

**Cooling Efficiency (SEER)**

Since efficiency is affected by outdoor and indoor air temperature, SEER (Seasonal Effectiveness Energy Ratio) is the average efficiency of equipment in the cooling season. The higher the number, the less electricity it uses to remove its rated capacity (BTUs/hour) from the home.

Heating Efficiency (HSPF)

Like SEER, HSPF (Heating Seasonal Performance Factor) is the average efficiency of the equipment in the heating season. HSPF does not vary greatly even with high-end equipment, but high-end equipment generally can operate at fully capacity in lower outside temperatures than low-end equipment.

Gas Heating Efficiency (AFUE)

AFUE (Annual Fuel Utilization Efficiency) indicates the percentage of fuel that is applied to heating the home rather than exiting the flue pipe.

Cooling Efficiency Improvement from Basic Option

This indicates how much more efficient upper tier options are from the Basic option. Keep in mind the Basic option is AT LEAST 14 SEER. Most equipment being replace is less than 14 SEER, meaning even higher energy savings in the cooling season.

AHRI Match

This number is assigned by the AHRI (Air Conditioning, Heating and Refrigeration Institute), which verifies the equipment presented is designed and lab-tested to achieve its efficiency rating and operate to manufacturer specifications. The match can be checked by anyone at the AHRI's website. A non-AHRI match may operate at lower efficiency than the nameplate suggests or experience operational issues.

Compressor Staging

More staging results in less cycling, which keeps the indoor temperature more stable and can extend the life of the equipment.

Single Stage: The compressor runs at 100% capacity only.

Two Stage: The compressor can operate at 66% or 100% capacity

Variable Capacity: The compressor can operate anywhere between 10% and 100% capacity.

Gas Heating Staging

Like compressor staging, more stages equals a more stable indoor temperature and less wear and tear on the equipment.

Single Stage: The furnace runs at 100% capacity only.

Two Stage: The furnace can operate at 50% or 100% capacity

Variable Capacity: The furnace can operate anywhere between 10% and 100% capacity.

Indoor Fan Type *ECM (Electronically Commutated Motor):* ECM blower motors are much more energy efficient than standard PSC blowers and don't require a capacitor, but are similar in that they are simply on or off.

Variable Speed: Variable speed blower motors are the same as ECMs, but are programmed with different airflow profiles to improve comfort and dehumidification.

DC Inverter Technology Inverter-driven compressors are much more efficient than conventional single-phase compressors. In addition to energy savings, inverter-driven compressors don't experience in-rush current, so they are ideal for homes with generators or limited electrical service.

Hot Heat Pump Technology Hot Heat Pump Technology is a feature with YORK Affinity heat pumps that works by lowering the blower speed to increase the temperature rise off the indoor coil. This helps improve comfort so the customer doesn't feel "cool" air coming out of the supply vents.

Auxiliary Heat Lockout A feature with YORK Affinity heat pumps, the heat pump can control the use of auxiliary heat in milder conditions, which can reduce energy consumption.

Dehumidification Dehumidification improves when airflow is lower than normal. Variable speed blowers can be programmed to ramp up slowly, allowing the surface of the coil to get cold quickly. Multi-stage compressors further improve dehumidification by running for longer periods with minimal airflow.