

Flexibility is the Solution™

What could be better than a high-efficiency boiler that saves space, saves money and helps resolve all your heating problems? How about one that's lightweight and simple to install, too! That's the Solution™ boiler by Lochinvar®. From the highly efficient copper finned tube heat exchanger, to our own specially designed two-stage electronic control system, the Solution boiler offers these features and many more in models up to 260,000 Btu/hr. Plus, all Solution boilers are equipped with top water connections, a built-in draft hood, and are approved for installation on combustible floors.

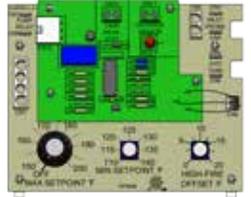


Copper Finned Tube Heat Transfer

The heart of the Solution boiler is its copper finned-tube heat exchanger. With this unique gasketless design, we've combined the best of both worlds: cast iron headers for long-lasting durability, and a copper finned-tube heat exchanger for high efficiencies and fast heat transfer. The gasketless design reduces the risk of leaks or system failures that are common with conventional boilers. Plus, the unit's low-mass design means that water gets heated quickly. Not only is heat up time nearly instantaneous with the Solution boiler, the energy consumption and operating costs are lower too, with a rating of 84% AFUE.

Two-Stage Control

The Solution boiler's two-stage electronic temperature control with built-in outdoor reset provides flexibility and saves fuel by closely matching heat output to system demand. On colder days the boiler fires at full output, and in warmer conditions the Solution boiler reduces the setpoint heat output to save energy and reduce boiler cycling.



During the majority of the heating season, less than full boiler output is required to satisfy the heat load. For this reason Lochinvar has developed a two-stage firing system. Two-stage firing - standard equipment on all Solution boilers, provides dramatic fuel savings by reducing the firing rate 50%. Two-stage firing is ideal for applications utilizing indoor/outdoor reset and is advantageous in systems where the Solution boiler is used with an Squire indirect water heater to produce domestic hot water.

PVC/CPVC Vent Kit (optional)



Vent up to 25' out a sidewall or rooftop with PVC/CPVC (CB 45-135).

Simple To Service

The Solution boiler is 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, Solution boilers allow 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 all up with our exclusive 20-year Limited Warranty.

Built-In Piping Solutions

Other boilers often require system piping upgrades which are cumbersome and expensive. The Solution boiler eliminates this problem with its built-in, performance loop. The loop maintains constant flow through the boiler when only a single zone of the system is calling for heat. This helps maintain peak system performance by keeping the copper heat transfer surface clean and operating at top efficiency. And the top water connections make replacements a snap by fitting into existing piping arrangements without additional elbows and connections.

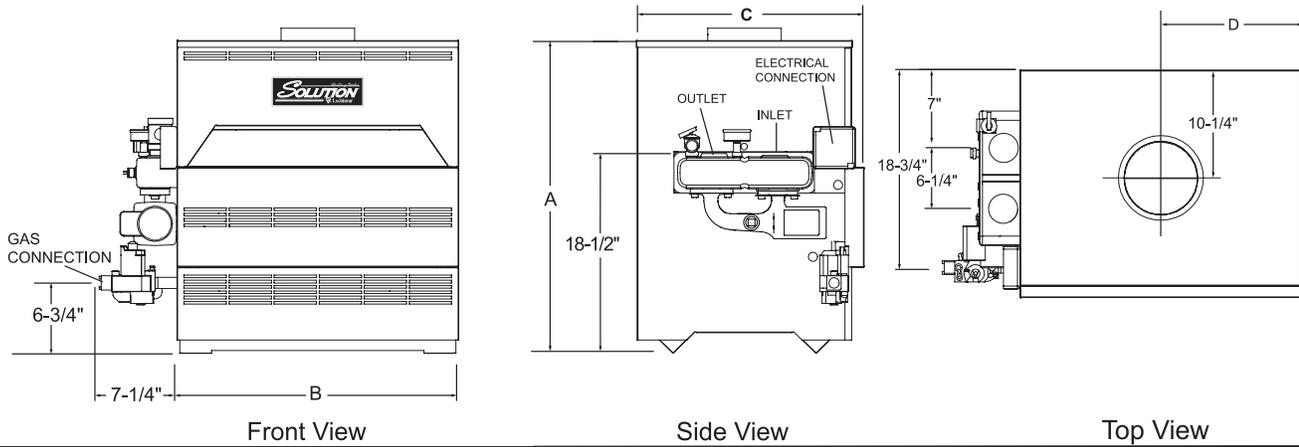
You can depend on Lochinvar, and you can depend on the Solution boiler to deliver the comfort, convenience, and reliability you need. For more information, call your Lochinvar dealer today.



84% AFUE

STACK FRAME

Solution® Boiler Dimensions & Specifications



Solution Heating Boiler					Dimensions & Specifications							
Model Number	Input Max MBH	AFUE %	Heating Capacity MBH	Net AHRI Rating MBH	A	B	C	D	Gas Conn.	Vent Size	Shipping Weight	
CBN045	45	84.0	37	32	29-1/2"	11-1/2"	21-1/2"	5-3/4"	1/2"	4"	145	
CBN075	75	84.0	62	54	29-1/2"	15-1/2"	21-1/2"	7-3/4"	1/2"	5"	155	
CBN090	90	84.0	75	65	29-1/2"	15-1/2"	21-1/2"	7-3/4"	1/2"	5"	155	
CBN135	135	84.0	112	97	29-1/2"	19-1/2"	21-1/2"	9-3/4"	1/2"	6"	175	
CBN180	180	84.0	149	130	29-1/2"	23-1/2"	21-1/2"	11-3/4"	3/4"	7"	195	
CBN215	215	84.0	178	155	29-1/2"	26-1/2"	21-1/2"	13-1/4"	3/4"	7"	220	
CBN260	260	84.0	216	188	29-1/2"	29-1/2"	21-1/2"	14-3/4"	3/4"	8"	225	

Notes: Change 'N' to 'L' to denote L.P. gas models
 Net ratings based on piping and pick-up allowance of 1.15
 Electrical Requirements: 120 VAC / 2 AMP
 Approved for indoor installation only
 Water connections are 1-1/2" NPT
 Performance data based on manufacturer test results.

Standard Features

- ASME Copper Finned Tube Heat Exchanger
- Gasketless Heat Exchanger Design
- Built-In Performance Loop
- Top Water Connections
- 24 Volt Control System
- Self Diagnostic Ignition Control
- Terminal Strip
- Intermittent Electronic Ignition
- Two Stage Solid State Temperature Control
- Outdoor Reset with Outdoor Sensor
- System Sensor
- Two Stage Gas Valve w/ Built In Manual Shut-Off
- Domestic Hot Water Priority
- 160 PSI Working Pressure
- Pump Relay
- Automatic Reset High Limit
- ASME Pressure Relief Valve
- Temperature & Pressure Gauge
- Automatic Vent Damper
- Built-In Draft Diverter
- Stainless Steel Burners
- Loch-Heat Ceramic Tile Combustion Chamber
- CSA Design Certified for Installation on Combustible Floors
- CSA Design Certified for Alcove Installation
- 20 Year Limited Warranty on the Heat Exchanger (see warranty for details)

Optional Equipment

- Adjustable High Limit w/ Manual Reset
- Flow Switch
- Low Water Cut-Off
- Stack Frame
- Pump Delay w/ Freeze Protection
- MP² Sequencer
- PVC/CPVC Venting Kit (CB 45-135)
- O² Barrier

Firing Control Systems

- M9 Two Stage, Intermittant Spark Ignition
- M7 California Code (CB215-260 only)