



## Typical Specifications For SureFlame Domestic Hot Water Supply Models SFW420, 520 and 600

The domestic hot water heater shall be a CAMUS Sureflame model \_\_\_\_\_ having an input rating of \_\_\_\_\_ Btu (kw) /hr. and \_\_\_\_\_ Btu (kw)/hr output for hydronic heating or having a recovery capacity of \_\_\_\_\_ gph (lph) at 100<sup>0</sup>F (56<sup>0</sup>C) for DHW.

The domestic hot water heater shall be design certified by CSA International and shall meet the requirements of ANSI Z21.10 and CSA 4.3. The domestic hot water shall be vented as a Category I appliance.

### **Combustion Chamber:**

The combustion chamber shall be fully enclosed by a metal sleeve inside of which is assembled a tightly wound dual copper coil having a maximum allowable working pressure of 160 psig (1100 kPag).

### **Burner:**

The burner shall be comprised of a lightweight tubular manifold having 60 orifices oriented for maximum air entrainment. The burner shall be self-cleaning, 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 kPag) and shall be of a four pass two row 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:**

Standard controls include an electronic proportional integrated combination limit/operator control accurate to 1<sup>0</sup>F (0.5<sup>0</sup>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 with 7-second slow opening gas valve for smooth light off.

### **Gas Train:**

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

### **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:**

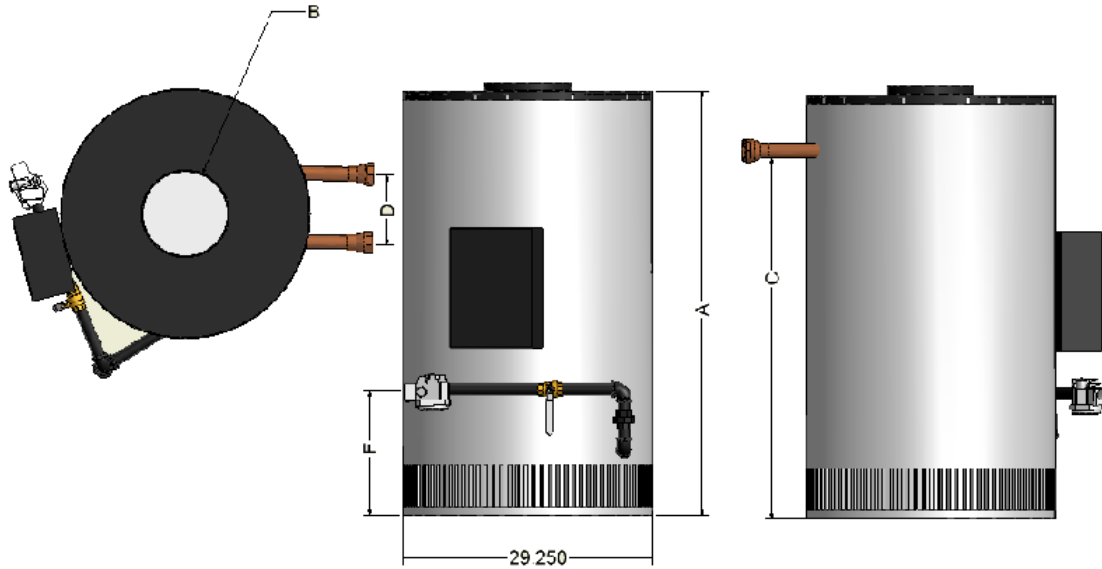
The external jacket shall be of stainless steel panels assembled with crimplite non-strip self tap screws.

# SUBMITTAL DATA SHEET – SUREFLAME

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

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

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



### Dimensions and Specifications

Model	Height Dim. "A"	Vent Dim. "B"	Water Conn. "C"	Water Conn. Dist "D"	Gas Height "E"	Water Conn. Prim.	Gas Conn.
420	42½"	10"	34"	8"	14½"	2" NPT	1" NPT
520	49¾"	10"	42½"	8"	14½"	2" NPT	1" NPT
600	49¾"	12"	42½"	8"	14½"	2" NPT	1" NPT

### Heat Exchanger Head Loss & Temperature Rise

Model	Temperature Rise Across Heat Exchanger			
	20°F		40°F	
	USGPM	ΔP - Ft.	USGPM	ΔP - Ft.
420	35.0	8.0	17.5	5.0
520	43.0	11.5	21.5	7.5
600	50.0	12.0	24.7	10.0

### Recovery Capacity

Model	100°F Rise	56°C Rise	80°F Rise	44°C Rise	60°F Rise	33°C Rise	50°F Rise	28°C Rise	40°F Rise	22°C Rise	20°F Rise	11°C Rise
	GPH	LPH	GPH	LPH	GPH	LPH	GPH	LPH	GPH	LPH	GPH	LPH
420	418	1582	523	1978	697	2637	836	3164	1045	3955	2090	7910
520	518	1960	648	2450	863	3267	1036	3920	1295	4900	2590	9800
600	590	2233	738	2791	983	3722	1180	4466	1475	5582.5	2950	11165

Model	Input BTUH	Output BTUH	Weight LBS.
420	420,000	348,600	296
520	520,000	431,600	331
600	600,000	498,000	331

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 _____		