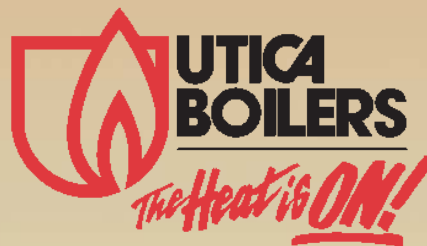


# Cast Aluminum Natural or Propane Gas-Fired Boilers

*Quality Engineered for Efficiency and Dependability*

## *UB90-100 Series*



## UB90-100 Series Boilers

Gas-Fired/Natural or Propane, Hot Water

# Warm Up to Higher Efficiency and Innovative Technology!

The UB90-100 Hot Water Boiler by Utica achieves an optimum combination of high efficiency, innovative technology, and simplicity of design, making it the ideal choice for today's heating customer.

### Remarkable 90% AFUE Efficiency

The UB90-100 dramatically reduces fuel consumption and *pays for itself* with substantial annual fuel savings. Its efficiency is increased beyond 90% when used in low temperature systems, such as radiant systems.

### Revolutionary Cast Aluminum Heat Exchanger

Transfers heat *three times faster* with greater thermal conductivity than conventional cast iron. It produces enormous gains in heat-up speed and operating efficiency. Also, the packaged boiler weighs only 256 pounds for easier installation.

### Safe, Economical CPVC and PVC Vent Pipe

Cooled flue gas can be safely vented through inexpensive readily available and easy to install PVC, after 5' of CPVC provided with the unit. The air intake also utilizes PVC pipe.

### Sealed Combustion, Direct-Vent System

Unlike conventional residential atmospheric and induced draft boilers, the UB90-100 draws fresh air from outdoors for combustion, instead of air from inside the home. Therefore it does not compete with building occupants for its air supply. With this design the UB90-100 runs quieter than a traditional boiler.

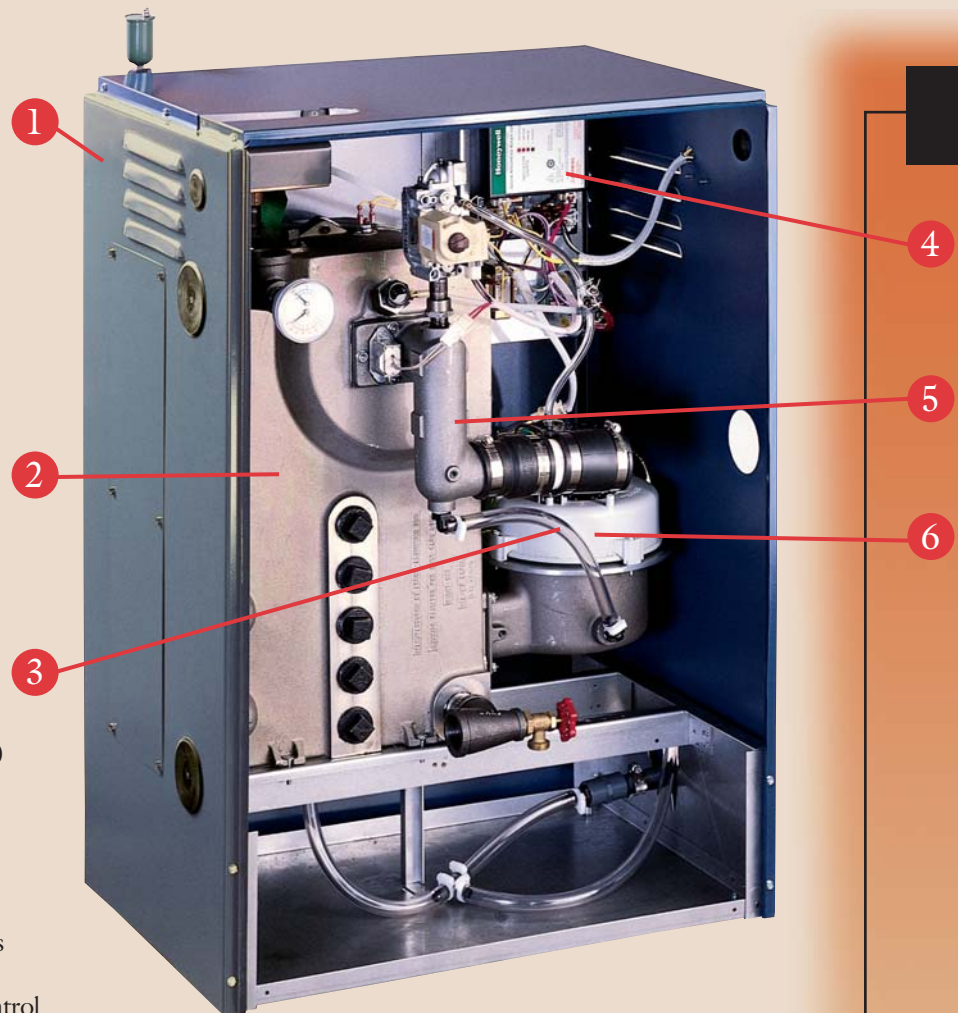
### Simplified Controls

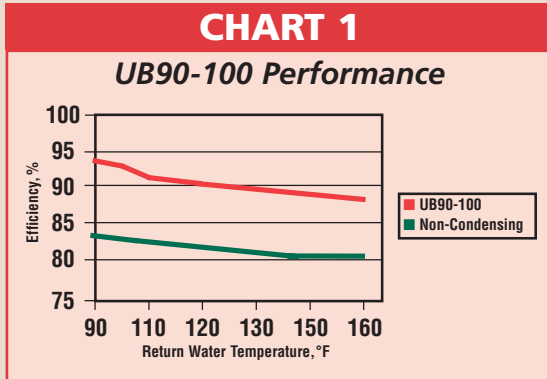
The UB90-100's simple design is engineered to maximize reliability. The UB90-100 incorporates an integrated boiler control for operation, safety and diagnostics. A High Temperature Limit Control

is included for additional safety. Ignition is provided by a hot surface igniter and a single stage gas valve. A single pressure switch ensures air intake and exhaust vents are clear. All components are easily accessible through the removable door.

### Environmentally Friendly

The UB90-100's direct-vent system, premix gas burner and low flame temperature substantially reduce CO and NOx emissions (acid rain and smog components).





## Ideal for Use with Radiant Systems

When used in combination with radiant systems, which use low supply and return water temperatures, the UB90-100's efficiency is increased beyond 90%. Unlike cast iron boilers, the UB90-100 does not require a return bypass or injection pumping system to preheat return water prior to entering the heat exchanger. This saves on material and labor costs since the cast aluminum heat exchanger works best at low water temperatures (see Chart 1).

## PAYBACK

|   |                 |
|---|-----------------|
| <b>UB90-100</b> .....                     | <b>90% AFUE</b> |
| Typical 20-year old Boiler .....          | 70% AFUE        |
| Difference in AFUE .....                  | 20%             |
| Increased Efficiency over 70% Model ..... | 28.57%          |
| <i>(20% ÷ 70%)</i>                        |                 |

The increased efficiency of the UB90-100 could save you approximately 28% on your heating bill each year... which means, if you pay \$1500 annually in fuel bills to space heat your home, you could save as much as **\$428 per year!**

***Now that's payback!***

## UB90-100 Boiler Features

- 1 Pre-Painted Steel Jacket
- 2 Cast Aluminum Heat Exchanger
- 3 CPVC/PVC Pipe
- 4 Integrated Boiler Control
- 5 Air/Fuel Mixer
- 6 Induced Draft Fan
- Supply-Side Pumping



*Come Home To The Safety And Comfort Of Sealed Combustion Technology*

# UB90-100 Cast Aluminum Natural or Propane Gas-Fired Boilers

| MODEL     | INPUT (MBH) | HEATING CAPACITY (MBH) | I=B=R NET RATING (MBH) | AFUE (%) | DIMENSIONS - INCHES |    |       | SHIPPING WEIGHT (POUNDS) |
|-----------|-------------|------------------------|------------------------|----------|---------------------|----|-------|--------------------------|
|           |             |                        |                        |          | H                   | W  | D     |                          |
| UB90-50*  | 50          | 45                     | 39                     | 90.0     | 39.5                | 28 | 19.75 | 256                      |
| UB90-75*  | 75          | 68                     | 59                     | 90.0     | 39.5                | 28 | 19.75 | 256                      |
| UB90-100* | 100         | 90                     | 78                     | 90.0     | 39.5                | 28 | 19.75 | 256                      |

\*Indicate an ENERGY STAR® product

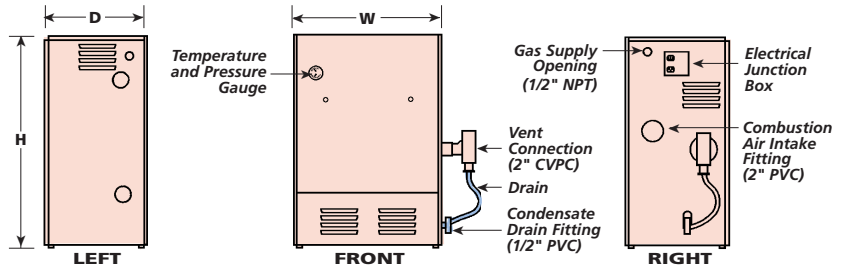
The ratings marked "NET I=B=R RATINGS" indicate the amount of energy that can be applied to heat the radiation or terminal units. The Net I=B=R ratings shown are based on an allowance of 1.15 in accordance with the factors shown on the I=B=R Code as published by the Hydronics Institute.

Selection of boiler size should be based upon "NET I=B=R RATING" being equal or greater than the calculated heat loss of the building.

Consult manufacturer before selecting a boiler for installations having unusual piping and pick-up requirements. UB90-100 boilers may be installed on combustible flooring.

These gas-fired boilers are design certified by C.S.A. in the United States and Canada for use with natural and propane gas. They are constructed and hydrostatically tested for a maximum working pressure of 50 psi in accordance with A.S.M.E. (American Society of Mechanical Engineers) Boiler and Pressure Vessel Code Section IV standards for heating boilers. They are capacity rated in accordance with the code of the Hydronics Institute.

MEA#218-98-E



## SPECIFICATIONS

- GAS-FIRED, DIRECT-VENT CONDENSING HOT WATER BOILER
- May be installed on combustible flooring
- 1" clearance on all sides and top to combustible construction
- 8" clearance right side for vent/air intake pipe installation
- 24" clearance front, 1" left side, 8" top clearance for servicing
- 0" clearance for Vent and Air Intake Pipes to combustible construction

## CONNECTIONS

- 120 Volts AC, 60 Hertz, 1 Phase, Less than 12 Amps
- VENT PIPE & AIR INTAKE PIPE
  - Vent pipe - first 5' is schedule 80, 2" CPVC (provided), then schedule 40, 2" or 3" PVC
  - Air intake - schedule 40, 2" or 3" PVC
- Water In/Out ..... 1-1/4" NPT
- Gas In ..... 1/2" NPT
- Condensate Drain ..... 1/2" PVC

## UB90-100 STANDARD EQUIPMENT

- Aluminum Boiler with painted jacket.
  - Hi limit aquastat.
  - Transformer.
  - 1-1/4" Taco (or Grundfos) circulator.
  - Temperature and pressure gauges.
  - 30 psi ASME relief valve.
  - Air vent.
  - Service Switch.
- Completely installed and wired safety control system with burner consisting of:*
- Microprocessor based Integrated Boiler Control.
  - Stainless steel premix burner.
  - Automatic gas valve.
  - Hot surface igniter.
  - Casting and vent temperature safety switches.
  - Air flow proving switch.

Specifications and dimensions are subject to change without notice. Made in America-by American Craftsmen

## YOUR ASSURANCE OF QUALITY

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



An ISO 9001-2000 Certified Company



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