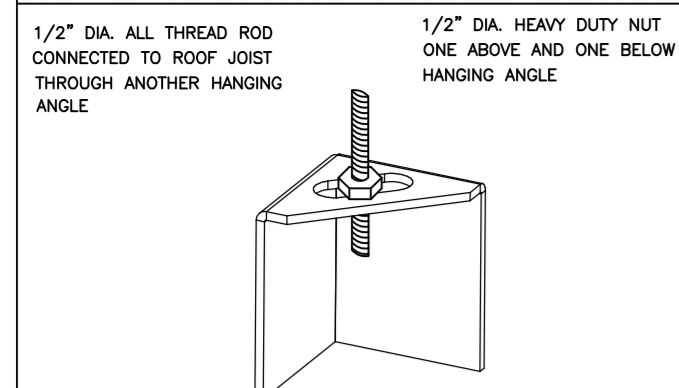


**ND-2 HANGING ANGLE DETAIL**



\*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" H)	DIM FROM FRONT (30" H)
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"

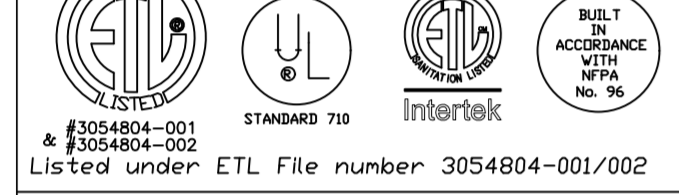
**CALCULATIONS UTILIZED**

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)  
 SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED  
 TOTAL DUCT AREA=144 X CFM / FPM  
 DUCT LENGTH= DUCT DEPTH / DUCT AREA

\*CAPTIVE-AIRE DUCT CONNECTION SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1500-1800 FPM AND A SUPPLY VELOCITY OF 300-400 FPM

**BUILDING CODES**

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:



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" UNINSULATED 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 SHUTOFF IN EVENT OF FIRE.
- EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
- ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE-AIRE ARE FACTORY PREWIRED. 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**

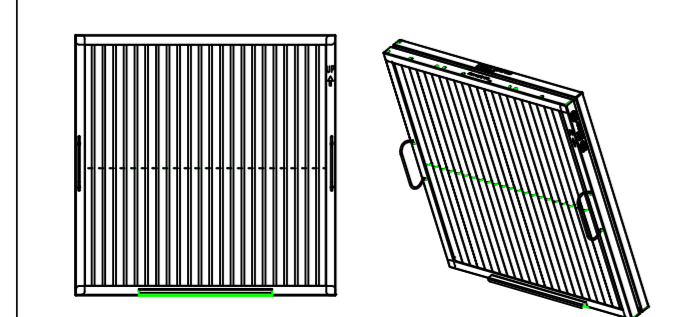
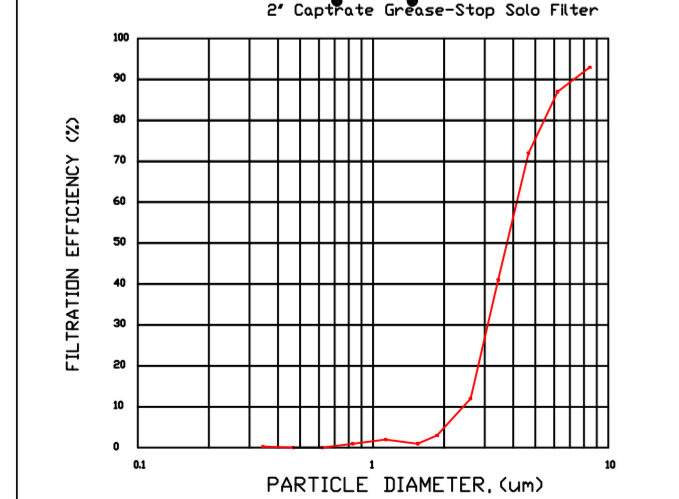
- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
- KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DINING AREA.
- RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

**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.

**FILTER DETAIL**

FILTER COLLECTION EFFICIENCY



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

**HOOD INFORMATION - JOB#5448908**

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				HOOD CONSTRUCTION	HOOD CONFIG		
										WIDTH	LENG	HEIGHT	DIA		CFM	VEL	SP
1	Item 52	5424 ND-2	CAPTIVEAIRE	12' 11"	450 DEG	I	MEDIUM	225	2910	4"	12"	1455	1853	-0.988"	430 SS WHERE EXPOSED	RIGHT	BACK
2	Item 53	5424 ND-2	CAPTIVEAIRE	7' 5"	450 DEG	I	MEDIUM	150	1115	4"	10"	1115	2044	-0.860"	430 SS WHERE EXPOSED	LEFT	BACK
3	Item 75	5424 VHB-ND	CAPTIVEAIRE	13' 6"	700 DEG	II	N/A	150	2025	4"	12"	1012	1289	-0.133"	430 SS 100%	ALONE	FRONT

**HOOD INFORMATION**

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT	
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM	ELECTRICAL			SWITCHES
1	Item 52	CAPTRATE SOLO FILTER	9	16'	16'	85% SEE FILTER SPEC	4	RECESSED ROUND	NO						NO	614 LBS
2	Item 53	CAPTRATE SOLO FILTER	5	16'	16'	85% SEE FILTER SPEC	2	RECESSED ROUND	NO						NO	432 LBS
3	Item 75		4				4	RECESSED ROUND	NO	RIGHT	12"x54"x24"		DCV-2011_MA4	1 LIGHT 1 FAN	NO	584 LBS

**HOOD OPTIONS**

HOOD NO	TAG	OPTION
1	Item 52	FIELD WRAPPER 18.00' HIGH FRONT, RIGHT. BALANCE DAMPERS. RISER SENSOR INSTALL 6IN PLEN. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
2	Item 53	FIELD WRAPPER 18.00' HIGH FRONT, LEFT. BALANCE DAMPERS. RISER SENSOR INSTALL 6IN PLEN. LEFT WIDE VERTICAL END PANEL 42" TOP WIDTH, 36" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
3	Item 75	FIELD WRAPPER 18.00' HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RISER SENSOR INSTALL 3IN DBL.

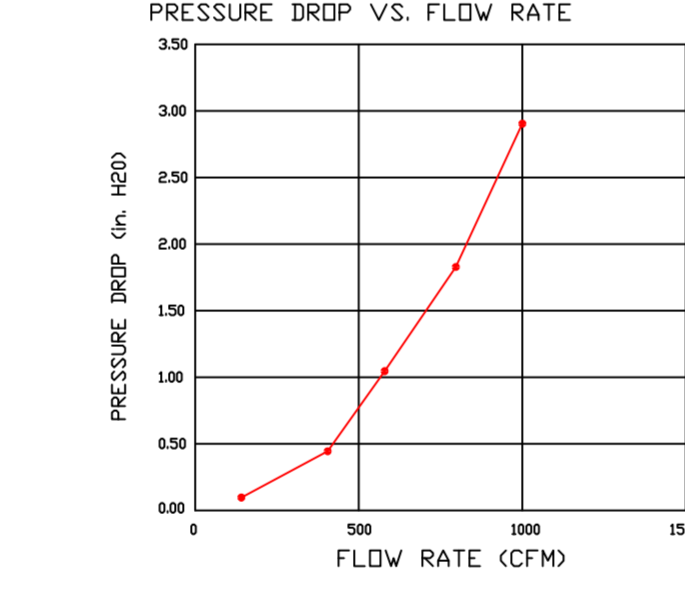
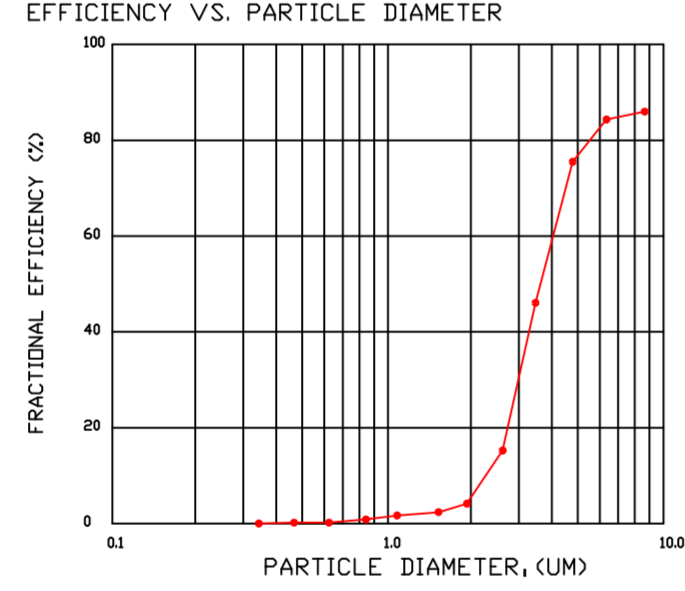
**SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER**

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.

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

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

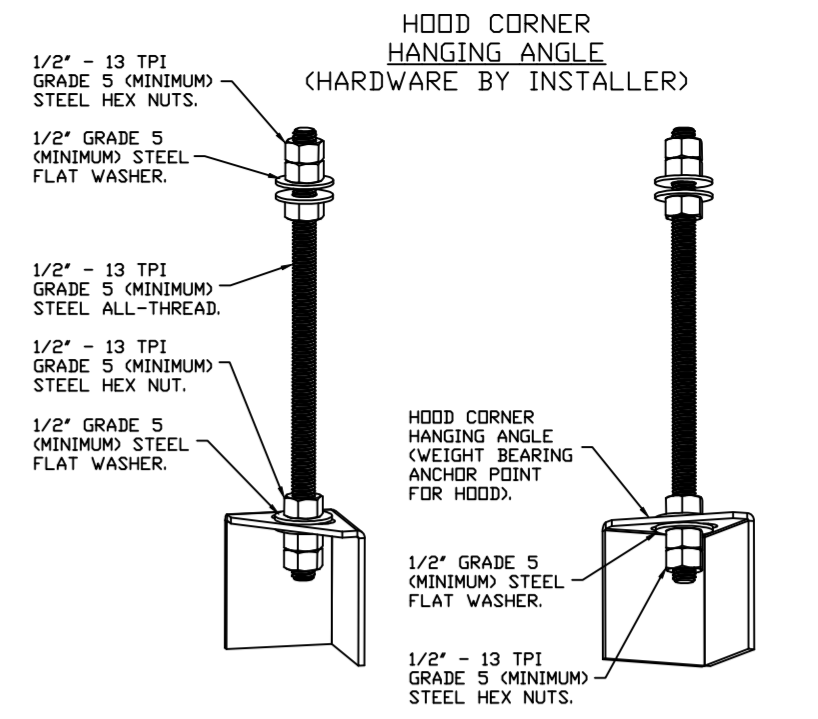
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
 NFPA #96.  
 NSF STANDARD #2.  
 UL STANDARD #1046.  
 INT. MECH. CODE (IMC).  
 ULC-S649.

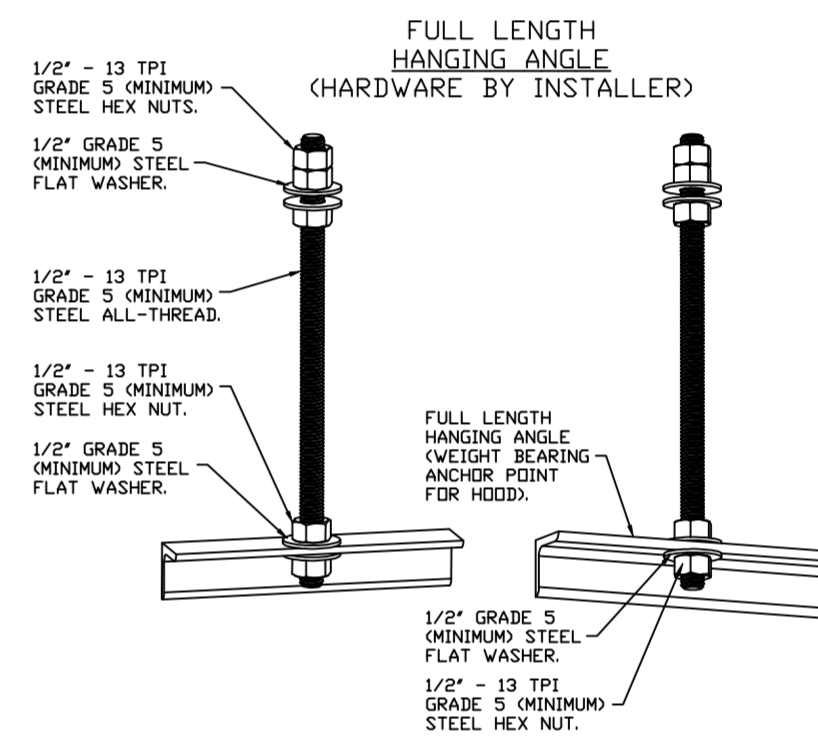


**PATENT NUMBERS**  
 EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435 C.



**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 FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

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   
 Revise and Resubmit   
 SIGNATURE \_\_\_\_\_  
 Your Title \_\_\_\_\_ Date \_\_\_\_\_

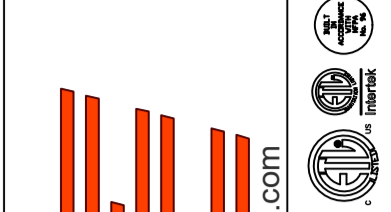
**\*\*\* NOTE \*\*\***  
 ALL WALLS AND STRUCTURES THAT COME WITHIN 18" OF HOOD MUST BE METAL STUDS AND SHEETROCK. WOOD STUDS OR ANY OTHER COMBUSTIBLE MATERIAL WITHIN 18" OF HOOD NO ALLOWED.

**\*\*\* NOTE \*\*\***  
 HOOD MANUFACTURER RECOMMENDS NO RETURNS IN MANNER THAT WILL NOT DISRUPT HOODS 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



**HBT Foodservice**

1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg98@captiveaire.com

Hawaiian Bros - Richardson, TX  
 2060 N Coit Rd,  
 Richardson, TX, 75080

DATE: 6/15/2022

DWG.#:  
 5448908

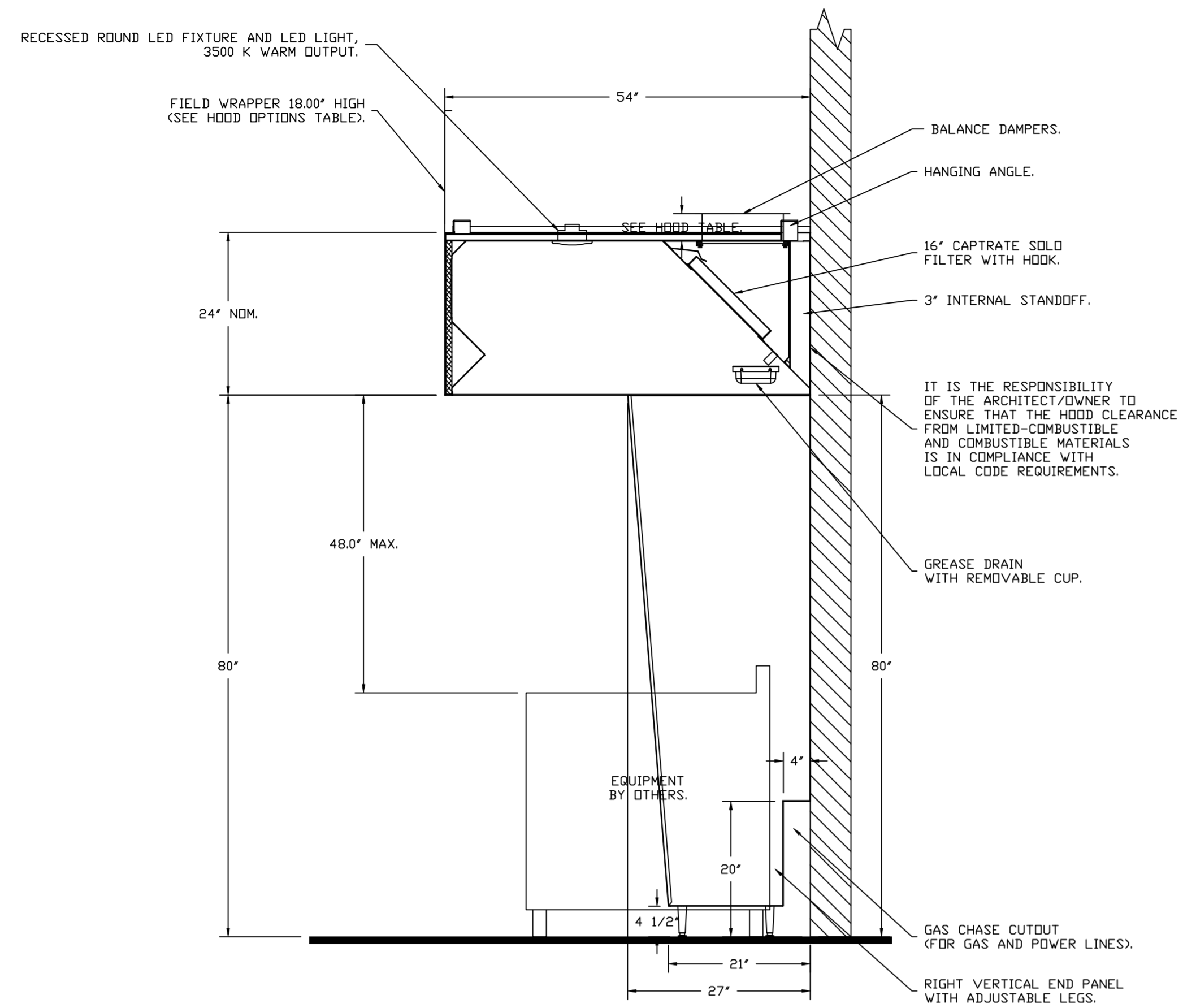
DRAWN BY:  
 michael.co

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

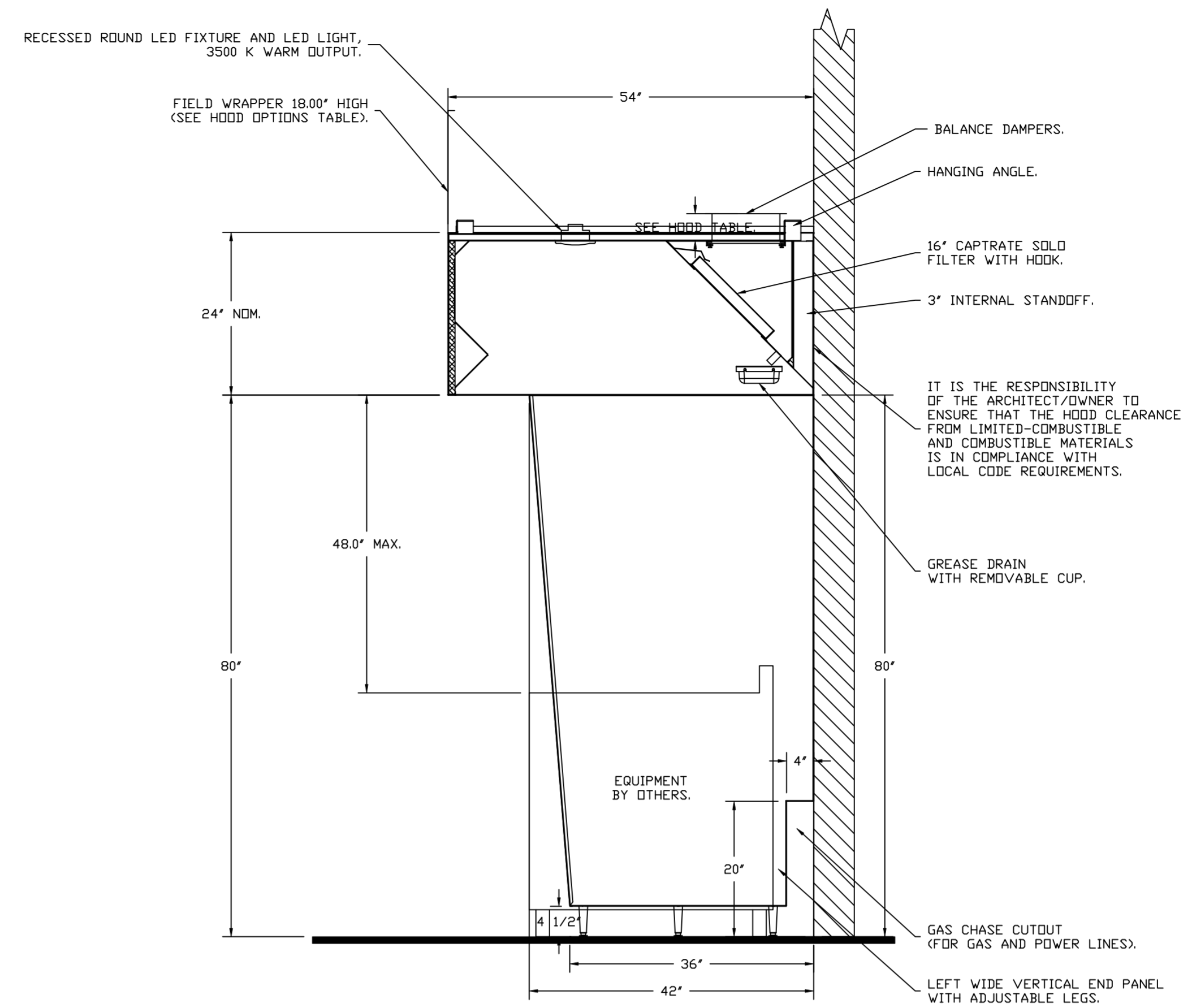
MASTER DRAWING

SHEET NO.  
 1

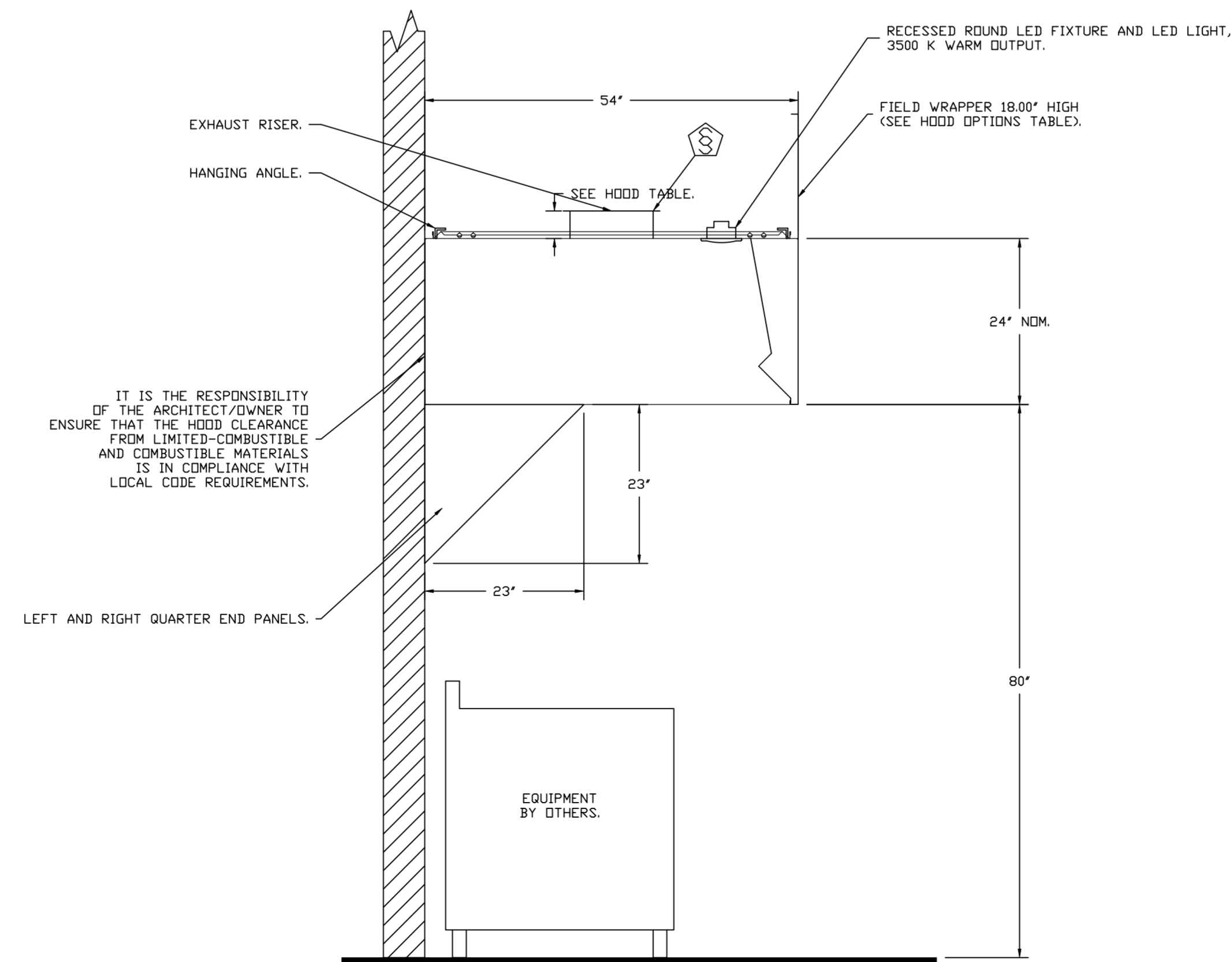




SECTION VIEW - MODEL 5424ND-2  
HOOD - #1 (Item 52)



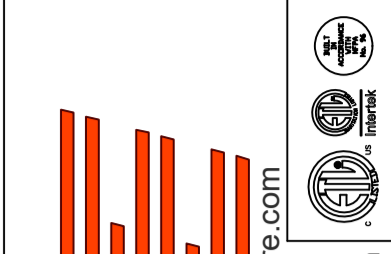
SECTION VIEW - MODEL 5424ND-2  
HOOD - #2 (Item 53)



SECTION VIEW - MODEL 5424VHB-ND  
HOOD - #3 (Item 75)

REVISIONS

DESCRIPTION	DATE



**CAPTIVE**  
HBT Foodservice  
1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg9@captivair.com

Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

DATE: 6/15/2022

DWG.#:  
5448908

DRAWN BY: michael.co

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

MASTER DRAWING

SHEET NO.  
3

## SPECIFICATIONS

TAG: Commercial Kitchen Ventilation Hoods, Listed Commercial Kitchen Hoods

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. The ND2 series is a Type I, wall canopy hood for use over 450°F, 700°F cooking surface temperatures. The aerodynamic design includes a mechanical baffle and performance enhancing lip for exceptional capture and containment.
- B. The VHB Series is a Premier Type II, exhaust only hood used over equipment not producing grease laden vapors. Type II hoods are used for condensation or heat removal applications.
- C. The hood shall have the size, shape, and performance specified on drawings.

## 1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use from this document. Specifications are to be reviewed by the engineer to confirm the project's requirements and meet Federal, State, and Local codes and regulations.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.
- C. The manufacturer shall supply complete computer generated submittal drawings, including hood section view(s) and hood plan view(s). These drawings must be available to the engineer, architect, and owner for their use in construction, operation, and maintenance.

## 1.3 QUALITY ASSURANCE

- A. This hood is ETL-listed to standard UL710, ULC710, and ULC-S646 when installed in accordance with these installation instructions and National Fire Protection Association Standard NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations."
- B. Built-in compliance with NSF/ANSI Standard 2.
- C. The hood shall be ETL Listed as:
1. "Exhaust Hood Without Exhaust Damper."
  2. ETL Sanitation Listed and built in accordance with NFPA 96.
  3. The ETL label shall list temperature rating(s) and minimum CFM/ft rating(s).

## 1.4 WARRANTY

- A. All units shall be provided with the following standard warranty:
1. This equipment is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 2-years from date of shipment.
- B. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 2-year warranty period, upon examination by the manufacturer, such part will be repaired or replaced by manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.
- C. Refer to Manufacturer's Operation, Installation, and Maintenance (OIM) Manual for detailed descriptions of what is/is not covered and contact information for warranty claims.

## PART 2 - PRODUCTS

## 2.1 GENERAL

- A. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints, and penetrations of the hood enclosure to the lower outermost

perimeter, which directs and captures grease-laden vapor and exhaust gases, shall have a liquid-tight continuous external weld in accordance with NFPA 96.

- B. Duct sizes, CFM, and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

## 2.2 CONSTRUCTION

- A. Construction shall be type 430 stainless steel.
- B. Double wall insulated front to eliminate condensation and increase rigidity on wide sizes. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
- C. Hood shall be equipped with a minimum of four connections for hanger rods. Hood lengths greater than 12' will have added hangers.
- D. Exhaust duct collar to be 4" high with flange.
- E. The grease drain system shall be an enclosed integral part of the hood back and have slopes with an exposed, removable 1/2 grease cup to facilitate cleaning.
- F. An integral baffle to direct grease laden vapors toward the exhaust filter bank.
- G. Hood shall be furnished with UL classified filters, supplied in size and quantity as required by ventilator.
- H. All seams shall be welded and have stainless steel on exposed surfaces.

## 2.3 LIGHTING

- A. Recessed round LED fixture and LED light, 3500K Warm output.

## 2.4 FILTERS

- A. Stainless Steel Captrate Solo filter with hook, ETL Listed. Particulate capture efficiency: 85% efficient at 9 microns, 76% efficient at 5 microns.

## 2.5 OPTIONS

- A. Hood Mounted Utility Cabinet - Cabinet can store listed fire suppression system, listed components, pre-wired electrical controls.

## 2.6 ACCESSORIES

- A. Balance Damper - Used to manually balance exhaust flow rate. Installed in hood plenum.
- B. End Panel(s) maximize hood performance and eliminate the effects of cross drafts in the kitchen. Units constructed of stainless steel and sized according to hood width and cooking equipment. Exposed edges hemmed for safety and rigidity. Selected panels:
1. Quarter End Panel
  2. Vertical End Panel
  3. Wide Vertical End Panel
- C. Wrapper(s) may be installed from the factory or field installed. Wrapper(s) selected:
1. Wrapper
- D. Miscellaneous option(s) selected:
1. Riser Sensor Install -Sensor set-up for 3" thick double wall duct.
  2. Riser Sensor Install -Sensor set-up for 6" plenum.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

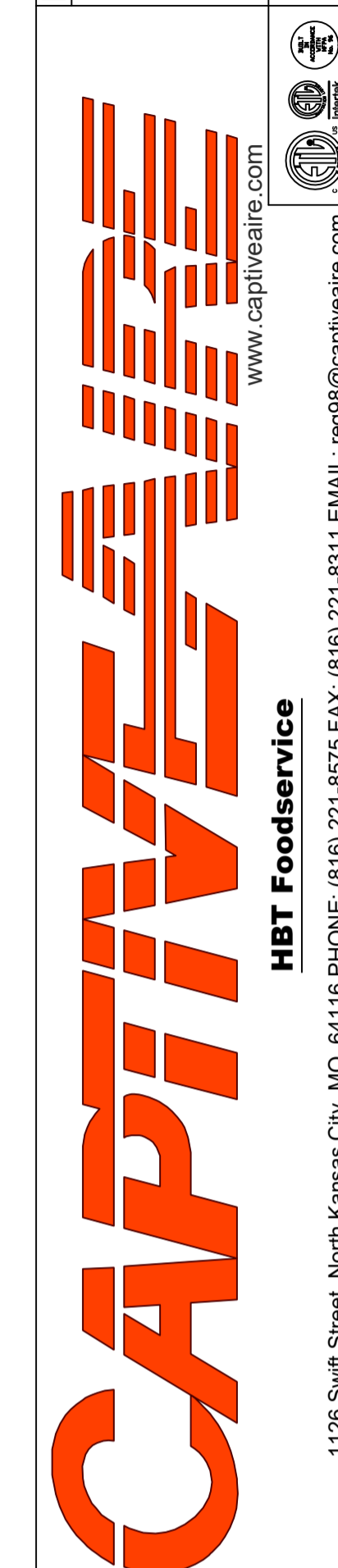
- A. Examine areas and conditions under which the system is installed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

## 3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all applicable building codes.

## REVISIONS

DESCRIPTION	DATE:
Δ	
Δ	
Δ	
Δ	



Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

DATE: 6/15/2022

DWG.#:  
5448908DRAWN  
BY: michael.coSCALE:  
3/4" = 1'-0"

MASTER DRAWING

SHEET NO.

4

**EXHAUST FAN INFORMATION – JOB#5448908**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	ITEM 52/53	1	DU240HFA	CAPTIVEAIRE	4025	1.500	894	DDP,PREMIUM	5.000	1.9990	3	208	15.8	915 FPM	308	17
2	ITEM 75	1	DU85HFA	CAPTIVEAIRE	2025	0.650	1308	TEAD-ECM	1.000	0.3980	1	208	6.9	641 FPM	92	13.1
3	CO2 EXHAUST	1	DR12HFA	CAPTIVEAIRE	200	0.380	1070	TEAD-ECM	0.250	0.0530	1	115	2.9		61	4.7
4	BATHROOM EXHAUST	1	DR12HFA	CAPTIVEAIRE	225	0.500	1223	TEAD-ECM	0.250	0.0800	1	115	2.9		61	6.4

**DOAS/RTU FAN SCHEDULE – JOB#5448908**

FAN UNIT NO	TAG	QTY	DOAS/RTU MODEL #	MANUFACTURER	ELECTRICAL INFORMATION										COOLING INFORMATION						REHEAT INFORMATION				GAS HEAT INFORMATION				NOTES							
					BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ESP	HP	Ø	VOLT	MCA	MOC	OUTSIDE AIR DB	OUTSIDE AIR WB	MIXED AIR DB	MIXED AIR WB	LEAVING AIR DB	LEAVING AIR WB	LEAVING AIR DP	TOTAL CAPACITY	IEER	ISMRE	DISCHARGE DB	DISCHARGE WB	CAPACITY DESIRED		CAPACITY MAX	MOISTURE REMOVAL RATE	GAS TYPE	INPUT BTUs	OUTPUT BTUs	TEMP RISE	
5	RTU-1 DINING	1	CASRTU3-I.300-24-20T-DOAS	CAPTIVEAIRE	24MF-3-RTU	4212	1588	5800	2683	1.000	10.00	3	208	103.1A	125A	100.2°F	79.5°F	81.8°F	67.4°F	52.9°F	52.9°F	53.0°F	247.2 MBH	175.3 MBH	18.2	6.0	70.0°F	59.6°F	109.3 MBH	129.6 MBH	65.9 LBS/HR	NATURAL	251154	200923	30°F	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
6	RTU-2 KITCHEN	1	CASRTU3-I.250-20-20T-DOAS	CAPTIVEAIRE	20P-3	0	3200	3200	2651	1.000	3.00	3	208	81.5A	90A	100.2°F	79.5°F	100.2°F	79.5°F	58.6°F	54.9°F	52.4°F	264.0 MBH	135.8 MBH	18.2	6.0	70.0°F	59.5°F	39.7 MBH	129.6 MBH	116.0 LBS/HR	NATURAL	230945	184756	50°F	1,2,3,4,5,6,7,8,9,10,11,12,13,15,18
7	RTU-3	1	CASRTU3-I.200-24-15T-DOAS	CAPTIVEAIRE	24MF-3-RTU	2000	1600	3600	2537	1.000	5.00	3	208	71.9A	80A	100.2°F	79.5°F	81.8°F	67.4°F	54.1°F	53.9°F	53.8°F	167.9 MBH	104.7 MBH	18.8	5.7	70.0°F	60.6°F	62.9 MBH	129.6 MBH	57.6 LBS/HR	NATURAL	103925	83140	20°F	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18

**NOTES:**

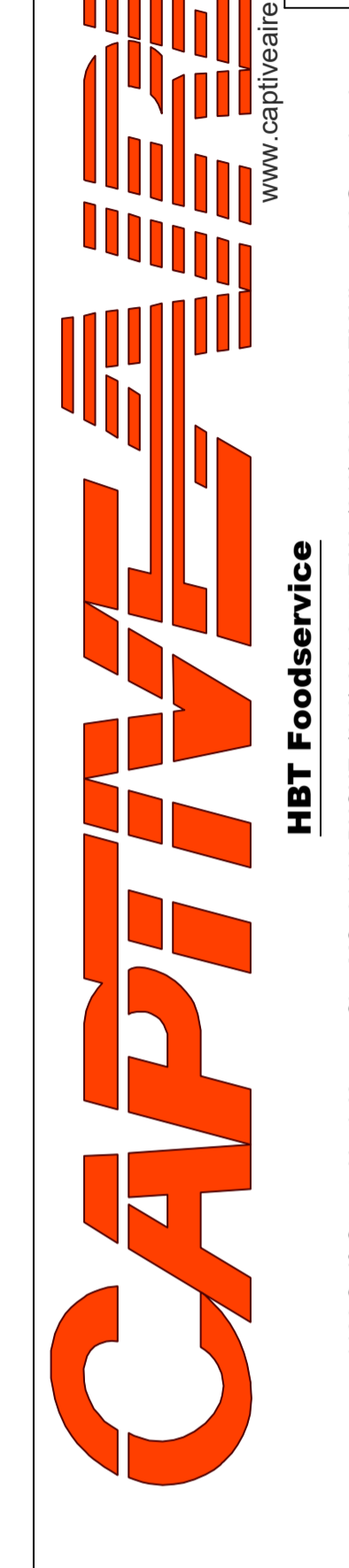
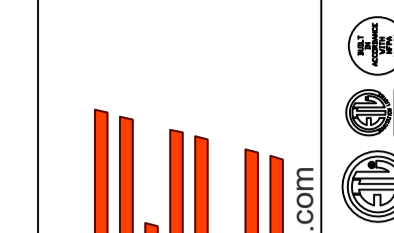
- INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL
- DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE
- INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
- REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE
- EC MOTOR CONDENSING FANS
- ELECTRONIC EXPANSION VALVE. TXV NOT ACCEPTABLE
- SUCTION LINE ACCUMULATOR
- FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER
- AVERAGING INTAKE, EVAP AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT)
- 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 20GA EXTERIOR W/ 14GA BASE
- 80% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE. 6:1 TURNDOWN WITH NG AND 5:1 TURNDOWN WITH LP
- SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE
- FULLY MODULATING HOT GAS REHEAT
- 15 DEGREE LOW AMBIENT OPERATION
- HAIL GUARD FOR CONDENSING COIL
- RTU ECONMIZER WITH DIFFERENTIAL ENTHALPY CONTROL
- BAROMETRIC RELIEF DAMPER

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION	FAN UNIT NO	TAG	QTY	DESCRIPTION
1	ITEM 52/53	1	GREASE BOX	7	RTU-3	1	RTU3 DOWN DISCHARGE
		1	EXHAUST FAN HEAT BAFFLE			1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
2	ITEM 75	1	2 YEAR PARTS WARRANTY	7	RTU-3	1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
		1	GREASE BOX			1	OVERHEAT STAT
3	CO2 EXHAUST	1	ECM WIRING PACKAGE – PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION	7	RTU-3	1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
		1	2 YEAR PARTS WARRANTY			1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR
4	BATHROOM EXHAUST	1	ECM WIRING PACKAGE – MANUAL OR 0-10VDC REFERENCE SPEED CONTROL –RTC- (TELCO MOTOR), CCW ROTATION	7	RTU-3	1	RTU3 CURB DUCT HANGER
		1	MOTORIZED I 12 BDD 120/240V			1	OCCUPIED SCHEDULING
5	RTU-1 DINING	1	2 YEAR PARTS WARRANTY	7	RTU-3	1	CLOGGED FILTER SWITCH – NOTIFICATION ON HMI
		1	ECM WIRING PACKAGE – MANUAL OR 0-10VDC REFERENCE SPEED CONTROL –RTC- (TELCO MOTOR), CCW ROTATION			1	20 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
6	RTU-2 KITCHEN	1	MOTORIZED I 12 BDD 120/240V	7	RTU-3	1	20 TON MODULATING REHEAT OPTION – SPACE DEWPOINT CONTROL
		1	2 YEAR PARTS WARRANTY			1	RTU INTAKE/RETURN DAMPER – MANUAL CONTROL VIA HMI
7	RTU-3	1	INLET PRESSURE GAUGE, 0-35"	7	RTU-3	1	RTU3 HAIL GUARD
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE			1	RTU3 DOWN RETURN
8	RTU-3	1	RTU TOTAL CFM MONITORING	7	RTU-3	1	FREEZESTAT
		1	SHIP LOOSE GAS STRAINER 3/4"			1	VAV PACKAGE W/ 0-10VDC INPUT CONTROL (571 VFD INCLUDED)
9	RTU-3	1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE	7	RTU-3	1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE – FACTORY INSTALLED
		1	CASLINK BUILDING MONITORING SYSTEM – INTERNET OR CELLULAR CONNECTION REQUIRED			1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)
10	RTU-3	1	LOW AMBIENT COOLING OPERATION – DOWN TO 15F AMBIENT	7	RTU-3	1	INLET PRESSURE GAUGE, 0-35"
		1	RTU3 DOWN DISCHARGE			1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
11	RTU-3	1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)	7	RTU-3	1	RTU TOTAL CFM MONITORING
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)			1	SHIP LOOSE GAS STRAINER 3/4"
12	RTU-3	1	OVERHEAT STAT	7	RTU-3	1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE			1	CASLINK BUILDING MONITORING SYSTEM – INTERNET OR CELLULAR CONNECTION REQUIRED
13	RTU-3	1	20 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS	7	RTU-3	1	LOW AMBIENT COOLING OPERATION – DOWN TO 15F AMBIENT
		1	20 TON MODULATING REHEAT OPTION – SPACE DEWPOINT CONTROL			1	RTU3 DOWN DISCHARGE
14	RTU-3	1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR	7	RTU-3	1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
		1	RTU3 CURB DUCT HANGER			1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
15	RTU-3	1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE – FACTORY INSTALLED	7	RTU-3	1	OVERHEAT STAT
		1	OCCUPIED SCHEDULING			1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
16	RTU-3	1	RTU ECONMIZER – DIFFERENTIAL ENTHALPY CONTROL	7	RTU-3	1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR
		1	RTU3 ECONMIZER BAROMETRIC RELIEF			1	RTU3 CURB DUCT HANGER
17	RTU-3	1	RTU3 HAIL GUARD	7	RTU-3	1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE – FACTORY INSTALLED
		1	VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED)			1	CLOGGED FILTER SWITCH – NOTIFICATION ON HMI
18	RTU-3	1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)	7	RTU-3	1	OCCUPIED SCHEDULING
		1	RTU INTAKE/RETURN DAMPER – MANUAL CONTROL VIA HMI			1	RTU ECONMIZER – DIFFERENTIAL ENTHALPY CONTROL
19	RTU-3	1	INLET PRESSURE GAUGE, 0-35"	7	RTU-3	1	RTU3 ECONMIZER BAROMETRIC RELIEF
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE			1	RTU3 HAIL GUARD
20	RTU-3	1	RTU TOTAL CFM MONITORING	7	RTU-3	1	RTU INTAKE/RETURN DAMPER – MANUAL CONTROL VIA HMI
		1	SHIP LOOSE GAS STRAINER 3/4"			1	RTU3 DOWN RETURN
21	RTU-3	1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE	7	RTU-3	1	FREEZESTAT
		1	CASLINK BUILDING MONITORING SYSTEM – INTERNET OR CELLULAR CONNECTION REQUIRED			1	VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED)
22	RTU-3	1	LOW AMBIENT COOLING OPERATION – DOWN TO 15F AMBIENT	7	RTU-3	1	15 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
		1	RTU3 DOWN DISCHARGE			1	20 TON MODULATING REHEAT OPTION – SPACE DEWPOINT CONTROL
23	RTU-3	1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)	7	RTU-3	1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)			1	INLET PRESSURE GAUGE, 0-35"

**REVISIONS**

DESCRIPTION	DATE



Hawaiian Bros - Richardson, TX  
 2060 N Coit Rd,  
 Richardson, TX, 75080

**DATE:** 6/15/2022

**DWG.#:**  
5448908

**DRAWN BY:** michael.co

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

**MASTER DRAWING**

**SHEET NO.**  
5

www.captiveair.com  
 HBT Foodservice  
 1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg98@captiveair.com

**FAN ACCESSORIES**

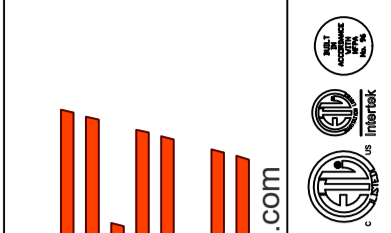
FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	ITEM 52/53	YES						
2	ITEM 75	YES						
3	CO2 EXHAUST							
4	BATHROOM EXHAUST							

**CURB ASSEMBLIES**

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1		48 LBS	CURB	31.500"W X 31.500"L X 20.000"H ALONG LENGTH, RIGHT INSULATED VENTED HINGED.
2	# 2		36 LBS	CURB	23.000"W X 23.000"L X 20.000"H ALONG LENGTH, RIGHT INSULATED VENTED HINGED.
3	# 3	CO2 EXHAUST	22 LBS	CURB	17.500"W X 17.500"L X 18.000"H ALONG LENGTH, RIGHT INSULATED.
4	# 4	CO2 EXHAUST	22 LBS	CURB	17.500"W X 17.500"L X 18.000"H ALONG LENGTH, RIGHT INSULATED.
5	# 6		92 LBS	CURB	59.500"W X 91.000"L X 16.000"H ALONG WIDTH, RIGHT INSULATED.
6	# 5	RTU-1 DINING	92 LBS	CURB	59.500"W X 91.000"L X 16.000"H ALONG WIDTH, RIGHT INSULATED.
7	# 7		92 LBS	CURB	59.500"W X 91.000"L X 16.000"H ALONG WIDTH, RIGHT INSULATED.

**REVISIONS**

DESCRIPTION	DATE:



Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

**DATE:** 6/15/2022

**DWG.#:**  
5448908

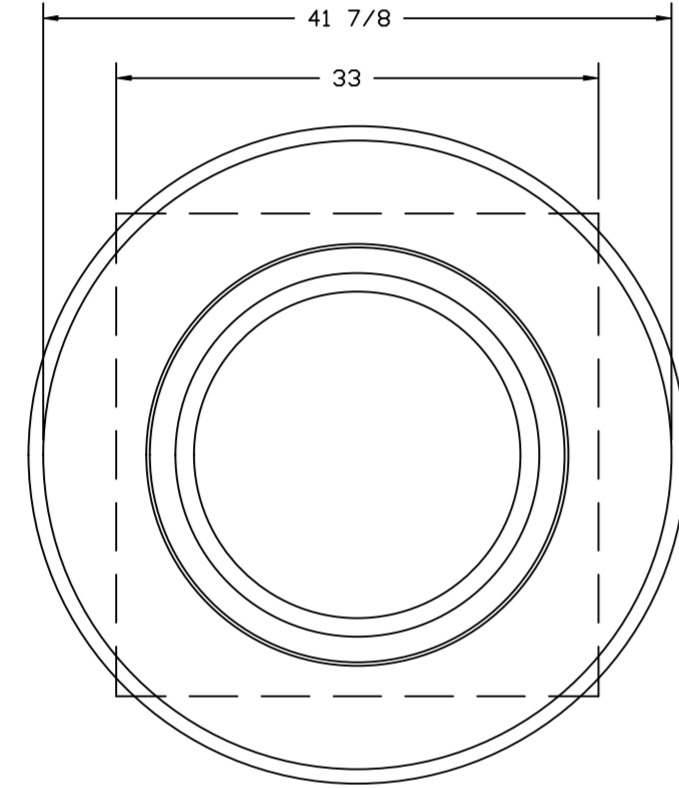
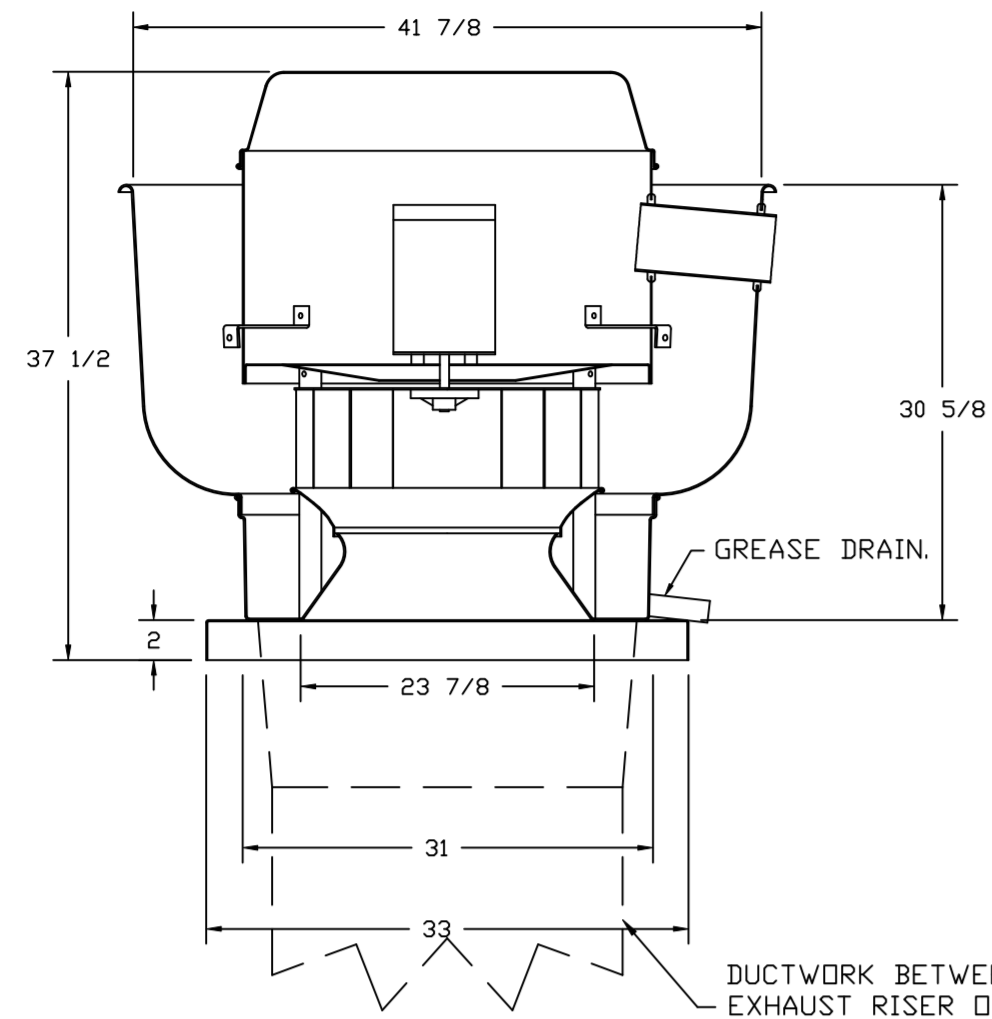
**DRAWN BY:** michael.co

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

**MASTER DRAWING**

**SHEET NO.**  
6

FAN #1 DU240HFA - EXHAUST FAN (ITEM 52/53)



TOP VIEW

**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**

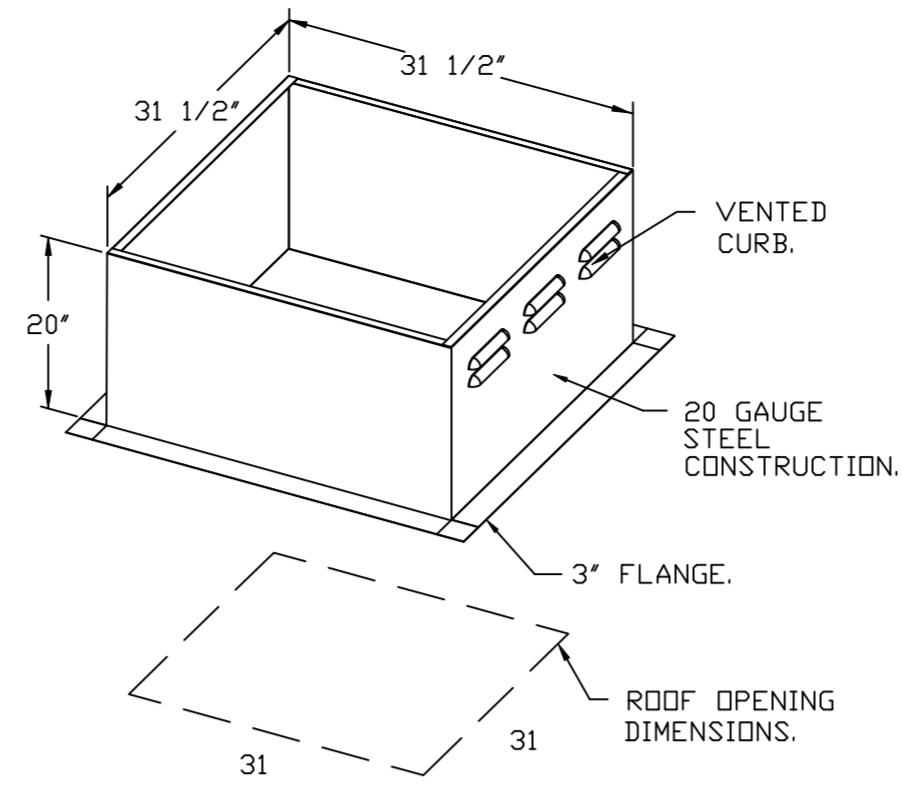
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**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.

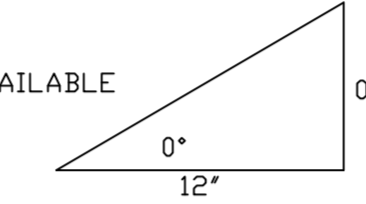
**OPTIONS**

- GREASE BOX.
- EXHAUST FAN HEAT BAFFLE.
- 2 YEAR PARTS WARRANTY.

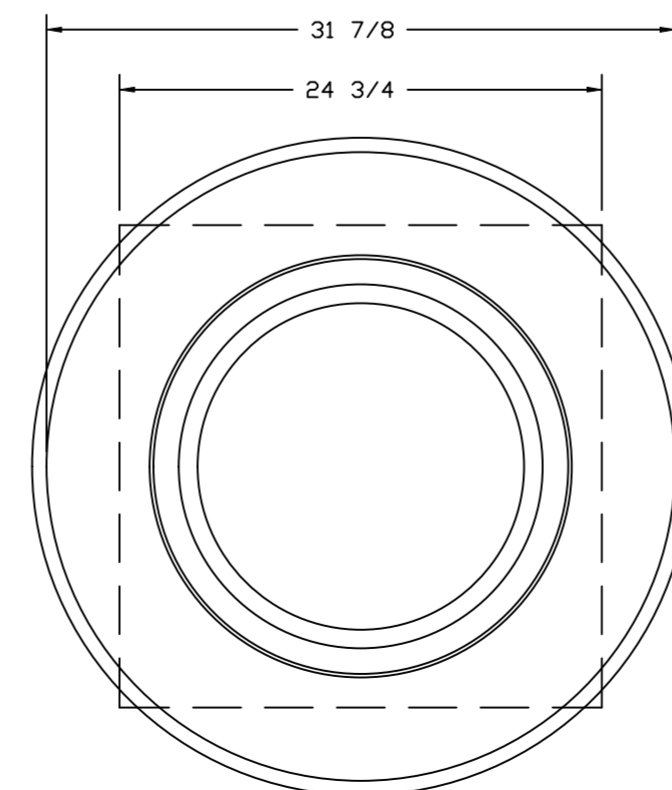
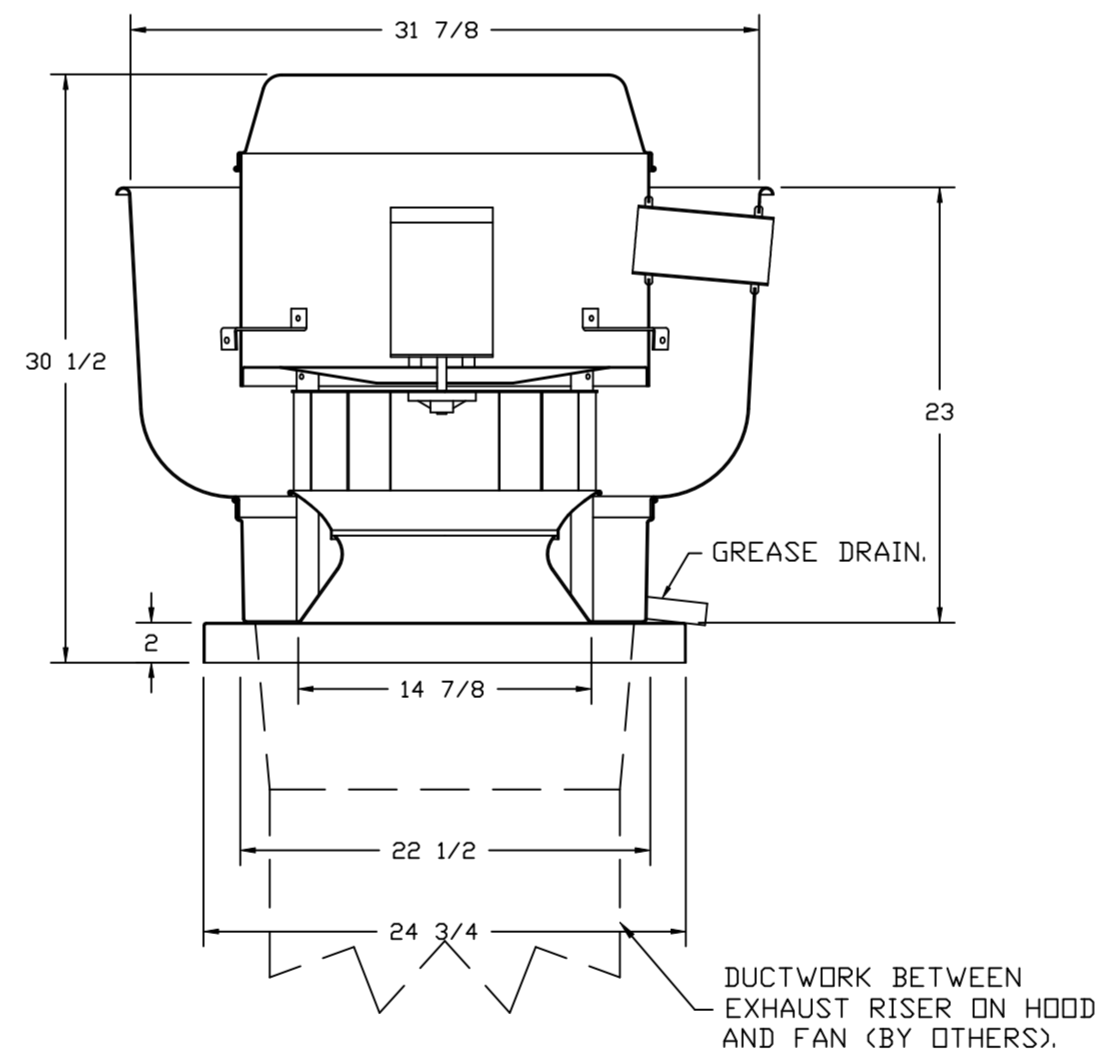


PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.



FAN #2 DU85HFA - EXHAUST FAN (ITEM 75)



TOP VIEW

**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**

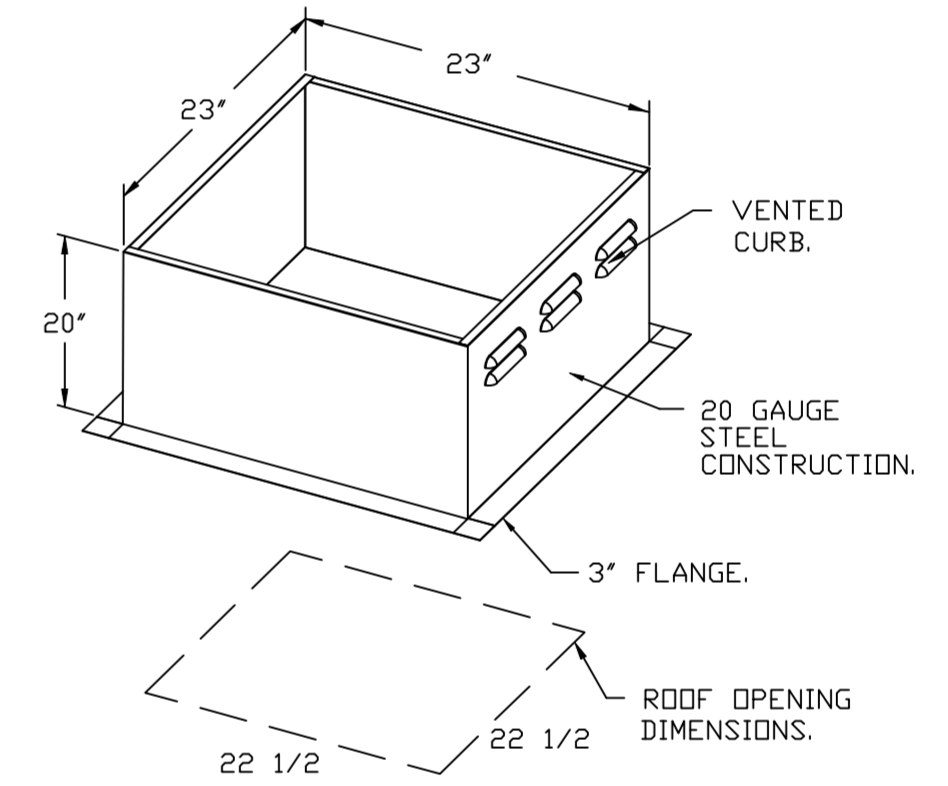
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**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.

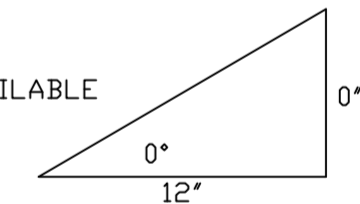
**OPTIONS**

- GREASE BOX.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECM/MS PREWIRE (TELCD MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



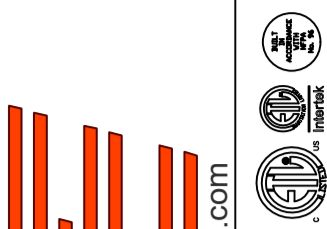
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.



**REVISIONS**

DESCRIPTION	DATE



**CAPTIVE AIR**  
www.captiveair.com  
**HBT Foodservice**  
1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg98@captiveair.com

Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

DATE: 6/15/2022

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5448908

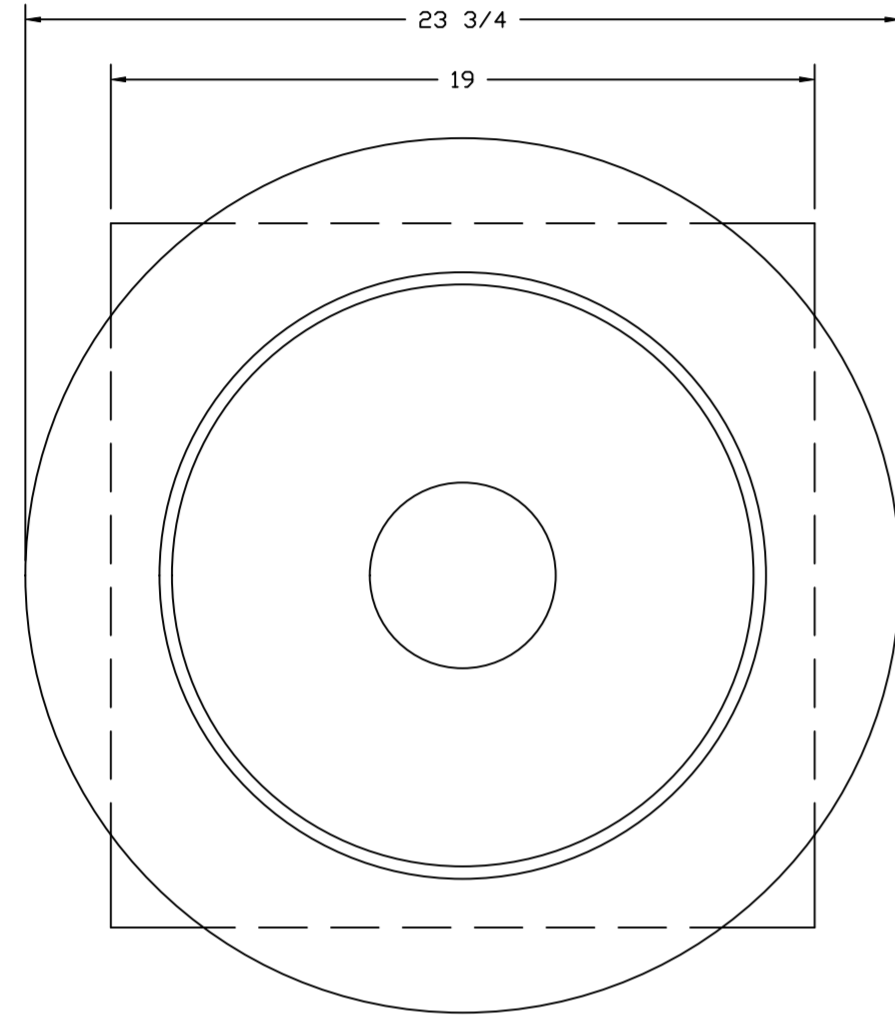
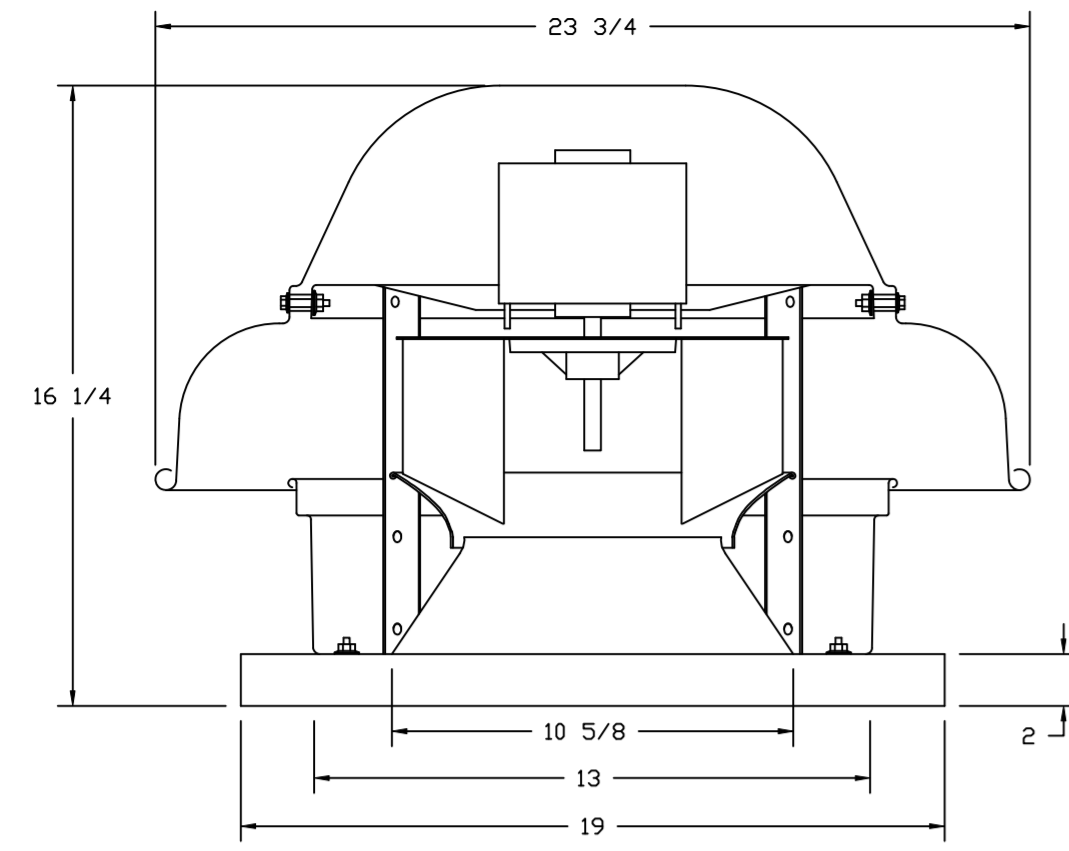
DRAWN BY: michael.co

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

MASTER DRAWING

SHEET NO.

FANS #3 (COR EXHAUST), #4 (BATHROOM EXHAUST) - DR12HFA EXHAUST FAN



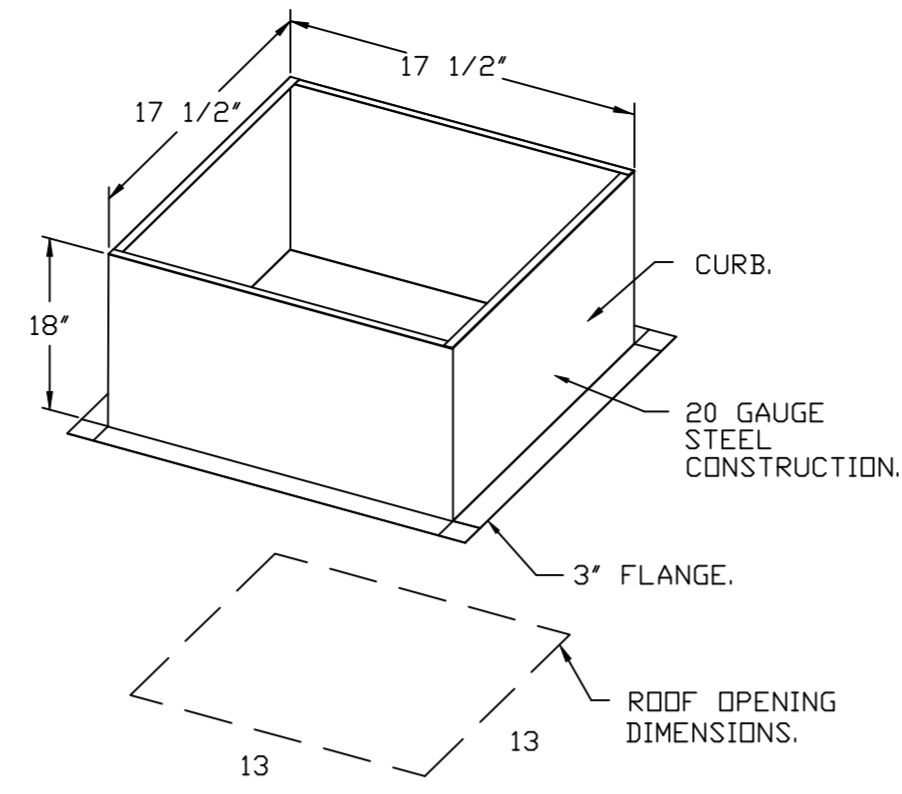
TOP VIEW

**FEATURES:**

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

**OPTIONS**

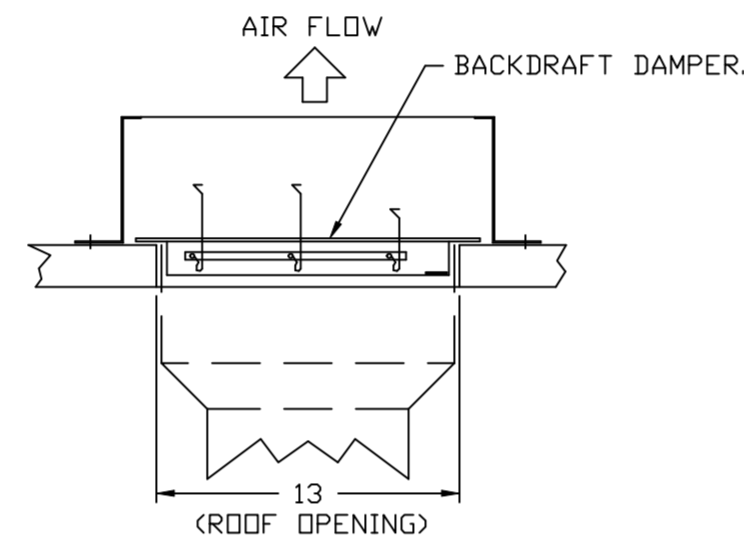
ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION. MOTORIZED I 12 BDD 120/240V. 2 YEAR PARTS WARRANTY.



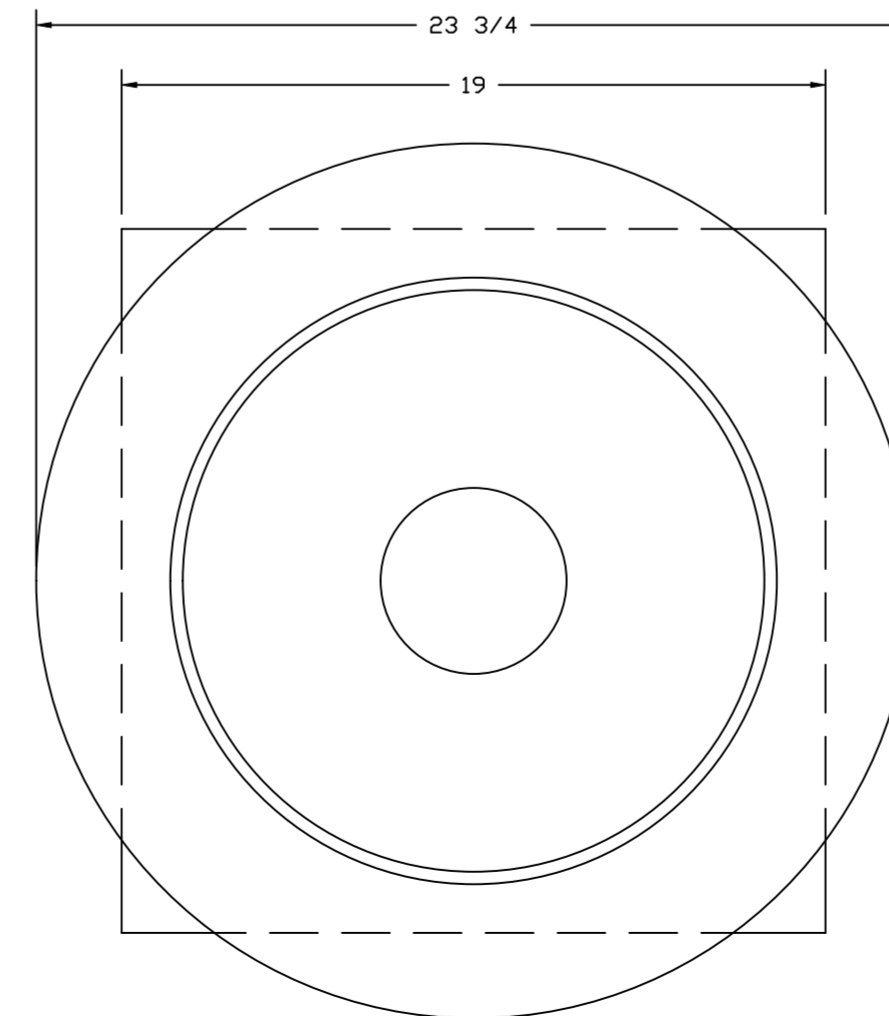
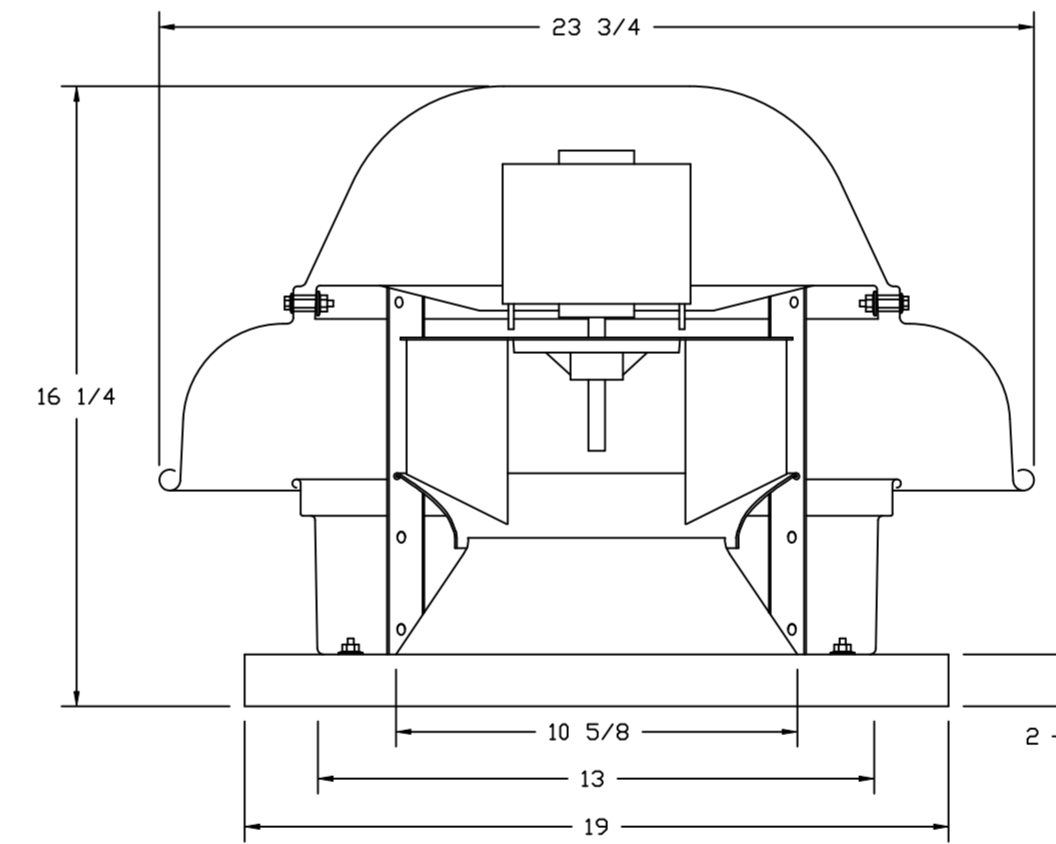
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.

**BACKDRAFT DAMPER INSTALLATION**



FANS #3 (COR EXHAUST), #4 (BATHROOM EXHAUST) - DR12HFA EXHAUST FAN



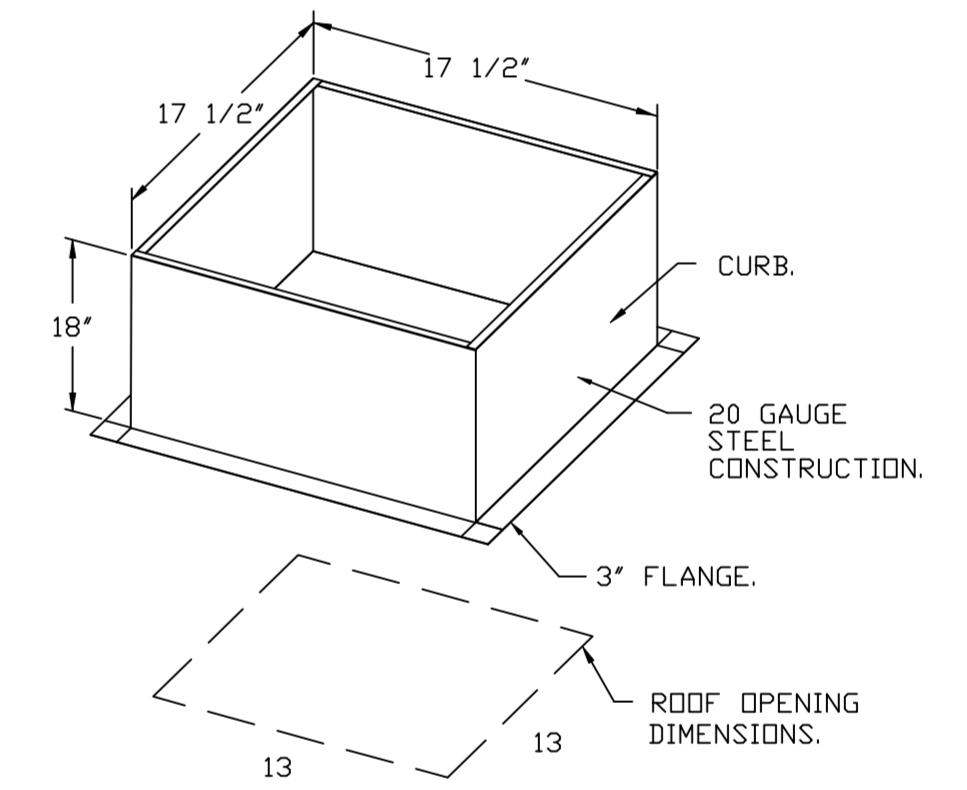
TOP VIEW

**FEATURES:**

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

**OPTIONS**

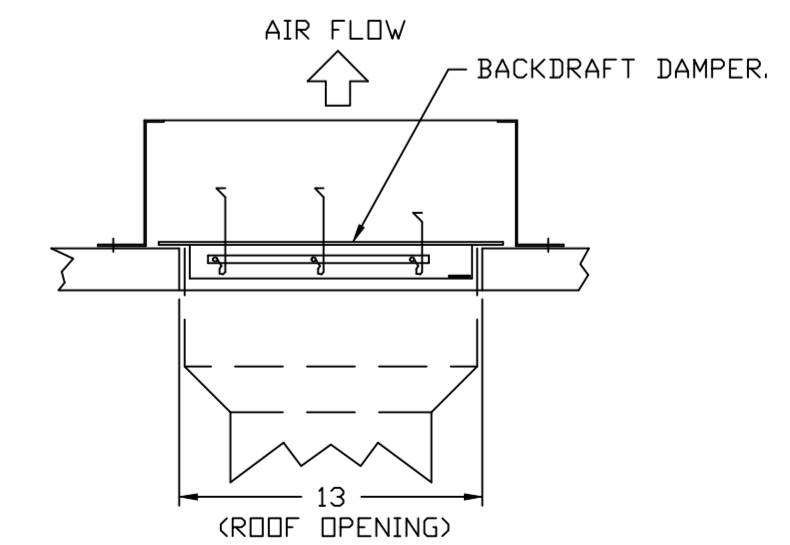
ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION. MOTORIZED I 12 BDD 120/240V. 2 YEAR PARTS WARRANTY.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

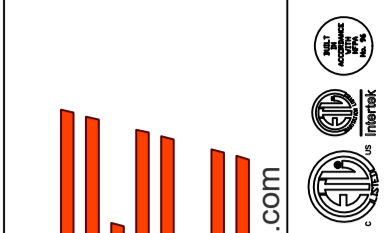
SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.

**BACKDRAFT DAMPER INSTALLATION**



**REVISIONS**

DESCRIPTION	DATE:



**CAPTIVE AIR**  
www.captiveair.com  
**HBT Foodservice**  
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Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
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DATE: 6/15/2022

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5448908

DRAWN BY: michael.co

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

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SHEET NO.  
8



AIR DIFFUSION SUPPLY DUCT SPECIFICATIONS:  
 PROVIDE AIR DIFFUSION SUPPLY DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL DW-S0(HC), DW-S90(HC), & DW-S180(HC).  
 THREE DISTINCT HOLE PATTERN OPTIONS TO COVER A VARIETY OF CEILING HEIGHTS.  
 NO ADDITIONAL DIFFUSERS REQUIRED, AS THE DUCT ITSELF PROVIDES AIR DIFFUSION.  
 MADE OF HIGH QUALITY STAINLESS STEEL DESIGNED TO LAST 20+ YEARS.  
 HIGH INDUCTION SUPPLY DUCT IS CONSTRUCTED USING 24 GAUGE, 430 SS - 5" THRU 24".  
 HIGH INDUCTION SUPPLY DUCT IS CONSTRUCTED USING 20 GAUGE, 430 SS - 26" THRU 36".  
 QUICK ONSITE ASSEMBLY USING EPDM GASKETS & UNIVERSAL V-BANDS.  
 DOUBLE WALL SUPPLY DUCT AVAILABLE FOR INTERIOR AND EXTERIOR SPACES, EITHER CONDITIONED OR UNCONDITIONED.  
 DOUBLE WALL SUPPLY DUCT AVAILABLE IN DW-1S, DW-2S, & DW-3S TO MEET SPECIFIC REGIONAL "R" VALUE REQUIREMENTS.

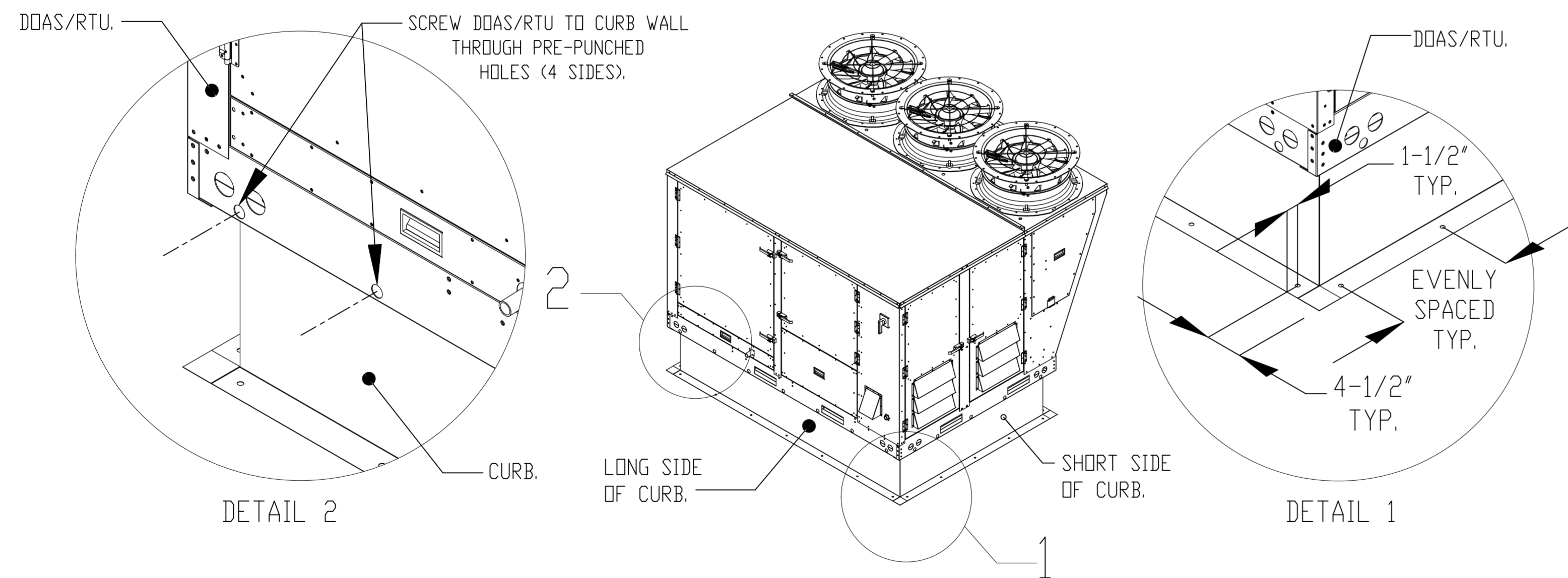
Insulation R-Value Recommendations

Supply Duct Type	Minimum R-value	Space Type
Single Wall - S & -HC	N/A	Conditioned Space Only
Double Wall - 1S	R-4	Unconditioned Interior Space Only
Double Wall - 2S	R-8	Unconditioned Space Climate Zones 1-4
Double Wall - 3S	R-12	Unconditioned Space Climate Zones 5-8

DOUBLE WALL SUPPLY DUCT IS INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.  
 AIR DIFFUSION SUPPLY DUCT COMPLIES WITH SMACNA (SHEET METAL AND AIR CONDITIONING CONTRACTORS) BEST PRACTICES.  
 POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTION TO DISCHARGE, SEE NFPA 13, TABLE 8.12.5.1.1.

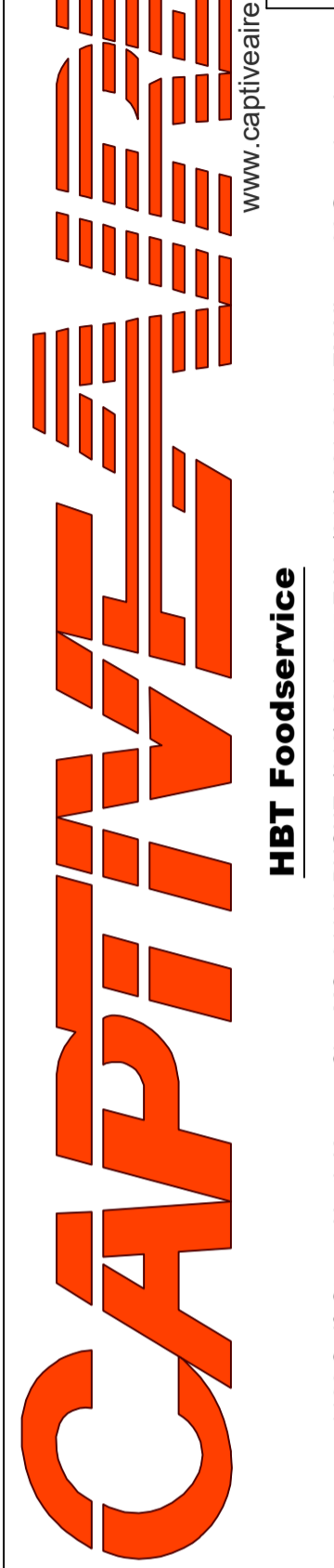
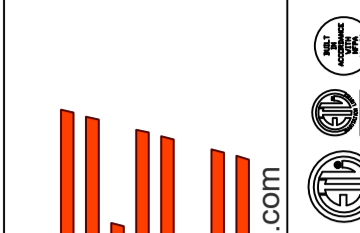
## TYPICAL DOAS/RTU ROOF MOUNTING INSTALLATION INSTRUCTIONS

1. SECURE THE CURB TO THE ROOF FRAMING MEMBERS BY DRILLING 1/4" PILOT HOLES IN THE CURB FLANGES AT LOCATIONS SHOWN IN THE DIAGRAM BELOW. USING 3/8" X 2" ZINC PLATED STEEL LAG BOLTS, AND ZINC PLATED WASHERS, SCREW THROUGH THE CURB FLANGES AND INTO THE ROOF FRAMING MEMBERS. A MINIMUM OF (5) LAG BOLTS ON EACH SHORT SIDE, AND (7) LAG BOLTS ON EACH LONG SIDE IS REQUIRED.
2. SECURE THE UNIT BASE TO THE SIDE WALLS OF THE CURB USING (24) 1/4"-14 X 2" SELF-DRILLING, STEEL ZINC PLATED SCREWS. PRE-PUNCHED HOLES HAVE BEEN PROVIDED FOR EACH SCREW LOCATION.



**REVISIONS**

DESCRIPTION	DATE:



**HBT Foodservice**

Hawaiian Bros - Richardson, TX  
 2060 N Coit Rd,  
 Richardson, TX, 75080

**DATE:** 6/15/2022

**DWG.#:**  
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**DRAWN BY:** michael.co

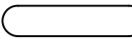
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3/4" = 1'-0"

**MASTER DRAWING**

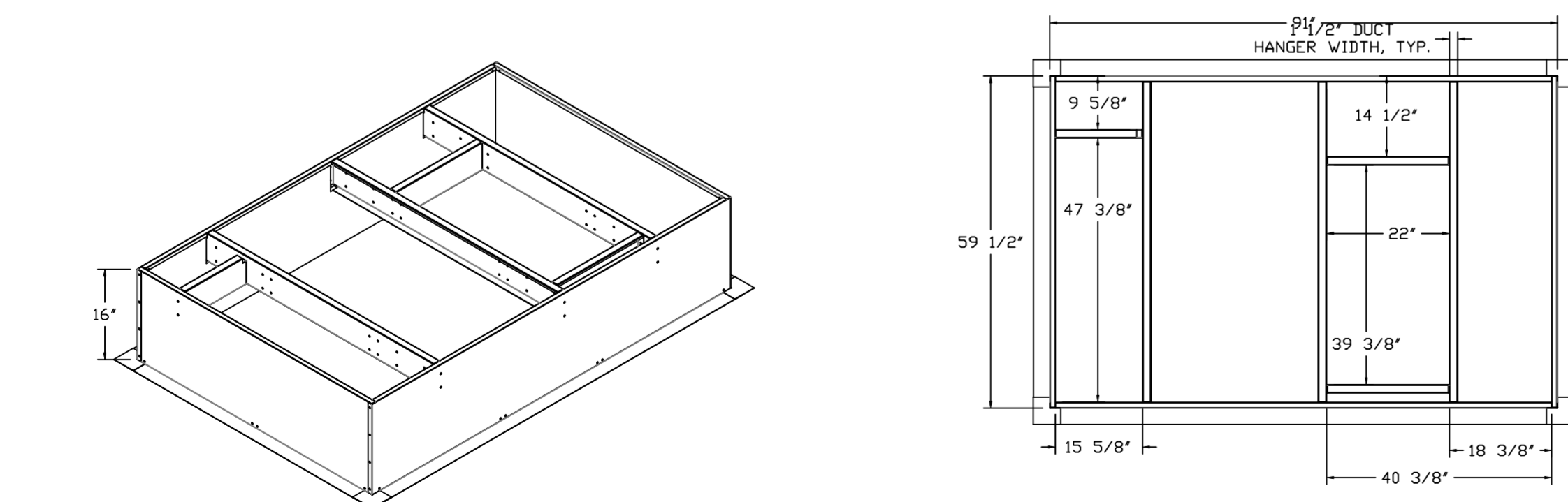
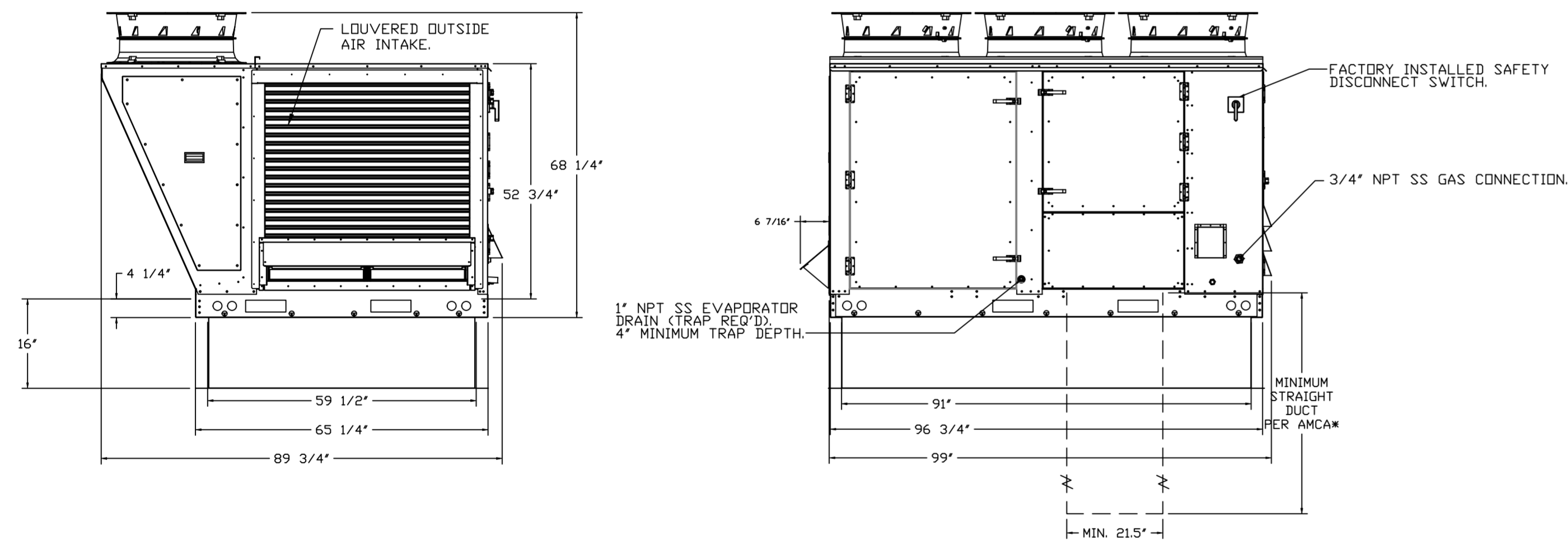
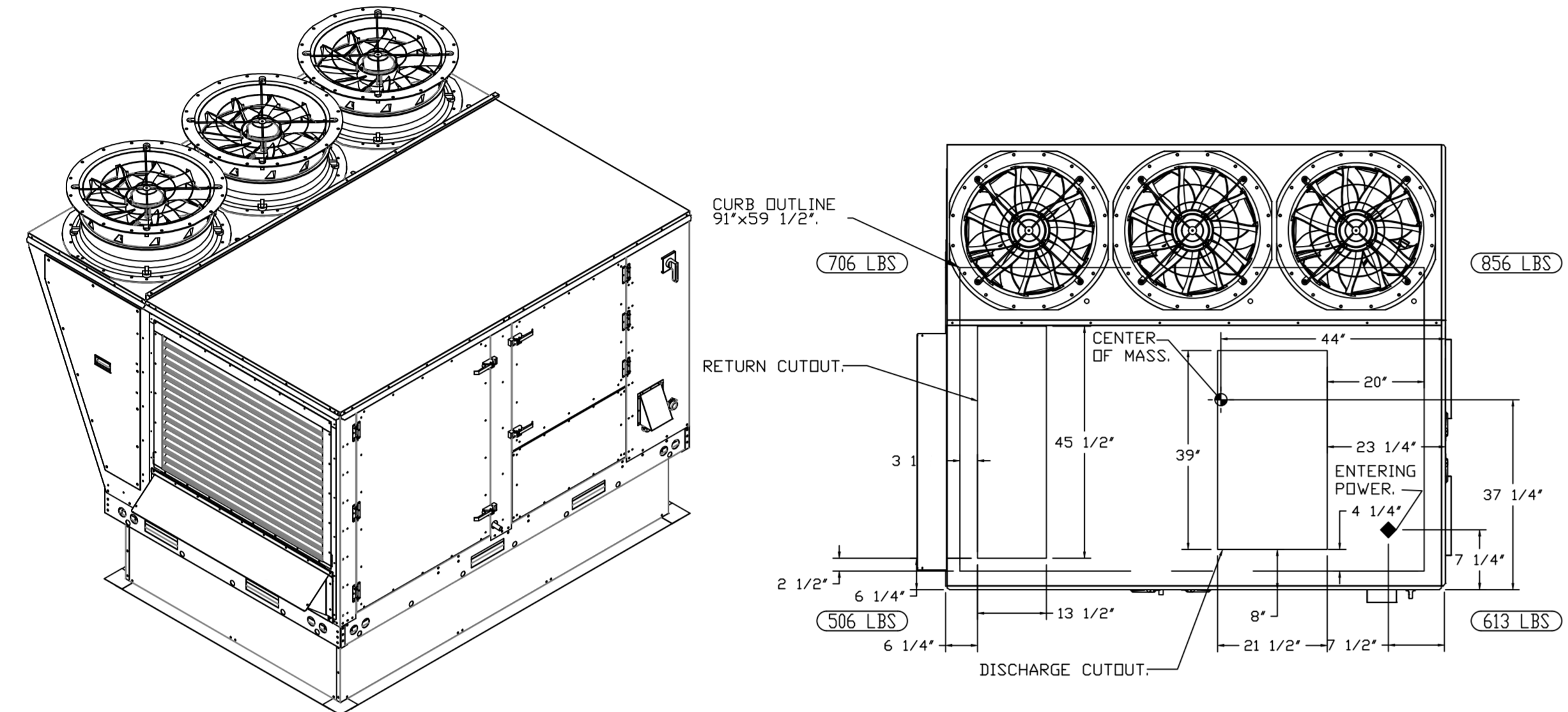
**SHEET NO.**  
9

FAN #5 CASRTU3-I.300-24MF-20T-DOAS - HEATER (RTU-1 DINING)

NOTES:

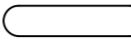
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
-  DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.

\*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 21.5" x 39".

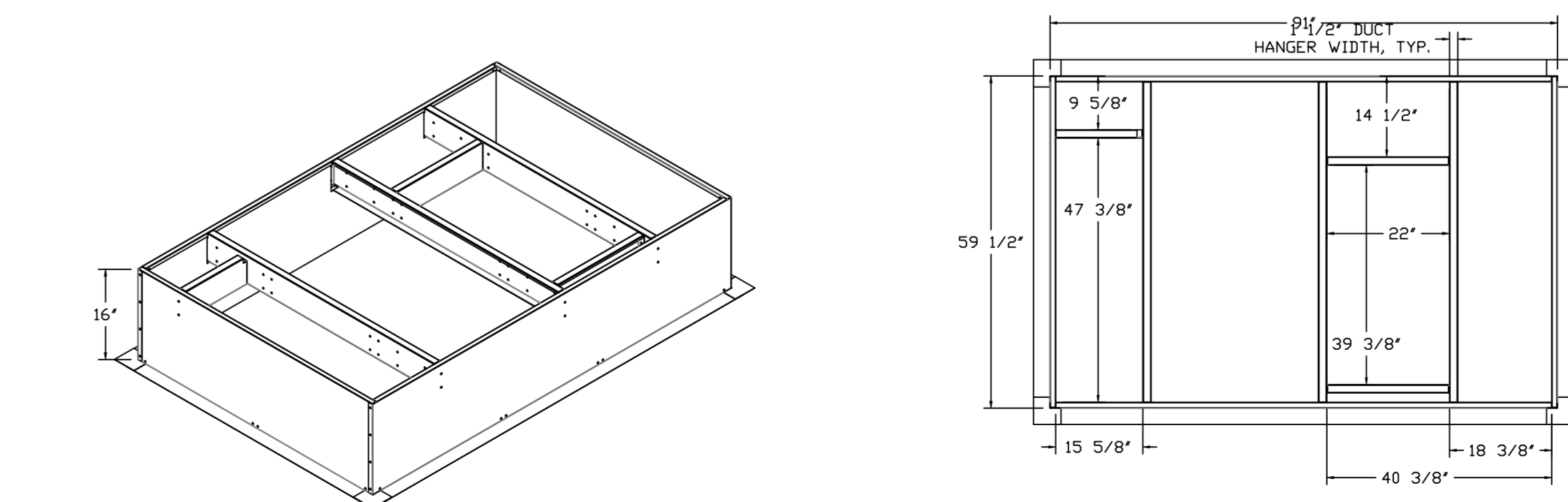
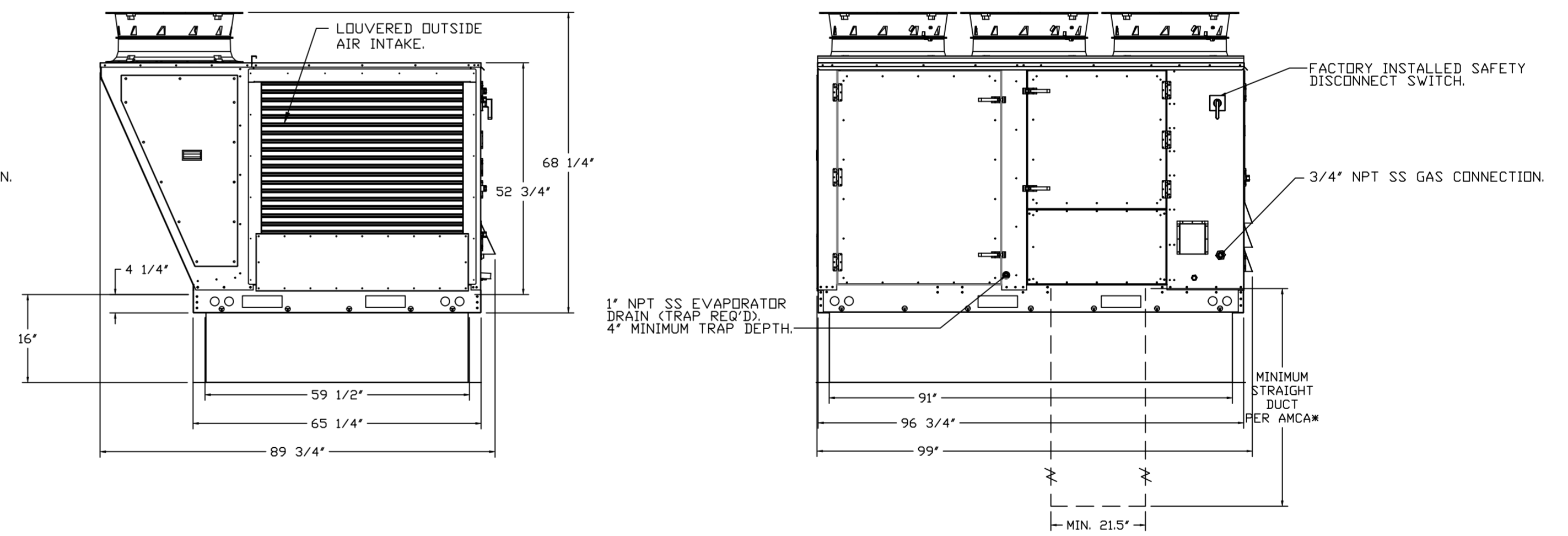
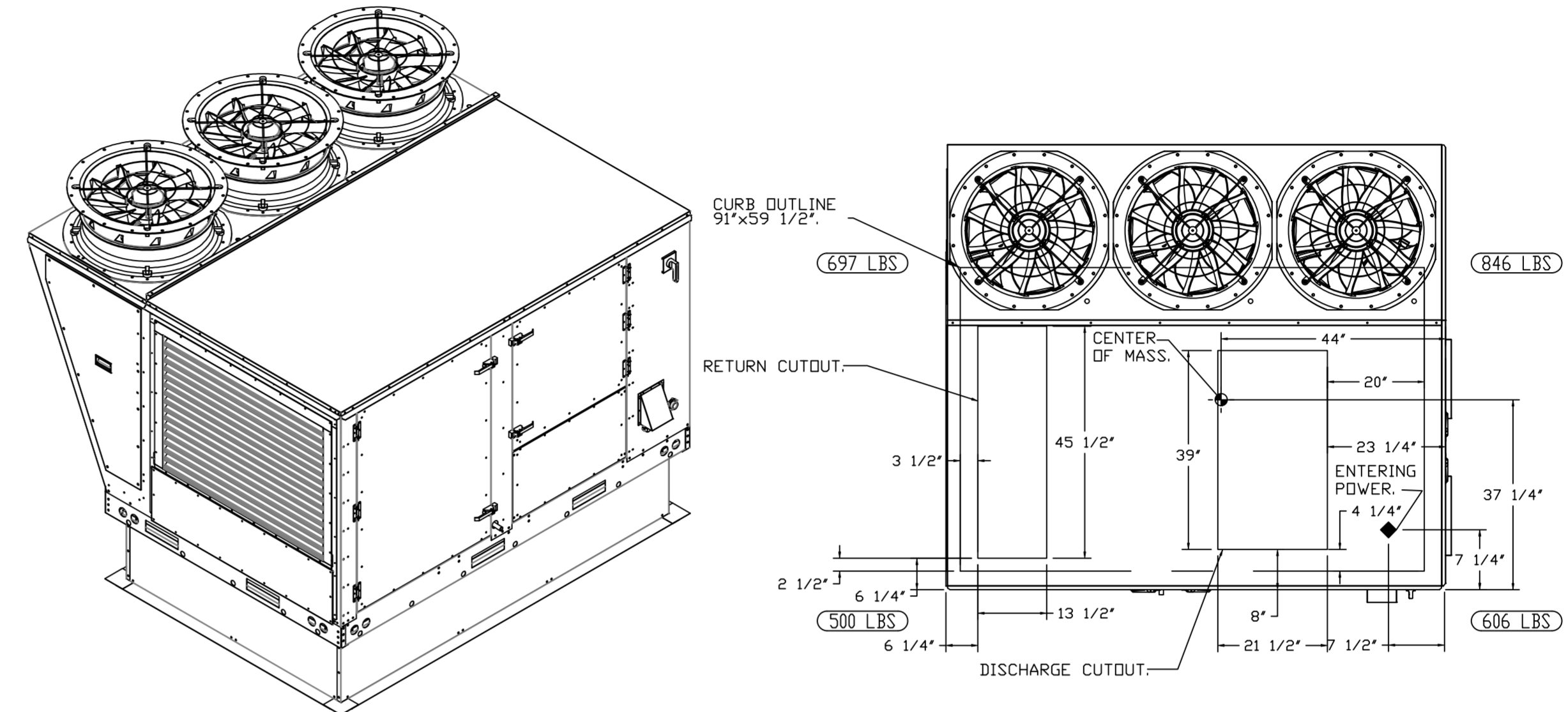


FAN #6 CASRTU3-I.250-20-20T-DOAS - HEATER (RTU-2 KITCHEN)

NOTES:

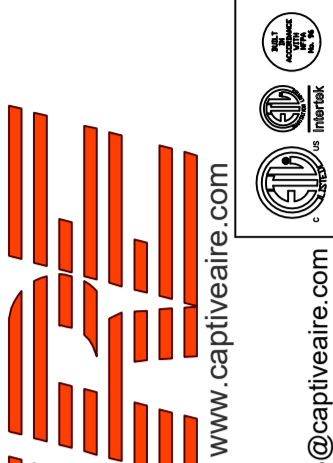
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
-  DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.

\*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 21.5" x 39".



REVISIONS

DESCRIPTION	DATE



**CAPTIVE AIR**  
www.captiveair.com  
**HBT Foodservice**  
www.hbtfoodservice.com

Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

DATE: 6/15/2022

DWG.#:  
5448908

DRAWN BY: michael.co

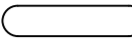
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1/2" = 1'-0"

MASTER DRAWING

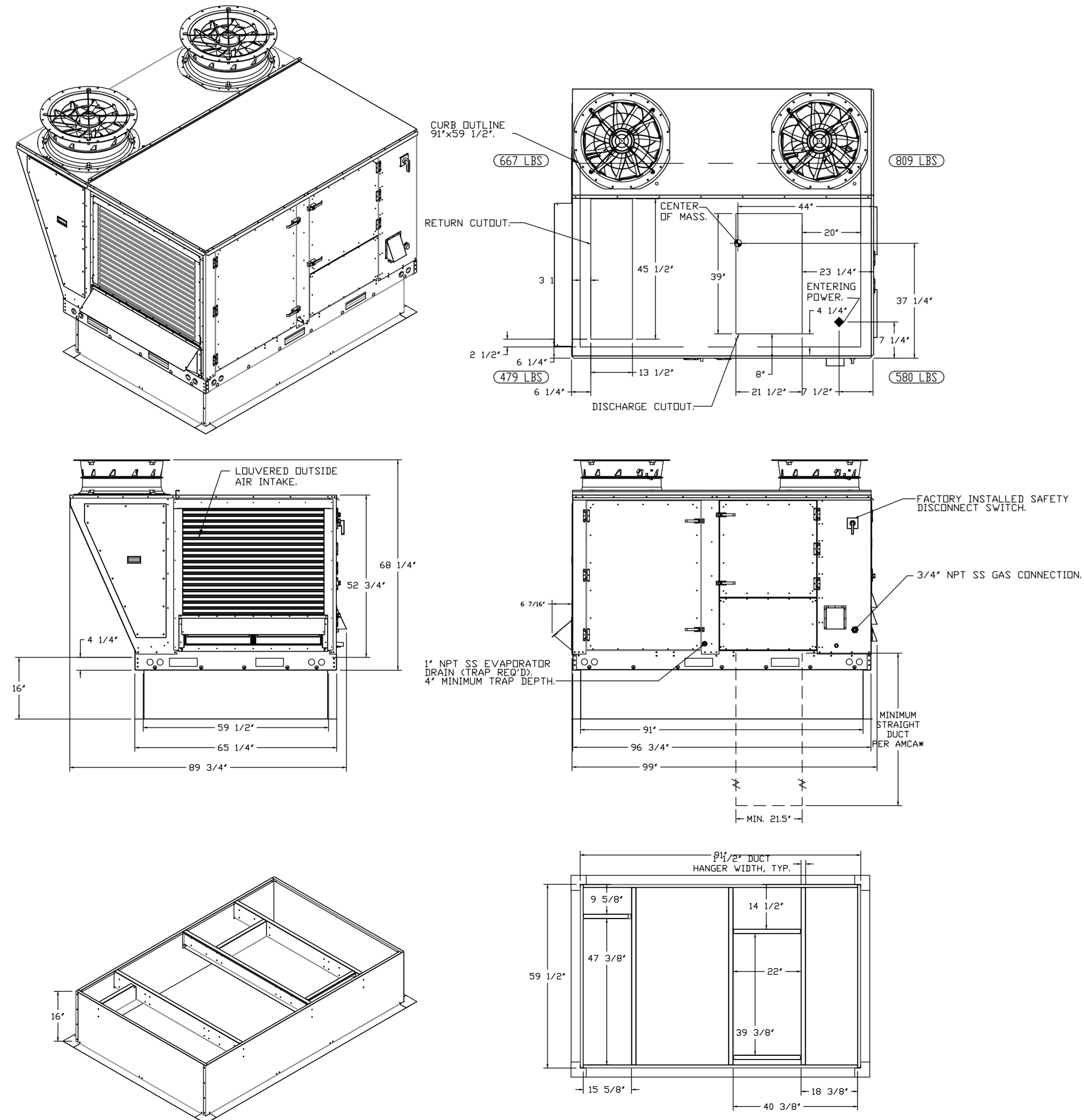
SHEET NO.

10

NOTES:

- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
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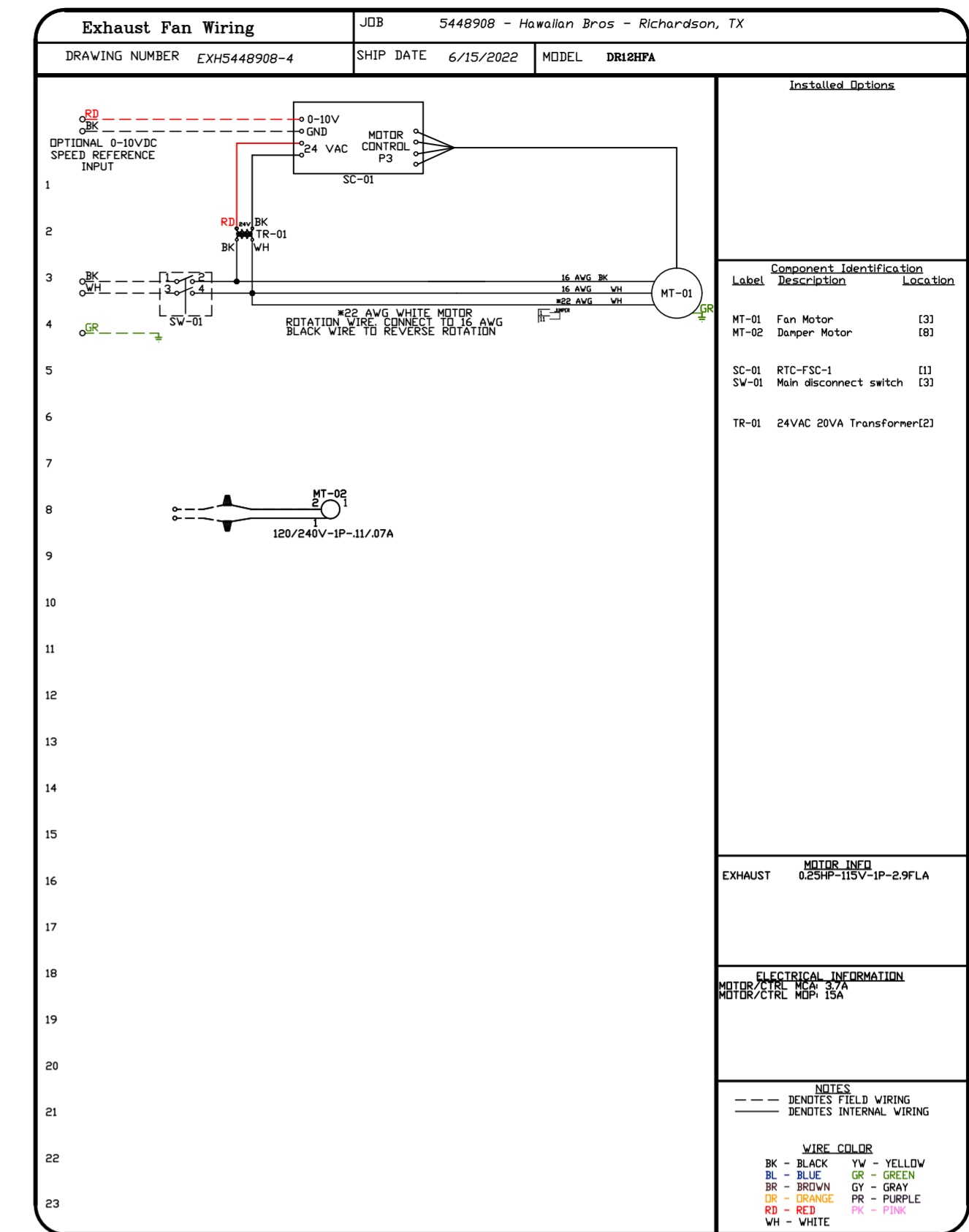
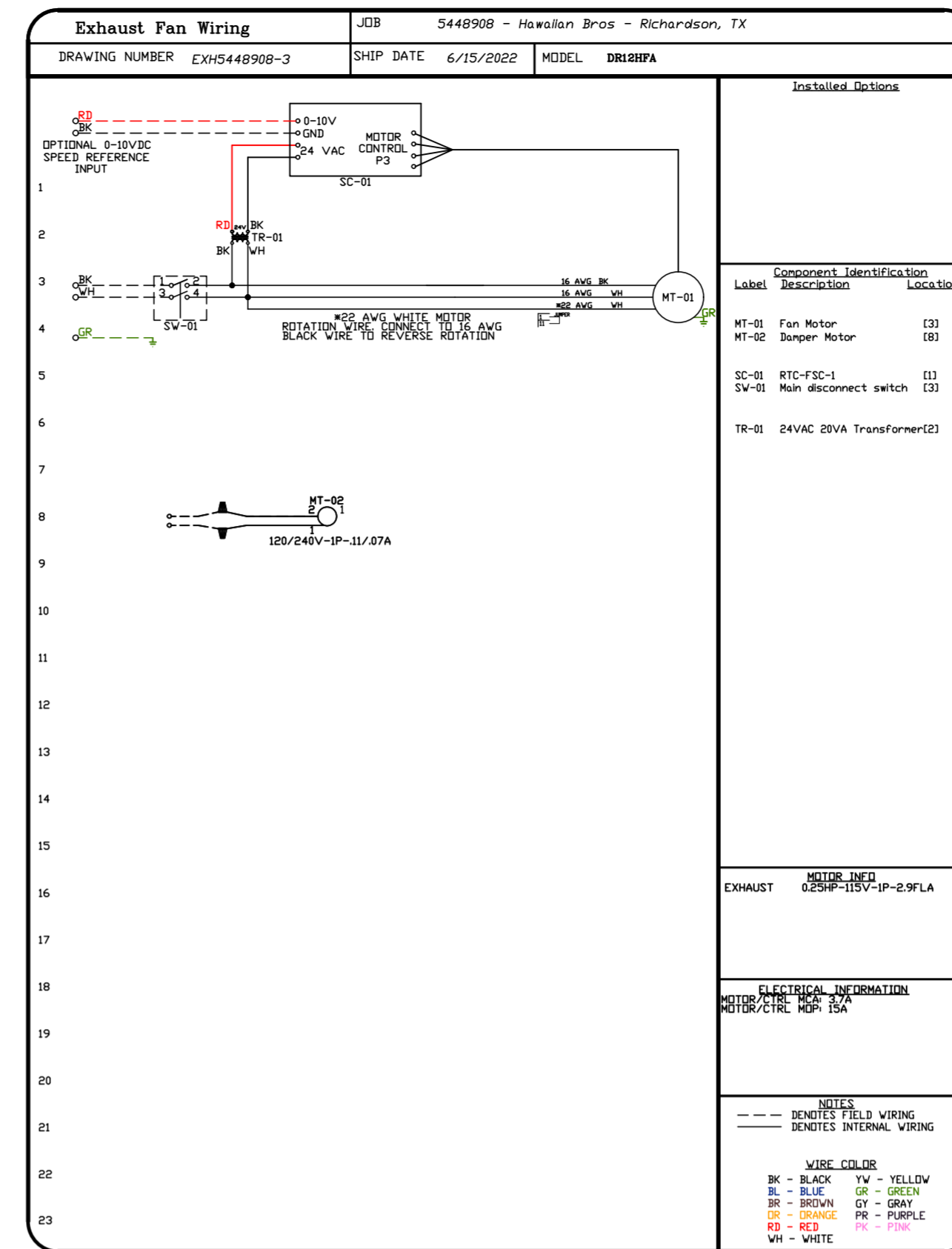
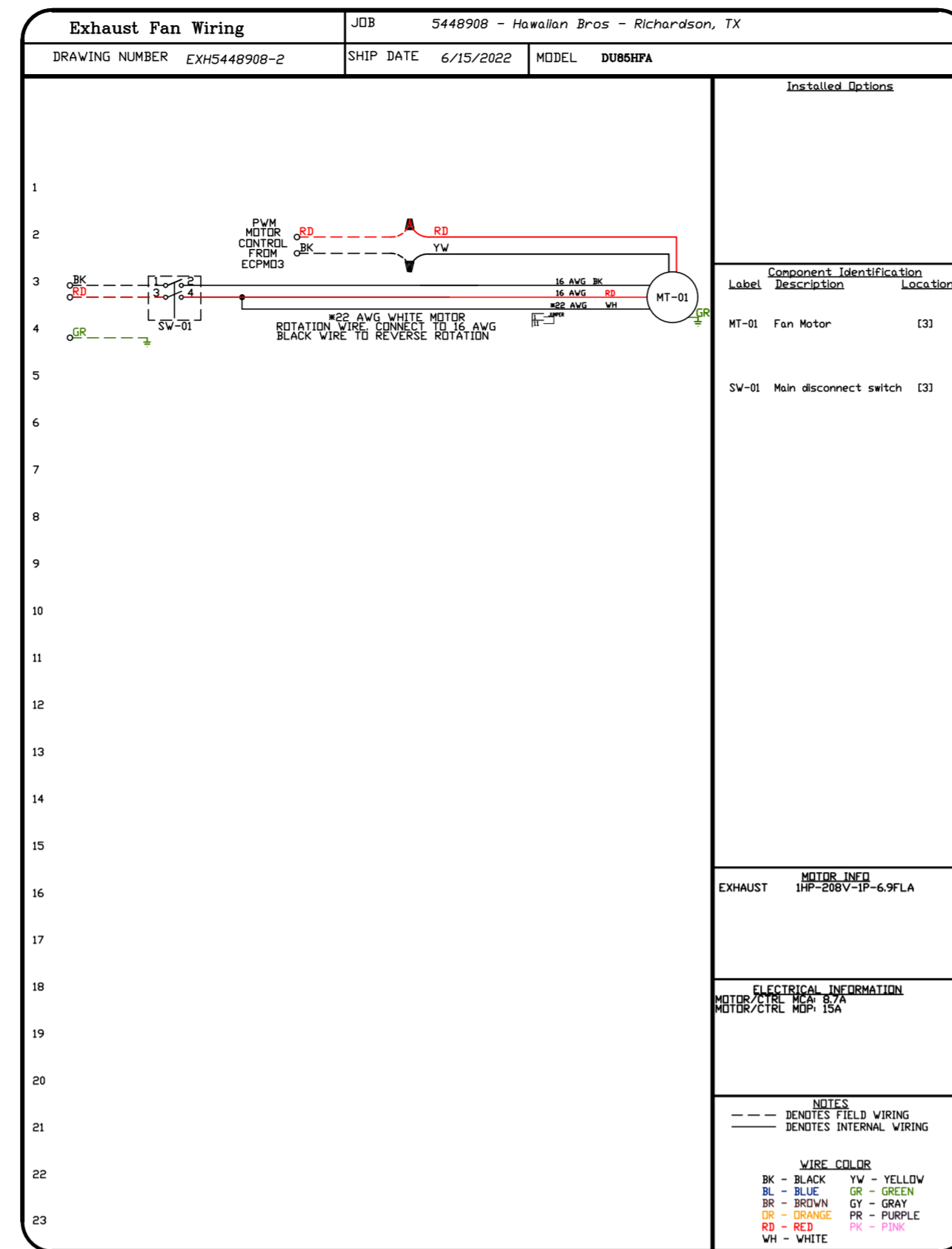
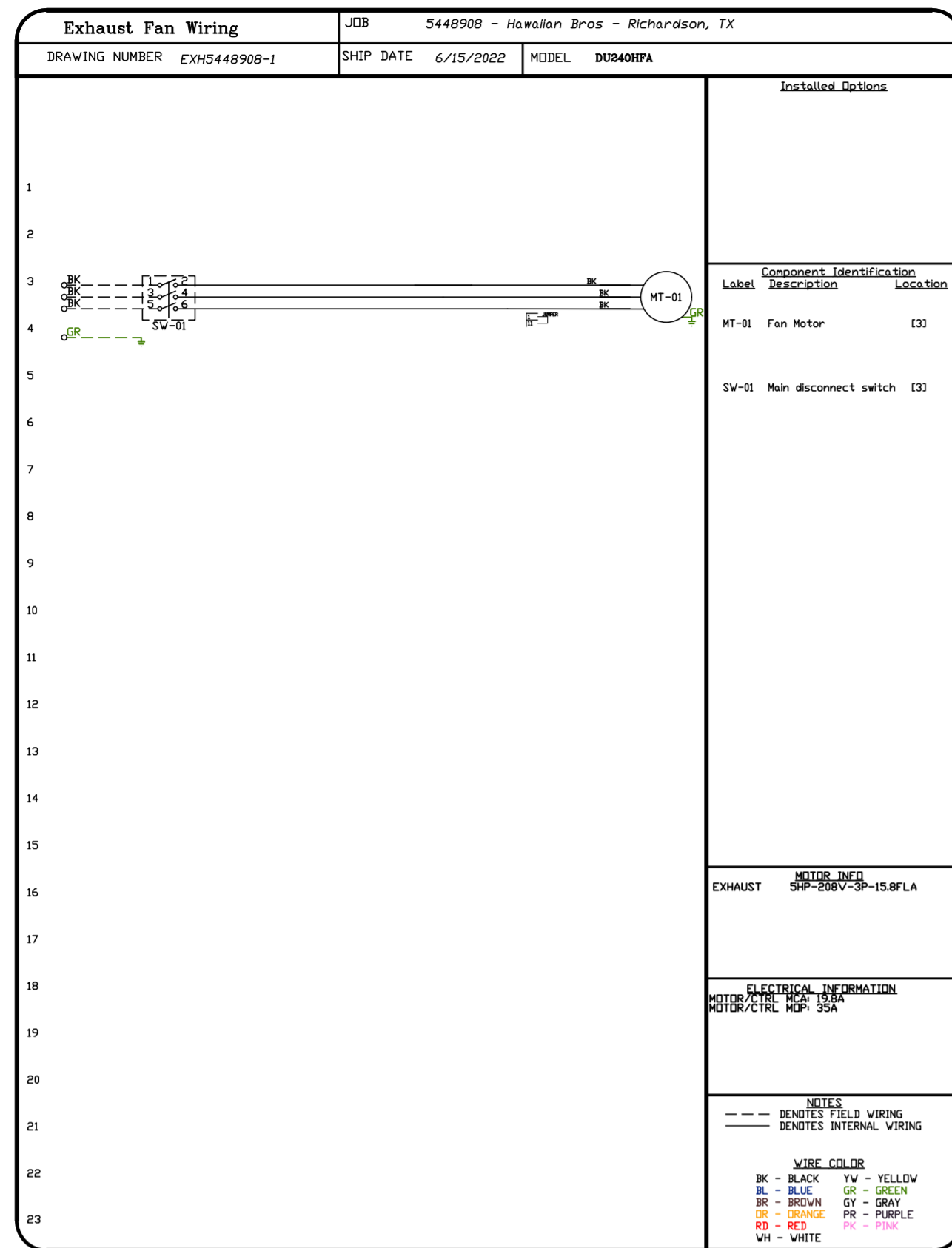
# CAPTIVE AIR

**HBT Foodservice**

1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg9@captveair.com

Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

DATE: 6/15/2022  
DWG.#: 5448908  
DRAWN BY: michael.co  
SCALE: 1/2" = 1'-0"  
MASTER DRAWING



REVISIONS	
DESCRIPTION	DATE

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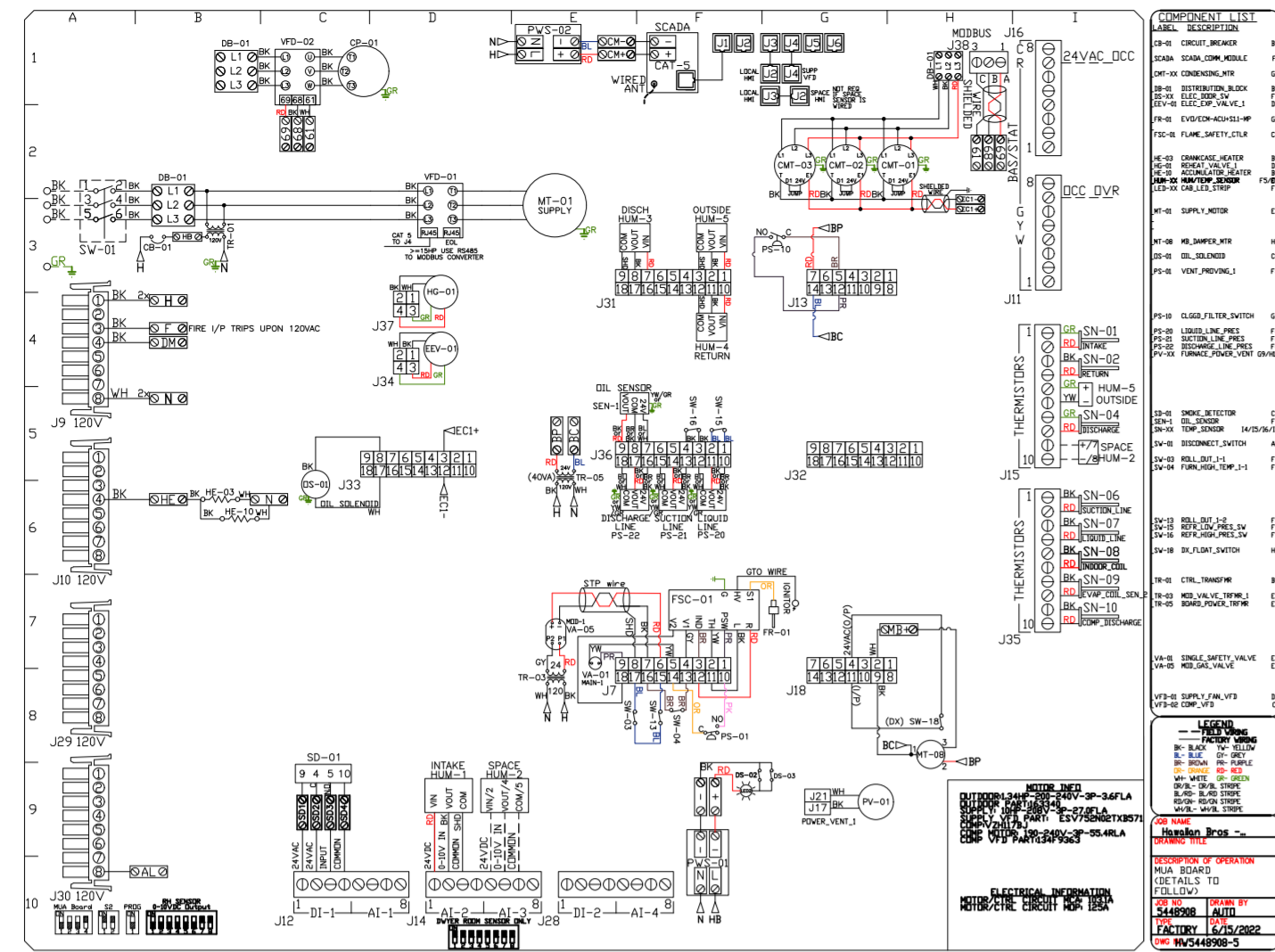
**HBT Foodservice**

1126 Swift Street, North Kansas City, MO, 64116 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg98@captive.com

Hawaiian Bros - Richardson, TX  
2060 N Coit Rd,  
Richardson, TX, 75080

<b>DATE:</b> 6/15/2022
<b>DWG.#:</b> 5448908
<b>DRAWN BY:</b> michael.co
<b>SCALE:</b> 3/4" = 1'-0"
<b>MASTER DRAWING</b>

**SHEET NO.**  
12

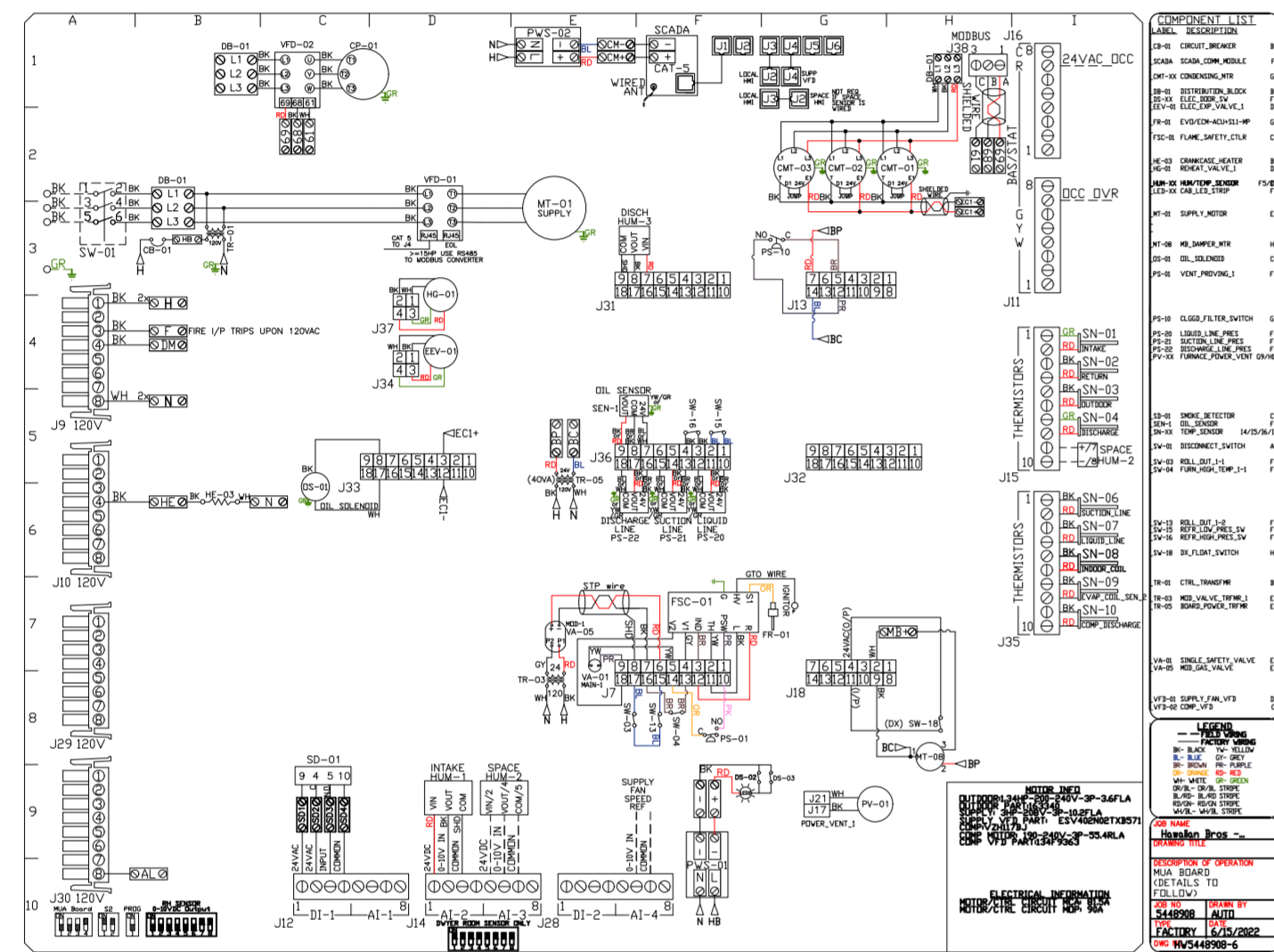
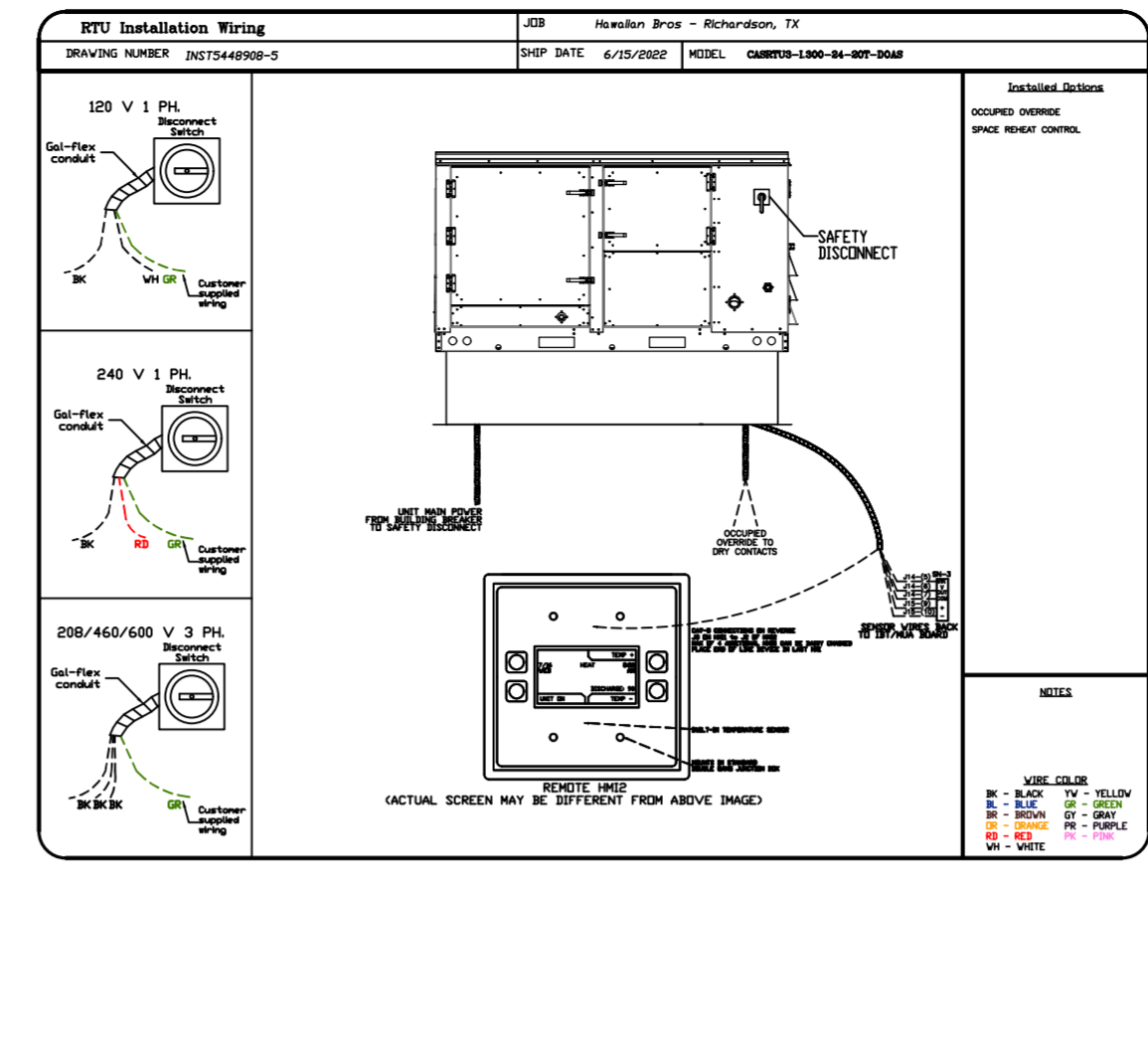
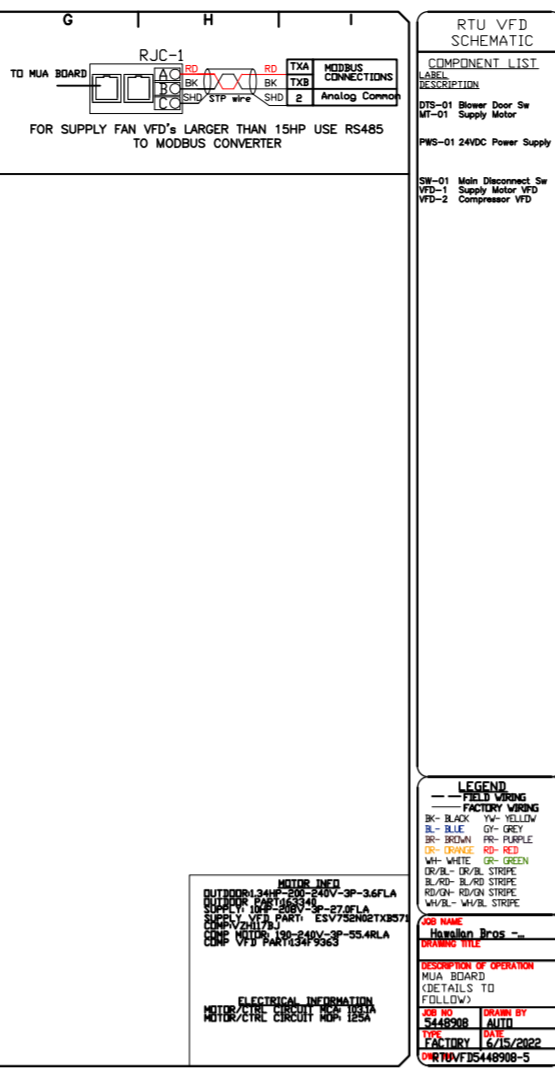


**SUPPLY DRIVE PARAMETER SETTINGS**

PARAMETER	FUNCTION
1	Output Frequency
2	Output Voltage
3	Output Current
4	Output Torque
5	Output Power
6	Output Speed
7	Output Torque Limit
8	Output Voltage Limit
9	Output Current Limit
10	Output Power Limit
11	Output Speed Limit
12	Output Torque Limit
13	Output Voltage Limit
14	Output Current Limit
15	Output Power Limit
16	Output Speed Limit
17	Output Torque Limit
18	Output Voltage Limit
19	Output Current Limit
20	Output Power Limit

**VFD SERIES COMPRESSION VFD**

PARAMETER	FUNCTION
1	Phase In
2	Phase In
3	Phase In
4	Phase In
5	Phase In
6	Phase In
7	Phase In
8	Phase In
9	Phase In
10	Phase In
11	Phase In
12	Phase In
13	Phase In
14	Phase In
15	Phase In
16	Phase In
17	Phase In
18	Phase In
19	Phase In
20	Phase In

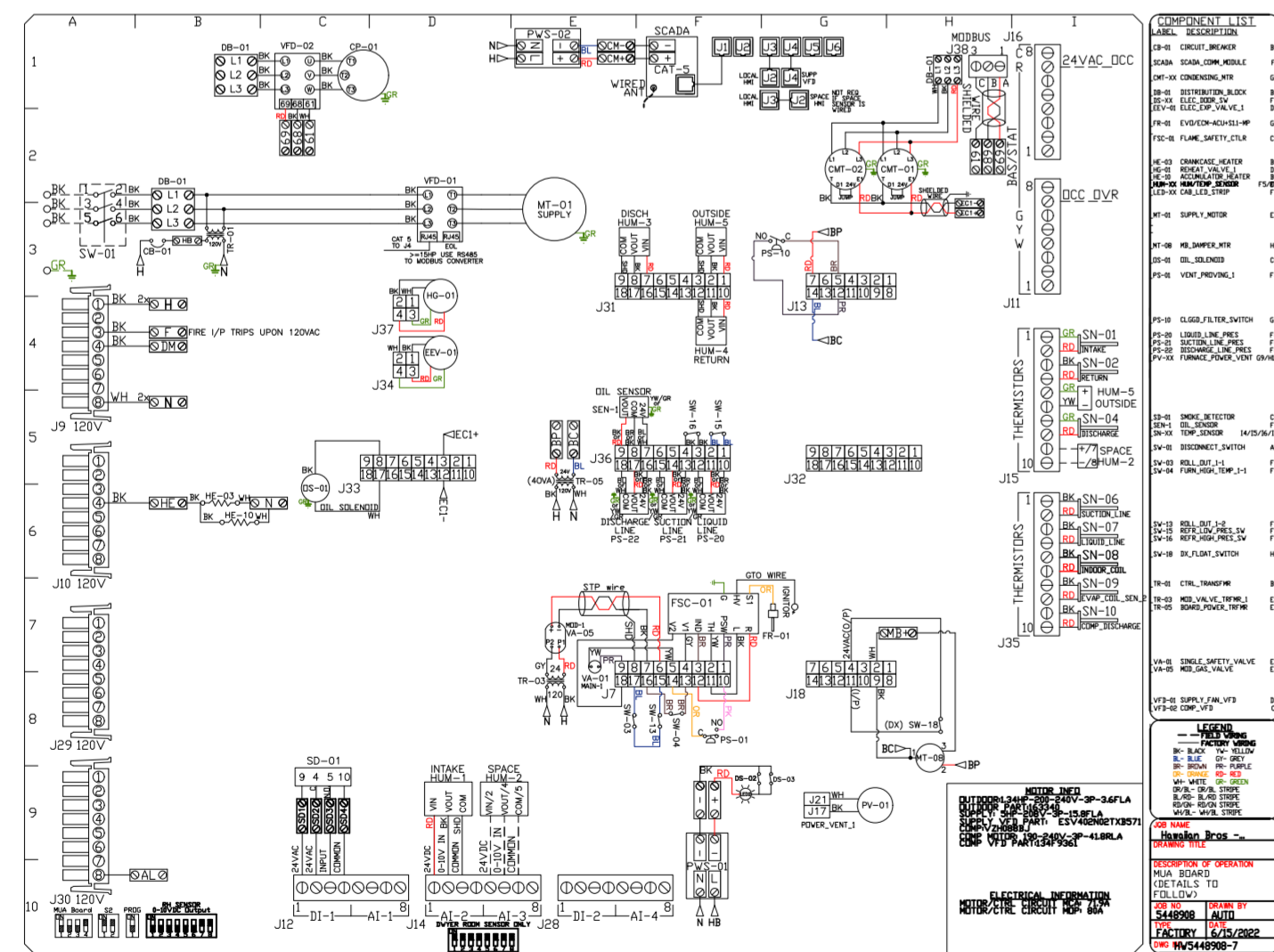
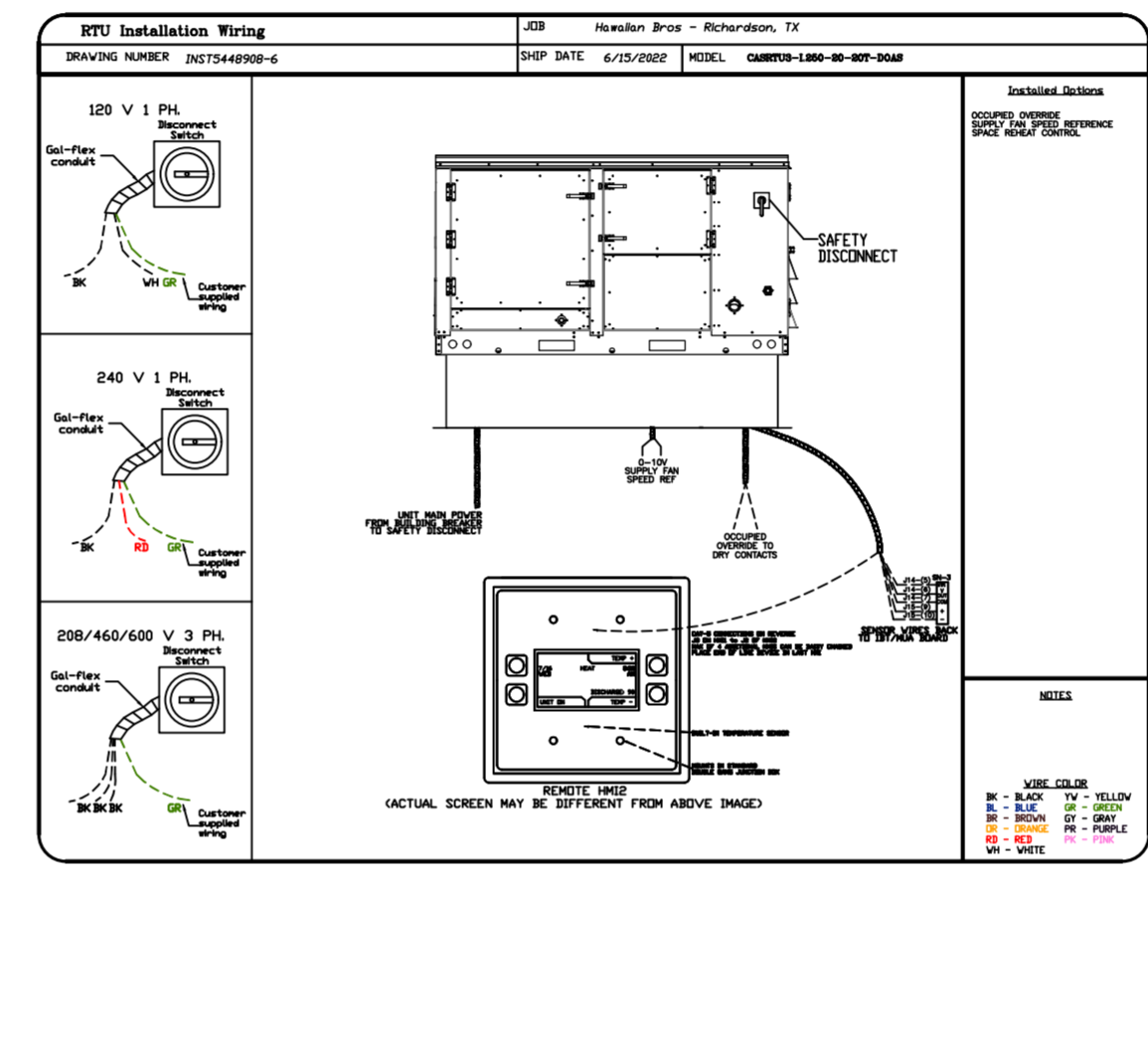
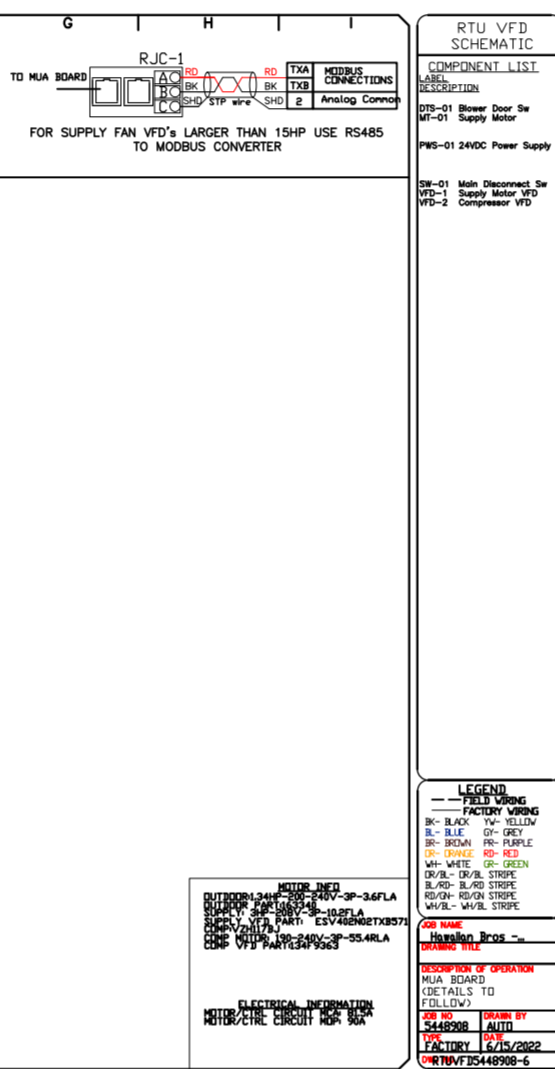


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10	Phase In
11	Phase In
12	Phase In
13	Phase In
14	Phase In
15	Phase In
16	Phase In
17	Phase In
18	Phase In
19	Phase In
20	Phase In

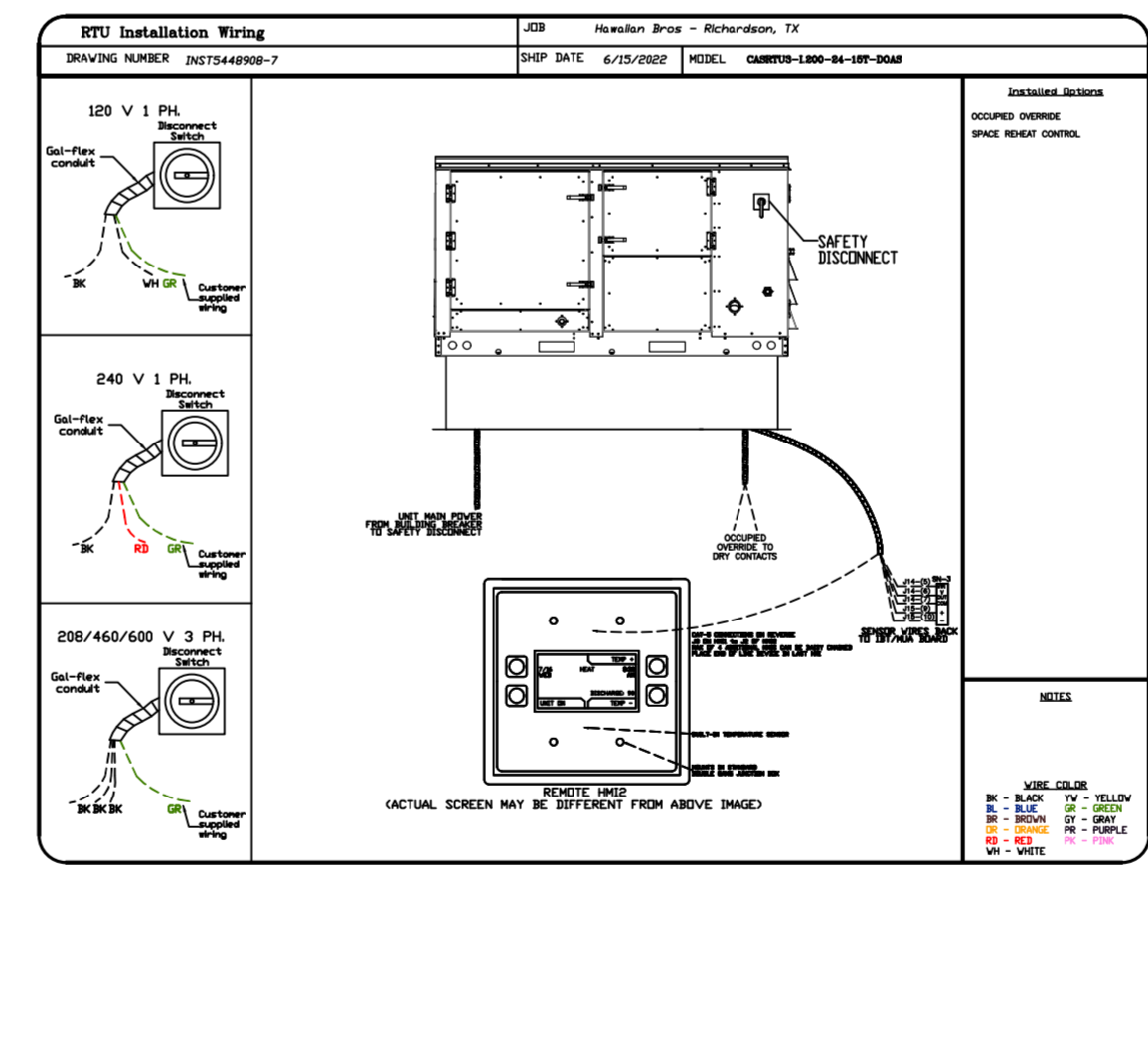
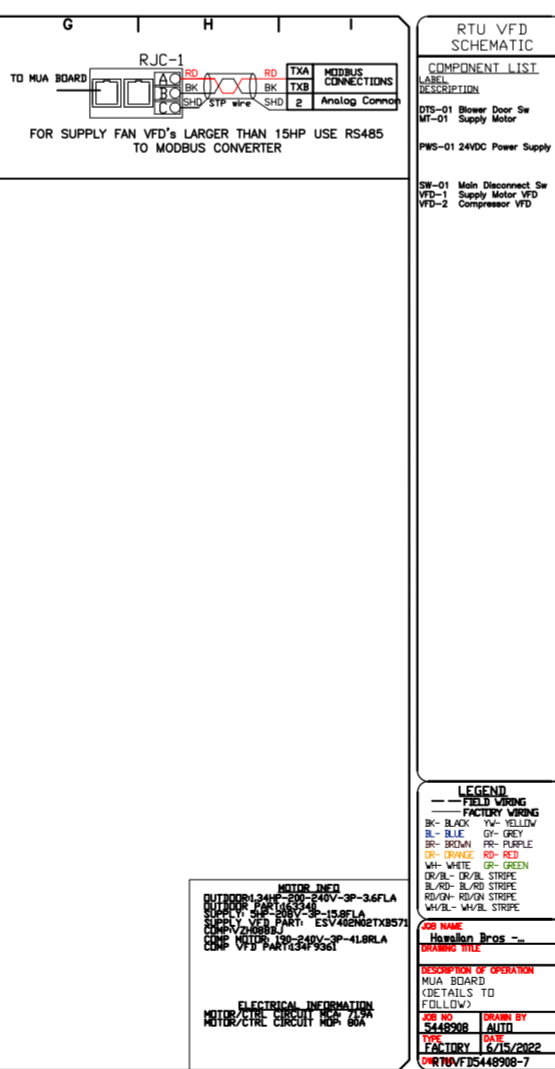


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4	Phase In
5	Phase In
6	Phase In
7	Phase In
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9	Phase In
10	Phase In
11	Phase In
12	Phase In
13	Phase In
14	Phase In
15	Phase In
16	Phase In
17	Phase In
18	Phase In
19	Phase In
20	Phase In



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

MASTER DRAWING

SHEET NO.  
13

