

SUBMITTAL REVIEW

CLIENT NAME: Vails Gate Fire Department

PROJECT TITLE: Vails Gate FD - New Firehouse

SUBMITTAL No.: 233813-1

H2M PROJECT No.: VGFD2001

SUBMITTAL NAME: Kitchen Hood System SD

SUBMITTAL REVIEW

**REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS.
NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS
OF DIMENSIONS OR DETAILS**

- | | |
|--|---|
| <input type="checkbox"/> NO EXCEPTIONS TAKEN | <input type="checkbox"/> SUBMIT SPECIFIED ITEM |
| <input checked="" type="checkbox"/> MAKE CORRECTIONS NOTED
<small>(RESUBMISSION NOT REQUIRED)</small> | <input type="checkbox"/> NO ACTION TAKEN
<small>(REVIEW IS THE RESPONSIBILITY OF ANOTHER PARTY)</small> |
| <input type="checkbox"/> REVISE & RESUBMIT | <input type="checkbox"/> NO ACTION TAKEN
<small>(THIS SUBMITTAL IS NOT REQUIRED BY THE CONTRACT)</small> |
| <input type="checkbox"/> REJECTED - SEE REMARKS | <input type="checkbox"/> RECEIVED FOR RECORD |

Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating their work with that of all other trades; and performing the work in a safe and satisfactory manner.

H2M architects + engineers

Date: 07/26/2023

By: MJV

Rev.: 2020-05-20

Comments:

Contractor to provide leak testing in accordance with specifications.

CONTRACTOR'S COMPANY NAME
ADDRESS

SUBMISSION TRANSMITTAL FORM
CLIENT NAME: Vails Gate Fire District
PROJECT TITLE: VGFD2001-New Firehouse

H2M PROJECT NO.: VGFD2001

Product, Item, or System Submitted:	Kitchen Hood System Shop Drawings (Phase 2)		
Submission Date:	2/28/2023	Submission Log No.:	233813-1
Specification Section:	233813	Paragraph Reference:	1.07/A
Contract Drawing Reference(s):			
Manufacturer's Name:			
Manufacturer's Mailing Address:			
Manufacturer's Contact Information:	<i>Name</i>	() <i>Tel. no.</i>	<i>Email</i>
Supplier's Name:	Joe Lombardo Plumbing & Heating		
Supplier's Mailing Address:			
Supplier's Contact Information:	<i>Name</i>	() <i>Tel. no.</i>	<i>Email</i>
This item is a substitution for the specified item:	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
<div style="border: 1px solid blue; padding: 5px;"> <p align="center">KEY CONSTRUCTION SERVICES, LLC</p> <p>Project No: VGFD2001</p> <p><small>Reviewed for General Acceptance Only. This review does not relieve the Subcontractors or Suppliers of responsibility for making the work conform to the requirements of the contract. The Subcontractor and Suppliers are responsible for all dimensions, correct fabrication and accurate fit with the work of other trades.</small></p> <p align="center"><u>SUBJECT TO ARCHITECT AND OR ENGINEER APPROVAL</u></p> <p><i>Signed Joseph Manfredi (PM) Date: 2/28/2023</i></p> </div> <p>Contractor's Approval Stamp with Signature & Date</p>	<p><u>Contractor's Brief Comments or Remarks</u> (attach separate letter as needed):</p> <p>By making this submission, we represent that we have determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving the item into the enclosed space, materials, catalog and model numbers and similar data and that we have checked and coordinated this submission with other work at or adjacent to the installed location in accordance with the requirements contained in the Contract Documents.</p>		

END OF SECTION 013300

Joe Lombardo

Plumbing & Heating of Rockland, Inc.

321 Spook Rock Road
 Suffern, NY 10901
 Ph. 845-357-6537 Fx 845-357-8529
 E: info@josephlombardo.com
 Website: www.josephlombardo.com

Rockland Cty. Plumbing #1000 Rockland Cty. Cooling # 1468
 Westchester Cty. Plumbing #460 New Jersey State Plumbing #12702

TO: Key Construction
4246 Albany Post Rd. Suite 1
Hyde Park, NY 12538

LETTER OF TRANSMITTAL

DATE: 02/27/23	JOB NO.
ATTENTION: Joe Manfredi	
RE: Vails Gate Firehouse	

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

Shop Drawings Prints Plans Samples Specifications

Copy of letter Change order _____

COPIES	DATE	No.	DESCRIPTION
1	02/27/23	233813	KITCHEN HOOD SYSTEM

THESE ARE TRANSMITTED as checked below:

For approval No Exceptions Taken Resubmit _____ copies for review

For your use Make Corrections Noted Submit _____ copies for distribution

As requested Rejected Return _____ corrected prints

For review and comment _____

FOR BIDS DUE _____ 20__ PRINTS RETURNED AFTER LOAN TO US

COPY TO: Joe Manfredi

SIGNED: Ronald J. Lombardo

HOOD INFORMATION - JOB#5607698

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG			
										WIDTH	LENG	HEIGHT	DIA			CFM	VEL	SP	END TO END
1		5424 ND-2-PSP-F	CAPTIVEAIRE	6' 0"	600 DEG	I	HEAVY	195	1170		4'	10'	1170	2145	-0.936'	983	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)			LIGHT(S)			UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD WEIGHT			
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE			SIZE	MODEL #	QUANTITIES
1		CAPTRATE SOLID FILTER	4	16"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO	LEFT	12"x54"x24"	TANK FS	4.0	DCV-1111	1 LIGHT 1 FAN	YES	696 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1		FIELD WRAPPER 18.00' HIGH FRDNT, LEFT, RIGHT. BACKSPLASH 80.00' HIGH X 84.00' LONG 430 SS VERTICAL. RIGHT VERTICAL END PANEL 27' TOP WIDTH, 21' BOTTOM WIDTH, 80' HIGH INSULATED 430 SS. LEFT VERTICAL END PANEL 27' TOP WIDTH, 21' BOTTOM WIDTH, 80' HIGH INSULATED 430 SS. SENSOR-CV.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG	DIA	CFM
1		Front	84'	14'	6'	MJA	12"	20"	491	0.133"
						MJA	12"	20"	491	0.133"

FIRE SYSTEM INFORMATION - JOB#5607698

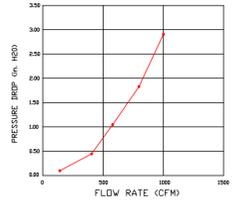
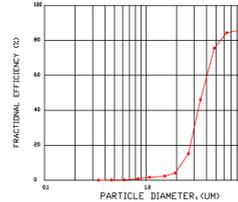
FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0	16	FIRE CABINET LEFT	LEFT, HOOD 1

GAS VALVE(S)

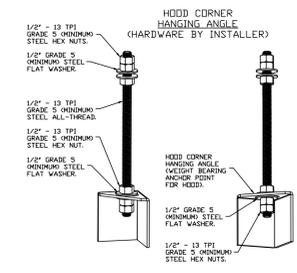
FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	2.000	CAPTIVEAIRE SYSTEMS

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 8-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. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER. EFFICIENCY VS. PARTICLE DIAMETER

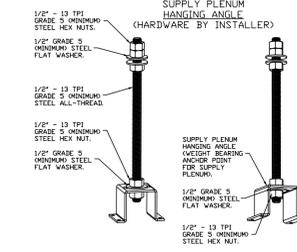


CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA #96.
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.



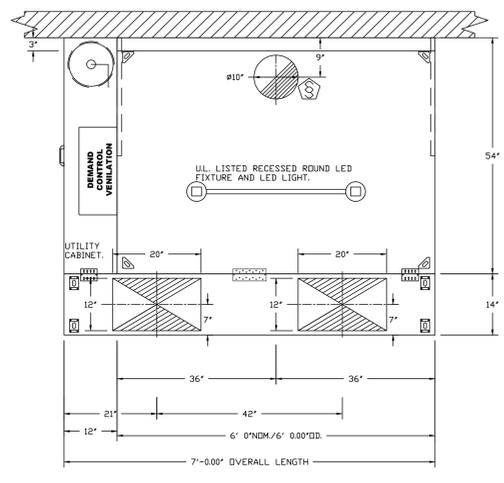
ASSEMBLY INSTRUCTIONS

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 PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



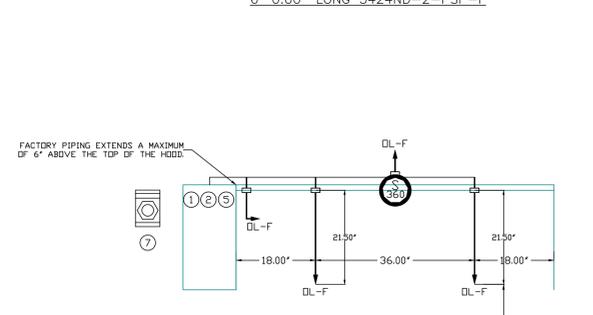
PLAN VIEW - HOOD #1
6' 0.00" LONG 5424ND-2-PSP-F

NOTES

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED 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.
- DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

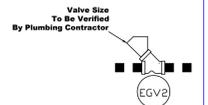
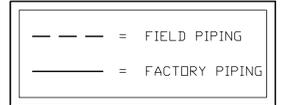
JOB #: 5607698.
JOB NAME: VAILS GATE FIRE DISTRICT.
SYSTEM SIZE: TANK-SP-1 TOTAL FP REQUIRED: 16.
HOOD # 1 6' 0.00" LONG X 54' WIDE X 24" HIGH.
RISER # 1 SIZE: 10" DIA.
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

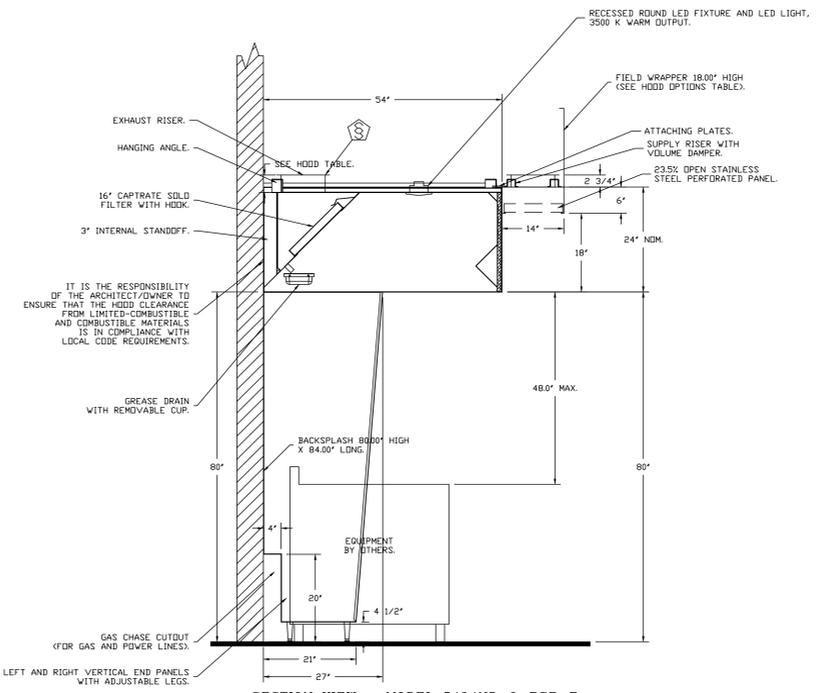


LEGEND - FIRE CABINET TANK SYSTEM

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.



DETAIL - FIRE SUPPRESSION SYSTEM LAYOUT



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

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

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted
Approved with NO Exception Taken
Revise and Resubmit
SIGNATURE _____
Your Title _____ Date _____

REVISIONS

DESCRIPTION	DATE

CAPTIVEAIRE
N. J. & S. N.Y.
Rutherford, NJ, 07070 PHONE: (201) 689-4982 FAX: (919) 747-5624 EMAIL: info@captivaire.com www.captivaire.com

Vails Gate Fire District
872 Blooming Grove Turnpike,
New Windsor, NY, 12553

DATE: 2/24/2023
DWG.#: 5607698
DRAWN BY: billy.gast
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 1

EXHAUST FAN INFORMATION - JOB#5607698

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	KX-1	1	DUBSHFA	CAPTIVEAIRE	1170	1.500	1391	TEAD-ECM	0.750	0.4880	1	208	5.2	370 FPM	89	12.1

CONDENSER DETAILS

FAN UNIT NO	TAG	FAN UNIT MODEL #	CONDENSER NO	TONNAGE	VOLTAGE	PHASE	FREQUENCY	MCA	RLA	MAX FUSE SIZE	MIN WIRE SIZE	SEER
2	MAU-1	A1-15D-MPU	1	3	208-230	3 PHASE	60 HZ	14.5 AMPS	11.9 AMPS	20 AMPS	14 AWG	14

MUA FAN INFORMATION - JOB#5607698

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SDNES
2	MAU-1	1	A1-15D-MPU	15MF-1-MDD	A1	450	963	0.500	1536	DDP, PREMIUM	1.000	0.5230	3	208	3.1	3.9A	15A	1125	16.6

COILS - JOB#5607698

FAN UNIT NO	TAG	COIL TYPE	DESIGN CFM	COOLING										HEATING											
				ENTERING DB TEMP	ENTERING WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	ENTERING FLUID TEMP	LEAVING FLUID TEMP	FLUID FLOW RATE	PERCENT GLYCOL	TOTAL CAPACITY	SENSIBLE CAPACITY	LATENT CAPACITY	ENTERING DB TEMP	LEAVING DB TEMP	ENTERING FLUID TEMP	LEAVING FLUID TEMP	FLUID FLOW RATE	PERCENT GLYCOL	STEAM PRESSURE	TOTAL CAPACITY	SENSIBLE CAPACITY		
2	MAU-1	DX AND HOT WATER	983	86.0°F	72.0°F	66.9°F	61.1°F	---	---	---	---	---	---	36.0 MBH	20.0 MBH	16.0 MBH	20.0°F	104.2°F	180.0°F	170.0°F	17.48 GAL/MIN	20	---	89.5 MBH	89.5 MBH

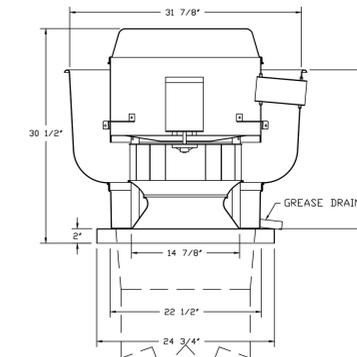
FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KX-1	1	GREASE BOX
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECM03 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
2	MAU-1	1	SIZE 1 UNTEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	MOTORIZED BACKDRAFT DAMPER FOR SIZE 1 HOUSING - MEETS AMCA CLASS 1A RATING
		1	HOT WATER COIL SECTION A1-2 ROW, TEMPERATURE CONTROLS, MIXING VALVES, THERMOSTATS, AND FREEZE PROTECTION BY OTHERS
		1	INSULATED BLOWER SECTION SIZE 1-2 COMMERCIAL
		1	MIXING BOX SHELL FOR SIZE 1 MDD PACKAGE UNIT CONDENSER SUPPORT
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV DR PREWIRE WITH VFD) - THREE PHASE ONLY
		1	3 TON SINGLE CIRCUIT MODULAR PACKAGED AC COOLING OPTION FOR SIZE 1 MUA (450 TO 1200 CFM), 208V/230V, 3 PHASE, COOLING THERMOSTAT OR PROGRAMMABLE STAT REQUIRED FOR PROPER OPERATION
		1	MDD PACKAGE UNIT AC CONTROLS FOR UNTEMPERED FANS
		1	2 YEAR PARTS WARRANTY

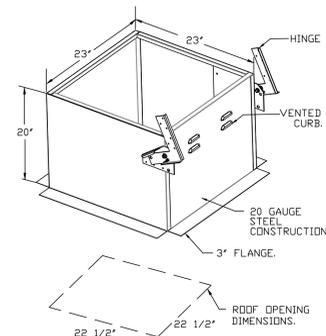
CURB ASSEMBLIES

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KX-1	36 LBS	CURB	23.000"W X 23.000"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
2	# 2		89 LBS	RAIL	6.000"W X 21.000"L X 20.000"H RIGHT.
2	# 2		89 LBS	RAIL	6.000"W X 21.000"L X 20.000"H RIGHT.
2	# 2		89 LBS	CURB	21.000"W X 21.000"L X 20.000"H ALONG LENGTH, RIGHT.
2	# 2		89 LBS	RAIL	6.000"W X 21.000"L X 20.000"H RIGHT.

FAN #1 DUBSHFA - EXHAUST FAN (KX-1)

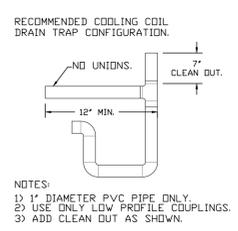
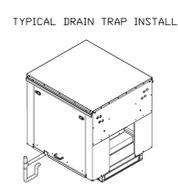
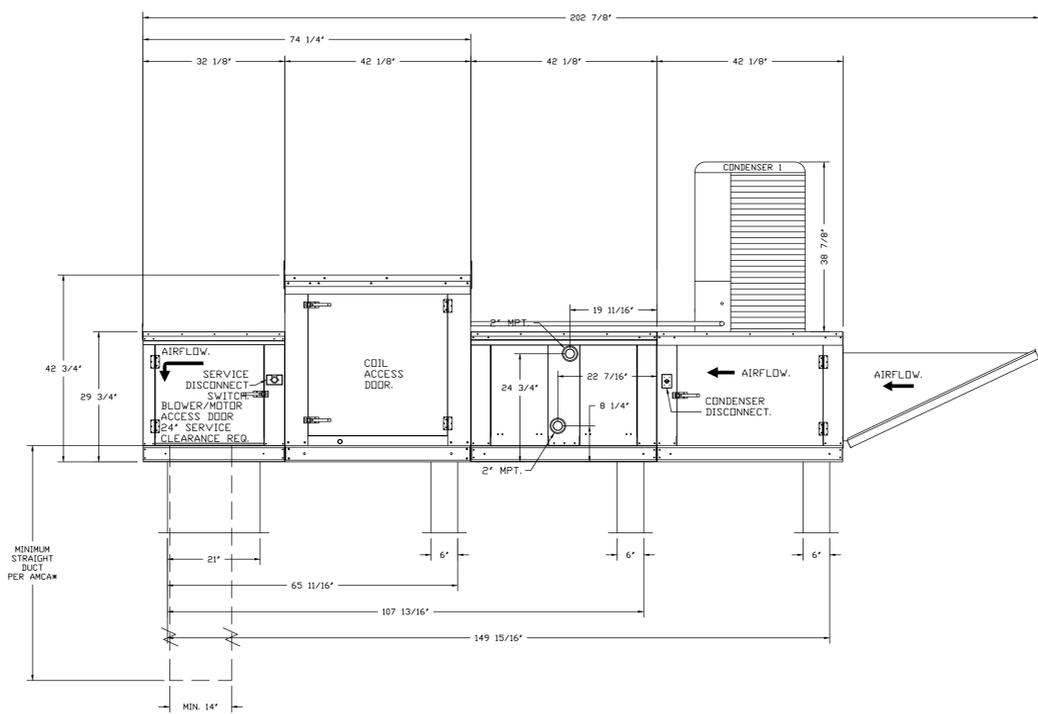
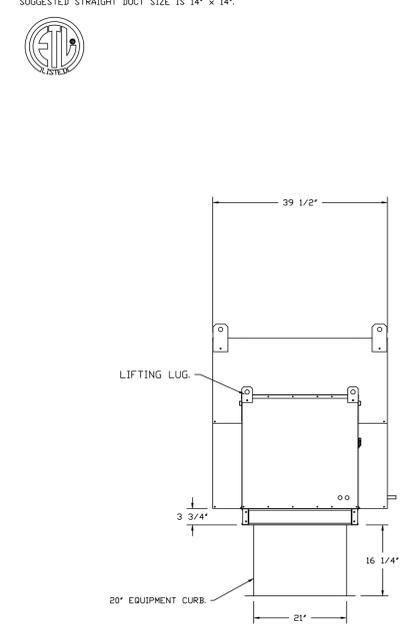
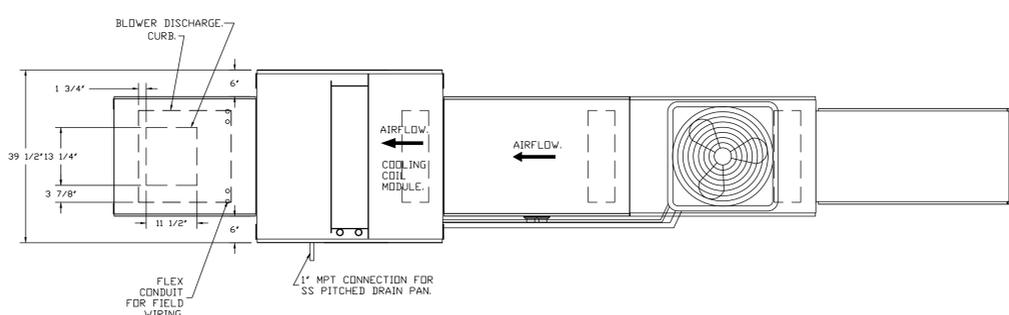


- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
 - ROOF MOUNTED FANS.
 - RESTAURANT MODEL.
 - UL705 AND UL762 AND ULC-5645
 - VARIABLE SPEED CONTROL.
 - INTERNAL WIRING.
 - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
 - HIGH HEAT OPERATION 300°F (149°C).
 - GREASE CLASSIFICATION TESTING.
 - NEMA 3R SAFETY DISCONNECT SWITCH.
- 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
 - ECM WIRING PACKAGE - PWM SIGNAL FROM ECM03 PREWIRE (TELCO MOTOR), CCW ROTATION
 - 2 YEAR PARTS WARRANTY.



FAN #2 A1-15D-MPU - SUPPLY FAN (MAU-1)
 1. SUPPLY UNIT WITH 15" MIXED FLOW DIRECT DRIVE FAN IN SIZE #1 HOUSING.
 2. INTAKE HOOD WITH EZ FILTERS.
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
 4. DOWN DISCHARGE CONSTRUCTION FOR SIZE 1 UNTEMPERED DIRECT DRIVE AHUS.
 5. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 UNTEMPERED UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LEAK TIGHT, TUBES ACTUATOR INCLUDED.
 6. HOT WATER COIL MODULE FOR SIZE 1 MODULAR FANS - 3350 CFM @ 70DEG TEMP RISE (253,260 BTU'S) COIL - 0MS140B-190X06.5. OPPOSITE AIRFLOW REQUIRES SPECIAL ORDER COIL WITH EXTENDED LEAD-TIME. TEMPERATURE CONTROLS, MIXING VALVES, THERMOSTATS, AND FREEZE PROTECTION BY OTHERS.
 7. INSULATED BLOWER HOUSING SIZES 1-2 COMMERCIAL MODULAR.
 8. SUPPORT SHELL FOR SIZE 1 MODULAR PACKAGE UNIT. INCLUDES CONTROL VESTIBULE. INCLUDES CONDENSER SUPPORTS. DOES NOT INCLUDE RETURN AIR OR INLET AIR DAMPER.
 9. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.
 10. 3 TON SINGLE CIRCUIT MODULAR PACKAGED AC COOLING OPTION FOR SIZE 1 MODULAR PACKAGED UNIT. INCLUDES CONDENSER, DA COIL, FILTER/DRYER KIT, THERMAL EXPANSION VALVE, R410A REFRIGERANT, AND REFRIGERANT PIPING (450 TO 1,225 CFM) WHEN ORDERED WITH OPPOSITE AIRFLOW CONDENSERS ACCESS AND COIL PIPING WILL REMAIN IN STANDARD POSITION. DRAIN AND SLEDS WILL MOVE TO THE OPPOSITE SIDE. ANY OTHER CHANGE WILL REQUIRE CLI. CONDENSERS REQUIRE SEPARATE 208V, 3 PHASE POWER SUPPLY UNLESS ORDERED WITH SINGLE POINT CONNECTION. COIL # 201402.
 11. CONTROL PACKAGE FOR MDD PACKAGE UNIT COOLING ONLY UNIT. INCLUDES AIRFLOW PROVING SWITCH, RTULINK-ACHP BOARD AND TERMINAL BLOCKS.
 12. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/MPU SECTION).
 13. 2 YEAR PARTS WARRANTY.

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 001. WHEN USING RECTANGULAR DUCTWORK ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL BRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" X 14".



NOTES:
 1) 1" DIAMETER PVC PIPE ONLY.
 2) USE ONLY LOW PROFILE COUPLINGS.
 3) ADD CLEAN OUT AS SHOWN.

REVISIONS

NO.	DESCRIPTION	DATE

CAPTIVEAIRE
 www.captiveaire.com
 N. J. & S. N.Y.
 Rutherford, N.J. 07070 PHONE: (201) 689-4982 FAX: (919) 747-5624 EMAIL: info@captiveaire.com

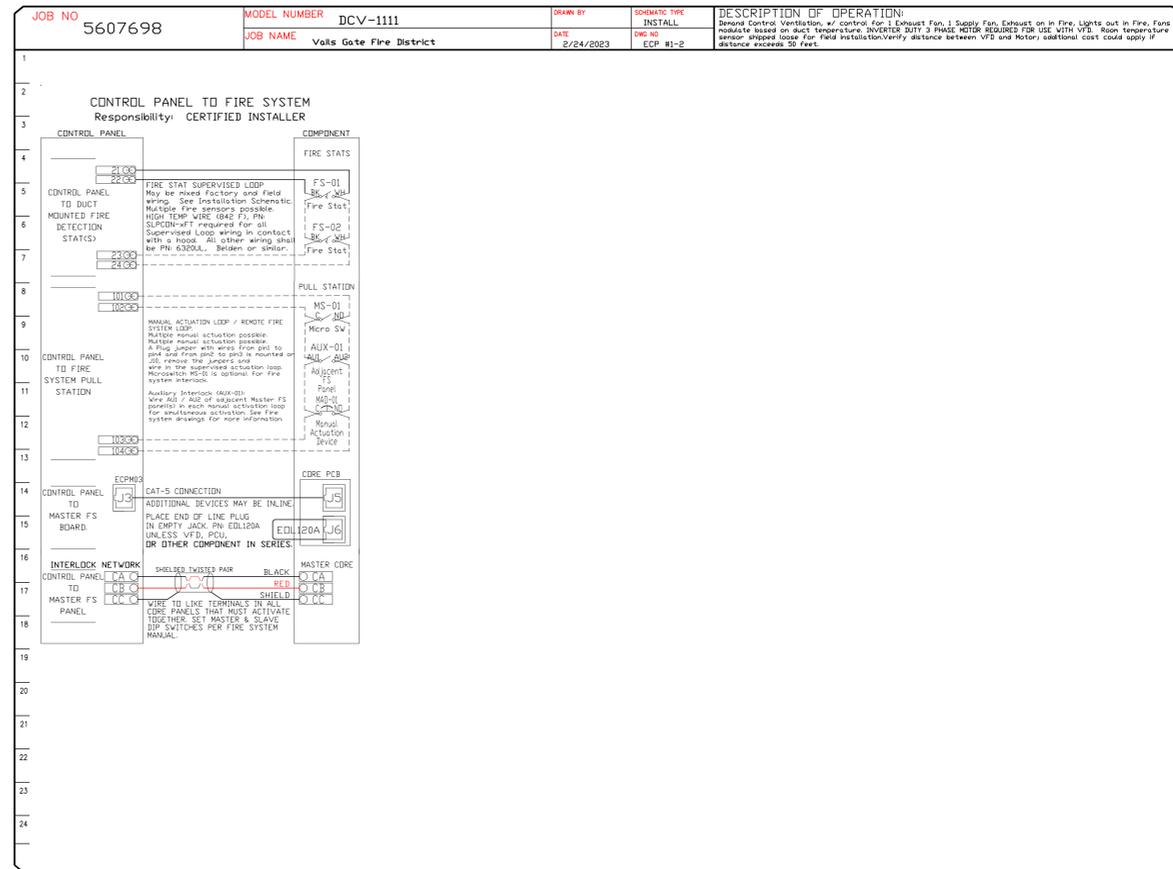
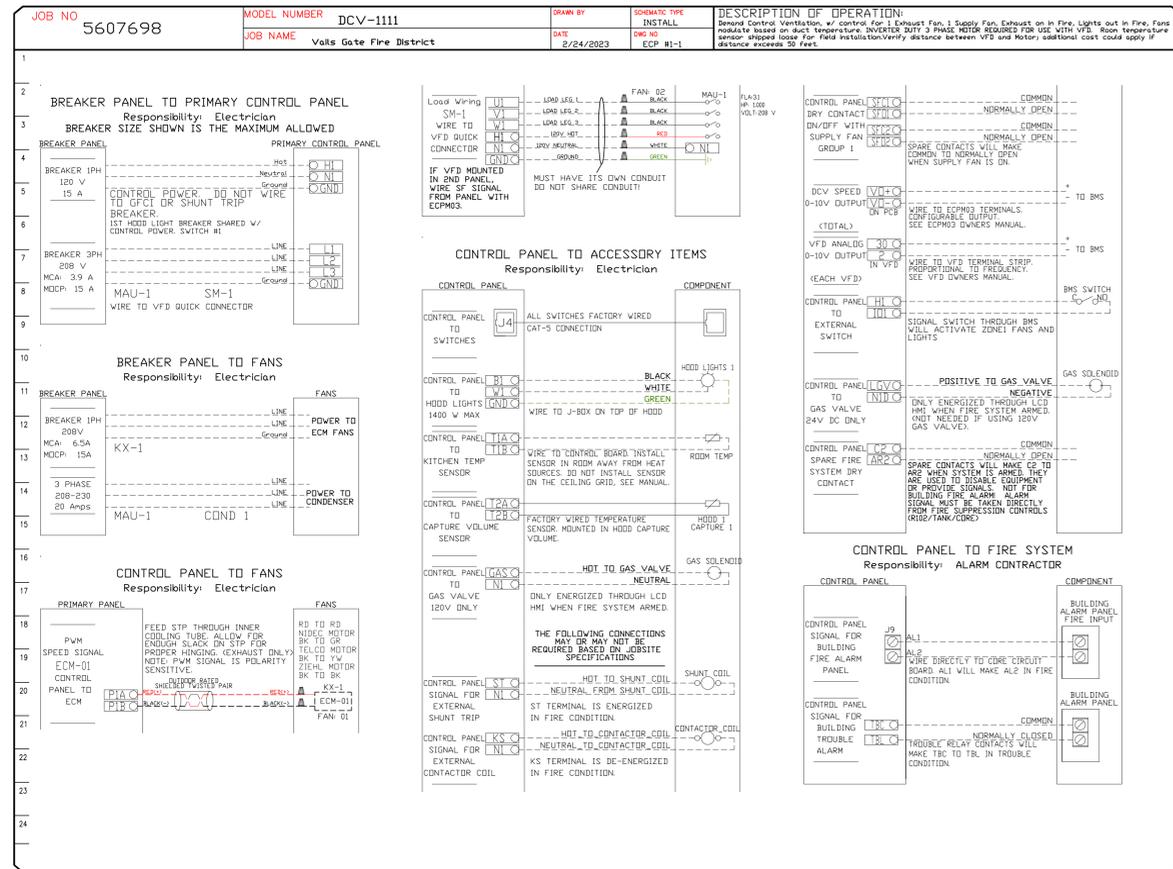
Vails Gate Fire District
 872 Blooming Grove Turnpike,
 New Windsor, NY, 12553

DATE: 2/24/2023
 DWG.#: 5607698
 DRAWN BY: billy.gast
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING

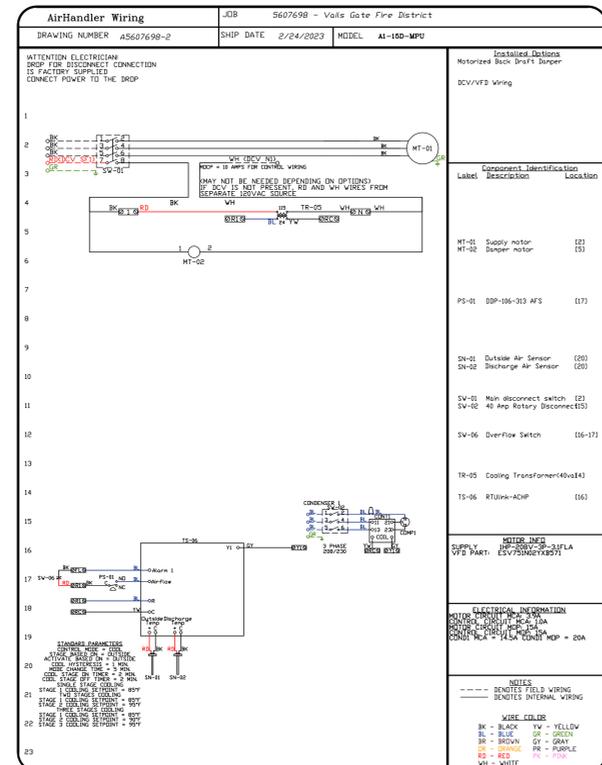
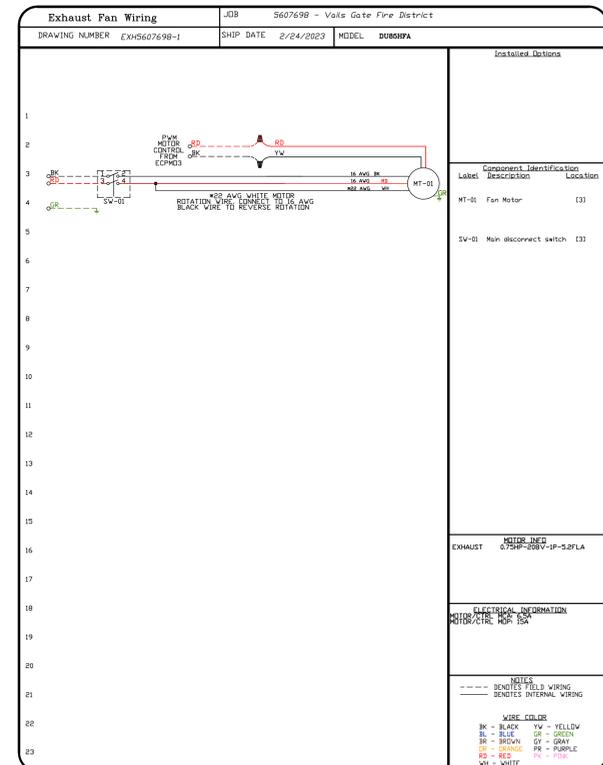
SHEET NO. 2

ELECTRICAL PACKAGE - JOB#5607698

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT	FLA	
1		DCV-1111	UTILITY CABINET LEFT	UTILITY CABINET LEFT	1 LIGHT	SMART CONTROLS DCV	KX-1	EXHAUST	1	0.750	208	5.2
				HOOD # 1	1 FAN		MAU-1	SUPPLY	3	1.000	208	3.1



DETAIL - HOOD/FAN CONTROL PANEL WIRING



REVISIONS	DATE



Vails Gate Fire District
872 Blooming Grove Turnpike,
New Windsor, NY, 12553

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SCALE: 3/4" = 1'-0"

MASTER DRAWING

DUCTWORK #1 PARTS - JOB#5607698 DOUBLE WALL

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1090DWASY-2R-S	1170				-0.21	20.35	2145.15	1	DOUBLE WALL DUCT - 10" INNER 90 DUCT - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P2	DW1001DWDFSETASY-2R-S	1170				-0.008	10.25	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT RISER & 1 DEGREE OFFSET - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P3	DW1047DWLT-2R-S	1170				-0.045	47.26	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT, 47' LONG - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P4	DW1418SADKIT						5.82		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 14" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1418SAD, & HARDWARE BAG 4.
P5	DW1047DWAJD-2R-S	1170				-0.034	72.54	2145.15	1	DOUBLE WALL ADJUSTABLE DUCT - 10" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 49.5' / ADJUSTMENT = 31.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P6	DW1001DWDFSETASY-2R-S	1170				-0.008	10.25	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT RISER & 1 DEGREE OFFSET - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P7 ASSEMBLED W/P8	DW10DWTEASY-2R-S	1170		1		-0.12	27.71	2145.15	1	DOUBLE WALL DUCT - 10" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P8 ASSEMBLED W/P7 D=S	DW10DWACCDORCOV-2R-S						15.14		1	DOUBLE WALL DUCT - 10" INNER ACCESS DOOR & 14" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P9	DW1047DWLT-2R-S	1170				-0.045	47.26	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT, 47' LONG - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P10	DW1047DWLT-2R-S	1170				-0.045	47.26	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT, 47' LONG - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P11 ASSEMBLED W/P12	DW10DWTEASY-2R-S	1170		1		-0.021	27.71	2145.15	1	DOUBLE WALL DUCT - 10" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P12 ASSEMBLED W/P11 D=T	DW10DWACCDORCOV-2R-S						15.14		1	DOUBLE WALL DUCT - 10" INNER ACCESS DOOR & 14" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P13	DW1047DWLT-2R-S	1170				-0.045	47.26	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT, 47' LONG - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL.
P14 ASSEMBLED W/P15	DW1035DWLTP-2R-S	1170				-0.034	36.51	2145.15	1	DOUBLE WALL DUCT - 10" INNER DUCT, 35' LONG - 2 LAYERS REDUCED CLEARANCE - 14" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P15 ASSEMBLED W/P14 SYSTEM AT P15	DW2310TPDB	1170					14.66	2145.15	1	DUCT TO CURB TRANSITION DOWN TURN, 23" CURB TO 10" DUCT, 16 GA ALUMINIZED. NOT FOR USE WITH EXHAUST FANS.
P16	DW1418SADKIT						5.82		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 14" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1418SAD, & HARDWARE BAG 4.
	3M-2000PLUS						0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW10DWCLASY-2R-S						5.67		8	DUCT - 10" DUCT - 14" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							498.70			

DOUBLE WALL FACTORY BUILT DUCTWORK

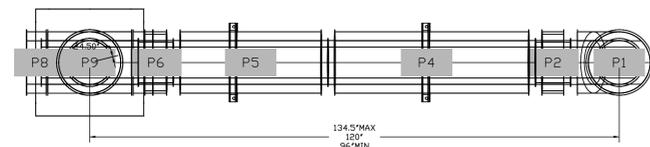
- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- 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)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

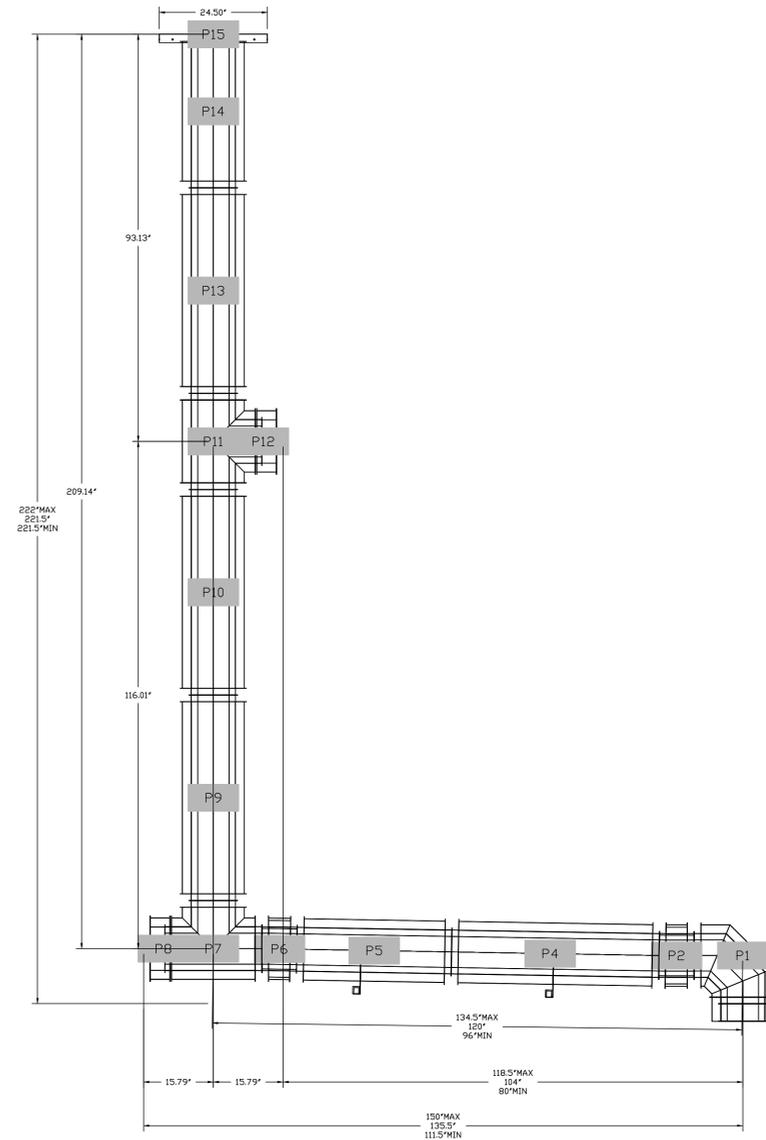
VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5'-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5'-24")	10'	24'	24'
3Z (26' -36")	10'	20'	20'

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

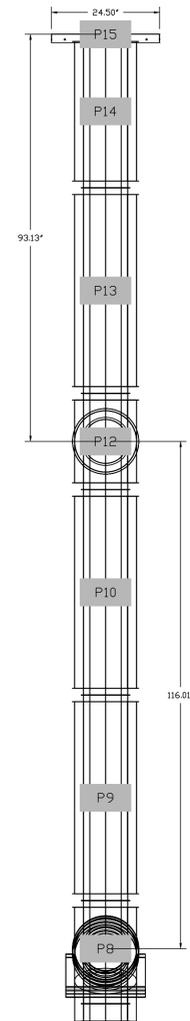
DUCTWORK #1 TOP VIEW



DUCTWORK #1 FRONT VIEW



DUCTWORK #1 SIDE VIEW



REVISIONS

NO.	DESCRIPTION	DATE

www.captiveaire.com
N. NJ & S. NY
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SHEET NO. 4