



Reviewed for Code Compliance
Inspection Division
Approved with Conditions

Date: 05/14/18

HOOD INFORMATION - Job#3284507

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S)						TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.		
						WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.			S.P.	END TO END	ROW
1		5424 ND-2-PSP-F	12' 3'	600 Deg.	2879			4'	12'	1439	1832	-0.725'	2591	430 SS Where Exposed	ALONE	ALONE
								4'	12'	1439	1832	-0.725'				

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WT			
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM				ELECTRICAL	SWITCHES	
1		Captrate Solo Filter	9	20"	16'	85% See Filter Spec.	4	Screw In Compact	NO								NO	683 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		RIGHT END STANDOFF (FINISHED) 1' Wide 54" Long Insulated LEFT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS RIGHT 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	148'	20'	6'	MUA	12"	28"		647	0.160'
						MUA	12"	28"		647	0.160'
						MUA	12"	28"		647	0.160'
						MUA	12"	28"		647	0.160'

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.

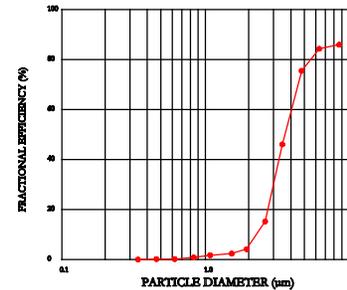
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

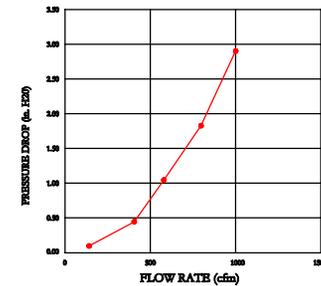
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

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

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



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



CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revise and Resubmit

SIGNATURE _____

Your Title _____ Date _____



JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 1	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

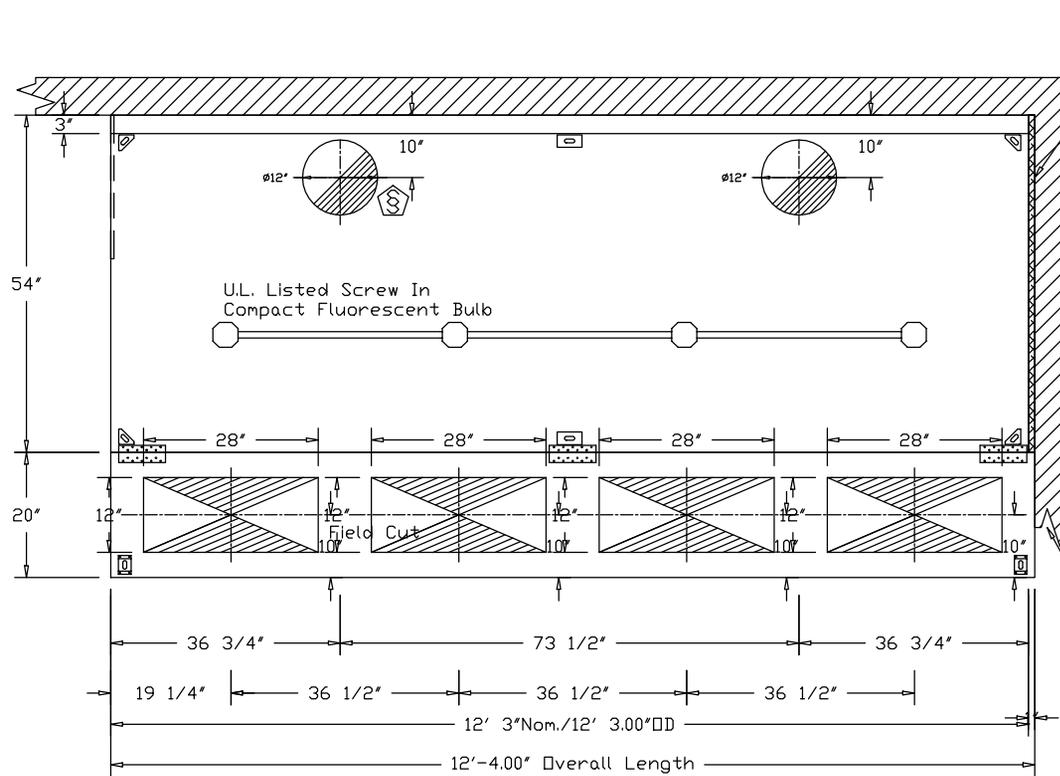
PATENT NUMBERS

AC-PSP (United States) - US F
 AC-PSP Wall (Canada) - CA Pat
 AC-PSP Island (Canada) - CA P



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1" LAYER OF INSULATION
 FACTORY INSTALLED IN
 100" END STANDOFF MEETS
 0" REQUIREMENTS CLEARANCE
 TO COMBUSTIBLE SURFACES.

INSTALLER MUST CONFIRM HOOD IS INSTALLED SUCH THAT THE SPECIFIED WALL, ACTING AS AN END PANEL, IS MATED TIGHT TO THE CORRECT END OF HOOD TO ACHIEVE A REDUCED MINIMUM EXHAUST CFM LISTING. NON-COMPLIANCE WILL NULLIFY THE ETL LISTING, VOID THE MANUFACTURER'S WARRANTY, AND HOLD THE CONTRACTOR LIABLE FOR ANY AND ALL LOSSES, COSTS, AND EXPENSES RELATED TO THE NON-CONFORMANCE OF THE MANUFACTURER'S SPECIFIED INSTRUCTION. THE WALL ACTING AS AN END PANEL MUST EXTEND NO LESS THAN 20" FROM THE INTERSECTING WALL ON WHICH HOOD IS MOUNTED AND MUST EXTEND NO LESS THAN 20" UNDER BOTTOM OF HOOD TO BE ELIGIBLE FOR REDUCED MINIMUM EXHAUST CFM LISTING.

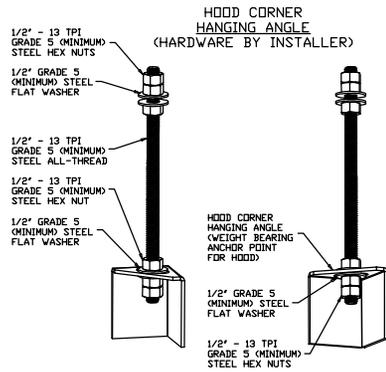
PLAN VIEW - Hood #1
12' 3.00" LONG 5424ND-2-PSP-F
 NOTE: Additional hanging angles provided for hoods 12' and longer.

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted	<input type="checkbox"/>
Approved with NO Exception Taken	<input type="checkbox"/>
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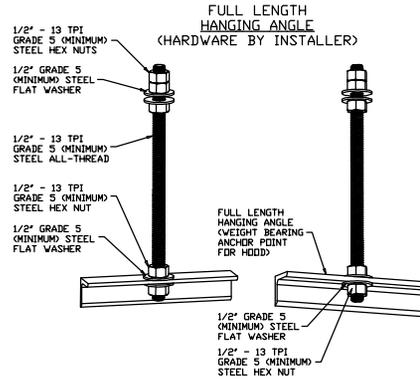


JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 2	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



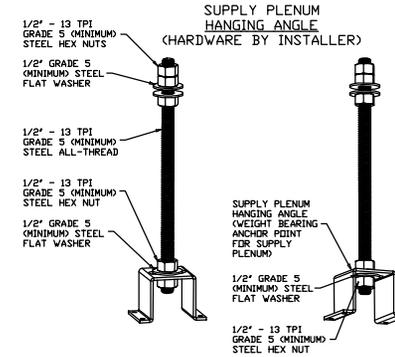
ASSEMBLY INSTRUCTIONS

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

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 ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



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 ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

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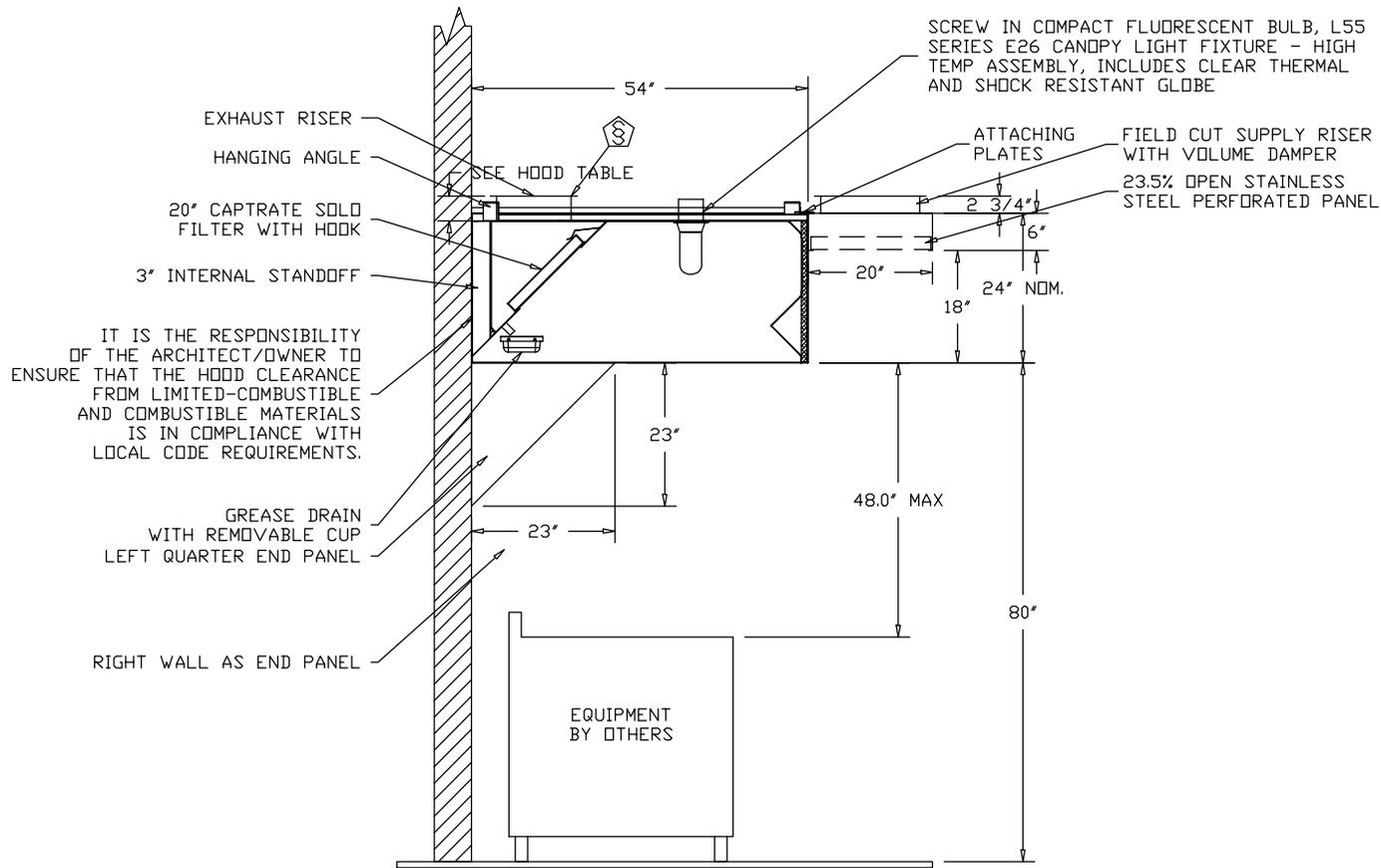
CAPTIVE AIRE

JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 3	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



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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.

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

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CAPTIVEAIR

JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 4	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



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EXHAUST FAN INFORMATION - Job#3284507

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1		DU180HFA	2879	1.500	1289	3.000	1.1450	3	208	9.5	665 FPM	222	18.4

MUA FAN INFORMATION - Job#3284507

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	DESIGN CFM		ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SDNES	BURNER EFFICIENCY(%)
					MIN	MAX										
2		A1-D250-G10	G10	A1-D250	-	2591	0.400	1215	2.000	1.4100	1	230	9.3	710	23	92

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2		258537	237854	85 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box
		1 - Full Crating For Exhaust Fans
		1 - Fan Base Ceramic Seal - Ship Loose - For Grease Ducts
		1 - Exhaust Fan Heat Baffle
2		1 - Motorized Backdraft Damper for A1-D Housing
		1 - Full Crating For Commercial Heater
		1 - Low Fire Start
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, -5 to 15' wc

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		

CURB ASSEMBLIES

NO.	DN FAN	WEIGHT	ITEM	SIZE
1	# 1	34 LBS	Curb	26.500"W x 26.500"L x 24.000"H Vented Hinged
2	# 2	74 LBS	Curb	21.000"W x 71.000"L x 24.000"H Insulated

FAN SOUND INFORMATION

FAN UNIT NO.	MOTDR	RPM	LWA	SDNES	DBA	DISTANCE FT	OCTAVE 1	OCTAVE 2	OCTAVE 3	OCTAVE 4	OCTAVE 5	OCTAVE 6	OCTAVE 7	OCTAVE 8
1	Exhaust	1289	82.3	18.4	70.8	5	76.5	81.2	88.1	78.6	71.4	69.1	63	57.1
2	Supply	1215	84.6	23	73.1	5	85.9	86.1	84.4	81.1	77.3	77.6	73.5	70

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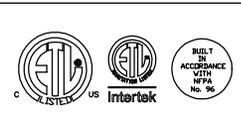
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JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 5	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

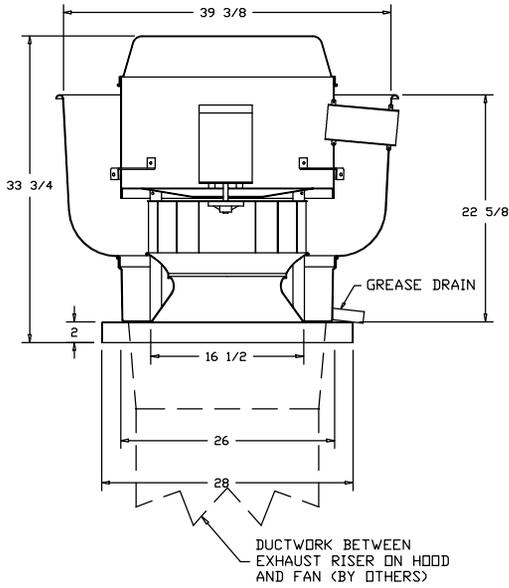


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Date:

FAN #1 DU180HFA - EXHAUST FAN



FEATURES:

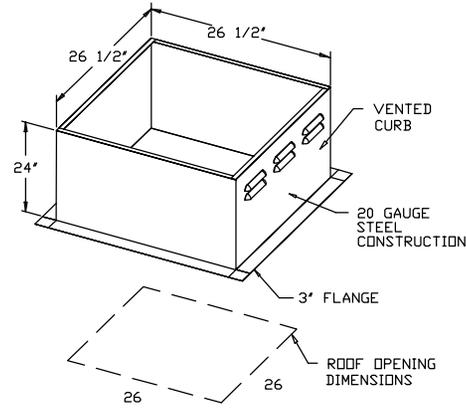
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

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
- FAN BASE CERAMIC SEAL - SHIP LOOSE - FOR GREASE DUCTS
- EXHAUST FAN HEAT BAFFLE



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

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

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CAPTIVEAIR

JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 6	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

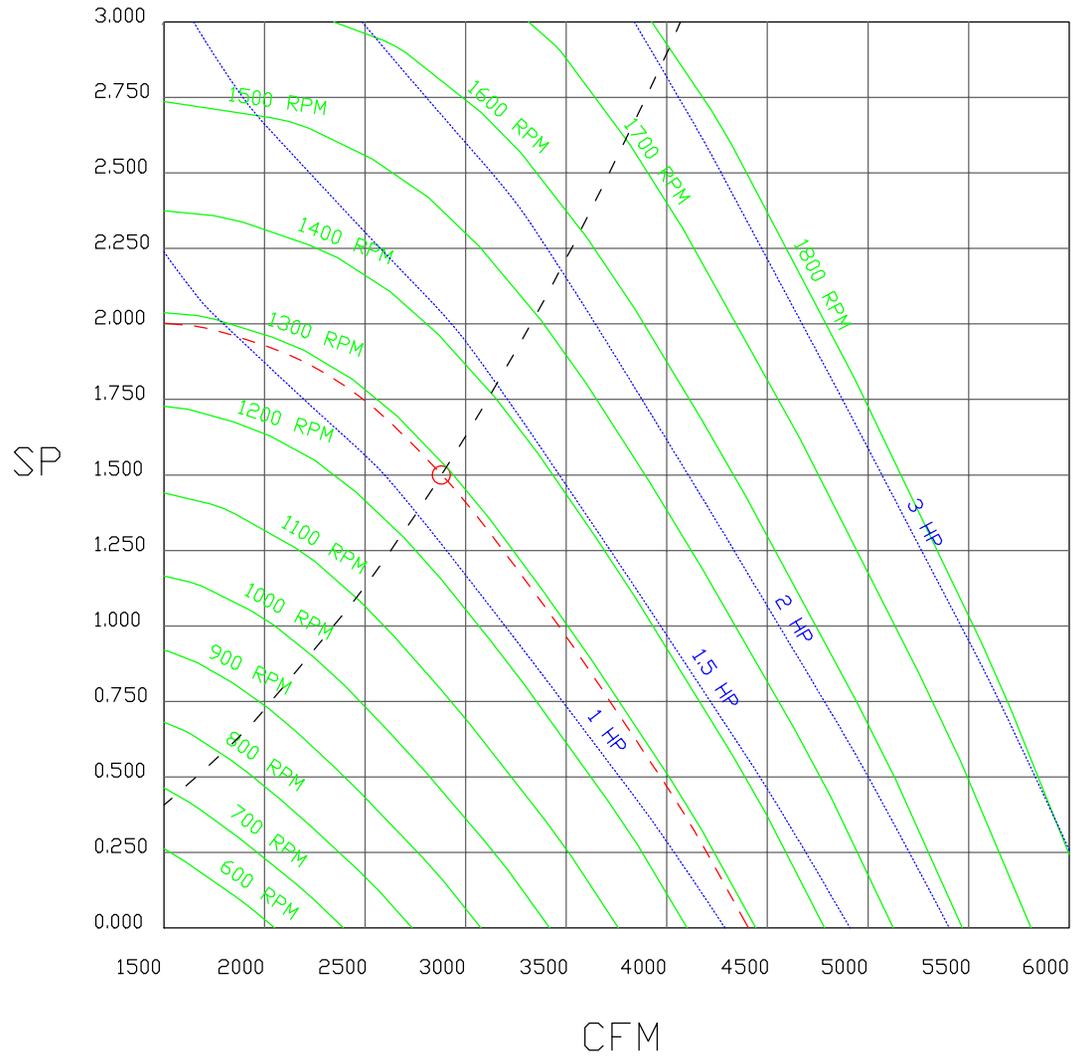
FAN#1 - EXHAUST PERFORMANCE CURVES.

2879 CFM, 1.5 SP @ 1289 RPM and 1.145 BHP at 25 feet and 70 deg F
 * Please note that these curves were adjusted for job specific temperature and altitude.



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JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 7	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"



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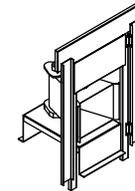
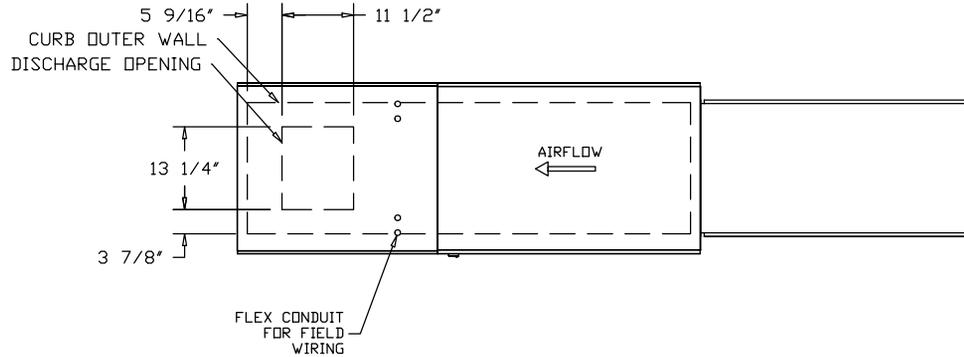
FAN #2 A1-D.250-G10 - HEATER

1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 10" BLOWER
2. INTAKE HOOD WITH EZ FILTERS
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. MOTORIZED BACK DRAFT DAMPER 16" X 18" FDR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, TFB120S ACTUATOR INCLUDED
5. FULL CRATING FOR COMMERCIAL HEATERS FOR SHIPPING.
6. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
7. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
8. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH EQUAL TO THREE TIMES THE SUPPLY DUCT EQUIVALENT DIAMETER MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY.

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 0°F. TEMP. RISE = 85°F.
BTUs CALCULATED OFF STANDARD AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 237854
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 258537



Direct Fired (DF) Profile Plate Assembly

Direct Fired Profile Plate Specifications:

Description:

Direct fired burners shall have patented (US Patent No. US6629523B2), 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 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2).

Application:

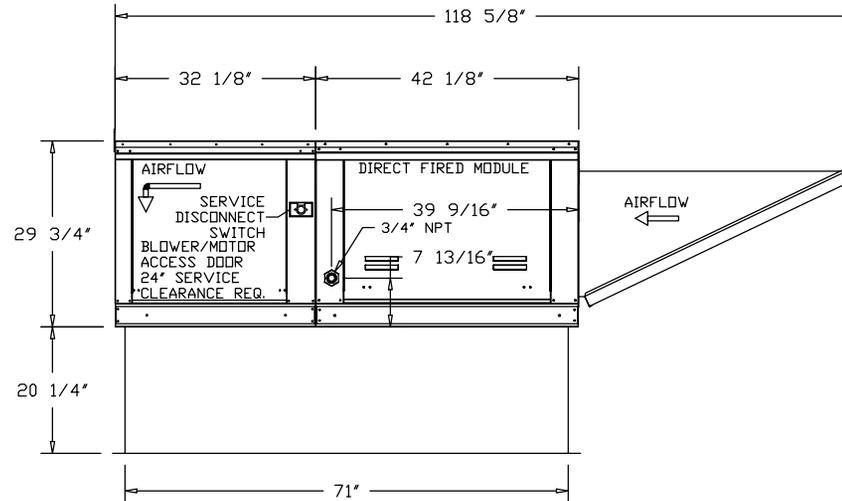
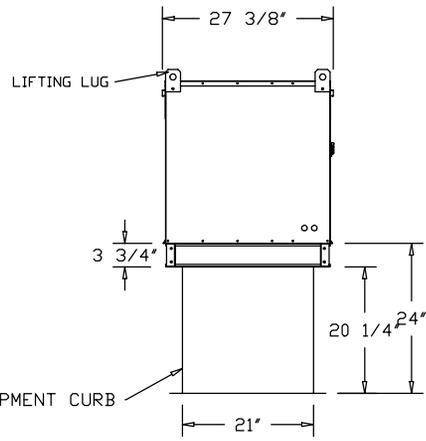
Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.

Certifications:

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.



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Approved with NO Exception Taken	<input type="checkbox"/>
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Your Title _____	Date _____



JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 8	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

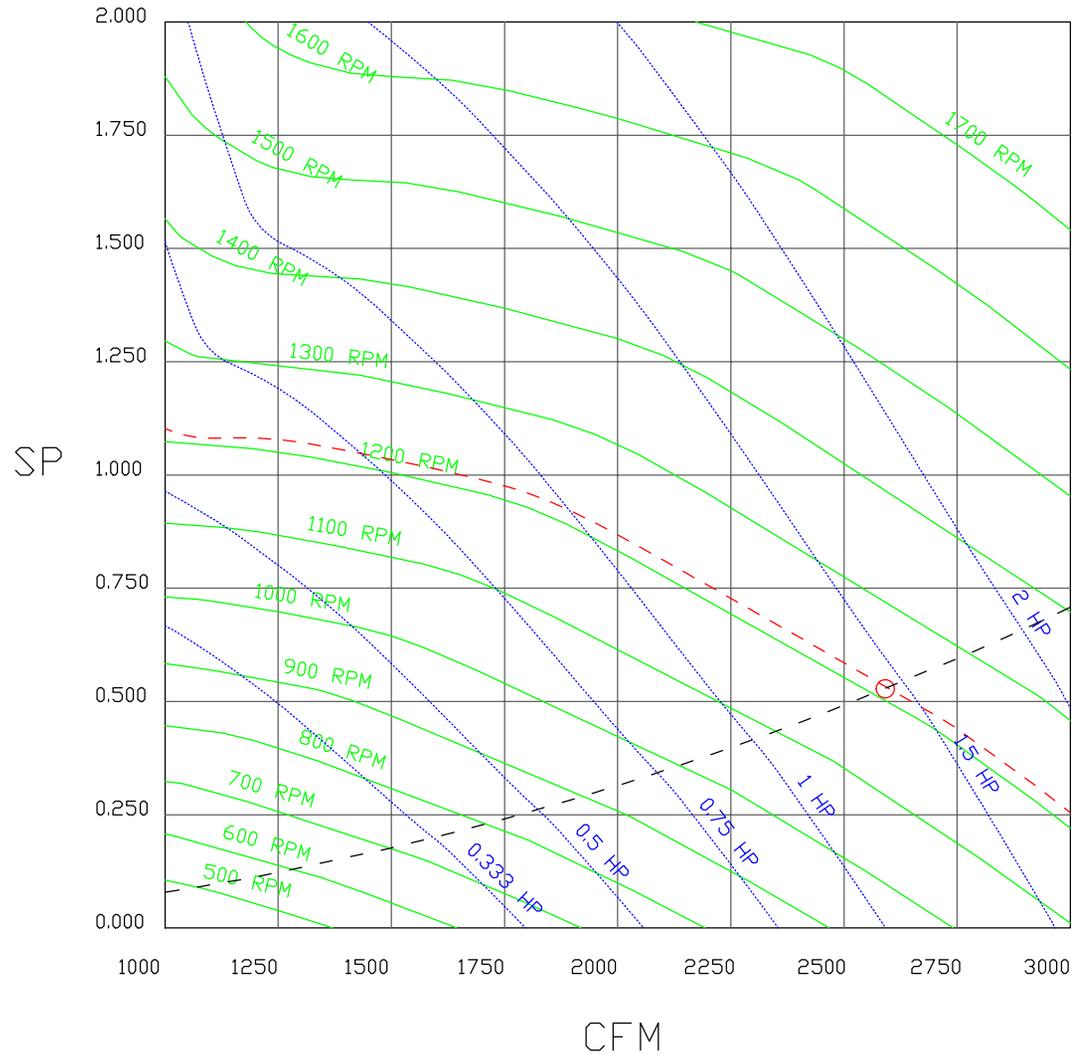
FAN#2 - HEATER PERFORMANCE CURVES.



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2591 CFM, 0.528 SP @ 1215 RPM and 1.41 BHP at 237 feet and 85 deg F
* Please note that these curves were adjusted for job specific temperature and altitude.



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JOB Bob's Clam Hut - Portland r3	
LOCATION PORTLAND, ME, 04101	
DATE 1/26/2018	JOB # 3284507
DWG # 9	DRAWN BY BFC-21
REV.	SCALE 3/8" = 1'-0"

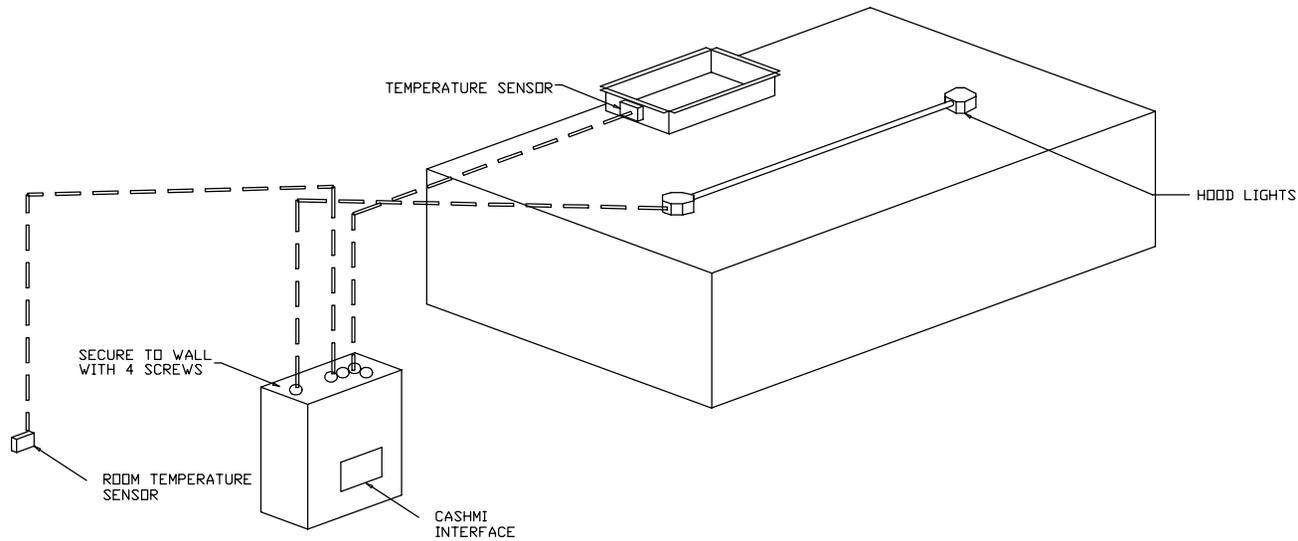


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ELECTRICAL PACKAGES - Job#3284507

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	◆	H.P.	VOLT	FLA
1		SC-F100111FP	Wall Mount In SS Box	05 - SS Wall Mount Box	1 Light 1 Fan	Smart Controls Thermostatic Control	Exhaust	3	3.000	208	9.5
							Supply	1	2.000	230	9.3



WALL MOUNTED CONTROL CENTER

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CAPTIVEAIR

<i>JOB</i> Bob's Clam Hut - Portland r3	
<i>LOCATION</i> PORTLAND, ME, 04101	
<i>DATE</i> 1/26/2018	<i>JOB #</i> 3284507
<i>DWG #</i> 10	<i>DRAWN BY</i> BFC-21
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

Exhaust Fan Wiring

JOB 3284507 - Bob's Clam Hut - Portland r3

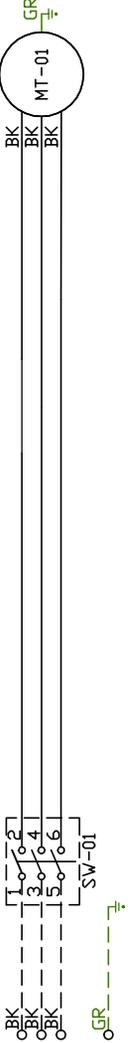
DRAWING NUMBER EXH3284507-1

SHIP DATE 1/26/2018

MODEL DU180HFA

Installed Options

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23



Component Identification Location

Label Description Location
 MT-01 Fan Motor [2]
 SW-01 Main disconnect switch [2]

EXHAUST MOTOR_INFO
 3HP-208V-3P-9.5FLA

ELECTRICAL INFORMATION
 MOTOR/CTRL MCA: 11.9A
 MOTOR/CTRL MDP: 20A

NOTES
 --- DENOTES FIELD WIRING
 --- DENOTES INTERNAL WIRING

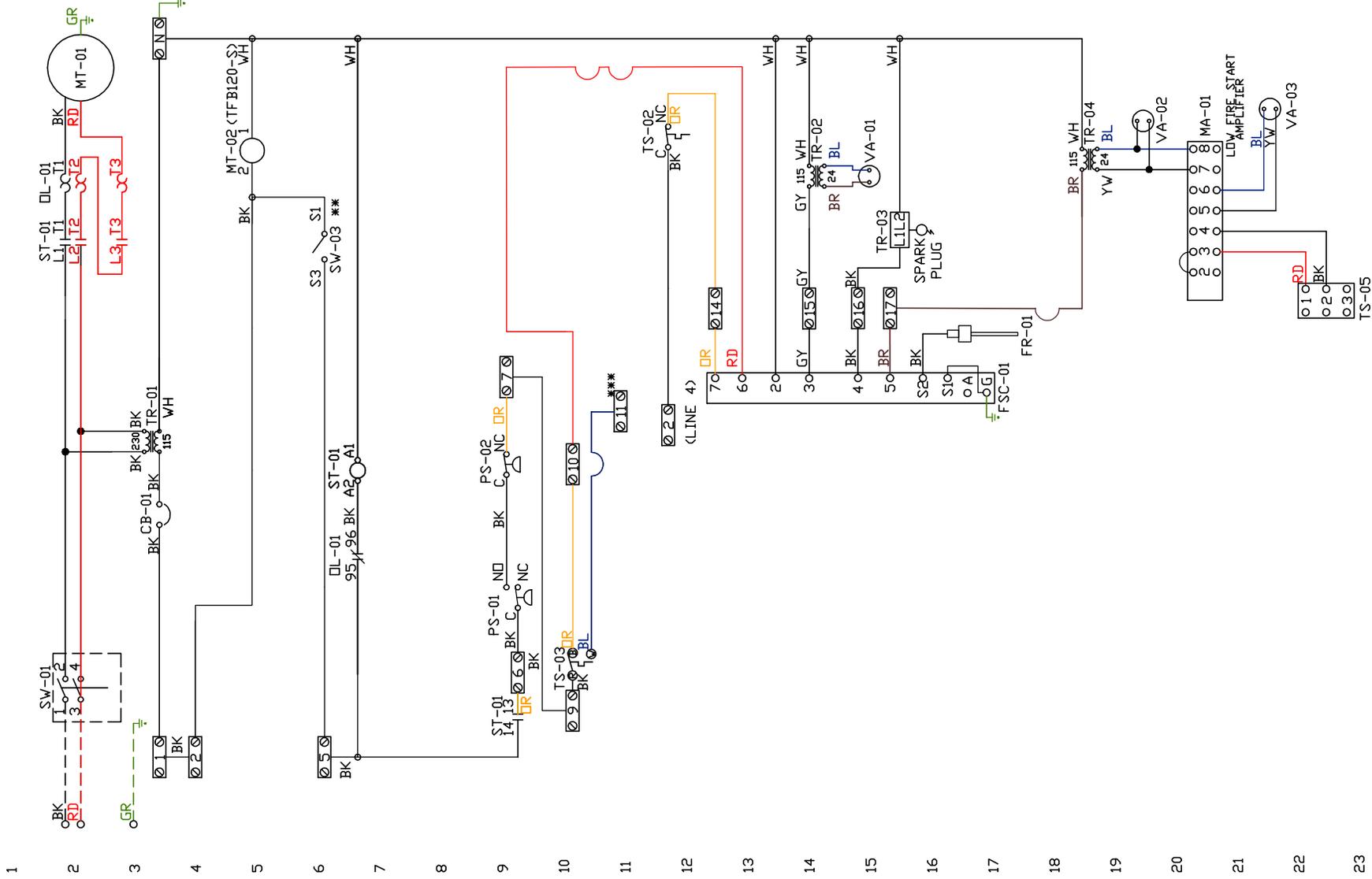
WIRE_C
 BK - BLACK
 BL - BLUE
 BR - BROWN
 OR - ORANGE
 RD - RED
 WH - WHITE



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ATTENTION ELECTRICIAN!
 DROP FOR DISCONNECT CONNECTION
 IS FACTORY SUPPLIED
 CONNECT POWER TO THE DROP



Installed Options

Motorized Back Draft Damper

Discharge Temp. Control

Label	Component Description	Identification Location
CB-01	Circuit breaker (5amp)	[3]
FR-01	Flame rod	[16], [11-14]
FSC-01	Fireeye FSC	[19]
MA-01	Modulating amplifier	[2]
MT-01	Supply motor	[5]
DL-01	Damper motor	[21]
PS-01	Supply motor overload	[21]
PS-01	Low Airflow Switch	[9]
PS-02	High Airflow Switch	[9]

ST-01	Supply motor contactor	[21][7][9]
SV-01	Main disconnect switch	[2]
SV-03	Damper end limit switch	[4]
TR-01	Power transformer(200V/83)	[12]
TR-02	Power transformer(20V/12)	[14]
TR-03	Ignition transformer	[14]
TR-04	Power transformer(20V/17)	[17]
TS-02	High temp. limit switch	[10]
TS-03	Intake Air Sensor	[10]
TS-05	Discharge Air Sensor	[21]
VA-01	Pilot gas valve	[13]
VA-02	Main gas valve	[18]
VA-03	Modulating gas valve	[20]

MOTOR INFO
 SUPPLY 2HP-230V-1P-9.3FLA
 OVERLOAD: 105-KC10
 OVERLOAD: 195-KC10

ELECTRICAL INFORMATION
 MOTOR/CTRL CIRCUIT MCA: 127A
 MOTOR/CTRL CIRCUIT MOP: 20A

NOTES
 --- DENOTES FIELD WIRING
 --- DENOTES INTERNAL WIRING

** TERMINALS S4 AND NF & AF SERIES A
 *** TERMINAL 11 PROV CONNECTION
 WIRE COLOR
 BK-BLACK YW - YELLOW
 BL-BLUE GR - GREEN
 BR - BROWN GY - GRAY
 DR - ORANGE PR - PURPLE



Reviewed for Code Compliance
 Inspections Division
 Approved with Conditions
 Date: 05/14/18

JOB 3284507 - Bob's Clam Hut - Portland r3

Installation Wiring

DRAWING NUMBER RP3284507-2

SHIP DATE 1/26/2018

MODEL A1-D.250-G10

Installed Options

120 V 1 PH.



Gal-flex conduit (in unit)

Factory wiring

Customer supplied wiring

BK

WH

GR

240 V 1 PH.



Gal-flex conduit (in unit)

Factory wiring

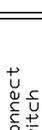
Customer supplied wiring

BK

RD

GR

208/460/600 V 3 PH.



Gal-flex conduit (in unit)

Factory wiring

Customer supplied wiring

BK

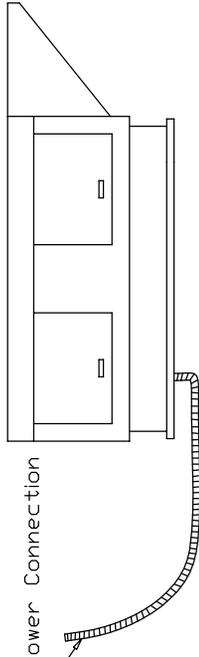
BK

BK

BK

GR

See above details:



NOTES

- WIRE (
- BK - BLACK
 - BL - BLUE
 - BR - BROWN
 - OR - ORANGE
 - RD - RED
 - WH - WHITE



Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/14/18

JOB NO
3284507

MODEL NUMBER
SC-F10011FP

JOB NAME
Bob's Clam Hut - Portland r3

DRAWN BY
INSTALL

DATE
1/26/2018

SCHEMATIC TYPE
DWG NO
ECP #1-1

DESCRIPTION OF OPERATION:
Mixed Voltage w/ control for 1 3Ph Exhaust Fan, 1 220V 1Ph Supply Fan, Exhaust or Fan(s) On/Off Thermostatically Controlled. Room temperature sensor shipped loose for DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.



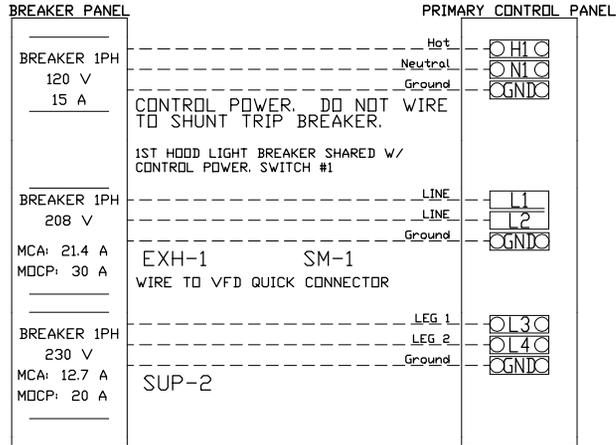
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/14/18

BREAKER PANEL TO PRIMARY CONTROL PANEL

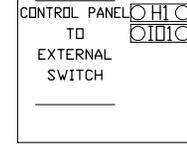
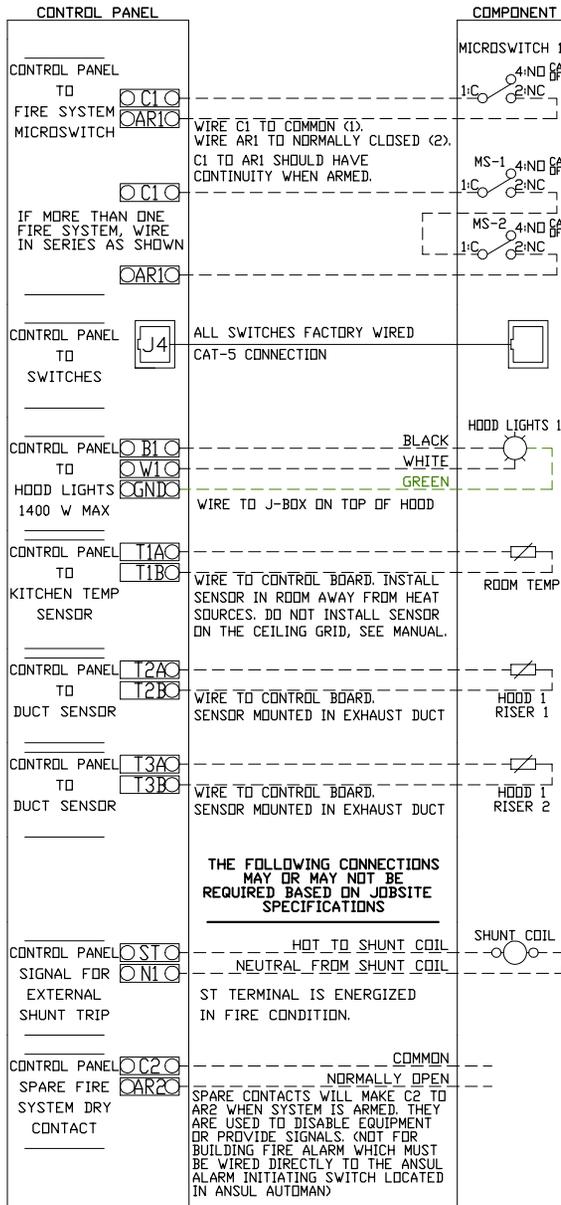
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



CONTROL PANEL TO ACCESSORY ITEMS

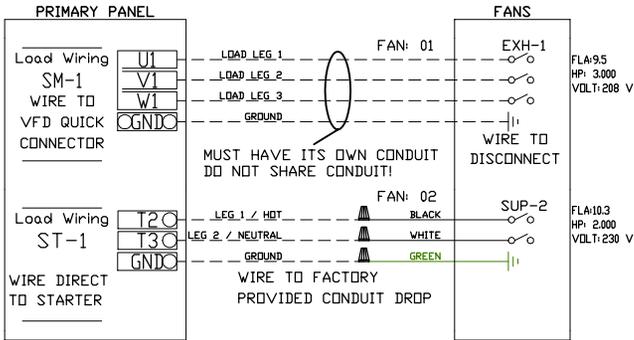
Responsibility: Electrician



SIGNAL SWITCH THROUGH BMS WILL ACTIVATE ZONE1 FANS AND LIGHTS

CONTROL PANEL TO FANS

Responsibility: Electrician



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Reviewed for Code Compliance
Inspection Division
Approved with Conditions

Date: **05/14/18**

NC	2	1	NC	2	1
COIL	8	7	COIL	8	7
COM	6	5	COM	6	5

COMPONENT LIST

LABEL	DESCRIPTION
ST-X	Starter PN-varies
OL-X	Overload PN-varies
C-X	Contactors PN-varies
PS-1	Power Sup. 24VDC PN-MDP18-24A-1C
RA-x	120V Relay DPDT PN-34.110.0184.0
RD-x	24VDC Light Relay PN-34.110.0188.0

LEGEND

--- FIELD WIRING
--- FACTORY WIRING

BK- BLACK YW- YELLOW
BL- BLUE GR- GREY
BR- BROWN PR- PURPLE
OR- ORANGE RD- RED
WH- WHITE GR- GREEN
DR/BL- DR/BL STRIPE
BL/RD- BL/RD STRIPE
RD/GN- RD/GN STRIPE
WH/BL- WH/BL STRIPE

JOB NAME

Bob's Clam Hut - ...

DRAWING TITLE
SC-F100111FP

DESCRIPTION OF OPERATION
Mixed Voltage w/ control for 1 3Ph Exhaust Fan, 1 220V 1Ph Supply Fan, Exhaust on in Fire, Lights out in Fire, Fan(s) On/Off Thermostatically Controlled, Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

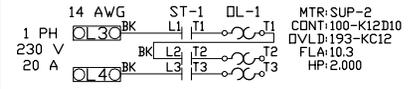
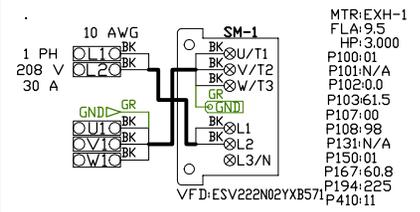
JOB NO
3284507

DRAWN BY
DATE

FACTORY 1/26/2018

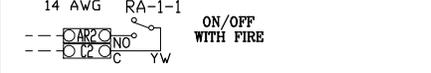
DWG NO ECP #1-2

MOTOR POWER CIRCUIT

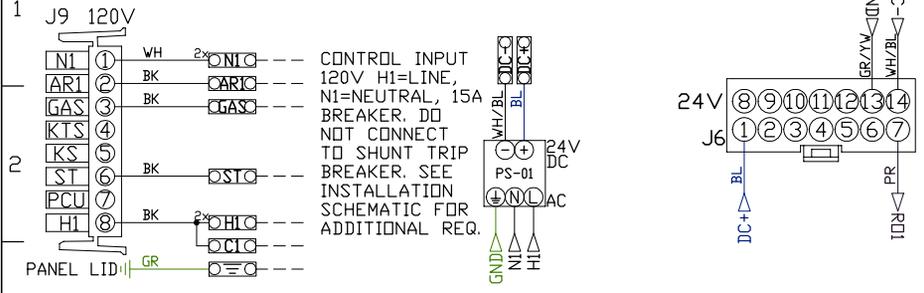


MTR: SUP-2
CNT: 100-K12D10
DVL: D193-KC12
FLA: 10.3
HP: 2.000

DRY CONTACTS (SHOWN DE-ENERGIZED)



UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.



NOTE: All items on ECPM03 J3 line to be daisy chained from one component to the next, with EOL120A at end of line. Place PN: EOL120A in empty RJ45 port.
ECPM03/DAISY CHAIN

