

**HOOD INFORMATION - Job#2633849**

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)							HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	S.P.		END TO END	ROW
1		3650 BD-2	6' 0.00"	450 Deg.	1200	10'	12'	4'		1200	-0.724'	430 SS Where Exposed	ALONE	ALONE

**HOOD INFORMATION**

HOOD NO.	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGT				
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM				ELECTRICAL	SWITCHES		
1		Captrate Solo Filter	4	16'	16'	93% See Filter Spec.	2	Screw In Compact	NO	Right	12"x36"x24"	Ansul R102	3.0					YES	326 LBS

**HOOD OPTIONS**

HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 18.00' High Front, Left, Right
		BACKSPLASH 61.00' High X 84.00' Long 430 SS Vertical
		RIGHT QUARTER END PANEL 26' Top Width, 0' Bottom Width, 26' High 430 SS
		LEFT QUARTER END PANEL 26' Top Width, 0' Bottom Width, 26' High 430 SS
		INSULATION FOR BACK OF HOOD

**SPECIFICATION: CAPRATE® GREASE-STOP® SOLO FILTER**

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

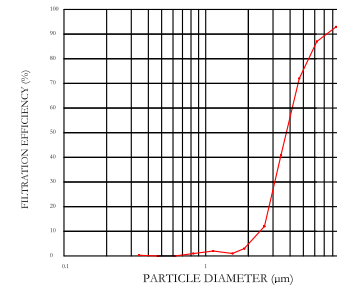
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

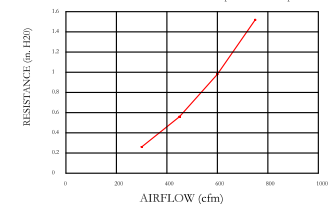
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 90% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

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

FILTER COLLECTION EFFICIENCY 2" Caprate Grease-Stop Solo Filter



RESISTANCE VS. AIRFLOW - 2" Caprate Grease-Stop Solo Filter

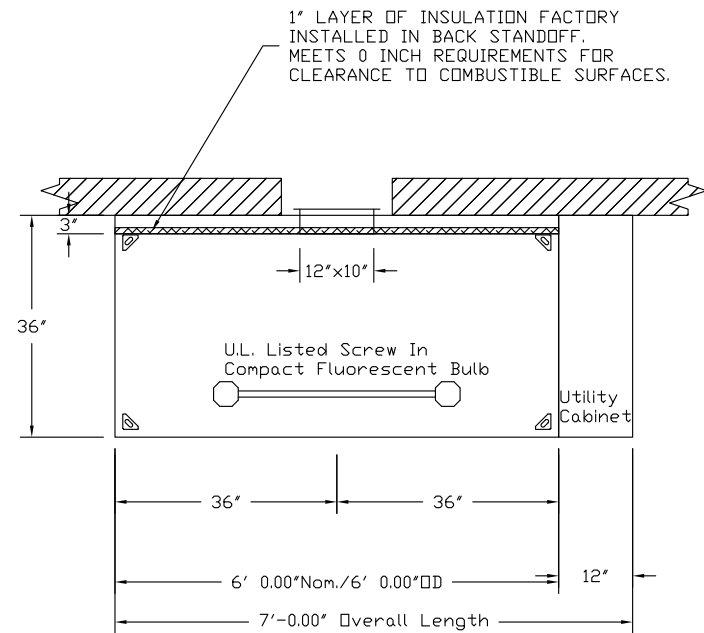
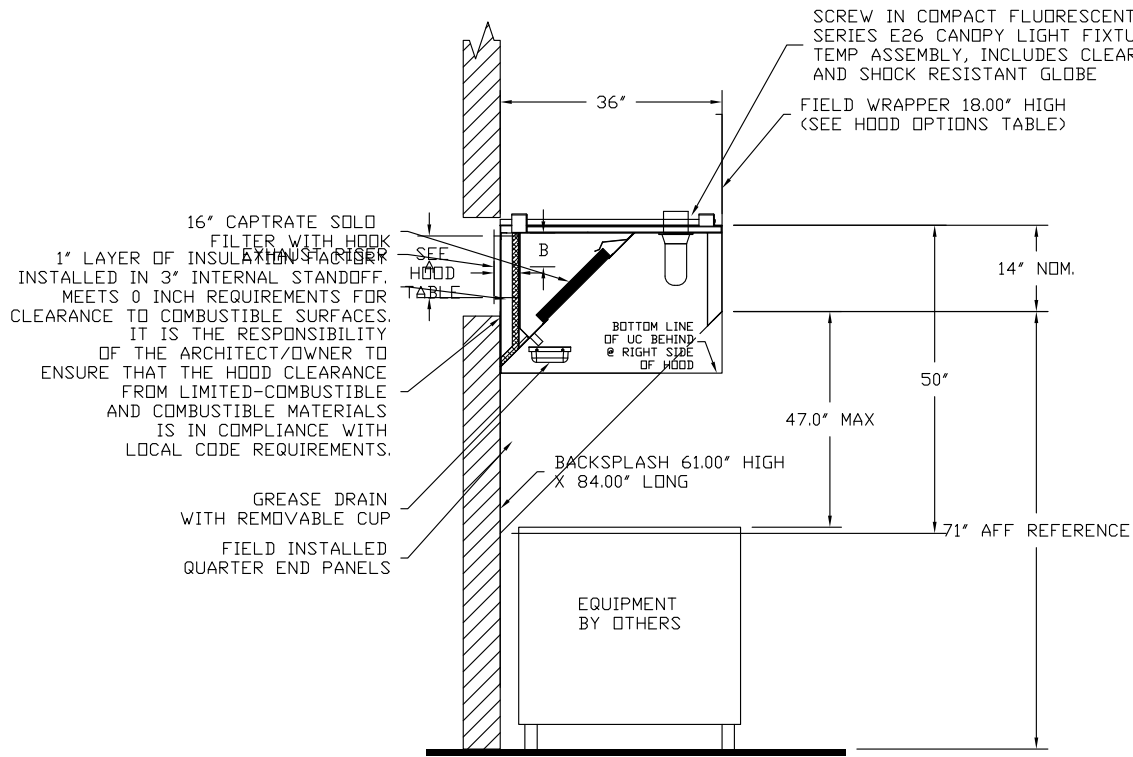


CAPRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
 NFPA #96  
 NSF STANDARD #2  
 UL STANDARD #1046  
 INT. MECH. CODE (IMC)



**CAPTIVEAIRE**

JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 1	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



SECTION VIEW - MODEL 3650BD-2  
HOOD - #1 - 1 Rear Riser(s)

Riser	A (Height/Diameter)	B (Vertical Dimension)
1	10	5.500

PLAN VIEW - Hood #1  
6' 0.00" LONG 3650BD-2



**CAPTIVEAIRE**

JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 2	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

**Fire System Information - Job#2633849**

FIRE SYSTEM NO.	Tag	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		Ansul R102	3.0	10	Fire Cabinet Right	Right

**Fire System Parts List Key**

FIRE SYSTEM NO.	TAG	KEY NUMBER - PART DESCRIPTION	QTY. BY FACTORY	QTY. BY DIST.
		0 - 0 - METALCAP-CB BLOWOFF CAP - Metal	6	0
		1 - 1 - AT - 3.0 TANK(#1B) - 3.0 Gallon SS Tank (For use with Automan Release, Actuator, or SS Enclosure (UL/ULC))	1	0
		3 - 3 - ANS-DEM REGULATED RELEASE - Ansul Regulated Mechanical Release/Bracket Assembly (79493), DEM, R-102, Cartridge Detection Included	1	0
		5 - 5 - LIQ-3.0 AGENT - Ansulox Low PH Wet Chemical Agent, 3 Gallon (UL) 79372	0	1
		7 - 7 - 101-20 CARTRIDGE - Carbon Dioxide 101-20, 3 Gallon Cartridge (R-102)	0	1
		10 - 10 - TLINK LINK - Test Link (1 test link)	0	1
		11 - 11 - MICRO-SDA MICROSWITCH KIT- Includes 2 switches and Mounting Hardware. Single Dual Electric Switch, One Standard Switch, One Alarm Duty Switch 437155	1	0
		14 - 14 - 419336 NOZZLE - 1W Nozzle, Duct/Appliance (Replaces ANSUL Part# 419347, CAS Part# 419336) A0001266	1	0
		16 - 16 - 419335 NOZZLE - 1N Nozzle, Plenum/Appliance (Replaces ANSUL Part# 419346, CAS Part# 419335) A0001265	1	0
		20 - 20 - 419340 NOZZLE - 245 Nozzle, Appliance (Replaces ANSUL Part# 419351, Part# 419340) A0001270	4	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL)	6	0
		27 - 27 - QPSA-1/2 PULLEY SEAL - 1/2" Hood Seal (UL)	1	0
		28 - 28 - S-DET DETECTOR - Series (Scissor Linkage) NEW#435547/435548 (OLD#417369/434480)	1	0
		29 - 29 - ANS-360FL FUSIBLE LINK - 360deg F, R-102 and PIRANHA	1	0
		34 - 34 - RPS-A REMOTE PULL STATION - Red composite (without wire rope) 434618 (Old Macola #06-4835)	1	0
		35 - 35 - PE-LT PULLEY ELBOW - Low Temp. Pulley Elbow, Set Screw Type ANSUL Part #415670	2	0
		36 - 36 - PE-HT PULLEY ELBOW - High Temp Pulley Elbow, Compression Type	1	0



JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 3	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

NOTES

- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- IF APPLICABLE, PRE-PIPED CHARBROILER 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 U.L. 300 REQUIREMENTS

Job #: 2633849

Job Name: Portland YMCA

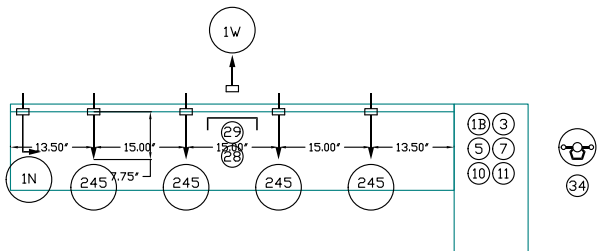
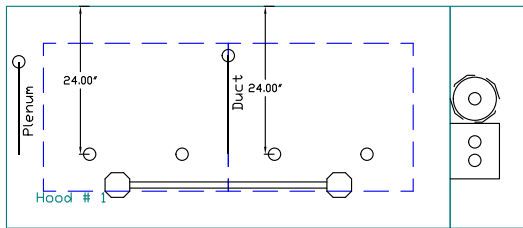
Drawn By:

System Size: ANSUL-3.0 Total FP required: 10

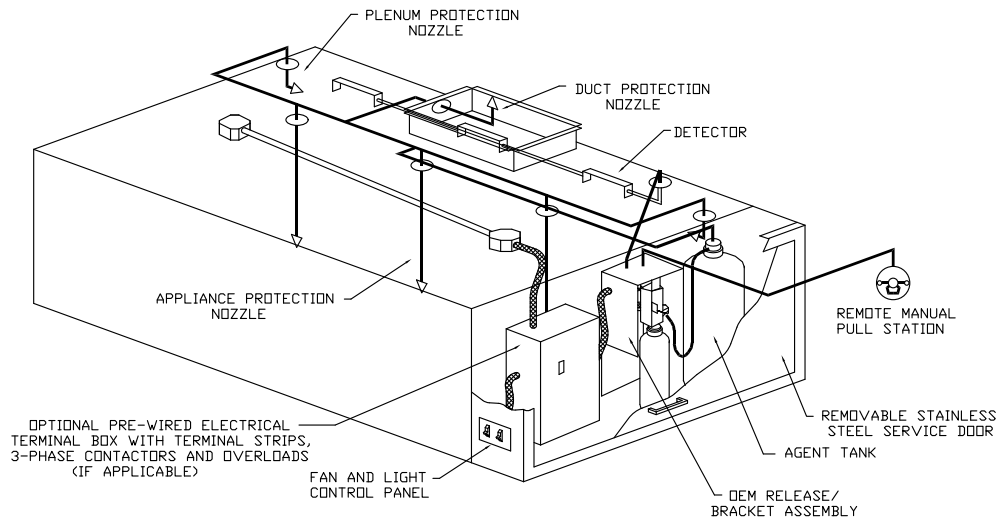
Hood # 1 6' 0.00" Long x 36" Wide x 50" High

Riser # 1 Size: 10" x 12"

Hood # 1 Metal Blow-Off Caps included.



JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 4	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



TYPICAL ANSUL R-102 SYSTEM LAYOUT

Job #: 2633849  
 Job Name: Portland YMCA  
 Drawn By:  
 System Size: ANSUL-3.0 Total FP required: 10  
 Hood # 1 6' 0.00" Long x 36" Wide x 50" High  
 Riser # 1 Size: 10" x 12"

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE, TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST; ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES), ONE MECHANICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2", PERMIT, AND SYSTEM TEST.  
 EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.

**NOTES**

- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY GAS
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- IF APPLICABLE, PRE-PIPED CHARBROILER 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 U.L. 300 REQUIREMENTS

**SPECIFICATIONS**

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/LINKAGE ASSEMBLY.



JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 5	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

**LEGEND – FIRE CABINET ANSUL SYSTEM**

- 1A 1.5 GALLON TANK
- 1B 3 GALLON TANK
- 2 DEM AUTOMAN RELEASE
- 3 DEM REGULATED RELEASE
- 4 DEM REGULATED ACTUATOR
- 5 ANSULEX LIQUID AGENT (3 GAL.)
- 6 ANSULEX LIQUID AGENT (1.5 GAL.)
- 7 CARTRIDGE (101-20)
- 8 CARTRIDGE (101-10)
- 9 CARTRIDGE (101-30)
- 9A CARTRIDGE (LT-A-101-30)
- 9B DOUBLE TANK CARTRIDGE
- 10 TEST LINK
- 11 DOUBLE MICROSWITCH
- 12 HOSE ASSEMBLY
- 1100 DUCT NOZZLE (430913)
- 2W DUCT NOZZLE (419337)
- 1W NOZZLE ASSEMBLY (419336)
- 1F NOZZLE ASSEMBLY (419333)
- 1N NOZZLE ASSEMBLY (419335)
- 1/2N NOZZLE ASSEMBLY (419334)
- 3N NOZZLE ASSEMBLY (419338)
- 245 NOZZLE ASSEMBLY (419340)
- 230 NOZZLE ASSEMBLY (419339)
- 2120 NOZZLE ASSEMBLY (419343)
- 290 NOZZLE ASSEMBLY (419342)
- 260 NOZZLE ASSEMBLY (419341)
- 28 DETECTOR BRACKET
- 29 LOW TEMP FUSIBLE LINK
- 30 HIGH TEMP FUSIBLE LINK
- MGV MECHANICAL GAS VALVE
- EGV ELECTRICAL GAS VALVE
- 34 REMOTE MANUAL PULL STATION
- S SWIVEL ADAPTOR

  			JOB Portland YMCA LOCATION Portland, ME, DATE 4/20/2016      JOB # 2633849 DWG # 6                      DRAWN BY BFC-21 REV.                              SCALE 3/8" = 1'-0"	
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**EXHAUST FAN INFORMATION - Job#2633849**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1		DU85HFA	1200	1.204	1236	0.750	0.3730	1	230	4.9	120	13.2

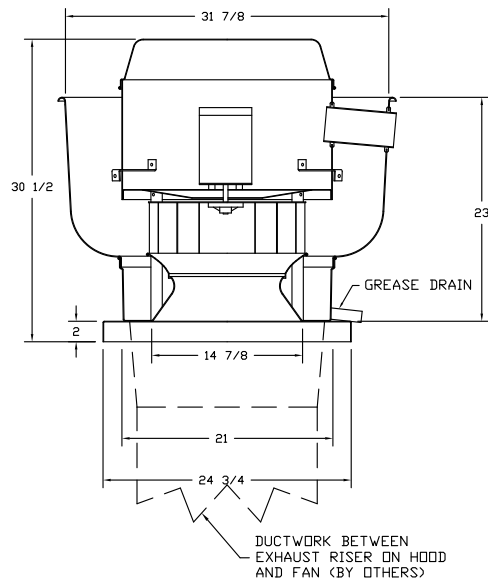
**FAN OPTIONS**

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box
		1 - Full Crating For Exhaust Fans
		1 - 3 Year Extended Motor Warranty
		1 - Fan Base Ceramic Seal - For Grease Ducts
		1 - Hinge Kit - Ships Loose For Curb Supplied by Others

**FAN ACCESSORIES**

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

FAN #1 DU85HFA - EXHAUST FAN



**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- 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**

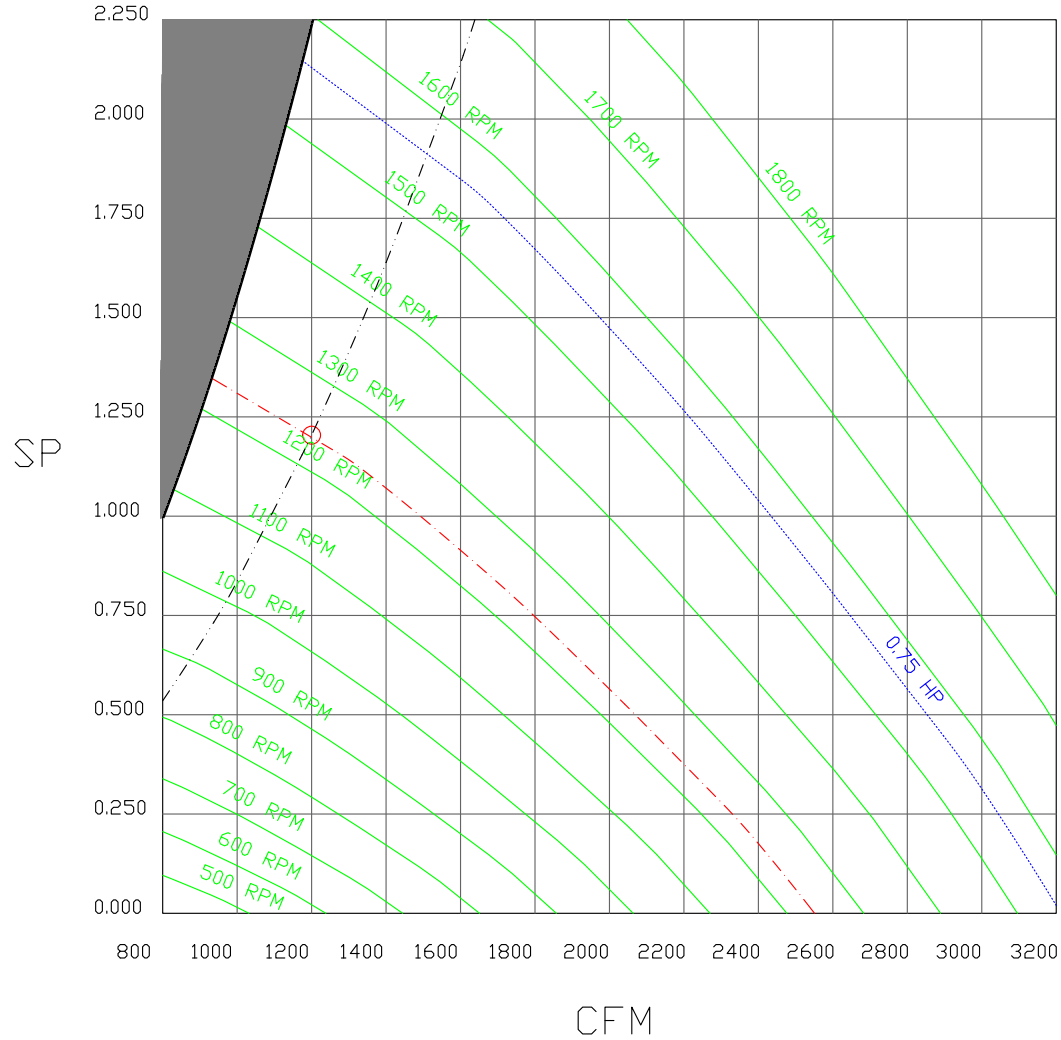
- GREASE BOX
- FULL CRATING FOR EXHAUST FANS
- 3 YEAR EXTENDED MOTOR WARRANTY
- FAN BASE CERAMIC SEAL - FOR GREASE DUCTS
- HINGE KIT - SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS



JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 7	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

FAN#1 - EXHAUST PERFORMANCE CURVES.

1200 CFM, 1,204 SP @ 1236 RPM and 0.373 BHP at 97 feet and 70 deg F  
 \* Please note that these curves were adjusted for job specific temperature and altitude.



	<b>CAPTIVEAIRE</b>	
	JOB Portland YMCA	
	LOCATION Portland, ME,	
	DATE 4/20/2016	JOB # 2633849
	DWG # 8	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"	



Exhaust Fan Wiring

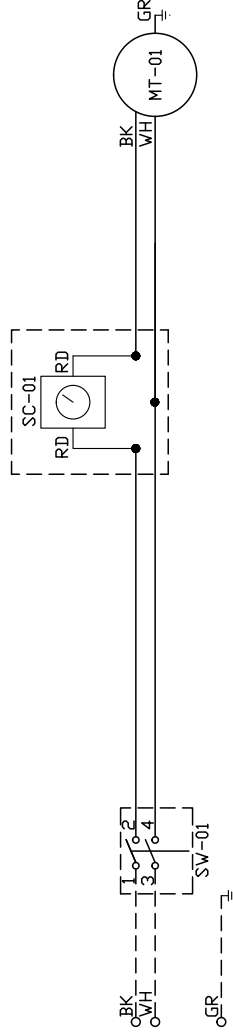
JOB 2633849 - Portland YMCA

DRAWING NUMBER EXH2633849-1

SHIP DATE 4/20/2016

MODEL DU85HFA

Installed Options  
Speed Control



Label	Component Identification	Location
MT-01	Fan Motor	[20]
OD-01	Quick Disconnect	[20]
SC-01	Speed Control	[10]
SW-01	Main disconnect switch	[20]

EXHAUST MOTOR\_INFO  
0.75HP-230V-1P-4.9FLA

ELECTRICAL INFORMATION  
MOTOR/CTRL MOP: 62A  
MOTOR/CTRL MOP: 15A

NOTES  
- - - DENOTES FIELD WIRING  
\_ \_ \_ DENOTES INTERNAL WIRING

WIRE COLOR  
BK - BLACK YW - YELLOW  
BL - BLUE GR - GREEN  
BR - BROWN GY - GRAY  
OR - ORANGE PR - PURPLE  
RD - RED PK - PINK  
WH - WHITE

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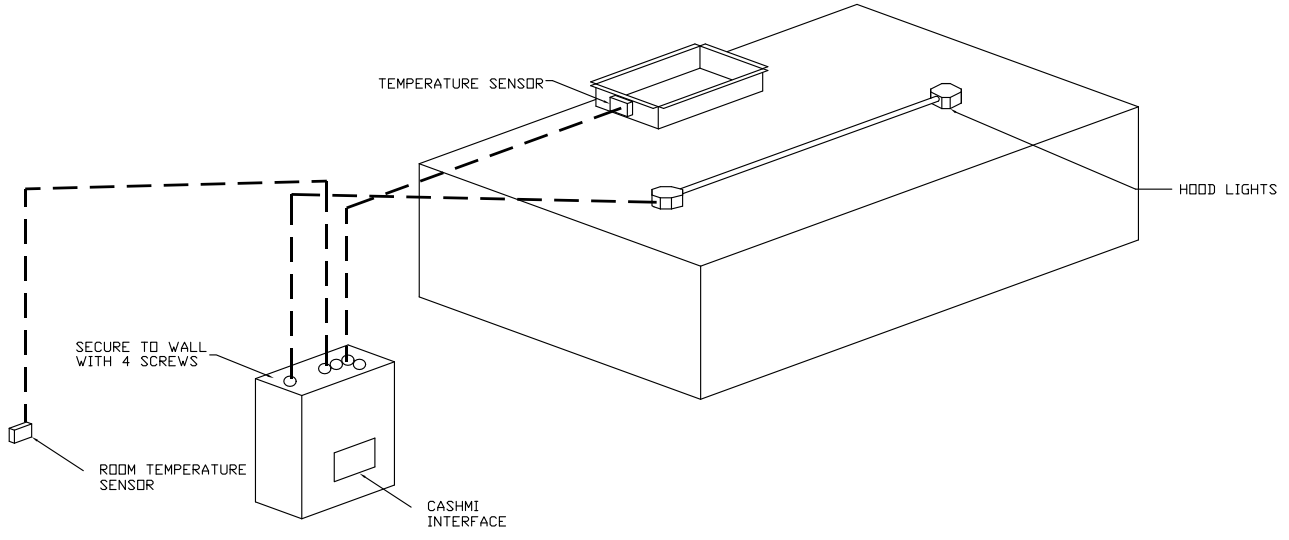
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**ELECTRICAL PACKAGES - Job#2633849**

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Ø	H.P.	VOLT	FLA
1		SC-210110FP	Wall Mount In SS Box	SS Wall Mount Box	1 Light 1 Fan	Smart Controls Thermostatic Control	Exhaust	1	0.750	230	4.9



WALL MOUNTED CONTROL CENTER



JOB Portland YMCA	
LOCATION Portland, ME,	
DATE 4/20/2016	JOB # 2633849
DWG # 10	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

JOB NO  
2633849

MODEL NUMBER  
SC-210110FP

DRAWN BY  
INSTALL

DESCRIPTION OF OPERATION:  
220V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Lights out in Fire, Fan(s) On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation.

JOB NAME  
Portland YMCA

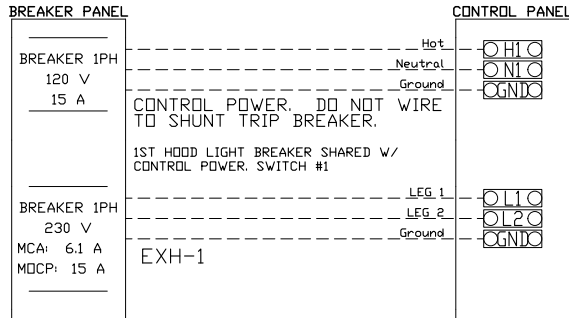
DATE  
4/20/2016

DWG NO  
ECP #1-1

### BREAKER PANEL TO CONTROL PANEL

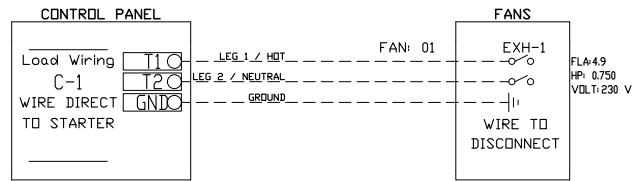
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



### CONTROL PANEL TO FANS

Responsibility: Electrician



### CONTROL PANEL TO ACCESSORY ITEMS

Responsibility: Electrician

