WHAT IS YOUR BOILER'S COMBUSTION EFFICIENCŸ

A combustion efficiency test measures how well your boiler converts fuel into usable heat. All boilers are designed to be able to reach at least 80% efficiency. The higher your combustion efficiency, the more heat you are getting for your fuel dollar. A badly tuned burner, soot buildup in the tubes, and rust buildup in the boiler water reduce efficiency, so it is important to perform regular maintenance, and have your boiler cleaned, tuned and serviced as often as necessary.

However, remember that the combustion efficiency test only measures what happens in the boiler room. You can still waste lots of fuel because your distribution system is bad, or you have a leaky, unweatherized building. When you have your boiler cleaned and tuned, ask your service company to perform a combustion efficiency test, and make sure they perform all of the following tests that make up a complete combustion efficiency test

NET STACK TEMPERATURE (stack temperature minus room temperature).

CARBON DIOXIDE TEST

SMOKE TEST

CARBON MONOXIDE TEST (required for gas burners only)

DRAFT TEST

SAVINGS FOR EVERY $100 IN FUEL COSTS BY INCREASE OF COMBUSTION EFFICIENCY

From an Original Efficiency of	To an Increased Combustion Efficiency of:								
	55%	60%	65%	70%	75%	80%	85%	90%	95%
50%	9.10	16.70	23.10	28.60	33.30	37.50	41.20	44.40	47.40
55%	—	8.30	15.40	21.50	26.70	31.20	35.30	38.90	42.10
60%	—	—	7.70	14.30	20.00	25.00	29.40	33.30	37.80
65%	—	—	—	7.10	13.30	18.80	23.50	27.80	31.60
70%	—	—	—	—	6.70	12.50	17.60	22.20	26.30
75%	—	—	—	—	—	6.30	11.80	16.70	21.10
80%	—	—	—	—	—	—	5.90	11.10	15.80
85%	—	—	—	—	—	—	—	5.60	10.50
90%	—	—	—	—	—	—	—	—	5.30