

# FUEL RATES ARE ASSUMED AS FOLLOWS:

Natural Gas:	\$0.78 per therm
Propane:	\$1.53 per gallon
Fuel Oil:	\$1.60 per gallon
Electricity:	\$0.078/kWh

Price of natural gas reflects Xcel Energy's distribution charges and the cost of fuel gas that the company purchased on the wholesale market.

Price of electricity is based on Xcel Energy's residential electricity rate and does not include state or municipal taxes or other local fees.

Price of propane and fuel oil reflects a seasonally average price that does not include taxes, local fees, customer charges or any other additional fee above the cost of the fuel and distribution.

**Natural gas appliance pricing comparison is based on average fuel consumption per year based on the following assumptions:**

## Furnace

High efficiency furnace average annual use:

Natural Gas:	964 therms
Propane:	1,055 gallons
Fuel Oil:	779 gallons
Electricity:	27,307 kWh

Standard efficiency furnace average annual use:

Natural Gas:	1,189 therms
Propane:	1,302 gallons
Fuel Oil:	857 gallons
Electricity:	27,307 kWh

Furnace efficiencies were selected based on highest efficiency commercially viable as listed

by Gas Appliance Manufacturers Association (GAMA's) *April 2003 Consumer's Directory of Certified Efficiency Ratings* and lowest allowable limits set by code. Heating loads were calculated using commercially available software based on a 1,600 square foot house in a northern climate. Furnace costs are based on annual heating requirements of 93.2 MMBtu/yr.

## Water heater

Average annual use:

Natural Gas:	214 therms
Propane:	234 gallons
Fuel Oil:	177 gallons
Electricity:	4,267 kWh

Comparisons on water heaters are based on a family of 3 using 67 gallons of water daily.

Water heater efficiencies were selected based on highest efficiency commercially viable as listed by GAMA's *April 2003 Consumer's Directory of Certified Efficiency Ratings*.

## Cooking Range

Average annual use:

Natural Gas:	66 therms
Propane:	72 gallons
Electricity:	1,934 kWh

Cooking range assumptions were from the Energy Information Administration (EIA) and measured typical loads. Oven operates an average of 45 minutes every day (2880 watts at average of 90% duty cycle on). Range top burners operate 90 minutes per day (60% small burner at average high/med setting of 1,740 watts and 40% large burner at average high/med setting of 2,800 watts). EIA estimates

range/oven energy use as follows: range 4 MMBTU/yr, oven 2.6 MMBTU/yr).

## Clothes Dryer

Average annual use:

Natural Gas:	63 therms
Propane:	69 gallons
Electricity:	1,584 kWh

Clothes dryer is assumed to operate 300 times per year with 20,000 BTU input on a natural gas or propane dryer and 5,000 watts on an electric. Both units include a .375 hp tumbler motor.

## Barbecue Grill

Average annual use:

Natural Gas:	13 therms
Propane:	14 gallons
Electricity:	369 kWh

Grill is assumed to be a 35,000 btu unit operating at 75% of full capacity for one hour, 48 times per year.

## Garage Unit Heater

Average annual use:

Natural Gas:	102 therms
Propane:	111 gallons
Electricity:	2,399 kWh

Garage unit heater is assumed to be vented and operating at 80% efficiency in a 624 square foot garage held at 50F.

## Pool Heater

Average annual use:

Natural Gas:	549 therms
Propane:	601 gallons
Electricity:	16,094 kWh

Natural gas pool heater is assumed to be a 250,000 Btu/hr heater operated two hours per day over four months.

## Radiant Flooring

Average annual use:

Natural Gas:	1,141 therms
Propane:	1,249 gallons
Electricity:	26,750 kWh

For more information, please visit [www.xcelenergy.com](http://www.xcelenergy.com) or contact the Builders Call Line at **1-800-628-2121**.



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