

PE
C/L 11/17/20
\$50

TOWN OF PLAINFIELD ZONING AND BUILDING PERMIT APPLICATION



Property owner: EVAN OXENHAM
Mailing Address for permit: 92 METHODIST HILL ROAD
PLAINFIELD NH 03781

Phone number: 603-727-9368 Street Address of project 92 METHODIST HILL ROAD
Tax Map and Lot # 212 1 14

Permit Type (circle one): building zoning

Please provide a written description of the project including, when appropriate, dimensions: _____

INSTALLATION OF MITSUBISHI ELECTRIC HYPER-HEAT SYSTEM
RUN A 220 V LINE TO PROVIDE ELECTRIC SUPPLY, LENGTH OF LINE IS
ALL WORK IS WITHIN HOUSE. 68 FEET.

Lot size: 14 acres Proposed project distances to property lines
front _____' rear _____' side _____' side _____'

Zoning District RCI
State Approved Septic Design # N/A
Driveway Permit # N/A

Town Use:	
Current Use	Y/N
ZBA	Y/N
PB	Y/N

Contractor Information

	Builder	Electrician	Plumber
Name	<u>PAUL LUCIOW</u> <u>ARC MECHANICAL</u>	<u>JOANNA SHARF</u>	_____
Phone #	<u>802-535-7167</u>	_____	_____

Applicant's signature: Evan Oxenham Date 1/28/2019

Required Attachments

Please provide a copy of plans detailing the project. If construction plans are not available attach a hand drawn map detailing the project.

Permits cannot be issued without receipt of the proper fee. If you are unsure of the amount due or have any questions about your application, contact the town office (603-469-3201).

TOWN ACTION

Permit # 19-04

Approved
 Denied

Date: 2/6/19

Reviewed [Signature]
Building Inspector/Zoning Administrator

Judith A. Belyea
[Signature]
[Signature]

Board of Selectmen

November 27, 2018

Evan Oxenham
92 Methodist Hill Road
Plainfield, NH 03781

Proposal # 18-402

Job Name & Location
Oxenham Residence Hyper-Heat Heat Pump System
Plainfield, NH

603-277-3151, evan.oxenham@gmail.com

Specifications

Evan,

Thank you for the opportunity to provide a quote to install one 24,000 BTU Mitsubishi Electric Hyper-Heat system for your main living area and office, with an 18,000 BTU wall unit for the main living area and a 6,000 BTU wall unit for the office. The system will provide cooling and heating down to -13 degrees.

Paul Luciw
Estimator/Project Manager
802-535-7167 Cell

We propose to supply all material and labor to install a Mitsubishi Electric Hyper-Heat system, complete and in accordance with the following specifications:

- Install an 18,000 BTU indoor unit mounted on the left-hand side of the living room wall that faces the back side of your home.
- Run the piping out through the wall, back into the basement, and over to the condenser.
- Install a 6,000 BTU indoor unit mounted on the right side of the exterior wall in the office.
- Run the piping through the back wall of your home to the condenser.
- Mount the 24,000 BTU condenser on a stand placed on a composite pad under your porch on the gable end of your home.

ARC will

- Run the refrigeration lines, drain line, and electrical from the indoor units to the outdoor condenser.
- Cover all piping in line-hide plastic enclosure, which you can paint to match your home if you wish.
- Pressure test, evacuate, charge, and check operation after all connections have been completed.

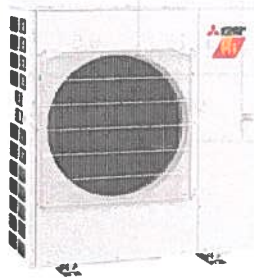
Note

- Mitsubishi Electric systems installed by ARC, a Mitsubishi Electric Diamond Dealer, carry a 12-year compressor and parts warranty. Systems installed by non-Diamond Dealers only carry a 10-year warranty.
- An electrician will be needed for the power to the condensing unit. We can supply one for an additional cost.

Job Name: Oxenham Residence

System Reference: 24,000 BTU System

Date: 11/27/18



Outdoor Unit: MXZ-3C24NAHZ2

ACCESSORIES

The outdoor unit is delivered with the base pan heater factory installed.

- Airflow Guide (PAC-SH96SG-E)
- 3/8" x 1/2" Port Adapter (MAC-A454JP-E)
- 1/2" x 3/8" Port Adapter (MAC-A455JP-E)
- 1/2" x 5/8" Port Adapter (MAC-A456JP-E)
- M-NET Adapter (PAC-IF01MNT-E)

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

Specifications			Model Name
Unit Type			MXZ-3C24NAHZ2
Cooling* (Non-ducted / Ducted)	Rated Capacity	Btu/h	22,000 / 23,600
	Capacity Range	Btu/h	6,000 - 23,600
	Rated Total Input	W	1,630 / 2,360
Heating at 47°F* (Non-ducted / Ducted)	Rated Capacity	Btu/h	25,000 / 24,600
	Capacity Range	Btu/h	7,200 - 30,600
	Rated Total Input	W	1,725 / 1,871
Heating at 17°F* (Non-ducted/Ducted)	Rated Capacity	Btu/h	14,000 / 14,000
	Maximum Capacity	Btu/h	25,000 / 24,600
	Rated Total Input	W	1,622 / 1,635
Heating at 5°F*	Maximum Capacity	Btu/h	25,000
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 (Non-ducted/Ducted)	Cooling	dB(A)	54
	Heating		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. — Eight Ports	Liquid (High Pressure)	In / mm	1/4 / 6.35
	Gas (Low Pressure)		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		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 / WB. 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 (6°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

Job Name: Oxenham Residence

System Reference: 6,000 BTU Indoor Unit

Date: 11/27/18

Indoor Unit: MSZ-FH06NA	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
- 3D i-see Sensor™ enables advance features:
 - Indirect or Direct Airflow for personalized comfort
 - Absence Detection for energy-saving mode
- Double Vane features:
 - Separates airflow to deliver air across a large area
 - Simultaneously deliver air to two people in different locations
 - Generates more comfortable natural airflow pattern
- Multiple control options available:
 - Hand-held Remote Controller (provided with unit)
 - kumo cloud® smart device app for remote access
 - Third-party interface options
 - Wired or wireless controllers
- Triple-action Filtration: Nano Platinum Filter, Deodorizing Filter, & Electrostatic Anti-Allergy Enzyme Filter
- Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation

ACCESSORIES: MSZ-FH06NA

Deodorizing Filter	<input type="checkbox"/> MAC-3000FT-E
Electrostatic Anti-allergy Enzyme Filter	<input type="checkbox"/> MAC-2330FT-E
Backlit, Wall-mounted, Wireless Controller	<input type="checkbox"/> MHK1
Portable Central Controller	<input type="checkbox"/> MCCH1
Wired MA Controller	<input type="checkbox"/> PAR-33MAA ¹
Simple MA Controller	<input type="checkbox"/> PAC-YT53CRAU ¹
Touch MA Controller	<input type="checkbox"/> PAR-CT01MAU-SB ¹
Wired Remote Sensor	<input type="checkbox"/> PAC-SE41TS-E
Wireless Temperature and Humidity Sensor	<input type="checkbox"/> PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	<input type="checkbox"/> MOS1
System Control Interface	<input type="checkbox"/> MAC-333IF-E ²
Wireless Interface	<input type="checkbox"/> PAC-USWHS002-WF-1
Thermostat Interface	<input type="checkbox"/> PAC-US444CN-1
kumo station [®]	<input type="checkbox"/> PAC-WHS01HC-E
USNAP Interface	<input type="checkbox"/> PAC-WHS01UP-E
IT Extender	<input type="checkbox"/> PAC-WHS01IE-E
BACnet [®] and Modbus Interface	<input type="checkbox"/> PAC-UKPRC001-CN-1
External Fan / Heater Control Relay Adapter	<input type="checkbox"/> CN24RELAY-KIT-CM3
i-see Sensor [™]	<input type="checkbox"/> PAC-SH91MK-E
Blue Diamond Sensor Extension Cable—15 Ft.	<input type="checkbox"/> C13-103
Blue Diamond Alarm Extension Cable—6.5 Ft.	<input type="checkbox"/> C13-192
Blue Diamond MultiTank—collection tank for use with multiple pumps	<input type="checkbox"/> C21-014
Blue Diamond Rubber Foot Pads	<input type="checkbox"/> F10-010
Mini Condensate Pump—230V application	<input type="checkbox"/> SI30-230
MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor	<input type="checkbox"/> X87-835 - 110 to 250V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 Btu/h [recommended]	<input type="checkbox"/> X87-711 - 110V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) up to 48,000 Btu/h [recommended]	<input type="checkbox"/> X87-721 - 208/230V
MicroBlue Blue Diamond Mini Condensate Pump (110/208/230V) up to 18,000 Btu/h	<input type="checkbox"/> X85-003
Fascia Kit for MicroBlue Pump – mounts the MicroBlue and sensor directly beneath the indoor unit	<input type="checkbox"/> T18-016
Drain Pan Level Sensor (Control for indoor unit shut off to prevent drain pan overflow)	<input type="checkbox"/> DPLS2
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - Black	<input type="checkbox"/> TAZ-MS303
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - White	<input type="checkbox"/> TAZ-MS303W
1/4" x 3/8" x 15' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MLS143812T-15
1/4" x 3/8" x 30' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MLS143812T-30
1/4" x 3/8" x 50' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MLS143812T-50
1/4" x 3/8" x 65' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MLS143812T-65
1/4 x 3/8 x 100' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-10

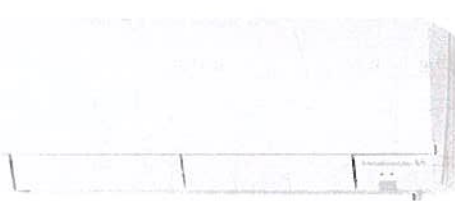
¹ Requires MAC-333IF-E

² Allows M-Series indoor units to connect to an MA controller

Job Name: Oxenham Residence

System Reference: 18,000 BTU Indoor Unit

Date: 11/27/18



Indoor Unit: MSZ-FH18NA



Wireless Remote Controller

ACCESSORIES:

Indoor Unit

- Condensate Pump (BlueDiamond X87-711/721; 115/230V)
- Condensate Pump (Sauermann SI30-115/230; 115/230V)
- Replacement Platinum Deodorizing Filter (MAC-3000FT-E)
- Replacement Anti-allergy Enzyme Filter (MAC-2330FT-E)

Controls

- Wireless Controller (MHK1)
- Wired Remote Controller PAR-31MAA (Requires MAC-333IF-E)
- Wireless Interface for kumo cloud™ (PAC-WHS01WF-E)
- Thermostat Interface (PAC-US444CN-1)

SPECIFICATIONS:

Rated Capacity*			
Cooling ¹	Btu/h / W	17,200	
Heating at 47° F ²	Btu/h / W	20,300	
<small>Rating Conditions per AHRI Standard: ¹ Cooling Indoor: 80° F(27° C)DB / 67° F(19° C)WB, Outdoor: 95° F(35° C)DB / 75° F(24° C)WB ² Heating at 47° F Indoor: 70° F (21° C)DB / 60° F (16° C)WB, Outdoor: 47° F (8° C)DB / 43° F (6° C)WB</small>			
<small>For data on specific indoor units (all ducted, all non-ducted, and both ducted and non-ducted) combinations, see the MXZ Technical and Service Manual.</small>			
<small>Applications should be restricted to comfort cooling only, equipment cooling applications are not recommended for low ambient temperature conditions.</small>			
Electrical Power Requirements		208 / 230V, 1-Phase, 60 Hz	
Minimum Circuit Ampacity (MCA)	A	1	
Blower Motor (ECM)	F.L.A.	0.67	
Blower Motor Output	W	30	
Field Drainpipe Size O.D.	In.(mm)	5/8 (15)	
Airflow Rate (Lo - Med - Hi - Super Hi - Powerful)			
Cooling	DRY	CFM	225-262-304-355-437
	WET		194-225-261-305-376
Heating	DRY		201-254-317-394-514
Sound Pressure Level (Lo - Med - Hi - Super Hi - Powerful)			
Cooling	dB(A)	27-31-35-39-44	
Heating		25-29-34-39-46	
External Dimensions (H x W x D)	In.(mm)	12 + 11/16 x 36-7/16 x 9-3/16 (305 +17 x 925 x 234)	
Net Weight	Lbs.(kg)	29 (12)	
External Finish	Munsell 1.0Y 9.2 / 0.2		
Refrigerant Piping (Flared)			
Liquid (High Pressure)	In.(mm)	1/4 (6.35)	
Gas (Low Pressure)		1/2 (12.7)	



Evan Oxenham <evan.oxenham@gmail.com>

Re: Quote for 220 V Line for Heat Pump

1 message

Joanna Sharf <josharf@gmail.com>

To: Evan Oxenham <evan.oxenham@gmail.com>

ELECTRICAL LICENSE # 12743M

Wed, Dec 19, 2018 at 9:12 PM

Hi Evan,
Thank you for the specs. Please see my estimate below.

Labor:
6 hrs. @ \$60/hr. \$360.00

Materials:
90 ft. 8/3 Romex \$144.00
(1) disconnect box \$35.00
(2) 2-pole 40 amp breakers \$40.00
Liquidite & connectors \$25.00
30 ft. #8 THHN \$15.00
Misc. (straps, screws, etc.) \$15.00

Total Materials: \$274.00

Total Labor & Materials: \$634.00

Of course, if things go more quickly than expected, I would only charge for time actually worked.

I am booked thru mid-January at this point, so I have time late January or early February, if you wanted to go forward with me doing the work.

Let me know if you have any questions. Thank you for the opportunity to present this estimate.

Warmly,
Joanna

On Wed, Dec 19, 2018 at 2:47 PM Evan Oxenham <evan.oxenham@gmail.com> wrote:
Joanna,

I have some more information regarding the 220 V line that I need for the heat pump installation.

As I said before the length of the 220 V line is 68 feet. According to the condenser product sheet the breaker size should be 40A (see attached).

--
Regards,