

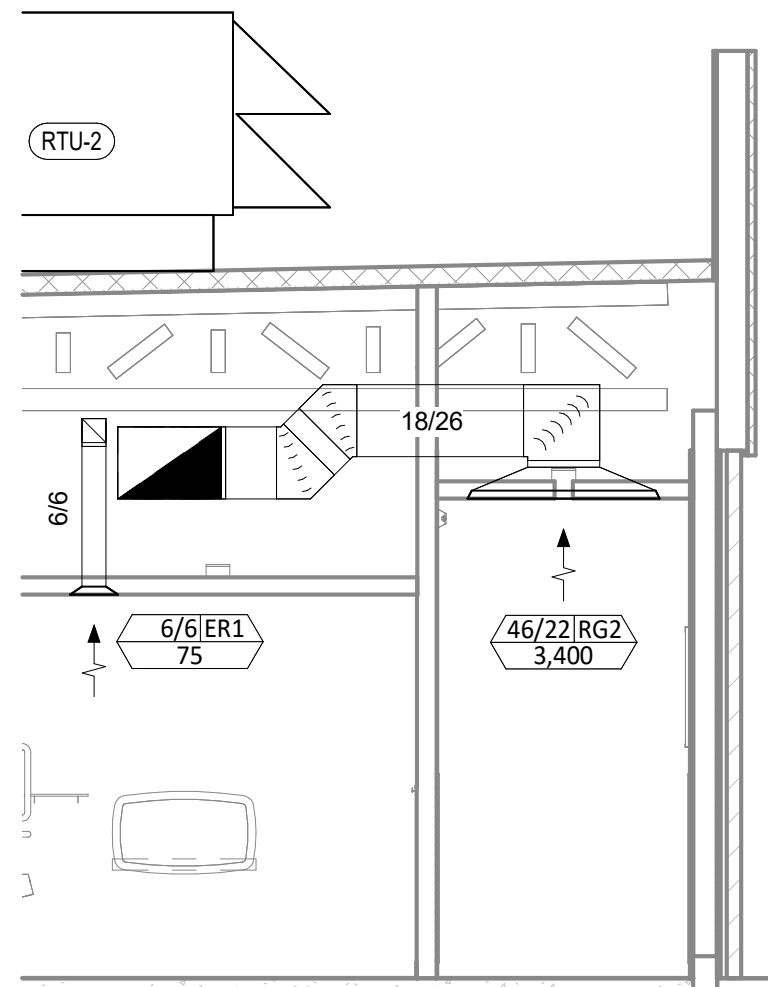


**HVAC PLAN NOTES**

- 1 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATION. TYPICAL.
- 2 PAINT DUCTWORK VISIBLE THROUGH DINING ROOM SUPPLY REGISTERS BLACK. TYPICAL.
- 3 PENETRATIONS THROUGH SHEAR WALL SHALL BE LIMITED TO 10" DIAMETER (OR A GROUP OF PENETRATIONS ALL CONTAINED WITHIN 10" DIAMETER). IF LARGER PENETRATIONS OR GROUPS OF PENETRATIONS ARE REQUIRED COORDINATE WITH STRUCTURAL ENGINEER FOR APPROPRIATE BRACING. SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATION.
- 4 26/14 DUCT UP FOR TRANSITION TO RTU-1 RETURN CONNECTION IN ROOF CURB. RTU-1 SHALL HAVE AN INTEGRAL SMOKE DETECTOR MOUNTED IN THE RETURN AIR STREAM. INTERLOCK SMOKE DETECTOR TO RTU-1 OPERATION.
- 5 26/18 DUCT UP FOR TRANSITION TO RTU-2 RETURN CONNECTION IN ROOF CURB. RTU-2 SHALL HAVE AN INTEGRAL SMOKE DETECTOR MOUNTED IN THE RETURN AIR STREAM. INTERLOCK SMOKE DETECTOR TO RTU-2 OPERATION.
- 6 26/14 DUCT UP FROM BUILDING SUPPLY THROUGH ROOF. TRANSITION TO RTU-1 SUPPLY CONNECTION IN ROOF CURB.
- 7 30/16 DUCT UP FROM BUILDING SUPPLY TO RTU-2 SUPPLY CONNECTION. TRANSITION IN ROOF CURB.
- 8 14/14 DUCT UP THROUGH ROOF. TRANSITION TO MAU-1 SUPPLY CONNECTION IN ROOF CURB.
- 9 16/16 DUCT UP FROM HOOD THROUGH ROOF TO EF-1 COMPLIANT WITH NFPA 96. PROVIDE RADIUS ELBOWS WITH AN INSIDE RADIUS OF 0.5W AT ELBOWS IN GREASE DUCT.
- 10 8/6 DUCT UP THROUGH ROOF TO EF-2.
- 11 28/6 DUCT DOWN TO MAKEUP AIR PSP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL FOR 3.
- 12 8" DIA. DUCT DOWN TO AC PSP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL. CAP UNUSED DUCT CONNECTIONS.
- 13 INSTALL SINGLE-GANG VERTICAL J-BOX FOR GRIDPOINT THERMOSTATS FURNISHED BY TEMS FOR RTU-1 AND RTU-2 AT THIS LOCATION AT 48" AFF. COORDINATE WITH ELECTRICAL SWITCHING IN THIS AREA. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 14 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR RTU-1 AT THIS LOCATION 72" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 15 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR RTU-2 AT THIS LOCATION 66" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 16 INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TEMS FOR RTU-1 IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 17 INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TEMS FOR RTU-2 IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 18 INSTALL REMOTE TEMPERATURE SENSOR FOR HOOD HD-1 AT THIS LOCATION 72" AFF. COORDINATE LOCATION WITH EQUIPMENT. PROVIDE (2) #18 G. THERMISTOR CABLE FROM TEMPERATURE SENSOR TO HOOD CONTROL PANEL.
- 19 INSTALL KITCHEN HOOD, HD-1. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOOD ACCORDING TO THE REQUIREMENTS OF ITS LISTING, IN COMPLIANCE WITH NFPA 96, THE BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT COLLAR TEMPERATURE SENSOR TO AUTOMATICALLY ENERGIZE THE EXHAUST AND MAKEUP AIR FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE WELDED OR FACTORY-MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANOUTS PER CODE AND AS SHOWN. INSTALL HOOD PER DETAILS 2, 4, AND 9/M700. CHIPOTLE WILL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.

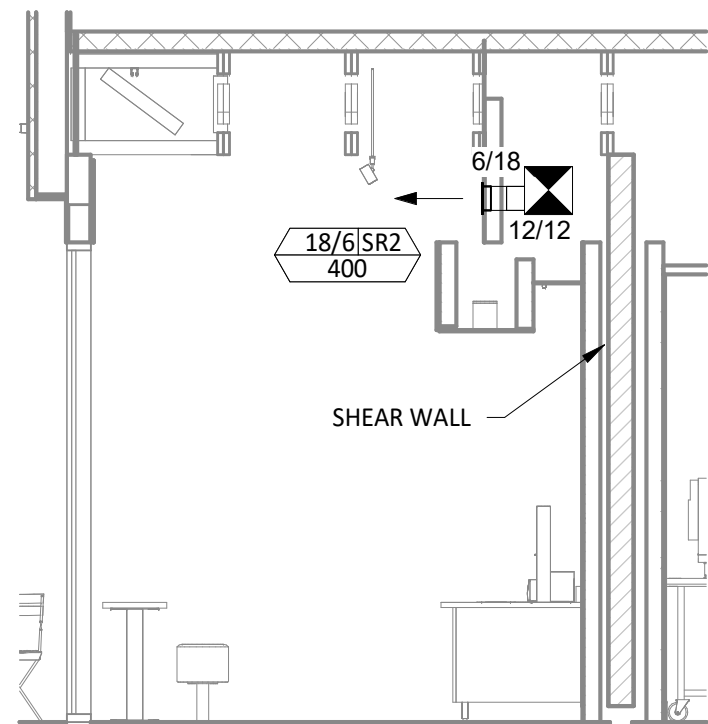
**HVAC PLAN NOTES**

- 20 INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER ON ROOF AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 3' OF THE CONDENSING UNIT. CUT 2-1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND SEAL PER THE COOLER MANUFACTURER'S INSTALLATION INSTRUCTIONS AFTER LINE SET IS INSTALLED.
- 21 INSTALL REMOTE CONDENSER FOR ICE MACHINE ON ROOF AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. SEAL PIPING PENETRATIONS THROUGH ROOF. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE ROOF DECK TO WITHIN 3' OF THE REMOTE CONDENSER. IF REFRIGERANT PIPING TO ICE MAKER IS EXPOSED TO PUBLIC VIEW CONCEAL WITHIN A STAINLESS STEEL SHROUD AS SHOWN IN THE ARCHITECTURAL DRAWINGS.
- 22 INSTALL ROOFTOP EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 23 INSTALL EXHAUST FAN EF-1 PER DETAIL 5/M700 AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL GREASE VIROGUARD SYSTEM FURNISHED BY CHIPOTLE ON EXHAUST FAN, EF-1.
- 24 PROVIDE SUPPLY DIFFUSER CONNECTION TO SUPPLY SYSTEM PER DETAIL 1/M700. TYPICAL.
- 25 PROVIDE AUDIO/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET. WIRE A UNIT BACK TO EACH SMOKE DETECTOR. MOUNT UNIT 60" AFF. TYPICAL.
- 26 INSTALL REME HALO AIR PURIFIER FURNISHED BY TUV IN RTU PER DETAIL 6/M700. SEE ELECTRICAL DRAWINGS FOR POWER CONNECTION INFORMATION. INSTALL UV WARNING STICKERS ON FACE OF ENCLOSURE PER DETAIL AND ON ANY RTU ACCESS DOOR(S) THROUGH WHICH THE REME HALO WOULD BE VISIBLE IF OPENED.
- 27 MAINTAIN 10' CLEARANCE BETWEEN WATER HEATER FLUE TERMINATION AND OUTSIDE AIR INTAKES. MAINTAIN 10' CLEARANCE BETWEEN WATER HEATER COMBUSTION AIR INTAKE AND EXHAUST FAN EF-1 DISCHARGE. SEE PLUMBING DRAWINGS FOR MORE INFORMATION ON WATER HEATER FLUE AND COMBUSTION AIR TERMINATIONS.
- 28 ADJUST SUPPLY REGISTERS SO THAT SUPPLY AIR HITS WALL ON OPPOSITE SIDE OF ROOM AT APPROXIMATELY 7' AFF WITH NO DRAFTS FELT IN THE DINING ROOM.



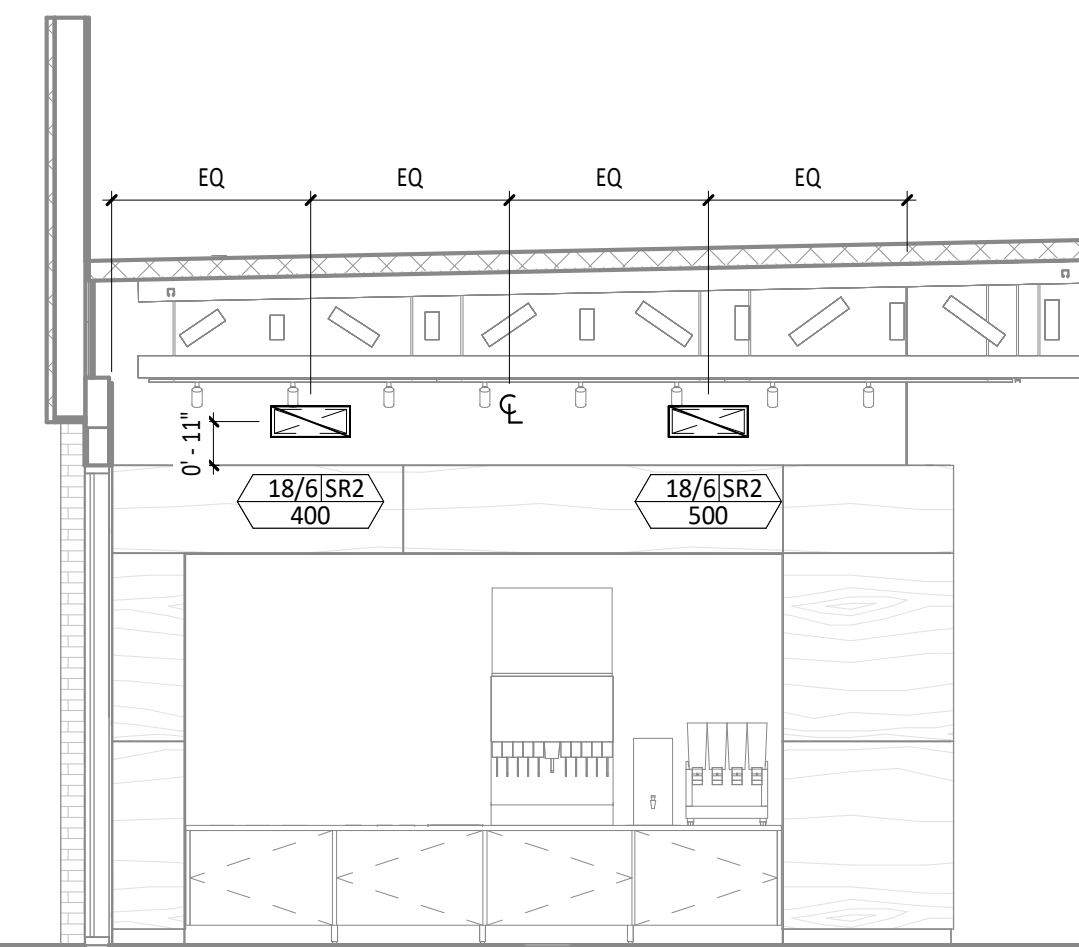
**HVAC DINING ROOM RETURN SECTION**

6 M100 1/4" = 1'-0"



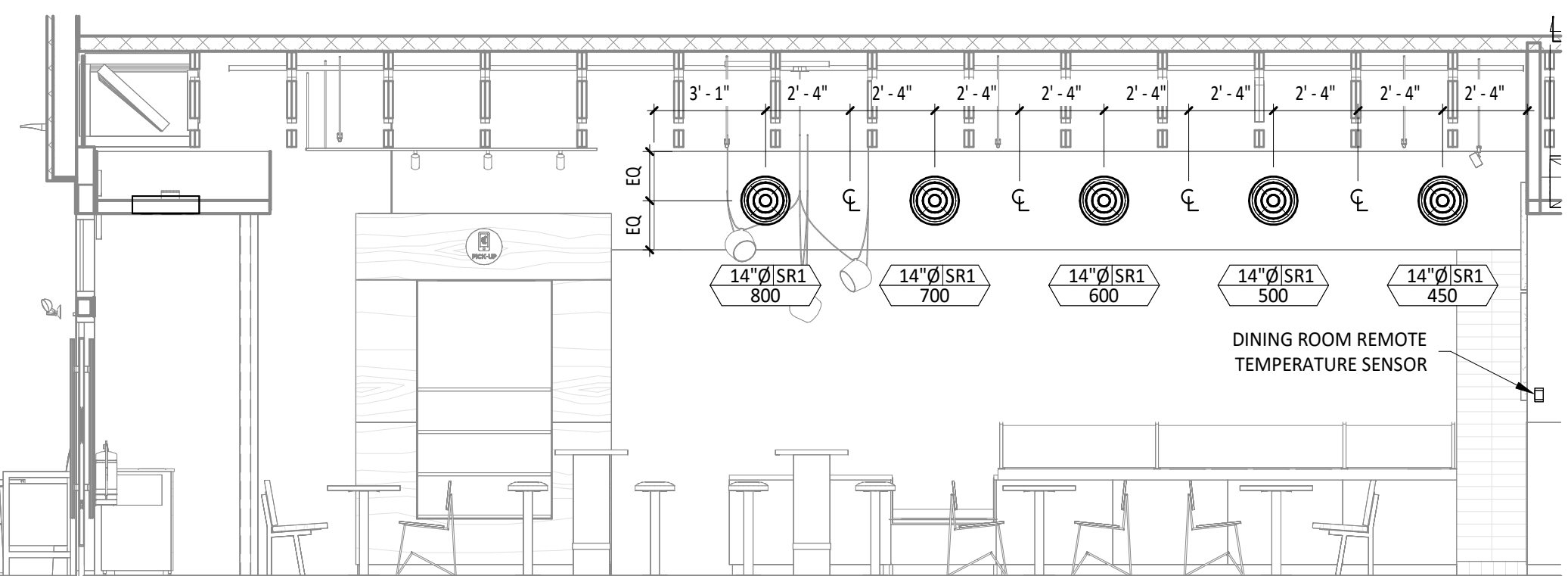
**HVAC DINING ROOM SECTION**

5 M100 1/4" = 1'-0"



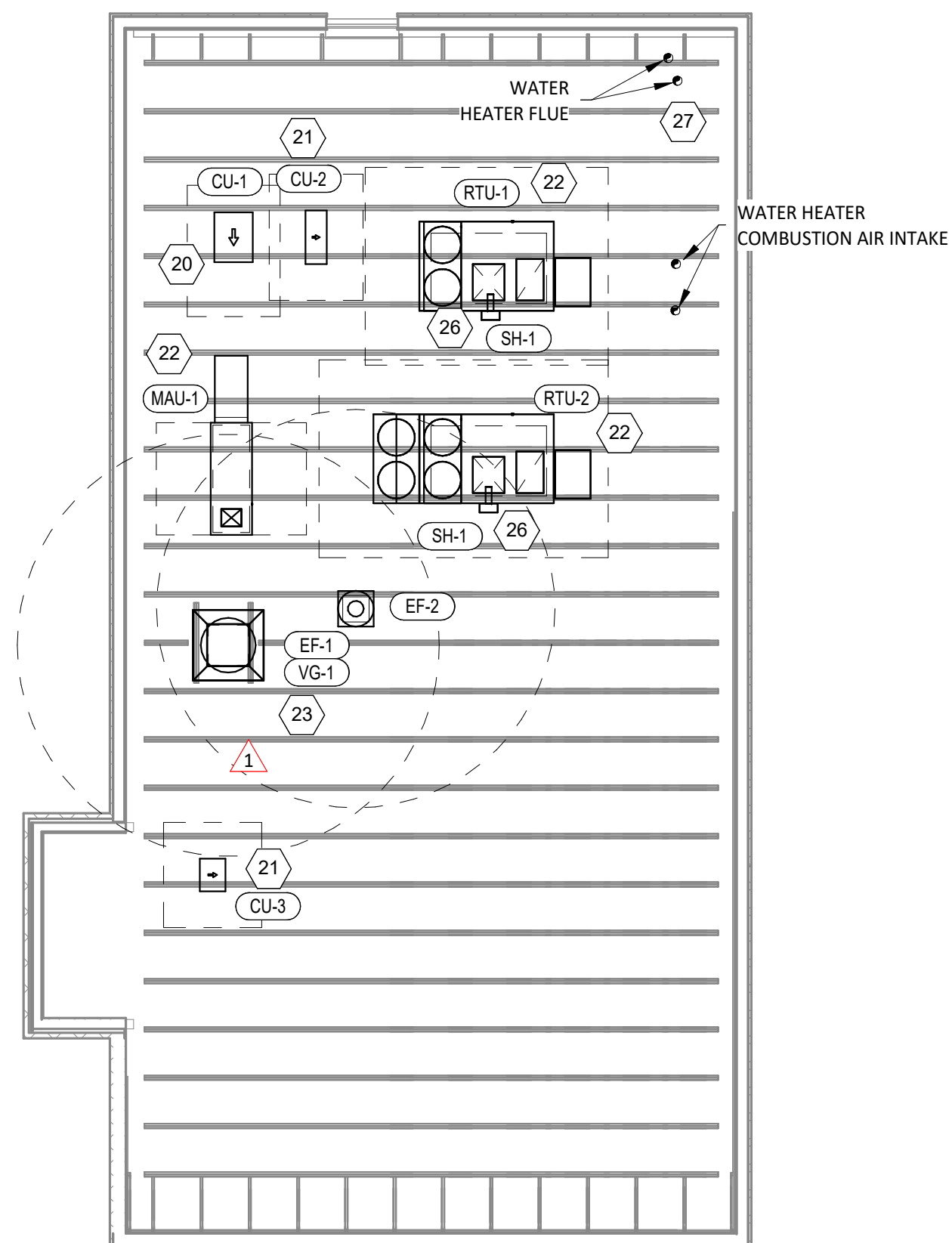
**HVAC DINING ROOM SECTION**

4 M100 1/4" = 1'-0"



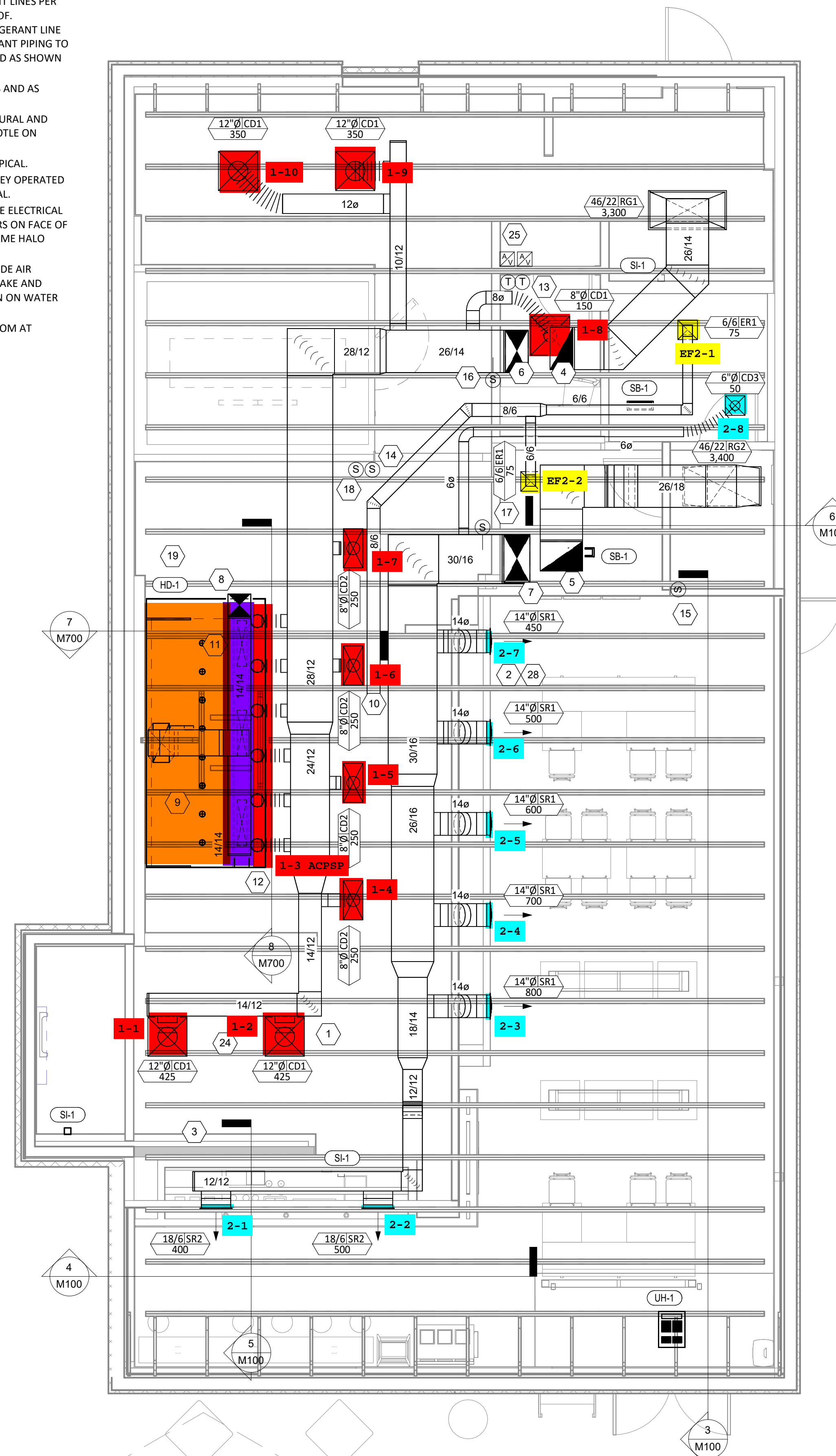
**HVAC DINING ROOM SECTION**

3 M100 1/4" = 1'-0"



**HVAC ROOF PLAN**

2 M100 1/8" = 1'-0"



**HVAC FLOOR PLAN**

1 M100 1/4" = 1'-0"

Consultant:  
**NE NATIONAL ENGINEERING**  
 4635 Trueman Blvd, Suite 250  
 Hilliard, Ohio 43026  
 Phone: (614) 751-9610  
 Fax: (614) 552-5240  
 Contact: DENNIS ALT  
 (614) 595-0599  
 DALT@nationalengineering.com

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CHIPOTLE MEXICAN GRILL, INC.  
 PO BOX 182566  
 COLUMBUS, OH 43218-2566  
 TELEPHONE: 614.318.2400  
 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 5446  
 CHIPOTLE CHARDON, OH  
 414 WATER STREET  
 CHARDON, OH 44024

Issue Record:

01/22/25	PERMIT SET
01/22/25	BID SET
03/28/25	CONSTRUCTION SET

Revisions:

1	02/12/25	BUILDING COMMENTS
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Drawn: DAA Checked: DAA

Project No:  
 2401092

Contents:  
**HVAC PLAN**

**M100**

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

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

**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.

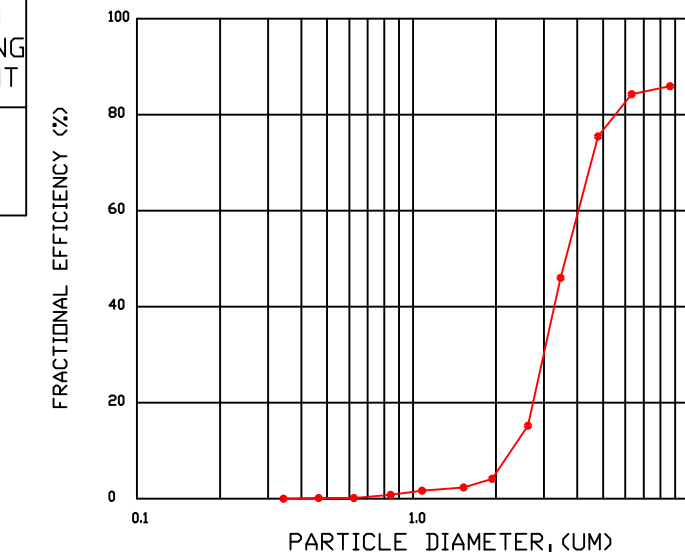
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

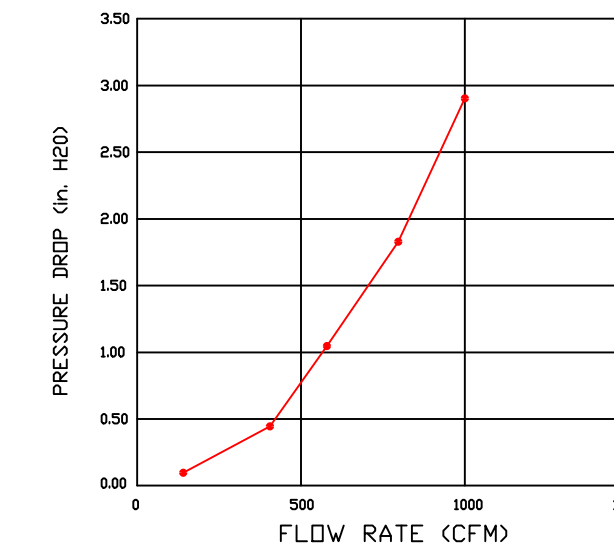
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

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#7024326**

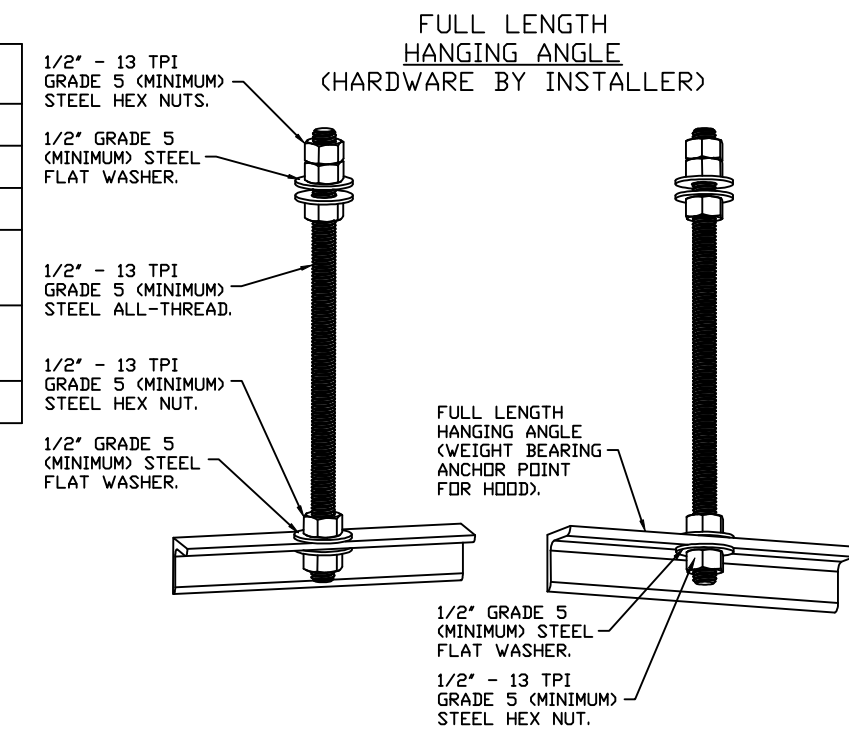
HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				HOOD CONSTRUCTION	HOOD CONFIG			
										WIDTH	LENG	HEIGHT	DIA		CFM	VEL	SP	END TO END
1		5424 ND-2	CAPTIVEAIRE	9' 4"	600 DEG	I	HEAVY	193	1800	10'	15'	4'	1800	1728	-0.912"	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
1		CAPTRATE SOLID FILTER	7	16"	16"	85% SEE FILTER SPEC	6	L55 SERIES E26	NO	RIGHT	12"x54"x24"	TANK FS	4.0/4.0	SC-110110MA	1 LIGHT 1 FAN	YES	955 LBS

**HOOD OPTIONS**

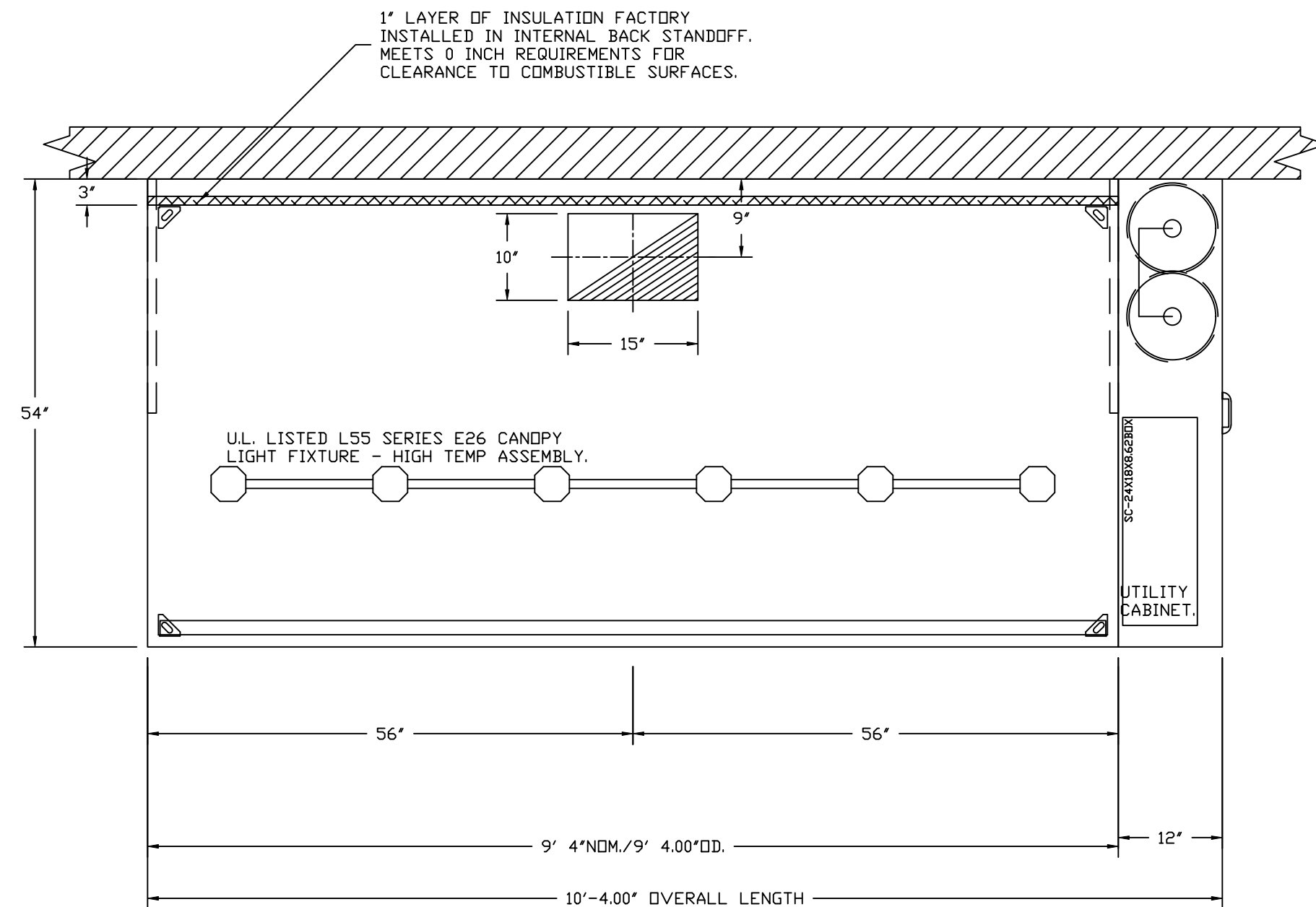
HOOD NO	TAG	OPTION
1		INSULATION FOR TOP OF HOOD.
1		INSULATION FOR BACK OF HOOD.
1		RISER SENSOR INSTALL 6IN PLEN.
1		RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
1		LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
1		FULL DIMENSION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



**CLEARANCE TO COMBUSTIBLES**

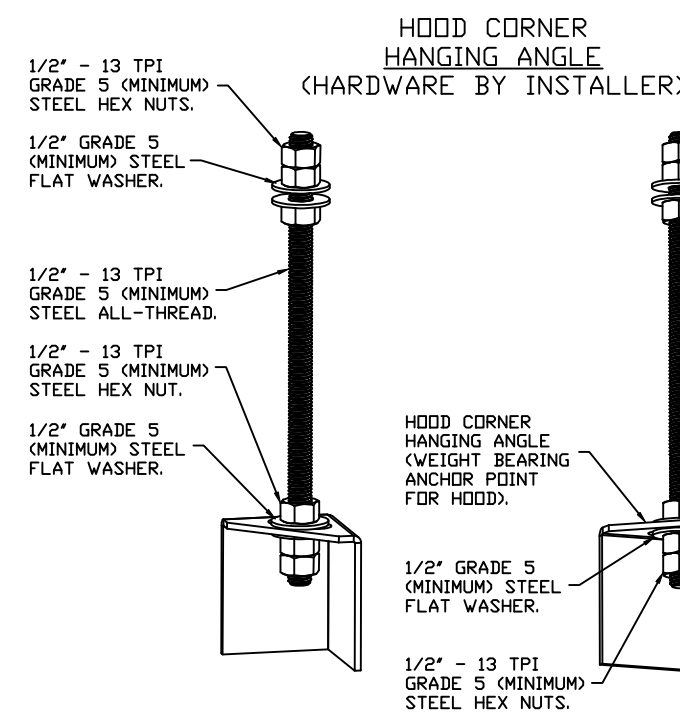
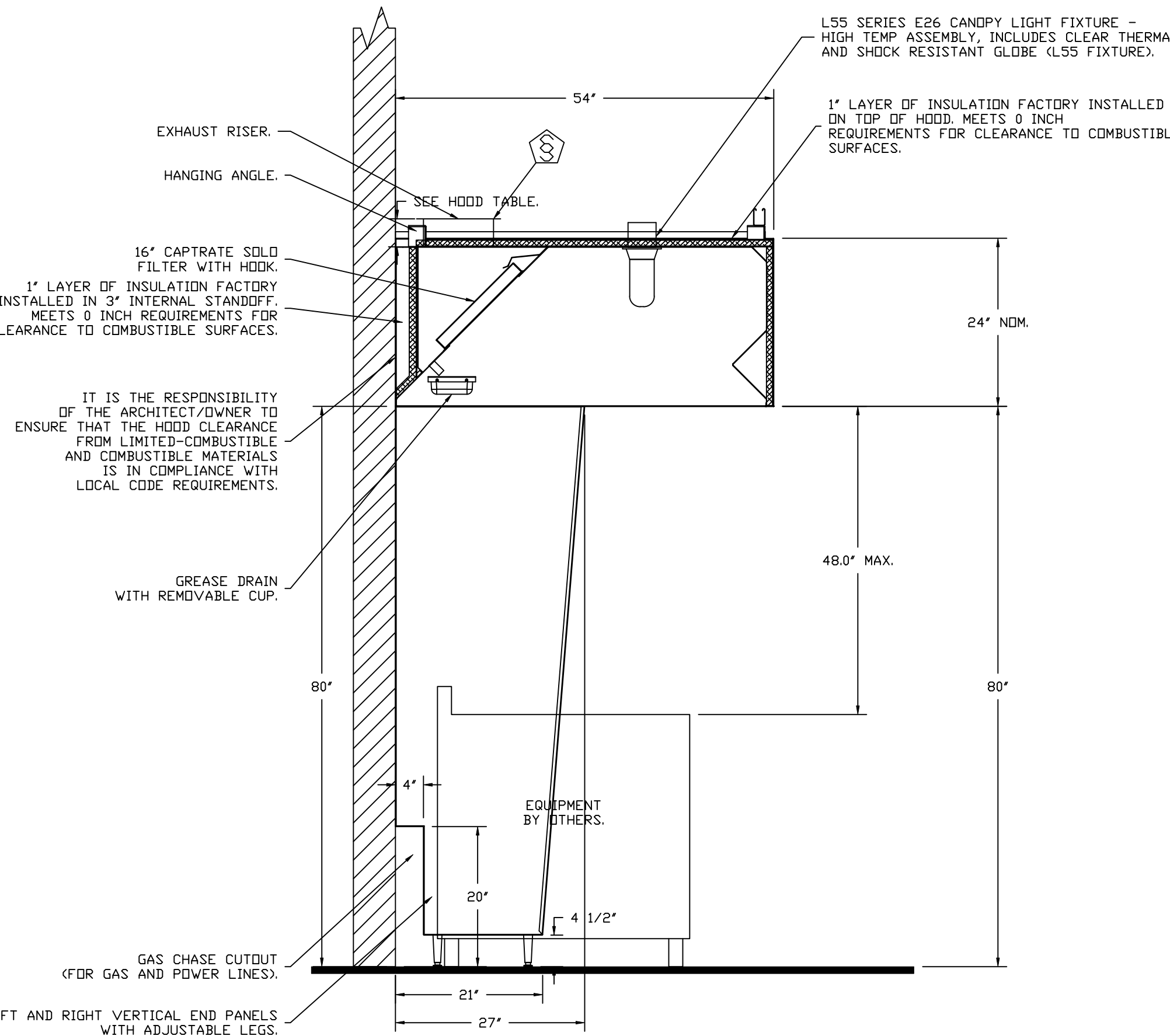
HOODS #	SURFACE	*CLEARANCE
1	TOP	0"
1	FRONT	0"
1	BACK	0"
1	LEFT	18"
1	RIGHT	0"

- \*0" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.



**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.

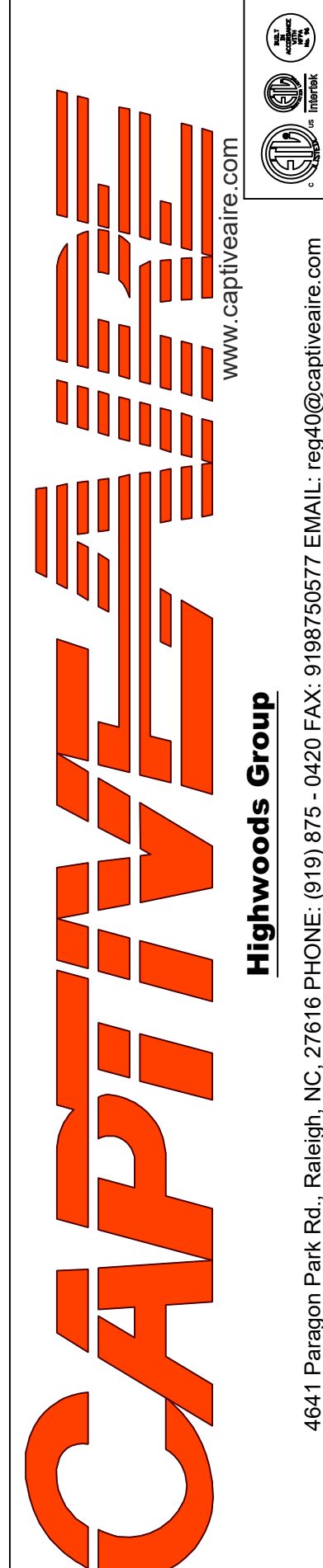


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**REVISIONS**

DESCRIPTION	DATE



CHIPOTLE CHARDON #5446  
CHARDON, OH, 44024

DATE: 9/5/2024  
DWG.#: 7024326  
DRAWN BY: JMB-40  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 1

**FIRE SYSTEM INFORMATION - JOB#7024326**

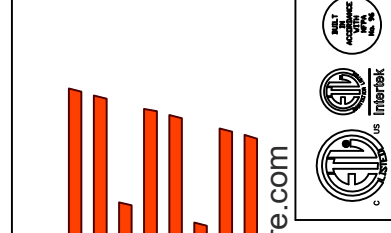
FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	28	FIRE CABINET RIGHT	RIGHT, HOOD 1

**FIRE SYSTEM PARTS LIST KEY**

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
		0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO, CLOSE ON TEMP RISE AT 360°F. (A0034310).	1	0
		0 - 0 - 32-00002 QUIK SEAL - 1/2" (UL).	1	0
		0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
		0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
		0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
		0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	6	0
		0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	5	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5' DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
		0 - 0 - B1145 3/8" BLACK IRON 90 ELL.	2	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	6	0
		16 - 16 - DL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE).	6	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL).	6	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0

**REVISIONS**

DESCRIPTION	DATE:



www.captivefire.com  
www.captivefire.com



Highwoods Group

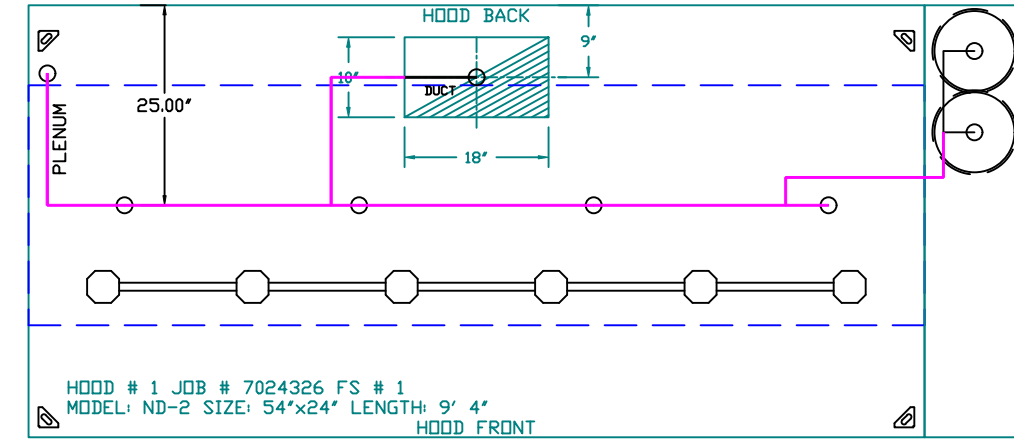
4641 Paragon Park Rd., Raleigh, NC, 27616 PHONE: (919) 875 - 0420 FAX: 9198750577 EMAIL: reg40@captivefire.com

CHIPOTLE CHARDON #5446  
CHARDON, OH, 44024

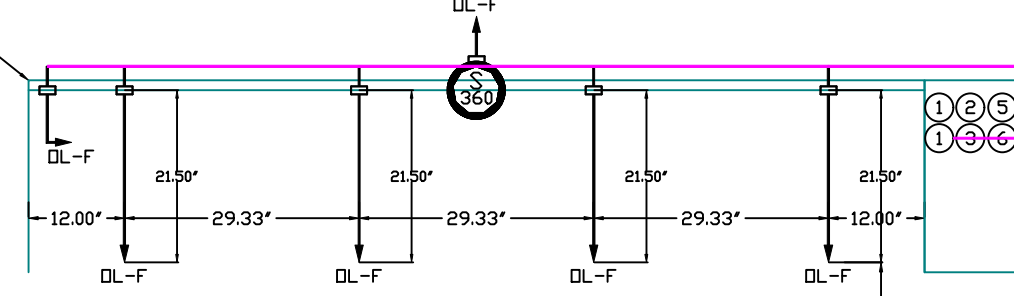
DATE: 9/5/2024  
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MASTER DRAWING

SHEET NO.  
2

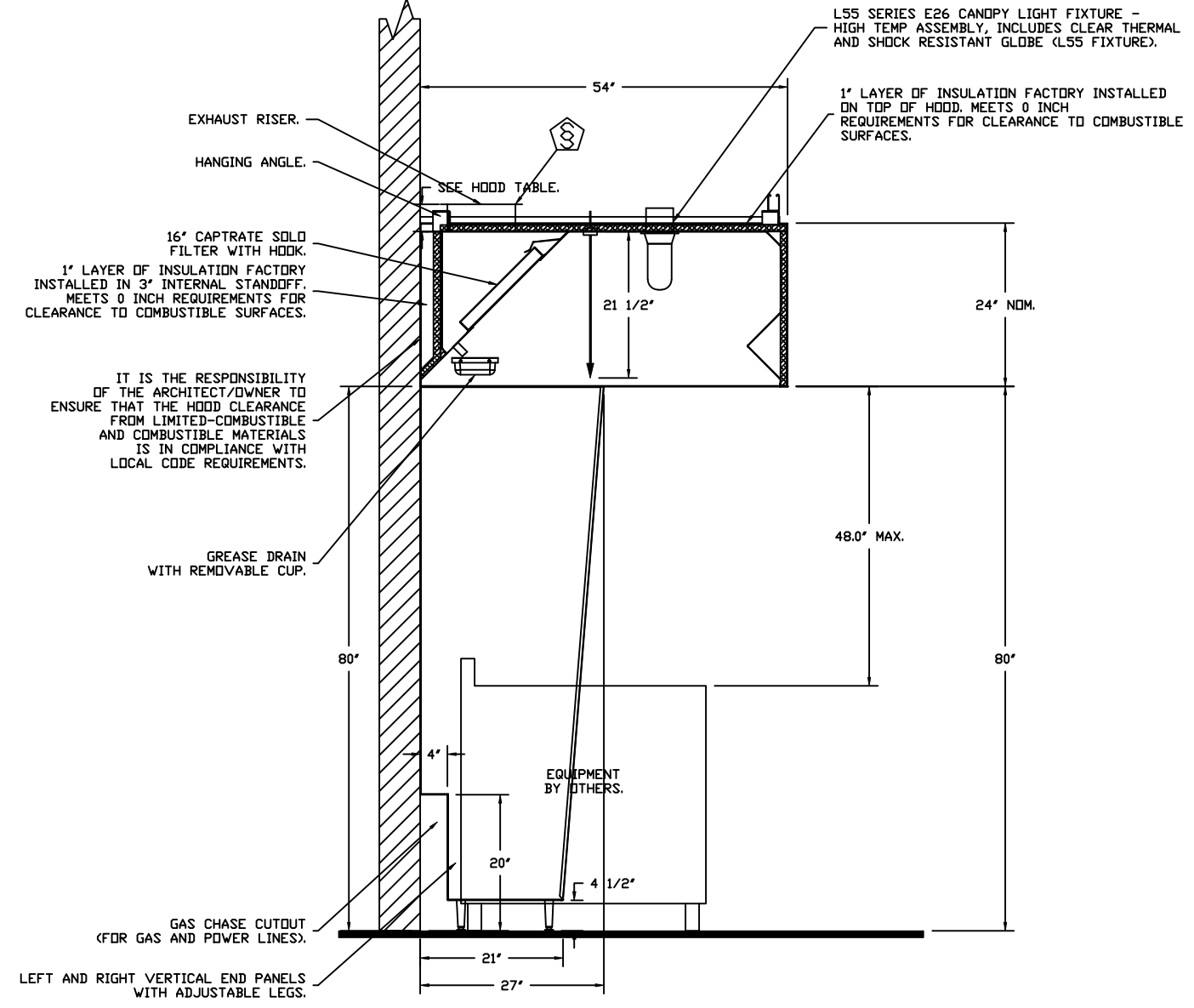
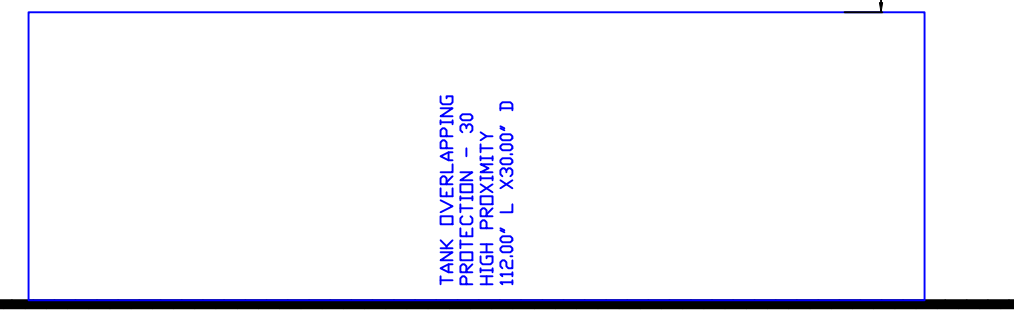
SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS.



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



NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (45.25")



SECTION VIEW - MODEL 5424ND-2 HOOD - #1

- NOTES
- FIELD PIPE DROPS AS SHOWN. PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
  - FIELD INSTALLED DROP; FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
  - SHIP LOOSE DROP; FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
  - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
  - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
  - IF APPLICABLE, EXTENDED PRE-PIPED 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.

- DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS
- JOB #: 7024326.
- JOB NAME: CHIPOTLE CHARDON #5446.

SYSTEM SIZE: TANK-SP-2 DESIGN FP: 28, MAXIMUM FP: 40.  
HOOD # 1 9' 4.00' LONG x 54' WIDE x 24' HIGH.  
RISER # 1 SIZE: 10" x 18".  
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

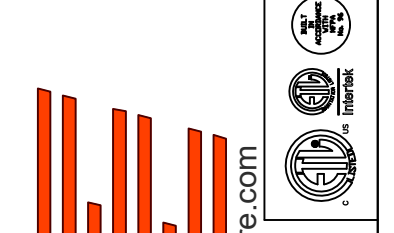
AGENT DISTRIBUTION PIPING LIMITATIONS	
PIPE SECTION	MAX PIPE LENGTH (FT)
MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE	42
OVERLAPPING NOZZLE APPLIANCE BRANCH	10
DEDICATED NOZZLE APPLIANCE BRANCH	10

- LEGEND - FIRE CABINET TANK SYSTEM
- 4 GALLON TANK.
  - PRIMARY ACTUATOR RELEASE.
  - SECONDARY ACTUATOR RELEASE.
  - PRESSURE SUPERVISION SWITCH.
  - PRIMARY HOSE ASSEMBLY.
  - SECONDARY HOSE ASSEMBLY.
  - REMOTE MANUAL ACTUATION DEVICE.

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE. TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST). ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES. ONE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2". PERMIT AND SYSTEM TEST.  
EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.

REVISIONS

DESCRIPTION	DATE:



www.captivefire.com  
www.highwoodsgroup.com

4641 Paragon Park Rd., Raleigh, NC, 27616 PHONE: (919) 975-0420 FAX: 9198750577 EMAIL: reg40@captivefire.com

# CAPTIVE

Highwoods Group

CHIPOTLE CHARDON #5446  
CHARDON, OH, 44024

DATE: 9/5/2024

DWG.#: 7024326

DRAWN BY: JMB-40

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

MASTER DRAWING

SHEET NO. 3

**EXHAUST FAN INFORMATION – JOB#7024326**

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	EF-1	1	DUB5HFA	CAPTIVEAIRE	1800	1.200	1462	TEAD-ECM	1.000	0.5430	1	115	11.6	570 FPM	94	13.9
2	EF-2	1	DR12HFA	CAPTIVEAIRE	150	0.500	1200	TEAD-ECM	0.250	0.0740	1	115	2.9		50	5.2

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1	1	GREASE BDX
		1	REMOVE HINGE KIT LABEL FROM THE FAN BASE
		1	ECM WIRING PACKAGE – PWM SIGNAL FROM ECPMD3 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
2	EF-2	1	ECM WIRING PACKAGE – EXHAUST – MANUAL OR 0-10VDC REFERENCE SPEED CONTROL –MSC- (TELCO), CCW ROTATION
		1	I 12-BDD DAMPER
		1	2 YEAR PARTS WARRANTY

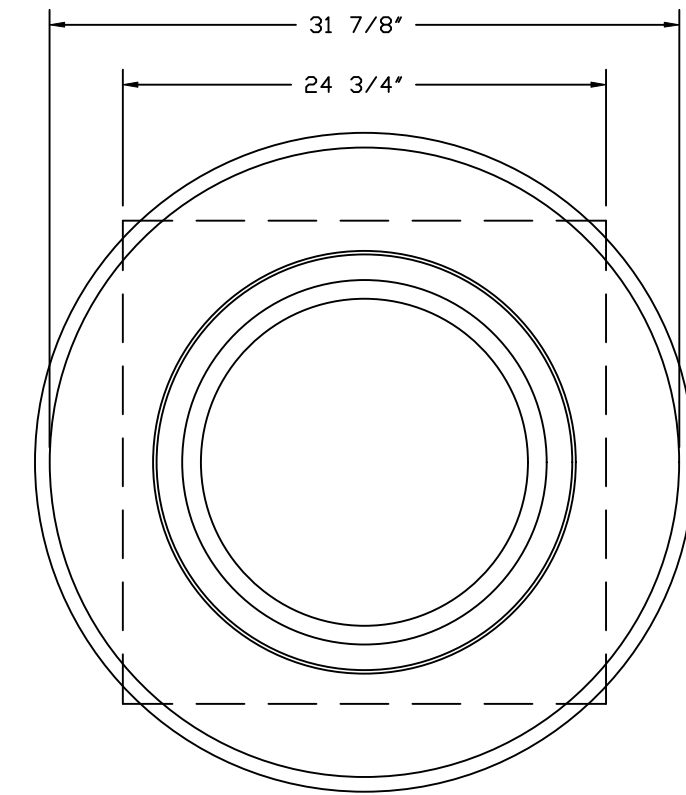
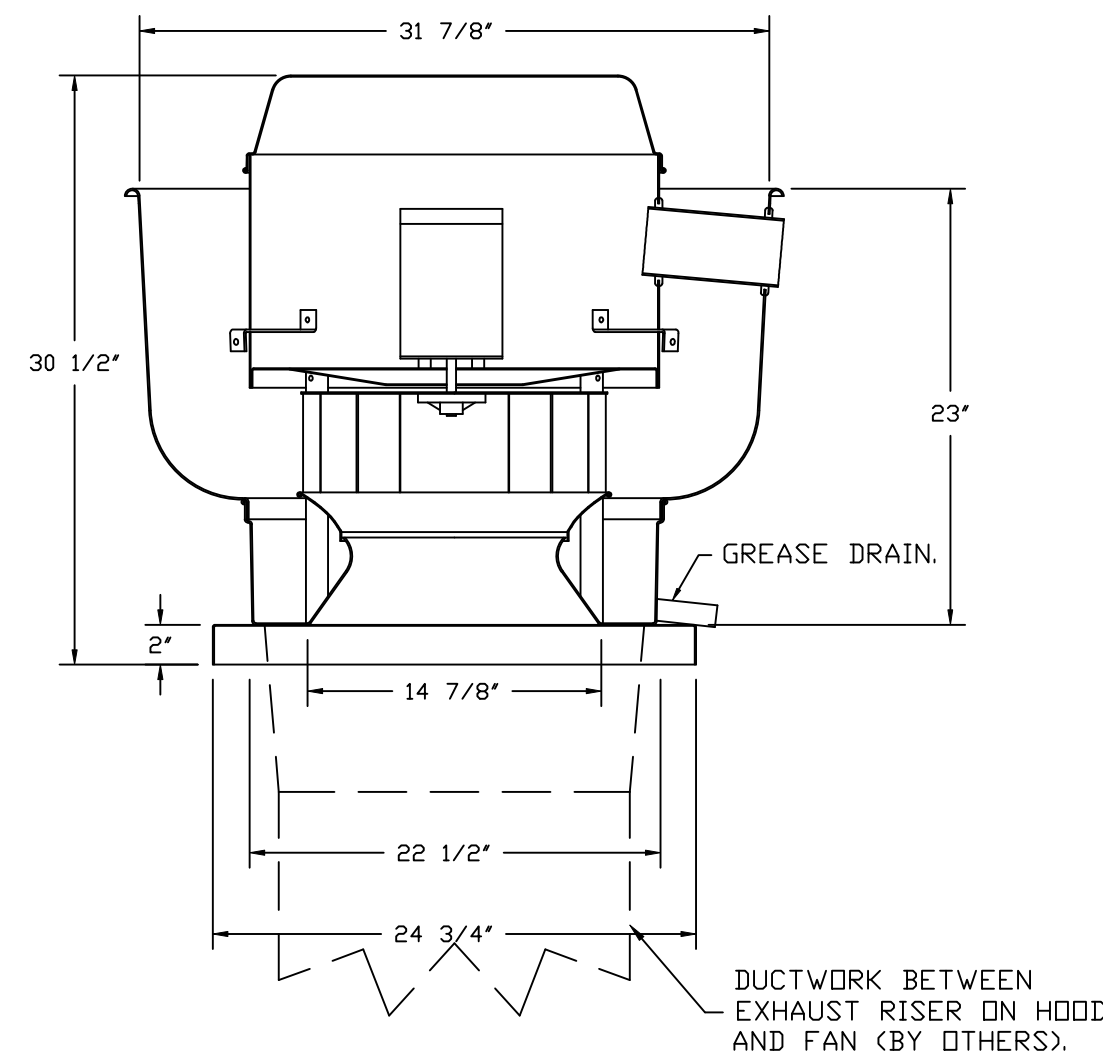
**FAN ACCESSORIES**

FAN UNIT NO	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1	EF-1	YES							
2	EF-2		YES						

**CURB ASSEMBLIES**

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1	32 LBS	CURB	23.000"W X 23.000"L X 20.000"H VENTED.
2	# 2	EF-2	31 LBS	CURB	17.500"W X 17.500"L X 26.000"H.

FAN #1 DUB5HFA – EXHAUST FAN (EF-1)



TOP VIEW

**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTRL.
- 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**

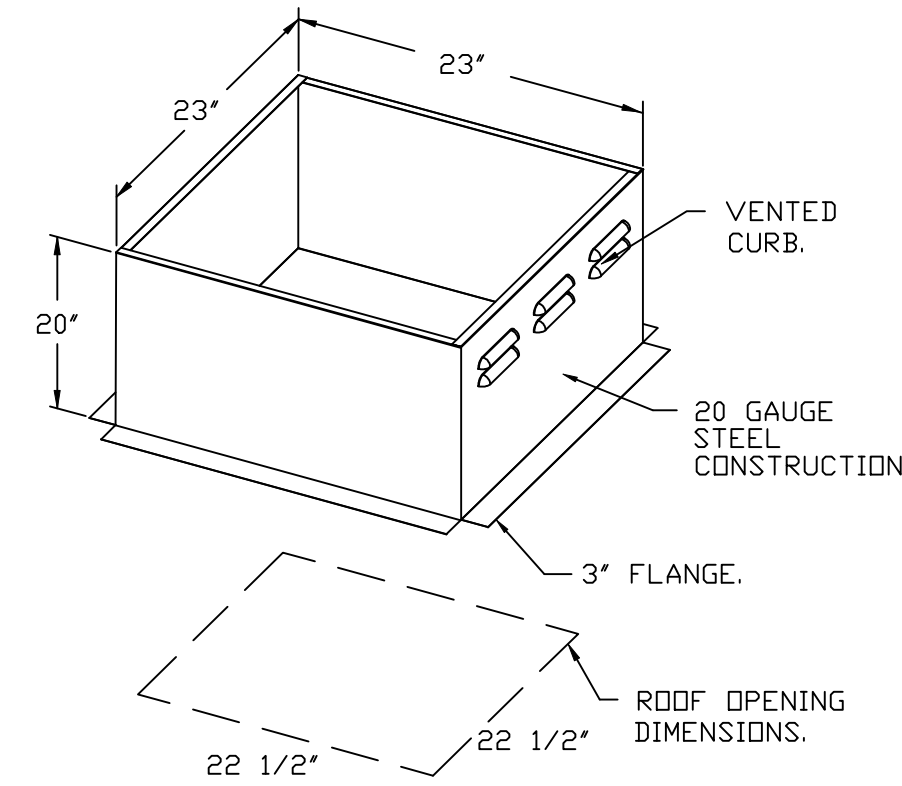
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**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.

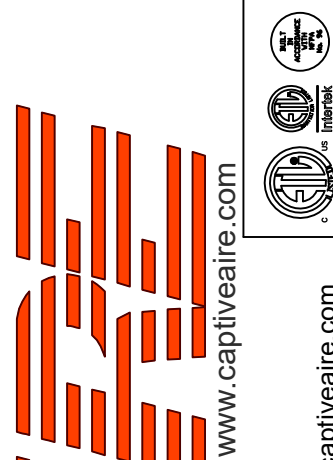
**OPTIONS**

- GREASE BDX.
- REMOVE HINGE KIT LABEL FROM THE FAN BASE.
- ECM WIRING PACKAGE – PWM SIGNAL FROM ECPMD3 PREWIRE (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



**REVISIONS**

REVISIONS	DESCRIPTION	DATE:
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Δ		
Δ		
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CHIPOTLE CHARDON #5446  
CHARDON, OH, 44024

DATE: 9/5/2024

DWG.#: 7024326

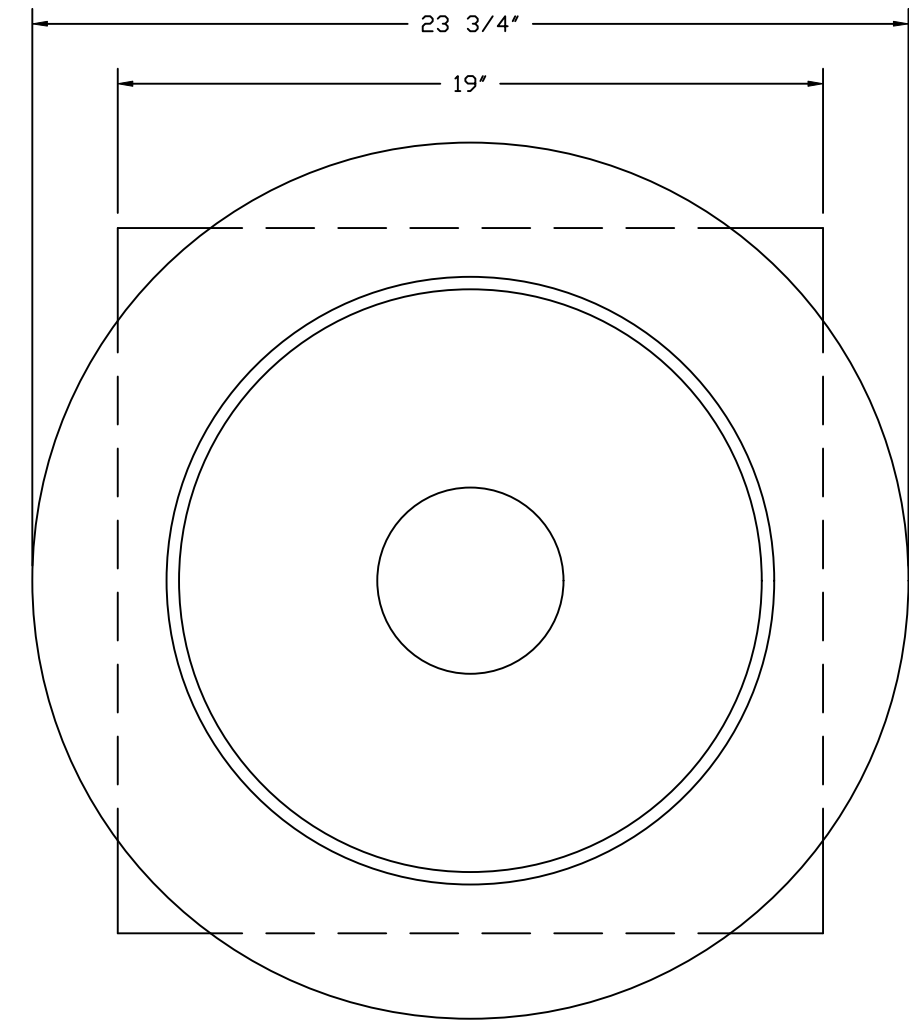
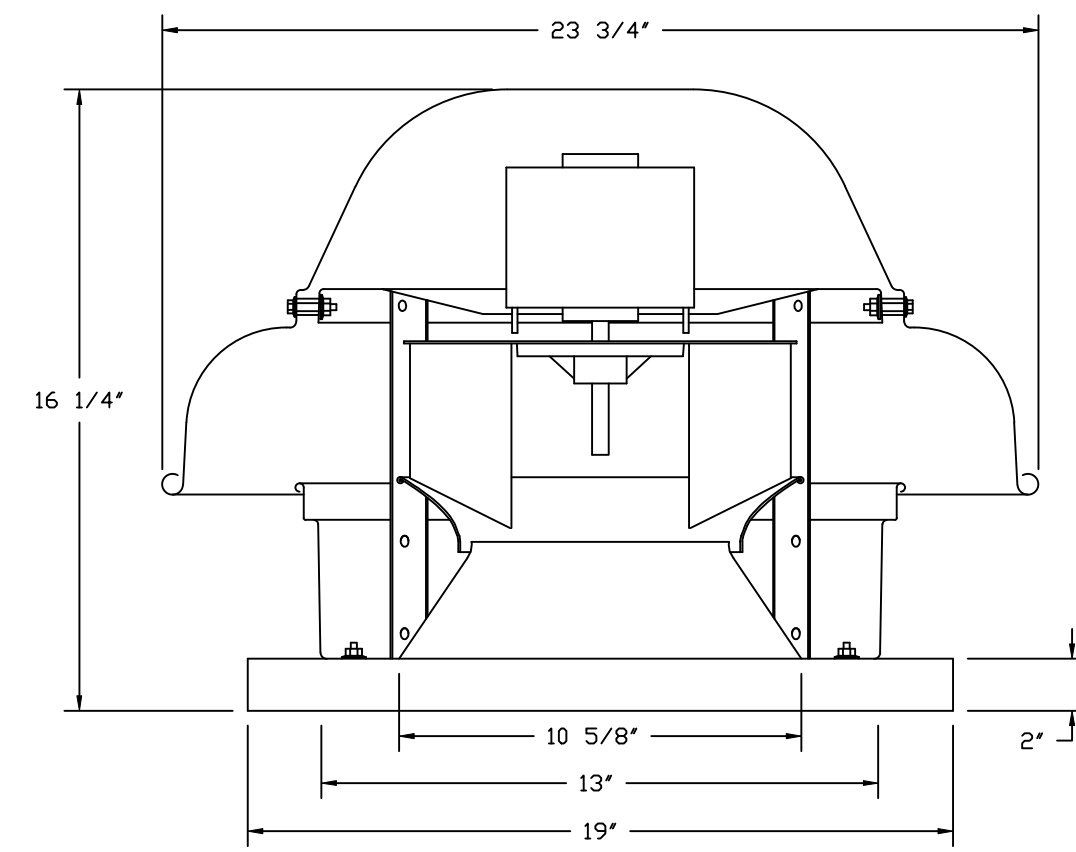
DRAWN BY: JMB-40

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

MASTER DRAWING

SHEET NO.

FAN #2\_DR12HFA - EXHAUST FAN (EF-2)



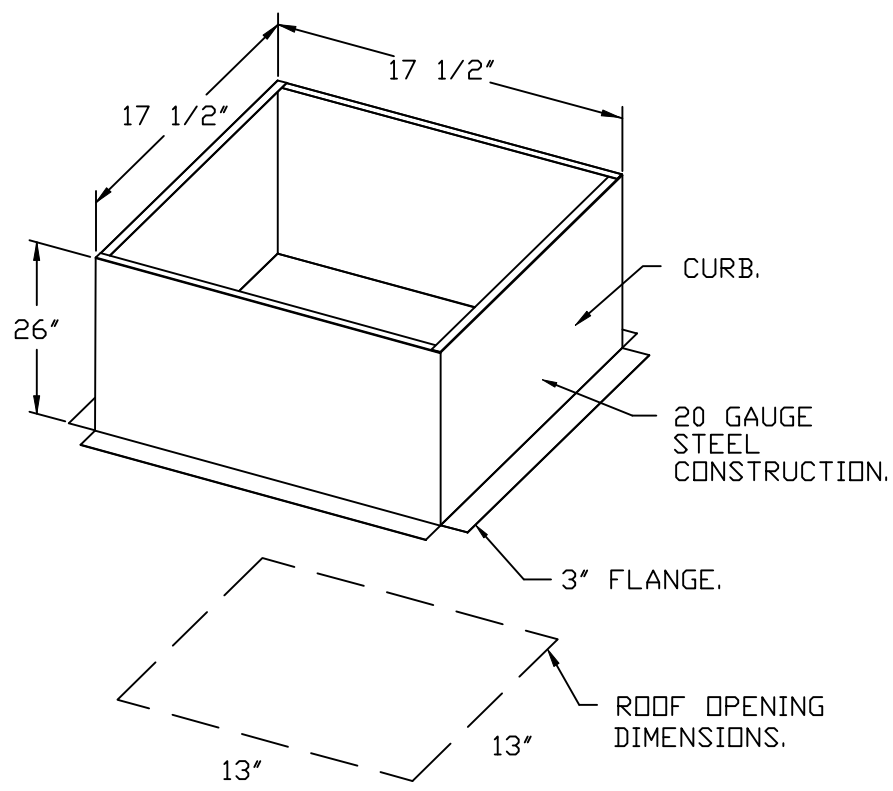
TOP VIEW

**FEATURES:**

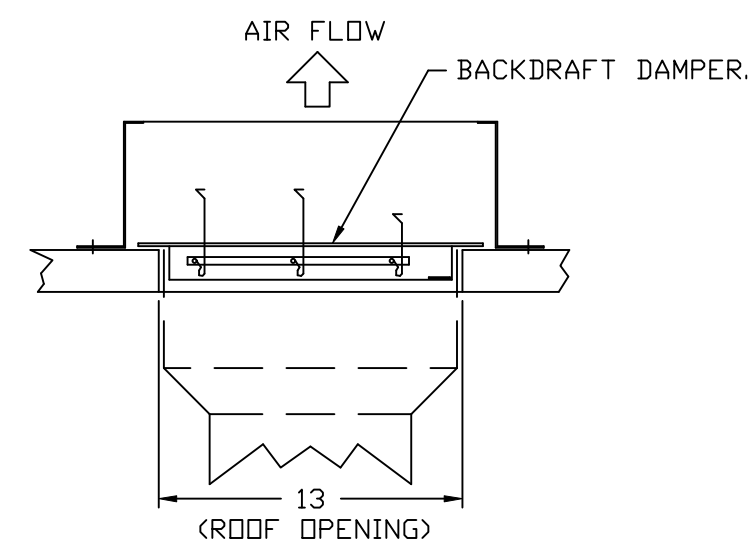
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

**OPTIONS**

- ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL - MSC - (TELCD), CCW ROTATION.
- 1 12-30D DAMPER.
- 2 YEAR PARTS WARRANTY.

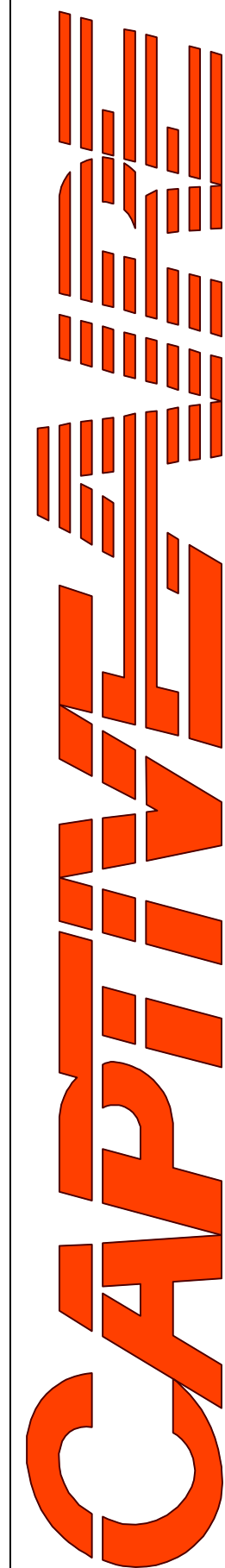
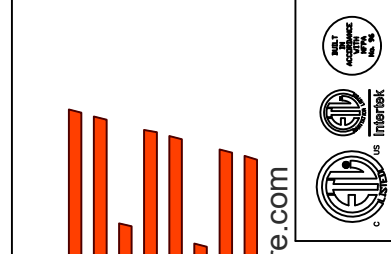


**BACKDRAFT DAMPER INSTALLATION**



**REVISIONS**

REVISION	DESCRIPTION	DATE
△		
△		
△		
△		



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CHIPOTLE CHARDON #5446  
CHARDON, OH, 44024

**DATE:** 9/5/2024

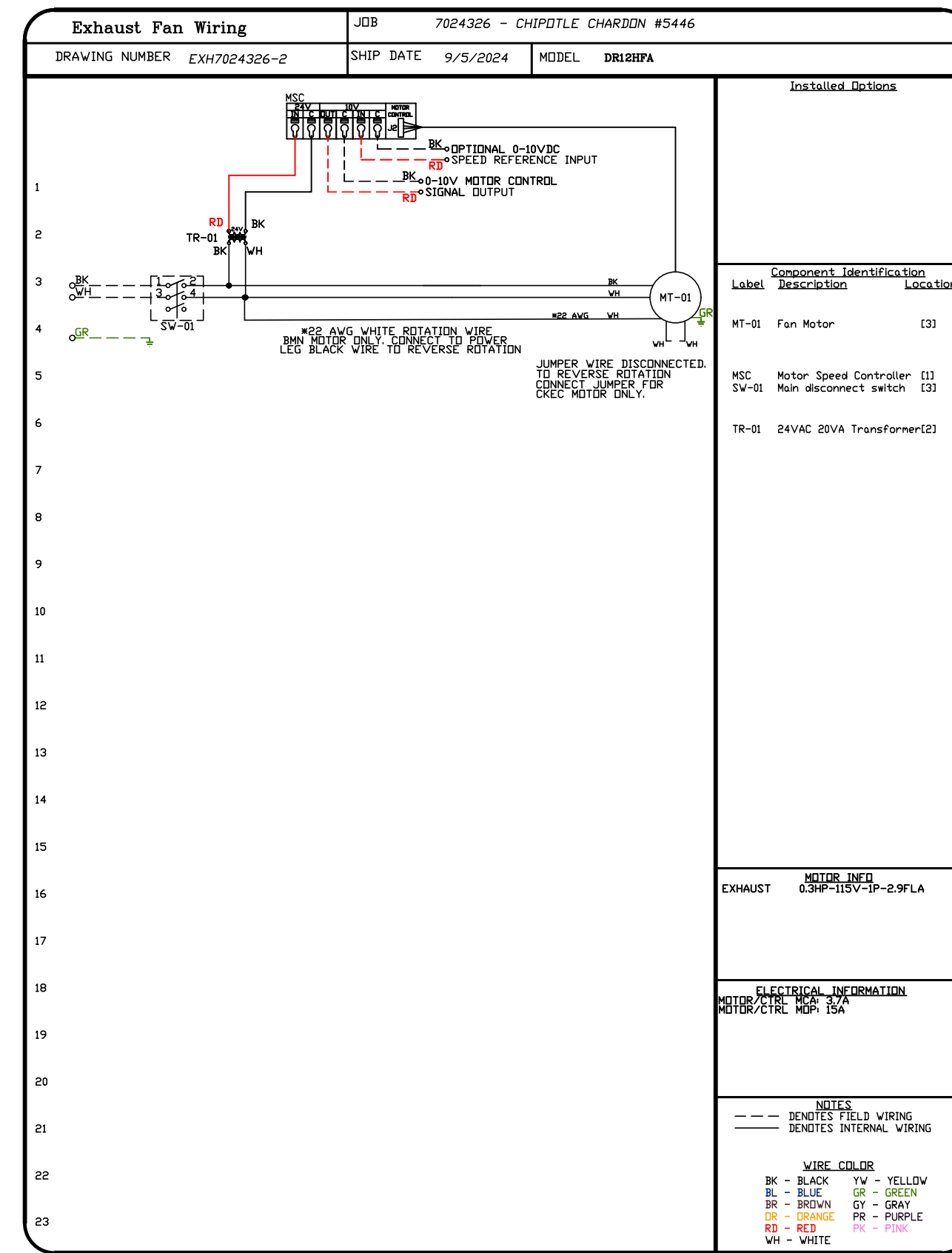
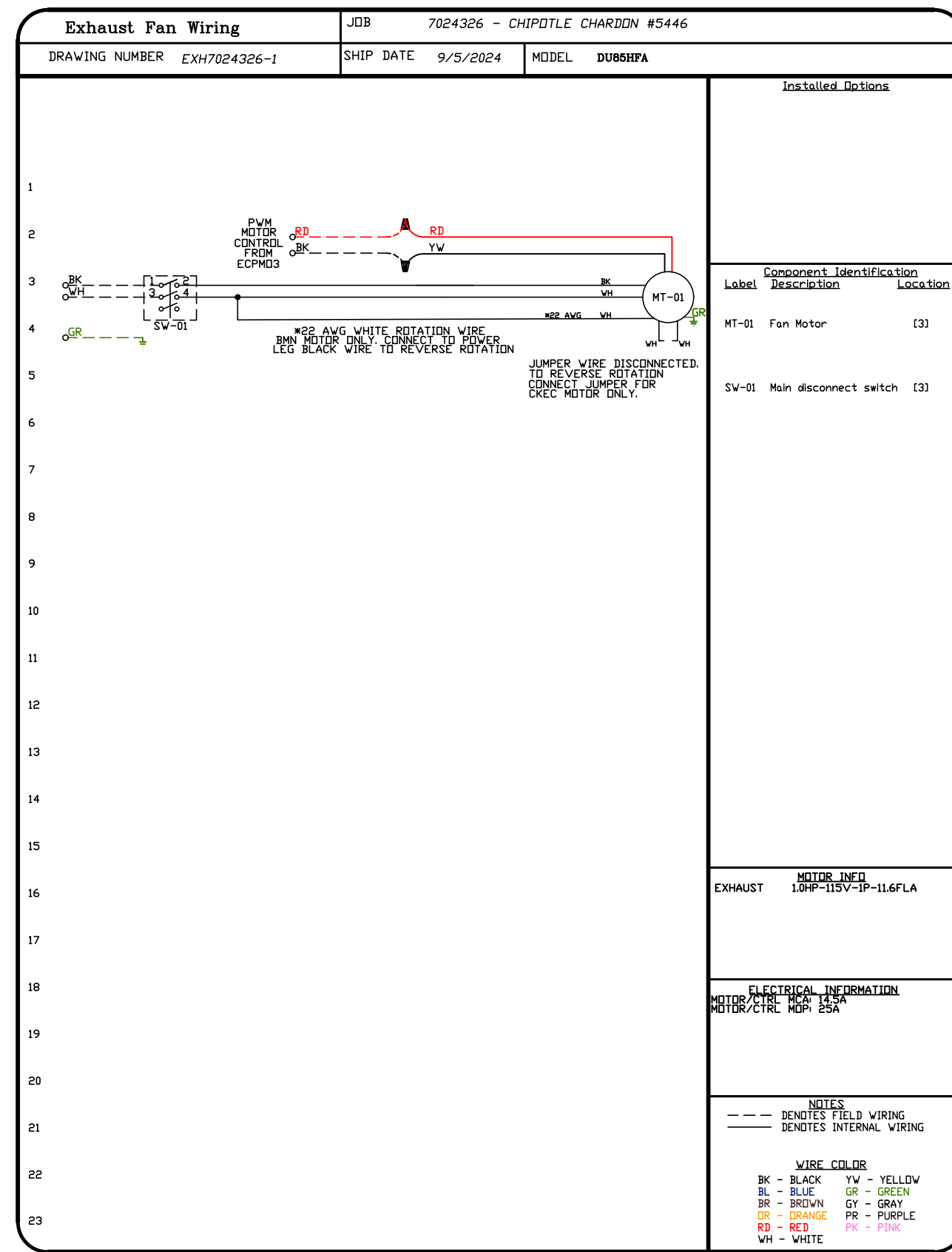
**DWG.#:**  
7024326

**DRAWN BY:** JMB-40

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

**MASTER DRAWING**

**SHEET NO.**



REVISIONS	
DESCRIPTION	DATE

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CHIPOTLE CHARDON #5446

CHARDON, OH, 44024

**DATE:** 9/5/2024

**DWG.#:** 7024326

**DRAWN BY:** JMB-40

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

**MASTER DRAWING**

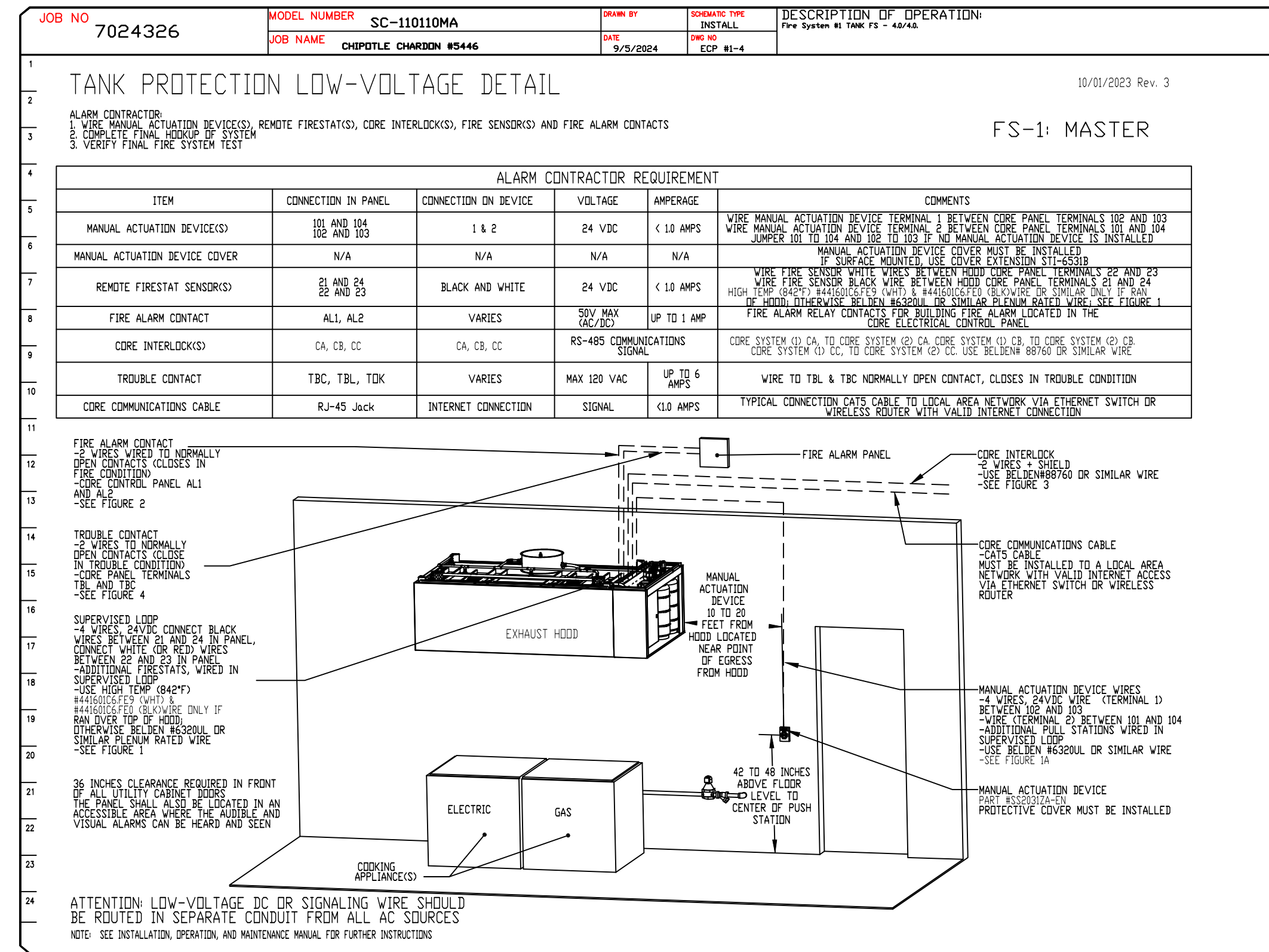
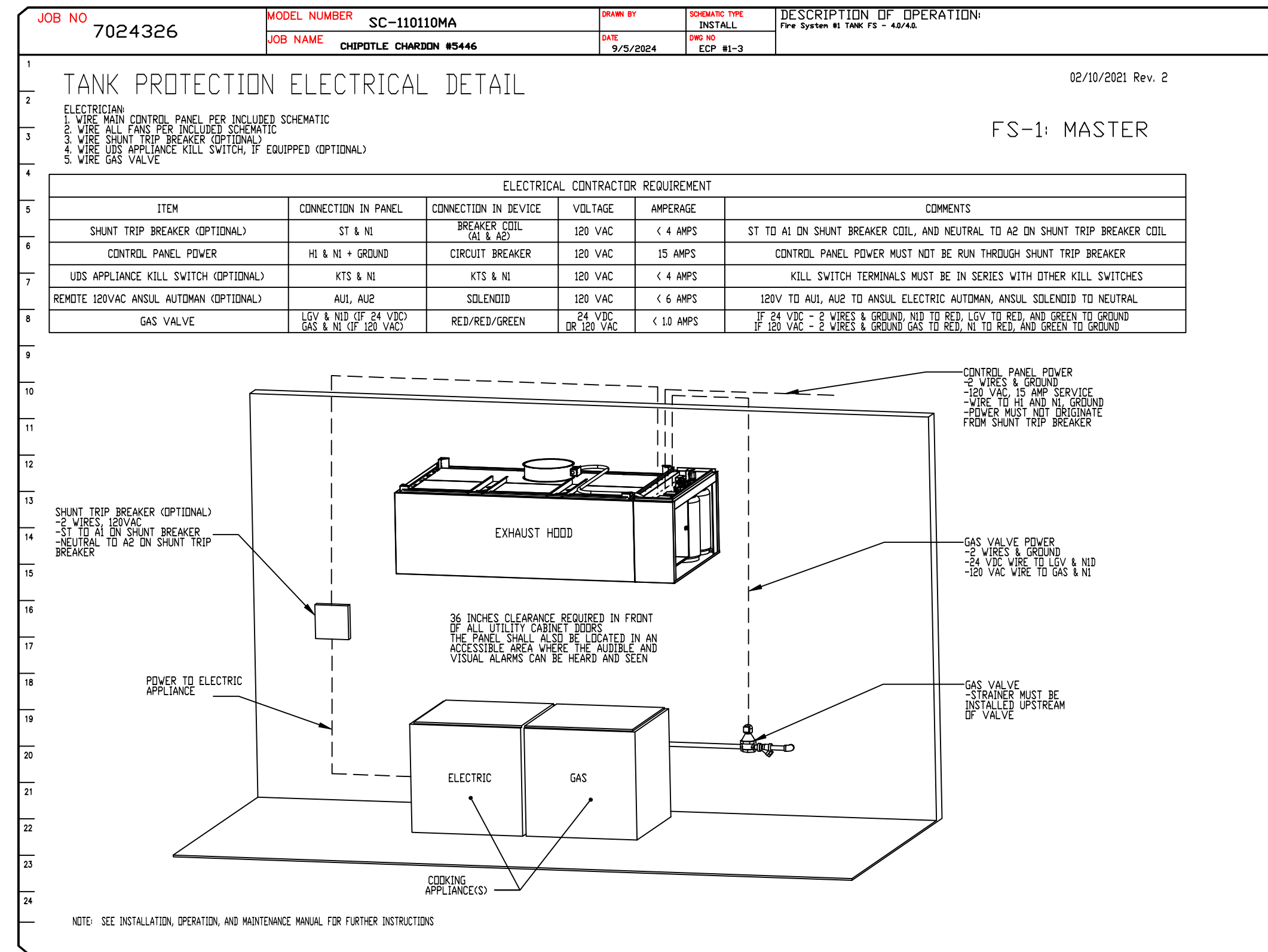
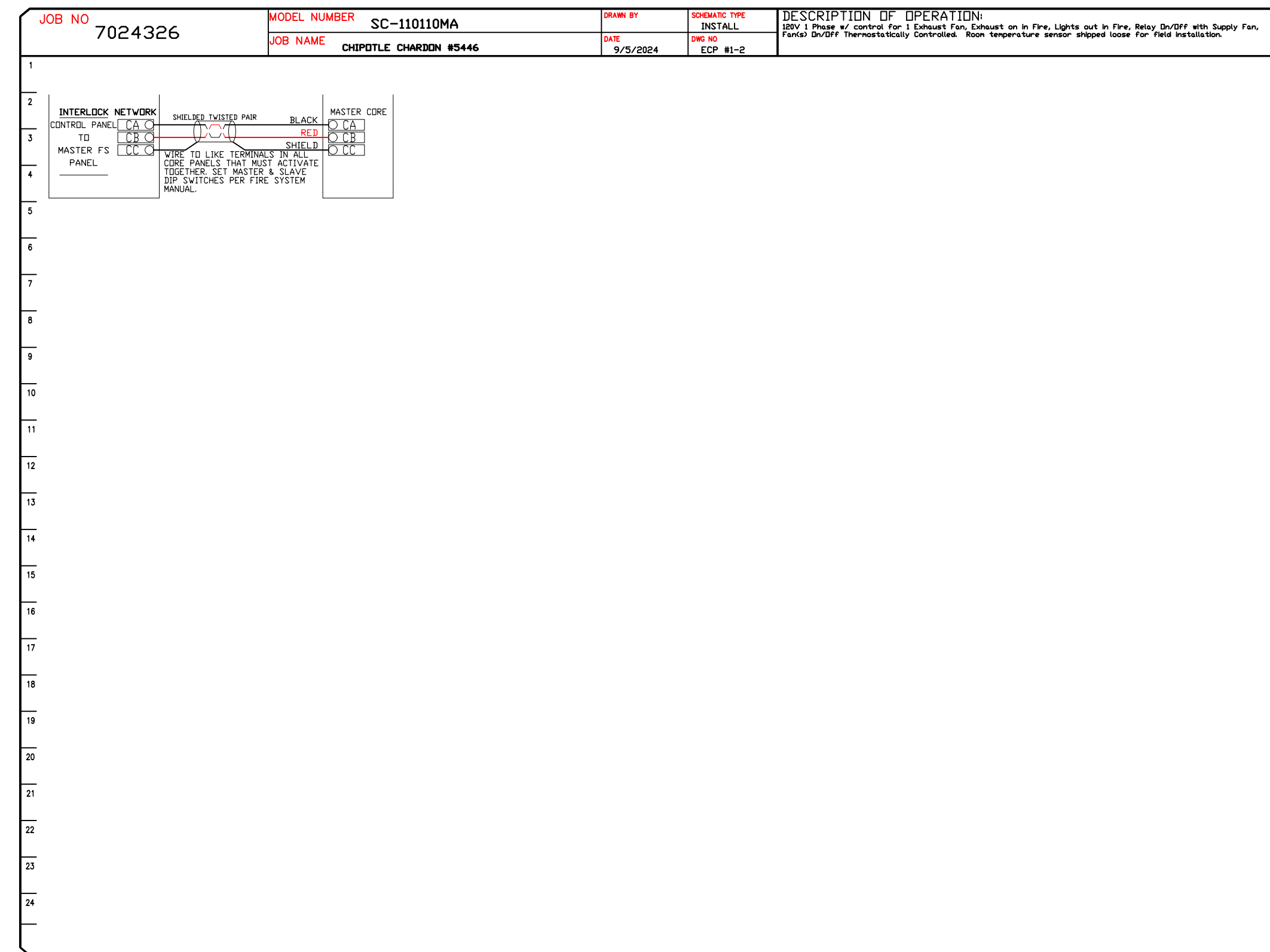
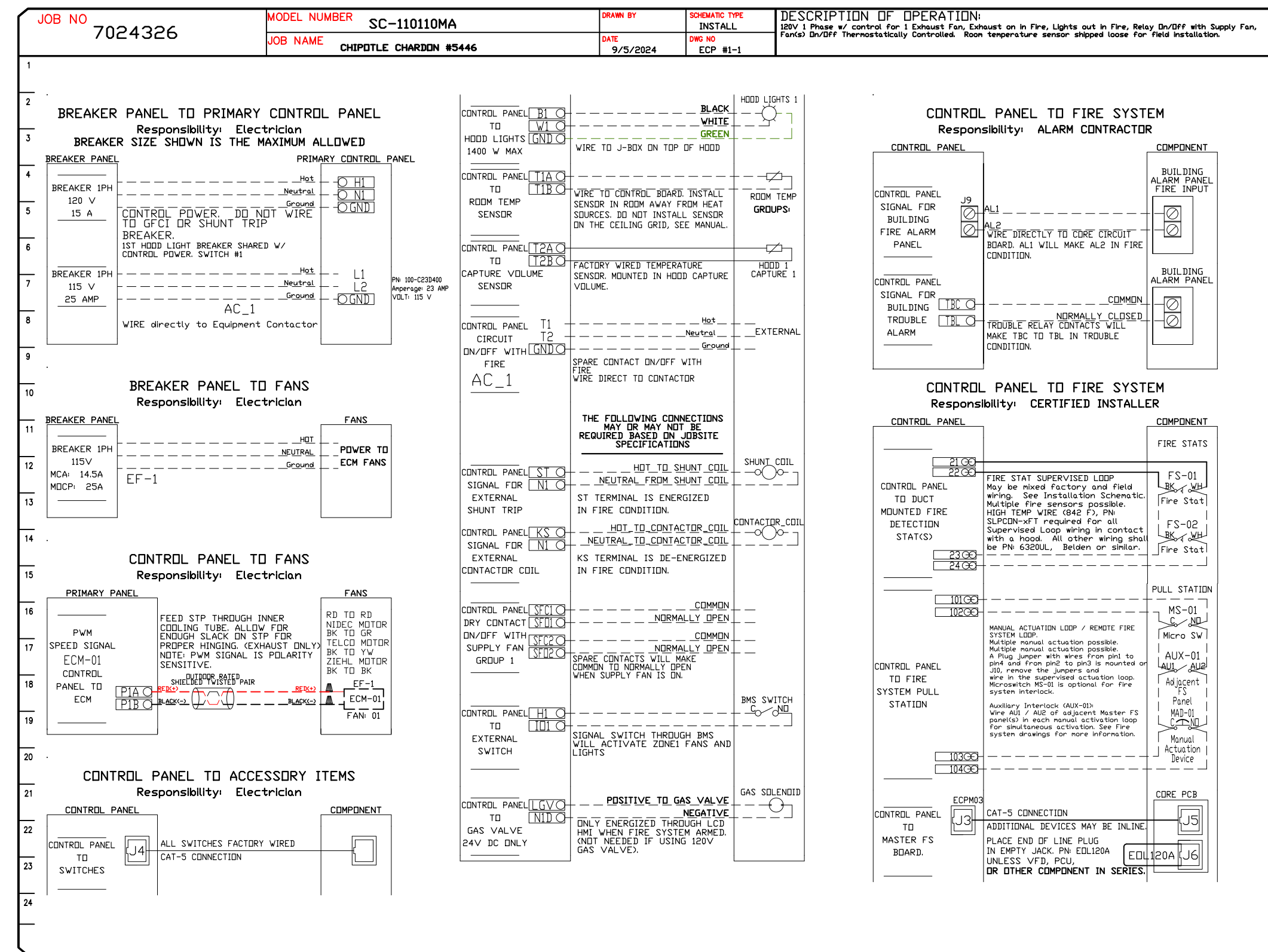
  

**SHEET NO.**

6

**ELECTRICAL PACKAGE - JOB#7024326**

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	#	HP	VOLT	FLA
1		SC-110110MA	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT HOOD # 1	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-1	EXHAUST	1	1.000	115	11.6



**REVISIONS**

NO.	DESCRIPTION	DATE

**CHIPOTLE**

**Highwoods Group**

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CHIPOTLE CHARDON #5446

CHARDON, OH, 44024

DATE: 9/5/2024

DWG #: 7024326

DRAWN BY: JMB-40

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

MASTER DRAWING

SHEET NO. 7





FOR  
 CONSTRUCTION

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 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 5446  
 CHIPOTLE CHARDON, OH  
 414 WATER STREET  
 CHARDON, OH 44024

Issue Record:

01/22/25	PERMIT SET
01/22/25	BID SET
03/28/25	CONSTRUCTION SET

Revisions:

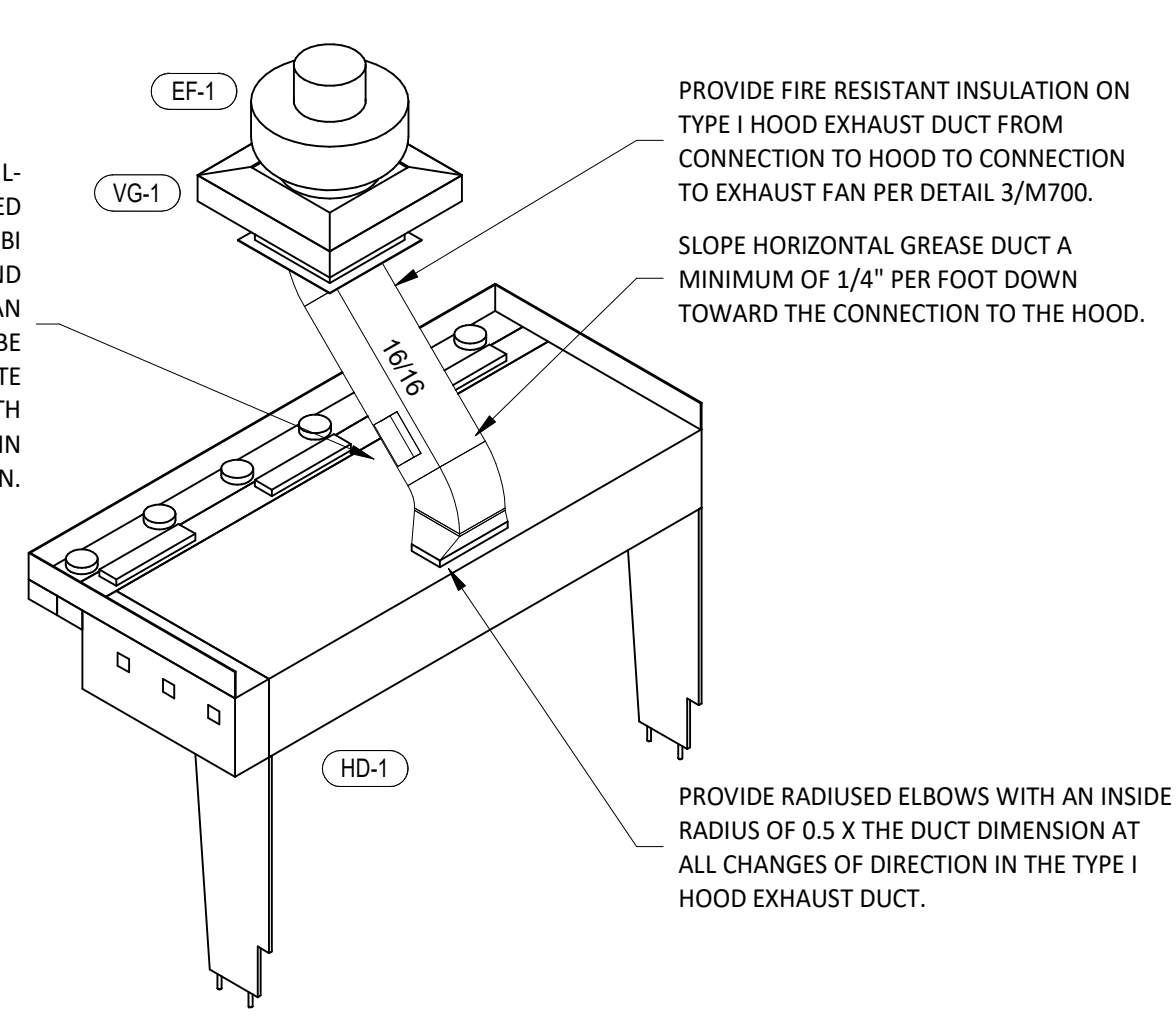
Drawn: DAA  
 Checked: DAA

Project No:  
 2401092

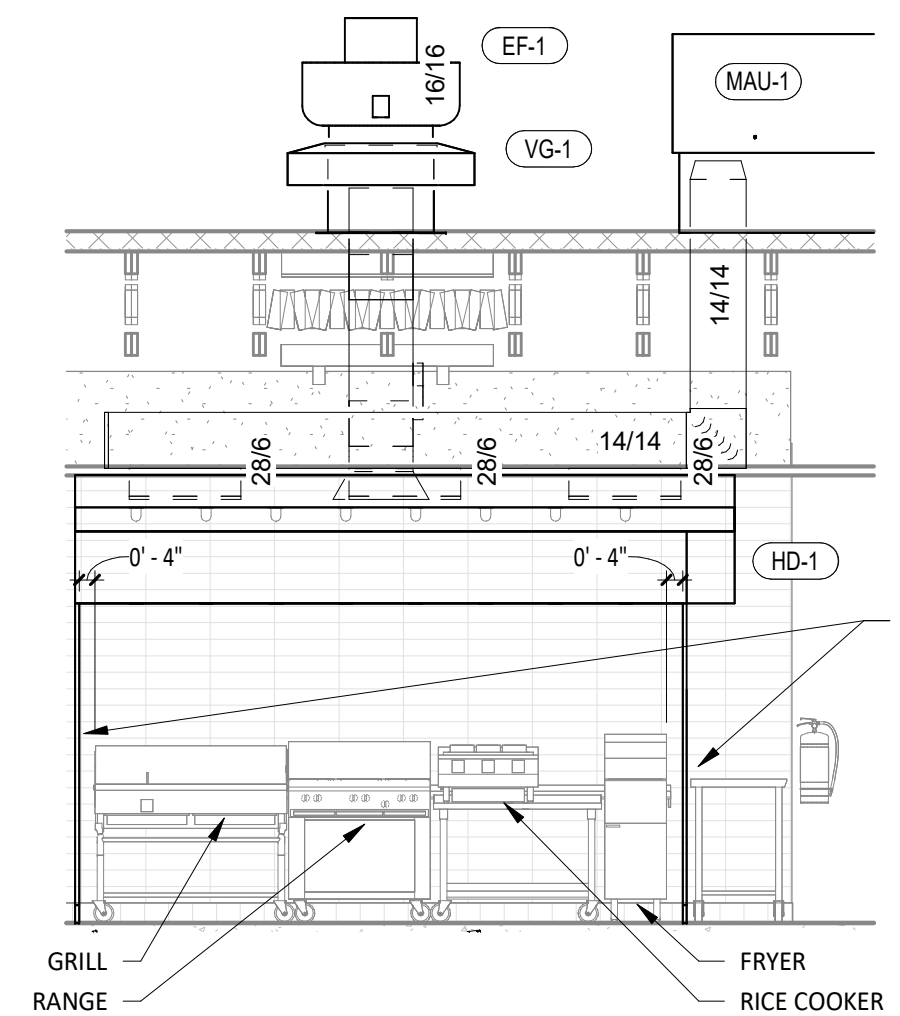
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HVAC DETAILS

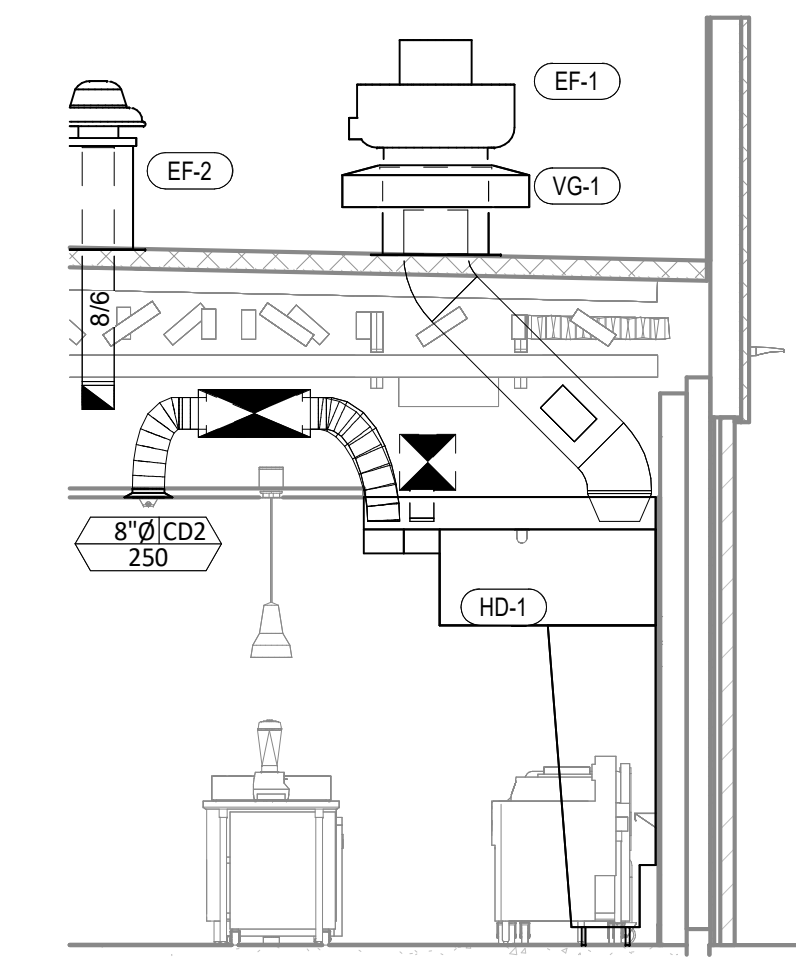
M700



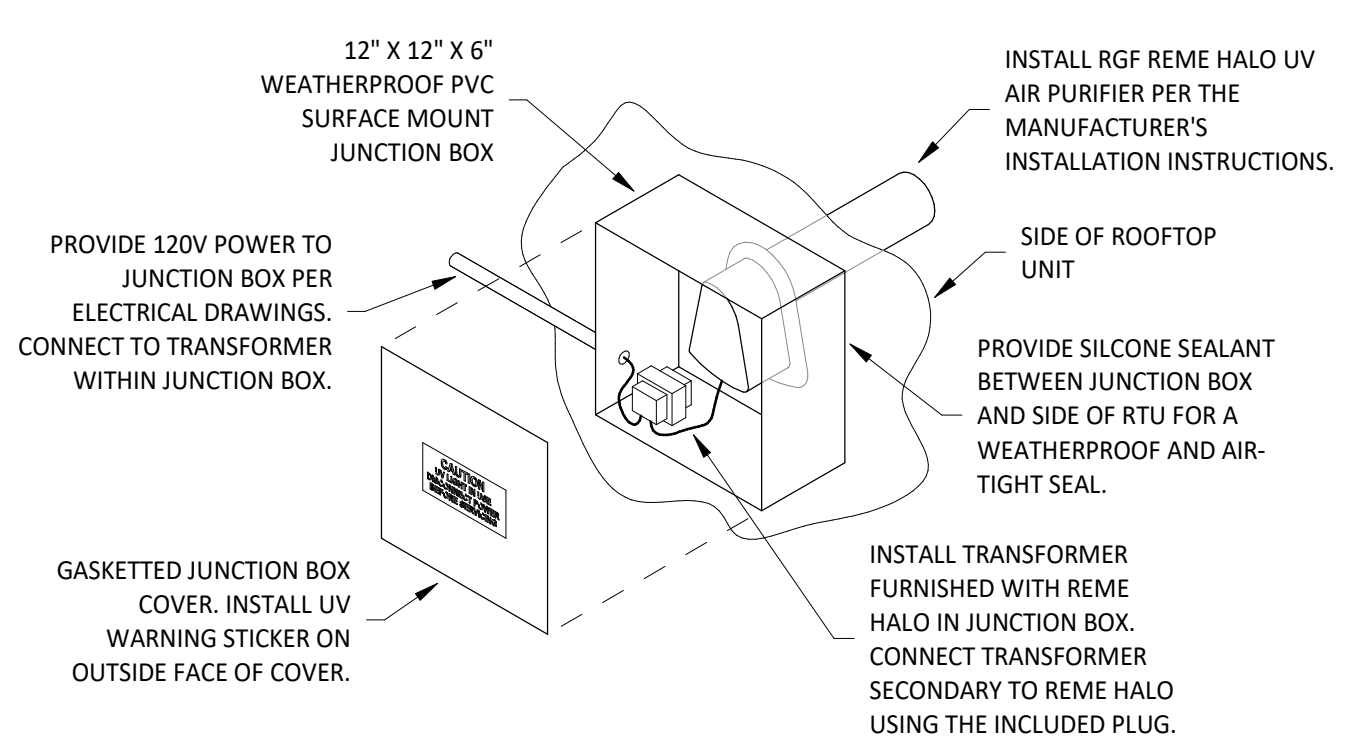
9 HOOD EXHAUST ISOMETRIC  
 M700 NOT TO SCALE



8 HOOD ELEVATION  
 M700 1/4" = 1'-0"

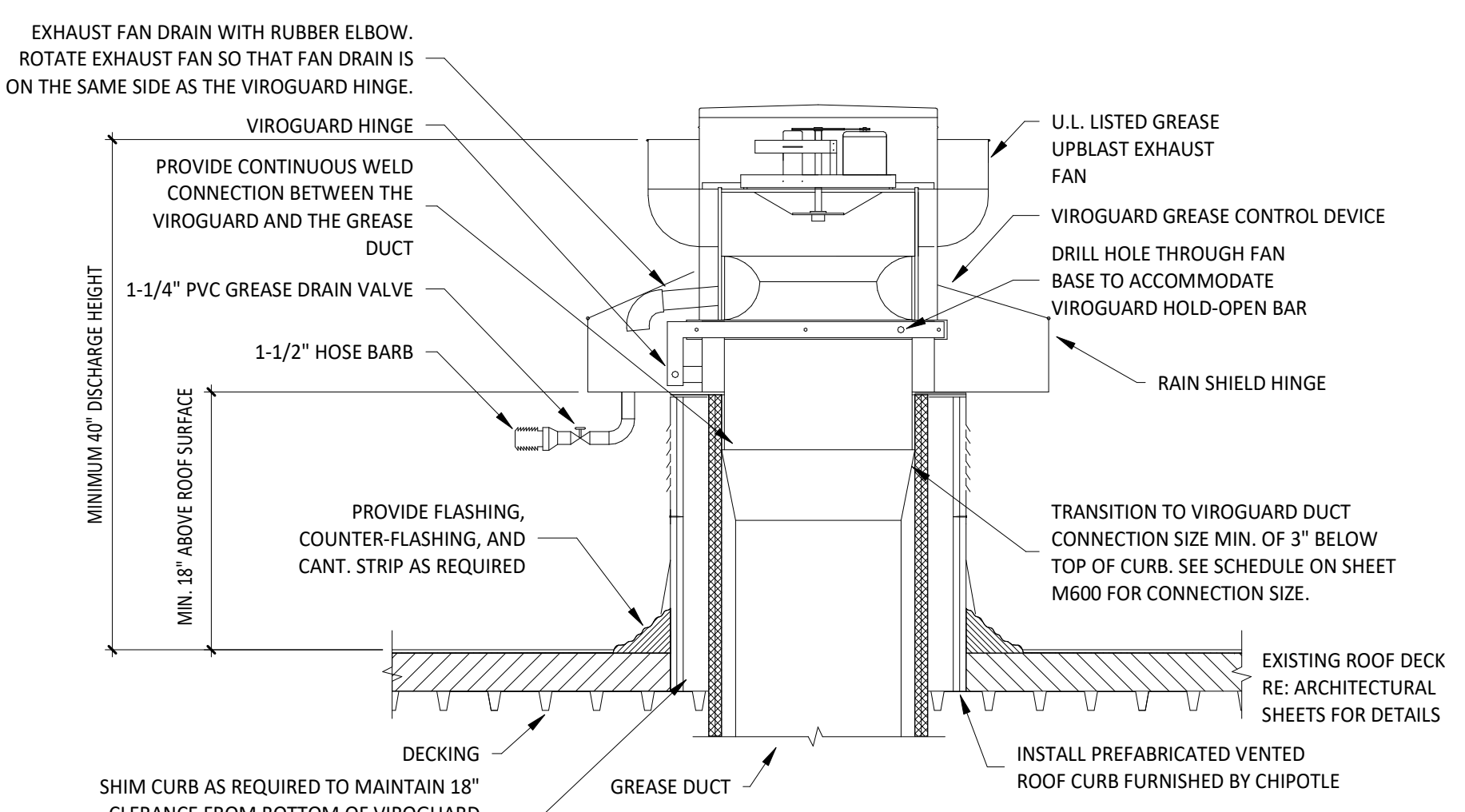


7 DUCT SECTION AT HOOD  
 M700 1/4" = 1'-0"



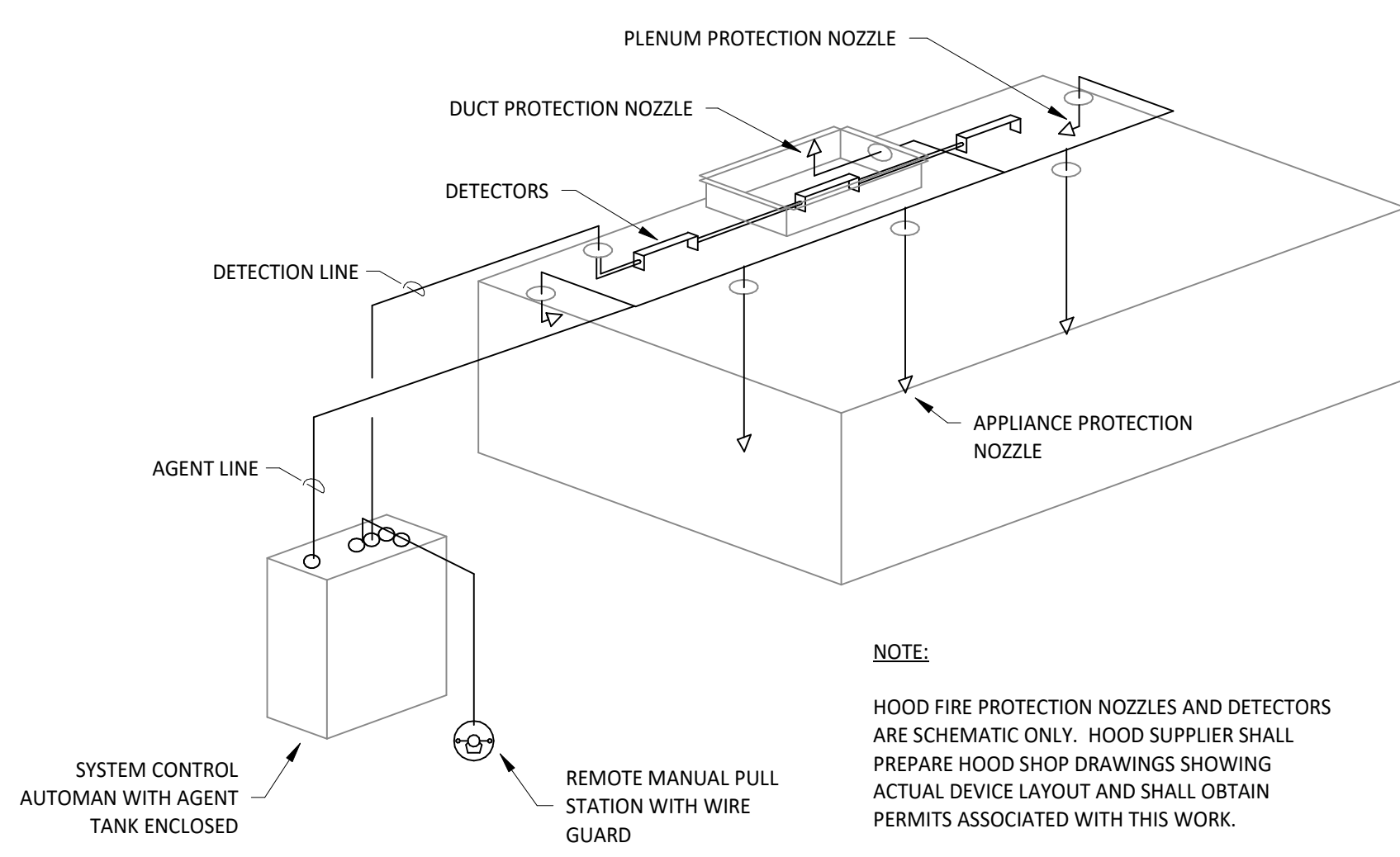
12" X 12" X 6" WEATHERPROOF PVC SURFACE MOUNT JUNCTION BOX  
 PROVIDE 120V POWER TO JUNCTION BOX PER ELECTRICAL DRAWINGS. CONNECT TO TRANSFORMER WITHIN JUNCTION BOX.  
 GASKETED JUNCTION BOX COVER. INSTALL UV WARNING STICKER ON OUTSIDE FACE OF COVER.  
 INSTALL RGF REME HALO UV AIR PURIFIER PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.  
 SIDE OF ROOFTOP UNIT  
 PROVIDE SILICONE SEALANT BETWEEN JUNCTION BOX AND SIDE OF RTU FOR A WEATHERPROOF AND AIR-TIGHT SEAL.  
 INSTALL TRANSFORMER FURNISHED WITH REME HALO IN JUNCTION BOX. CONNECT TRANSFORMER SECONDARY TO REME HALO USING THE INCLUDED PLUG.

6 UV AIR PURIFIER INSTALLATION  
 M700 NOT TO SCALE

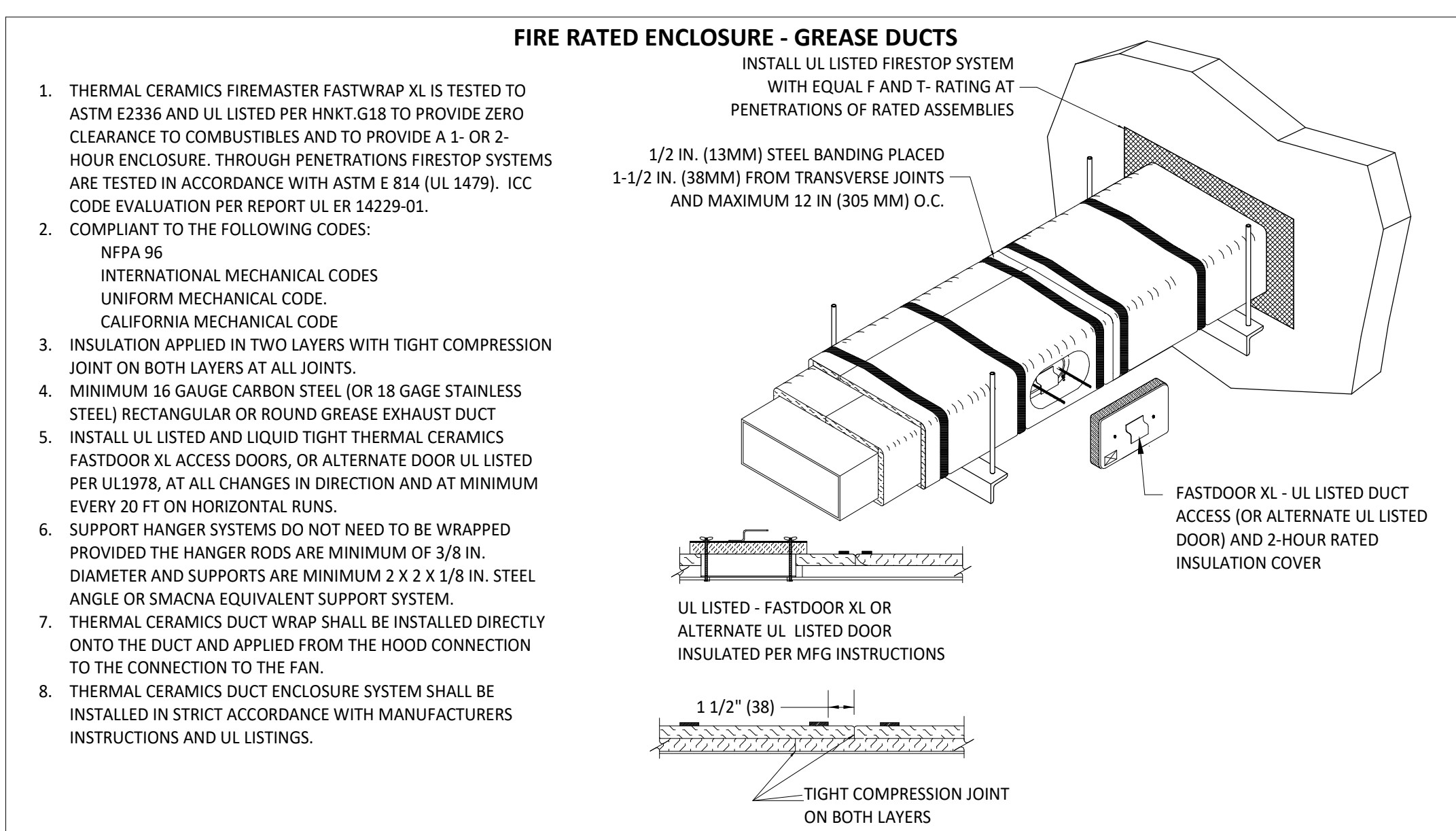


EXHAUST FAN DRAIN WITH RUBBER ELBOW. ROTATE EXHAUST FAN SO THAT FAN DRAIN IS ON THE SAME SIDE AS THE VIROGUARD HINGE.  
 VIROGUARD HINGE  
 PROVIDE CONTINUOUS WELD CONNECTION BETWEEN THE VIROGUARD AND THE GREASE DUCT  
 1-1/4" PVC GREASE DRAIN VALVE  
 1-1/2" HOSE BARB  
 MINIMUM 40" DISCHARGE HEIGHT  
 MIN. 18" ABOVE ROOF SURFACE  
 PROVIDE FLASHING, COUNTER-FLASHING, AND CANT. STRIP AS REQUIRED  
 DECKING  
 SHIM CURB AS REQUIRED TO MAINTAIN 18" CLEARANCE FROM BOTTOM OF VIROGUARD TO ROOF SURFACE AND OTHER COMBUSTIBLE MATERIALS. SEE STRUCTURAL DRAWINGS FOR ANY REQUIRED CONNECTION DETAILS.  
 U.L. LISTED GREASE UPBLAST EXHAUST FAN  
 VIROGUARD GREASE CONTROL DEVICE  
 DRILL HOLE THROUGH FAN BASE TO ACCOMMODATE VIROGUARD HOLD-OPEN BAR  
 RAIN SHIELD HINGE  
 TRANSITION TO VIROGUARD DUCT CONNECTION SIZE MIN. OF 3" BELOW TOP OF CURB. SEE SCHEDULE ON SHEET M600 FOR CONNECTION SIZE.  
 EXISTING ROOF DECK RE: ARCHITECTURAL SHEETS FOR DETAILS  
 INSTALL PREFABRICATED VENTED ROOF CURB FURNISHED BY CHIPOTLE

5 GREASE EXHAUST FAN  
 M700 NOT TO SCALE



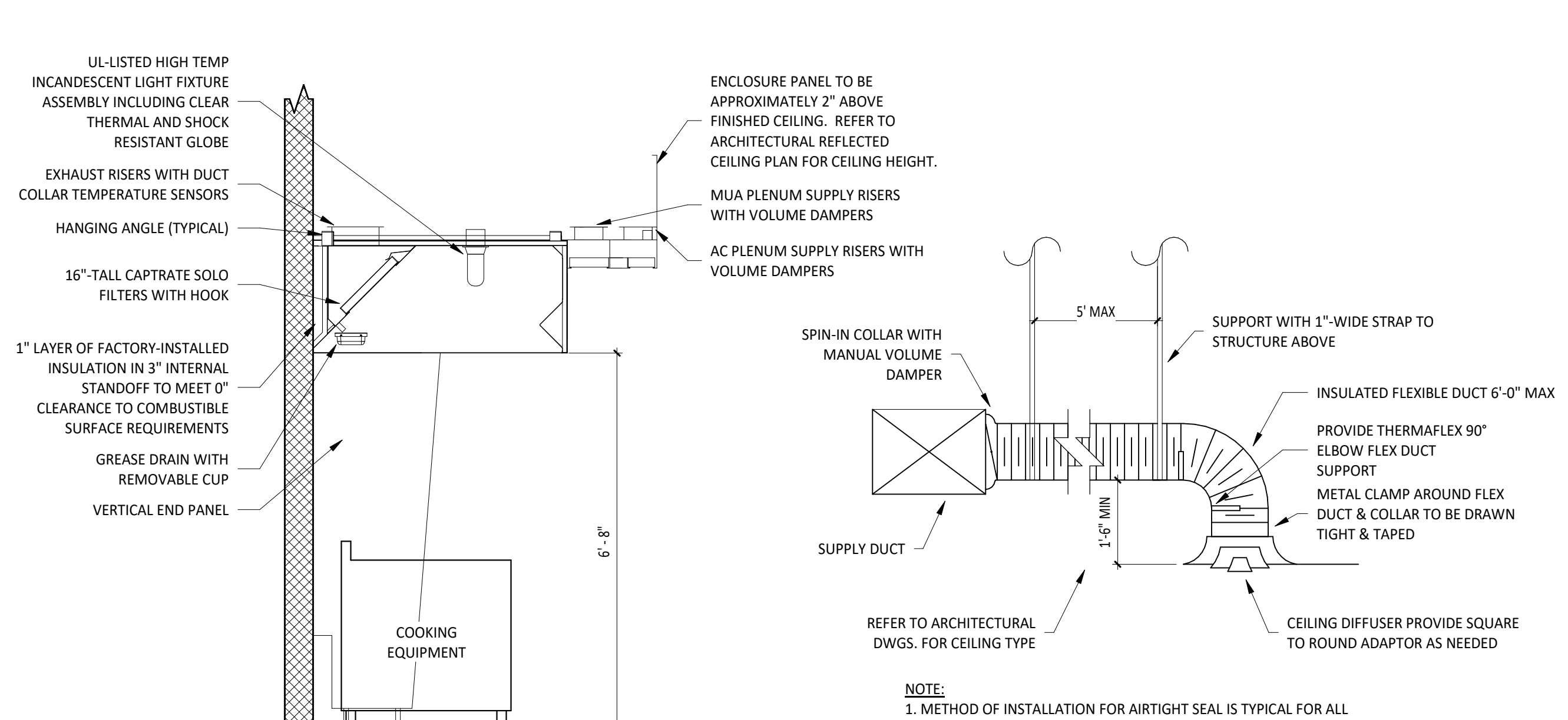
4 FIRE SUPPRESSION SYSTEM SCHEMATIC  
 M700 NOT TO SCALE



- FIRE RATED ENCLOSURE - GREASE DUCTS**  
 INSTALL UL LISTED FIRESTOP SYSTEM WITH EQUAL F AND T-RATING AT PENETRATIONS OF RATED ASSEMBLIES
- THERMAL CERAMICS FIREMASTER FASTWRAP XL IS TESTED TO ASTM E2336 AND UL LISTED PER HNK1.G18 TO PROVIDE ZERO CLEARANCE TO COMBUSTIBLES AND TO PROVIDE A 1- OR 2-HOUR ENCLOSURE. THROUGH PENETRATIONS FIRESTOP SYSTEMS ARE TESTED IN ACCORDANCE WITH ASTM E 814 (UL 1479). ICC CODE EVALUATION PER REPORT UL 14229-01.
  - COMPLIANT TO THE FOLLOWING CODES:  
 NFPA 96  
 INTERNATIONAL MECHANICAL CODES  
 UNIFORM MECHANICAL CODE  
 CALIFORNIA MECHANICAL CODE
  - INSULATION APPLIED IN TWO LAYERS WITH TIGHT COMPRESSION JOINT ON BOTH LAYERS AT ALL JOINTS.
  - MINIMUM 16 GAUGE CARBON STEEL (OR 18 GAGE STAINLESS STEEL) RECTANGULAR OR ROUND GREASE EXHAUST DUCT
  - INSTALL UL LISTED AND LIQUID TIGHT THERMAL CERAMICS FASTDOOR XL ACCESS DOORS, OR ALTERNATE DOOR UL LISTED PER UL1978, AT ALL CHANGES IN DIRECTION AND AT MINIMUM EVERY 20 FT ON HORIZONTAL RUNS.
  - SUPPORT HANGER SYSTEMS DO NOT NEED TO BE WRAPPED PROVIDED THE HANGER RODS ARE MINIMUM OF 3/8 IN. DIAMETER AND SUPPORTS ARE MINIMUM 2 X 2 X 1/8 IN. STEEL ANGLE OR SMACNA EQUIVALENT SUPPORT SYSTEM.
  - THERMAL CERAMICS DUCT WRAP SHALL BE INSTALLED DIRECTLY ONTO THE DUCT AND APPLIED FROM THE HOOD CONNECTION TO THE CONNECTION TO THE FAN.
  - THERMAL CERAMICS DUCT ENCLOSURE SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND UL LISTINGS.

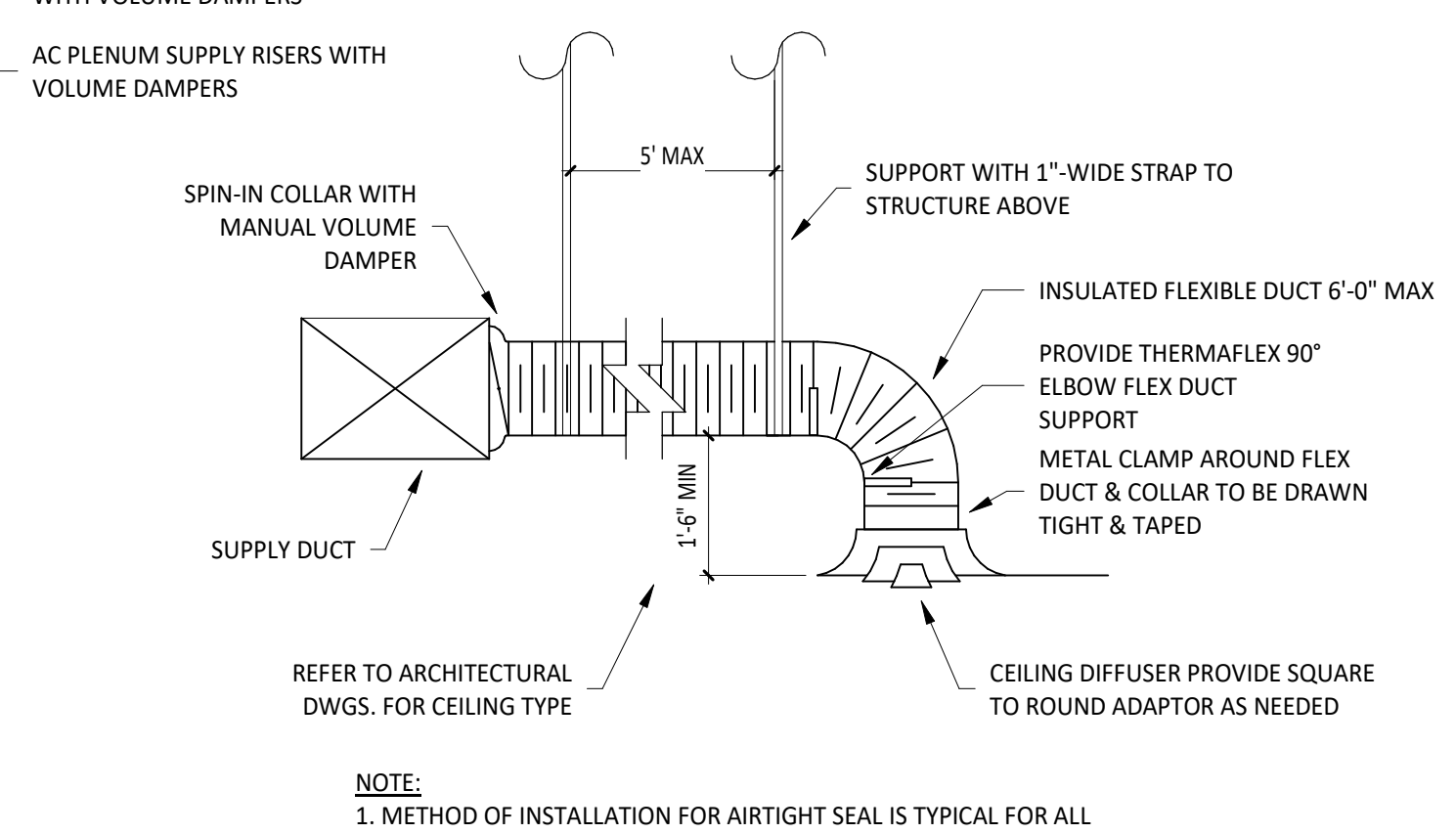
1/2 IN. (13MM) STEEL BANDING PLACED 1-1/2 IN. (38MM) FROM TRANSVERSE JOINTS AND MAXIMUM 12 IN. (305 MM) O.C.  
 FASTDOOR XL - UL LISTED DUCT ACCESS (OR ALTERNATE UL LISTED INSULATION COVER)  
 UL LISTED - FASTDOOR XL OR ALTERNATE UL LISTED DOOR INSULATED PER MFG INSTRUCTIONS  
 TIGHT COMPRESSION JOINT ON BOTH LAYERS

3 FIREMASTER DUCT WRAP - UL HNK1-G18  
 M700 NOT TO SCALE



UL LISTED HIGH TEMP INCANDESCENT LIGHT FIXTURE ASSEMBLY INCLUDING CLEAR THERMAL AND SHOCK RESISTANT GLOBE  
 EXHAUST RISERS WITH DUCT COLLAR TEMPERATURE SENSORS  
 HANGING ANGLE (TYPICAL)  
 16"-TALL CAPTRATE SOLO FILTERS WITH HOOK  
 1" LAYER OF FACTORY-INSTALLED INSULATION IN 3" INTERNAL STANDOFF TO MEET 0" CLEARANCE TO COMBUSTIBLE SURFACE REQUIREMENTS  
 GREASE DRAIN WITH REMOVABLE CUP  
 VERTICAL END PANEL  
 ENCLOSURE PANEL TO BE APPROXIMATELY 2" ABOVE FINISHED CEILING. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING HEIGHT.  
 MUA PLENUM SUPPLY RISERS WITH VOLUME DAMPERS  
 AC PLENUM SUPPLY RISERS WITH VOLUME DAMPERS  
 SPIN-IN COLLAR WITH MANUAL VOLUME DAMPER  
 SUPPORT WITH 1"-WIDE STRAP TO STRUCTURE ABOVE  
 INSULATED FLEXIBLE DUCT 6'-0" MAX  
 PROVIDE THERMAFLEX 90° ELBOW FLEX DUCT SUPPORT  
 METAL CLAMP AROUND FLEX DUCT & COLLAR TO BE DRAWN TIGHT & TAPED  
 CEILING DIFFUSER PROVIDE SQUARE TO ROUND ADAPTOR AS NEEDED

2 HOOD SECTION VIEW  
 M700 NOT TO SCALE



1 DIFFUSER CONNECTION  
 M700 NOT TO SCALE

NOTE:  
 1. METHOD OF INSTALLATION FOR AIRTIGHT SEAL IS TYPICAL FOR ALL FLEX CONNECTIONS TO AIR DISTRIBUTION DEVICES.