

FOR QUESTIONS, CALL THE  
 Florida National Accounts  
 REGION 60  
 PHONE: (407) 682-3100  
 EMAIL: reg60@captiveaire.com

**DOAS/RTU FAN SCHEDULE -- JOB#5578090**

FAN UNIT NO	TAG	QTY	DOAS/RTU MODEL #	MANUFACTURER	FAN INFORMATION					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	MDCP	OUTSIDE AIR	MIXED AIR	LEAVING AIR	CAPACITY	IEER	ISMRE	DISCHARGE	CAPACITY	MOISTURE REMOVAL RATE	GAS TYPE	INPUT BTUS		OUTPUT BTUS	TEMP RISE							
					DB	WB	DB	WB	DB	WB	DP	TOTAL	SENS.	DB	WB	DESIRED	MAX	LBS/HR	NATURAL	225926	183000	30°F														
1	RTU-1 DINING	1	CASRTU3-1.300-24-20T-DOAS	CAPTIVEAIRE	24MF-3-RTU	4400	1750	6150	2689	0.750	10.00	3	208	103.1A	125A	82.9°F	76.5°F	77.2°F	66.6°F	53.1°F	53.1°F	53.2°F	242.4 MBH	156.0 MBH	18.2	6.0	70.0°F	59.6°F	114.3 MBH	129.6 MBH	79.3 LBS/HR	NATURAL	276543	224000	30°F	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
2	RTU-2 KITCHEN	1	CASRTU3-1.300-24-20T-DOAS	CAPTIVEAIRE	24MF-3-RTU	4450	1700	6150	2689	0.750	10.00	3	208	103.1A	125A	82.9°F	76.5°F	77.2°F	66.6°F	53.1°F	53.1°F	53.2°F	242.4 MBH	156.0 MBH	18.2	6.0	70.0°F	59.6°F	114.3 MBH	129.6 MBH	79.3 LBS/HR	NATURAL	225926	183000	25°F	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18

**NOTES:**

1. INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL
2. DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE
3. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
4. REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE
5. EC MOTOR CONDENSING FANS
6. ELECTRONIC EXPANSION VALVE. TXV NOT ACCEPTABLE
7. SUCTION LINE ACCUMULATOR
8. FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER
9. AVERAGING INTAKE, EVAP AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT)
10. 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 20GA EXTERIOR W/ 14GA BASE
11. 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
12. SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE
13. FULLY MODULATING HOT GAS REHEAT
14. 15 DEGREE LOW AMBIENT OPERATION
15. HAIL GUARD FOR CONDENSING COIL
16. RTU ECONOMIZER WITH FIXED ENTHALPY CONTROL
17. BAROMETRIC RELIEF DAMPER

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	RTU-1 DINING	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
		1	RTU TOTAL CFM MONITORING
		1	SHIP LOOSE GAS STRAINER 3/4"
		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	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	LOW AMBIENT COOLING OPERATION - DOWN TO 0°F AMBIENT
		1	RTU3 DOWN DISCHARGE
		1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
		1	OVERHEAT STAT
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
		1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR
		1	20 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
		1	20 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL
		1	RTU3 CURB DUCT HANGER
		1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE - FACTORY INSTALLED
		1	OCCUPIED SCHEDULING
		1	RTU3 CONVENIENCE OUTLET (GFCI), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J-BOX
		1	RTU ECONOMIZER - FIXED ENTHALPY CONTROL
		1	RTU3 ECONOMIZER BAROMETRIC RELIEF
		1	RTU3 HAIL GUARD
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI
		1	RTU3 DOWN RETURN
		1	VAV PACKAGE W/ MANUAL/DDC CONTROL (S71 VFD INCLUDED)
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)		
2	RTU-2 KITCHEN	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
		1	RTU TOTAL CFM MONITORING
		1	SHIP LOOSE GAS STRAINER 3/4"
		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
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		1	OVERHEAT STAT
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
		1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR
		1	RTU3 CURB DUCT HANGER
		1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE - FACTORY INSTALLED
		1	OCCUPIED SCHEDULING
		1	RTU3 CONVENIENCE OUTLET (GFCI), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J-BOX
		1	20 TON MODULATING COOLING OPTION, 208/230V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
		1	20 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL
		1	RTU ECONOMIZER - FIXED ENTHALPY CONTROL
		1	RTU3 ECONOMIZER BAROMETRIC RELIEF
		1	RTU3 HAIL GUARD
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI
		1	RTU3 DOWN RETURN
		1	VAV PACKAGE W/ MANUAL/DDC CONTROL (S71 VFD INCLUDED)
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)		

**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.

**Accepted**

**Accepted as Noted**


**Revise and Resubmit**

**Rejected**

These Drawings have been reviewed for general arrangement and agreement with the contract documents. Review/Acceptance neither extends nor alters any contractual obligations of the architect or contractor. This acceptance does not relieve the contractor's responsibilities as defined in the contract documents.

By: JR

Date: 9/21/2022



**Campbell Construction**  
*The Future is Building*

461 River Crest Ct.  
 Mukwonago, WI 53149  
 262-436-4760

**REVISIONS**

DESCRIPTION	DATE

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CULVERS BOWLING GREEN OH  
 BOWLING GREEN, OH, 43402

DATE: 7/29/2022  
 DWG.#: 5578090  
 DRAWN BY: studdyjr  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

**SHEET NO.**

1

**CURB ASSEMBLIES**

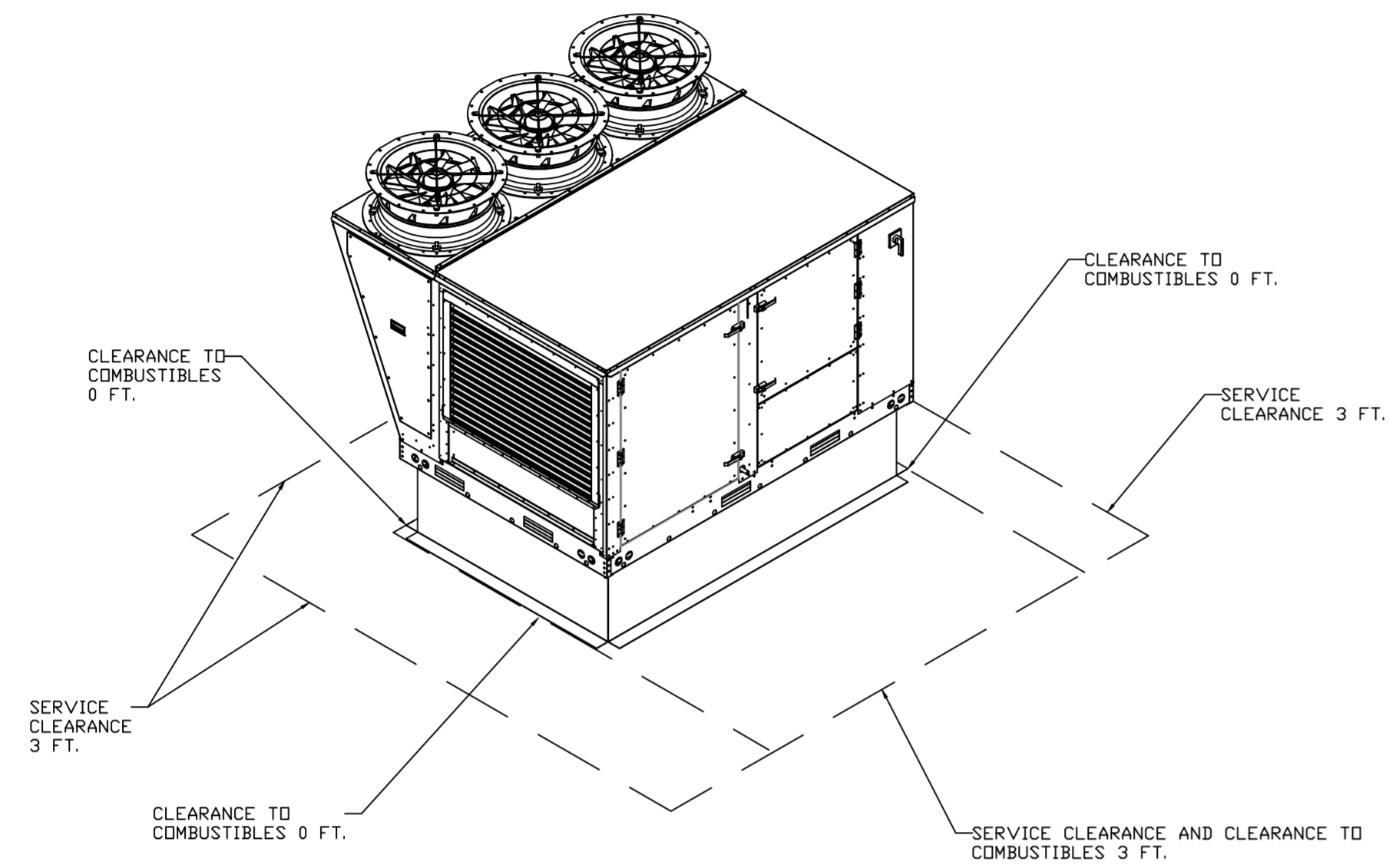
NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	RTU-1 DINING	78 LBS	CURB	59.500"W X 91.000"L X 14.000"H 0.250:12.000 PITCH ALONG WIDTH, RIGHT INSULATED.
2	# 2	RTU-2 KITCHEN	78 LBS	CURB	59.500"W X 91.000"L X 14.000"H 0.250:12.000 PITCH ALONG WIDTH, RIGHT INSULATED.

**REVISIONS**

DESCRIPTION	DATE:

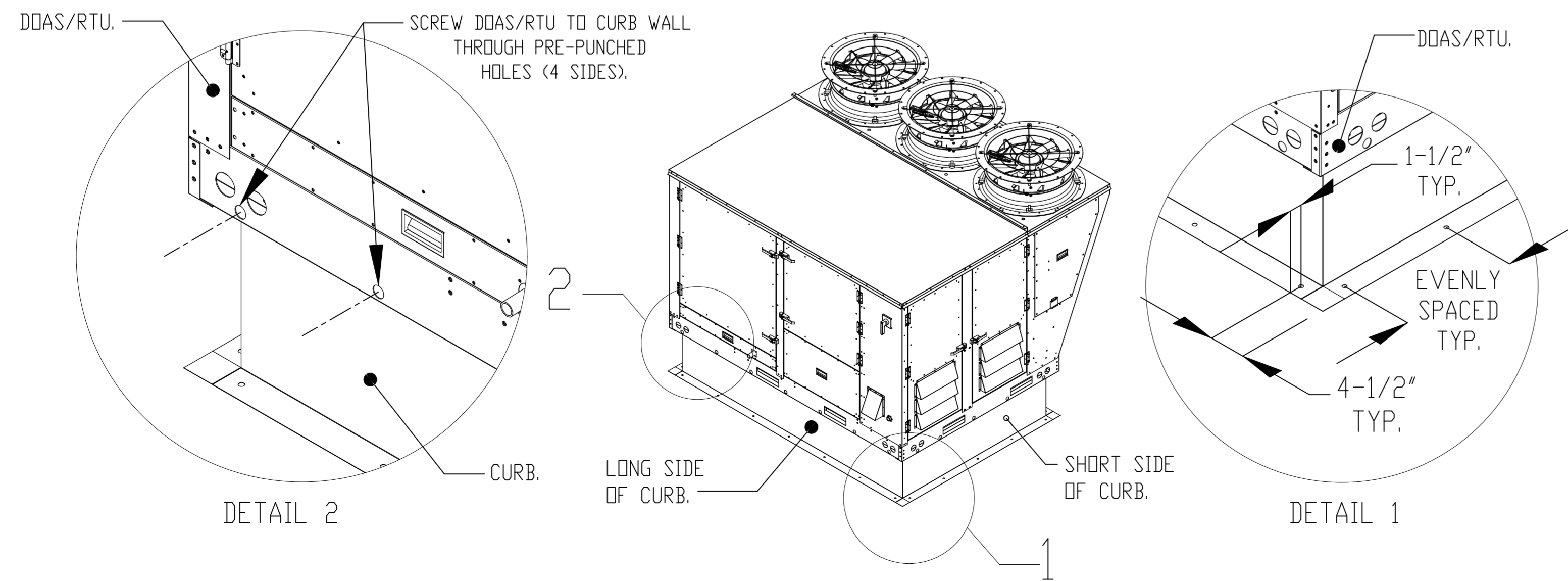
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**TYPICAL DOAS/RTU ROOF MOUNTING INSTALLATION INSTRUCTIONS**

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.



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DWG.#:  
5578090

DRAWN BY: sluddy jr

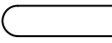
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3/4" = 1'-0"

MASTER DRAWING

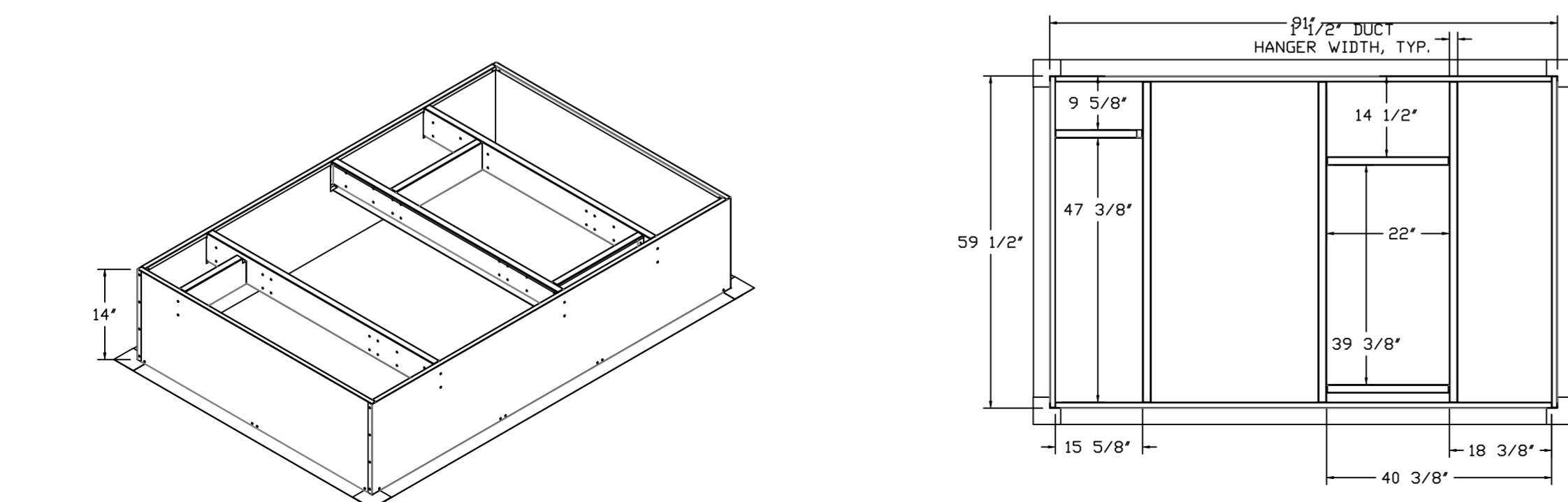
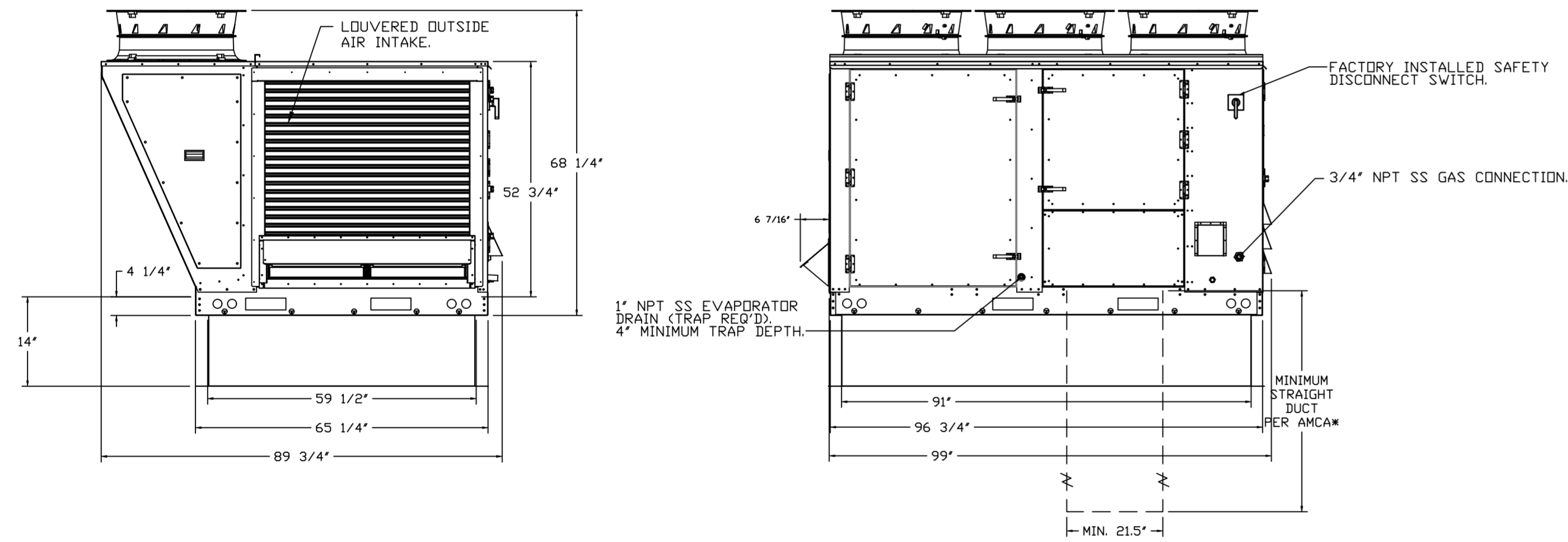
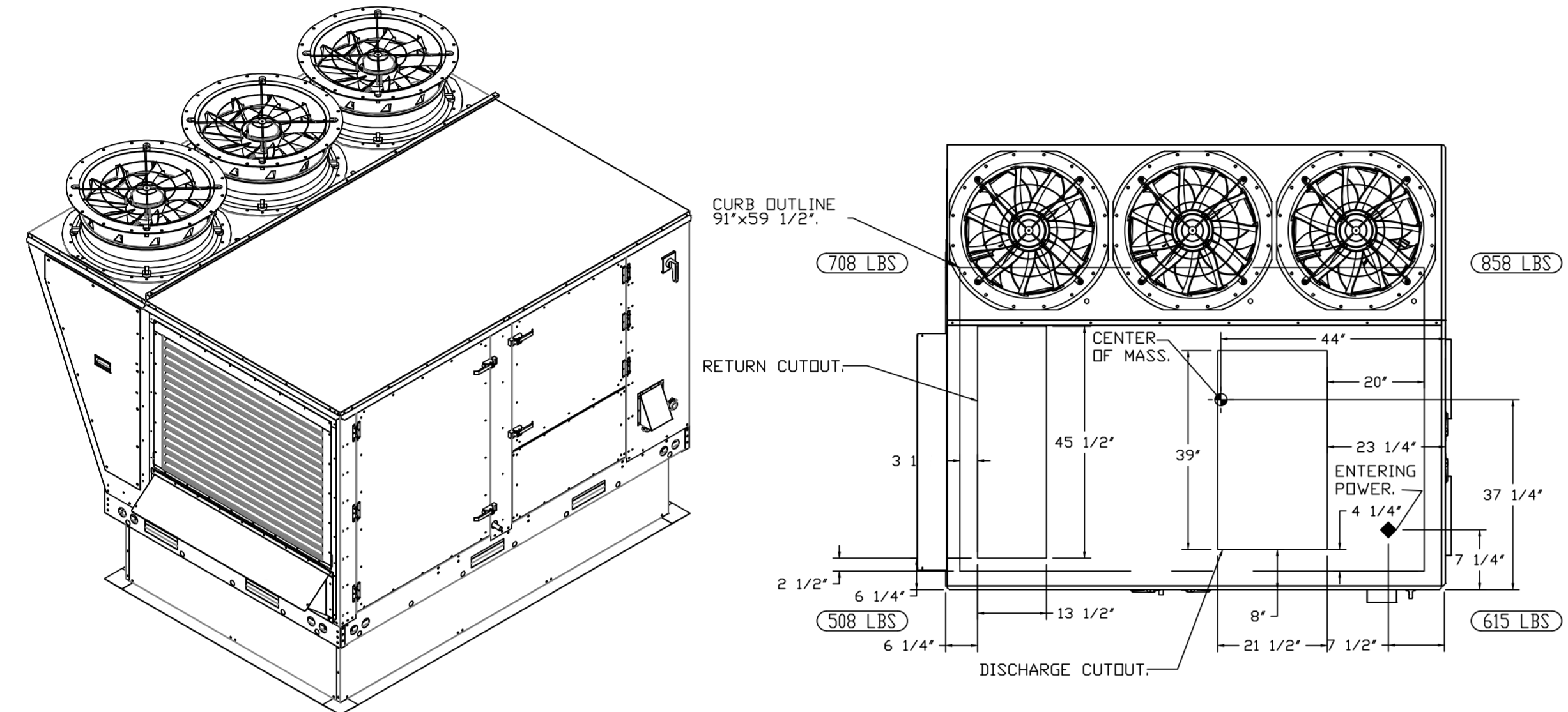
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FAN #1 CASRTU3-I.300-24MF-20T-DDAS - HEATER (RTU-1 DINING)

NOTES:

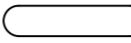
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
-  DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.

\*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".

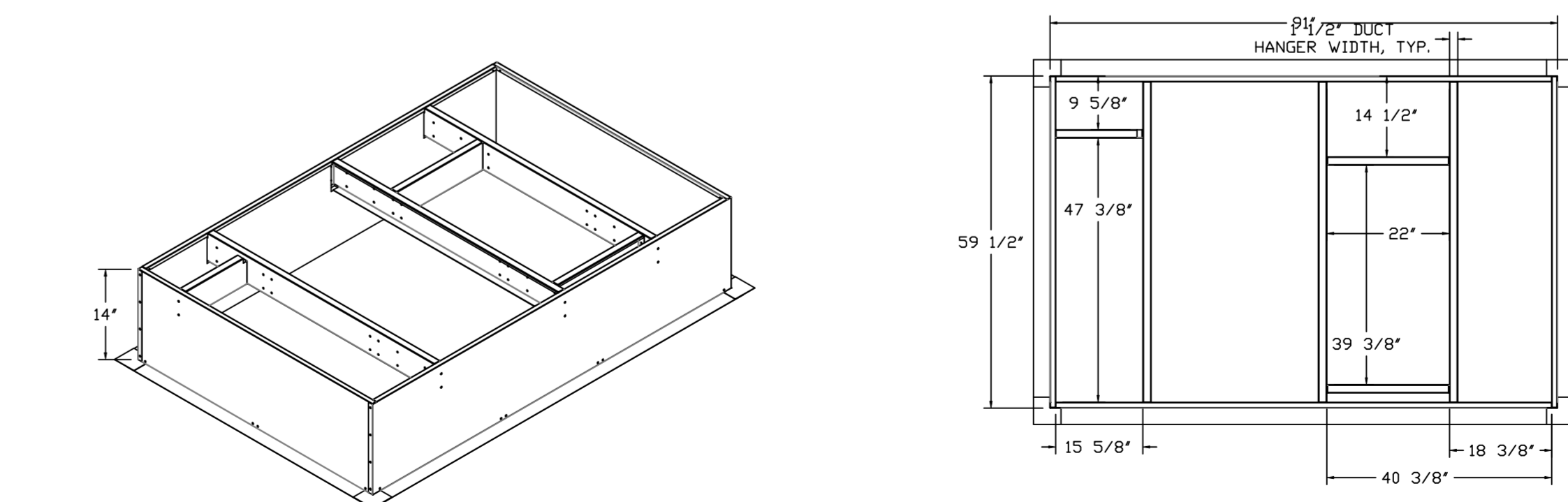
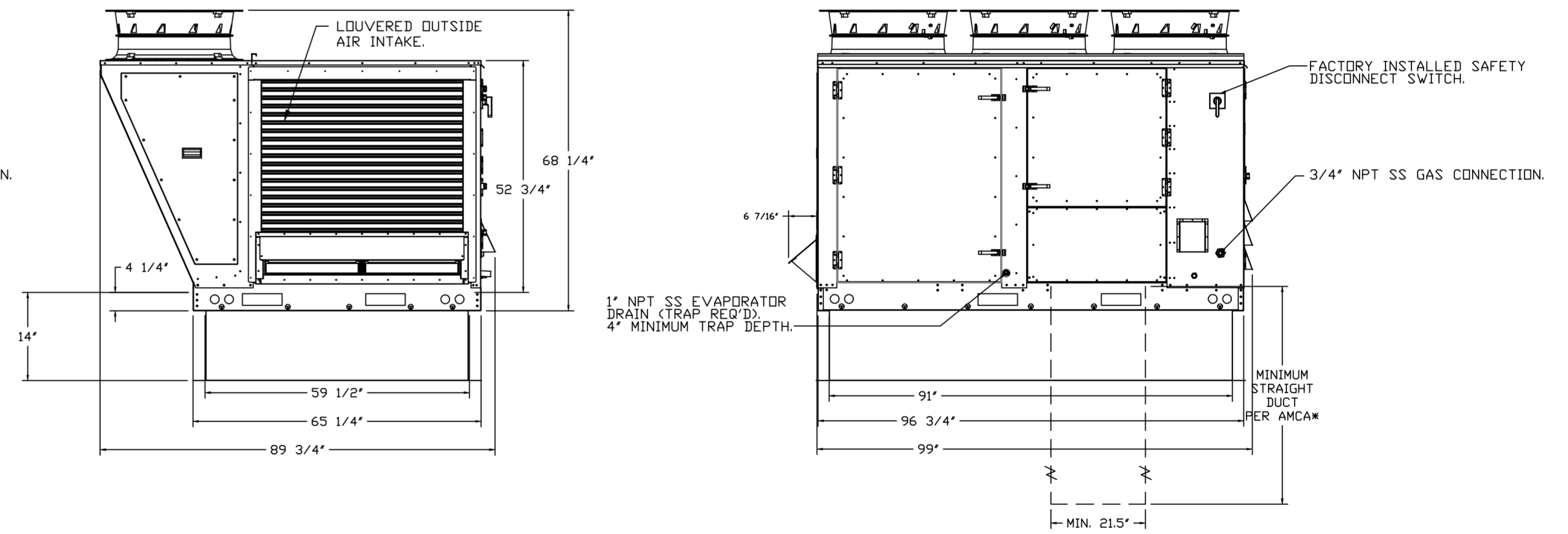
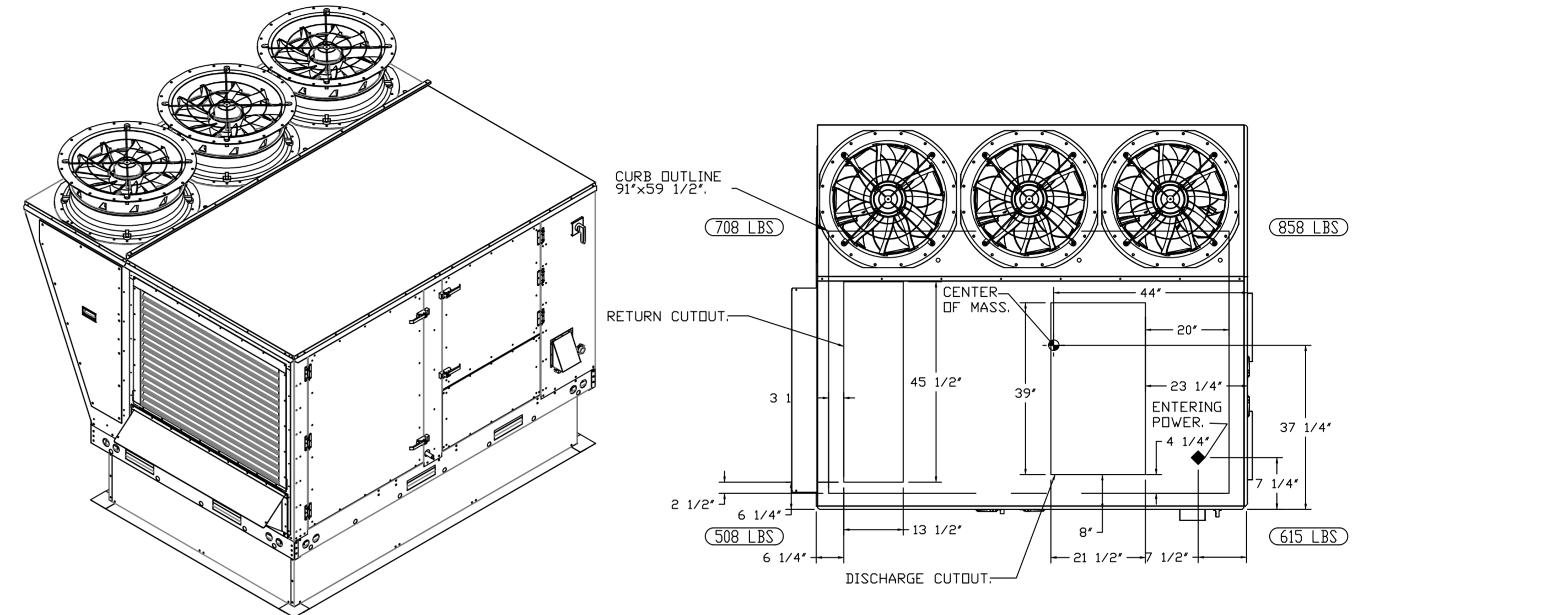


FAN #2 CASRTU3-I.300-24MF-20T-DDAS - HEATER (RTU-2 KITCHEN)

NOTES:

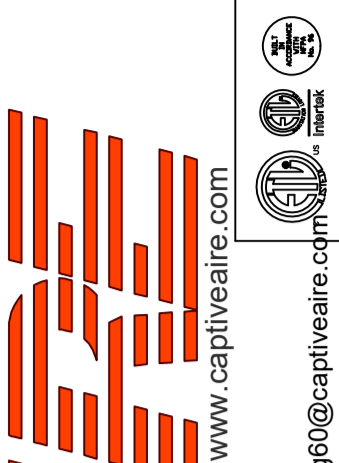
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
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BOWLING GREEN, OH, 43402

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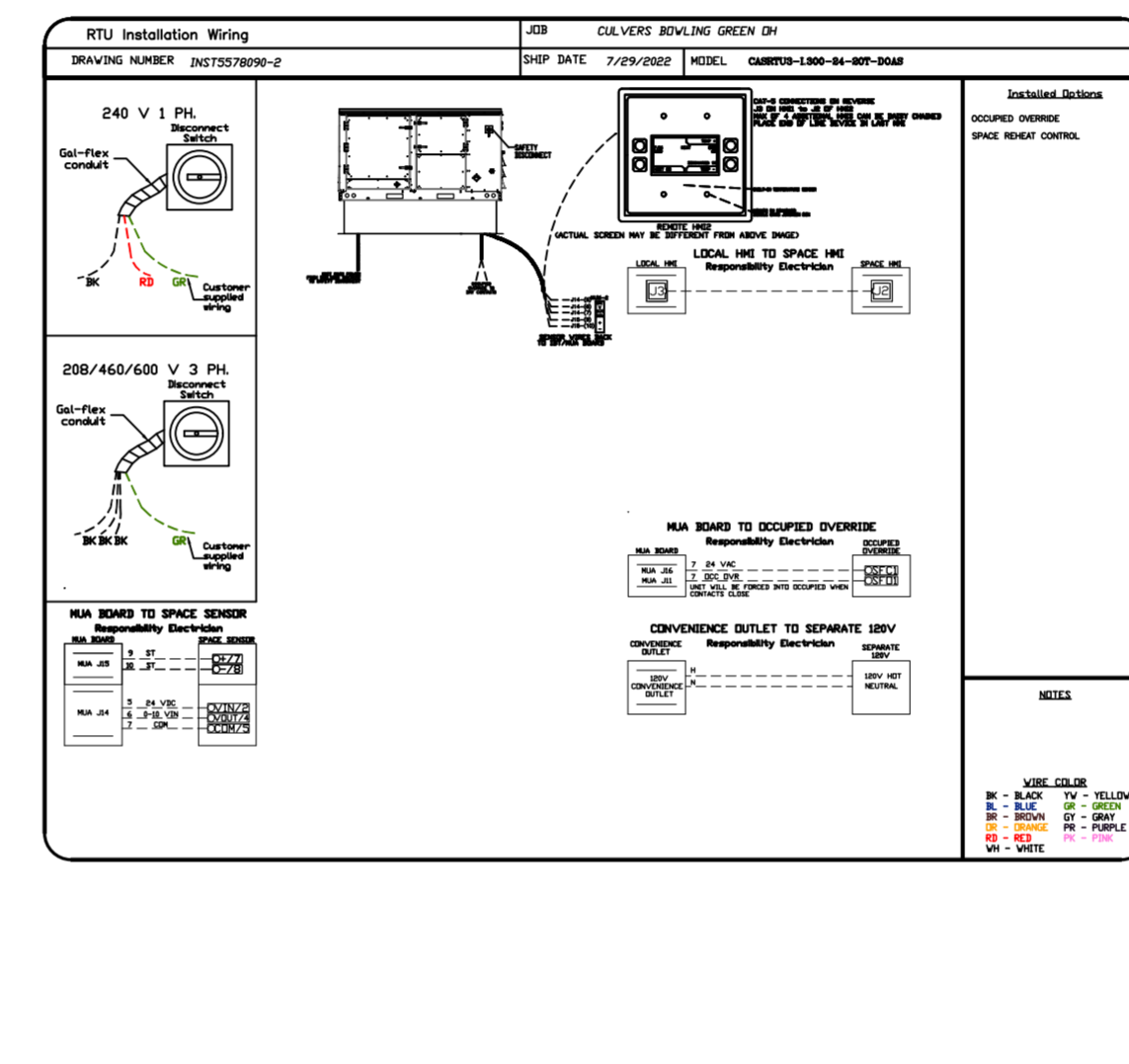
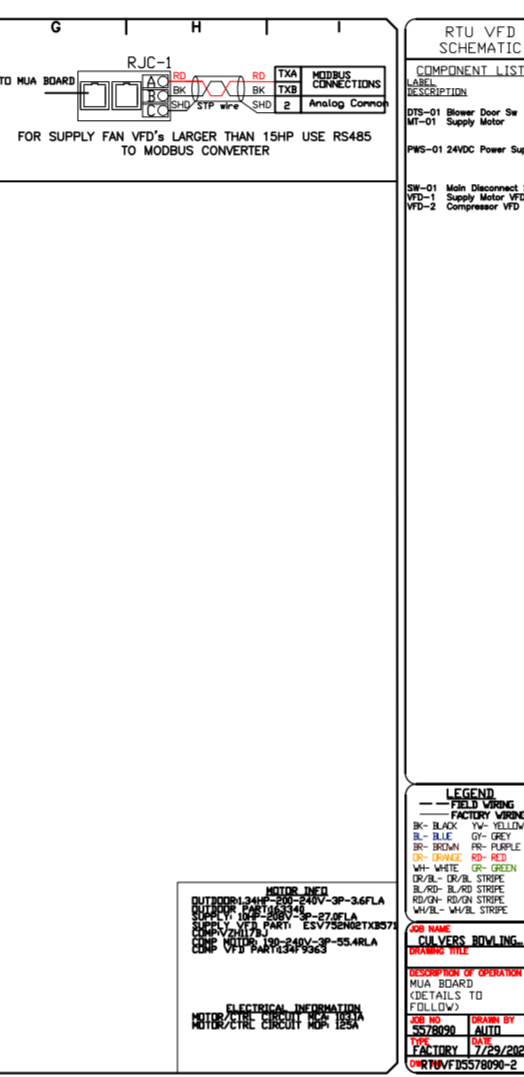
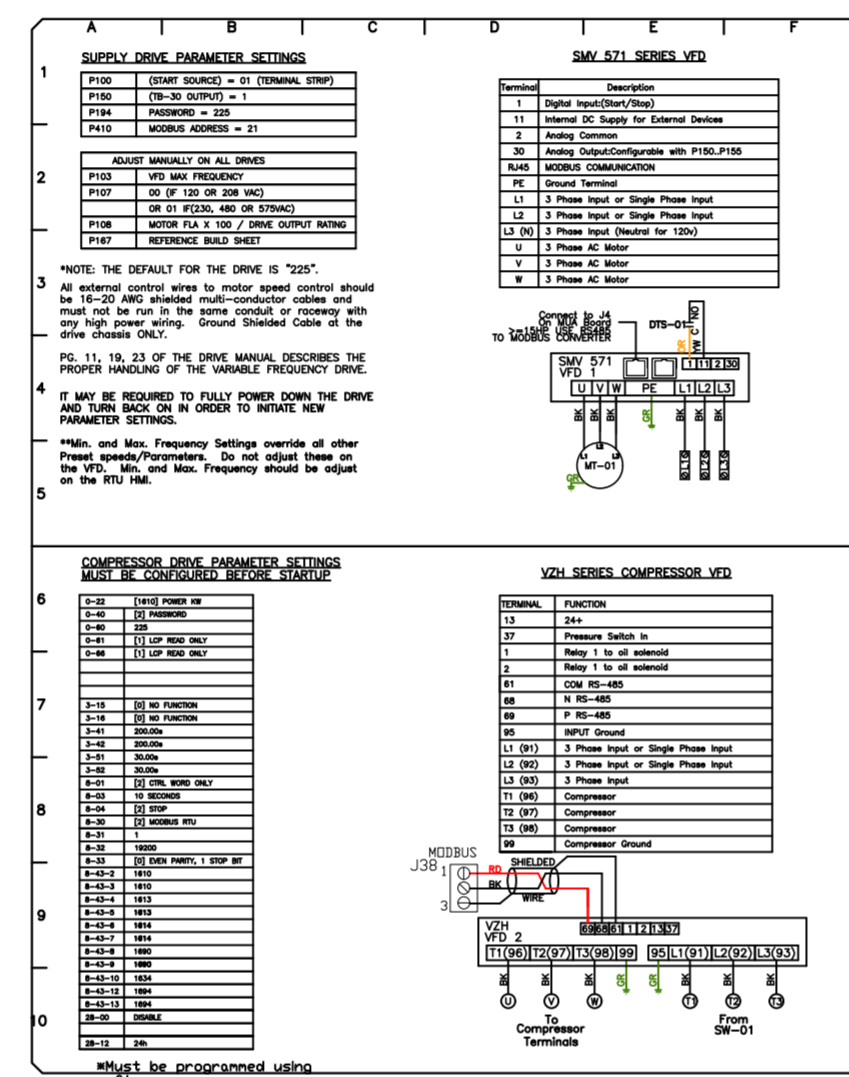
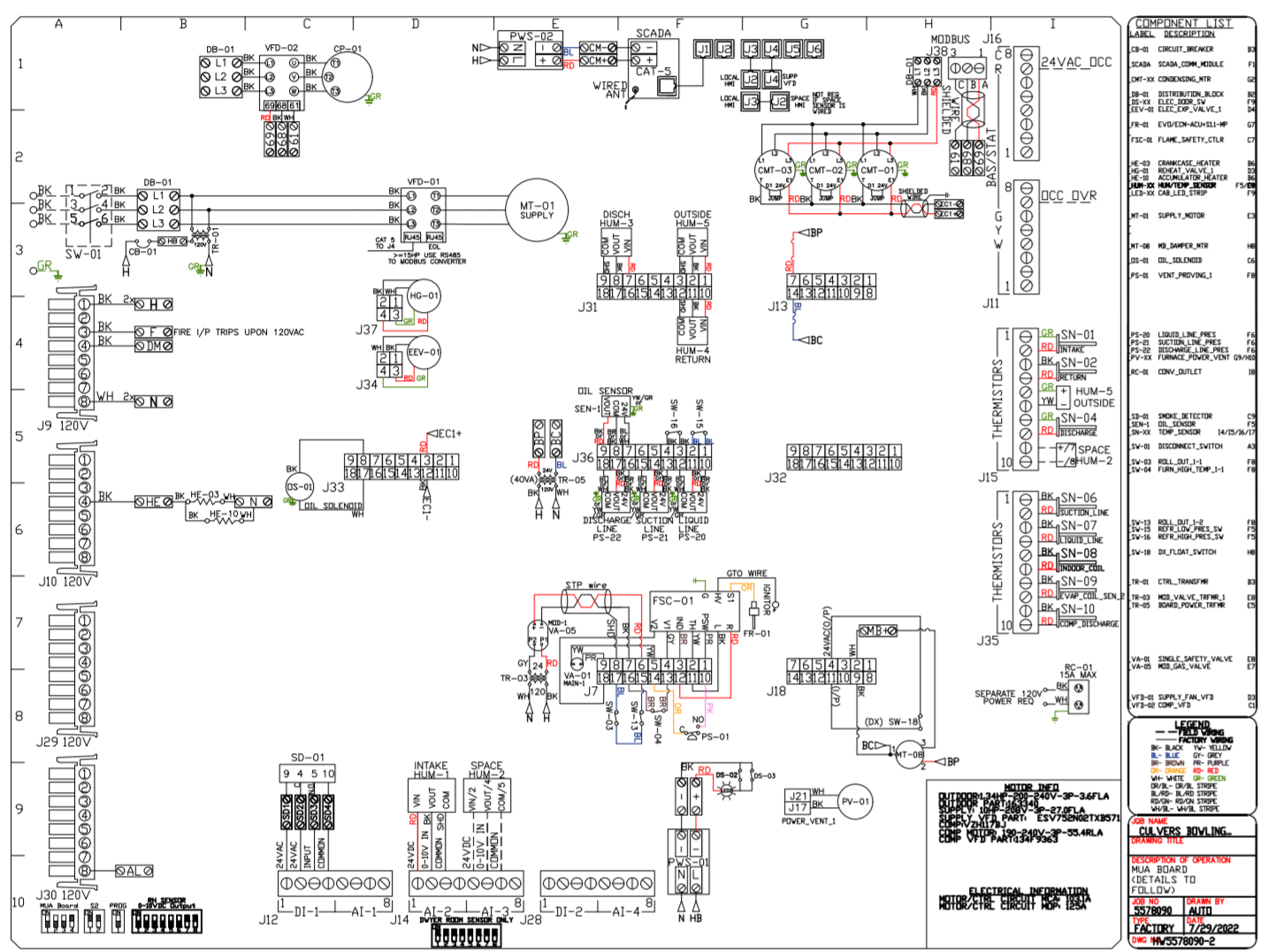
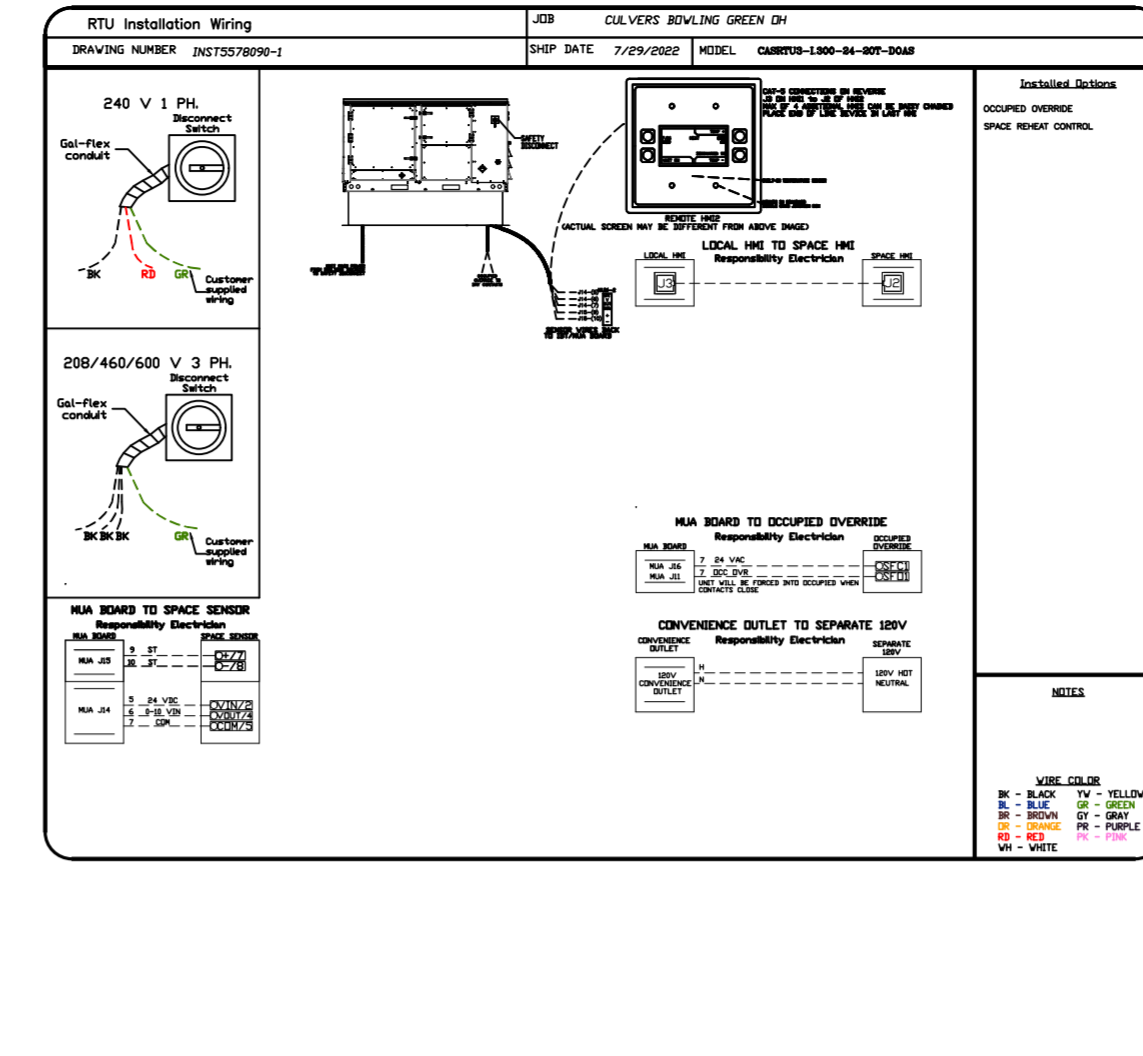
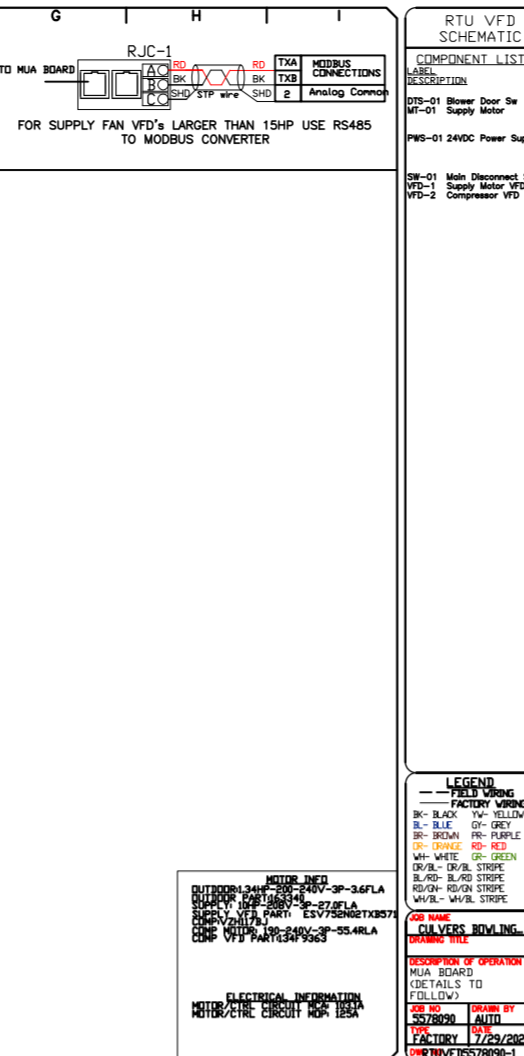
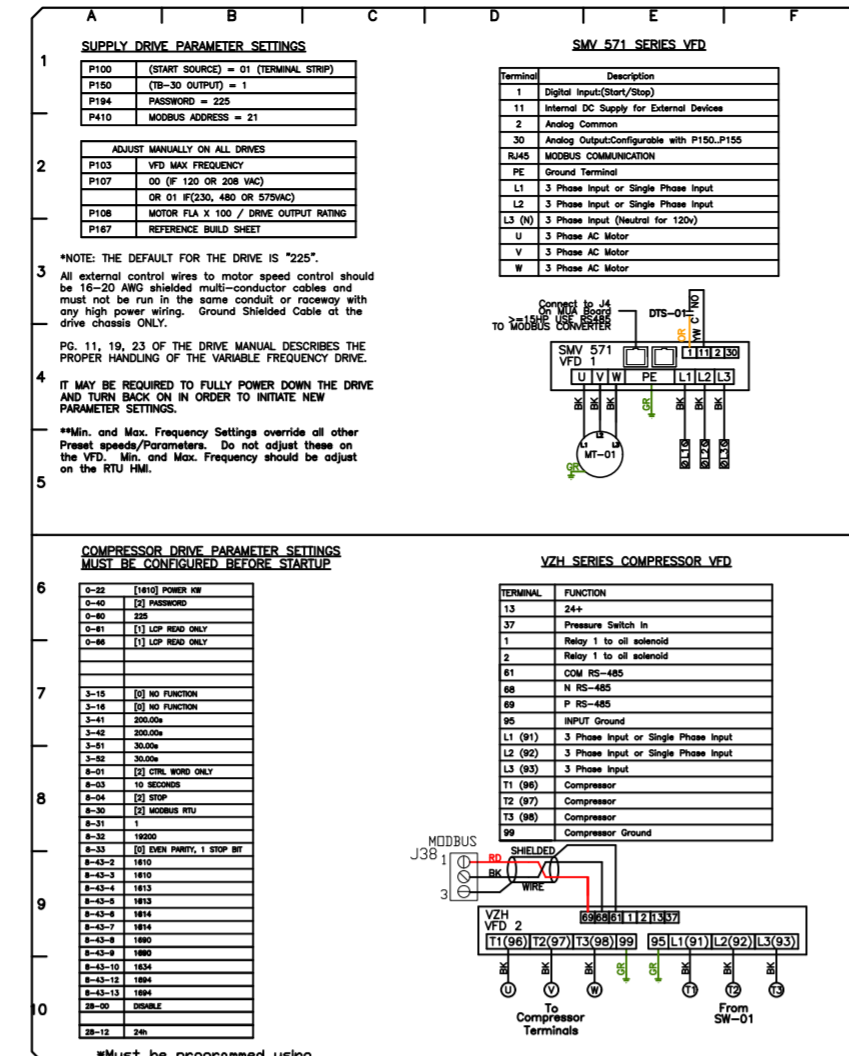
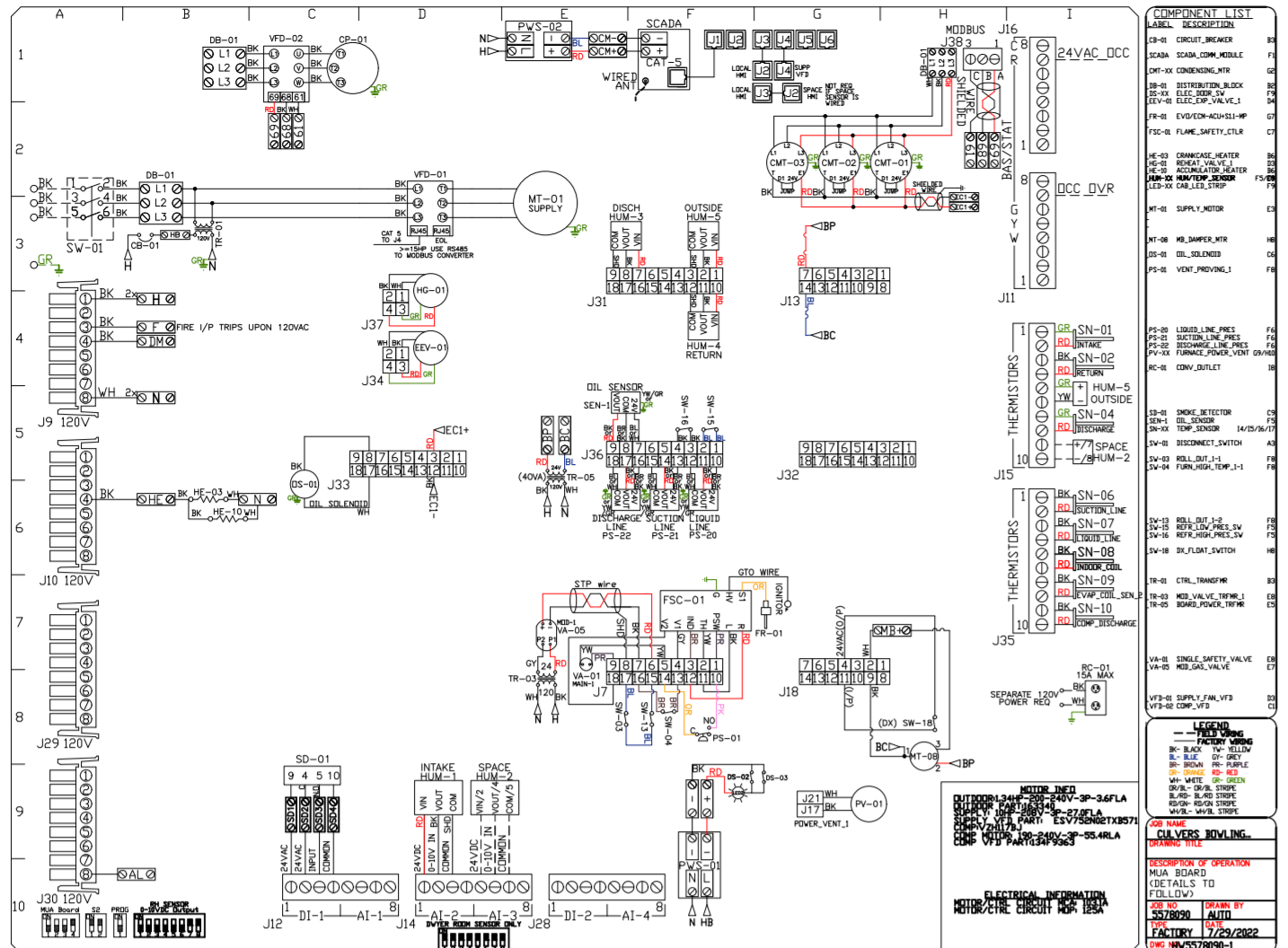
DWG.#: 5578090

DRAWN BY: sluddy jr

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

MASTER DRAWING

SHEET NO. 3



**REVISIONS**

NO.	DESCRIPTION	DATE
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SHEET NO. 4