# Efficiency Ratings

The efficiency of combustion heating equipment is expressed in terms of AFUE (Annual Fuel Utilization Efficiency), whereas the cooling efficiency for electric air conditioners and heat pumps is expressed in terms of SEER (Seasonal Energy Efficiency Ratio) and the efficiency of heat pump heating is expressed in terms of HSPF (Heating Season Performance Factor).

While high-efficiency equipment is always recommended, it is worthless if the system is not well designed. The equipment must be properly sized to meet the actual energy loads of each building, and the equipment and ductwork must be properly installed and maintained to run efficiently. Airtight ductwork is critical, and the system must be sized using a load analysis. The refrigerant lines must be precisely charged, and maintaining the correct airflow over the evaporative coil is vital to the system running efficiently.