

TOWN OF WOODSTOCK CLIMATE SMART TASK FORCE

Erin Moran, Coordinator
Kenneth Panza, Secretary
Alex Bolotow, Chair,
Woodstock Environmental Commission

Application for 17 Points

June 8, 2021

PE4 Action: Heat Pumps

9 – 22 Points

Addendum Woodstock Ground & Air Sourced Heat Pumps

The purpose of this addendum is to update Woodstock's documentation for installed heat pumps to reflect the changed requirements of the PE4 action item. The previous version, based on Climate Smart Communities (CSC) Certification Action Checklist - Version 3.6 (Jan. 3, 2020), was limited to ground-sourced geothermal installations. In its January 26, 2020 submission, Woodstock identified two ground-sourced, geothermal heating and cooling systems: one at the highway garage and another at the town hall.

The recently released Climate Smart Communities (CSC) Certification Action Checklist - Version 4.1 (April 8, 2021) changed the requirements with the addition of air-sourced heat pumps. Admittedly, it was irregular for CSC to award points for rooftop solar, ground-sourced geothermal, wind power systems, and wood pellet heating systems, and ignore air-sourced heat pumps. Adding air-source heat pumps to the program seemed obvious. But considering the importance of air-sourced heat pump technology for achieving the state's climate goals, it deserved its own action item rather than being lumped in with ground-sourced geothermal. Air-sourced heat pumps should receive the same serious considerations as wood pellet burning furnaces.

Mescal Hornbeck Community Center

Woodstock, NY – Assemblymember Kevin A. Cahill (D-Ulster, Dutchess) celebrated with the town of Woodstock on Saturday, September 19, 2015 as they officially opened the Mescal Hornbeck Community Center, formally known as the Woodstock Community Center. Funds secured by Assemblymember Cahill were used towards completing much-needed renovations to the existing Center.

"On behalf of the Woodstock taxpayer and on behalf of the numerous associations,



performers, speakers and gatherings that have waited many years for the Town to bring the Mescal Hornbeck Community Center into the modern era; I thank Assemblyman Kevin Cahill for securing the \$250,000 grant,” said Town Supervisor, Jeremy Wilbur. “This funding made into a reality a comfortable, spacious and energy efficient community center that otherwise would have remained an elusive dream. Two years ago, at around this same time, I declared that the Town of Woodstock and its residents have Assemblyman Kevin Cahill’s deepest respect and regard.”¹

Woodstock Board OKs Community Center Expansion²

January 2, 2014, the Town Board voted to move forward with a \$1 million expansion and renovation of the Mescal Hornbeck Community Center. The project will be funded, in part, with \$100,000 from the town’s 2013 budget surplus fund, the board agreed on Monday. The plan calls for expanding the center on Rock City Road by about 1,800 square feet and making the facility more energy efficient.

Supervisor Jeremy Wilber said the improvements at the Rock City Road Center have the twofold goal of living up to Woodstock’s “Colony of the Arts” reputation and continuing to provide space for town recreation programs, like those offered in the summer for young people.

The resolution approved on Monday calls for the center to be updated with an “energy-efficient building envelope, solar energy and geothermal heating and cooling systems. Right now, that whole thing leaks energy like a sieve. ... It will be warm in the winter, because right now it’s drafty in the winter, and will be cool in the summer, because right now it’s stifling in the summer,” Wilber said.

Community Center/ Andy Lee Field



The community center is a complex of buildings located at Andy Lee Field, the town’s recreation area. Included in this complex is the Mescal Hornbeck Community Center, a swimming pool, picnic pavilion, and craft barn. The community center heating system used fuel oil, and each of the other facilities had its own electric service and utility meter.

A major renovation initiated in 2014 replaced the fossil fuel heating system with air-sourced heat pumps for heating and cooling, substantially reducing the carbon footprint and energy expenses for the complex. Individual electric services for the other facilities were consolidated into community center saving about

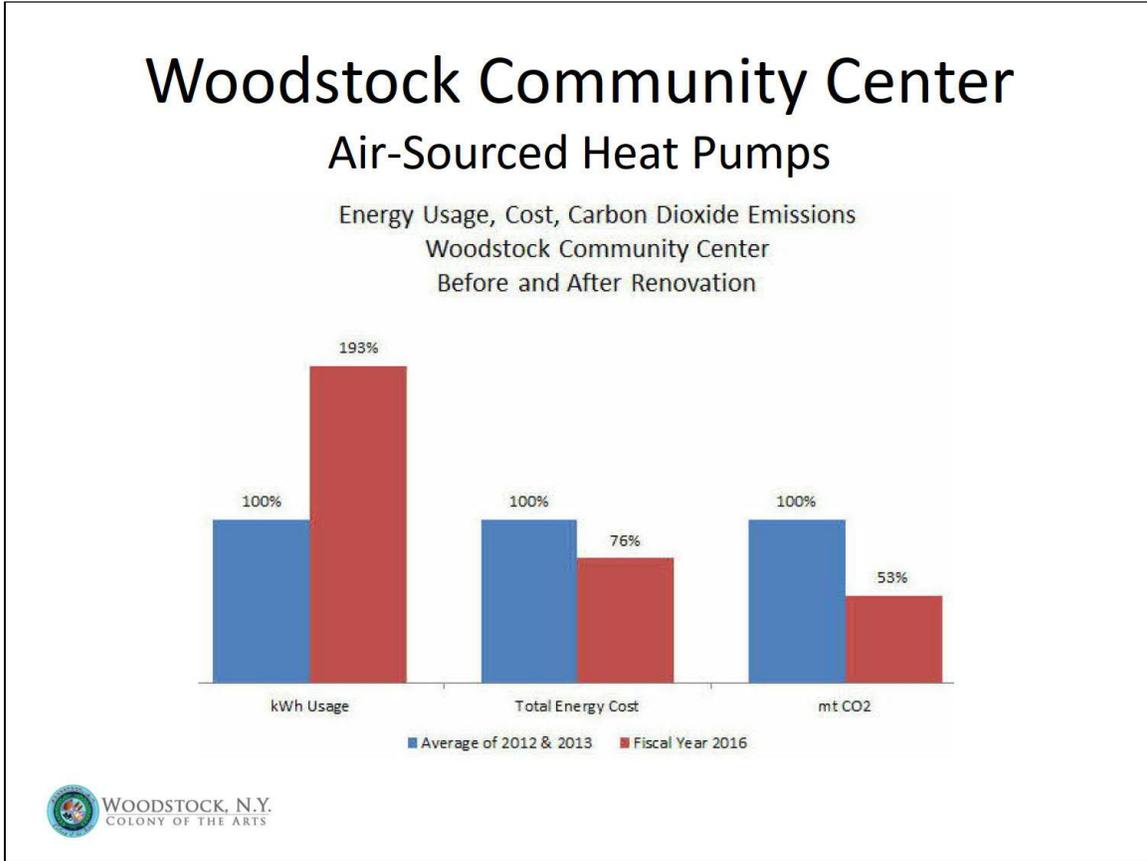
\$500 per year/meter in fixed, basic service charges.

The result of the conversion of the fossil fuel heating system to air-sourced heat pumps:

- Electricity usage, compared to an average of 2012 & 2013, doubled.
- The total cost of energy dropped by about 25%.
- The complex’s carbon footprint was cut in half.

¹ Assemblymember Kevin A. Cahill, “Woodstock Honors Mescal Hornbeck with Opening of Refurbished Community Center,” Press Release, September 15, 2015 (Available at <https://nyassembly.gov/mem/Kevin-A-Cahill/story/66341>)

² William J. Kemble, “Woodstock board OKs community center expansion,” Daily Freeman, January 2, 2014 (Available at https://www.dailyfreeman.com/news/woodstock-board-oks-community-center-expansion/article_e8b48d0d-3544-5953-a787-34ac46305ab6.html)



“The Road to Carbon Neutrality”
Presentation at the Woodstock Library
March 30, 2019

Andy Lee Field Energy Usage

	2012				2013			
	Gals	kWh	Cost	mt CO2	Gals	kWh	Cost	mt CO2
Any Lee Field Pavillion		32	\$417	0.0		299	\$447	0.1
Andy Lee Field Pool		7,951	\$1,146	1.8		6,057	\$1,014	1.5
Andy Lee Field Craft Barn		913	\$502	0.2		1,044	\$529	0.3
Community Center		18,233	\$1,931	4.1		18,821	\$2,077	4.7
Electric								
Heating Oil	1,528		\$5,336	15.6	1,850		\$5,790	18.9
Generator Diesel								
Community Center Totals		27,129	\$9,332	21.8		26,221	\$9,856	25.4
Percent Change								

Community Center/Andy Lee Field Energy Use Before Renovation

Appendix – Press Releases

Appendix – Community Center Heat Pumps

Engineering Certification

Pages from the HAVC Operating & Service Manual

Appendix – March 30, 2019 Library Presentation

Public outreach with Community Center renovation



DJ Heating & Air Conditioning Inc.

1409 Route 9W
Marlboro, New York 12542

845-236-4436
FAX 845-236-3638

Woodstock Community Center

Woodstock, NY

Operating and Maintenance Instruction Booklets for HVAC Equipment



DJ Heating & Air Conditioning Inc.

1409 Route 9W
Marlboro, New York 12542

845-236-4436
FAX 845-236-3638

July 22, 2015

Mr. Charlie Wesley
Town of Woodstock
45 Comeau Drive
Woodstock NY 12498

Project: **Woodstock Community Center**

This letter serves as a guarantee for labor and materials provided at the above referenced project.

"All labor and material supplied and installed by D.J. Heating & Air Conditioning, Inc. shall bear a one-year warranty from the date of June 30, 2015 against defects in workmanship and material", and will be corrected free of charge.

The system is running with full functionality to the best of our knowledge, according to plans and specifications and change orders, and satisfies all balancing requirements.

In order to keep the warranty valid, all equipment must be properly maintained including but not limited to replacing filters as needed. If maintenance is done by entities other than DJ Heating & Air Conditioning, owner must have records kept for DJ Heating & Air Conditioning to reference.

If you have any questions, or need further information, please contact me.

Sincerely,

D. J. HEATING & AIR CONDITIONING, INC.

Steve Corts
Vice President

WOODSTOCK COMMUNITY CENTER

WOODSTOCK NY

Operating & Maintenance Instruction Booklets for HVAC Equipment

Table of Contents

<u>Tab</u>	<u>Equipment Item</u>	<u>Description</u>	<u>Manufacturer</u>
1		Louvers	Nailor
2	FD	Fire Dampers	Nailor
3	HP-1, 2a, 2b, 3 4, 5a, 5b, 6, 7, 8	Heat Pumps, Indoor	Mitsubishi
	HP-A,C,D,E	Heat Pumps, Outdoor	Mitsubishi
4	HRV- 1, 2	Energy Recovery Units	Renewaire



SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

Changes for the Better



May 2013

No. OCH502
REVISED EDITION-B

TECHNICAL & SERVICE MANUAL

[Model name]
<Outdoor unit>

PUMY-P60NKMU

PUMY-P60NKMU-BS

[Service Ref.]

PUMY-P60NKMU

PUMY-P60NKMU-BS

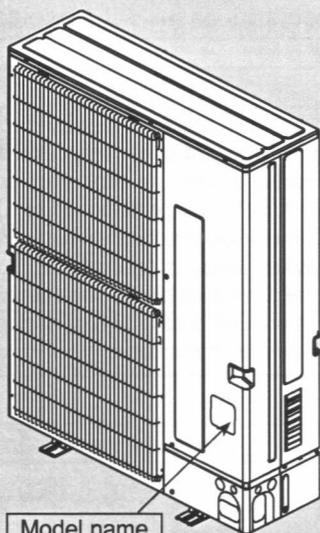
Revision:

- Errors have been corrected in REVISED EDITION-B.
- Some descriptions have been modified.

- Please void OCH502 REVISED EDITION-A.

Note :

- This service manual describes technical data of outdoor unit. As for indoor units, refer to its service manual.



OUTDOOR UNIT

CONTENTS

1. SAFETY PRECAUTION	2
2. OVERVIEW OF UNITS	5
3. SPECIFICATIONS	10
4. DATA	11
5. OUTLINES AND DIMENSIONS	17
6. WIRING DIAGRAM	18
7. NECESSARY CONDITIONS FOR SYSTEM CONSTRUCTION	19
8. TROUBLESHOOTING	29
9. ELECTRICAL WIRING	69
10. REFRIGERANT PIPING TASKS	72
11. DISASSEMBLY PROCEDURE	77

PARTS CATALOG (OCB502)



CITY MULTI



SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

Changes for the Better



September 2012

No. OC366
REVISED EDITION-H

TECHNICAL & SERVICE MANUAL

[Model name]	[Service Ref.]
(Standard type) PUMY-P36NHMU	PUMY-P36NHMU PUMY-P36NHMUR1 PUMY-P36NHMUR4
PUMY-P48NHMU	PUMY-P48NHMU PUMY-P48NHMU ₁ PUMY-P48NHMU ₂ PUMY-P48NHMUR3 PUMY-P48NHMUR4
(Salt proof type) PUMY-P36NHMU-BS	PUMY-P36NHMU-BS PUMY-P36NHMUR1-BS PUMY-P36NHMUR4-BS
PUMY-P48NHMU-BS	PUMY-P48NHMU-BS PUMY-P48NHMU ₁ -BS PUMY-P48NHMU ₂ -BS PUMY-P48NHMUR3-BS PUMY-P48NHMUR4-BS

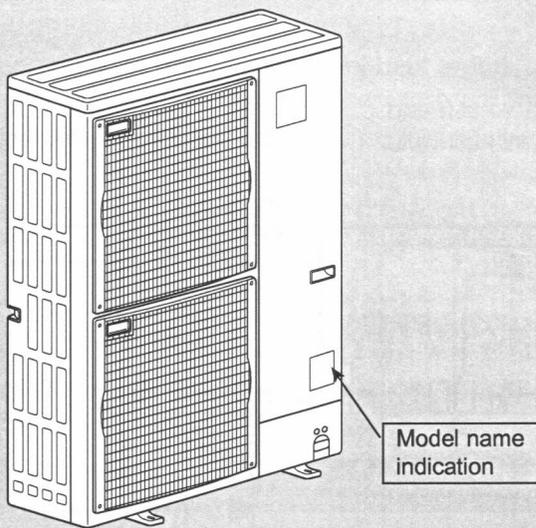
Revision:

- PUMY-P36NHMUR4(-BS) and PUMY-P48NHMUR4(-BS) have been added in REVISED EDITION-H.
- Some descriptions have been modified.

- Please void OC366 REVISED EDITION-G.

Note :

- This service manual describes technical data of outdoor unit. As for indoor units, refer to its service manual.
- RoHS compliant products have <G> mark on the spec name plate.



OUTDOOR UNIT

CONTENTS

1. TECHNICAL CHANGES.....	2
2. SAFETY PRECAUTION.....	5
3. OVERVIEW OF UNITS.....	8
4. SPECIFICATIONS.....	10
5. DATA.....	12
6. OUTLINES AND DIMENSIONS.....	18
7. WIRING DIAGRAM.....	20
8. NECESSARY CONDITIONS FOR SYSTEM CONSTRUCTION.....	24
9. TROUBLESHOOTING.....	34
10. ELECTRICAL WIRING.....	80
11. REFRIGERANT PIPING TASKS.....	83
12. DISASSEMBLY PROCEDURE.....	88
13. PARTS LIST.....	94
14. RoHS PARTS LIST.....	96
15. OPTIONAL PARTS.....	99



CITY MULTI



Assemblymember

Kevin A. Cahill

Assembly District 103

Home

About

Newsroom

Media

Legislation

Committee
Membership

Contact

Important
Links

Assembly Home



Contact



Join email list



Map & Offices



Woodstock Honors Mescal Hornbeck with Opening of Refurbished Community Center

September 19, 2015

Woodstock, NY – Assemblymember Kevin A. Cahill (D-Ulster, Dutchess) celebrated with the town of Woodstock this Saturday, September 19, 2015 as they officially opened the Mescal Hornbeck Community Center, formally known as the Woodstock Community Center. Funds secured by Assemblymember Cahill were used towards completing much-needed renovations to the existing Center.

“The Mescal Hornbeck Community Center is more than just a gathering place, it is a symbol of unity for the entire community,” said Assemblyman Cahill. “The grant we helped get has enabled the Town of Woodstock to enhance, upgrade and expand the Center in a way that will allow community groups and residents to continue to enjoy and make use of this space. It is a true testament to the vision of Mescal Hornbeck, an activist and community leader who made great strides in bringing crucial programs and services to the seniors and children of Woodstock.”

enhancements include improved handicap accessibility, the installation of energy efficient lighting and appliances, as well as an air-heat exchange system to cool and ventilate the facility and expanded meeting rooms. All of these refurbishments have allowed the facility to become more user-friendly and safer for all members within this lively community.

“Jeremy Wilber, Woodstock Town Supervisor, has worked tirelessly in collaboration with the Town Board, Woodstock residents, and my office to see that this project was successfully carried out from start to finish,” said Assemblymember Cahill. “Thanks to his hard work and unwavering commitment, the Town now has a safe and adequate space for summer camps, theater performances and countless other local gatherings for years to come.”

"On behalf of the Woodstock taxpayer and on behalf of the numerous associations, performers, speakers and gatherings that have waited many years for the Town to bring the Mescal Hornbeck Community Center into the modern era; I thank Assemblyman Kevin Cahill for securing the \$250,000 grant," said Town Supervisor, Jeremy Wilbur. "This funding made into a reality a comfortable, spacious and energy efficient community center that otherwise would have remained an elusive dream. Two years ago at around this same time I declared that the Town of Woodstock and its residents have Assemblyman Kevin Cahill's deepest respect and regard."



Assemblymember

Kevin A. Cahill

Assembly District 103

Home

About

Newsroom

Media

Legislation

Committee
Membership

Contact

Important
Links

Assembly Home



Contact



Join email list



Map & Offices



Assemblyman Cahill Announces \$250,000 Grant for the Mescal Hornbeck Community Center

October 24, 2014

Woodstock,
NY -



Assemblymember Kevin Cahill (D-Ulster, Dutchess) announced yesterday at a Woodstock Community Forum that the Mescal Hornbeck Community Center, formally known as the Woodstock Community Center, will be receiving a \$250,000 New York State Economic Development Program grant. These funds.

a symbol of unity for the entire community, said Assemblyman Cahill. This allotment will serve to enhance the facility and provide much needed expansions that will allow for a wider range of activities to take place at the Center.”

The Town of Woodstock has attempted for a number of years to raise funds for the upgrades of the Community Center, including enhancing handicap accessibility, expanding restrooms and enlarging the capacity of meeting rooms. These updates will allow the facility to become more user-friendly for the events and activities that use the space.

“The opportunities and experiences that the revitalized Center will provide are endless,” said Assemblymember Cahill. “When finished, it will be a true testament to the vision of Mescal Hornbeck, an activist and community leader who made great strides in bringing crucial programs and services to the seniors and children of Woodstock. This grant will finally allow the Town of Woodstock to create a more workable and adequate environment for summer camps, theatre performances and countless other local gatherings for years to come.”

Town of Woodstock Supervisor, Jeremy Wilber, stated, “I am thrilled to be a part of such a historic moment for our community. On behalf of our children, seniors and cultural institutions

I thank Assemblyman Cahill for his support and his assistance in securing the funds to make this all possible.”

Pictures of the Assemblyman announcing the grant can be viewed below or by visiting our Facebook page at https://www.facebook.com/AssemblymanCahill?ref=br_tf.

[dailyfreeman.com](https://www.dailyfreeman.com)

Woodstock board OKs community center expansion

William J. Kemble news@freemanonline.com

3 minutes

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WOODSTOCK >> The Town Board has voted to move forward with a \$1 million expansion and renovation of the Mescal Hornbeck Community Center.

The project will be funded, in part, with \$100,000 from the town's 2013 budget surplus fund, the board agreed on Monday. The plan calls for expanding the center, on Rock City Road, by about 1,800 square feet and making the facility more energy efficient.

"It's going to ... have facilities to support cultural activities," said town Supervisor Jeremy Wilber said.

"It's going to kind of be what the Town Hall was many years ago, before they moved the courtroom into the back," he said. "The Town Hall used to have a presidium stage, and so it ... was also used for performing arts."

Wilber said the improvements at the Rock City Road Center have the twofold goal of living up to Woodstock's "Colony of the Arts" reputation and continuing to provide space for town recreation programs, like those offered in the summer for young people.

"It also serves as the facility for our senior programs ... (and) it's going to be designed is so that these big accordion doors can separate discrete spaces so that more than one entity can be using it at a time," the supervisor said.

The resolution approved on Monday calls for the center to be

updated with an “energy-efficient building envelope, solar energy and geothermal” heating and cooling systems.

“Right now, that whole thing leaks energy like a sieve. ... It will be warm in the winter, because right now it’s drafty in the winter, and will be cool in the summer, because right now it’s stifling in the summer,” Wilber said.

The project is to include a new kitchen, a renovated stage and backstage area and improved studios for public-access TV producers.

Town Board last month voted to hire architect Lester Walker for an estimated \$45,000 to design the renovation. The work is expected to begin in September and be completed in time for the summer 2015 recreation programs.