



Prepared For:  
**118 on Munjoy Hill, LLC**  
 118 CONGRESS STREET  
 PORTLAND, ME 04101

Consulting Engineer:  
  
 MECHANICAL SYSTEMS ENGINEERS  
 10 FOREST HILLS DRIVE  
 PORTLAND, MAINE 04101  
 (207) 772-4056  
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Architect:  
**ARCHITECTYPE Architects**  
 48 Union Wharf Portland, Maine 04101  
 (207) 772-6022 Fax (207) 772-4056

Project:  
**118 ON MUNJOY HILL**  
 118 CONGRESS STREET  
 PORTLAND, MAINE

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**MECHANICAL SCHEDULES**

**M13**  
 MSE PROJECT 1332

### ELECTRIC HEATER SCHEDULE

TAG	MANUFACTURER & MODEL	SIZE	POWER	WATTS	REMARKS
EB-1	RUNTHAL EB3-120D	48"	120V	586	EURO-STYLE ELECTRIC BASEBOARD - COLOR SELECTED BY ARCHITECT
EB-2	RUNTHAL EB3-120D	36"	120V	440	EURO-STYLE ELECTRIC BASEBOARD - COLOR SELECTED BY ARCHITECT
TH-1	RUNTHAL TW2	12"x34.8"	120V	700	TOWEL WARMER DIRECT WIRED WITH OFF/LOW/MED/HIGH - COLOR SELECTED BY ARCHITECT
CEB-1	MARKEL E3105-028	28"	120V	500	ARCHITECTURAL STYLE COMMERCIAL ELECTRIC BASEBOARD HEATER
CEB-2	MARKEL E3101-048	48"	120V	1000	ARCHITECTURAL STYLE COMMERCIAL ELECTRIC BASEBOARD HEATER

### HOT WATER DUCT HEATING COIL SCHEDULE

TAG	TYPE	MOUNTING	SIZE HxL	CFM FOR SIZING	APD MAXIMUM	EAT	LAT	EWT	MBH	GPM	WPD
DH-1	SERPENTINE	SLIP IN	12"x18"	850	0.15	60	75	120	13.8	3.0	0.5'
DH-2	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-3	SERPENTINE	SLIP IN	12"x14"	600	0.12	60	70	120	9.7	3.0	0.11'
DH-4	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-5	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-6	SERPENTINE	SLIP IN	12"x16"	800	0.15	60	70	120	13.0	3.0	0.44'
DH-7	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-8	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-9	SERPENTINE	SLIP IN	12"x18"	850	0.15	60	75	120	13.8	3.0	0.5'
DH-10	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-11	SERPENTINE	SLIP IN	12"x14"	600	0.12	60	70	120	9.7	3.0	0.11'
DH-12	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-13	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-14	SERPENTINE	SLIP IN	12"x16"	800	0.15	60	70	120	13.0	3.0	0.44'
DH-15	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-16	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-17	SERPENTINE	SLIP IN	12"x18"	850	0.15	60	75	120	13.8	3.0	0.5'
DH-18	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-19	SERPENTINE	SLIP IN	12"x14"	600	0.12	60	70	120	9.7	3.0	0.11'
DH-20	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-21	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-22	SERPENTINE	SLIP IN	12"x16"	800	0.15	60	70	120	13.0	3.0	0.44'
DH-23	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'
DH-24	SERPENTINE	SLIP IN	9X12"	450	0.12	60	70	120	7.6	3.0	1.04'

### ELECTRIC DUCT HEATING COIL SCHEDULE

TAG	MANUFACTURER	TYPE	SIZE HxL	CFM FOR SIZING	APD	EAT	LAT	KW	POWER	CONTROLS
DH-25	INDEECO	SLIP-IN DUCT HEATER	24X10"	1,400	0.04	60	70	5.0	208/60/1	SEE REQUIRED CONTROLS BELOW THIS SCHEDULE
DH-26	INDEECO	SLIP-IN DUCT HEATER	24X10"	1,100	0.04	60	70	3.5	208/60/1	SEE REQUIRED CONTROLS BELOW THIS SCHEDULE

REQUIRED CONTROLS FOR ALL HEATERS:  
 AUTOMATIC AND MANUAL RESET THERMAL CUTOUPS TO PROTECT AGAINST OVERHEATING.  
 DIFFERENTIAL PRESSURE AIRFLOW SWITCH TO DE-ENERGIZE THE HEATER CONTROL CIRCUIT UPON LOSS OF AIRFLOW  
 MAGNETIC CONTACTORS FOR EACH HEATER STAGE.  
 A CONTROL CIRCUIT TRANSFORMER WITH 24V SECONDARY INCLUDING OVERCURRENT PROTECTION.  
 BUILT-IN SNAP-ACTING DISCONNECT SWITCH WITH DOOR INTERLOCK

### PUMPS

MANUFACTURER & MODEL	LOCATIONS	POWER	WATTS
TACO 007	ONE PUMP IN EACH CONDOMINIUM BY WATER HEATER	115/60 / 1	40

### BRANCH CONTROLLERS

TAG	MANUFACTURER & MODEL	BRANCHES	POWER	FLA
BCC-1	mitsubishi CMB-PI010NUGA	10	115/60 / 1	2.0
BCC-2	mitsubishi CMB-PI010NUGA	10	115/60 / 1	2.0
BCC-3	mitsubishi CMB-PI010NUGA	10	115/60 / 1	2.0
BCC-4	mitsubishi CMB-PI020NUGA	8	115/60 / 1	2.0

### AIR TERMINAL SCHEDULE

TAG	MANUFACTURER & MODEL	SIZE	MAX NC	MAX SP	MAX CFM	REMARKS
DI	LBP LINEAR BAR DIFFUSER	16"x6"	20	.07	250	SURFACE MOUNT WITH CRD-60 FIRE DAMPER AND 5020 GABLE DAMPER OPERATOR - 30% DEFLECTION - CONCEALED FASTENERS - WHITE POWDER BAKED FINISH
G1	PRICE 530	24"x12"	20	.07	850	45 DEGREE RETURN GRILLE FOR SURFACE MOUNT
G2	PRICE 530	16"x12"	20	.07	450	45 DEGREE RETURN GRILLE FOR SURFACE MOUNT
G3	PRICE 530	16"x14"	20	.07	600	45 DEGREE RETURN GRILLE FOR SURFACE MOUNT
G4	PRICE 530D	6"x6"	20	.07	100	45 DEGREE RETURN GRILLE FOR SURFACE MOUNT WITH OPPOSED BLADE DAMPER

### VARIABLE FLOW REFRIGERANT OUTDOOR UNIT SCHEDULE

UNIT TAG	MANUFACTURER AND MODEL	NOMINAL TONS	COOLING BTUH	HEATING BTUH	ELECTRIC			REFRIGERANT	WEIGHT	REMARKS
					POWER	MCA	MOP			
OU-1	mitsubishi PURY-PI44TKMU-A	12	144,000	160,000	208/60/3	53	60	410A	715 LBS	MOUNT ON 18" HIGH BUCKLEY MODEL E5300 EQUIPMENT SUPPORTS
OU-2	mitsubishi PURY-PI44TKMU-A	12	144,000	160,000	208/60/3	53	60	410A	715 LBS	MOUNT ON 18" HIGH BUCKLEY MODEL E5300 EQUIPMENT SUPPORTS
OU-3	mitsubishi PURY-PI44TKMU-A	12	144,000	160,000	208/60/3	53	60	410A	715 LBS	MOUNT ON 18" HIGH BUCKLEY MODEL E5300 EQUIPMENT SUPPORTS
OU-4	mitsubishi PURY-P46TKMU-A	8	96,000	108,000	208/60/3	34	40	410A	538 LBS	MOUNT ON 18" HIGH BUCKLEY MODEL E5300 EQUIPMENT SUPPORTS

\* COOLING CAPACITIES BASED ON 80/67 DEG. F. ENTERING AIR & 95 DEG. F. AT THE OUTDOOR UNIT  
 \*\* HEATING CAPACITIES BASED ON 70 DEG. F. ENTERING AIR & 47/43 DEG. F. AT THE OUTDOOR UNIT

### VARIABLE FLOW REFRIGERANT INDOOR UNIT SCHEDULE

TAG	MANUFACTURER AND MODEL	NOMINAL TONS	CFM RANGE	ESP RANGE " W.C.	ELECTRIC			REFRIGERANT	WEIGHT	REMARKS
					POWER	MCA	MOP			
AH-1	mitsubishi PEFY-P30NMAU-E2	2.5	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	71 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-2	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-3	mitsubishi PEFY-P18NMAU-E2	1.5	424-600	0.14-0.60	208/60/1	1.56	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-4	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-5	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-6	mitsubishi PEFY-P24NMAU-E2	2.0	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	67 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-7	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-8	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-9	mitsubishi PEFY-P30NMAU-E2	2.5	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	71 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-10	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-11	mitsubishi PEFY-P18NMAU-E2	1.5	424-600	0.14-0.60	208/60/1	1.56	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-12	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-13	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-14	mitsubishi PEFY-P24NMAU-E2	2.0	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	67 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-15	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-16	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-17	mitsubishi PEFY-P30NMAU-E2	2.5	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	71 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-18	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-19	mitsubishi PEFY-P18NMAU-E2	1.5	424-600	0.14-0.60	208/60/1	1.56	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-20	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-21	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-22	mitsubishi PEFY-P24NMAU-E2	2.0	618-883	0.14-0.60	208/60/1	2.73	1.45	410A	67 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-23	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-24	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-25	mitsubishi PEFY-P48NMAU-E2	4.0	984-1412	0.14-0.60	208/60/1	3.33	3.33	410A	86 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-26	mitsubishi PEFY-P36NMAU-E2	3.0	812-1165	0.14-0.60	208/60/1	3.50	3.50	410A	86 LBS	WITH EXTERNAL HEATER ADAPTER RELAY & 2" MERV 13 FILTER BOX
AH-27	mitsubishi PEFY-P15NMAU-E2	1.25	353-494	0.14-0.60	208/60/1	1.45	1.45	410A	58 LBS	2" MERV 13 FILTER BOX
AH-28	mitsubishi PMFY-PI2NBMU-E	1.0	258328	0.14-0.60	208/60/1	0.26	0.26	410A	31 LBS	CEILING RECESSED UNIT ONE-WAY THROW
AH-29	mitsubishi PMFY-PO8NBMU-E	0.75	258-328	0.14-0.60	208/60/1	0.25	0.25	410A	31 LBS	CEILING RECESSED UNIT ONE-WAY THROW
AH-30	mitsubishi PMFY-PO8NBMU-E	0.75	258-328	0.14-0.60	208/60/1	0.25	0.25	410A	31 LBS	CEILING RECESSED UNIT ONE-WAY THROW

### ENERGY RECOVERY UNIT SCHEDULE

TAG	MANUFACTURER AND MODEL	RECOVERY TYPE	WINTER EXHAUST AIR					WINTER O.A.		SUPPLY AIR TO SPACES					ELECTRIC POWER	WEIGHT	REMARKS
			CFM	DB	WB	E.S.P.	HP	DB	WB	CFM	DB	WB	E.S.P.	HP			
ERV-1	SEMCO FV-2000	WHEEL	1400	70	52.9	0.75	1.5	-10	-10.2	1,400	48.9	40.5	0.75	15	208/60/3	550 LBS	ROOFTOP DOWNFLOW WITH FACTORY CURB

### FAN SCHEDULE

TAG	MANUFACTURER & MODEL	TYPE	CFM	ESP	ELECTRIC		WEIGHT	REMARKS	CONTROL
					POWER	HP			
KHE-1	GREENHECK 094 -V6	UPBLAST	160-800	0.5"	115 / 60 / 1	¼	58 LBS	VARIGREEN MOTOR, 14" HIGH ROOF CURB AND BACKDRAFT DAMPER	GREENVENT SYSTEM WITH PRESSURE SENSOR
DE-1	GREENHECK 094 -V6	UPBLAST	160-800	0.5"	115 / 60 / 1	¼	58 LBS	VARIGREEN MOTOR, 14" HIGH ROOF CURB AND BACKDRAFT DAMPER	GREENVENT SYSTEM WITH PRESSURE SENSOR
DE-2	GREENHECK 094 -V6	UPBLAST	160-800	0.5"	115 / 60 / 1	¼	58 LBS	VARIGREEN MOTOR, 14" HIGH ROOF CURB AND BACKDRAFT DAMPER	GREENVENT SYSTEM WITH PRESSURE SENSOR
EF-1	GREENHECK SEI-20-436-B5	SIDEWALL	5,000	0.25"	208 / 60 / 1	½	51 LBS	WITH OSHA GUARD, WALL SLEEVE, MOTORIZED DAMPER AND LOUVER	CO2 AND N2 EXHAUST SYSTEMS CONTROLS