-300-CA - EXHAUST FAN (VF-1 - CO2 FAN)

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER, SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

REVISIONS	
DESCRIPTION	DATE

**CAPTIVE**  
Tulsa Office  
www.captiveair.com  
12101 East 51st Street, Suite 101A, Tulsa, OK, 74146 PHONE: (918) 258-0251 FAX: 9192275947 EMAIL: reg@captveair.com



SIGNATURE DATE: 10/10/2025

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DES MOINES, IOWA

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PROTOTYPE	Fryer
DIVISION	Des Moines
VERSION	4000
DATE	06-18-2025

QT - Fryer Addition Remodel Pkg Going Forward (DW) (450F)  
Various Locations,  
Tulsa, OK, 74136

DATE: 4/29/2025

DWG.#:  
7284466

DRAWN BY: R-JH-80

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

MASTER DRAWING

SHEET NO.  
5

REV	DATE	DESCRIPTION

SHEET TITLE:  
MECHANICAL HOOD  
DETAILS

SHEET NUMBER:  
M514

