



# Cast Iron Gas-Fired Water Boilers

MCB SERIES

*KEEPING FAMILIES*  *WARM SINCE 1936*



*Quality Engineered for Efficiency and Dependability*

# MCB SERIES

## Gas-Fired Water Boiler

# Warm-Up To Higher Efficiency With The MCB

The MCB Series boiler features an advanced heat exchanger design that utilizes atmospheric burners allowing it to be vented vertically through a chimney. This heat exchanger design combined with quality components such as a flue damper and electronic ignition helps the MCB achieve fuel efficiencies up to 84.1%, making it an ideal choice for new or existing homes.

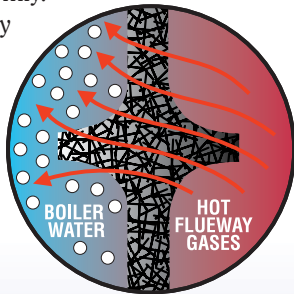


### Quality Cast Iron Heat Exchanger

The MCB utilizes cast iron construction because of its

durability and efficient heat transfer capabilities. Cast iron sections and push nipples are an integral part of each MCB heat exchanger. Dual thermal flow speeds heat transfer. Hot flueway gases pass around hundreds of staggered studs on the flueway wall, providing rapid heat transfer to the boiler water. Internal baffles agitate the circulating water, so it heats quickly and uniformly.

Using only the highest quality cast iron and heat transfer designs ensure that the MCB will provide many years of efficient and trouble-free operation.



### High Energy Efficiency and Lower Heating Costs

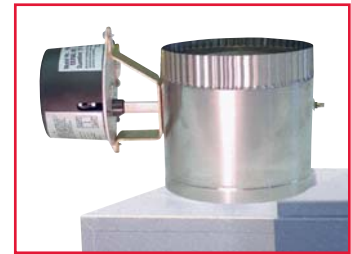
With efficiency ratings as high as 84.1%, the MCB provides increased energy savings resulting in lower fuel bills. With the potential cost savings this represents, the MCB boiler will pay for itself in a few short years.

### Stainless Steel Burners

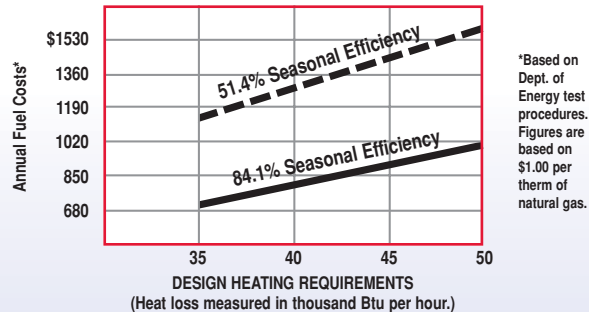
Corrosion resistant atmospheric stainless steel burners are incorporated into each MCB boiler delivering uniform flame patterns that optimize combustion efficiency and quiet operation.

### Fuel Saving Components

Advanced engineering can be found in every part of a MCB boiler. An optional "on-demand" ignition control eliminates wasted fuel associated with a continuously burning pilot light. In addition, an integrated automatic vent damper closes when the burner shuts off, preventing heat from leaving through the chimney saving fuel and heating costs.



### Compare The Difference High Efficiency Makes

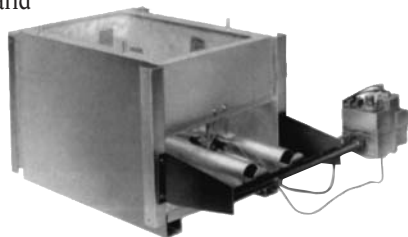


This graph illustrates the difference in annual operating costs between boilers with higher and lower efficiencies. Boilers installed years ago have seasonal efficiencies as low as 50%. So, your savings in fuel dollars with Columbia's MCB boiler can repay its installed cost in a few short years!



## Easy Installation

A compact design and special packaging features make the MCB boiler easy to install and service. An integrated flue collector and draft hood allows for easier installation in cramped areas. The MCB comes factory-assembled, wired and tested to eliminate costly field assembly and reduce installation time.



## Manufacturers Limited Lifetime Warranty

Columbia Boilers backs its residential, cast-iron heat exchangers with a Limited Lifetime Warranty. This Warranty is meant to protect your investment, but is also offered to illustrate our commitment to customer satisfaction.

### MCB Boiler Features

- Cast-iron sections and push nipples
- Automatic Stack Damper
- Corrosion resistant stainless steel burners
- Energy Efficiency Ratings up to 84.1%
- Standard Pilot or Electronic Ignition
- Integral draft hood, natural draft chimney vented

# MCB SERIES

## GAS-FIRED/NATURAL OR PROPANE

BOILER NO.	A.G.A. INPUT BTU/HR.	HEATING CAPACITY BTU/HR	I=B=R** NET OUTPUT BTU/HR.	NATURAL* GAS INLET	DIMENSIONS						PUMP SIZE SUPPLY & RETURN TAPPINGS	NO. OF BURNERS	ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE)	
					A	B	C	D	E	F			ELECT. IGN. & DAMPER	STD. PILOT & DAMPER
MCB-50	50,000	42,000	37,000	1/2"	11 1/8"	5 1/2"	4"	30 3/4"	36 1/4"	6"	1 1/4"	1	84.1	80.0
MCB-75	75,000	63,000	55,000	1/2"	15"	7 1/2"	5"	30 3/4"	37 3/4"	6"	1 1/4"	2	83.1	80.0
MCB-100	100,000	83,000	72,000	1/2"	15"	7 1/2"	6"	30 3/4"	37 1/4"	6 1/2"	1 1/4"	2	83.0	80.0
MCB-125	125,000	104,000	90,000	1/2"	18 7/8"	9 1/2"	6"	30 3/4"	37 1/4"	6 1/2"	1 1/4"	3	82.0	80.0
MCB-150	150,000	124,000	108,000	1/2"	18 7/8"	9 1/2"	7"	30 3/4"	37 3/4"	7"	1 1/4"	3	83.0	80.0
MCB-175	175,000	143,000	124,000	1/2"	22 3/4"	11 3/8"	7"	30 3/4"	38 3/4"	7"	1 1/4"	4	81.0	80.0
MCB-200	200,000	165,000	143,000	1/2"	22 3/4"	11 3/8"	8"	30 3/4"	38 3/4"	8"	1 1/4"	4	81.9	80.0
MCB-250	250,000	205,000	178,000	3/4"	26 7/8"	13 1/4"	8"	32 3/4"	40 3/4"	8"	1 1/4"	5	80.5	80.0
MCB-300	299,999	243,000	214,000	3/4"	30 1/2"	15 1/4"	9"	32 3/4"	42 3/4"	10"	1 1/4"	6	80.0	80.0

\* Propane Gas Inlet, all units, 1/2" \*\* For equivalent square feet of radiation, divide I=B=R output by 150.

STANDARD EQUIPMENT: Boiler jacket, cast iron section, combination aquastat relay, thermostatic gauge, circulator (field mounted), main gas burners, combination 24-volt gas control (includes automatic gas valve, gas pressure regulator, automatic pilot, safety shutoff, pilot flow adjustment, pilot filter), A.S.M.E. relief valve, drain valve, spill switch, rollout switch, automatic vent damper.

OPTIONAL EQUIPMENT: Interrupted electronic ignition pilot system, combustible floor kit. Conversion Kits: Natural Gas to Propane or Propane to Natural Gas. High Altitude Conversion Kits also available. Electronic Low Water Cut Off now available to meet the latest codes requirements.

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### EXPLANATION NOTES

All boilers are design-certified for installation on non-combustible floors.

For installation on any combustible floor, use combustible floor kit.

Recommended chimney height 20 feet. In special cases where conditions permit, chimney height may be reduced to 10 feet. Refer to the latest revision of NFGC Part II.

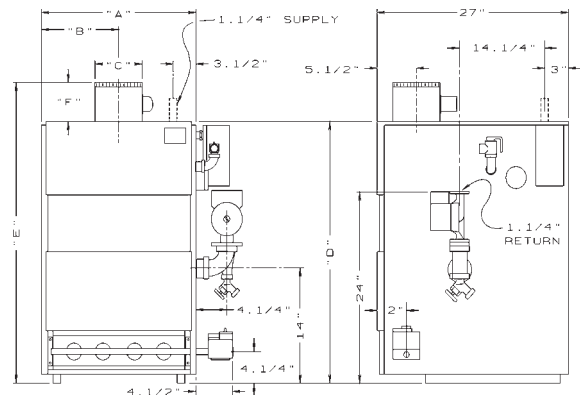
Electrical service to be 120 Volts, 15 Amps, 60 Hz.

For elevations above 2000 feet, ratings should be reduced at a rate of 4% for each 1000 feet above sea level.

Net I=B=R ratings include 15% allowance for normal piping and pickup load. Manufacturer should be consulted on installations having other than normal piping and pickup requirements.

Specifications and dimensions are subject to change without notice.

### DIMENSIONS



CSA Certified for Natural Gas or Propane

TESTED FOR 100 LBS. ASME WORKING PRESSURE

### YOUR ASSURANCE OF QUALITY

Columbia Boilers products are designed, tested, and assembled to ensure that you get the very best in home heating and cooling comfort, and value. Each one meets or exceeds all recognized safety, performance and efficiency standards.



For more information on Columbia Boilers contact the following:

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390 Old Reading Pike, PO Box 377  
Pottstown, PA 19464  
Tel 610-323-9200 Fax 610-323-8532

Web Site: [www.columbiaheating.com](http://www.columbiaheating.com)