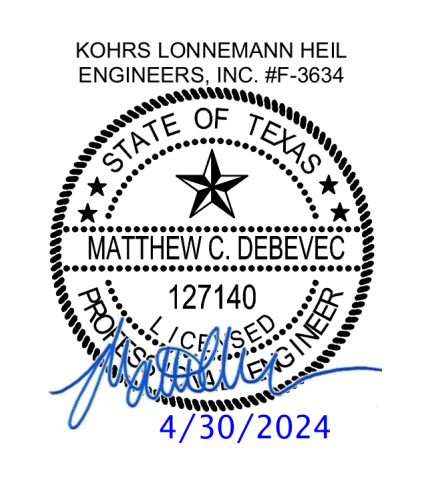


- ### KEYED NOTES
- M3 REFER TO SHEETS M3.1.6 AND M3.1.7 FOR INFORMATION REGARDING SUSPENDED ELECTRIC HEATER USING THREADED ROD TO UNSPLIT CHANNEL OR APPROVED EQUAL. MOUNTED 16" AFF TO BOTTOM OF UNIT. VERIFY LOCATION AND REQUIREMENTS TO OWNER PRIOR TO INSTALLATION. REFER TO HSD-16 AND M3.1 FOR MORE INFORMATION. DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
 - M5 DUCT UP TO OPENING THRU ROOF. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEG F.
 - M8 DUCTWORK TO BE HELD TIGHT TO STRUCTURE. REFER TO DETAIL HSD-3 ON SHEET M3.1 FOR DUCT ELEVATION DETAILS.
 - M13 DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AES MODEL NUMBERS AND QUANTITIES. REFER TO FLOOR PLANS FOR THROW DIRECTIONS AND AIRFLOW. REFER TO DETAIL HSD-1 FOR INSTALLATION.
 - M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY ORIGINAL EQUIPMENT MANUFACTURER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
 - M21 RETURN AIR GRILLE IN SIDE OF DUCT DROP, TITUS 50F WITH 1 INCH OPENINGS OR APPROVED EQUAL.
 - M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. AIRFLOW TO BE BALANCED TO SCHEDULED AIRFLOW BY THIRD PARTY. REFERENCE DETAIL HSD-10 ON SHEET M3.1.
 - M33 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK, DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL SAMPLING TUBES AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. DETECTOR, FAN SHUTDOWN WIRING AND CONTROLS BY OTHERS.
 - M43 FLUE VENT AND INTAKES FROM WATER HEATERS. REFER TO PLUMBING PLAN FOR LOCATION AND CONNECTIONS.
 - M48 PROVIDE CO2 SENSOR WHERE SHOWN. ROUTE CONTROL WIRING TO BUILDING CONTROL PANEL.
 - M82 FAN PROVIDED BY CONTRACTOR AND CONTROLLED BY LOCAL SWITCH. MOUNT FAN PER MANUFACTURER'S RECOMMENDATIONS.
 - M91 CLEANING CENTER EXHAUST GRILLE TO BE MOUNTED AT 8'-0" AFF PER AIR CURTAIN TO BE FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR ABOVE DOORWAY PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DOOR ACTIVATED MICRO-SWITCH TO MAINTAIN OPERATION OR AIR CURTAIN ONLY WHEN DOOR IS OPEN. LIGHT SWITCHES AND BREAKER BOXES MAY NOT BE USED IN PLACE OF OR TO CIRCUMVENT DOORWINDOW ACTIVATED MICRO-SWITCHES.



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1 MECHANICAL PLAN - FIN FLOOR - RIGHT
 3/32" = 1'-0"

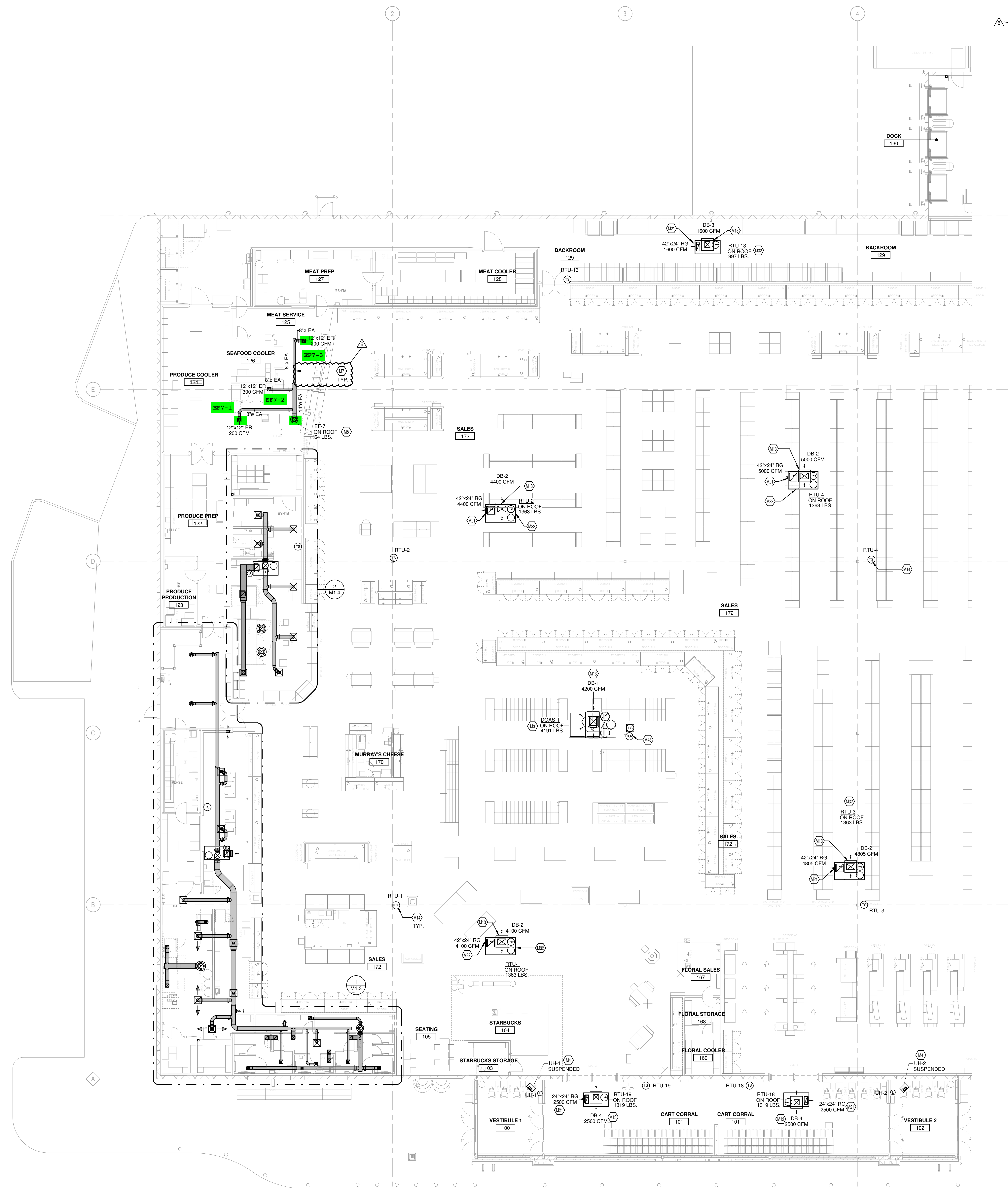
PROJECT TITLE
KROGER'S STORE DAL984

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COMMISSION NO. 523313
 ISSUE DATE 04/27/2023
 SHEET TITLE
HVAC FLOOR PLAN - RIGHT

SHEET NO.
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- ### KEYED NOTES
- M3 REFER TO SHEETS M3.1.6 AND M3.1.7 FOR INFORMATION REGARDING DOORS/LIGHTS
 - M4 SUSPENDED ELECTRIC HEATER USING THREADED ROD TO UNISTRUT CHANNEL OR APPROVED EQUAL. MOUNTED 16" AFF TO BOTTOM OF UNIT. VERIFY LOCATION AND REQUIREMENTS TO OWNER PRIOR TO INSTALLATION. REFER TO HSD-16 AND TO M3.1 FOR MORE INFORMATION
 - M5 DUCT TOP TO OPENING THROUGH ROOF CAPPED WITH CURB AND SPOKE BURSTER EQUIVALENT
 - M7 ROUTE SUPPLY AND RETURN DUCTWORK ROUGHLY 2" ABOVE THE CEILING FOR EASE OF FUTURE ACCESS. CONFIRM FINAL HEIGHT WITH OWNER
 - M13 DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AES MODEL NUMBERS AND QUANTITIES. REFER TO FLOOR PLANS FOR THROW DIRECTIONS AND AIRFLOW. REFER TO DETAIL HSD-1 FOR INSTALLATION
 - M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY ORIGINAL EQUIPMENT MANUFACTURER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL
 - M21 RETURN AIR GRILLE IN SIDE OF DUCT DROP. TITUS 50" WITH 1" INCH OPENINGS OR APPROVED EQUAL
 - M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. AIRFLOW TO BE BALANCED TO SCHEDULED AIRFLOW BY THIRD PARTY. REFERENCE DETAIL HSD-10 ON SHEET M5.1
 - M48 PROVIDE CO2 SENSOR WHERE SHOWN. ROUTE CONTROL WIRING TO BUILDING CONTROL PANEL

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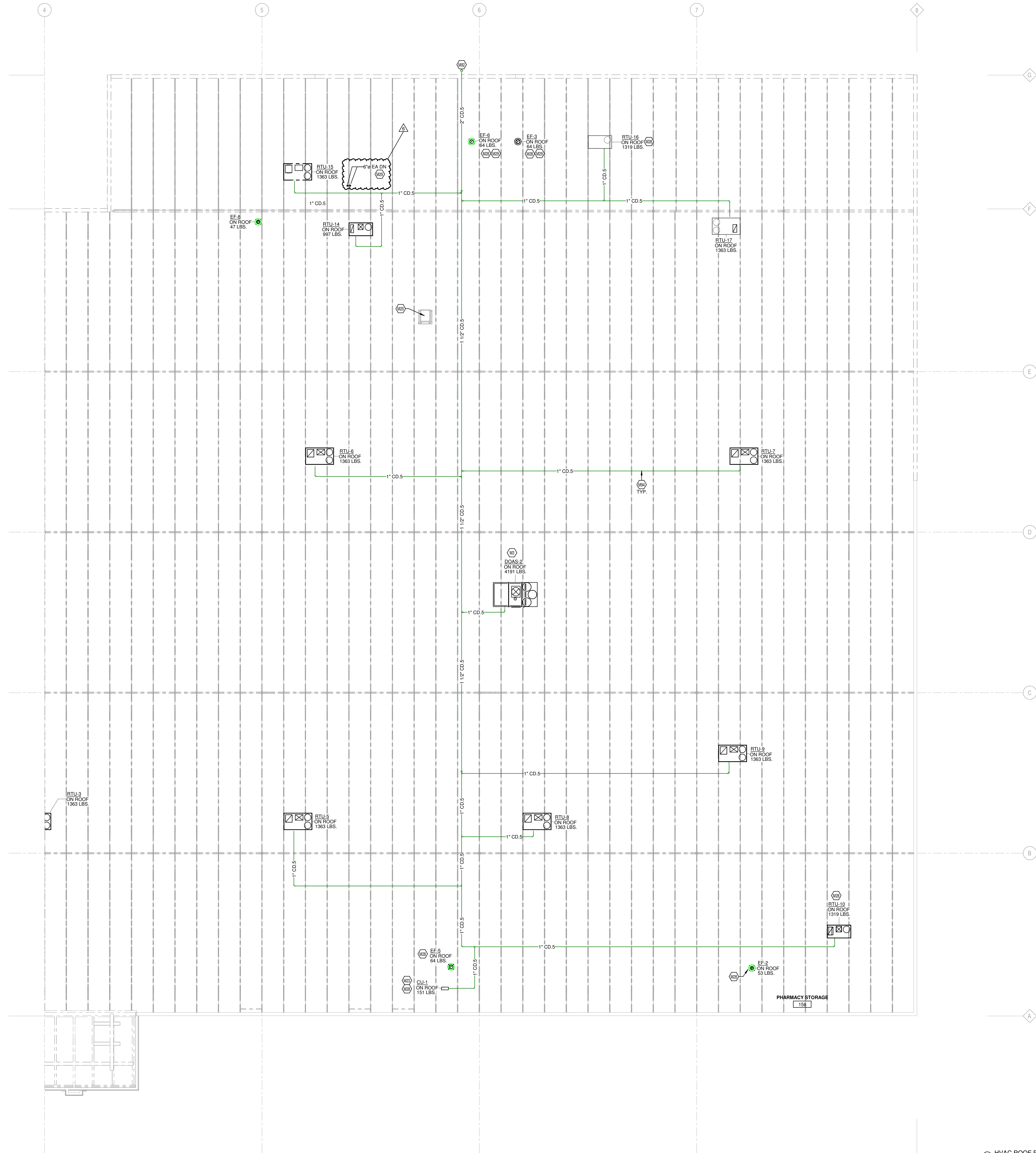
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HVAC FLOOR PLAN - LEFT

SHEET NO.
M1.1a

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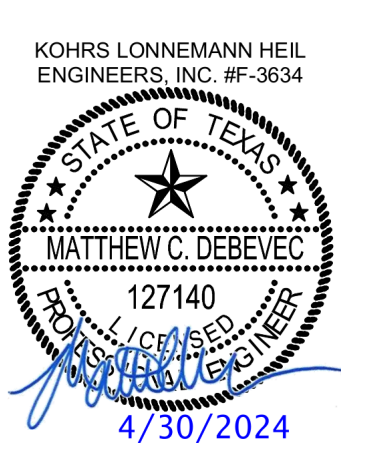
1 HVAC FLOOR PLAN - LEFT
3/32" = 1'-0"



- ### KEYED NOTES
- M3 REFER TO SHEETS M3.1.6 AND M3.1.7 FOR INFORMATION REGARDING DOAS UNITS.
 - M20 ROOF HATCH
 - M23 KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND BAFFLES. MOUNT INDOOR UNIT A MINIMUM OF 7'-0" TO THE BOTTOM OF THE UNIT, AND PER MANUFACTURER'S RECOMMENDATIONS. ROUTE REFRIGERANT LINES THROUGH ROOF TO CONDENSING UNIT PER MANUFACTURER'S GUIDELINES. ROUTE INSULATED CONDENSATE TO HUB DRAIN AREA. COORDINATE ORDERING OF REFRIGERANT LINES WITH OWNER'S PROJECT MANAGER. REFERENCE HSD-11 FOR ADDITIONAL INFORMATION.
 - M28 INSTALL A MINIMUM OF 10 FEET FROM ROOF EDGE OR PARAPET.
 - M29 INSTALL FLUES AND EXHAUST FANS A MINIMUM OF 10 FEET FROM OUTSIDE AIR INTAKE OF ROOFTOP UNITS.
 - M92 ROUTE CONDENSATE DRAINAGE TO STORM DOWNSPOUT. PROVIDE AIR GAP. CONDENSATE PIPING IS TO BE SLOPED NO LESS THAN 1/8" PER FOOT. REFER TO DETAIL 232113-23-25 ON M3.2 FOR CONDENSATE DRAIN TRAPS TO BE INSTALLED AT UNITS AS REQUIRED BY MANUFACTURER AND FOR CLEANING.
 - M94 ALL PVC ROOFTOP UNIT CONDENSATE PIPING IS TO BE PAINTED WITH AN APPROVED WATER BASED SYNTHETIC LATEX PAINT TO AVOID DAMAGE FROM SUNLIGHT. CONTRACTOR TO VERIFY APPROVAL OF UV PAINT WITH LOCAL JURISDICTION.

Pipe Type Legend

Mark	System Name	Pipe Material
CD.5	CD - (HVAC) Condensate	PVC - Schedule 40 - ASTM D1785



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① HVAC ROOF PLAN - RIGHT
3/32" = 1'-0"

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KEYED NOTES

M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER
 FURNISH PER PLAN.

M7 ROUTE SUPPLY AND RETURN DUCT WORK REUSING 1'-2" ABOVE THE CEILING FOR
 EASE OF FUTURE ACCESS. CONFIRM FINAL HEIGHT WITH OWNER.

M10 GREASE DUCT FROM EXHAUST HOOD TO OPENING THROUGH ROOF PER NFPA 96.
 MECHANICAL CONTRACTOR TO INSTALL PROVIDED HINGE KIT. DUCTTRAP IS TO RUN
 THE ENTIRE LENGTH OF GREASE DUCT FROM CONNECTION TO HOOD TO FAN.
 REFERENCE HSD-4 ON M5.1, AND BOTH 233813.00-04 AND 233813.00-02, AS WELL AS
 CAPTIVE AIR SHEETS, FOR ADDITIONAL INFORMATION.

M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY ORIGINAL EQUIPMENT
 MANUFACTURER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING
 CONTROL PANEL.

M15 COMBINATION TEMPERATURE/RELATIVE HUMIDITY SENSOR FOR RTU FURNISHED BY
 BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK
 TO BUILDING CONTROL PANEL.

M17 LW-50 VENT KIT INCLUDES WITH UNIT AND SUPPLIED BY HOBART. VENT KIT
 AUTOMATICALLY REMOVES STEAM CONDENSATION AT THE COMPLETION OF THE
 WAREWASH CYCLE. WAREWASH DOOR WILL NOT OPEN UNTIL THIS PROCESS IS
 COMPLETED. MECHANICAL CONTRACTOR TO CONNECT STAINLESS STEEL DUCT TO
 THE VENT KIT OPENING THROUGH ROOF. REFER TO HSD-8 FOR ADDITIONAL
 INFORMATION.

M18 DIFFUSER AROUND HOOD TO BE A 2-WAY DIFFUSER FACING AWAY FROM THE HOOD
 TO PREVENT INTERFERENCE WITH THE HOOD'S CONTAIN AND CAPTURE.

M22 MECHANICAL CONTRACTOR TO PROVIDE VAV DIFFUSER, ACOUTHERM THERMA-FUSE
 MODEL TF-HC OR APPROVED EQUAL.

M24 HOOD ANSUL PULL STATION LOCATION. COORDINATE FINAL LOCATION WITH
 ELECTRICAL PLANS. PROVIDE NAMEPLATE AT STATION WITH HOOD NUMBER AND
 LOCATION. REFERENCE HSD-4A AND 4B FOR ADDITIONAL INFORMATION.

M27 MOUNTED GRILLE REGISTER 100 AFF

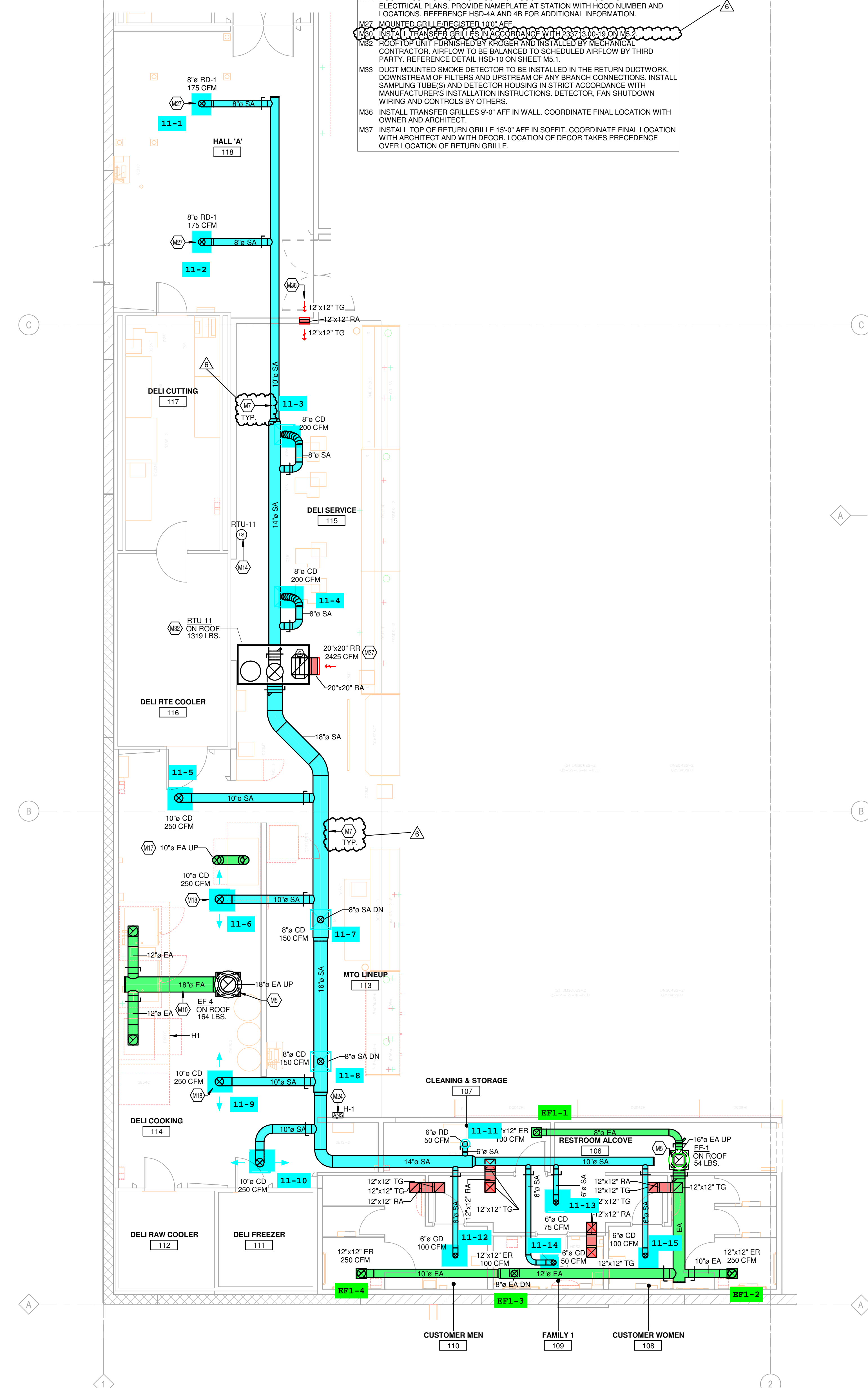
M28 INSTALL TRANSFER GRILLES IN ACCORDANCE WITH HSD-10 AND 11

M32 ROOF TOP UNIT FURNISHED BY HOBART AND INSTALLED BY MECHANICAL
 CONTRACTOR. AIRFLOW TO BE BALANCED TO SCHEDULED AIRFLOW BY THIRD
 PARTY. REFERENCE DETAIL HSD-10 ON SHEET M5.1.

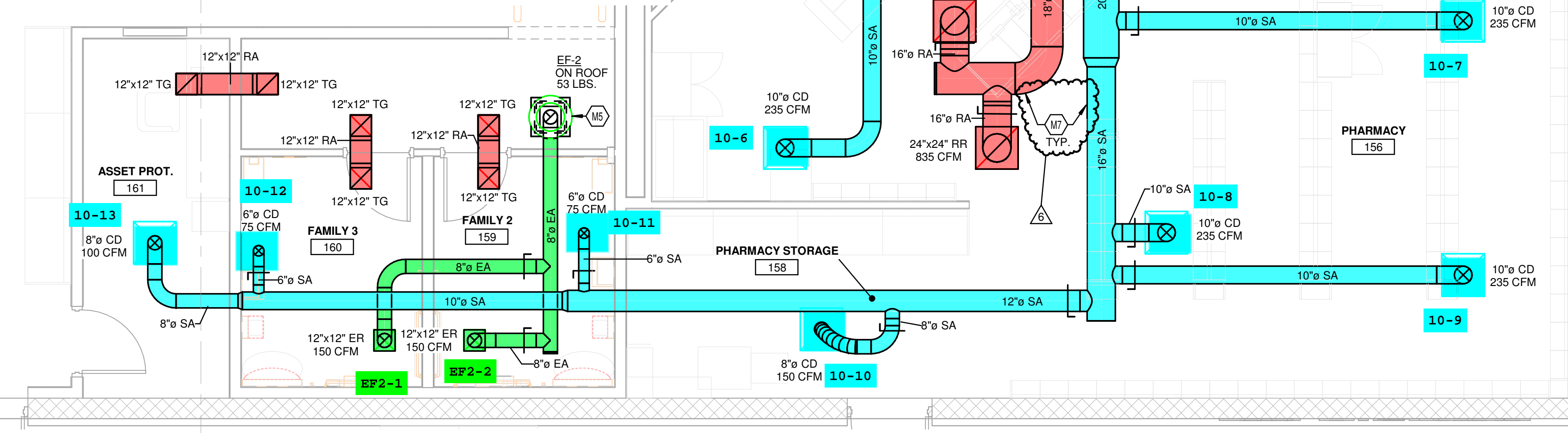
M33 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK,
 DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL
 SAMPLING TUBES AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH
 MANUFACTURER'S INSTALLATION INSTRUCTIONS, DETECTOR, FAN SHUTDOWN
 WIRING AND CONTROLS BY OTHERS.

M36 INSTALL TRANSFER GRILLES 9'-0" AFF IN WALL. COORDINATE FINAL LOCATION WITH
 OWNER AND ARCHITECT.

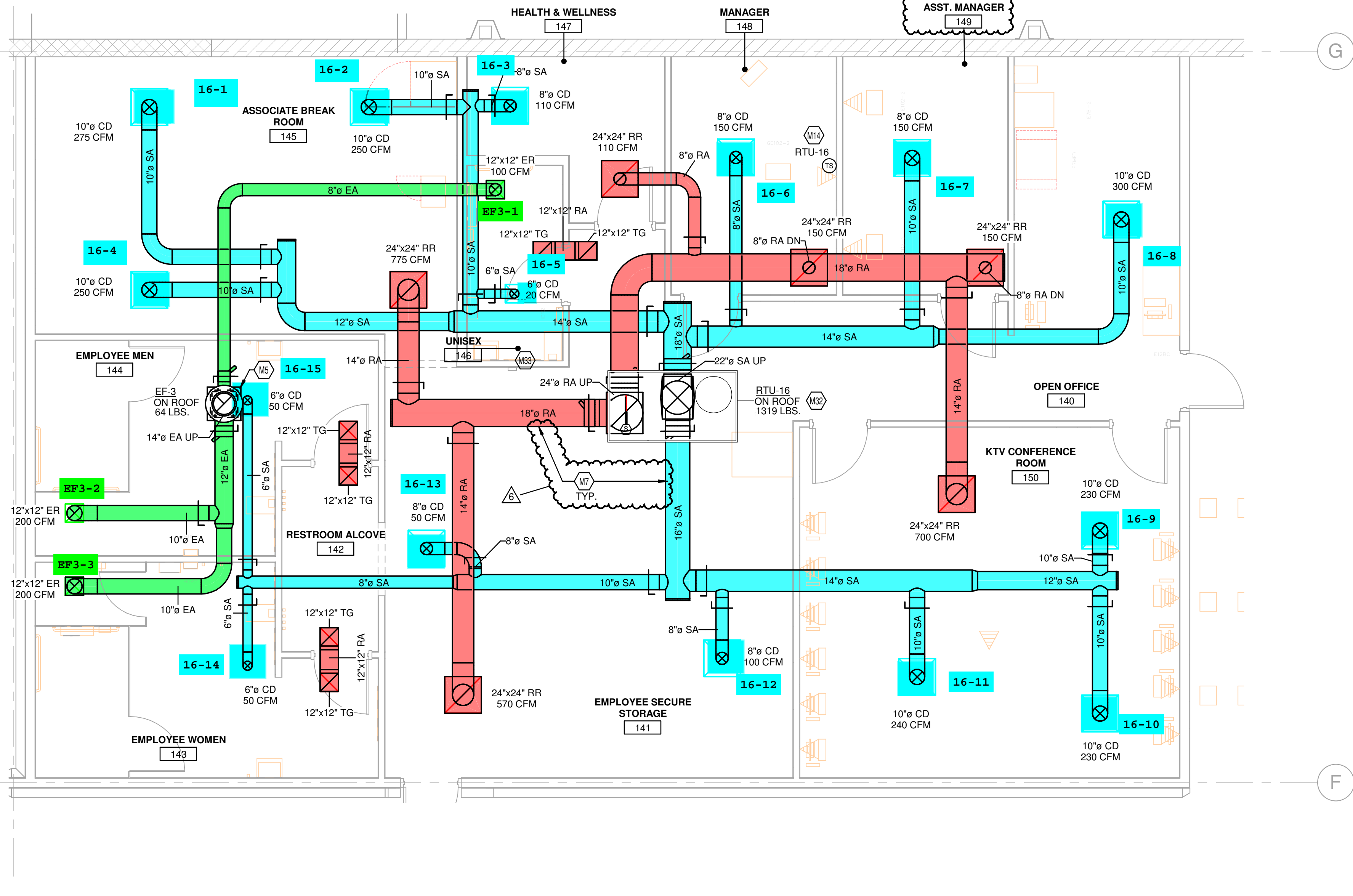
M37 INSTALL TOP OF RETURN GRILLE 15'-0" AFF IN SOFFIT. COORDINATE FINAL LOCATION
 WITH ARCHITECT AND WITH DECOR. LOCATION OF DECOR TAKES PRECEDENCE
 OVER LOCATION OF RETURN GRILLE.



① HVAC ENLARGED PLAN - DELI
 3/16" = 1'-0"



③ HVAC ENLARGED PLAN - PHARMACY
 1/4" = 1'-0"



② HVAC ENLARGED PLAN - BACK OFFICES
 1/4" = 1'-0"

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KEYED NOTES

M2 THERMOSTAT TO BE MOUNTED AT 5'0" AFF. PROVIDE LOCKABLE PROTECTIVE COVER OVER DEVICE.

M6 DUCT UP TO OPENING THRU ROOF. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEGREE.

M7 ROUTE SUPPLY AND RETURN DUCTWORK ROUGHLY 2'0" ABOVE THE CEILING FOR EASE OF FUTURE ACCESS. CONFIRM FINAL HEIGHT WITH OWNER.

M8 8" VENT DUCT UP FROM HOOK OVER VENT COLLAR THROUGH ROOF. DUCTS ARE ONLY TO OFFSET ABOVE ACT TILES. DUCTS ARE TO BE RUN STRAIGHT AND VERTICAL WHEN VISIBLE TO SALES FLOOR. REFER TO DETAIL HSD-7 FOR ADDITIONAL INFORMATION.

M11 INSTALL TRANSFER GRILLES IN ACCORDANCE WITH 233713.00-13 ON M5.2

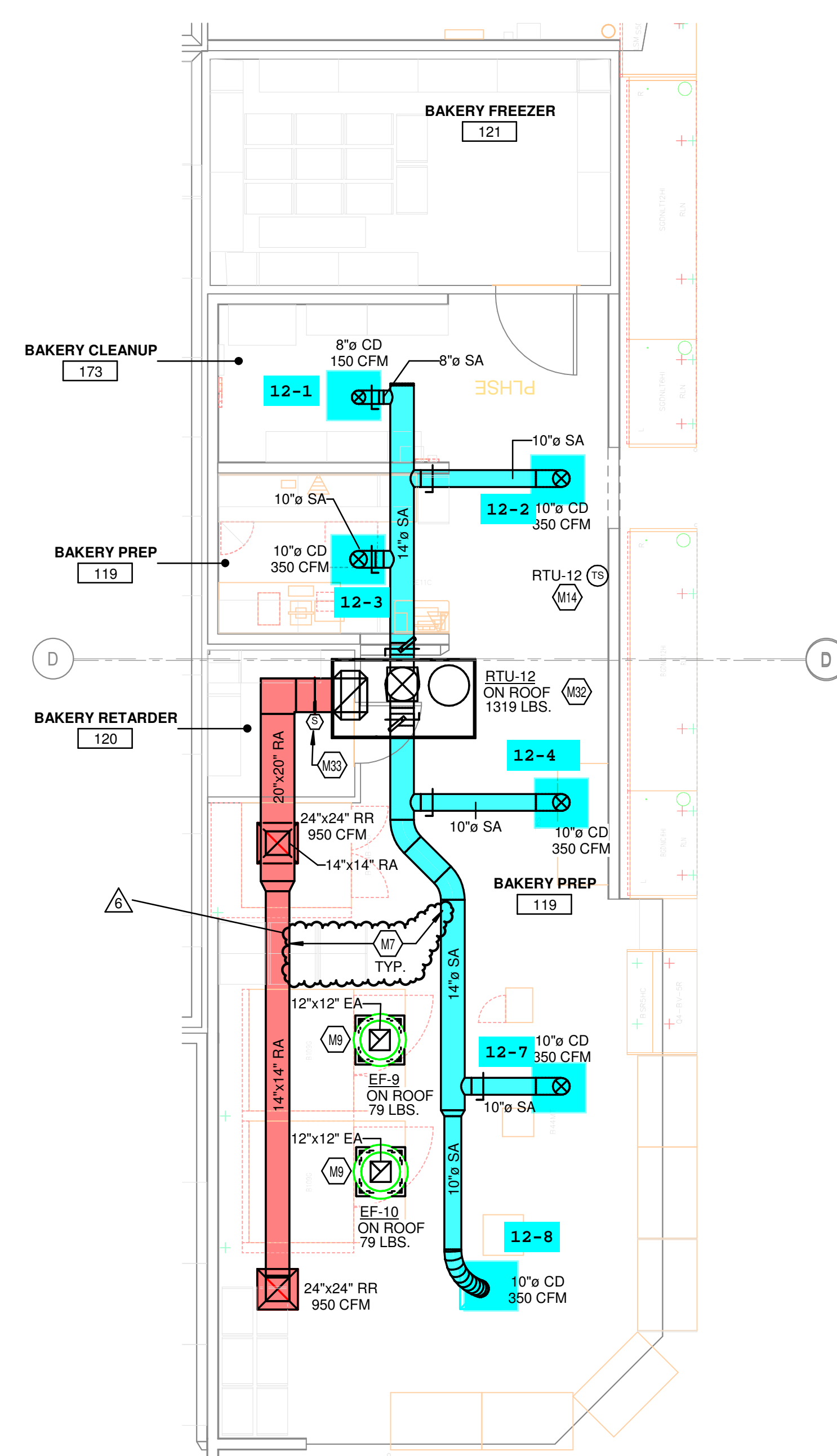
M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY ORIGINAL EQUIPMENT MANUFACTURER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.

M23 KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND BATTLES. MOUNT INDOOR UNIT A MINIMUM OF 7'-0" TO THE BOTTOM OF THE UNIT, AND PER MANUFACTURER'S RECOMMENDATIONS. ROUTE REFRIGERANT LINES THROUGH ROOF TO CONDENSING UNIT PER MANUFACTURER'S GUIDELINES. ROUTE INSULATED CONDENSATE TO HUB DRAIN IN AREA. COORDINATE ORDERING OF REFRIGERANT LINES SET WITH OWNER'S PROJECT MANAGER. REFERENCE HSD-11 FOR ADDITIONAL INFORMATION.

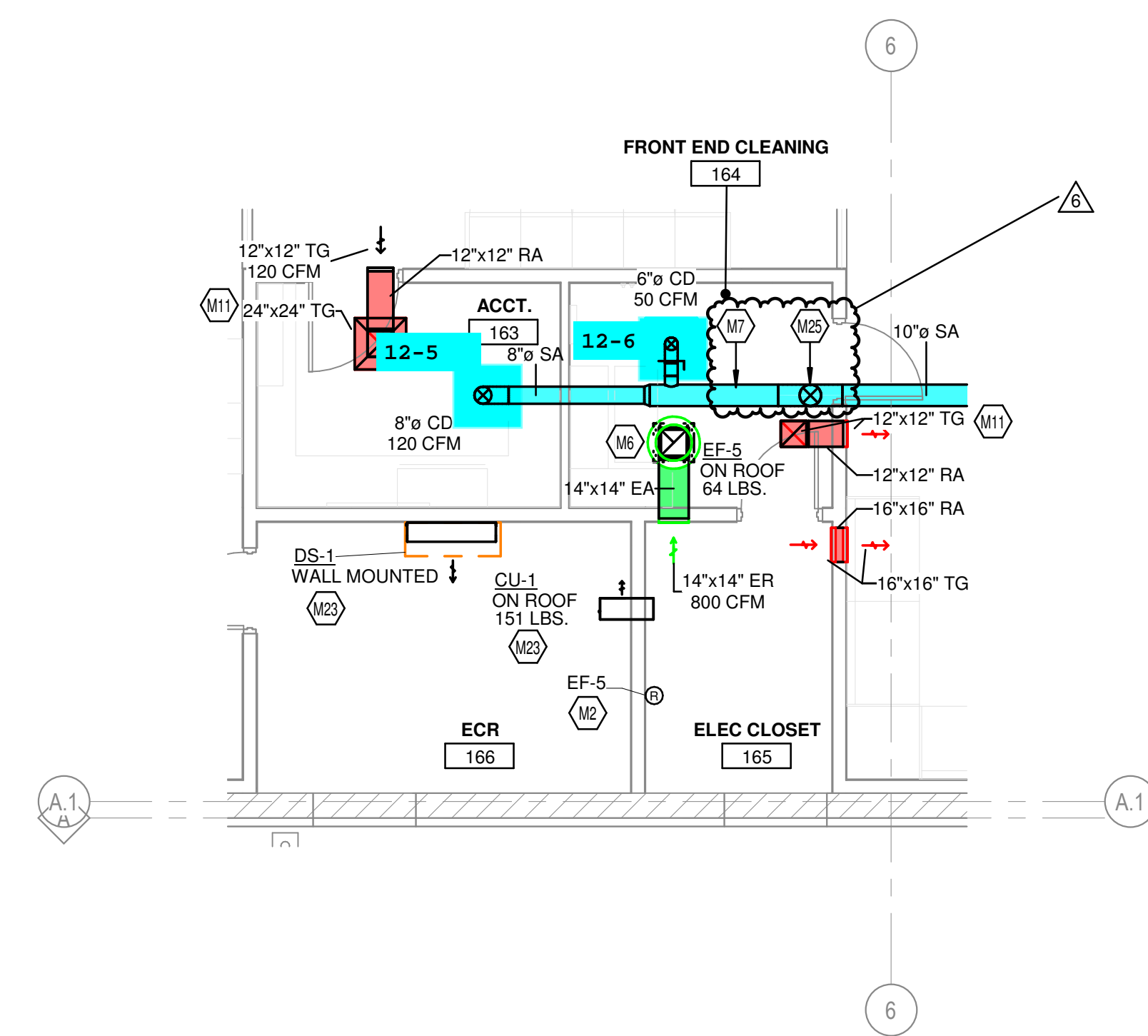
M25 DROP DUCT DOWN TO BE TIGHT TO CEILING TO AVOID VISIBILITY FROM SALES FLOOR.

M32 ROOF TOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. AIRFLOW TO BE BALANCED TO SCHEDULED AIRFLOW BY THIRD PARTY. REFERENCE DETAIL HSD-10 ON SHEET M1.1.

M33 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK, DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL SAMPLING TUBES AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. DETECTOR, FAN SHUTDOWN WIRING AND CONTROLS BY OTHERS.



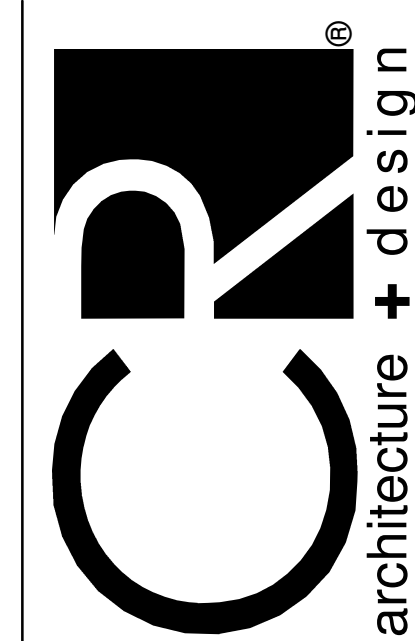
2 HVAC ENLARGED PLAN - BAKERY
3/16" = 1'-0"



1 HVAC ENLARGED PLAN - CUSTOMER SERVICE
3/16" = 1'-0"

KEYED NOTES

- M2 THERMOSTAT TO BE MOUNTED AT 5'0" AFF. PROVIDE LOCKABLE PROTECTIVE COVER OVER DEVICE.
- M6 DUCT UP TO OPENING THRU ROOF. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEG F.
- M9 B-VENT DUCT UP FROM RACK OVEN VENT COLLAR THROUGH ROOF. DUCTS ARE ONLY TO OFFSET ABOVE ACT TILES. DUCTS ARE TO BE RUN STRAIGHT AND VERTICAL WHEN VISIBLE TO SALES FLOOR. REFER TO DETAIL HSD-7 FOR ADDITIONAL INFORMATION.
- M11 INSTALL TRANSFER GRILLES IN ACCORDANCE WITH 233713.00-13 ON MS.2
- M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY ORIGINAL EQUIPMENT MANUFACTURER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M23 KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND BAFFLES. MOUNT INDOOR UNIT A MINIMUM OF 7'-2" TO THE BOTTOM OF THE UNIT, AND PER MANUFACTURER'S RECOMMENDATIONS. ROUTE REFRIGERANT LINES THROUGH ROOF TO CONDENSING UNIT PER MANUFACTURER'S GUIDELINES. ROUTE INSULATED CONDENSATE TO HUB DRAIN IN AREA. COORDINATE ORDERING OF REFRIGERANT LINES SET WITH OWNER'S PROJECT MANAGER. REFERENCE HSD-11 FOR ADDITIONAL INFORMATION.
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- M33 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK, DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL SAMPLING TUBE(S) AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. DETECTOR, FAN SHUTDOWN WIRING AND CONTROLS BY OTHERS.



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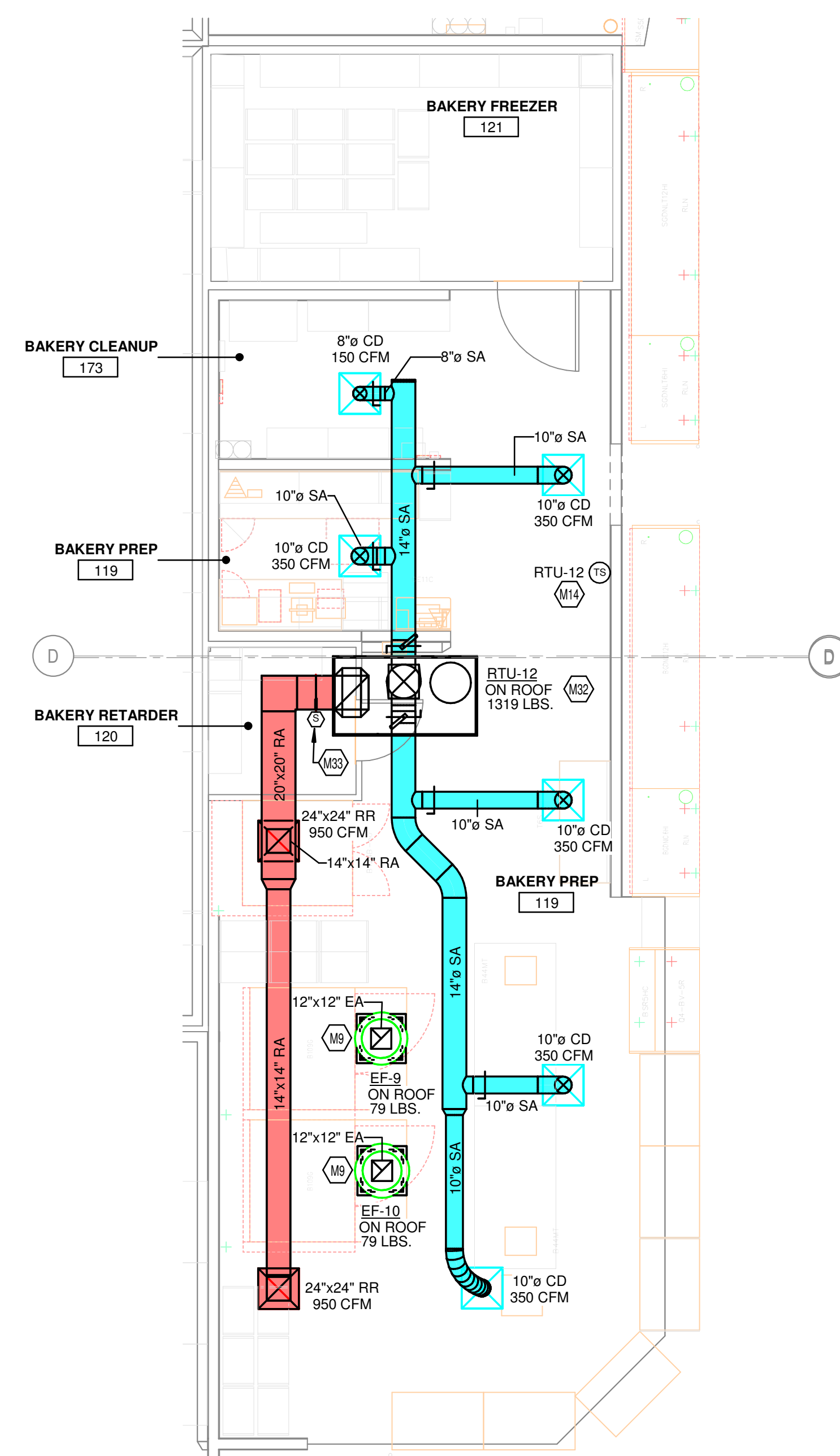
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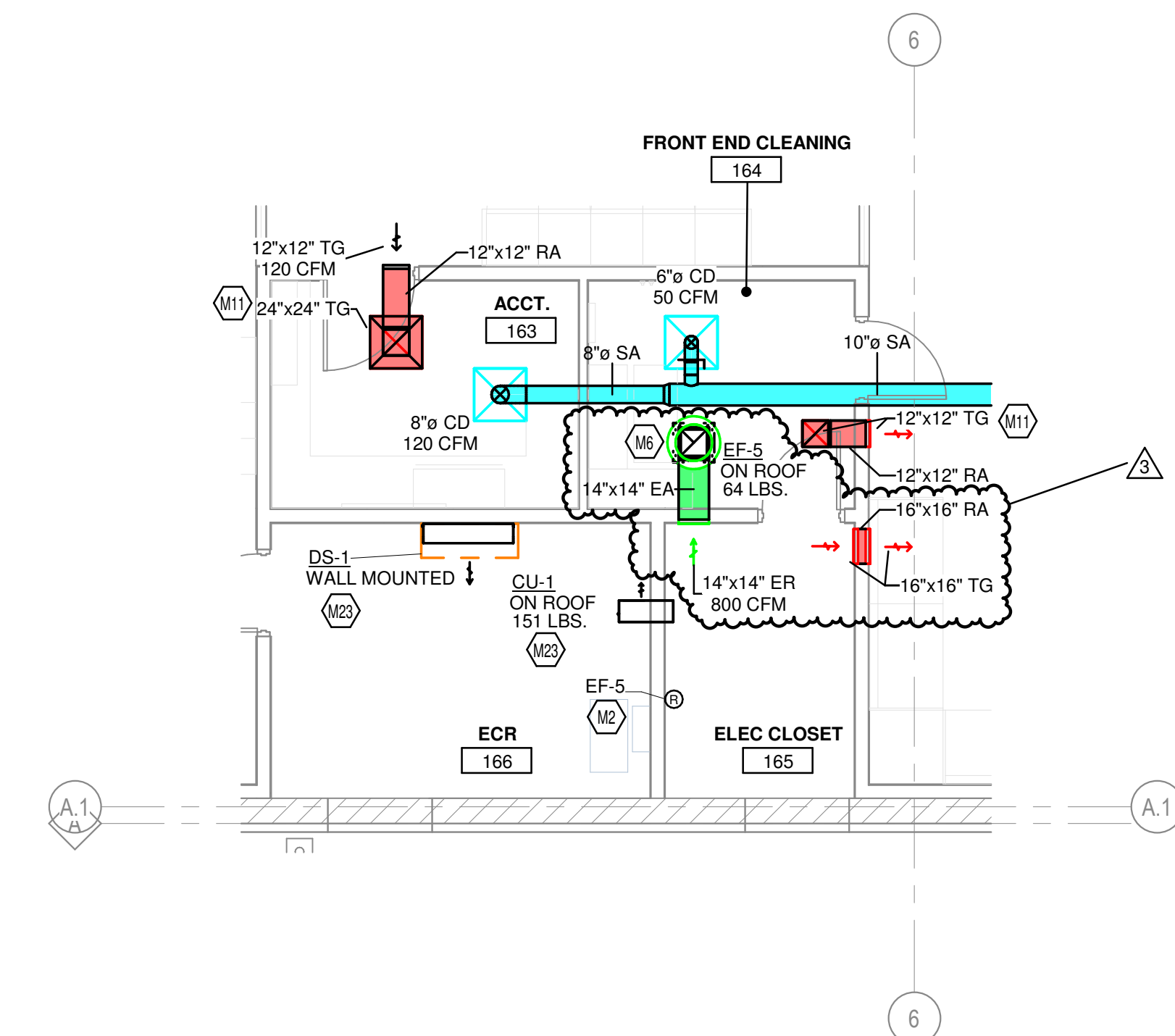


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2 HVAC ENLARGED PLAN - BAKERY
3/16" = 1'-0"



1 HVAC ENLARGED PLAN - CUSTOMER SERVICE
3/16" = 1'-0"

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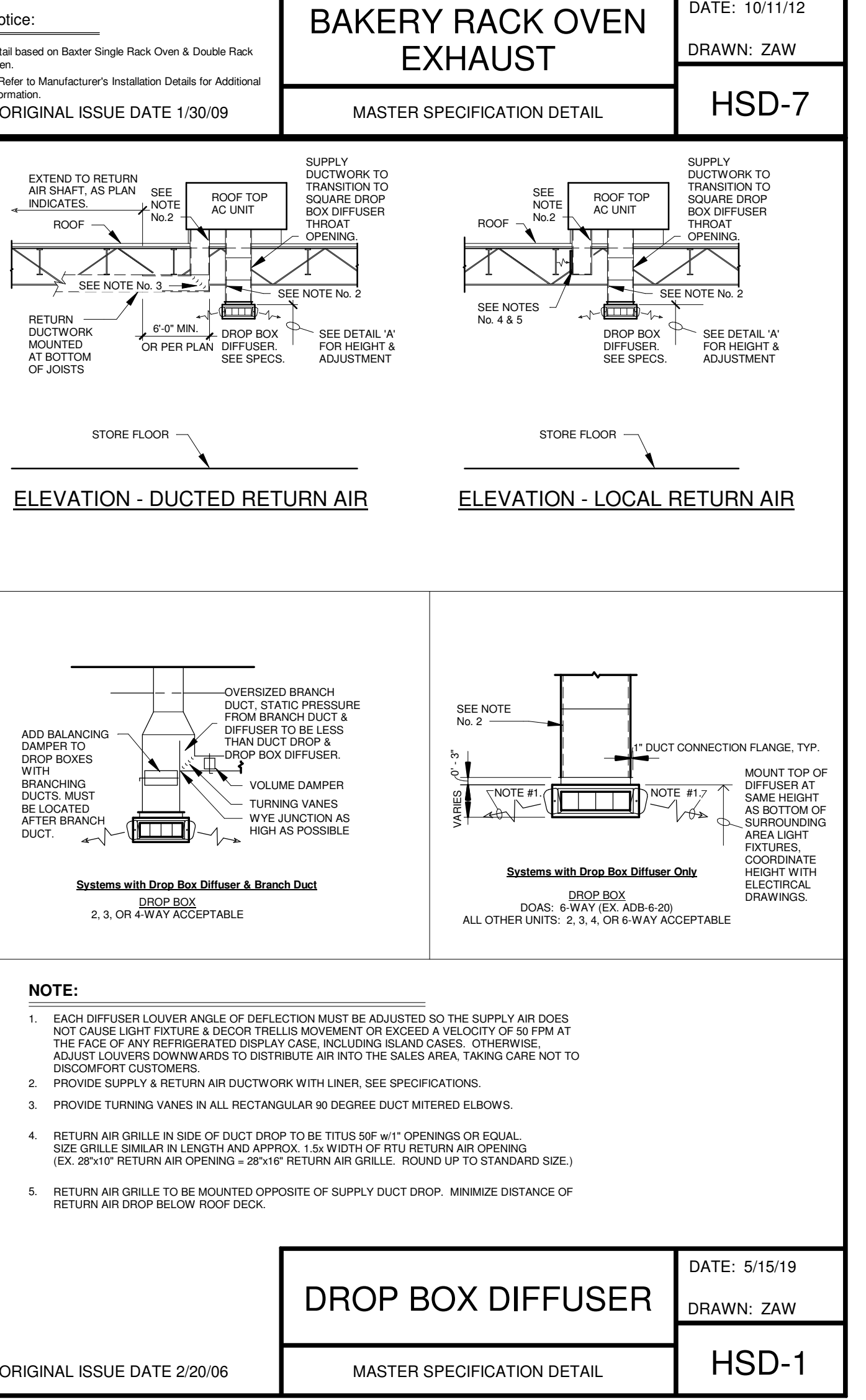
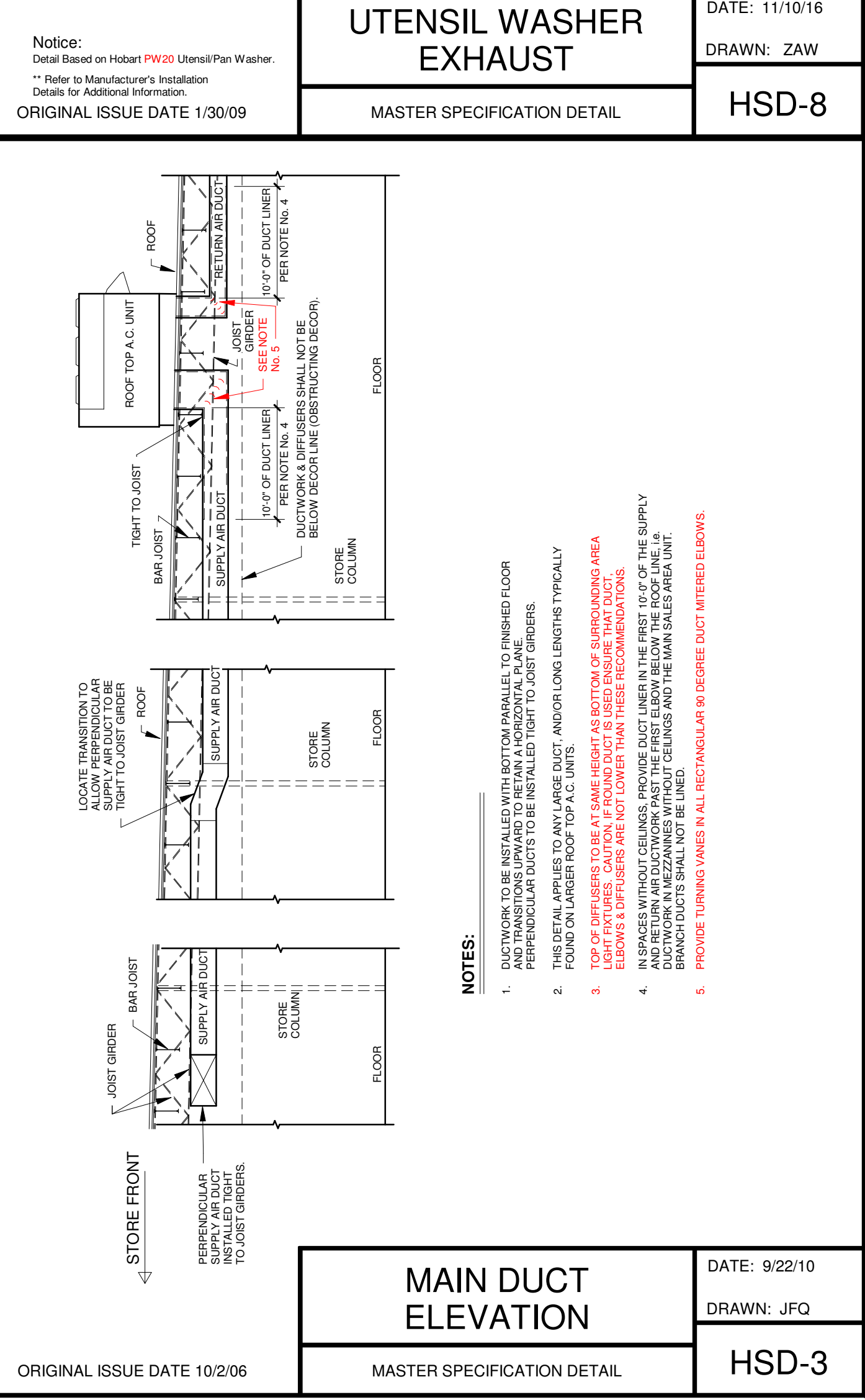
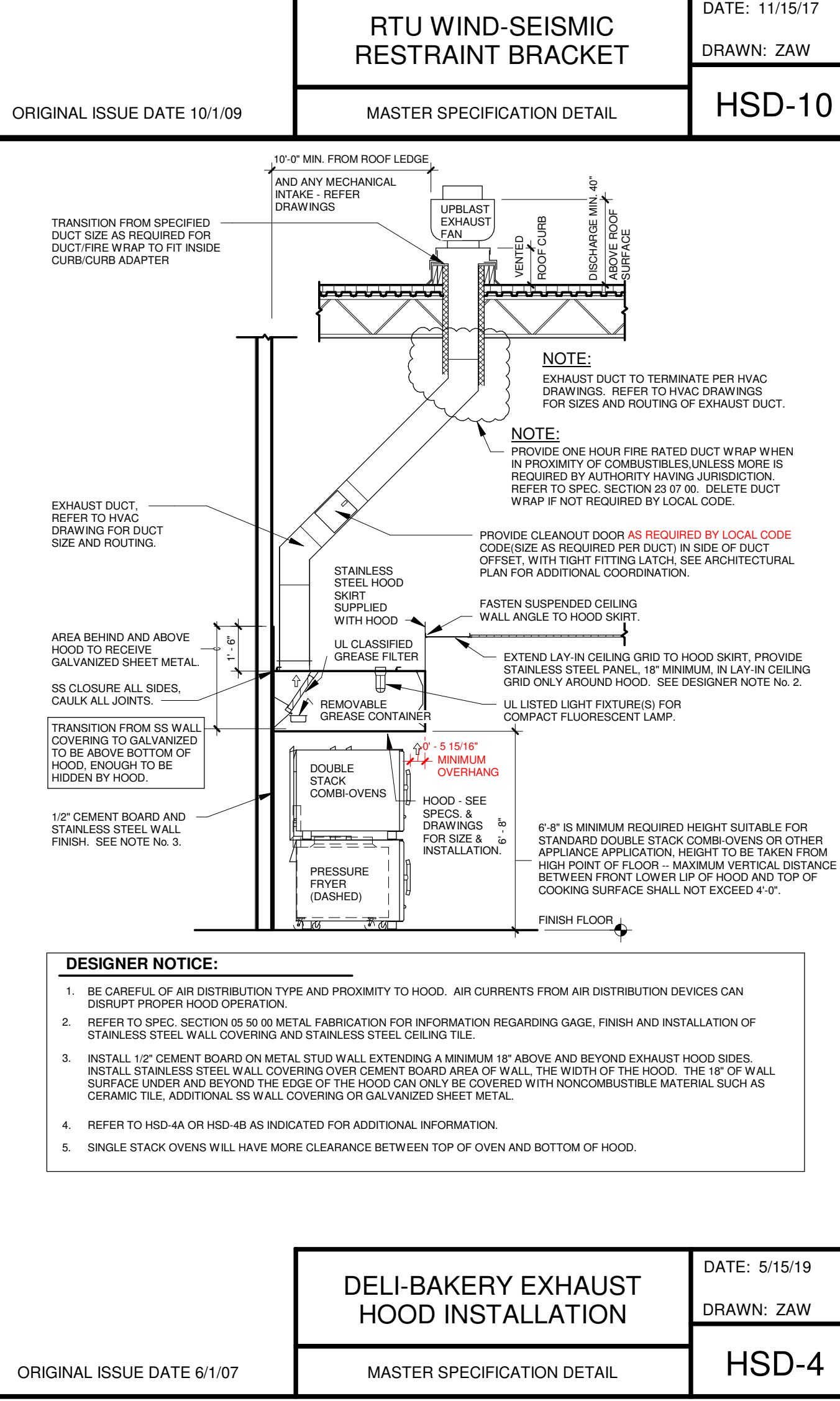
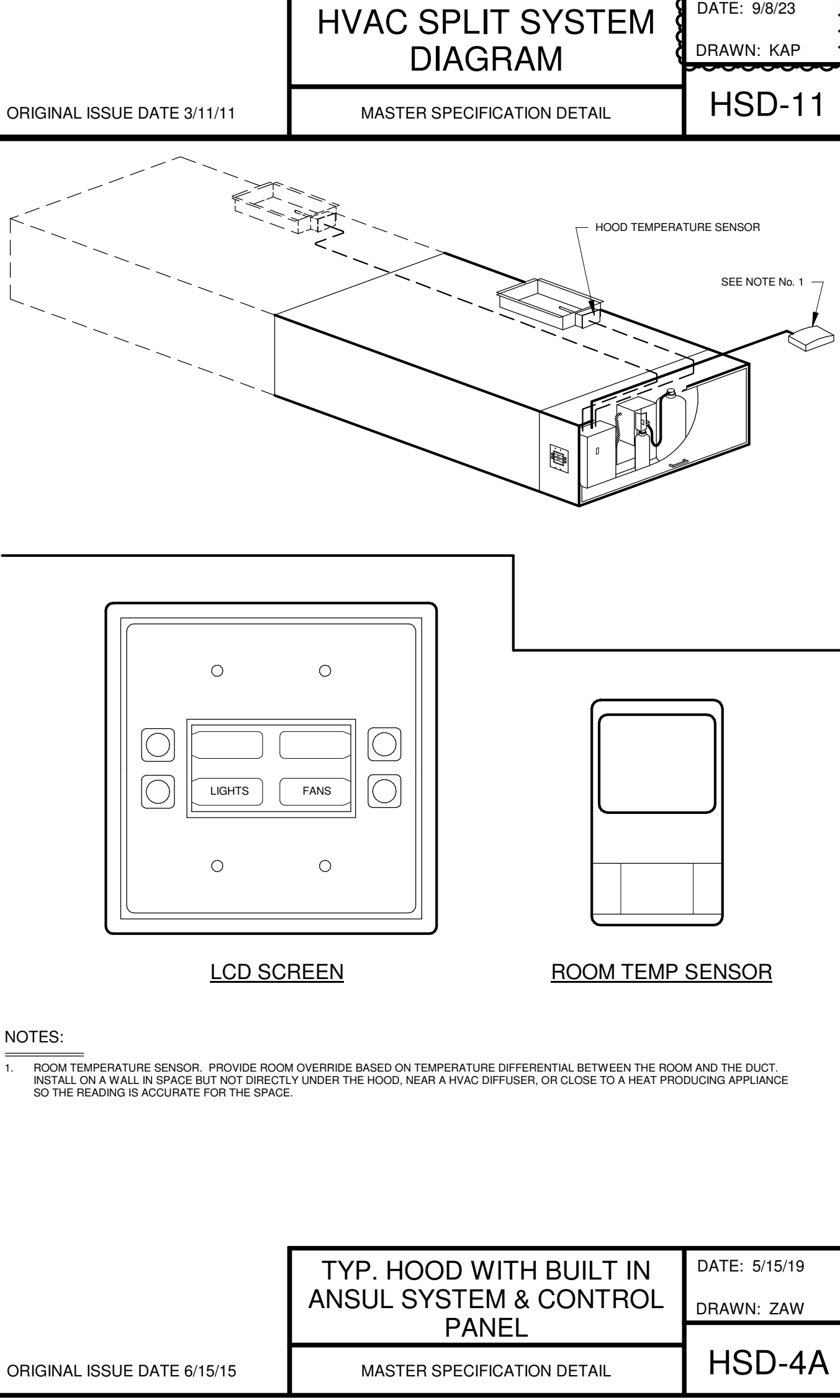
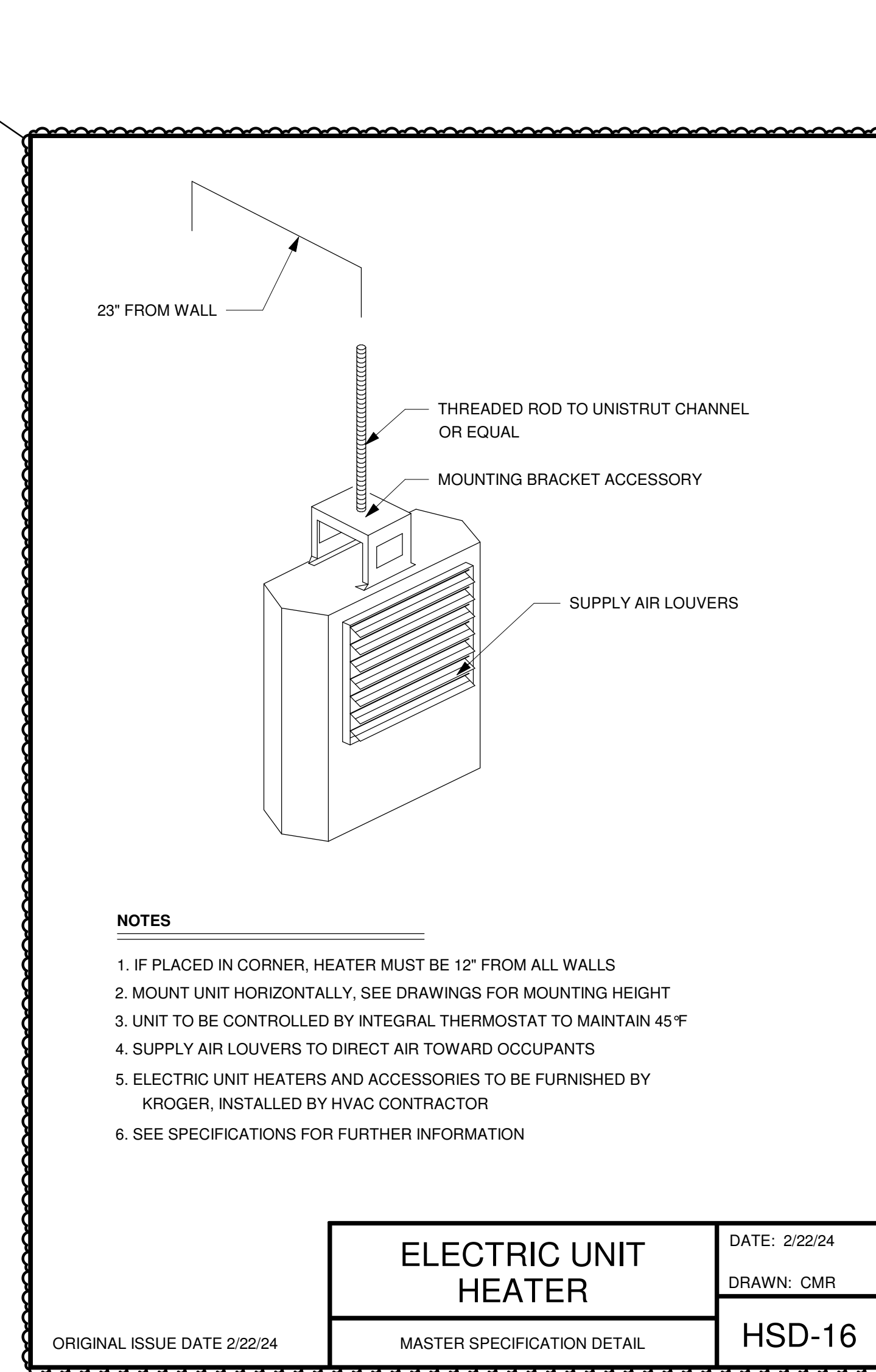
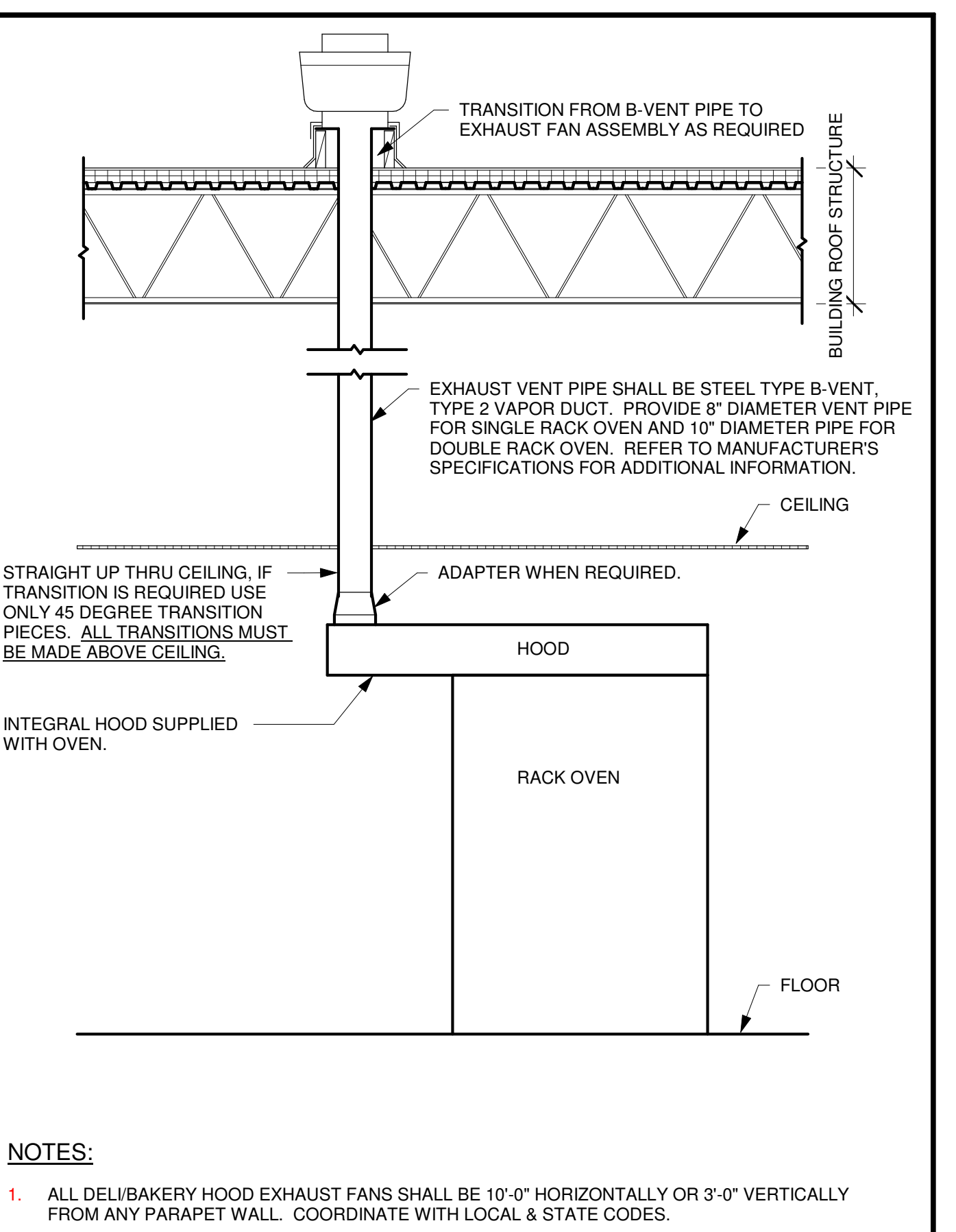
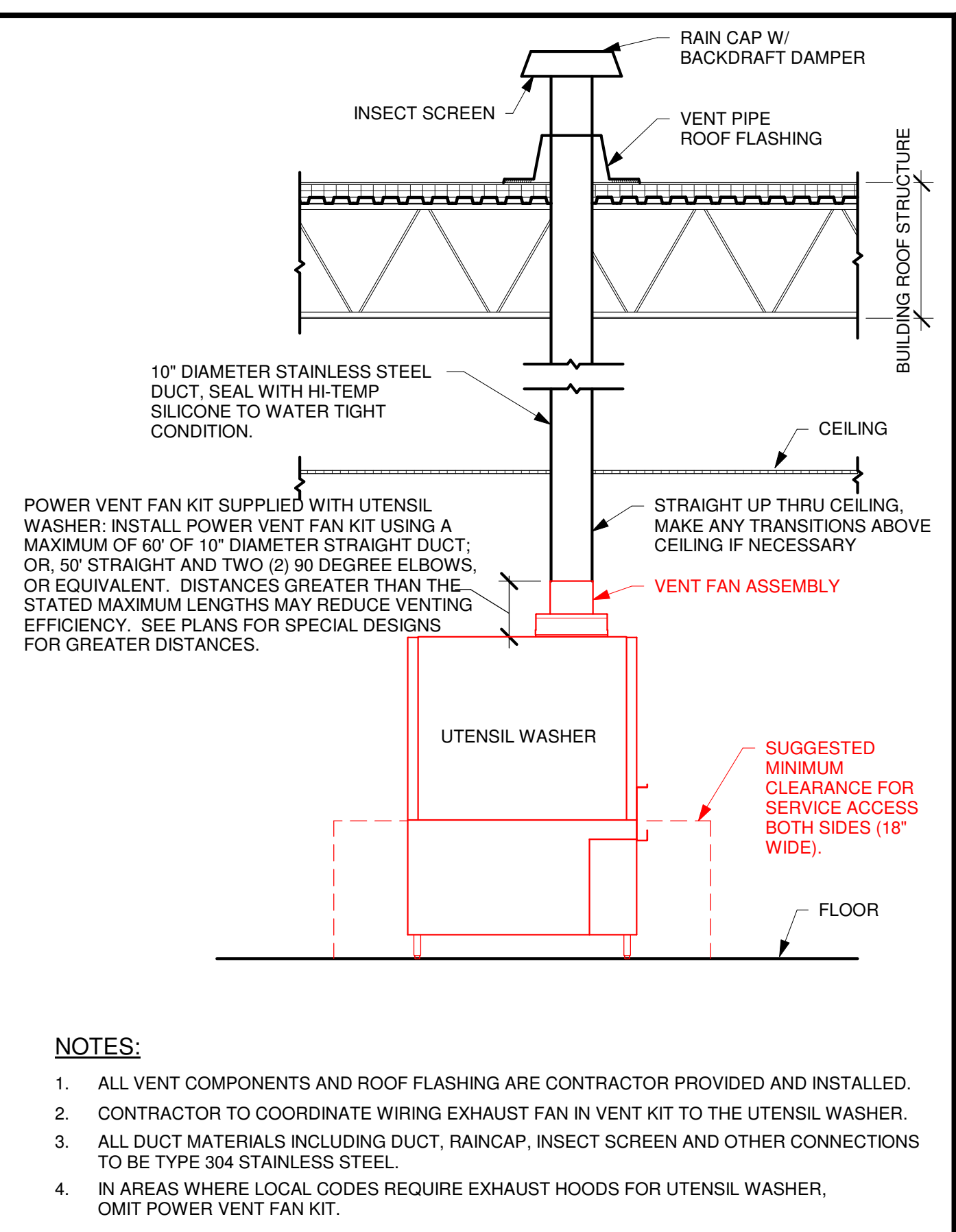
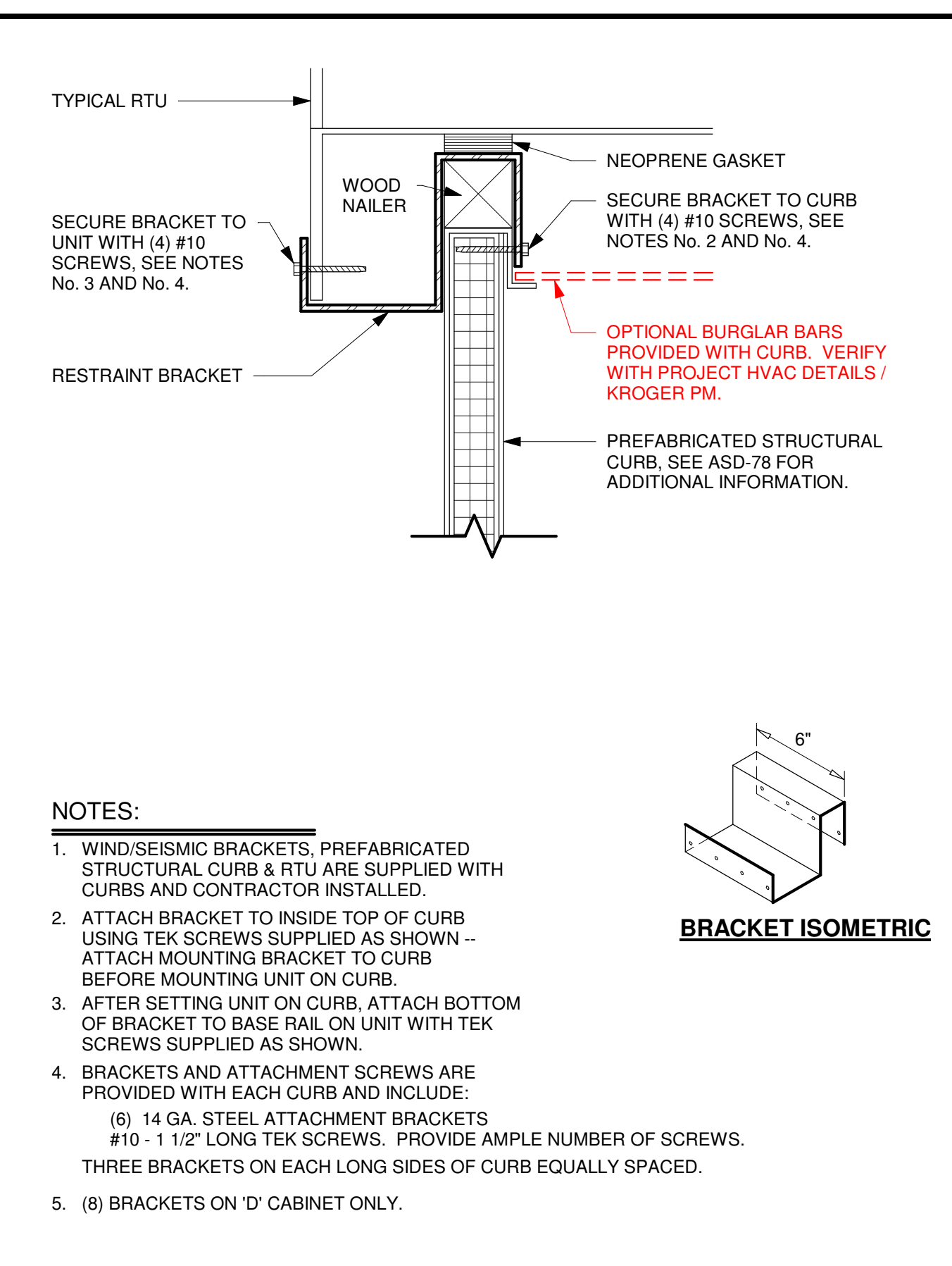
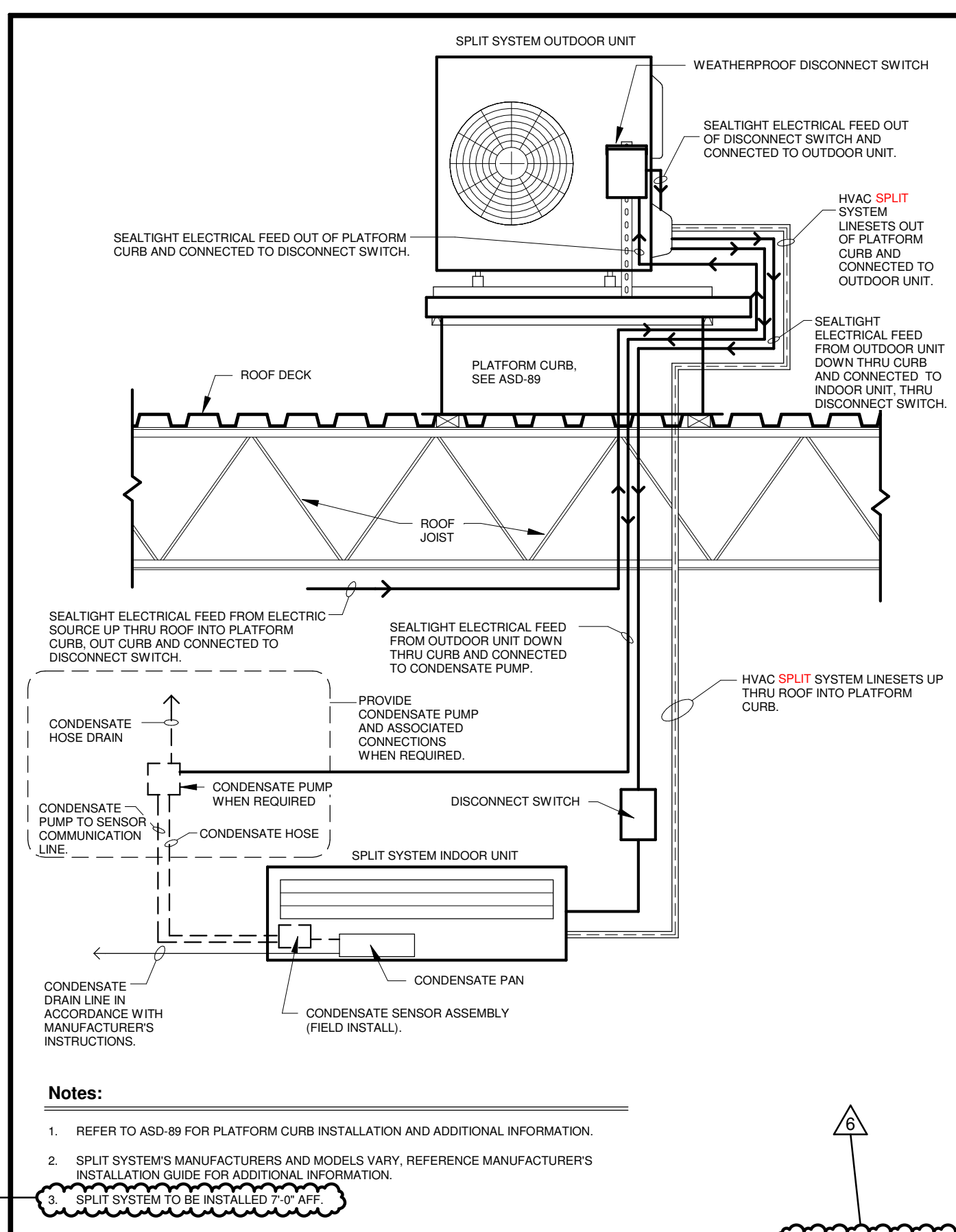
SHEET TITLE

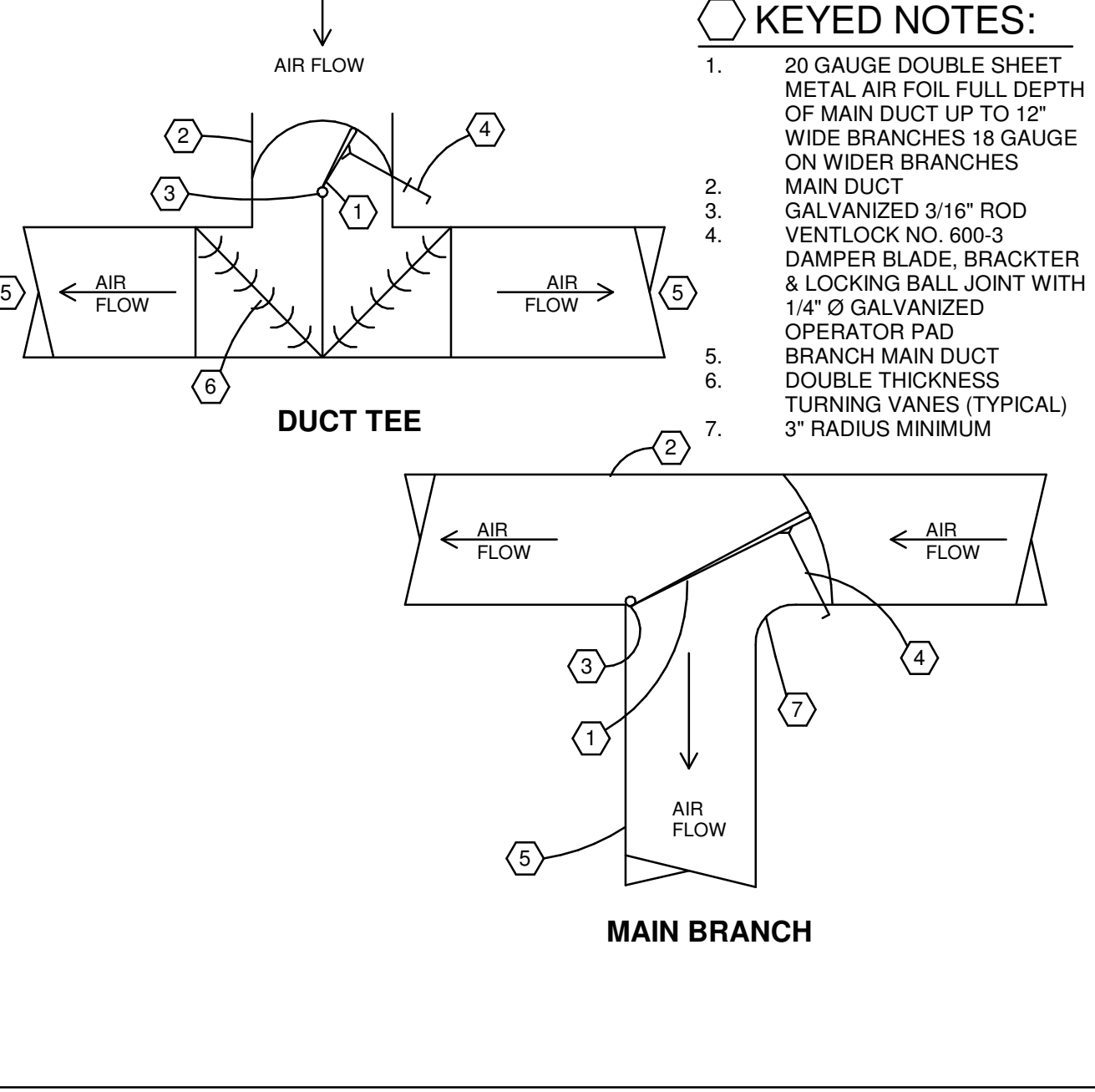
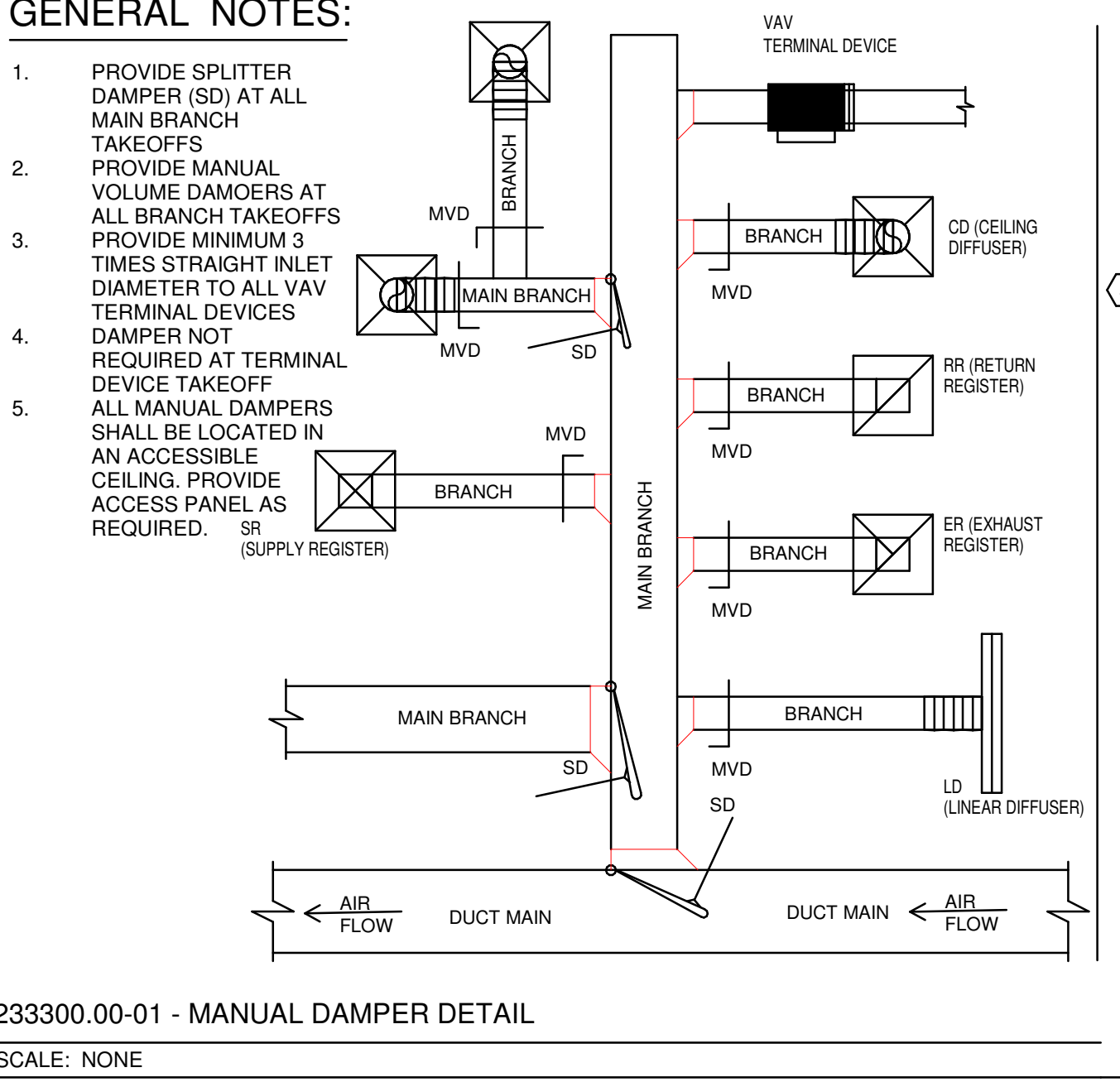
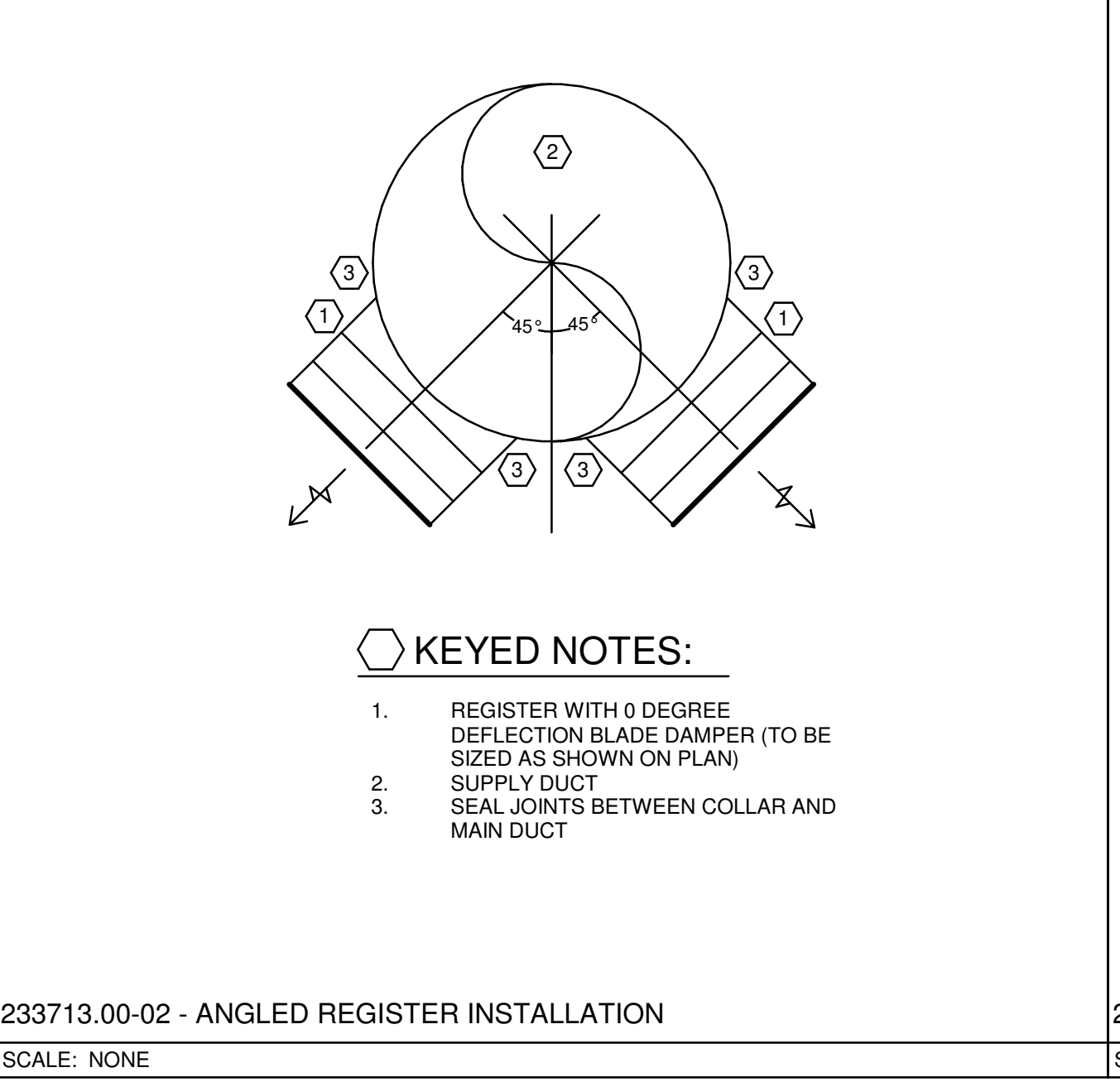
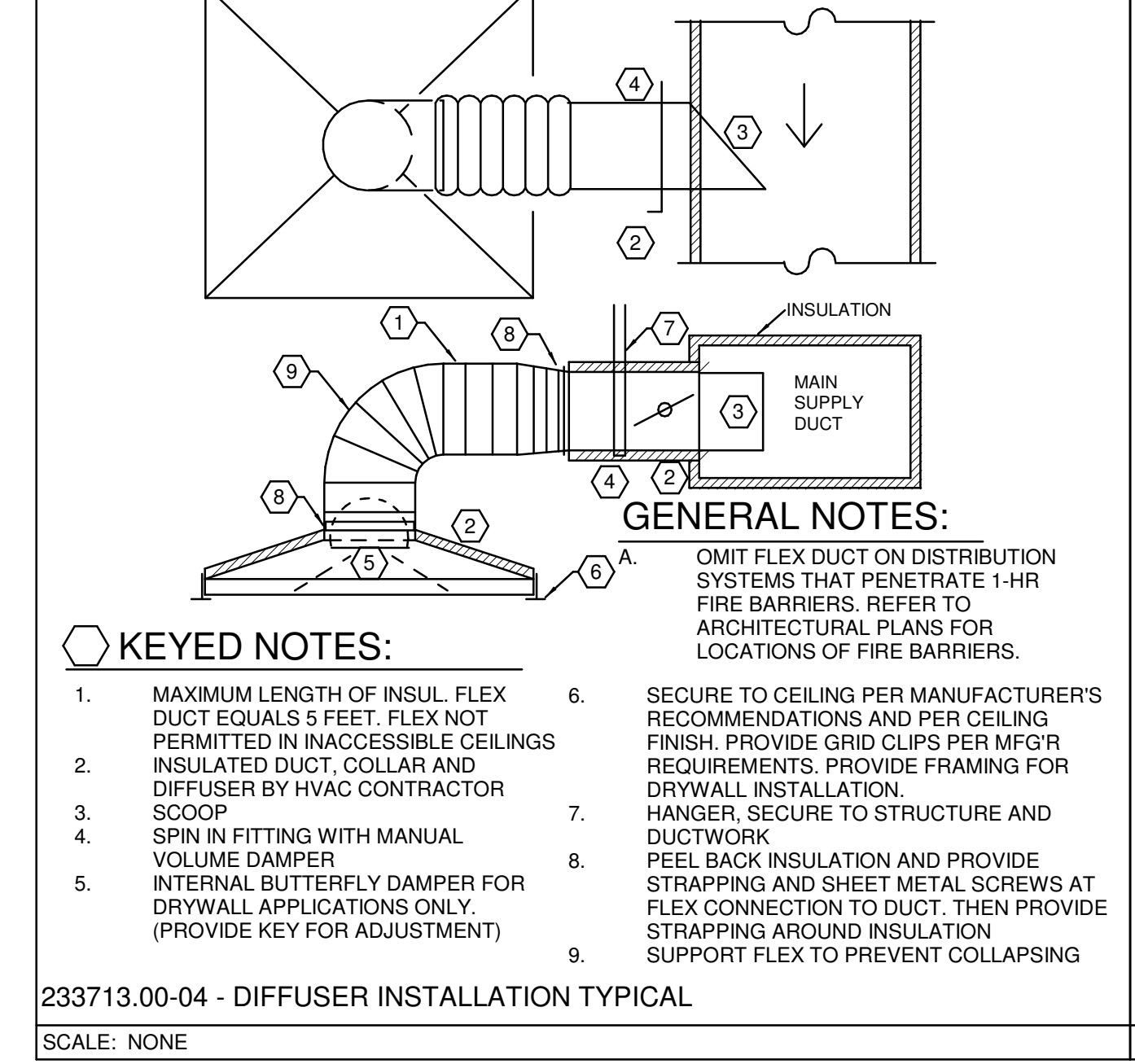
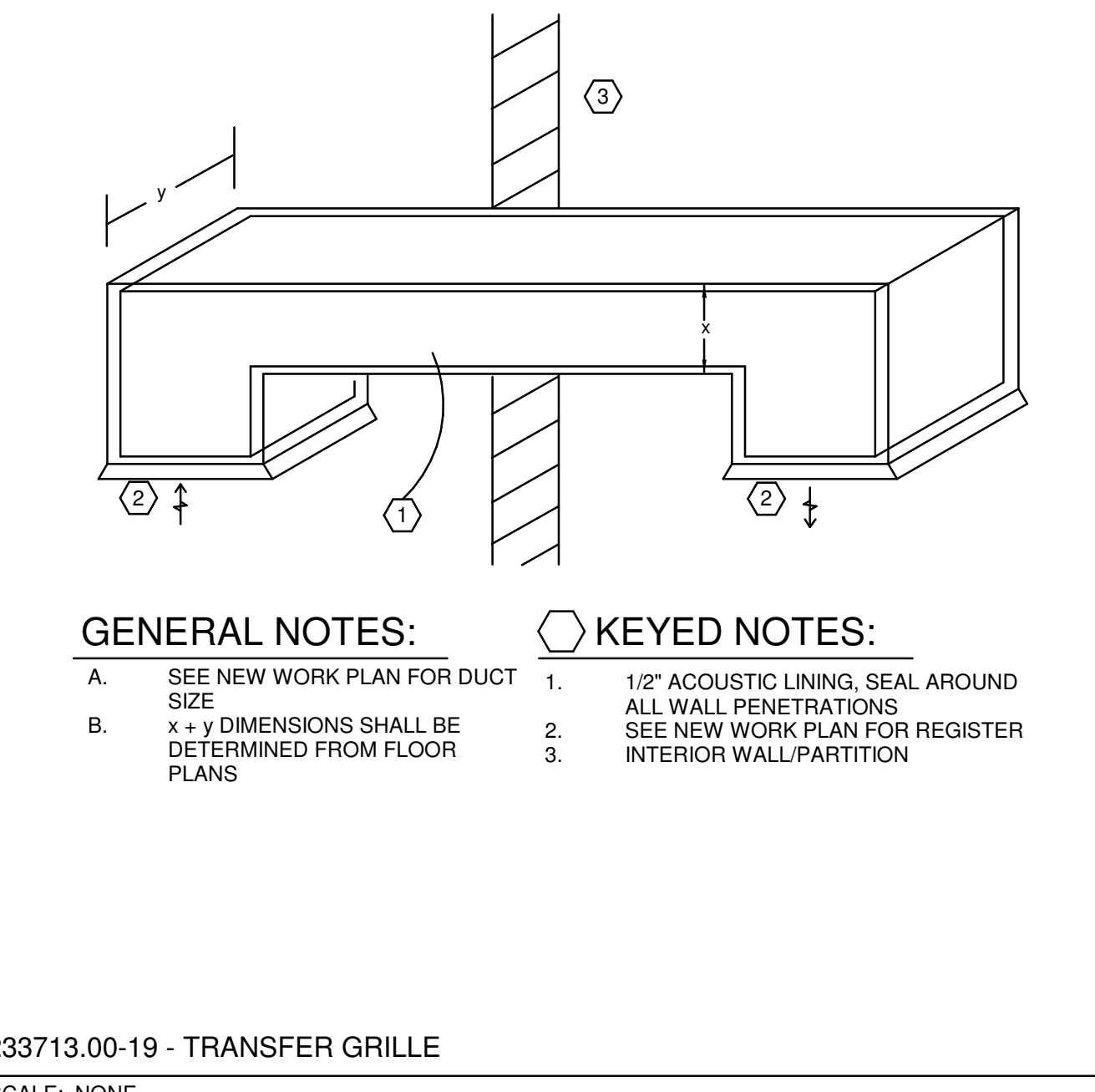
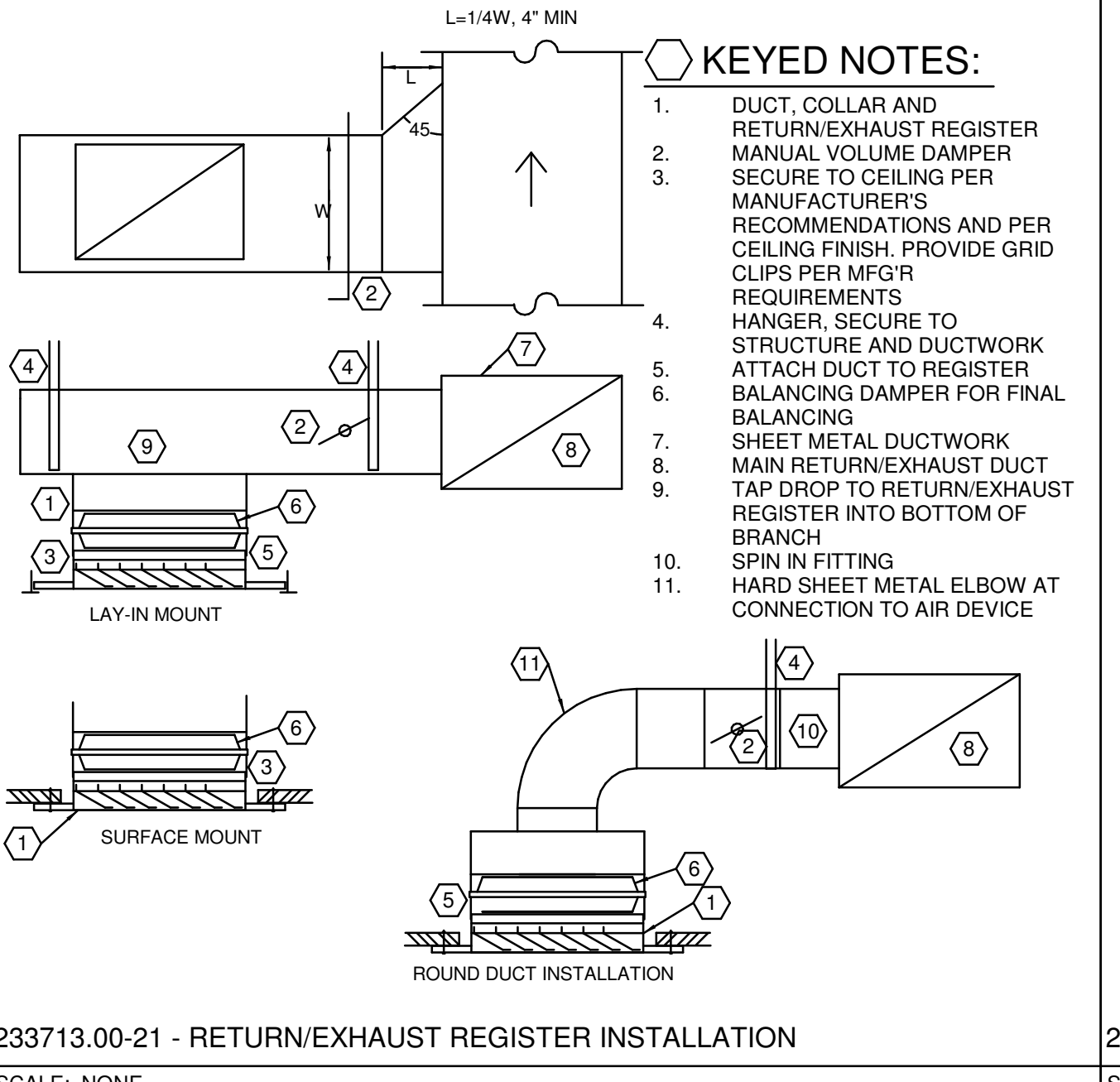
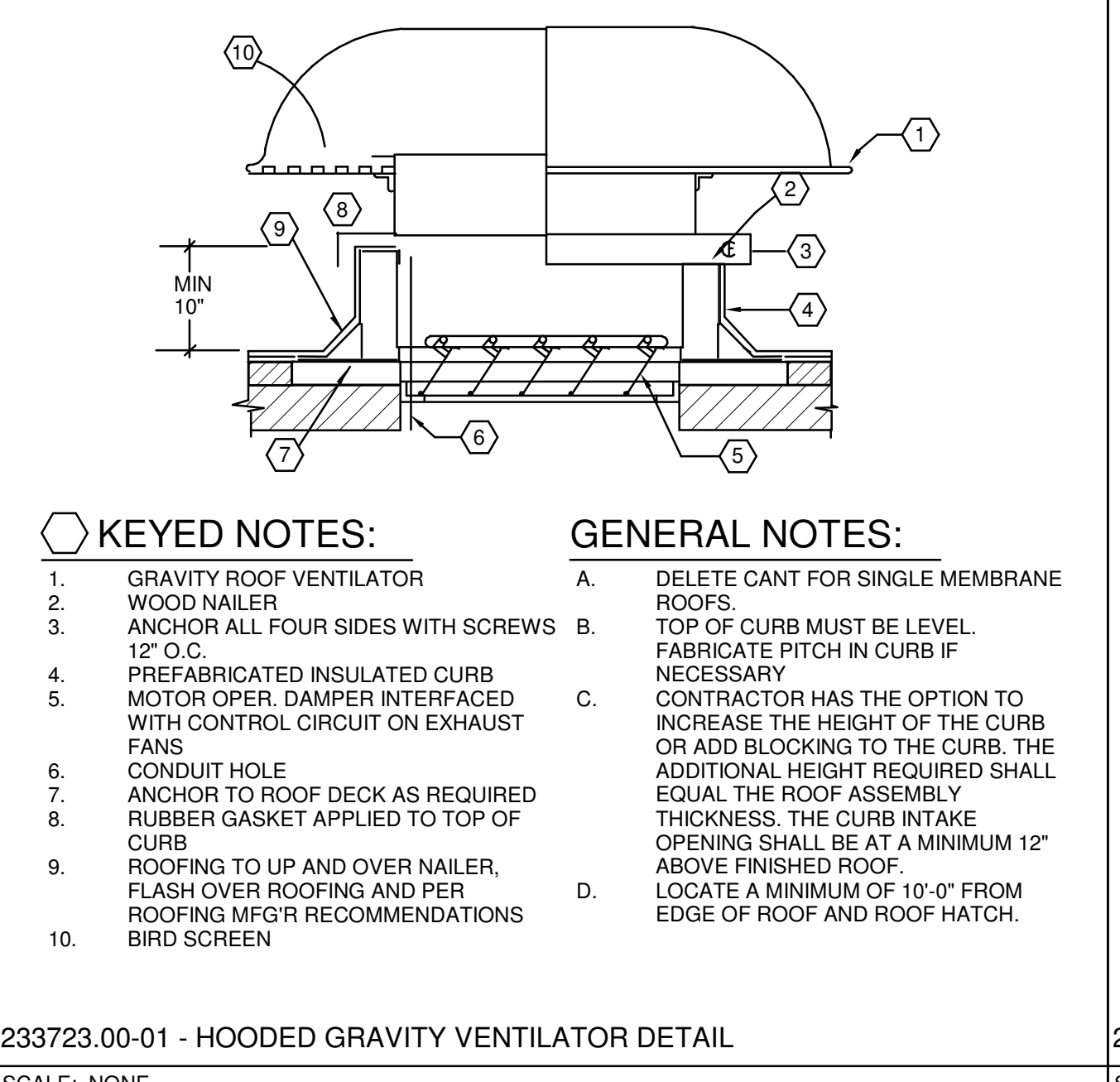
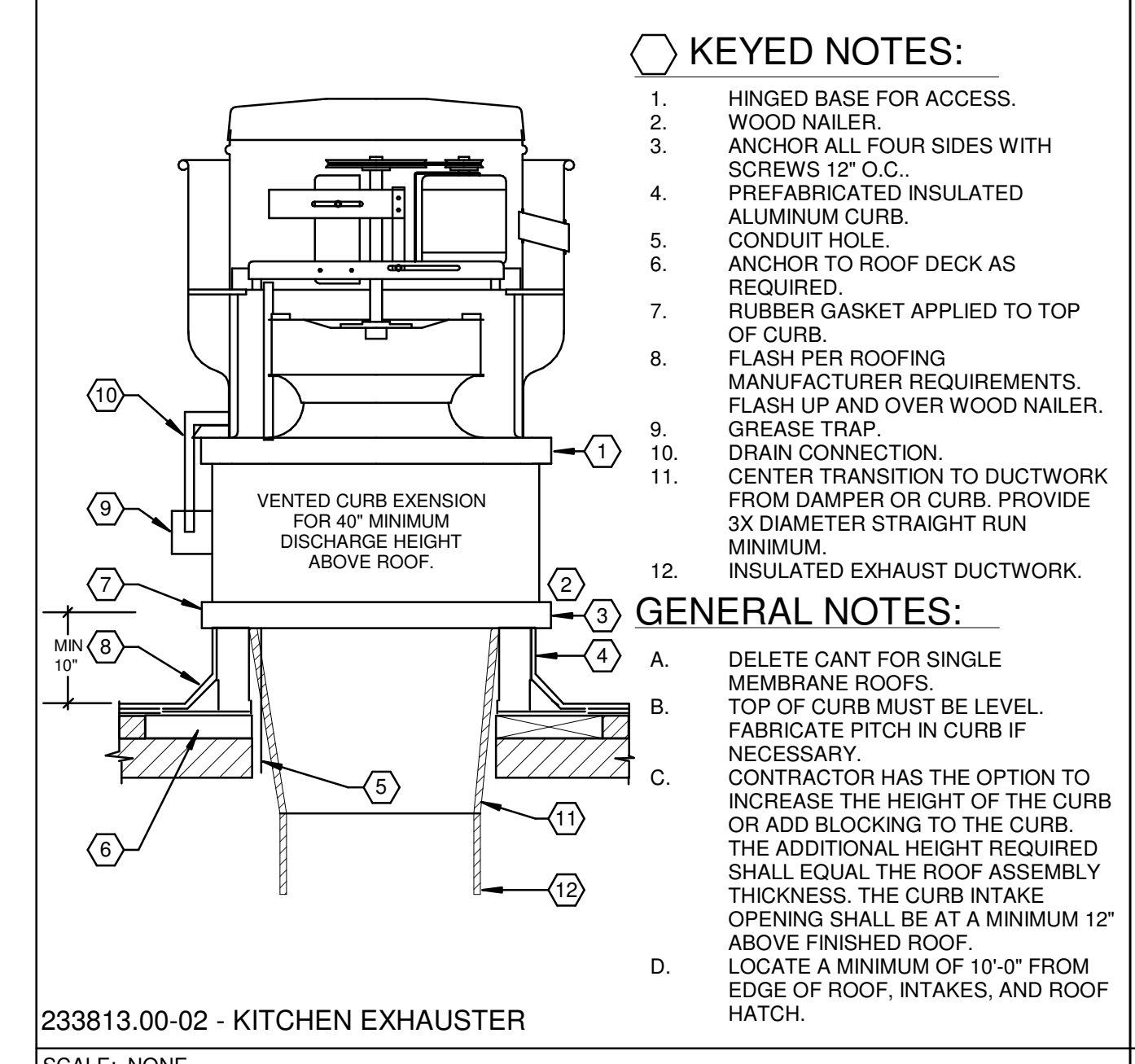
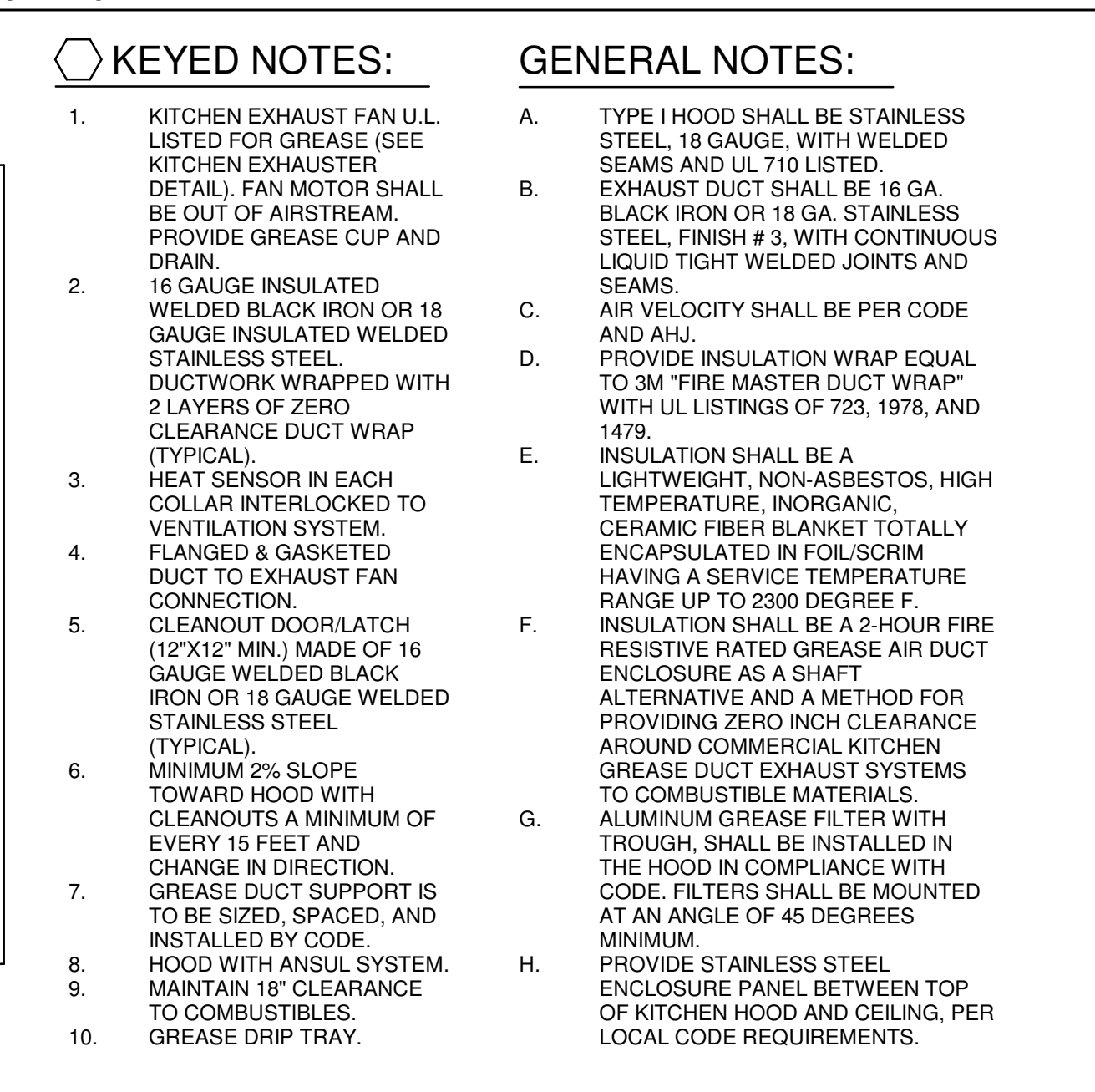
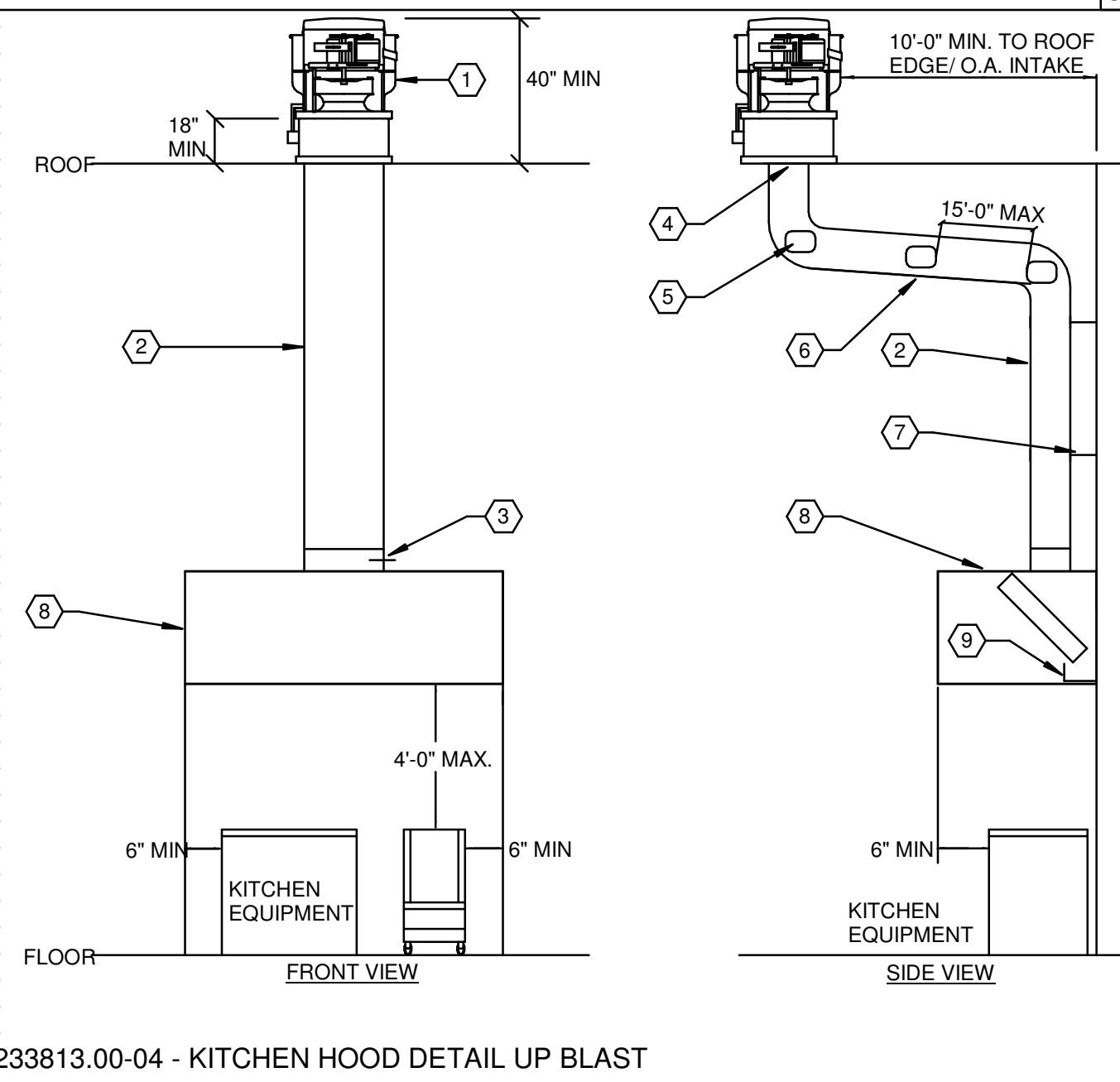
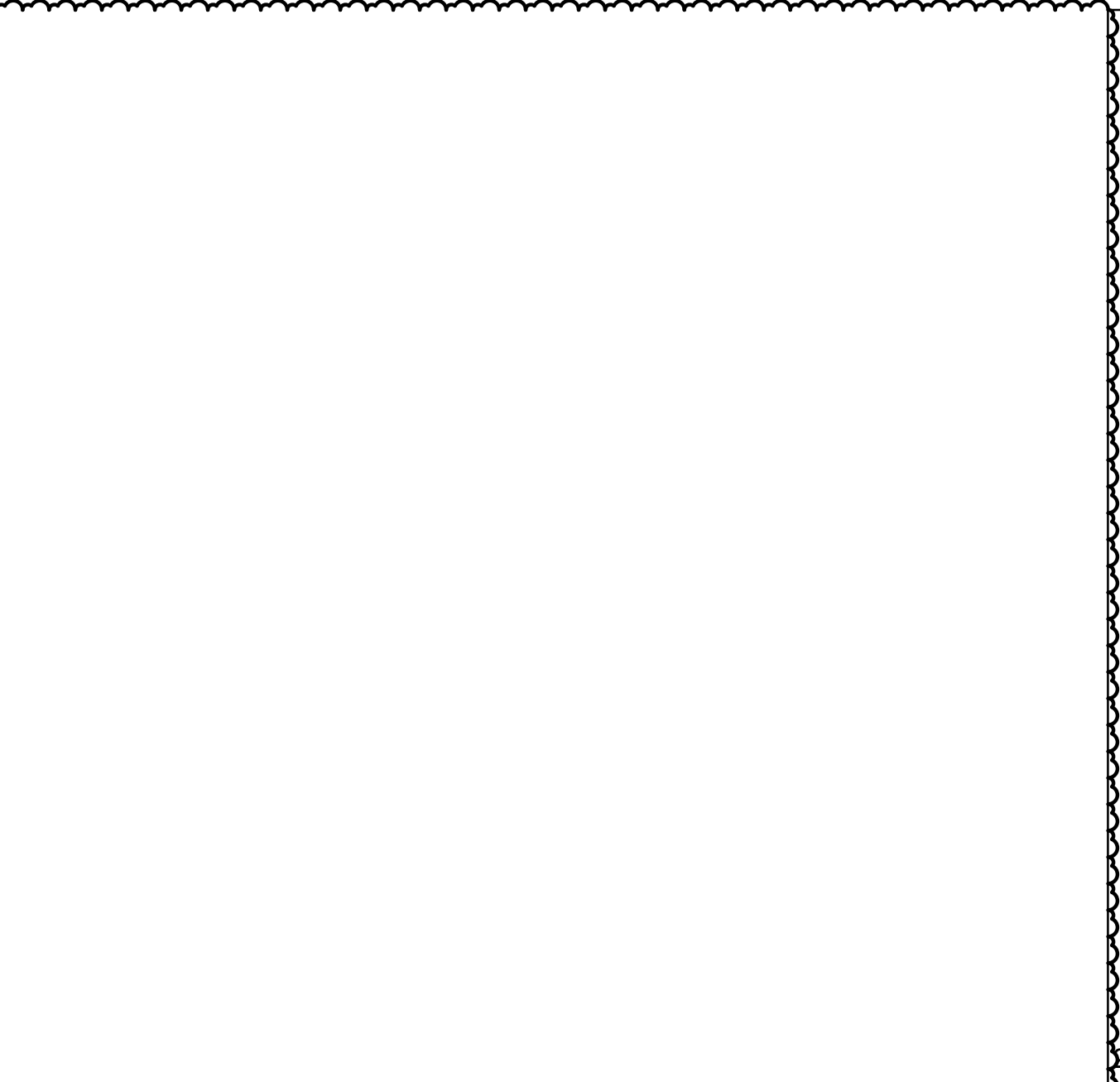
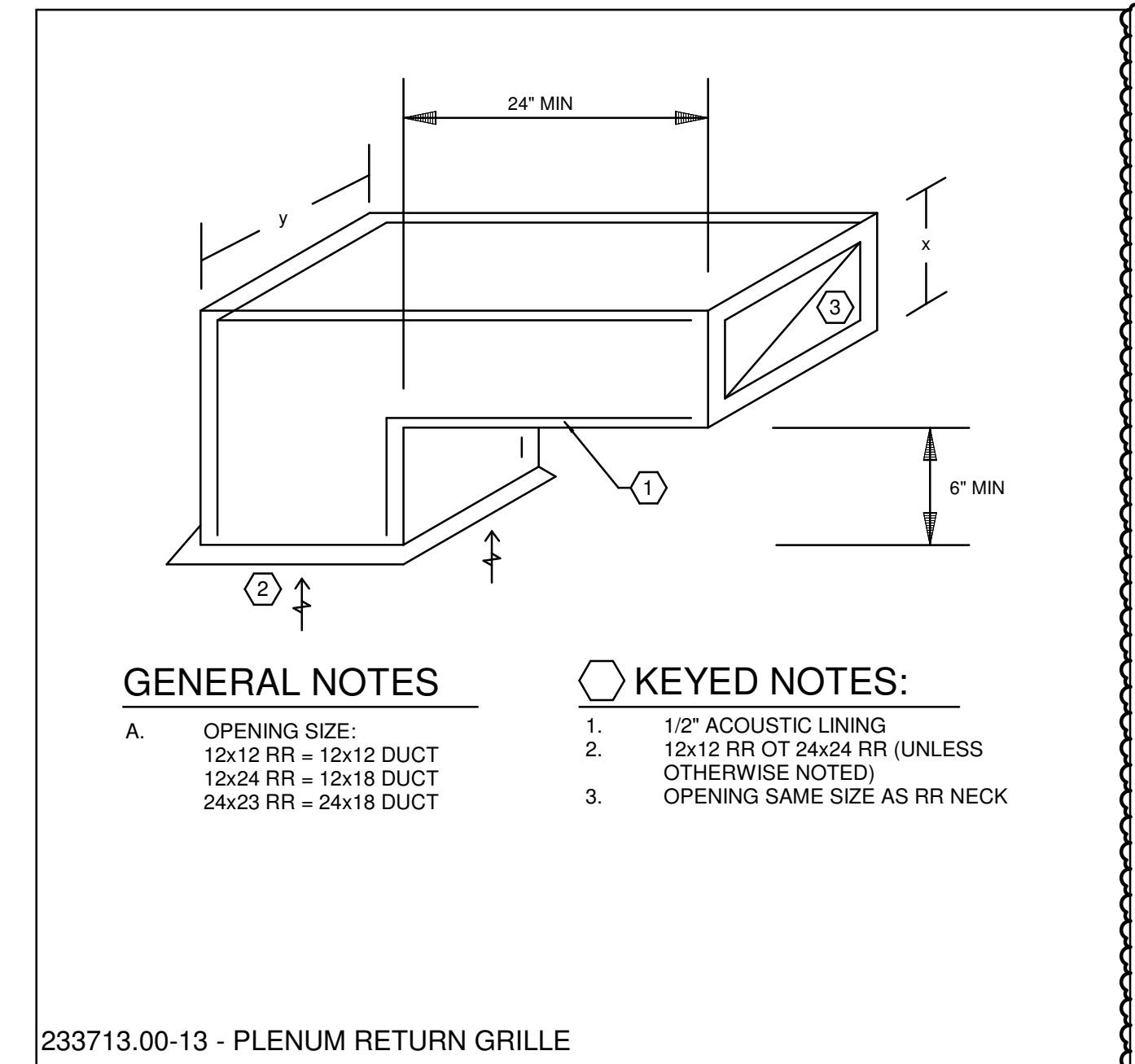
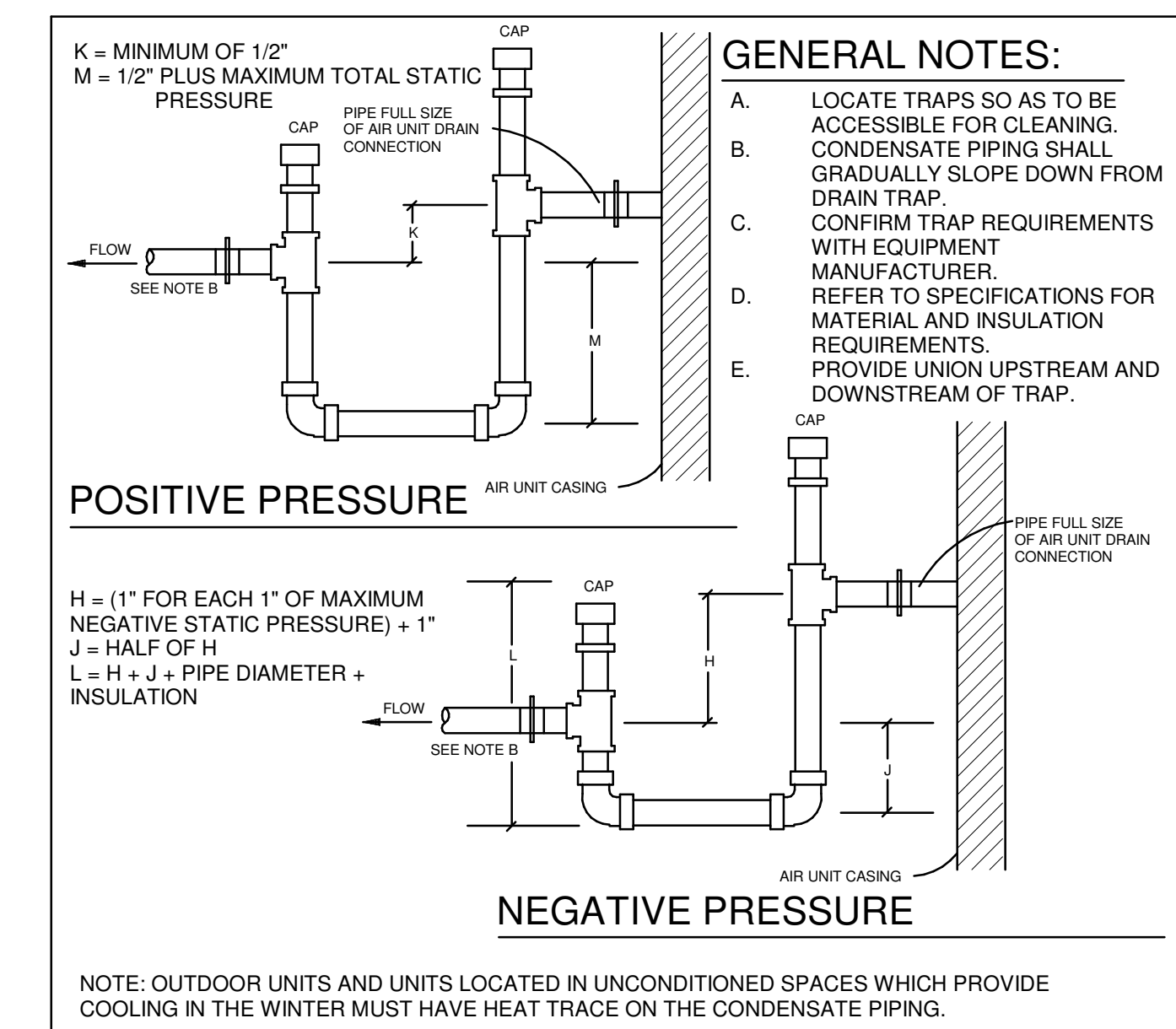
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PLANS

SHEET NO.

M1.4

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HOOD INFORMATION - JOB#5941644

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 CNFNG				
										WIDTH	LENG	HEIGHT	DIA		CFM	VEL	SP	END TO END	RDW
1	H1A - K-0002317	6024 ND-2	CAPTIVEAIRE	8' 0"	450 DEG	I	MEDIUM	150	1200			4'	12'	1200	1528	-0.294'	304 SS WHERE EXPOSED	LEFT	ALDNE
2	H1B - K-0002317	6024 ND-2	CAPTIVEAIRE	8' 0"	450 DEG	I	MEDIUM	150	1200			4'	12'	1200	1528	-0.294'	304 SS WHERE EXPOSED	RIGHT	ALDNE

HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)		LIGHT(S)		UTILITY CABINET(S)		FIRE SYSTEM	HOOD HANGING PIPING	HOOD WEIGHT						
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE				WIRE GUARD	LOCATION	SIZE	TYPE	SIZE	ELECTRICAL MODEL #
1	H1A - K-0002317	SS BAFFLE WITH HANDLES	5	16"	16'	30%	3	L55 SERIES E26	NO	LEFT	12"x60"x24"	TANK FS	4.0/4.0	SC-310110MA	1 LIGHT 1 FAN	YES	744 LBS
2	H1B - K-0002317	SS BAFFLE WITH HANDLES	5	16"	16'	30%	3	L55 SERIES E26	NO							YES	420 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	H1A - K-0002317	FIELD WRAPPER 18.00" HIGH FRONT, LEFT. LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 304 SS. SENSOR-CV.
2	H1B - K-0002317	FIELD WRAPPER 18.00" HIGH FRONT, RIGHT. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 304 SS. SENSOR-CV.

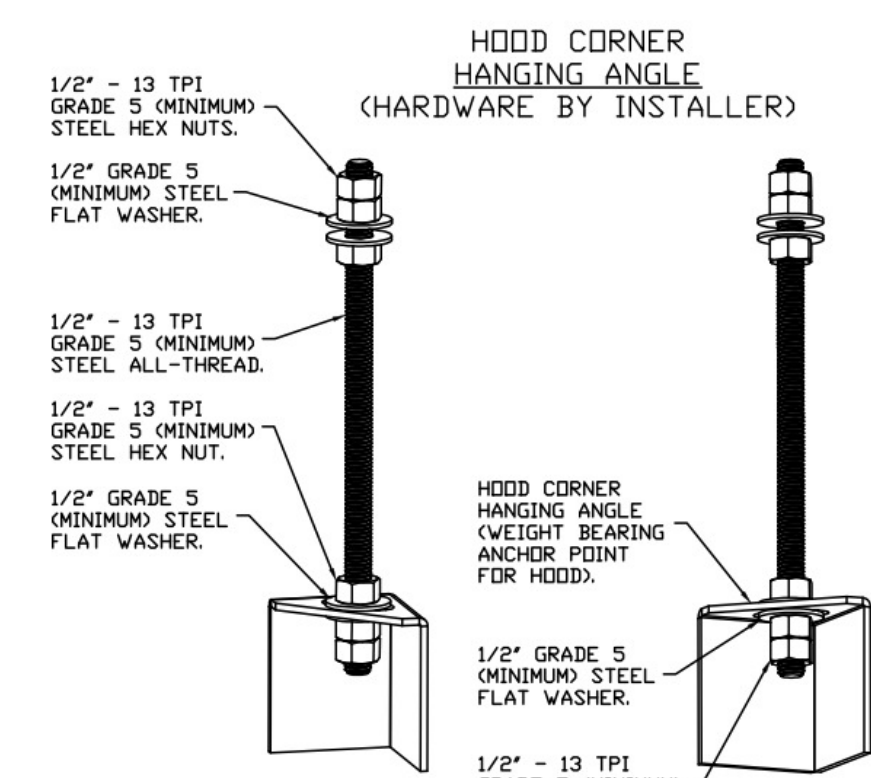
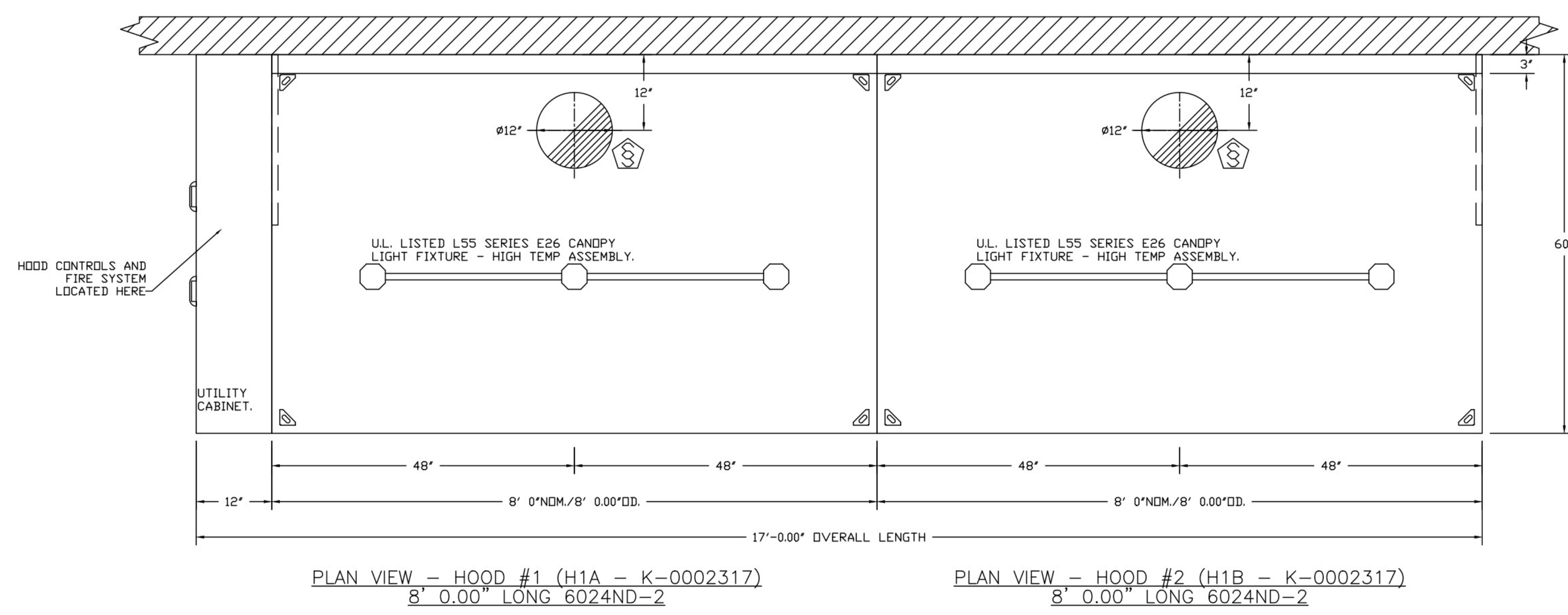
CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED

ETL LISTED
FILE# 102900319PRT-001

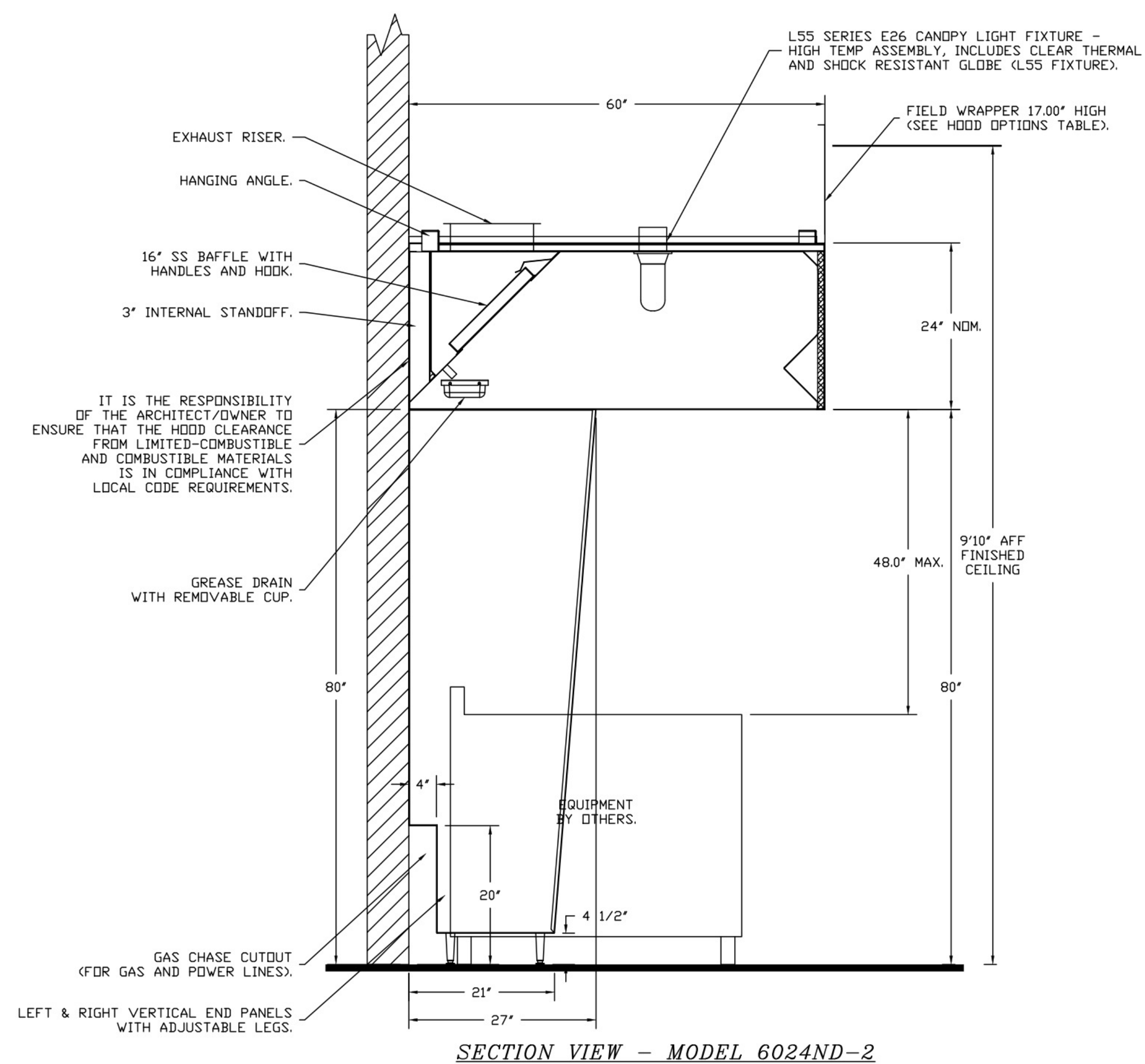
HVAC DISTRIBUTION NOTE

IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.



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.



REVISIONS

NO.	DATE	DESCRIPTION

CAPTIVEAIRE

National Accounts

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KROGER #984 - MELISSA, TX
MELISSA, TX 75454

DATE: 4/6/2023

DWG.#: 5941644

DRAWN BY: JAC

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

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DATE	DESCRIPTION
04/06/2023	90% KROGER REVIEW
04/27/2023	100% PERMIT

PROJECT TITLE
KROGER'S STORE DAL984

NEG OF ST. HWY. 121 & WASHINGTON DR.
MELISSA, TX 75454

COMMISSION NO. 523313
ISSUE DATE 04/27/2023
SHEET TITLE
HVAC SECTIONS AND DETAILS

SHEET NO.
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FIRE SYSTEM INFORMATION - JOB#5941644

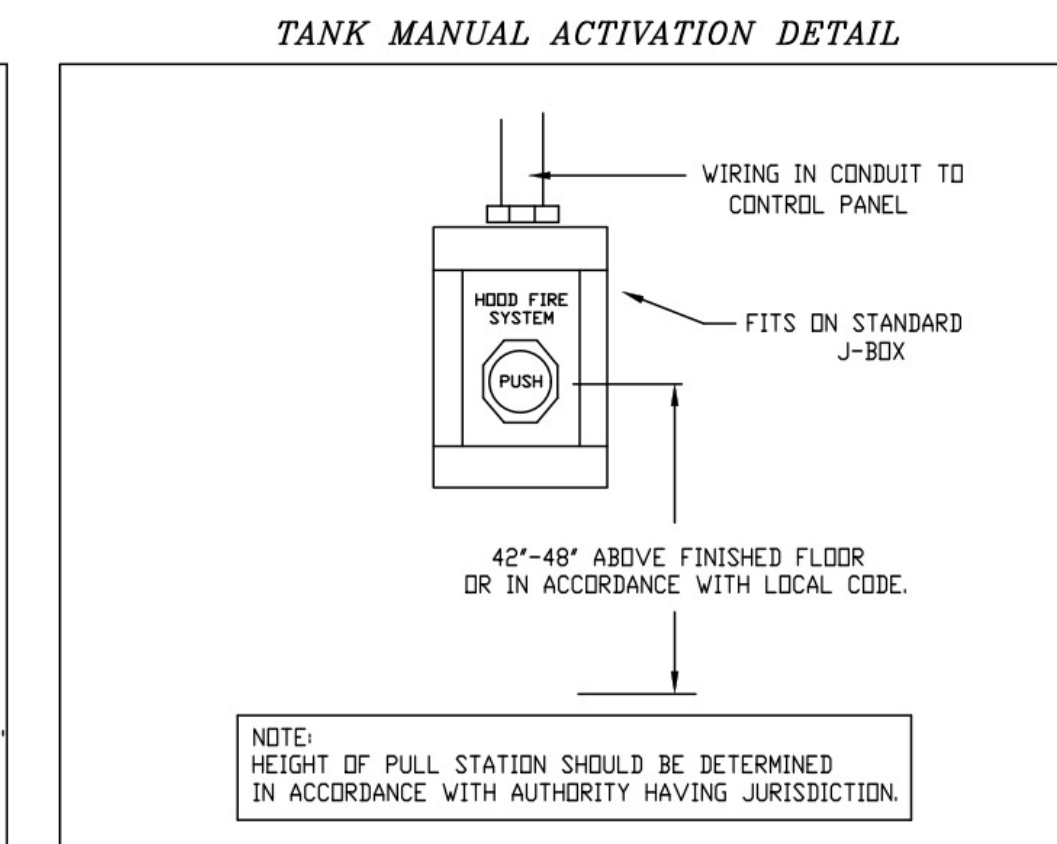
FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	36	FIRE CABINET LEFT	LEFT, HOOD 1

THE TANK WET CHEMICAL FIRE SUPPRESSION SYSTEM IS UL & ULC LISTED IN ACCORDANCE WITH UL300, UL1254, ULCDRD-C1254.6 UNDER FILE# EX27953, ETL LISTED UNDER REPORT 104560275SAT-003.

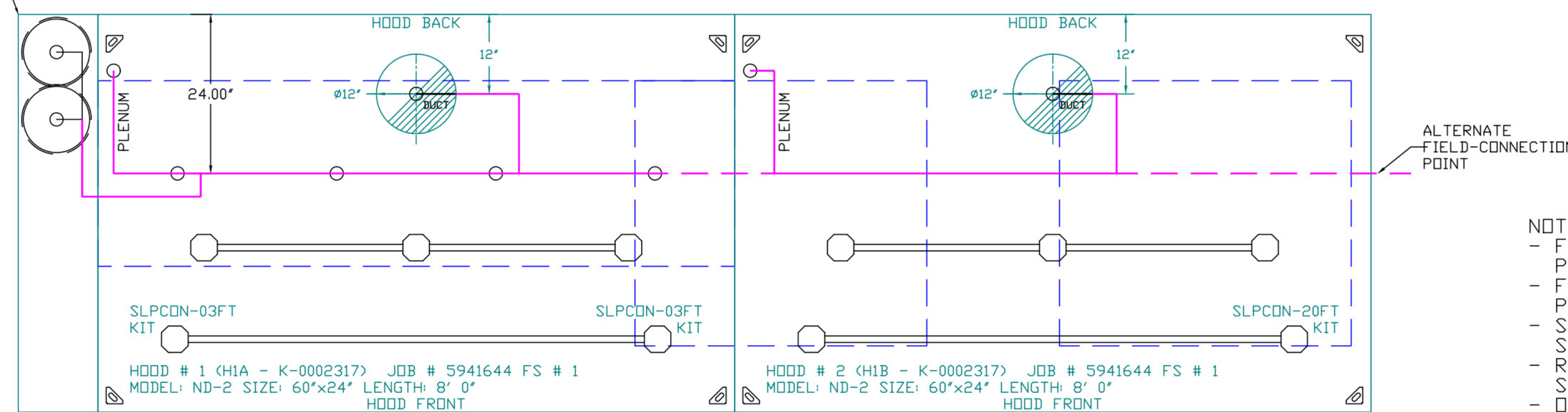
THE MICROPROCESSOR-BASED CONTROL BOARD IS ETL LISTED TO UL864 AND CAN/ULC-S527-11.

THE TANK WET CHEMICAL FIRE SUPPRESSION SYSTEM IS ACCEPTABLE FOR USE IN NEW YORK CITY, IS APPROVED PER FDNY COA #5870.

MEETS THE REQUIREMENTS OF NFPA 96 AND NFPA 17A.

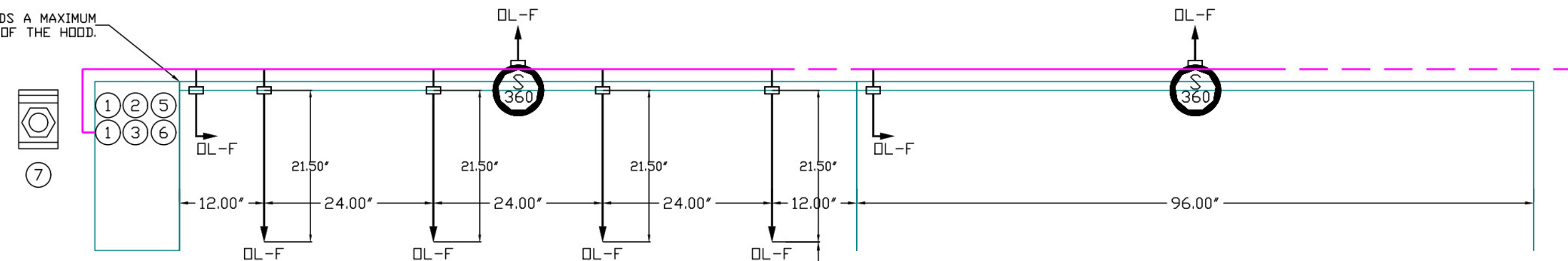


- SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS.



- 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 SHELVING, 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\"/>

FACTORY PIPING EXTENDS A MAXIMUM OF 6\"/>



NOZZLE HEIGHT 35-50\"/>

- 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 #: 5941644.
 JOB NAME: KROGER #984 - MELISSA, TX.

SYSTEM SIZE: TANK-SP-2 TOTAL FP REQUIRED: 36.
 HOOD # 1 8' 0.00\"/>

- 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.

LEGEND - FIRE CABINET TANK SYSTEM

- 1 4 GALLON TANK.
- 2 PRIMARY ACTUATOR RELEASE.
- 3 SECONDARY ACTUATOR RELEASE.
- 4 PRESSURE SUPERVISION SWITCH.
- 5 PRIMARY HOSE ASSEMBLY.
- 6 SECONDARY HOSE ASSEMBLY.
- 7 REMOTE MANUAL ACTIVATION DEVICE.

TANK OVERLAPPING PROTECTION - 30 HIGH PROXIMITY 78.00\"/>

DVEN HIGH PROXIMITY 44.00\"/>

DVEN HIGH PROXIMITY 44.00\"/>

REVISIONS	
DESCRIPTION	DATE



National Accounts

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KROGER #984 - MELISSA, TX
 MELISSA, TX 75454

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PROJECT TITLE
KROGER'S STORE DAL984

NEG OF ST. HWY. 121 & WASHINGTON DR.
 MELISSA, TX 75454

COMMISSION NO. 523313
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SHEET TITLE
HVAC SECTIONS AND DETAILS

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EXHAUST FAN INFORMATION - JOB#5941644

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-1 K-0002355	1	DR30HFA	CAPTIVEAIRE	700	0.500	1375	DDP	0.250	0.1470	1	115	3.8		64	9.1
2	EF-2 K-0002357	1	DR12HFA	CAPTIVEAIRE	300	0.400	1181	DDP	0.180	0.0710	1	115	1.9		54	5.1
3	EF-3 K-0002355	1	DR30HFA	CAPTIVEAIRE	500	0.500	1176	DDP	0.250	0.0920	1	115	3.8		64	6.7
4	EF-4 K-0069365	1	DR10HFA	CAPTIVEAIRE	2400	1.250	1146	DDP PREMIUM	2.000	1.0380	3	208	6.1	554 FPM	164	13.5
5	EF-5 K-0002355	1	DR30HFA	CAPTIVEAIRE	800	0.400	1429	DDP	0.250	0.1650	1	115	3.8		64	9.8
6	EF-6 K-0002355	1	DR30HFA	CAPTIVEAIRE	800	0.400	1429	DDP	0.250	0.1650	1	115	3.8		64	9.8
7	EF-7 K-0002355	1	DR30HFA	CAPTIVEAIRE	700	0.400	1313	DDP	0.250	0.1280	1	115	3.8		64	8.4
8	EF-8 K-0002358	1	DR10HFA	CAPTIVEAIRE	200	0.300	1250	DDP	0.060	0.0380	1	115	1.1		48	3.3
9	EF-9 K-0002372	1	DU33HFA	CAPTIVEAIRE	600	0.500	1253	DDP	0.333	0.1190	1	115	5.6	297 FPM	79	10.9
10	EF-10 K-0002372	1	DU33HFA	CAPTIVEAIRE	600	0.500	1253	DDP	0.333	0.1190	1	115	5.6	297 FPM	79	10.9

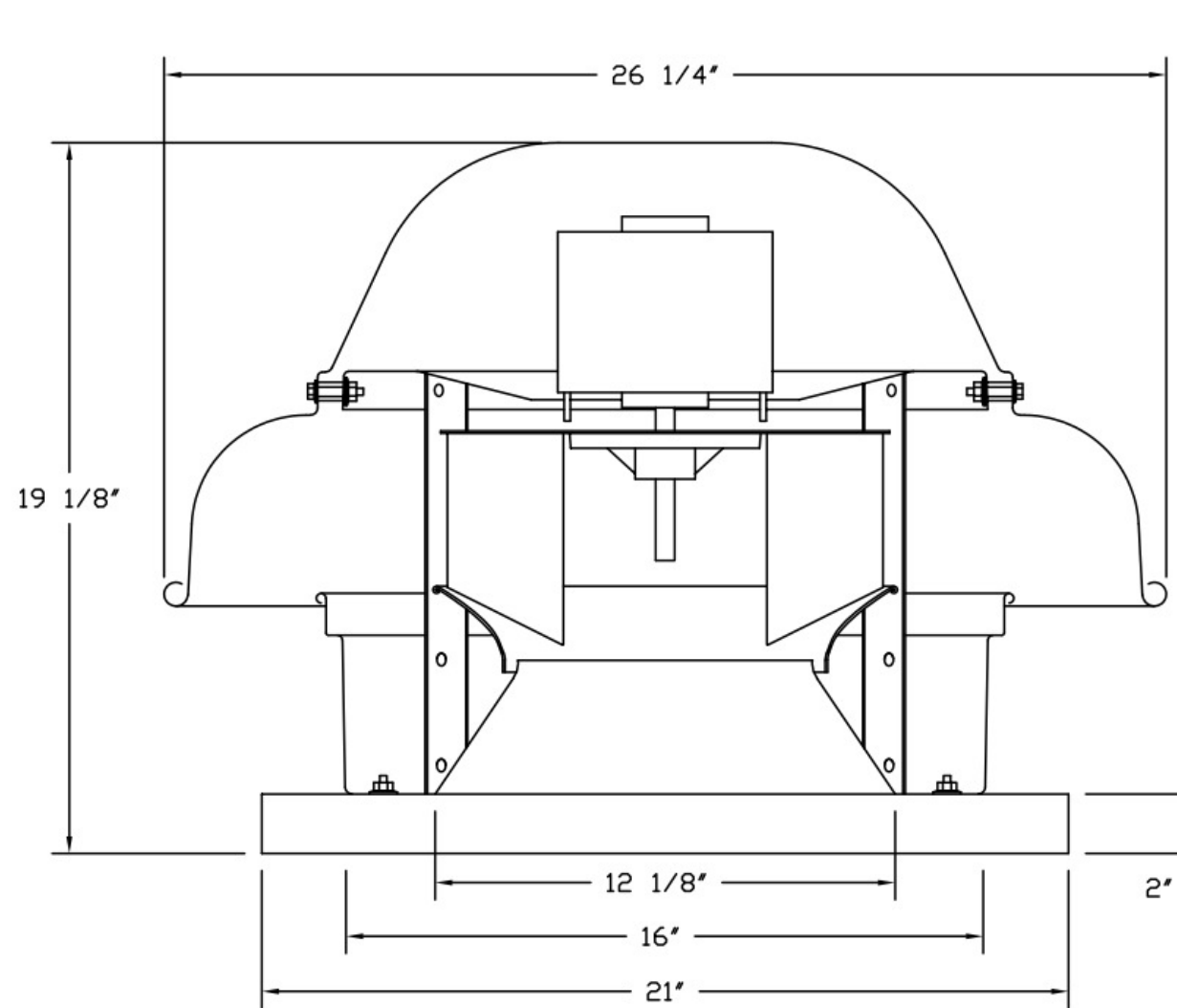
FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1 K-0002355	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 15-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
2	EF-2 K-0002357	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 12-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
3	EF-3 K-0002355	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 15-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
4	EF-4 K-0069365	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	2 YEAR PARTS WARRANTY
		1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 15-BDD DAMPER
5	EF-5 K-0002355	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 15-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
		1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
6	EF-6 K-0002355	1	I 15-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
		1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 12-BDD DAMPER
7	EF-7 K-0002355	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	I 15-BDD DAMPER
		1	2 YEAR PARTS WARRANTY
		1	I 12-BDD DAMPER
8	EF-8 K-0002358	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	2 YEAR PARTS WARRANTY
		1	GREASE BOX
9	EF-9 K-0002372	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	2 YEAR PARTS WARRANTY
		1	GREASE BOX
10	EF-10 K-0002372	1	HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	2 YEAR PARTS WARRANTY
		1	GREASE BOX

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 K-0002355		YES					
2	EF-2 K-0002357		YES					
3	EF-3 K-0002355		YES					
4	EF-4 K-0069365	YES						
5	EF-5 K-0002355		YES					
6	EF-6 K-0002355		YES					
7	EF-7 K-0002355		YES					
8	EF-8 K-0002358		YES					
9	EF-9 K-0002372	YES						
10	EF-10 K-0002372	YES						

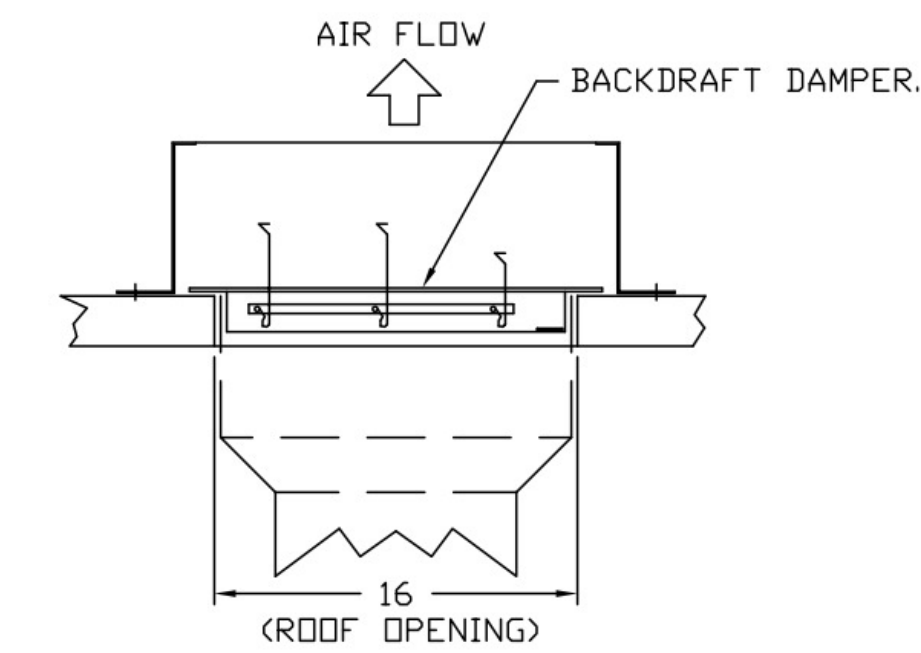
FANS #1 (EF-1 K-0002355), #3 (EF-3 K-0002355), #5 (EF-5 K-0002355), #6 (EF-6 K-0002355), #7 (EF-7 K-0002355) - DR30HFA EXHAUST FAN



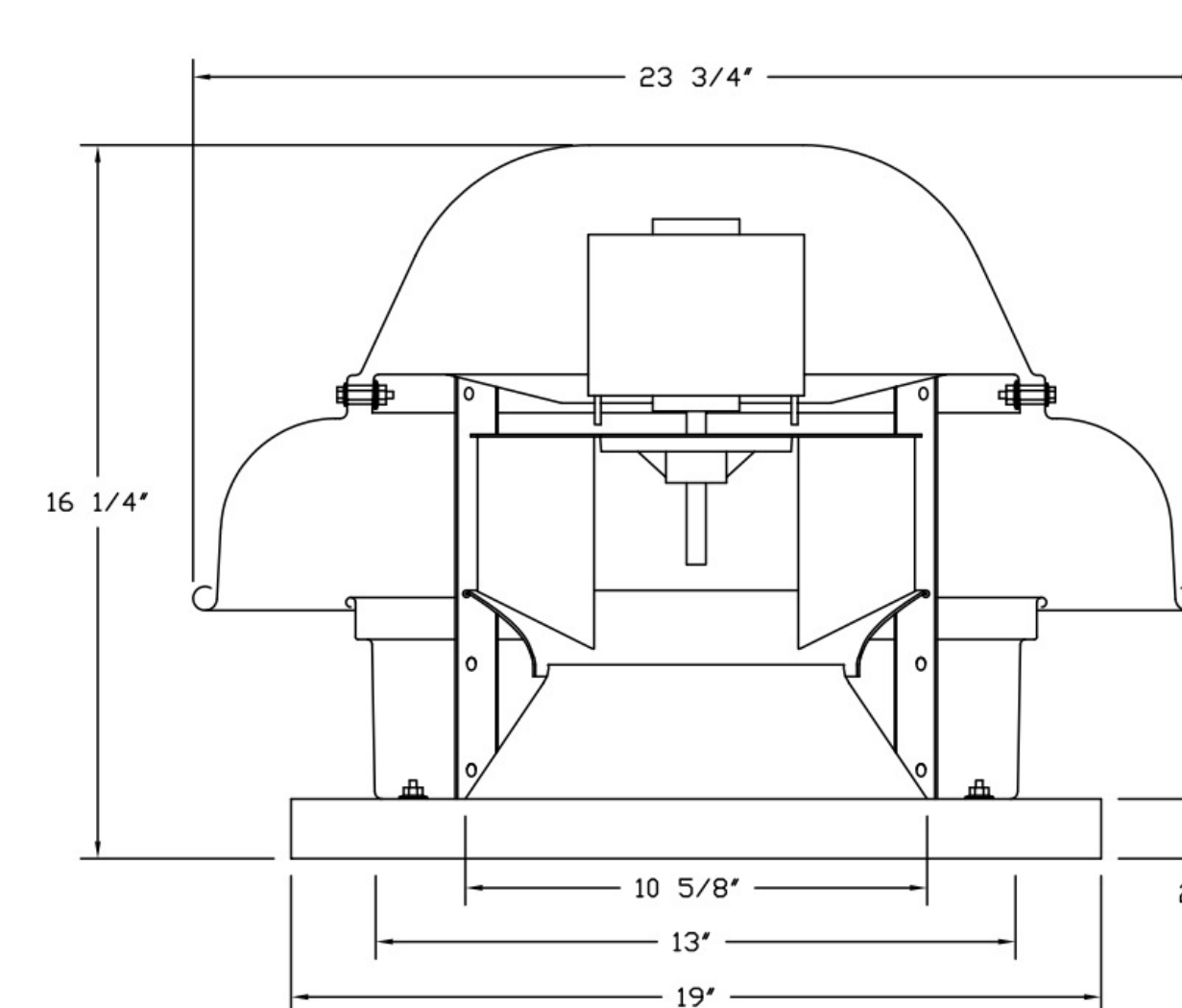
- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
 - ROOF MOUNTED FANS.
 - UL705.
 - SAFETY DISCONNECT.
 - STANDARD BIRD SCREEN.
 - SPEED CONTROL.

- OPTIONS:**
- HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
 - I 15-BDD DAMPER.
 - 2 YEAR PARTS WARRANTY.

BACKDRAFT DAMPER INSTALLATION



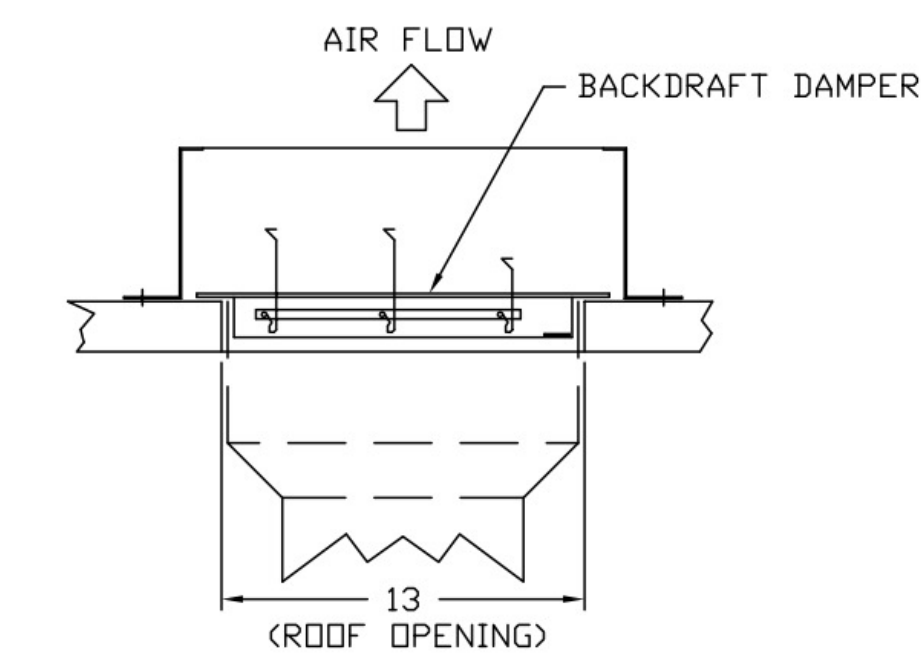
FANS #2 (EF-2 K-0002357) - DR12HFA EXHAUST FAN



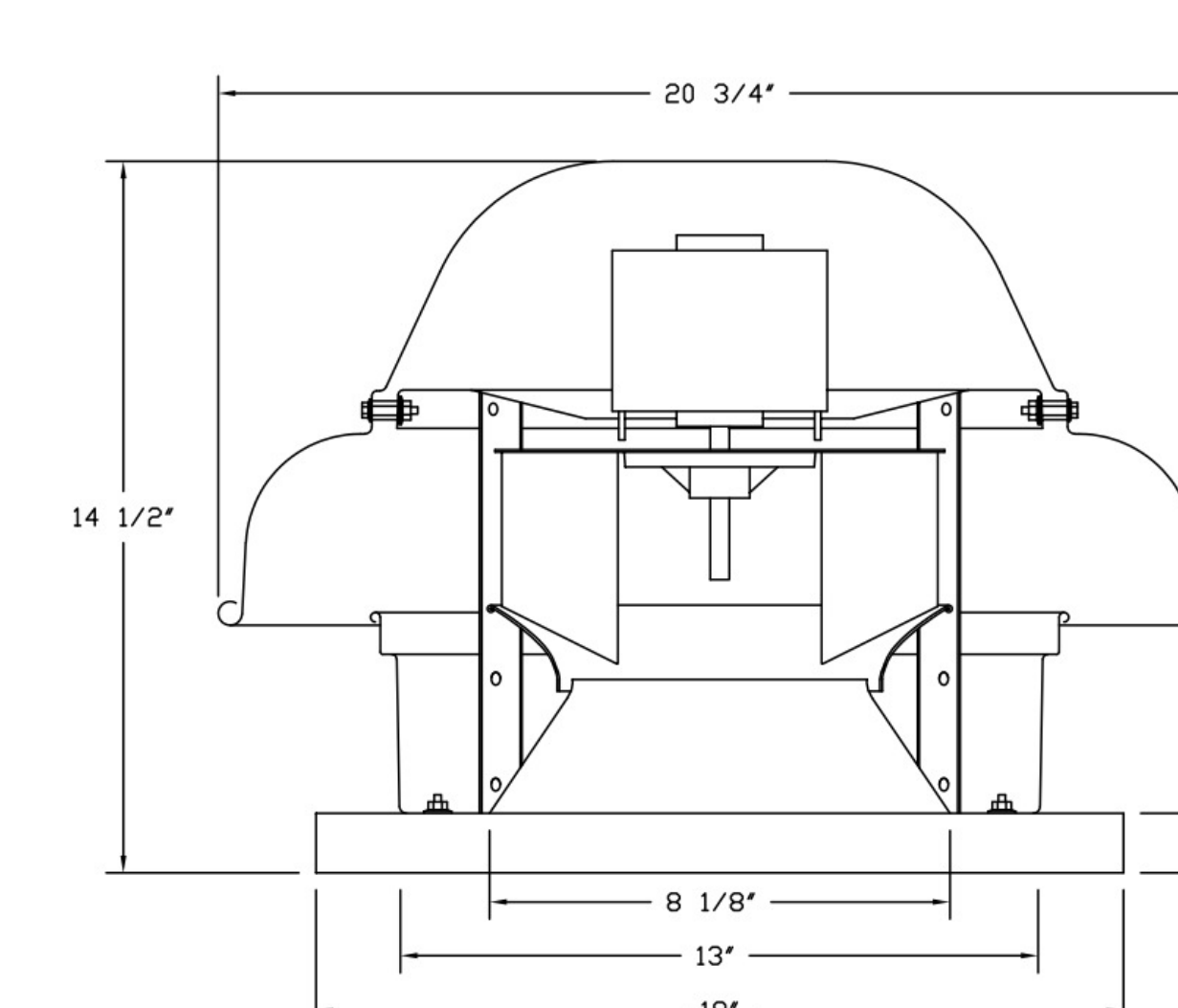
- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
 - ROOF MOUNTED FANS.
 - UL705.
 - SAFETY DISCONNECT.
 - STANDARD BIRD SCREEN.
 - SPEED CONTROL.
 - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

- OPTIONS:**
- I 12-BDD DAMPER.
 - HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
 - 2 YEAR PARTS WARRANTY.

BACKDRAFT DAMPER INSTALLATION



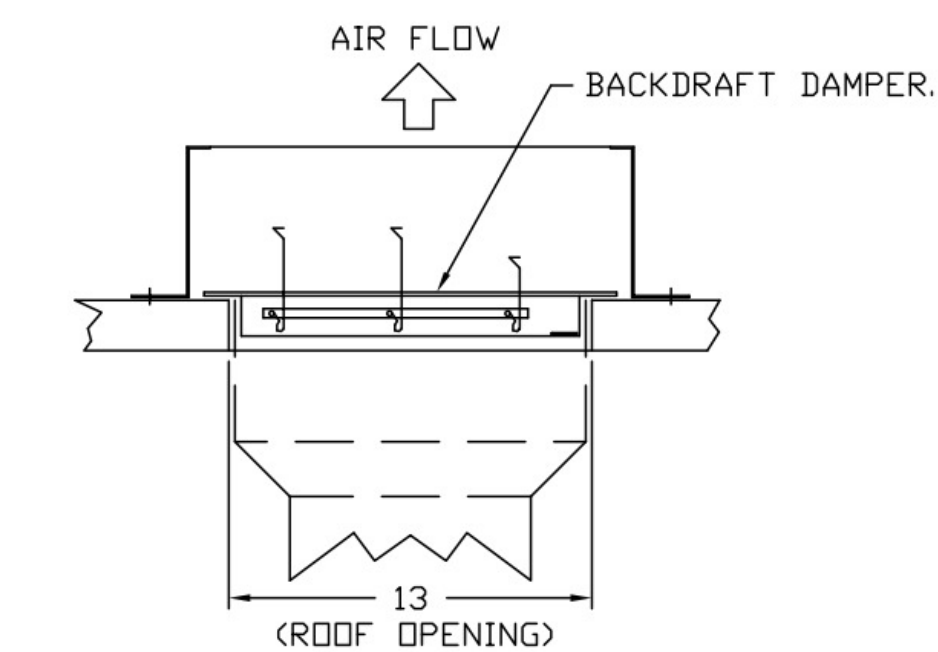
FAN #8 DR10HFA - EXHAUST FAN (EF-8 K-0002358)



- 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.
 - HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
 - 2 YEAR PARTS WARRANTY.

BACKDRAFT DAMPER INSTALLATION



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 859-442-8058 FAX

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ISSUE/REVISION	DATE	DESCRIPTION

3 10/31/2023 BULLETIN NO. 2

PROJECT TITLE
KROGER'S STORE DAL984

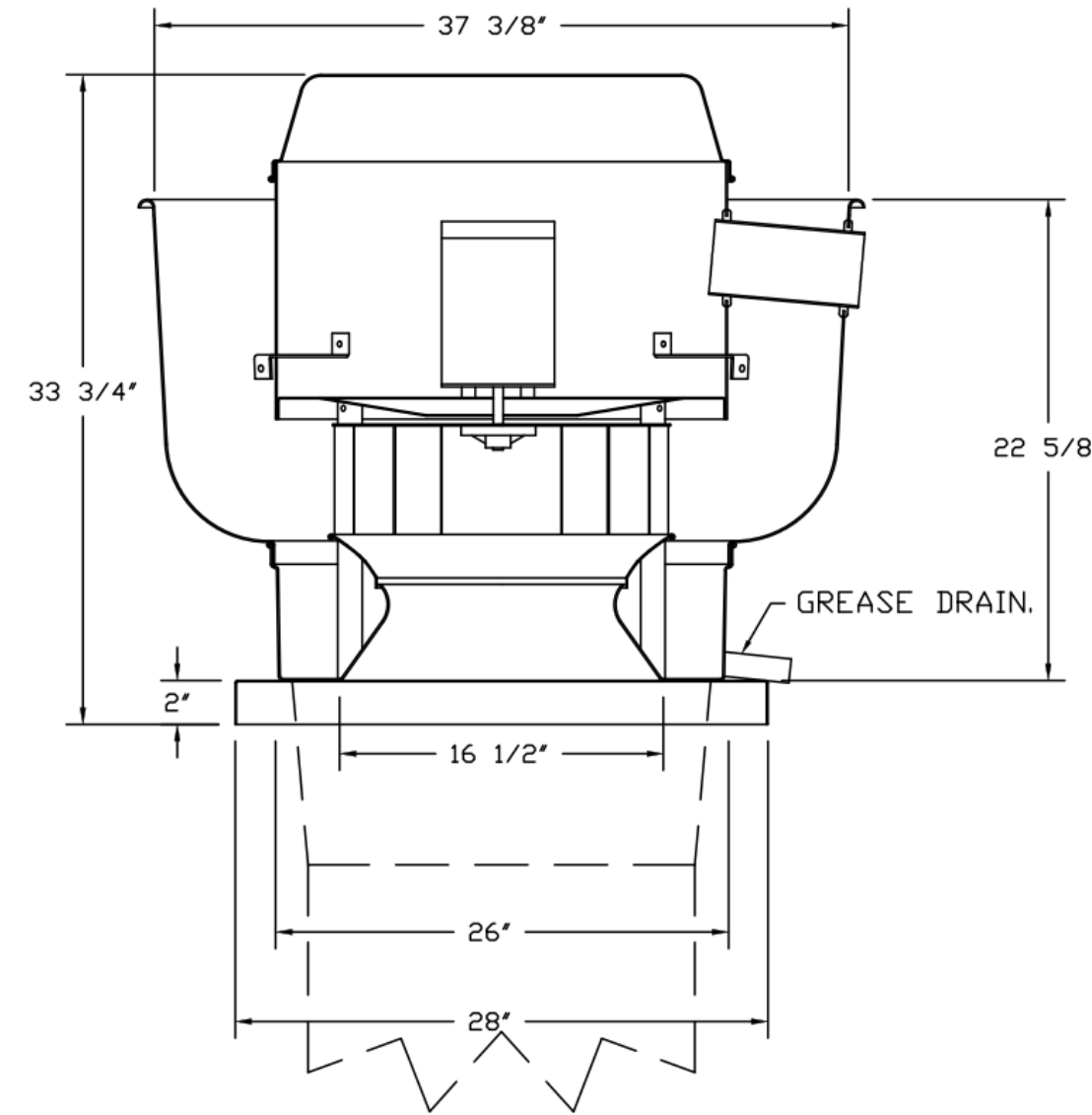
NEG OF ST. HWY. 121 &
 WASHINGTON DR.
 MELISSA, TX 75454

COMMISSION NO. 523313
 ISSUE DATE 04/27/2023
 SHEET TITLE
HVAC SECTIONS AND DETAILS

SHEET NO.
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FAN #4 DU33HFA - EXHAUST FAN (CF-4 K-0069365)



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

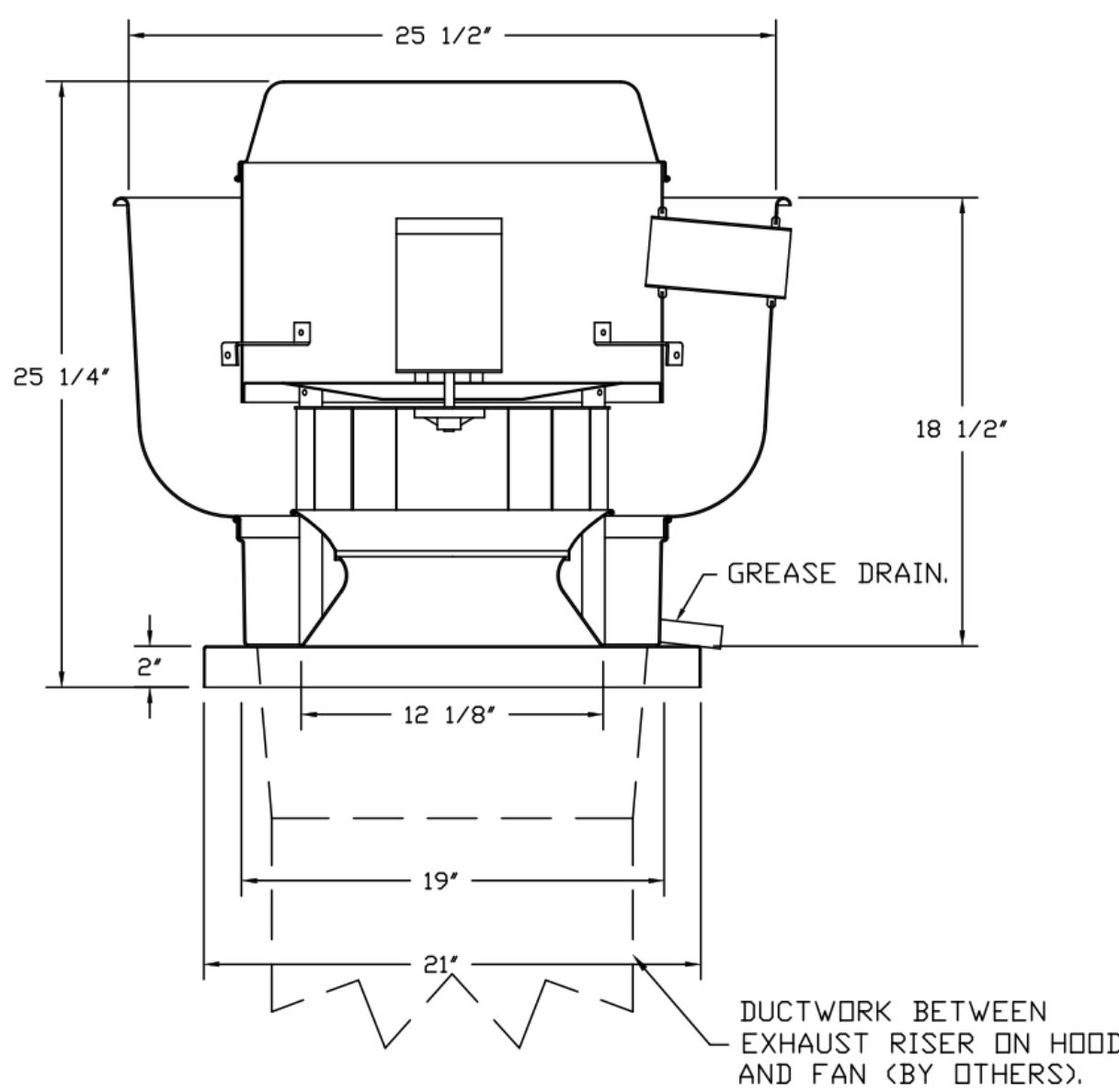
NORMAL TEMPERATURE TEST:
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST:
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS:

- GREASE BOX.
- HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
- 2 YEAR PARTS WARRANTY.

FANS #9 (CF-9 K-0002372), #10 (CF-10 K-0002372) - DU33HFA EXHAUST FAN



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

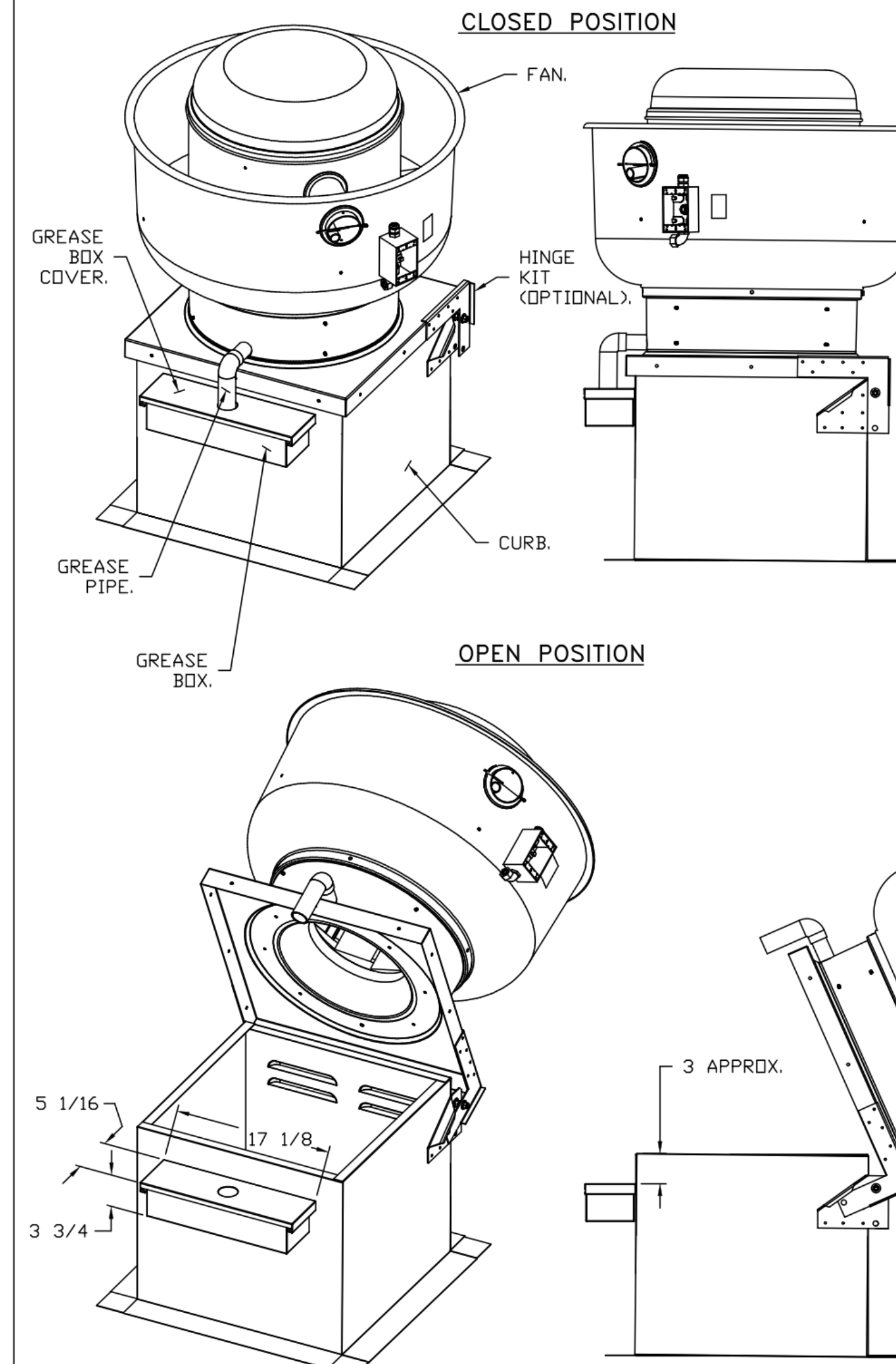
NORMAL TEMPERATURE TEST:
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST:
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS:

- GREASE BOX.
- HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
- 2 YEAR PARTS WARRANTY.

GREASE BOX INSTALLATION



*NOTE: UL 705 INSTALL.

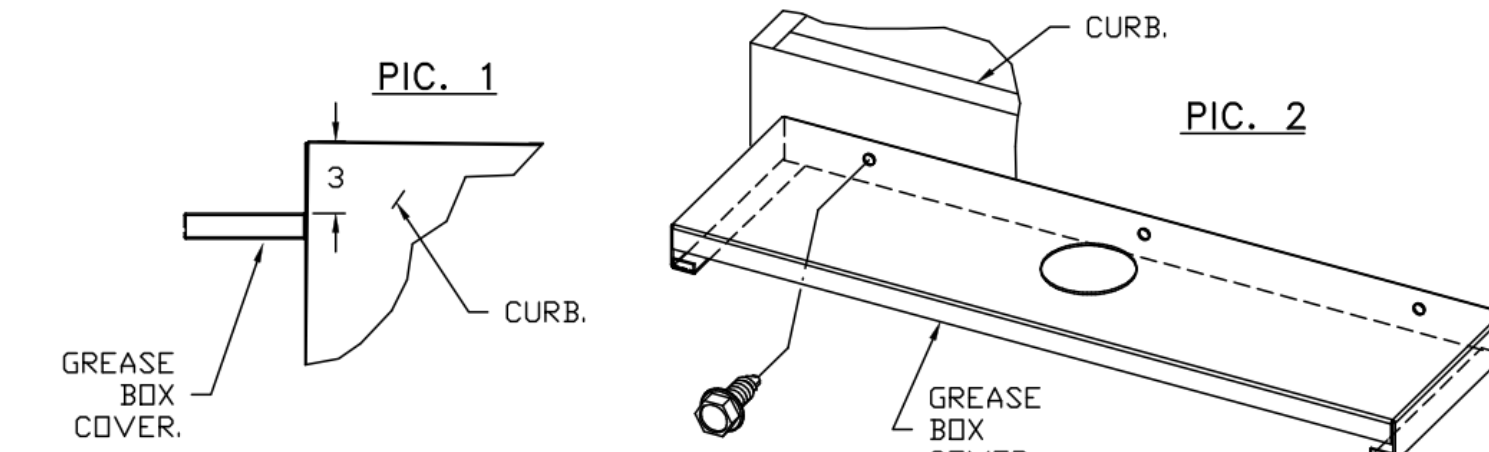
PARTS INCLUDED

- GREASE BOX.
- GREASE BOX COVER.
- GREASE PIPE.
- SHEET METAL SCREWS
- 3 - LONG (3/4" LG.).

GREASE BOX FIELD INSTALLATION

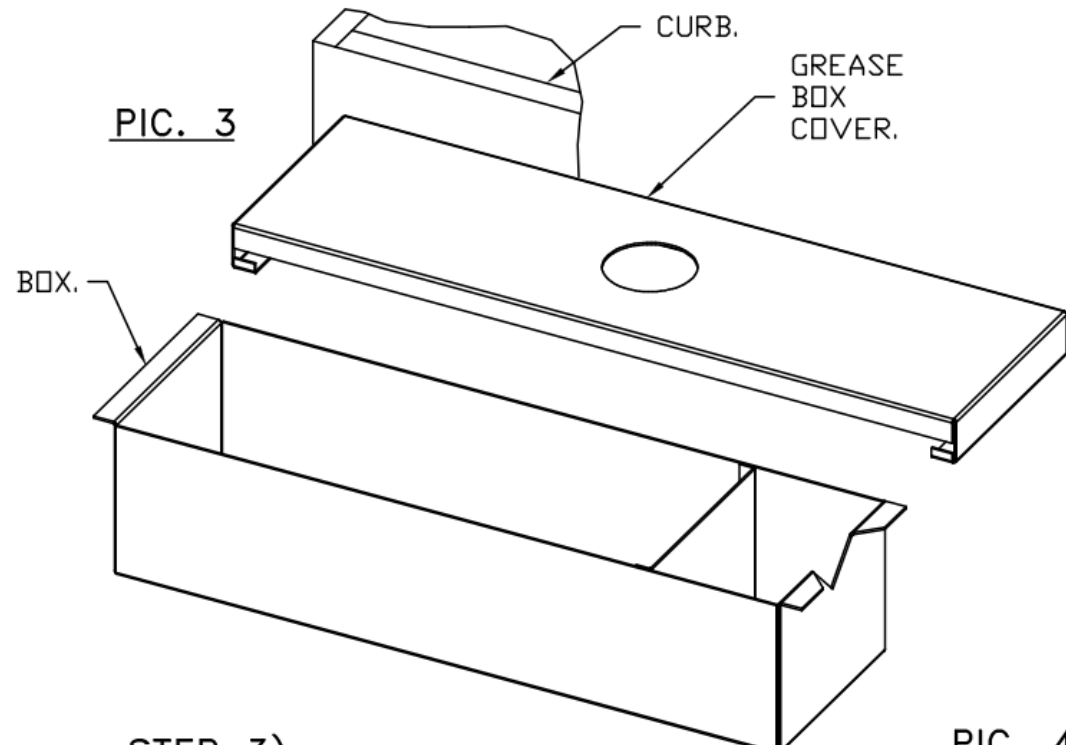
STEP 1)

ATTACH GREASE BOX COVER TO THE CURB, HELD 3" DIMENSION AS SHOWN ON PIC. 1. SCREW GREASE BOX COVER TO CURB USING (3) LONG (3/4" LG.) SCREWS AS SHOWN ON PIC. 2.



STEP 2)

ATTACH GREASE BOX TO GREASE BOX COVER, SLIDE AND DROP, AS SHOWN ON PIC. 3.

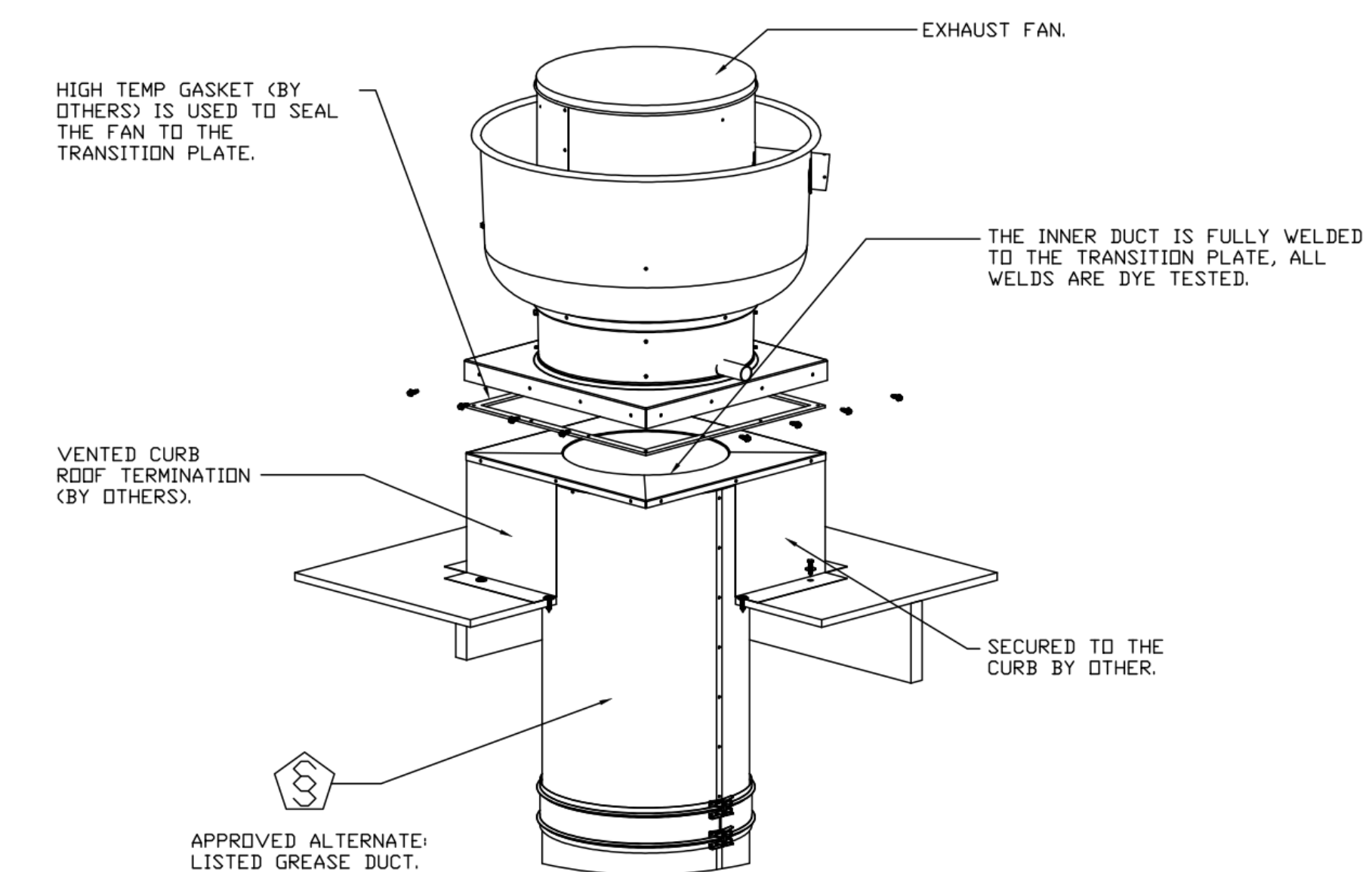


STEP 3)

INSTALL GREASE PIPE AS SHOWN ON PIC. 4.

CAPTIVE AIRE UL LISTED DUCT IS APPROVED AS AN ALTERNATE - SPEC BELOW

GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURER'S INSTALLATION GUIDE.
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURER'S LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.
IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R", 2R TYPE HT, 3R, OR 32" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.



REVISIONS	
DESCRIPTION	DATE

CAPTIVE AIRE
National Accounts
4641 Paragon Park Rd., Raleigh, NC, 27616 PHONE: (919) 882-2410 FAX: (919) 227-5948 EMAIL: reg15@captivaire.com

KROGER #984 - MELISSA, TX
MELISSA, TX 75454

DATE: 4/6/2023
DWG.#: 5941644
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SCALE: 3/4" = 1'-0"
MASTER DRAWING

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OWNER
Kroger
ISSUE/REVISION
DATE DESCRIPTION
04/06/2023 90% KROGER REVIEW
04/27/2023 100% PERMIT

PROJECT TITLE
KROGER'S STORE DAL984
NEG OF ST. HWY. 121 & WASHINGTON DR.
MELISSA, TX 75454
COMMISSION NO. 523313
ISSUE DATE 04/27/2023
SHEET TITLE
HVAC SECTIONS AND DETAILS
SHEET NO.
M3.1.4
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DATE	DESCRIPTION
04/06/2023	90% KROGER REVIEW
04/27/2023	100% PERMIT

KROGER #984 - MELISSA, TX
MELISSA, TX 75454

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DWG.#: 5941644
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SCALE: 3/4" = 1'-0"
MASTER DRAWING

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PROJECT TITLE
KROGER'S STORE
DAL984

NEC OF ST. HWY. 121 &
WASHINGTON DR.
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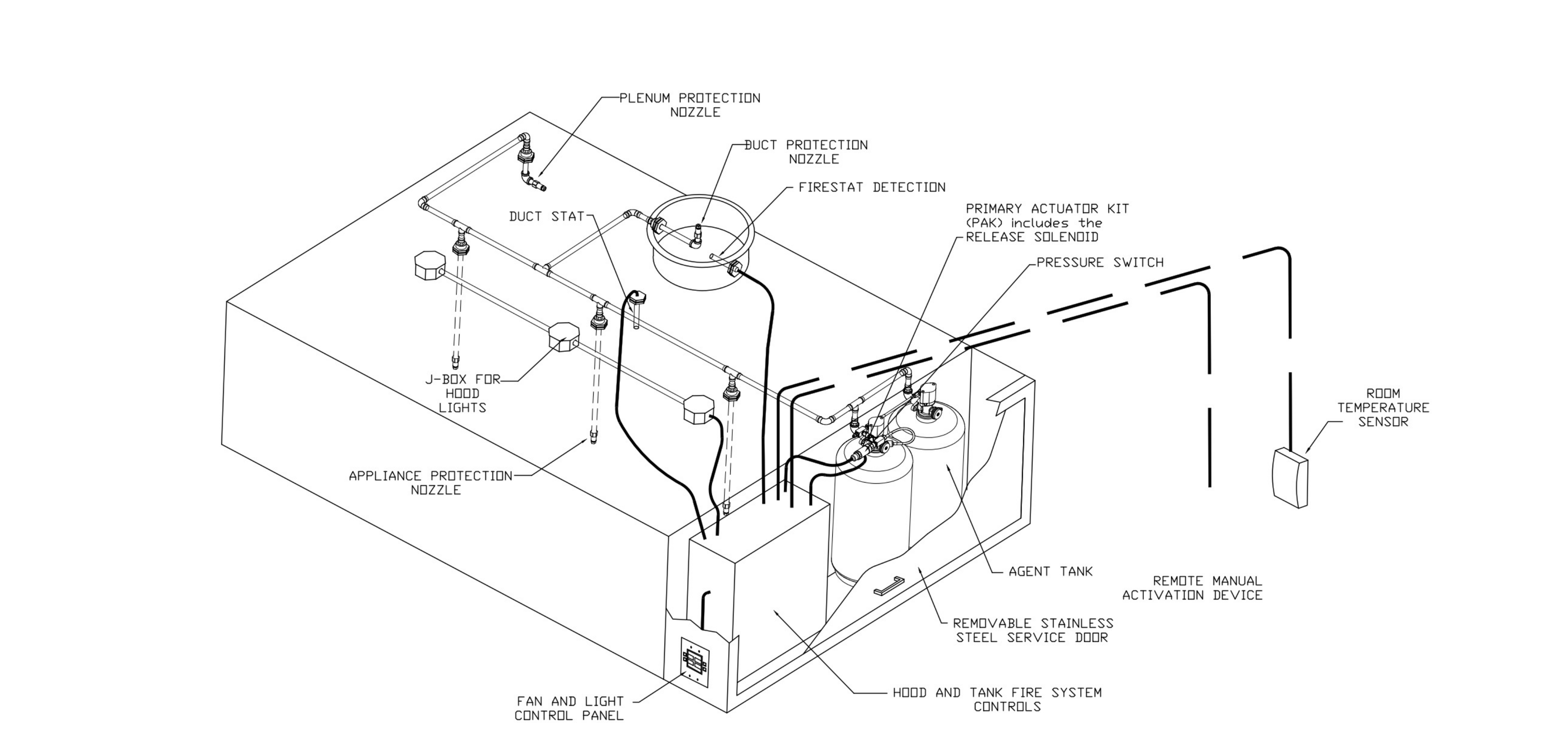
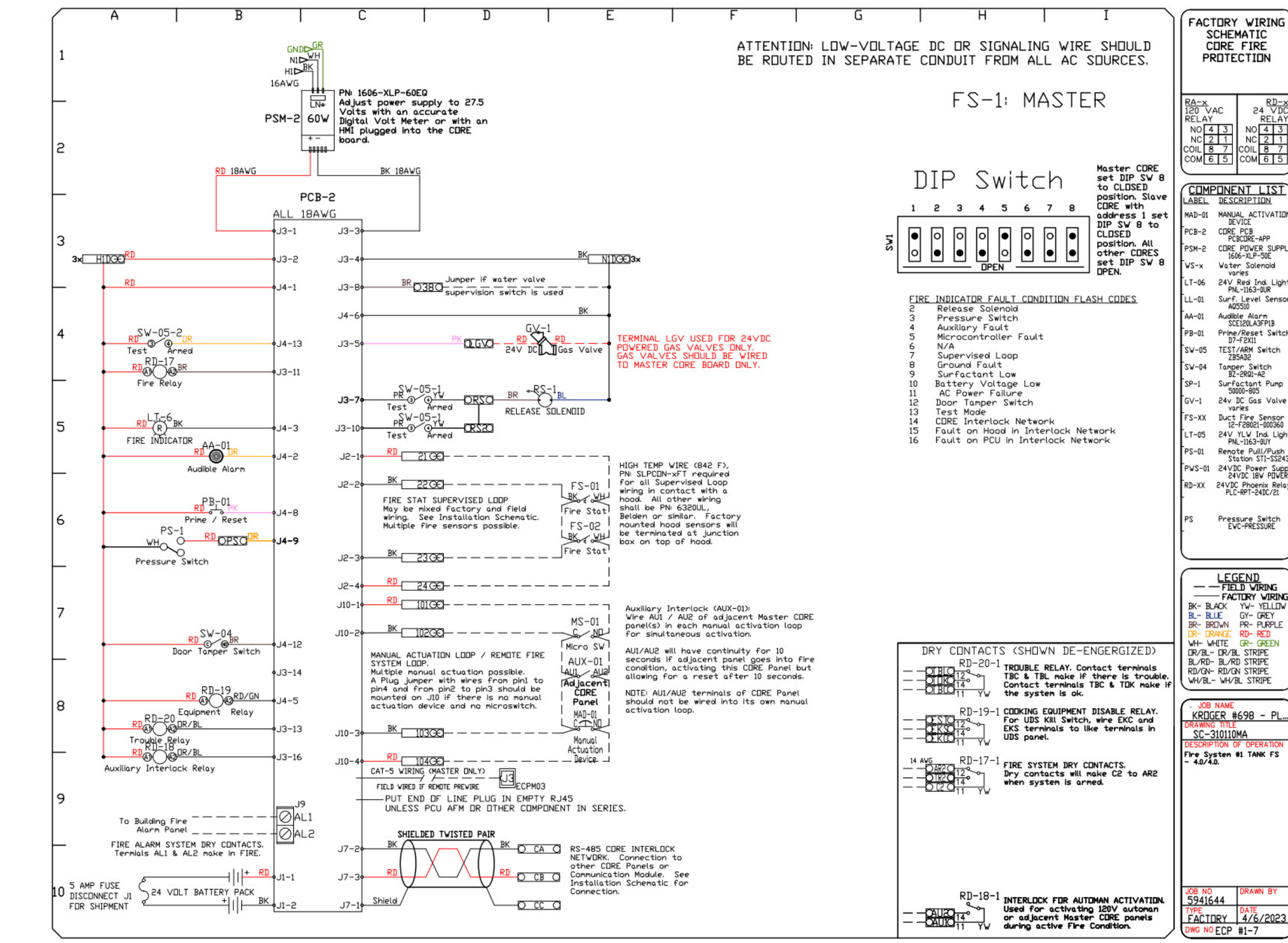
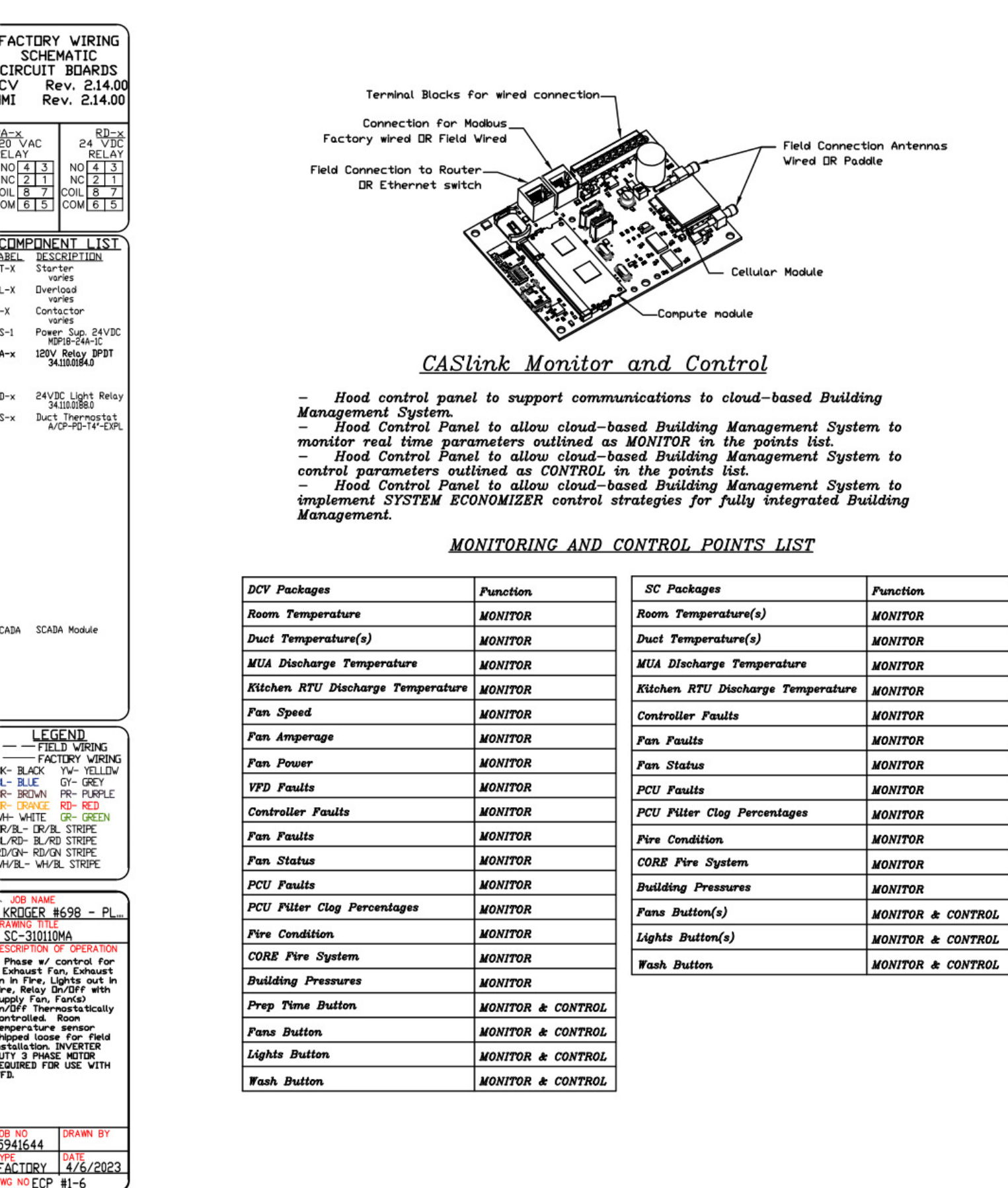
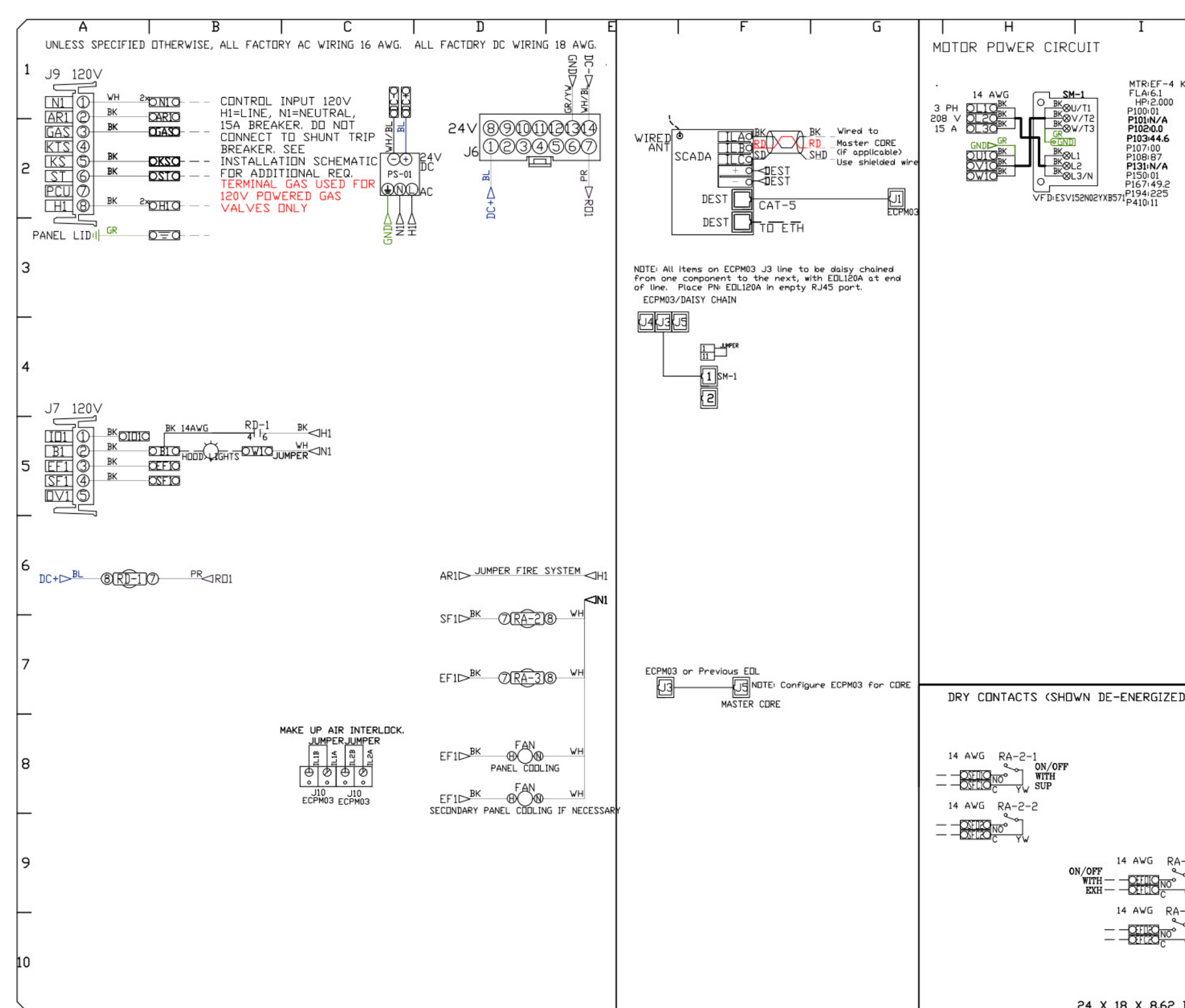
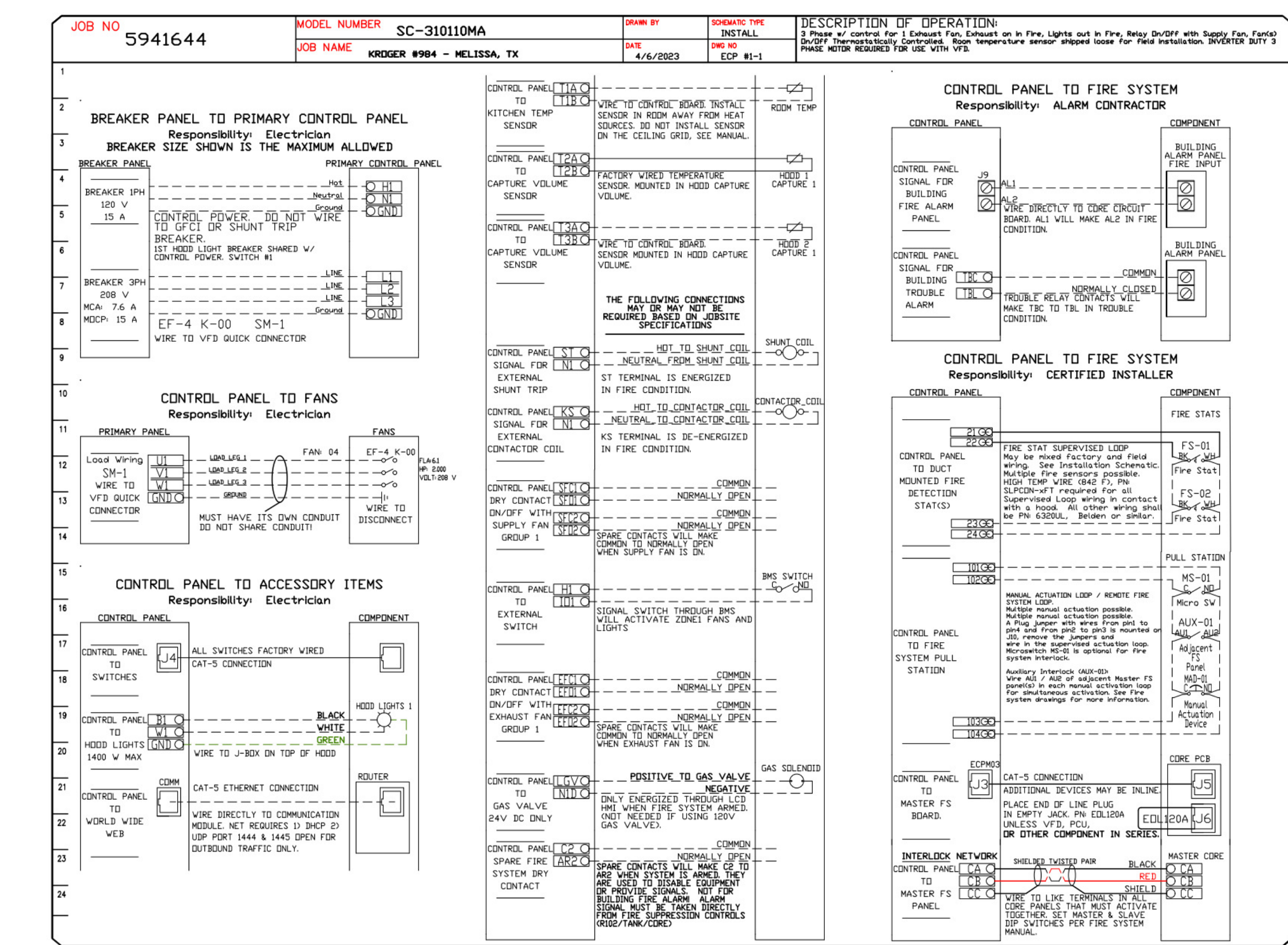
COMMISSION NO. 523313
ISSUE DATE 04/27/2023
SHEET TITLE

HVAC SECTIONS
AND DETAILS

SHEET NO.
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ELECTRICAL PACKAGE - JOB#5941644

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED						
				LOCATION	QUANTITY		FAN TAG	TYPE	Ø	HP	VOLT	FLA	
1		SC-31010MA	UTILITY CABINET LEFT	UTILITY CABINET LEFT HOOD # 1	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-4	K-0069365	EXHAUST	3	2.000	208	6.1



DOAS/RTU BACnet Points List - JOB#5942039

BACNET POINTS AVAILABLE FOR FAN #1 (DDAS-1), #2 (DDAS-2)					BACNET POINTS AVAILABLE FOR FAN #1 (DDAS-1), #2 (DDAS-2)				
BACnet Object	BACnet Type	BACnet ID	LDN SNVT Name	Function	BACnet Object	BACnet Type	BACnet ID	LDN SNVT Name	Function
DDCHeatCommand	BV	1	nvIDDCHeat	Control/Monitor	MixingBoxManualVoltsDcc	AV	102	nvMxBoxManVDC	Control/Monitor
DDCCoolCommand	BV	2	nvIDDCCool	Control/Monitor	MixingBoxManualVoltsUnocc	AV	103	nvMxBoxManVUn	Control/Monitor
DDCBlowerCommand	BV	3	nvIDDCBlow	Control/Monitor	DynamicSPDFF	AV	120	nvIDynSPDFF	Control/Monitor
DDCCoolOverride	AV	4	nvIDDCModHeat	Control/Monitor	DynamicSPDFFSet	AV	121	nvIDynSPDFFSet	Control/Monitor
DDCCoolOverride	BV	5	nvIDDCModCool	Control/Monitor	DynamicSPDFFDa	AV	122	nvIDynSPDFFDa	Control/Monitor
IntakeHeatUnoccSP	AV	6	nvIInHeatUnoccSP	Control/Monitor	DynamicSPDFFDa	AV	123	nvIDynSPDFFDa	Control/Monitor
IntakeHeatUnoccSP	AV	7	nvIInHeatUnoccSP	Control/Monitor	UnitStatus	AI	139	nvoCurrentSts	Monitor Only
SpaceHeatUnoccSP	AV	8	nvISpHeatUnoccSP	Control/Monitor	CurrentOccupiedSts	AI	140	nvoOccStatus	Monitor Only
SpaceHeatUnoccSP	AV	9	nvISpHeatUnoccSP	Control/Monitor	AverageSpaceTemp	AI	141	nvoAvgSpaceTemp	Monitor Only
DischargeHeatUnoccSP	AV	12	nvDisHeatUnoccSP	Control/Monitor	AverageRH	AI	145	nvoAvgRH	Monitor Only
DischargeHeatUnoccSP	AV	13	nvDisHeatUnoccSP	Control/Monitor	OutdoorTemp	AI	146	nvoOutdoorTemp	Monitor Only
IntakeCoolUnoccSP	AV	16	nvIInCoolUnoccSP	Control/Monitor	ReturnTemp	AI	147	nvoReturnTemp	Monitor Only
IntakeCoolUnoccSP	AV	17	nvIInCoolUnoccSP	Control/Monitor	DischargeTemp	AI	148	nvoDischargeTemp	Monitor Only
SpaceCoolUnoccSP	AV	18	nvISpCoolUnoccSP	Control/Monitor	IntakeTemp	AI	149	nvoIntakeTemp	Monitor Only
SpaceCoolUnoccSP	AV	19	nvISpCoolUnoccSP	Control/Monitor	SpaceTemp	AI	150	nvoSpaceTemp	Monitor Only
DischargeCoolUnoccSP	AV	22	nvDisCoolUnoccSP	Control/Monitor	HMI1Temp	AI	151	nvoHMI1Temp	Monitor Only
DischargeCoolUnoccSP	AV	23	nvDisCoolUnoccSP	Control/Monitor	HMI2Temp	AI	152	nvoHMI2Temp	Monitor Only
RoomOverrideDccSP	AV	26	nvRoomDvUnoccSP	Control/Monitor	HMI3Temp	AI	153	nvoHMI3Temp	Monitor Only
RoomOverrideUnoccSP	AV	27	nvRoomDvUnoccSP	Control/Monitor	HMI4Temp	AI	154	nvoHMI4Temp	Monitor Only
FirestatIntakeSP	AV	28	nvFireIntakeSP	Control/Monitor	HMI5Temp	AI	155	nvoHMI5Temp	Monitor Only
FirestatDischargeSP	AV	29	nvFireDischSP	Control/Monitor	SuctionLineTemp	AI	156	nvoSuctionLineTemp	Monitor Only
FreezeStatSP	AV	30	nvIFreezeSP	Control/Monitor	LiquidLineTemp	AI	157	nvoLiquidLineTemp	Monitor Only
OverheatDischargeSP	AV	31	nvIDheatDisSP	Control/Monitor	EvapIndoorCoilTemp	AI	158	nvoEvapCoilTemp	Monitor Only
CabinetHeatSP	AV	32	nvICabHeatSP	Control/Monitor	CondOutdoorCoilTemp	AI	159	nvoCondCoilTemp	Monitor Only
FurnaceDrainHeatSP	AV	33	nvIFDrainHeatSP	Control/Monitor	CompressorDischargeTemp	AI	160	nvoCompDisTemp	Monitor Only
IntakeRHUnoccSP	AV	34	nvIInRHUnoccSP	Control/Monitor	IntakeRH	AI	161	nvoIntakeRH	Monitor Only
IntakeRHUnoccSP	AV	35	nvIInRHUnoccSP	Control/Monitor	SpaceRH	AI	162	nvoSpaceRH	Monitor Only
SpaceRHUnoccSP	AV	36	nvISpRHUnoccSP	Control/Monitor	OutdoorRH	AI	163	nvoOutdoorRH	Monitor Only
SpaceRHUnoccSP	AV	37	nvISpRHUnoccSP	Control/Monitor	DischargeRH	AI	164	nvoDischargeRH	Monitor Only
DischargeRHUnoccSP	AV	38	nvDisRHUnoccSP	Control/Monitor	ReturnRH	AI	165	nvoReturnRH	Monitor Only
DischargeRHUnoccSP	AV	39	nvDisRHUnoccSP	Control/Monitor	SuctionLinePs	AI	166	nvoSuctionLinePs	Monitor Only
IntakeDpUnoccSP	AV	40	nvIInDpUnoccSP	Control/Monitor	DischargeLinePs	AI	167	nvoDischargeLinePs	Monitor Only
IntakeDpUnoccSP	AV	41	nvIInDpUnoccSP	Control/Monitor	LiquidLinePs	AI	168	nvoLiquidLinePs	Monitor Only
SpaceDpUnoccSP	AV	42	nvISpDpUnoccSP	Control/Monitor	HMI1RH	AI	169	nvoHMI1RH	Monitor Only
SpaceDpUnoccSP	AV	43	nvISpDpUnoccSP	Control/Monitor	HMI2RH	AI	170	nvoHMI2RH	Monitor Only
DischargeDpUnoccSP	AV	44	nvDisDpUnoccSP	Control/Monitor	HMI3RH	AI	171	nvoHMI3RH	Monitor Only
DischargeDpUnoccSP	AV	45	nvDisDpUnoccSP	Control/Monitor	HMI4RH	AI	172	nvoHMI4RH	Monitor Only
ScheduleSundayASStart	AV	46	nvISundayASStart	Control/Monitor	HMI5RH	AI	173	nvoHMI5RH	Monitor Only
ScheduleSundayAEnd	AV	47	nvISundayAEnd	Control/Monitor	SupplyPwmRate	AI	174	nvoSupplyPwmRate	Monitor Only
ScheduleSundayBStart	AV	48	nvISundayBStart	Control/Monitor	CondFanPwmRate	AI	176	nvoCondFanPwmRate	Monitor Only
ScheduleSundayBEnd	AV	49	nvISundayBEnd	Control/Monitor	CondFanPwmRate	AI	177	nvoCondFanPwmRate	Monitor Only
ScheduleSundayCStart	AV	50	nvISundayCStart	Control/Monitor	ModulatingGasValveOutput	AI	178	nvoModulatingGasValveOutput	Monitor Only
ScheduleSundayCEnd	AV	51	nvISundayCEnd	Control/Monitor	AdjustableDampOutput	AI	180	nvoAdjustableDampOutput	Monitor Only
ScheduleMondayASStart	AV	52	nvIMondayASStart	Control/Monitor	DilBoostActiveFlag	BI	182	nvoDilBoostDN	Monitor Only
ScheduleMondayAEnd	AV	53	nvIMondayAEnd	Control/Monitor	ReheatActiveFlag	BI	183	nvoReheatDN	Monitor Only
ScheduleMondayBStart	AV	54	nvIMondayBStart	Control/Monitor	DefrostActiveFlag	BI	184	nvoDefrostDN	Monitor Only
ScheduleMondayBEnd	AV	55	nvIMondayBEnd	Control/Monitor	PumpdownDFActiveFlag	BI	185	nvoPumpDFDN	Monitor Only
ScheduleMondayCStart	AV	56	nvIMondayCStart	Control/Monitor	PumpdownDFActiveFlag	BI	186	nvoPumpDFDN	Monitor Only
ScheduleMondayCEnd	AV	57	nvIMondayCEnd	Control/Monitor	ReheatValvePosition	AI	187	nvoReheatPos	Monitor Only
ScheduleTuesdayASStart	AV	58	nvITuesdayASStart	Control/Monitor	EevValvePosition	AI	188	nvoEevValvePos	Monitor Only
ScheduleTuesdayAEnd	AV	59	nvITuesdayAEnd	Control/Monitor	IntakeDpActual	AI	189	nvoIntakeDpActual	Monitor Only
ScheduleTuesdayBStart	AV	60	nvITuesdayBStart	Control/Monitor	SpaceDpActual	AI	190	nvoSpaceDpActual	Monitor Only
ScheduleTuesdayBEnd	AV	61	nvITuesdayBEnd	Control/Monitor	CompressorPower	AI	191	nvoCompPower	Monitor Only
ScheduleTuesdayCStart	AV	62	nvITuesdayCStart	Control/Monitor	CompressorFrequency	AI	192	nvoCompFreq	Monitor Only
ScheduleTuesdayCEnd	AV	63	nvITuesdayCEnd	Control/Monitor	CompressorCurrent	AI	193	nvoCompAnps	Monitor Only
ScheduleWednesdayASStart	AV	64	nvIWedASStart	Control/Monitor	Subcool	AI	208	nvoSubcool	Monitor Only
ScheduleWednesdayAEnd	AV	65	nvIWedAEnd	Control/Monitor	Superheat	AI	209	nvoSuperheat	Monitor Only
ScheduleWednesdayBStart	AV	66	nvIWedBStart	Control/Monitor	ActiveFault1	AI	210	nvoActiveFault1	Monitor Only
ScheduleWednesdayBEnd	AV	67	nvIWedBEnd	Control/Monitor	ActiveFault2	AI	211	nvoActiveFault2	Monitor Only
ScheduleWednesdayCStart	AV	68	nvIWedCStart	Control/Monitor	ActiveFault3	AI	212	nvoActiveFault3	Monitor Only
ScheduleWednesdayCEnd	AV	69	nvIWedCEnd	Control/Monitor	ActiveFault4	AI	213	nvoActiveFault4	Monitor Only
ScheduleThursdayASStart	AV	70	nvIThursASStart	Control/Monitor	ActiveFault5	AI	214	nvoActiveFault5	Monitor Only
ScheduleThursdayAEnd	AV	71	nvIThursAEnd	Control/Monitor	ActiveFault6	AI	215	nvoActiveFault6	Monitor Only
ScheduleThursdayBStart	AV	72	nvIThursBStart	Control/Monitor	SchedulingEnableFlag	BV	216	nvoSchedEnableFlag	Control/Monitor
ScheduleThursdayBEnd	AV	73	nvIThursBEnd	Control/Monitor	HeatTemperModeDcc	AV	217	nvoHeatModeDcc	Control/Monitor
ScheduleThursdayCStart	AV	74	nvIThursCStart	Control/Monitor	HeatTemperModeUnocc	AV	218	nvoHeatModeUnocc	Control/Monitor
ScheduleThursdayCEnd	AV	75	nvIThursCEnd	Control/Monitor	CoolTemperModeDcc	AV	219	nvoCoolModeDcc	Control/Monitor
ScheduleFridayASStart	AV	76	nvIFridayASStart	Control/Monitor	CoolTemperModeUnocc	AV	220	nvoCoolModeUnocc	Control/Monitor
ScheduleFridayAEnd	AV	77	nvIFridayAEnd	Control/Monitor	ActivateDcc	AV	221	nvoActivateDcc	Control/Monitor
ScheduleFridayBStart	AV	78	nvIFridayBStart	Control/Monitor	ActivateUnocc	AV	222	nvoActivateUnocc	Control/Monitor
ScheduleFridayBEnd	AV	79	nvIFridayBEnd	Control/Monitor	BlowerModeDcc	AV	223	nvoBlowModeDcc	Control/Monitor
ScheduleFridayCStart	AV	80	nvIFridayCStart	Control/Monitor	BlowerModeUnocc	AV	224	nvoBlowModeUnocc	Control/Monitor
ScheduleFridayCEnd	AV	81	nvIFridayCEnd	Control/Monitor	MixingBoxMode	AV	225	nvoMBMode	Control/Monitor
ScheduleSaturdayASStart	AV	82	nvISatASStart	Control/Monitor	Reheat DP Adj Dcc	AV	226	nvoDPAdjDcc	Control/Monitor
ScheduleSaturdayAEnd	AV	83	nvISatAEnd	Control/Monitor	Reheat DP Adj Unocc	AV	227	nvoDPAdjUnocc	Control/Monitor
ScheduleSaturdayBStart	AV	84	nvISatBStart	Control/Monitor	BlowerPwmRateDcc	AV	232	nvoPwmMinDcc	Control/Monitor
ScheduleSaturdayBEnd	AV	85	nvISatBEnd	Control/Monitor	BlowerPwmRateUnocc	AV	233	nvoPwmMinUnocc	Control/Monitor
ScheduleSaturdayCStart	AV	86	nvISatCStart	Control/Monitor	BlowerPwmMaxRateDcc	AV	234	nvoPwmMaxDcc	Control/Monitor
ScheduleSaturdayCEnd	AV	87	nvISatCEnd	Control/Monitor	BlowerPwmMaxRateUnocc	AV	235	nvoPwmMaxUnocc	Control/Monitor
BlowerManualPwmRateDcc	AV	90	nvIBlowManPwmDcc	Control/Monitor	MixingBoxMinDAPercentDcc	AV	236	nvoMBMinDAPerDcc	Control/Monitor
BlowerManualPwmRateUnocc	AV	91	nvIBlowManPwmUnocc	Control/Monitor	MixingBoxMinDAPercentUnocc	AV	237	nvoMBMinDAPerUnocc	Control/Monitor
EconomizerTempSPDcc	AV	94	nvIEcoTempSPDcc	Control/Monitor	MixingBoxMaxDAPercentDcc	AV	238	nvoMBMaxDAPerDcc	Control/Monitor
EconomizerTempSPUnocc	AV	95	nvIEcoTenSPUnocc	Control/Monitor	MixingBoxMaxDAPercentUnocc	AV	239	nvoMBMaxDAPerUnocc	Control/Monitor
EconomizerTempBandDcc	AV	96	nvIEcoTenBandDcc	Control/Monitor	MixingBoxMinVoltsDcc	AV	240	nvoMBMinVoltsDcc	Control/Monitor
EconomizerTempBandUnocc	AV	97	nvIEcoTenBandUnocc	Control/Monitor	MixingBoxMinVoltsUnocc	AV	241	nvoMBMinVoltsUnocc	Control/Monitor
EconomizerTotalBandDcc	AV	98	nvIEcoTotBandDcc	Control/Monitor	MixingBoxMaxVoltsDcc	AV	242	nvoMBMaxVoltsDcc	Control/Monitor
EconomizerTotalBandUnocc	AV	99	nvIEcoTotBandUnocc	Control/Monitor	MixingBoxMaxVoltsUnocc	AV	243	nvoMBMaxVoltsUnocc	Control/Monitor
EconomizerRHSPDcc	AV	100	nvIEcoRHSPDcc	Control/Monitor	CFMReading	AI	244	nvoCFMReading	Read Only
EconomizerRHSPUnocc	AV	101	nvIEcoRHSPUnocc	Control/Monitor	StaticPressure	AI	245	nvoStaticPress	Read Only

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OWNER

Kroger

DATE	DESCRIPTION
04/06/2023	90% KROGER REVIEW
04/27/2023	100% PERMIT

PROJECT TITLE
KROGER'S STORE DAL984

NEG OF ST. HWY. 121 & WASHINGTON DR.
MELISSA, TX 75454

COMMISSION NO. 523313
ISSUE DATE 04/27/2023

SHEET TITLE
HVAC SECTIONS AND DETAILS

SHEET NO.
M3.1.8

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DOAS/RTU FAN SCHEDULE - JOB#5942039

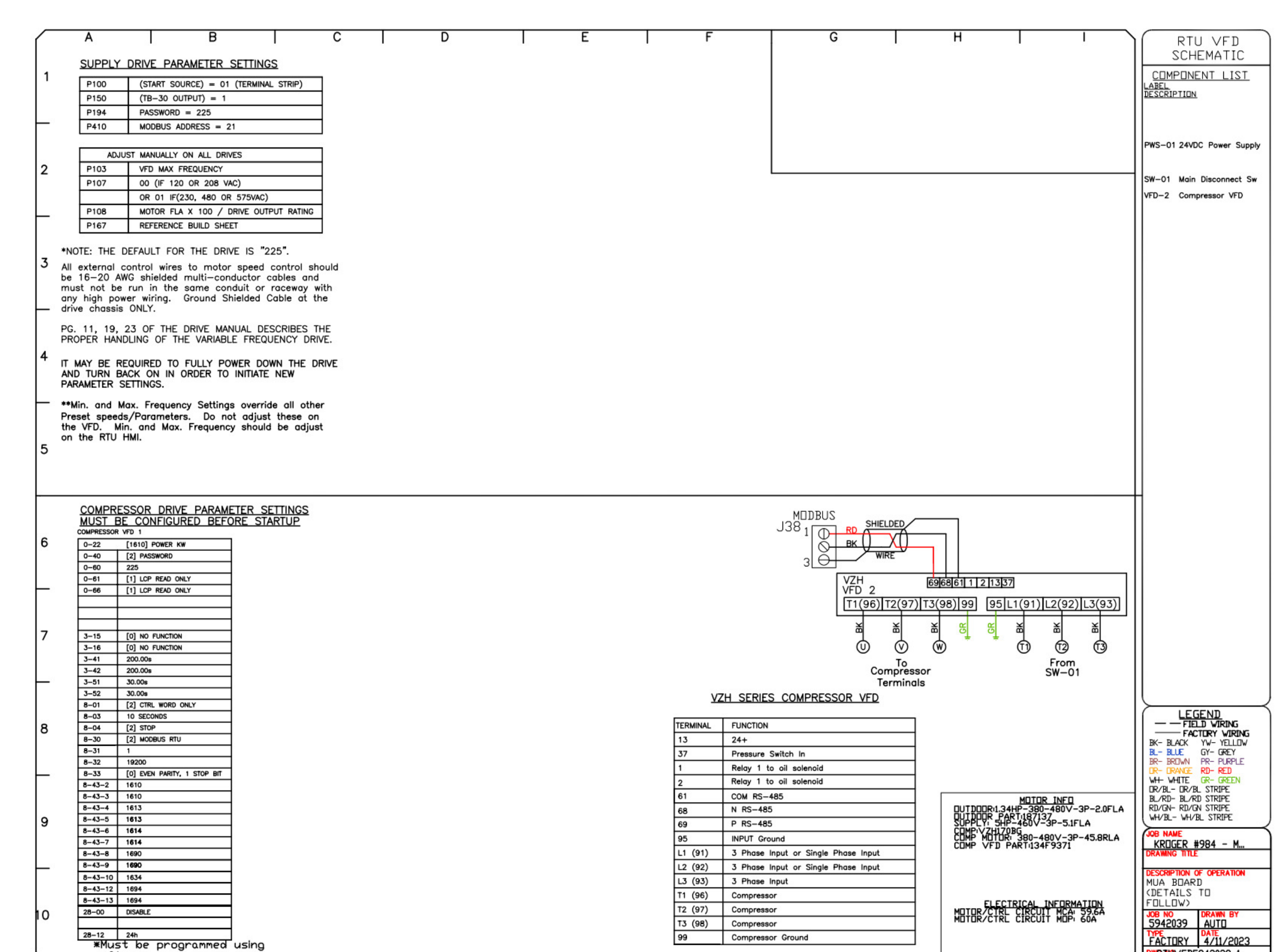
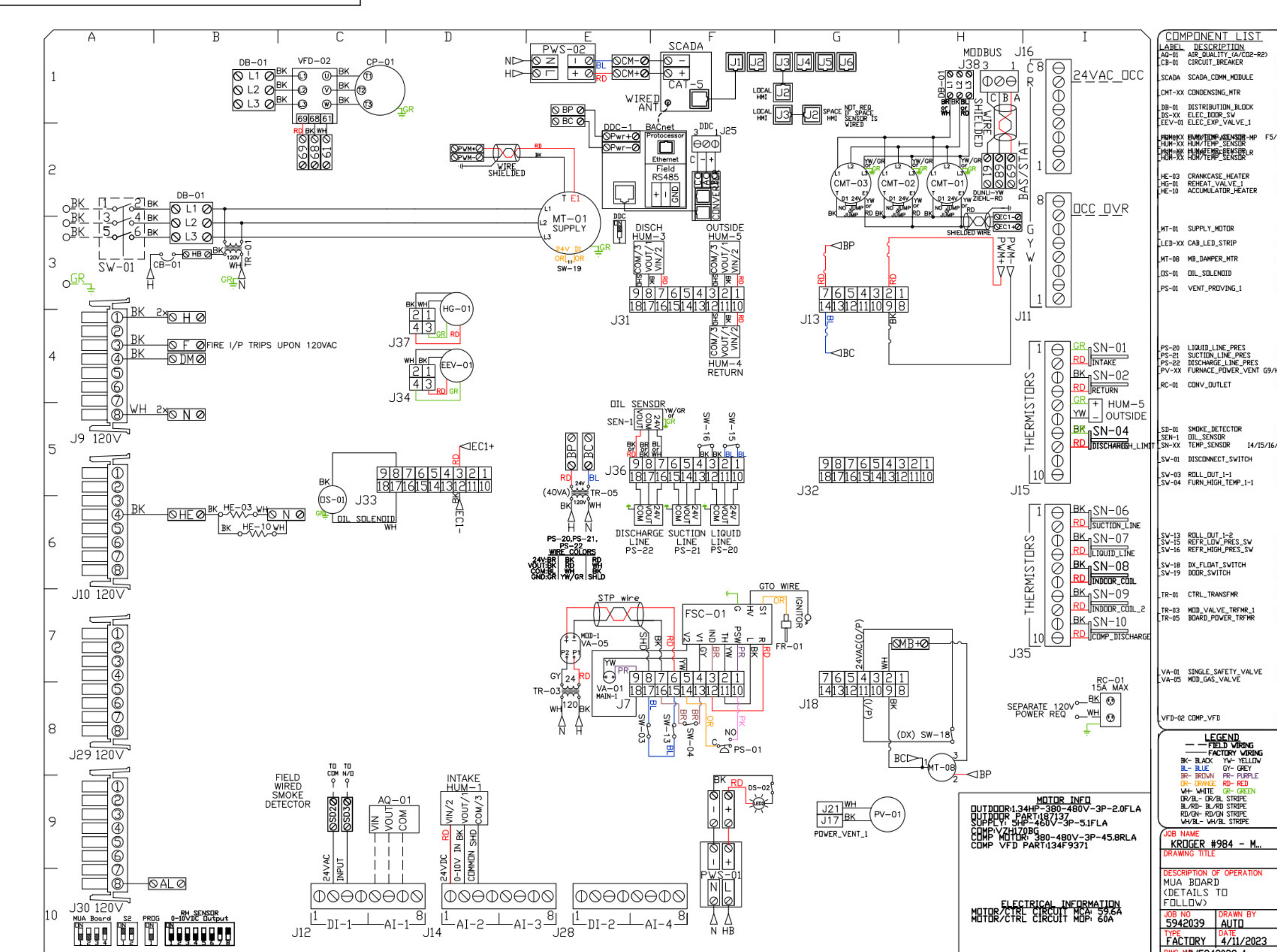
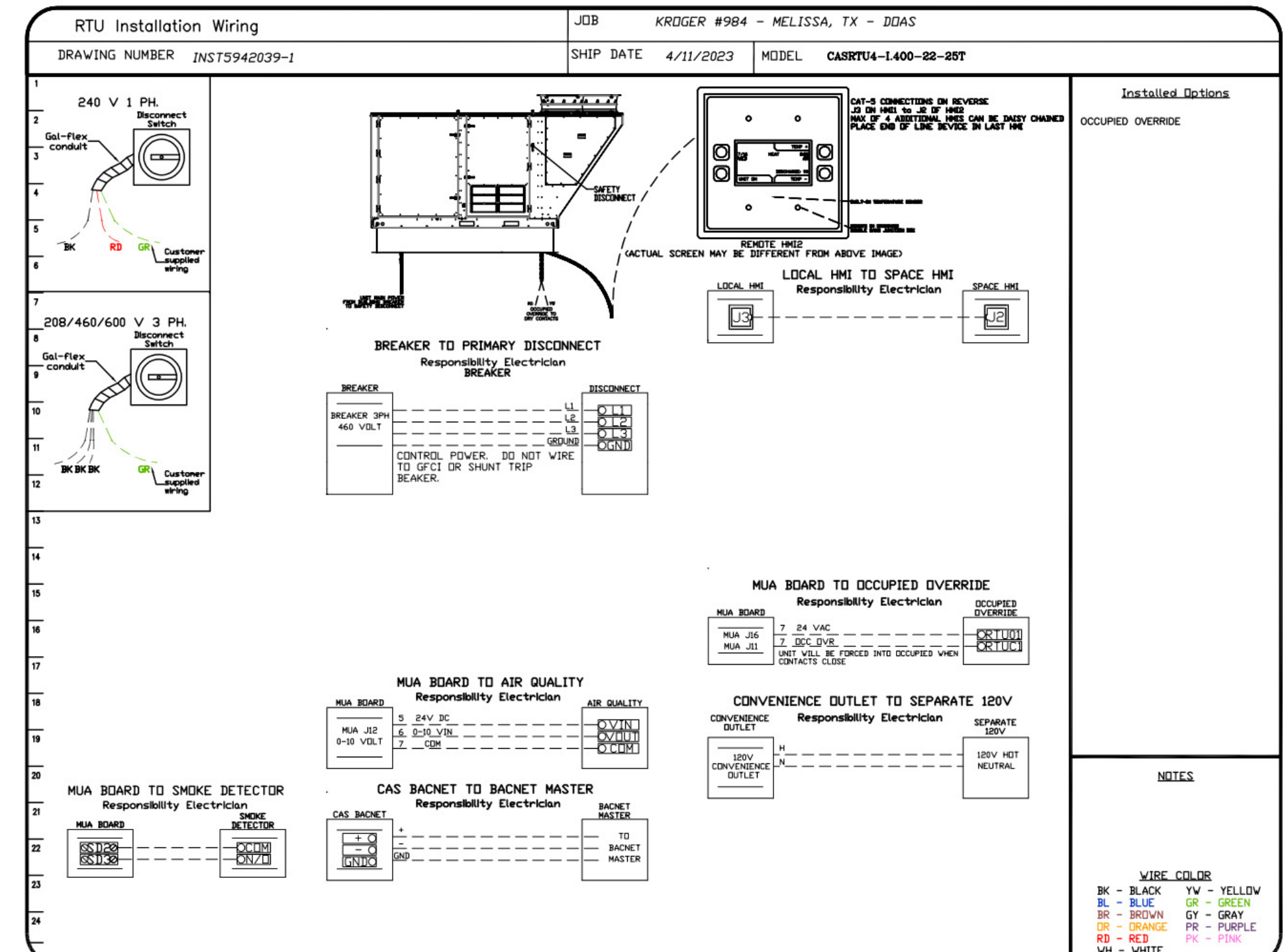
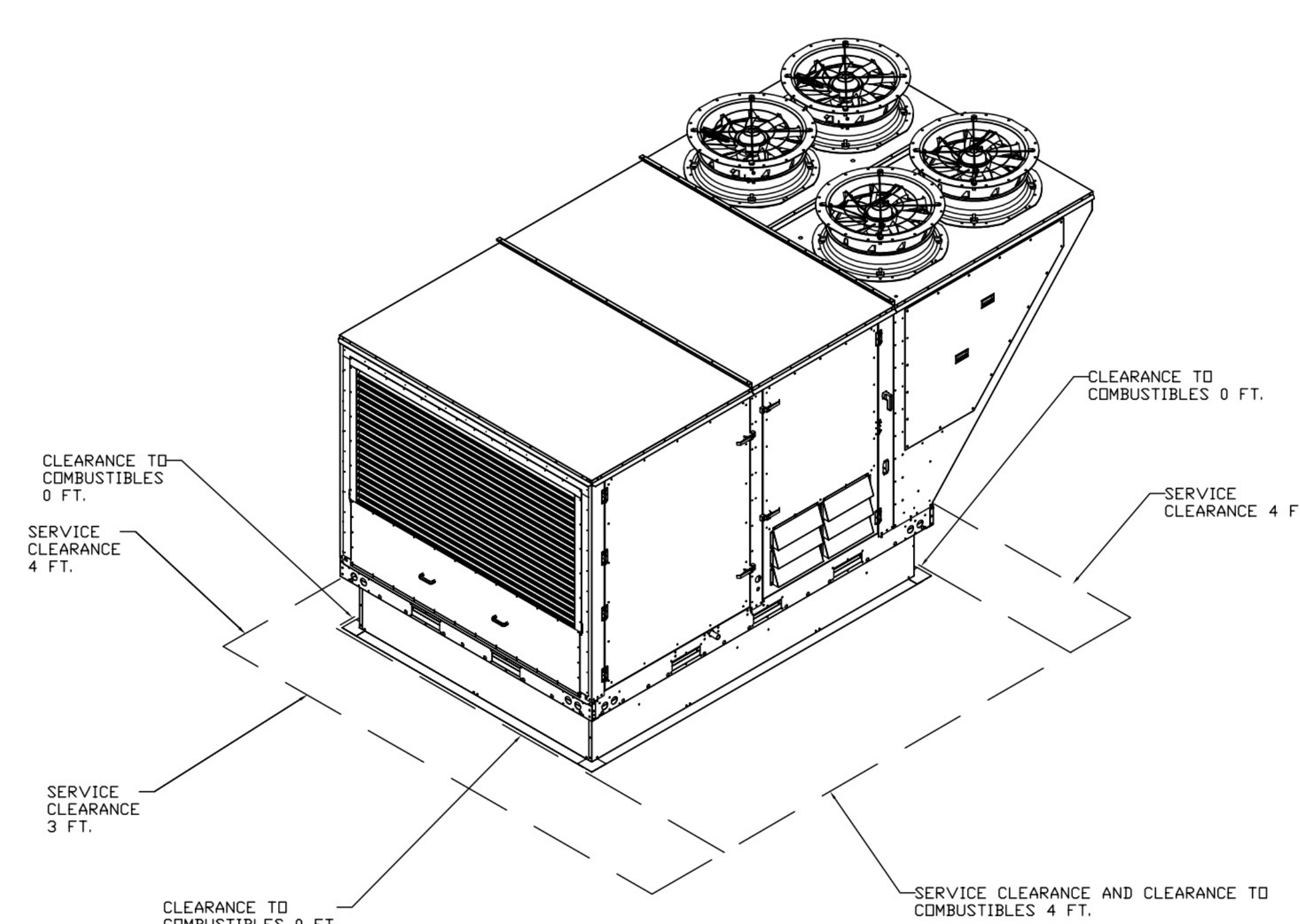
FAN UNIT NO	TAG	QTY	FAN INFORMATION				ELECTRICAL INFORMATION				COOLING INFORMATION				REHEAT INFORMATION				GAS HEAT INFORMATION				NOTES														
			DOAS/RTU MODEL #	MANUFACTURER	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ESP	HP	PHASE	VOLT	MCA	MDCP	DB	WB	DB	WB	DB	WB	DP		TOTAL	SENS.	IEER	ISMRE	DISCHARGE	DB	WB	DESIRED	MAX	MOISTURE REMOVAL RATE	GAS TYPE	INPUT BTUS	OUTPUT BTUS	TEMP RISE
1	DDAS-1	1	CASRTU4-1400-22-25T	CAPTIVEAIRE	222-4	0	4200	4200	4191	0.000	5.00	3	460	59.6A	60A	83.5°F	77.3°F	83.5°F	77.3°F	58.8°F	51.6°F	50.8°F	336.0 MBH	129.2 MBH	17.9	4.7	70.0°F	58.5°F	75.6 MBH	260 MBH	186.4 LBS/HR	NATURAL	299894	242914	53°F	7 IN. W.C. - 14 IN. W.C.	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
2	DDAS-2	1	CASRTU4-1400-22-25T	CAPTIVEAIRE	222-4	0	4200	4200	4191	0.000	5.00	3	460	59.6A	60A	83.5°F	77.3°F	83.5°F	77.3°F	58.8°F	51.6°F	50.8°F	336.0 MBH	129.2 MBH	17.9	4.7	70.0°F	58.5°F	75.6 MBH	260 MBH	186.4 LBS/HR	NATURAL	299894	242914	53°F	7 IN. W.C. - 14 IN. W.C.	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18

NOTES:

- INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL
- DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE
- INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
- REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE
- EC MOTOR CONDENSING FANS
- ELECTRONIC EXPANSION VALVE. TXV NOT ACCEPTABLE
- SUCTION LINE ACCUMULATOR
- FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER
- AVERAGING INTAKE, EVAP AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT)
- 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 20GA EXTERIOR W/ 14GA BASE
- 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE. 6:1 TURNDOWN WITH NG AND 5:1 TURNDOWN WITH LP
- SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE
- FULLY MODULATING HEAT GAS REHEAT
- 15 DEGREE LOW AMBIENT OPERATION
- HAIL GUARD FOR CONDENSING COIL
- RTU ECONOMIZER WITH DIFFERENTIAL ENTHALPY CONTROL
- BAROMETRIC RELIEF DAMPER
- DOWN DISCHARGE/DOWN RETURN

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1 & 2	DDAS-1 & DDAS-2	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	RTU4 DOWN DISCHARGE
		1	2" MERV 8 FILTERS FOR RTU4 (QTY. 12)
		1	OVERHEAT STAT
		1	25 TON MODULATING COOLING OPTION, 460/480V. 3CFS. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
		1	ECM FAN DOAS - 3 PHASE
		1	FREEZE STAT
		1	OCCUPIED SCHEDULING
		1	AUXILIARY REHEAT
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	ECM WIRING PACKAGE - SUPPLY FAN CONTROL RTU MUA BOARD
		1	DDC MSP BACKUP REMOTE UNIT MONITORING - ALLOWS FOR REMOTE DDC OCCUPIED OVERRIDE AND SETPOINT CHANGES
		1	RTU4 CONVENIENCE OUTLET (GFCI), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J-BOX
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI
		1	RTU4 HAIL GUARD
		1	RTU4 DOWN RETURN
		1	LOW AMBIENT COOLING OPERATION - DOWN TO OF AMBIENT
		1	25 TON MODULATING REHEAT OPTION - DISCHARGE DEWPOINT CONTROL
		1	DAMPER CONTROL - CO2 MIN/MAX OVERRIDE SETPOINT
		1	RTU ECONOMIZER - DIFFERENTIAL ENTHALPY CONTROL
		1	RTU4 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)



REVISIONS

NO.	DESCRIPTION	DATE
1		
2		
3		
4		

CAPTIVEAIRE

National Accounts

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KROGER #984 - MELISSA, TX - DOAS
MELISSA, TX, 75454

DATE: 4/11/2023
DWG.#: 5942039
DRAWN BY: JAC
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 1

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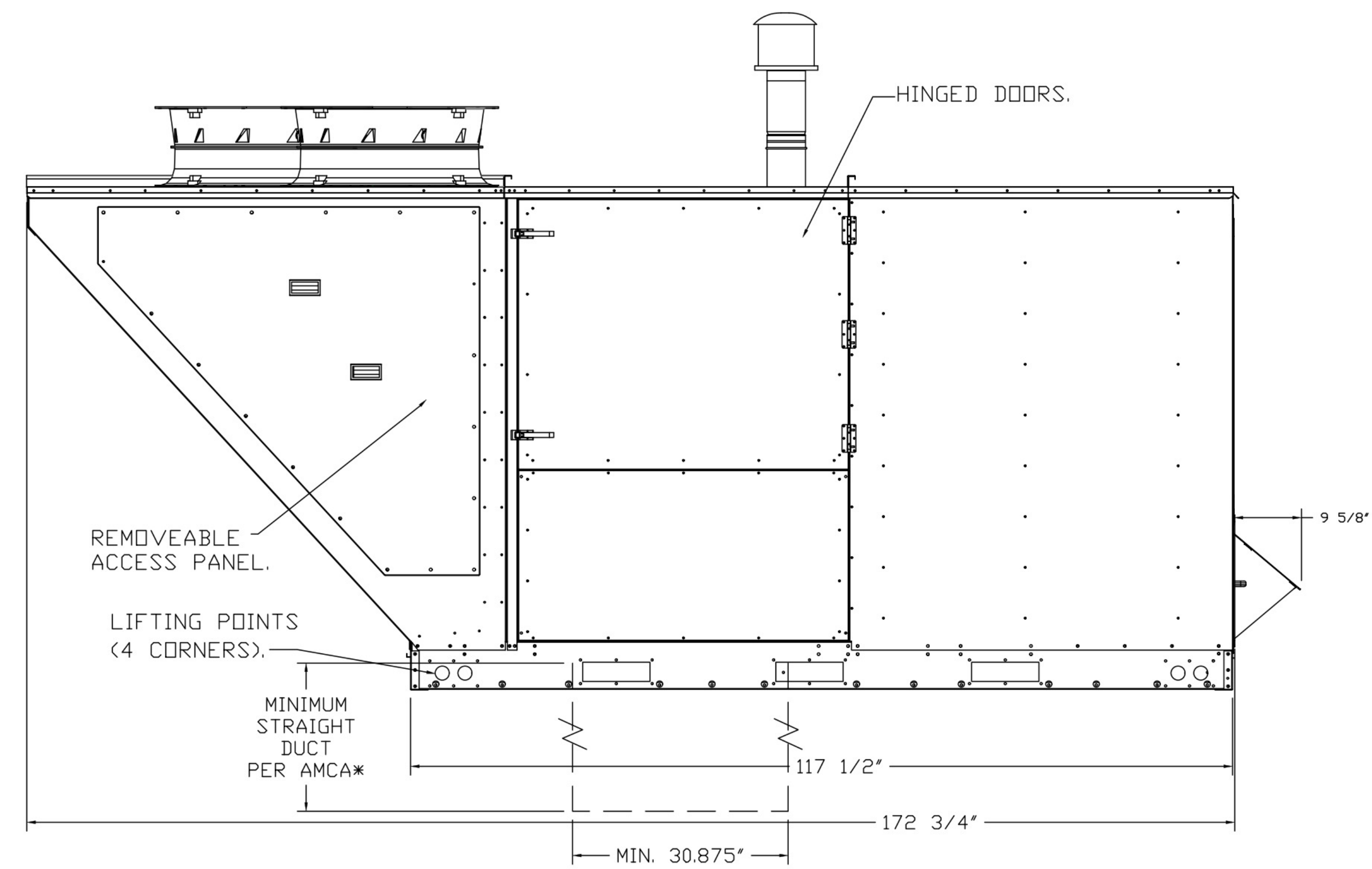
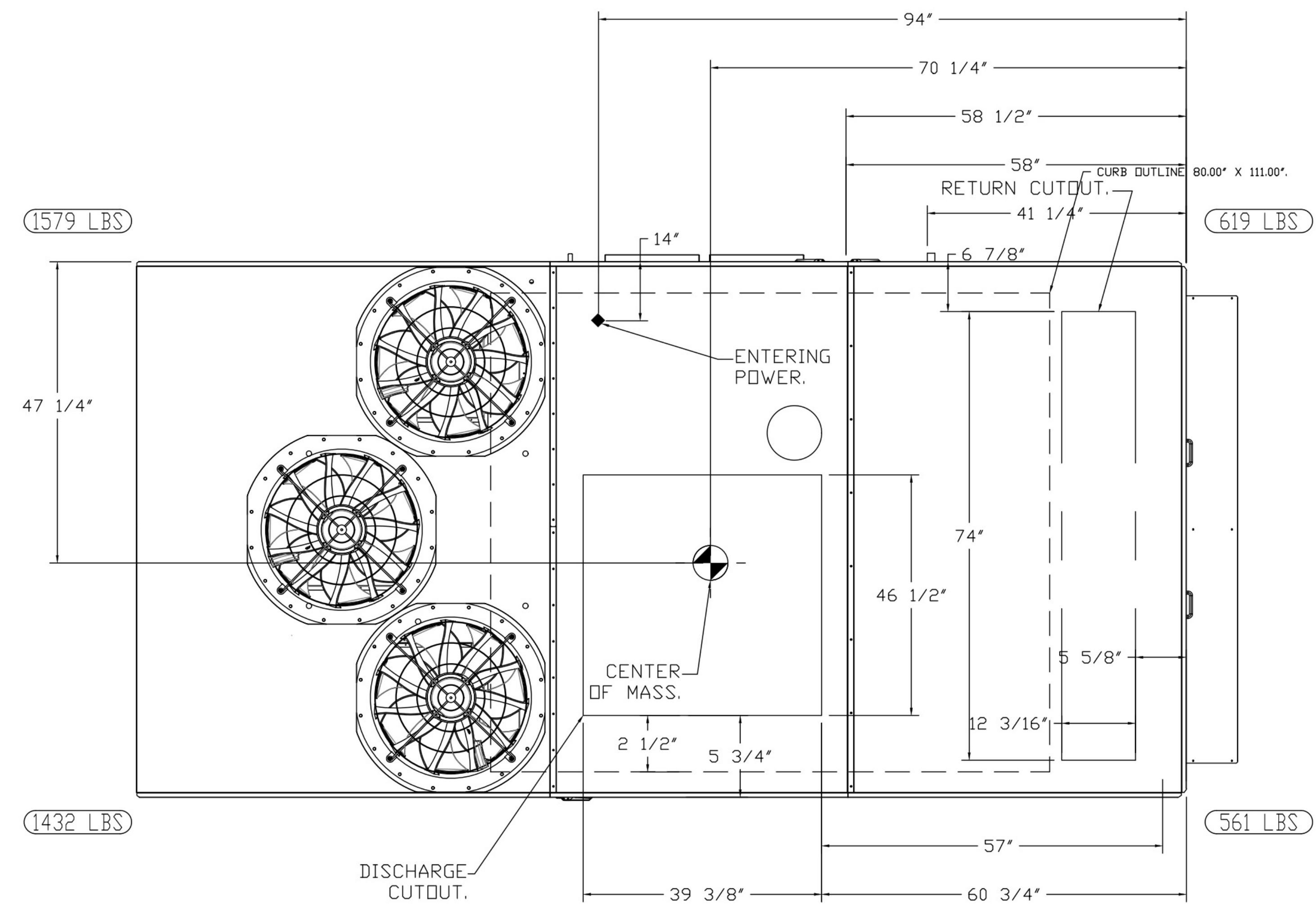
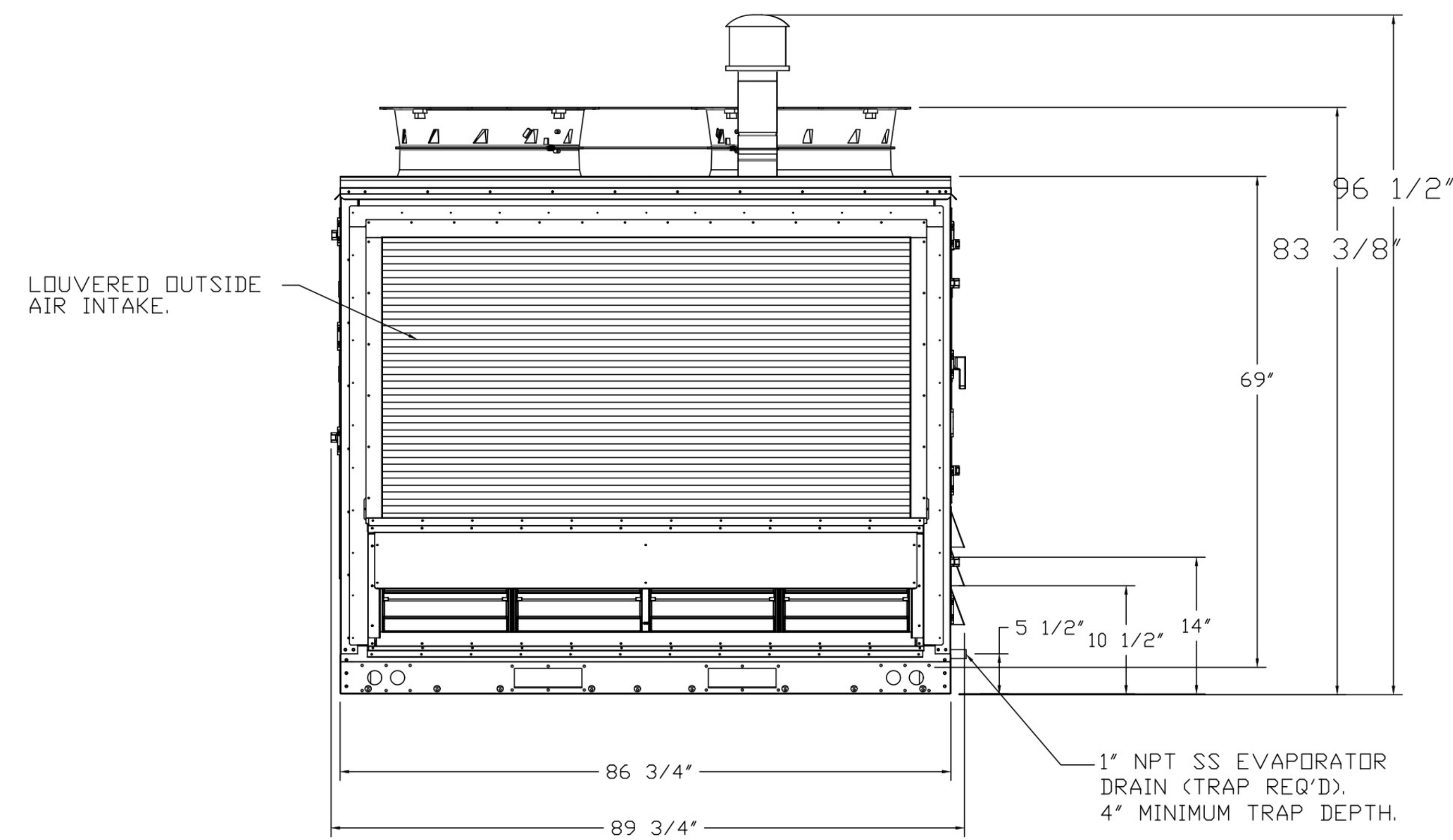
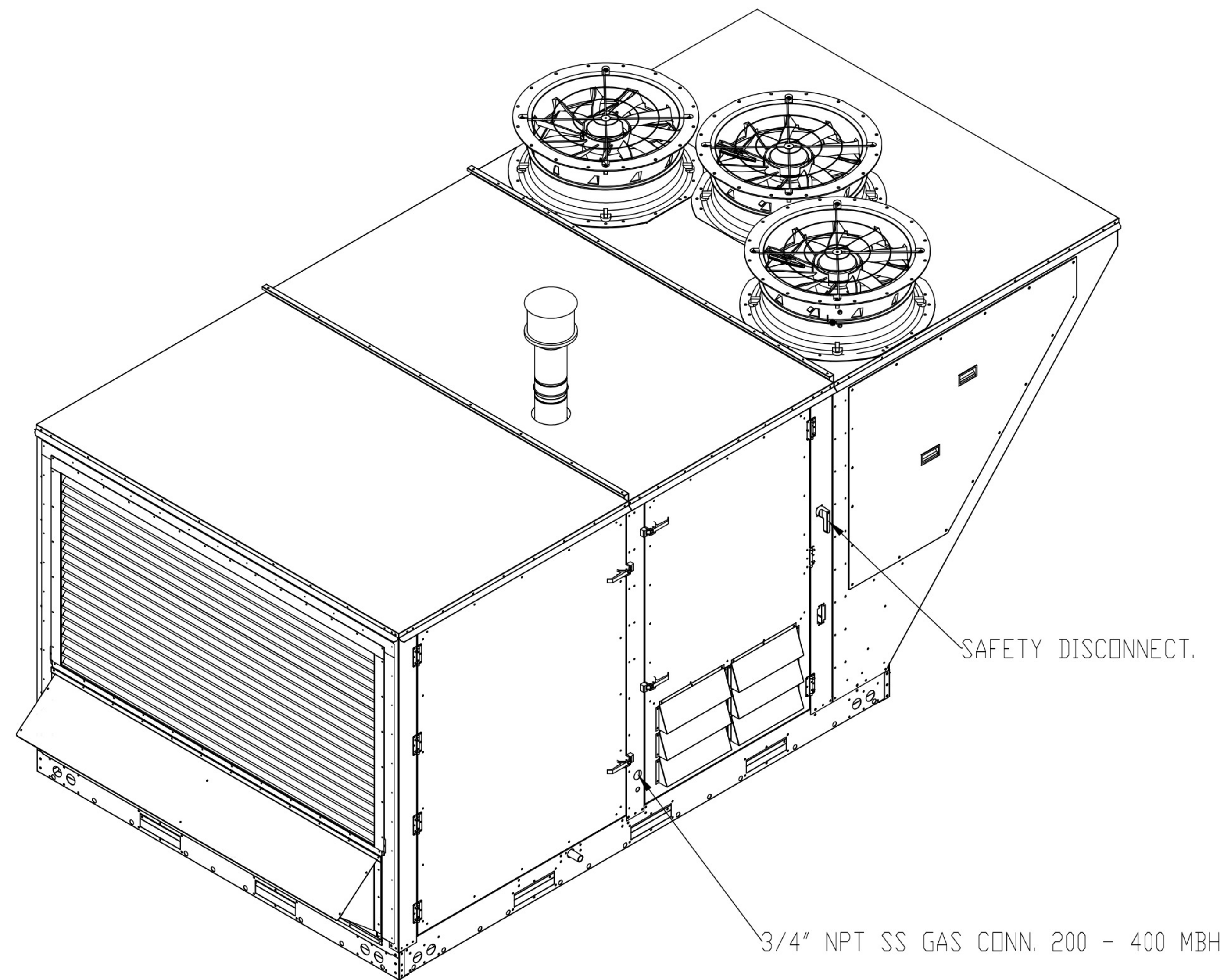
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FAN #1 (DOAS-1), #2 (DOAS-2) - CASRTU4-I.400-22-25T
HEATER

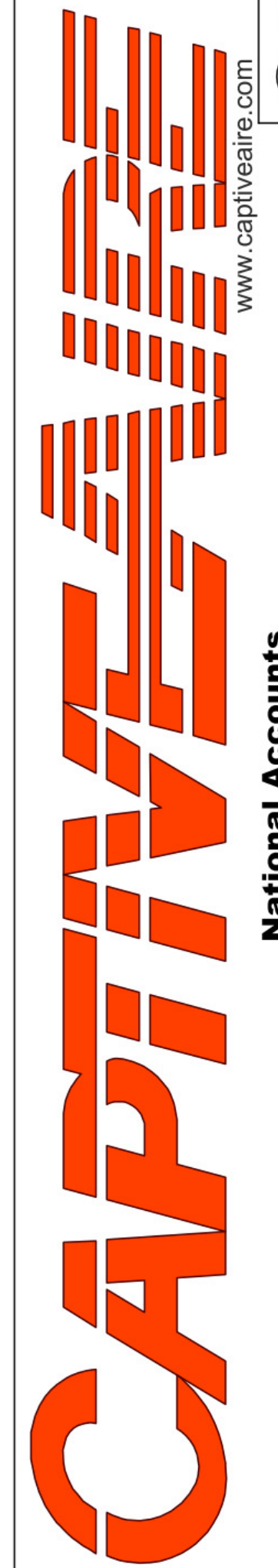
NOTES:

- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
-  DENOTES CORNER WEIGHT.

*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 30.875" x 39.75".



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