

Oelwein Public Library 201 East Charles Street ~ Oelwein, Iowa 50662-1939 319.283.1515 (v) ~ 319.283.6646 (f)

June 21, 2023

To: Mayor, City Council, and City Administrator From: Susan Macken, Library Director

Project: Library HVAC

The following contractors were invited to look at the current HVAC system, give recommendations for resolving the HVAC issues, and submit an estimate for replacing the HVAC system:

Ken's Electric - Oelwein Young Plumbing and Heating - Waterloo Plumb Tech - Waterloo Mick Gage Plumbing and Heating – New Hampton Johnson Plumbing, Heating, and Cooling - Oelwein Fitzpatrick Water and Plumbing - Hazleton Casper Plumbing and Heating - Decorah Bergen Plumbing and Heating - Waterloo NEIA Mechanical - Elgin Marv Smith Electric, Plumbing, and Heating – Fort Atkinson

The following contractors submitted estimates for replacing five (5) heat pumps:

NEIA Mechanical - Upgrade to 5 year Parts Warranty - Total with upgrade - Warranty: 18 months parts	\$192,580.94 \$ 8,607.12 \$201,188.06
Plumb Tech - Warranty: 1 year parts 5 year refrigeration circu	\$231,229.00 uit parts
Ken's Electric - Warranty: 1 year parts 3 years labor	\$231,855.00

The following measures were taken to try and reduce the cost of replacing the HVAC system:

- Submitted an Equipment Breakdown Endorsement claim to EMC Insurance. This claim was denied.
- Researched the federal Inflation Reduction Act Geothermal Heat Pumps Tax Credit. This is for homeowners.
- Researched the Tax Deductions for Commercial Buildings. This is a tax deduction for systems demonstrating a 50% reduction in energy usage using a software program to calculate energy usage.
- Researched geothermal incentives on the Iowa Geothermal Association website. This circled back to the Geothermal Tax Credit for homeowners.
- ▶ Researched Alliant Energy Rebates. These are for new residential geothermal systems.

All the contractors stated that it is possible, but not recommended, to repair the HVAC system. The system is 17 years old and uses the R22 refrigerant that is no longer produced. R22 can only be acquired by harvesting it from decommissioned systems. Attached is a list of repairs from 2009-2022.

The Library Board of Trustees reviewed the following documents: estimates submitted, incentives sought, insurance company report, and repair history. The Board of Trustees recommend for the City Council's consideration replacing the five (5) HVAC units using NEIA Mechanical as the contractor with an estimate of \$192,580.94. This does not include the upgraded warranty option.

Respectfully submitted, Susan Macken Library Director



PROPOSAL

	PHONE-	NEIA Mecha 19034 Flee ELGIN, IA 5 (563) 426-5144 - FAX- (563)	t Rd	
SUBMITTED TO: ADDRESS:	Oelwein Library 201 E Charles St Oetwein, IA	JOB NAME: JOB #: DATE:	20-3143 OLLE-(303)300-0301	5/12/2023
PHONE #:	319-283-1515	EMAIL:		
WE HEREBY SUB	MIT SPECIFICATONS AND ESTIMATES FO	R:		
Include	EPLACEMENT / INSTALLATION es installation of new Waterfurance Water t es all associated ductwork and electrical Warranty - 18 Months Parts Warranty	o Air Geothermal Units		\$192,580.94
			Option - Upgrade to 5 Year Parts Warranty on all units \$ TOTAL	8,607.12 \$201,188.06
WORKMANLIKE MANNER AC DEVIATION FROM ABOVE SP UPON WRITTEN ORDERS, AN ESTIMATE,	EED TO BE AS SPECIFIED. ALL WORK TO BE COMPLETED IN A CORDING TO ALL STANDARD PRACTICES, ANY ALTERATION OR REFIRCATIONS INVOLVING EXTRA COSTS WILL BE EXECUTED ONLY ND WILL BECOME AN EXTRA CHARGE OVER AND ABOVE THE	NEIA MECHANICAL AUTHORIZED SIGNATURE: NOTE: DAS PROVOLA MAYAE WITHORMAY IN NOT ACCEPTE	Doug A. Rocke Lawinouszowa	
ACCEPTANCE OF	F PROPOSAL THE ABOVE PRICES, SPECIFICATIONS AND	SIGNATURE		

ACCEPTANCE OF PROPOSALTHE ABOVE PRICES, SPECIFICATIONS AND SIGNATURE CONDITIONS ARE SATISFACTORY AND HEREDY ACCEPTED. YOU ARE AUTHORIZED TO DO THE WORK AS SPECIFICED. PAYNEWIN, ULL BE MADE SO UTINED ABOVE, A 11 2/34 SERVICE CHARGE WILL BE ADDED TO ANY UNPAD BALANCE AFTER 30 DAYS, SHOULD LEGAL ACTION BE RECUIRED FOR COLLECTION OF AMOUNT DATE DATE.

Updated 5/12/23

Plumb Tech Inc.

3261 W. Airline Hwy.

Waterloo, IA 50703

Phone: 319-233-5616

Fax: 319-233-5737

Date: 3/23/23 To: Oelwein Public Library Attn: Susan Re: Heat Pump Replacement

We propose to furnish the materials and labor to replace the three existing heat pumps at the Oelwein Public Library. We are proposing to replace the two big heat pumps that feed the common space and the conference room heat pump. We have based the price on removing and disposal of the existing units, installing and re-hooking up the new units, running new condensate, installing new ductwork, and reconnecting the stand-alone controls. We have also included in the quote a \$ 15,000.00 allowance for the electrical disconnect and reconnect and also the general construction work needed to install the new heat pumps.

Quote: \$ 191,824.00

If you wish to change out the other two Heat Pumps in the mechanical room at the same time as the others there will be an add to the quote above.

Add: \$ 39,405.00

warranty: 1 year parts 5 year refrigeration circuit parts

> All changed - 231,229 Updated 5/31/23

Plumb Tech Inc. Brett Behrends KEN'S ELECTRIC INC. 841 1st Ave SE, Oelwein, IA 50662 ELECTRICAL HVAC SOLAR

319-283-4221

Ken's Electric, Inc. 841 1st Ave SE, Oelwein, Iowa 50662 United States (319) 283-4221

Updated 5/10/23 Total to replace all units -\$231,855

BILL TO

Oelwein Public Library 201 East Charles Street Oelwein, IA 50662 USA

	estimate 28548585	ESTIMATE DATE Jan 27, 2023
JOB ADDRESS Oelwein Public Library 201 East Charles Street Oelwein, IA 50662 USA	Job: 28243198	
	ESTIMATE DETAILS	

HVAC-Heat Pump 1 & 2 Replacement: Included in this option will be the replacement of the current heat pump 1 and 2. We will install (2) new GeoComfort geothermal units to replace the current Florida Heat Pump units. The return air ducting will need to be redone to prevent pre mature failure of the new units. We will re due the return air connection from the main trunk line down to each unit. They will be isolated from each other with an air damper installed in each unit return air drop. The same will go for the supply air side of each unit. The dampers will open upon unit demand. All loop connections will be made back to each unit. All material and labor have been included to install the above.

Warranty: 1 year parts

3 year labor

ΤΑ 5 Κ	DESCRIPTION	QTY	PRICE	TOTAL
IGWA3	INSTALL GEO WATER TO AIR 60 TON LIBRARY	1.00	\$53,500.00	\$53,500.00
NONSTOCK EQUIP	GEOCOMFORT 30 TON WATER TO AIR- ECV300AHC2AABTS	2.00		\$112,400.00

	SUB-TOTAL	\$165,900.00
	ТАХ	\$0.00
	TOTAL	\$165,900.00
	EST. FINANCING	\$3,069.15
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Thank you for choosing Ken's Electric, Inc.

Pay online- https://kenselectricinc.securepayments.cardpointe.com/pay CUSTOMER AUTHORIZATION 50% DUE UPON ACCEPTANCE OF THIS PROPOSAL AND 50% DUE UPON COMPLETION OF THE PROJECT. THIS PROPOSAL IS VALID FOR 30 DAYS.

Sign here

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Date

BILL TO

Oelwein Public Library 201 East Charles Street Oelwein, IA 50662 USA

	е stiмате 29027942	ESTIMATE DATE Feb 10, 2023
JOB ADDRESS Oelwein Public Library 201 East Charles Street Oelwein, IA 50662 USA	Job: 28243198	

ESTIMATE DETAILS

HVAC-Conf. RM, Restroom, Horizontal Unit Replacement: Included in this option will be the replacement of the current heat pumps for the conference room, the restroom, and the horizontal unit. We will install (3) new GeoComfort geothermal units to replace the current Florida Heat Pump units. All material and labor have been included to install the above.

Warranty: 1 year parts 3 year labor

TA S K	DESCRIPTION	QTY	PRICE	TOTAL
IGWA6	INSTALL GEO WATER TO AIR 6 TON	1.00	\$8,550.00	\$8,550.00
IGWA5	INSTALL GEO WATER TO AIR 5 TON	1.00	\$8,485.00	\$8,485.00
IGWA3	INSTALL GEO WATER TO AIR 2.5 TON HORIZONTAL	1.00	\$9,150.00	\$9,150.00
NONSTOCK EQUIP	GEOCOMFORT 6 TON WATER TO AIR-GYT072E20MT1CSS	1.00	\$15,385.00	\$15,385.00
NONSTOCK EQUIP	GEOCOMFORT 5 TON WATER TO AIR-GYT060E20MT1CSS	1.00	\$14,920.00	\$14,920.00
NONSTOCK EQUIP	GEOCOMFORT 2.5 TON WATER TO AIR-GZT030D20LM1CSS	1.00	\$9,465.00	\$9,465.00

	SUB-TOTAL	\$65,955.00
	ТАХ	\$0.00
	TOTAL	\$65,955.00
	EST. FINANCING	\$1,220.17
Thank you for choosing Ken's Electric, Inc.		
Pay online- https://kenselectricinc.securepayments.cardpointe.com/pay CUSTOMER AUTHORIZATION		
50% DUE UPON ACCEPTANCE OF THIS PROPOSAL AND 50% DUE UPON CO VALID FOR 30 DAYS.	DMPLETION OF THE PROJECT. TH	IS PROPOSAL IS

Sign here

Date

Des Moines Claim Department



May 31, 2023

City Of Oelwein Attn: Susan Macken 20 2nd Ave SW Oelwein, IA 5662-2247

Via Email—Return Receipt Requested

Re:	Claim Number:	Z01773149
	Date of Loss:	02/08/2023
	Loss Location:	201 E Charles St, Oelwein, IA
	Incident:	Problem with water source heat pump system

Dear City of Oelwein:

EMC Property & Casualty Company (EMC) provides the commercial property insurance coverage under the CP7121 Public Entity Coverage Form, and including the CP7358 Equipment Breakdown Endorsement, subject to a \$10,000 deductible, regarding the above captioned claim. The Equipment Breakdown portion of the policy must be reviewed by Mutual Boiler Reinsurance Company (MBRe) to determine any possible coverage.

EMC has completed our investigation for the malfunction of the water source heat pump system under your base policy (CP7121), and MBRe has also completed their investigation under the equipment breakdown endorsement (CP7358). Nederveld Inc, a Forensic Engineering Company, assisted with the investigation of reported damages involving two 17-year-old water source heat pump systems.

It has been confirmed that the subject heat pump units are repairable and do not require full replacement. The units are currently operational, and all reports indicate that the units have met the heating and cooling needs of the building over the past several years despite the various refrigerant leaks that have been discovered, reported, and attempted to be remediated. The isolated locations of leaks in the refrigerant piping systems that were observed during this investigation need to be repaired and the systems need to be properly and thoroughly pressure-tested per manufacturer's recommendations and/or typical industry standards to discover any other leaks that may not be currently evident and evaluate subsequent repairs.

It was noted that there have been multiple refrigerant leaks because of a gradually developing condition attributed to age-related use and vibration. The HVAC maintenance records determined the vibration isolators on the compressor suction lines have been replaced multiple times, including January of 2019 and July of 2022. There was no evidence of a mechanical or electrical system event that would support coverage under the Equipment Breakdown Endorsement. There was also no evidence that these units experienced damages because of a Covered Cause of Loss.

Unfortunately, based on the facts obtained and the language contained within your policy of insurance, we regret that we are unable to assist you with this claim.

We respectfully refer you to policy provisions which read, in part, as follows:

P.O. Box 884 | Des Moines, IA 50306-0884 | 515.280.2604 | 800.362.2227 | F 888.992.8213 P&C | F 888.992.8214 Work Comp | www.emcins.com

Employers Mutual Casualty Company EMCASCO Insurance Company EMC Reinsurance Company Illinois EMCASCO Insurance Company Dakota Fire Insurance Company EMC Property & Casualty Company

Union Insurance Company of Providence Hamilton Mutual Insurance Company EMC Risk Services, LLC EMC Underwriters, LLC EMC National Life Company (affiliate)



EQUIPMENT BREAKDOWN COVERAGE – CP7358 (02/17) (INCLUDING ELECTRONIC CIRCUITRY IMPAIRMENT)

The following is added to the applicable Causes of Loss Form or Coverage Form:

A. Additional Coverage – Equipment Breakdown

- The term Covered Cause of Loss includes the Additional Coverage Equipment Breakdown as described and limited below. Without an "accident" or "electronic circuitry impairment", there is no Equipment Breakdown Coverage.
 - **a.** We will pay for direct physical damage to Covered Property that is the direct result of an "accident" or "electronic circuitry impairment". We will consider "electronic circuitry impairment" to be physical damage to "covered equipment".

e. DEFINITIONS

The following definitions are added with respect to this endorsement only:

- (1) "Accident"
 - (a) An "accident" means a fortuitous event that causes direct physical damage to "covered equipment". The event must be one of the following:
 - (i) Mechanical breakdown, including rupture or bursting caused by centrifugal force;
 - (ii) Artificially generated electrical current, including electric arcing, that disturbs electrical devices, appliances or wires;
 - (iii) Explosion of steam boilers, steam pipes, steam engines or steam turbines owned or leased by you, or operated under your control;
 - (iv) Loss or damage to steam boilers, steam pipes, steam engines or steam turbines caused by or resulting from any condition or event inside such equipment; or
 - (v) Loss or damage to hot water boilers or other water heating equipment caused by or resulting from any condition or event inside such boilers or equipment.
- (5) "Covered equipment"
 - (a) "Covered equipment" means, unless otherwise specified in a "Schedule", Covered Property that:
 - (i) Transmits, generates or utilizes energy; or
 - (ii) Which, during normal usage, operates under vacuum or pressure, other than the weight of its contents.

"Covered equipment" may utilize conventional design and technology or new or newly commercialized design and technology.

- (b) None of the following is "covered equipment":
 - (i) Structure, foundation, cabinet or compartment;
 - (iii) Sewer piping, buried vessels or piping, or piping forming a part of a sprinkler or fire suppression system;
 - (iv) Water piping other than boiler feedwater piping, boiler condensate return piping or water piping forming a part of a refrigerating or air conditioning system;

2. EXCLUSIONS

As respects this endorsement only, with the exception of "power outage", all exclusions within the Exclusions section of the Property Coverage Form or Causes of Loss form apply, except as modified below and to the extent that coverage is specifically provided by this endorsement. The following exclusions are added:

c. We will not pay for loss or damaged caused by or resulting from:

Depletion, deterioration, corrosion, erosion, wear and tear, or other gradually developing conditions, but if an "accident" or "electronic circuitry impairment" results, we will pay for that resulting loss, damage or expense caused by that "accident" or "electronic circuitry impairment".

The heat pumps did not experience physical loss or damage from an "equipment breakdown."



EMC also completed a review of the Property forms. Please refer to the following language from your policy:

BUILDING AND PERSONAL PROPERTY COVERAGE FORM - CP7121 (10/20)

A. Coverage

We will pay for direct physical loss of or damage to Covered Property at the premises described in the Declarations caused by or resulting from any Covered Cause of Loss.

1. Covered Property

Covered Property, as used in this Coverage Part, means the type of property described in this section, **A.1.**, and limited in **A.2.**, Property Not Covered, if a Limit of Insurance is shown in the Declarations for that type of property.

3. Covered Causes Of Loss

Covered Causes Of Loss means direct physical loss unless the loss is excluded or limited in Section **B**. Exclusions and Limitations.

B. Exclusions And Limitations

2. We will not pay for loss or damage caused by or resulting from any of the following:

- d. (1) Wear and tear;
 - (2) Rust or other corrosion, decay, deterioration, hidden or latent defect or any quality in property that causes it to damage or destroy itself;
 - (4) Settling, cracking, shrinking or expansion;
 - (6) Mechanical breakdown, including rupture or bursting caused by centrifugal force. But if mechanical breakdown results in elevator collision, we will pay for the loss or damage caused by that elevator collision;
- 3. We will not pay for loss or damage caused by or resulting from any of the following, 3.a. through 3.c. But if an excluded cause of loss that is listed in 3.a. through 3.c. results in a Covered Cause of Loss, we will pay for the loss or damage caused by that Covered Cause of Loss.
 - c. Faulty, inadequate or defective:
 - (1) Planning, zoning, development, surveying, siting;
 - (2) Design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;
 - (3) Materials used in repair, construction, renovation or remodeling; or
 - (4) Maintenance;

of part or all of any property on or off the described premises.

E. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions. The following conditions, **1.** through **7.**, do not apply to Additional Coverage **o.**, Legal Liability. The following condition **1.** does not apply to Additional Coverage **i.** Business Income And Extra Expense. **3.** Duties In The Event Of Loss Or Damage

- a. You must see that the following are done in the event of loss or damage to Covered Property:
 - (4) Take all reasonable steps to protect the Covered Property from further damage, and keep a record of your expenses necessary to protect the Covered Property, for consideration in the settlement of the claim. This will not increase the Limit of Insurance. However, we will not pay for any subsequent loss or damage resulting from a cause of loss that is not a Covered Cause of Loss. Also, if feasible, set the damaged property aside and in the best possible order for examination.

As the cause of loss was not accidental in nature, as defined, and due to an excluded cause of loss (wear/tear/deterioration), we regret to inform that you we are unable to find coverage for the loss regarding the repairs related to the heat pump systems.

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May 31, 2023 Page 4



Nothing in this letter is intended to be, nor should be construed as, a waiver of any of the terms or conditions of your policy of insurance. EMC expressly reserves all rights, conditions, and defenses it may have now or those that may become apparent through additional investigation.

Please understand that by making specific reference to certain language and sections contained within your policy, EMC neither waives, nor shall it be estopped from, raising other exclusions, conditions, limitations, or provisions of your policy or the facts of this specific claim. Further, nothing in this letter is intended to be, nor should be construed as, a waiver of any of the terms or Conditions of your policy of insurance. EMC expressly reserves all rights, Conditions, and defenses it may have now or those that may become apparent through additional investigation or claim handling.

If you have any additional information you would like us to consider, please forward it to us for review. If you have any questions or concerns regarding your claim, or wish to discuss any aspect of your claim, please feel free to contact me.

Sincerely,

Mike Otto Claims Adjuster <u>Mike.j.otto@emcins.com</u> #515-345-2519

cc: Vogel Agency, 34 W Charles St, Oelwein, IA (via email)



FOR PARTNERS ABOUT

SSARCH

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ENERGY STAR Home

Upgrade

Upgrade now

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Commercial Buildings Industrial Plants New Homes Find Products Save At Home

Home » About ENERGY STAR » Federal Tax Credits » Tax Credits for Homeowners » Geothermal Heat Pumps

About ENERGY STAR

Geothermal Heat Pumps Tax Credit

Information updated 12/30/2022 Subscribe to ENERGY STAR's Newsletter for updates on tax credits for energy efficiency and other ways to save energy and money at

See tax credits for 2022 and previous years.

home.

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About ENERGY STAR

ENERGY STAR Impacts

How ENERGY STAR Works

How ENERGY STAR Protects

Federal Tax Credits

Tax Credit Legislation

Definitions

Tax Credits FAQs

Tax Credits for Homeowners

Air Source Heat Pumps

Battery Storage Technology

Central Air Conditioners

Qualified geothermal heat pump property expenditure:

(2) is ENERGY STAR certified.

What products are eligible?

Qualified geothermal heat pump property:

An expenditure for qualified geothermal heat pump property installed on or in connection with the taxpayer's residence.

(1) uses the ground or ground water as a thermal energy source (to heat), or as a thermal energy sink (to cool) a home, and

Ask the

The following Residential Clean Energy Tax Credit amounts apply for the prescribed periods:

30% for property placed in service after December 31, 2016, and before January 1, 2020

 26% for property placed in service after December 31, 2019, and before January 1, 2022 30% for property placed in service after December 31, 2021, and before January 1, 2033

26% for property placed in service after December 31, 2032, and before January 1, 2034

22% for property placed in service after December 31, 2033, and before January 1, 2035



Find Eligible Products

Find products that are eligible

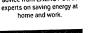
for this tax credit

Explore models



Who can use this credit?

Your go to resource for the latest advice from ENERGY STAR





Existing homes and new construction qualify. Both principal residences and second homes qualify. Rentals do not qualify.

This system must be installed in connection with a dwelling unit located in the United States and used as a residence by the taxpayer The home served by this system does not have to be the taxpayer's principal residence.

A principal residence is the home where you live most of the time. The home must be in the United States. It can include a house, houseboat, mobile home, cooperative apartment, condominium, and a manufactured home.

the Environment

Biomass Stoves/Boilers

Equipment which

Electric Panel Upgrade

Electric Vehicles

Exterior Doors

Fuel Cells (Residential Fuel Cell and Microturbine System)

Furnaces (Natural Gas, Oil)

Geothermal Heat Pumps

Heat Pump Water Heaters

Home Energy Audit Hot Water Boilers (Natural

Gas, Propane, Oil) Insulation

Small Wind Turbines

(Residential)

Solar Energy Systems

Water Heaters (Natural Gas)

Windows & Skylights

About ENERGY STAR

About ENERGY STAR	commercial buildings. The following information applies to building upgrades completed on or before December 31, 2022.
ENERGY STAR Impacts	The Inflation Reduction Act extended and expanded these tax deductions. We will have
How ENERGY STAR Works	updated information on this page as soon as guidance becomes available from the IRS.
How ENERGY STAR Protects the Environment	 What Can Be Deducted? A tax deduction of up to \$1.80 per square foot is available to owners or designers of
Federal Tax Credits	 commercial buildings or systems that demonstrate a 50% reduction in energy usage accomplished solely through improvements to the heating, cooling, ventilation, hot water,
Tax Credit Legislation	and interior lighting systems. Partial deductions of up to \$.60 per square foot can be taken for qualifying measures.
Tax Credits FAQs	How to Apply for the Tax Deduction
Tax Credits for Homeowners	The IRS requires that you use a qualified software program to model your energy usage. See a list of qualified software for calculating energy savings.
Builders	Additional Information
Tax Deductions for Commercial Buildings	 IRS Notice 2006-52 (6/2/2006) provides guidance on the deduction for energy- efficient commercial buildings.
Historical Tax Credit Information	 IRS Notice 2008-40 (4/7/2008) - Amplification of Notice 2006-52 sets forth additional guidance not covered in the initial notice.
Newsroom	 IRS Notice 2012-26, page 5, provides savings percentages for a partial tax deduction.
ENERGY STAR Kids Page	Renewable Energy Tax Credits
	Get Help Saving Energy in Your Commercial Building

For information on capturing energy-efficiency opportunities for your commercial property, visit www.energystar.gov/buildings.

Tax Deductions for Commercial Buildings

Section 179D of the Internal Revenue Code allows deductions for energy-efficient

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Clean Energy



Geothermal system

A geothermal pump heats and cools your home by using the renewable power of the earth. The units are over 45% more efficient than other standard heating and cooling equipment.

To learn more about how a geothermal system works check out powerhousetv.com.

Rebate requirements:

- Alliant Energy must provide the electricity for the equipment installed.
- The equipment must be ENERGY STAR and listed in the current AHRI directory.
- Must be a new geothermal system including equipment and ground loop. See rebate claim form for types, applications and other qualifications.

The age of your home will determine your rebate.

- Homes five years or older are considered existing homes.
- Homes less than five year old are considered new homes.

Important information:

If locked rotor amps are more than 100, please call 1-800-ALLIANT (800-255-4268) and ask for a field engineering specialist.

How do I find a qualified dealer?

Visit our Dealer Locator to find a professional in your area.

Work Done on HVAC 2009-2022

February 2009	Loop Pump Fuse	\$380
July 2010	Freon	\$2,004
January 2011	Repair Blowers	\$1,592
May 2011	Transformer and Contactor	\$1,558
November 2011	Wire Short	\$195
October 2013	Algae in HVAC Lines	\$320
February 2014	Transformer	\$618
May 2014	Contactor	\$573
September 2016	Actuator	\$1,124
April 2018	Damper Motor and Linkage, Replaced Actuator	\$1,840
January 2019	Leak on Vibration Isolator on Suction Line at Compressor, Freon	\$3,338
December 2019	Replace Damper Motor	\$1,643
March 2020	Compressor	\$322
April 2020	Blower Wheel, Compressor (Ken's)	\$5,890
September 2020	Freon Leak (Ken's)	\$2,919
July 2021	Reversing Valve Leak, Sensing Bulb Line Worn, Replace TXV, Freon	\$3,278
July 2022	Replaced Suction Line Vibration Isolator, Freon	\$3,852

\$31,446