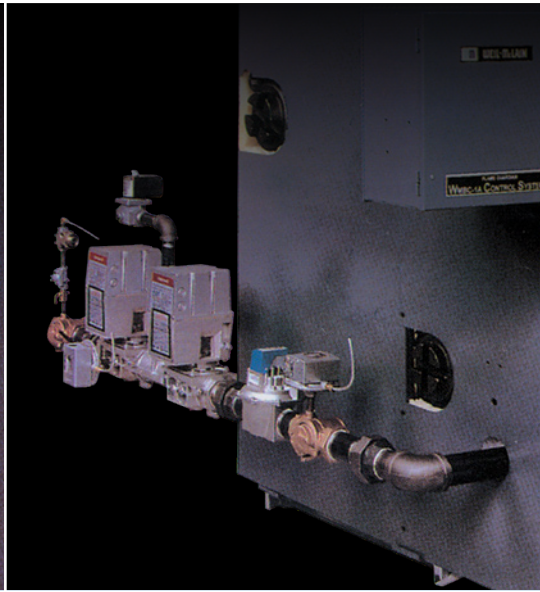
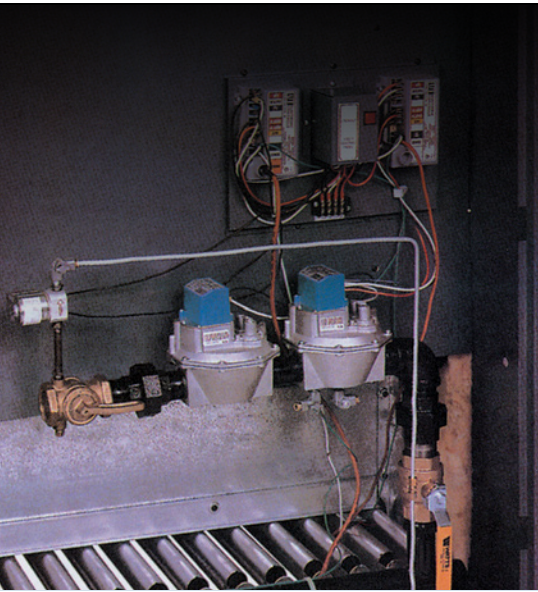


Series 2 | Gas | Water or Steam | MBH: 400-2,860 | Efficiency 85.1%  
Net Load Range: Hot Water 280-2,111 MBH / Steam 975-7,402 Sq. Ft.



- Versatile combustion control systems
- Made with Weil-McLain quality

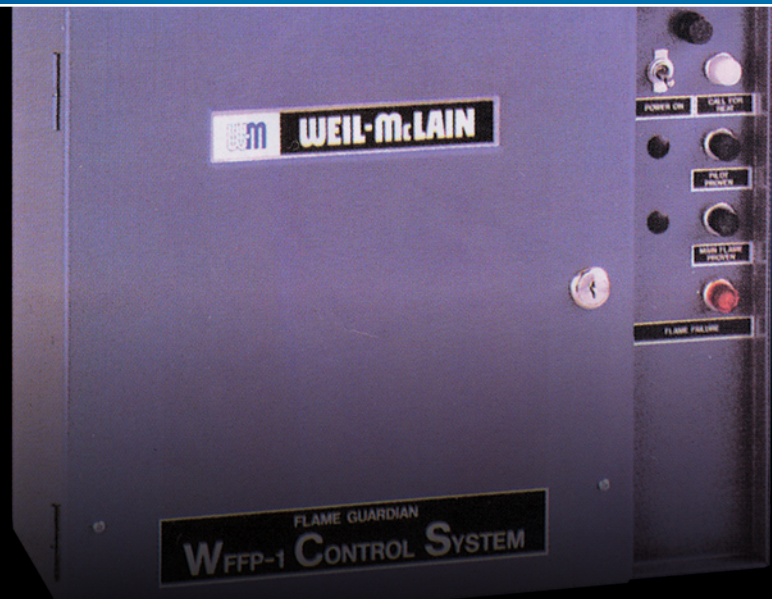
COMMERCIAL GAS BOILER

**LGB**<sup>™</sup>



**APPLICATIONS INCLUDE:**

- Apartment Buildings
- Commercial Buildings
- Schools and Other Institutions
- Multiple Boilers
- Indirect-Fired Water Heating
- ...And Much More



# STANDARD, ADDITIONAL AND OPTIONAL EQUIPMENT

## STANDARD EQUIPMENT, ALL UNITS:

- Cast iron sections
- Insulated extended jacket
- Aluminized steel collector hood(s) and draft hood(s)
- Control transformer (120/24v)
- Factory-assembled burner and base unit(s):
  - One-piece aluminized steel burners
  - Gas manifold
  - Aluminized steel base panels
  - Hi-temp insulated board
- Wiring harness: junction box and pre-wired flexible conduit

## STANDARD EQUIPMENT, LGB™-4 and 5:

- Intermittent electronic ignition systems (UCS):
  - Intermittent ignition control module
  - Electronically supervised pilot burner with ignition electrode and flame rod
  - Wire Harness

## STANDARD EQUIPMENT, LGB™-6 thru 23:

- Flame guardian® panel with flame rectification electronic control system for each base assembly:
  - Pre-wired control panel
    - Terminal block
    - Two ignition control modules having integral spark generators
    - Intermittent electronic ignition pilot system
    - Electronically supervised pilot burner with ignition electrode and flame rod
    - Main flame sensor rod

## STANDARD EQUIPMENT, WATER BOILERS:

- Combination operating and high limit temperature control (LGB™-4 thru 20 only)
- Operating temperature control (LGB™-21 thru 23 only)
- High limit temperature control (LGB™-21 thru 23 only)
- Combination pressure temperature gauge
- 30 PSI ASME relief valve-side outlet
- Built-in air eliminator in end sections
- Probe-type low water cutoff, PS-851-120 (packaged only)

## STANDARD EQUIPMENT, STEAM BOILERS:

- Operating pressure control
- High limit pressure control
- Compound pressure-vacuum gauge
- Gauge cocks, glass and guards
- 15 PSI ASME relief valve-side outlet
- Float-type low water cutoff, MM no. 61 LWCO

## ADDITIONAL EQUIPMENT

- WFFP™ control panels (LGB™-6 thru 23)
- WMBC™ control panels (LGB™-5 thru 23)
- Probe-type low water cutoff, ps-851-120 (non-packaged water only)
- Factory-assembled sections (LGB™-4 thru 14 only)
- Fire-tested packaged unit (LGB™-4 thru 14 only)
- 1½" Inspection tapings with brass plugs – two for each section
- 80 PSI working pressure test of sections
- Water level controls and low water cutoffs
- Low-high-low firing (LGB™-6 thru 12 only)
- Stage firing (LGB™-13 thru 23 only)
- Energy management control systems (BCP panels)
- FM and CSD-1 control systems
- Natural gas to propane gas conversion kit
- Aqua Plus and Aqua Pro indirect fired water heaters

## WFFP CONTROL PANEL EQUIPMENT STANDARD:

- WFFP™-1 Panel (LGB™-6 Thru 12)
- WFFP™-2 Panel (LGB™-13 Thru 23)
  - 30-second time delay relay (two on WFFP™-2)
  - Two 24-volt DPDT relays (four on WFFP™-2)
  - Terminal block
  - Fuse (two on WFFP™-2)
  - Toggle switch
  - Four Indicator lamps (eight on WFFP™-2)

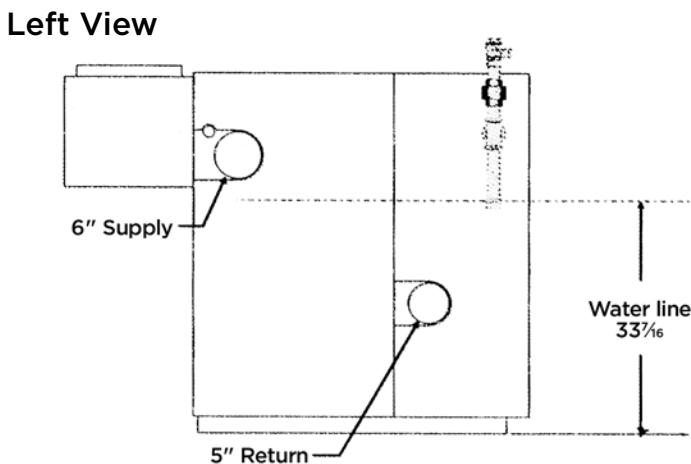
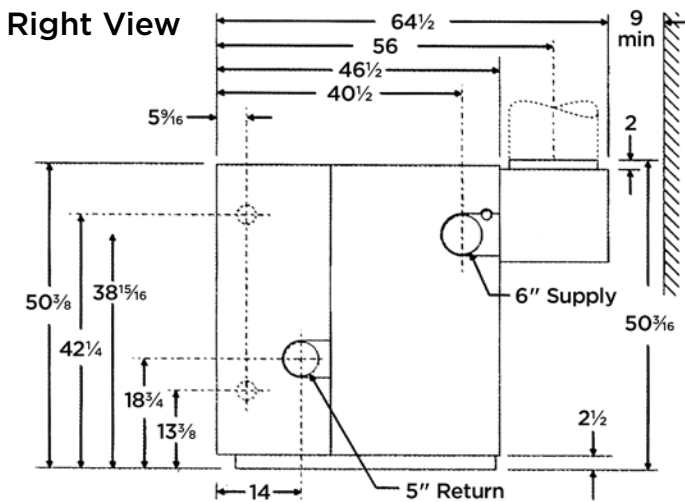
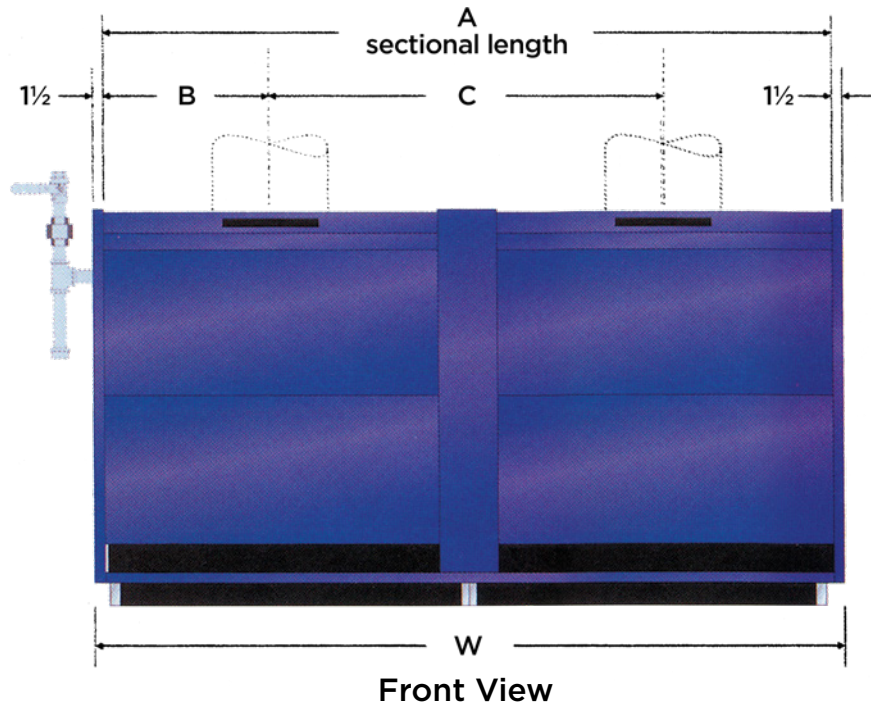
## ADDITIONAL:

- Alarm bell and transformer for remote indication of flame failure
- Alarm bell - panel mounted

## WMBC™ CONTROL PANEL EQUIPMENT STANDARD:

- WMBC™-1A panel (LGB™-5 thru 12)
- WMBC™-2A panel (LGB™-13 thru 23)
  - Motorized gas train
  - Interruptible pilot (intermittent pilot for adjacent base and additional control module)
  - Pre-wired control panel:
    - Flame safeguard primary control
    - Pre-purge control timer
    - Relay(s)
    - Terminal block
    - Fuse (two on WMBC™-2A)
    - Four toggle switches
    - Five indicator lamps
    - Alarm bell

# LGB™ DIMENSIONS



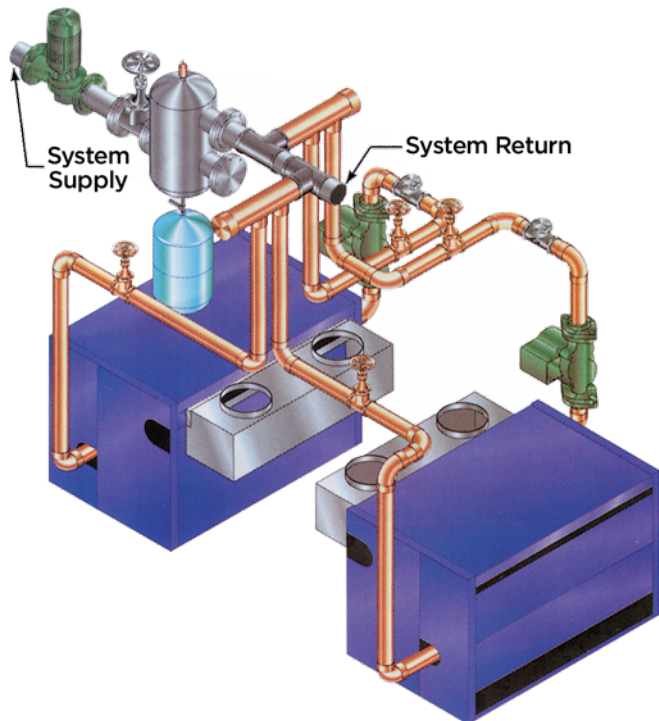
Model	Dimensions (inches)				Draft Hood Outlet(s) Number & Size
	A	B	C	W	
LGB™-4	18	9	—	21	1-10"
LGB™-5	23	11 1/2	—	26	1-12"
LGB™-6	28	14	—	31	1-12"
LGB™-7	33	16 1/2	—	36	1-12"
LGB™-8	38	19	—	41	1-14"
LGB™-9	43	21 1/2	—	46	1-14"
LGB™-10	48	24	—	51	1-16"
LGB™-11	53	26 1/2	—	56	1-16"
LGB™-12	58	29	—	61	1-16"
LGB™-13	63	16 1/2	30	66	2-12"
LGB™-14	68	19	32 1/2	71	1-12"/ 1-14"
LGB™-15	73	19	35	76	2-14"
LGB™-16	78	21 1/2	37 1/2	81	2-14"
LGB™-17	83	21 1/2	40	86	2-14"
LGB™-18	88	24	42	91	1-14"/ 1-16"
LGB™-19	93	24	45	96	2-16"
LGB™-20	98	26 1/2	47 1/2	101	2-16"
LGB™-21	103	26 1/2	60	106	2-16"
LGB™-22	108	29	52 1/2	111	2-16"
LGB™-23	113	29	55	116	2-16"

**Notes:**

- (1) For LGB™ 4-23-return tapping size is 5" (qty. 2) and supply tapping size is 6" (qty. 2).
- (2) Gas trains on all IRI boilers and LGB™ 21-23 for CSD-1 & FM are located outside the boiler jacket. Allow additional clearances as required.



# PIPING CONNECTIONS



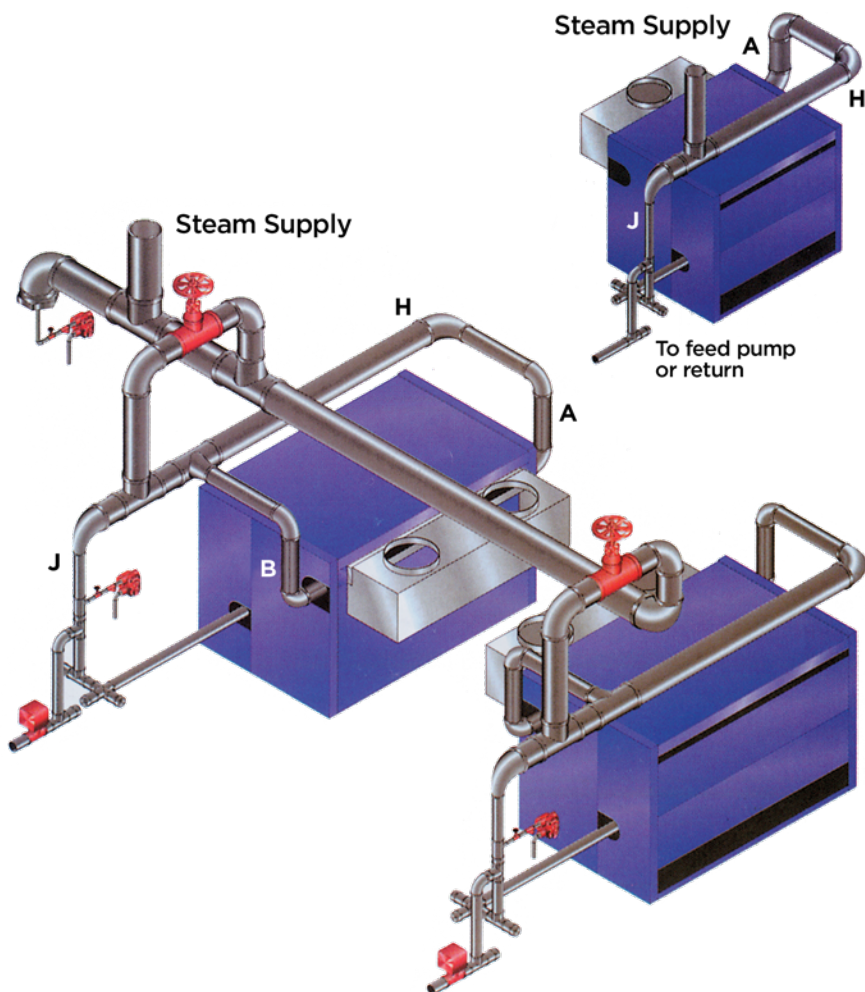
## WATER BOILERS

### PIPING NOTES:

Alternative Piping—for LGB™-4 through 12 only: If desired, all three piping connections (supply, return and expansion tank) can be taken off same end of boiler.

Supply and return sizes in table below for water boilers refer to minimum size of pipe connected to boiler for 20° or higher temperature drop between supply and return.

Recommended Minimum Pipe Sizes (20° Rise Through Boiler)	
Boiler Model	Pipe Size Supply and Return
LGB™-4	2"
LGB™-5	2½"
LGB™-6 through 8	3"
LGB™-9 through 16	4"
LGB™-17 through 23	5"



## STEAM BOILERS

Recommended Minimum Pipe Sizes For Single Risers			
Boiler Model	Riser A	Header H	Equalizer J
LGB™-4 through 8	4"	4"	2"
LGB™-9 through 11	5"	5"	2½"
LGB™-12	6"	6"	2½"

Recommended Minimum Pipe Sizes For Dual Risers				
Boiler Model	Riser A	Riser B	Header H	Equalizer J
LGB™-13 through 15	4"	4"	6"	4"
LGB™-16 through 19	5"	5"	6"	4"
LGB™-20 through 23	6"	6"	8"	4"

## RATINGS — STEAM

Boiler Model Number (1)	Heating Medium	Input MBH (2)	AHRI Certified Ratings (3)		Boiler N.P.	Sq. Ft. Steam	Boiler Water Content Gallons		Approx. Shipping Weight Lbs.	Assembled Block Weight	Complete Packaged Boiler Weight	Chimney Breeching Size (I.D.) (inches) (5)
			Gross Output MBH (2)	Net Rating Steam MBH (2)			Steam (to waterline)	Water (gallons)				
LGB-4-S	Steam	400	312	234	9.7	975	23.2	36.5	1185	975	1600	10
LGB-5-S	Steam	520	409	307	12.6	1279	28.9	45.6	1455	1200	1800	12
LGB-6-S	Steam	650	514	386	15.7	1607	34.6	54.7	1725	1425	2000	12
LGB-7-S	Steam	780	619	464	18.9	1936	40.3	63.9	2005	1650	2300	12
LGB-8-S	Steam	910	724	543	22.0	2264	46.0	73.0	2290	1900	2500	14
LGB-9-S	Steam	1040	829	622	25.2	2591	51.9	82.1	2560	2125	2800	14
LGB-10-S	Steam	1170	934	701	28.3	2918	57.6	91.2	2800	2375	3100	16
LGB-11-S	Steam	1300	1039	779	31.5	3246	63.4	100.4	3105	2600	3300	16
LGB-12-S	Steam	1430	1144	858	34.6	3576	69.1	109.5	3365	2850	3500	16
LGB-13-S	Steam	1560	1239	929	37.8	3868	74.9	118.6	3785	3100	4100	16
LGB-14-S	Steam	1690	1344	1015	40.9	4228	80.7	127.7	4085	3330	4300	16
LGB-15-S	Steam	1820	1449	1102	44.0	4592	86.4	136.9	4355	—	—	16
LGB-16-S	Steam	1950	1552	1188	47.2	4950	92.2	146.0	4725	—	—	17
LGB-17-S	Steam	2080	1658	1276	50.3	5316	98.0	155.1	4975	—	—	17
LGB-18-S	Steam	2210	1764	1364	53.5	5682	103.6	164.2	5270	—	—	18
LGB-19-S	Steam	2340	1867	1448	56.6	6034	109.5	173.4	5540	—	—	18
LGB-20-S	Steam	2470	1974	1533	59.8	6384	115.3	182.5	5820	—	—	19
LGB-21-S	Steam	2600	2077	1613	62.9	6720	121.0	191.6	6080	—	—	19
LGB-22-S	Steam	2730	2184	1696	66.1	7065	126.8	201.2	6365	—	—	19
LGB-23-S	Steam	2860	2288	1776	69.2	7402	132.5	209.8	6625	—	—	20

## RATINGS — WATER

Boiler Model Number (1)	Heating Medium	Input MBH (2)	AHRI Certified Ratings (3)		Boiler H.P.	Boiler Water Content Gallons	Approx. Shipping Weight Lbs.	Assembled Block Weight	Complete Packaged Boiler Weight	Chimney Breeching Size (I.D.) Inches (5)
			Gross Output MBH (2)	Net Rating Water MBH (2)						
LGB-4-W	Water	400	322	280	9.7	36.5	1185	975	1600	10
LGB-5-W	Water	520	419	364	12.6	45.6	1455	1200	1800	12
LGB-6-W	Water	650	523	455	15.7	54.7	1725	1425	2000	12
LGB-7-W	Water	780	628	546	18.9	63.9	2005	1650	2300	12
LGB-8-W	Water	910	737	641	22.0	73.0	2290	1900	2500	14
LGB-9-W	Water	1040	843	733	25.2	82.1	2560	2125	2800	14
LGB-10-W	Water	1170	950	826	28.3	91.2	2800	2375	3100	16
LGB-11-W	Water	1300	1057	919	31.5	100.4	3105	2600	3300	16
LGB-12-W	Water	1430	1165	1013	34.6	109.5	3365	2850	3500	16
LGB-13-W	Water	1560	1273	1107	37.8	118.6	3785	3100	4100	16
LGB-14-W	Water	1690	1381	1201	40.9	127.7	4085	3330	4300	16
LGB-15-W	Water	1820	1489	1295	44.0	136.9	4355	—	—	16
LGB-16-W	Water	1950	1597	1389	47.2	146.0	4725	—	—	17
LGB-17-W	Water	2080	1708	1485	50.3	155.1	4975	—	—	17
LGB-18-W	Water	2210	1817	1580	53.5	164.2	5270	—	—	18
LGB-19-W	Water	2340	1926	1675	56.6	173.4	5540	—	—	18
LGB-20-W	Water	2470	2035	1770	59.8	182.5	5820	—	—	19
LGB-21-W	Water	2600	2207	1919	62.9	191.6	6080	—	—	19
LGB-22-W	Water	2730	2318	2016	66.1	201.2	6365	—	—	19
LGB-23-W	Water	2860	2428	2111	69.2	209.8	6625	—	—	20

**Notes:**

(1) Add to boiler number "S" for Steam, "W" for Water.

(2) MBH = thousands of BTU/hour.

(3) Net AHRI ratings are based on net installed radiation of sufficient quantity for building requirements. Do not add on for normal piping and pickup. Water boilers are rated at 80 psig maximum working pressure. Water ratings are based on piping and pickup allowance of 1.15. Additional allowance should be made for gravity hot water systems or unusual piping and pickup loads. Ratings shown are for elevations up to 2,000 feet. For ratings above 2,000 feet, reduce at rate of 4 percent per 1000 feet above sea level.

(4) Sling length is 5 feet; 2 per boiler.

(5) A twenty-foot (20') chimney height may be used in most cases, based on using a six-foot (6') length of connector for breeching of the size shown from the nearest draft hood outlet to the chimney or vent with not more than one (1) standard sloping-type 90° elbow. Consult the National Fuel Gas Code, ANSI Z223.1, for actual sizing. If individual vertical vents are to be used, each vent diameter should be the same size as the respective draft hood outlet and the height may be reduced to five feet (5') measured above the draft hood outlet.

