



**MINI-fin**<sup>®</sup>

***Residential  
Light Commercial  
Gas Boilers***



***Models from  
45,000 to  
500,000 Btu/hr***

# BIG ON EFFICIENCY, SMALL ON SPACE.

## Built-In Draft Diverter

Gives unit a low 27" profile, making it ideal for installations with headroom restrictions.

## 30 PSI ASME Pressure Relief Valve

Ensures safe operation, protects unit from damage.

## Temperature And Pressure Gauge

Makes checking boiler functions easy.

## Pump Relay

Switches circulating pump on/off automatically.

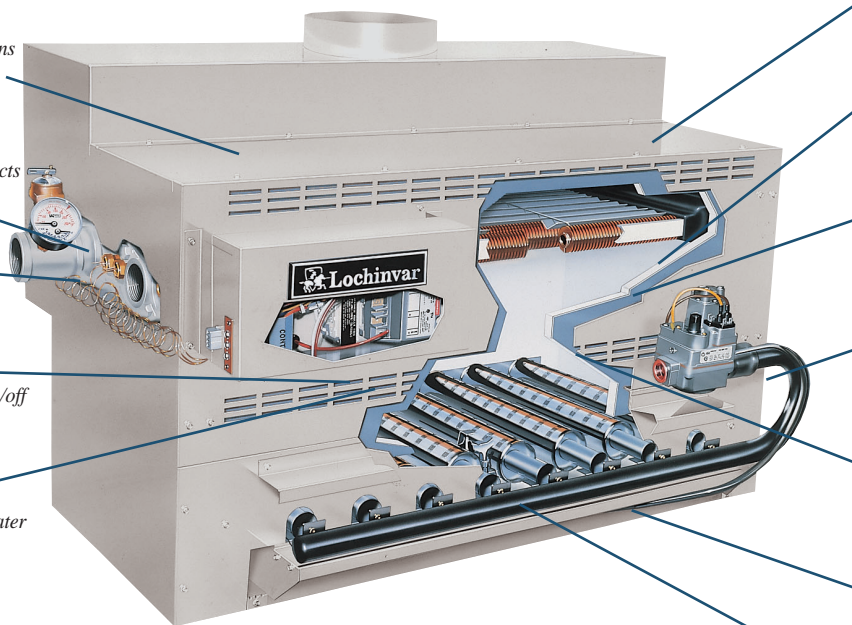
## Dual Adjustable High-Limit Controls

Allows operator control of water temperature for application flexibility, greater protection.

Up to 84% A.F.U.E. Efficiency

Models from 45,000 to 500,000 Btu/hr

Adaptable for L.P. or Natural Gas Applications



## Pre-Painted Steel Jacket

Heavy-duty construction with a durable pre-painted finish.

## Copper Tube Heat Exchanger

Ensures rust- and corrosion-free operation for longer life.

## Unique Copper-Fin® Design

Fins extruded directly from copper tube for unsurpassed heat transfer.

## Gas Valve with Manual Shutoff

Designed for easy connection and added safety.

## Loch-Heat™ Ceramic Tile

Space-age material insulates better and weighs less than standard refractory.

## Stainless Steel Burners

Durable construction for longer life, higher efficiency.

## Spark Ignition\*

Standard equipment on 315 through 500 models. Optional on 045 through 270 models, replaces standing pilot.

\* Also available with module firing gas valve (except on 45,000 Btu/hr model).

*What could be better than a high-efficiency boiler that keeps you warm all over while it saves you money? How about one that saves valuable space, too! That's the Mini-Fin by Lochinvar®.*

*This unique boiler design packs more features and heating capacity into a compact unit than you ever thought possible. From the Copper-Fin® heat exchanger and stainless steel burners, to our own lightweight Loch-Heat™ ceramic insulating tiles.*

*Plus, the Mini-Fin offers capacities up to 500,000 Btu/hr, and all models are approved for tight-fitting installations like closets or alcoves.*

## Up To 84.2% A.F.U.E. Efficiency\*

At the heart of the Mini-Fin is our Copper-Fin® heat exchanger. Using a unique gasketless design, we've combined the best of both worlds: cast iron headers for long-lasting durability, and specially-finned copper tubing for higher energy efficiency. In fact, the Mini-Fin is rated up to 84.2% A.F.U.E. — which means lower energy consumption and operating costs.

**84.2%  
A.F.U.E.**

For maximum performance, the copper fins are extruded directly from the wall of the copper tube. The result is a heat exchanger that has a heat transfer ratio 9 times greater than ordinary copper tube. Plus, because it's copper, there's no need to worry about rust or corrosion — it simply lasts longer. And the gasketless design reduces the risk of leaks or system failures that are so common with conventional boilers.

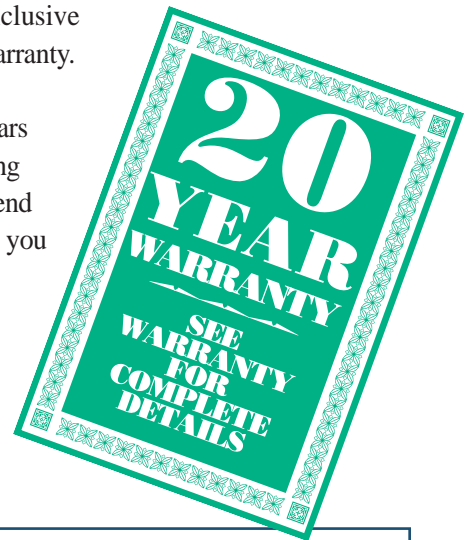
\*When using spark ignition and vent damper.

## Only From Lochinvar®

But there's more to a Mini-Fin than its low 27 inch profile and 84.2% efficiency. This remarkable boiler is also as flexible and convenient as it is efficient and compact. For example, the heavy-duty stainless steel burners can easily be adapted for use with either natural or liquefied petroleum (LP) gas.

What's more, the Mini-Fin allows easy access to all major components for servicing. We even designed the heat exchanger to slide out the front of the boiler for faster maintenance, and we back it with our exclusive 20-year Limited Warranty.

So, with over 75 years experience in heating water, you can depend on Lochinvar. And you can depend on the Mini-Fin to deliver the performance, convenience and reliability you need.



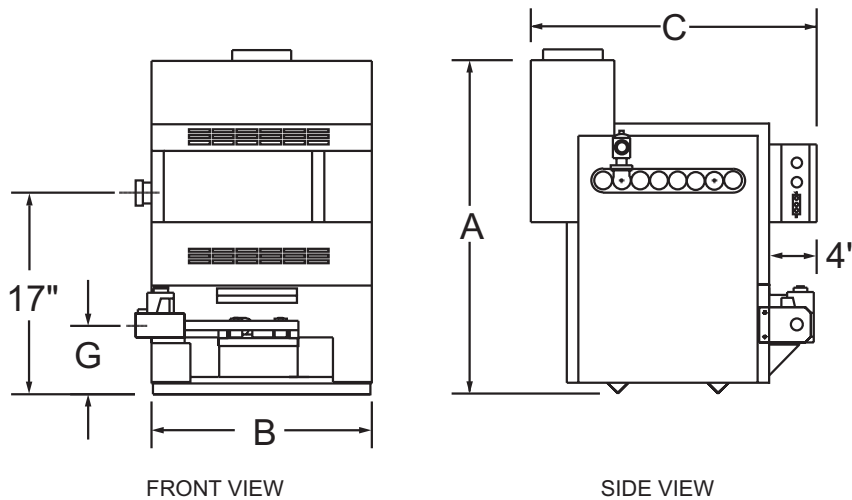
## Space-Saving Design

A high efficiency Mini-Fin can not only do the job of other boilers for much less — it also needs less space. Our 45,000 Btu/hr unit has a footprint of less than 2.5 sq. feet. It features a smaller profile, with an overall unit height of just 27 inches. Thanks to its built-in draft hood, the Mini-Fin is a natural choice for applications where headroom restrictions are a factor.

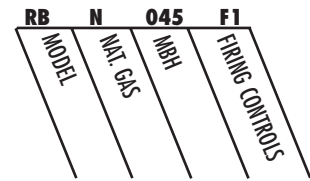
Plus, we insulate the combustion chamber with our special Loch-Heat™ ceramic tiles. These interlocking tiles not only insulate better than standard materials, they're also more durable. And unlike refractory-lined combustion chambers, Loch-Heat insulation is thinner and lighter. Up to 25% lighter — which makes installation and servicing much easier. In fact, Mini-Fin units start at just over 100 lbs. — so they can easily be handled by just one person.



# Mini-Fin® Dimensions & Specifications



**FOR EASE IN ORDERING  
BY MODEL NUMBER**



*This heater is 45,000 Btu/hr natural gas Mini-Fin® boiler with F1 firing controls.*

Model Number	Btu/hr Input	Btu/hr Output	Net Water (MBH)	A	B	C	G	Vent Size	Gas Conn	Shipping Weight
RBN045-F1	45,000	36,900	32	27"	14-1/2"	24"	5-3/4"	3"	1/2"	145
RBN075-F1	75,000	61,500	54	27"	18-1/2"	24"	5-3/4"	5"	1/2"	155
RBN090-F1	90,000	73,800	65	27"	18-1/2"	24"	5-3/4"	5"	1/2"	155
RBN135-F1	135,000	110,700	97	27"	22-1/2"	24"	5-3/4"	5"	1/2"	175
RBN180-F1	180,000	147,600	129	27"	26-1/2"	24"	5-3/4"	6"	3/4"	195
RBN225-F1	225,000	184,500	161	27"	29-1/2"	25"	11-3/4"	7"	3/4"	220
RBN270-F1	270,000	221,400	194	27"	32-1/2"	25"	11-3/4"	7"	3/4"	225
RBN315-F9	315,000	258,300	226	27"	35-1/2"	25"	11-3/4"	8"	3/4"	245
RBN360-F9	360,000	295,200	258	27"	38-1/2"	25"	11-3/4"	8"	3/4"	255
RBN399-F9	399,000	327,180	285	28"	47-3/4"	26"	11-3/4"	10"	1"	320
RBN500-F9	500,000	410,000	357	28"	53-1/2"	26"	11-3/4"	10"	1"	345

*Notes: Change 'N' to 'L' to denote L.P. gas models.  
Water Connections are 1-1/2" NPT on 6-1/4" centers for models RB225 through 500.*

*Water Connections are 1-1/4" NPT on 8" centers for models RB045 through 180.  
Performance data based on manufacturer test results.*

## Standard Features

- 84.2% A.F.U.E.
- Built-In Draft Diverter
- Stainless Steel Burners
- ASME Copper Finned Tube Heat Exchanger
- 160 PSI Working Pressure
- Gasketless Heat Exchanger Design
- Pump Relay
- Loch-Heat Ceramic Tile Combustion Chamber
- Adjustable High Limit (RB045 - 360)
- Manual Reset High Limit (RB399 - 500)
- Gas Valve with Built-In Manual Shut-Off
- ASME Pressure Relief Valve, 30 PSI (RB045 - 360)
- ASME Pressure Relief Valve, 50 PSI (RB399 - 500)
- Temperature & Pressure Gauges
- Automatic Vent Damper (RB045 - 270)
- CSA Design Certified for Closet Installation (RB045 - 180)
- CSA Design Certified for Alcove Installation (RB225 - 500)
- 24 Volt Control System
- Down Stream Test Cock (RB500)

## Optional Equipment

- Alarm Bell
- Combustible Floor Shield
- Contacts on any Failure
- Cupro-Nickel Heat Exchanger
- Flow Switch
- High or Low Gas Pressure Switch
- Indoor/Outdoor Control
- Low Water Cut-Off
- Manual Reset High Limit
- Multi-Stack Frame
- Solenoid Gas Valve

## Mod-U-Pak Sequencer

- 2-6 Stage
- 7-10 Stage
- 11-15 Stage
- Indoor/Outdoor Reset

## Firing Control Systems

- F1 Standing Pilot (Standard on RB045 - 270)
- F9 Spark Ignition (Standard on RB315 - 500)
- M9 Two Stage, Module Firing (RB075 - 500)
- F13 Factory Mutual (FM)
- F14 Industrial Risk Insurers (IRI)
- F7 California Code
- M7 California Code, Two Stage (RB075 - 500)



**Lochinvar®**  
High Efficiency Water Heaters, Boilers and Pool Heaters



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[www.Lochinvar.com](http://www.Lochinvar.com)