

## Wood-Fired Boiler Sizes and Costs

Boiler Size (Boiler Horsepower)	Boiler Size (Million Btu per hour)	Boiler Size (Kilowatts)	GREEN Wood/ Bark Fuel	DRY Wood- Bark Fuel
<u>50</u>	<u>1,673,950</u>	<u>491</u>	\$ 182,500	\$ 175,000
<u>100</u>	<u>3,347,900</u>	<u>981</u>	\$ 237,500	\$ 225,000
<u>150</u>	<u>5,021,850</u>	<u>1,472</u>	\$ 395,000	\$ 370,000
<u>200</u>	<u>6,695,800</u>	<u>1,962</u>	\$ 555,000	\$ 515,000
<u>250</u>	<u>8,369,750</u>	<u>2,453</u>	\$ 675,000	\$ 625,000
<u>300</u>	<u>10,043,700</u>	<u>2,943</u>	\$ 745,000	\$ 685,000
<u>350</u>	<u>11,717,650</u>	<u>3,434</u>	\$ 810,000	\$ 745,000
<u>400</u>	<u>13,391,600</u>	<u>3,924</u>	\$ 875,000	\$ 805,000
<u>450</u>	<u>15,065,550</u>	<u>4,415</u>	\$ 900,000	\$ 830,000
<u>500</u>	<u>16,739,500</u>	<u>4,905</u>	\$ 940,000	\$ 865,000
<u>550</u>	<u>18,413,450</u>	<u>5,396</u>	\$ 975,000	\$ 900,000
<u>600</u>	<u>20,087,400</u>	<u>5,886</u>	\$ 1,010,000	\$ 935,000
<u>650</u>	<u>21,761,350</u>	<u>6,377</u>	\$ 1,050,000	\$ 970,000
<u>700</u>	<u>23,435,300</u>	<u>6,867</u>	\$ 1,090,000	\$ 1,005,000
<u>750</u>	<u>25,109,250</u>	<u>7,358</u>	\$ 1,135,000	\$ 1,050,000
<u>800</u>	<u>26,783,200</u>	<u>7,848</u>	\$ 1,170,000	\$ 1,080,000
<u>850</u>	<u>28,457,150</u>	<u>8,339</u>	\$ 1,200,000	\$ 1,110,000
<u>900</u>	<u>30,131,100</u>	<u>8,829</u>	\$ 1,230,000	\$ 1,140,000
<u>950</u>	<u>31,805,050</u>	<u>9,320</u>	\$ 1,265,000	\$ 1,170,000
<u>1000</u>	<u>33,479,000</u>	<u>9,810</u>	\$ 1,300,000	\$ 1,200,000

NOTE: The table above provides some ROUGH estimates of wood/bark fueled boiler system costs for various boiler sizes. This is a ROUGH estimation of what might be expected as an installed wood/bark fuel boiler system, to include the low pressure steam boiler, the fuel stoker and combustion device, flue gas cleaning system, steam piping with water side auxiliaries, assembly, installation, start-up and operator training. As a general rule of thumb, for each 50 horsepower of the boiler system, approximately a 2,000 cubic foot area is required for wood fuel receiving, metering and storage for a 3 day fuel supply.

THESE COST DATA ARE SUITABLE FOR ROUGH PRELIMINARY ESTIMATES ONLY!

April 04

Reference: Bob Govett (University of Wisconsin-Stevens Point)