

HOOD INFORMATION - JOB#6460865

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				MUA CFM	AC CFM	HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT	DIA				CFM	VEL	SP	END TO END	RDW
1		5430 ND-2-ACPSP-F	CAPTIVEAIRE	11' 0"	600 DEG	I	HEAVY	225	2475			4'	16"	2475	1773	-0.872'	2000	650	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT		
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	SIZE			ELECTRICAL MODEL #	SWITCHES QUANTITY
1		CAPTRATE SOLD FILTER	8	20"	16"	85% SEE FILTER SPEC	4	L55 SERIES E26	NO	LEFT	12"x54"x30"	TANK FS	4.0/4.0	DCV-1111	1 LIGHT 1 FAN	YES	1250 LBS

HOOD OPTIONS

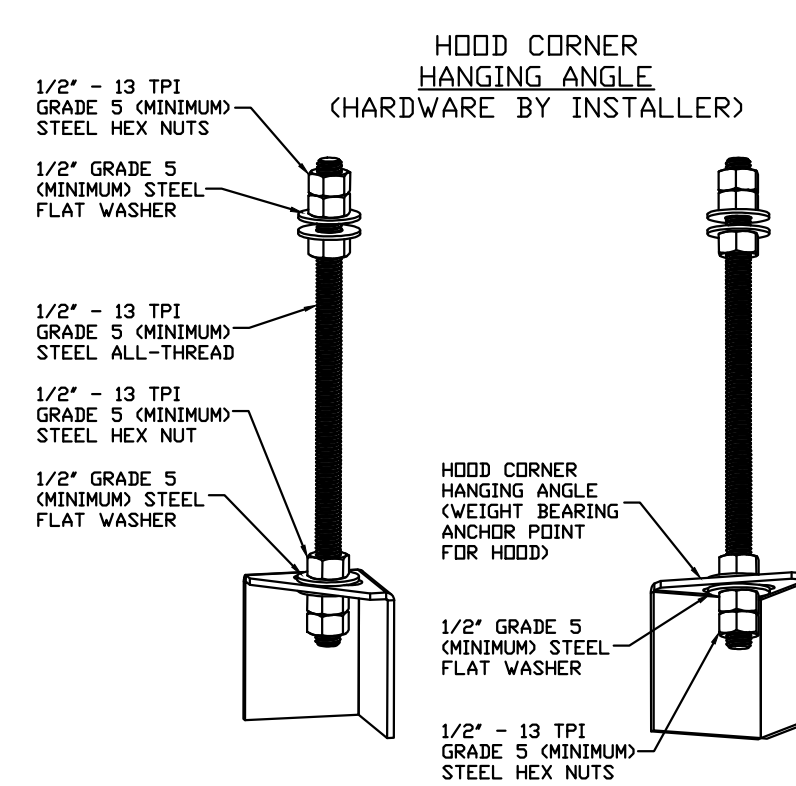
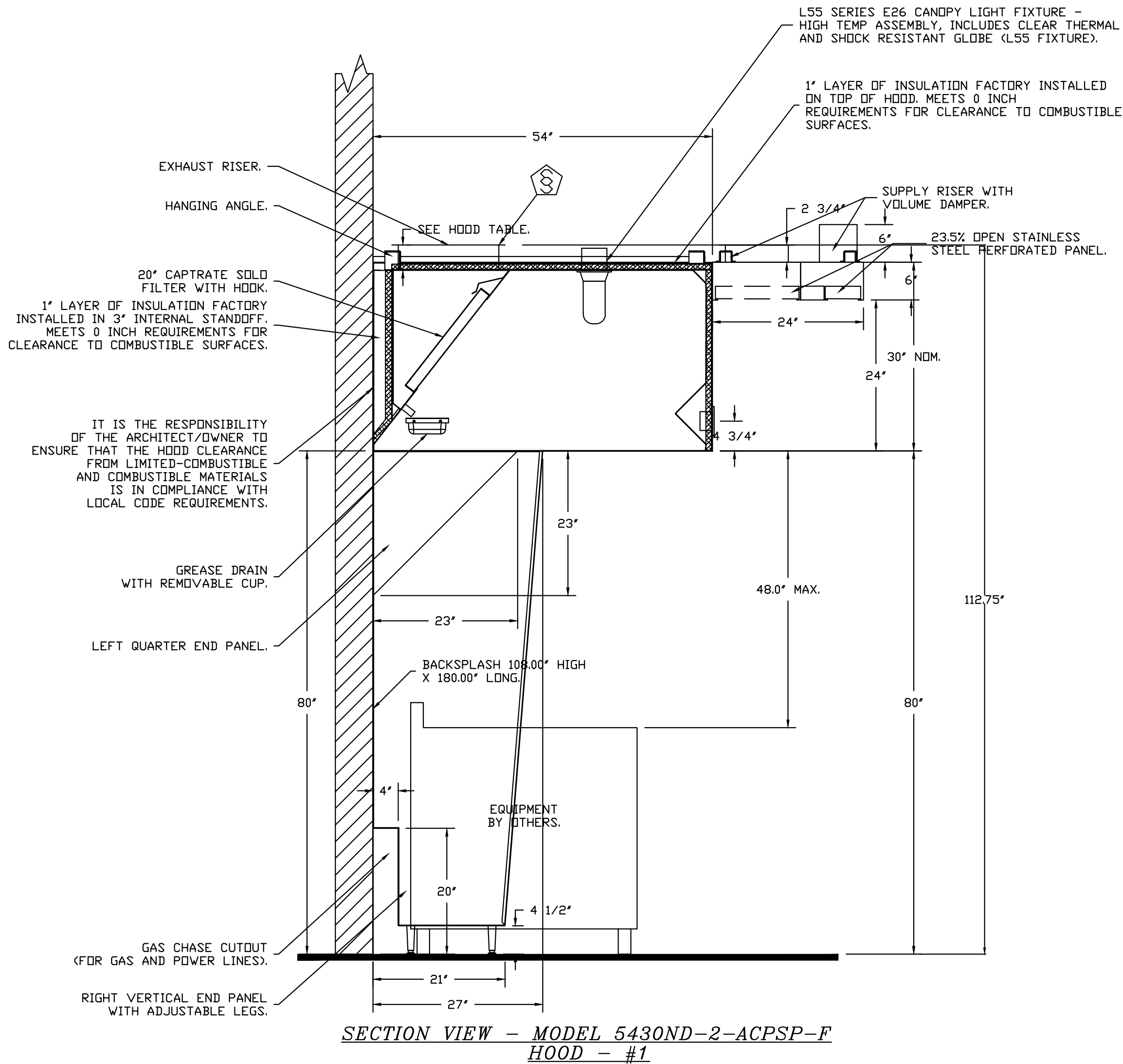
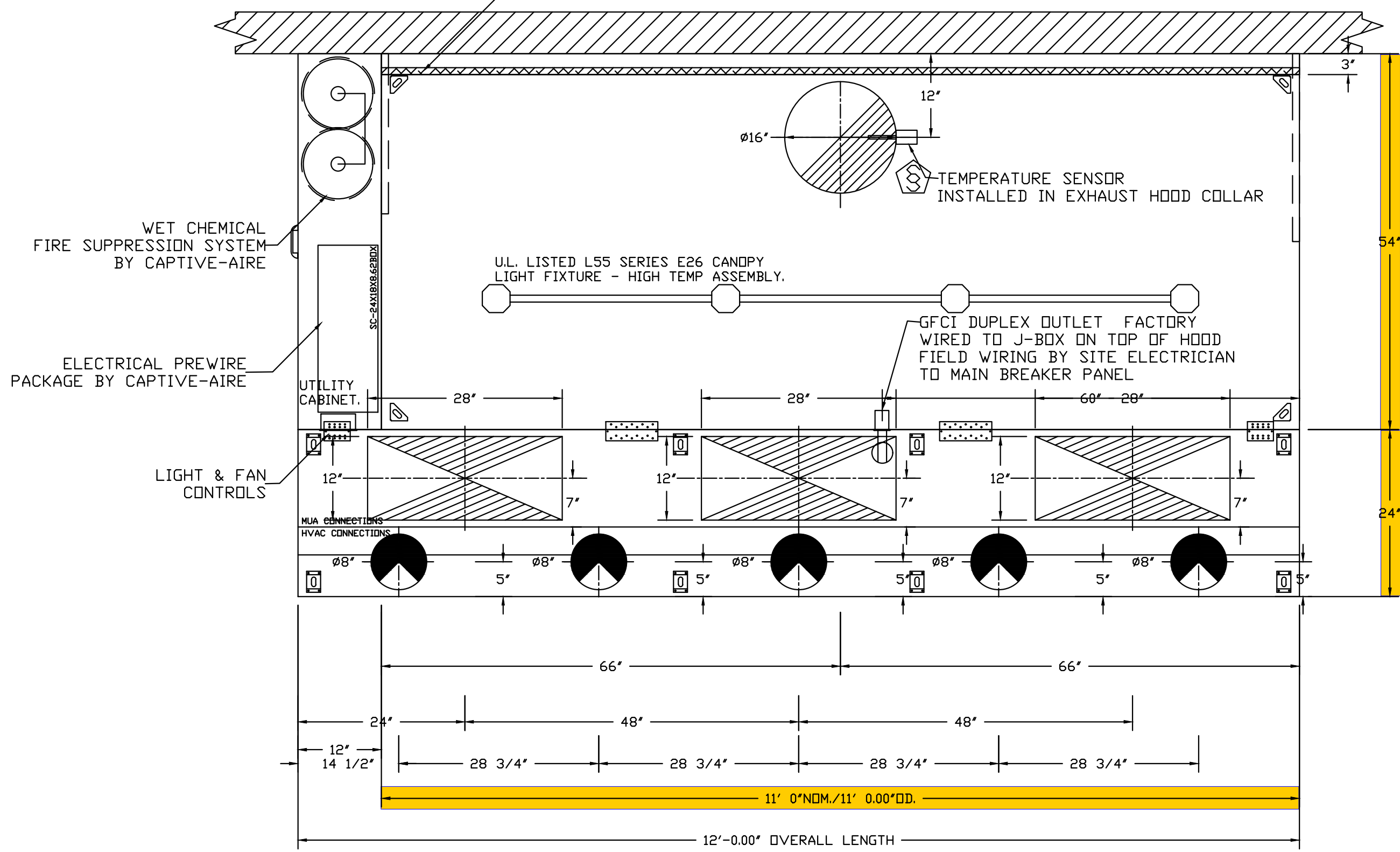
HOOD NO	TAG	OPTION
1		BACKSPLASH 108.00" HIGH X 240.00" LONG 430 SS VERTICAL. BACKSPLASH 108.00" HIGH X 180.00" LONG 430 SS VERTICAL. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. INSULATION FOR TOP OF HOOD. STRUCTURAL FRONT PANEL. INSULATION FOR BACK OF HOOD. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS. GFCI DUPLEX OUTLET, 20A 125V - HOOD FRONT RIGHT - VERTICAL - DIST FROM END: 60.00 DIST FROM BOTTOM: 4.75.

BACKSPLASH IS NOT INSULATED AND IS UNSUITABLE FOR INSTALL AGAINST COMBUSTIBLE WALLS.

PERFORATED SUPPLY PLENUM(S)

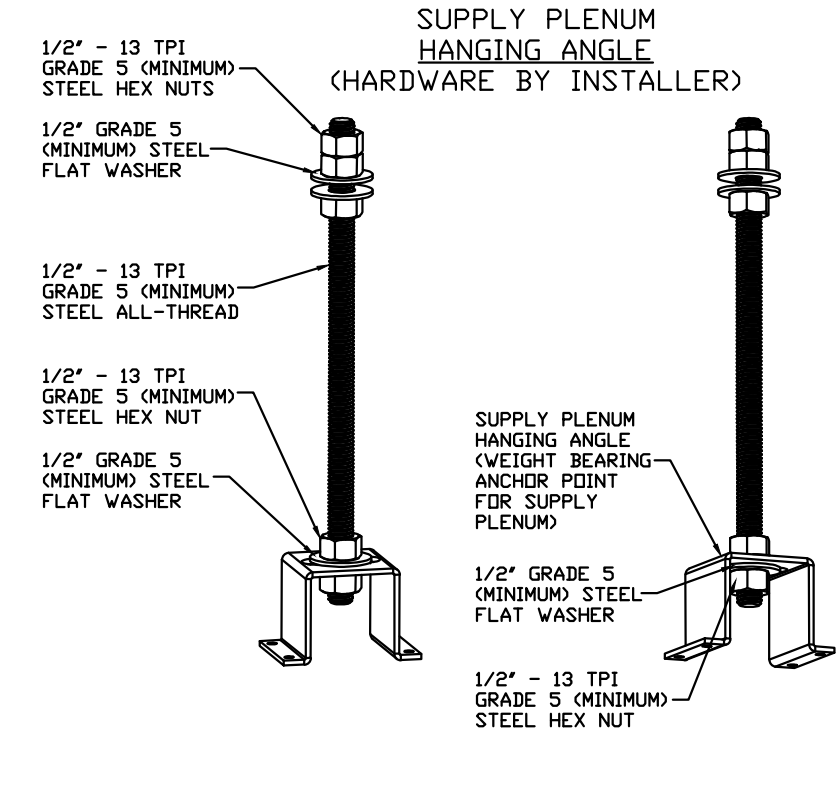
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG	DIA	CFM
1		Front	144'	24'	6'	MUA	12"	28"	666	0.169"
						MUA	12"	28"	666	0.169"
						MUA	12"	28"	666	0.169"
						AC		8"	130	0.053"
						AC		8"	130	0.053"
						AC		8"	130	0.053"
						AC		8"	130	0.053"

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



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.



ASSEMBLY INSTRUCTIONS

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2700 CFM IN 16" DIA. EXHAUST COLLAR = 1934 FPM
HOOD CONSTRUCTION OF 18 GAUGE AND 20 GAUGE METAL

CALCULATIONS UTILIZED

Calculations utilized are based on the hood's ETL Listing
 Exhaust CFM = 12 foot X 225 CFM/lin. ft. (load) = 2700 cfm
 Supply CFM = 2700 Exhaust CFM X 80 percent = 2160 cfm

Total Duct Area = $144 \times \frac{CFM}{FPM \text{ (note 1)}}$
 Duct Length = $\frac{\text{Total Duct Area}}{\text{Duct Depth (note 2)}}$

1) Captive-Aire ventilator duct sizes are calculated using an Exhaust velocity of 1500 - 1800 FPM and a Supply velocity of 800 - 1000 FPM.
 2) Please consult factory for maximum allowable duct sizes.

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH



NFPA #96
NSF
UL 710 & ULC710 STANDARDS
E.T.L. LISTED 3054804-001

FOR QUESTIONS, EMAIL THE
 CaptiveAire Dallas Sales Office
 Colin Prewitt
 PHONE: (214) 220-3999
 EMAIL: reg45@captiveaire.com

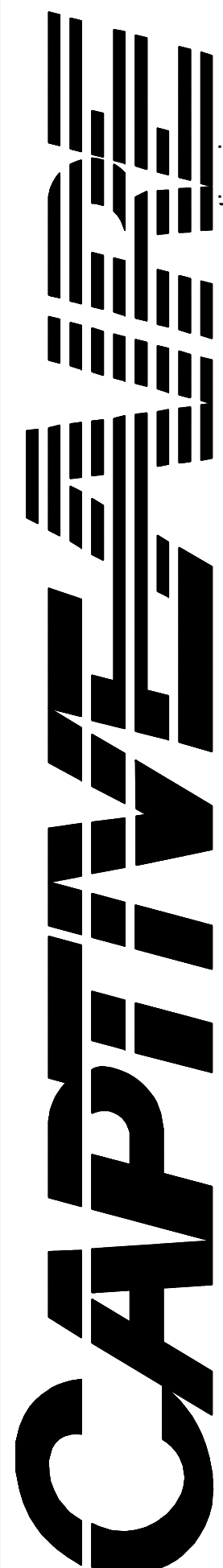
ALL HVAC SUPPLY DIFFUSERS WITHIN 10' OF THE EXHAUST HOOD MUST BE PERFORATED SCREEN STYLE WITH NO DIRECTIONAL VANES. HVAC AIR MUST NOT BLOW AT THE EXHAUST HOOD OR THE APPLIANCES.

ALL HVAC RETURN GRILLS MUST BE AT LEAST 10' FROM THE EXHAUST HOOD
 THE BACK OF THE FRYERS SHOULD BE NO MORE THAN 6' FROM THE WALL
 REFER TO HOOD MANUAL FOR PROPER INSTALLATION

CAPTIVE-AIRE HOOD PACKAGE AS SHOWN IS OWNER PROVIDED

REVISIONS

DESCRIPTION	DATE



Wingstop Redding CA #AB078
 1020 East Cypress Avenue, Suite A
 Redding, CA, 96002

DATE: 1/2/2024

DWG.#: 6460865

DRAWN BY: CJP-REG45

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

MASTER DRAWING

SHEET NO.

H.1

Dallas Office
 1901 Royal Lane Suite 101, DALLAS, TX, 75229 PHONE: (214) 220-3999 FAX: 2142200099 EMAIL: reg45@captiveaire.com

FIRE SYSTEM INFORMATION – JOB#6460865

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	37	FIRE CABINET LEFT	LEFT, HOOD 1

GAS VALVE(S)

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

INCLUDES: FIELD INSTALLATION AND HOOKUP OF THE FIRE SUPPRESSION SYSTEM DURING NORMAL BUSINESS HOURS ONLY, TWO SITE VISITS ONLY (ONE VISIT FOR SYSTEM HOOKUP/INSTALL AND ONE VISIT FOR ONE TEST/FINAL WITH FIRE MARSHAL), PERMIT, AND ONE SYSTEM TEST.

EXCLUDES: GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND ALL ELECTRICAL CONNECTIONS, HANGING OF WALL MOUNTED FIRE & ELECTRICAL CABINET(S) (IF APPLICABLE), RECESSING PULL STATION IN WALL, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES, ADDITIONAL SITE VISITS DUE TO CONDITIONS OUTSIDE THE INSTALLERS RESPONSIBILITY, RETEST DUE TO CONDITIONS OUTSIDE THE INSTALLERS RESPONSIBILITY, UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), CERTIFIED PAYROLL, ENGINEER STAMPING OF DRAWINGS, HORN STROBE(S) AND CARBON MONOXIDE DETECTOR(S)

BUILDING FIRE ALARM CONNECTIONS & PERMITTING ARE EXCLUDED. TO BE PROVIDED, INSTALLED AND WIRED BY GC WHEN A BUILDING FIRE ALARM SYSTEM IS PRESENT.

HORN STROBE(S) AND CARBON MONOXIDE DETECTOR(S) ARE EXCLUDED. TO BE PROVIDED, INSTALLED AND WIRED BY GC WHEN REQUIRED.

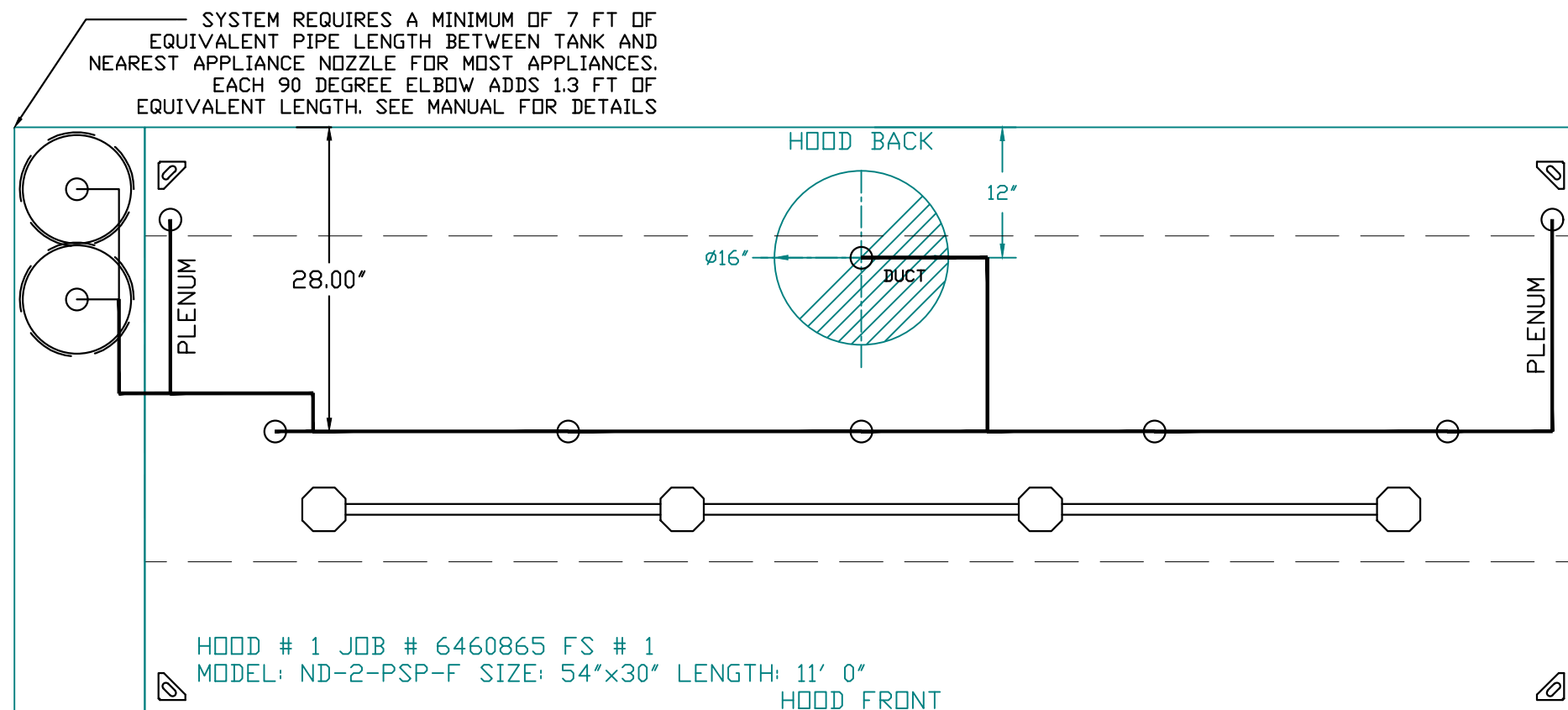
STANDARD SINGLE GANG JUNCTION BOX AND CONDUIT FOR THE REMOTE MANUAL ACTIVATION DEVICE (PUSH/PULL STATION) TO BE PROVIDED AND RECESS INSTALLED (PER WINGSTOP REQUEST) BY JOB SITE ELECTRICIAN. OTHERWISE JUNCTION BOX AND CONDUIT WILL BE SURFACE MOUNTED ON TOP OF THE WALL TO BE PROVIDED AND INSTALLED BY JOB SITE ELECTRICIAN.

THE REMOTE MANUAL ACTUATION DEVICE (PUSH/PULL STATION) SHOULD BE MOUNTED AT A POINT OF EGRESS AND POSITIONED AT A HEIGHT DETERMINED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). THIS POSITION IS USUALLY 10 TO 20 FEET FROM HOOD AND 42 TO 48 INCHES ABOVE THE FLOOR.

The TANK Fire Suppression System is a UL and ETL Listed system for wet chemical extinguishing system units. The TANK system is UL listed under file number EX27953 to meet requirements of UL 300; ULC Listed to meet requirements of ULC/ORD-C1254.6 and UL/ULC 1254; CE Marked; Meets requirements of NFPA 96 and NFPA 17A. The TANK Fire suppression system is ETL listed under Report Number 104560275SAT-003 to ANSI/CAN/UL/ULC 300.

The control package for TANK Fire Suppression is ETL listed under report number 101196419NYM-001 to the UL Standard 864 and CAN/ULC-S527-11; FDNY Certificate of Approval #5870

This product may be covered by one or more of the following patent number(s): (United States) 8378834, or other U.S. and foreign patents pending.



NOTES

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- PLATED 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' ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH UL 300 REQUIREMENTS.

- DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

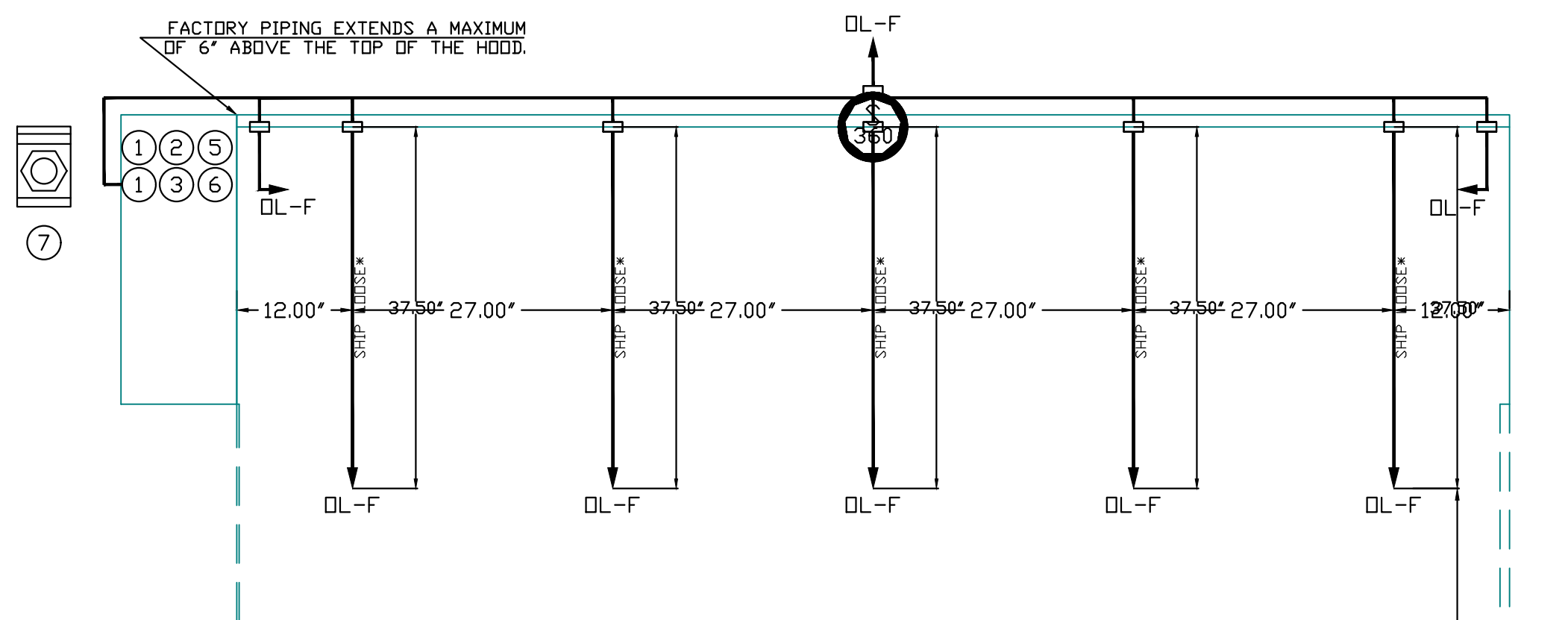
JOB #: 6460865.
JOB NAME: WINGSTOP REDDING CA #AB078.

SYSTEM SIZE: TANK-SP-2 DESIGN FP: 37. MAXIMUM FP: 40.
HOOD # 1 11' 0.00" LONG x 54" WIDE x 30" HIGH.
RISER # 1 SIZE: 16" DIA.
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.

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.



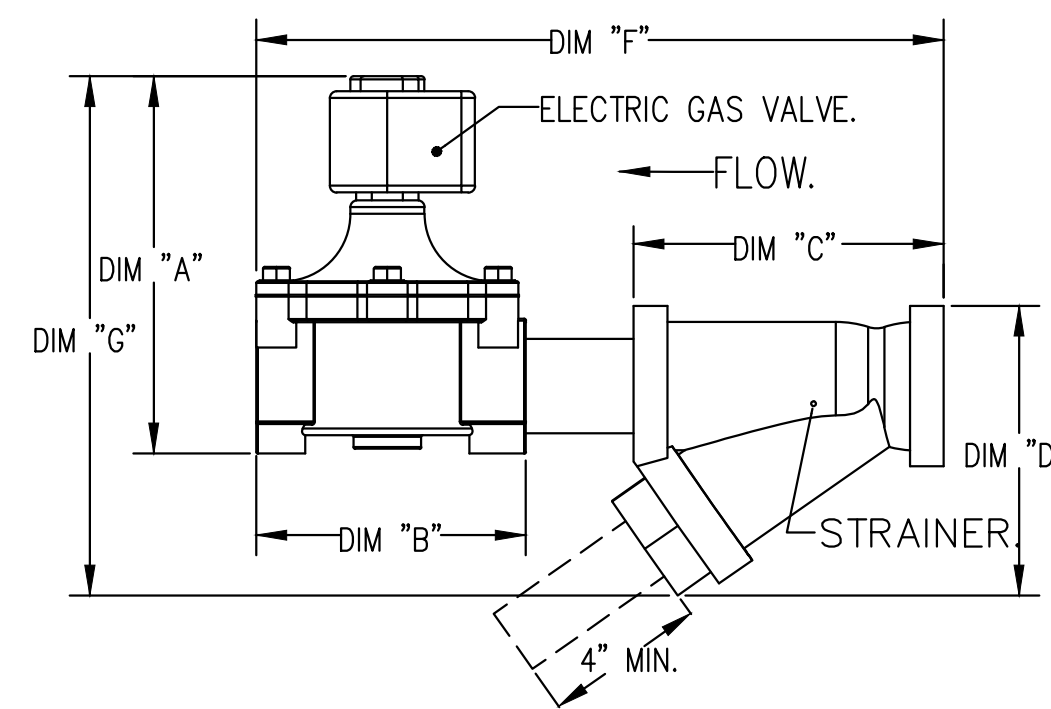
NOZZLE HEIGHT
35-50" FROM
COOKING SURFACE.
(44.75")

TANK OVERLAPPING
PROTECTION
HEIGHT
132.00" L X 30.00" D

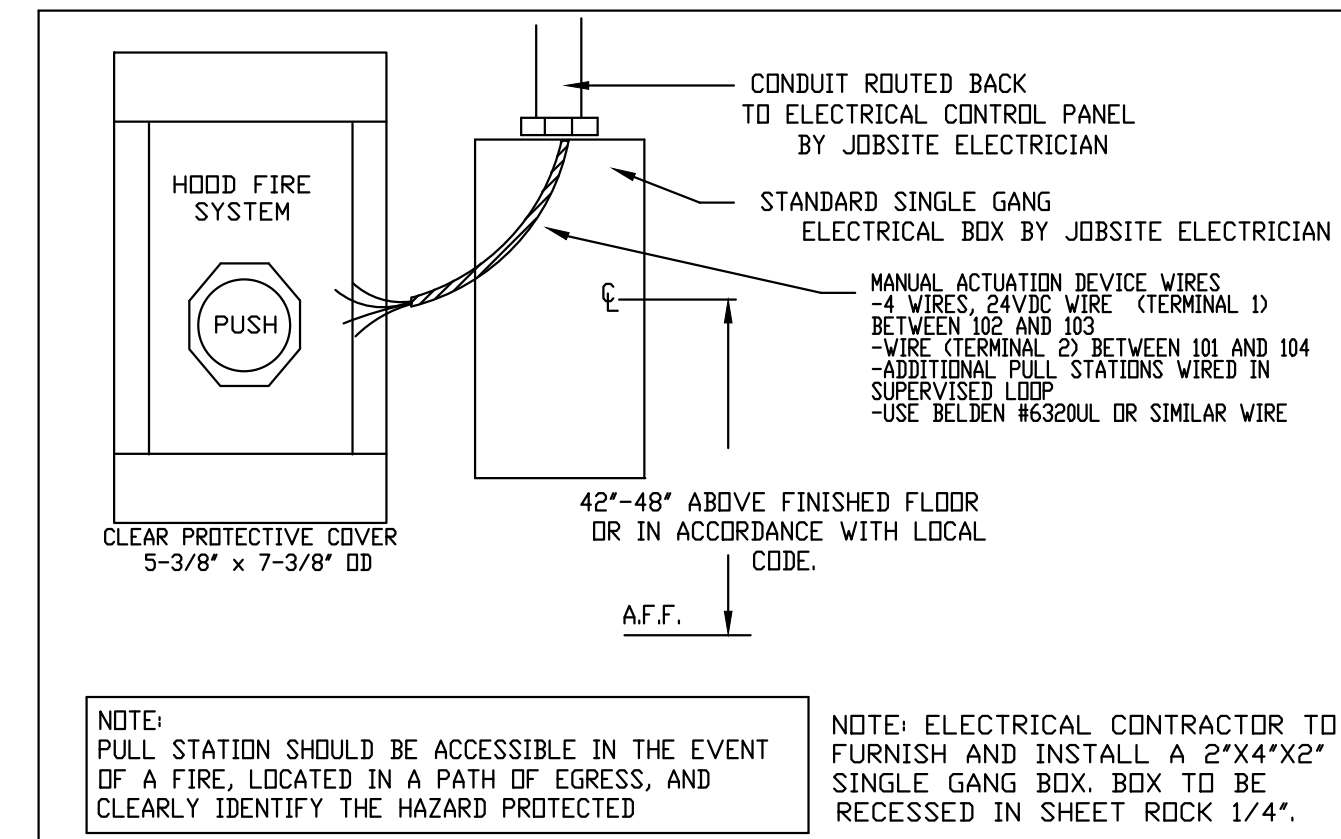
GAS VALVES AND STRAINERS																
TYPE	SIZE	VOLTAGE	GAS VALVE SIZING			GAS VALVE DIMENSIONS						INSTALLATION	PART NUMBERS			
			MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"		DIM "F"	DIM "G"	MOUNTING ORIENTATION	GAS VALVE PART NUMBER
ELECTRICAL	2"	120 VAC	0 PSI (0 IN.W.C.)	5 PSI (138 IN.W.C.)	2,940,500 BTU/HR	1,908,048 BTU/HR	7-5/8"	6-3/8"	7-1/4"	7-13-18"	15-5/8"	13-15/16"	HORIZONTAL/VERTICAL	821428D	4417K68	(SC)E0VA2

ALL GAS VALVES/STRAINERS
PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS
TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP
NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP^{0.5}
TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY
NEW BTU/HR = (BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)^{0.5}



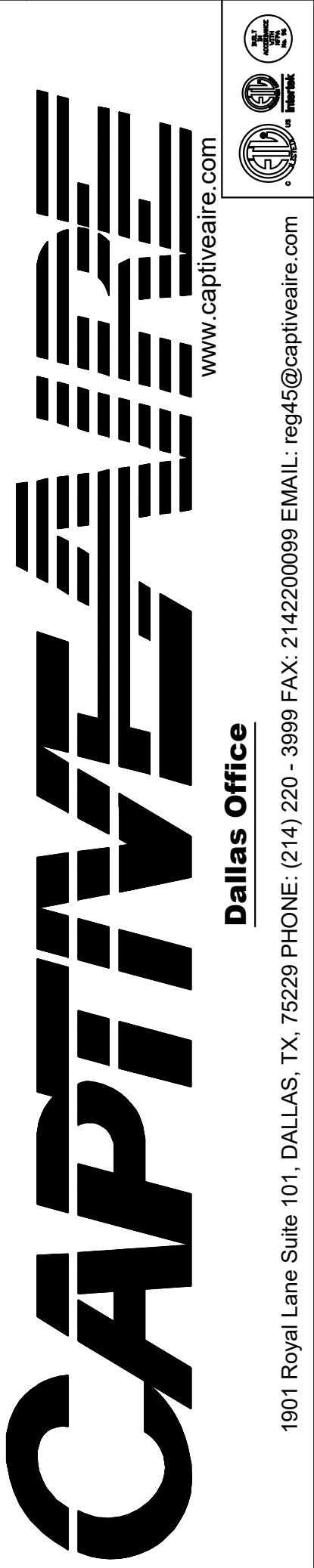
TANK MANUAL ACTIVATION DEVICE (MAD) DETAIL



CAPTIVE-AIRE HOOD PACKAGE AS SHOWN IS OWNER PROVIDED

REVISIONS

DESCRIPTION	DATE



Wingstop Redding CA #AB078
1020 East Cypress Avenue, Suite A
Redding, CA, 96002

DATE: 1/2/2024
DWG.#: 6460865
DRAWN BY: CJP-REG45
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. H.2

EXHAUST FAN INFORMATION - JOB#6460865

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		1	DUI80HFA	CAPTIVEAIRE	2700	1.200	1164	ODP,PREMIUM	2.000	1.1500	3	208	8.3	624 FPM	210	14

MUA FAN INFORMATION - JOB#6460865

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	EVAP FLOW RATE (GAL/HR)	EVAP COOLER ENTERING DB TEMP	EVAP COOLER ENTERING WB TEMP	EVAP COOLER LEAVING DB TEMP	EVAP COOLER LEAVING WB TEMP	WEIGHT (LBS)	SONES
2		1	A1-15D	15MF-1-MDD	A1	-	2160	0.500	2053	ODP,PREMIUM	2.000	1.3430	3	208	6.1	7.7A	15A	3.59	100.0°F	68.0°F	79.0°F	68.0°F	507	29.3

FAN OPTIONS

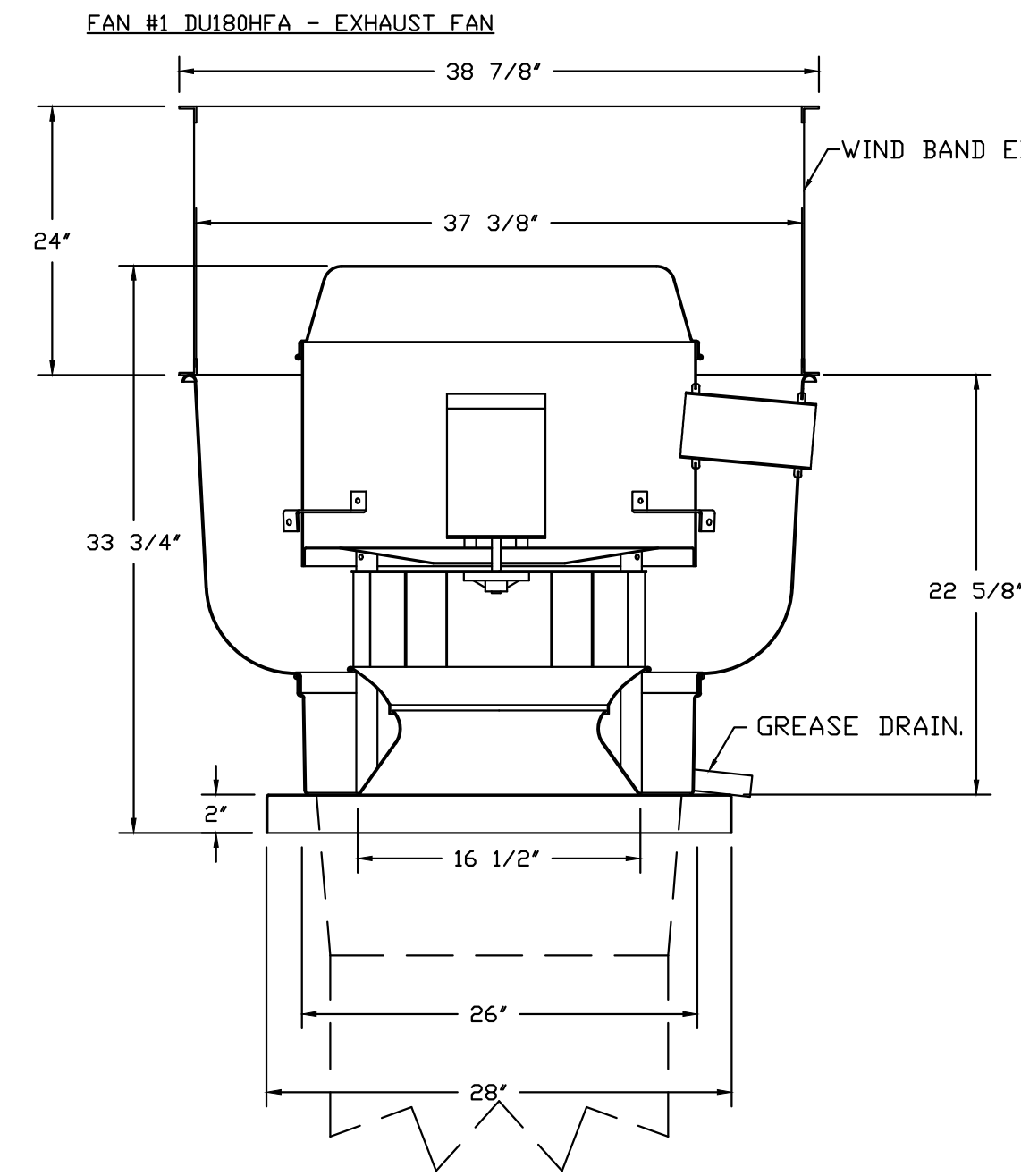
FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	GREASE BOX
		1	24" TALL STRAIGHT WIND BAND EXTENSION 18/20 (SHIPS LOOSE)
		1	2 YEAR PARTS WARRANTY
2		1	SIZE 1 UNTEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	EVAPORATIVE COOLER WIRING HARNESS
		1	FREEZE PROTECTION DRAIN KIT FOR EVAPORATIVE COOLERS
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY
	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		YES						

CURB ASSEMBLIES

NO	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	52 LBS	CURB	26.500"W X 26.500"L X 24.000"H VENTED HINGED.
2	# 2	39 LBS	CURB	21.000"W X 21.000"L X 20.000"H.
	# 2		RAIL	4.000"W X 4.000"L X 36.000"H.



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

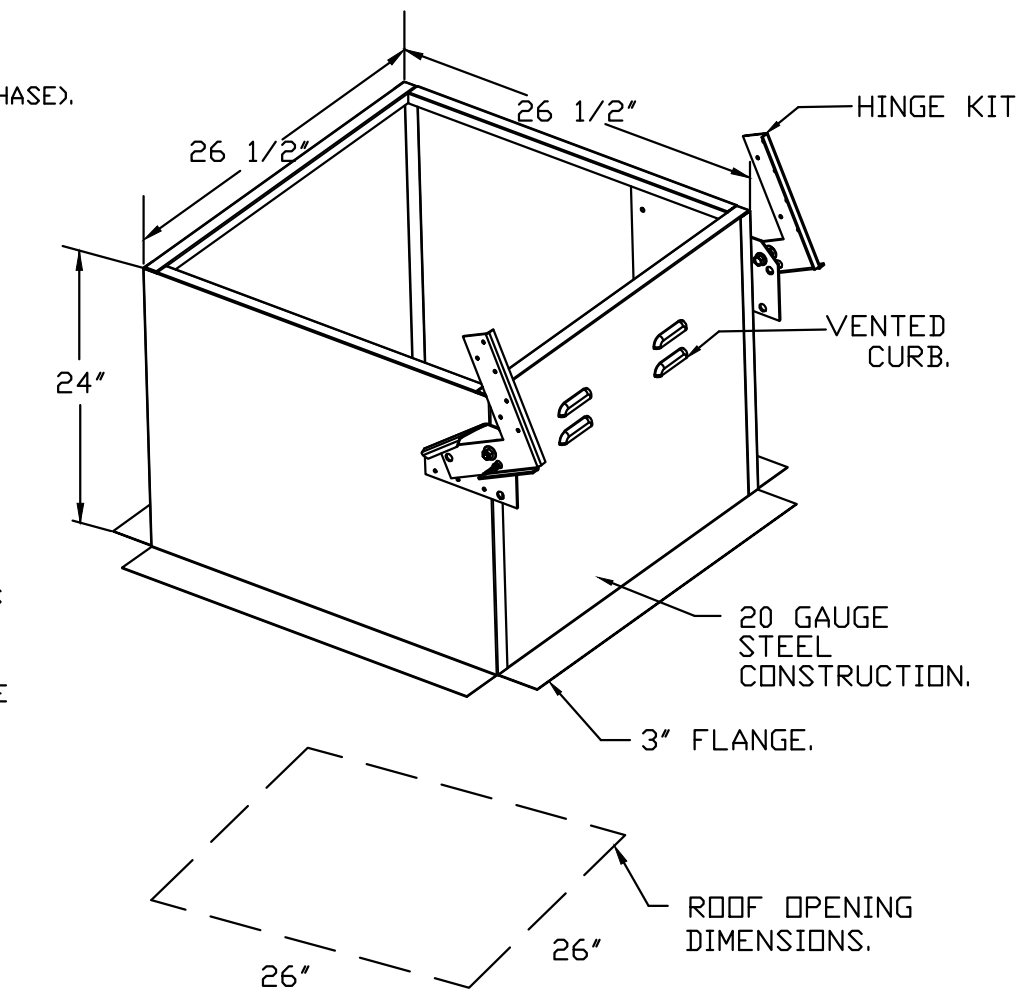
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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

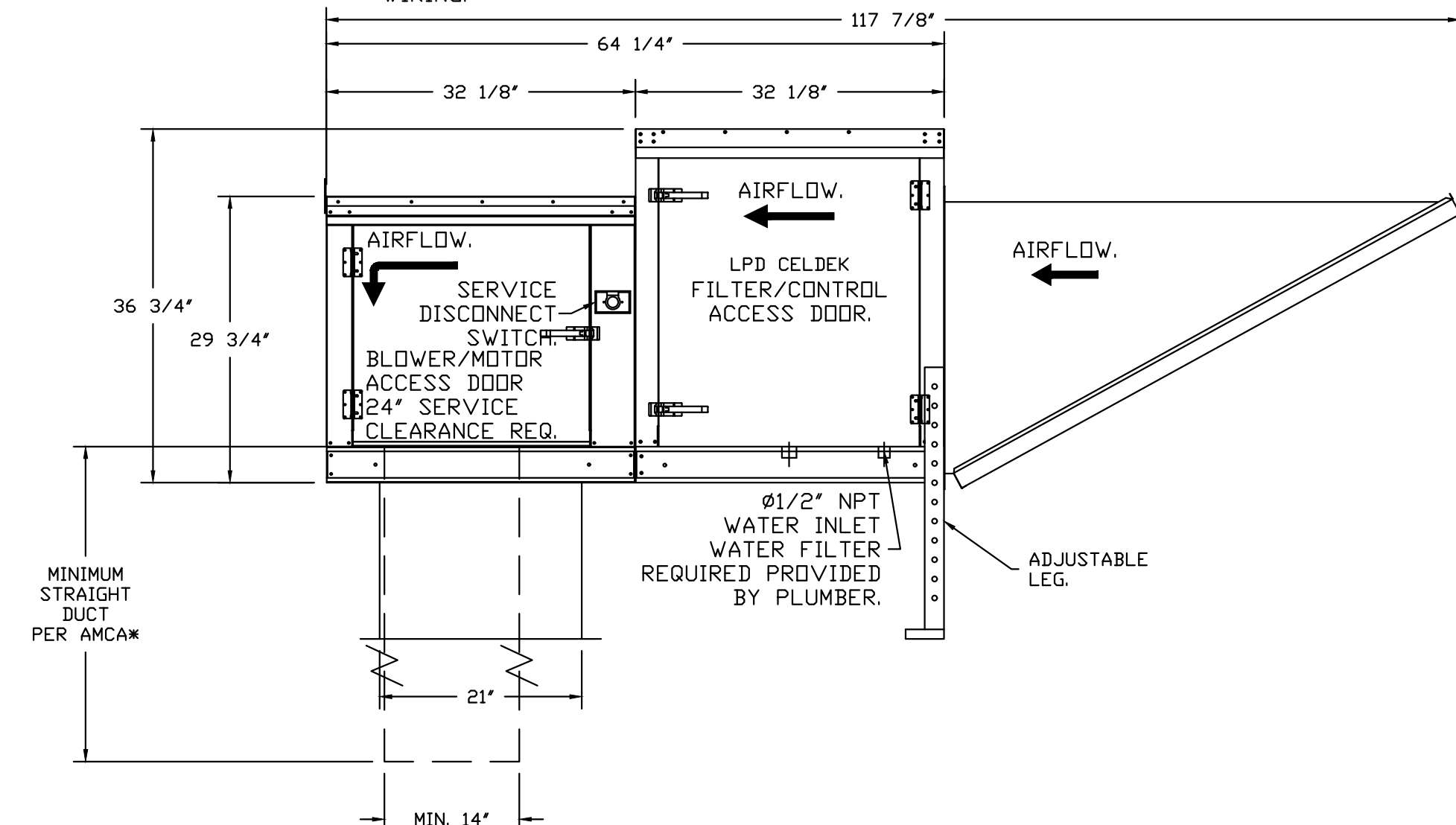
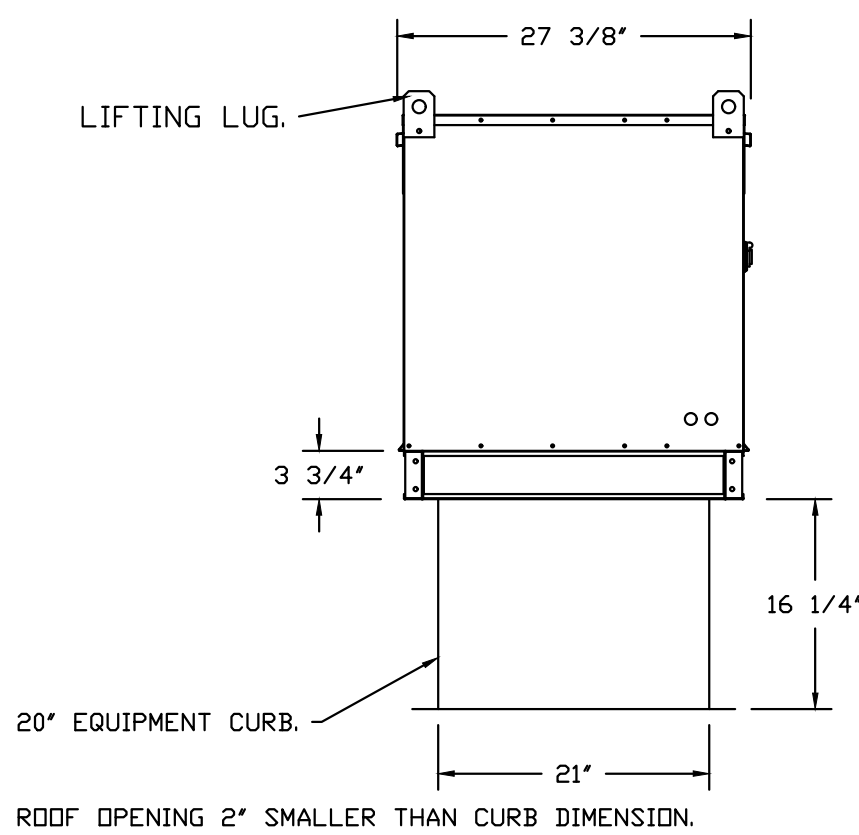
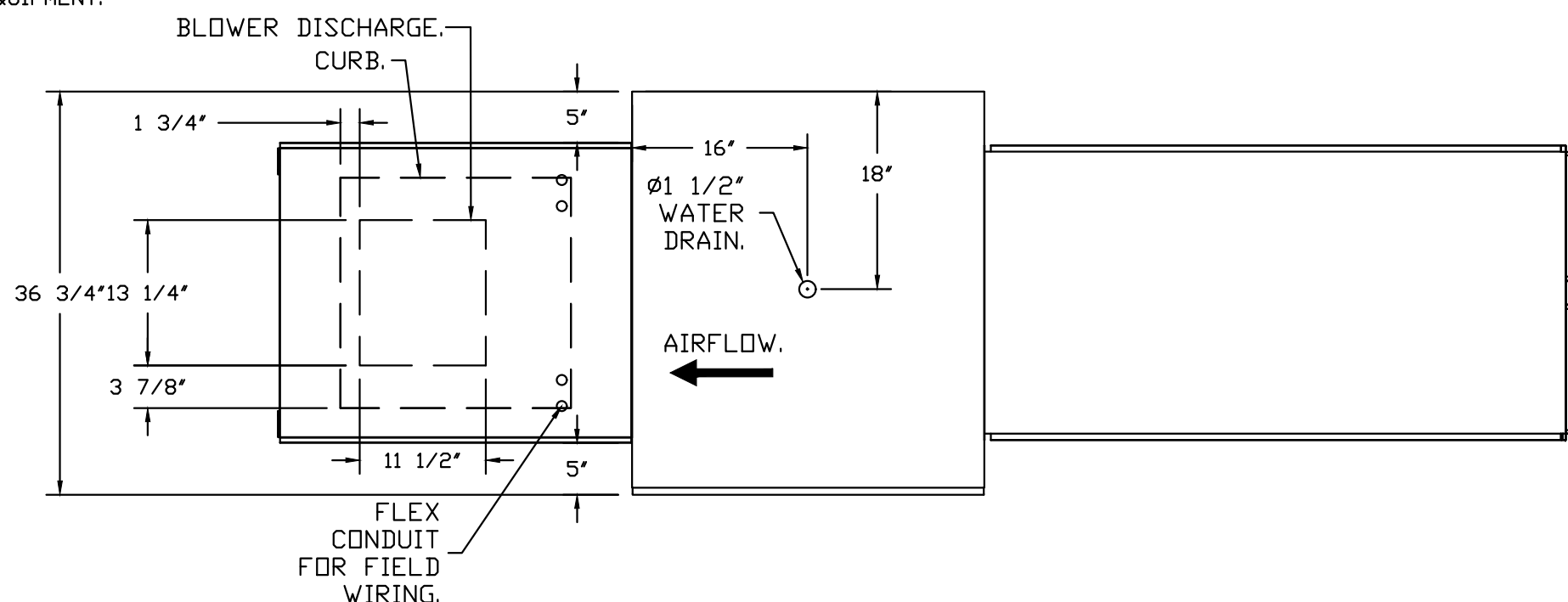
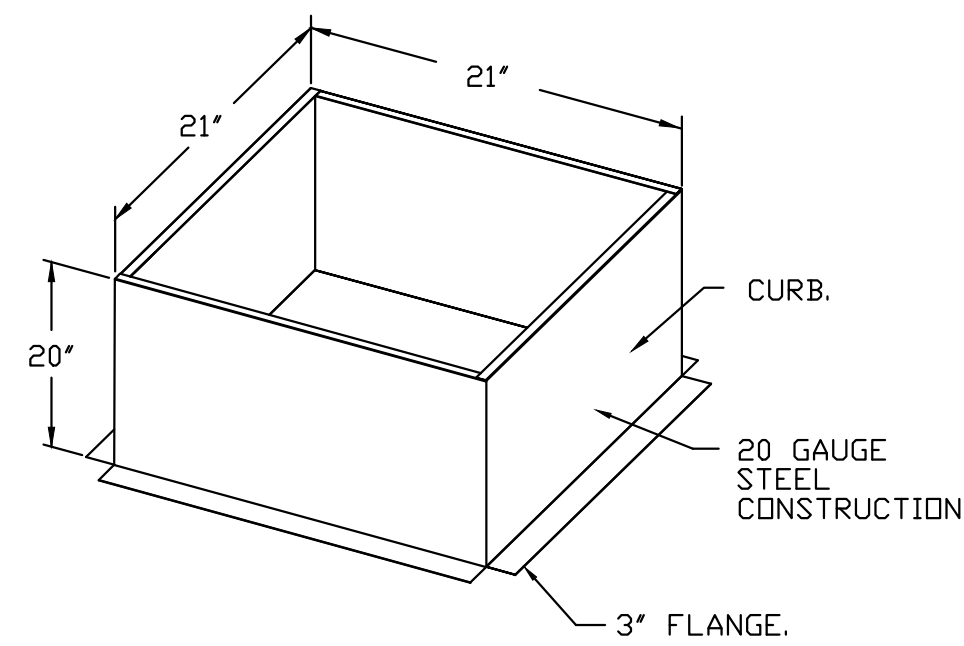
- GREASE BOX.
- 24" TALL STRAIGHT WIND BAND EXTENSION 18/20 (SHIPS LOOSE).
- 2 YEAR PARTS WARRANTY.



FAN #2 A1-15D - SUPPLY FAN

- UNTEMPERED SUPPLY UNIT WITH 15" MIXED FLOW DIRECT DRIVE FAN IN SIZE #1 HOUSING.
- EVAP COOLER (LPD CELDEK) - W/INTAKE HOOD W/EZ FILTERS.
- DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
- DOWN DISCHARGE CONSTRUCTION FOR SIZE 1 UNTEMPERED DIRECT DRIVE AHUS.
- 120V WIRING CONNECTION TO ENERGIZE EVAPORATIVE COOLERS FROM UNTEMPERED SUPPLY FANS.
- FREEZE PROTECTION DRAIN CONTROL KIT FOR EVAPORATIVE COOLERS. INCLUDES 3-WAY WATER SOLENOID VALVE 8316G064 (SHIPPED LOOSE), PRESSURE SWITCH INSTALLED UPSTREAM OF 2WAY SOLENOID IN UNIT, BRASS TEE, 2 NPT HALF INCH NIPPLES, AND TWO STAGE THERMOSTAT T678A1361. FIELD WIRING REQUIRED BY OTHERS FOR 3-WAY VALVE. FOR BOTH CELDEK AND STANDARD V-BANK TYPE CONFIGURATIONS.
- SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.
- HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/EVAP SECTION).
- 2 YEAR PARTS WARRANTY.

*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 14" x 14".



SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

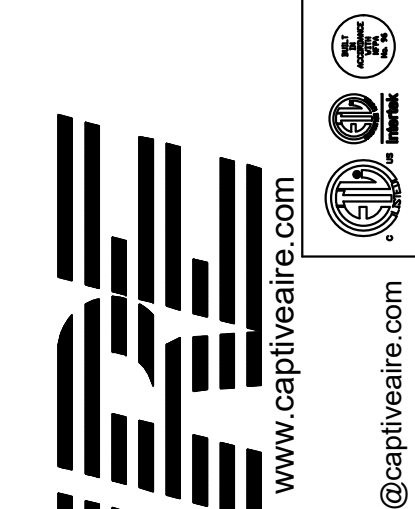
DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

REFER TO FAN MANUALS REGARDING PROPER STARTUP AND INSTALLATION

CAPTIVE-AIRE HOOD PACKAGE AS SHOWN IS OWNER PROVIDED

REVISIONS

DESCRIPTION	DATE



Wingstop Redding CA #AB078
1020 East Cypress Avenue, Suite A
Redding, CA, 96002

DATE: 1/2/2024

DWG.#: 6460865

DRAWN BY: CJP-REG45

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

MASTER DRAWING

SHEET NO. H.5

1901 Royal Lane Suite 101, DALLAS, TX, 75229 PHONE: (214) 220 - 3999 FAX: 2142200099 EMAIL: reg45@captiveaire.com

DUCTWORK #1 PARTS - JOB#6460865 DOUBLE WALL FOR 17'-5" ROOF DECK

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
HI-E1	DW20DWRISER-2R-S	2475				-0.8715	8.36	0.00	1	DOUBLE WALL RISER COVER - USED ON 16" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	DW1645DWASY-2R-S	2475				-0.0508	22.06	1772.59	1	DOUBLE WALL DUCT - 16" INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2 ASSEMBLED W/P3	DW16DWTEASY-2R-S	2475		1		-0.011	49.32	1772.59	1	DOUBLE WALL DUCT - 16" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P3 ASSEMBLED W/P2 □=T	DW16DWACDDORCDV-2R-S						21.48		1	DOUBLE WALL DUCT - 16" INNER ACCESS DOOR & 20" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P4	DW1611DWLT-2R-S	2475				-0.004	16.52	1772.59	1	DOUBLE WALL DUCT - 16" INNER DUCT, 11' LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P5	DW2024SADKIT						8.01		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 20" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW2024SAD, & HARDWARE BAG 4.
P6	DW1645DWASY-2R-S	2475				-0.058	22.06	1772.59	1	DOUBLE WALL DUCT - 16" INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P7	DW1647DWAJD-2R-S	2475				-0.012	103.34	1772.59	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P8 ASSEMBLED W/P9	DW1635DWLTP-2R-S	2475				-0.014	53.98	1772.59	1	DOUBLE WALL DUCT - 16" INNER DUCT, 35' LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P9 ASSEMBLED W/P8 □=B	DW2616TPDBEX	2475					9.00	1772.59	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 26 1/2" CURB TO 16" DUCT, 16 GA ALUMINIZED. USED ON NCA16FA / NCA16HPFA & NCA18FA / NCA18HPFA. TRANSITION PLATE DD IS 27.00" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
SYSTEM AT P9						-1.0213	0.00			
	3M-2000PLUS						0.80		2	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW16DWCLASY-2R-S						7.96		3	DUCT - 16" DUCT - 20" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							339.61			

GREASE DUCT SPECIFICATION

Furnish single-wall, factory built, grease duct for use with Type I kitchen hoods, which conforms to the requirements of NFPA-96. Products shall be ETL listed to UL-1978. For venting air and grease vapors from commercial cooking operations as described in NFPA-96. The duct wall shall be constructed of .036" thick type 430 stainless steel and be available in diameters 8" through 24". All supports, fan adapters, hood connections, fittings and expansion joints required to install grease duct shall be included. Roof penetrations shall comply with listed clearance to combustibles, see "Clearance to combustibles" guide for details. The grease duct will terminate at the fan adapter plate, will be fully welded to the fan adapter plate and the fan adapter plate will be fastened to the curb using a suitably sized fastener provided by others; see page 12 of the "Installation, Operation and Maintenance Manual" for details. Grease duct joints shall be held together by means of formed vee clamps and sealed with 3M Fire Barrier 2000+. Screws used to secure the vee clamps shall be of the hex-head type with flanged stops and tapered "lead in" threads for easy starting. Nuts shall be retained by means of a Free-floating cage to allow easy alignment. Single-Wall Grease Duct shall be installed in accordance with the manufacturer's "Installation, Operation and Maintenance Manual", ETL listing and state and local codes. Grease duct installed outside of the building shall be protected against accidental damage or vandalism. Support vertically installed grease duct from the building structure using rigid structural supports. Anchor supports to the structure by welding or bolting steel expansion anchors or concrete inserts. Support horizontally installed grease duct from the building structure using above method or use Duct Mate, Wire Rope & Clutchers, part numbers WR20 & CL20. 1/2" Threaded rod and saddles may also be used for the support of horizontal grease duct. Fans shall be supported independently from the grease duct sections. Protect grease duct from twisting or movement caused by fan torque or vibration.

DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPDRT (FT)	CURB SUPPDRT (FT)	FLOOR SUPPDRT (FT)
2R & 2R HT (5'-16')	20'	24'	24'
2R (18')	18'	24'	24'
3R & 3Z (5'-24')	10'	24'	24'
3Z (26' -36')	10'	20'	20'

Model DW Series is ETL Listed under file number 3114021, and complies with UL-1978, as well as CAN/ULC-S662.

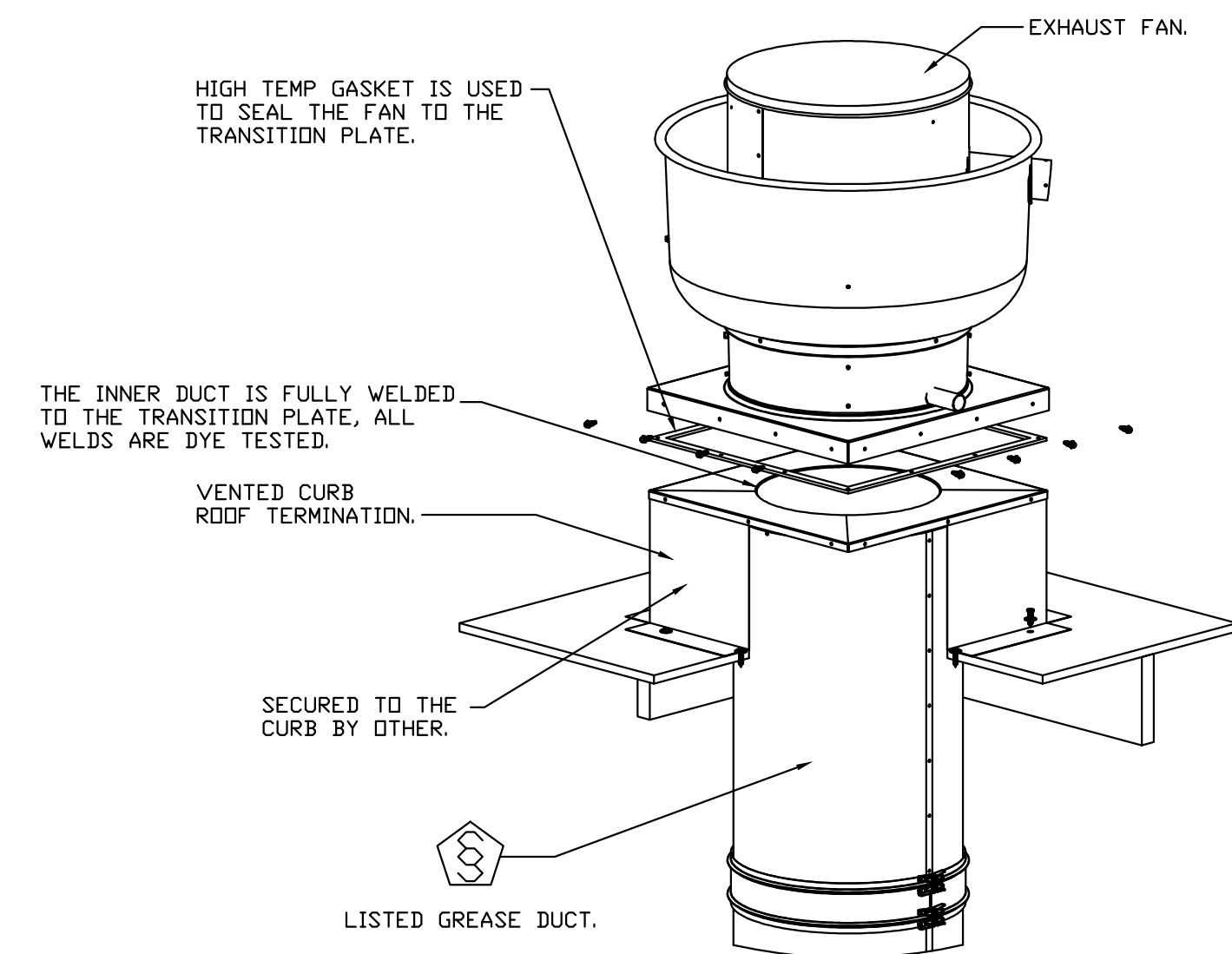
The DW Series has been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance.



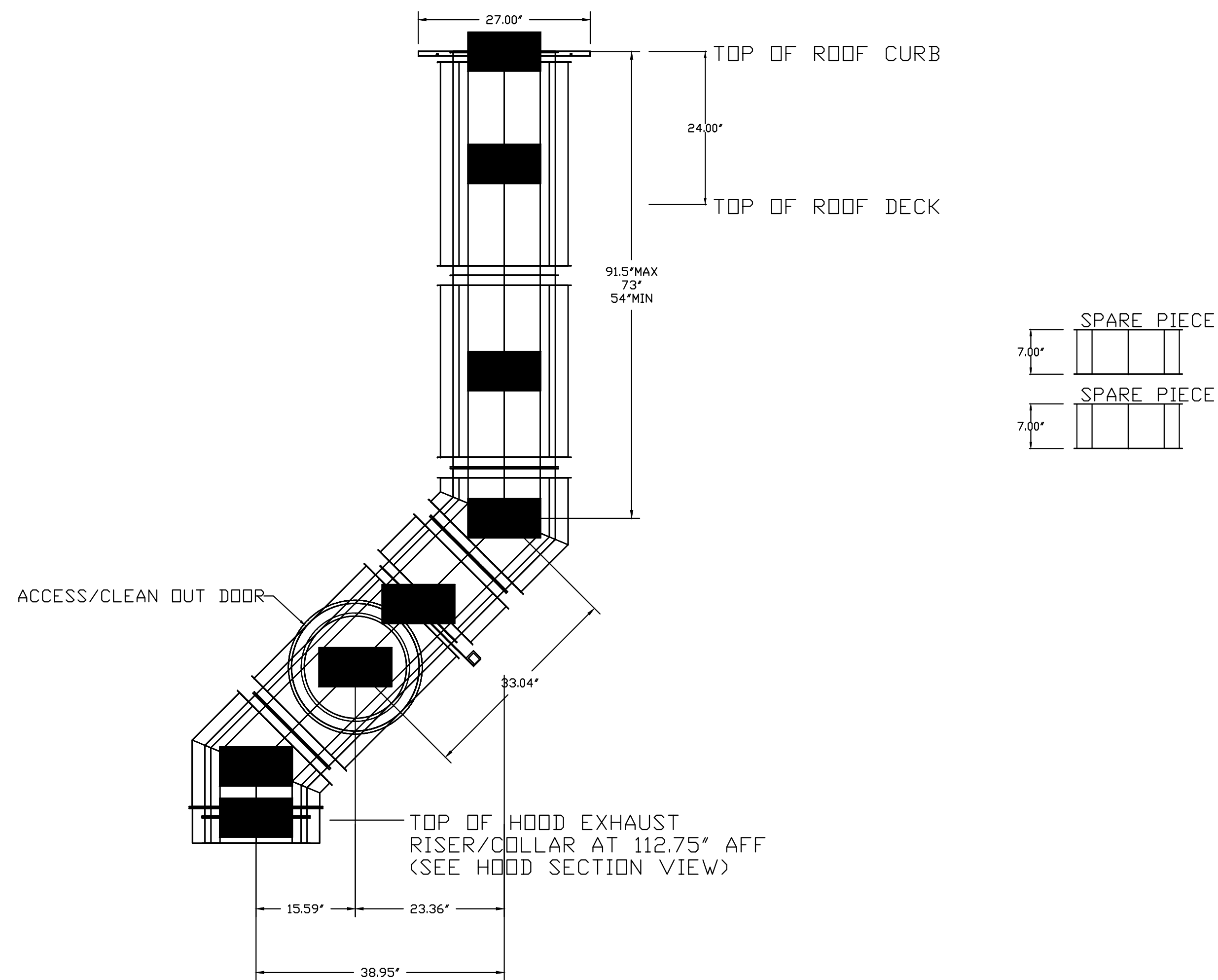
UL 1978 -Standard for Grease Duct
 UL 2221 -Fire Resistive Grease Duct Enclosure Assemblies
 NFPA 96 -Installation Standard
 ASTM E2336 -Test Method for Fire Resistive Grease Duct Enclosure System

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

MINIMUM CLEARANCE TO COMBUSTIBLES			
DUCT DIAMETER	COMBUSTIBLES	LIMITED COMBUSTIBLES	NON COMBUSTIBLES
8"	18"	3"	0"
10"	18"	3"	0"
12"	18"	3"	0"
14"	18"	3"	0"
16"	18"	3"	0"
18"	18"	3"	0"
20"	18"	3"	0"
24"	18"	3"	0"



DUCTWORK #1 SIDE VIEW FOR 17'-5" ROOF DECK



CAPTIVE-AIRE HOOD PACKAGE AS SHOWN IS OWNER PROVIDED

REVISIONS	
DESCRIPTION	DATE:

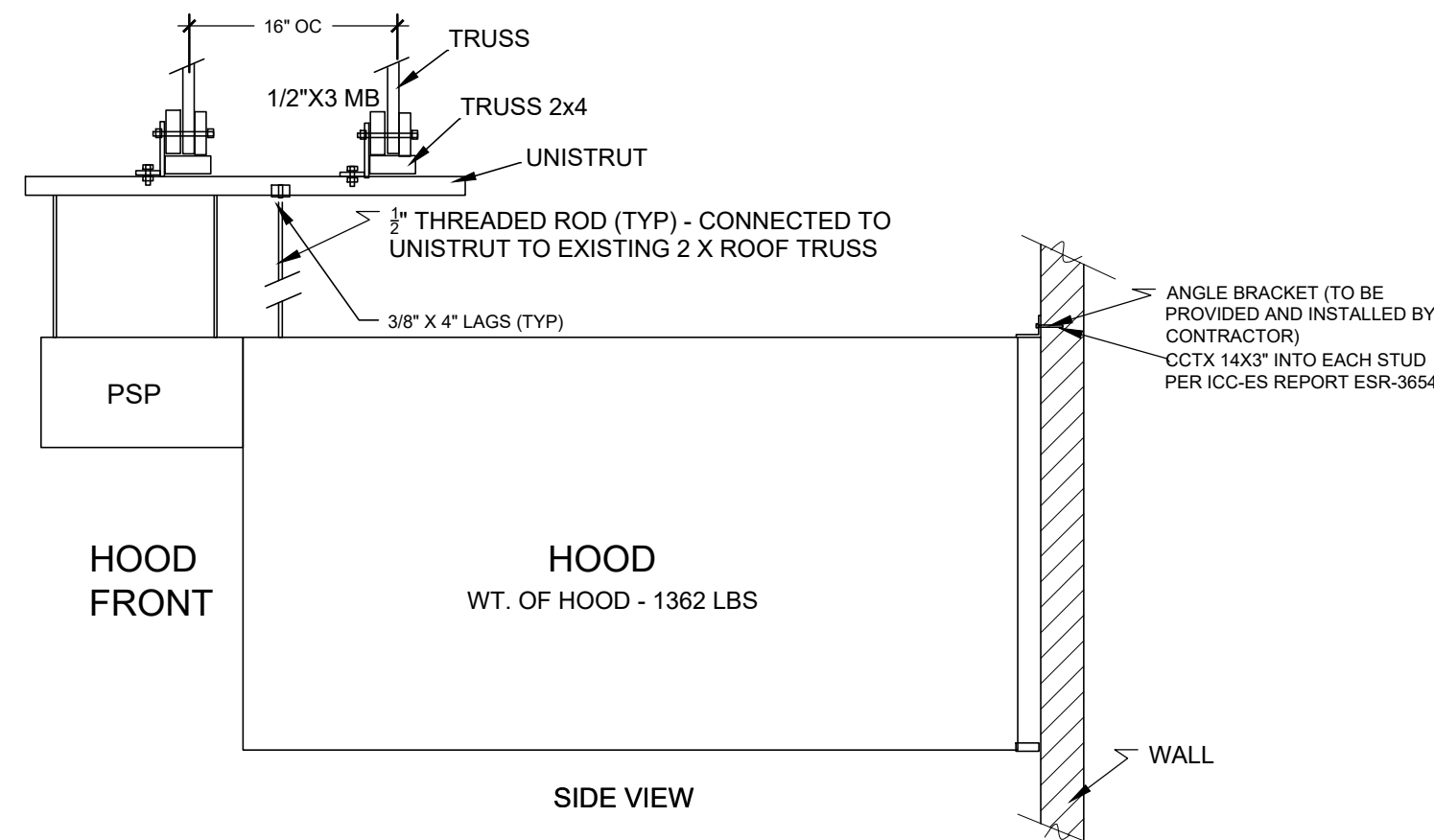
www.captiveaire.com
Dallas Office
 1901 Royal Lane Suite 101, DALLAS, TX, 75229 PHONE: (214) 220-3999 FAX: 2142200909 EMAIL: reg45@captiveaire.com

Wingstop Redding CA #AB078
 1020 East Cypress Avenue, Suite A
 Redding, CA, 96002

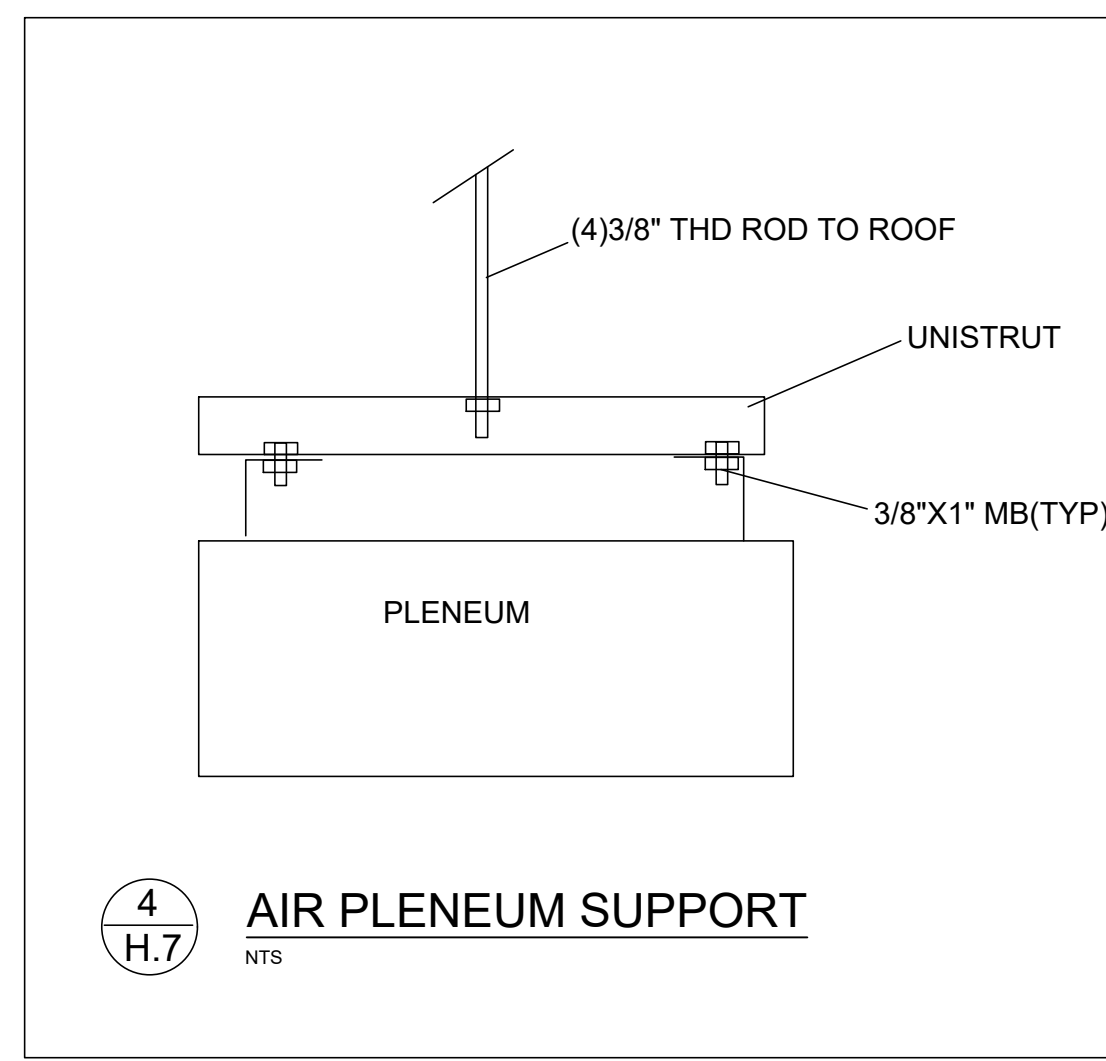
DATE: 1/2/2024
DWG.#: 6460865
DRAWN BY: CJP-REG45
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
H.6

"THE HOOD IS SECURED BY AN ANGLE BRACKET TO THE BACK WALL BY 3-1/2" #14 SCREWS INTO EACH STUD. THE ANGLE BRACKET IS WELDED TO THE UPPER BACK TOP OF THE HOOD AND SUPPORTS THE ENTIRE WEIGHT OF THE HOOD. TO ADD STABILITY TO THE HOOD, THE FRONT CORNERS OF THE HOOD ARE SUPPORTED BY (3) 1/2" THREADED RODS THAT TIE INTO CEILING JOIST ABOVE. THESE RODS GIVE STABILITY TO THE HOOD BUT SHOULD HAVE NO MORE THAN 100# OF WEIGHT PER ROD."

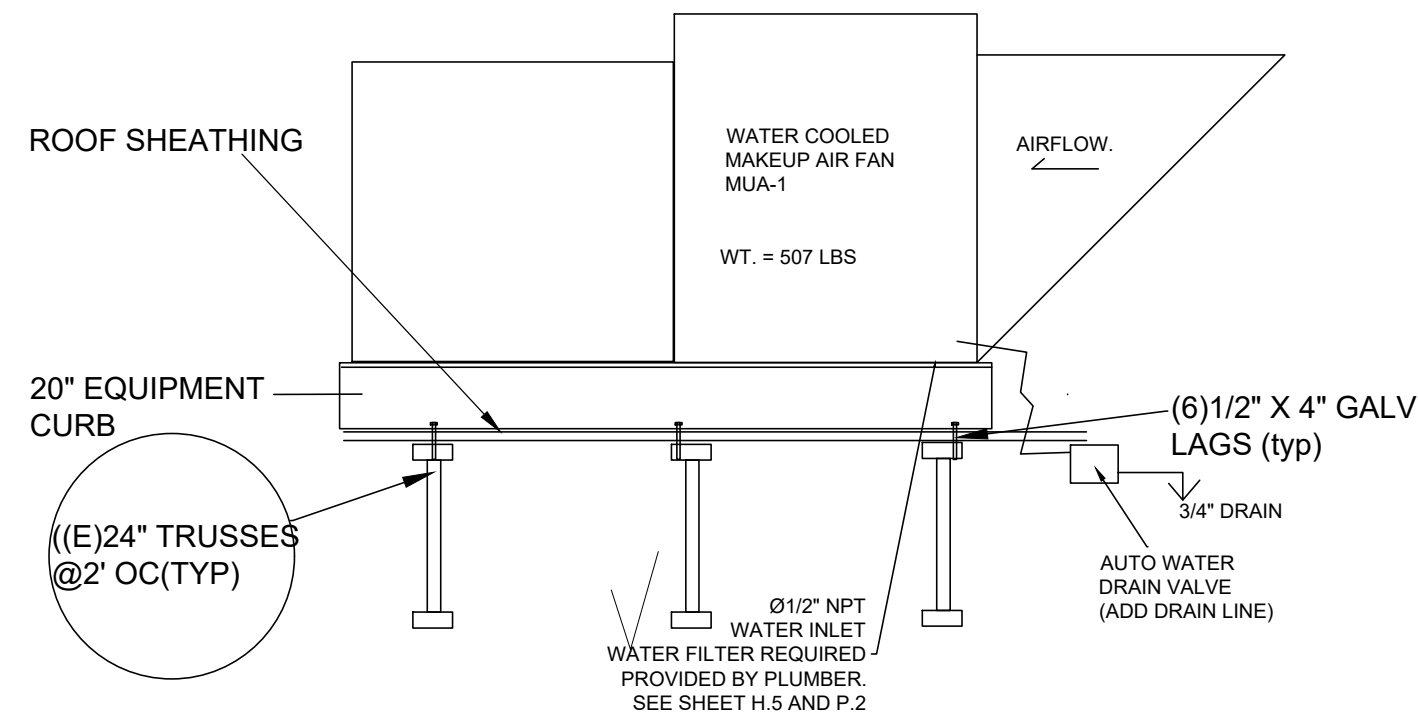


1 H.7 HOOD HANGING DETAIL
NTS



4 H.7 AIR PLENUM SUPPORT
NTS

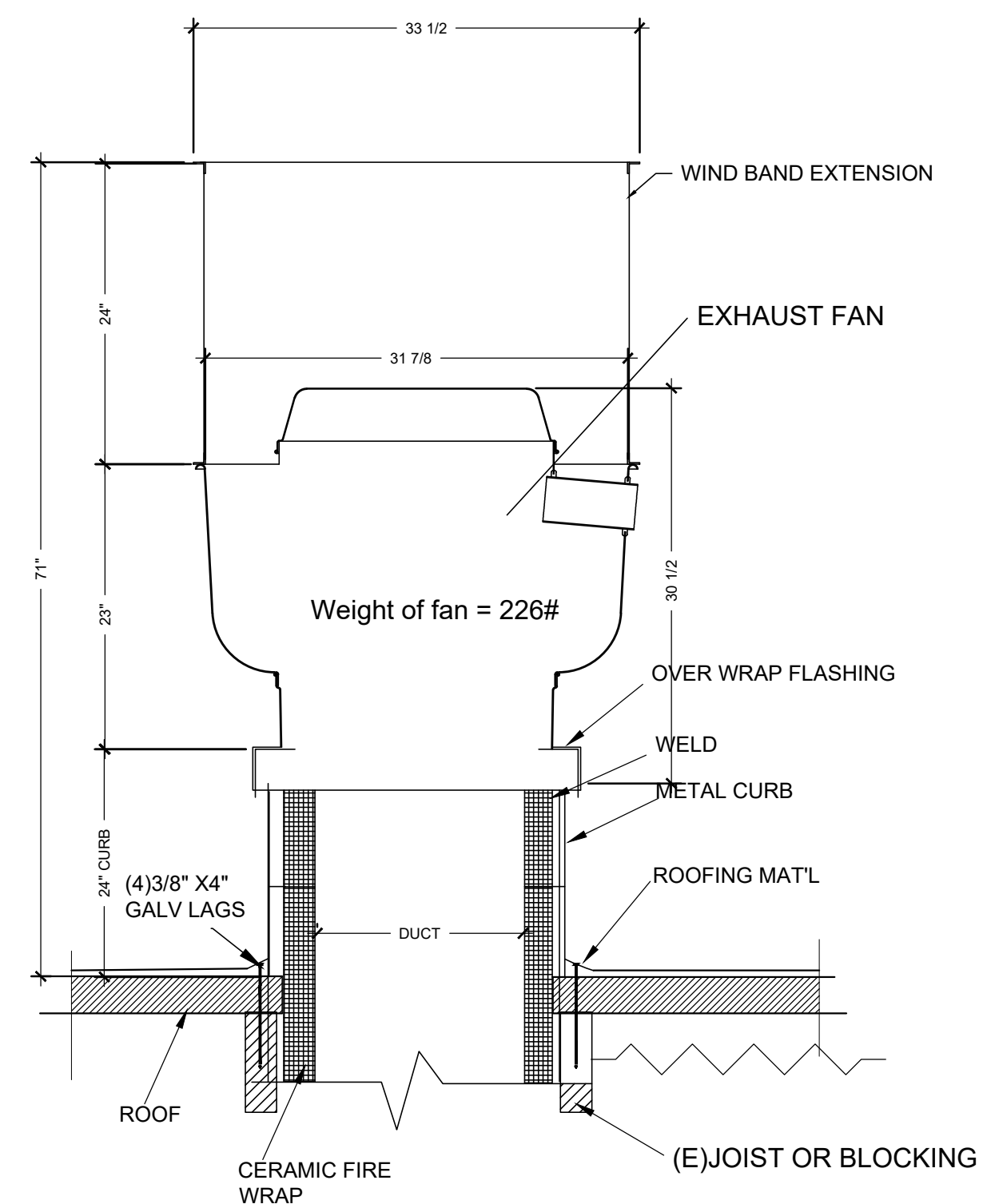
WATER CONNECTION TO ROOF REQUIRED TO MAKE-UP AIR FAN FOR EVAPORATIVE COOLING. SEE NOTES ON SHEET H.5. FREEZE PROTECTION KIT TO BE FIELD INSTALLED BELOW THE ROOF BY PLUMBER. WIRING BY ELECTRICIAN.



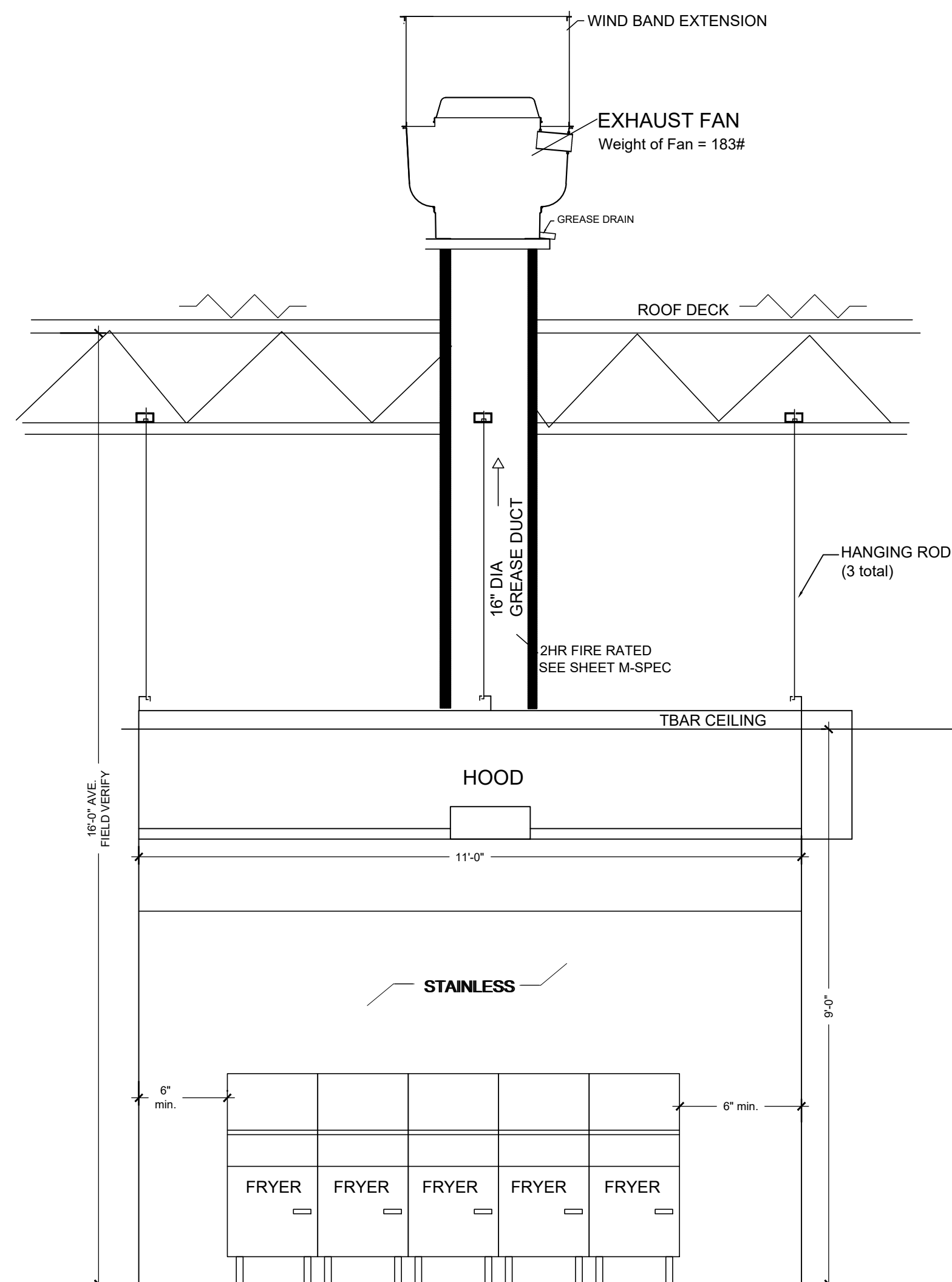
2 H.7 MUA FAN ROOF SUPPORT DETAIL
NTS

SEE CAPTIVE AIRE TYPE I HOOD SYSTEM DETAILS ON SHEET H.1 THRU H.6
NOTE: FIELD VERIFY BEFORE ORDERING CAPTIVE AIRE DUCT

SEE SHEET M.1 FOR EQUIPMENT ROOF PLAN

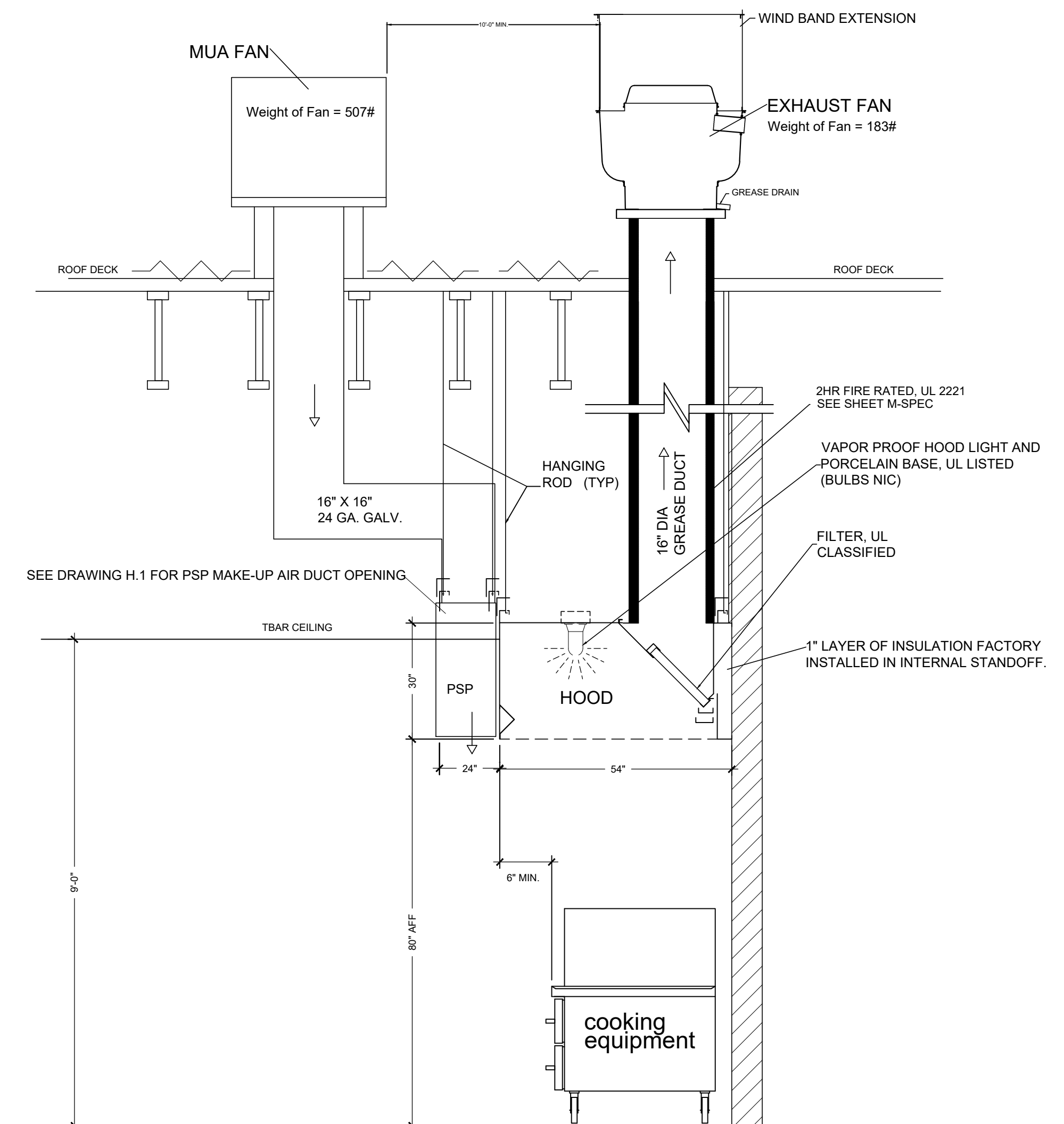


3 H.7 EXHAUST FAN ROOF SUPPORT DETAIL
NTS

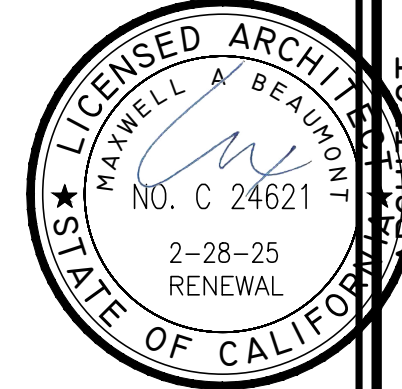


NOTE: UP BLAST GREASE EXHAUST FANS SHALL HAVE A HINGED BASE FOR CLEANING AT ROOF LEVEL.

HOOD & DUCT ELEVATION-FRONT VIEW
NTS



HOOD & DUCT ELEVATION-SIDE VIEW
NTS



REV.	DATE	NO.

ARCHITECT:
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DESIGN@ACUTE-CONSULTING.COM

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ORINDA, CA 94563
925-818-4132

WING STOP RESTAURANT
CYPRESS POINTE SHOPPING CENTER
1020 E. CYPRESS AVE., Suite A
REDDING, CA 96002
STORE GL#R8078



DWG DATE:
1/2/24

DRAWN BY:
MSD

HOOD
INSTALLATION

H.7

Factory Built Double Wall Grease Duct Specification

Furnish double wall, factory built grease duct for use with Type I kitchen hoods, which conforms to the requirements of NFPA-96. Products shall be ETL listed to UL-1978 and UL-2221 for venting air and grease vapors from commercial cooking operation. Models DW-2R, 3R and 3Z are used for grease duct applications when installed in accordance with these instructions and National Fire Protection Association "NFPA 96"; Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations. Double wall grease ducts are listed for a continuous internal temperature of 500 degrees F and intermittent temperatures of 2000 degrees F.

The duct sections shall be constructed of an inner duct wall and an outer wall with insulation in between. The inner duct wall shall be constructed of .036 inch thick, 430 type stainless steel and be available in diameters 8" through 24". The outer wall shall be constructed of stainless steel at a minimum of .024 inch thickness. The duct, based on model number, shall include layers of Super Wool 607 Plus insulation between the inner and outer wall. Grease duct joints shall be held together by means of formed V clamps and sealed with 3M Fire Barrier 2000+. The duct wall assembly shall be tested and listed at 3/4" or zero inch clearance, according to classifications.

Classifications and Clearances

UL 2221: Standard for Fire Resistive Grease Duct Enclosure Assemblies. Chapter 7 of this standard references a test labeled Internal Fire Test. Section 7.1.1 references two installation conditions, Condition A and Condition B. Condition A represents all installation condition except for installation within non-ventilated combustible enclosures. Condition B represents installation within a non-ventilated combustible enclosure.

Model DW-3Z is classified under UL2221 (Test of Fire Resistive Duct Enclosure Assemblies) as an alternate to 2-Hr. fire resistive shaft enclosures with a minimum zero clearance to combustibles (sizes 8" to 24" diameter). Model 3Z is listed in accordance with the requirements for duct enclosure Condition A and B.

Model DW-3R is classified under UL2221 (Test of Fire Resistive Duct Enclosure Assemblies) as an alternate to 2-Hr. fire resistive shaft enclosures with a reduced clearance to combustibles (sizes 8" to 24" diameter). Model 3R is listed in accordance with the requirements for duct enclosure Condition B.

Model DW-2R is classified under UL2221 (Test of Fire Resistive Duct Enclosure Assemblies) as an alternate to 2-Hr. fire resistive shaft enclosures with a reduced clearance to combustibles (sizes 8" to 16" diameter). Model 2R is listed in accordance with the requirements for duct enclosure Condition B.

DUCT MODEL	INNER DIAMETER (ID)	OUTSIDE DIAMETER	CLEARANCE TO COMBUSTIBLES	CLEARANCE TO NON-COMBUSTIBLES
DW - 2R	8" - 16"	ID + 4	3/4"	0"
DW - 3R	8" - 24"	ID + 6	3/4"	0"
DW - 3Z	8" - 24"	ID + 6	0"	0"

*DW - 2R: 3/4" clearance to combustibles from the surface of the duct outer shell; zero inch clearance from combustibles from the tip of the outer V Band.

**DW - 3R: 3/4" clearance to combustibles from the surface of the duct outer shell; zero inch clearance from combustibles from the tip of the outer V Band.

Classifications and Clearances

Through floor fire stop support assembly are used to support duct sections that penetrate a fire resistant floor(s). The full support ring is installed under the double V band; the struts are connected to the support ring with supplied 5/16-18 hardware. Once the struts have been connected they are secured to the floor using appropriate type and size fasteners supplied by others. When duct systems penetrate a fire resistance rated floor, ceiling and/or a wall, a fire stop kit is used to retain the fire resistance rating on the floor and/or wall. The double wall grease duct (2R, 3R and 3Z) and the fire stop assemblies detailed below have achieved 2-hour ratings for integrity, insulation and stability. Testing was conducted in accordance with the applicable requirements UL 2221, Test of Fire Resistive Grease Duct Enclosure Assemblies.

DUCT MODEL	INNER DIAMETER	OUTER DIAMETER	SQUARE / ROUND OPENING MIN/MAX
DW - 2R	8"	12"	14" - 15"
DW - 2R	10"	14"	16" - 17"
DW - 2R	12"	16"	18" - 19"
DW - 2R	14"	18"	20" - 21"
DW - 2R	16"	20"	22" - 23"
DW - 3R / 3Z	8"	14"	16" - 17"
DW - 3R / 3Z	10"	16"	18" - 19"
DW - 3R / 3Z	12"	18"	20" - 21"
DW - 3R / 3Z	14"	20"	22" - 23"
DW - 3R / 3Z	16"	22"	24" - 25"
DW - 3R / 3Z	18"	24"	26" - 27"
DW - 3R / 3Z	20"	26"	28" - 29"
DW - 3R / 3Z	24"	30"	32" - 33"

Double Wall Grease Duct shall be installed in accordance with the manufacturer's "Installation, Operation and Maintenance Manual," ETL listing, state codes and local codes. Fans shall be supported independently from the grease duct sections. Protect grease duct from twisting or movement caused by fan torque or vibration.

Additional Information Available

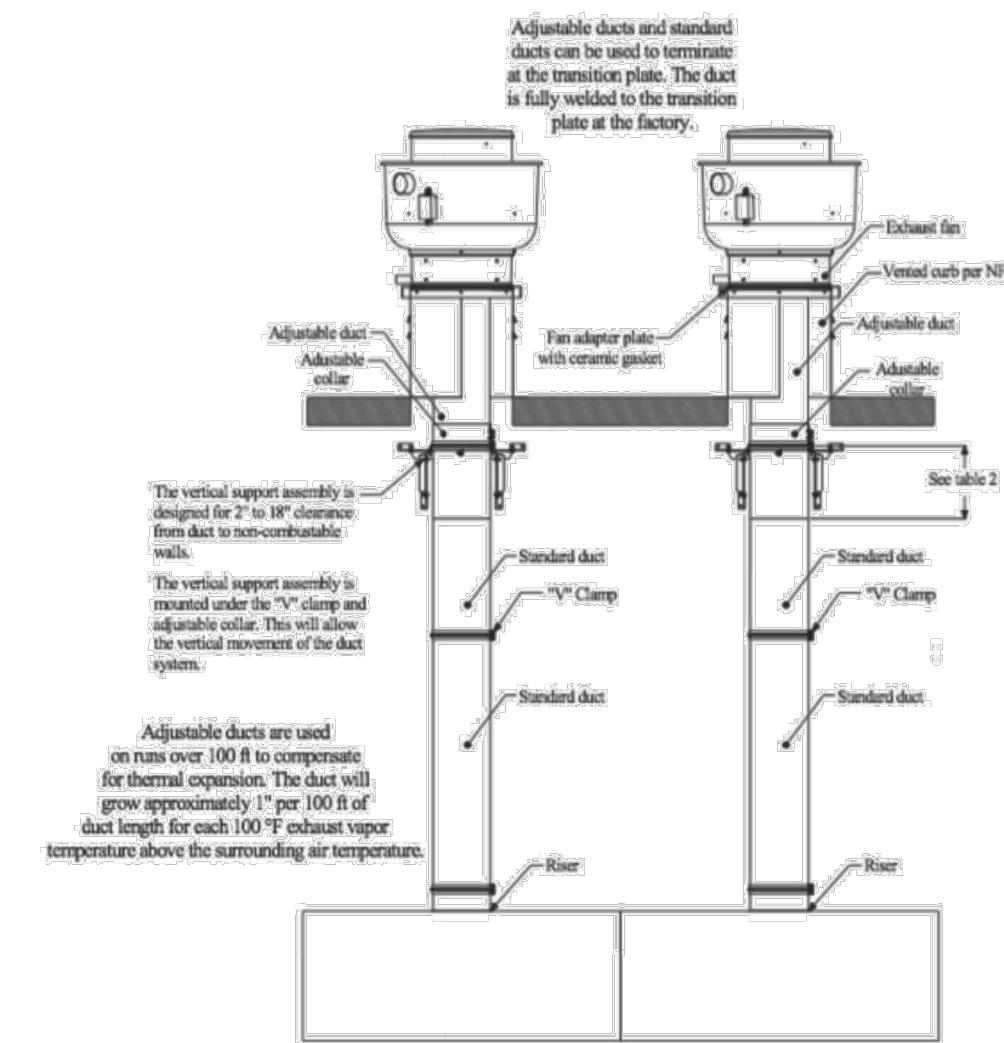
Operation, Installation, and Maintenance Manual

Copy of the manual is sent with every duct order from our manufacturing facility. Additional copies, if needed, are available for download at: <https://www.captiveaire.com/CATALOGCONTENT/DUCTWORK/INSTALLATION.ASP?catId=306&Model=GREASE+DUCT> Available also at the link above are recommendations for vertical and guy line support guides.

Grease Duct Design Guide

The Grease Duct Design Guide gives specifics for all parts available for order including Elbows, Straight Pieces, etc. Formulas and other information to calculate static pressure through a pre-engineered system is also available. Design Guide is available for download at <https://www.captiveaire.com/catalog/genpartCatalog.asp?catId=306> or as a hard copy from your local CaptiveAir sales office.

Sample Duct Drawing



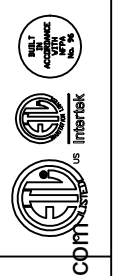
Certifications

The DW Series has been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance.

Model Double Wall Series is ETL Listed and complies with UL Listings

REVISIONS

DESCRIPTION	DATE



www.captiveaire.com
 fsiinstallations@captiveaire.com

CENTRAL CA

1665 GEARY RD, WALNUT CREEK, CA, 94597 PHONE: (925) 330-9880 FAX: (919) 227-5940 EMAIL: fsiinstallations@captiveaire.com

ETL DUCT SPEC PAGE

DATE: --

DWG.#:

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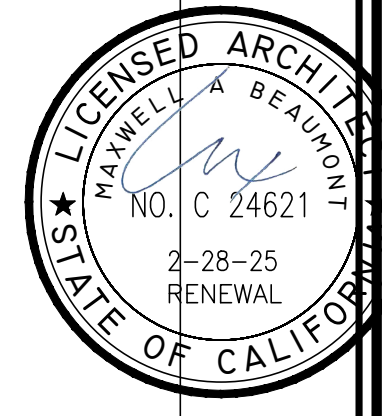
SCALE:

MASTER DRAWING

SHEET NO.
 M-SPEC


REV. DATE	NO.

ARCHITECT:
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WING STOP RESTAURANT
CYPRESS POINTE SHOPPING CENTER
1020 E. CYPRESS AVE., Suite A
REDDING, CA 96002
STORE GL#AB078



DWG DATE:
1/2/24

DRAWN BY:
MSD

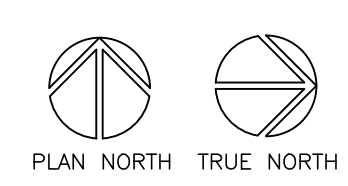
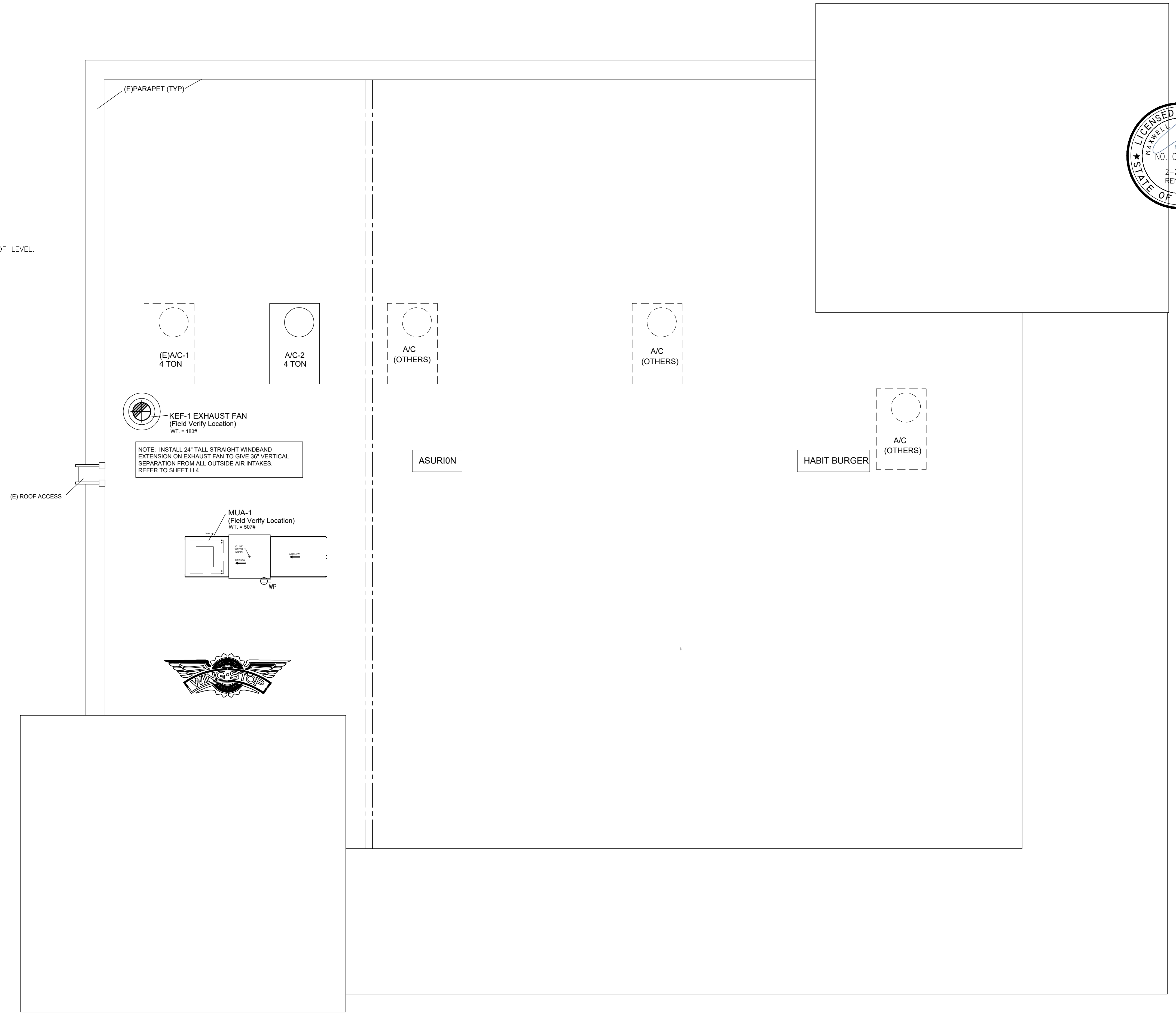
EQUIPMENT
ROOF PLAN

M.I.

**NOTE: EXHAUST OUTLETS SERVING GREASE DUCT SYSTEMS:
ROOF OUTLETS SHALL MEET THE FOLLOWING REQUIREMENTS:**

1. SHALL BE MINIMUM 24 INCHES ABOVE THE ROOF SURFACE WITH AIRFLOW DIRECTED UPWARDS..
2. SHALL BE MINIMUM 10 FEET FROM AIR INTAKE OPENING INCLUDING A/C UNITS, AIR INTAKE OPENINGS, WINDOWS, ETC.
3. SHALL BE MINIMUM 10 FEET ABOVE ADJOINING GRADE.
4. SHALL BE MINIMUM 10 FEET AWAY FROM PARTS OF THE SAME BUILDING INCLUDING PARAPETS, EQUIPMENT SCREENS, ROOF PUP OUT, ETC. AND ADJACENT/ ADJOINING BUILDINGS.

NOTE: UP BLAST GREASE EXHAUST FANS SHALL HAVE A HINGED BASE FOR CLEANING AT ROOF LEVEL.
NOTE: A 10' MINIMUM CLEARANCE IS REQUIRED FROM ALL PLUMBING AND EXHAUST VENTS TO AIR INTAKE VENTS.



ROOF EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

2021 CAL GREEN REQUIREMENTS:
5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

5.410.4.2 (Reserved)

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)j for additional testing requirements of specific systems.

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

SECTION 5.504 POLLUTANT CONTROL

5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992. Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the California Energy Code, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

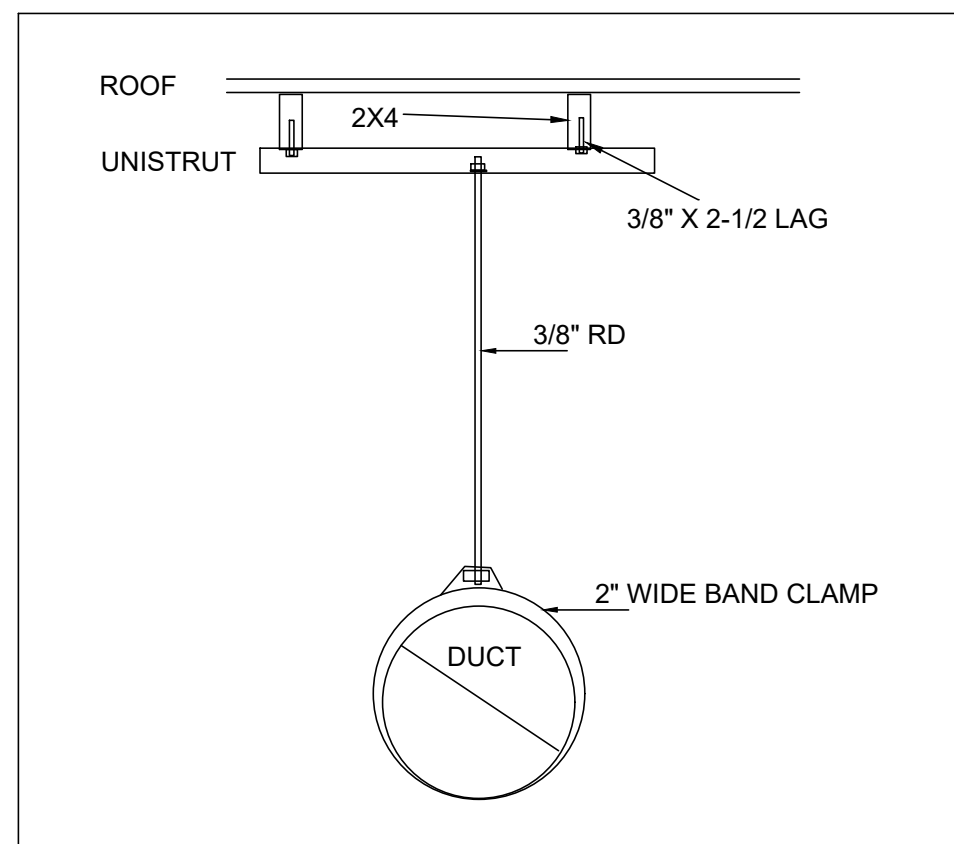
1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

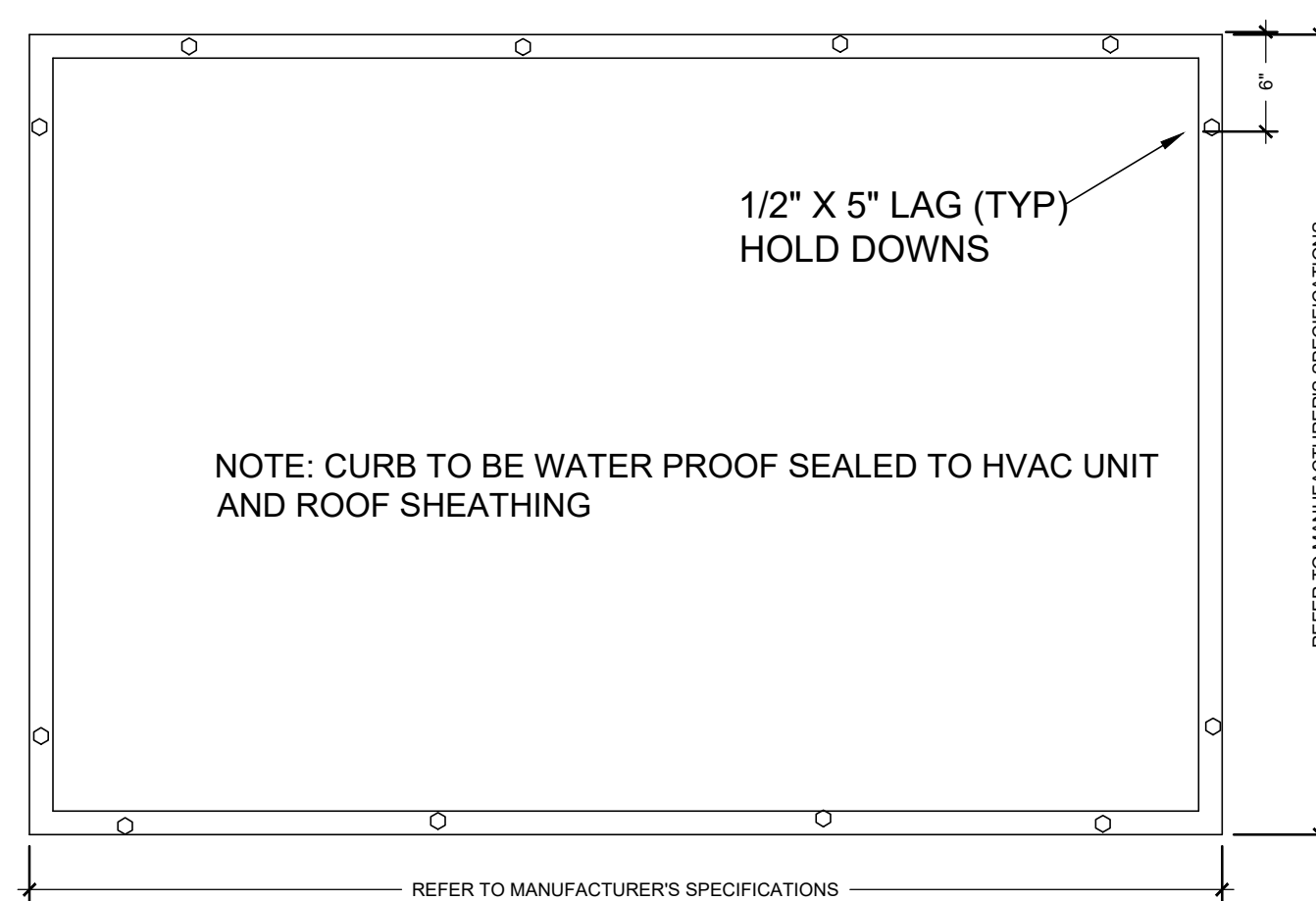
Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.



DUCT SUPPORT DETAIL
NTS



HVAC METAL CURB PLAN VIEW
NTS

SYMBOL LEGEND			
MK.	SYMBOL	SPECIFICATIONS	NOTES
EF		EXHAUST FAN: BROAN #H80 80CFM SUPPLIER: MELETO ELECTRICAL SUPPLY	MOUNT TO SCHEDULED GYP CEILING STANDARD WHITE COVER
		LAY-IN HVAC 2X2 SUPPLY REGISTER PROVIDED BY HVAC CONTRACTOR	MOUNT TO SCHEDULED ACOUSTICAL CEILING SUPPLY REGISTERS AND EXPOSED DUCT TO BE PAINTED P6
N/A		LAY-IN HVAC 2X2 PERFORATED SUPPLY REGISTER PROVIDED BY HVAC CONTRACTOR	MOUNT TO SCHEDULED ACOUSTICAL CEILING LOCATED NEAR HOOD ONLY SUPPLY REGISTERS AND EXPOSED DUCT TO BE PAINTED P6
N/A		HVAC SUPPLY REGISTER AT ROUND DUCT	MOUNT TO SCHEDULED DUCT AT A MINIMUM OF 8'-0" A.F.F. DUCT SUPPORTS SHALL BE STANDARD HVAC STYLE 2" WIDTH SUPPLY REGISTERS AND EXPOSED DUCT TO BE PAINTED P6
		MUA PERFORATED SUPPLY PLENUM (AT HOOD)	
		AC PERFORATED SUPPLY PLENUM (AT HOOD)	
		2X4 RETURN REGISTER	

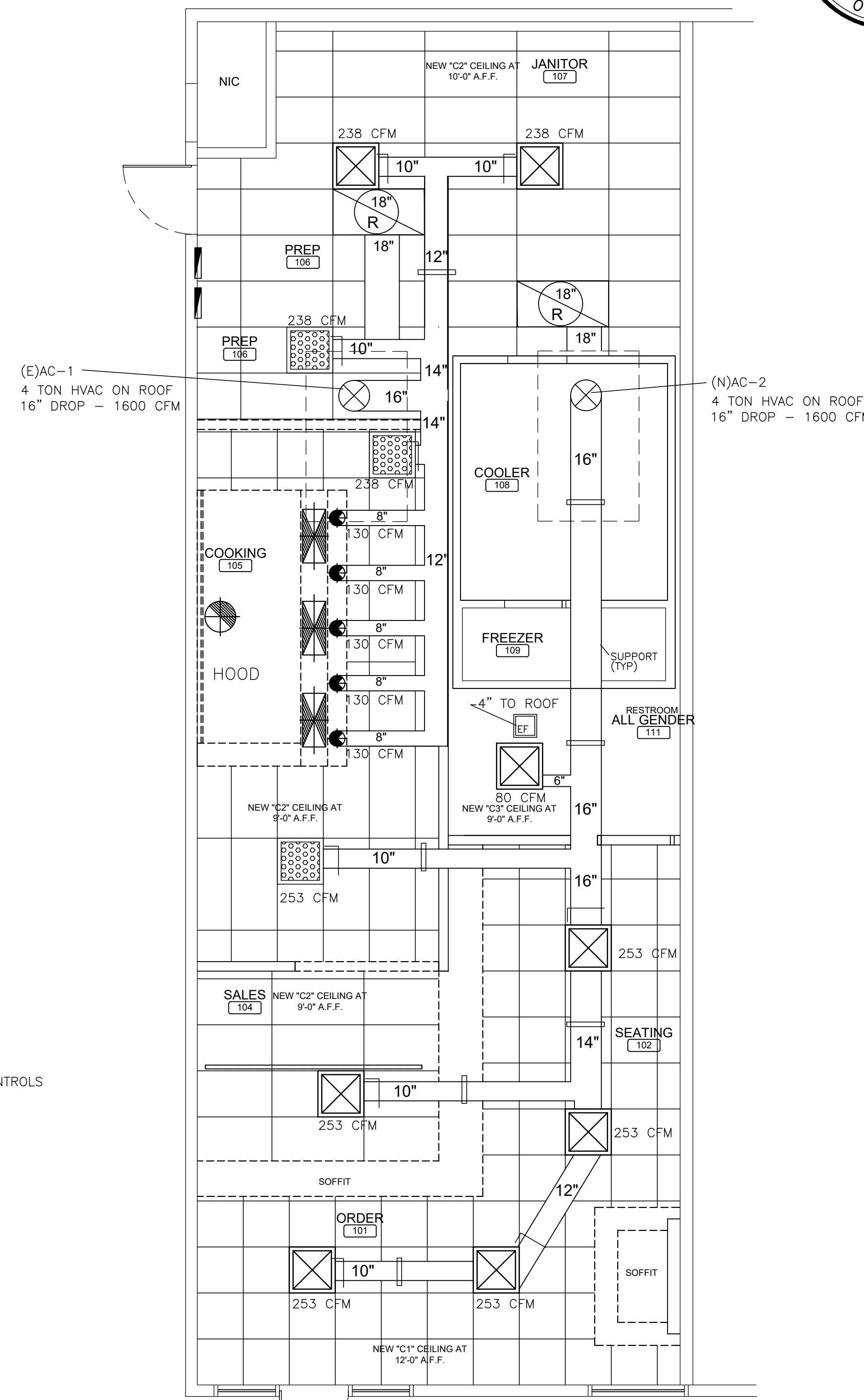
TRANE CONTACT INFO:
Wingstop National Account Team
866-986-4822
wingstop@trane.com
Account Manager: Austin Lupton

HVAC RTU SCHEDULE

(E) 4 TON HVAC RTU
CARRIER #481FD005
ELECTRICAL - 208 V/3 Ph/60 Hz, 4.8 KW
HEATER - 72,000 BTU
SUPPLY AIR - 1600 CFM

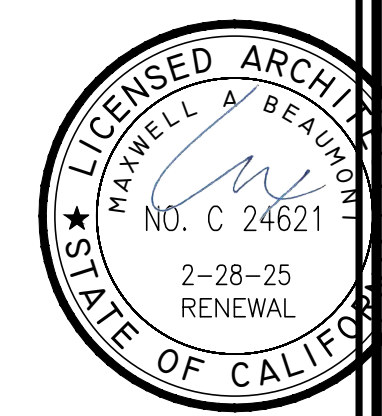
4 TON HVAC RTU
TRANE PRECEDENT GAS/ ELECTRIC UNIT
MODEL #YHC048F3RMA
ELECTRICAL - 208 V/3 Ph/60 Hz, 4.8 KW
HEATER - 65,000 BTU
SUPPLY AIR - 1600 CFM
MAX. OPERATING WT. = 946#
DIMENSIONS: 7.39'L x 4.44'W x 3.42'H

PROVIDE ECONOMIZER WITH FDD FAULT DETECTION DEVICE AND DCV CONTROLS



HVAC PLAN
SCALE: 1/4" = 1'-0"
TRUE NORTH PLAN NORTH

AIR BALANCE SCHEDULE:					
UNIT MARK	SUPPLY AIR	OUTSIDE AIR	MAKE-UP AIR	EXHAUST AIR	RETURN AIR
AC-1	1600 CFM	310 CFM	-	-	1290 CFM
AC-2	1600 CFM	310 CFM	-	-	1290 CFM
MUA	-	-	2160 CFM	-	-
KEF-1	-	-	-	2700 CFM	-
EF-1	-	-	-	80 CFM	-
BLDG. TOTAL	3200 CFM	620 CFM	2160 CFM	2780 CFM	2580 CFM
			MAKE UP: A/C UNITS OUTSIDE AIR INTAKE +620 FAN MAKE UP: -2160		
			2780 CFM		
			EXHAUST: HOOD EXHAUST -2700 GENERAL EXHAUST -80		
			2780 CFM		
			BALANCE RESULTS: MAKE-UP +2780 EXHAUST -2780		
			0 CFM		



REV.	DATE	NO.

ARCHITECT:
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EMERYVILLE, CALIFORNIA
DESIGN@ACUTE-CONSULTING.COM

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CYPRESS POINTE SHOPPING CENTER
1020 E. CYPRESS AVE., Suite A
REDDING, CA 96002
STORE GL#AB078



DWG DATE:
1/3/24
DRAWN BY:
MSD

HVAC FLOOR PLAN

M.2