

**HOOD INFORMATION - Job#2890376**

HOOD NO.	TAG	MODEL	LENGTH	WALKWAY TEMP.	DOOR	WTH	HEIGHT	DIAM.	S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD SIZES
1		5424	15' 0.00"	500	4125	4"	14"	2002	1-016"	3300	430 SS	ALONE

**HOOD INFORMATION**

HOOD NO.	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ P MICRONS	QTY	WIRE GAUGE	LOCATION	SIZE	TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE STOPPING	HOOD MOUNT
1		Captrate Solo Filter	1	20"	18"	93% See Filter Specs	5	Screw In Compact	NO						NO	NO

**HOOD OPTIONS**

NO.	TAG	DESCRIPTION
1		FIELD WRAPPER 18.00" High Front
		BACKSLASH 80.00" High X 182.00" Long 430 SS Vertical
		LEFT END STANDOFF (FINISHED) 1" WIDE 54" Long Insulated
		RIGHT END STANDOFF (FINISHED) 1" WIDE 54" Long Insulated
		LEFT END STANDOFF (FINISHED) 1" WIDE 54" Long Insulated
		BACKSLASH - INSIDE CORNER 80.00" High X 2.00" Long Length 430 SS Vertical
		BACKSLASH - INSIDE CORNER 80.00" High X 2.00" Long 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	WIDTH	LENGTH	DIAM.	CFM	S.P.
1		Front	182"	20"	6"	MUA	12"	28"	833	0.251"	
						MUA	12"	28"	833	0.251"	

**SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER**

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A 5-MEDIA 5-MEDIA SYSTEM IN COMBINATION WITH A SLOTTED PLAIN MESH DESIGN TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNELS.

UNIT'S SMALL INCLUDES STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL BE AT LEAST THAT OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND SOOT GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 0.75 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2219-02.

FILTER COLLECTION EFFICIENCY (%)

RESISTANCE VS. AIRFLOW

CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:

- NSF
- UL
- UL STANDARD #604
- UL LISTED CODE (NLS)
- ULC-5648

**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 MANUFACTURER'S INSTALLATION GUIDE.

PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURER'S LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12". HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT 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 7963530 B2  
AC-PSP (United States) - CA Patent 2820228  
AC-PSP (United States) - CA Patent 2533335

**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 in kind   
Approved with NO Exception Taken   
Revise and Resubmit   
SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Your Title: \_\_\_\_\_

**CAPTIVEAIRE**

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

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

**ASSEMBLY INSTRUCTIONS**

INSULATOR MUST CONFIRM HOOD IS INSTALLED SUCH THAT THE GREASE DUCT ACTS AS AN END PANEL. IT IS CRITICAL THAT THE CORRECT END OF HOOD TO FABRICATE A SLOPED INNER DUCT ON THE LISTED MANUFACTURER'S INSTALLATION GUIDE.

VOID THE MANUFACTURER'S WARRANTY, AND HOLD THE INSTALLER LIABLE FOR ANY AND ALL DAMAGES, COSTS AND EXPENSES RELATED TO THE NON-COMPLIANCE OF THE MANUFACTURER'S SPECIFIED INSTRUCTIONS. THE HOOD SHALL BE INSTALLED WITHIN THE MANUFACTURER'S SPECIFIED CLEARANCE TO COMBUSTIBLE SURFACES.

INSULATOR MUST CONFIRM HOOD IS INSTALLED SUCH THAT THE GREASE DUCT ACTS AS AN END PANEL. IT IS CRITICAL THAT THE CORRECT END OF HOOD TO FABRICATE A SLOPED INNER DUCT ON THE LISTED MANUFACTURER'S INSTALLATION GUIDE.

VOID THE MANUFACTURER'S WARRANTY, AND HOLD THE INSTALLER LIABLE FOR ANY AND ALL DAMAGES, COSTS AND EXPENSES RELATED TO THE NON-COMPLIANCE OF THE MANUFACTURER'S SPECIFIED INSTRUCTIONS. THE HOOD SHALL BE INSTALLED WITHIN THE MANUFACTURER'S SPECIFIED CLEARANCE TO COMBUSTIBLE SURFACES.

**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.	HP	S.H.P.	#	VOLT	FLA	WEIGHT (LBS.)	SONES	
1		NC424RFA	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.	HP	S.H.P.	#	VOLT	FLA	WEIGHT (LBS.)	SONES	
2		A2-015	015-FB	A2	3300	0.750	651	2.000	0.8340	1	230	8.3	420	11.4

**FAN OPTIONS**

FAN UNIT NO.	TAG	OPTION (Qty = Default)
1		Grease Box
		3 Year Extended Motor Warranty
		Extra Set of Belts
		Fan Base Ceramic Seal - Fan Grease Ducts
		Full Coating for Untempered Fans
		3 Year Extended Motor Warranty
		Extra Set of Belts
		Gravity Block-off Damper for Size 2 Housing

**FAN ACCESSORIES**

FAN UNIT NO.	TAG	EXHAUST	SUPPLY
1		GREASE CLIP DAMPER MOUNT	GRAVITY DAMPER MOUNT
2		YES	YES

**CURB ASSEMBLIES**

NO. ON FAN	WEIGHT	ITEM	SIZE
1	48 LBS	Curb	31.500" W x 31.500" H x 24.000" D 3,000 12,000 Pitch Vented Hinged
2	42 LBS	Curb	31.500" W x 31.500" H x 20.000" D 3,000 12,000 Pitch Jersey Wall, Right Insulated

**FAN SOUND INFORMATION**

FAN UNIT NO.	MOTOR	RPM	LWA	SONES	DBA	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	68.6	62.6
2	Supply	651	73.9	11.4	62.4	5	79.1	77.5	74.5	71.2	68.7	64	59.2	55.4

**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 NC424RFA - EXHAUST FAN**

**FEATURES:**

- ROOF MOUNTED FANS
- RESTAURANT MODEL
- 3 YEAR EXTENDED MOTOR WARRANTY
- GRAVITY DAMPER MOUNT
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- WARRANTYPROOF DISCONNECT
- HIGH HEAT OPERATION ROOF (HAPS)
- GREASE COLLECTION SYSTEM

**NORMAL TEMPERATURE TEST**

EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING HEAT AT HOOD TEMPS UNTIL ALL FAN PARTS HAVE REACHED NORMAL OPERATING TEMPS. REPORT ANY EXCESSIVE HEAT TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL PLUME-UP TEST**

EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING HEAT AT HOOD TEMPS AT HOOD TEMPS FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN 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

**FITTED 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. F. 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