Typical Specifications For SureFlame Hydronic Heating Boilers Models SFH 420, 520 and 600

The heater shall be a CAMUS Sureflame 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 a metal sleeve inside of which is assembled a tightly wound dual copper coil having a maximum allowable working pressure of 160 psig (1100 kPa).

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 kPa) 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 of valve of _____ lb/hr shall be furnished with the heater.

Controls:
Standard controls include an electronic proportional integrated combination limit/operator control accurate to 1^0F (0.5^0C) .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.

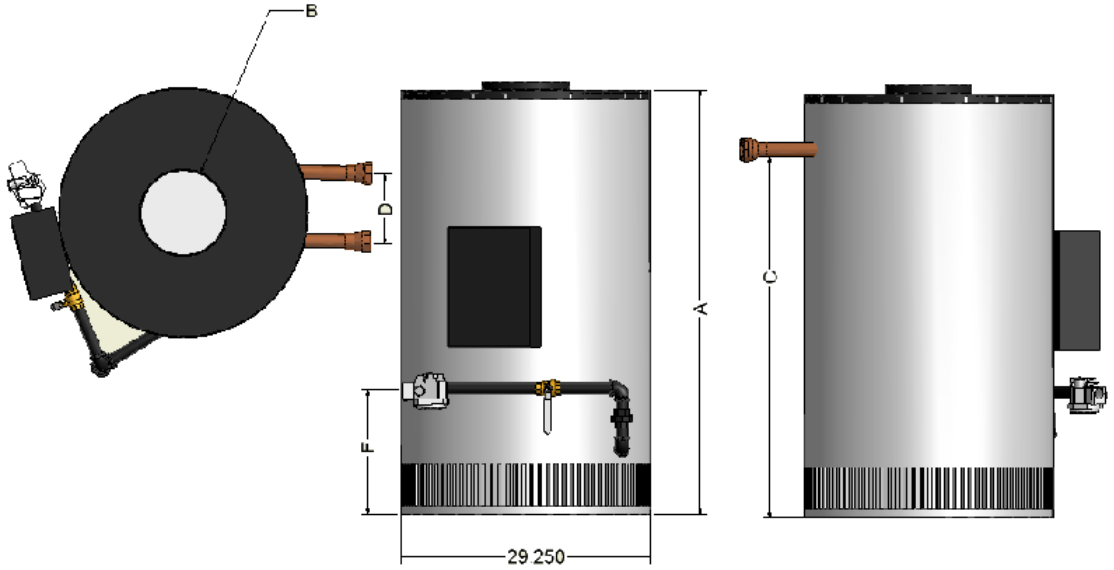
Gas Train:
The gas train shall consist of a combination control incorporating a main manual gas valve, dual main valve seats, a pilot valve and pilot regulator.

Ignition Module:
The ignition module shall provide for intermittent ignition and continuous retrial. Trial for ignition shall be 15 seconds with 5 minutes between retrials.

External Jacket and Fasteners:
The external jacket shall be of stainless steel panels assembled with crimptite non-strip self tap screws.

SUBMITTAL DATA SHEET – SUREFLAME

Engineer: _____ | Job Location: _____ | Date: _____
Prepared by: _____ | Buyer's Name: _____ | Quote #: _____
Job Name: _____ | Buyer's Address: _____



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"	42⅛"	8"	14½"	2" NPT	1" NPT
600	49¾"	12"	42⅛"	8"	14½"	2" NPT	1" NPT

Heat Exchanger Head Loss & Temperature Rise

Model	Temperature Rise Across Heat Exchanger			
	20^{0}F		40^{0}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

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 @ _____^{0}F

Optional Accessories _____