

CEE RESIDENTIAL GAS HEATING INITIATIVE

High-efficiency specifications for GAS FURNACES AND BOILERS

Terms of Usage below

Annual Fuel Utilization Efficiency (AFUE) performance levels

Technology	CEE specifications (%)	Federal minimum (%)
Gas-fired furnaces	Tier 1: 90 Tier 2: 92 Tier 3: 94	78
Gas-fired boilers	85	80

Air Handling (Electricity Use) performance level*

Technology	CEE specification
Gas-fired furnaces, minimum of 90% AFUE	$\frac{3.412 \cdot E_{AE}}{3.412 \cdot E_{AE} + 1000 \cdot E_F} \leq 2.0\%$

*This performance level is equivalent to $E_{AE} / E_F \leq 6$, and, in words, "the annual electricity use must be less than or equal to 2 percent of the total annual energy use." There is no Federal minimum for furnace electricity use. E_{AE} (Annual Electricity Use) and E_F (Annual Fuel Energy Use) are outputs of the US Department of Energy test procedure for residential gas furnaces. Both E_{AE} and E_F are listed in the Gas Appliance Manufacturers Association's *Consumers' Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment* (available at www.gamanet.org).

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