

CERTIFICATE OF APPROPRIATENESS PLACARD

for Raleigh Historic Resources

Project Description:

Install mechanical equipment

500 N Boundary St

Address

Oakwood

Historic District

Historic Property

COA-0012-2021

Certificate Number

2/2/2021

Date of Issue

12/2/2021

Expiration Date

This card must be kept posted in a location within public view until all phases of the described project are complete. The work must conform with the code of the City of Raleigh and laws of the state of North Carolina. When your project is complete, you are required to ask for a final zoning inspection in a historic district area. Telephone the RHDC office at 832-7238 and commission staff will coordinate the inspection with the inspections Department. If you do not call for this final inspection, your Certificate of Appropriateness is null and void.

Signature, _____

Kim Mochon

Raleigh Historic Development Commission

Pending the resolution of appeals, commencement of work is at your own risk.

Type or print the following:		
Applicant name: Mike Brennan		
Mailing address: 500 N Boundary St		
City: Raleigh	State: NC	Zip code: 27604
Date: 1/23/2021	Daytime phone #: 9192192957	
Email address: brennan919@gmail.com		
Applicant signature: <i>Michael W. Brennan</i>		
<p>Minor work (staff review) – one copy</p> <p>Major work (COA committee review) – ten copies</p> <p style="padding-left: 40px;">Additions > 25% of building sq. footage</p> <p style="padding-left: 40px;">New buildings</p> <p style="padding-left: 40px;">Demolition of building or structure</p> <p style="padding-left: 40px;">All other</p> <p>Post approval re-review of conditions of approval</p>	<p style="text-align: center;">Office Use Only</p> <p>Transaction #: _____</p> <p>File #: <u>COA-0012-2021</u></p> <p>Fee: _____</p> <p>Amount paid: _____</p> <p>Received date: _____</p> <p>Received by: _____</p>	
Property street address: 500 N Boundary St, Raleigh NC 27604		
Historic district: Oakwood		
Historic property/Landmark name (if applicable): NA		
Owner name: Mike Brennan		
Owner mailing address: 500 N Boundary St, Raleigh NC 27604		

For applications that require review by the COA Committee (major work), provide addressed and stamped envelopes for owners for all properties with 100 feet on all sides of the property, as well as the property owner.

Property Owner Name & Address	Property Owner Name & Address

I understand that all major work applications that require review by the Raleigh Historic Development Commission's COA Committee must be submitted by 4 p.m. on the date of the application deadline; otherwise, consideration will be delayed until the following committee meeting. An incomplete application will not be accepted.

Will you be applying for rehabilitation tax credits for this project? Yes No Did you consult with staff prior to filing the application? Yes No	Office Use Only Type of work: <u>50</u> <hr/>
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Design Guidelines: please cite the applicable sections of the design guidelines (www.rhdc.org).		
Section/Page	Topic	Brief description of work (attach additional sheets as needed).
2.10	Energy	Install new HVAC unit

Minor Work Approval (office use only)	
Upon being signed and dated below by the Planning Director or designee, this application becomes the Minor Work Certificate of Appropriateness. It is valid until <u>12/02/2021</u> . Please post the enclosed placard form of the certificate as indicated at the bottom of the card. Issuance of a Minor Work Certificate shall not relieve the applicant, contractor, tenant, or property owner from obtaining any other permit required by City Code or any law. Minor Works are subject to an appeals period of 30 days from the date of approval.	
Signature (City of Raleigh) <u><i>Erin Morth</i></u>	Date <u>02/02/2021</u>

Brief Description of Work:

The proposed work associated with this Minor COA application is to install a mini-split ductless HVAC system on the third floor of the property. This will involve installation of a small exterior compressor unit (see photo for an illustration of the exterior unit). Unlike the photo, this unit will be installed on the a ground pad and will be adjacent to existing compressors for the main level of the house. A lineset will run up the exterior wall to provide power and cooling/heating properties to the interior of the house. This will be covered in a white enclosure similar to the photo. This work will take less than one week to complete.

500 N BOUNDARY ST.
MINOR COA APPLICATION

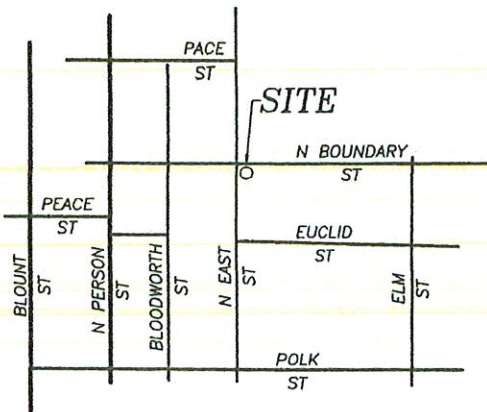
1/27/21

FLOOD CERTIFICATION

THIS WILL CERTIFY THAT THE SUBJECT PROPERTY
() IS or (X) IS NOT located in a SPECIAL FLOOD HAZARD AREA
as determined by the Department of Housing and Urban
Development, or as shown on the FLOOD INSURANCE RATE MAP.

370243 0343 J
COMMUNITY # PANEL SUFFIX

[Signature]
PROFESSIONAL LAND SURVEYOR



VICINITY MAP
(N.T.S.)

LEGEND

- EXISTING IRON PIPE
- NEW IRON PIPE
- × COMPUTED CORNER

NOTE:
THIS PROPERTY DOES NOT LIE WITHIN
2000' OF A N.C.G.S. MONUMENT.

THIS SURVEY IS OF AN EXISTING PARCEL
OR PARCELS OF LAND.

ALL CREEKS, EASEMENTS, BUFFERS,
FLOOD LIMITS & SETBACKS TAKEN
FROM BOM 1927, PG 062

NORTH BOUNDARY STREET
(PUBLIC R/W)

DB 2847, PG 521

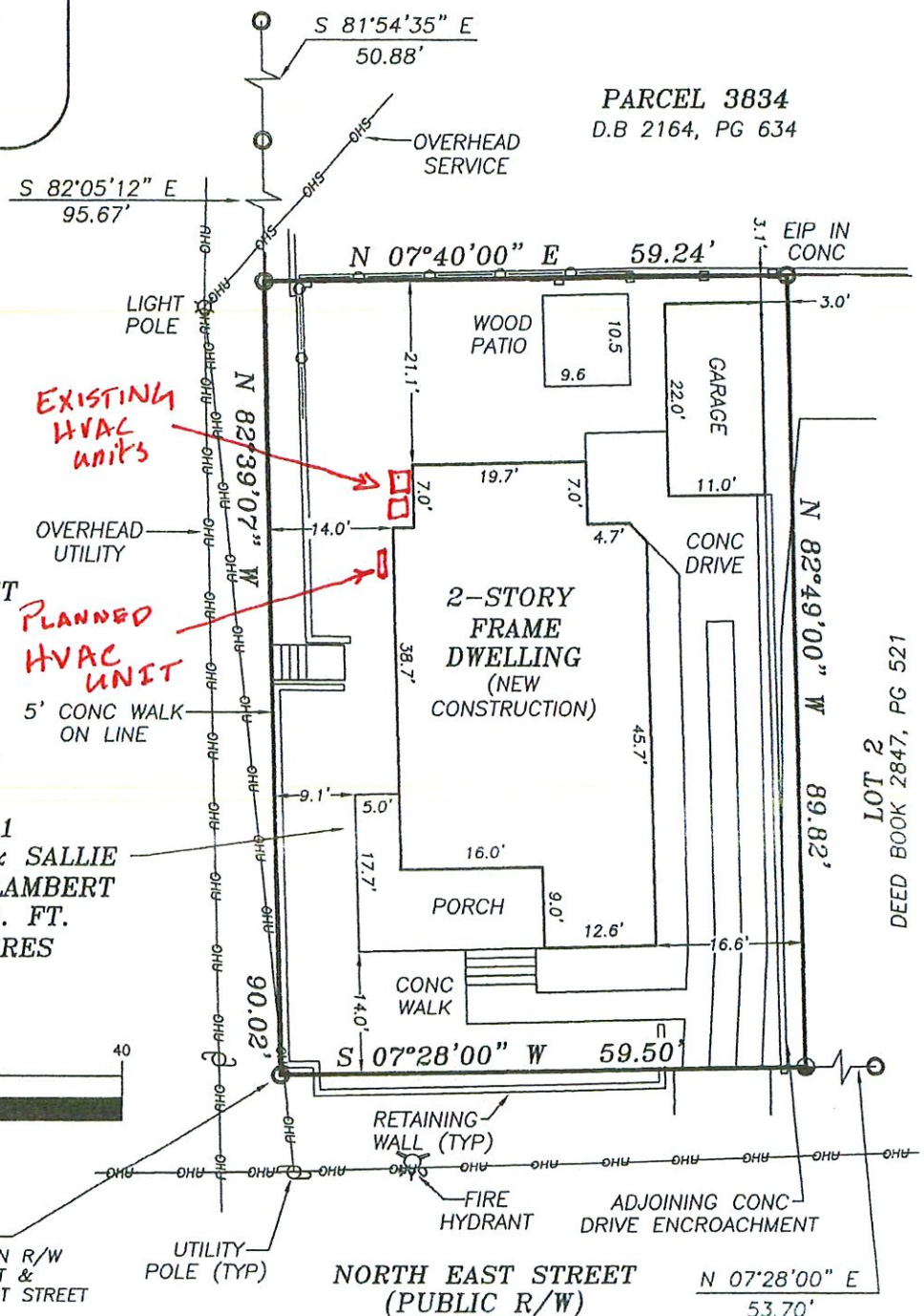
LOT 1
M. ASHBY & SALLIE
WHITAKER LAMBERT
5,338 SQ. FT.
0.12 ACRES

SCALE



(IN FEET)
1 inch = 20 ft.

TIE TO A POINT IN THE
INTERSECTION OF THE SOUTHERN R/W
OF NORTH BOUNDARY STREET &
THE EASTERN R/W OF NORTH EAST STREET



PARCEL 3834
D.B 2164, PG 634

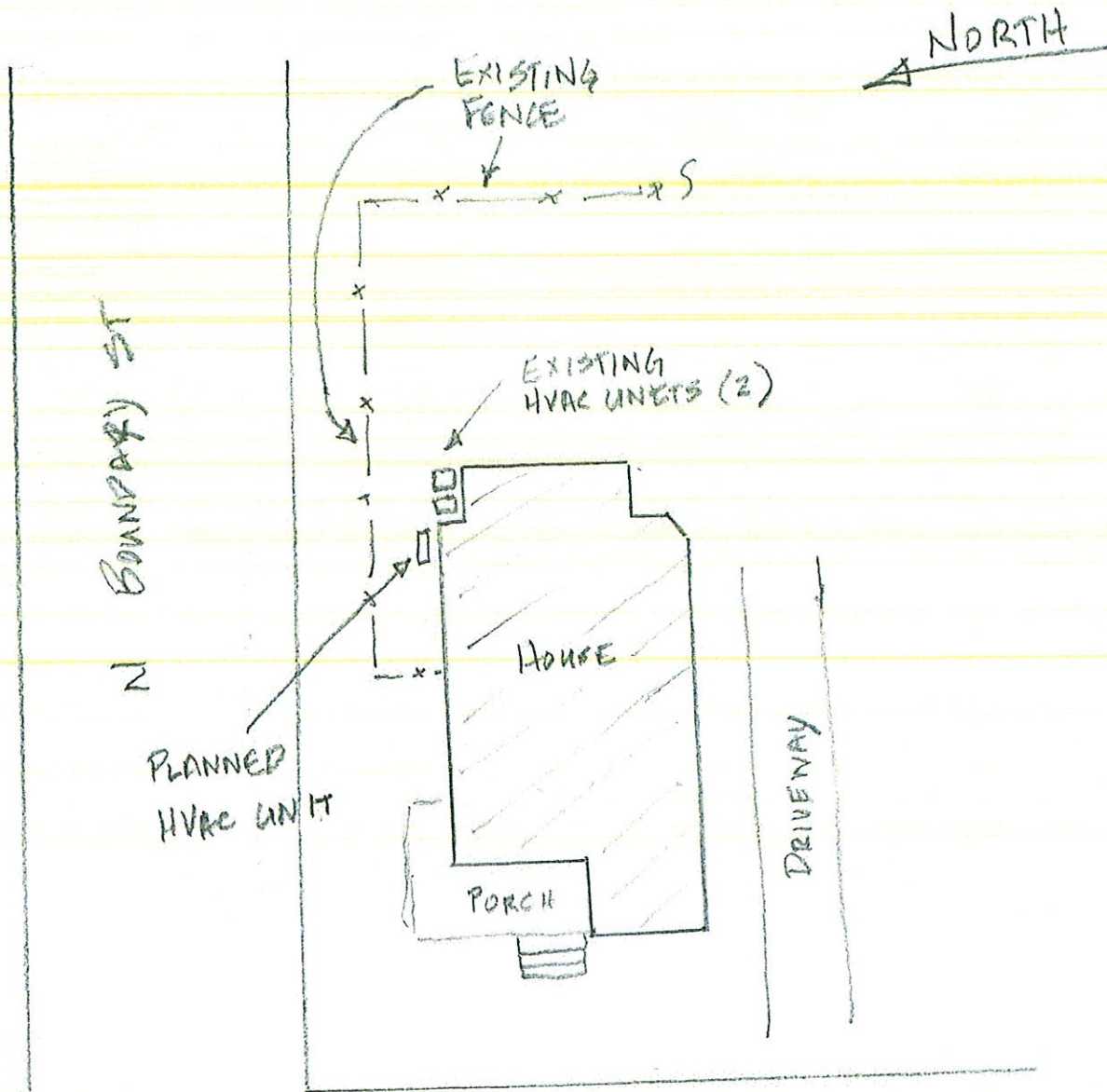
LOT 2
DEED BOOK 2847, PG 521

NORTH EAST STREET
(PUBLIC R/W)

500 N. BOUNDARY ST.

1/27/21

MINOR CDA APPLICATION

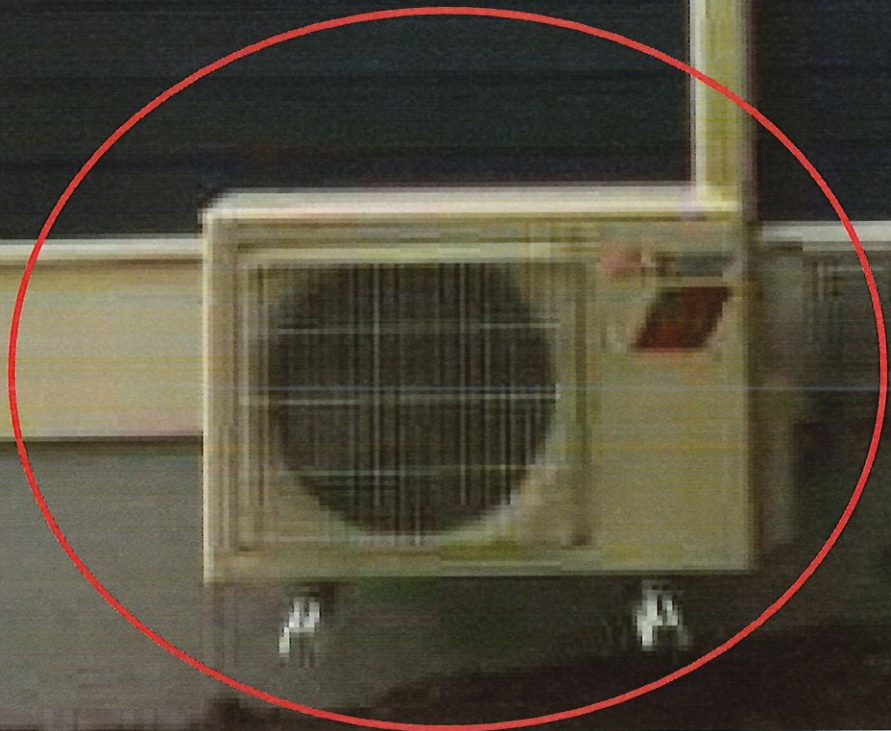


N EAST ST





Staff approval of HVAC unit only, to be ground-mounted. See next page for approved leader style.





Morton, Erin

From: Mike and Julie Brennan <brennan919@gmail.com>
Sent: Friday, January 29, 2021 7:15 PM
To: Morton, Erin
Subject: Re: COA-0012-2021 (500 N Boundary St) Minor Work
Attachments: pvc example.jpg; mits_5835.JPG; Front of house.jpg; HVAC pic location.jpg; Site Plan 500 N Boundary HVAC.pdf; M_SUBMITTAL_MSZ-WR18NA_MUZ-WR18NA-en.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you verify that the attachment and content are safe. If you believe this email is suspicious, please click the 'Phish Alert' link in the banner to report this message. **EXTERNAL EMAIL ADDRESS: brennan919@gmail.com**

Erin,

I am attaching several items.

- 1) Picture of the front of our house
- 2) Picture of area where new HVAC unit will go - it will be to the right of the existing HVAC units in the photo
- 3) A site plan (survey and sketch) showing the proposed location
- 4) The specification sheet for the unit which has dimensions as requested.

As to the matter of the covering for the line set, I would prefer to have this be enclosed in a PVC pipe similar to how my electric line comes in from the street and down to the meter. See attached picture - this would be painted the same color as the house and would be very discrete and in my opinion the best approach. The system we will install comes with a plastic lineset cover that can be painted white to match our trim. Alternatively, if we cannot use this, we would use a white aluminum k-style downspout to match our existing downspouts. As I mentioned my preference is to use a PVC pipe as is used for the electrical service line.

Please let me know if you have any questions or need additional information

Mike

On Wed, Jan 27, 2021 at 2:21 PM Morton, Erin <Erin.Morton@raleighnc.gov> wrote:

David,

Thank you for submitting a minor work COA. We have completed the initial review and need some additional information in order to consider the application complete.

Please provide an overall photo of the front of the house and contextual photos of the area where the HVAC equipment will be installed. Please also provide a site plan marking where on the property the HVAC will be located. You noted that it will be near existing compressors – is the equipment currently screened?

Specific to the proposed model, what are the dimensions of the equipment and ground pad? What is the casing material of the proposed line set rising to the 3rd floor? Staff is not able to approve plastic at the minor work level. Lastly, the portions of the assembly attached to the exterior of the house must be painted to match the body and trim of the house in order to be approved as a minor work.

Please provide additional information to the above comments via email at your earliest convenience. Let us know if you have any questions. Thank you.

Best,

Erin

Erin Morton

Preservation Planner II

City of Raleigh

Planning and Development

■ Raleigh Urban Design Center

919-996-2632 | raleighnc.gov


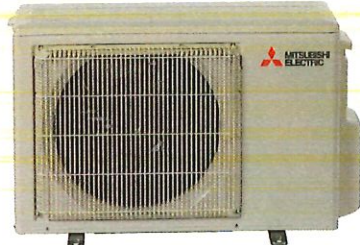

For Planning and Development COVID-19 updates, [visit our information page.](#)

M-SERIES

SUBMITTAL DATA: MSZ-WR18NA & MUZ-WR18NA 18,000 BTU/H WALL-MOUNTED HEAT PUMP SYSTEM



Job Name:	
System Reference:	Date:

Indoor Unit: MSZ-WR18NA	Outdoor Unit: □ MUZ-WR18NA-U1 □ MUZ-WR18NA-U2	Wireless Remote Controller
		

GENERAL FEATURES

- Single-zone heat pump systems
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life
- Four fan speeds: Low, Medium, High, Super-high
- Anti-mold filter
- INVERTER-driven heat pump
- Cooling operation range: 32° F to 115° F
- Heating operation range: 5° F to 75° F
- 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
- 12-hour timer
- ECONO COOL mode
- AUTO restart
- The outdoor unit powers the indoor unit and should a power outage occur, the system is automatically restarted when the power returns.

SPECIFICATIONS: MSZ-WR18NA & MUZ-WR18NA

Cooling at 95°F ¹	Maximum Capacity	BTU/H	18,000
	Rated Capacity	BTU/H	17,200
	Minimum Capacity	BTU/H	5,800
	Maximum Power Input	W	2,170
	Rated Power Input	W	1,720
	Moisture Removal	Pints/h	2.1
	Sensible Heat Factor		0.86
	Power Factor (208/230V)	%	98/98
Cooling at 82°F	Maximum Capacity	BTU/H	19,872
	Rated Capacity	BTU/H	18,700
	Minimum Capacity	BTU/H	6,404
	Maximum Power Input	W	1,956
	Rated Power Input	W	1,548
Heating at 47°F ²	Maximum Capacity	BTU/H	20,900
	Rated Capacity	BTU/H	18,000
	Minimum Capacity	BTU/H	5,400
	Maximum Power Input	W	2,360
	Rated Power Input	W	1,670
	Power Factor	%	97/97
Heating at 17°F ³	Maximum Capacity	BTU/H	15,000
	Rated Capacity	BTU/H	11,500
	Maximum Power Input	W	2,040
	Rated Power Input	W	1,360
Heating at 5°F ⁴	Maximum Capacity	BTU/H	12,780
	Maximum Power Input	W	1,770
Efficiency	SEER		16.0
	EER ¹		10.0
	HSPF (IV)		8.5
	COP at 47°F ²		3.16
	COP at 17°F in Maximum Capacity ³		2.16
	COP at 5°F in Maximum Capacity ⁴		2.12
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)	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	A	15
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
Indoor Unit	MCA	A	1
	Blower Motor Full Load Amperage	A	0.67
	Blower Motor Output	W	30
	Airflow Rate at Cooling, Dry	CFM	625-530-431-328
	Airflow Rate at Cooling, Wet	CFM	562-477-388-295
	Airflow Rate at Heating, Dry	CFM	625-530-431-307
	Sound Pressure Level (Cooling)	dB(A)	47-42-37-30
	Sound Pressure Level (Heating)	dB(A)	47-42-37-30
	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)	36-5/16 (923)

SPECIFICATIONS: MSZ-WR18NA & MUZ-WR18NA

	Package Dimensions	D: In. (mm)	9-13/16 (250)
		H: In. (mm)	12 (305)
		W: In. (mm)	39 (990)
		D: In. (mm)	13 (330)
		H: In. (mm)	15 (380)
	Unit Weight	Lbs. (kg)	28 (13)
Indoor Unit Operating Temperature Range	Package Weight	Lbs. (kg)	33 (15)
	Cooling Intake Air Temp (Maximum / Minimum)*	*F	90F D.B / 73F W.B // 67F D.B / 57F W.B
Outdoor Unit	Heating Intake Air Temp (Maximum / Minimum)	*F	80F D.B // 70F D.B
	MCA	A	10
	MOCP	A	15
	Fan Motor Full Load Amperage	A	0.5
	Fan Motor Output	W	55
	Airflow Rate	CFM	1,243 / 1,229
	Refrigerant Control		LEV
	Defrost Method		Reverse cycle
	Heat Exchanger Type		Plate fin coil
	Blue Fin Coating on Heat Exchanger		Yes
	Sound Pressure Level, Cooling ¹	dB(A)	53
	Sound Pressure Level, Heating ²	dB(A)	51
	Compressor Type		DC INVERTER-driven Twin Rotary
	Compressor Model		SNB130FQBMT
	Compressor Rated Load Amps	A	7.4
	Compressor Locked Rotor Amps	A	9.3
	Compressor Oil Type // Charge	oz.	FV50S // 11.8
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		Optional
	Unit Dimensions	W: In. (mm)	31-1/2 (800)
		D: In. (mm)	11-1/4 (285)
		H: In. (mm)	21-5/8 (550)
	Package Dimensions	W: In. (mm)	38-9/16 (980)
		D: In. (mm)	16-9/16 (420)
		H: In. (mm)	39 (990)
	Unit Weight	Lbs. (kg)	81 (37)
	Package Weight	Lbs. (kg)	88 (40)
Outdoor Unit Operating Temperature Range	Cooling Air Temp (Maximum / Minimum)*	*F	115 / 32
	Cooling Thermal Lock-out / Re-start Temperatures**	*F	-1 / 3
	Heating Air Temp (Maximum / Minimum)	*F	75 / 5
	Heating Thermal Lock-out / Re-start Temperatures**	*F	-9 / -4
Refrigerant	Type		R410A
	Charge	Lbs, oz	2, 10
Piping	Gas Pipe Size O.D. (Flared)	In.(mm)	1/2 (12.7)
	Liquid Pipe Size O.D. (Flared)	In.(mm)	1/4 (6.35)
	Maximum Piping Length	Ft. (m)	65 (20)
	Maximum Height Difference	Ft. (m)	40 (12)
	Maximum Number of Bends		10

SPECIFICATIONS: MSZ-WR18NA & MUZ-WR18NA

Notes

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	¹ Cooling (Indoor // Outdoor)	*F	80 DB, 67 WB // 95 DB, 75 WB
	² Heating at 47°F (Indoor // Outdoor)	*F	70 DB, 60 WB // 47 DB, 43 WB
	³ Heating at 17°F (Indoor // Outdoor)	*F	70 DB, 60 WB // 17 DB, 15 WB
Conditions	⁴ Heating at 5°F (Indoor // Outdoor)	*F	70 DB, 60 WB // 5 DB, 4 WB

*Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

**System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

ACCESSORIES: MSZ-WR18NA

Anti-allergy Enzyme Filter	□ MAC-408FT-E
Remote Controller Holder	□ U01A01083
kumo touch™ RedLINK™ Wireless Controller	□ MHK2
Deluxe MA Remote Controller ¹	□ PAR-40MAAU
Simple MA Controller ¹	□ PAC-YT53CRAU-J
Touch MA Controller ¹	□ PAR-CT01MAU-SB
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
System Control Interface ²	□ 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

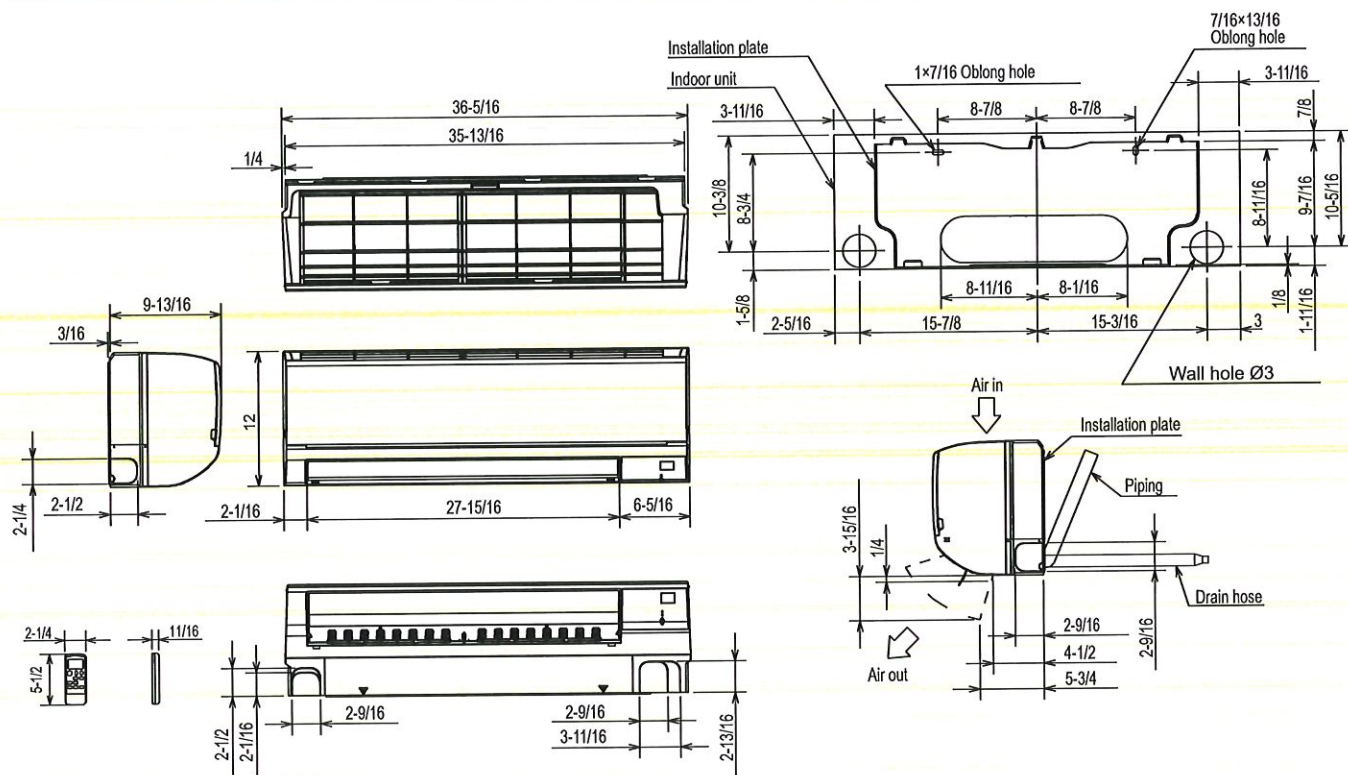
¹ Requires MAC-334IF-E

² Allows indoor units to connect to an MA Controller

ACCESSORIES: MUZ-WR18NA

Air Outlet Guide	□ MAC-881SG
Drain Socket	□ MAC-860DS
Optional Defrost Heater	□ MAC-640BH-U
Hail Guard	□ HG-B4
Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	□ DSD-400P
Condensing Unit Mounting Pad 16" x 36" x 3"	□ ULTRILITE1
Outdoor Unit Stand — 12" High	□ QSMS1201M
Outdoor Unit Stand — 18" High	□ QSMS1801M
Outdoor Unit Stand — 24" High	□ QSMS2401M
Heavy Duty Wall Mounting Bracket— Coated Steel	□ QSWB2000M-1
Heavy Duty Wall Mounting Bracket — 316 Series Stainless Steel	□ QSWBSS
15' x 1/4" x 15' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-15
30' x 1/4" x 30' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-30
50' x 1/4" x 50' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-50
65' x 1/4" x 65' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-65
100' x 1/4" x 100' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-100

DIMENSIONS: MSZ-WR18NA



18 KBTU/H

Piping	Insulation	Ø2 O.D
	Liquid line	Ø5/16 15-3/8 (Flared connection Ø1/4)
	Gas line	Ø15/32 13-3/8 (Flared connection Ø1/2)
Drain hose	Insulation	Ø1-1/8 Connected part Ø5/8 O.D

24 KBTU/H

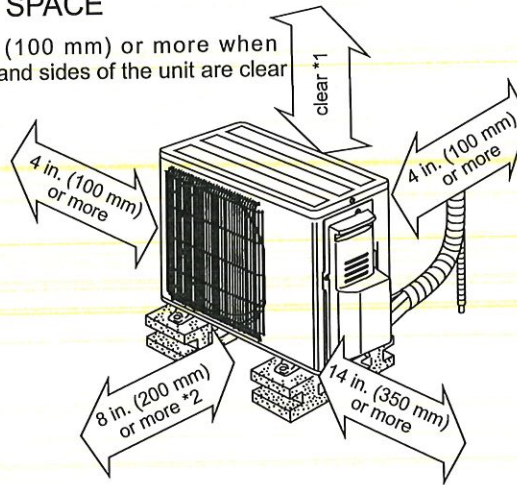
Piping	Insulation	Ø2 O.D
	Liquid line	Ø5/16 15-3/8 (Flared connection Ø3/8)
	Gas line	Ø15/32 13-3/8 (Flared connection Ø5/8)
Drain hose	Insulation	Ø1-1/8 Connected part Ø5/8 O.D

DIMENSIONS: MUZ-WR18NA

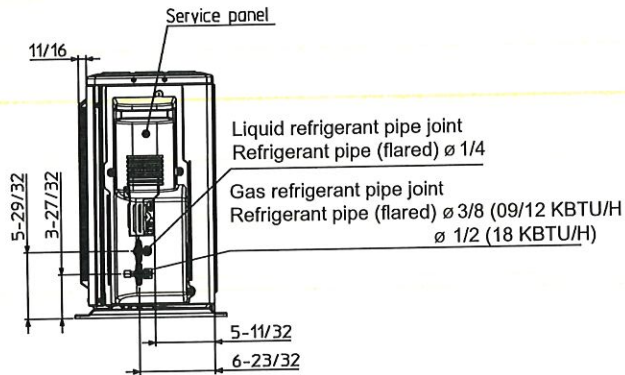
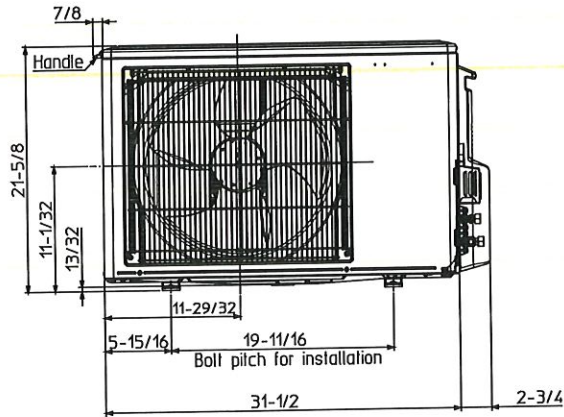
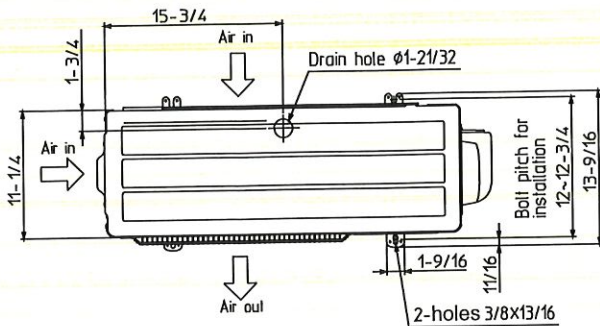
Unit: inch

REQUIRED SPACE

*1 4 in. (100 mm) or more when front and sides of the unit are clear



*2 When any 2 sides of left, right and rear of the unit are clear



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

FORM# MSZ-WR18NA / MUZ-WR18NA - 202005



Specifications are subject to change without notice.

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