

BENCO ELECTRIC COOPERATIVE

AIR SOURCE HEAT PUMP FACT SHEET



AIR SOURCE HEAT PUMPS (ASHPs)

Air Source Heat Pumps (ASHPs) give members the best of both worlds: home cooling and supplemental heating with 72% less electricity than conventional air conditioners and furnaces.



ASHPs are measured by Seasonal Energy Efficiency Ratio (SEER), Energy Efficiency Ratio (EER) and Heat Seasonal Performance Factor (HSPF). The SEER rating most accurately reflects overall system cooling efficiency on a seasonal basis and EER reflects the system's cooling energy efficiency at peak day operations. HSPF is the most commonly used measure of heat pump heating efficiency. The higher the HSPF, the more efficient the heat pump.

Members have complete control of the ASHP and can switch between cooling and heating directly from their thermostat.

Qualifying ASHPs must have an overall efficiency of 15 SEER or higher and an HSPF rating of 8.5 or higher, in order to be eligible. **Please reference the following page of this document for a conversion chart for newer equipment.**

QUALITY INSTALLATION PROGRAM

The Quality Installation (QI) program provides rebates for members when using a QI Certified Trade Partner to perform the installation of a high-efficient ASHP. It is essential that the equipment is installed correctly and according to the manufacturer's specifications to accomplish maximum electric savings.

A list of qualified QI contractors can be found on BENCO's website.

AIR SOURCE HEAT PUMP POOL HEATERS

Rebates are available to both new and retrofit air source heat pump pool heating systems. These systems can be used both indoor and outdoor residential applications. Today's ASHP pool heaters have a very high, coefficient of performance and typically produce between four to six times more heat per kWh of electricity than electric resistance pool heating technologies.

Qualifying pool ASHPs must be tested to AHRI 1160 testing standards. ASHP pool heating systems must have a minimum of Coefficient of Performance of 5.0.



HEATING AND COOLING

2023 Reference and Conversion Sheet

Notice: On January 1, 2023 the Department of Energy (DoE) began using a new testing procedure to rate the efficiency of air conditioners and air source heat pumps. These changes require new metrics (SEER2/EER2/HSPF2) that were derived from the DoE's new test procedure (M1) rather than the historical metrics (SEER/EER/HSPF) from the old test procedure (M).

The simple conversion table below will help you to identify air conditioning (AC) and air source heat pump (ASHP) equipment that qualifies for ENERGYWISE rebates in 2023 using the following steps.

Step 1: Determine what ratings system was used for the equipment model that you plan to purchase.

Step 2: Confirm that the efficiency ratings of the new equipment exceeds the requirements for the rebate measure you are applying for using the table below to convert between the old and new efficiency ratings when needed.

SEER	DUCTED SEER2	DUCTLESS SEER2
14.0	13.4	14.0
14.5	13.8	14.5
15.0	14.3	15.0
15.5	14.8	15.5
16.0	15.2	16.0
17.0	16.2	17.0
17.5	16.7	17.5
18.0	17.2	18.0
19.0	18.1	19.0
20.0	19.0	20.0

EER	DUCTED EER2	DUCTLESS EER2
10.2	9.8	10.2
11.0	10.5	11.0
11.5	11.0	11.5
11.7	11.2	11.7
12.0	11.5	12.0
12.2	11.5	12.2
12.5	12.0	12.5
13.0	12.5	13.0

HSPF	DUCTED SPLIT HSPF2	DUCTED PACKAGE HSPF2	DUCTLESS HSPF2
8.0	6.8	6.7	7.7
8.2	7.0	6.9	7.9
8.8	7.5	7.4	8.4
9.0	7.7	7.6	8.6
9.5	8.1	8.0	9.1
10.0	8.5	8.4	9.5
11.0	9.4	9.2	10.4

NOTE: The cross references for efficiency in the above tables should be noted as approximate.