

FOR QUESTIONS, CALL THE
Highwoods Group
REGION 40
PHONE: (919) 875-0420
EMAIL: reg40@captiveaire.com

PATENT NUMBERS

AC-PSP (UNITED STATES) - US PATENT 7963830 B2.
AC-PSP WALL (CANADA) - CA PATENT 2820509.
AC-PSP ISLAND (CANADA) - CA PATENT 2520330.

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLID FILTER

THE CAPTRATE GREASE-STOP SOLID 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.

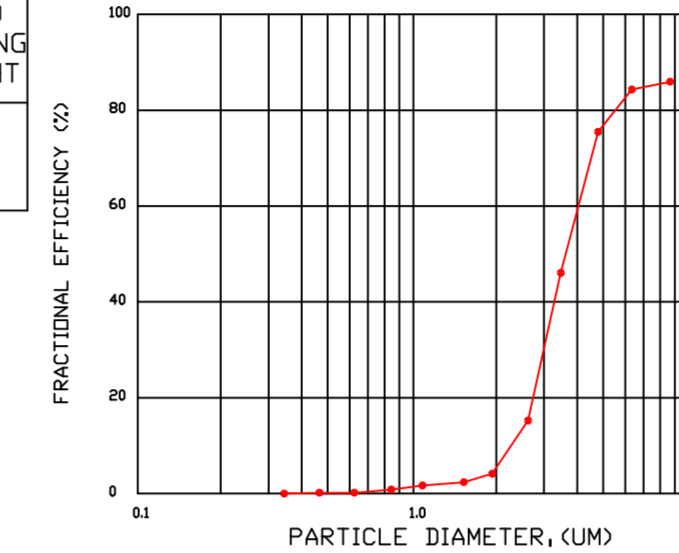
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

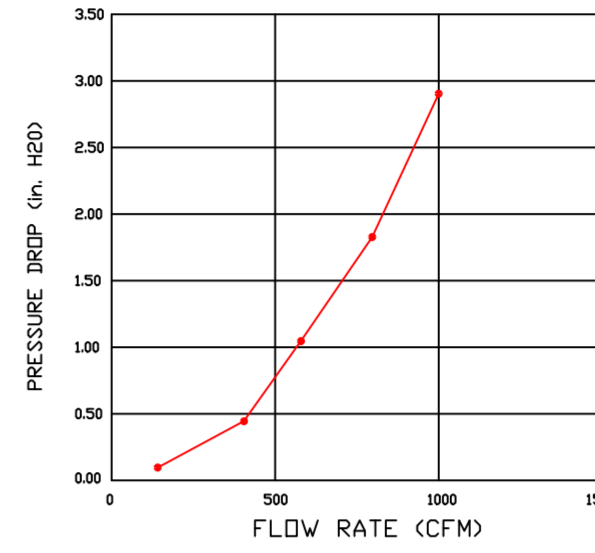
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05, MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



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



HOOD INFORMATION - JOB#6137380

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)			MUA CFM	AC CFM	HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT				DIA	CFM	VEL	SP	END TO END
1		5424 ND-2-ACPSP-F	CAPTIVEAIRE	12' 9"	600 DEG	I	HEAVY	200	2550	10'	24'	4'	2550	1530	-0.966'	1300	696	430 SS WHERE EXPOSED	ALONE	ALONE

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 TYPE	SIZE			ELECTRICAL MODEL #	SWITCHES QUANTITY
1		CAPTRATE SOLID FILTER	9	16"	16"	85% SEE FILTER SPEC	8	L55 SERIES E26	NO	RIGHT	12"x54"x24"	ANSUL R-102	3.0/3.0	SC-311110MA	1 LIGHT 1 FAN	YES	1029 LBS

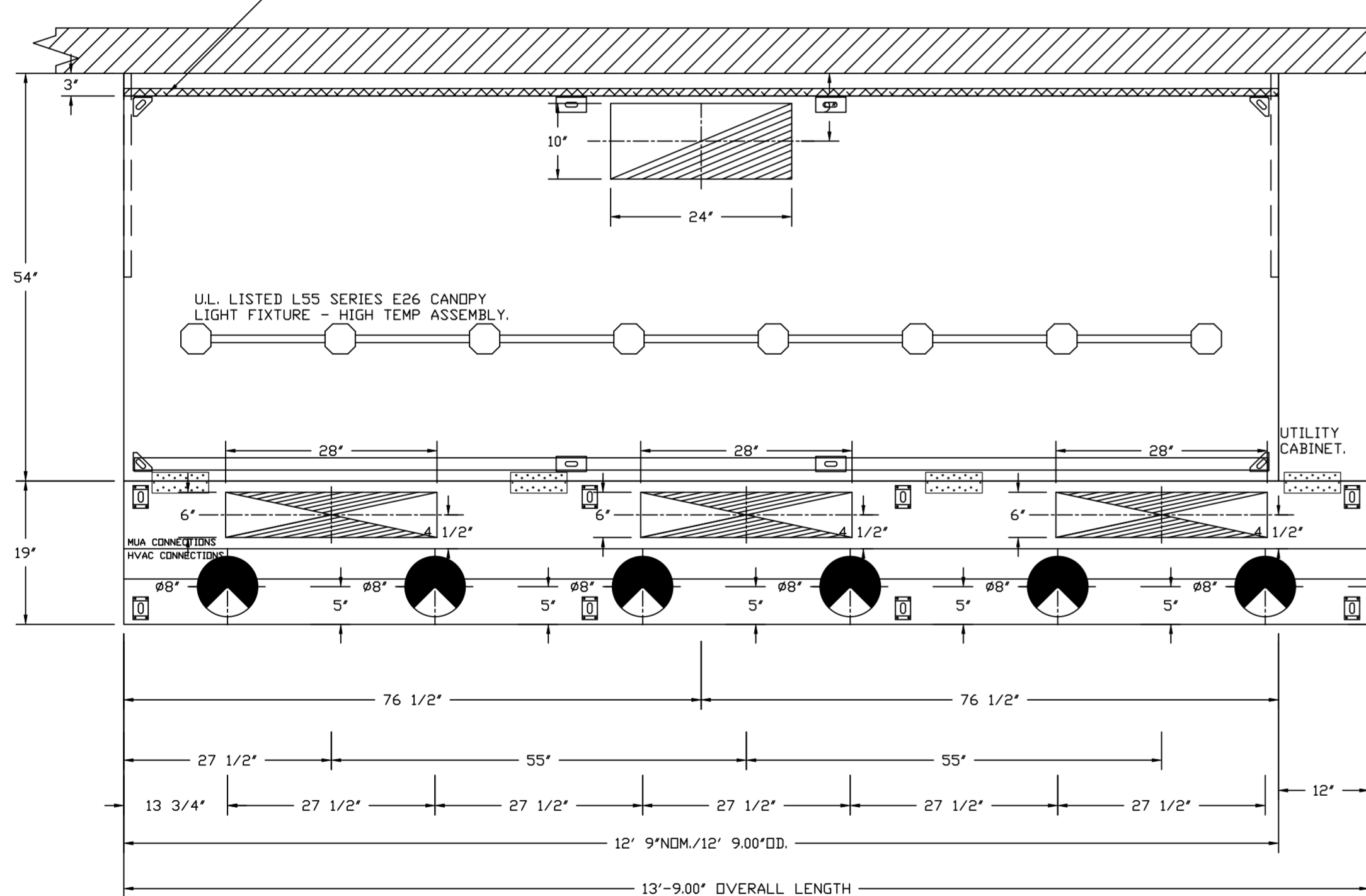
HOOD OPTIONS

HOOD NO	TAG	OPTION
1		FIELD WRAPPER 10.00" HIGH FRONT, LEFT, RIGHT. INSULATION FOR BACK OF HOOD. RISER SENSOR INSTALL 6IN PLEN. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS. LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS. FULL DIMENSION HANGING BRACKET - FRONT.

PERFORATED SUPPLY PLENUM(S)

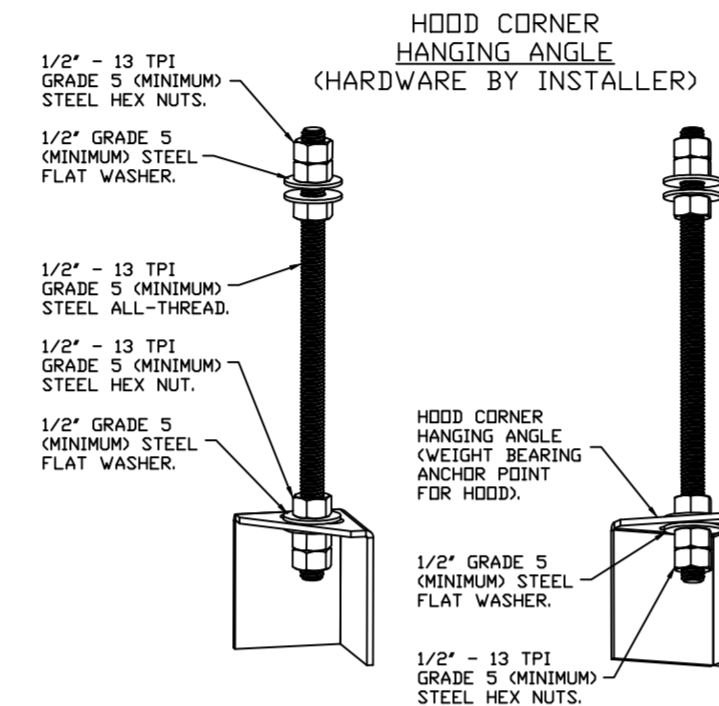
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	RISER(S)					
						TYPE	WIDTH	LENG	DIA	CFM	SP
1		Front	165'	19'	6'	MUA	6"	28"		432	0.127"
						MUA	6"	28"		432	0.127"
						MUA	6"	28"		432	0.127"
						AC		8"	116	0.043"	
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						AC		8"	116	0.043"	
						AC		8"	116	0.043"	
						AC		8"	116	0.043"	

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



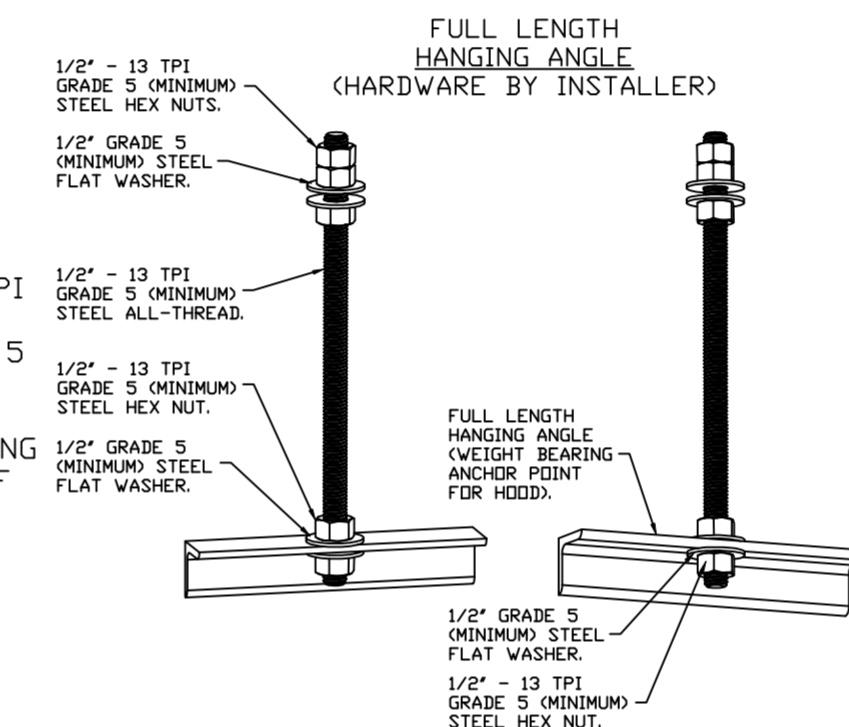
PLAN VIEW - HOOD #1
12' 9.00" LONG 5424ND-2-ACPSP-F
NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12' AND LONGER.

ACPSP SHIPS LOOSE FOR FIELD INSTALLATION



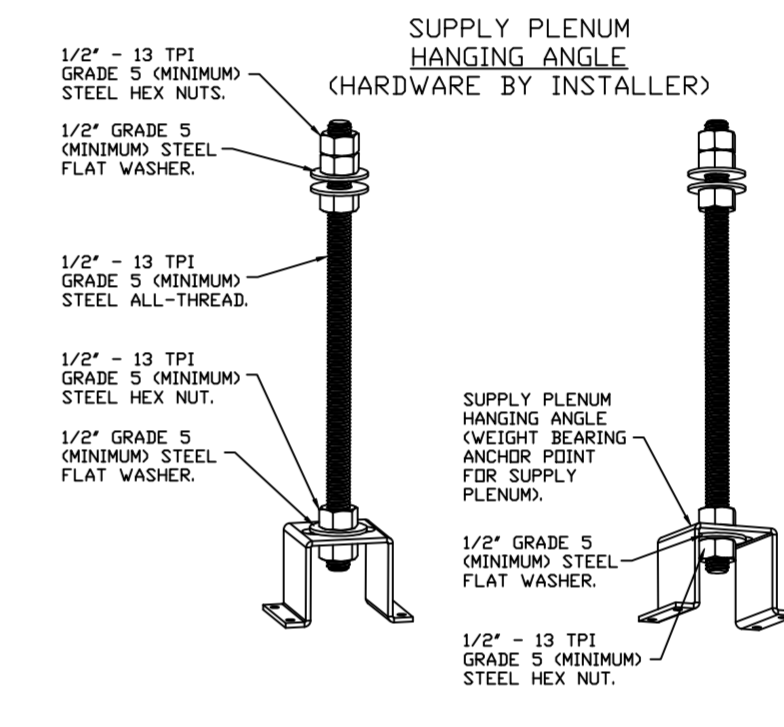
ASSEMBLY INSTRUCTIONS

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.



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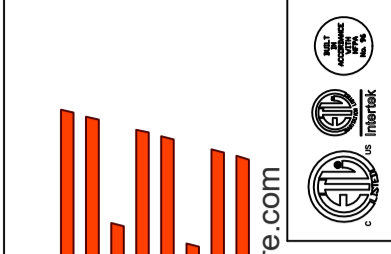


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REVISIONS

DESCRIPTION	DATE



www.captiveaire.com



CHIPOTLE CORALVILLE #4913
CORALVILLE, IA, 52241

DATE: 7/31/2023

DWG.#: 6137380

DRAWN BY: JMB-40

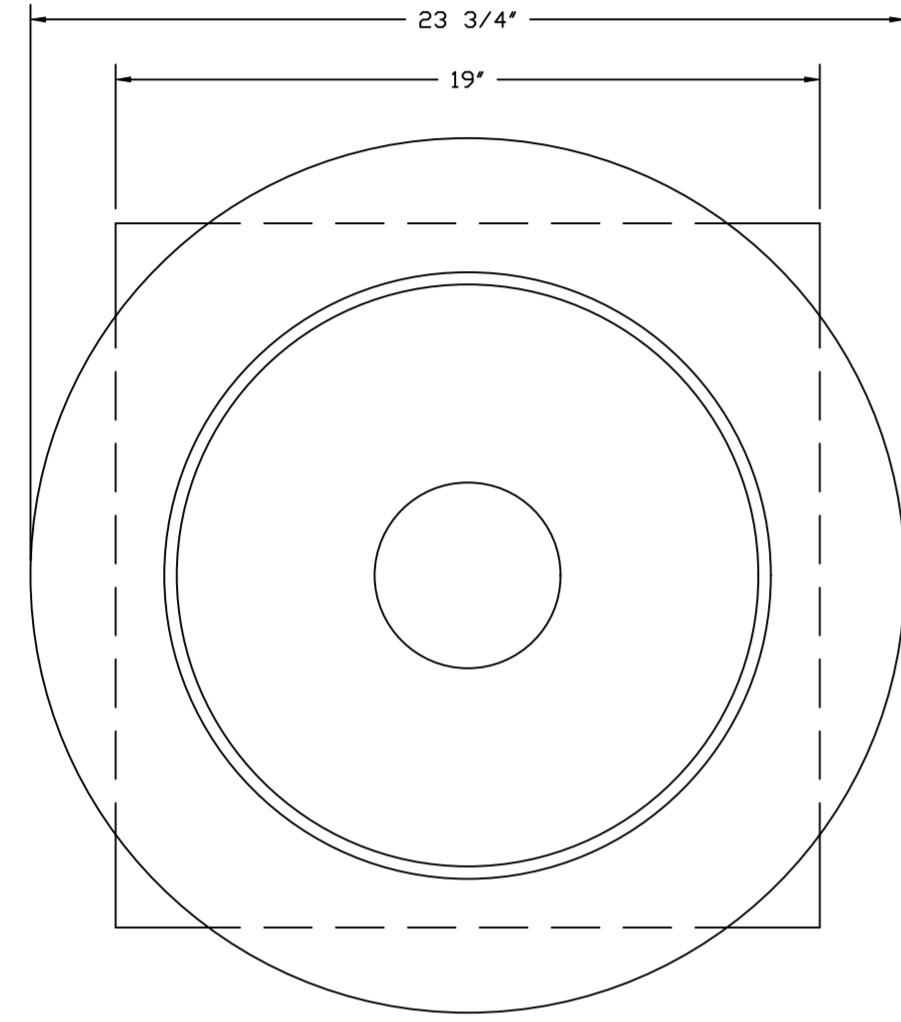
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 1

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FAN #2 DR12HFA - EXHAUST FAN (CF-22)



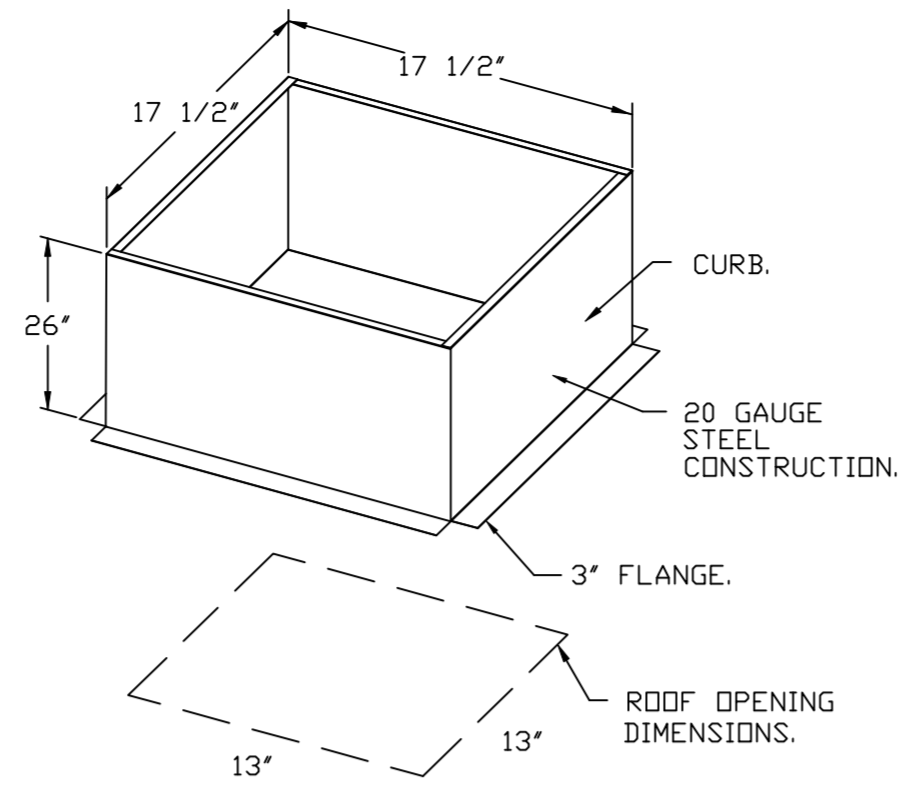
TOP VIEW

FEATURES:

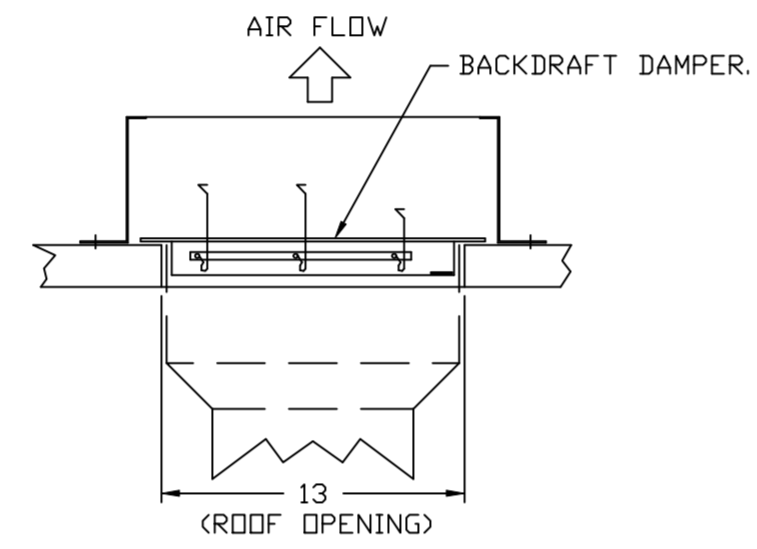
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

OPTIONS:

- I 12-BDD DAMPER.
- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL.
- RTC- (THERM MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.

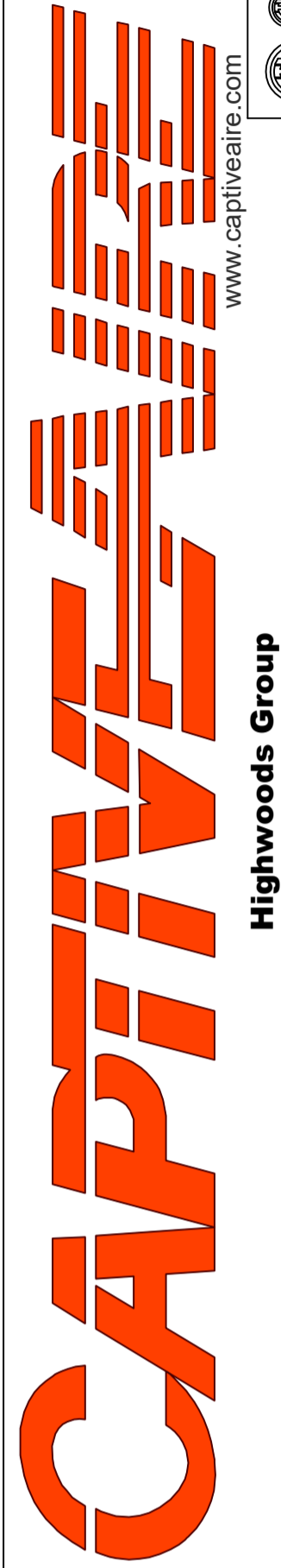


BACKDRAFT DAMPER INSTALLATION



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

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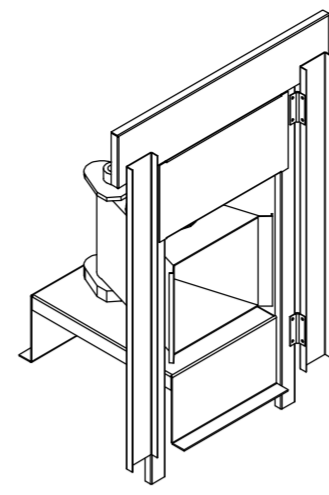
SHEET NO. 4

1. DIRECT GAS FORCE HEATED MAKE UP AIR UNIT WITH 15" MIXED FLOW DIRECT DRIVE FAN
2. INTAKE HOOD WITH EZ FILTERS
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. GAS PRESSURE GAUGE, 0-35" H₂O DIAMETER, 1/4" THREAD SIZE
5. SHIP LODGE GAS STRAINER, TO BE INSTALLED UPSTREAM OF UNIT CONNECTION, 3/4" CONNECTION
6. MOTORIZED BACK BRACKET HANGER 16" X 16" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFBSSS ACTUATOR INCLUDED
7. 3 TON SINGLE CIRCUIT MODULAR PACKAGED COOLING OPTION FOR SIZE 1 OR 2H MODULAR PACKAGED UNIT, INCLUDES CONDENSER, DX COIL, FILTER/DRYER KIT, THERMAL EXPANSION VALVE, R410A REFRIGERANT, AND REFRIGERANT PIPING 0.100 TO 1.000 CFM WHEN ORDERED WITH OPPOSITE AIRFLOW CONDENSERS ACCESS AND COIL PIPING WILL REMAIN IN STANDARD POSITION, DRAIN AND SLEDS WILL MOVE TO THE OPPOSITE SIDE, ANY OTHER CHANGE WILL REQUIRE OIL CONDENSERS REQUIRE SEPARATE DRYS
8. 3 PHASE POWER SUPPLY UNLESS ORDERED WITH SINGLE POINT CONNECTION, COIL = SECTION
9. DOWNTURN PLENUM FOR SIZE 1 COOLING COIL MODULE - REQUIRED FOR DOWN DISCHARGE COOLING COIL APPLICATIONS
10. LOCKING CASE FOR SINGLE CONDENSER UNITS CONSISTS OF 2 LOCKING CASE PARTS NCR-4, AND 1 KEY, PART NCR-KEY
11. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH 30V PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM BCV TO MAIN SWITCH
12. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/NPU SECTION)
13. 2 YEAR PARTS WARRANTY

NOTES: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN APCA PUBLICATION 05L 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 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 14" X 14".

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = -4°F, TEMP. RISE = 79°F.
 BTUS CALCULATED OFF ACTUAL AIR DENSITY.
 OUTPUT BTUS AT ALTITUDE OF 0.0 FT. = 109719.
 INPUT BTUS AT ALTITUDE OF 0.0 FT. = 119259.
 OUTPUT BTUS AT ALTITUDE OF 688 FT. = 107038.
 INPUT BTUS AT ALTITUDE OF 688 FT. = 116324.



DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

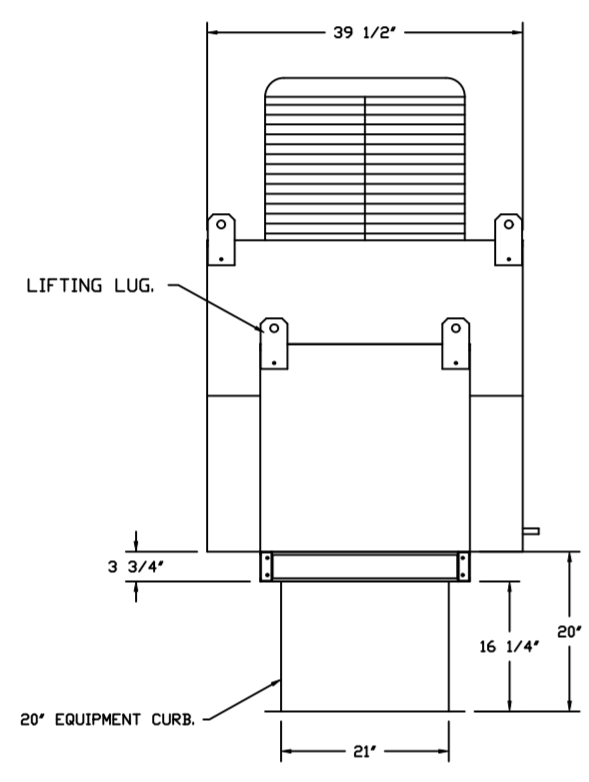
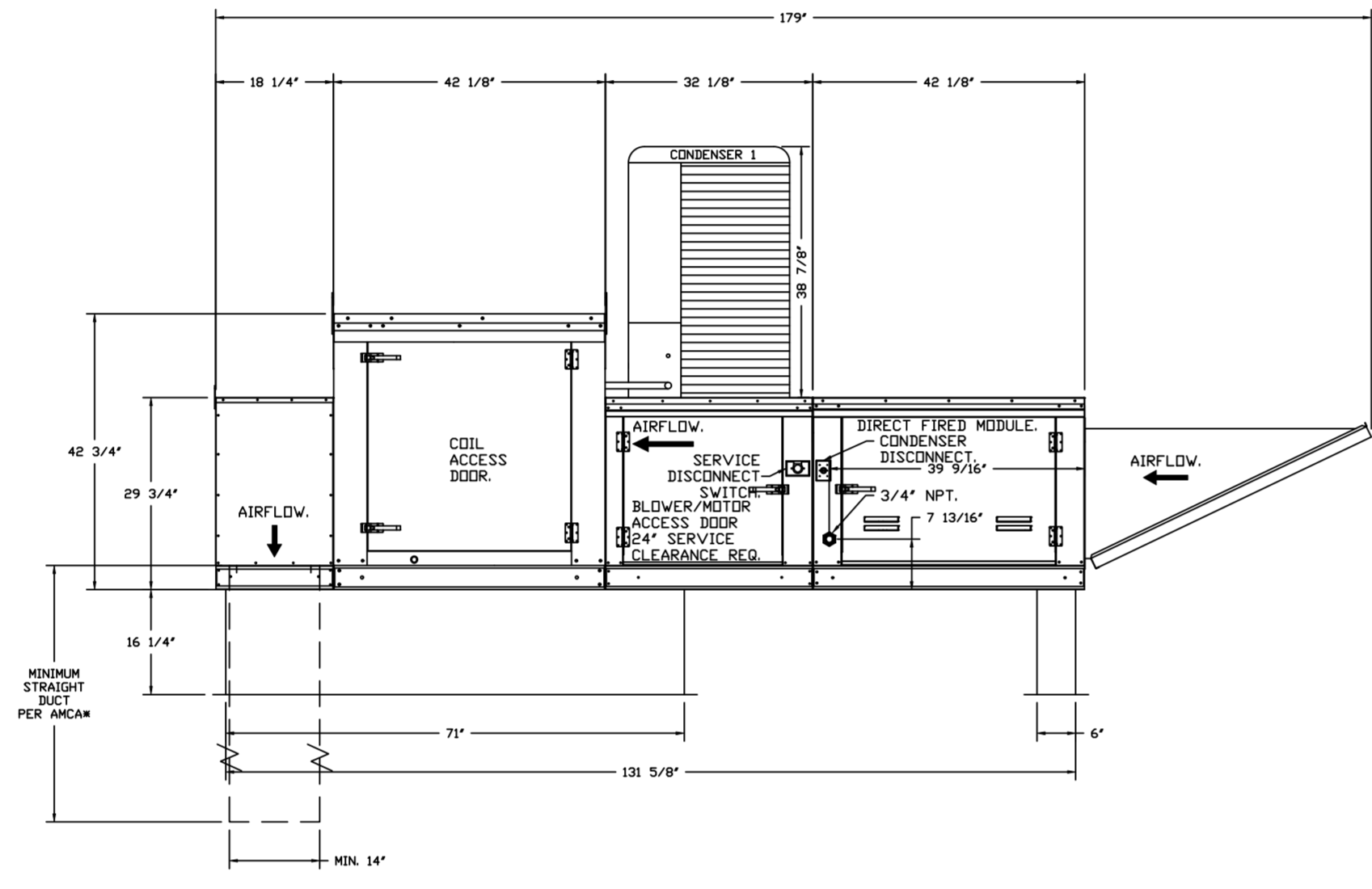
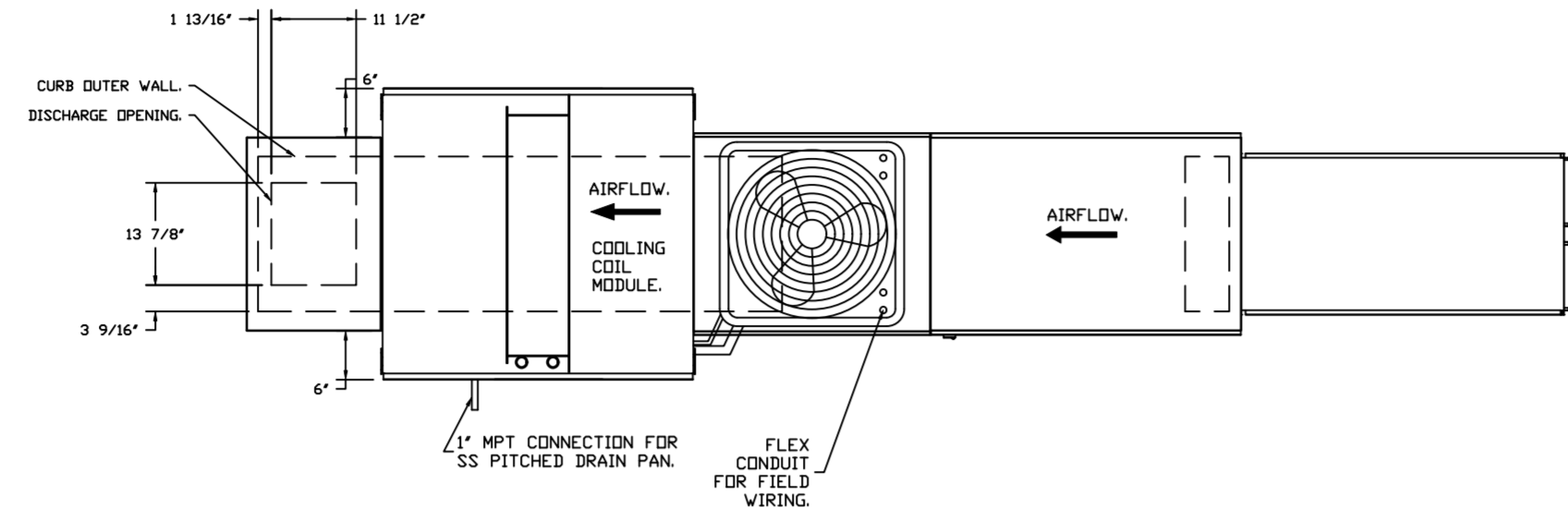
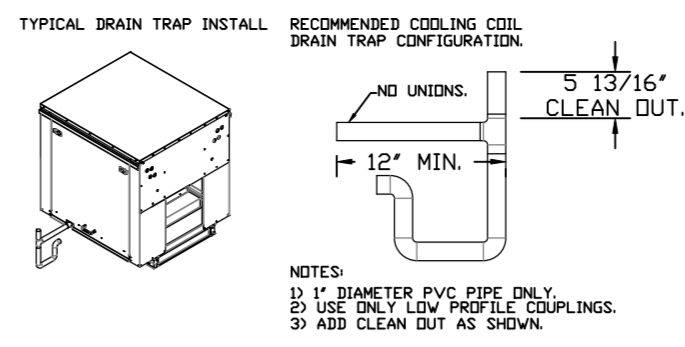
DIRECT FIRED PROFILE PLATE SPECIFICATIONS:

DESCRIPTION:
 DIRECT FIRED BURNERS SHALL HAVE PATENTED US PATENT NO. US6499238B2, SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER PROFILE PLATES SHALL ALLOW BURNERS TO ACHIEVE CLEAN COMBUSTION BY LIMITING BY-PRODUCT LEVELS TO A MAXIMUM OF 0.0PM OF CARBON MONOXIDE (CO), AND 0.0PPM OF NITROGEN DIOXIDE (NO₂). INDIRECT FIRED UNITS SHALL BE CONFIGURED WITH THE BLOWER LOCATED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.

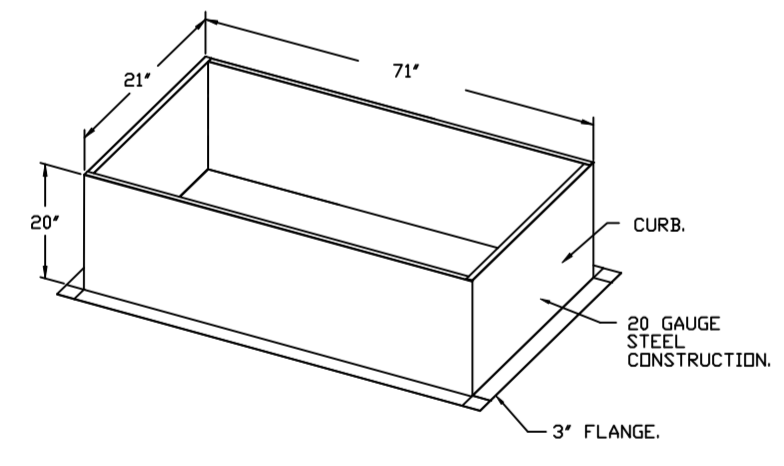
OPERATION:
 SPRING-LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM, WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. WITH THIS FEATURE, ALL OF UNITS ARE DESIGNED FOR DEMAND CONTROL VENTILATION (DCV) REQUIREMENTS.

CERTIFICATIONS:
 ALL PROFILE PLATE ASSEMBLIES SHALL BE INCLUDED IN THE IF UNITS' ETL LISTING AND COMPLY WITH COMBINED SAFETY STANDARDS ANSI Z83.4 AND CSA 3.7 (NDM-RECIRCULATING DF HEATERS) AND ANSI Z83.18 (RECIRCULATING DF HEATERS).

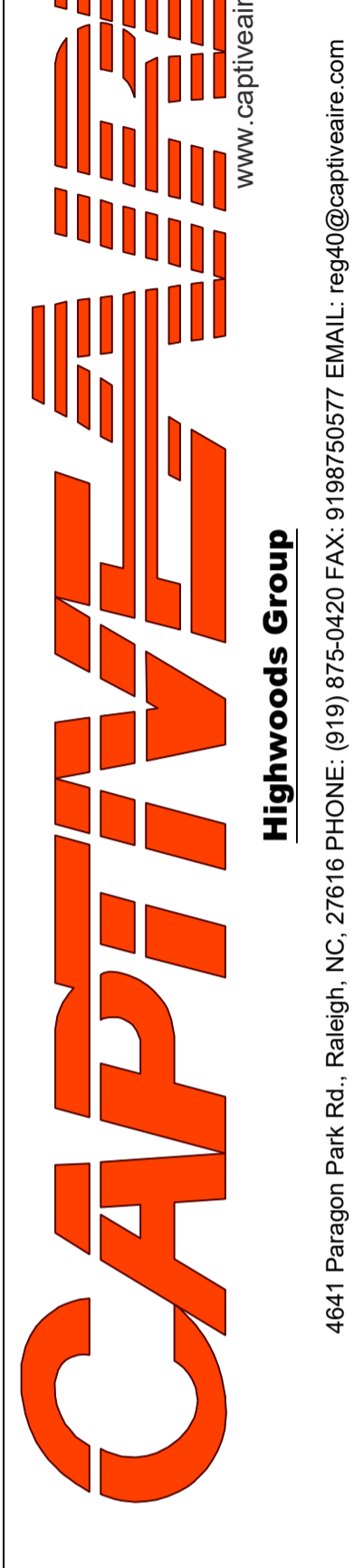
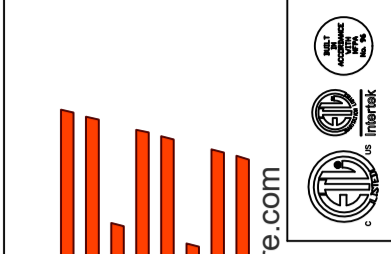
GENERAL CONSTRUCTION:
 -PROFILE PLATES SHALL BE FORMED FROM 600 GALVANIZED STEEL.
 -PROFILE PLATES SHALL VARY IN SIZE FOR UNIT.
 -PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER.
 -SECTION SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.
 -SPRING HINGES SHALL BE MADE FROM PLATED STEEL.



OPTIONS:
 - FULL BOTTOM CORNERS.



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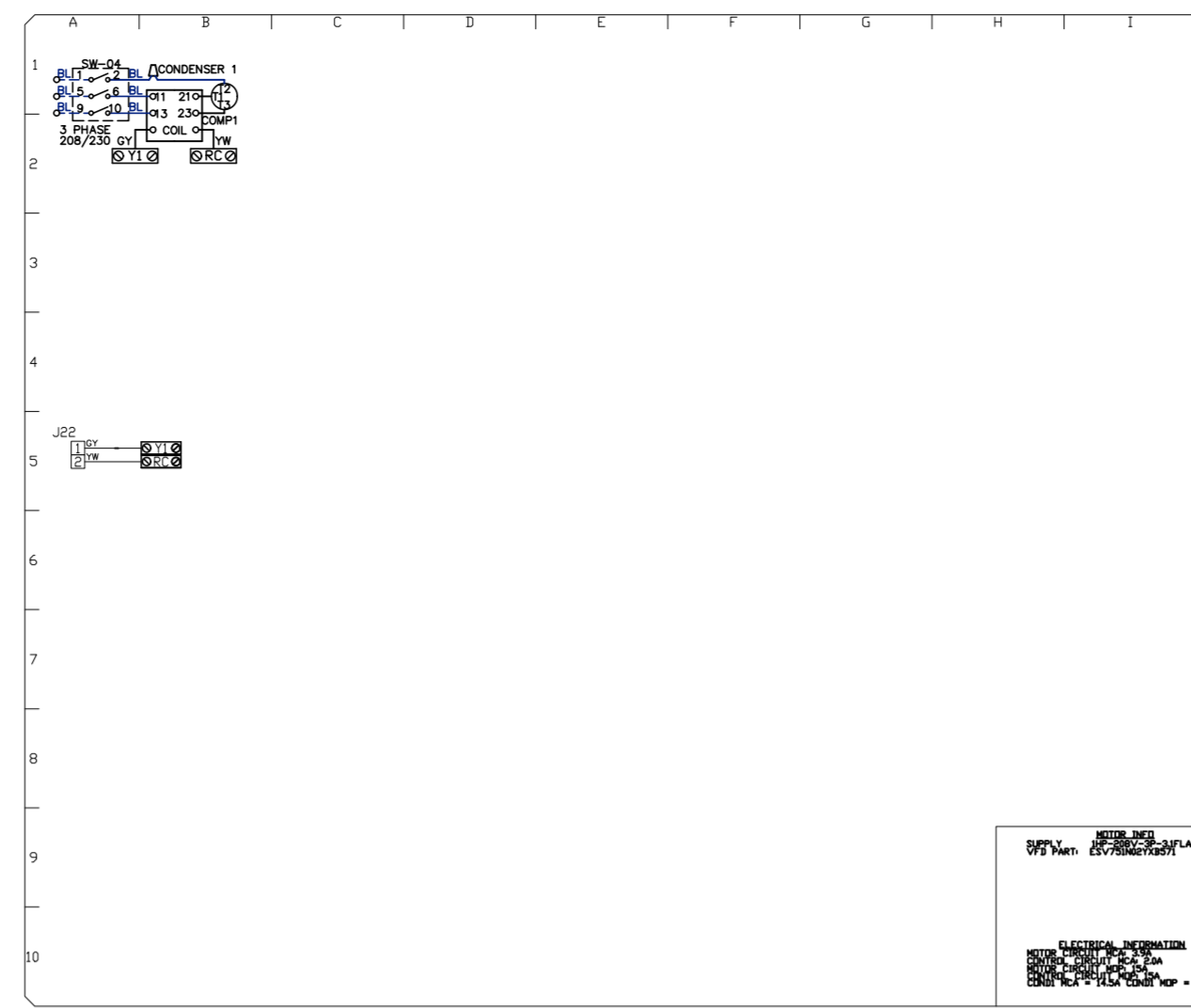
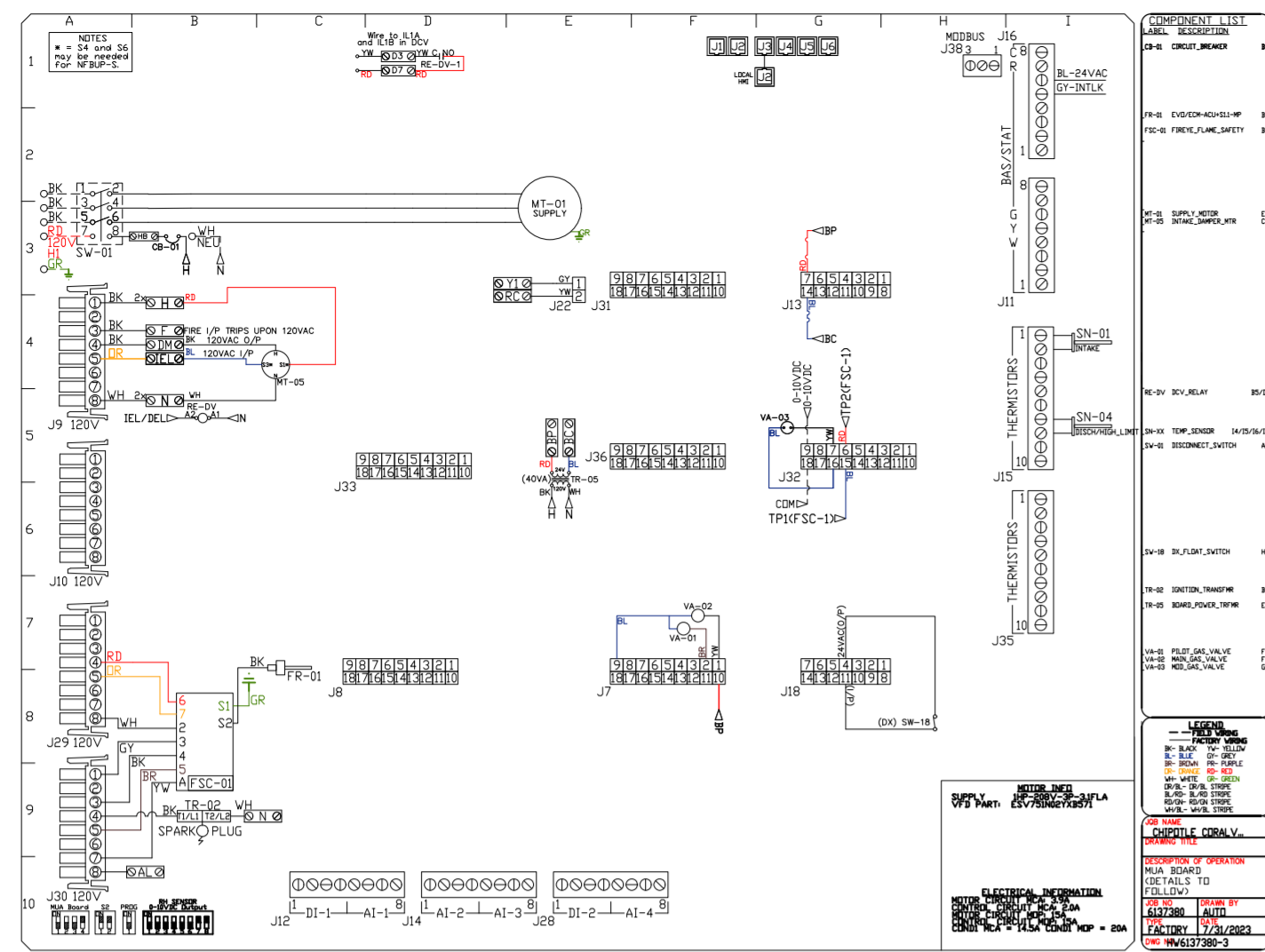


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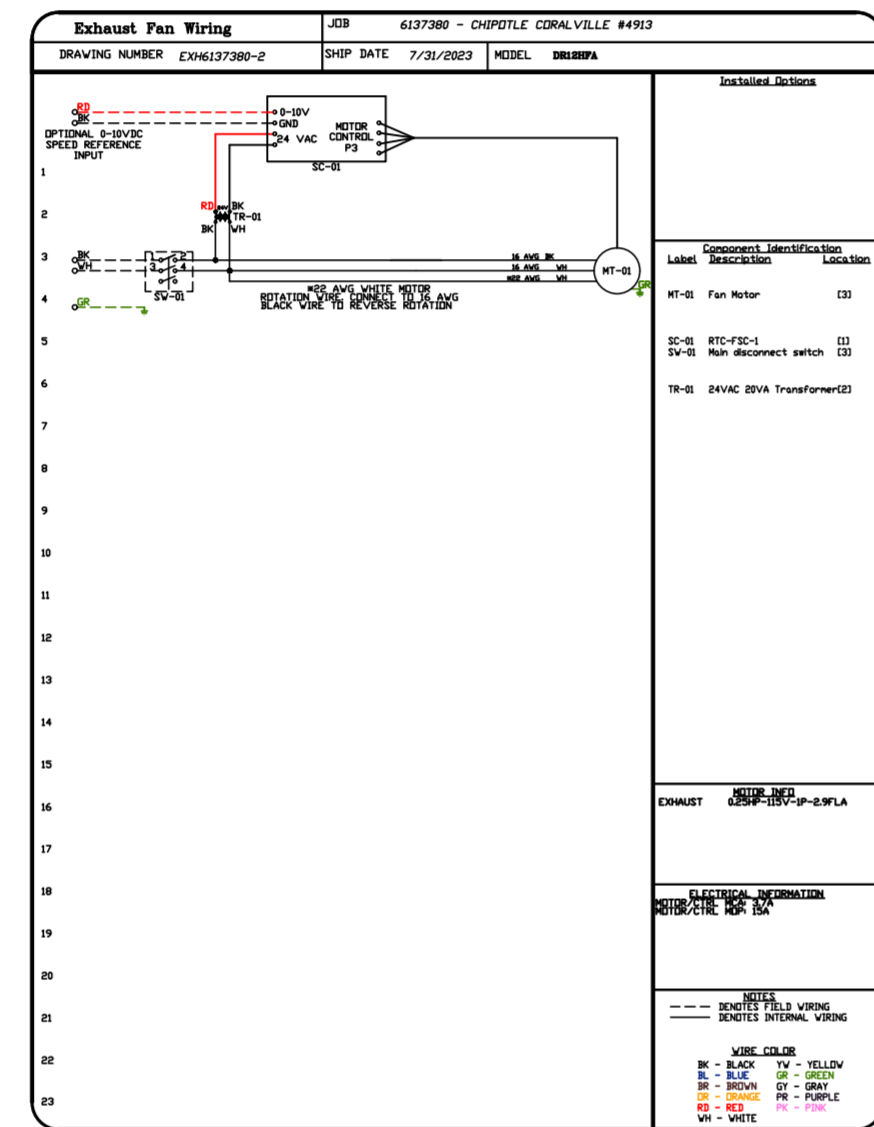
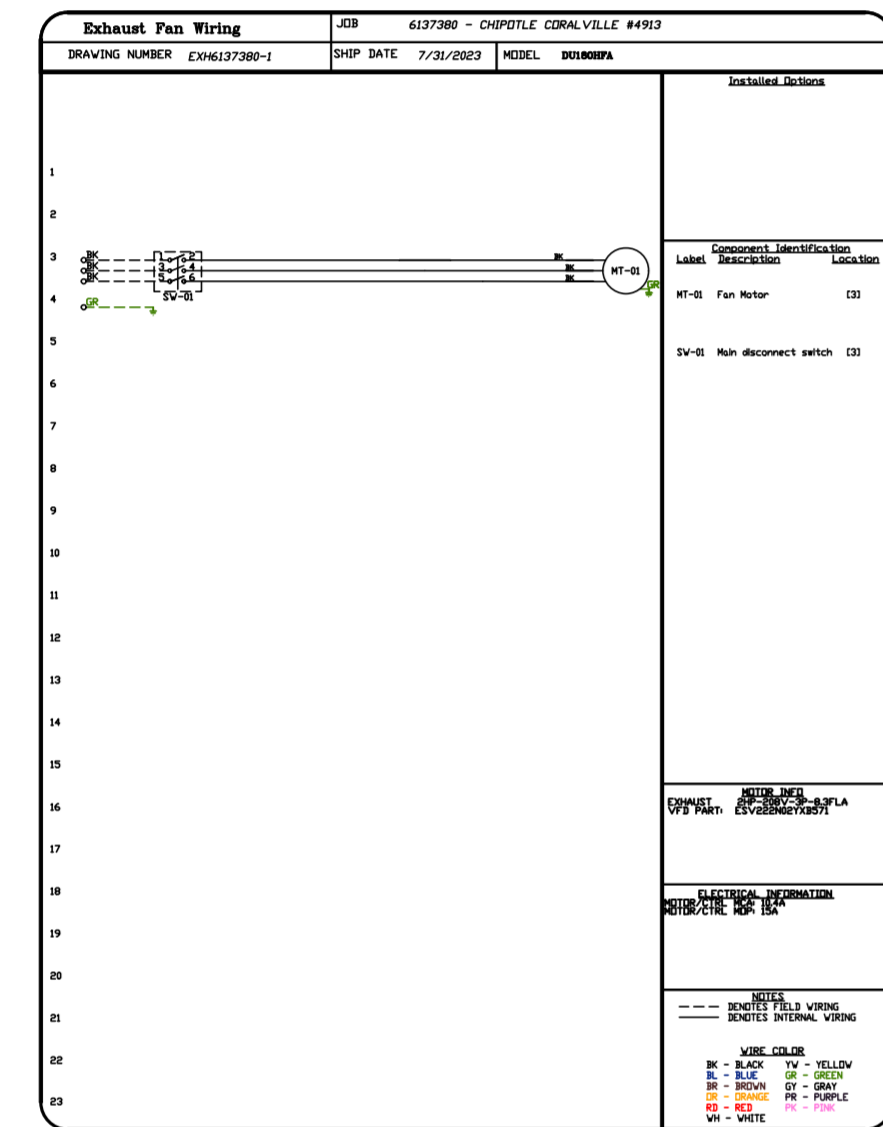
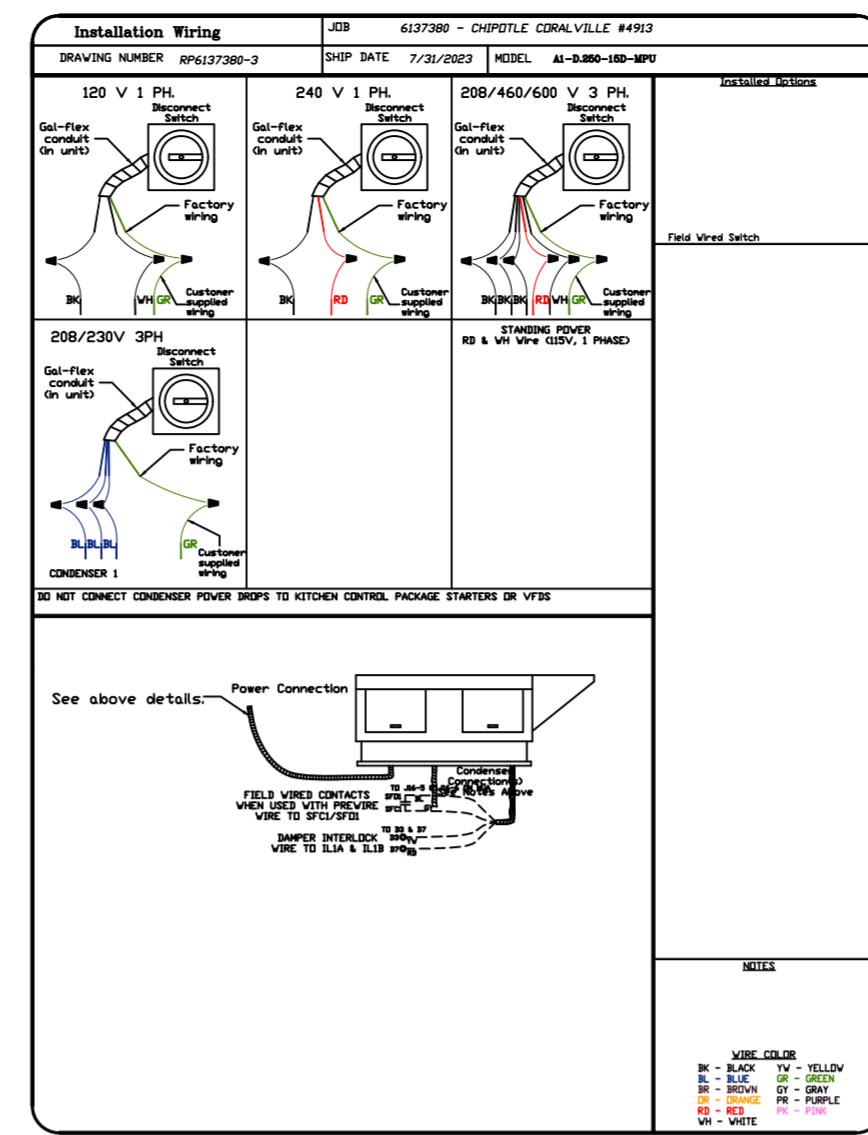
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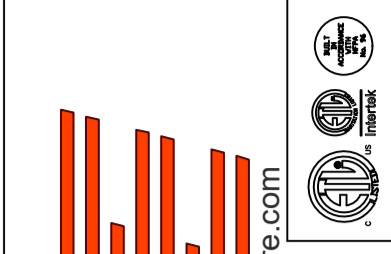


NO.	DESCRIPTION	DATE
1	CONDENSER 1	7/31/2023
2	CONDENSER 2	7/31/2023
3	CONDENSER 3	7/31/2023



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