

HOOD INFORMATION - Job#3206768

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)							HOOD CONSTRUCTION	HOOD CONFIG.		
					TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.		S.P.	END TO END	ROW
1		3347 BD-2	3' 0"	450 Deg.	450			4'	8'	450	1289	-0.320'	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 @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM			ELECTRICAL	SWITCHES			
1		Captrate Solo Filter	2	16'	16'	85% See Filter Spec.	1	Screw In Compact	NO									NO	140 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		RIGHT END STANDOFF(FIN/SLP) 1' Wide 33' Long Insulated
		RIGHT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS
		LEFT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS
		STRUCTURAL FRONT PANEL
		INSULATION FOR BACK OF HOOD
		RISER SENSOR INSTALL 6IN PLEN

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLID FILTER

THE CAPTRATE GREASE-STOP SOLID 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.

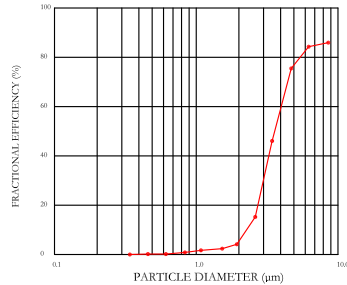
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

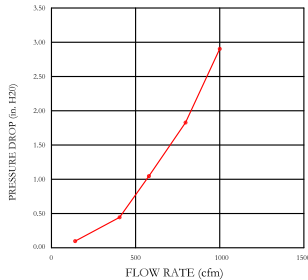
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

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

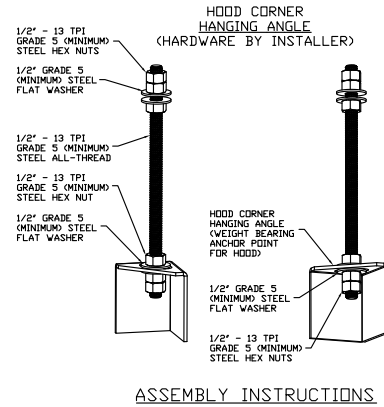
EFFICIENCY VS. PARTICLE DIAMETER



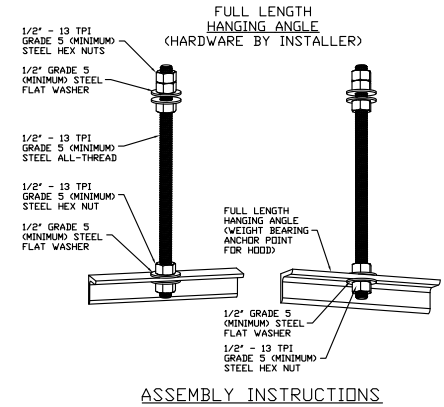
PRESSURE DROP VS. FLOW RATE



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



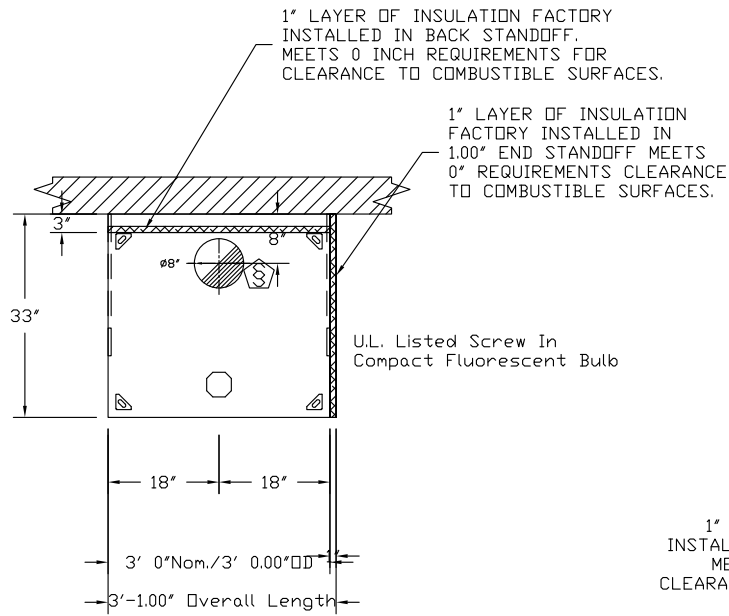
HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



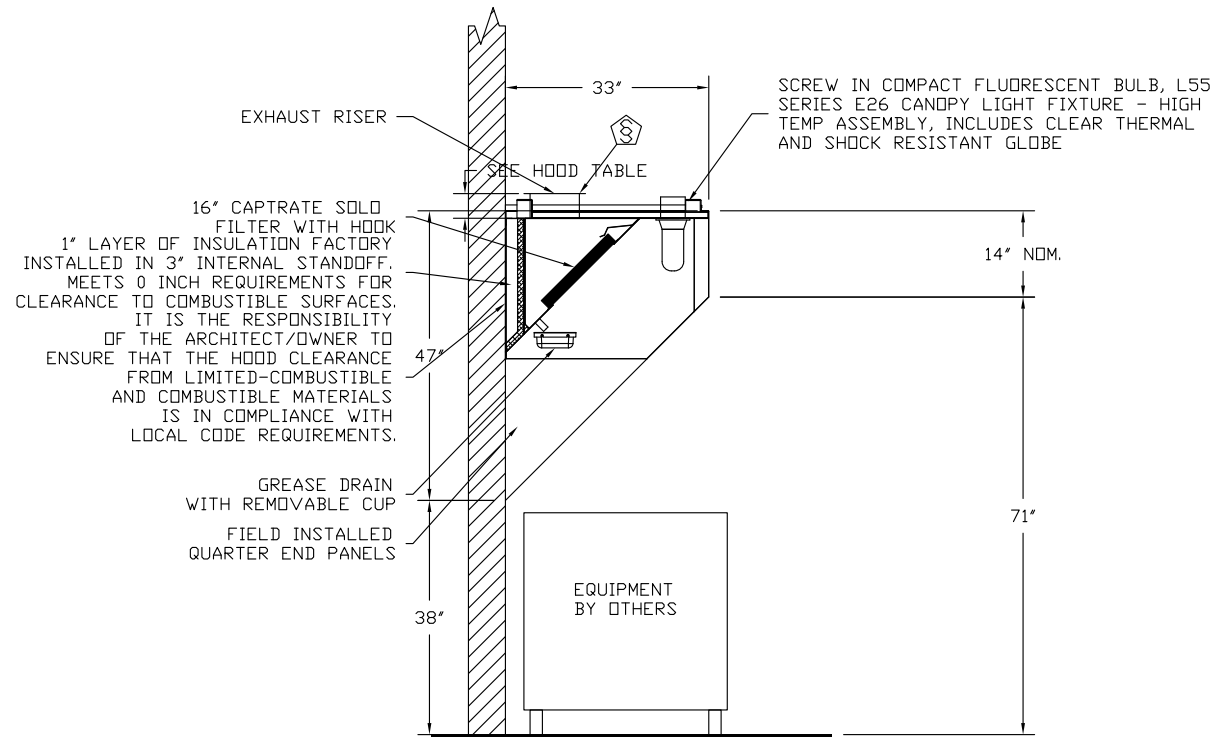
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JOB Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
DATE 11/10/2017	JOB # 3206768
DWG # 1	DRAWN BY kduncan21
REV.	SCALE 3/8" = 1'-0"



PLAN VIEW - Hood #1
3' 0.00" LONG 3347BD-2



SECTION VIEW - MODEL 3347BD-2
HOOD - #1



CAPTIVEAIR

JOB Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
DATE 11/10/2017	JOB # 3206768
DWG # 2	DRAWN BY kduncan21
REV.	SCALE 3/8" = 1'-0"

EXHAUST FAN INFORMATION - Job#3206768

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1		DUI2HFA	450	0.500	1351	0.250	0.1080	1	115	3.8	319 FPM	92	7.3

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box
		1 - 3 Year Extended Motor Warranty
		1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
		1 - Full Crating For Exhaust Fans

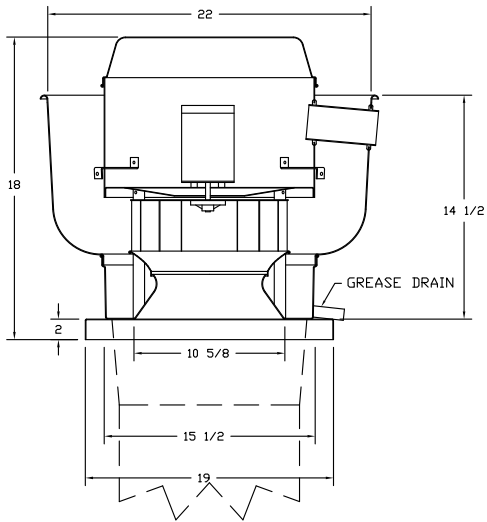
FAN ACCESSORIES

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

CURB ASSEMBLIES

ND.	DN FAN	WEIGHT	ITEM	SIZE
1	# 1	16 LBS	Curb	17.500"W x 17.500"L x 14.000"H

FAN #1 DUI2HFA - 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

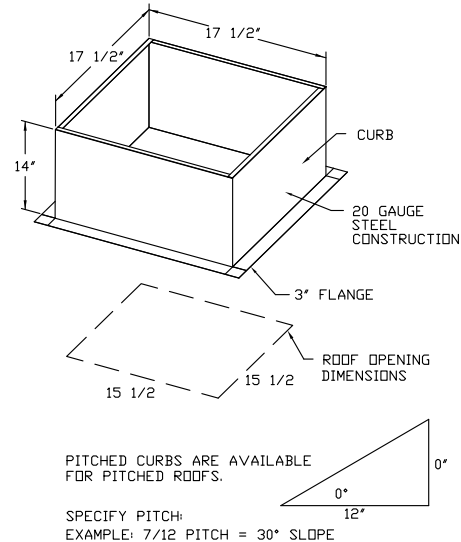
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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
- 3 YEAR EXTENDED MOTOR WARRANTY
- ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPM03 PREWIRE (NIDEC MOTOR)
- FULL CRATING FOR EXHAUST FANS



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

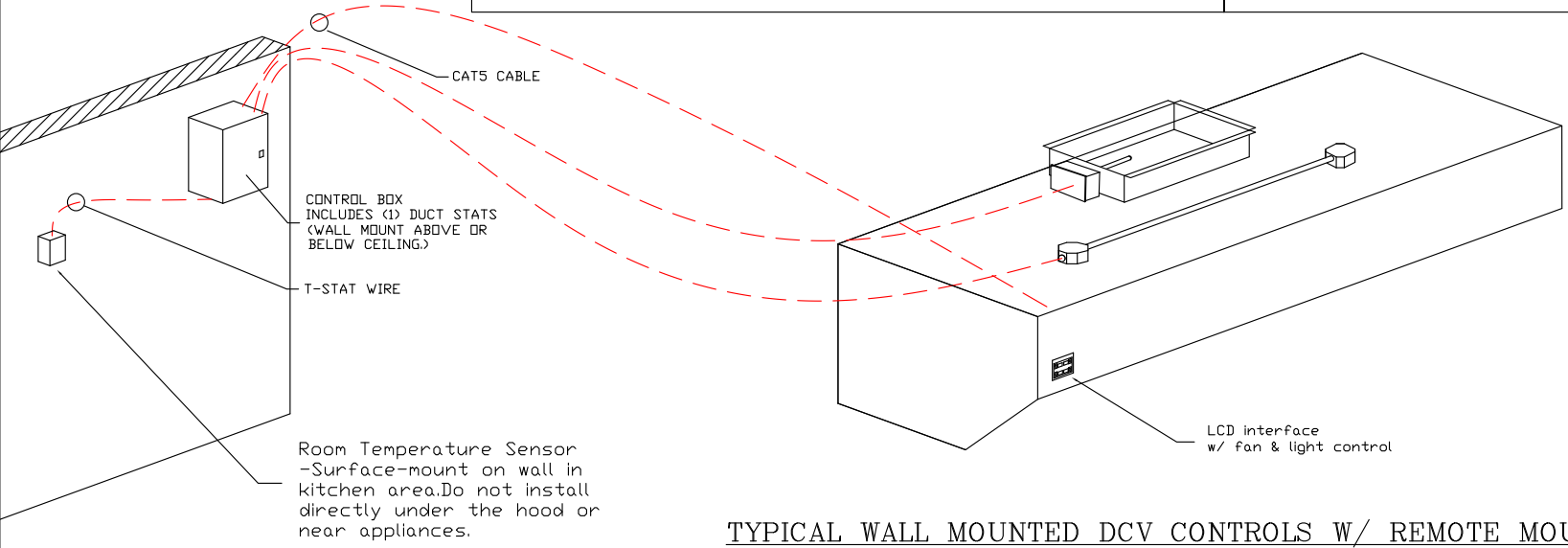
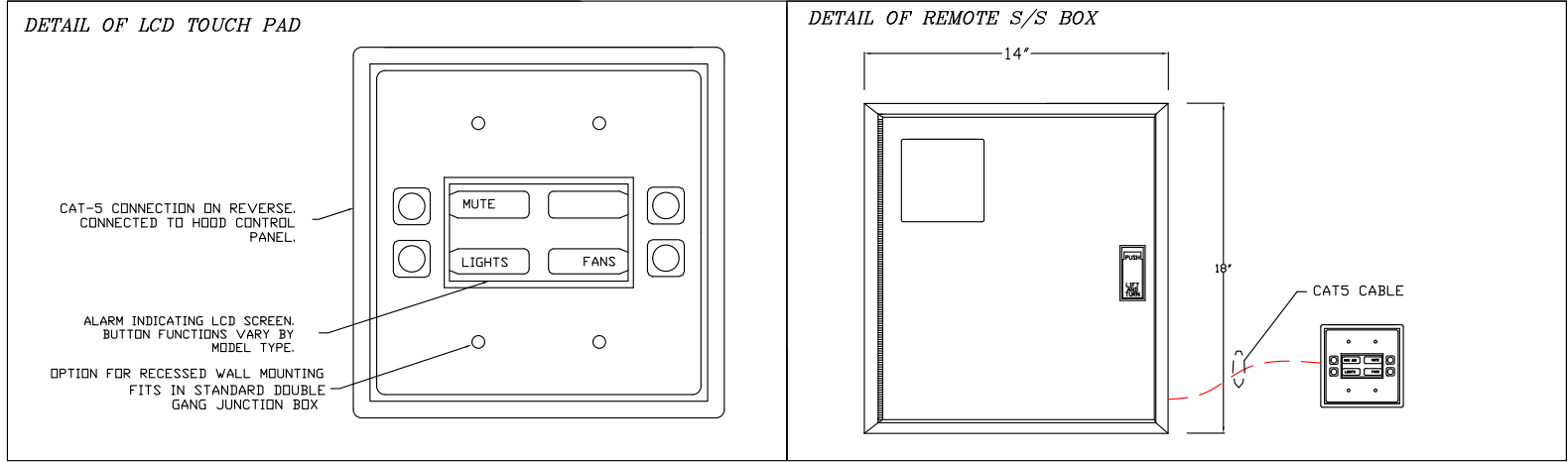
SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE



JOB Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
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DWG # 3	DRAWN BY kduncan21
REV.	SCALE 3/8" = 1'-0"

ELECTRICAL PACKAGES - Job#3206768

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	?	H.P.	VOLT	FLA
1		SC-110110FP	Wall Mount In SS Box	01 - Face Mount Left Side of Hood Hood # 1	1 Light 1 Fan	Smart Controls Thermostatic Control	Exhaust	1	0.250	115	3.8



TYPICAL WALL MOUNTED DCV CONTROLS W/ REMOTE MOUNTED LCD SCREEN)

-- FIELD WIRING



JOB Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
DATE 11/10/2017	JOB # 3206768
DWG # 4	DRAWN BY kduncan21
REV.	SCALE 3/8" = 1'-0"

DuctWork #1 Parts - Job#3206768

Tag	Part #	CFM	S.P.	Weight	Velocity	QTY	Description
P1	DW0845DWASY-2R-S	450	-0.028	15.79	1289.16	1	Double Wall Duct - 8" Inner 45 Duct - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P2	DW0812DWLT-2R-S	450	-0.005	10.62	1289.16	1	Double Wall Duct - 8" Inner Duct, 12' long - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P3 Assembled w/P4	DW08DWTEASY-2R-S	450	-0.0695	21.00	1289.16	1	Double Wall Duct - 8" Inner Tee Duct - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P4 Assembled w/P3	DW08DWACCDORCOV-2R-S			7.00		1	Double Wall Duct - 8" Inner Access Door & 12" Access Door Cover With Clamps - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P5	DW0802DWOFFSETASY-2R-S	450	-0.003	9.06	1289.16	1	Double Wall Duct - 8" Inner Duct Riser & 2 Degree Offset - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P6	DW0817DWLT-2R-S	450	-0.007	16.26	1289.16	1	Double Wall Duct - 8" Inner Duct, 17' long - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P7	DW0847DWAJD-2R-S	450	-0.01	55.90	1289.16	1	Double Wall Adjustable Duct - 8" Inner Duct, 47' long - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell. Min Length = 18' / Max Length = 50.5' / Adjustment = 32.5' / Adjustable Section May Need To Be Cut.
P8	DW1216SAD			2.97		1	Duct - Horizontal Saddle Support, Used With 12" DD - Includes Uni-Strut Cut To Length, 12 Grade 5 Hex Nuts, 8 Grade 8 Washers.
P9	DW0802DWOFFSETASY-2R-S	450	-0.003	9.06	1289.16	1	Double Wall Duct - 8" Inner Duct Riser & 2 Degree Offset - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P10 Assembled w/P11	DW0817DWLT-2R-S	450	-0.007	16.26	1289.16	1	Double Wall Duct - 8" Inner Duct, 17' long - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Shell.
P11 Assembled w/P10 System at P11	DW1708TP	450	0	6.62	1289.16	1	Duct to Curb Transition, 17-1/2' Curb to 8" Duct, 16 GA Aluminized. Used on DU10.
	3M-2000PLUS			0.80		2	Duct - 3M Fire Barrier 2000 Plus Silicone - Used as sealant to Seal Duct Joints.
	DW08DWCLASY-2R-S			5.33		7	Duct - 8" Duct - 12" Double "V" Clamp - 2R Insulation & Single "V" Clamp Included - Reduced Clearance.
	DW12DWRISER-2R-S			6.60		1	Double Wall Riser Cover - Used On 8" Inner Riser, 4' long - 2 Layers Reduced Clearance - 12" Stainless Steel Outer Riser Shell Assembly. Includes Insulation & Single V Clamps For Inner & Outer Connections.
Total Weight				216.05			

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 Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
DATE 11/10/2017	JOB # 3206768
DWG # 5	DRAWN BY kduncan21
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.

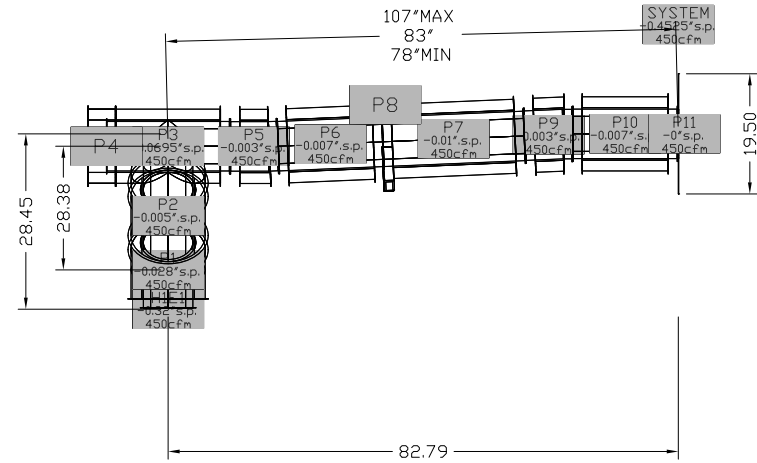
HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (ft)
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'

DuctWork #1 Top View

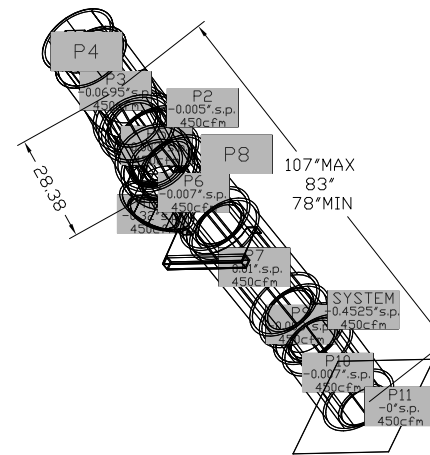
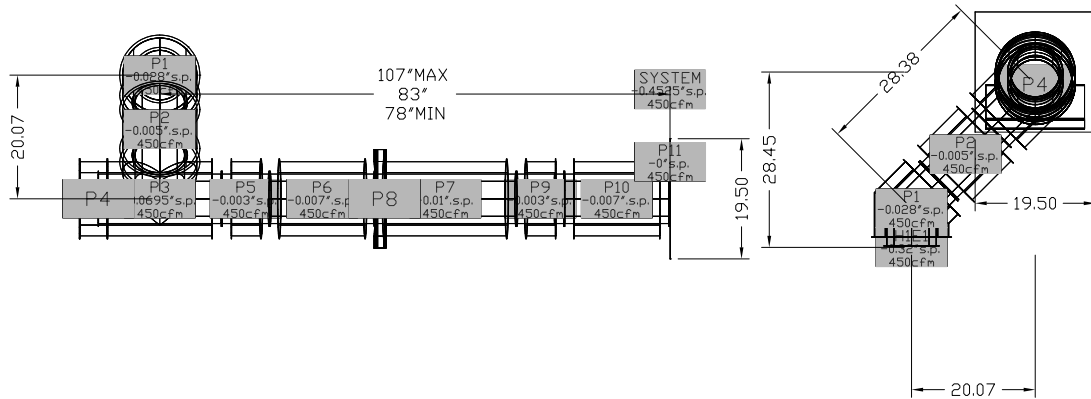
VERTICAL			
TYPE	WALL SUPPORT (ft)	CURB SUPPORT (ft)	FLOOR SUPPORT (ft)
2R & 2R HT	20'	24'	24'
3R	10'	24'	24'
3Z	10'	24'	24'

DuctWork #1 Side View

DuctWork #1 Front View



DuctWork #1 SE View



JOB Middle Street Cafe - Portland, ME r.1	
LOCATION PORTLAND, ME, 04101	
DATE 11/10/2017	JOB # 3206768
DWG # 6	DRAWN BY kduncan21
REV.	SCALE 3/8" = 1'-0"

Exhaust Fan Wiring

JOB

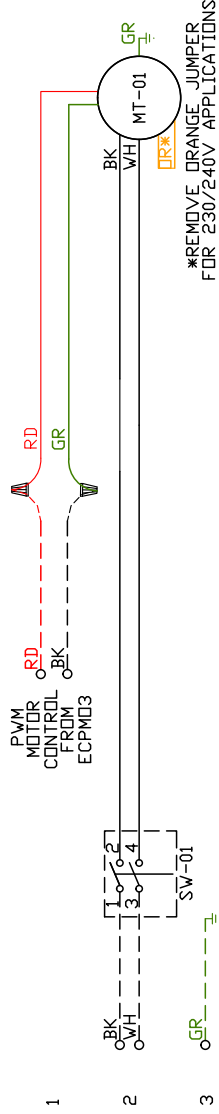
3206768 - Middle Street Cafe - Portland, ME r.1

DRAWING NUMBER EXH3206768-1

SHIP DATE 11/10/2017

MODEL DU12HPA

Installed Options



Label	Component Description	Location
MT-01	Fan Motor	[20]
SW-01	Main disconnect switch	[20]

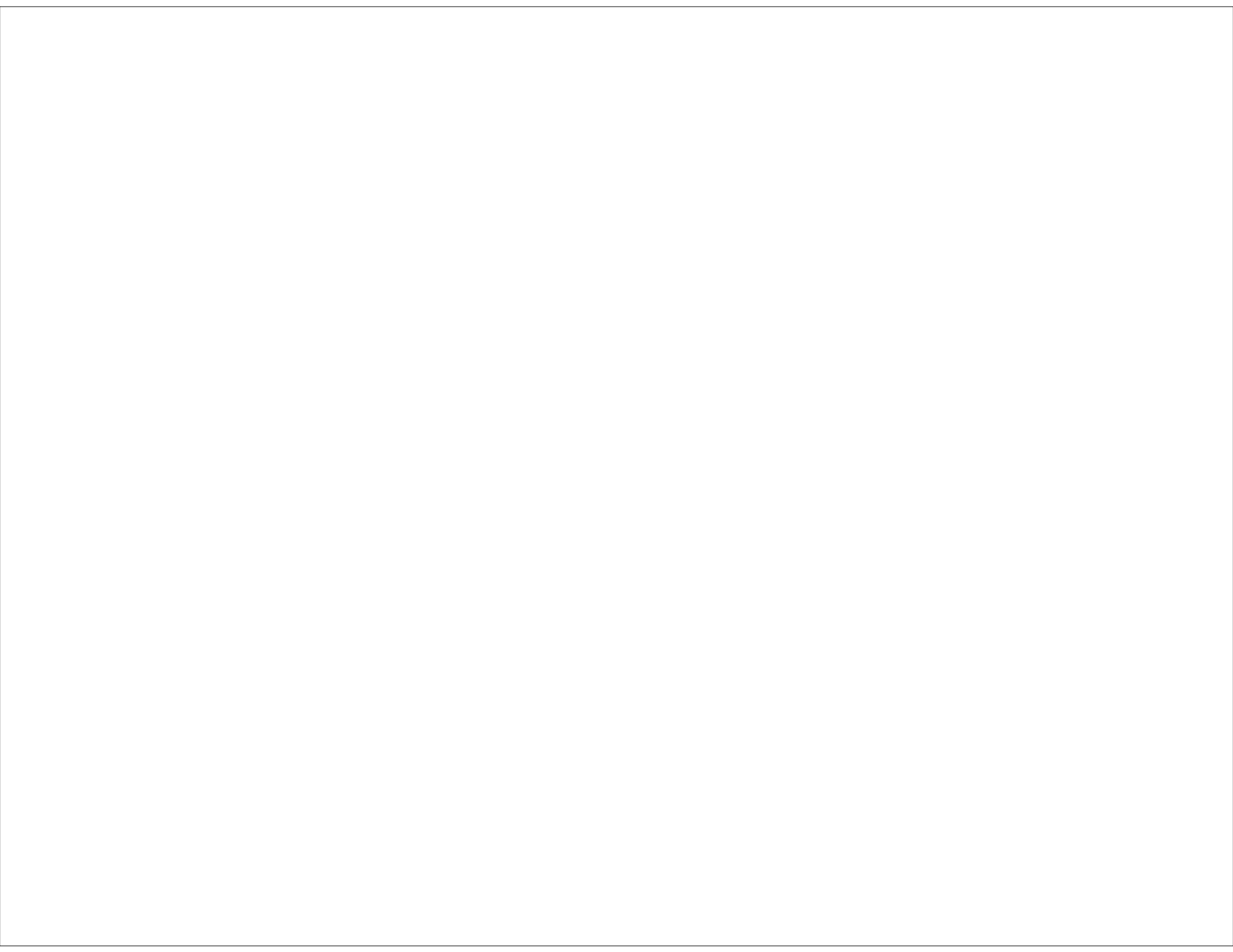
EXHAUST MOTOR INFO
0.25HP-115V-1P-3.8FLA

ELECTRICAL INFORMATION
MOTOR/CTRL MOP: 48A
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			



JOB NO
3206768

MODEL NUMBER
SC-110110FP

DRAWN BY
SCHEMATIC TYPE
INSTALL

DESCRIPTION OF OPERATION:
120V 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
Middle Street Cafe - Portland..

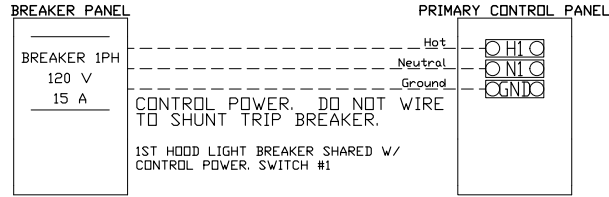
DATE
11/10/2017

DWG NO
ECP #1-1

BREAKER PANEL TO PRIMARY CONTROL PANEL

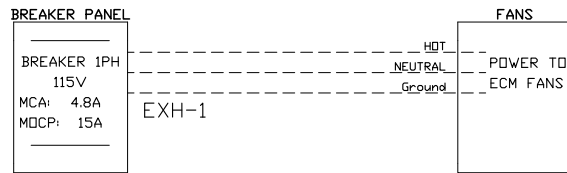
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



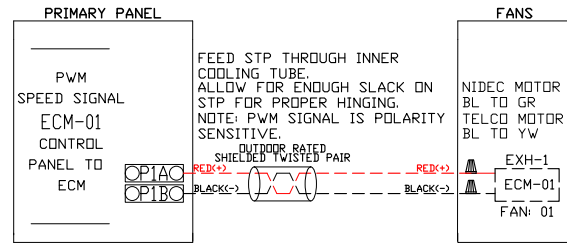
BREAKER PANEL TO FANS

Responsibility: Electrician



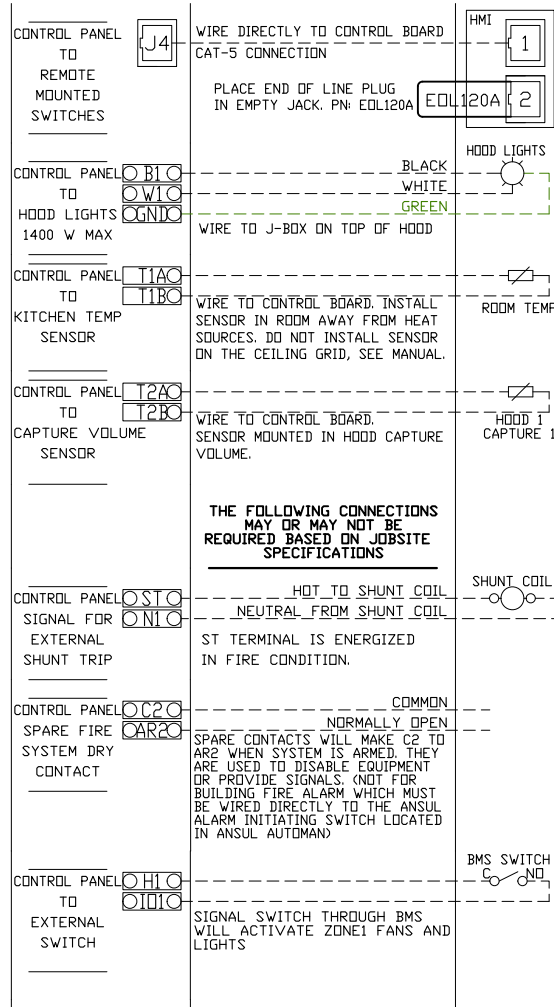
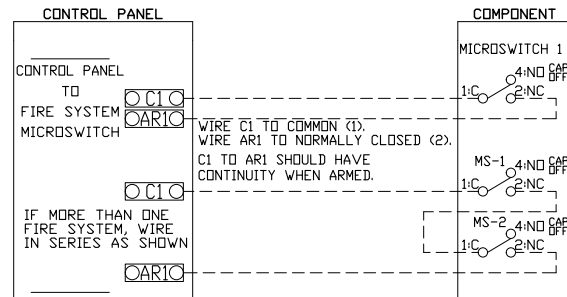
CONTROL PANEL TO FANS

Responsibility: Electrician

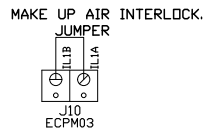
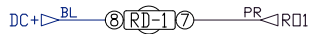
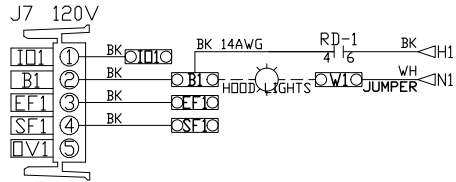
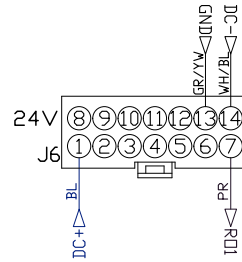
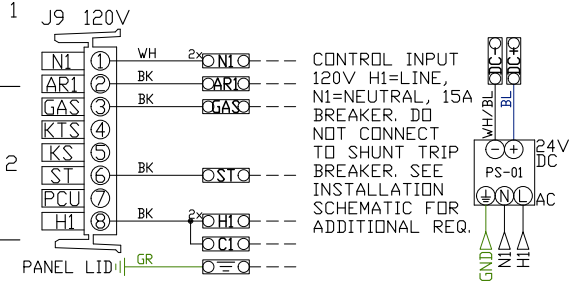


CONTROL PANEL TO ACCESSORY ITEMS

Responsibility: Electrician



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



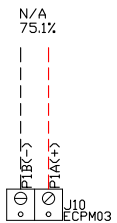
MOTOR POWER CIRCUIT

FACTORY WIRING SCHEMATIC CIRCUIT BOARDS DCV Rev. 2.08.00 HMI Rev. 2.08.00

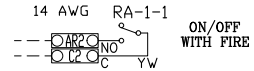
RA-x 120 VAC RELAY	RD-x 24 VDC RELAY
NO 4 3	NO 4 3
NC 2 1	NC 2 1
COIL 8 7	COIL 8 7
COM 6 5	COM 6 5

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-34.110.0186.0



DRY CONTACTS (SHOWN DE-ENERGIZED)



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

Middle Street Ca...
SC-110110FP

DESCRIPTION OF OPERATION

120V 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 NO 3206768	DRAWN BY
TYPE FACTORY	DATE 11/10/2017
DWG NO ECP #1-2	

