

UNIT SYMBOL		RTU 1 (NEW)	RTU 2 (NEW)
LOCATION		ROOF	ROOF
BLOWER	CFM	3,400 (8.5-TON)	3,400 (8.5-TON)
	OUTSIDE AIR (CFM)	820	820
COOLING	TSP (IN W.G.)	0.7"	0.7"
	BHP/HP	1.77/2.0	1.77/2.0
	TOTAL (BTU/HR)	103,940	103,940
	SENSIBLE (BTU/HR)	81,860	81,860
	AMBIENT (F)	95.0	95.0
	COIL ENTERING	80.6 DB/67.2 WB	80.6 DB/67.2 WB
	COIL LEAVING	58.2 DB/57.6 WB	58.2 DB/57.6 WB
HEATING	CAPACITY (BTU/HR)	180,000 (INPUT) / 148,000 (OUTPUT)	180,000 (INPUT) / 148,000 (OUTPUT)
	EAT/LAT	56.7/97.1	56.7/97.1
ELECTRICAL	POWER SUPPLY	208V/3PH/60HZ	208V/3PH/60HZ
	COMPRESSOR (RLA)	13.7/13.7	13.7/13.7
	CONDENSER MOTOR (FLA)	(2) 1.5	(2) 1.5
	EVAPORATOR MOTOR (FLA)	6.9	6.9
	MIN. CIRCUIT AMPACITY	41, HACR = 50	41, HACR = 50
PRICING ORDERING AND DELIVERY CONDITIONS: THERESA DAWSON PHONE: 949-309-9815 E-MAIL: Theresa.Dawson@camier.utc.com		BY CARRIER 48HCDD09B2A5 DOWN DISCHARGE COMPLETE WITH 14" ROOF MOUNT CURB, ELECTRONIC PROGRAMMABLE THERMOSTAT, ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF. COMB. FAN MOTOR 0.48 AMPS (DOES NOT OPERATE WITH COMPRESSOR). OPER. WT. : 1274 LBS APPROX. SEER=NA EER=12.0, AFUE=82%	BY CARRIER 48HCDD09B2A5 DOWN DISCHARGE COMPLETE WITH 14" ROOF MOUNT CURB, ELECTRONIC PROGRAMMABLE THERMOSTAT, ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF. COMB. FAN MOTOR 0.48 AMPS (DOES NOT OPERATE WITH COMPRESSOR). OPER. WT. : 1274 LBS APPROX. SEER=NA EER=12.0, AFUE=82%

MARK	MFR/ MODEL	LOCATION	SERVICE AREA	GAS HEAT	TYPE	MIN CFM	CFM	ESP	MOTOR	REMARKS
MAU1	CAPTIVEAIRE EA3-G14	ROOF-TOP	KITCHEN HOOD #1 & #2	INPUT: 518,789 BTHU OUTPUT: 477,286	FIRE GAS HEATED, DOWN DISCHARGE	3500	4,760	0.75"	3 HP 208V/3PH/60HZ	GAS FIRED MAKEUP AIR UNIT. REFER TO SHEET M-402 FOR INFORMATION. 4-WEEK LEAD TIME. SHIPPING INCLUDED IN PRICE. SHIPS FROM TYLER, TX. SHIPS SEPARATE, FREIGHT INCLUDED. NOTE: FACTORY OPTIONS SHALL INCLUDE NONCORROSIVE COATING AND HAIL GUARD PROTECTION. REQUIRED INPUT GAS PRESSURE 7" WC TO 14" WC.

DESIGNATION	MANUFACTURER	MODEL NO	TYPE	COLOR	NOM NECK SIZE	NOM FACE SIZE	FRAME TYPE	NC MAX	REMARKS
A	TITUS	PMC3	PERFORATED MODULAR CORE	²⁸ WHITE	14" x 14"	24" x 24"	LAY-IN T-BAR	< 30	INSULATION BLANKET FOR BACKPAN, CONTRACTOR FURNISHED ROUND NECK ADAPTER
B	TITUS	PMC-1C	PERFORATED MODULAR CORE	²⁸ WHITE	12" x 12"	19" x 19"	SURFACE	< 30	AG95 OBD, (CONTRACTOR TO INSTALL INSULATED CEILING BOX 16"x16" ID)
C	TITUS	PMC-1C	PERFORATED MODULAR CORE	²⁸ WHITE	8" x 8"	15" x 15"	SURFACE	< 30	AG95 OBD, (CONTRACTOR TO INSTALL INSULATED CEILING BOX 12"x12" ID)
D	TITUS	PAR-3	PERFORATED RETURN	²⁸ WHITE	22" x 22"	24" x 24"	LAY-IN T-BAR	< 35	CONTRACTOR FURNISHED INSULATE RETURN BOX FOR CONNECTING FLEX DUCT
E	TITUS	PMR-1C	PERFORATED EXHAUST	²⁸ WHITE	12" x 12"	15" x 15"	SURFACE		AG95 OBD, (CONTRACTOR TO INSTALL INSULATED CEILING BOX 12"x12" ID)
F	TITUS	PAR-3	PERFORATED RETURN	PANDA BRONZE	22" x 22"	24" x 24"	LAY-IN T-BAR	< 35	CONTRACTOR FURNISHED INSULATE RETURN BOX FOR CONNECTING FLEX DUCT
H	TITUS	PMC-3	PERFORATED MODULAR CORE	PANDA BRONZE	14" x 14"	24" x 24"	LAY-IN T-BAR	< 30	AG95 OBD, INSULATION BLANKET FOR BACKPAN, CONTRACTOR FURNISHED ROUND NECK ADAPTER
J	TITUS	PMC-3	PERFORATED MODULAR CORE	²⁸ WHITE	8" x 8"	24" x 24"	LAY-IN T-BAR	< 30	AG95 OBD, INSULATION BLANKET FOR BACKPAN, CONTRACTOR FURNISHED ROUND NECK ADAPTER

NOTE: PROVIDE FACTORY INSTALLED BACK PAN INSULATION ON AIR DEVICES.
 HVAC CONTRACTOR IS TO PURCHASE ALL AIR DEVICES FROM PANDA APPROVED NATIONAL ACCOUNT VENDOR THERMAIR SYSTEMS INC.
 PLEASE CONTACT RON CUMPLAIN AT 602-705-5010 OR EMAIL ronc@thermairsystems.com

ITEM	SUPPLY AIR	RETURN AIR	MAKE-UP AIR	EXHAUST
MAU1	0	0	+4,760	0
EF-1, EF-2	0	0	0	-2,975 x 2
RTU-1, RTU-2	+3,400, +3,400	-2,580, -2,580	2@820 EA	0
EF-3	-	-	-	-450
TOTAL	+6,800	-5,160	+6,400	-6,400

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FAN NO.		EF 1	EF 2	EF 3
LOCATION		ROOF	ROOF	ROOF
AREA SERVED		KITCHEN GREASE EXHAUST HOOD #1	KITCHEN GREASE EXHAUST HOOD #2	RESTROOMS
FAN DUTY		AIR EXHAUST	AIR EXHAUST	AIR EXHAUST
FAN TYPE		CENTRIFUGAL BELT-DRIVEN	CENTRIFUGAL BELT-DRIVEN	CENTRIFUGAL BELT-DRIVEN
FAN ARRANGEMENT		UPBLAST	UPBLAST	DOWNBLAST
MIN. WHEEL DIAMETER		-	-	-
PERFORMANCE	C.F.M.	2,975	2,975	450
	T.S.P.	1.25"	1.25"	0.25"
	B.H.P.	1.18	1.18	0.085
	FAN R.P.M.	1156	1156	1128
MOTOR	MOTOR H.P.	2.0	2.0	0.25
	ELEC. CHARACTERISTICS	208V/3PH/60HZ	208V/3PH/60HZ	115V/1PH/60HZ
	MOTOR R.P.M.	1725	1725	-
	MOTOR SPECIAL FEATURES	OPEN DRIP-PROOF	OPEN DRIP-PROOF	OPEN DRIP-PROOF
ACCESSORIES		1. VENTED ROOF CURB 2. HINGED AND CHAINED FAN INSTALLATION FOR DUCT ACCESS	1. VENTED ROOF CURB 2. HINGED AND CHAINED FAN INSTALLATION FOR DUCT ACCESS	1. ROOF CURB 2. BACKDRAFT DAMPER
MANUFACTURER		CAPTIVEAIRE MODEL: EABDU18 WT. 222 LBS	CAPTIVEAIRE MODEL: EABDU18 WT. 222 LBS	CAPTIVEAIRE MODEL: EABDCR7 WT. 108 LBS

1. KITCHEN EXHAUST FANS SHALL BE ELECTRICALLY INTERLOCKED WITH MAKE-UP AIR UNIT AND ROOFTOP UNITS.
2. FOR WIRING DIAGRAM SEE 5/M-501

EACH HVAC UNIT SHALL BE PROVIDED WITH CONTROLS AS FOLLOWS:

THERMOSTAT: CARRIER COMMERCIAL PROGRAMMABLE THERMOSTAT WITH REMOTE TEMPERATURE SENSOR. SEE SHEET M-100 FOR THERMOSTAT AND SENSOR LOCATIONS.

ALL THERMOSTATS SHALL HAVE MANUAL OVERRIDE.

EACH UNIT CONTROL SHALL BE SET UP INITIALLY AS FOLLOWS:

CONTRACTOR SHALL DETERMINE OCCUPIED PERIOD FROM OWNER.

FAN OPERATION SHALL BE CONTINUOUS DURING OCCUPIED PERIOD AND CYCLE WITH COOLING/HEATING DURING UNOCCUPIED PERIOD.

PROGRAMMED SETPOINTS (FOR EACH THERMOSTAT):

COOLING OCCUPIED:	75°F.
COOLING UNOCCUPIED:	85°F.
HEATING OCCUPIED:	68°F.
HEATING UNOCCUPIED:	50°F.

NOTE: DEVIATIONS FROM THE ABOVE MAY RESULT IN UNACCEPTABLE AIR QUALITY, COMFORT AND/OR ENERGY CONSUMPTION.

EACH UNIT CONTROL SHALL BE SET UP INITIALLY AS FOLLOWS:

FAN OPERATION SHALL BE CONTINUOUS DURING COOKING OPERATION
INTERLOCK WITH KITCHEN EXHAUST FANS. REFER TO HOOD DRAWINGS.

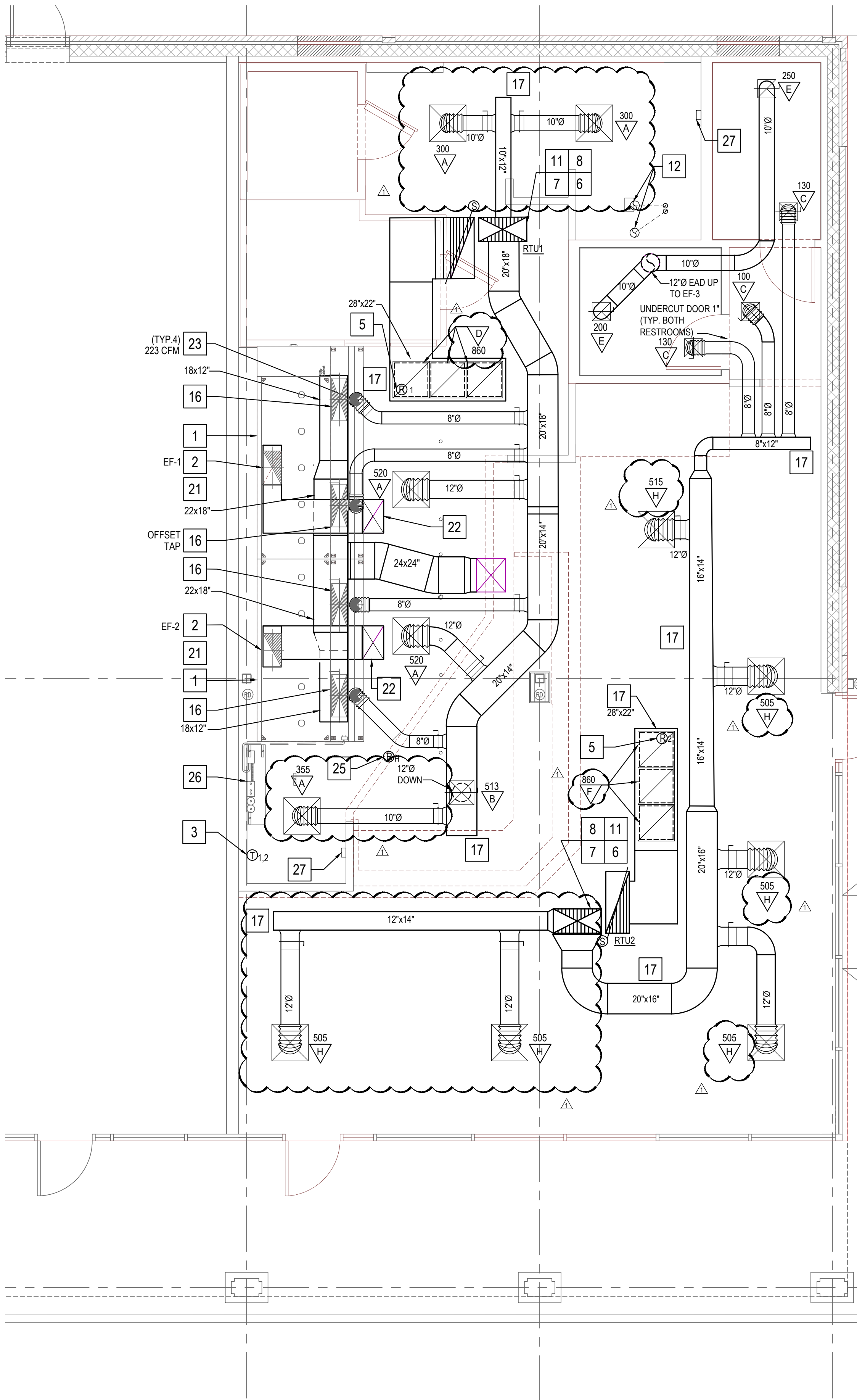
PROGRAMMED SETPOINTS:

COOLING :	85°F.
HEATING :	55°F.

1. WORK INCLUDES INSTALLATION OF HVAC SYSTEMS, INCLUDING GREASE EXHAUST FANS AND MAKE-UP AIR UNIT FOR KITCHEN HOODS, SPACE HEATING/AIR CONDITIONING SYSTEMS, SUPPLY, RETURN, EXHAUST, AND GREASE EXHAUST DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, COMPLETE CONTROLS SYSTEM, INTERLOCK WIRING FOR OPERATION OF KITCHEN HOODS, EXHAUST FANS, AND MAKE-UP AIR UNIT, DUCT INSULATION, AND RELATED ITEMS NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM AS INDICATED ON THE PLANS. FURNISH ALL NEW MATERIALS AND EQUIPMENT UNLESS NOTED OTHERWISE (U.N.O.).
2. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND REQUIRED EQUIPMENT. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. AS REQUIRED, REFER TO ARCHITECTURAL AND MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. FURNISH AND INSTALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND EQUIPMENT SHOWN ON PLANS.
3. CODE COMPLIANCE: ALL WORK COVERED BY THIS SECTION SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
4. COORDINATE WORK WITH OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS AND OWNER REQUIREMENTS. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR INSTALLATION AND/OR TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK. WORK SHALL BE PERFORMED BY EXPERIENCED TRADESMEN AND THEIR WORK SHALL BE OF HIGH STANDARD ACCEPTABLE TO THE OWNER.
5. DUCTWORK: DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED, SEALED AND INSULATED AS PROVIDED IN THE INT'L ENERGY AND MECHANICAL CODES. SHEET METAL SHALL BE IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. SHEET METAL SHALL BE GALVANIZED OF LOCK-FORMING QUALITY, ASTM A-525. UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE NET INSIDE CLEAR DIMENSIONS ON LINED DUCTS OR SHEET METAL. DIMENSIONS ON UNLINED DUCTS: ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. ROUND RIGID DUCTWORK SHALL CONFORM TO SMACNA TABLE 3-2.
6. INSTALL DUCT HIGH AS POSSIBLE WITHIN JOIST SPACE. CONSULT ARCHITECT AND ENGINEER FOR ALTERNATE ROUTING IF CONFLICT OCCURS.
7. SEAL ALL TRANSVERSE AND LONGITUDINAL DUCT SEAMS AIR-TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 30 DEGREES.
8. GREASE EXHAUST SYSTEM: ALL GREASE EXHAUST DUCTS SHALL BE FABRICATED BY WELDED JOINT CONSTRUCTION OF 16 GAUGE WELDED STEEL OR 18 GAUGE STAINLESS STEEL. PROVIDE RATED ACCESS DOORS AT ALL ELBOWS AND OFFSETS NECESSARY FOR COMPLETE CLEANING OF GREASE DUCT. PROVIDE MINIMUM 30"x30" UNOBSTRUCTED ACCESS OR ROUTE FROM THE CEILING TO EACH ACCESS DOOR. DO NOT BLOCK ACCESS WITH PLUMBING, ELECTRICAL OR HVAC OBSTRUCTIONS. ALL ELBOWS SHALL BE LONG RADIUS. GREASE DUCT SHALL BE INSTALLED EITHER IN A RATED ENCLOSURE PROVIDED BY THE GENERAL CONTRACTOR OR WRAPPED WITH FIREMASTER GREASE DUCT WRAP.
9. DUCT INSULATION: PROVIDE DUCT WRAP FOR ALL DUCTS ABOVE CEILING, INCLUDING VERTICAL, HORIZONTAL, RIGID AND FLEXIBLE DUCTS, EXCLUDING PREFABRICATED PREINSULATED DUCTS AND GREASE DUCTS. DUCT WRAP SHALL BE JOHNS MANVILLE MICROLITE OR EQUAL WITH FOIL/SURCKRAFFT, 1" IN THICKNESS, 15 POUNDS/FT³ DENSITY. DUCT WRAP SHALL BE BONDED GLASS FIBERS IN THERMOSETTING RESIN MEETING NFPA 90A, WITH K VALUE NOT TO EXCEED 0.23 AT 75 DEGREES F. FLAME SPREAD AND SMOKE DEVELOPED RATINGS SHALL NOT EXCEED 25/50. APPLY 100% ADHESIVE COVERAGE TO SHEET METAL DUCTWORK. PROVIDE ADDITIONAL MECHANICAL FASTENERS ON DUCTS OVER 12" WIDE OR 16" HIGH. MECHANICAL FASTENERS SHALL BE "GRIPNAIL" OR WELDED PIN AND SPEED CLIPS SPACED PER SMACNA STANDARDS.
10. FLEX DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50 AND SHALL BE RATED FOR 2" W.C. PRESSURE AND 0 TO 250 DEGREE TEMPERATURE. FLEX DUCT MAXIMUM ALLOWED LENGTH TO BE PER LOCAL CODE.
11. PROVIDE INSULATION APPLIED TO COMPLETE BACKPAN OF AIR DEVICES.
12. ACCESS DOOR: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE SHOWN AND AS REQUIRED FOR ACCESS TO DAMPERS OR EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.
13. AUTOMATIC TEMPERATURE CONTROL: CONTRACTOR TO PROVIDE AND INSTALL 24/7 PROGRAMMABLE THERMOSTATS AND REMOTE SENSORS.
14. KITCHEN HOOD EQUIPMENT INTERLOCK: PROVIDE ALL INTERLOCK AND CONTROL WIRING FOR KITCHEN HOOD SYSTEMS, WHICH INCLUDES EF1, EF2, MAU1 AND ANSUL SYSTEM SHUT DOWN INTERLOCK TO MAKE-UP AIR FAN. UPON ACTIVATION OF ANSUL SYSTEM, MAKE-UP AIR FAN SHALL BE DEACTIVATED. PROVIDE ALL NECESSARY CONTROLS AND WIRING FOR A COMPLETE AND OPERABLE SYSTEM. INTERLOCK GREASE EXHAUST FANS AND MAKE-UP AIR UNIT TO START SIMULTANEOUSLY FROM SWITCH PROVIDED AT HOOD.
15. TEST AND ADJUST EACH PIECE OF EQUIPMENT AND EACH SYSTEM AS REQUIRED TO ASSURE PROPER AIR BALANCE AND OPERATION. PROVIDE A CERTIFIED AIR BALANCE REPORT TO OWNER SHOWING DESIGN AND MEASURED AIR VOLUMES, STATIC PRESSURES, FAN RPMs, ETC. AIR BALANCE CONTRACTOR SHALL ADJUST SYSTEMS TO MINIMIZE NOISE AND VIBRATION, AND TO ASSURE PROPER FUNCTION OF CONTROLS, MAINTENANCE OF TEMPERATURE AND OPERATION. GENERAL CONTRACTOR TO OBTAIN ALL INSPECTIONS REQUIRED BY LOCAL CODE AND GUARANTEE WORK AND INSTALLATION FOR ONE YEAR AFTER ACCEPTANCE BY OWNER. GENERAL CONTRACTOR TO FURNISH OWNER WITH TWO COMPLETE SETS OF AS-BUILT DRAWINGS INDICATING ALL INSTALLED WORK, INCLUDING ALL CONTROL WIRING DIAGRAMS AND INTERLOCK FOR SYSTEM OPERATION.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ECONOMIZERS INCLUDING INSTALLATION OF ALL NECESSARY SENSORS AND CONNECTIONS TO THERMOSTAT. PROVIDE SUPPORT OF ECONOMIZERS PER MANUFACTURER'S REQUIREMENTS AND TEST FOR PROPER OPERATION PRIOR TO FINAL TEST AND BALANCE.



MECHANICAL LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
	ABV	ABOVE
	AFF	ABOVE FINISHED FLOOR
	CLG	CEILING
	DN	DOWN
		DUCT SECTIONS (SUPPLY, EXHAUST, RETURN)
		FLEXIBLE DUCT
	MVD	MANUAL VOLUME DAMPER
	OBD	OPPOSED BLADE DAMPER
	MFR	MANUFACTURER
	MIN	MINIMUM
	OSA	OUTSIDE AIR
		ROUND RIGID DUCTWORK
	TSP	TOTAL STATIC PRESSURE
		TURNING VANES
		CONSTRUCTION NOTES
		MECHANICAL EQUIPMENT DESIGNATION
		SMOKE DETECTOR
		THERMOSTAT / UNIT
		REMOTE SENSOR / UNIT



HVAC FLOOR PLAN 2
Scale: 1/4"=1'-0" M-100

MAKE UP AIR CALCULATION:

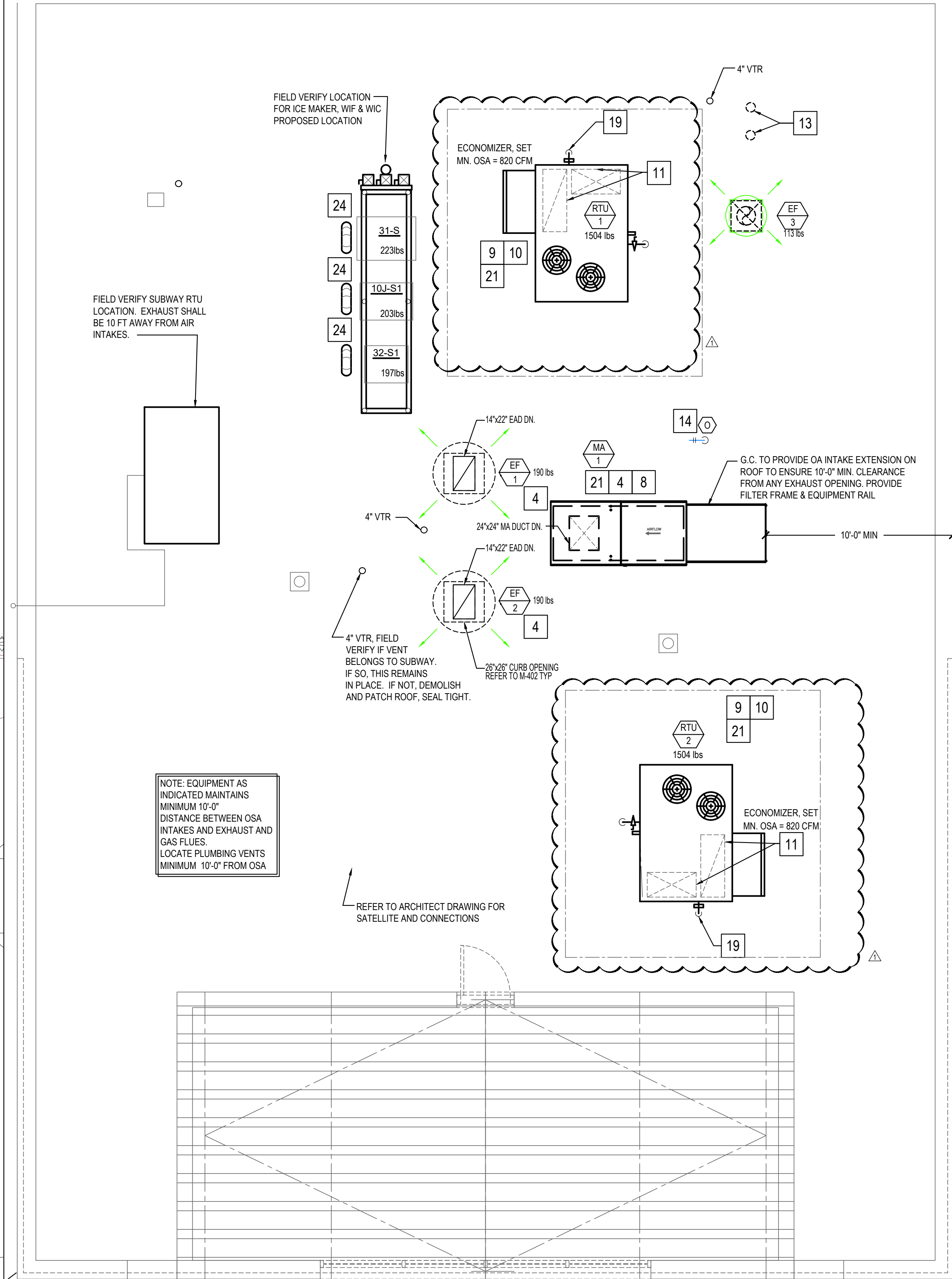
CALCULATION FOR MAKE UP AIR TEMPERATURE DIFFERENTIAL BETWEEN MAKEUP AIR AND THE AIR IN THE CONDITIONED SPACE SHALL NOT EXCEED 10 DEG F. FOR EACH SITE. CALCULATE AVERAGE DAILY TEMPERATURE FOR PREVIOUS 5 YEARS
OCCUPIED COOLING SET POINT IS 75 F. IF TEMPERATURES AVERAGE 85 F OR ABOVE FOR MORE THAN 14 DAYS PROVIDE COOLING ON MAKEUP AIR.
OCCUPIED HEATING SET POINT IS 70 F. IF TEMPERATURES AVERAGE 60 F OR BELOW FOR MORE THAN 14 DAYS PROVIDE HEATING ON MAKEUP AIR.
FROM THE NATIONAL WEATHER SERVICE CLIMATE DATA FOR: FAIRFAX, VA (WASHINGTON DULLES, DC) FROM MAY THRU SEPTEMBER.

YEAR	AVERAGE # OF DAYS TEMP OVER 85 F
2015	0
2016	9
2017	0
2018	1
2019	2

TOTAL:
TOTAL AVERAGE 12 / 5 = 2.4 DAYS

MONTH/YEAR	AVERAGE # OF DAYS TEMP BELOW 60 F
JAN/2019	31

PANDA HAS APPROVED THAT COOLING IS NOT REQUIRED. HEATING SHALL BE PROVIDED.



HVAC ROOF PLAN 1
Scale: 1/4"=1'-0" M-100

MECHANICAL KEY NOTES:

- 1 INSTALL GREASE EXHAUST HOODS FURNISHED BY PANDA. HOOD SHALL BE ONE CAPTIVEAIRE 4824ND HOOD EXHAUSTING 2,975 CFM. SUPPORT FROM STRUCTURE ABOVE WITH UNISTRUT AND ALL THREAD ROD. MOUNT HOOD PER LOCAL CODE REQUIREMENTS. REFER TO PLAN FOR HOOD CONNECTIONS. SEE CODE COMPLIANCE DRAWINGS ON SHEET M-500 AND CAPTIVEAIRE HOOD DRAWINGS FOR ADDITIONAL REQUIREMENTS. (TWO SECTIONS TOTAL).
- 2 PROVIDE AND INSTALL GREASE EXHAUST DUCT, ROUTE ON TOP OF MAKE UP AIR DUCT, FROM INLET OF ROOF MOUNTED GREASE EXHAUST FAN, TRANSITION TO 22"x14" BETWEEN ROOF JOIST, CONNECT TO EXHAUST HOOD COLLAR, FIELD VERIFY WRAP WITH THERMAL CERAMIC FIREMASTER DUCT WRAP+ OR EQUAL. FABRICATE CURB FROM 16 GAUGE STEEL WITH WELDED SEAM CONSTRUCTION SEAL TO THE ROOF CURB WITH FIRE CAULKING. SEE HOOD DETAIL DRAWINGS ON SHEET M-500 AND CAPTIVEAIRE DRAWINGS. TRANSITION DUCT TO CURB AND FAN INLET SIZE. TRANSITION TO 22X12" DUCT COLLAR SIZE.
- 3 MOUNT THERMOSTAT AT MANAGER STATION. REFER TO DETAIL #1 ON SHEET E-200. SEE DWG FOR EXACT LOCATION OF REMOTE SENSOR. SEE ROOFTOP UNIT SCHEDULE AND TEMPERATURE CONTROL DIAGRAM DETAIL 5 ON SHEET M-501 FOR ADDITIONAL INFORMATION.
- 4 INSTALL GREASE EXHAUST FAN WITH CURB (EF-1 AND EF-2) AND MAKE UP AIR (MA-1) FURNISHED BY PANDA. COORDINATE LOCATION OF UNIT WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 5 PROVIDE AND INSTALL A REMOTE SENSOR FOR ROOFTOP UNIT AT THIS LOCATION. MOUNT REMOTE SENSOR IN RETURN AIR DUCTWORK. SEE TEMPERATURE CONTROL DIAGRAM ON SHEET M-501 FOR ADDITIONAL INFORMATION.
- 6 PROVIDE AND INSTALL DUCT MOUNTED SMOKE DETECTOR AT MAIN SUPPLY AIR DUCT PER UMC, SEC. 609, OR AT RETURN AIR DUCT PER IMC, SECTION 606.2.1. DETECTORS SHALL BE INTERLOCKED TO SHUT DOWN ROOFTOP UNITS UPON DETECTION OF SMOKE. PROVIDE ALL CONTROL WIRING NECESSARY TO PERFORM THIS OPERATION.
- 7 PROVIDE FLEXIBLE CONNECTION BETWEEN UNIT, ROUTE DUCT THRU ROOF CURB AND TRUSS.
- 8 FOR GAS OR WATER CONNECTION, SEE PLUMBING DRAWINGS.
- 9 PROVIDE FABRICATED CURB PER MANUFACTURERS REQUIREMENTS AND COORDINATE EXACT LOCATION OF UNIT IN FIELD. SHIM ROOF CURB LEVEL FOR PROPER CONDENSATE DRAINAGE.
- 10 FURNISH AND INSTALL ALL TEMPERATURE CONTROL WIRING FROM THE UNIT TO THE THERMOSTAT OR OTHER CONTROL DEVICES.
- 11 FULL SIZE SA AND RA UP TO RTU. TRANSITION AS REQUIRED TO RTU INLET/OUTLET SIZE.
- 12 PVC VENT AND COMBUSTION AIR PIPING PROVIDED AND INSTALLED BY PLUMBING FOR SEALED COMBUSTION WATER HEATER. REFER TO PLUMBING PLANS.
- 13 WATER HEATER VENT AND COMBUSTION AIR INTAKE PIPES. REFER TO PLUMBING PLANS. OFFSET AS REQUIRED FOR CLEARANCE FROM AIR INTAKES.
- 14 ROOF HYDRANT. REFER TO PLUMBING DRAWINGS.
- 15 NOT USED.
- 16 MA DUCT (BELOW MAKE UP AIR) CONNECT TO 28"x10" RISER FROM SUPPLY PLENUM. 1,190 CFM
- 17 PROVIDE DUCT EXTERNAL INSULATION WRAP AT TRUNK, TYPICAL.
- 18 NOT USED.
- 19 CONDENSATE DRAIN LINE DOWN THRU ROOF. REFER TO DETAIL 16/P-500 AND PLUMBING SHEET P-100.
- 20 NOT USED.
- 21 PROVIDE AND INSTALL ALL EQUIPMENT WITH MANUFACTURER'S RECOMMENDED CLEARANCES FOR MAINTENANCE. MAINTAIN MINIMUM CLEARANCES TO ELECTRICAL AND SERVICE ACCESS PANELS AND DISCONNECTS.
- 22 GREASE DUCT CLEANOUT LOCATION. PROVIDE ACCESS TO CLEANOUT ABOVE CEILING. REFER TO MECHANICAL SPECIFICATIONS SHEET M-000
- 23 8" CONNECTION TO HOOD RTU SUPPLY PLENUM COLLAR. BALANCE TO 223 CFM.
- 24 PROVIDE AND INSTALL ACR TUBING, SIZED AND ROUTED PER MANUFACTURER'S INSTRUCTIONS. FROM REMOTE REFRIGERANT CONDENSERS TO WALK-IN COOLER AND FREEZER FAN COILS, AND ICE MAKER. TEST, PURGE, EVACUATE AND CHARGE LINES AS REQUIRED BY MANUFACTURER. (START-UP FOR ICE MAKER IS BY OWNER'S REPRESENTATIVE). ROUTE REFRIGERANT LINES THROUGH "ATR HUB" PROVIDED AND INSTALLED BY GC (REFER TO ARCH. ISO 3 AND 4, SHEET A-108).
- 25 ROOM AIR SENSOR FROM CAPTIVEAIRE HOOD ON BACK OF MENU BOARD WALL, AS CLOSE TO CEILING AS POSSIBLE.
- 26 INSTALL ANSUL SYSTEM SUCH THAT TOP OF CABINET IS ON THE UNDERSIDE OF ACT CEILING.
- 27 PROVIDE CO2 MONITORING SYSTEM, CHART MODEL NUMBER AX60. CO2 SENSOR SHALL BE MOUNTED 12" TO 18" ABOVE FINISHED FLOOR NEAR CO2 TANK. CENTRAL DISPLAY AND CO2 ALARM SHALL BE MOUNTED VISIBLE TO OCCUPANTS FOR ALARM. REFER TO ARCH AND ELECTRICAL PLANS.

NOTE: MAXIMUM FLEXIBLE DUCT LENGTH ALLOWED SHALL BE PER 5 FT.



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REVISIONS:

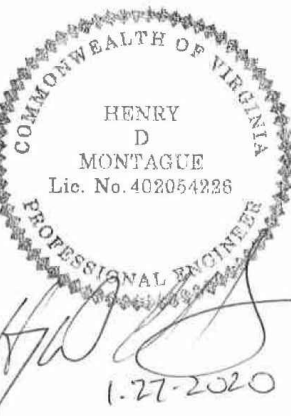
1	PERMIT RESPONSE 1	06-01-2020

ISSUE DATE:

PEER REVIEW	01-27-2020
PR RESPONSE 1	02-21-2020
BUILDING PERMIT	03-11-2020

DRAWN BY: J. DESKINS

PANDA PROJECT #: D7446
ARCH PROJECT #: JCDT19-0314



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M-100

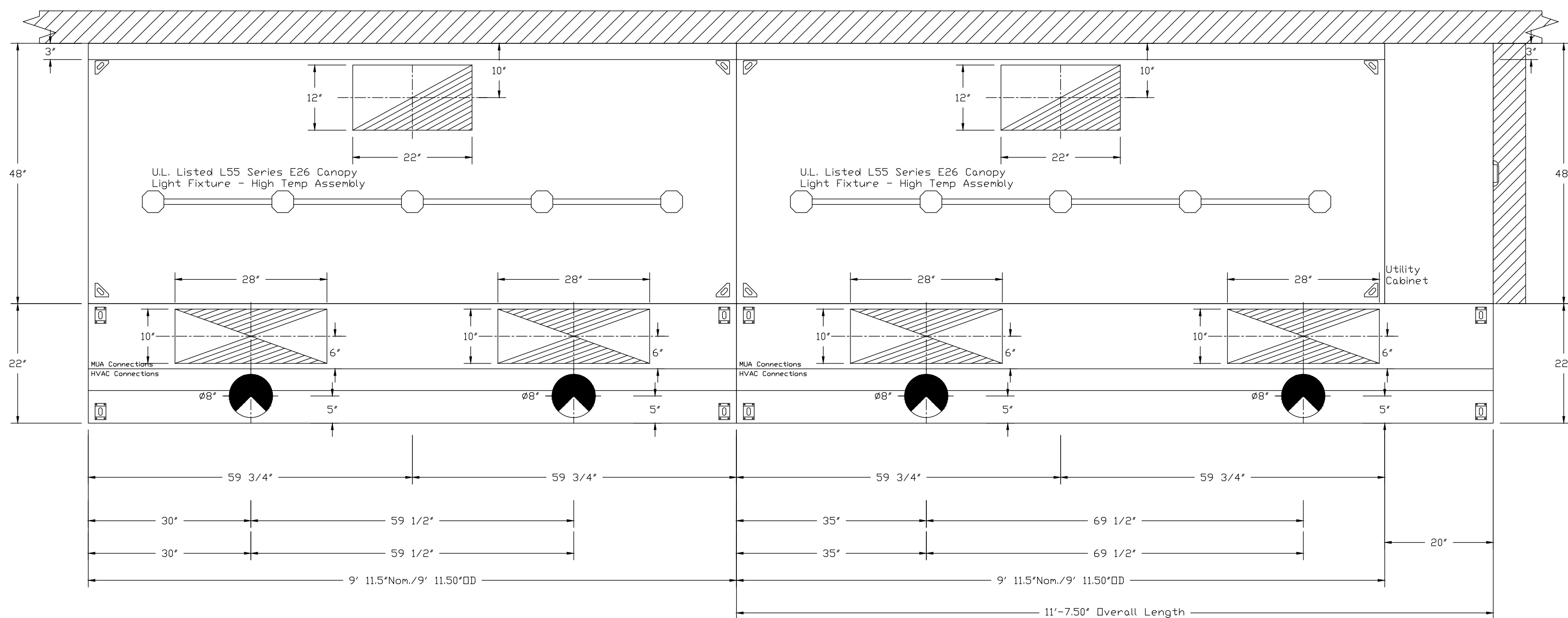
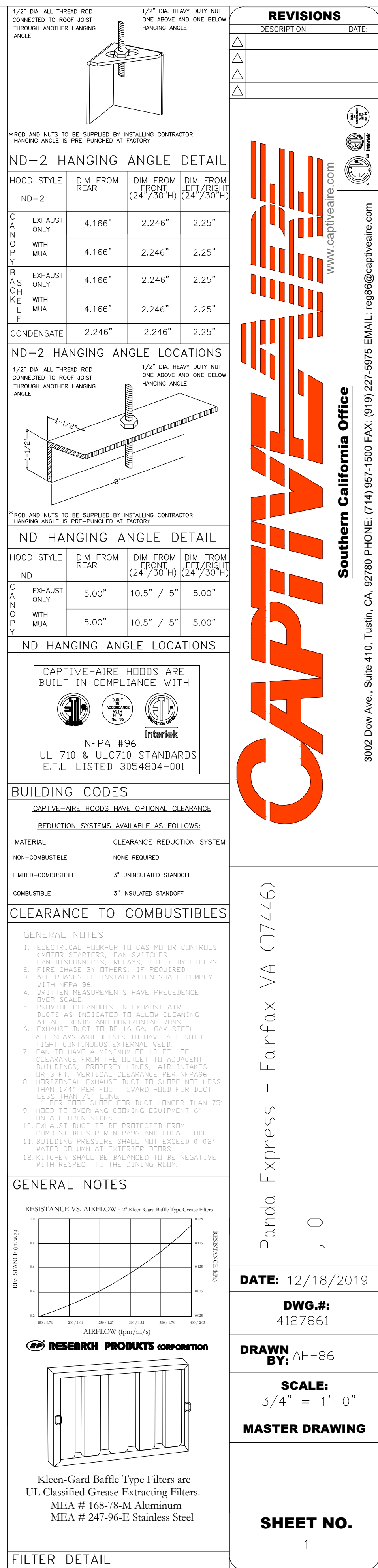
H.V.A.C. FLOOR PLAN &
H.V.A.C. ROOF PLAN

HOOD NO.	TAG	MODEL	LENGTH	MAX COOKING TEMP.	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.	S.P.				END TO END	ROW
1		4824 ND-2-ACPSP-F	9' 11.5"	600 Deg.	Heavy	299	2975	12'	22'	4'		2975	1623	-0.524"	2380	446	430 SS Where Exposed	LEFT	ALONE
2		4824 ND-2-ACPSP-F	9' 11.5"	600 Deg.	Heavy	299	2975	12'	22'	4'		2975	1623	-0.524"	2380	446	430 SS Where Exposed	RIGHT	ALONE

HOOD NO.	TAG	FILTER(S)				EFFICIENCY @ 7 MICRONS	LIGHT(S)			UTILITY CABINET(S)					FIRE SYSTEM PIPING	HOOD HANGING WT	
		TYPE	QTY.	HEIGHT	LENGTH		QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL			SWITCHES
												TYPE	SIZE	MODEL #			QUANTITY
1		SS Baffle with Handles	7	20"	16"	30%	5	L55 Series E26	NO	Wall Mnt	12"x54"x24"	Ansul R102	3.0/3.0/3.0	SC-321110FP-SEP	1 Light 1 Fan	YES	529 LBS
2		SS Baffle with Handles	7	20"	16"	30%	5	L55 Series E26	NO	Right	20"x48"x24"					YES	620 LBS

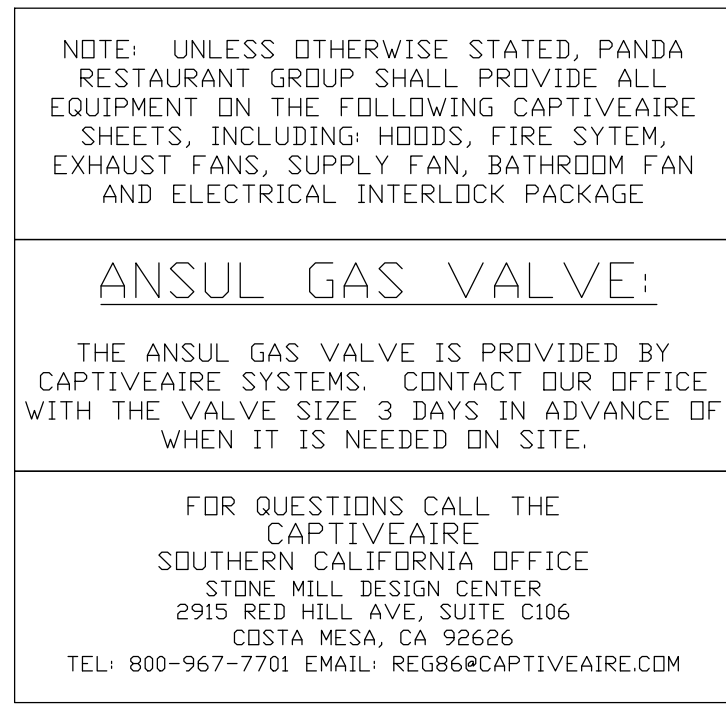
HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG.	DIA.	CFM
1	Front	119.5"	22"	6'	MUA	10"	28"	8"	1189	0.524"
					MUA	10"	28"		1189	0.524"
					AC				223	0.121"
					AC				223	0.121"
2	Front	139.5"	22"	6'	MUA	10"	28"	8"	1189	0.476"
					MUA	10"	28"		1189	0.476"
					AC				223	0.121"
					AC				223	0.121"

EXHAUST RISER -
HANGING ANGLE
20" SS BAFFLE WITH
HANDLES AND HOOD
3" INTERNAL STANDOFF
IT IS THE RESPONSIBILITY
OF THE ARCHITECT/OWNER TO
ENSURE THAT THE HOOD CLEARANCE
FROM LIMITED-COMBUSTIBLE
AND COMBUSTIBLE MATERIALS
IS IN COMPLIANCE WITH
LOCAL CODE REQUIREMENTS.



ACPSP ships loose for field installation






REVISIONS	
DESCRIPTION	DATE:
△	
△	
△	
△	

Panda Express - Fairfax VA (D7446)

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Southern California Office

3002 Dow Ave Suite 410 Tustin CA 92780 PHONE: (714) 957-1500 FAX: (910) 297-6975 EMAIL: rcs86@captiveair.com

www.captiveair.com

DATE: 12/18/2019
DWG.#: 4127861
DRAWN BY: AH-86
SCALE: 3/4" = 1'-0"
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2

HOOD DETAIL PLAN

EXHAUST FAN INFORMATION – Job#4127861

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1		EABDU18	2975	1.250	1156	2.000	1.1840	3	208	5.9	687 FPM	184	14.3
2		EABDU18	2975	1.250	1156	2.000	1.1840	3	208	5.9	687 FPM	184	14.3
3		EABDCR7	450	0.250	1128	0.250	0.0850	1	115	4.8		90	6.3

MUA FAN INFORMATION – Job#4127861

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	MCA	MDCP	WEIGHT (LBS.)	SDNES
4		EA3-D.500-G18	G18-PB	A3-D.500	3500	4760	0.750	739	3.000	1.9810	3	208	9.5	13.1A	20A	876	12.2

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
4		518789	477286	100 deg F	7 in. w.c. – 14 in. w.c.	Natural	92

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. – Descr.)
1		1 – Grease Box 1 – Upblast Fan Wheel Access Port
2		1 – Grease Box 1 – Upblast Fan Wheel Access Port
3		1 – I 15-BDD Damper 1 – AC Interlock Relay – 24VAC Coil 1 – Low Fire Start
4		1 – Inlet Pressure Gauge, 0-35" 1 – Manifold Pressure Gauge, -5 to 15" wc 1 – Motorized Backdraft Damper for A3-D Housing 1 – VAV Package w/ Manual Control (VFD Included) 1 – VFD factory mounted and wired in commercial control vestibule for tempered supply fan.

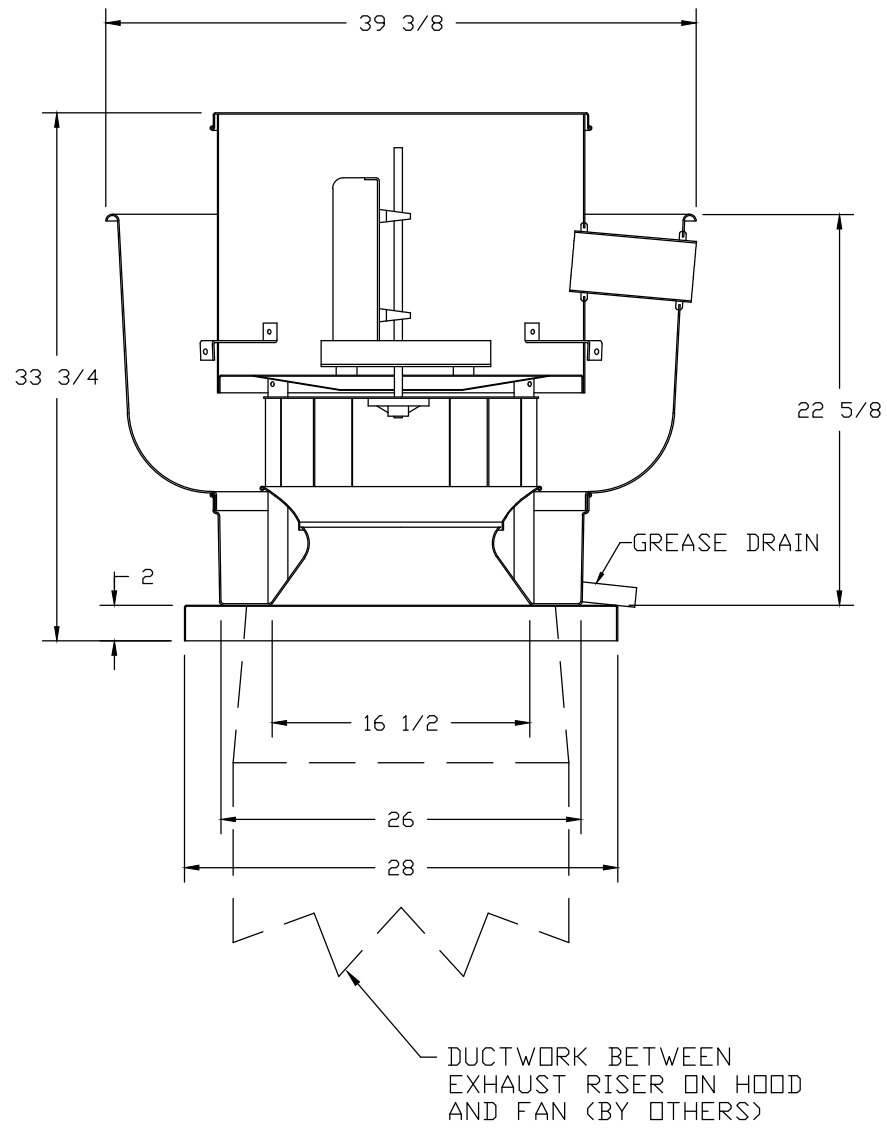
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1		YES							
2		YES							
3			YES						
4							YES		

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE	
1	# 1	38 LBS	Curb	26.500"W x 26.500"L x 24.000"H	Vented Hinged
2	# 2	38 LBS	Curb	26.500"W x 26.500"L x 24.000"H	Vented Hinged
3	# 3	18 LBS	Curb	19.500"W x 19.500"L x 12.000"H	
4	# 4	84 LBS	Curb	35.000"W x 84.000"L x 20.000"H	Insulated

FANS #1, #2 – EABDU18 EXHAUST FAN



FEATURES:

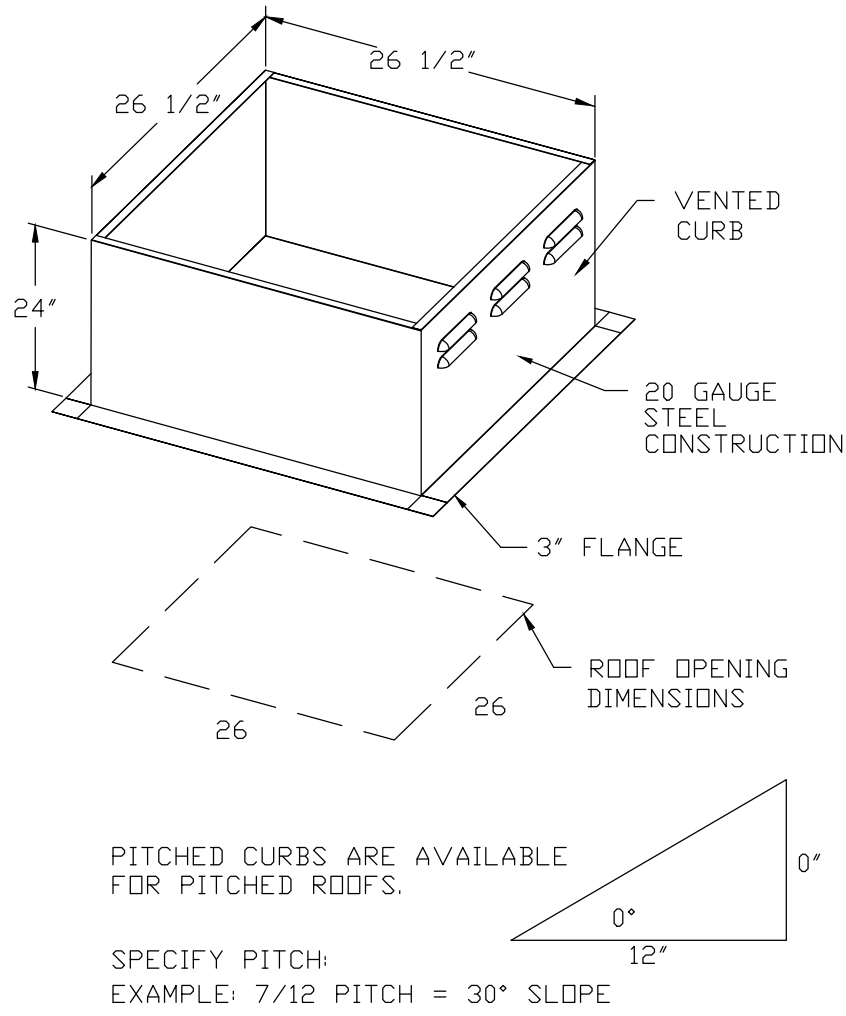
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- AMCA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- WEATHERPROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

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

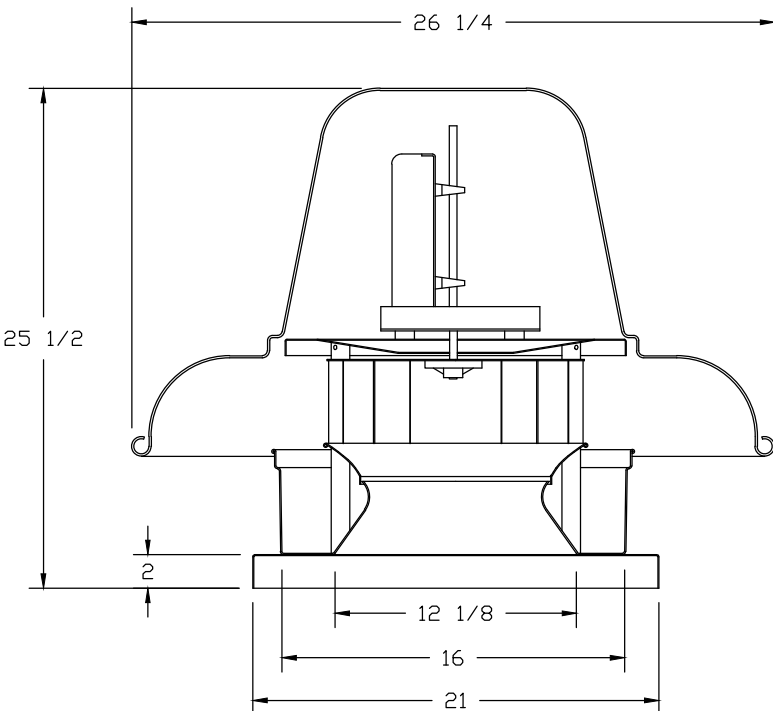
- GREASE BOX
- UPBLAST FAN WHEEL ACCESS PORT.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE

FAN #3 EABDCR7 – EXHAUST FAN

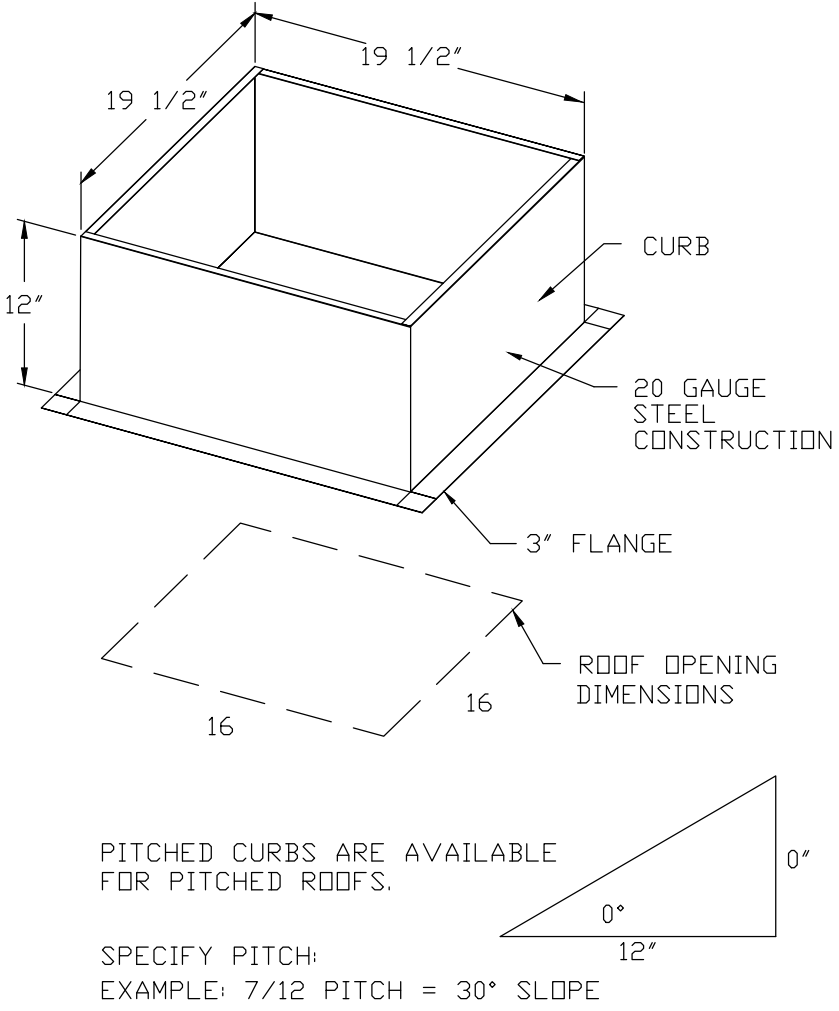


FEATURES:

- ROOF MOUNTED FANS
- UL705
- AMCA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- DISCONNECT SWITCH
- STANDARD BIRD SCREEN

OPTIONS

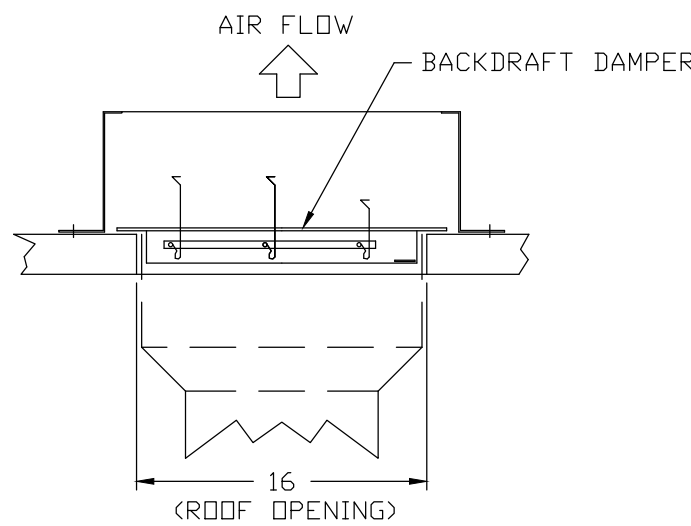
- I 15-BDD DAMPER.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE

BACKDRAFT DAMPER INSTALLATION



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Panda Express – Fairfax VA (D7446)

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DATE: 12/18/2019

DWG.#:
4127861

DRAWN BY: AH-86

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

MASTER DRAWING

SHEET NO.

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BUILDING PERMIT	03-11-2020

DRAWN BY: J. DESKINS

PANDA PROJECT #: D7446

ARCH PROJECT #: JCOT19-0314

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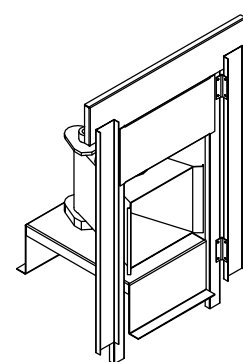
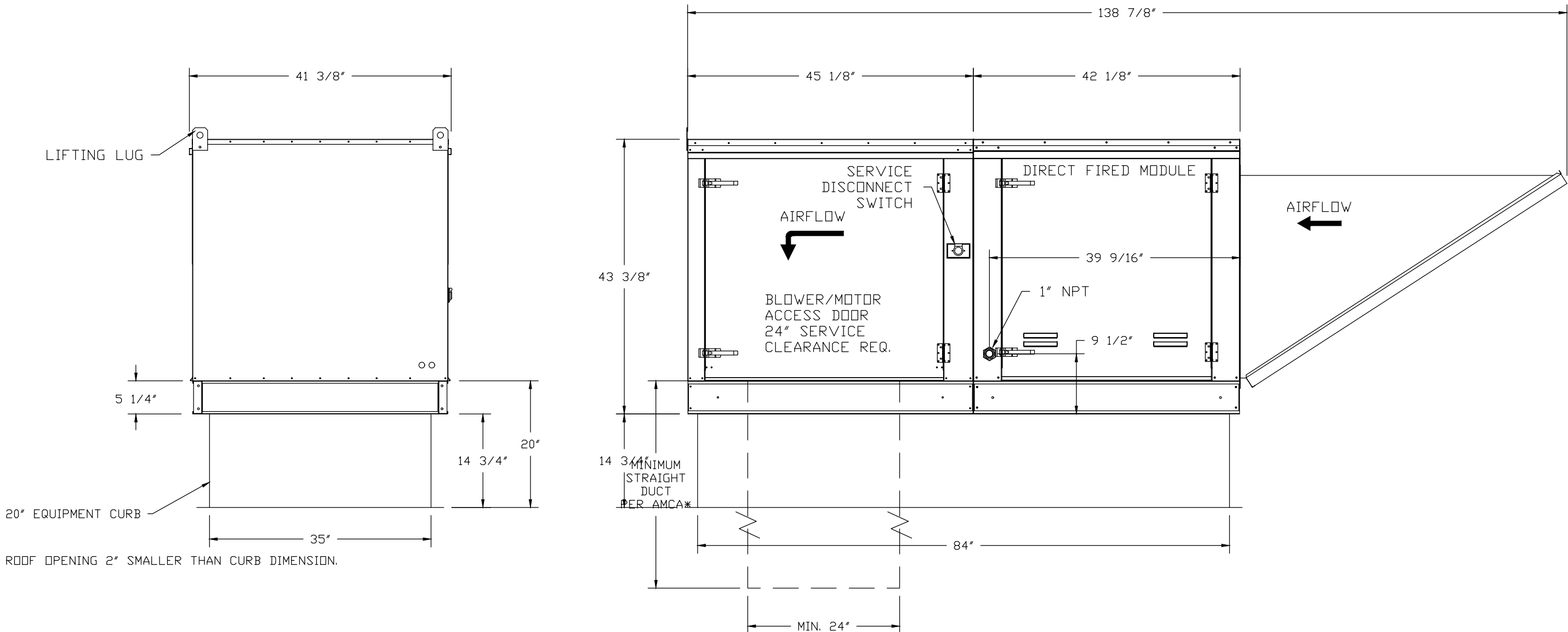
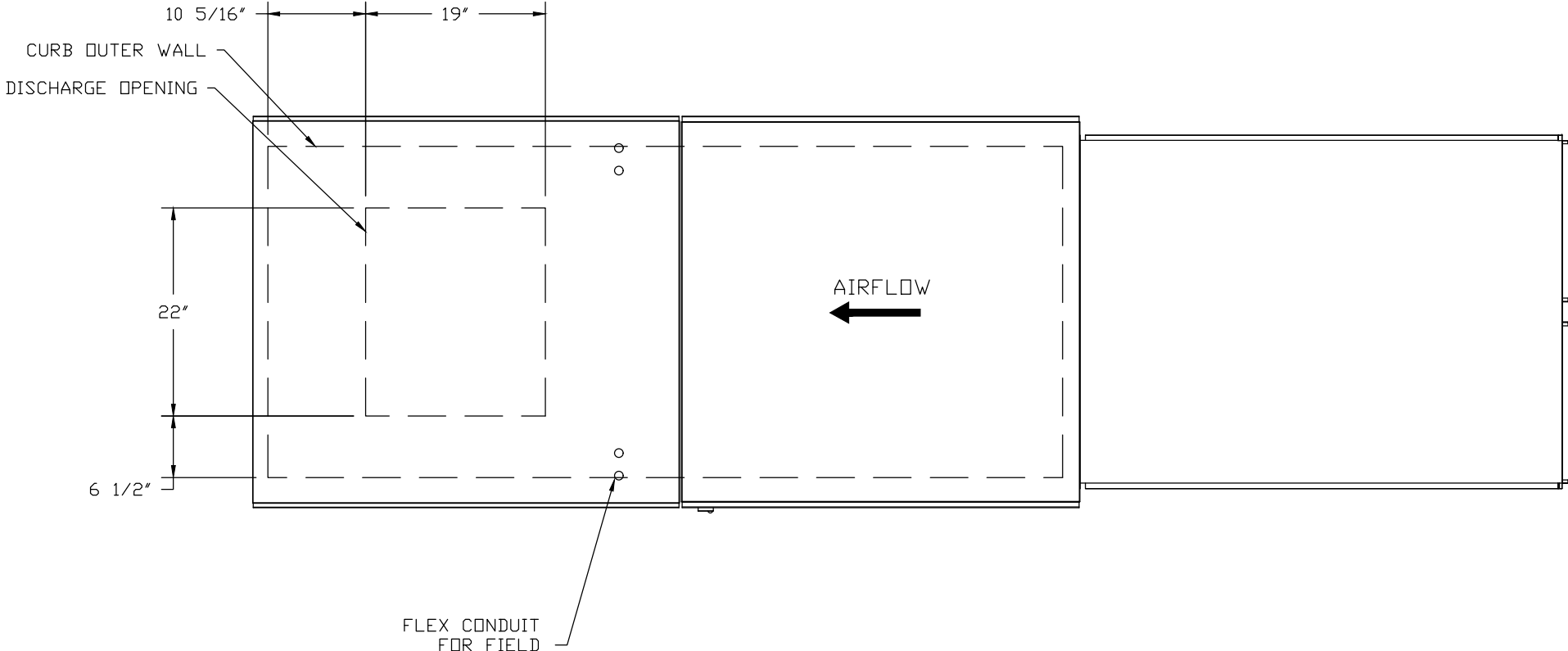
HOOD DETAIL PLAN

FAN #4 EA3-D500-G18 - HEATER
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 18" BLOWER AND 12" BURNER.
2. INTAKE HOOD WITH EZ FILTERS.
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. COOLING INTERLOCK RELAY - 24VAC COIL - 120V CONTACTS. LOCKS OUT BURNER CIRCUIT WHEN AC IS ENERGIZED.
5. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
6. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
7. GAS PRESSURE GAUGE - 5 TO +15 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE
8. MOTORIZED BACK DRAFT DAMPER 30" X 30" FOR SIZE 3 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, NFPA-3 ACTUATOR INCLUDED
9. VAV (VARIABLE-AIR-VOLUME) WIRING PACKAGE FOR COMMERCIAL FANS.
10. MANUAL SPEED CONTROL VARIABLE FREQUENCY DRIVE INCLUDED
11. VFD FACTORY MOUNTED AND WIRED IN UNIT CONTROL VESTIBULE.

*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. 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 24" x 24"

SUPPLY SIDE HEATER INFORMATION:

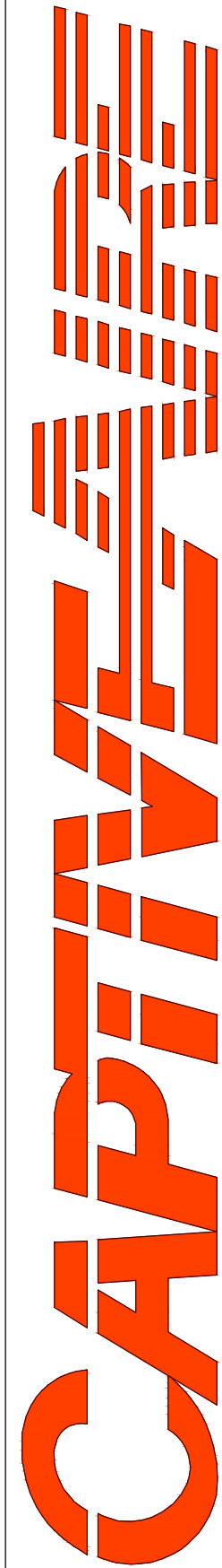
WINTER TEMPERATURE = 10°F. TEMP. RISE = 100°F.
BTUs CALCULATED OFF ACTUAL AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 477286
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 518789



Direct Fired (DF) Profile Plate Assembly

Direct Fired Profile Plate Specifications:
Description:
Direct fired burners shall have patented US Patent No. US6629533B2, self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 50ppm of carbon monoxide (CO) and 50ppm of nitrogen dioxide (NO2). Direct fired units shall be configured with the blower mounted downstream of the burner. This arrangement will ensure a consistent airflow, regardless of inlet air temperature.
Application:
Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.
Verifications:
All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).
General Construction:
-Profile plates shall be formed from G90 galvanized steel.
-Profile plates shall vary in size per unit.
-Profile plates shall be mounted along the same plane as the discharge of the burner.
-Design shall incorporate properly torqued, permanently mounted spring hinges.
-Spring hinges shall be made from plated steel.

REVISIONS	
DESCRIPTION	DATE



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Panda Express - Fairfax VA (D7446)

DATE: 12/18/2019

DWG.#:
4127861

DRAWN BY:
AH-86

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

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PANDA PROJECT #: D7446
ARCH PROJECT #: JCDT19-0314

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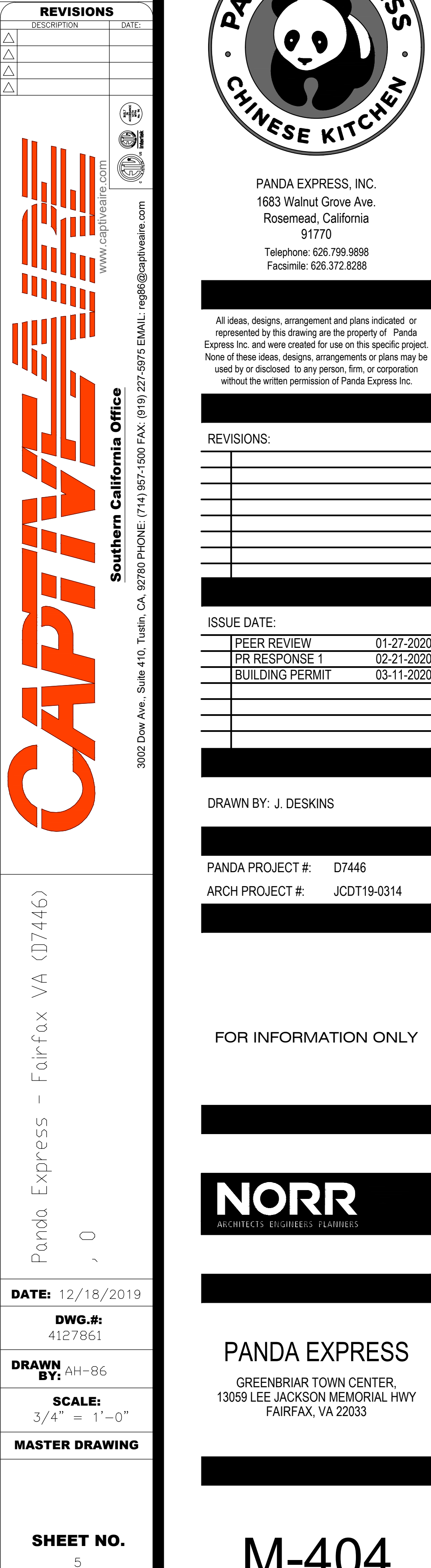
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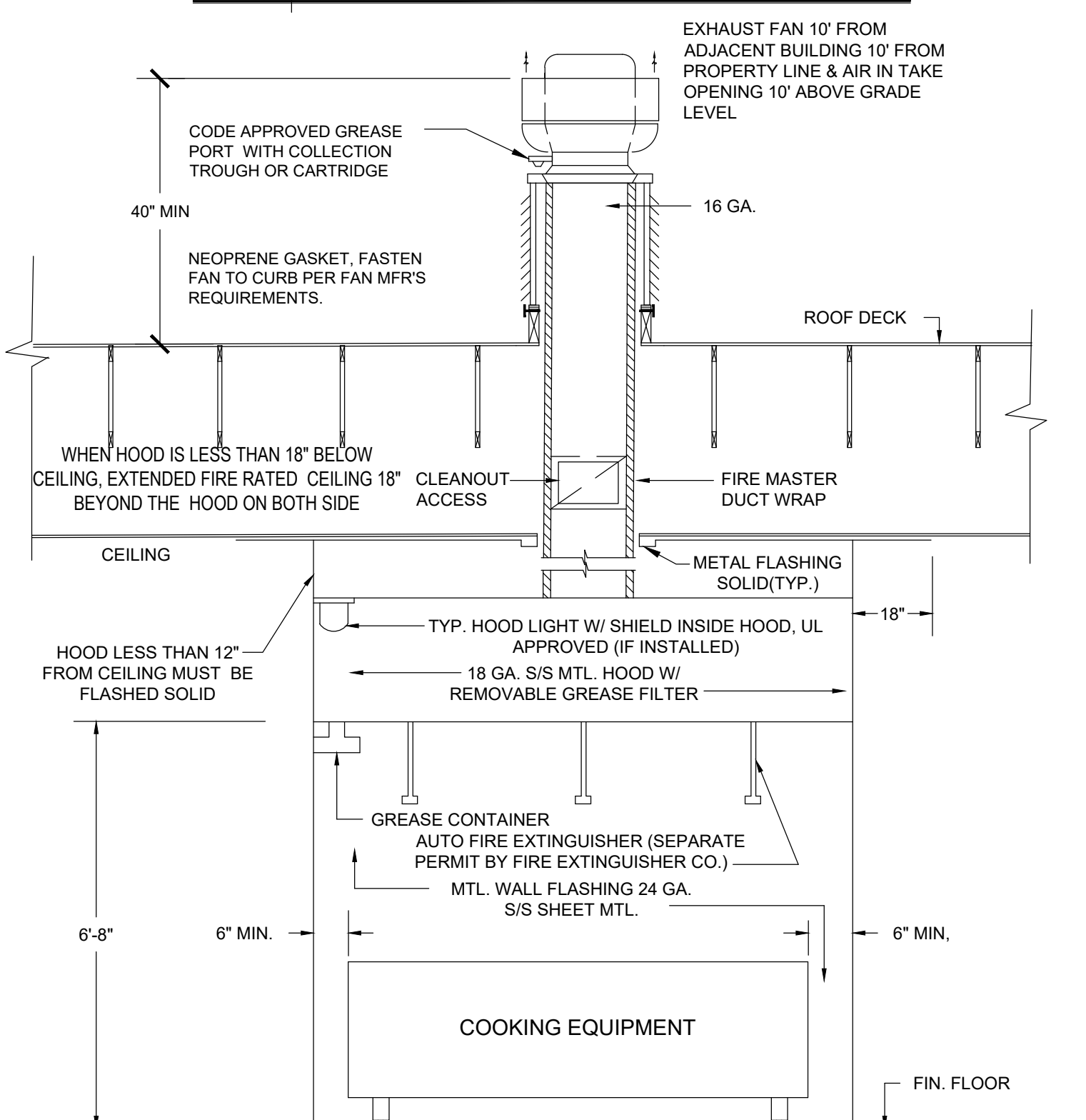
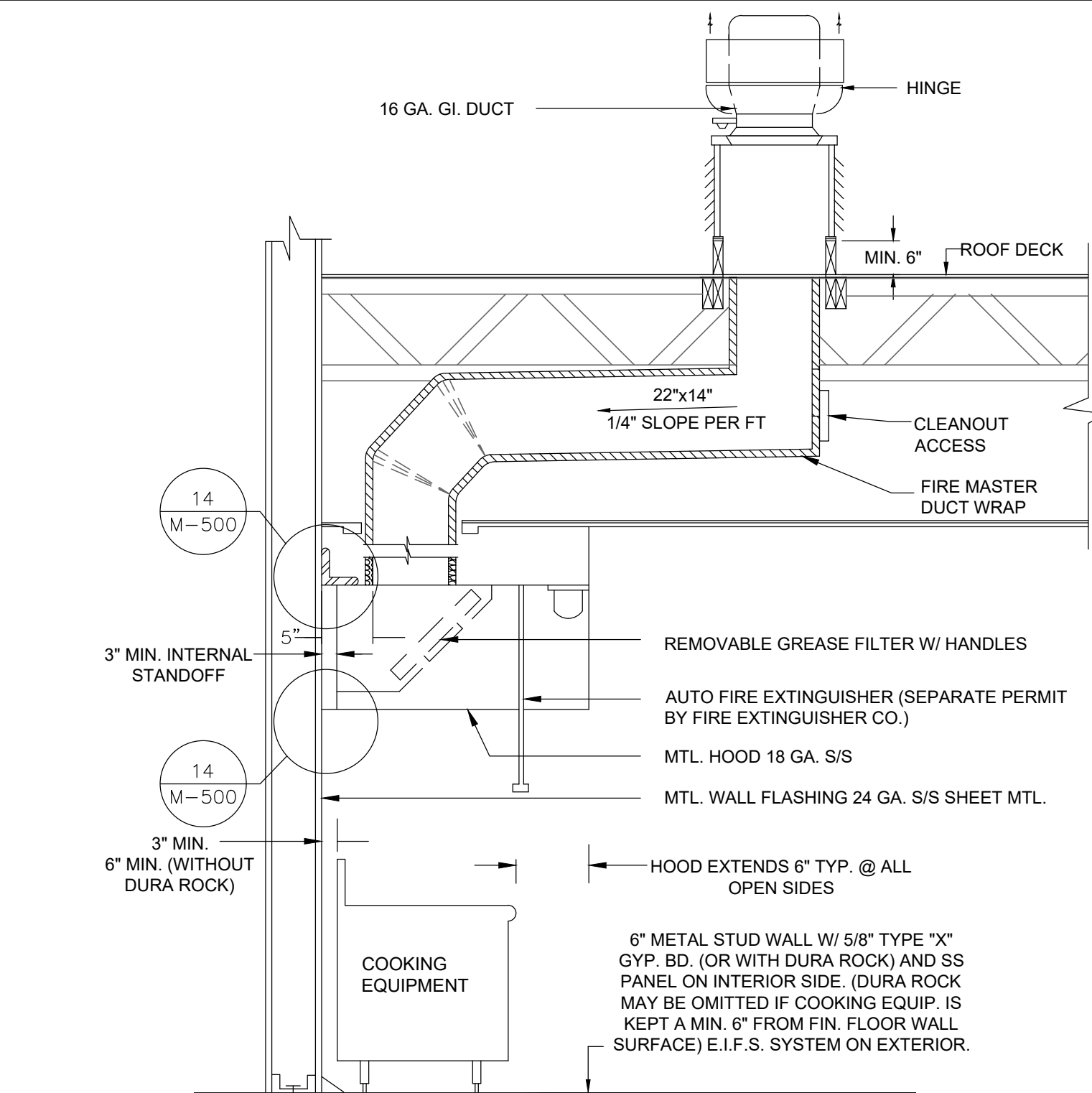
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M-403

HOOD DETAIL PLAN

JOB NO 4127861	MODEL NUMBER SC-321110FP-SEP	DRAWN BY	SCHEMATIC TYPE INSTALL	DESCRIPTION OF OPERATION: 3 Phase w/ control for 2 Exhaust Fans, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fan(s) On/Off Thermostatically Controlled. Separate Breaker Input for each Fan. Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.
	JOB NAME Panda Express - Fairfax VA (D...	DATE 12/18/2019	DWG NO ECP #1-1	



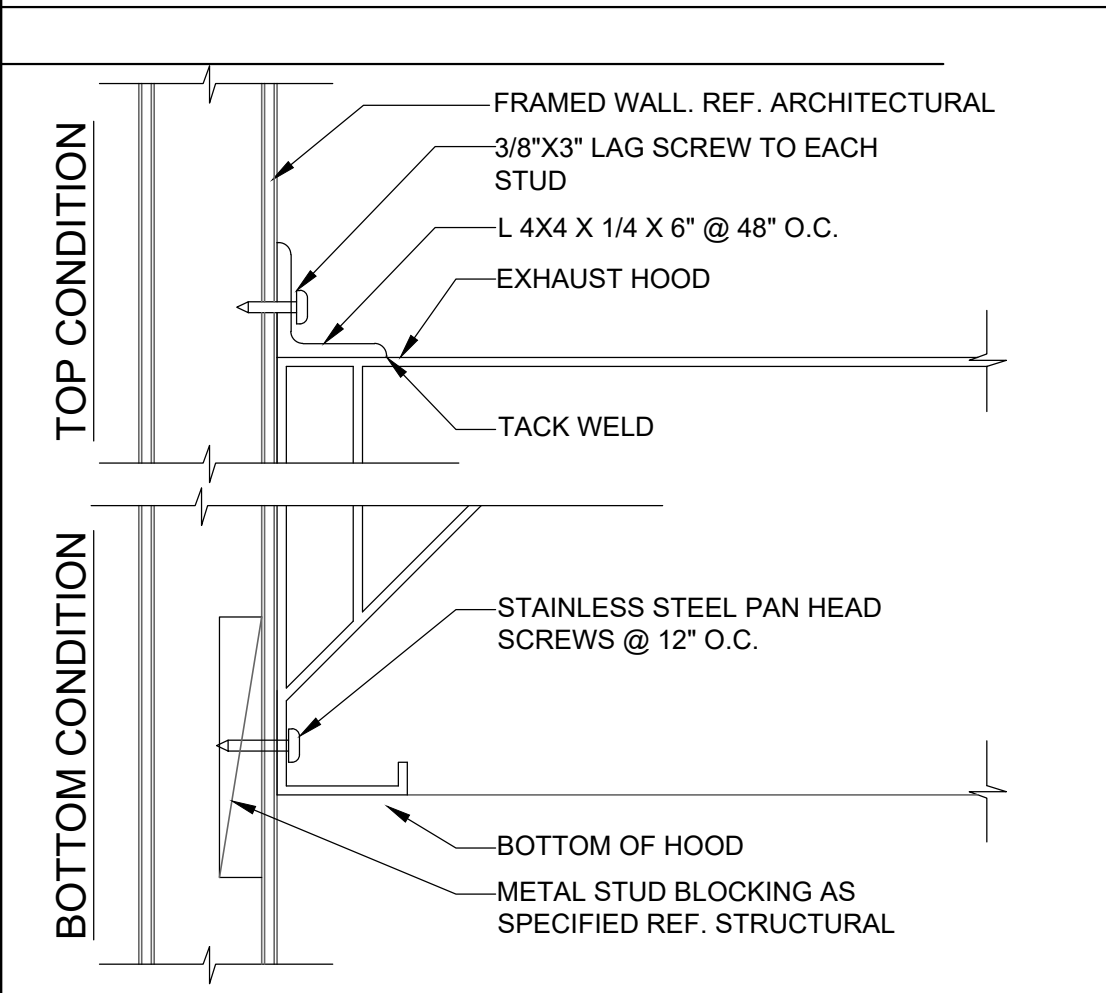


HOOD SECTIONS

18

Scale: NO SCALE

M-500

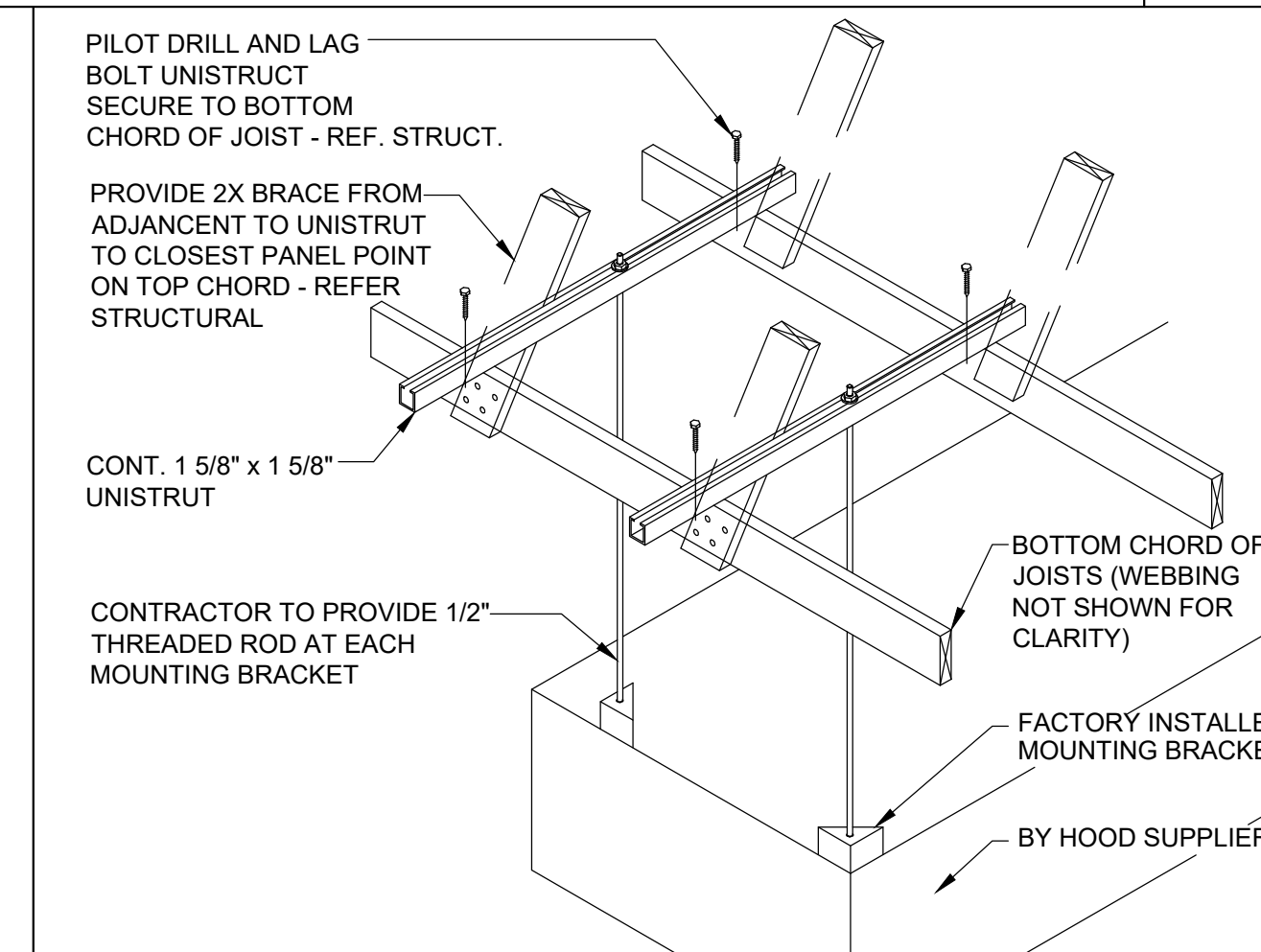


HOOD CLIP AT WALL

14

Scale: NO SCALE

M-500



HOOD SUPPORT AT TRUSS

13

Scale: NO SCALE

M-500

SYSTEM SHALL BE INSTALLED, PERFORMANCE TESTED, LISTED FOR MECHANICAL HOOD AND LABELED PER REQUIREMENTS FOR NFPA AND MANUFACTURER'S INSTRUCTION PER IFC 904.12.

GREASE HOOD SYSTEM CALCULATION

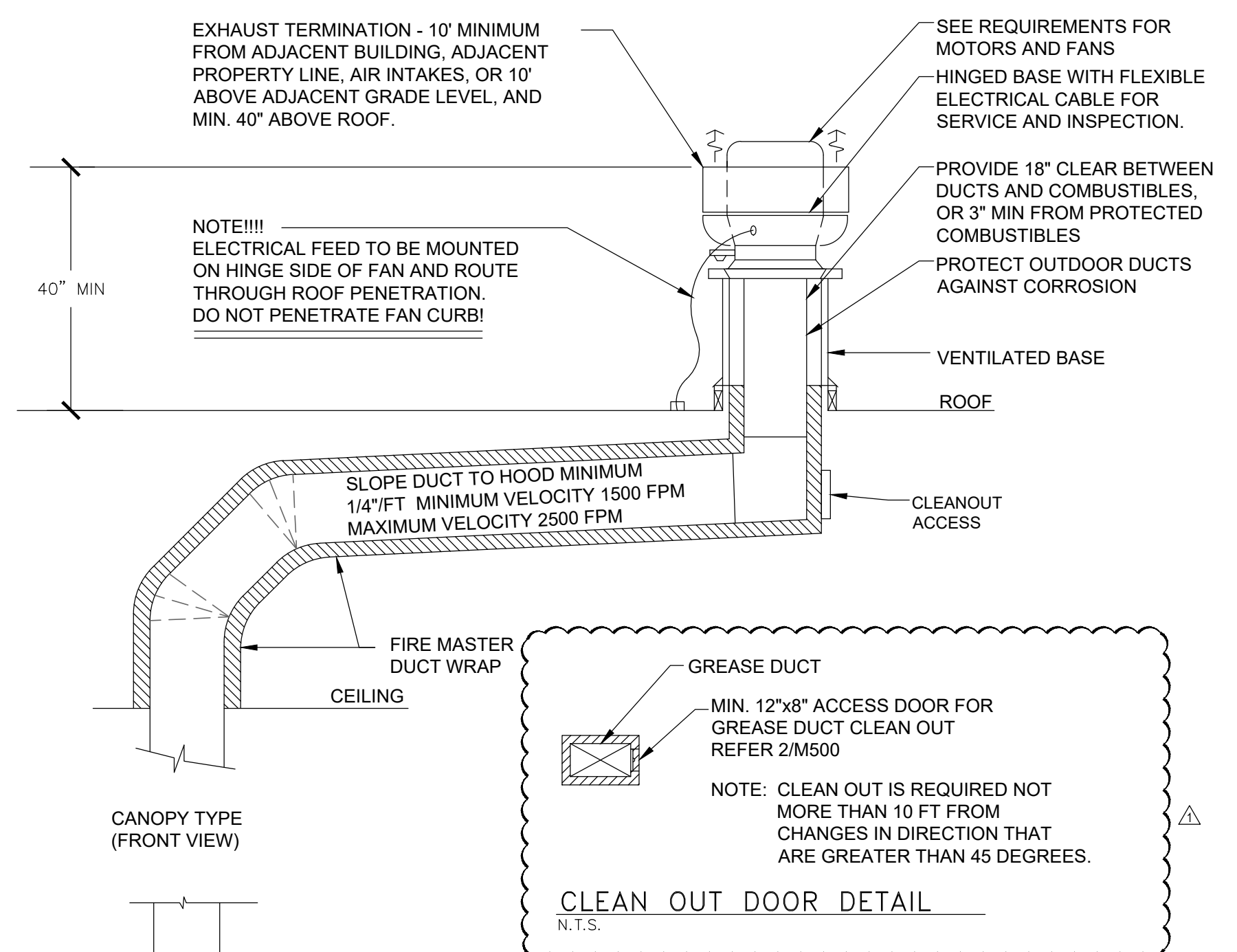
1. TYPE : CANOPY TYPE I, STAINLESS STEEL 18 GAUGE.
2. COOKING EQUIPMENT: (2) CHINESE RANGE, (2) DEEP FRYER, RICE COOKER
3. SIZE: 23'-6" x 4'-0" + 2'-0" MAKEUP AIR PLENUM
4. MIN. REQ'D CAPACITY CFM: (2) U.L. LISTED HOOD @ 3,450 CFM EACH
5. PROPOSED (2) EXHAUST FAN & (1) MAKE-UP AIR UNIT. EF1 & EF2 (3,450 CFM EACH); MAU1 (5,520 CFM, 80% OF EXHAUST)
6. EXHAUST DUCT SIZE: 22"x14"
7. EXHAUST VELOCITY @ EXHAUST DUCT 3450/(22"x14"/144)= 1612 FPM 1500FPM < 1612 FPM < 2500FPM
8. EXHAUST FAN (EF1 & EF2) AND MAKE-UP AIR UNIT (MAU1) SHALL BE ELECTRICALLY INTERLOCKED
9. FOR CODE COMPLIANCE SEE DETAIL
10. FOR FILTER INFORMATION SEE CAPTIVEAIRE DWG #M-400.
11. INTERLOCK RTU FANS TO OPERATE WITH KEF'S FOR MAKEUP AIR.

INFORMATIONAL GUIDE FOR COMMERCIAL COOKING HOODS

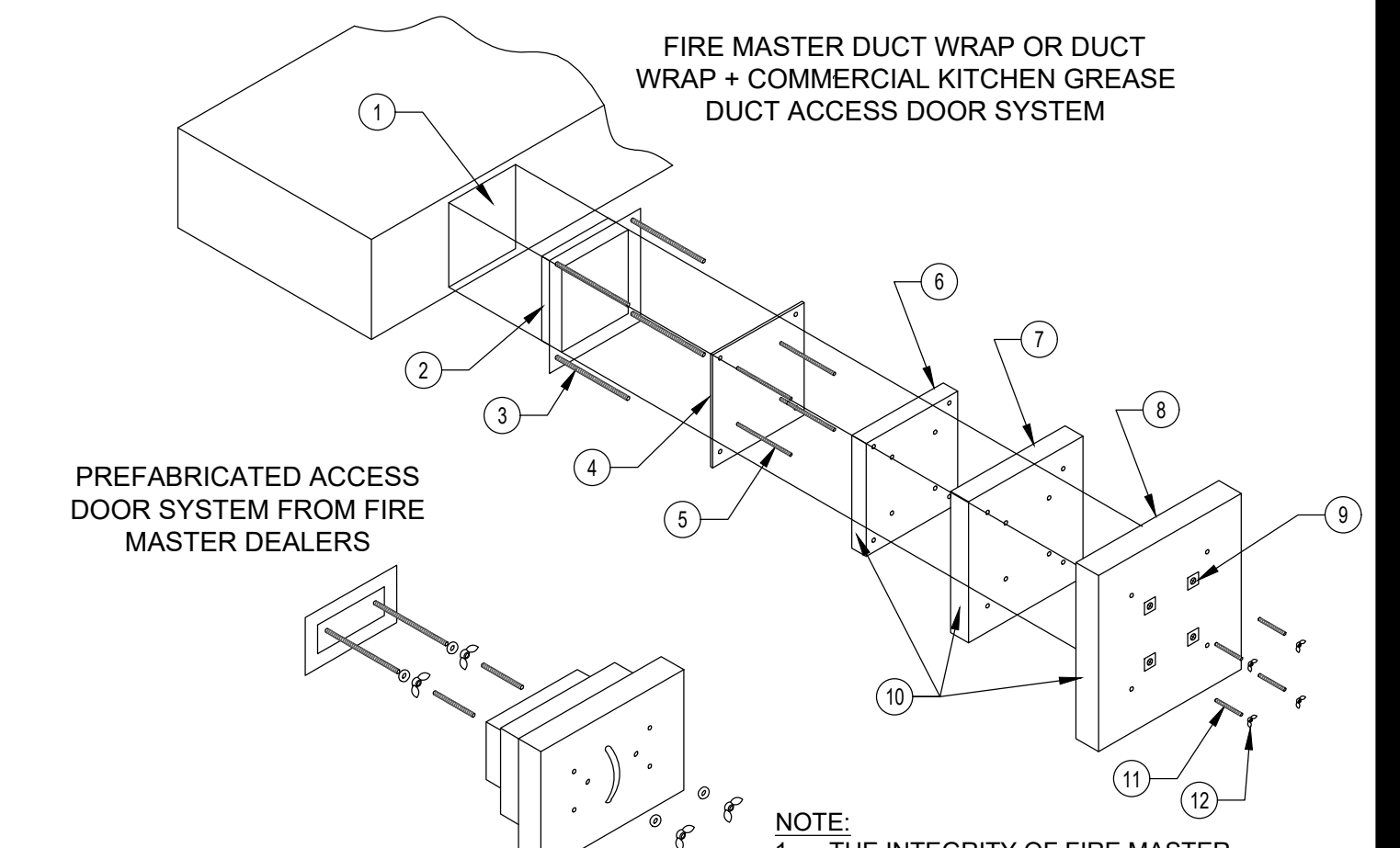
1. STAINLESS STEEL TO BE NO. 18 U.S. GAGE
2. WHEN GUTTERS ARE PROVIDED THEY SHALL DRAIN TO A COLLECTING PAN WHICH IS READILY ACCESSIBLE FOR CLEANING
3. SEE TABLE 507.11 FOR MINIMUM DISTANCE BETWEEN LOWER EDGE OF GREASE FILTER AND THE COOKING OR HEATING SURFACE.
4. GREASE FILTERS SHALL BE OF STEEL CONSTRUCTION AND READILY ACCESSIBLE FOR CLEANING.
5. ALL JOINTS AND SEAMS SHALL BE GREASE TIGHT.
6. HOODS SHALL BE SECURELY FASTENED IN PLACE BY INCOMBUSTIBLE SUPPORTS.

NOTES

1. PROVIDE ADEQUATE CLEANOUT OPENINGS FOR THOROUGH CLEANING OF DUCT SYSTEM.
2. PROVIDE ADEQUATE MAKE-UP AIR FOR PROPER OPERATION.
3. PROVIDE A SEPARATE DUCT SYSTEM FOR EACH HOOD.
4. THICKNESS OF DUCTS SHALL BE:
DUCT AREA U.S. GAGE STEEL
UP TO 4 SQ. FT. 16 GA
OVER 4 SQ. FT. 14 GA
5. WELD OR BRAZE ALL DUCT JOINTS AND SEAMS ON THE EXTERNAL SURFACE.
6. SUPPORT THE DUCTS AS REQUIRED. DO NOT PENETRATE DUCT WALLS WITH SCREWS, NAILS, ETC.
7. SECTIONS OF DUCT SHALL NOT CONTAIN GREASE POCKETS.



(FOR REFERENCE ONLY)



FIRE MASTER DUCT WRAP or DUCT WRAP+	
1	DOOR HOLE
2	ACCESS FRAME WELDED TO DUCT
3	1/4" DIA. ALL THREAD RODS
4	ACCESS COVER - 16 GAUGE
5	INSULATION PINS - WELDED
6	ONE LAYER FIRE MASTER DUCT WRAP or DUCT WRAP +
7	ONE LAYER FIRE MASTER DUCT WRAP or DUCTWRAP + 1" OVERLAP
8	ONE LAYER FIRE MASTER DUCT WRAP or DUCTWRAP + 1" OVERLAP
9	SPEED CLIPS
10	ALUMINUM TAPE AT EDGES
11	SPOOL PIECES FOR THREADED RODS
12	1/4" DIA. WING NUTS

GREASE DUCT ACCESS DOOR

2

M-500

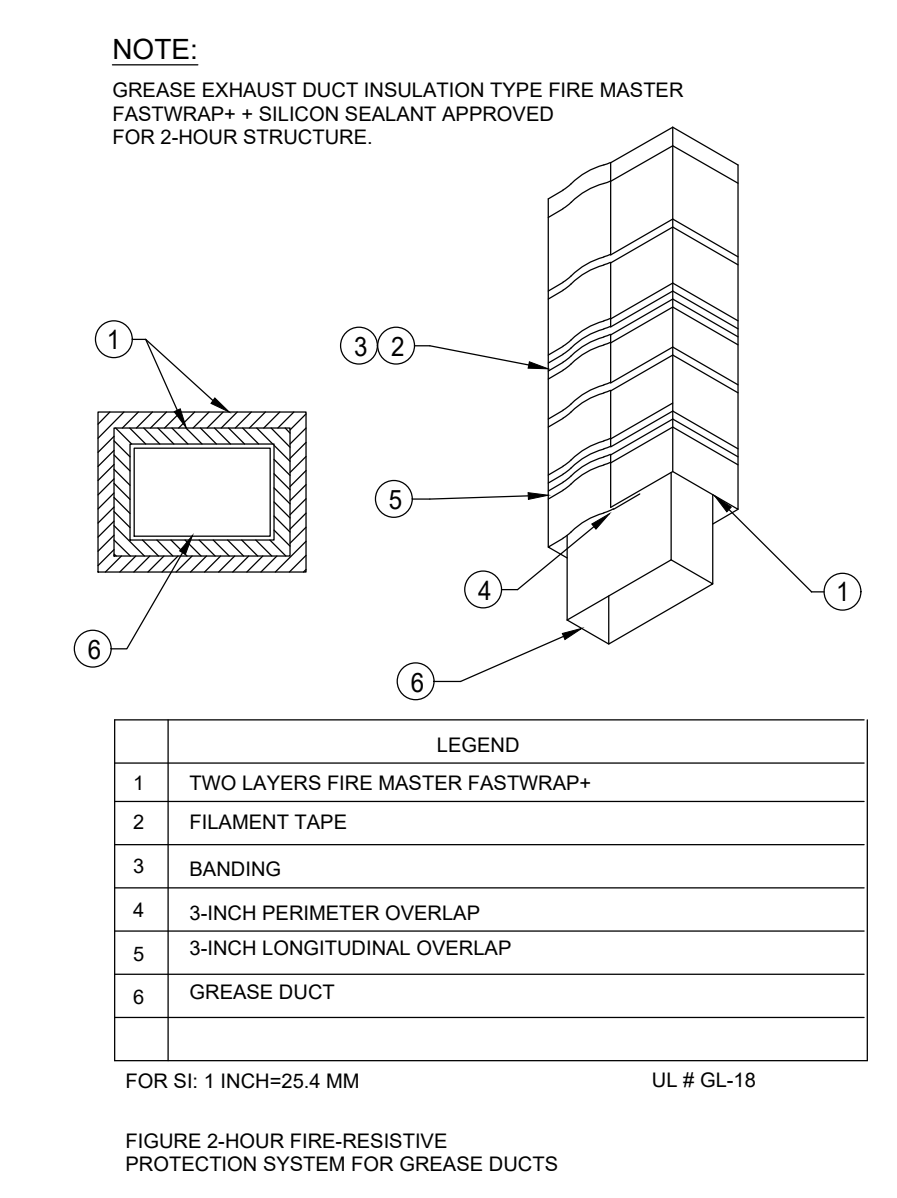


FIGURE 2-HOUR FIRE-RESISTIVE PROTECTION SYSTEM FOR GREASE DUCTS

2 HOUR GREASE DUCT WRAP

1

Scale: NO SCALE

M-500



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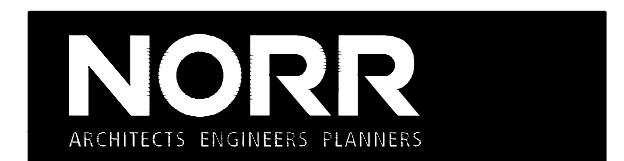
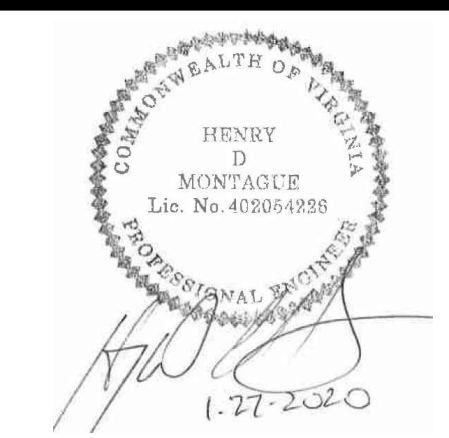
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PANDA PROJECT #: D7446

ARCH PROJECT #: JCDT19-0314



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KITCHEN HOOD DETAILS



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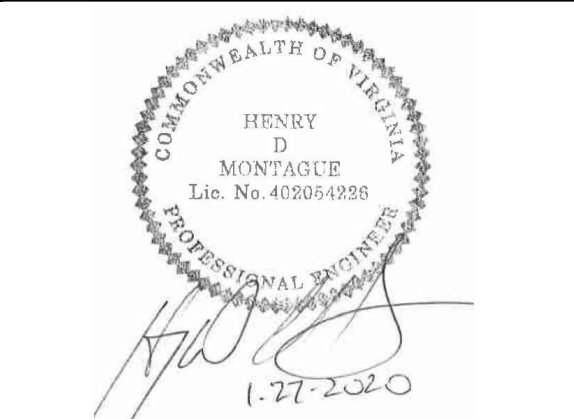
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PANDA PROJECT #: D7446

ARCH PROJECT #: JCDT19-0314

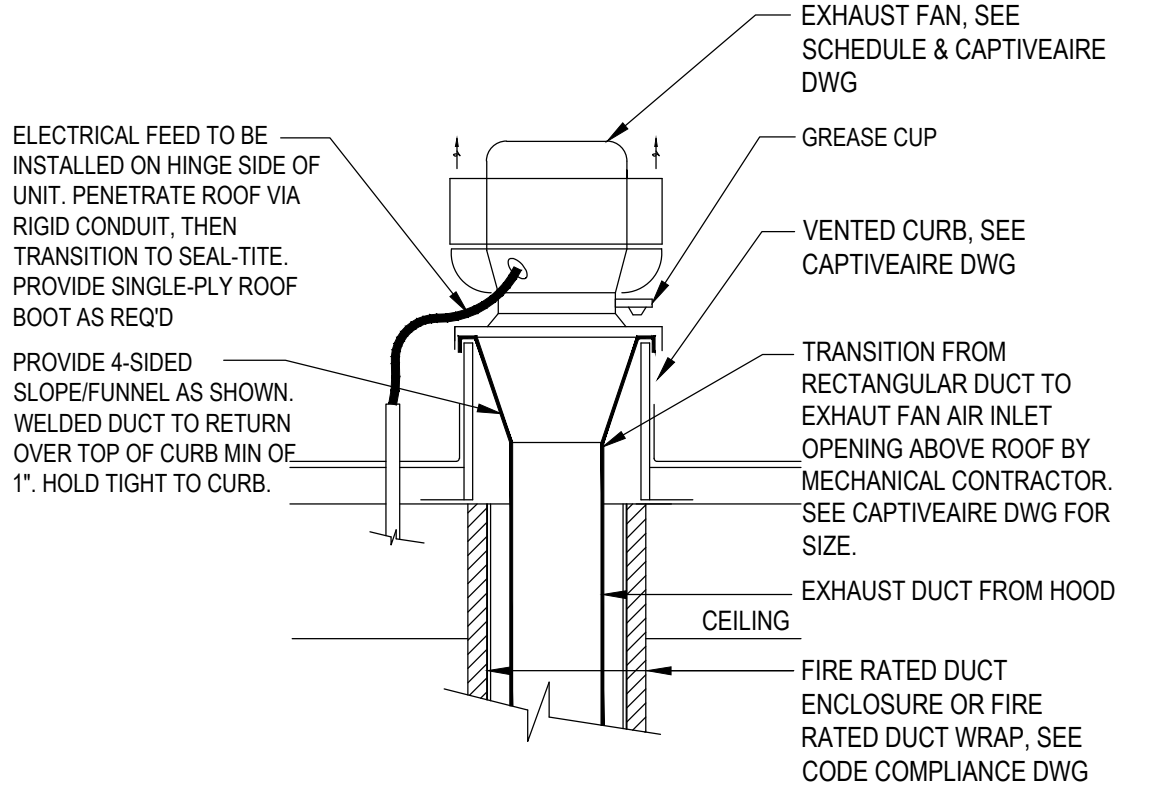


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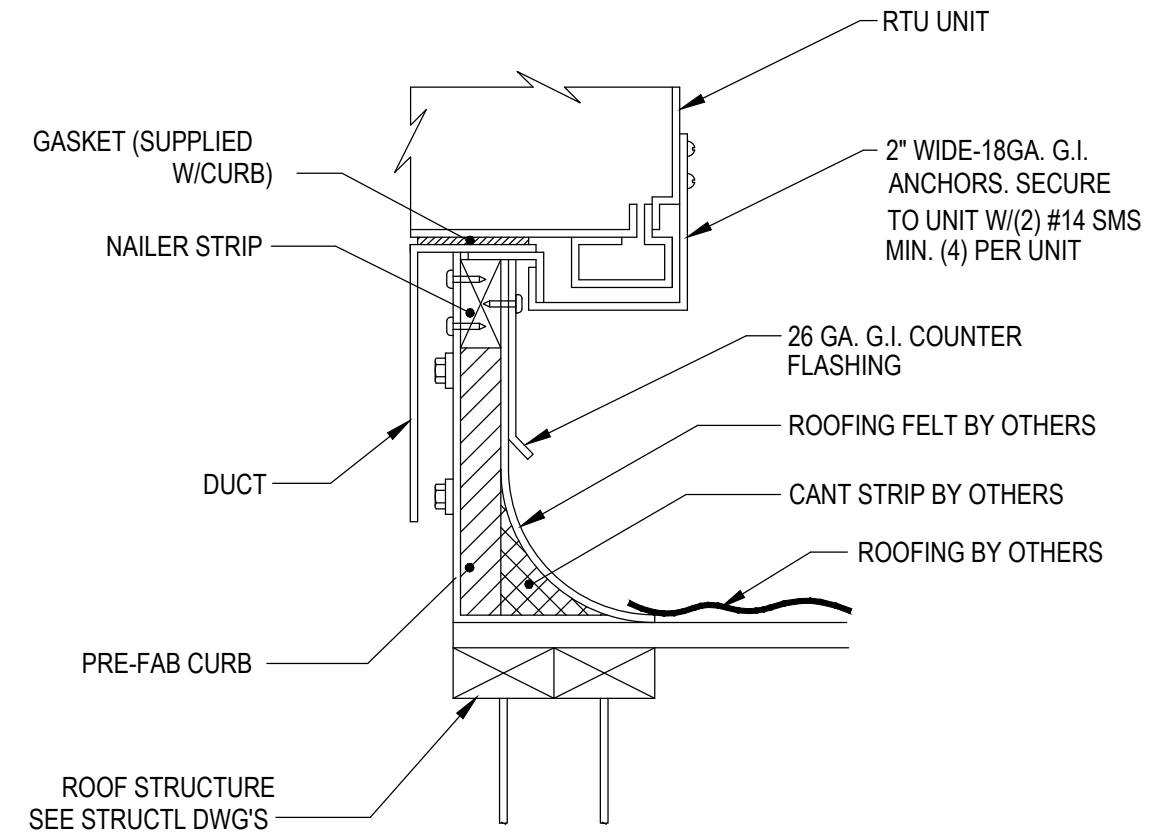
M-501

MECHANICAL DETAILS



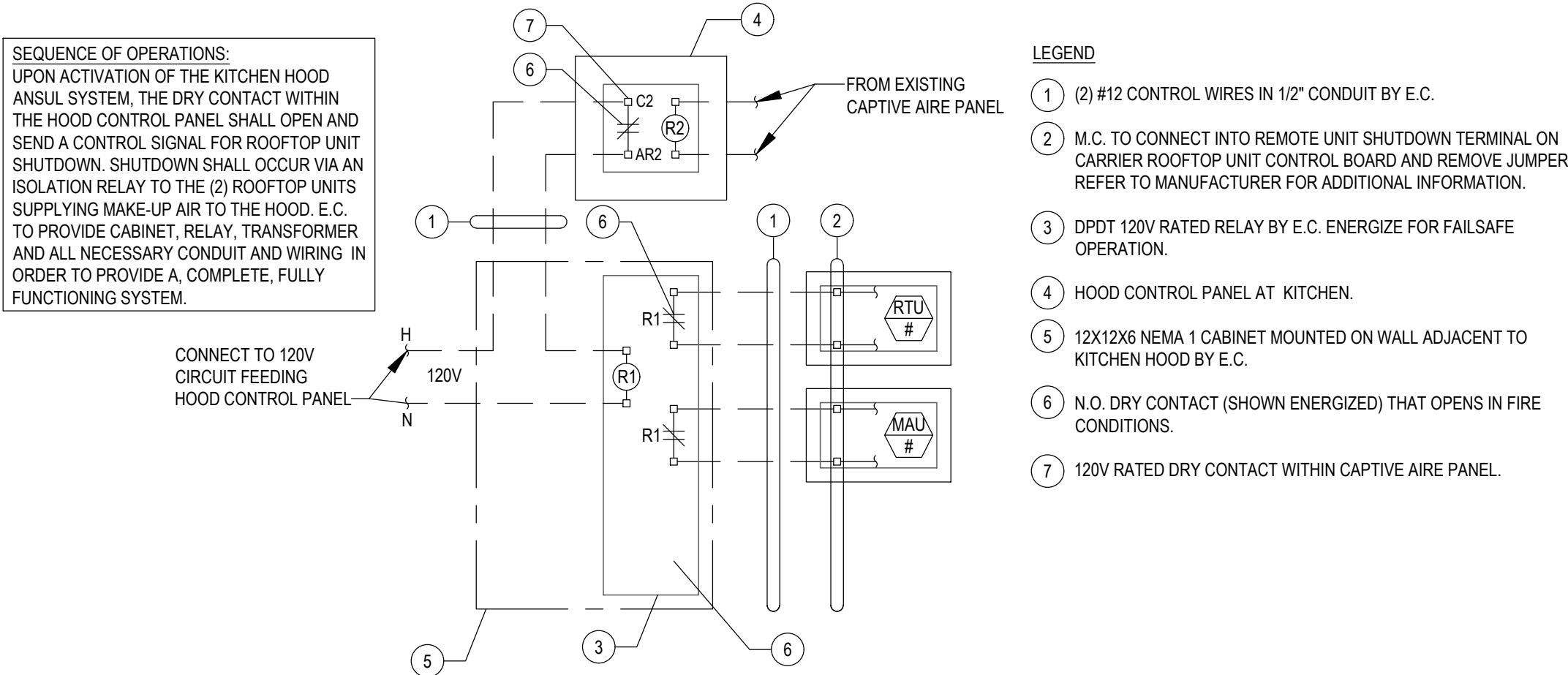
GREASE EXHAUST FAN DETAIL

3



RTU UNIT CURB DETAIL

2



RTU CONTROL WIRING DIAGRAM

5