

## Residential Atmospheric Vent High EF Gas Water Heater



Photo is of  
**HE-4-40S6FBN**

**FEATURING:**



**The High EF FVIR Defender Safety System<sup>®</sup> Models Feature:**

- **ENERGY STAR<sup>®</sup> Qualified**—These .70 Energy Factor models meet and exceed the September 1st, 2010 minimum of ENERGY STAR<sup>®</sup> EF requirement of .67 and qualify for most utility rebate programs.
- **High Efficiency Blower**—Pulls air through a tightly restricted baffle system resulting in increased water heater efficiency ratings.
  - **Ten Foot Power Cord**—Included (120 VAC).
- **Bradford White ICON System<sup>™</sup>**—Intelligent gas control with spark to pilot ignition system eliminates the constant burning pilot. This results in savings of pilot gas during stand by periods (120 VAC).
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Delivery ratings and tighter temperature differentials.
  - **Advanced Temperature Control System**—Microprocessor constantly monitors and controls burner operation to maintain consistent and accurate water temperature levels.
  - **Intelligent Diagnostics**—An exclusive green LED light prompts the installer during start-up and provides 14 different diagnostic codes to assist in troubleshooting.
  - **Separate Immersed Thermowell**—High strength advanced polymer composite thermowell provides isolation between electric temperature sensor and surrounding water.
- **Compatible With Optional Accessory Packages**—Performance Package, Protection Package and Inlet Shut-Off Valve Packages.
- **Advanced ScreenLok<sup>®</sup> Technology Flame Arrestor Design**—Flame arrestor is designed to prevent ignition of flammable vapors outside of the water heater.
- **Flammable Vapor Sensor**—Electronic sensor prevents burner operation if flammable vapors are detected.
- **Maintenance Free**—No regular cleaning of air inlet openings or flame arrestor is required under normal conditions.
- **Sight Window**—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **Factory Installed Hydrojet<sup>®</sup> Total Performance System**—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- **Vitraglas<sup>®</sup> Lining**—Bradford White tanks are lined with a exclusively engineered enamel formula that provides superior protection from the highly corrosive effects of hot water. This formula (Vitraglas<sup>®</sup>) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **2" Non-CFC Foam Insulation**—Covers the side and top, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Pedestal Base.**
- **Water Connections**—3/4" NPT factory installed true dielectric fittings.
- **Factory Installed Heat Traps**—Design incorporates a flexible disk that reduces heat loss in piping and eliminates the potential for noise generation.
- **Protective Magnesium Anode Rod.**
- **3x4 "Snap Lock" Draft Diverter**—Allows either 3" or 4" vent connections.
- **T&P Relief Valve**—Included.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.

**AUDI**



**6 or 10-Year Limited Tank Warranties / 6 or 10-Year Limited Warranty on Component Parts.**

For more information on warranty, please visit [www.bradfordwhite.com](http://www.bradfordwhite.com)

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,954,492; 5,761,379; 5,943,984; 5,081,696; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,669,448; 4,829,983; 4,808,356; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534; 7,270,087 B2. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105; 2,409,271  
Defender Safety System<sup>®</sup>, Vitraglas<sup>®</sup>, Hydrojet<sup>®</sup>, and ScreenLok<sup>®</sup> are registered trademarks of Bradford White<sup>®</sup> Corporation.

# Residential Atmospheric Vent Gas Water Heater

## High EF Energy Saver Models

NATURAL GAS AND LIQUID PROPANE GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

Model Number	Capacity		Recovery* 90°F Rise		A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	G Floor to Water Conn.	H Depth	Approx. Shipping Weight				
	U.S. Gal.	Imp. Gal.	Nat. BTU/Hr. Input	LP BTU/Hr. Input										Nat. U.S. GPH	Nat. Imp. GPH	LP U.S. GPH	LP Imp. GPH
HE-4-40S6FBN	40	33	38,000	38,000	40	33	40	33	55 <sup>3</sup> / <sub>8</sub>	22	3 x 4	40 <sup>3</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>4</sub>	47 <sup>5</sup> / <sub>8</sub>	48 <sup>1</sup> / <sub>2</sub>	26 <sup>3</sup> / <sub>4</sub>	145
HE-4-50S6FBN	50	42	38,000	38,000	40	33	40	33	56 <sup>1</sup> / <sub>8</sub>	24	3 x 4	40 <sup>3</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	48 <sup>3</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>4</sub>	28 <sup>3</sup> / <sub>4</sub>	176

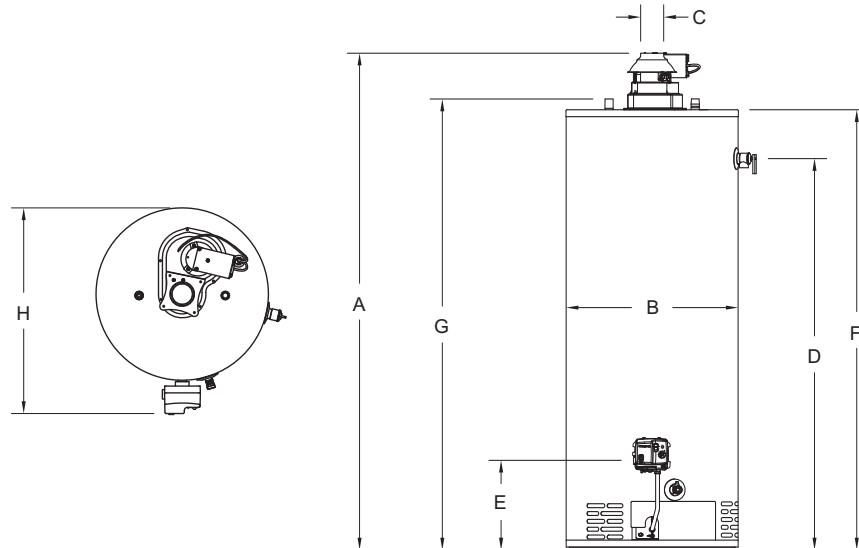
Model Number	Capacity		Recovery* 50°C Rise		A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	G Floor to Water Conn.	H Depth	Approx. Shipping Weight		
	U.S. Gal.	Imp. Gal.	Nat. BTU/Hr. Input	LP BTU/Hr. Input										Nat. U.S. GPH	Nat. Imp. GPH
HE-4-40S6FBN	151	11.1	11.1	11.1	151	151	1407	559	76x102	1021	298	1210	1232	679	66
HE-4-50S6FBN	189	11.1	11.1	11.1	151	151	1426	610	76x102	1035	298	1251	1251	730	80

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "BN" to "SX".

For 10 year models, change suffix from "6" to "10".

\*Based on manufacturers rated recovery efficiency.

115V, 60Hz. 1 Amp.



### Meets NAECA Requirements

#### General

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All potable water connections are 3/4" NPT (19mm) on 8" (203mm) centers. All models design certified by CSA International (formerly AGA/CGA), ANSI Z-21.10.1 and peak performance rated.

**Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.**

**Suitable for Water (Potable) Heating and Space Heating. See AHRI for current Energy Factor ratings.**

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into the potable side of this system. The potable side may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance.



Ambler, PA

For U.S. and Canada field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 • Fax 215-641-1670 / Technical Support 800-334-3393 • Fax 269-795-1089 • Warranty 800-531-2111 • Fax 269-795-1089

International: Telephone 215-641-9400 • Telefax 215-641-9750 / [www.bradfordwhite.com](http://www.bradfordwhite.com)



BRADFORD WHITE-CANADA INC. Sales / Technical Support 866-690-0961 / 905-238-0100 • Fax 905-238-0105 / [www.bradfordwhite.com](http://www.bradfordwhite.com)

**Built to be the Best™**

©2013, Bradford White Corporation. All rights reserved.