



Job Name:

System Reference:

Date:

Indoor Unit: MSZ-GL24NA	Wireless Remote Controller
	

### GENERAL FEATURES

- Slim wall-mounted indoor units provide zone comfort control
- The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- Multiple control options available:
  - Hand-held Remote Controller (provided with unit)
  - kumo cloud<sup>®</sup> smart device app for remote access
  - Third-party interface options
  - Wired or wireless controllers
- Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation
- Smart Set: recalls a preferred preset temperature setting at the touch of a button

## SPECIFICATIONS: MSZ-GL24NA

Cooling Capacity <sup>1, 3</sup>		BTU/H	22,500
Heating Capacity <sup>2, 3</sup>		BTU/H	27,600
Electrical	Voltage, Phase, Frequency		208/230V, 1 phase, 60Hz
	Guaranteed Voltage Range		V AC 187 - 253
	Voltage: Indoor - Outdoor, S1-S2		V AC 208 / 230
	Voltage: Indoor - Outdoor, S2-S3		V DC 24
	Short-circuit Current Rating (SCCR)		5
MCA		A	1
Blower Motor Full Load Amperage		A	0.76
Blower Motor Output		W	56
Airflow Rate at Cooling, Dry		CFM	738-628-544-469-388
Airflow Rate at Cooling, Wet		CFM	661-562-487-420-347
Airflow Rate at Heating, Dry		CFM	738-628-544-469-388
Sound Pressure Level (Cooling)		dB(A)	53-49-45-41-34
Sound Pressure Level (Heating)		dB(A)	52-49-45-41-32
Drain Pipe Size		In. (mm)	5/8 (15.88)
Heat Exchanger Type		Plate fin coil	
External Finish Color		Munsell 1.0Y 9.2/0.2	
Unit Dimensions		W: In. (mm)	43-5/16 (1,100)
		D: In. (mm)	9-3/8 (238)
		H: In. (mm)	12-13/16 (325)
Package Dimensions		W: In. (mm)	45-1/2 (1,160)
		D: In. (mm)	12-3/4 (320)
		H: In. (mm)	15-1/2 (390)
Unit Weight		Lbs. (kg)	37 (17)
Package Weight		Lbs. (kg)	37 (17)
Refrigerant	Type		R410A
Piping	Gas Pipe Size O.D. (Flared)	In. (mm)	5/8 (15.88)
	Liquid Pipe Size O.D. (Flared)	In. (mm)	3/8 (9.52)

**Notes:**

Nominal Conditions	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
	<sup>2</sup> Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB

<sup>3</sup>Capacity varies based on the number of indoor units operating and the model of the Multi-zone Outdoor Unit. For reference to connected capacity charts, please refer Multi-zone Outdoor Unit Operational Performance.

## ACCESSORIES: MSZ-GL24NA

Anti-allergy Enzyme Filter	□ MAC-2310FT-E
kumo touch™ RedLINK™ Wireless Controller	□ MHK2
Deluxe MA Remote Controller <sup>1</sup>	□ PAR-40MAAU
Simple MA Controller <sup>1</sup>	□ PAC-YT53CRAU-J
Touch MA Controller <sup>1</sup>	□ PAR-CT01MAU-SB
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
System Control Interface <sup>2</sup>	□ MAC-334IF-E
Wireless Interface 2	□ PAC-USWHS002-WF-2
Thermostat Interface	□ PAC-US444CN-1
kumo station®	□ PAC-WHS01HC-E
USNAP Interface	□ PAC-WHS01UP-E
IT Extender	□ PAC-WHS01IE-E
BACnet® and MODBUS® Interface	□ PAC-UKPRC001-CN-1
Lockdown Bracket for Hand-held Remote Controllers	□ RCMKP1CB
Blue Diamond Sensor Extension Cable — 15 Ft.	□ C13-103
Blue Diamond Alarm Extension Cable — 6.5 Ft.	□ C13-192
Blue Diamond MultiTank — collection tank for use with multiple pumps	□ C21-014
Blue Diamond Rubber Foot Pads	□ F10-010
Mini Condensate Pump — 230 volt application	□ SI30-230
MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor	□ X87-835 - 110 to 250V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 BTU/H [recommended]	□ X87-711 - 110V
Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	□ X87-721 - 208/230V
MicroBlue Blue Diamond Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H	□ X85-003
Fascia Kit for MicroBlue Pump – mounts the MicroBlue and sensor directly beneath the indoor unit	□ T18-016
Drain Pan Level Sensor	□ SS610E
(30A/600V/UL) [fits 2" X 4" utility box] - Black	□ TAZ-MS303
(30A/600V/UL) [fits 2" X 4" utility box] - White	□ TAZ-MS303W

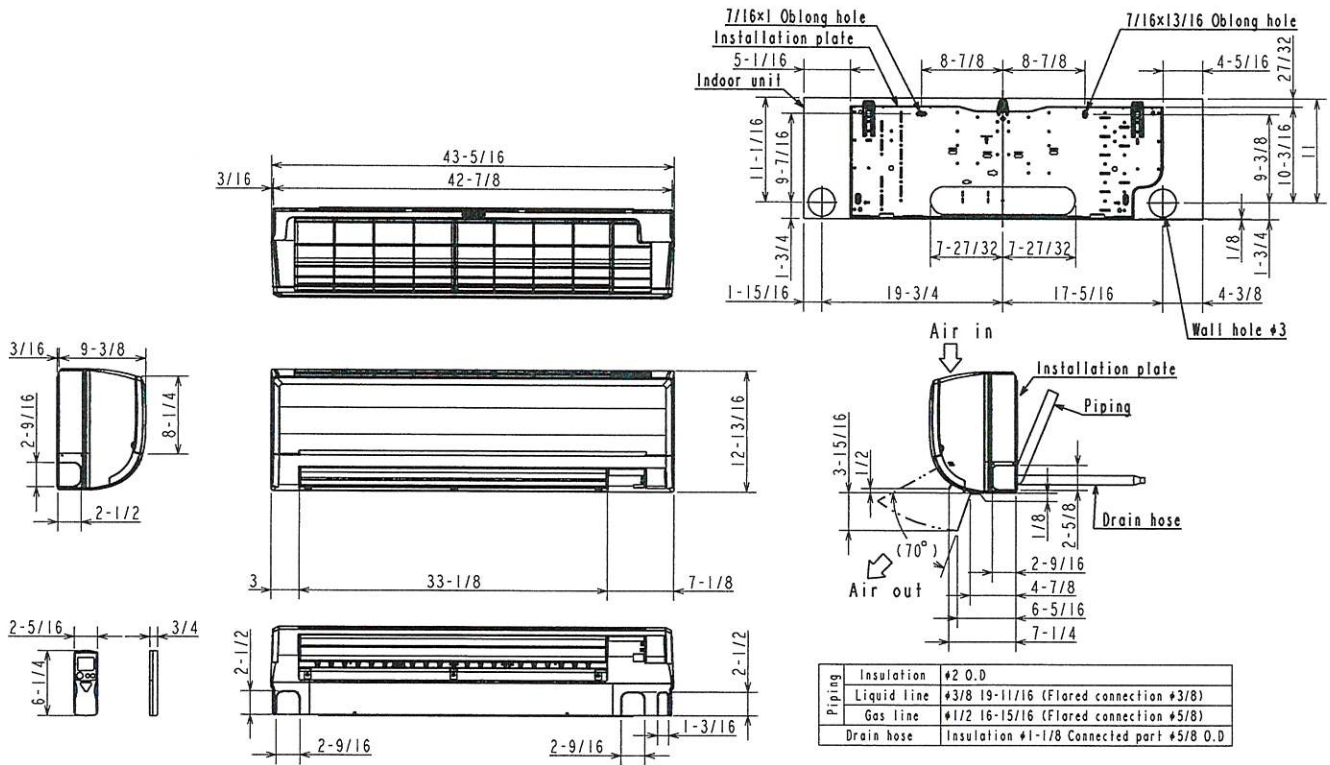
<sup>1</sup> Requires MAC-334IF-E

<sup>2</sup> Allows indoor units to connect to an MA Controller



# DIMENSIONS: MSZ-GL24NA

Unit: inch



FORM# MSZ-GL24NA FOR MXZ-C MULTI-ZONE HEAT PUMP SYSTEMS - 202003

1340 Satellite Boulevard, Suwanee, GA 30024  
 Toll Free: 800-433-4822 www.mehvac.com



Specifications are subject to change without notice.

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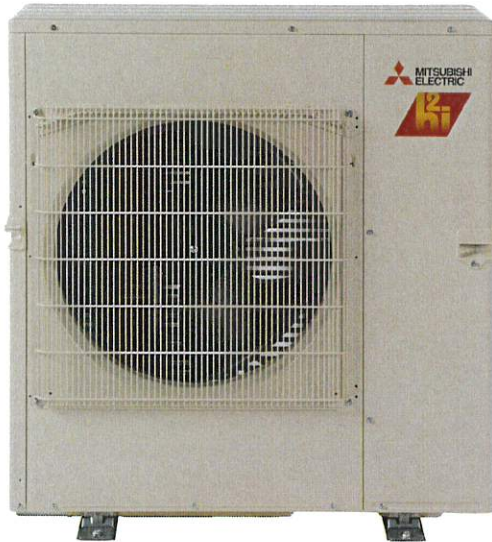
**MXZ-3C30NAHZ2**  
**MULTI-ZONE INVERTER HEAT-PUMP SYSTEM**



Job Name:

System Reference:

Date:



**FEATURES**

- Variable speed INVERTER-driven compressor
- Built-in base pan heater
- Quiet outdoor unit operation as low as 58 dB(A)
- High pressure protection
- Compressor thermal protection
- Compressor overcurrent detection
- Fan motor overheating/voltage protection
- H2i<sup>®</sup>hyper heat performance offers 100% heating capacity at 5°F and 74% heating capacity at -13°F
- ENERGY STAR<sup>®</sup>certified (non-ducted)

ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.

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# SPECIFICATIONS: MXZ-3C30NAHZ2

(For data on specific indoor units, see the MXZ-C Technical and Service Manual.)

Cooling* (Non-ducted / Ducted)	Rated Capacity	Btu/h	28,400 / 27,400
	Capacity Range	Btu/h	12,600 - 28,400
	Rated Total Input	W	2,272 / 2,661
Heating at 47°F* (Non-ducted / Ducted)	Rated Capacity	Btu/h	28,600 / 27,600
	Capacity Range	Btu/h	11,400 - 36,000
	Rated Total Input	W	2,096 / 2,187
Heating at 17°F* (Non-ducted/Ducted)	Rated Capacity	Btu/h	18,000 / 16,500
	Maximum Capacity	Btu/h	28,600 / 27,600
	Rated Total Input	W	1,991 / 1,993
Heating at 5°F*	Maximum Capacity	Btu/h	28,600
Connectable Capacity		Btu/h	12,000 - 36,000
Energy Star® (ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.)			Yes
Electrical Requirements	Power Supply	Voltage, Phase, Hertz	208 / 230V, 1-Phase, 60 Hz
	Recommended Fuse/Breaker Size	A	40
	MCA	A	30.5
Voltage	Indoor - Outdoor S1-S2	V	AC 208 / 230
	Indoor - Outdoor S2-S3	V	DC ±24
Compressor	DC INVERTER-driven Twin Rotary		
Fan Motor (ECM)		F.L.A.	2.43
Sound Pressure Level	Cooling	dB(A)	54
	Heating	dB(A)	58
External Dimensions (H x W x D)		In mm	41-9/32 x 37-13/32 x 13 1048 x 950 x 330
Net Weight		Lbs / kg	189 / 86
External Finish	Munsell No. 3Y 7.8/11		
Refrigerant Pipe Size O.D.	Liquid (High Pressure)	In / mm	1/4 / 6.35
	Gas (Low Pressure)	In / mm	A: 1/2 / 12.7 ; B,C: 3/8 / 9.52
Max. Refrigerant Line Length		Ft / m	230 / 70
Max. Piping Length for Each Indoor Unit		Ft / m	82 / 25
Max. Refrigerant Pipe Height Difference	If IDU is Above ODU	Ft / m	49 / 15
	If IDU is Below ODU	Ft / m	49 / 15
Connection Method	Flared/Flared		
Refrigerant	R410A		

\* Rating Conditions per AHRI Standard:

Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB  
Cooling | Outdoor: 95° F (35° C) DB / W.B. 23.9° C (75° F)

Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB  
Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

Heating at 17° F | Indoor: 70° F (21° C) DB  
Heating at 17° F | Outdoor: 17° F (-8° C) DB / 15° F (-9° C) WB

#### OPERATING RANGE:

	Outdoor
Cooling	D.B. 14 to 115° F [ D.B. -10 to 46° C ]*1
Heating	W.B. -13 to 65° F [ W.B. -25 to 18° C ]

#### ENERGY EFFICIENCIES:

Indoor Unit Type	SEER	EER	HSPF	COP @ 47°F	COP @ 17°F
Non-ducted (09+09+12)	18.0	12.5	11.0	4.00	2.65
Ducted and Non-ducted	17.00	11.40	10.40	3.85	2.58
Ducted (09+09+12)	16.0	10.3	9.8	3.70	2.50

#### NOTES:

For actual capacity performance based on indoor unit type and number of indoor units connected, please refer to MXZ Operational Performance. Although the maximum connectable capacity can exceed rated, the outdoor unit cannot provide more than 100% of the rated capacity. Please utilize this over capacity capability for load shedding or applications where it is known that all connected units will NOT be operating at the same time.

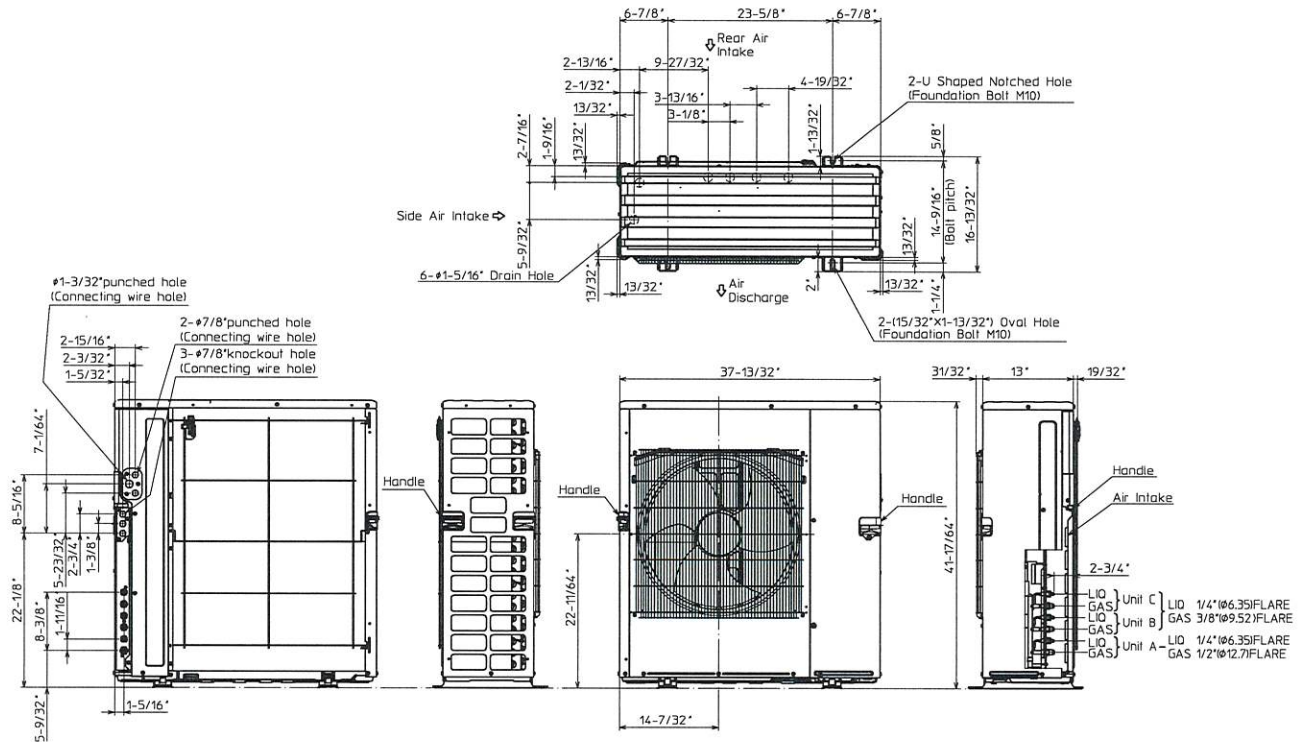
## OUTDOOR UNIT ACCESSORIES: MXZ-3C30NAHZ2

Air Outlet Guide	Air Outlet Guide (1 Piece)	<input type="checkbox"/> PAC-SH96SG-E
Ball Valve	Refrigeration Ball Valve - 1/2"	<input type="checkbox"/> BV12FFSI2
	Refrigeration Ball Valve - 1/4"	<input type="checkbox"/> BV14FFSI2
	Refrigeration Ball Valve - 3/8"	<input type="checkbox"/> BV38FFSI2
	Refrigeration Ball Valve - 5/8"	<input type="checkbox"/> BV58FFSI2
Distribution pipe for Branch Box	M-NET Converter	<input type="checkbox"/> PAC-IF01MNT-E
Hail Guards	Hail Guard	<input type="checkbox"/> HG-A1
Mounting Pad	Condensing Unit Mounting Pad: 16" x 36" x 3"	<input type="checkbox"/> ULTRILITE1
	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	<input type="checkbox"/> DSD-400P
Port Adapter	Adaptor: 1/2" x 3/8"	<input type="checkbox"/> MAC-A455JP-E
	Adaptor: 1/2" x 5/8"	<input type="checkbox"/> MAC-A456JP-E
	Adaptor: 3/8" x 1/2"	<input type="checkbox"/> MAC-A454JP-E
	Adaptor: 3/8" x 5/8"	<input type="checkbox"/> PAC-SG76RJ-E
Power Supplies and Auxiliary Components	M-Net Control Wire, 1,000' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated)	<input type="checkbox"/> CW162S-1000
Power Supplies And Auxiliary Components	M-Net Control Wire, 250' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated)	<input type="checkbox"/> CW162S-250
Stand	18" Single Fan Stand	<input type="checkbox"/> QSMS1801M
	24" Single Fan Stand	<input type="checkbox"/> QSMS2401M
	Condenser Wall Bracket	<input type="checkbox"/> QSWB2000M-1
	Condenser Wall Bracket -Stainless Steel Finish	<input type="checkbox"/> QSWBSS
	Outdoor Unit Stand — 12" High	<input type="checkbox"/> QSMS1201M

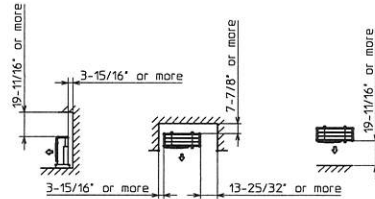


# OUTDOOR UNIT DIMENSIONS: MXZ-3C30NAH2

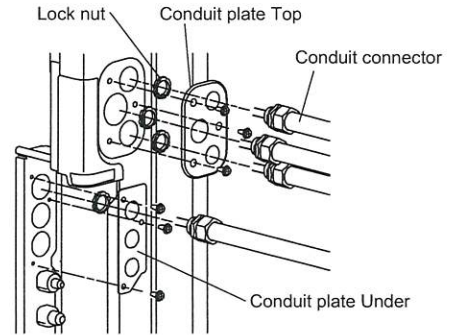
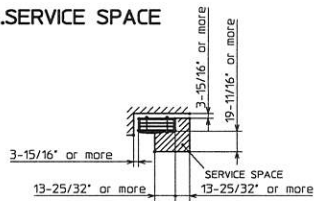
Unit: inch



## 1.FREE SPACE



## 2.SERVICE SPACE



1340 Satellite Boulevard Suwanee, GA 30024  
Toll Free: 800-433-4822 www.mehvac.com

FORM# M\_SUBMITTAL\_MXZ-3C30NAH2\_en - 202103





Hello Geoff,

I attached the drawings that show the locations of the condensers & indoor unit. I also attached cut sheets on the heat pump equipment that is being proposed. It's just a typical "head" and typical "condenser" ... I didn't provide a cut of every piece of equipment.

## Thetford Town Hall - Cost Breakdown

Tasks	Costs	Over Head (15%)	Profit (5%)	Total Sell	% Total
General Conditions & Site Management	\$14,600	\$2,190	\$840	\$17,630	6.25%
Drawings & Design	\$11,500	\$1,725	\$661	\$13,886	4.92%
Site Work & Pads	\$2,950	\$443	\$170	\$3,562	1.26%
Mechanical	\$158,200	\$23,730	\$9,097	\$191,027	67.74%
Electrical	\$23,500	\$3,525	\$1,351	\$28,376	10.06%
Drywall & Paint	\$5,025	\$754	\$289	\$6,068	2.15%
P&P Bond	\$2,700	\$405	\$155	\$3,260	1.16%
Permits	\$2,500	\$375	\$144	\$3,019	1.07%
Warranty	\$3,450	\$518	\$198	\$4,166	1.48%
Contingency (Cost & Project Timing)	\$11,000			\$11,000	3.90%
	\$235,425	\$33,664	\$12,904	<b>\$281,993</b>	

I'm still waiting on the lease terms and when I get that, I will send it right over.

Feel free to call w/ any questions, 802-318-3181.

Best,

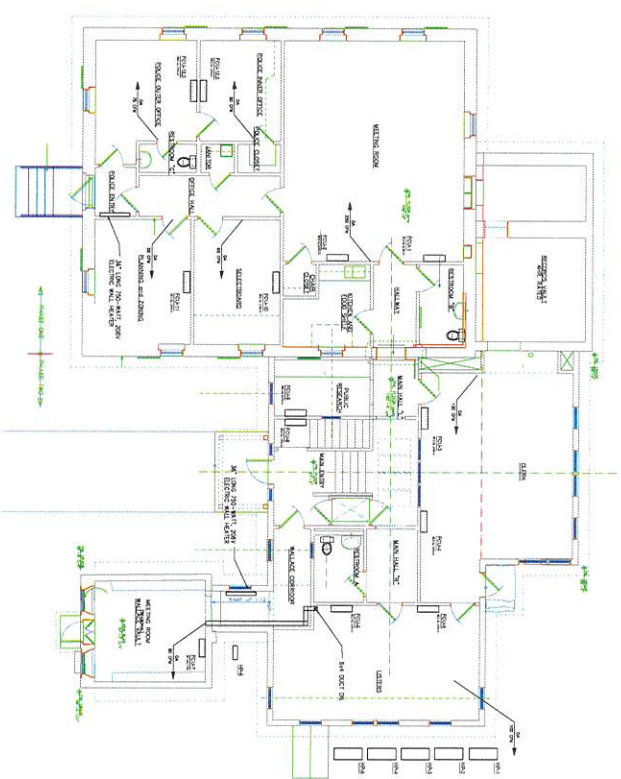
**Eric Lafayette**

Project Manager - Vermont

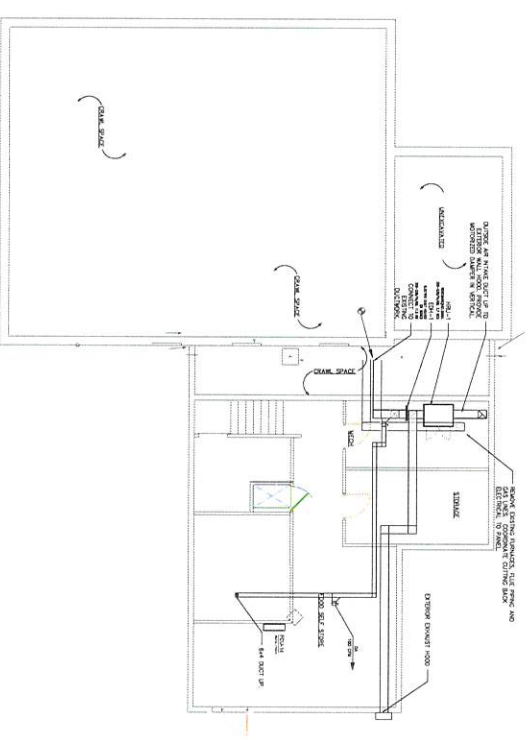
**Energy Efficient Investments**

E: [elafayette@eeiservices.com](mailto:elafayette@eeiservices.com)

M: 802.318.3181



1 1ST LEVEL MECHANICAL PLANS  
1/8"=1'-0"



1 BASEMENT LEVEL MECHANICAL PLANS  
1/8"=1'-0"

CONDENSING UNITS (CU-X)											
MARK	MANUFACTURER	MODEL #	DESCRIPTION	SERVICES	LOCATION	SOUND PRESSURE (dB)	COOLING (Tons)	HEATING (Tons)	ELECTRICAL (VOLTAGE/PHASE/FREQ)	MCA	NOTES
HP-1	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-1 & 2	MEETING ROOM	65.0	48.0	28.6	208-230/1/60	42.0	1
HP-2	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-3 & 4	CLERKS OFFICE	65.0	28.4	28.6	208-230/1/60	30.5	1
HP-3	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-5 & 6	LISTERS OFFICE	65.0	28.4	28.6	208-230/1/60	30.5	1
HP-4	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-10 & 11	SELECTOR ROOM	65.0	22.0	14.0	208-230/1/60	29.9	1
HP-5	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-12 & 13	POLICE OFFICE	65.0	28.4	28.6	208-230/1/60	30.5	1
HP-6	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-9 & 14	1ST FLOOR ENTRY & FOOD SHED	65.0	28.4	28.6	208-230/1/60	30.5	1
	WILSON	WC-230MAHZ	ROOF HP UNIT	FOL-7	WALLMOUNT VALVE	65.0	15.0	8.45**	208-230/1/60	11.0	1

NOTES:  
 \*\*HEATING AT -13°F  
 1. PROVIDE STAND AND ANCHOR TO PRECAST HOUSE KEEPING PAD.

- GENERAL NOTES
1. ALL MECHANICAL WORK PER 2015 IBC, NFPA-90A, ASHRAE STANDARDS AND NH AGENCIES.
  2. PROVIDE ALL NECESSARY PERMITS AND INSURING BEFORE INSULATING. PROVIDE A WRITTEN REPORT OF TEST AND COORDINATE WITH CONSTRUCTION MANAGER.
  3. MECHANICAL INSULATION PER 2015 IECC AND AS PER SPECIFICATIONS.
  4. FIRE SEAL ALL PENETRATIONS THROUGH FIRE WALLS.
  5. PROVIDE AND INSTALL REFRIGERANT PIPING PER MANUFACTURERS INSTRUCTIONS.
  6. PROVIDE AND INSTALL CONDENSATE PUMP ON FAN CURTAIN AND CONDENSATE PIPING (PVC).
  7. PROVIDE AND INSTALL CONDENSATE PIPING (PVC) FOR EACH FAN COIL UNIT.

PROGRESS DRAWING  
 NOT FOR CONSTRUCTION

PROJECT: <b>THETFORD TOWN OFFICES</b> THETFORD, VERMONT	FOR: <b>ENERGY EFFICIENT INVESTMENTS, INC</b> MERRIMACK, NH	REVISIONS: 	THETFORD TOWN OFFICES MECHANICAL SYSTEM IMPROVEMENTS  HVAC MECHANICAL PLANS.
DATE: 12/8/2021		M1.0 SHEET 1 OF 1	