



**Typical Specifications For:  
MicoFlame Grande Hydronic Heating Boilers  
Models MFH 2000, Through MFH 4000**

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

The heating boiler shall be design/certified by CSA International and shall meet the requirements of ANSI Z21.13 & CSA 4.9. The heating boiler shall be optionally vented as a Category I conventional appliance or a category III 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.

**Burner:**

The burner shall be constructed of high heat resistant ceramic tile supported in a steel casing. The burner shall provide equal distribution of heat through the entire heat exchanger. Maximum input per burner shall be 1,000,000 Btu/hr.

**Heat Exchanger:**

The heat exchanger shall be suitable for a maximum allowable working pressure (M.A.W.P.) of 160 psig (1100 kPa) and shall be of a two pass 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. There shall be ready access to the heat exchanger to permit internal and external inspection and cleaning of the tubes.

**Controls:**

Standard SmartFlame 780014 combination limit/operator control accurate to 1<sup>0</sup>F (0.5<sup>0</sup>C). The control shall also provide readouts of boiler target, differential and inlet/outlet temperatures as well as accumulated runtime. On/off switch, and full diagnostic light package shall be provided. The complete control package shall be mounted on the front panel with hinged door for easy access to all control modules. A flow switch shall be provided loose. The control shall have 6 preset modes to allow operation of the heater as hydronic heating with outdoor reset, DHW or remote enable.

**Firing Mode:**

The heater shall operate as on/off, two-stage, three stage or four-stage.

**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. Each ignition module shall control a maximum input of 1,000,000 Btu/hr.

**External Jacket and Fasteners:**

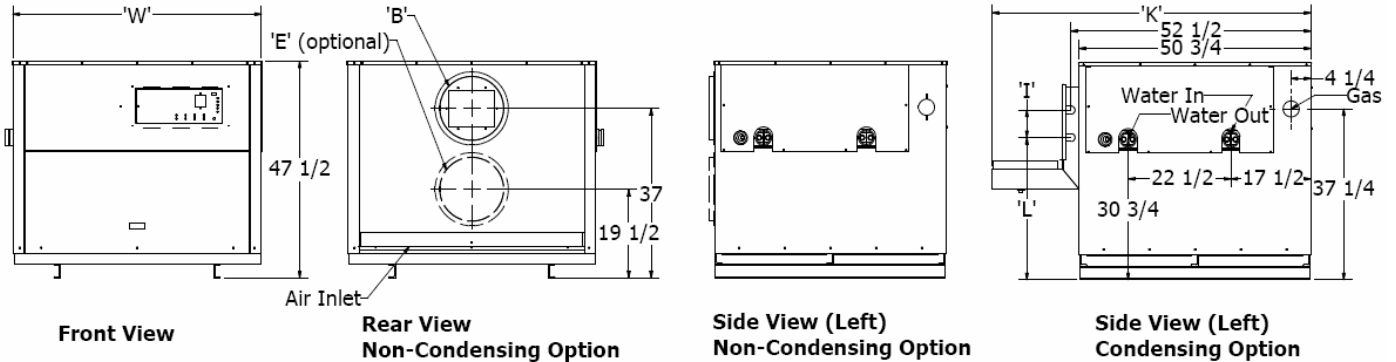
The external jacket shall be of stainless and enameled steel panels assembled with crimplite non-strip self tap screws.

# SUBMITTAL DATA SHEET – MICOFLAME GRANDE

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

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

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



### Dimensions and Specifications

Model	T'	K'	L'	W'	Water Connection	Gas Connection	'B' Dia. Venting			'E' Dia.
							Outdoor	Sidewall or Condensing	Standard	Air Inlet
MFNH2000	6	68	34 5/8	54 5/8	3	1 1/2	12	12	14	12
MFNH2500	6	72	34 5/8	78 7/8	3	2	14	14	16	14
MFNH3000	6	72	34 5/8	78 7/8	3	2	14	14	16	14
MFNH3500	6	72	34 5/8	103	4	2 1/2	16	16	18	16
MFNH4000	6	72	34 5/8	103	4	2 1/2	16	16	18	16

Model	Input BTUH	Output BTUH Non Condensing	Output BTUH Condensing	Input kW	Output kW Non Condensing	Output kW Condensing	Approx. Weight LBS. Non Condensing	Approx. Weight LBS. Condensing
MFNH2000	2,000,000	1,700,000	1,900,000	585.6	497.8	556.3	1,585.0	1,635.0
MFNH2500	2,500,000	2,125,000	2,375,000	732.0	622.2	695.4	1,675.0	1,745.0
MFNH3000	3,000,000	2,550,000	2,850,000	878.4	746.6	834.5	1,750.0	1,820.0
MFNH3500	3,500,000	2,975,000	3,325,000	1,024.8	871.1	973.6	2,000.0	2,070.0
MFNH4000	4,000,000	3,400,000	3,800,000	1,171.2	995.5	1,112.6	2,200.0	2,270.0

### Head Loss and Flow Vs Temperature Rise

Model	20 °F		30 °F		35 °F	
	USGPM	ΔP ft.	USGPM	ΔP ft.	USGPM	ΔP ft.
MFNH2000	170	5.1	113	2.4	97	1.8
MFNH2500	200 *	8.2	141	4.30	121	3.3
MFNH3000	200 *	8.2	170	6.20	146	4.5
MFNH3500	200 *	10.2	198	10.20	170	7.7
MFNH4000	200 *	10.2	200 *	10.20	194	9.8

\* Maximum flow recommended. Temperature rise may be higher than shown. Contact factory for recommendations

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

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Total Input \_\_\_\_\_ BTU/hr Flow \_\_\_\_\_ USGPM @ Allowable Pressure Drop \_\_\_\_\_ ft.

Total Output \_\_\_\_\_ BTU/hr Recovery Rate \_\_\_\_\_ USGPH @ \_\_\_\_\_ °F

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