



AES Technical Bulletin

Overall Efficiency VS Combustion Efficiency

Product models covered: Magnum / Wood Pellet / Biomass Appliances

Topic: This technical bulletin will be addressing the difference between overall efficiency and combustion efficiency.

The combustion efficiency is the rating on how well the fuel can burn and the design of the firepot systems. This is typically the same for any appliance and changes depending on fuel quality, fuel type, firepot type and combustion air.

The overall efficiency is the rating on how much of the heat generated by the fire will actually be transferred into the home. This is a calculation that is made based on the fire temperature, heat temperature coming into the room and the temperature of the exhaust going out the back of the unit.

This is where Magnum units really shine. Laboratory tests have shown that Magnum units run around 84% overall efficiency. Magnum combustion efficiency will run between 97% - 99% depending on fuel conditions.