



## Typical Specifications For BlueFlame Hydronic Hot Water Supply Models BFW 480 to 1950

The heater shall be a CAMUS Blueflame model \_\_\_\_\_ having an input rating of \_\_\_\_\_ Btu (kw) /hr. and \_\_\_\_\_ Btu (kw)/hr output for hydronic heating.

The heater shall be design certified by CSA International and shall meet the requirements of ANSI Z21.13 & CSA 4.9. The heater shall be vented as a Category I appliance.

### **Combustion Chamber:**

The combustion chamber shall be fully enclosed by high temperature fiberboard refractory, which is of modular interlocking construction for ease of replacement. The Water Heater shall have refractory inspection doors for ease of inspection of the combustion chamber without disruption.

### **Burner Tray:**

The burners shall be constructed of Stainless Steel. The heater shall have a Burner Tray Drawer Guide Rail so that the burner tray can slide out of the heater for ease of service. The burner shall light off smoothly and shall run with minimum heat build up. The intermittent ignition pilot shall shut down the main burner within 4 seconds of pilot flame failure (natural & propane).

### **Heat Exchanger:**

The heat exchanger shall be suitable for a m.a.w.p. of 160 psig (1100 kPa) and shall be of a two pass one row 10 tubes design employing integrally finned 7/8" copper tubes . All castings shall be bronze. A pressure relief valve of \_\_\_\_\_ lb/hr shall be furnished with the heater.

### **Controls:**

Controls include an optional electronic proportional integrated limit/operator control accurate to 1°F (0.5°C) .The control shall also provide readouts of inlet/outlet temperatures and delta T as well as accumulated run hours. The control shall have 3 preset modes to allow operation of the heater as hydronic heating, DHW or remote enable.

On/off switch, and full diagnostic light package are included. Flow switch is included loose.

### **Firing Mode:**

The heater shall operate as on/off. As an option the heater will be provided with two stage or modulating gas valve.

### **Gas Train:**

The gas train shall consist of a combination control incorporating dual main valve seats, a main manual gas valve, a pilot valve and pilot regulator and a firing valve.

### **Ignition Module:**

The ignition module shall provide for intermittent ignition and continuous retrieval. Trial for ignition shall be 15 seconds with 5 minutes between retrievals.

### **External Jacket and Fasteners:**

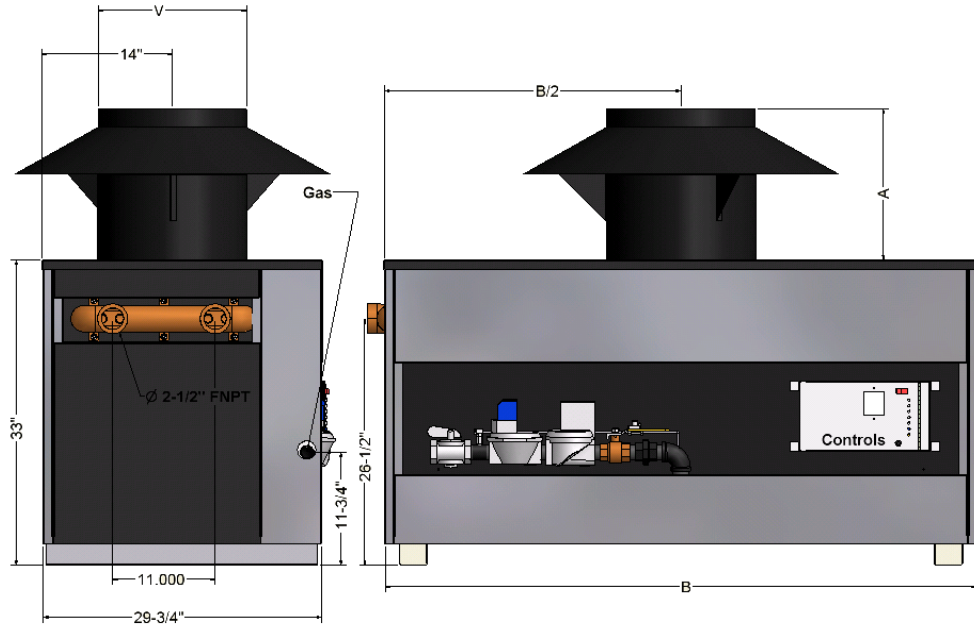
The external jacket shall be of stainless and enameled steel panels assembled with crimplite non-strip self tap screws.

# SUBMITTAL DATA SHEET – BLUEFLAME

Engineer: \_\_\_\_\_  
 Prepared by: \_\_\_\_\_  
 Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_  
 Buyer's Name: \_\_\_\_\_  
 Buyer's Address: \_\_\_\_\_

Date: \_\_\_\_\_  
 Quote #: \_\_\_\_\_



### Dimensions

Model	B	V	A	Nat. Gas	L.P.
480	30 3/4"	10"	16"	1"	3/4"
660	39"	12"	16"	1"	3/4"
840	47 1/4"	14"	19"	1"	3/4"
1020	55 1/2"	16"	21"	1 1/4"	1"
1200	63 3/4"	16"	21"	1 1/4"	1"
1380	72"	18"	21"	1 1/4"	1"
1560	80 1/4"	18"	21"	1 1/4"	1"
1740	88 1/2"	20"	21"	1 1/2"	1 1/4"
1950	96 3/4"	20"	21"	1 1/2"	1 1/4"

### Heat Exchanger Head Loss & Flow vs. Temp. R

Model	20 °F		30 °F		35 °F	
	USGPM	ΔP ft.	USGPM	ΔP ft.	USGPM	ΔP ft.
480	40.0	0.5	26.5	0.3	22.5	0.2
660	55.0	1.1	36.5	0.5	31.0	0.4
840	70.0	2.1	46.5	0.9	40.0	0.7
1020	85.0	3.3	56.5	1.5	48.5	1.2
1200	100.0	5.6	66.5	2.3	57.0	1.7
1380	*	*	76.5	3.3	65.5	2.5
1560	*	*	86.0	4.5	74.0	3.4
1740	*	*	96.0	5.9	82.0	4.5
1950	*	*	108.0	8.0	92.5	6.0

\* Note: Contact factory for recommendation

### Recovery Capacity

Model	70 °F	80 °F	100 °F	120 °F
480	683.0	598	478	398
660	938.0	821	657	547
840	1194.0	1045	836	697
1020	1450.0	1269	1015	846
1200	1706.0	1493	1194	995
1380	1961.0	1716	1373	1144
1560	2219.0	1942	1553	1294
1740	2474.0	2165	1732	1443
1950	2773.0	2426	1941	1618

Model	Input BTUH	Output BTUH	Weight LBS.
480	480,000	398,400	356
660	660,000	547,800	422
840	840,000	697,200	507
1020	1,020,000	846,600	564
1200	1,200,000	996,000	620
1380	1,380,000	1,145,400	698
1560	1,560,000	1,294,800	764
1740	1,740,000	1,444,200	830
1950	1,950,000	1,618,500	900

Model # \_\_\_\_\_ # Of Units \_\_\_\_\_ Type of Gas \_\_\_\_\_

Total Input _____ BTU/hr	Flow _____ USGPM @ Allowable Pressure Drop _____ ft.
Total Output _____ BTU/hr	Recovery Rate _____ USGPH @ _____ °F

Optional Accessories \_\_\_\_\_