SHOP DRAWING REVIEW

- [ ] NOT REVIEWED
- [ ] REVIEWED
- [ ] REVIEWED AS NOTED
- [x] REVISE AND RESUBMIT

This review by Hilditch Architect Inc. is for the sole purpose of ascertaining conformance with the general design concept features only, and does not in any way constitute review of the design of engineering elements which form part of the Contract Documents prepared by others. This review shall not mean that Hilditch Architect Inc. approves the design detail inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all trades.

***Hilditch** Architect Inc.*

By: Sasha Stairs

Project No: 1809

Date Rec'd:

Date Rev'd: 2024.11.20

GC/CM: 2024.11.14

Consultant: 2024.11.19

HAI; reviewed for 18 pages total:

1. Refer to mechanical consultant comments; resubmit as per conments.
2. Location of manual actuation device to be coordinated on site and reviewed with Consultant.

Submittal No. 09

Kitchen Exhaust Hood and Fire Suppression System

Project Name:
Neshama Hospice

Owner:
Neshama

Prime Consultant:
Hilditch Architect Inc

General Contractor: Renokrew

SustainGlobe:
1. Kitchen exhaust hoods 'KH-1' and 'KH-2' are approved with comments.
2. Kitchen exhaust fans 'KEF-1' and KEF-2' are not approved. Resubmit KEF-1 and KEF-2 for review.

SHOP DRAWING SUBMITTAL REVIEW	JOB NAME: Neshama Hospice JOB #: 24-130 DATE: Nov 14, 2024
REVIEWED REJECTED REVIEW & RESUBMIT REVIEW AS NOTED	This review is for general conformance of plans and specifications only. Approvals are subject to subcontractors performance within the confines of the contract documents. Review of dimensions will not serve to relieve the subcontractor of contractual responsibility for any deviation from the contract requirements. SPECIFICATION: 23 08 10 ✓ SHOP DRAWING PRODUCT DATA DOCUMENTATION LETTER RENOKREW TORONTO | OTTAWA CHECKED BY: REVIEWED BY: JP TOTAL PAGES: 18

SustainGlobe Ltd.

THIS DRAWING REVIEWED SOLELY FOR GENERAL CONFORMITY WITH DESIGN CONCEPTS. QUANTITIES, DETAILS, DIMENSIONS AND DESIGNS INHERENT IN THE SHOP DRAWINGS ARE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DATA WITH FIELD DIMENSIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN OF MANUFACTURED ITEMS, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION AND INSTALLATION OF EQUIPMENT.

DATE RECEIVED: November 14, 2024	✓ MECHANICAL ❑ ELECTRICAL ❑ OTHERS
THIS DRAWING IS: ❑ REVIEWED ✓ REVIEWED AS NOTED ❑ REVIEWED AND TO BE RESUBMIT	BY: TL DATE: November 19, 2024 PROJ. NO.: 18031

RENOKREW
TORONTO | OTTAWA

54 Audia Court, Unit 2
Concord, ON L4K 3N5
(905)-738-1400

Submittal 24-256-006

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
NESHAMA HOSPICE 24-256	3 Cadillac Avenue North York, ON M3H 1R9	Nov 8, 2024

TO	FROM
Taranjeet Singh	PAUL LEDDY
COMPANY	COMPANY
1568796 ONTARIO INC. C/A RENOKREW	Consult Mechanical Inc.
EMAIL	EMAIL
taranjeet@renokrew.com	paul.l@consultmechanical.com
ADDRESS	ADDRESS
43 LEPAGE COURT TORONTO, ON M3J 1Z9	54 Audia Court, Unit 2 Concord, ON L4K 3N5

Title

CaptiveAire Kitchen Exhaust and Fire Suppression System

Description

Complete design package for Kitchen Exhaust Hood and Fire Suppression System

Package Items

SPEC	SUBSECTION ITEM	TYPE
M-16 Kitchen Exhaust Hood, Fire Suppression system	Drawing M-16	Shop Drawings

FOR QUESTIONS, CALL THE
International Sales Office
REGION 20
PHONE: (647) 977 - 2217
EMAIL: reg20@captiveaire.com

HOOD INFORMATION – JOB#6880247

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S) WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP	HOOD CONSTRUCTION	HOOD CONFIG END TO END	ROW
1	KH-1	3650 BD-2	CAPTIVEAIRE	4' 8"	600 DEG	I	HEAVY	175	817	9"	8"	4"		817	1634	-0.736"	430 SS WHERE EXPOSED	ALONE	ALONE
2	KH-2	3650 BD-2	CAPTIVEAIRE	4' 8"	600 DEG	I	HEAVY	175	817	9"	8"	4"		817	1634	-0.736"	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

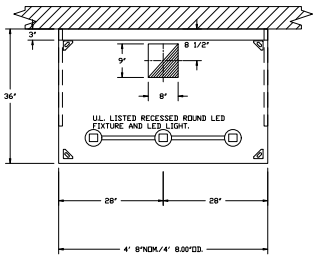
HOOD NO	TAG	FILTER(S) TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY	TYPE	WIRE GUARD	LOCATION	SIZE	UTILITY CABINET(S) FIRE SYSTEM TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1	KH-1	CAPTRATE SOLO FILTER	3	16"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO							YES	203 LBS
2	KH-2	CAPTRATE SOLO FILTER	3	16"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO							YES	203 LBS

HOOD OPTIONS

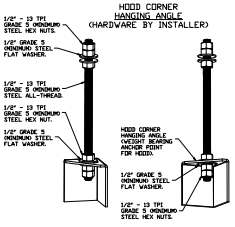
HOOD NO	TAG	OPTION
1	KH-1	RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS.
		LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS.
		RISER SENSOR INSTALL 6IN PLEN.
2	KH-2	RIGHT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS.
		LEFT QUARTER END PANEL 26" TOP WIDTH, 0" BOTTOM WIDTH, 26" HIGH 430 SS.
		RISER SENSOR INSTALL 6IN PLEN.

WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S) FIRE SYSTEM TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	WEIGHT
1	WALL MNT	12"x30"x24"	TANK FS	4.0			200.00 LBS
2	WALL MNT	12"x30"x24"	TANK FS	4.0			200.00 LBS



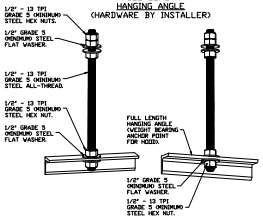
PLAN VIEW – HOOD #1 (KH-1), #2 (KH-2)
4' 8.00" LONG 3650BD-2



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.

FULL LENGTH HANGING ANGLE (HARDWARE BY INSTALLER)



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.

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLO FILTER

THE CAPTRATE 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.

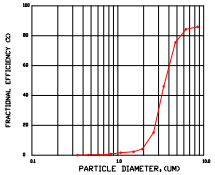
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

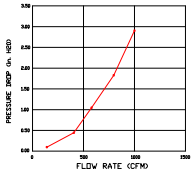
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



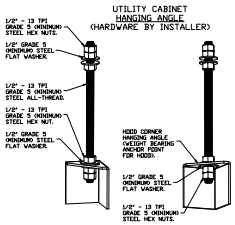
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH.
NFPA #96.
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.

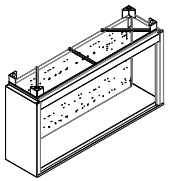
WALL-MOUNT UTILITY CABINET ASSEMBLY INSTRUCTIONS

CABINET TO BE HUNG BY OTHERS. SEE UTILITY CABINET SCHEDULE FOR CABINET SIZE.

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 UTILITY CABINET HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

UTILITY CABINET HANGING ANGLE (HARDWARE BY INSTALLER)

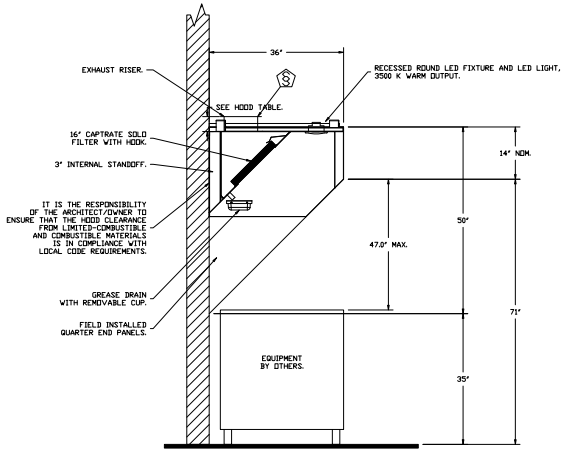




CLEARANCE TO COMBUSTIBLES

HOODS #	SURFACE	*CLEARANCE
1,2	TOP	18"
	FRONT	0"
	BACK	18"
	LEFT	18"
	RIGHT	18"

– *0" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.



SECTION VIEW – MODEL 3650BD-2
HOOD – #1 (KH-1), #2 (KH-2)

REVISIONS

	DESCRIPTION	DATE
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CAPTIVEAIRE
International Sales Office
www.captiveaire.com
4444 Eastgate Parkway, Unit #20, Mississauga, ON, L4W 4T6 PHONE: (647) 977 - 2217 FAX: 9192275605 EMAIL: reg20@captiveaire.com

Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024
DWG.#: 6880247
DRAWN BY: Ryan Fung
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 1

FIRE SYSTEM INFORMATION – JOB#6880247

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0	20	18	WALL UTILITY CABINET RIGHT	N/A
2		TANK FS	4.0	20	18	WALL UTILITY CABINET LEFT	N/A

GAS VALVE(S)

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

FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1		0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. ND, CLOSE ON TEMP RISE AT 360°F. (A0034310).	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - SLPCON-10FT SUPERVISED LOOP CONNECTION KIT. CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN END TO END HOODS WITH LESS THAN A 9' GAP OR BACK TO BACK HOODS. KIT CONTAINS 12 FEET OF BLACK MG WIRE, 12 FEET OF TAN MG WIRE, 10 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	3	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	1	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0
2		0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. ND, CLOSE ON TEMP RISE AT 360°F. (A0034310).	1	0
		0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	1	0
		0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - SLPCON-10FT SUPERVISED LOOP CONNECTION KIT. CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN END TO END HOODS WITH LESS THAN A 9' GAP OR BACK TO BACK HOODS. KIT CONTAINS 12 FEET OF BLACK MG WIRE, 12 FEET OF TAN MG WIRE, 10 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	3	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	1	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0
		ADDITIONAL PARTS TO BE DETERMINED..		

REVISIONS

	DESCRIPTION	DATE
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Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 2

EXHAUST FAN INFORMATION – JOB#6880247

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-1	1	DU85HFA	CAPTIVEAIRE	817	1.000	1115	TEAO-ECM	0.750	0.2460	1	115	8.9	259 FPM	90	7.7
2		1	DU85HFA	CAPTIVEAIRE	817	1.000	1115	TEAO-ECM	0.750	0.2460	1	115	8.9	259 FPM	90	7.7

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1	1	GREASE BOX
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
2		1	GREASE BOX
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY

SustainGlobe:
1. Kitchen exhaust fans 'KEF-1' and 'KEF-2' shall be Delhi model BI-RM-10 as specified. Resubmit shop drawing for KEF-1 and KEF-2 for review.

FAN ACCESSORIES

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

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1	41 LBS	CURB	23.000"W X 23.000"L X 24.000"H VENTED HINGED.
2	# 2		41 LBS	CURB	23.000"W X 23.000"L X 24.000"H VENTED HINGED.

FAN SOUND DATA

FAN UNIT NO	TAG	MOTOR	SOUND DATA			OCTAVE BAND SOUND DATA								
			LWA	SONES @ 5 FT	DBA @ 5 FT	DISTANCE (FT)	63 HZ	125 HZ	250 HZ	500 HZ	1 KHZ	2 KHZ	4 KHZ	8 KHZ
1	EF-1	EXHAUST	68.9	7.683200536004 51	57.4	5	70.7	72.8	71.5	65.6	63.1	59.8	54.3	48.3
2		EXHAUST	68.9	7.683200536004 51	57.4	5	70.7	72.8	71.5	65.6	63.1	59.8	54.3	48.3

REVISIONS

	DESCRIPTION	DATE
1		
2		
3		
4		

CAPTIVEAIRE
International Sales Office
4444 Eglinton Parkway, Unit #20, Mississauga, ON, L4W 4T6 PHONE: (647) 977 - 2217 FAX: 9192275606 EMAIL: regO@captiveaire.com
www.captiveaire.com

Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

DWG.#: 6880247

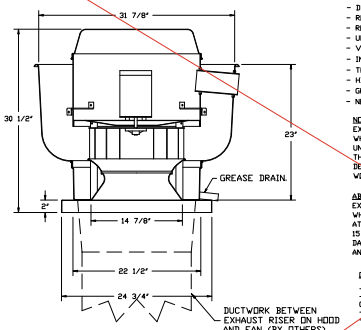
DRAWN BY: Ryan Fung

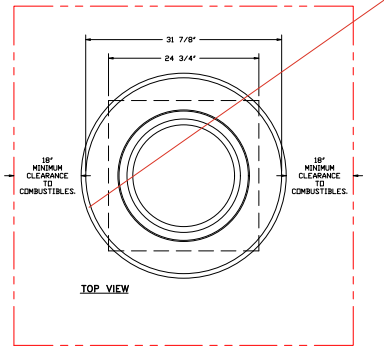
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 3

FANS #1 (EF-1), #2 - DUBSHFA EXHAUST FAN





TOP VIEW

FEATURES:

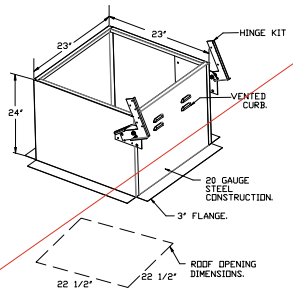
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT 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 - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL.
- RTC - (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



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Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

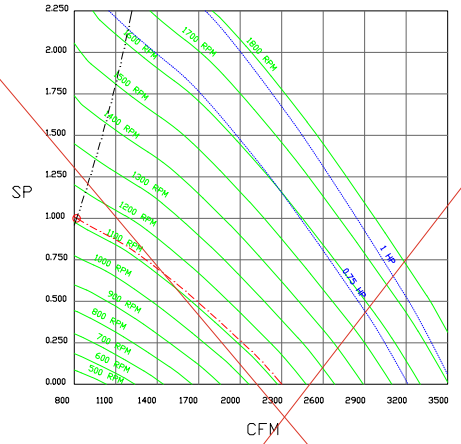
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 4

FANS #1 (EF-1) #2 - EXHAUST PERFORMANCE CURVES.

817 CFM, 1 SP @ 1115 RPM AND 0.246 BHP AT 492 FEET AND 120 DEG F.
* PLEASE NOTE THAT THESE CURVES WERE ADJUSTED FOR JOB SPECIFIC TEMPERATURE AND ALTITUDE.



GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" 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 "DW" 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 CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED	☐
APPROVED WITH NO EXCEPTION TAKEN	☐
REVISE AND RESUBMIT	☐

SIGNATURE _____

YOUR TITLE _____ DATE _____ _____

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DWG.#: 6880247

DRAWN BY: Ryan Fung

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

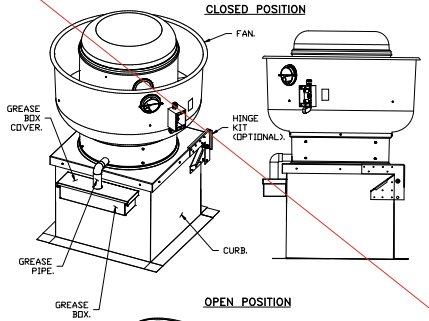
MASTER DRAWING

SHEET NO. 5

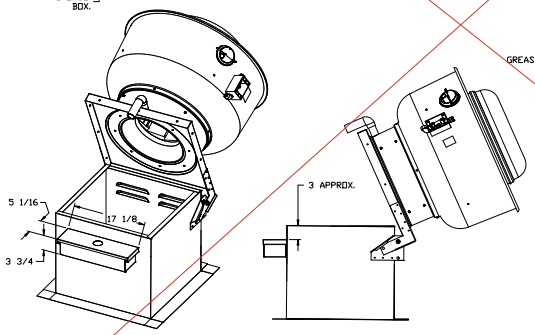
GREASE BOX INSTALLATION

GREASEBOX
REV.#2 08/19/02

CLOSED POSITION



OPEN POSITION



PARTS INCLUDED

GREASE BOX.
GREASE BOX COVER.
GREASE PIPE.

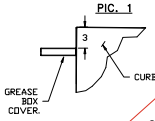
SHEET METAL SCREWS
3 - LONG (3/4" LG.).

GREASE BOX FIELD INSTALLATION

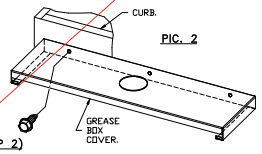
STEP 1)

ATTACH GREASE BOX COVER TO THE CURB.
HOLD 3" DIMENSION AS SHOWN ON PIC. 1.
SCREW GREASE BOX COVER TO CURB USING (3) LONG (3/4" LG.) SCREWS AS SHOWN ON PIC. 2.

PIC. 1



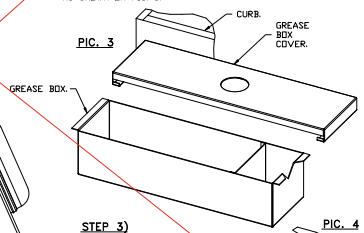
PIC. 2



STEP 2)

ATTACH GREASE BOX TO GREASE BOX COVER, SLIDE AND DROP. AS SHOWN ON PIC. 3.

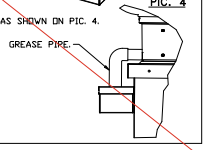
PIC. 3



STEP 3)

INSTALL GREASE PIPE AS SHOWN ON PIC. 4.

PIC. 4



*NOTE: UL 705 INSTALL.

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	DESCRIPTION	DATE
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2		
3		
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Neshama Hospice R2
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DATE: 11/7/2024

DWG.#: 6880247

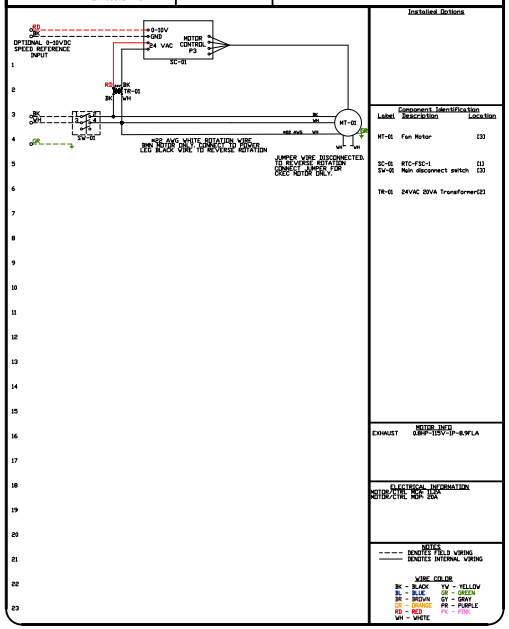
DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 6

Exhaust Fan Wiring	JOB 6880247 - Neshama Hospice R2	
DRAWING NUMBER EXH6880247-1	SHIP DATE 11/7/2024	MODEL DUB66MPA



Installed Options

Component Identification

Label	Description	Location
MT-01	Fan Motor	[3]
SC-01	RTC-FSC-1	[1]
SV-01	Main disconnect switch	[3]
TR-01	24VAC 20VA Transformer	[2]

MOTOR SPEED

EXHAUST DUBMP-115V-1P-8.9FLA

ELECTRICAL INFORMATION

MOTOR/CTRL MCA 12.6A
MOTOR/CTRL MOP 15A

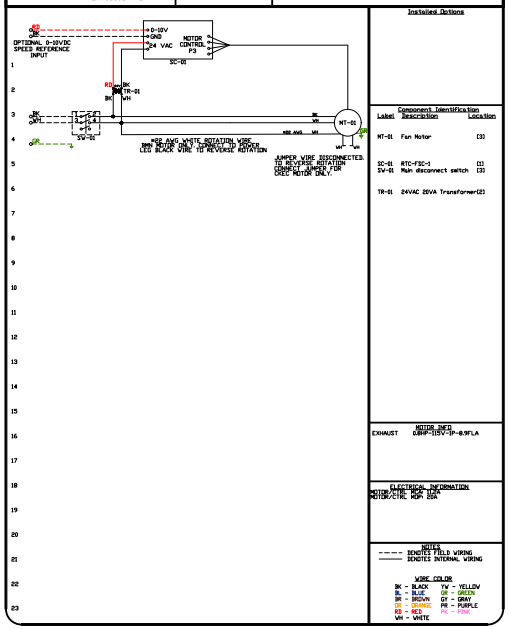
NOTES

---- 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			

Exhaust Fan Wiring	JOB 6880247 - Neshama Hospice R2	
DRAWING NUMBER EXH6880247-2	SHIP DATE 11/7/2024	MODEL DUB66MPA



Installed Options

Component Identification

Label	Description	Location
MT-01	Fan Motor	[3]
SC-01	RTC-FSC-1	[1]
SV-01	Main disconnect switch	[3]
TR-01	24VAC 20VA Transformer	[2]

MOTOR SPEED

EXHAUST DUBMP-115V-1P-8.9FLA

ELECTRICAL INFORMATION

MOTOR/CTRL MCA 12.6A
MOTOR/CTRL MOP 15A

NOTES

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Neshama Hospice R2
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DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

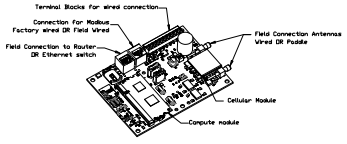
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 7

ELECTRICAL PACKAGE – JOB#6880247

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Φ	HP	VOLT	FLA
1		SC-110110MA	WALL MOUNT IN SS BOX	SS WALL MOUNT BOX	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-1	EXHAUST	1	0.750	115	8.9
2		SC-110110MA	WALL MOUNT IN SS BOX	SS WALL MOUNT BOX	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY		EXHAUST	1	0.750	115	8.9



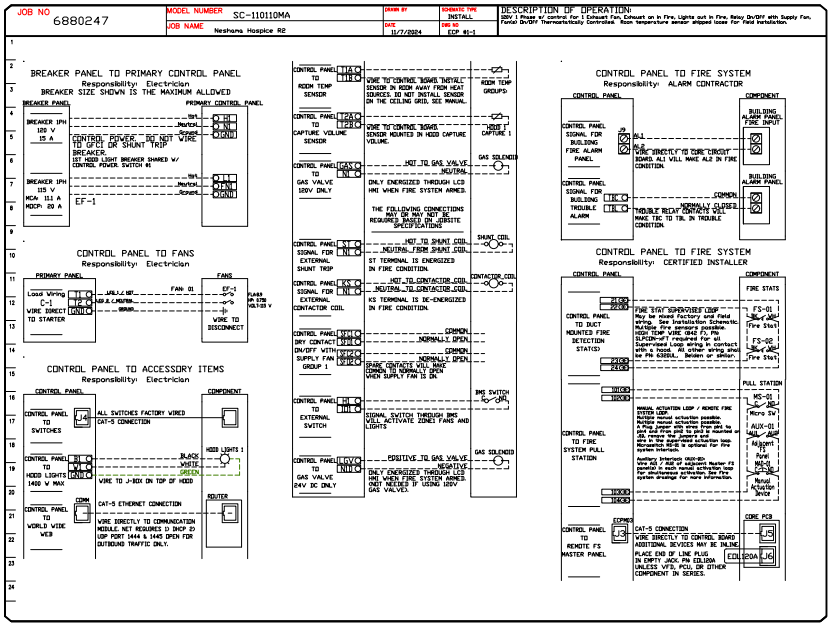
CASlink Monitor and Control

- ***Hood control panel to support communications to cloud-based Building Management System.***
- ***Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.***
- ***Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.***
- ***Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.***

MONITORING AND CONTROL POINTS LIST

DCV Packages	Function
Room Temperature	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR
Fan Amperage	MONITOR
Fan Power	MONITOR
VFD Faults	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults	MONITOR
PCU Filter Clog Percentages	MONITOR
Fire Condition	MONITOR
CORE Fire System	MONITOR
Building Pressure	MONITOR
Prep Time Button	MONITOR & CONTROL
Fans Button	MONITOR & CONTROL
Lights Button	MONITOR & CONTROL
Wash Button	MONITOR & CONTROL

SC Packages	Function
Room Temperature(s)	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults	MONITOR
PCU Filter Clog Percentages	MONITOR
Fire Condition	MONITOR
CORE Fire System	MONITOR
Building Pressure	MONITOR
Fans Button(s)	MONITOR & CONTROL
Lights Button(s)	MONITOR & CONTROL
Wash Button	MONITOR & CONTROL



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Neshama Hospice R2
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DWG.#: 6880247

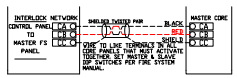
DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 8

JOB NO	MODEL NUMBER	DRAWN BY	SCHEMATIC TYPE	DESCRIPTION OF OPERATION:
6880247	SC-110110MA		INSTALL	DRV 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Relay On/Off with Supply Fan. Fanal On/Off Thermostatically Controlled. Wall temperature sensor shipped loose for field installation.
	JOB NAME: Neshama Hospice R2	DATE: 11/7/2024	DWG NO: ECP. #1-2	



JOB NO	MODEL NUMBER	DRAWN BY	SCHEMATIC TYPE	DESCRIPTION OF OPERATION:
6880247	SC-110110MA		INSTALL	Fire System #1 TANK FS - 4A
	JOB NAME: Neshama Hospice R2	DATE: 11/7/2024	DWG NO: ECP. #1-3	

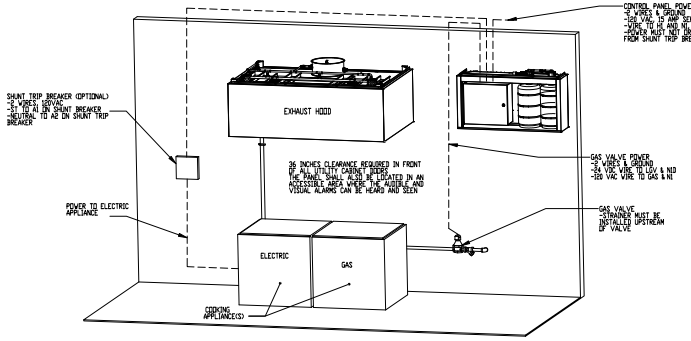
WALL MOUNT UTILITY CABINET TANK PROTECTION ELECTRICAL DETAIL

10/01/2023 Rev. 03

FS-1: MASTER

ELECTRICIAN:
- 3 WIRE MAIN CONTROL PANEL PER INCLUDED SCHEMATIC
- 3 WIRE ALL FANS PER INCLUDED SCHEMATIC
- 2 WIRE SHUNT TRIP BREAKER (OPTIONAL)
- 2 WIRE UDS APPLIANCE KILL SWITCH, IF EQUIPPED (OPTIONAL)
- 2 WIRE GAS VALVE

ELECTRICAL CONTRACTOR REQUIREMENT					
ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
SHUNT TRIP BREAKER (OPTIONAL)	S1 & N1	BREAKER COIL (A1 & A2)	120 VAC	< 4 AMPS	S1 TO A1 ON SHUNT BREAKER COIL, AND NEUTRAL TO A2 ON SHUNT TRIP BREAKER COIL
CONTROL PANEL POWER	H1 & N1 + GROUND	CIRCUIT BREAKER	120 VAC	15 AMPS	CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER
UDS APPLIANCE KILL SWITCH (OPTIONAL)	K1S & N1	K1S & N1	120 VAC	< 4 AMPS	KILL SWITCH TERMINALS MUST BE IN SERIES WITH OTHER KILL SWITCHES
REMOTE 120VAC ANSUL AUTOMAN (OPTIONAL)	AUL, AUE	SOLENOID	120 VAC	< 6 AMPS	120V TO AUL, AUE TO ANSUL ELECTRIC AUTOMAN, ANSUL SOLENOID TO NEUTRAL
GAS VALVE	LGV & N2S (IF 24 VDC) GAS & N2 (IF 120 VAC)	RED/RED/GREEN	24 VDC OR 120 VAC	< 10 AMPS	IF 24 VDC - 3 WIRES & GROUND, N2S TO RED, LGV TO RED, AND GREEN TO GROUND IF 120 VAC - 2 WIRES & GROUND GAS TO RED, N1 TO RED, AND GREEN TO GROUND



NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

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DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 9

JOB NO	MODEL NUMBER	DRAWN BY	SCHEMATIC TYPE	DESCRIPTION OF OPERATION:
6880247	SC-110110MA		INSTALL	Fire System in TANK FS - 4A
	JOB NAME: Neshama Hospice R2	DATE: 11/7/2024	DWG NO: ECP 93-4	

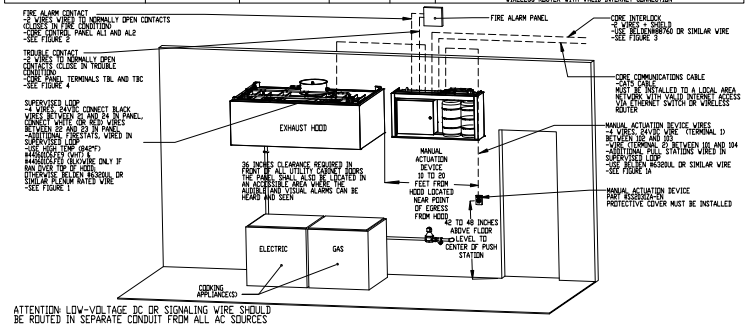
WALL MOUNT UTILITY CABINET TANK PROTECTION LOW-VOLTAGE DETAIL

10/01/2023 Rev. 3

FS-1: MASTER

ALARM CONTRACTOR:
1. WIRE MANUAL ACTUATION DEVICE(S), REMOTE FIRESTAT(S), CORE INTERLOCK(S), FIRE SENSOR(S) AND FIRE ALARM CONTACTS
2. CONNECT FLOW SWITCH TO SYSTEM
3. VERIFY FINAL FIRE SYSTEM TEST

ALARM CONTRACTOR REQUIREMENT					
ITEM	CONNECTION IN PANEL	CONNECTION ON DEVICE	VOLTAGE	AMPERAGE	COMMENTS
MANUAL ACTUATION DEVICE(S)	101 AND 104 102 AND 103	1 & 2	24 VDC	< 10 AMPS	WIRE MANUAL ACTUATION DEVICE TERMINAL 1 BETWEEN CORE PANEL TERMINALS 102 AND 103 WIRE MANUAL ACTUATION DEVICE TERMINAL 2 BETWEEN CORE PANEL TERMINALS 101 AND 104 JUMPER 101 TO 104 AND 103 TO 103 IF NO MANUAL ACTUATION DEVICE IS INSTALLED
MANUAL ACTUATION DEVICE COVER	N/A	N/A	N/A	N/A	MANUAL ACTUATION DEVICE COVER MUST BE INSTALLED IF SURFACE MOUNTED, USE COVER EXTENSION ST1-50558
REMOTE FIRESTAT SENSOR(S)	24 AND 24 23 AND 23	BLACK AND WHITE	24 VDC	< 10 AMPS	WIRE FIRE SENSOR WHITE WIRES BETWEEN HOOD CORE PANEL TERMINALS 22 AND 23 WIRE FIRE SENSOR BLACK WIRE BETWEEN HOOD CORE PANEL TERMINALS 23 AND 24 HIGH TEMP (84°C?) 14AWG/5CEC (WHT) & 14AWG/5CEC (BLK) WIRE OR SIMILAR ONLY IF RAN OF HOOD, OTHERWISE BELDEN 86360UL OR SIMILAR PLENUM RATED WIRE - SEE FIGURE 1
FIRE ALARM CONTACT	AL1, AL2	VARIES	50V MAX (AC/DC)	UP TO 1 AMP	FIRE ALARM RELAY CONTACTS FOR BUILDING FIRE ALARM LOCATED IN THE CORE ELECTRICAL CONTROL PANEL
CORE INTERLOCK(S)	CA, CB, CC	CA, CB, CC	RS-485 COMMUNICATIONS SIGNAL		CORE SYSTEM UI CA TO CORE SYSTEM CO CA, CORE SYSTEM UI CB TO CORE SYSTEM CO CB, CORE SYSTEM UI CC, TO CORE SYSTEM CO CC USE BELDEN 8872O OR SIMILAR WIRE
TROUBLE CONTACT	TBC, TBL, TDK	VARIES	MAX 120 VAC	UP TO 6 AMPS	WIRE TO TBL & TBC NORMALLY OPEN CONTACT, CLOSES IN TROUBLE CONDITION
CORE COMMUNICATIONS CABLE	RJ-45 Jack	INTERNET CONNECTION	SIGNAL	<1.0 AMPS	TYPICAL CONNECTION CAT5 CABLE TO LOCAL AREA NETWORK VIA ETHERNET SWITCH OR WIRELESS ROUTER WITH VALID INTERNET CONNECTION



ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

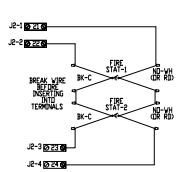
NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

			DESCRIPTION OF OPERATION:

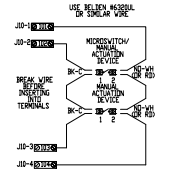
TOTAL PROTECTION LOW-VOLTAGE FIGURES

10/01/2023 Rev. 17

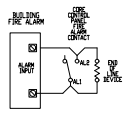
FS-1: MASTER



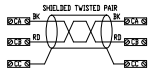
WIRING CONNECTIONS FOR FIRESTAT LOOP
FIGURE 1



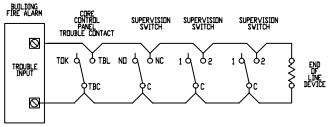
WIRING CONNECTIONS FOR MANUAL ACTUATION LOOP
FIGURE 1A



WIRING CONNECTIONS FOR FIRE ALARM CONTACT
FIGURE 2



WIRING CONNECTIONS FOR CORE INTERLOCK
FIGURE 3



WIRING CONNECTIONS FOR TROUBLE CONTACT
FIGURE 4

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

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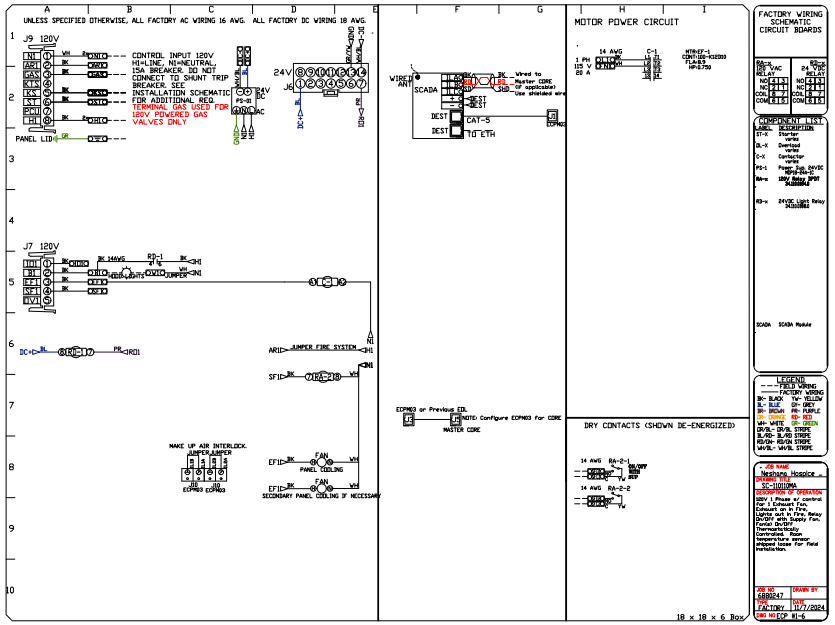
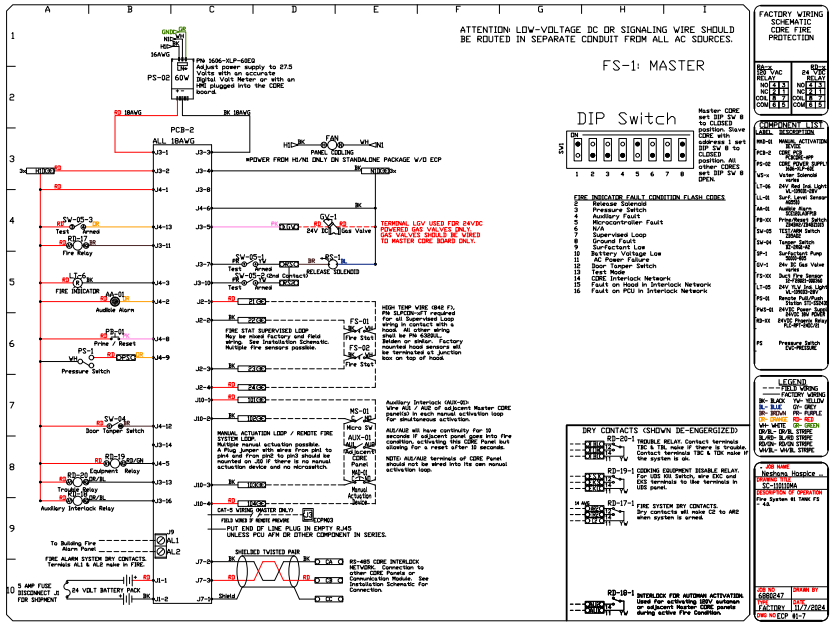
DRAWN BY: Ryan Fung

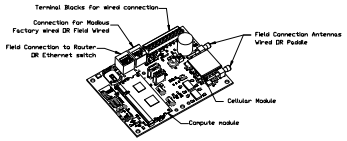
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 10







CASlink Monitor and Control

- *Hood control panel to support communications to cloud-based Building Management System.*
- *Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.*

MONITORING AND CONTROL POINTS LIST

DCV Packages	*Function*
Room Temperature	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Fan Speed	*MONITOR*
Fan Amperage	*MONITOR*
Fan Power	*MONITOR*
VFD Faults	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressure	*MONITOR*
Prep Time Button	*MONITOR & CONTROL*
Fans Button	*MONITOR & CONTROL*
Lights Button	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

SC Packages	*Function*
Room Temperature(s)	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressure	*MONITOR*
Fans Button(s)	*MONITOR & CONTROL*
Lights Button(s)	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

REVISIONS

DESCRIPTION	DATE

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Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

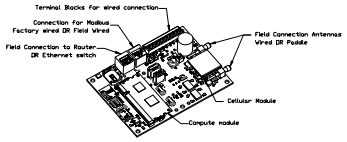
DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 11



CASlink Monitor and Control

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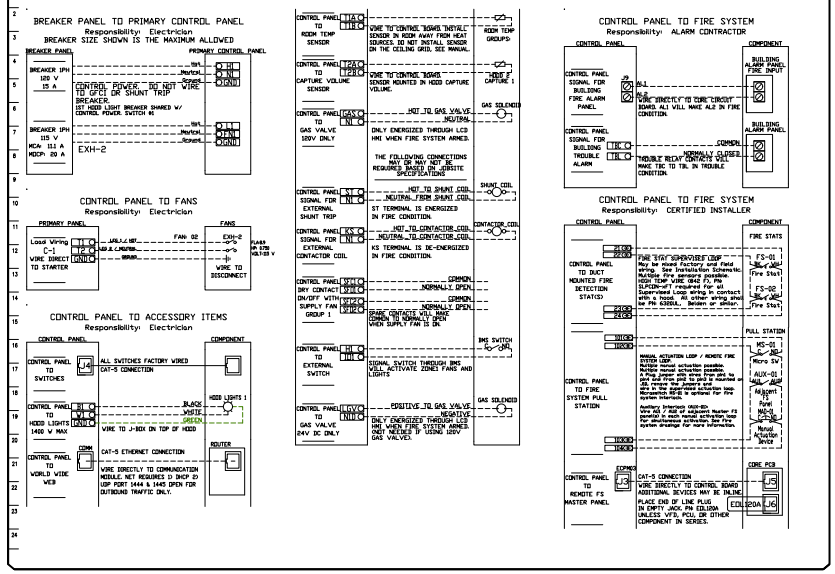
MONITORING AND CONTROL POINTS LIST

DCV Packages	*Function*
Room Temperature	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Fan Speed	*MONITOR*
Fan Amperage	*MONITOR*
Fan Power	*MONITOR*
VFD Faults	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressure	*MONITOR*
Prep Time Button	*MONITOR & CONTROL*
Fans Button	*MONITOR & CONTROL*
Lights Button	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

SC Packages	*Function*
Room Temperature(s)	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressure	*MONITOR*
Fans Button(s)	*MONITOR & CONTROL*
Lights Button(s)	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

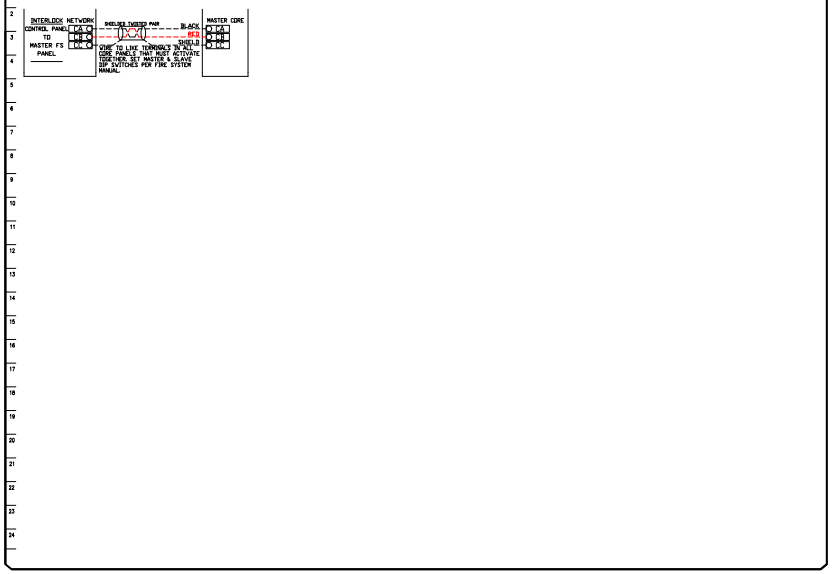
JOB NO 6880247 | MODEL NUMBER SC-110110MA | JOB NAME Neshama Hospice R2 | DRAWN BY | DATE 11/7/2024 | SCHEMATIC TYPE INSTALL | DWG NO ECP 82-1

DESCRIPTION OF OPERATION: 120V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Lights out in Fire, Relay On/Off with Supply Fan, Partial On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation.



JOB NO 6880247 | MODEL NUMBER SC-110110MA | JOB NAME Neshama Hospice R2 | DRAWN BY | DATE 11/7/2024 | SCHEMATIC TYPE INSTALL | DWG NO ECP 82-2

DESCRIPTION OF OPERATION: 120V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Lights out in Fire, Relay On/OFF with Supply Fan, Partial On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation.



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Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 12

JOB NO 6880247	MODEL NUMBER SC-110110MA	DRAWN BY	SCHEMATIC TYPE INSTALL	DESCRIPTION OF OPERATION: Fire System #2 TANK FS - 4.0.
	JOB NAME Neshama Hospice R2	DATE 11/7/2024	DWG NO ECP #2-3	

WALL MOUNT UTILITY CABINET TANK PROTECTION ELECTRICAL DETAIL

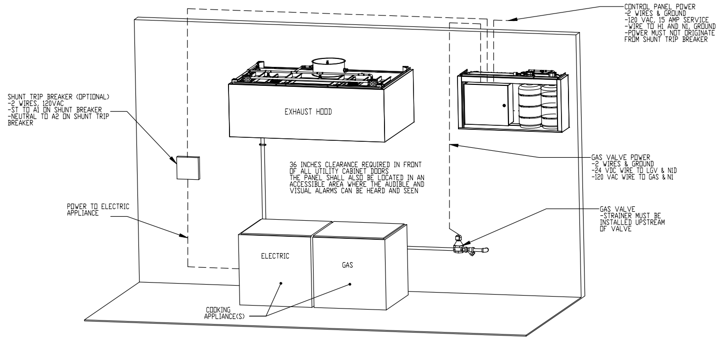
10/01/2023 Rev. 03

FS-2: MASTER

ELECTRICIAN:
1. WIRE MAIN CONTROL PANEL PER INCLUDED SCHEMATIC
2. WIRE ALL FANS PER INCLUDED SCHEMATIC
3. WIRE SHUNT TRIP BREAKER (OPTIONAL)
4. WIRE UDS APPLIANCE KILL SWITCH, IF EQUIPPED (OPTIONAL)
5. WIRE GAS VALVE

ELECTRICAL CONTRACTOR REQUIREMENT

ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
SHUNT TRIP BREAKER (OPTIONAL)	ST & N1	BREAKER COIL (A1 & A2)	120 VAC	< 4 AMPS	ST TO A1 ON SHUNT BREAKER COIL, AND NEUTRAL TO A2 ON SHUNT TRIP BREAKER COIL
CONTROL PANEL POWER	H1 & N1 + GROUND	CIRCUIT BREAKER	120 VAC	15 AMPS	CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER
UDS APPLIANCE KILL SWITCH (OPTIONAL)	KTS & N1	KTS & N1	120 VAC	< 4 AMPS	KILL SWITCH TERMINALS MUST BE IN SERIES WITH OTHER KILL SWITCHES
REMOTE 120VAC ANSUL AUTOMAN (OPTIONAL)	AU1, AU2	SOLENOID	120 VAC	< 6 AMPS	120V TO AU1, AU2 TO ANSUL ELECTRIC AUTOMAN, ANSUL SOLENOID TO NEUTRAL
GAS VALVE	LGV & N1D (IF 24 VDC) GAS & N1 (IF 120 VAC)	RED/RED/GREEN	24 VDC OR 120 VAC	< 1.0 AMPS	IF 24 VDC - 2 WIRES & GROUND, N1D TO RED, LGV TO RED, AND GREEN TO GROUND IF 120 VAC - 2 WIRES & GROUND GAS TO RED, N1 TO RED, AND GREEN TO GROUND


CONTROL PANEL POWER
-2 WIRES & GROUND
-120 VAC, 15 AMP SERVICE
-WIRE TO H1 AND N1, GROUND
-POWER MUST NOT ORIGINATE FROM SHUNT TRIP BREAKER
SHUNT TRIP BREAKER (OPTIONAL)
-2 WIRES, 120VAC
-ST TO A1 ON SHUNT BREAKER
-NEUTRAL TO A2 ON SHUNT TRIP BREAKER
EXHAUST HOOD
GAS VALVE POWER
-2 WIRES & GROUND
-24 VDC WIRE TO LGV & N1D
-120 VAC WIRE TO GAS & N1
36 INCHES CLEARANCE REQUIRED IN FRONT OF ALL UTILITY CABINET DOORS
THE PANEL SHALL ALSO BE LOCATED IN AN ACCESSIBLE AREA WHERE THE AUDIBLE AND VISUAL ALARMS CAN BE HEARD AND SEEN
POWER TO ELECTRIC APPLIANCE
GAS VALVE
-STRAINER MUST BE INSTALLED UPSTREAM OF VALVE
ELECTRIC
GAS
COOKING APPLIANCE(S)

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

JOB NO 6880247	MODEL NUMBER SC-110110MA	DRAWN BY	SCHEMATIC TYPE INSTALL	DESCRIPTION OF OPERATION: Fire System #2 TANK FS - 4.0.
	JOB NAME Neshama Hospice R2	DATE 11/7/2024	DWG NO ECP #2-4	

WALL MOUNT UTILITY CABINET TANK PROTECTION LOW-VOLTAGE DETAIL

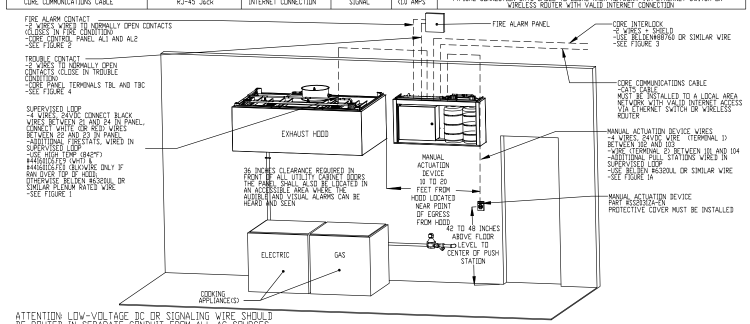
10/01/2023 Rev. 3

FS-2: MASTER

ALARM CONTRACTOR:
1. WIRE MANUAL ACTUATION DEVICE(S), REMOTE FIRESTAT(S), CORE INTERLOCK(S), FIRE SENSOR(S) AND FIRE ALARM CONTACTS
2. COMPLETE FINAL HOOKUP OF SYSTEM
3. VERIFY FINAL FIRE SYSTEM TEST

ALARM CONTRACTOR REQUIREMENT

ITEM	CONNECTION IN PANEL	CONNECTION ON DEVICE	VOLTAGE	AMPERAGE	COMMENTS
MANUAL ACTUATION DEVICE(S)	101 AND 104 102 AND 103	1 & 2	24 VDC	< 1.0 AMPS	WIRE MANUAL ACTUATION DEVICE TERMINAL 1 BETWEEN CORE PANEL TERMINALS 102 AND 103 WIRE MANUAL ACTUATION DEVICE TERMINAL 2 BETWEEN CORE PANEL TERMINALS 101 AND 104 JUMPER 101 TO 104 AND 102 TO 103 IF NO MANUAL ACTUATION DEVICE IS INSTALLED
MANUAL ACTUATION DEVICE COVER	N/A	N/A	N/A	N/A	MANUAL ACTUATION DEVICE COVER MUST BE INSTALLED IF SURFACE MOUNTED, USE COVER EXTENSION STI-6531B
REMOTE FIRESTAT SENSOR(S)	21 AND 24 22 AND 23	BLACK AND WHITE	24 VDC	< 1.0 AMPS	WIRE FIRE SENSOR WHITE WIRES BETWEEN HOOD CORE PANEL TERMINALS 22 AND 23 WIRE FIRE SENSOR BLACK WIRE BETWEEN HOOD CORE PANEL TERMINALS 21 AND 24 HIGH TEMP (842°F) #441601C6.FE9 (WHT) & #441601C6.FE0 (BLK)WIRE OR SIMILAR ONLY IF RAN OF HOOD; OTHERWISE BELDEN #6320UL OR SIMILAR PLENUM RATED WIRE; SEE FIGURE 1
FIRE ALARM CONTACT	AL1, AL2	VARIES	50V MAX (AC/DC)	UP TO 1 AMP	FIRE ALARM RELAY CONTACTS FOR BUILDING FIRE ALARM LOCATED IN THE CORE ELECTRICAL CONTROL PANEL
CORE INTERLOCK(S)	CA, CB, CC	CA, CB, CC	RS-485 COMMUNICATIONS SIGNAL		CORE SYSTEM (1) CA, TO CORE SYSTEM (2) CA. CORE SYSTEM (1) CB, TO CORE SYSTEM (2) CB. CORE SYSTEM (1) CC, TO CORE SYSTEM (2) CC. USE BELDEN# 88760 OR SIMILAR WIRE
TROUBLE CONTACT	TBC, TBL, TOK	VARIES	MAX 120 VAC	UP TO 6 AMPS	WIRE TO TBL & TBC NORMALLY OPEN CONTACT, CLOSES IN TROUBLE CONDITION
CORE COMMUNICATIONS CABLE	RJ-45 Jack	INTERNET CONNECTION	SIGNAL	<1.0 AMPS	TYPICAL CONNECTION CAT5 CABLE TO LOCAL AREA NETWORK VIA ETHERNET SWITCH OR WIRELESS ROUTER WITH VALID INTERNET CONNECTION


FIRE ALARM CONTACT
-2 WIRES WIRED TO NORMALLY OPEN CONTACTS (CLOSES IN FIRE CONDITION)
-CORE CONTROL PANEL AL1 AND AL2
-SEE FIGURE 2
FIRE ALARM PANEL
CORE INTERLOCK
-2 WIRES + SHIELD
-USE BELDEN#88760 OR SIMILAR WIRE
-SEE FIGURE 3
TROUBLE CONTACT
-2 WIRES TO NORMALLY OPEN CONTACTS (CLOSE IN TROUBLE CONDITION)
-CORE PANEL TERMINALS TBL AND TBC
-SEE FIGURE 4
CORE COMMUNICATIONS CABLE
-CAT5 CABLE
MUST BE INSTALLED TO A LOCAL AREA NETWORK WITH VALID INTERNET ACCESS VIA ETHERNET SWITCH OR WIRELESS ROUTER
SUPERVISED LOOP
-4 WIRES, 24VDC CONNECT BLACK WIRES BETWEEN 21 AND 24 IN PANEL, CONNECT WHITE (OR RED) WIRES BETWEEN 22 AND 23 IN PANEL
-ADDITIONAL FIRESTATS, WIRED IN SUPERVISED LOOP
-USE HIGH TEMP (842°F) #441601C6.FE9 (WHT) & #441601C6.FE0 (BLK)WIRE ONLY IF RAN OVER TOP OF HOOD; OTHERWISE BELDEN #6320UL OR SIMILAR PLENUM RATED WIRE
-SEE FIGURE 1
EXHAUST HOOD
MANUAL ACTUATION DEVICE WIRES
-4 WIRES, 24VDC WIRE (TERMINAL 1) BETWEEN 102 AND 103
-WIRE (TERMINAL 2) BETWEEN 101 AND 104
-ADDITIONAL PULL STATIONS WIRED IN SUPERVISED LOOP
-USE BELDEN #6320UL OR SIMILAR WIRE
-SEE FIGURE 1A
36 INCHES CLEARANCE REQUIRED IN FRONT OF ALL UTILITY CABINET DOORS
THE PANEL SHALL ALSO BE LOCATED IN AN ACCESSIBLE AREA WHERE THE AUDIBLE AND VISUAL ALARMS CAN BE HEARD AND SEEN
MANUAL ACTUATION DEVICE 10 TO 20 FEET FROM HOOD LOCATED NEAR POINT OF EGRESS FROM HOOD
MANUAL ACTUATION DEVICE
PART #SS2031ZA-EN
PROTECTIVE COVER MUST BE INSTALLED
42 TO 48 INCHES ABOVE FLOOR LEVEL TO CENTER OF PUSH STATION
ELECTRIC
GAS
COOKING APPLIANCE(S)

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

REVISIONS

	DESCRIPTION	DATE:
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International Sales Office

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Neshama Hospice R2
25 Brightwood Street,
Toronto, ON, M3H 2Z7

DATE: 11/7/2024

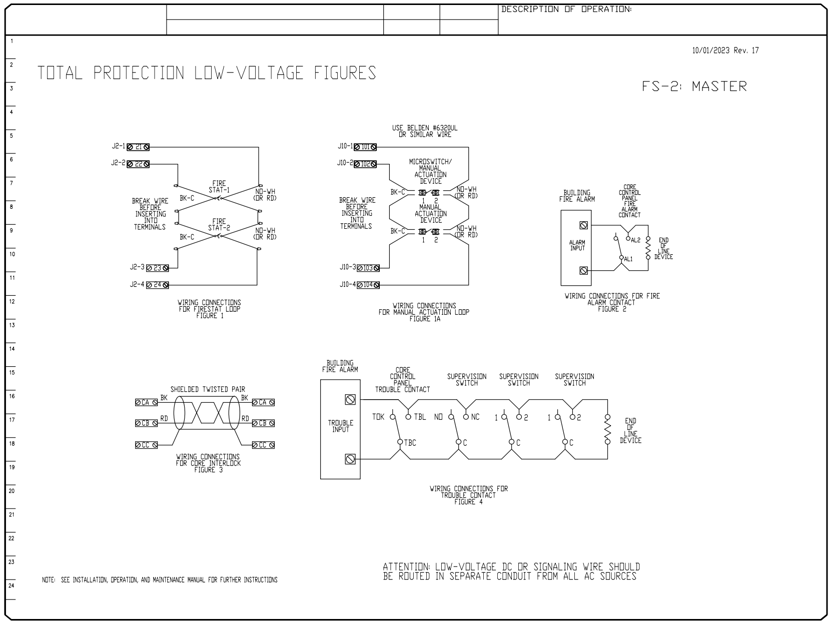
DWG.#: 6880247

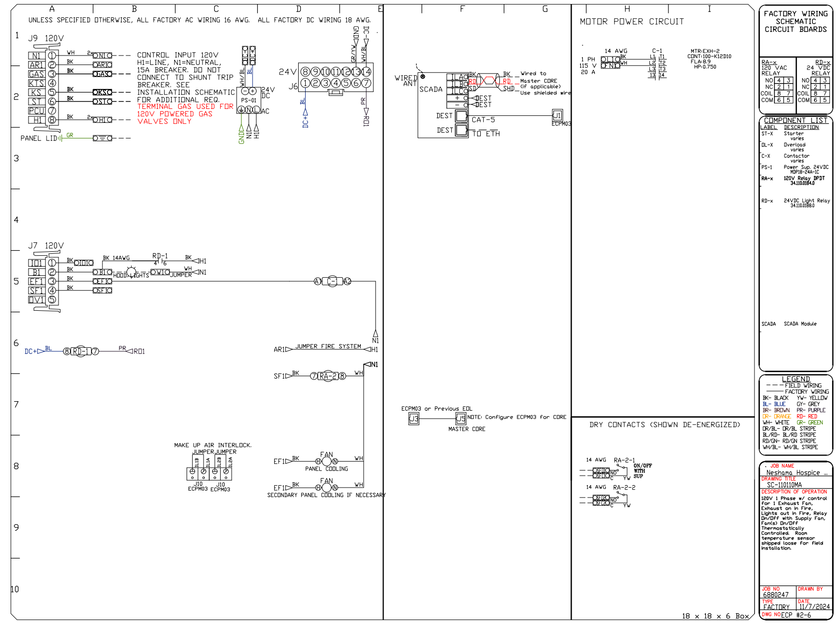
DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 13


DESCRIPTION OF OPERATION:
10/01/2023 Rev. 17
TOTAL PROTECTION LOW-VOLTAGE FIGURES
FS-2: MASTER
WIRING CONNECTIONS FOR FIRESTAT LOOP
FIGURE 1
USE BELDEN #6320UL OR SIMILAR WIRE
WIRING CONNECTIONS FOR MANUAL ACTUATION LOOP
FIGURE 1A
WIRING CONNECTIONS FOR FIRE ALARM CONTACT
FIGURE 2
SHIELDED TWISTED PAIR
WIRING CONNECTIONS FOR CORE INTERLOCK
FIGURE 3
WIRING CONNECTIONS FOR TROUBLE CONTACT
FIGURE 4
NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS
ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD
BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES


UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.
J9 120V
CONTROL INPUT 120V
H1=LINE, N1=NEUTRAL,
15A BREAKER. DO NOT
CONNECT TO SHUNT TRIP
BREAKER. SEE
INSTALLATION SCHEMATIC
FOR ADDITIONAL REQ.
TERMINAL GAS USED FOR
120V POWERED GAS
VALVES ONLY
PANEL LID
J7 120V
MAKE UP AIR INTERLOCK
PANEL COOLING
SECONDARY PANEL COOLING IF NECESSARY
SCADA
CAT-5
TO ETH
MASTER CORE
MOTOR POWER CIRCUIT
DRY CONTACTS (SHOWN DE-ENERGIZED)
18 x 18 x 6 Box
FACTORY WIRING SCHEMATIC CIRCUIT BOARDS
COMPONENT LIST
LEGEND
Neshama Hospice
FACTORY
11/7/2024
6880247

REVISIONS

DESCRIPTION	DATE

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Neshama Hospice R2

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Toronto, ON, M3H 2Z7

DATE: 11/7/2024

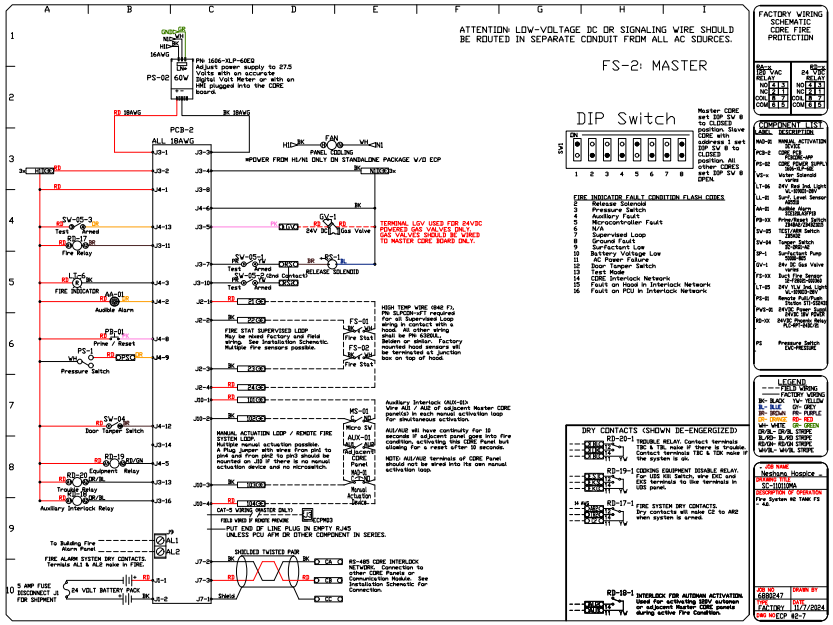
DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 14



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DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 15

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

REVISIONS

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CAPTIVE-AIRE
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Neshama Hospice R2
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Toronto, ON, M3H 2Z7

DATE: 11/7/2024

DWG.#: 6880247

DRAWN BY: Ryan Fung

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

MASTER DRAWING

SHEET NO. 16