

HOOD INFORMATION - Job#3186795

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)								TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.			END TO END	ROW
1		5424 VX-2-PSP-F	6' 0"	600 Deg.	1500			4'	14'	1500	1403	-0.395'	1200	430 SS Where Exposed	ALONE	ALONE

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S)					LIGHT(S)					UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGHT
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL	SWITCHES		
												TYPE	SIZE	MODEL #	QUANTITY		
1		SS Baffle with Handles	4	16'	16'	30%	2	L55 Series E26	NO	Left	12"x54"x24"	Ansul R102	3.0	SC-111110FP	1 Light 1 Fan	YES	479 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		BACKSPLASH 80.00' High X 84.00' Long 430 SS Vertical

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG.	DIA.	CFM	S.P.
							1		Front	84'	16'
						MUA	12"	24"	600	0.162"	

The model VX-2 is an exhaust only canopy hood rated for all types of cooking equipment. The hood shall have the size, shape and performance specified on drawings.

Construction shall be 18 gauge type 430 stainless steel with a #3 or #4 polish where exposed.

		JOB Arcadia Bar & Grill	
		LOCATION PORTLAND, ME, 04112	
		DATE 11/29/2017	JOB # 3186795
		DWG # 1	DRAWN BY
		REV.	SCALE 3/8" = 1'-0"



GREASE DUCT & CHIMNEY SPECIFICATIONS:

PROVIDE GREASE DUCT EQUAL TO VENTILATION DIRECT MODEL "VDW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "VDW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "VDW" 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 "VDW" 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 OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO VENTILATION DIRECT MODEL "VDW- 2R, 2R TYPE HT, 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 2820509
AC-PSP Island (Canada) - CA Patent 2520330

VENTILATION DIRECT 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

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

___' - ___"

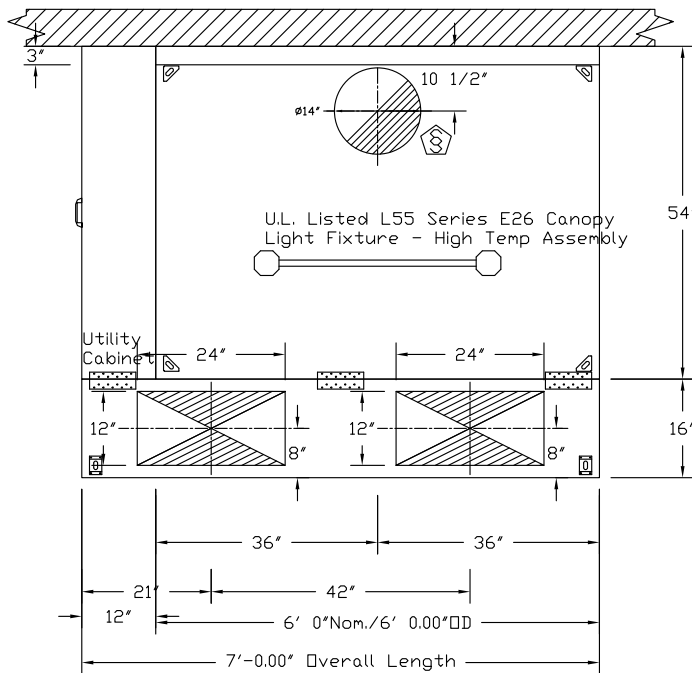
HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

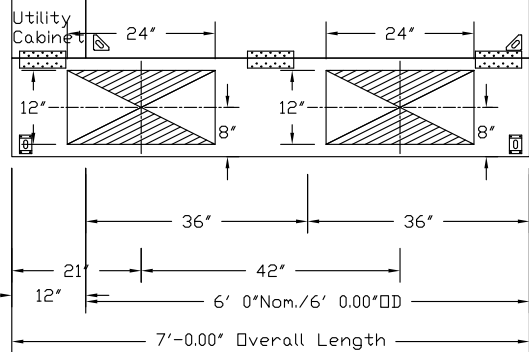
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Approved with NO Exception Taken	<input type="checkbox"/>
Revise and Resubmit	<input type="checkbox"/>
SIGNATURE _____	
Your Title _____	Date _____



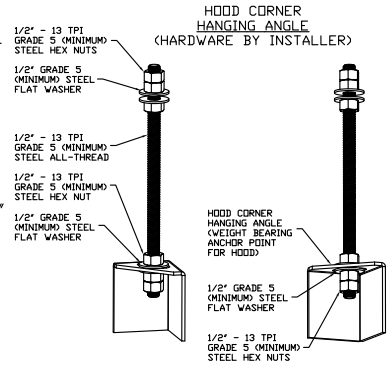
JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 2	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



U.L. Listed L55 Series E26 Canopy Light Fixture - High Temp Assembly

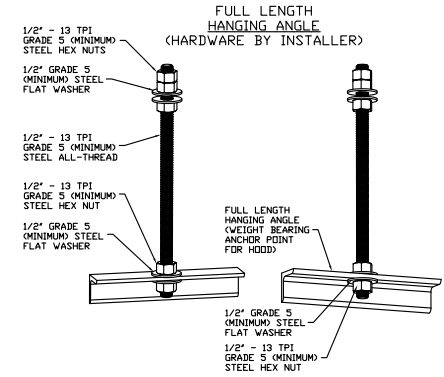


PLAN VIEW - Hood #1
6' 0.00" LONG 5424VX-2-PSP-F



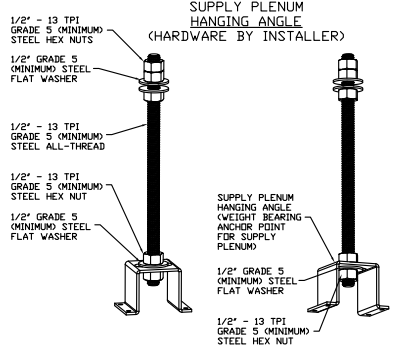
ASSEMBLY INSTRUCTIONS

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.

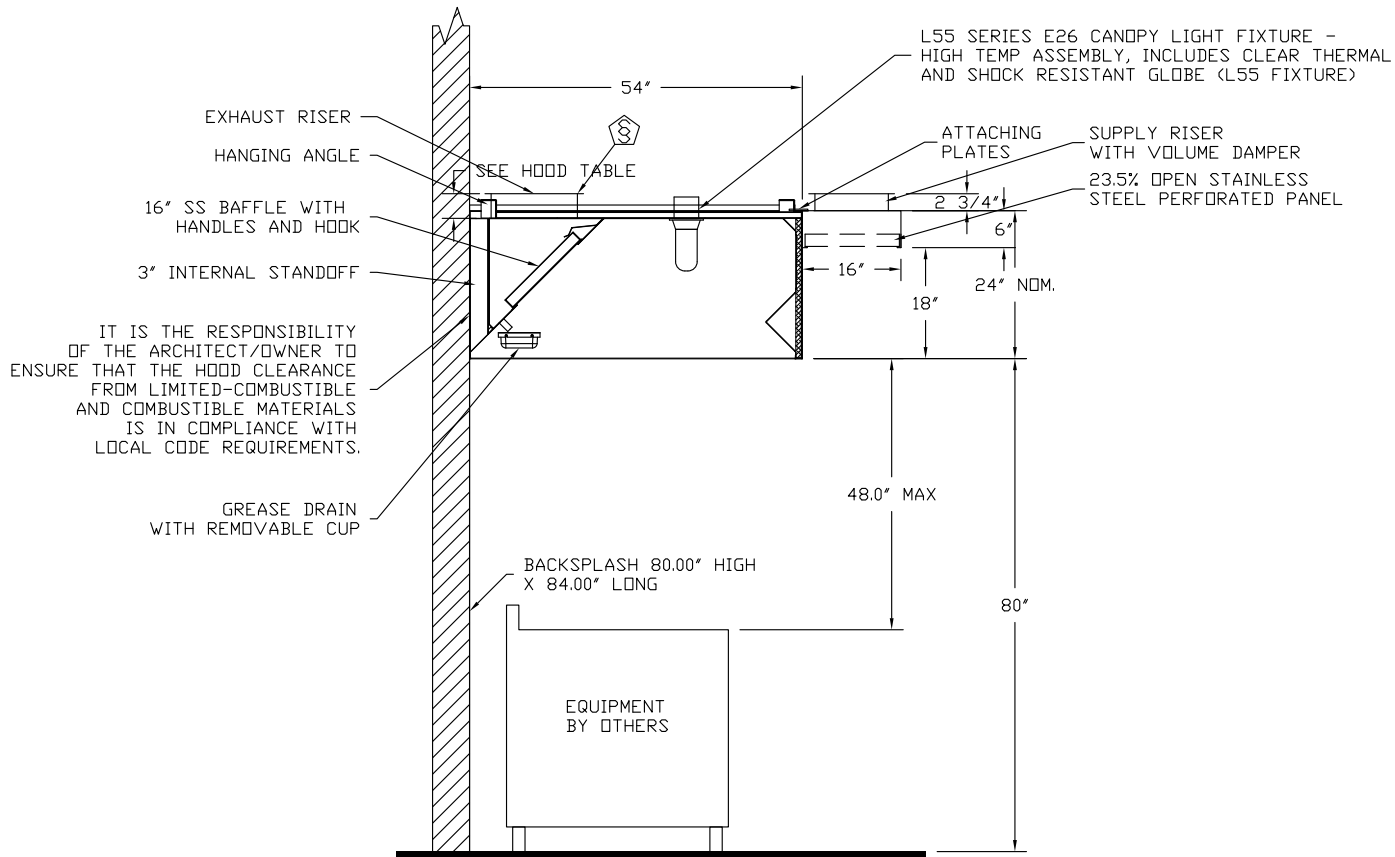


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JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 3	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



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

  			JOB Arcadia Bar & Grill	
			LOCATION PORTLAND, ME, 04112	
			DATE 11/29/2017	JOB # 3186795
			DWG # 4	DRAWN BY
			REV.	SCALE 3/8" = 1'-0"

Fire System Information - Job#3186795

FIRE SYSTEM NO.	Tag	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		Ansul R102	3.0	9	Fire Cabinet Left	Left

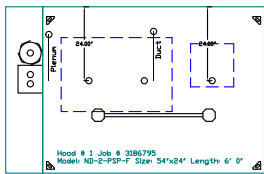
Fire System Parts List Key

FIRE SYSTEM NO.	TAG	KEY NUMBER - PART DESCRIPTION	QTY. BY FACTORY	QTY. BY DIST.
1		0 - 0 - METALCAP-CB BLOWOFF CAP - Metal	5	0
		0 - 0 - UCTANKBRACKET Tank Bracket for fire system tank installation in utility cabinets	1	0
		1 - 1 - AT - 3.0 TANK(#1B) - 3.0 Gallon SS Tank (for use with Automan Release, Actuator, or SS Enclosure (UL/ULC)) Macola # 01-429862	1	0
		3 - 3 - ANS-DEM REGULATED RELEASE - Ansul Regulated Mechanical Release/Bracket Assembly, DEM, R-102, Cartridge Detection Included, Ansul Part # 79493	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) Ansul Part # 24916, Macola # 20-24916	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 Ansul Part # 437155, Macola # 08-437155	1	0
		14 - 14 - 419336 NOZZLE - 1W Nozzle, Duct/Appliance (Replaces ANSUL Part# 419347, CAS Part# 419336) A0001266	1	0
		16 - 16 - 419335 NOZZLE - IN Nozzle, Plenum/Appliance (Replaces ANSUL Part# 419346, CAS Part# 419335) A0001265	1	0
		19 - 19 - 419338 NOZZLE - 3N Nozzle, Appliance (Replaces ANSUL Part# 419349, CAS Part# 419338) A0001268	1	0
		20 - 20 - 419340 NOZZLE - 245 Nozzle, Appliance (Replaces ANSUL Part# 419351, Part# 419340) A0001270	2	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL)	5	0
		27 - 27 - QPSA-1/2 PULLEY SEAL - 1/2" Hood Seal (UL) Ansul Part # 423253, Macola # 32-79768	1	0
		28 - 28 - S-DET DETECTOR - Series (Scissor Linkage) Ansul Part # 435547/435548 (Old # 417369/434480); Macola # 05-417369	2	0
		29 - 29 - ANS-360FL FUSIBLE LINK - 360deg F, R-102 and PIRANHA, Ansul Part # 439088	1	0
		30 - 30 - ANS-500FL FUSIBLE LINK - 500deg F, R-102 and PIRANHA, Ansul Part # 439232	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, Macola # 11-415671	2	0	
	36 - 36 - PE-HT PULLEY ELBOW - High Temp Pulley Elbow, Compression Type, Ansul Part # 423251, Macola # 10-45771	1	0	

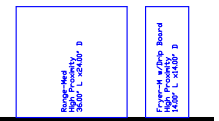
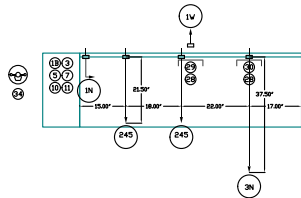


Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 5	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



Hood # 1 Job # 3186795
Model: NS-2-PSP-F Size: 54\"/>

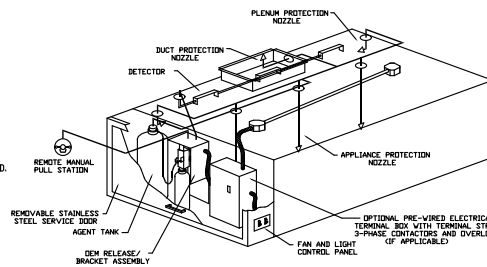


- NOTES
- FIELD PIPE DROPS AS SHOWN
 - SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
 - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
 - MAXIMUM 9 ELBOWS IN SUPPLY LINE
 - MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE
 - IF APPLICABLE, PRE-PIPED CHARBROILER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

Job #: 3186795
Job Name: Arcadia Bar & Grill
Drawn By:
System Size: ANSUL-3.0 Total FP required: 9
Hood # 1 6' 0.00" Long x 54" Wide x 24" High
Riser # 1 Size: 14" Dia.
Hood # 1 Metal Blow-Off Caps included.

LEGEND - FIRE CABINET ANSUL SYSTEM

- 1A 15 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 (LY-A-101-30)
- 9B DOUBLE TANK CARTRIDGE
- 10 TEST LINK
- 11 DOUBLE MICROSWITCH
- 12 HOSE ASSEMBLY
- 1100 DUCT NOZZLE (430913)
- 2V DUCT NOZZLE (419337)
- 1V 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)
- 210 NOZZLE ASSEMBLY (419342)
- 220 NOZZLE ASSEMBLY (419343)
- 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



TYPICAL ANSUL R-102 SYSTEM LAYOUT

NOTES

- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
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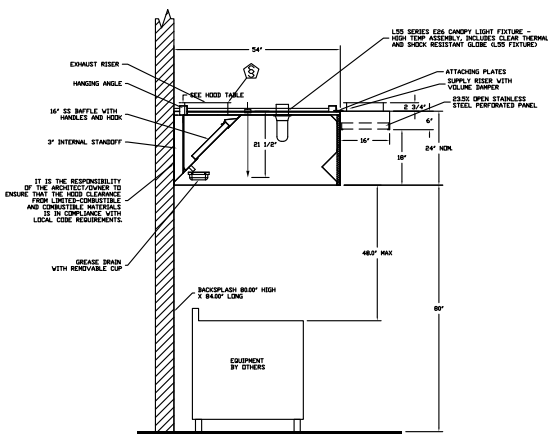
SPECIFICATIONS

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

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTIVATION WITH LOCAL OR REMOTE MANUAL ACTIVATION. 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.



SECTION VIEW - MODEL 6424VX-2-PSP-F HOOD - 61

DUCT NOZZLE AND PLENUM SPRAY BAR LOCATION

Job #: 3186795
Job Name: Arcadia Bar & Grill
Drawn By:
System Size: ANSUL-3.0 Total FP required: 9
Hood # 1 6' 0.00" Long x 54" Wide x 24" High
Riser # 1 Size: 14" x 0"



JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 6	DRAWN BY
REV.	SCALE 3/16" = 1'-0"

EXHAUST FAN INFORMATION - Job#3186795

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1		VXD85	1500	1.000	1237	0.750	0.3740	1	115	9.8	475 FPM	102	13.2

MUA FAN INFORMATION - Job#3186795

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	DESIGN CFM		ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
					MIN	MAX									
2		VA1-G10	G10D	A1	0	1600	0.250	710	1.000	0.2770	1	115	10.2	196	13
3		V76	G7	D.6	-	1200	0.250	1737	1.000	0.7440	1	115	9.0	318	21

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
3		100017	92016	71 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Wallmount 24.25' sq. x 2'
		1 - Wall Mount Construction for Fan
		1 - Ship Loose Disconnect For Remote Mount.
2		1 - ECM Wiring Package-Supply - Manual or 0-10VDC Reference Speed Control (NIDEC Motor)
3		1 - High Profile Lid
		1 - Inlet Pressure Gauge, 0-35'
		1 - Manifold Pressure Gauge, -5 to 15' wc

FAN ACCESSORIES

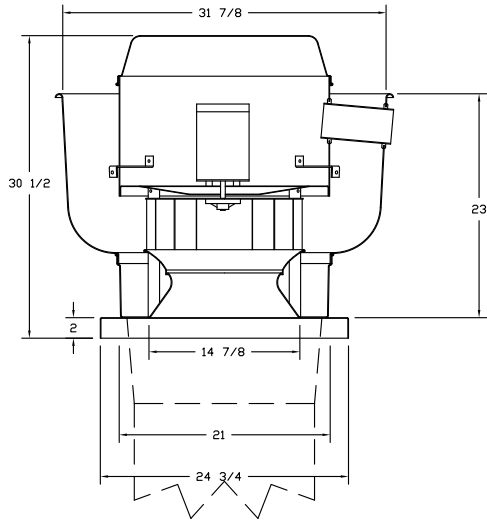
FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1				YES				
2					YES			
3					YES			



Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 7	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

FAN #1 VXD85 - EXHAUST FAN



FEATURES:

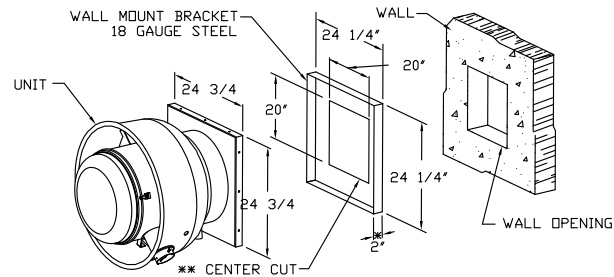
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)

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.

OPTIONS

WALLMOUNT 24.25" SQ, X 2"
 WALL MOUNT CONSTRUCTION FOR FAN
 SHIP LOOSE DISCONNECT FOR REMOTE MOUNT.

WALL MOUNT BRACKET



- WALL BRACKET FITS INTO BASE OF FAN
- SELF DRILLING SCREWS SHOULD BE USED FOR UNIT ATTACHMENT TO WALL MOUNT BRACKET
- * DIMENSION = 5" WHEN USED WITH DAMPER
- ** CENTERED IN WALL MOUNT



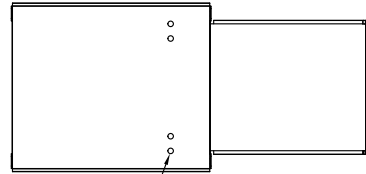
Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 8	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

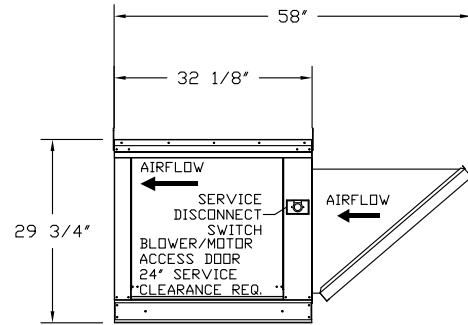
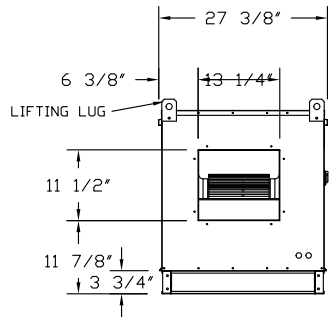
FAN #2 VAI-G10D - SUPPLY FAN

1. DIRECT DRIVE DIRECT DRIVE UNTEMPERED SUPPLY UNIT WITH 10' BLOWER IN SIZE #1 HOUSING WITH SPEED CONTROL, DISCONNECT SWITCH.
2. INTAKE HOOD WITH EZ FILTERS-LOW CFM
3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT
4. ECM WIRING PACKAGE AND MANUAL DR 0-10VDC CONTROL FOR SUPPLY EC MOTORS. RTC CONTROLLER.

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.



FLEX CONDUIT FOR FIELD WIRING



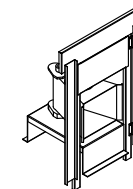
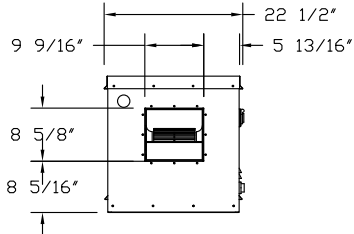
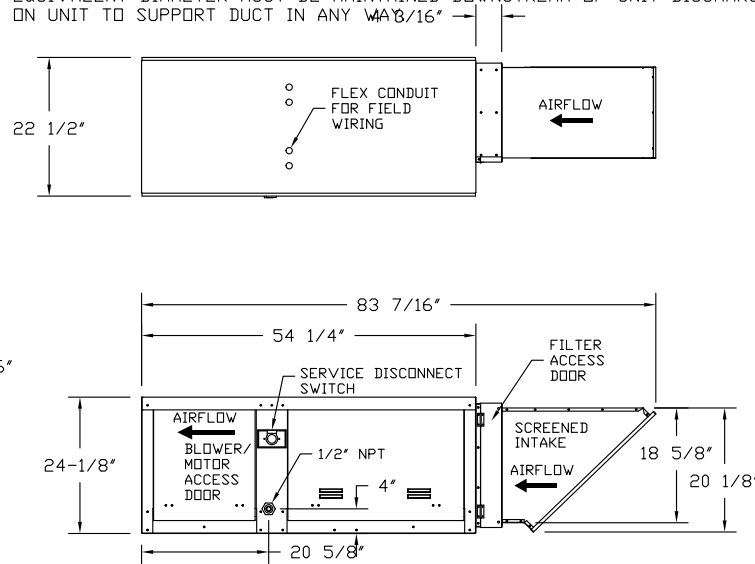
Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 9	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

FAN #3 V76 - HEATER

1. LOW CFM DIRECT FIRED HEATER. BELT DRIVE.
2. INTAKE HOOD WITH EZ FILTERS
3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT
4. HIGH PROFILE LID OPTION FOR D76. REQUIRED WITH BELT DRIVE, SINGLE PHASE MOTORS.
5. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
6. 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.



Direct Fired (DF) Profile Plate Assembly

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 4°F. TEMP. RISE = 71°F.
 BTUs CALCULATED OFF STANDARD AIR DENSITY
 OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 92016
 INPUT BTUs AT ALTITUDE OF 0.0 ft. = 100017

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.



Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 10	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

Exhaust Fan Wiring

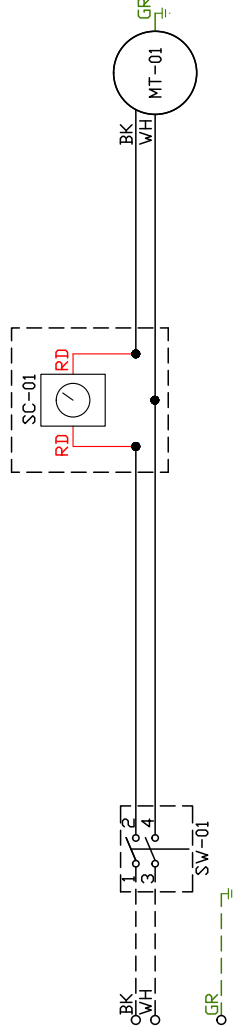
JOB 3186795 - Arcadia Bar & Grill

DRAWING NUMBER EXH3186795-1

SHIP DATE 11/29/2017

MODEL YXD85

Installed Options
Speed Control



Component Identification Location

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

EXHAUST MOTOR_INFO 0.75HP-115V-IP-98FLA

ELECTRICAL INFORMATION
MOTOR/CTRL MOP: 12.3A
MOTOR/CTRL MOP: 20A

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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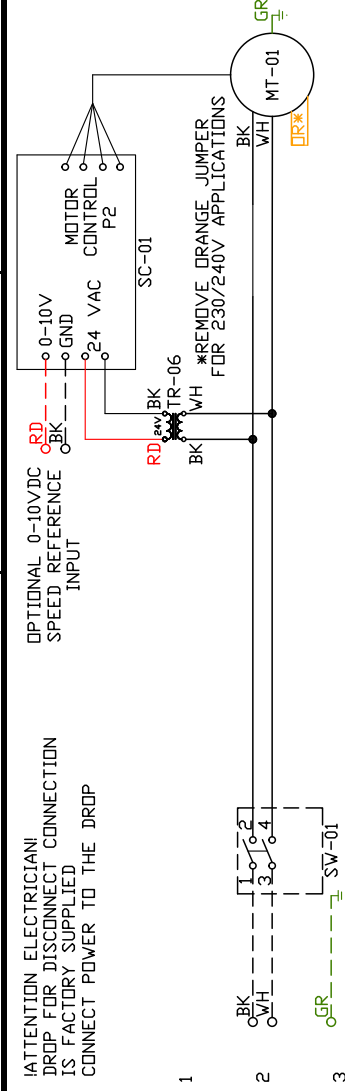
22

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AirHandler Wiring

JOB 3186795 - Arcadia Bar & Grill
 SHIP DATE 11/29/2017 MODEL VA1-G10

DRAWING NUMBER A3186795-2



Installed Options

Label Description Location

MT-01 Supply motor [20]

SC-01 RTC-FSC-1 [10]

SW-01 Main disconnect switch [20]

TR-06 24VAC 20VA Transformer [10]

SUPPLY MOTOR_INFO
 1HP-115V-1P-10.2FLA

ELECTRICAL INFORMATION
 MOTOR/CTRL CIRCUIT MCB: 12.8A
 MOTOR/CTRL CIRCUIT MCB: 20A

NOTES
 - - - DENOTES FIELD WIRING
 _____ DENOTES INTERNAL WIRING

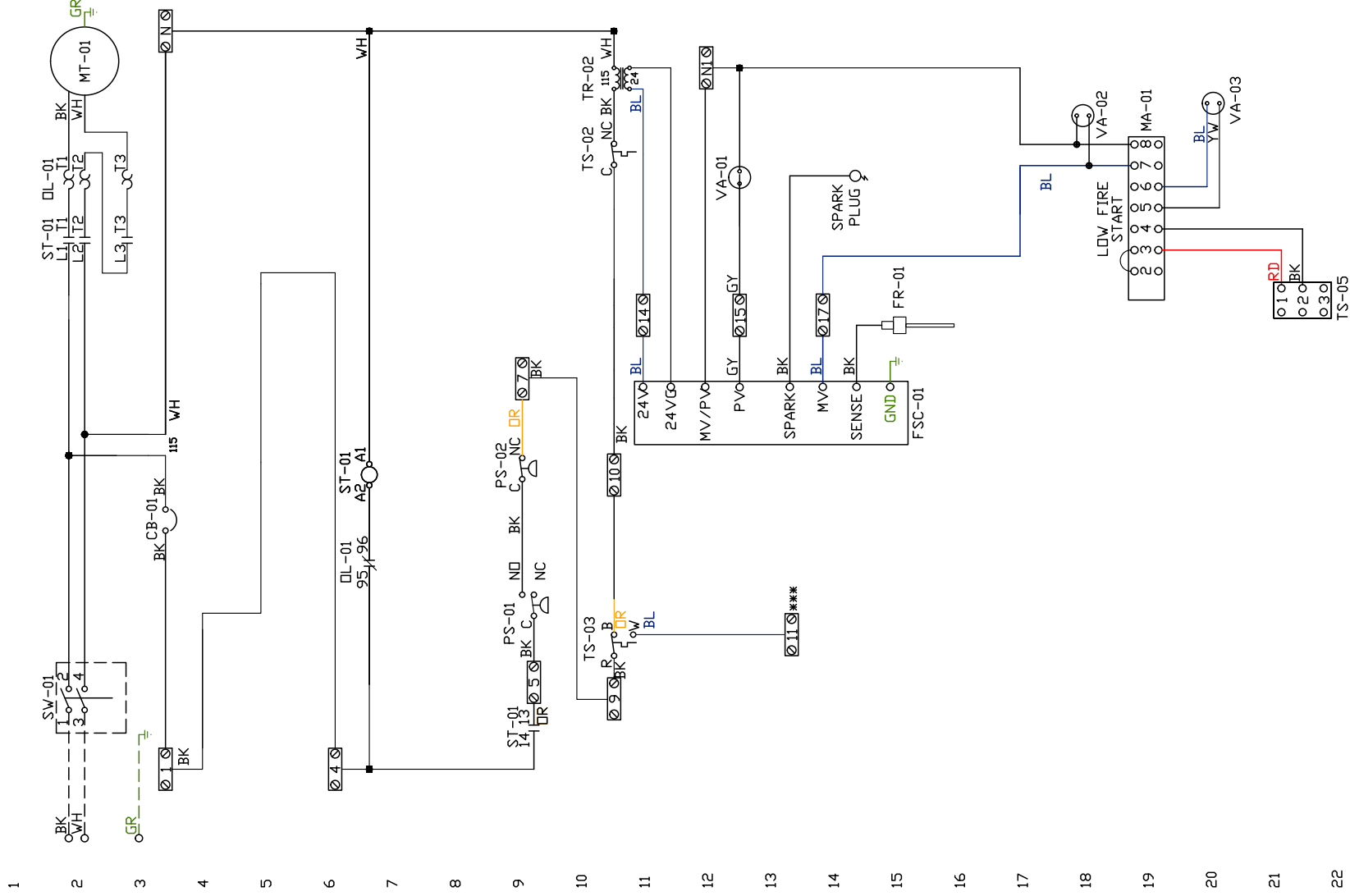
WIRE COLOR

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

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

Installed Options



Discharge Temp. Control

Component Identification
 Label Description Location
 CB-01 Circuit breaker (Camp) [30]

FR-01 Flame rod [160]
 FSC-01 Flame Safety Control [11-140]

MA-01 Modulating Dial/Amplifier [190]

MT-01 Supply motor [20]

DL-01 Supply motor overload [20][70]

PS-01 Low Air-flow Switch [90]

PS-02 High Air-flow Switch [90]

ST-01 Supply motor contactor [20][70][90]

SV-01 Main disconnect switch [20]

TR-01 Power transformer(200v)[30]

TR-02 Control transformer(20V)[30]

TS-02 High temp limit switch [100]

TS-03 Intake air thermostat [100]

TS-05 Discharge Air Sensor [20]

VA-01 Pilot gas valve [130]

VA-02 Main gas valve [180]

VA-03 Modulating gas valve [200]

MOTOR INFO
 SUPPLY 1HP-115V-1P-9.0FLA
 CONTACTOR: 100-C16D10
 OVERLOAD: 193-T1AC10

ELECTRICAL INFORMATION
 MOTOR/CTRL CIRCUIT MOP: 3.44A
 MOTOR/CTRL CIRCUIT MOP: 20A

NOTES

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

*** TERMINAL 11 PROVIDES COOLING CONNECTION

WIRE COLOR		SOCKET STYLE	
Color	Code	Style	Relay
BK-BLACK	YV	4	3
BL-BLUE	GR	2	1
BR - BROWN	GY	6	7
DR - ORANGE	PR	6	5
GR - GREEN	WH	4	3
GY - GRAY	PK	2	1
RD - RED	PK	6	5
TS-05	DR	6	5

Installation Wiring

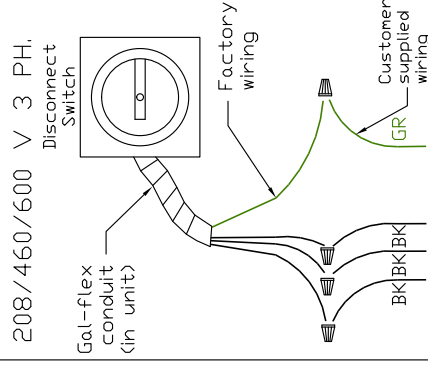
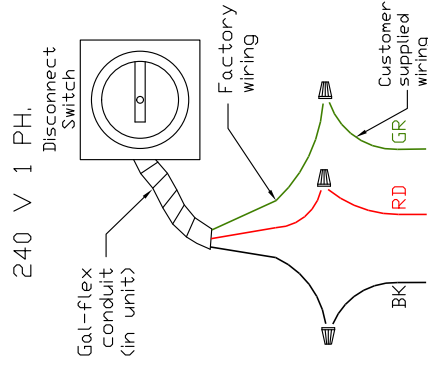
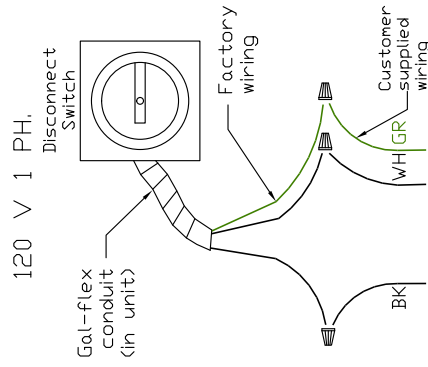
JOB 3186795 - Arcadia Bar & Grill

DRAWING NUMBER RP3186795-3

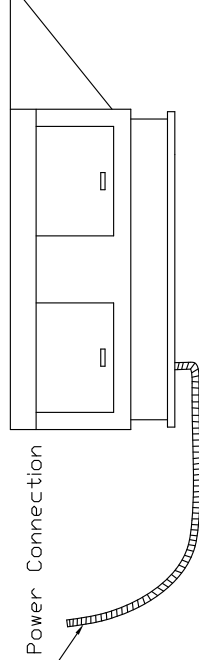
SHIP DATE 11/29/2017

MODEL V76

Installed Options



See above details.



NOTES

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

ELECTRICAL PACKAGES - Job#3186795

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	?	H.P.	VOLT	FLA
1		SC-111110FP	Utility Cabinet Left	03 - Utility Cabinet Left	1 Light	Smart Controls Thermostatic Control	Exhaust	1	0.750	115	9.8
				Hood # 1	1 Fan		Supply	1	1.000	115	9.0



Ventilation Direct

<i>JOB</i> Arcadia Bar & Grill	
<i>LOCATION</i> PORTLAND, ME, 04112	
<i>DATE</i> 11/29/2017	<i>JOB #</i> 3186795
<i>DWG #</i> 15	<i>DRAWN BY</i>
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

JOB NO
3186795

MODEL NUMBER
SC-11110FP

DRAWN BY
INSTALL

DESCRIPTION OF OPERATION:
120V 1 Phase w/ control for 1 Exhaust Fan, 1 Supply 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
Arcadia Bar & Grill

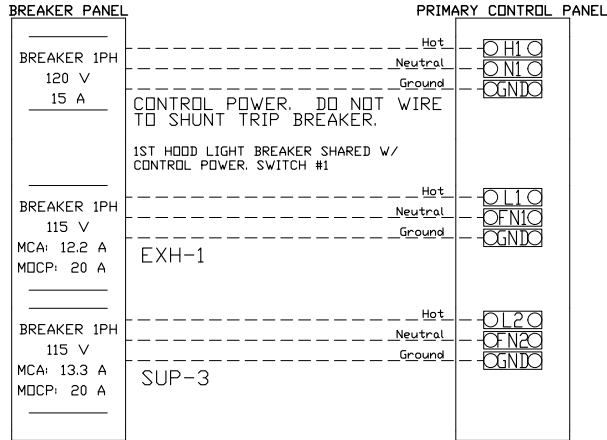
DATE
11/29/2017

DWG NO
ECP #1-1

BREAKER PANEL TO PRIMARY CONTROL PANEL

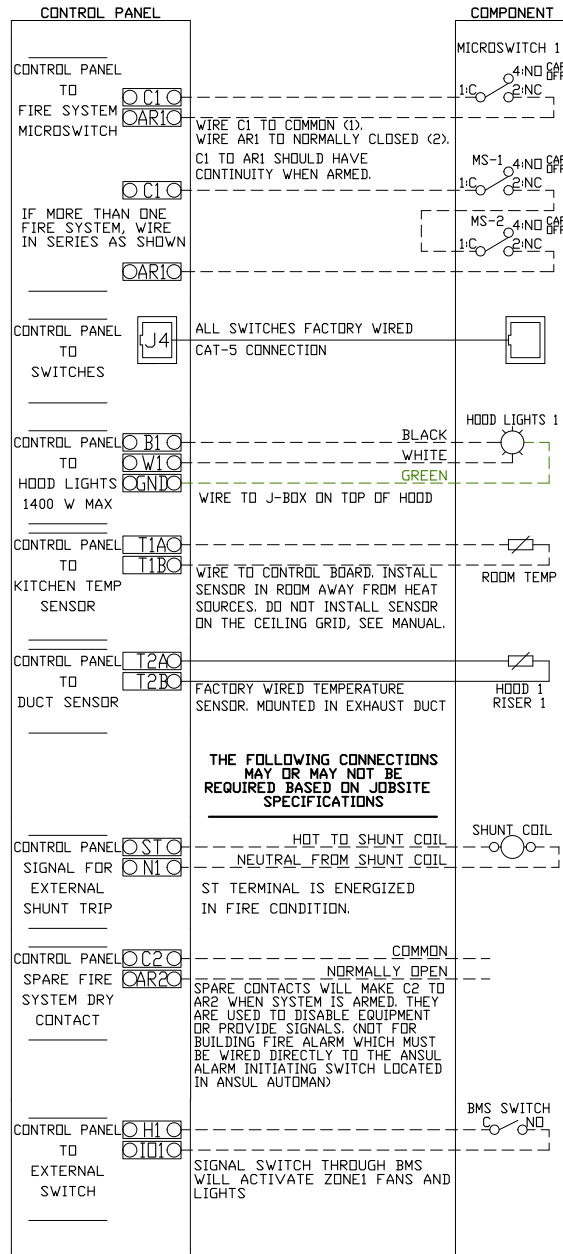
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



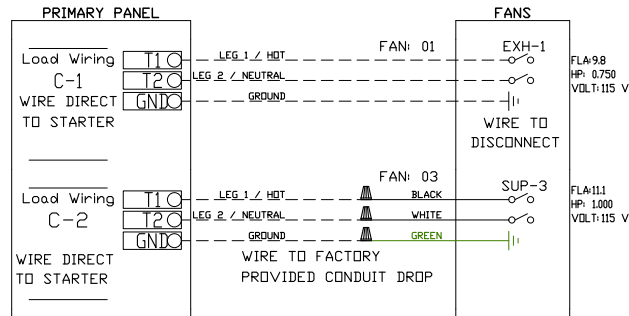
CONTROL PANEL TO ACCESSORY ITEMS

Responsibility: Electrician

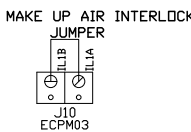
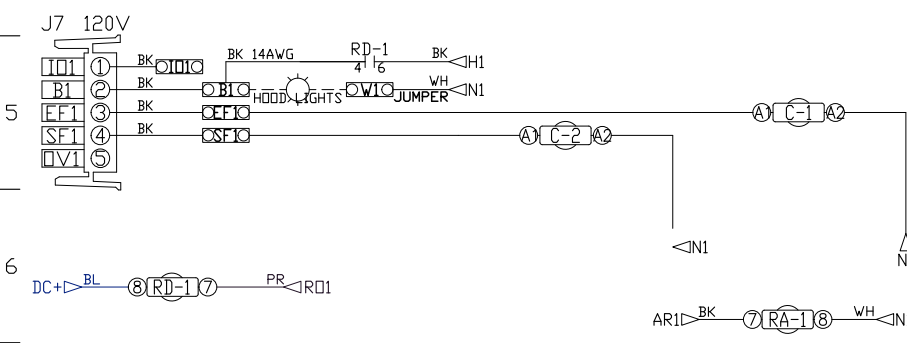
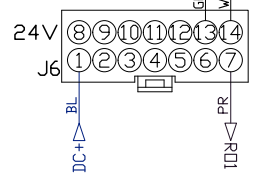
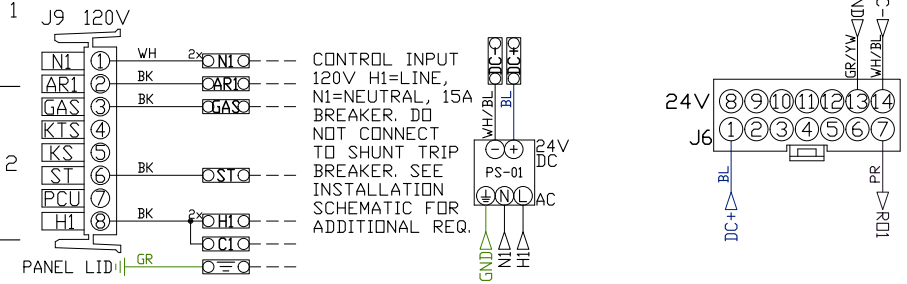


CONTROL PANEL TO FANS

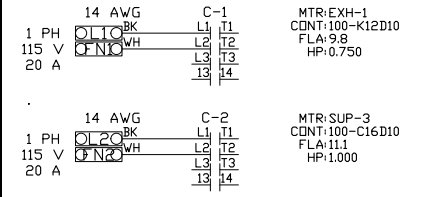
Responsibility: Electrician



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



MOTOR POWER CIRCUIT



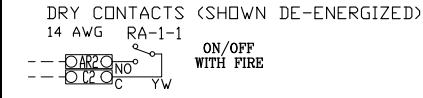
FACTORY WIRING SCHEMATIC CIRCUIT BOARDS

DCV	Rev. 2.08.00
HMI	Rev. 2.08.00

RA-x		RD-x	
120 VAC RELAY		24 VDC RELAY	
NO	4 3	NO	4 3
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
DL-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
TS-x	Duct Thermostat PN-A/CP-P0-14'-EXPL

LEGEND	
- - -	FIELD WIRING
—	FACTORY WIRING
BK-	BLACK
BL-	BLUE
BR-	BROWN
OR-	ORANGE
WH-	WHITE
GR/BL-	GR/BL STRIPE
BL/RD-	BL/RD STRIPE
RD/GN-	RD/GN STRIPE
WH/BL-	WH/BL STRIPE
YW-	YELLOW
GY-	GREY
PR-	PURPLE
RD-	RED
GR-	GREEN



JOB NAME	
Arcadia Bar & Gr...	
DRAWING TITLE	
SC-111110FP	
DESCRIPTION OF OPERATION	
120V 1 Phase w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fan(s) On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation.	
JOB NO	DRAWN BY
3186795	
TYPE	DATE
FACTORY	11/29/2017
DWG NO ECP #1-2	

DuctWork #1 Parts - Job#3186795

Tag	Part #	CFM	S.P.	Weight	Velocity	QTY	Description
P1	VDW140805LT	1500	-0.0027	10.85	1403.16	1	Single Wall Duct 14' diameter, 8.50' long, flange at both ends. Stainless Steel.
P2	VDW1415AJDKIT	1500	-0.0023	15.00	1403.16	1	Single Wall Duct Adjustable, 14' diameter, 14.50' long, flange at one end With a 14' Adjustable Collar - Stainless Steel.
P3 Assembled w/P17	VDW14TEASY	1500	-0.084	12.72	1403.16	1	Single Wall Duct Tee, 14' Duct, Assembly.
P4	VDW1404CID	1500	-0.001	2.47	1403.16	1	Single Wall Duct Off Set Collar - 14' diameter duct - 1/4' Pitch.
P5	VDW1459LT	1500	-0.0172	37.12	1403.16	1	Single Wall Duct 14' diameter, 59' long, flange at both ends. Stainless Steel.
P6	VDW1459LT	1500	-0.0172	37.12	1403.16	1	Single Wall Duct 14' diameter, 59' long, flange at both ends. Stainless Steel.
P7	VDW1459LT	1500	-0.0172	37.12	1403.16	1	Single Wall Duct 14' diameter, 59' long, flange at both ends. Stainless Steel.
P8	VDW1435LT	1500	-0.0099	16.22	1403.16	1	Single Wall Duct 14' diameter, 34' long, flange at both ends. Stainless Steel.
P9	VDW1448AJDKIT	1500	-0.0095	25.58	1403.16	1	Single Wall Duct Adjustable, 14' diameter, 47.5' long, flange at one end With a 14' Adjustable Collar - Stainless Steel.
P10	VDW14SUBRASY			14.00		1	Duct Support Bracket Assembly, 14' Duct, Used for Hanging Duct. 12 GA Steel, Clear Zinc Coating. - 2 Rings, 4 Brackets Plus Hardware.
P11	VDW14SUBRASY			14.00		1	Duct Support Bracket Assembly, 14' Duct, Used for Hanging Duct. 12 GA Steel, Clear Zinc Coating. - 2 Rings, 4 Brackets Plus Hardware.
P12	VDW1404C2D	1500	-0.001	2.47	1403.16	1	Single Wall Duct Off Set Collar - 14' diameter duct - 1/2' Pitch.
P13	VDW141850LT	1500	-0.0057	10.85	1403.16	1	Single Wall Duct 14' diameter, 18.50' long, flange at both ends. Stainless Steel.
P14 Assembled w/P15	VDW1430AJDKIT	1500	-0.0053	17.08	1403.16	1	Single Wall Duct Adjustable, 14' diameter, 29.5' long, flange at one end With a 14' Adjustable Collar - Stainless Steel.
P15 Assembled w/P14 System at P15	VDW2314TPDBEX	1500	0	9.00	1403.16	1	Duct to Curb Transition 3/4' Down Turn, 23' Curb to 14' Duct, 16 GA Aluminized. Used on NCA14FA & NCA14HPFA. Transition Plate DD is 23.5' Designed For Use With Exhaust Fan. Non-Standard Part.
P16	VDW14SUBRASY			14.00		1	Duct Support Bracket Assembly, 14' Duct, Used for Hanging Duct. 12 GA Steel, Clear Zinc Coating. - 2 Rings, 4 Brackets Plus Hardware.
P17 Assembled w/P3	VDW1415ADKIT			5.82		1	Duct Access Door with Handle & Grease Dam, for 14' duct use 15' door. Stainless Steel.
	3M-2000PLUS			0.80		4	Duct - 3M Fire Barrier 2000 Plus Silicone - Used as sealant to Seal Duct Joints.
	VDW14CLASY			1.37		13	Duct *V* Clamp With new design 14 Ga Brackets, 14' Duct, Assembly.
Total Weight				302.43			

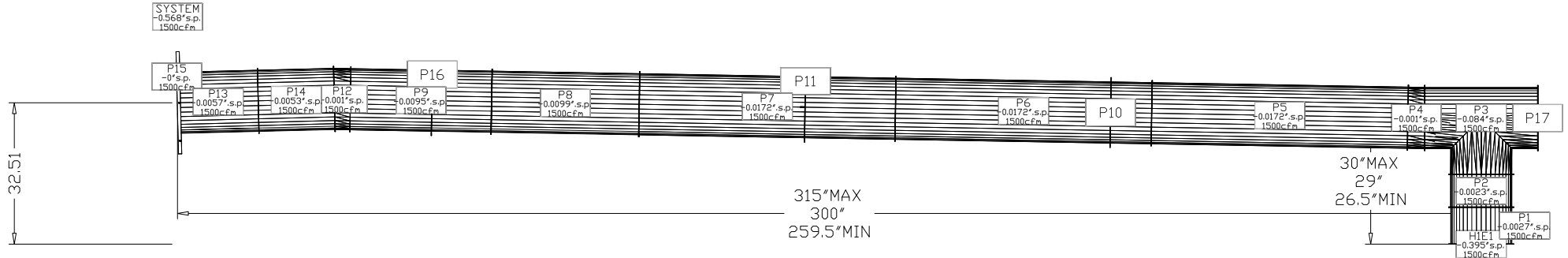
SINGLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16' PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16' PER LINEAR FOOT.

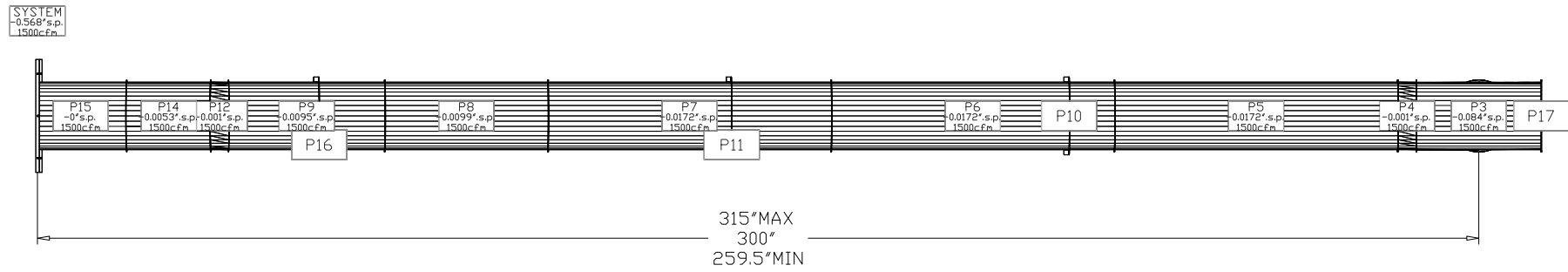
DUCT DIAMETER	HORIZONTAL SUPPORT (ft)	VERTICAL WALL SUPPORT (ft)	VERTICAL CURB SUPPORT (ft)
8"	10'	10'	24'
10"	10'	10'	24'
12"	10'	10'	24'
14"	10'	10'	24'
16"	10'	10'	24'
18"	10'	10'	24'
20"	10'	10'	24'
22"	10'	10'	24'
24"	10'	10'	24'

		JOB Arcadia Bar & Grill	
		LOCATION PORTLAND, ME, 04112	
		DATE 11/29/2017	JOB # 3186795
		DWG # 18	DRAWN BY
		REV.	SCALE 3/8" = 1'-0"

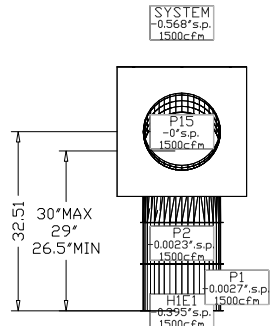
DuctWork #1 Front View



DuctWork #1 Top View



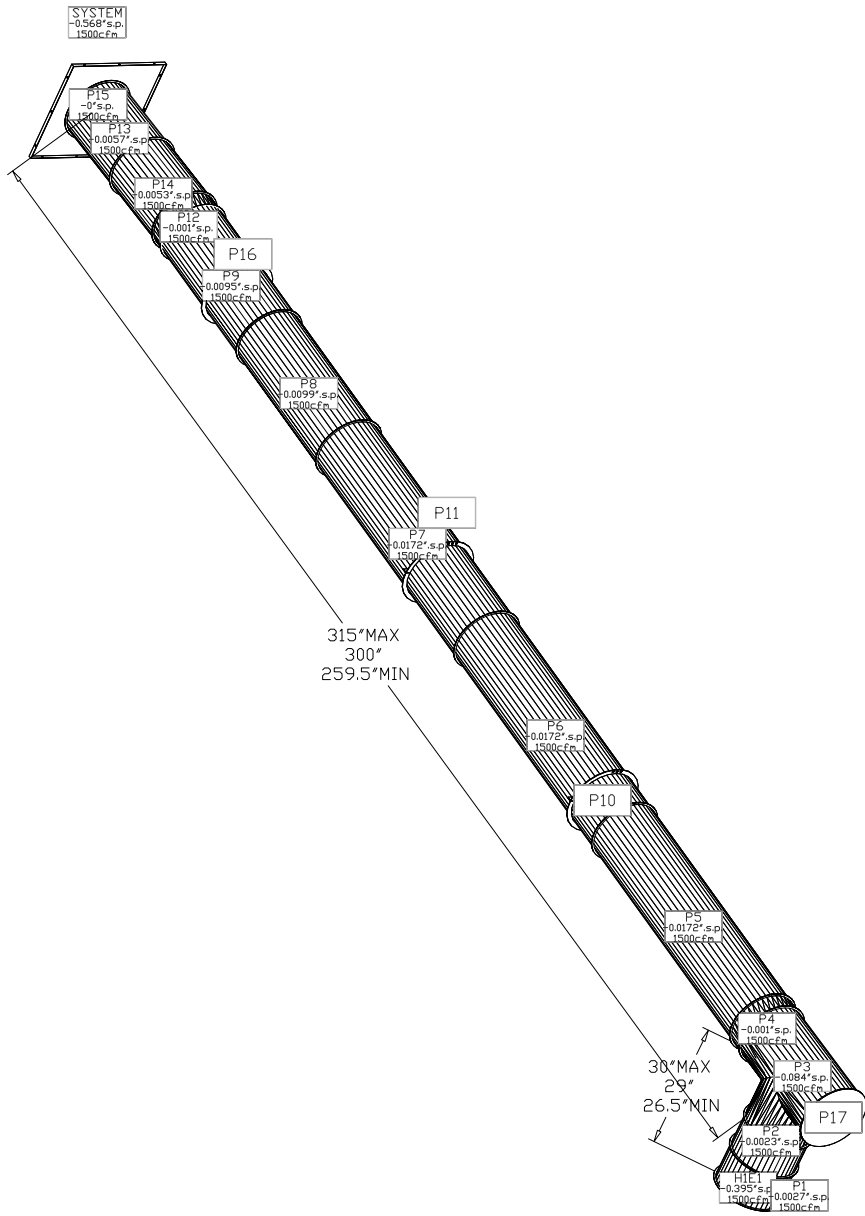
DuctWork #1 Side View



Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 19	DRAWN BY
REV.	SCALE NOT TO SCALE

DuctWork #1 SE View



Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 20	DRAWN BY
REV.	SCALE NOT TO SCALE

DuctWork #2 Parts - Job#3186795

Tag	Part #	CFM	S.P.	Weight	Velocity	QTY	Description
P1	VDW1412DWLT-2R-S	2000	-0.006	17.00	1870.88	1	Double Wall Duct - 14" Inner Duct, 12' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P2 Assembled w/P17	VDW141DWTEASY-2R-S	2000	-0.15	43.58	1870.88	1	Double Wall Duct - 14" Inner Tee Duct - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P3	VDW1401DWOFFSETASY-2R-S	2000	-0.004	13.88	1870.88	1	Double Wall Duct - 14" Inner Duct Riser & 1 Degree Offset - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P4	VDW1447DWLT-2R-S	2000	-0.0245	69.47	1870.88	1	Double Wall Duct - 14" Inner Duct, 47' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P5	VDW1447DWLT-2R-S	2000	-0.0245	69.47	1870.88	1	Double Wall Duct - 14" Inner Duct, 47' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P6	VDW1447DWLT-2R-S	2000	-0.0245	69.47	1870.88	1	Double Wall Duct - 14" Inner Duct, 47' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P7	VDW1447DWLT-2R-S	2000	-0.0245	69.47	1870.88	1	Double Wall Duct - 14" Inner Duct, 47' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P8	VDW1427DWLT-2R-S	2000	-0.0141	39.00	1870.88	1	Double Wall Duct - 14" Inner Duct, 27' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P9	VDW1447DWAJD-2R-S	2000	-0.0149	89.49	1870.88	1	Double Wall Adjustable Duct - 14" Inner Duct, 47' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell. Min Length = 18" / Max Length = 48.5" / Adjustment = 30.5" / Adjustable Section May Need To Be Cut.
P10	VDW1822SAD			4.58		1	Duct - Horizontal Saddle Support, Used With 18" OD - Includes Uni-Strut Cut To Length, 12 Grade 5 Hex Nuts, 8 Grade 8 Washers.
P11	VDW1822SAD			4.58		1	Duct - Horizontal Saddle Support, Used With 18" OD - Includes Uni-Strut Cut To Length, 12 Grade 5 Hex Nuts, 8 Grade 8 Washers.
P12	VDW1402DWOFFSETASY-2R-S	2000	-0.004	13.88	1870.88	1	Double Wall Duct - 14" Inner Duct Riser & 2 Degree Offset - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P13	VDW1413DWLT-2R-S	2000	-0.0069	25.39	1870.88	1	Double Wall Duct - 14" Inner Duct, 13' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P14 Assembled w/P15	VDW1423DWLT-2R-S	2000	-0.0121	33.62	1870.88	1	Double Wall Duct - 14" Inner Duct, 23' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
P15 Assembled w/P14 System at P15	VDW2314TPDBEX	2000	0	9.00	1870.88	1	Duct to Curb Transition 3/4" Down Turn, 23' Curb to 14" Duct, 16 GA Aluminized. Used on NCA14FA & NCA14HPFA. Transition Plate OD is 23.5" Designed For Use With Exhaust Fan. Non-Standard Part.
P16	VDW1822SAD			4.58		1	Duct - Horizontal Saddle Support, Used With 18" OD - Includes Uni-Strut Cut To Length, 12 Grade 5 Hex Nuts, 8 Grade 8 Washers.
P17 Assembled w/P2	VDW141DWACCDORCOV-2R-S			17.80		1	Double Wall Duct - 14" Inner Access Door & 18" Access Door Cover With Clamps - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Shell.
	3M-2000PLUS			0.80		4	Duct - 3M Fire Barrier 2000 Plus Silicone - Used as sealant to Seal Duct Joints.
	VDW141DWCLASY-2R			7.71		11	Duct - 14" Duct - 18" Double "V" Clamp - 2R Insulation & Single "V" Clamp Included - Reduced Clearance.
	VDW18DWRISER-2R-S			9.50		1	Double Wall Riser Cover - Used On 14" Inner Riser, 4' long - 2 Layers Reduced Clearance - 18" Stainless Steel Outer Riser Shell Assembly. Includes Insulation & Single V Clamps For Inner & Outer Connections.
Total Weight				691.77			

SINGLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

DUCT DIAMETER	HORIZONTAL SUPPORT (ft)	VERTICAL WALL SUPPORT (ft)	VERTICAL CURB SUPPORT (ft)
8"	10'	10'	24'
10"	10'	10'	24'
12"	10'	10'	24'
14"	10'	10'	24'
16"	10'	10'	24'
18"	10'	10'	24'
20"	10'	10'	24'
22"	10'	10'	24'
24"	10'	10'	24'



JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 21	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (ft)
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'

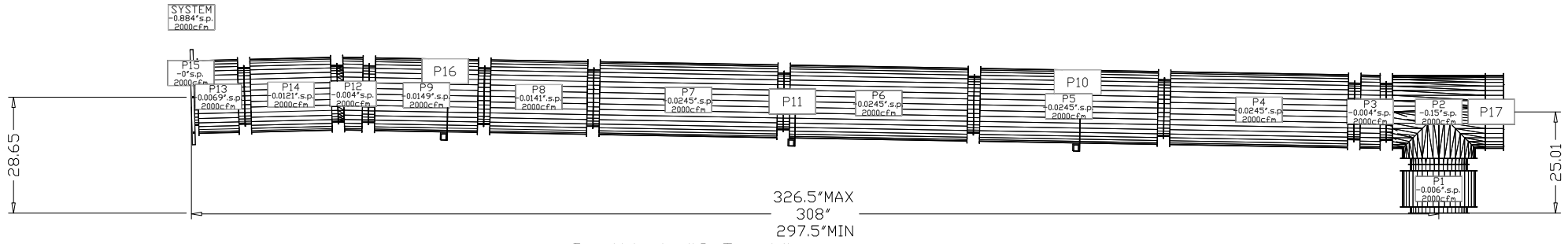
VERTICAL			
TYPE	WALL SUPPORT (ft)	CURB SUPPORT (ft)	FLOOR SUPPORT (ft)
2R & 2R HT	20'	24'	24'
3R	10'	24'	24'
3Z	10'	24'	24'



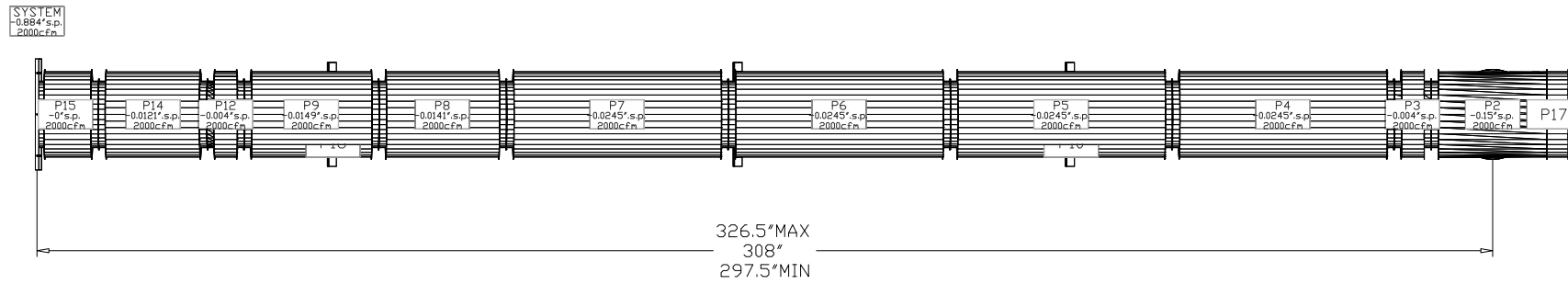
Ventilation Direct

<i>JOB</i> Arcadia Bar & Grill	
<i>LOCATION</i> PORTLAND, ME, 04112	
<i>DATE</i> 11/29/2017	<i>JOB #</i> 3186795
<i>DWG #</i> 22	<i>DRAWN BY</i>
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

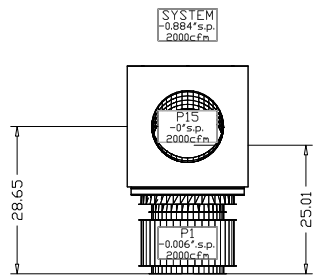
DuctWork #2 Front View



DuctWork #2 Top View

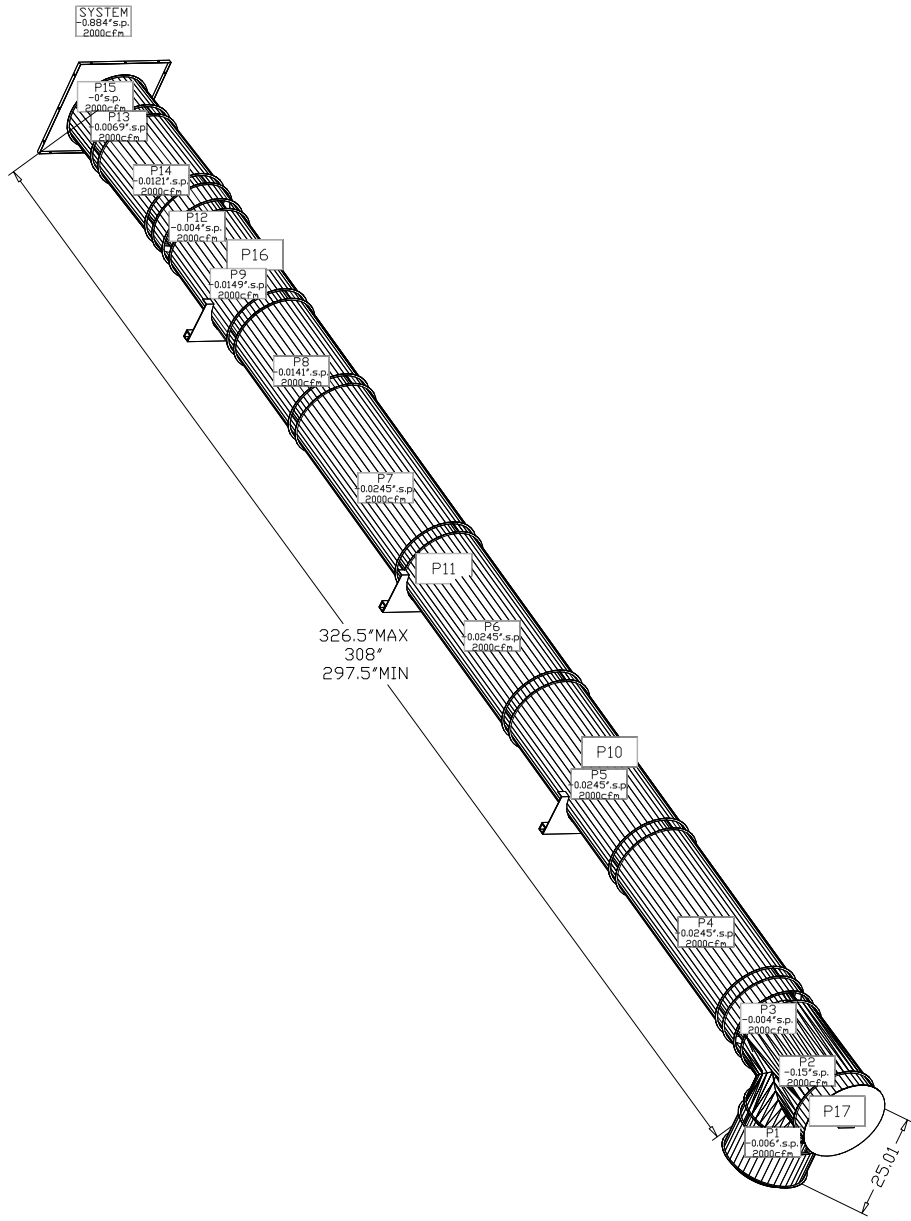


DuctWork #2 Side View



JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWG # 23	DRAWN BY
REV.	SCALE NOT TO SCALE

DuctWork #2 SE View



Ventilation Direct

JOB Arcadia Bar & Grill	
LOCATION PORTLAND, ME, 04112	
DATE 11/29/2017	JOB # 3186795
DWC # 24	DRAWN BY
REV.	SCALE NOT TO SCALE