

*ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-FABRICATED BY FACTORY

HANGING ANGLE DETAILS

HOOD STYLE / MODEL	450 DEGREES cfm/ft.	600 DEGREES cfm/ft.	700 DEGREES cfm/ft.
CANOPY ND-2	150	200	250
CANOPY ND-2 W/ END PANELS	105	140	175
SLOPED SND-2	228	294	-
ISLAND ND-2W	269	300	350
ISLAND ND-2I	346	422	475

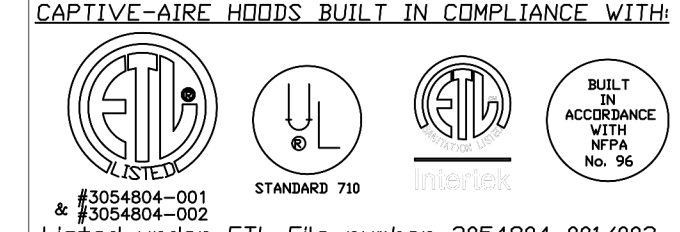
ETL HOOD LISTING DETAIL

EXHAUST CFM = LENGTH OF HOOD X CFM/INLET (L/IN)
 SUPPLY CFM = EXHAUST CFM X PERCENTAGE REQUIRED
 TOTAL DUCT AREA (sq. in.) = 144 X (CFM)² / (VELOCITY)³
 DUCT LENGTH = DUCT WIDTH

*CAPTIVEAIR VENTILATOR DUCT SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 300-350 FPM AND A SUPPLY VELOCITY OF 300 FPM

CALCULATIONS UTILIZED

CAPTIVE-AIRE HOODS BUILT IN COMPLIANCE WITH:



BUILDING CODES

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

CLEARANCE TO COMBUSTIBLES

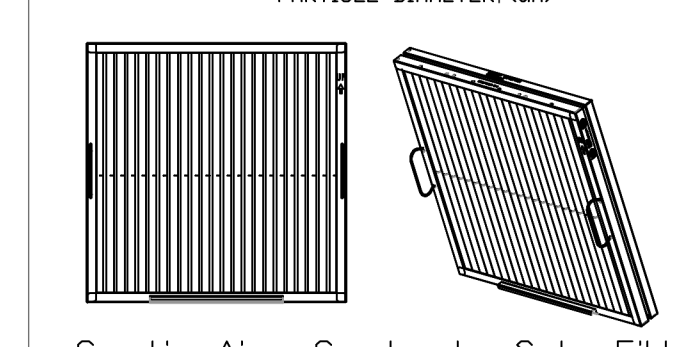
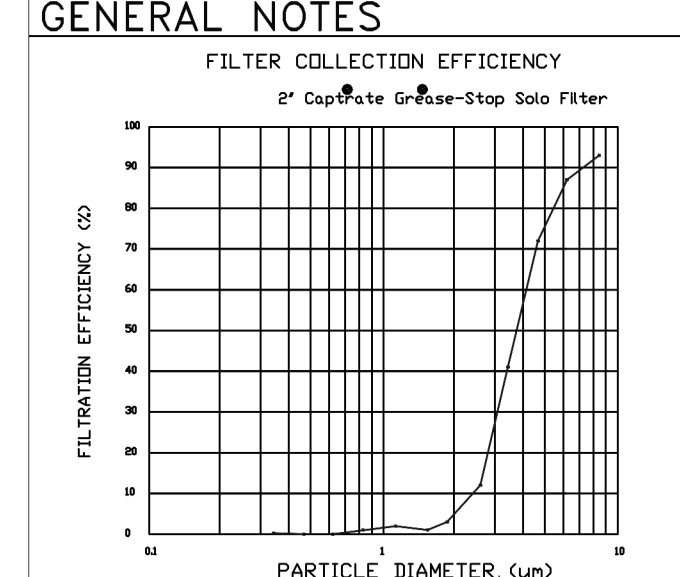
- INSTALLATION**
- ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS
 - ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS
 - HANGING BRACKETS LOCATED AND WELDED AS SHOWN ON PLANS. ALL OTHER HANGING MATERIALS PROVIDED BY INSTALLING CONTRACTORS.
 - ALL CONNECTIONS FROM CAPTIVEAIR HOOD FOR MECHANICAL CONTRACTOR'S PLANS.
 - COOKING EQUIPMENT TO SHUT OFF IN EVENT OF FIRE.
 - EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
 - ALL LIGHT FIXTURES SHOWN INSTALLED BY CAPTIVEAIR ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES ARE BY ELECTRICAL CONTRACTOR.
 - LAWS 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, INTERPRETATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.

- ADDITIONAL**
11. KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
 12. KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DRAINING AREA.
 13. RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

GENERAL NOTES

14. WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.

15. SIGNATURE AND APPROVED COPIES OF THIS DOCUMENT MUST BE OBTAINED FROM FACTORY PRIOR TO CONSTRUCTION.



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

FILTER DETAIL

HOOD INFORMATION - JOB#5098285

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	END TO END
1	GRILL	3650 BD-2	CAPTIVEAIR	4' 0"	600 DEG	I	HEAVY	175	700	8"	8"	4"	700	1575	-0.574'	430 SS WHERE EXPOSED	ALONE	ALONE
2	GRILL	3650 BD-2	CAPTIVEAIR	4' 0"	600 DEG	I	HEAVY	175	700	8"	8"	4"	700	1575	-0.574'	430 SS WHERE EXPOSED	ALONE	ALONE
3	FRYER	3650 BD-2	CAPTIVEAIR	4' 0"	600 DEG	I	HEAVY	175	700	8"	8"	4"	700	1575	-0.574'	430 SS WHERE EXPOSED	ALONE	ALONE
4	FRYER	3650 BD-2	CAPTIVEAIR	4' 0"	600 DEG	I	HEAVY	175	700	8"	8"	4"	700	1575	-0.574'	430 SS WHERE EXPOSED	ALONE	ALONE

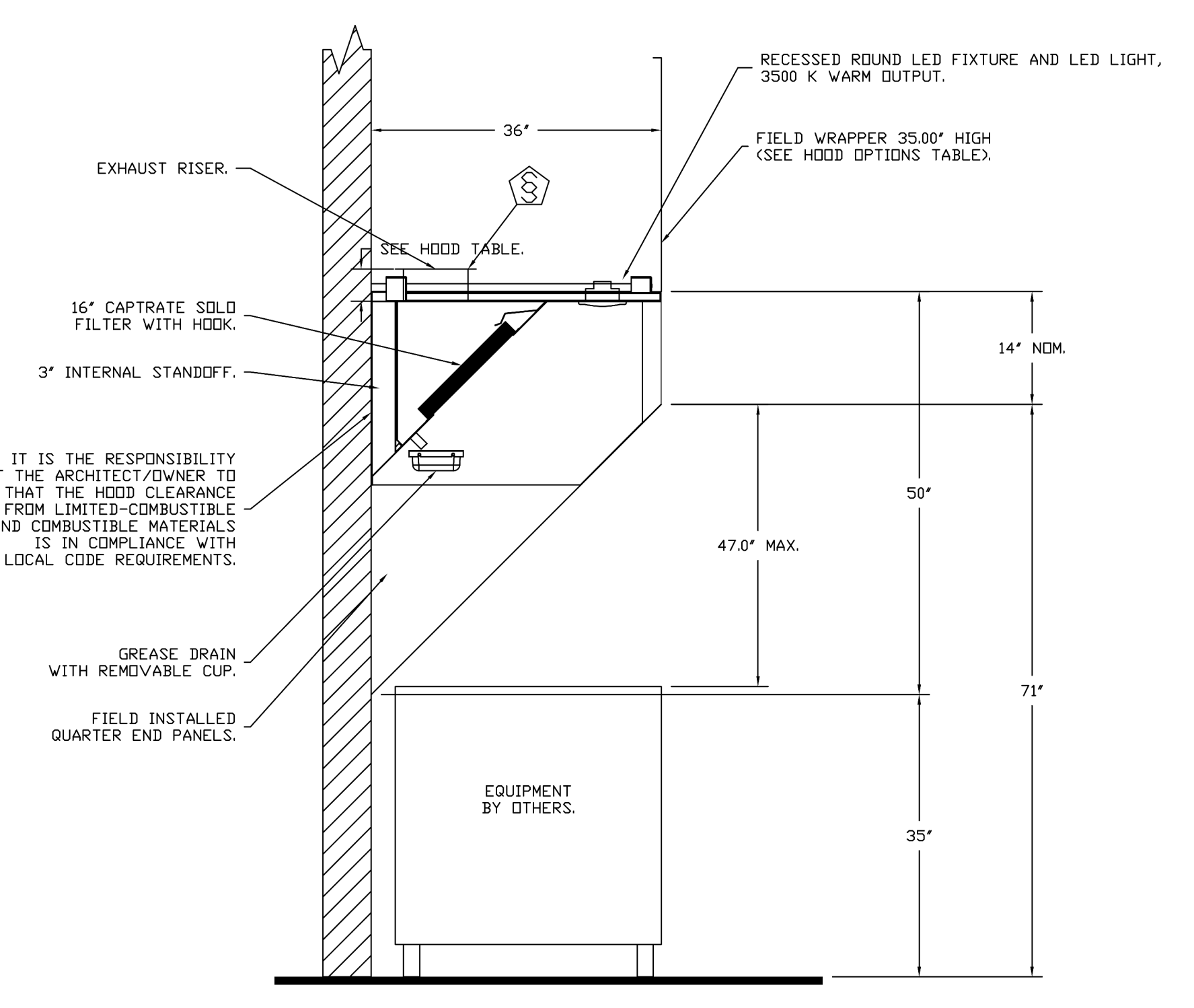
HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)			EFFICIENCY @ 7 MICRONS	QTY	LIGHT(S)		UTILITY CABINET(S)		FIRE SYSTEM	HOOD HANGING WEIGHT
			QTY	HEIGHT	LENGTH			TYPE	WIRE GUARD	LOCATION	SIZE		
1	GRILL	CAPTRATE SOLD FILTER	2	16"	20"	85% SEE FILTER SPEC	1	RECESSED ROUND	NO			YES	205 LBS
2	GRILL	CAPTRATE SOLD FILTER	2	16"	20"	85% SEE FILTER SPEC	1	RECESSED ROUND	NO			YES	205 LBS
3	FRYER	CAPTRATE SOLD FILTER	2	16"	20"	85% SEE FILTER SPEC	1	RECESSED ROUND	NO			YES	205 LBS
4	FRYER	CAPTRATE SOLD FILTER	2	16"	20"	85% SEE FILTER SPEC	1	RECESSED ROUND	NO			YES	205 LBS

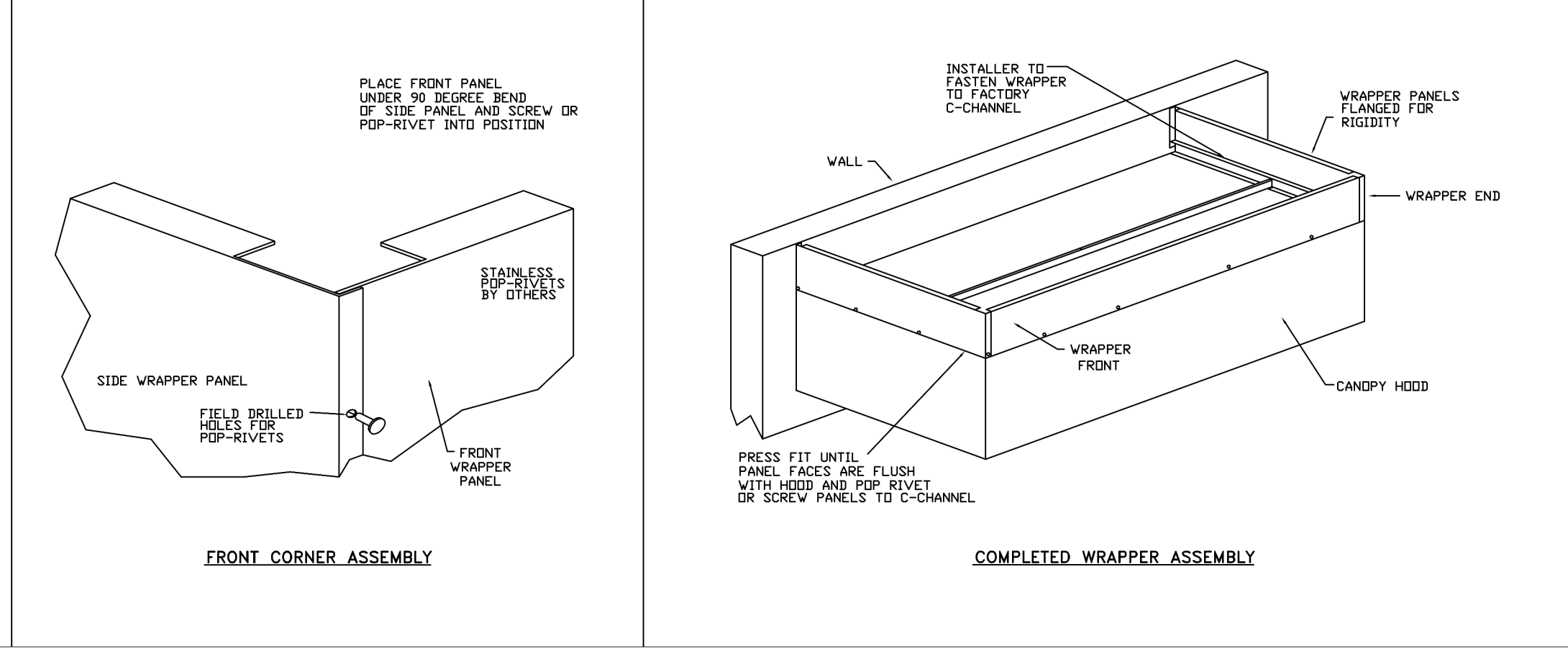
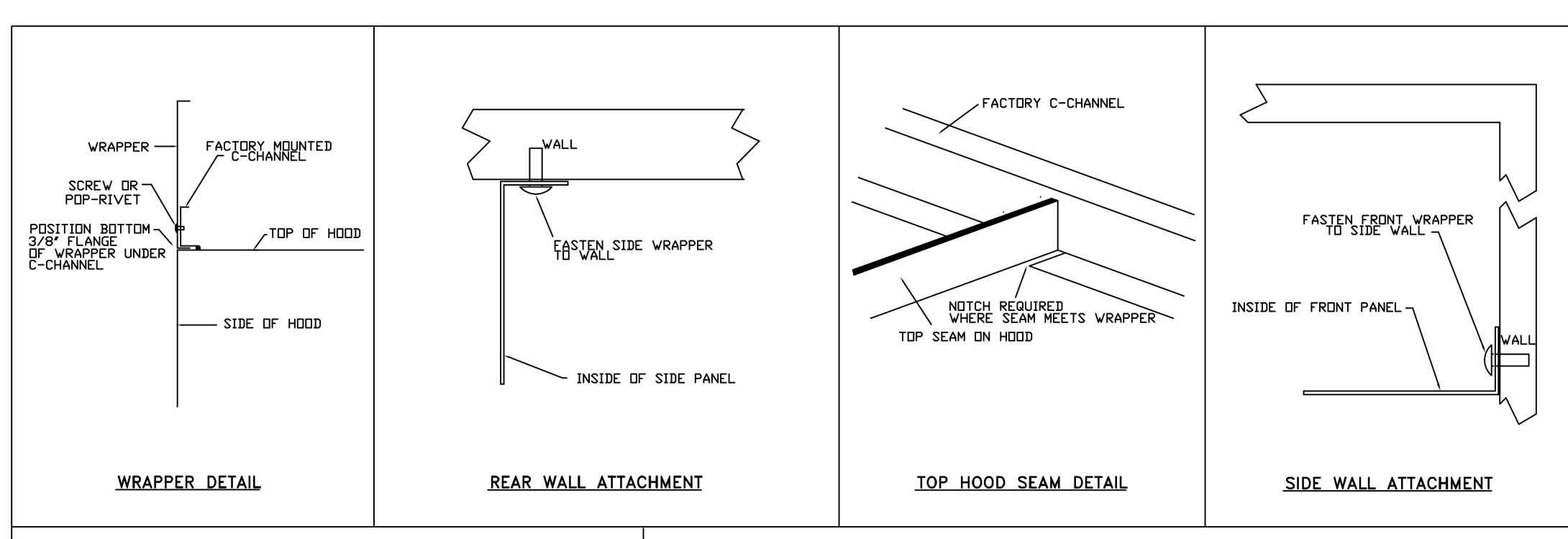
HOOD OPTIONS

HOOD NO	TAG	OPTION
1	GRILL	FIELD WRAPPER 35.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. 1-PINT GREASE CUP. RISER SENSOR INSTALL 6IN PLEN.
2	GRILL	FIELD WRAPPER 35.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. 1-PINT GREASE CUP. RISER SENSOR INSTALL 6IN PLEN.
3	FRYER	FIELD WRAPPER 35.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. 1-PINT GREASE CUP. RISER SENSOR INSTALL 6IN PLEN.
4	FRYER	FIELD WRAPPER 35.00" HIGH FRONT, LEFT, RIGHT. RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS. 1-PINT GREASE CUP. RISER SENSOR INSTALL 6IN PLEN.

FOR QUESTIONS, CALL THE
 Eastern PA Mechanical
 REGION US
 PHONE: (267) 504-4126
 EMAIL: regi08@captiveaire.com



SECTION VIEW - MODEL 3650BD-2
 HOOD - #1 (GRILL), #2 (GRILL), #3 (FRYER), #4 (FRYER)



VERIFY CEILING HEIGHT

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revise and Resubmit

SIGNATURE _____ Date _____

Your Title _____

REVISIONS

NO	DESCRIPTION	DATE

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Shack Shack-1390-Katy, TX
 KATY, TX 77493

DATE: 11/4/21
 DWG.#: 5098285
 DRAWN BY: Joe Shilka
 SCALE:
 MASTER DRAWING
 SHEET NO. 1

STORE NO: TX 1390

SHAKE SHACK
 KATY, TX
 HOUSTON, TX 77084

REVISION

NO	DATE	DESCRIPTION
A	02/15/22	Revision A
C	06/13/22	Revision C
T	08/24/22	REVISION 1

STATUS: IFC SET

FOR REFERENCE ONLY

FIELD VERIFICATION:
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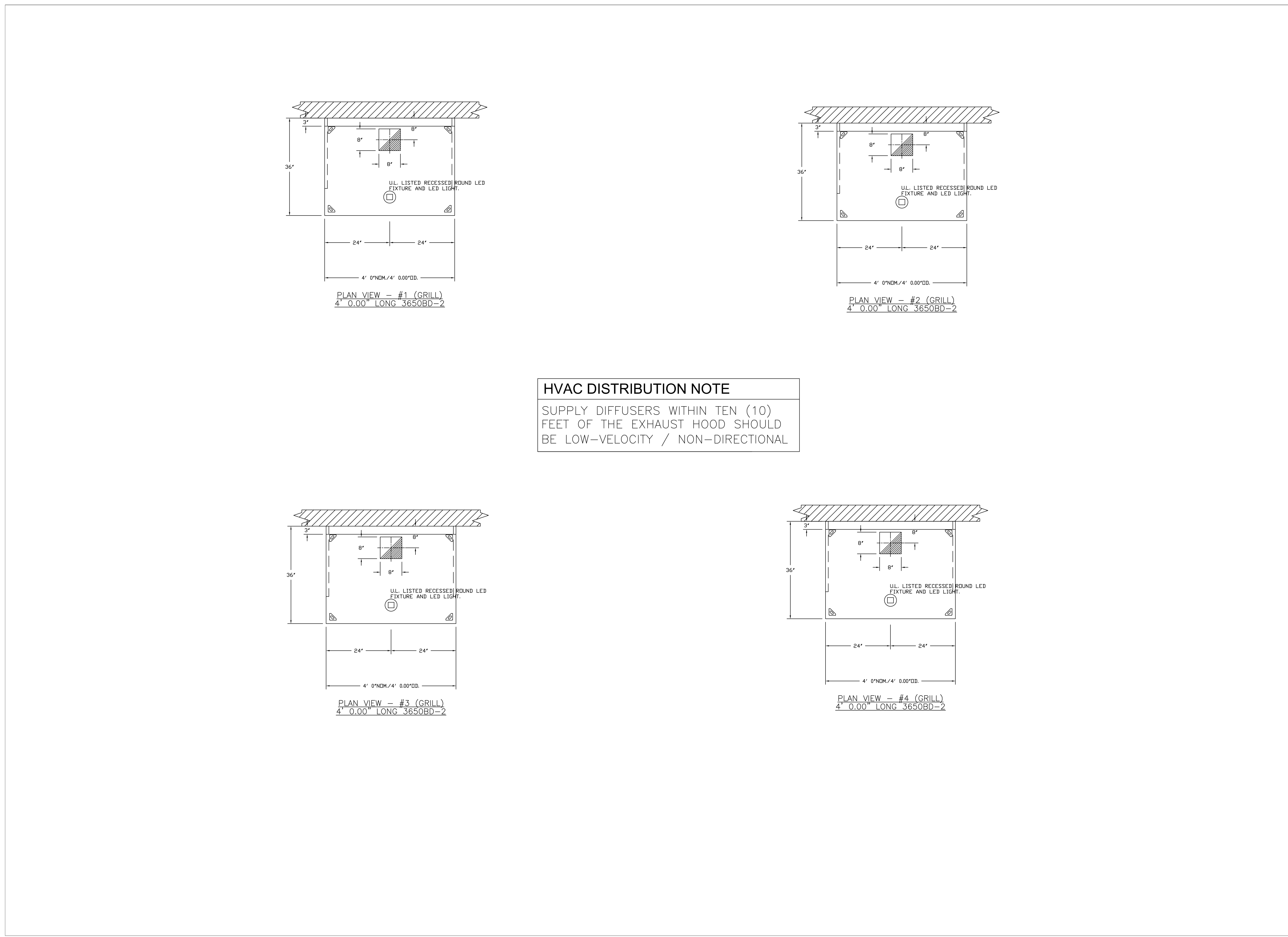
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 CAPTIVE AIRE DRAWINGS

DATE: 12/18/20 PROJECT NO: 34207
 DRAWN: AJP SCALE: AS NOTED

SHEET NO: M701

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E
D
C
B
A



HVAC DISTRIBUTION NOTE
 SUPPLY DIFFUSERS WITHIN TEN (10)
 FEET OF THE EXHAUST HOOD SHOULD
 BE LOW-VELOCITY / NON-DIRECTIONAL

REVISIONS	
DESCRIPTION	DATE

CAPTIVE
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Shack Shack-1390-Katy, TX
 KATY, TX, 77493

DATE: 11/4/21
DWG.#: 5098285
DRAWN BY: Joe.shilba
SCALE:
MASTER DRAWING
SHEET NO.
 2

STORE NO:
 TX 1390



REVISION	
DATE	DESCRIPTION
A 02/15/22	Revision A
C 06/13/22	Revision C
T 08/24/22	REVISION 1

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 CAPTIVE AIRE DRAWINGS

DATE: 12/18/20 PROJECT NO: 34207
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FIRE SYSTEM INFORMATION - JOB#5098285

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		ANSUL R102	3.0/3.0/3.0/3.0	32	WALL-MT (54"W x 24"H x 9"D)	N/A

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		MECHANICAL	2.000	CAPTIVEAIRE SYSTEMS

NOTES

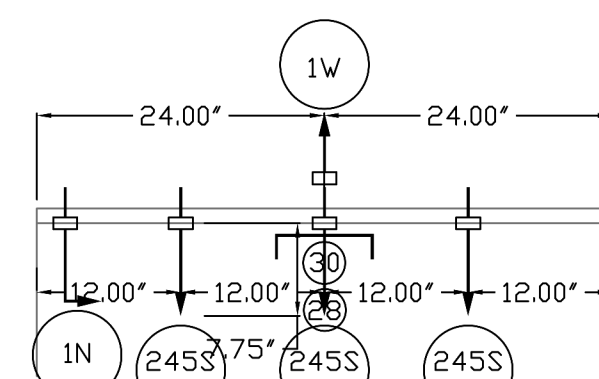
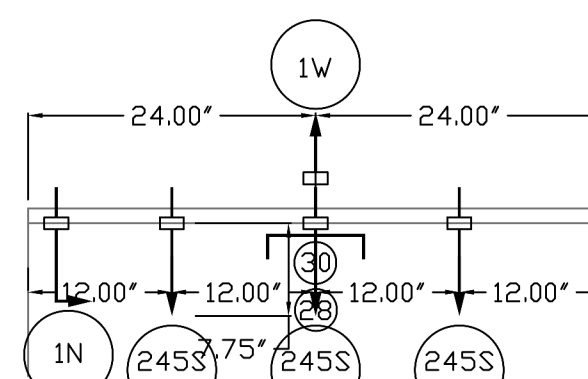
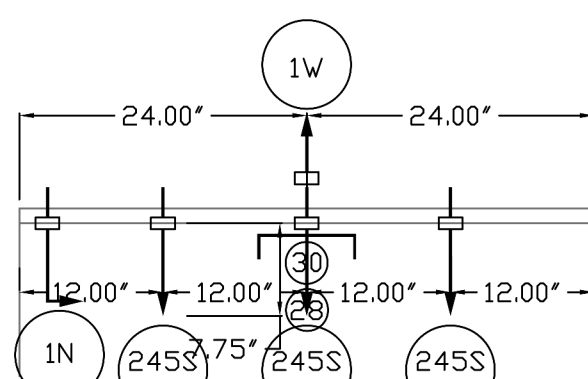
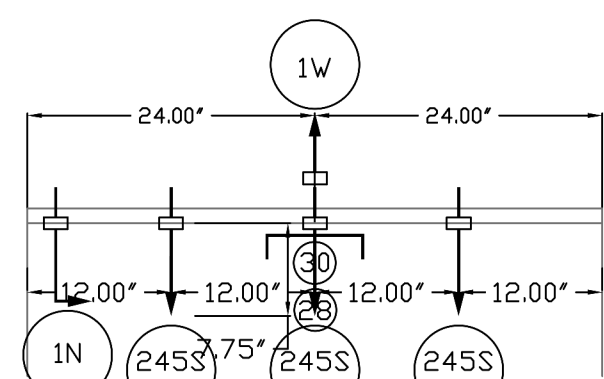
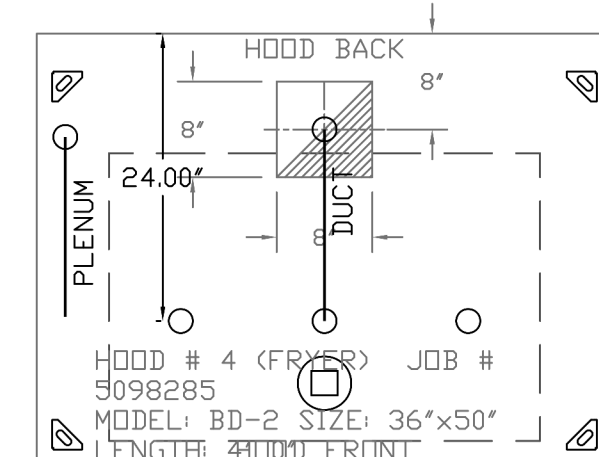
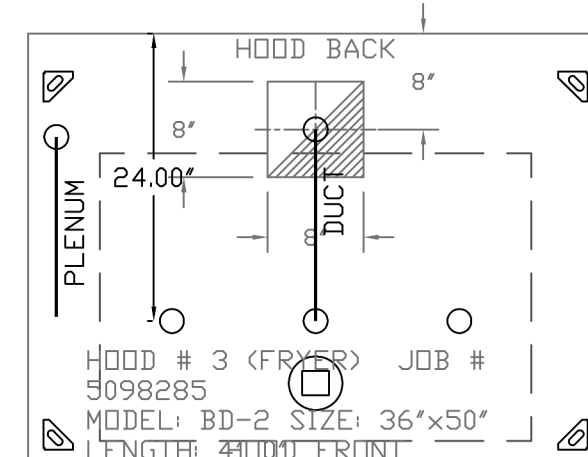
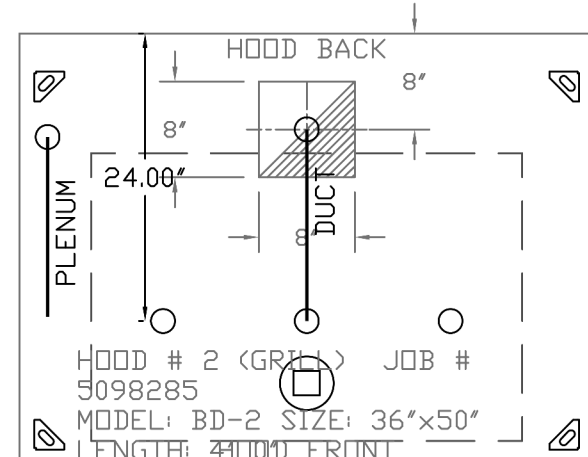
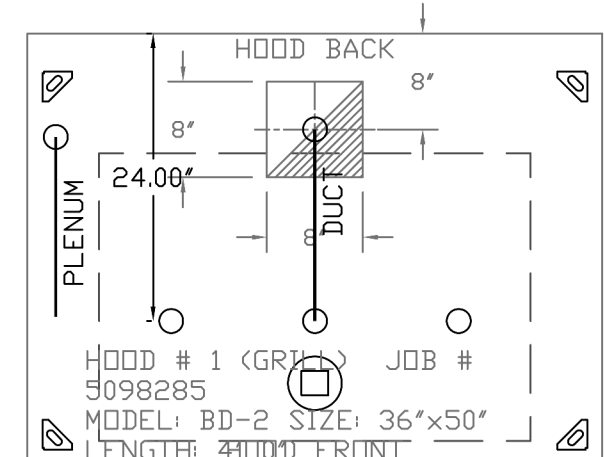
- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE COVERING A RANGE, FRYER, OR WOK TO REFLECT GENERAL PIPING REQUIREMENTS.
- IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6' ABOVE THE TOP OF THE HOOD.
- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

JOB #: 5098285
 JOB NAME: SHACK SHACK-1390-KATY, TX.

SYSTEM SIZE: ANSUL-3.0/3.0/3.0/3.0 TOTAL FP REQUIRED: 32.
 HOOD # 1 4' 0.00' LONG x 36' WIDE x 50' HIGH.
 RISER # 1 SIZE: 8" x 8".
 HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.
 HOOD # 2 4' 0.00' LONG x 36' WIDE x 50' HIGH.
 RISER # 1 SIZE: 8" x 8".
 HOOD # 2 METAL BLOW-OFF CAPS INCLUDED.
 HOOD # 3 4' 0.00' LONG x 36' WIDE x 50' HIGH.
 RISER # 1 SIZE: 8" x 8".
 HOOD # 3 METAL BLOW-OFF CAPS INCLUDED.
 HOOD # 4 4' 0.00' LONG x 36' WIDE x 50' HIGH.
 RISER # 1 SIZE: 8" x 8".
 HOOD # 4 METAL BLOW-OFF CAPS INCLUDED.

LEGEND - WALL MOUNTED ANSUL SYSTEM

- 1A 1.5 GALLON TANK.
- 1B 3.0 GALLON TANK.
- 2 AUTOMAN RELEASE.
- 3 3 GALLON TANK ENCLOSURE.
- 3A 6 GALLON TANK ENCLOSURE.
- 4 REGULATED ACTUATOR.
- 5 ANSULEX LIQUID AGENT (3 GAL.).
- 6 ANSULEX LIQUID AGENT (1.5 GAL.).
- 7 CARTRIDGE (101-20).
- 8 CARTRIDGE (101-10).
- 9 CARTRIDGE (101-30).
- 9A CARTRIDGE (LT-A-101-30).
- 9B DOUBLE TANK CARTRIDGE.
- 10 TEST LINK.
- 11 DOUBLE MICROSWITCH.
- 2W DUCT NOZZLE (419337).
- 1W NOZZLE ASSEMBLY (419336).
- 1F NOZZLE ASSEMBLY (419333).
- 1N NOZZLE ASSEMBLY (419335).
- 1/2N NOZZLE ASSEMBLY (419334).
- 3N NOZZLE ASSEMBLY (419338).
- 245 NOZZLE ASSEMBLY (419340).
- 230 NOZZLE ASSEMBLY (419339).
- 2120 NOZZLE ASSEMBLY (419343).
- 290 NOZZLE ASSEMBLY (419342).
- 260 NOZZLE ASSEMBLY (419341).
- 28 DETECTOR BRACKET.
- 29 LOW TEMP FUSIBLE LINK.
- 30 HIGH TEMP FUSIBLE LINK.
- MGV MECHANICAL GAS VALVE.
- EGV ELECTRICAL GAS VALVE.
- 34 REMOTE MANUAL PULL STATION.
- S SWIVEL ADAPTOR.

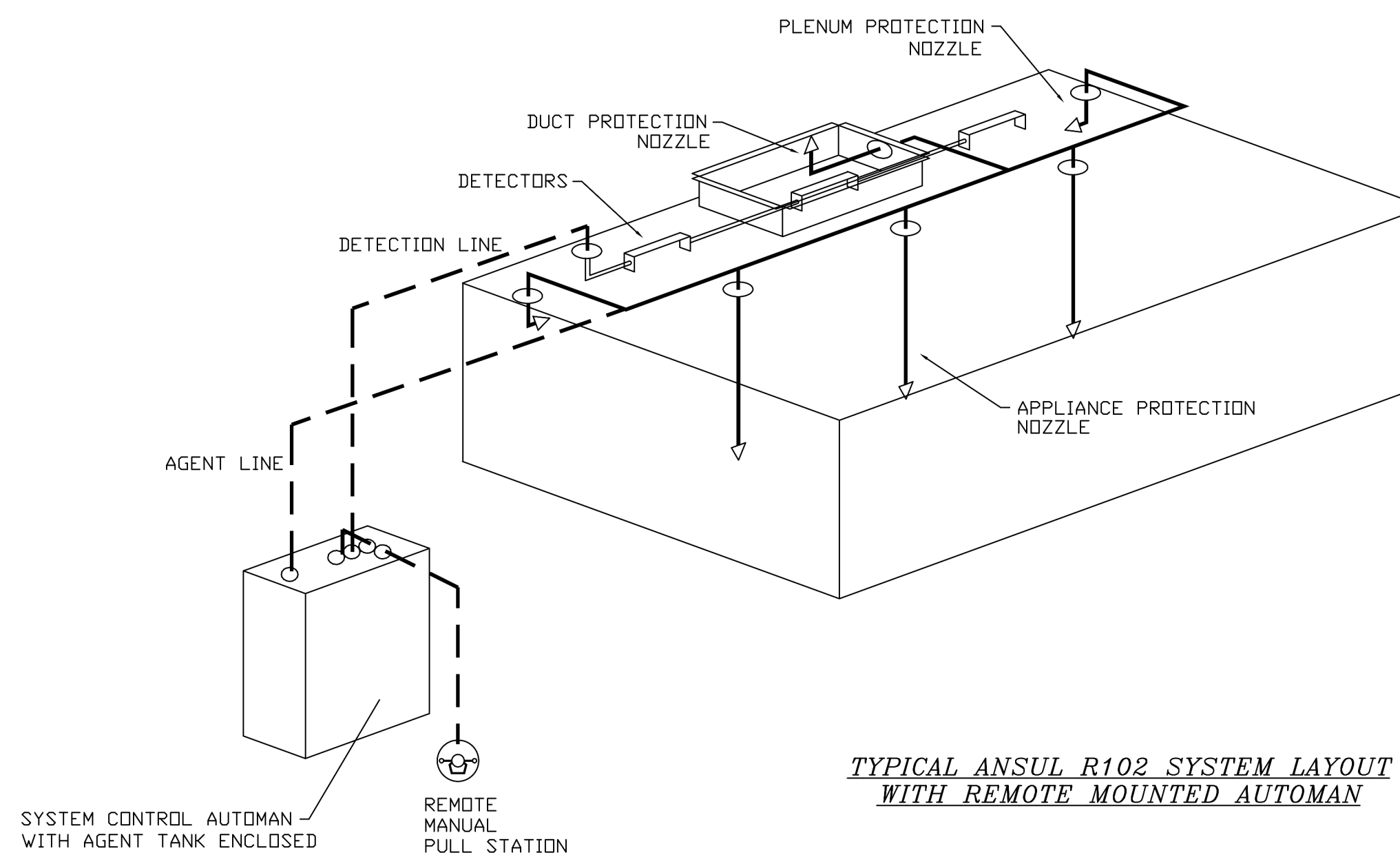


ANSUL DIVER/LAPPING
 COVERAGE - 12'
 HIGH PROXIMITY
 36.00' L X 24.00' D

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 COVERAGE - 12'
 HIGH PROXIMITY
 36.00' L X 24.00' D

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ANSUL DIVER/LAPPING
 COVERAGE - 12'
 HIGH PROXIMITY
 36.00' L X 24.00' D



TYPICAL ANSUL R102 SYSTEM LAYOUT WITH REMOTE MOUNTED AUTOMAN

REVISIONS

DESCRIPTION	DATE

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Shack Shack-1390-Katy, TX
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DATE: 11/4/21
DWG.#: 5098285
DRAWN BY: Joe Shilba
SCALE:
MASTER DRAWING
SHEET NO. 3

STORE NO: TX 1390

SHAKE SHACK
 KATY, TX
 HOUSTON, TX 77084

REVISION

DATE	DESCRIPTION
A 02/15/22	Revision A
C 08/15/22	Revision C
T 08/24/22	REVISION 1

STATUS: IFC SET

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SHEET NAME:
CAPTIVE AIRE DRAWINGS

DATE: 12/18/20 **PROJECT NO:** 34207
DRAWN: Author **SCALE:** AS NOTED

SHEET NO.: M703

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EXHAUST FAN INFORMATION – JOB#5167441

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
2	KEF-1	1	DUS0HFA	CAPTIVEAIRE	700	1.000	1411	TEAD-ECM	0.500	0.2890	1	208	3.8	266 FPM	82	14.2
3	KEF-2	1	DUS0HFA	CAPTIVEAIRE	700	1.000	1411	TEAD-ECM	0.500	0.2890	1	208	3.8	266 FPM	82	14.2
4	KEF-3	1	DUS0HFA	CAPTIVEAIRE	700	1.000	1411	TEAD-ECM	0.500	0.2890	1	208	3.8	266 FPM	82	14.2
5	KEF-4	1	DUS0HFA	CAPTIVEAIRE	700	1.000	1411	TEAD-ECM	0.500	0.2890	1	208	3.8	266 FPM	82	14.2

DOAS/RTU FAN SCHEDULE – JOB#5167441

FAN UNIT NO	TAG	QTY	DOAS/RTU MODEL #	MANUFACTURER	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	ESP	HP	BHP	PHASE	VOLT	MCA	MDCP	WEIGHT (LBS)
1	RTU-2	1	CASRTU3-1400-24-20T-DOAS	CAPTIVEAIRE	24P-3	2500	2500	5000	1.000	7.500	5.1420	3	208	95.7A	110A	2676

DOAS/RTU COOLING SCHEDULE

FAN UNIT NO	TAG	COMPRESSOR			OUTDOOR FAN			INDOOR COIL		OUTSIDE AIR DB TEMP	OUTSIDE AIR WB TEMP	MIXED AIR DB TEMP	MIXED AIR WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	LEAVING DP TEMP	TOTAL CAPACITY	SENSIBLE CAPACITY	LATENT CAPACITY	REHEAT LEAVING DB TEMP	REHEAT LEAVING WB TEMP	DESIRED REHEAT CAPACITY	MAX REHEAT CAPACITY	REHEAT LEAVING RELATIVE HUMIDITY	MOISTURE REMOVAL RATE	IEER	
		TONNAGE	VOLTAGE	PHASE	MOTOR VOLTAGE	MOTOR Ø	MOTOR FREQUENCY	MOTOR QTY	RDVS																		FACE AREA
1	RTU-2	20	190-240	3	200-240	3	60	3	7	11.9 SQFT	95.0°F	78.0°F	85.0°F	70.7°F	54.6°F	54.0°F	53.6°F	264.0 MBH	164.3 MBH	99.7 MBH	75.0°F	62.5°F	110.2 MBH	129.6 MBH	50	88.1 LBS/HR	18.2

DOAS/RTU HEATING SCHEDULE

FAN UNIT NO	TAG	RTU INPUT BTUS	OUTPUT BTUS	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
1	RTU-2	371250	297000	55°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	80

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	RTU-2	1	INLET PRESSURE GAUGE, 0-35".
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.
		1	RTU TOTAL CFM MONITORING.
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU, 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROL THIS UNIT, THE R2B, R47, "MAX", OR "EZ" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	LDW AMBIENT COOLING OPERATION - DOWN TO 15F 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	RTU3 CURB DUCT HANGER.
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS.
		1	OCCUPIED SCHEDULING.
		1	CLOGGED FILTER SWITCH - NOTIFICATION ON HMI.
		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 INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI.
		1	RTU3 DOWN RETURN.
		1	REMOTE TEMPERATURE AND HUMIDITY SPACE SENSOR.
		1	VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED).
		1	LOAD REACTOR MOUNTED IN FAN.
		1	RTU ECONOMIZER - DIFFERENTIAL ENTHALPY CONTROL.
		1	RTU ECONOMIZER BAROMETRIC RELIEF.
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	KEF-1	1	GREASE BOX.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
3	KEF-2	1	2 YEAR PARTS WARRANTY.
		1	GREASE BOX.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
4	KEF-3	1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
		1	2 YEAR PARTS WARRANTY.
		1	GREASE BOX.
5	KEF-4	1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
		1	2 YEAR PARTS WARRANTY.

CURB ASSEMBLIES

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	RTU-2	68 LBS	CURB	59.500"W X 91.000"L X 12.000"H ALONG WIDTH, RIGHT INSULATED.
2	# 2	KEF-1	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
3	# 3	KEF-2	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
4	# 4	KEF-3	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
5	# 5	KEF-4	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.

REVISIONS

DESCRIPTION	DATE

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Shack Shack-1390-Katy, TX
 KATY, TX, 77493

DATE: 11/4/21
DWG.#: 5098285
DRAWN BY: Joe Shilba
SCALE:
MASTER DRAWING

SHEET NO.
4

STORE NO:
TX 1390

SHAKE SHACK
 KATY, TX
 HOUSTON, TX 77084

REVISION

DATE	DESCRIPTION
A 02/15/22	Revision A
C 08/15/22	Revision C
T 08/24/22	REVISION 1

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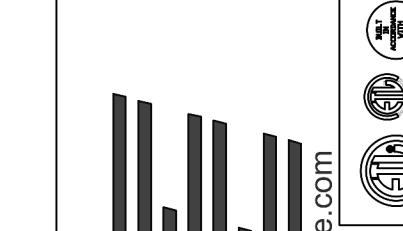
DATE: 12/18/20 PROJECT NO: 34207

DRAWN: Author SCALE: AS NOTED

SHEET NO:
M704

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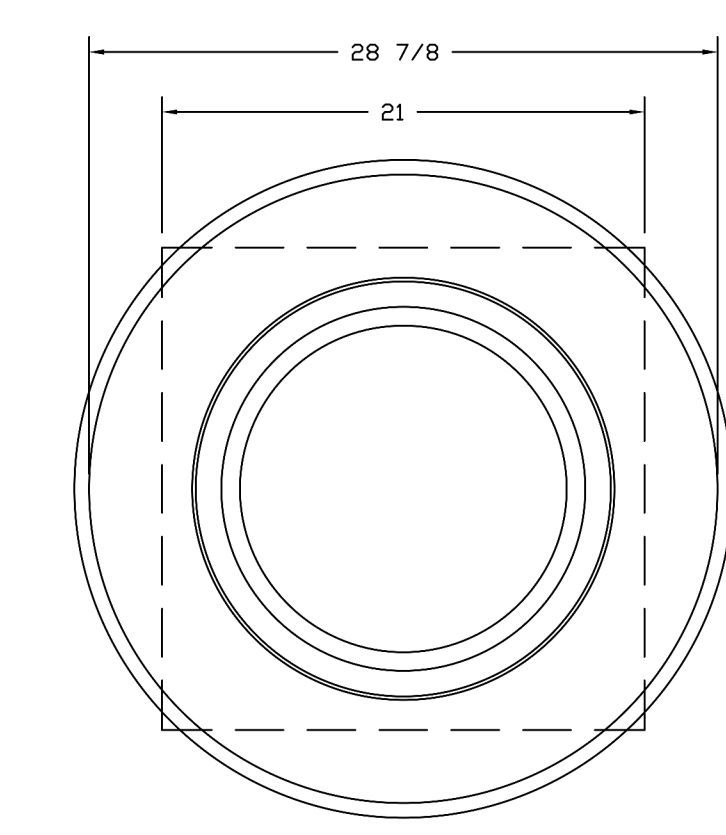
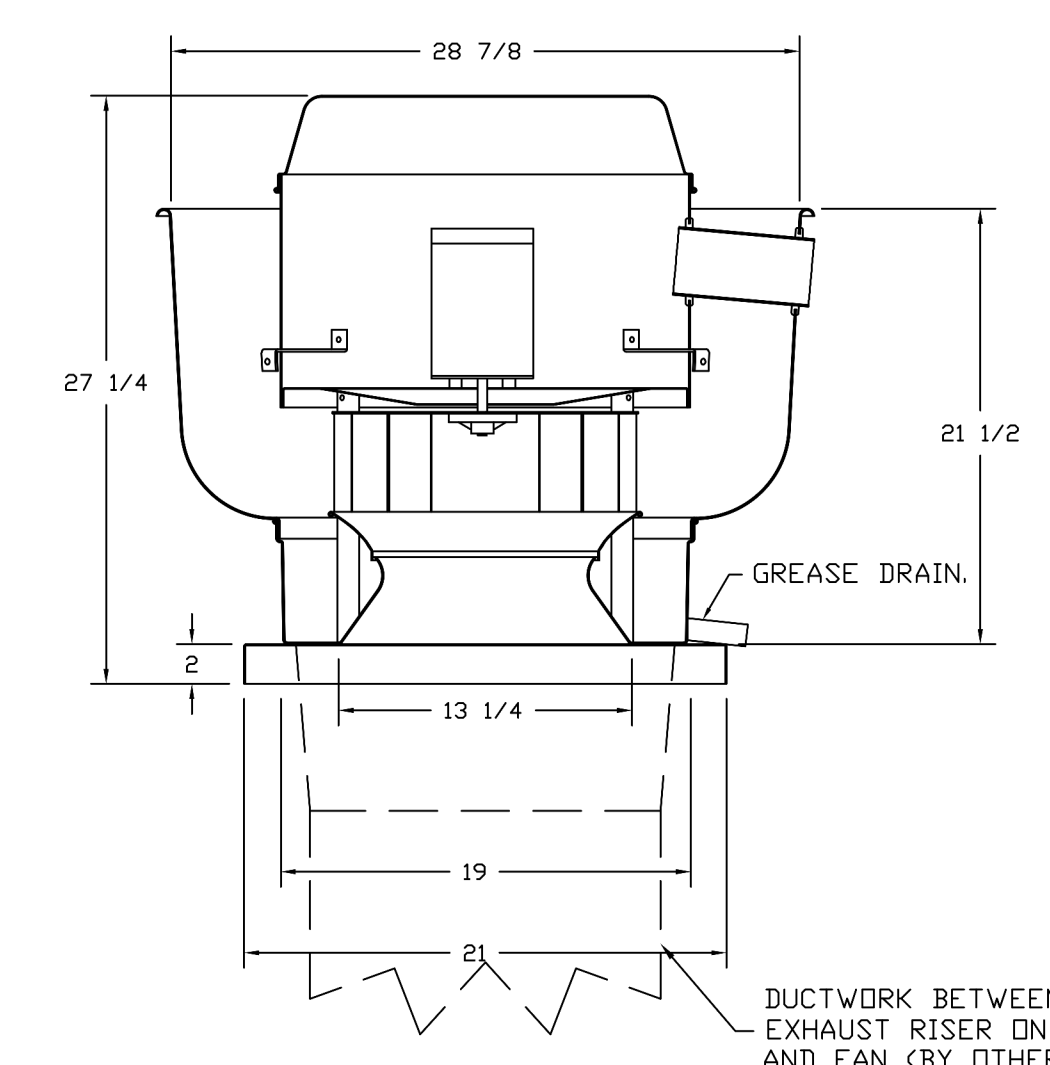


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DATE: 11/4/21
DWG.#: 5098285
DRAWN BY: Joe.shilka
SCALE:
MASTER DRAWING
SHEET NO. 5

FANS #2 (KEF-1), #3 (KEF-2), #4 (KEF-3), #5 (KEF-4) - BUSOHEA EXHAUST FAN



TOP VIEW

FEATURES:

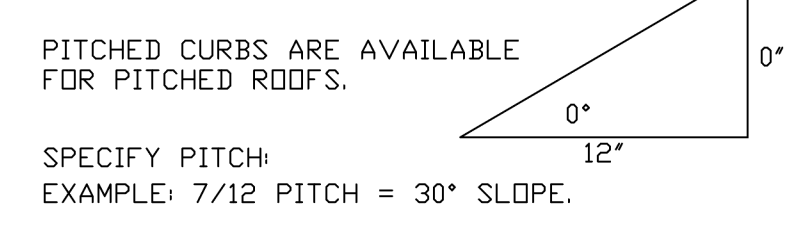
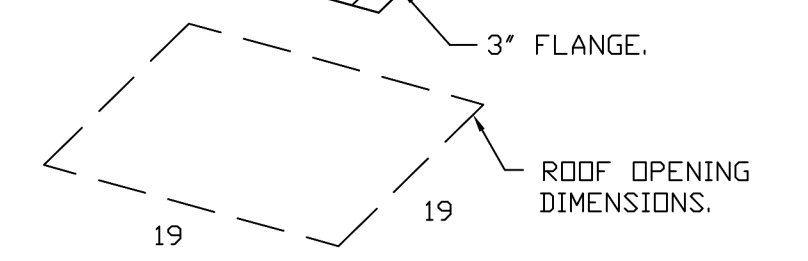
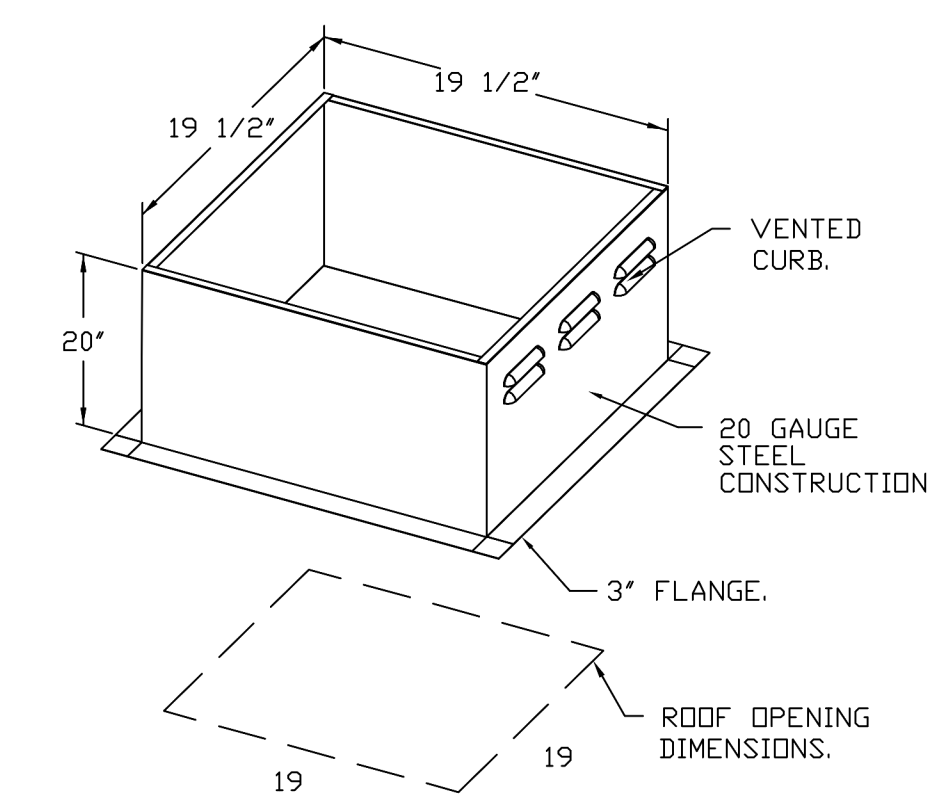
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL755 AND UL756 AND UL-C-5645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT 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 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.
- FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
- ECH WIRING PACKAGE - PWM SIGNAL FROM ECHMS PREWIRE (TELCO METHOD), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.
 SPECIFY PITCH
 EXAMPLE: 7/12 PITCH = 30° SLOPE.

DUCTWORK BETWEEN EXHAUST RISER ON HOOD AND FAN (BY OTHERS).

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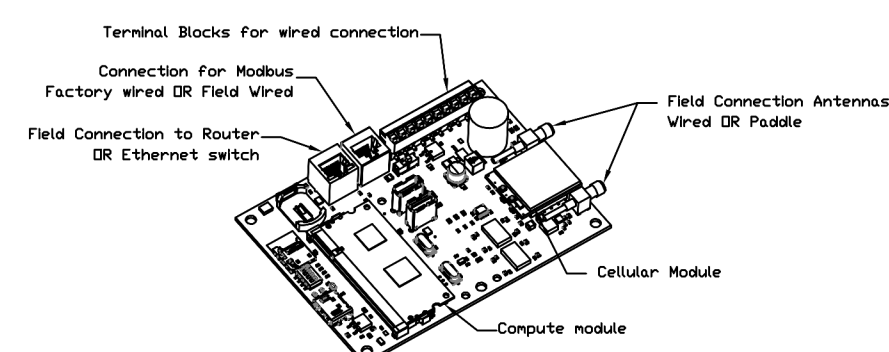
DATE: 12/18/20 PROJECT NO: 34207

DRAWN: Author SCALE:

SHEET NO:
M705

ELECTRICAL PACKAGE - JOB#5098285

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	#	HP	VOLT	FLA
1		SC-140110MA	WALL MOUNT IN SS BDX (18"W x 18"H x 6"D)	OS - SS WALL MOUNT BDX	1 LIGHT	SMART CONTROL S THERMOSTATIC CONTROL V/ RELAY D/VOFF WITH SUPPLY	KEF-1	EXHAUST	1	0.500	208	3.8
					1 FAN		KEF-2	EXHAUST	1	0.500	208	3.8
							KEF-3	EXHAUST	1	0.500	208	3.8
							KEF-4	EXHAUST	1	0.500	208	3.8

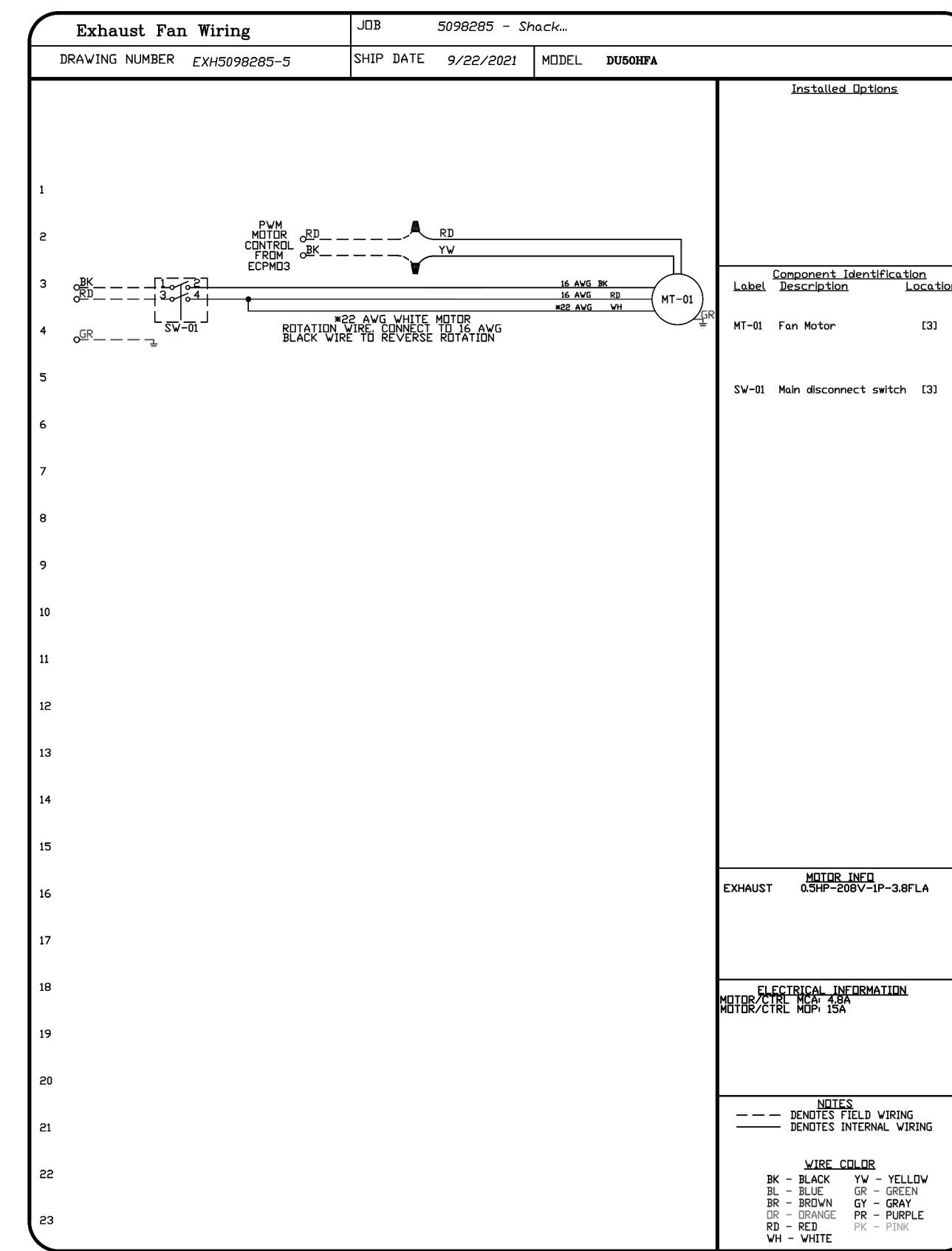
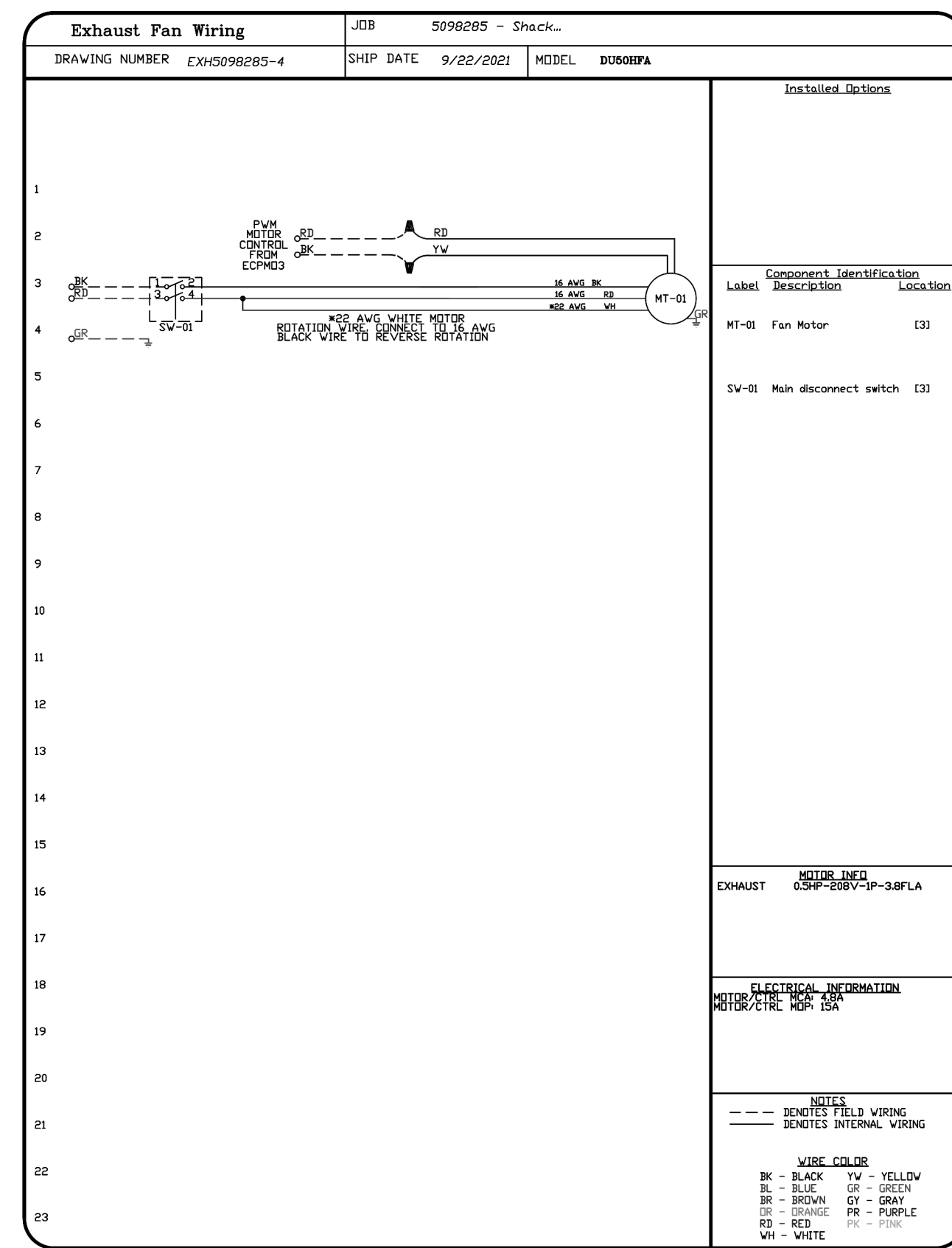
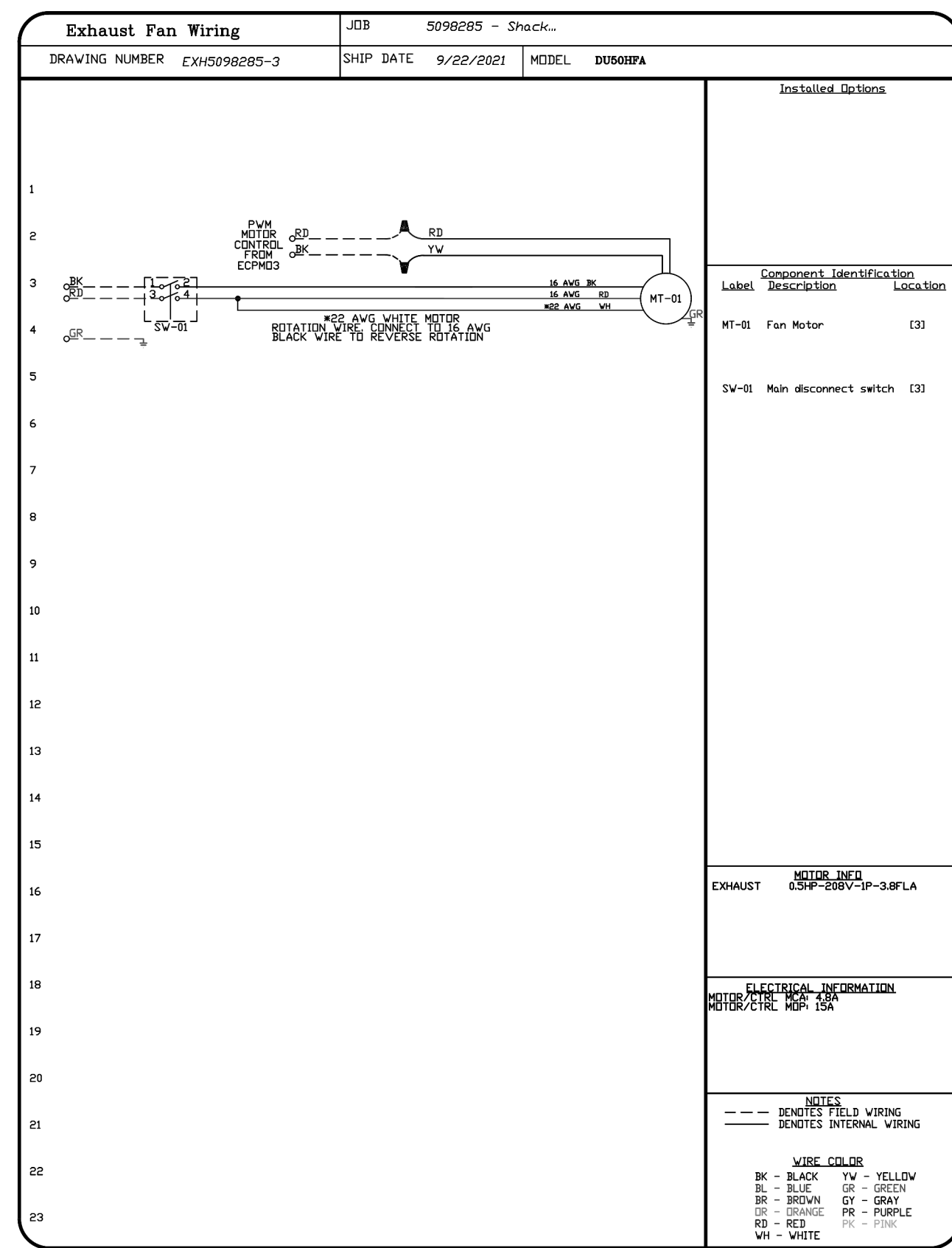
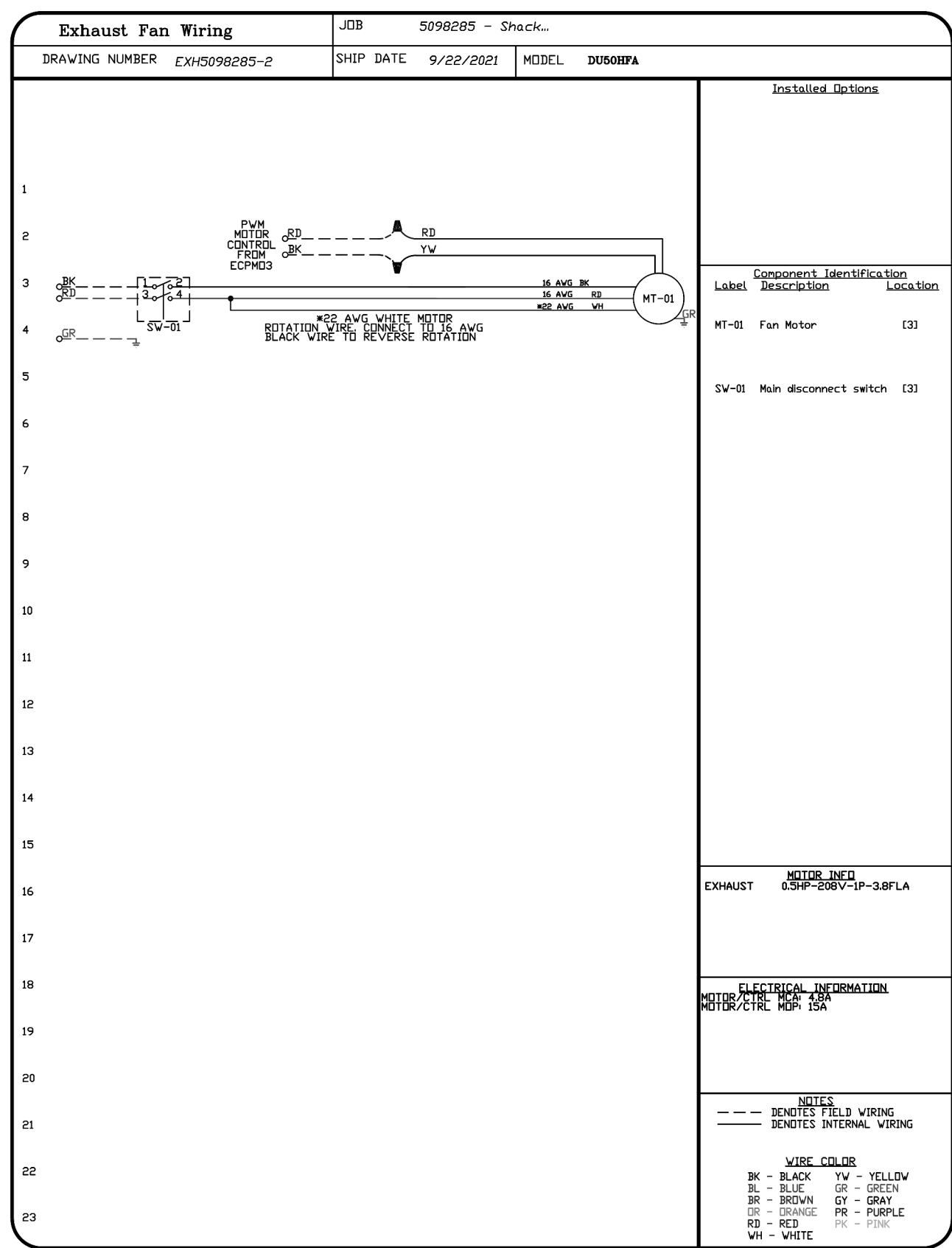
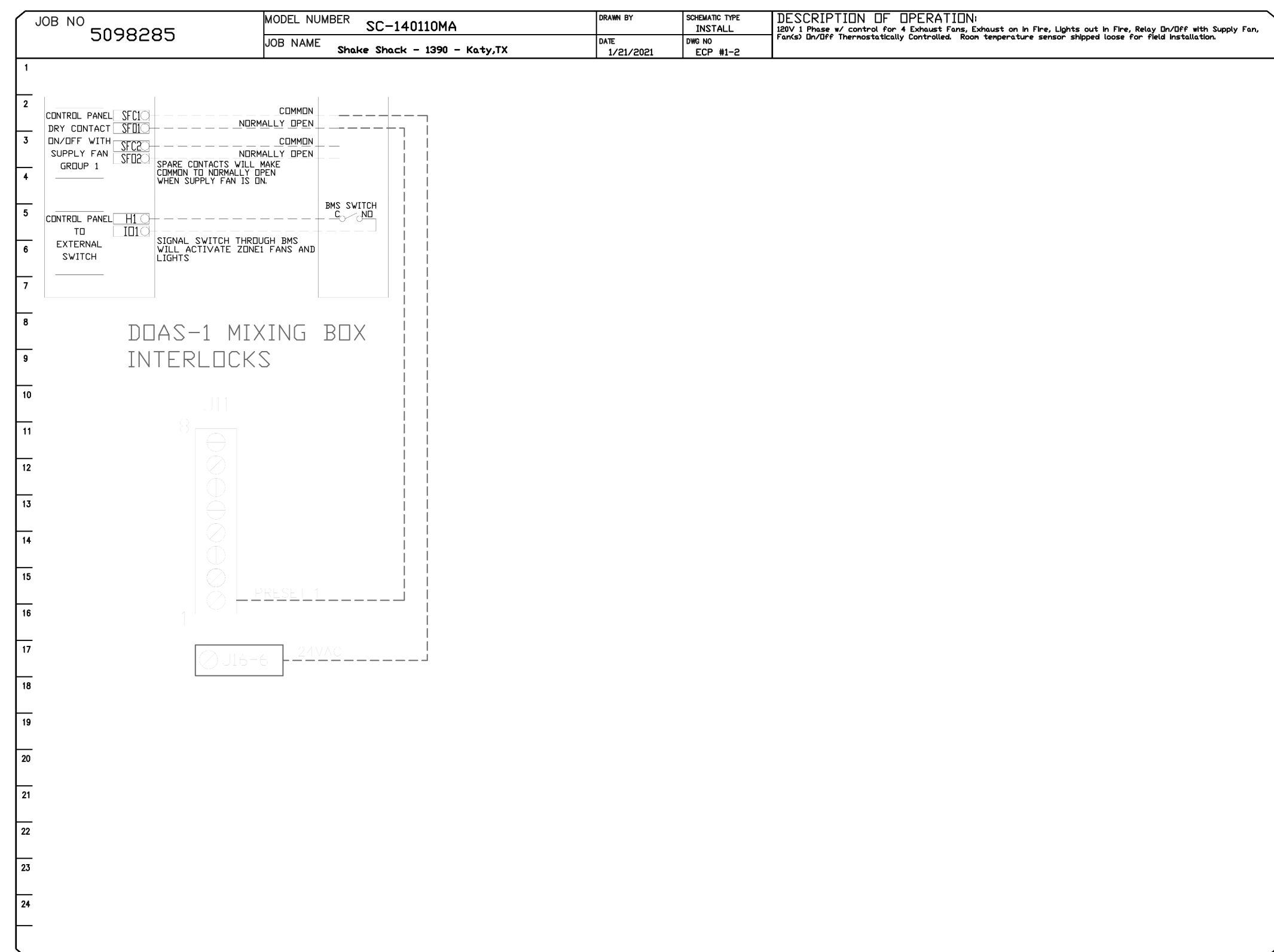
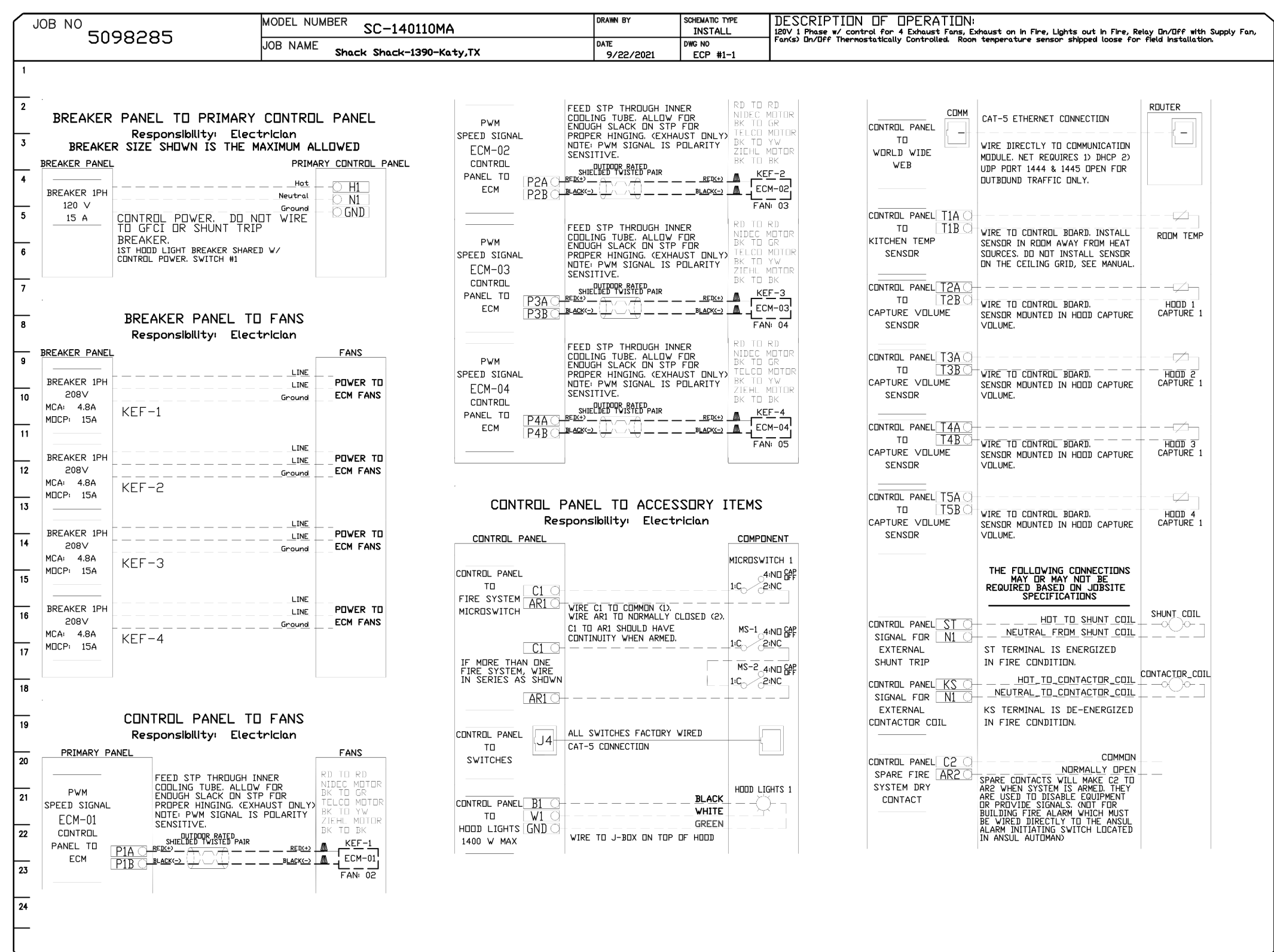


CASlink Monitor and Control

- Hood control panel to support communications to cloud-based Building Management System.
- Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the notes list.
- Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the notes list.
- Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZED control strategies for fully integrated Building Management.

MONITORING AND CONTROL POINTS LIST

SC Packages	Function	SC Packages	Function
Room Temperature	MONITOR	Room Temperature(s)	MONITOR
Plant Temperature(s)	MONITOR	Plant Temperature(s)	MONITOR
WGA Discharge Temperature	MONITOR	WGA Discharge Temperature	MONITOR
Blowdown RTV Discharge Temperature	MONITOR	Blowdown RTV Discharge Temperature	MONITOR
Fan Speed	MONITOR	Compressor Faults	MONITOR
Fan Ampage	MONITOR	Fan Faults	MONITOR
Fan Status	MONITOR	Fan Status	MONITOR
FFD Faults	MONITOR	PCV Faults	MONITOR
Compressor Faults	MONITOR	PCV Filter Clog Percentages	MONITOR
Fan Faults	MONITOR	Fan Conditions	MONITOR
Fan Status	MONITOR	COND Fan System	MONITOR & CONTROL
PCV Faults	MONITOR	PCV Faults	MONITOR
PCV Filter Clog Percentages	MONITOR	Building Pressures	MONITOR & CONTROL
Fan Conditions	MONITOR	Light Status(s)	MONITOR & CONTROL
COND Fan System	MONITOR	Flash Status	MONITOR & CONTROL
Building Pressures	MONITOR	Flash Status	MONITOR & CONTROL
Prep Time Status	MONITOR & CONTROL		
Fan Status	MONITOR & CONTROL		
Light Status	MONITOR & CONTROL		
Flash Status	MONITOR & CONTROL		



REVISIONS

NO	DATE	DESCRIPTION

STORE NO: TX 1390

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DATE: 11/4/21
 DWG #: 5098285
 DRAWN BY: Joe Shilko
 SCALE:
 MASTER DRAWING
 SHEET NO. 7

REVISION

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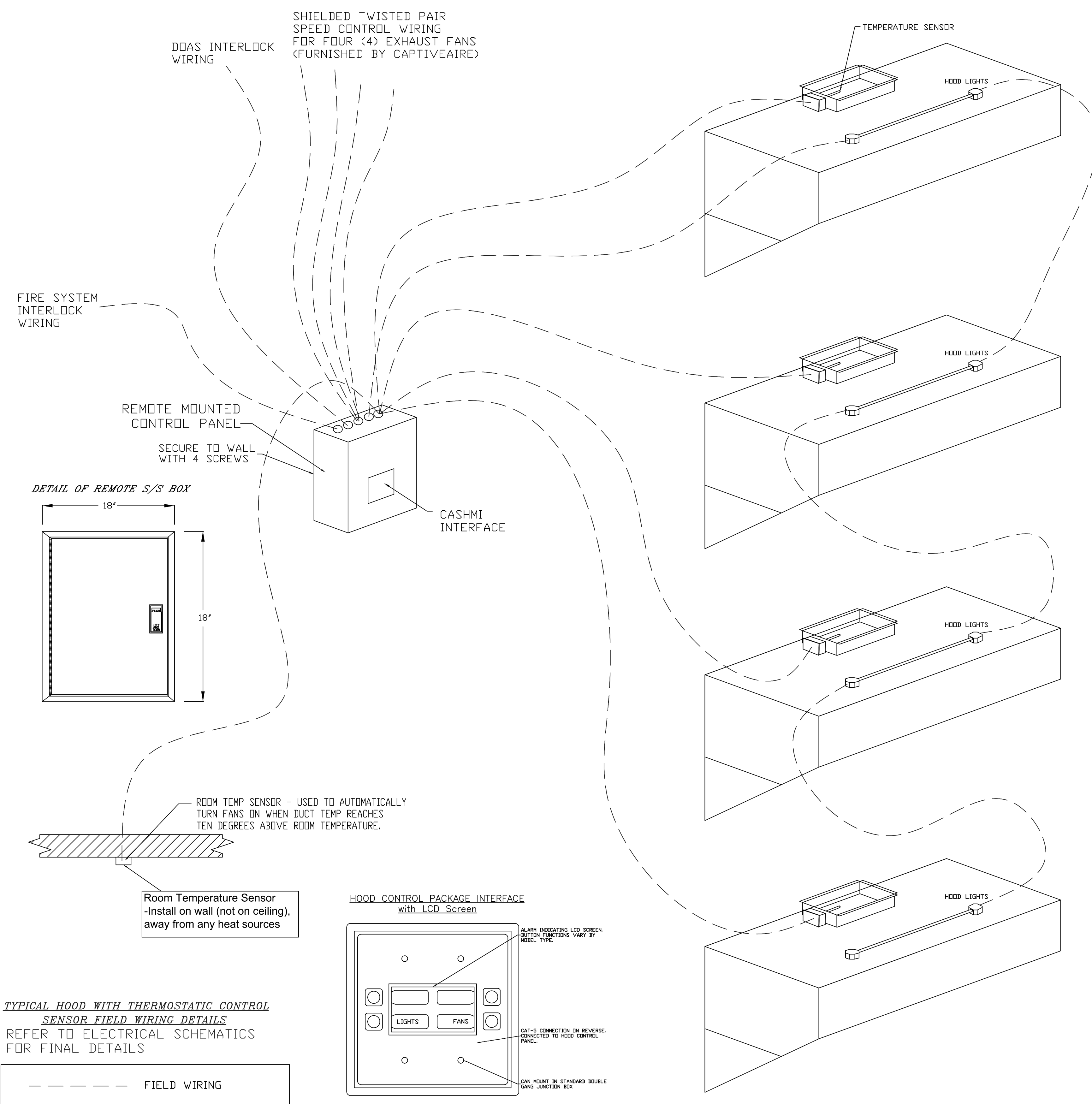
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CRIMSON+ CONTROL DETAILS

LOW VOLTAGE & INTERLOCKS (SEE SCHEMATICS FOR LINE VOLTAGE)



SC- Specification:

The Electrical Package, typically FP, is designed to thermostatically activate the exhaust fans for an exhaust hood whenever elevated temperatures are sensed in the exhaust system. This option will meet the requirements of IMC 507.2.1.1 by providing a thermostat(s) mounted in the duct or hood riser to sense increased exhaust temperatures. Controls shall be listed by ETL (UL 508A). The control enclosure shall be NEMA 1 rated and listed for installation inside of the exhaust hood utility cabinet. The control enclosure may be constructed of stainless steel or painted steel.

Temperature probes(s) located in the duct riser shall be constructed of Stainless Steel. A room temperature sensor is also provided for field installation in the kitchen space in order to start the fan(s) based on the temperature differential between the room and the exhaust air in the duct, rather than fixed set-points. The system is factory pre-set to activate the fans at 10 deg F° above the room temperature.

Once the duct temperature reaches the activation point, the exhaust fans will be activated. The controls also provide hysteresis to prevent cycling of the fans after the cooking appliances have been turned off and the heat in the exhaust system is reduced. The hysteresis is factory set 2 degrees and will keep the exhaust running until the temperature falls 2 degrees below the activation set point. A hysteresis timer also exists to keep the fans running for at least 30 min after being activated by the temperature rise.

The activation and hysteresis settings may be field adjusted on the board LCD interface located inside the control enclosure to meet application needs. The panel is factory configured to shut down supply fans, turn on the exhaust fans and turn off the hood lights in a fire condition.

REVISIONS	
DESCRIPTION	DATE

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DATE: 11/4/21
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 SCALE:
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STORE NO: TX 1390

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