

TECHNICAL ACRONYMS

- ASHRAE: American Society of Heating, Refrigeration, and Air Conditioning Engineers.
- SEER: The efficiency of air conditioning units is governed by U.S. Law and regulated by the U.S. Department of Energy. Every AC unit is assigned an efficiency rating known as its “seasonal energy efficiency rating” (SEER). The SEER is defined as the total cooling output (in BTU) provided by the unit during its normal annual usage period divided by its total energy input (in watt hours) during the same time period. The higher the SEER rating, the more efficient the unit.
- EER: The **energy efficiency rating (EER)** of an air conditioner is its BTU rating over its wattage. For example, if a 10,000-BTU air conditioner consumes 1,200 watts, its EER is 8.3 (10,000 BTU/1,200 watts). Obviously, you would like the EER to be as high as possible.
- IEER AHRI Standard 340/360 2007 defines IEER as "a single number figure of merit expressing **cooling part-load EER efficiency** for commercial unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities for the equipment." It applies to unitary equipment $\geq 65k$ Btu/hr. (5.41 Tons). IEER reflects ratings at specific load conditions (100%, 75%, 50% and 25%) and is intended to measure the effect of units with multi-stage compressors. The higher the IEER, the better the part load efficiency.
- VRF The term **Variable Refrigerant Flow (VRF)** refers to the ability of the system to control the amount of **refrigerant** flowing to each of the evaporators, enabling the use of many evaporators of differing capacities and configurations, individualized comfort control, simultaneous heating and cooling in different zones, and heat recovery from one zone to another. **VRF** moves refrigerant to the zone to be heated or cooled, allowing the temperature of that area to be more precisely controlled. This system is capable of operating as an air-conditioner or as a heat pump.

