Reviewed for Code Compliance
Inspectional Services
Department - Fire Prevention
Date: 07/20/17

HOOD INFORMATION – Job#2890376

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S) WIDTH	LENG.	HEIGHT	DIA.	CFM	S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	ROW
1		5424 ND-2-PSP-F	15' 0.00"	650 Deg.	4125	1092	3.000	2.2980	4"	14"	2062	-1.016"	3300	430 SS Where Exposed	ALONE ALONE
									4"	14"	2062	-1.016"			

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S) TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	LIGHT(S) QTY.	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1		Captivate Solo Filter	11	20"	16"	93% See Filter Spec.	5	Screw in Compact	NO							NO	806 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 18.00" High Front
		BACKSPLASH 80.00" High X 182.00" Long 430 SS Vertical
		LEFT SIDESPLASH 80.00" High X 54.00" Long 430 SS Vertical
		RIGHT SIDESPLASH 80.00" High X 54.00" Long 430 SS Vertical
		RIGHT END STANDOFF (FINISHED) 1" Wide 54" Long Insulated
		LEFT END STANDOFF (FINISHED) 1" Wide 54" Long Insulated
		BACKSPLASH – INSIDE CORNER 80.00" High X 2.00" Leg Length 430 SS Vertical
		BACKSPLASH – INSIDE CORNER 80.00" High X 2.00" Leg Length 430 SS Vertical
		INSULATION FOR BACK OF HOOD
		RIGHT WALL AS END PANEL
		LEFT WALL AS END PANEL

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S) WIDTH	LENG.	DIA.	CFM	S.P.
1		Front	182"	20"	6"	MUA	12"	28"		823	0.251"
						MUA	12"	28"		823	0.251"
						MUA	12"	28"		823	0.251"
						MUA	12"	28"		823	0.251"

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-SHAPED DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 12-INCH DEEP HOOD CHANNEL(S).

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

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 90% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

FILTER COLLECTION EFFICIENCY F (Captrate Grease Stop Solo Filter

RESISTANCE VS. AIRFLOW (Captrate Grease Stop Solo Filter

CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:.
NFPA #96
UL STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)
ULC-S649

CAPTIVEAIRE

JOB Benkay	
LOCATION Lewiston, ME,	
DATE 1/17/2017	JOB # 2890376
DWG # 1	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

GREASE DUCT 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 MANUFACTURES INSTALLATION GUIDE.
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES 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 IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 LISTED DOUBLE WALL GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

PATENT NUMBERS
AC-PSP (United States) – US Patent 7963830 B2
AC-PSP Wall (Canada) – CA Patent 2820508
AC-PSP Island (Canada) – CA Patent 2520330

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

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.

VERIFY CEILING HEIGHT

___' - ___"

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

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted ☐
Approved with NO Exception Taken ☐
Revise and Resubmit ☐
SIGNATURE: _____
Your Title _____ Date _____

CAPTIVEAIRE

JOB Benkay	
LOCATION Lewiston, ME,	
DATE 1/17/2017	JOB # 2890376
DWG # 2	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

PLAN VIEW – Hood #1
15' 0.00" LONG 5424ND-2-PSP-F
NOTE: Additional hanging angles provided for Hoods 12' and longer.

SECTION VIEW – MODEL 5424ND-2-PSP-F
HOOD – #1

CAPTIVEAIRE

JOB Benkay	
LOCATION Lewiston, ME,	
DATE 1/17/2017	JOB # 2890376
DWG # 3	DRAWN BY BFC-21
REV.	SCALE 1/4" = 1'-0"

EXHAUST FAN INFORMATION – Job#2890376

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	WEIGHT (LBS.)	SONES
1		NCA24HPFA	4125	2.000	1092	3.000	2.2980	1	230	17.0	299	21

MUA FAN INFORMATION – Job#2890376

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	WEIGHT (LBS.)	SONES
2		A2-G15	G15-PB	A2	3300	0.750	651	2.000	0.9340	1	230	9.3	420	11.4

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. – Descr.)
1		1 – Grease Box
		1 – 3 Year Extended Motor Warranty
		1 – Extra Set of Belts
		1 – Fan Base Ceramic Seal – For Grease Ducts
2		1 – Full Crating For Untempered Fans
		1 – 3 Year Extended Motor Warranty
		1 – Extra Set of Belts
		1 – Gravity Backdraft Damper for Size 2 Housing

FAN ACCESSORIES

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

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	48 LBS	Curb	31.500"W x 31.500"L x 24.000"H 3.000:12.000 Pitch Vented Hinged
2	# 2	42 LBS	Curb	31.000"W x 37.000"L x 20.000"H 3.000:12.000 Pitch Along Width, Right Insulated

FAN SOUND INFORMATION

FAN UNIT NO.	MOTOR	RPM	LWA	SONES	DBA	DISTANCE FT	OCTAVE 1	OCTAVE 2	OCTAVE 3	OCTAVE 4	OCTAVE 5	OCTAVE 6	OCTAVE 7	OCTAVE 8
1	Exhaust	1092	83.5	21	72	5	76.2	85.8	88.9	79	73.8	70.9	66.6	62.8
2	Supply	651	73.9	11.4	62.4	5	79.1	77.5	74.3	71.2	68.7	64	59.2	53.4

CAPTIVEAIRE

JOB Benkay	
LOCATION Lewiston, ME,	
DATE 1/17/2017	JOB # 2890376
DWG # 4	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

FAN #1 NCA24HPFA – EXHAUST FAN

FEATURES:
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762
- AMCA SOUND AND AIR CERTIFIED
- WEATHERPROOF 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 STEADY STATE TEMPERATURES WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLAME-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 400°F (204°C) FOR A PERIOD OF 15 MINUTES WITHOUT ANY PART BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

GREASE BOX
3 YEAR EXTENDED MOTOR WARRANTY
EXTRA SET OF BELTS
FAN BASE CERAMIC SEAL – FOR GREASE DUCTS

PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

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

CAPTIVEAIRE

JOB Benkay	
LOCATION Lewiston, ME,	
DATE 1/17/2017	JOB # 2890376
DWG # 5	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

ATM
A. T. MCDONALD & ASSOCIATES
FOOD FACILITIES CONSULTANT - DESIGNER
735 Main Street Shrewsbury, MA 01545
Tel: 508.845.9891 Cell: 508.479.3511

SCALE: AS NOTED | DATE: 02/02/17

PROJECT: BENKAY REST
16 MIDDLE STREET
PORTLAND, ME

CLIENT: -

JOB#: | SHEET#: K-3

DRAWING: EXHAUST HOOD DETAIL