Air-Source Heat Pumps and Central Air Conditioners Key Product Criteria

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| **Equipment** | **Specification** |
| Air-Source Heat Pumps | >= 8.2 HSPF/ >=14.5 SEER/ >=12 EER\* for split systems>= 8.0 HSPF/ >=14 SEER/ >=11 EER\* for single package equipment including gas/electric package units  |
| Central Air Conditioners | >=14.5 SEER/ >=12 EER\* for split systems>=14 SEER/ >=11 EER\* for single package equipment including gas/electric package units  |

\*Energy Efficiency Ratio

**Air-Source Heat Pump (ASHP):**

An air-source unitary heat pump model consists of one or more factory-made assemblies which normally include an indoor conditioning coil(s), compressor(s), and outdoor coil(s), including means to provide a heating function. ASHPs shall provide the function of air heating with controlled temperature, and may include the functions of air-cooling, air-circulation, air-cleaning, dehumidifying or humidifying.

**Central Air Conditioner:**

A central air conditioner model consists of one or more factory-made assemblies which normally include an evaporator or cooling coil(s), compressor(s), and condenser(s). Central air conditioners provide the function of air-cooling, and may include the functions of air-circulation, air-cleaning, dehumidifying or humidifying.

**Heating Seasonal Performance Factor (HSPF):**

This is a measure of a heat pump's energy efficiency over one heating season. It represents the total heating output of a heat pump (including supplementary electric heat) during the normal heating season (in Btu) as compared to the total electricity consumed (in watt-hours) during the same period. HSPF is based on tests performed in accordance with AHRI 210/240 (formerly ARI Standard 210/240)1.

**Seasonal Energy Efficiency Ratio (SEER):**

This is a measure of equipment energy efficiency over the cooling season. It represents the total cooling of a central air conditioner or heat pump (in Btu) during the normal cooling season as compared to the total electric energy input (in watt-hours) consumed during the same period. SEER is based on tests performed in accordance with AHRI 210/240 (formerly ARI Standard 210/240)1.

**Energy Efficiency Ratio (EER):**

This is a measure of the instantaneous energy efficiency of cooling equipment. EER is the steady-state rate of heat energy removal (e.g., cooling capacity) by the equipment in Btuh divided by the steady-state rate of energy input to the equipment in watts. This ratio is expressed in Btuh per watt (Btuh/watt). EER is based on tests performed in accordance with AHRI 210/240 (formerly ARI Standard 210/240)1.

1Air-Conditioning, Heating and Refrigeration Institute. Standard 210/240 “2003 Standard for Unitary Air-Conditioning and Air-Source Heat Pump Equipment.”