

HB 262



Hydronic Heaters

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[Breathe Easier with Cleaner Outdoor Wood-Fired Heaters \(PDF\)](#) (1pg, 451k, [About PDF](#))

Below are 3 lists of cleaner burning hydronic heaters that qualify for the EPA voluntary program. The first table is for models that qualify for the Phase 2 white tag (about 90 percent cleaner than unqualified models). The second table is for models that qualify for the Phase 1 orange tag for "year round" use (about 70 percent cleaner than unqualified models). Please note that although the tag is calculated for year round use, some jurisdictions may not allow "year round" use (i.e., not during summer for just hot water rather than heat). The third table is for models that qualify for the Phase 1 orange tag for "heating season use only." These emissions are calculated as if the model is only used during the heating season. Please note that some jurisdictions do not allow models that only qualify for "heating season use only" because their emissions would be greater if they are used year round.

Please Note that some States and/or local jurisdictions do not allow models that only qualify for "Heating Season Only" use. Also, please note that all data below are according to EPA Method 28 OWHH unless otherwise noted. One manufacturer has asked to use the "cordwood exception" to use the ASTM cordwood test method in lieu of the EPA method. Labels based on the "cordwood exception" expire 12/31/08.

Phase 2 White Tag Models

Manufacturer	Model Name & Number	Heat Output Rating (1)	Efficiency (1)	Annual Average Emission Rate	Heat Input (2) Annual Average Emission Level	Heat Output Annual Average Emission Level	Highest Individual Test Run
Central Boiler	Maxim M250	212,453 BTU/hr	87.8 % high heating value 95.54 % low heating value	1.6 grams/hr 0.07 grams/hr/10,000 BTU output	0.05 lbs/million BTU input	0.06 lbs/million BTU output	4.9 grams/hr
Central Boiler	E - Classic 2300	160,001 BTU/hr	74.94 % high heating value 85.74 %	6.4 grams/hr 0.06 grams/hr/10,000	0.20 lbs/million BTU input	0.31 lbs/million BTU output	17.6 grams/hr

			low heating value	BTU heat output			
<u>Greenwood Technologies, LLC</u>	Aspen 175	66,290 BTU/hr	67.5% high heating value 77.2% low heating value	8.4 grams/hr 0.18 grams/hr/10,000 BTU heat output	0.18 lbs/million BTU input	0.27 lbs/million BTU output	18.0 grams/hr
<u>Hardy Manufacturing Co., Inc.</u>	KBP 270	120,000 BTU/hr	72.3% high heating value 77.9% low heating value	2.96 grams/hr 0.23 grams/hr/10,000 BTU output	0.10 lbs/million BTU input	0.20 lbs/million BTU output	6.03 grams/hr
<u>Northwest Manufacturing, Inc. (Woodmaster)</u>	AFS 900	107,069 BTU/hr		2.49 grams/hr 0.27 grams/hr/10,000 BTU output	0.11 lbs/million BTU input	0.20 lbs/million BTU output	7.38 grams/hr
<u>Silverwinds Metals (Wood Doctor)</u>	WD-HE8000	112,655 BTU/hr	66.3 % high heating value 75.8 % low heating value	6.1 grams/hr 0.09 grams/hr/10,000 BTU output	0.17 lbs/million BTU input	0.26 lbs/million BTU output	17.4 grams/hr

1 - Based on 8-hour test for stick wood models and 4-hour test for continuous feed models.

2 - EPA Phase 2 qualified level is 0.32 pounds of fine particles per million BTU of heat output (weighted average representing the range of burn rates expected in a year) and a maximum individual test run of 18.0 grams per hour. Typically, the maximum individual test run is the maximum heat output burn rate.

Phase 1 Orange Tag "Year Round" Models

Manufacturer	Model Name & Number	Heat Output Rating ⁽¹⁾	Annual Average Emission Rate	Heat Input ⁽²⁾ Annual Average Emission Level	Heat Output Annual Average Emission Level	Highest Individual Test Run
<u>Greenwood Technologies</u>	Aspen 175	66,290 BTU/hr	8.40 grams/hr 0.18 grams/hr/10,000	0.182 lbs/million BTU heat input	0.27 lbs/million BTU heat output	18.023 grams/hr