

SIGNATURE DATE: 01/23/2026

H & B
HOSS & BROWN ENGINEERS
 15902 Midland Drive
 Shawnee, Kansas 66217
 913.262.9090 | mail@h-b.com
 © Hoss & Brown Engineers 2026

QuikTrip No. 0739
 4330 CHAMBLEE TUCKER ROAD
 TUCKER, GEORGIA



© QUIKTRIP CORPORATION 2025
 ALL RIGHTS RESERVED. REPRODUCTION, PUBLICITY, DISTRIBUTION OR SALE IN WHOLE OR IN PART, IS STRICTLY PROHIBITED.

PROTOTYPE	Fryer
DIVISION	Atlanta
VERSION	4600
DATE	03-18-2022

REV	DATE	DESCRIPTION

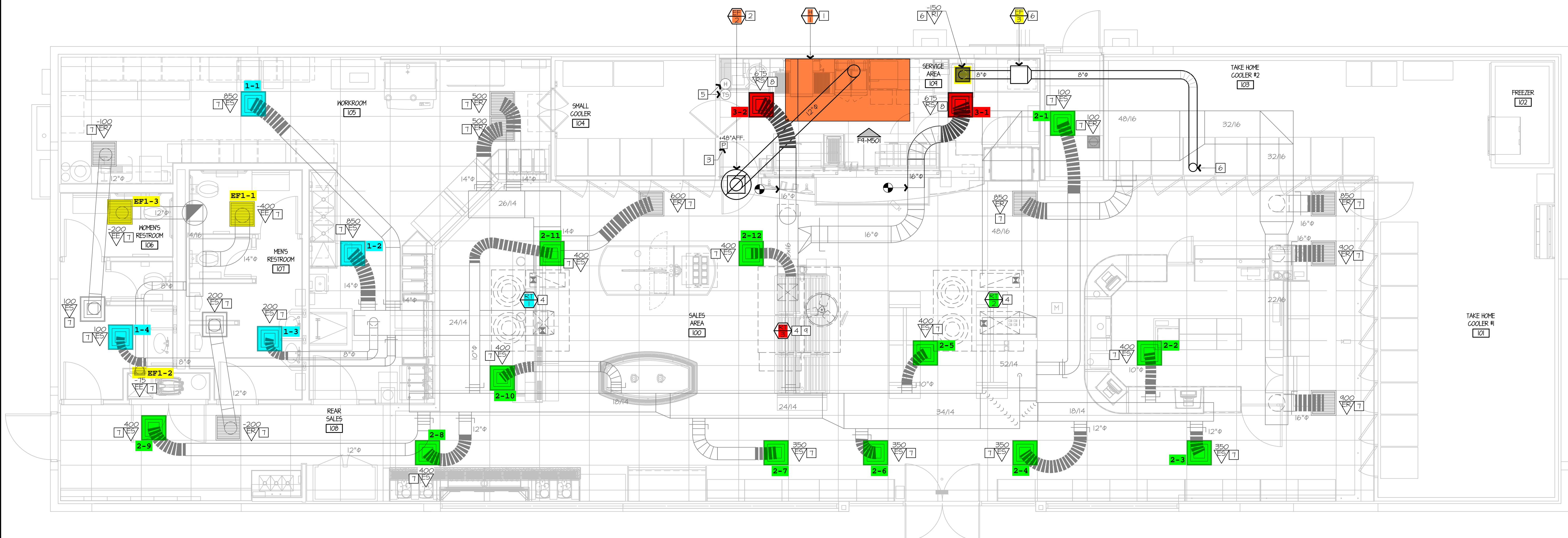
ORIGINAL ISSUE DATE: 01/23/2026

SHEET TITLE:
 MECHANICAL
 DUCTWORK
 CEILING PLAN - DEMO

SHEET NUMBER:
M101

- 1 REMOVE KITCHEN HOOD SYSTEM AND ALL ASSOCIATED GREASE DUCT BETWEEN HOOD AND EXHAUST FAN ON ROOF, RE: M102.
- 2 REMOVE ROOF-MOUNTED EXHAUST FAN AND ALL ASSOCIATED DUCT WORK, RE: M102.
- 3 EXISTING TEMPERATURE SENSOR AND HUMIDITY SENSOR FOR ROOFTOP UNIT SERVING KITCHEN SHALL REMAIN; SHOWN FOR REFERENCE.
- 4 EXISTING ROOF EQUIPMENT SHALL REMAIN; SHOWN FOR REFERENCE.
- 5 REMOVE DIFFUSER AND ASSOCIATED FLEX DUCT BACK TO LOCATION SHOWN AND RETAIN FOR RELOCATION, RE: M102.

BUILDING CODES:
 2024 INTERNATIONAL MECHANICAL CODE WITH GEORGIA AMENDMENTS



AIRFLOW CFMS SHOWN ON PLAN AND SCHEDULES ARE RECOMMENDATIONS BASED ON RECORDS FROM EXISTING DRAWINGS. RE-BALANCE AS REQUIRED ACCORDING TO EXISTING EQUIPMENT ON SITE AND PROVIDE TEST & BALANCE REPORT TO ENGINEER OF RECORD UPON COMPLETION FOR REVIEW AND COORDINATION.

- 1 INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM, FIRE SUPPRESSION SYSTEM, GREASE DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM. INSTALL HOOD CONTROL PANEL, TEMPERATURE SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD UTILITY CABINET ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 2 INSTALL NEW OWNER-FURNISHED ROOF-MOUNTED EXHAUST FAN. MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN ROOF TERMINATION AND ANY NEARBY RTU INTAKE OR ROOF EDGE. INSTALL 12" GREASE DUCT TO ROOF-MOUNTED FAN. EXTEND HOOD COLLAR. BALANCE TO AIRFLOW RATE SCHEDULED ON M601. COORDINATE WITH ELECTRICAL CONTRACTOR FOR FAN CONTROLS BETWEEN HOOD AND FAN. RE: QT INSTALL DRAWINGS AND HOOD MANUFACTURER'S INSTRUCTIONS.
- 3 INSTALL NEW OWNER-FURNISHED HOOD SUPPRESSION PUSH STATION PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 4 EXISTING ROOF EQUIPMENT SHALL REMAIN, SHOWN FOR REFERENCE. RE: 61-M601 TO RE-BALANCE AIRFLOWS AS REQUIRED.
- 5 EXISTING TEMPERATURE SENSOR AND HUMIDITY SENSOR FOR ROOFTOP UNIT SERVING KITCHEN SHALL REMAIN, SHOWN FOR REFERENCE.
- 6 PROVIDE EXHAUST GRILLE & IN-LINE EXHAUST FAN ABOVE CEILING. PROVIDE ROUND DUCT ABOVE CEILING TO EXHAUST GRILLE IN CEILING AND TO NEW ROOF TERMINATION PER DETAIL K5-M501. MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN ROOF TERMINATION AND ANY NEARBY RTU INTAKE OR ROOF EDGE. RE: 61-M601.
- 7 RE-BALANCE EXISTING DIFFUSER/GRILLE TO AIRFLOW SHOWN ON PLAN. RE: M601.
- 8 RELOCATE DIFFUSER/GRILLE RETAINED DURING DEMOLITION AND MODIFY DUCTWORK AS SHOWN. FIELD VERIFY DIFFUSER TYPE. PROVIDE TITUS PAR TYPE DIFFUSER IF NOT CURRENTLY PROVIDED.
- 9 INTERLOCK RTU VIA RELAY TO NEW HOOD CONTROL PANEL. EXISTING RTU SHALL SHUT DOWN UPON ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM.



SIGNATURE DATE: 01/23/2026

H & B
HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-b.com
© Hoss & Brown Engineers 2026

QuikTrip No. 0739
4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA



PROTOTYPE	Fryer
DIVISION	Atlanta
VERSION	4600
DATE	03-18-2022

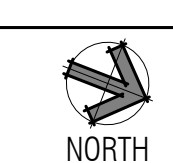
REV	DATE	DESCRIPTION

SHEET TITLE:
MECHANICAL DUCTWORK CEILING PLAN - NEW

SHEET NUMBER:
M102

A1

MECHANICAL DUCTWORK CEILING PLAN - NEW



A13

PLAN NOTES

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

EXHAUST PLENUM

WIDTH	LENGTH	HEIGHT	DIA	CFM	VEL	SP
4"	12"	1350	1718	-0.540"		

HOOD CONFIG

HOOD CONSTRUCTION	END TO END	ROW
430 95 WHERE EXPOSED	ALONE	ALONE

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

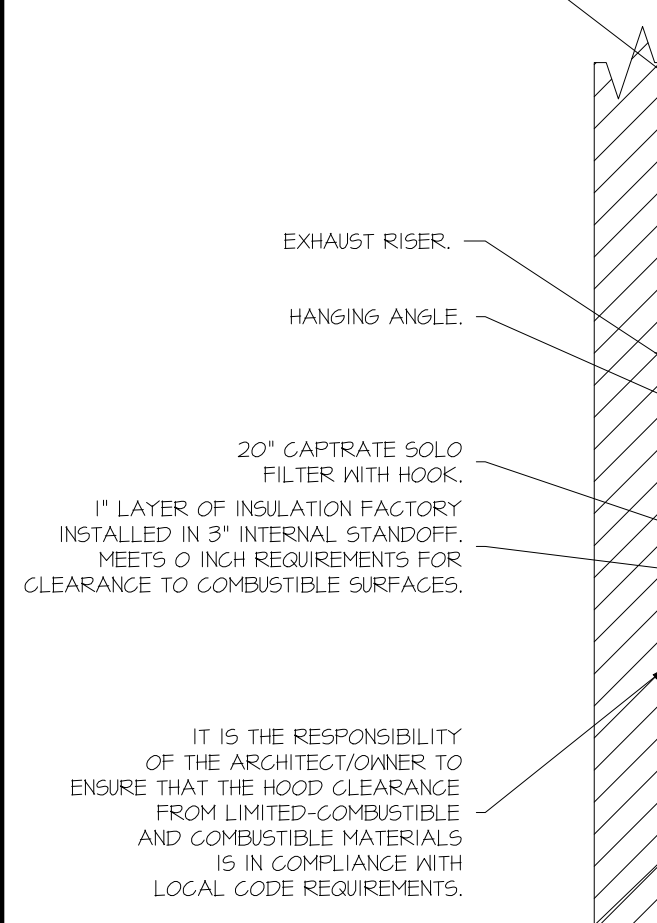
HOOD INFORMATION

HOOD NO	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	AVERAGE FOOT CANDLES @ 36" AFF	LOCATION	SIZE	TYPE	SIZE	MODEL #	SWITCHES	QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1		CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	6	RECESSED ROUND	NO	66	LEFT	12"x60"x30"	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.

*6" CLEARANCE ABOVE HOOD REQUIRED FOR FIRE SYSTEM PIPING.



RECESSED ROUND LED FIXTURE AND LED LIGHT, 3500 K WARM OUTPUT.

*24" CLEARANCE ABOVE HOOD RECOMMENDED FOR SERVICEABILITY.

1" LAYER OF INSULATION FACTORY INSTALLED ON TOP OF HOOD, MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.

FIELD WRAPPER 11.00" HIGH (SEE HOOD OPTIONS TABLE).

20" CAPTRATE SOLO FILTER WITH HOOK.

1" LAYER OF INSULATION FACTORY INSTALLED IN 3" INTERNAL STANDOFF, MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.

IT IS THE RESPONSIBILITY OF THE ARCHITECT/OWNER TO ENSURE THAT THE HOOD CLEARANCE FROM LIMITED-COMBUSTIBLE AND COMBUSTIBLE MATERIALS IS IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS.

GREASE DRAIN WITH REMOVABLE CUP.

EQUIPMENT BY OTHERS.

48.0" MAX.

80"

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

1" LAYER OF INSULATION FACTORY INSTALLED IN INTERNAL BACK STANDOFF, MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.

FACTORY WIRED DUCT MOUNTED FIRE STAT

FACTORY WIRED

UL LISTED RECESSED ROUND LED FIXTURE AND LED LIGHT.

FACTORY WIRED & POWERED BY HOOD CONTROL BOARD

UTILITY CABINET.

HOOD CONTROL PACKAGE INTERFACE WITH LED SCREEN

LEAVE LOOSE IN CABINET FOR QT-FS

ROOM TEMPERATURE SENSOR

Provides room override based on temperature differential between the room and duct. Installed by electrician on a wall, 5'-6" off the finished floor, in the space but not directly under the hood or close to an appliance (including the electrical control box) or near HVAC register so that the reading is accurate for space.

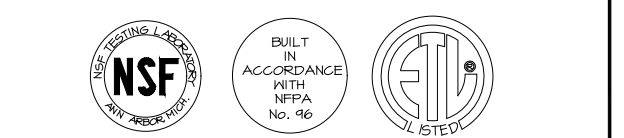
12"

9" 0.00"/M @ 9" 0.00"/OD.

10'-1.00" OVERALL LENGTH

PLAN VIEW - HOOD #1 9' 0.00" LONG 6030ND-2

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH



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

HOOD CORNER HANGING ANGLE (HARDWARE BY INSTALLER)

HOOD CORNER HANGING ANGLE (WEIGHT BEARING ANCHOR POINT FOR HOOD)

SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.5 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS.

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 UL710 STANDARD.

HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.

FACTORY PIPING EXTENDS A MAXIMUM OF 6' ABOVE THE TOP OF THE HOOD.



NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (47.25")

LEGEND - FIRE CABINET TANK SYSTEM

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

1 4 GALLON TANK.

2 PRIMARY ACTUATOR RELEASE.

3 SECONDARY ACTUATOR RELEASE.

4 PRESSURE SUPERVISION SWITCH.

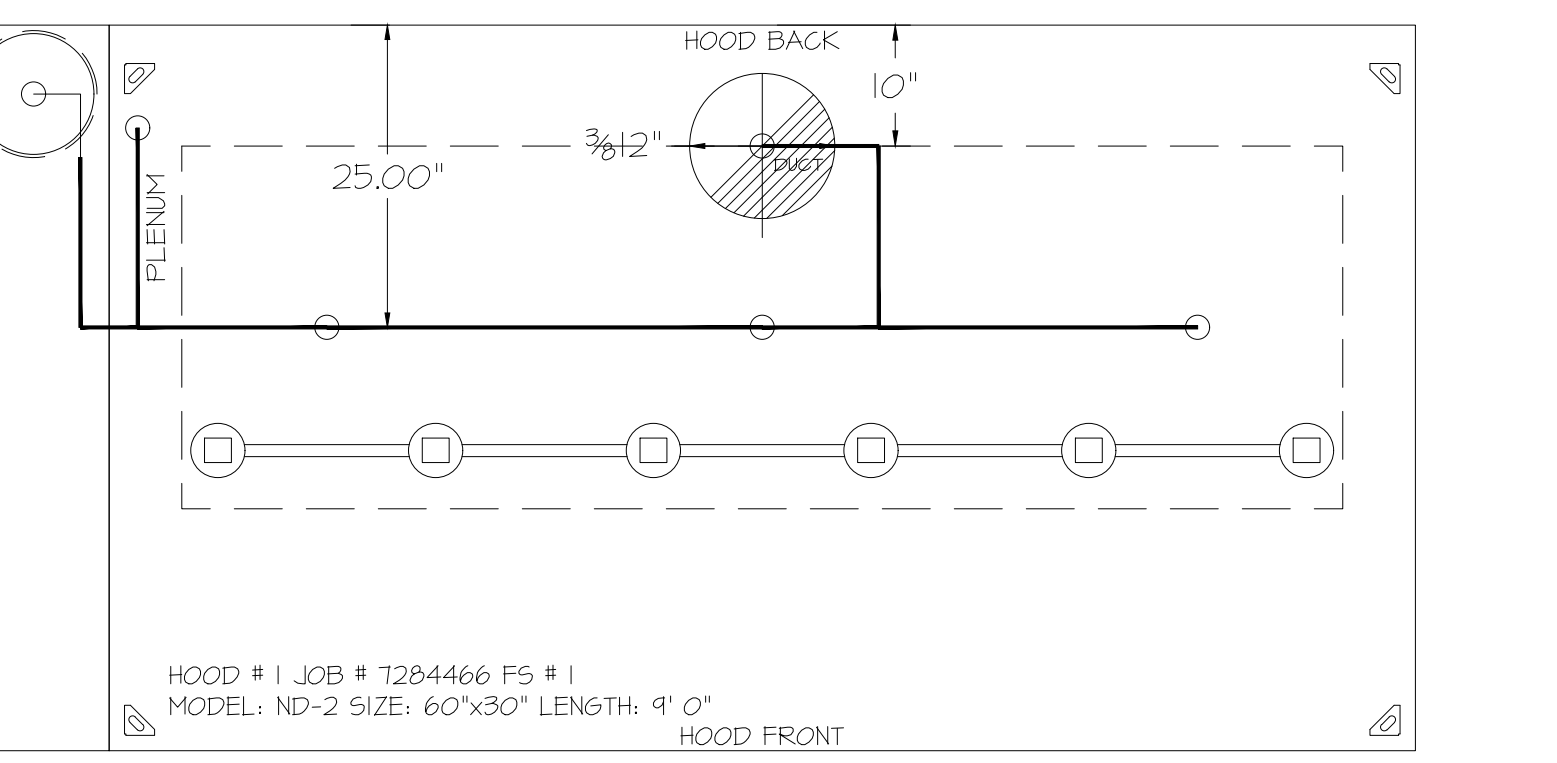
5 PRIMARY HOSE ASSEMBLY.

6 SECONDARY HOSE ASSEMBLY.

7 REMOTE MANUAL ACTUATION DEVICE.

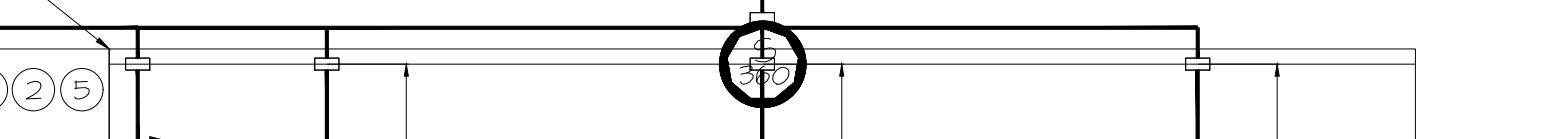
FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
0	0	TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
0	0	TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
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	0	32-00002 QUIK SEAL - 1/2" (UL)	1	0
0	0	442K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
0	0	78525 1/2" 40 PRO-PRESS ELBOW WITH 1/2" ANPT FEMALE CONNECTION, VIEGA.	1	0
0	0	78680 1/2" X 1/2" PRO-PRESS TEE X 1/2" ANPT FEMALE CONNECTION, VIEGA.	1	0
0	0	81-30001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	1	0
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	0	81-30003-001 DIN CONNECTOR, GANFIELD PART #5,560-201-EU0A, TANK FIRE SUPPRESSION, SUBMERSIBLE SOLENOID CONNECTION (SEE VENDOR 30371).	1	0
0	0	81-30003-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	4	0
0	0	4055459C PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	4	0
0	0	401200C PRO PRESS PC611 1/2 PRESS TEE LD.	4	0
0	0	48644A15 HARDWARE, DATANLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	2	0
0	0	A0024593 JUNCTION BOX FOR MANUAL PULL STATION, 1.5" DEEP BACK BOX, RED COLOR.	1	0
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	0	B145 3/8" BLACK IRON 90 ELL.	2	0
0	0	DATANLOCK DISCHARGE ADAPTER, TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
0	0	TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	3	0
0	0	TANK BRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
0	0	283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	1	0
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	05A-3/8 QUIK SEAL - 3/8" (UL)	5	0
34	34	A003481P PAVING SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT, RED COLOR.	1	0



HOOD # 1 JOB # 7284466 FS # 1 MODEL: ND-2 SIZE: 60"x30" LENGTH: 9' 0" HOOD FRONT

NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (47.25")



LEGEND - FIRE CABINET TANK SYSTEM

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

1 4 GALLON TANK.

2 PRIMARY ACTUATOR RELEASE.

3 SECONDARY ACTUATOR RELEASE.

4 PRESSURE SUPERVISION SWITCH.

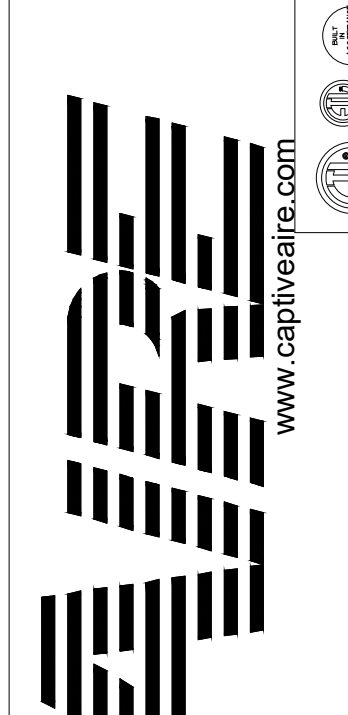
5 PRIMARY HOSE ASSEMBLY.

6 SECONDARY HOSE ASSEMBLY.

7 REMOTE MANUAL ACTUATION DEVICE.

REVISIONS

NO.	DESCRIPTION	DATE



CAPTIVE

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

Various Locations, Tulsa, OK, 74136

DATE: 4/29/2025

DWG.#: 7284466

DRAWN BY: RJB-80

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

MASTER DRAWING

SHEET NO. 1



SIGNATURE DATE: 01/23/2026



QuikTrip No. 0739

4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA



REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 01/23/2026

SHEET TITLE:
MECHANICAL HOOD DETAILS

SHEET NUMBER:
M510

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	79	16.6
2	EF-1 - RR FAN	1	DR33HFA	CAPTIVEAIRE	600	0.500	1304	TEAO-ECM	0.333	0.1530	1	115	4.3	297 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 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							

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

CURB ASSEMBLIES

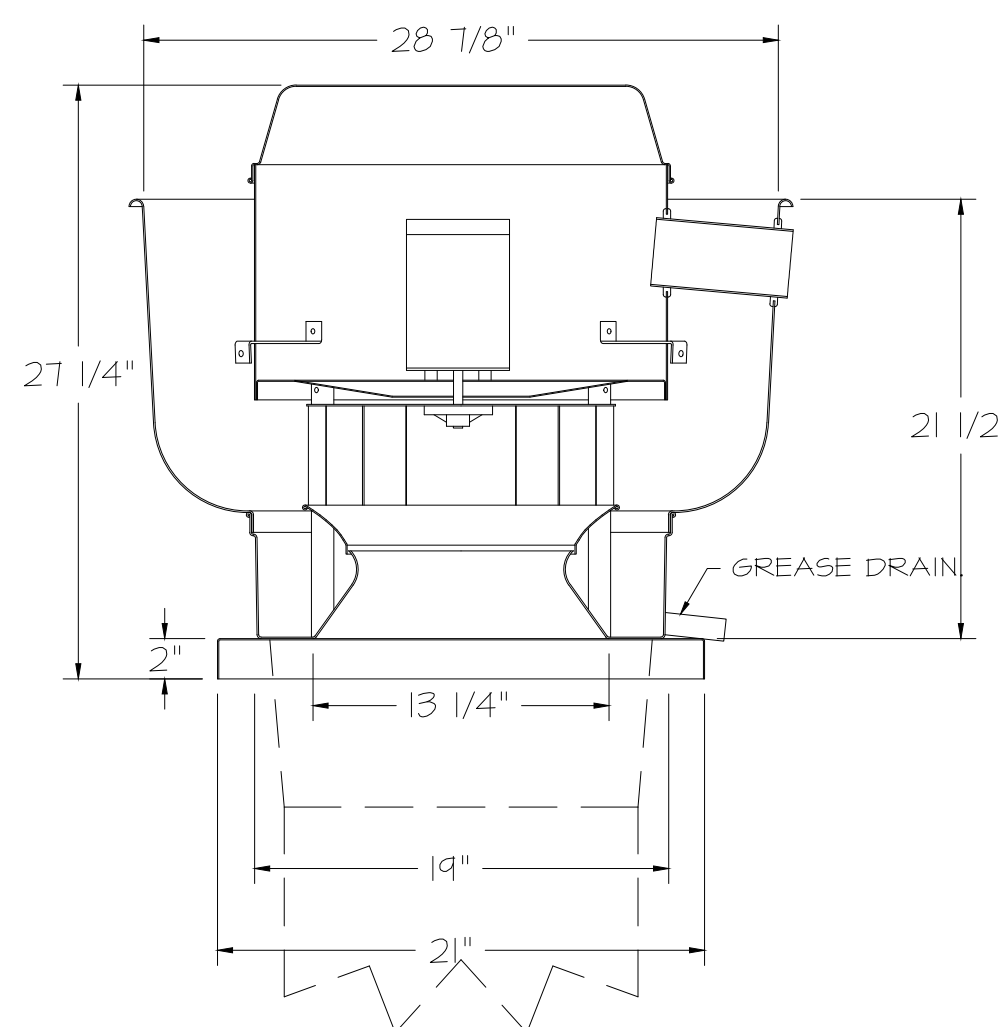
NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-3 (TYPE I)	34 LBS	CURB	19,500"W X 19,500"L X 24,000"H VENTED HINGED.
2	# 2	EF-1 - RR FAN	31 LBS	CURB	19,500"W X 19,500"L X 20,000"H HINGED.

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	12.9	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.

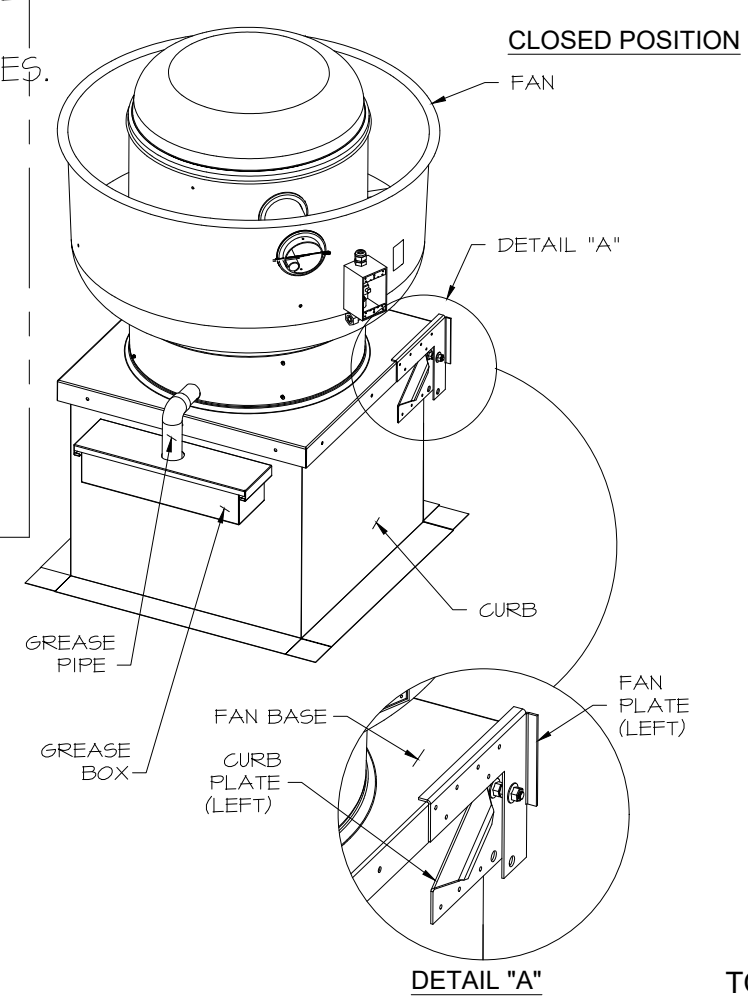
NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DEGRADING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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.

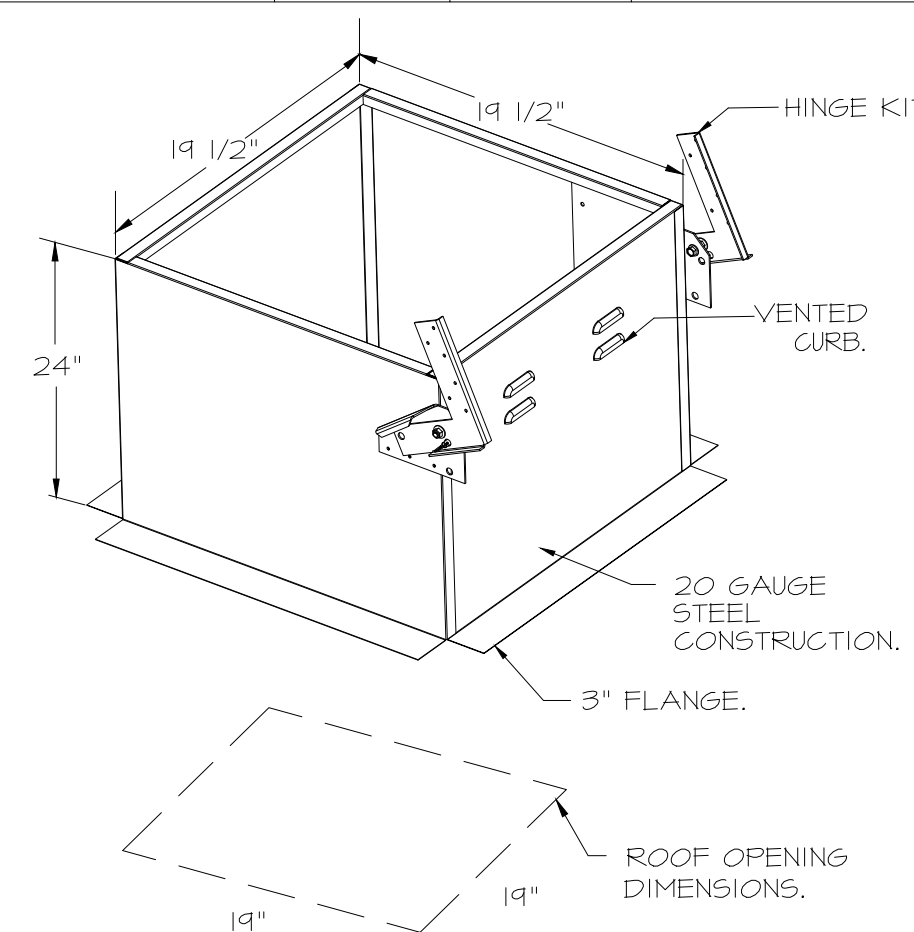
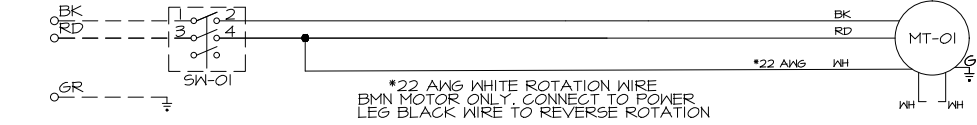
OPTIONS

- 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



J5 FROM ECPM03 TO J7



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

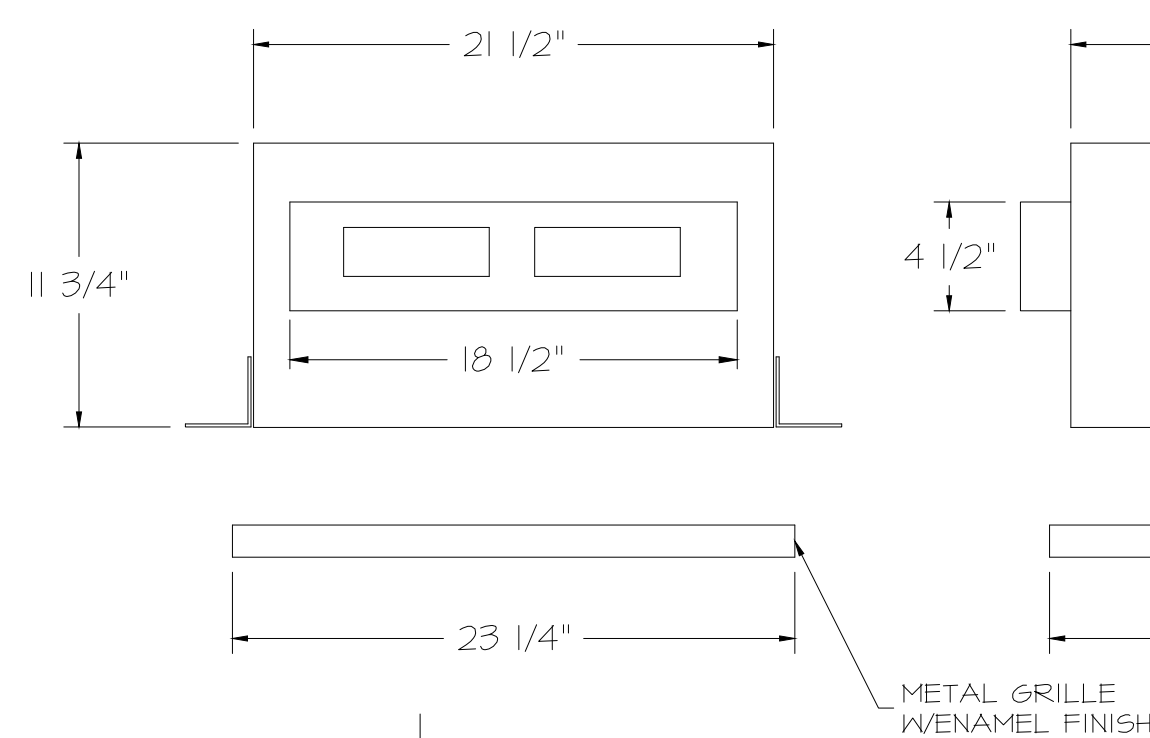
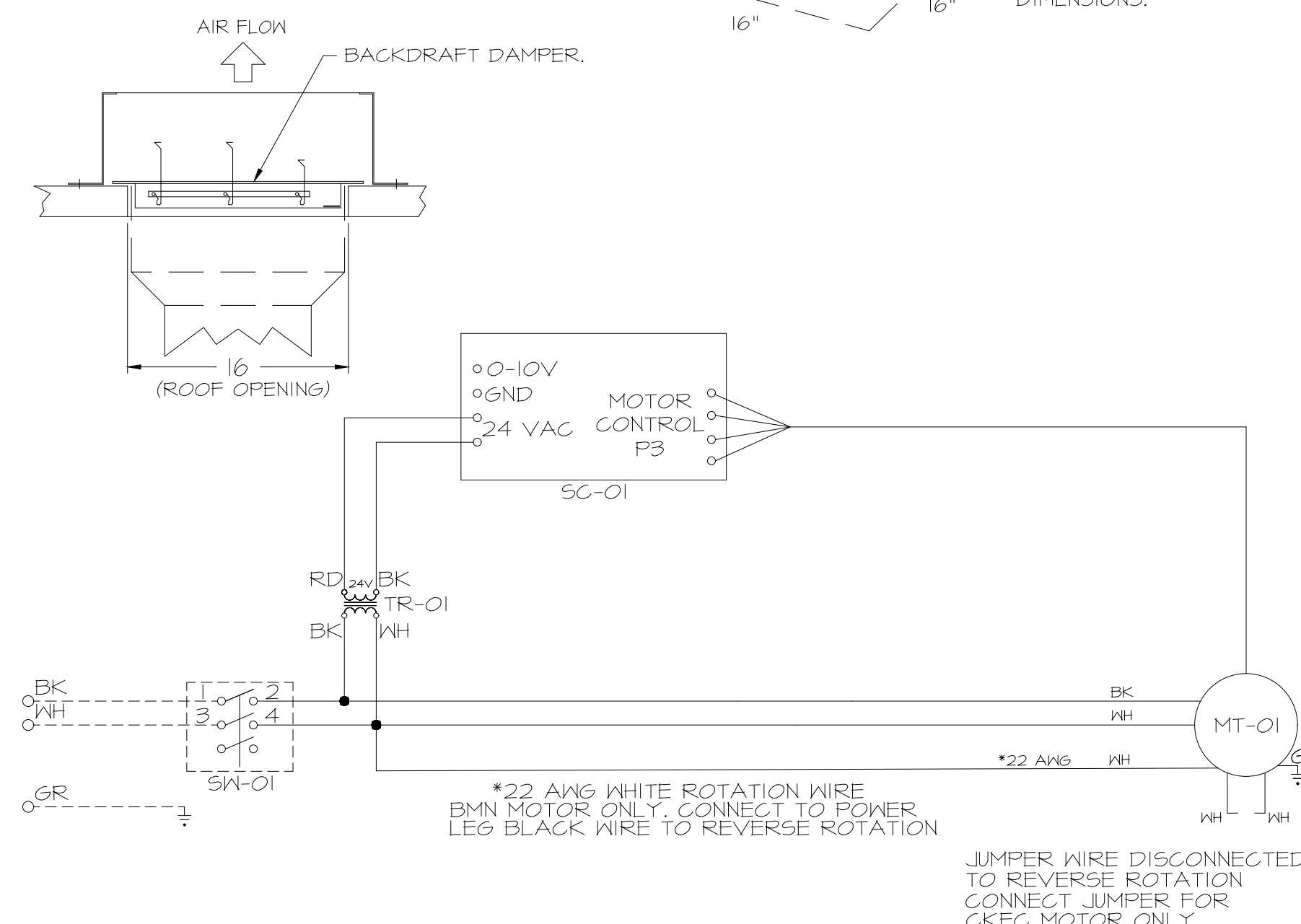
FEATURES:

- 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 4 AIR CERTIFIED.
- UL LISTED.
- CAN BE INSTALLED IN CEILING OR WALL.
- 8 POSITION MOUNTING BRACKETS.

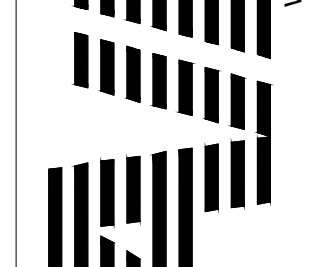
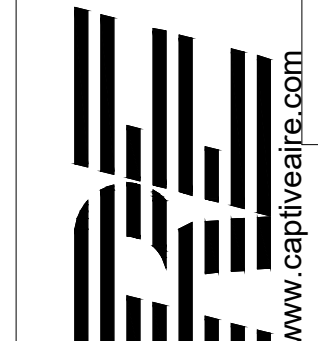
OPTIONS

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

REVISIONS

NO	DESCRIPTION	DATE

SIGNATURE DATE: 01/23/2026



15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@hb-engineers.com
© Hoss & Brown Engineers 2026



Tulsa Office
12101 East 51st Street, Suite 101A, Tulsa, OK, 74114
PHONE: (918) 258-0291 FAX: 918.275.6947 EMAIL: reg@captivaire.com

QuikTrip No. 0739
4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA



PROTOTYPE	Fryer
DIVISION	Atlanta
VERSION	4600
DATE	03-18-2022

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"

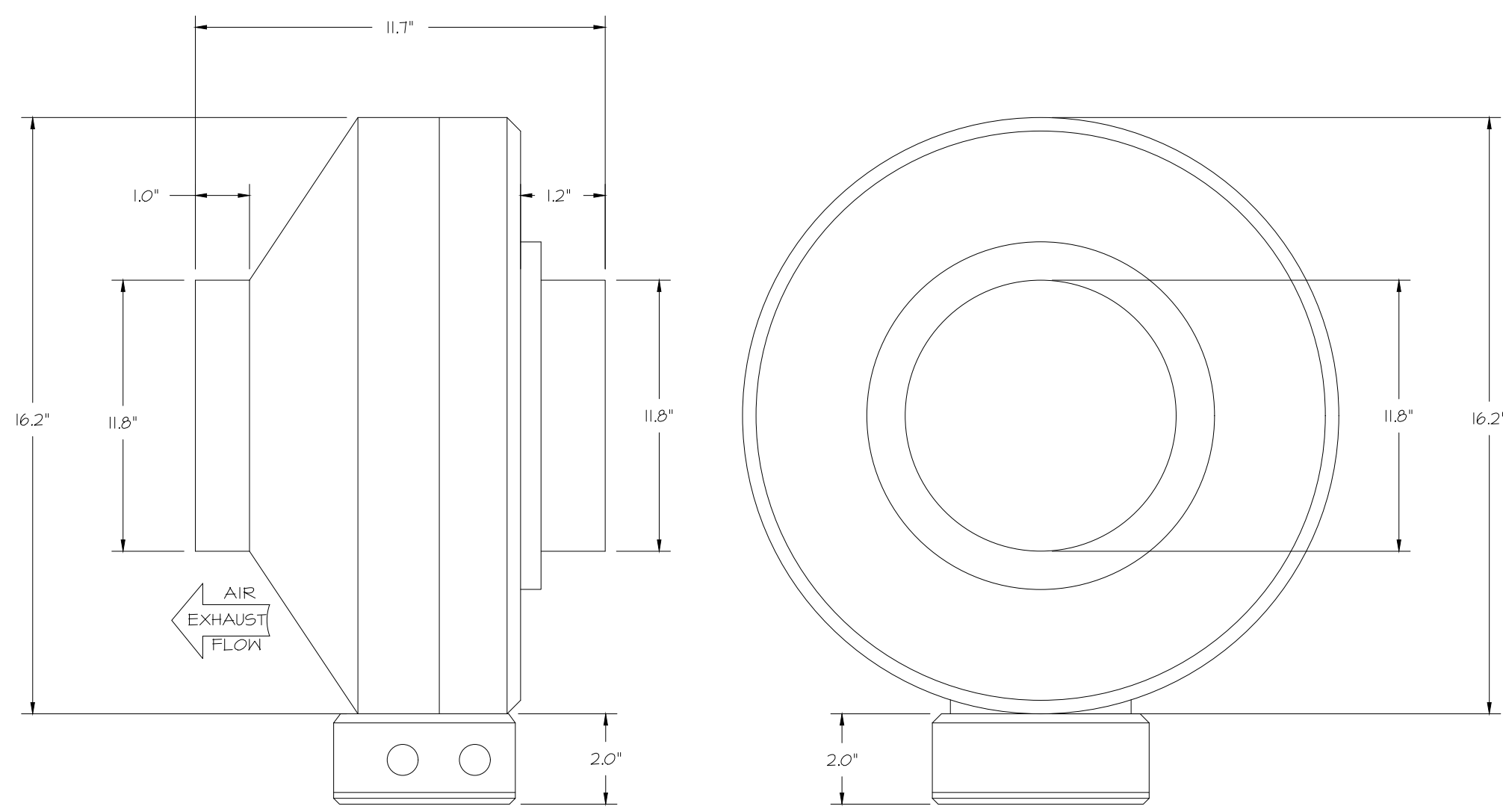
MASTER DRAWING

SHEET NO. 2

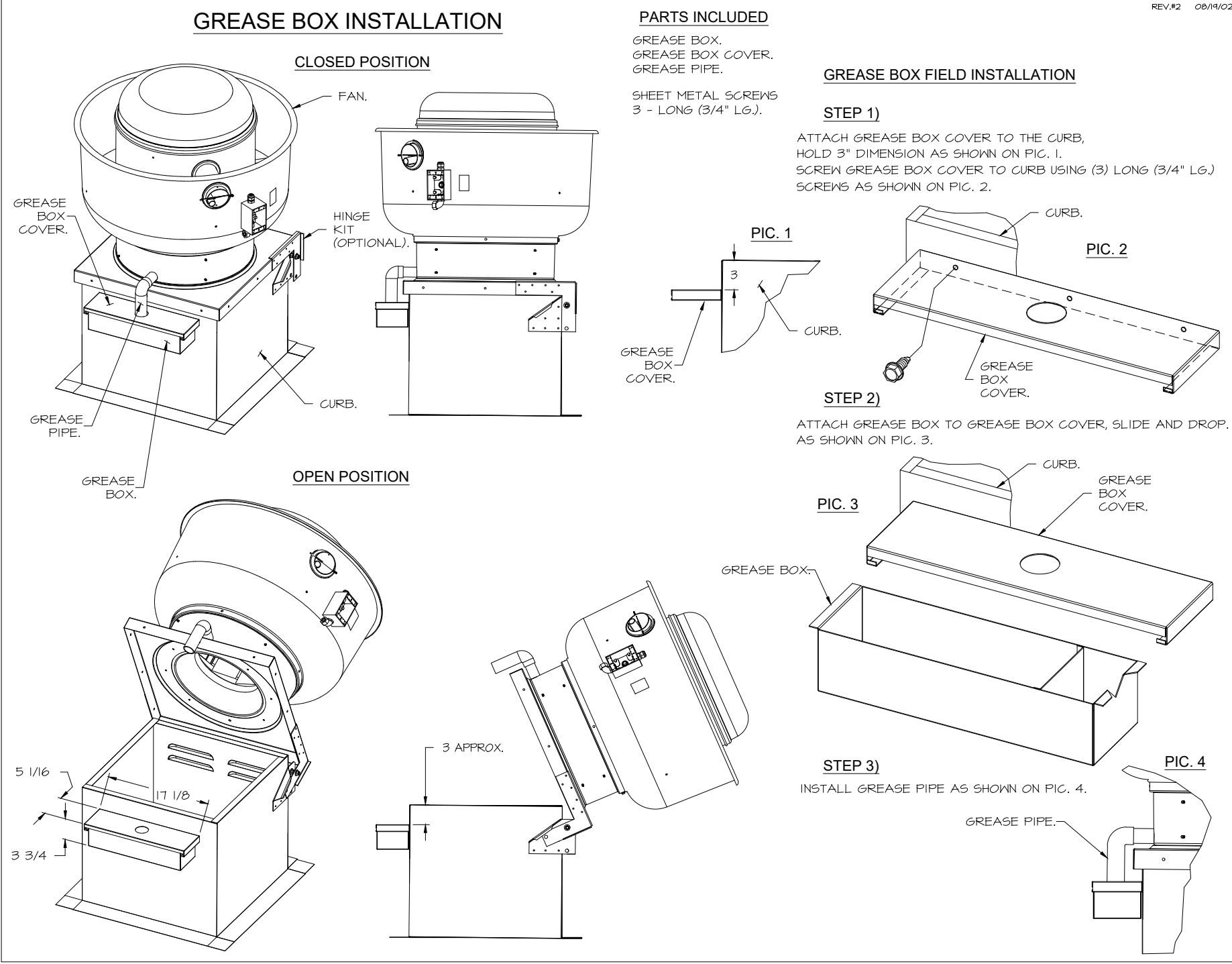
SHEET TITLE:
MECHANICAL HOOD
DETAILS

SHEET NUMBER:
M511

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

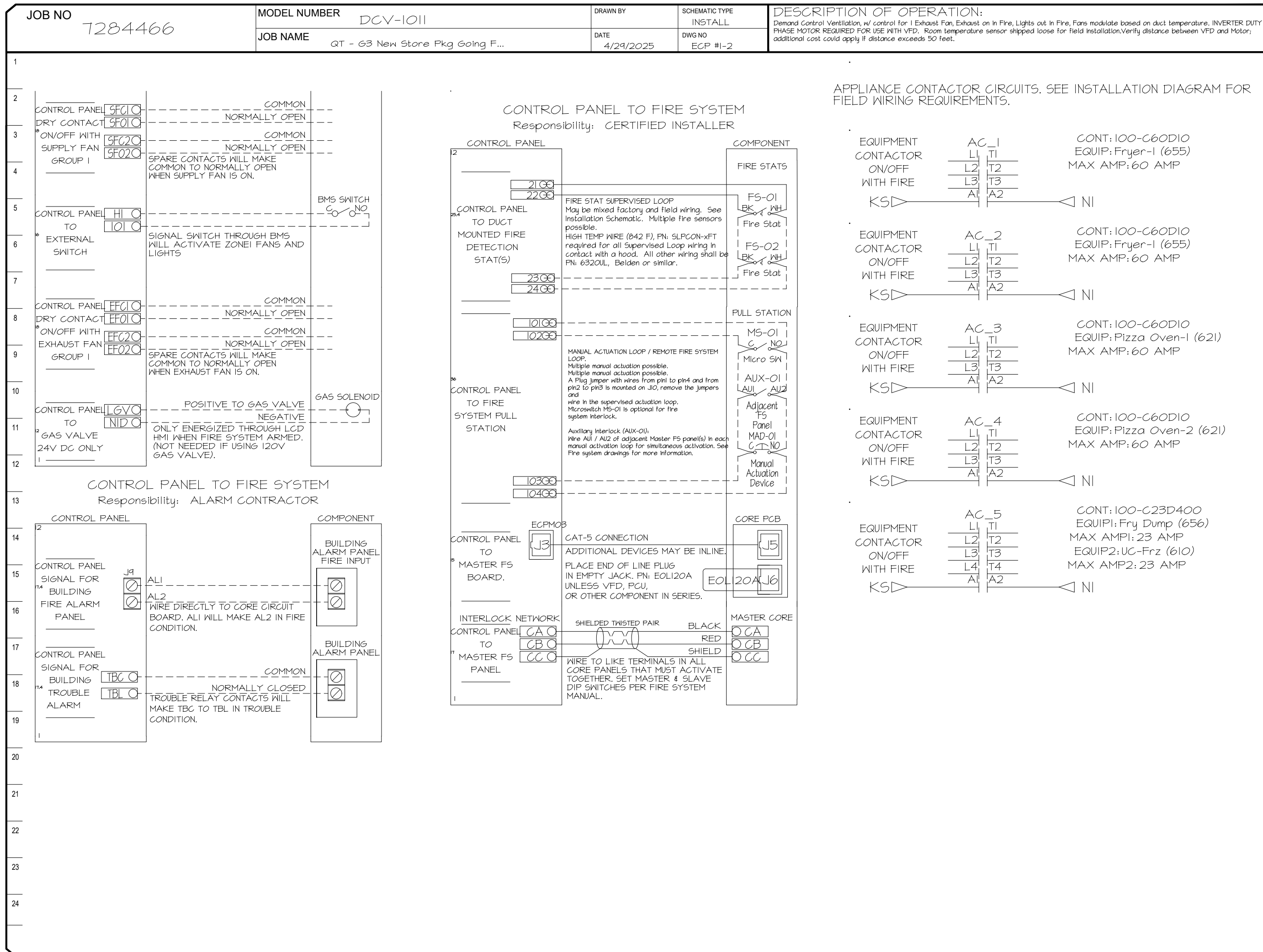
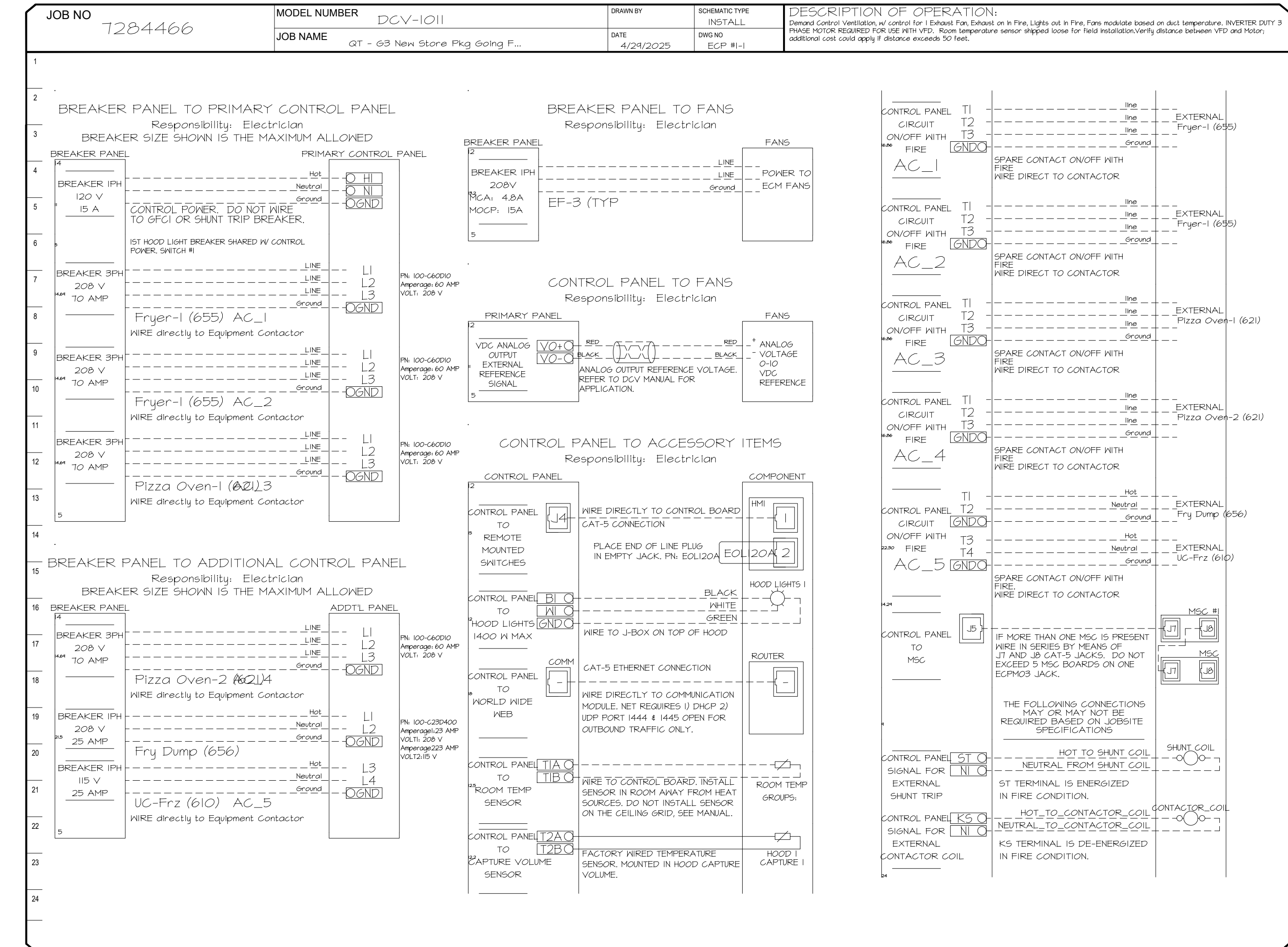


- FEATURES:**
- 20 GA. GALVANIZED STEEL HOUSING.
 - STANDARD 4" - 12" ROUND DUCT CONNECTIONS.
 - EASILY ACCESSIBLE J-BOX.
 - UL507 LISTED.
 - EXTREMELY QUIET OPERATION.
- OPTIONS:**
- FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN.
 - 2 YEAR PARTS WARRANTY.



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.captiveair.com
www.captiveair.com
www.captiveair.com



SIGNATURE DATE: 01/23/2026

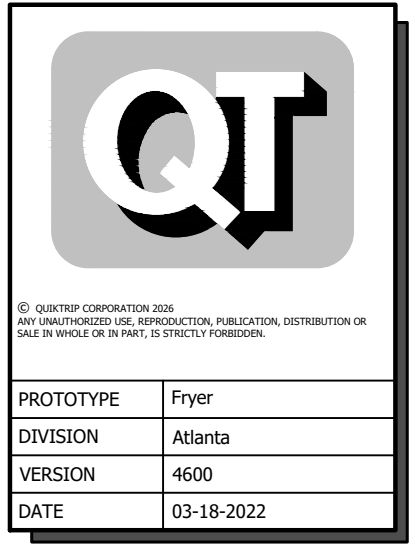
H & B ENGINEERS

HOSS & BROWN

15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-b.com
© Hoss & Brown Engineers 2026

QuikTrip No. 0739

4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA



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: RJB-80
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
3

SHEET TITLE:
MECHANICAL HOOD
DETAILS

SHEET NUMBER:
M512

DUCTWORK #1 PARTS - JOB#7284466 DOUBLE WALL OFFSET

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
HI-EI	DWI6DWRISER-2R-5	1350				-0.54	7.31	0.00	1	DOUBLE WALL RISER COVER - USED ON 12" INNER RISER, 4" LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	DWI230DWASY-2R-5	1350				-0.0387	14.16	1718.87	1	DOUBLE WALL DUCT - 12" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL.
SYSTEM AT P1										
P2	DWI24TDWAJD-2R-5	1350				-0.0128	83.19	1718.87	1	DOUBLE WALL ADJUSTABLE DUCT - 12" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
SYSTEM AT P2										
P3	DWI230DWASY-2R-5	1350				-0.0442	14.16	1718.87	1	DOUBLE WALL DUCT - 12" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL.
SYSTEM AT P3										
P4	DWI24TDWAJD-2R-5	1350				-0.0169	83.19	1718.87	1	DOUBLE WALL ADJUSTABLE DUCT - 12" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
SYSTEM AT P4										
P5	DWI24DWRNDADP2ASY13-2R-5	1350				-0.0122	21.94	1718.87	1	DOUBLE WALL DUCT - 12" X 14" RND2RND ADAPTER - 13" TALL - 2 LAYERS REDUCED CLEARANCE - 16" X 16" STAINLESS STEEL OUTER SHELL. STANDARD ADAPTER.
SYSTEM AT P5										
P6	DW2314TP	1350				-0.6648	8.44	1262.85	1	DUCT TO CURB TRANSITION, 23" CURB TO 14" DUCT, 16 GA ALUMINIZED. USED ON BDUI5, DU75 & 85.
SYSTEM AT P6										
RC1	DWI6DWRISER-2R-5						7.31		1	DOUBLE WALL RISER COVER - USED ON 12" INNER RISER, 4" LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	3M-2000PLUS						0.80		2	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
TOTAL WEIGHT							241.35			

DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26" -36")	10'	20'	20'

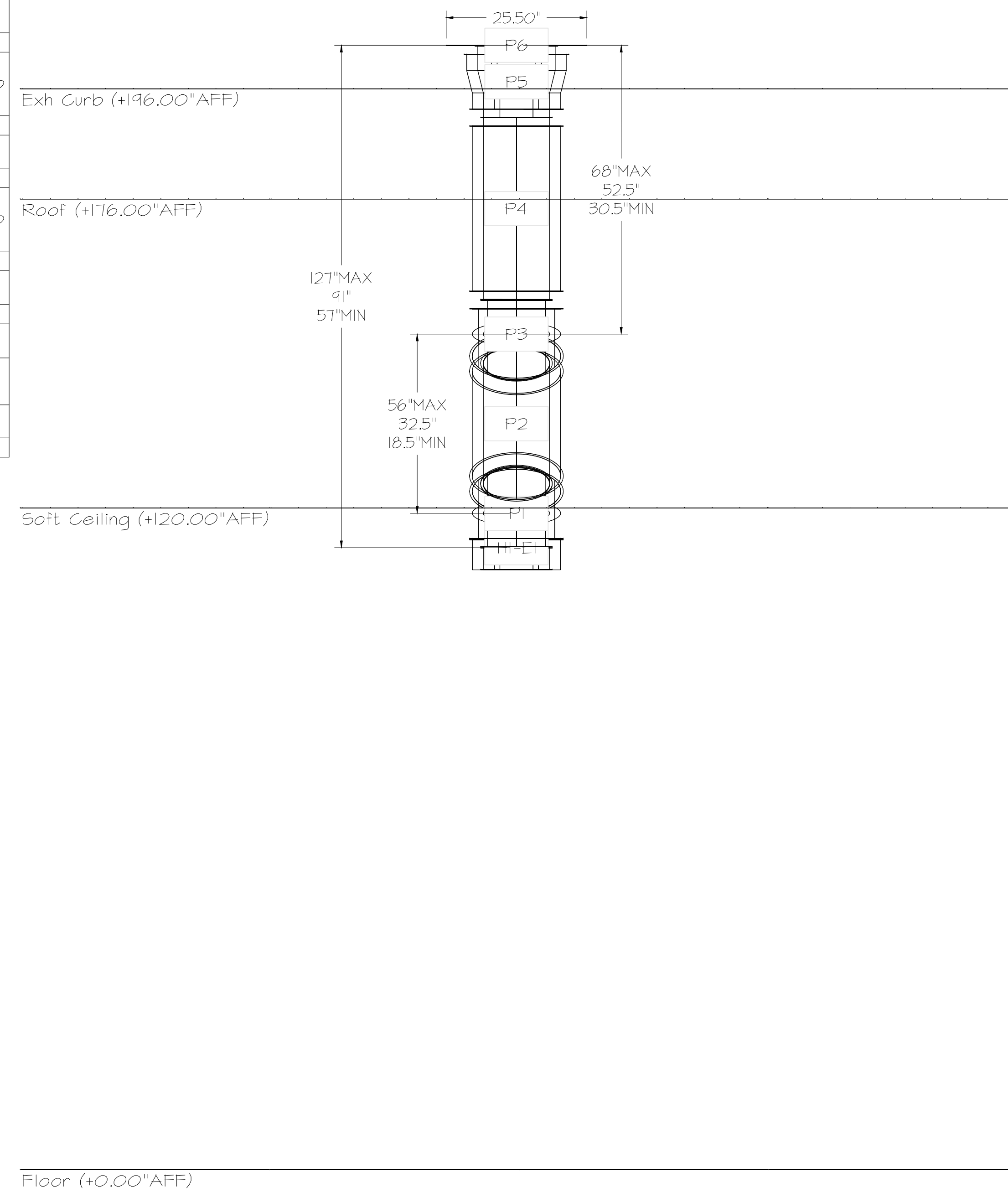
Double Wall Grease Duct Specification

Furnish double 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 and UL-2221 for venting air and grease vapors from commercial cooking operation. Models DW-2R, 3R and 3Z are used for grease duct applications when installed in accordance with these instructions and National Fire Protection Association "NFPA 96"; Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations. Double wall grease ducts are listed for a continuous internal temperature of 500 degrees F and intermittent temperatures of 2000 degrees F. The duct sections shall be constructed of an inner duct wall and an outer wall with insulation in between. The inner duct wall shall be constructed of .036 inch thick, 430 type stainless steel and be available in diameters 8" through 24". The outer wall shall be constructed of stainless steel at a minimum of .024 inch thickness. The duct, based on model number, shall include layers of Super Wool 60T Plus insulation between the inner and outer wall. Grease duct joints shall be held together by means of formed V clamps and sealed with 3M Fire Barrier 2000+. The duct wall assembly shall be tested and listed at 3/4" or zero inch clearance, according to classifications.

Classifications and Clearances

UL 2221: Standard for Fire Resistive Grease Duct Enclosure Assemblies. Chapter 7 of this standard references a test labeled Internal Fire Test. Section 7.1.1 references two installation conditions, Condition A and Condition B. Condition A represents all installation condition except for installation within non-ventilated combustible enclosures. Condition B represents installation within a non-ventilated combustible enclosure. Model DW-2R is classified under UL2221 (Test of Fire Resistive Duct Enclosure Assemblies) as an alternate to 2-Hr. Fire resistive shaft enclosures with a reduced clearance to combustibles (sizes 8" to 16" diameter). Model 2R is listed in accordance with the requirements for duct enclosure Condition B.

DUCTWORK #1 FRONT VIEW OFFSET



Floor (+0.00\"AFF)

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

REVISIONS	
DESCRIPTION	DATE

CAPTIVEAIRE

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



SIGNATURE DATE: 01/23/2026

H & B
HOSS & BROWN ENGINEERS

15902 Midland Drive
Shawnee, Kansas 66217
913.362.9000 | m.hoss@hb-engineers.com
© Hoss & Brown Engineers 2026

QuikTrip No. 0739

4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA

QT	
© QUIKTRIP CORPORATION 2018. ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION, DISTRIBUTION OR SALE OF THIS DOCUMENT IS STRICTLY PROHIBITED.	
PROTOTYPE	Fryer
DIVISION	Atlanta
VERSION	4600
DATE	03-18-2022

REV	DATE	DESCRIPTION

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

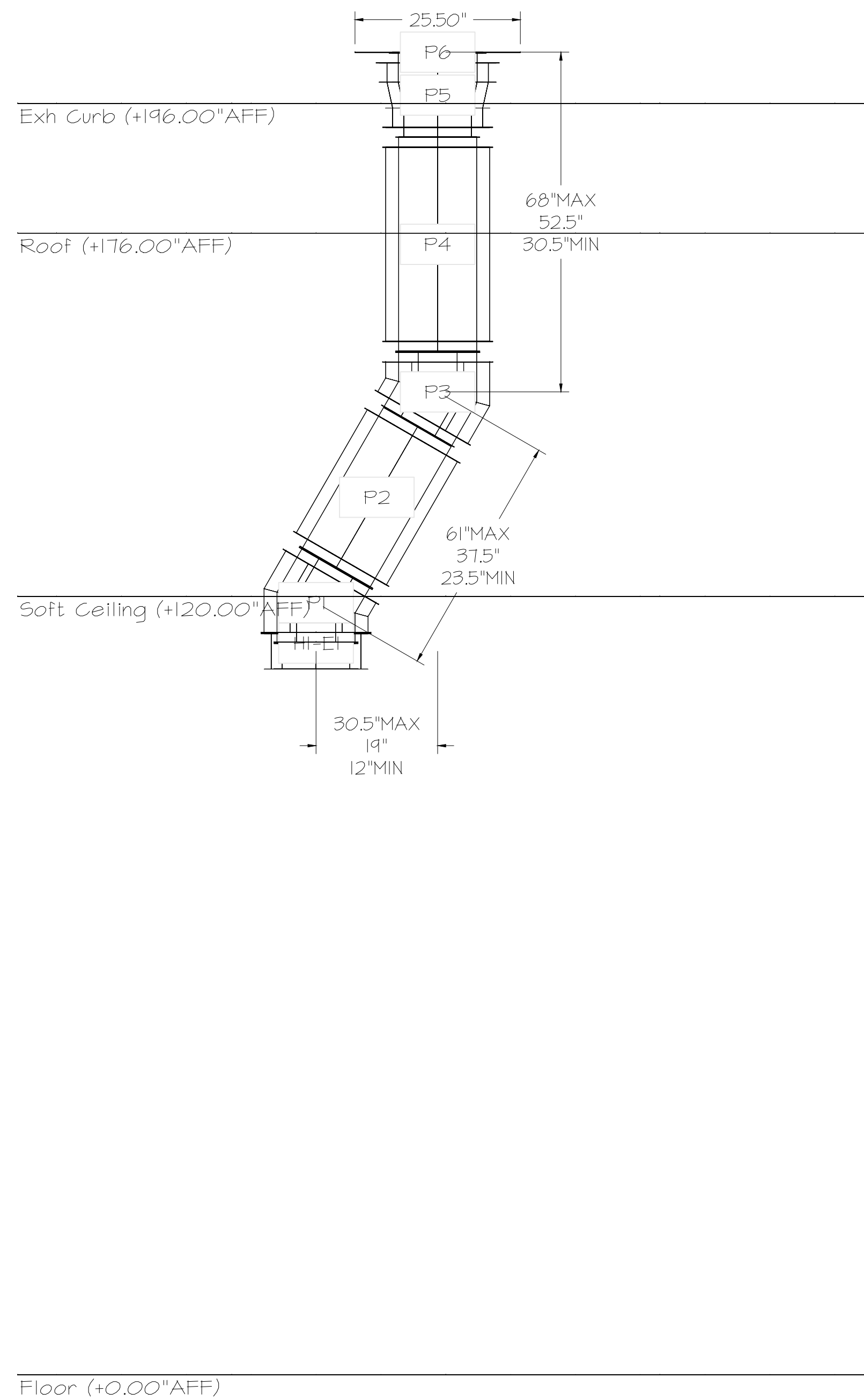
DATE: 4/29/2025
DWG.#: 7284466
DRAWN BY: RJH-80
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
4

SHEET TITLE:
**MECHANICAL HOOD
DETAILS**

SHEET NUMBER:
M513

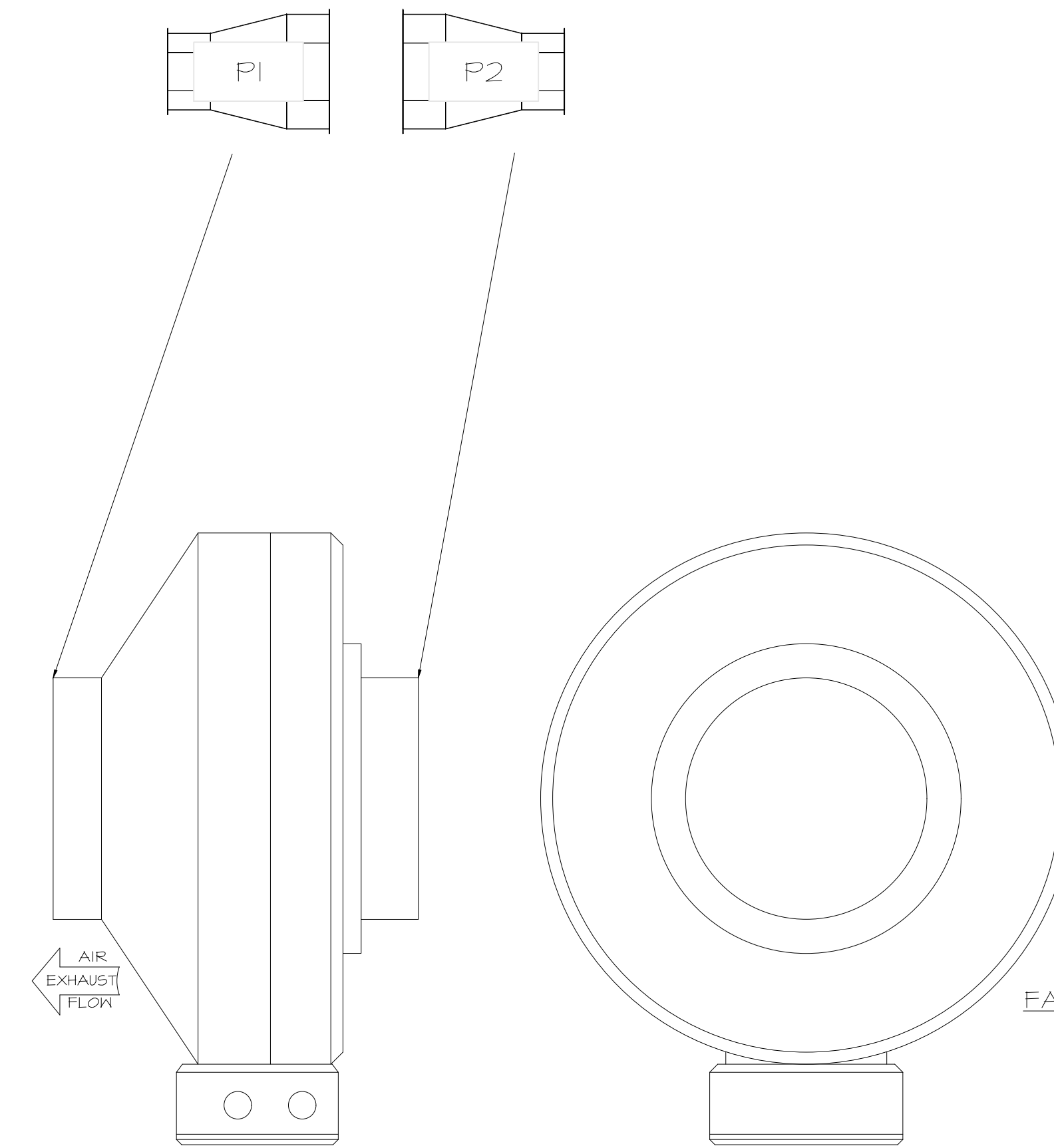
DUCTWORK #1 SIDE VIEW
OFFSET



DUCTWORK #2 PARTS - JOB#7284466

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DNO8I2ADPIT						6.74		1	SINGLE WALL DUCT ADAPTER, 8" DUCT DIA TO 12" DUCT DIA, ASSEMBLY - 430 STAINLESS STEEL.
P2	DNO8I2ADPIT						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



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

NO.	DESCRIPTION	DATE

CAPTIVE

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



SIGNATURE DATE: 01/23/2026

H & B
HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-b.com
© Hoss & Brown Engineers 2026

QuikTrip No. 0739

4330 CHAMBLEE TUCKER ROAD
TUCKER, GEORGIA



PROTOTYPE	Fryer
DIVISION	Atlanta
VERSION	4600
DATE	03-18-2022

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.
5

SHEET TITLE:
MECHANICAL HOOD
DETAILS

SHEET NUMBER:
M514

