



## Residential Ultra Low NOx Series Energy Saver Gas Water Heater



Photo is of  
U1-5036FRN

### Identical Dimensions

Same diameter, height and connections as standard units for ease of installation.

### The FVIR Eco-Defender Safety System® Models Feature:

- **Defender Combustion Chamber**—Incorporates the Advanced ScreenLok® Technology Flame Arrestor and large split-door design to prevent ignition of flammable vapors outside the water heater.
- **Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices**—Ensures proper air to gas ratio for reduction of NOx generated by the combustion process.
- **Digital Thermal Sensor and Resettable Thermal Switch**—Coordinates with self diagnostic control to prevent water heater operation as needed.
- **Millivolt Powered Control with Built-in Piezo Igniter**—Easy and quick lighting of the pilot burner by push button.
- **Pedestal Base**—Rugged and durable base allows easy transport and positioning, while providing corrosion resistant contact with floor.
- **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.
- **No Electricity Required.**
- **Factory Installed Hydrojet® 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® Lining**—Bradford White water heater tanks are protected from the corrosive effects of hot water by an exclusive ceramic porcelain-like coating.
- **Self Diagnostic Honeywell Gas Control**—Integrated, immersion gas control learns and monitors the combustion chamber's temperature profile and prevents water heater operation during upset conditions. Also equipped with an LED display to aid in start-up and diagnostics.
- **Side Connections**—3/4" NPT tapings allow an easy connection for space heating applications (U1-XR-403S model only).
- **1" Non-CFC Foam Insulation**—Surrounds the tank surface, saving energy by retarding loss of heat.
- **Water Connections**—3/4" NPT factory installed true dielectric fittings extend water heater life and eases installation.
- **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**—Provides added protection against corrosion for long trouble-free service.
- **3x4 "Snap Lock" Draft Diverter**—Allows either 3" or 4" vent connections with inputs of 40,000 BTU/Hr. or less. Over 40,000 BTU/Hr. has the 4" "Snap Lock" Draft Diverter.
- **Flue Baffle**—Maximizes the amount of heat absorbed by the tank and reduces heat loss during standby periods.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded.
- **T&P Relief Valve**—Included.
- **Brass Drain Valve.**
- **Meets SCAQMD Rule 1121 (10ng/J NOx limit).**
- **Design Certified by CSA International (formerly AGA and CGA).**

### 6 or 10-Year Limited Tank Warranties / 6-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.



Bradford White received the highest numerical score among water heater/boiler manufacturers in the proprietary J.D. Power and Associates/ McGraw-Hill Construction 2006 HVAC and Water Heater/Boiler Subcontractor Satisfaction Study™. Study based on 882 responses measuring 3 water heater/boiler manufacturers and measures opinions of subcontractors. Proprietary study results are based on experiences and perceptions of subcontractors surveyed in May through July 2006. Your experiences may vary. Visit [jdpower.com](http://jdpower.com)

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,063,133 B2; 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. 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.. Defender Safety System®, ScreenLok®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

# Residential Atmospheric Vent Gas Water Heater



## Ultra Low NOx Energy Saver Models

NATURAL GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
Recovery efficiency ranging up to 78%

Model Number	Capacity		Nat. BTU/Hr. Input	Recovery at 90°F Rise*		A Floor to Flue Conn. in.	B Jacket Dia. in.	C Vent Size in.	D Floor to T&P Conn. in.	E Floor to Gas Conn. in.	F Floor to Space Heating Return in.	G Floor to Space Heating Outlet in.	H Floor to Water Conn. in.	K Depth in.	Approx. Shipping Weight lbs.
	U.S. Gal.	Imp. Gal.		Nat. U.S. GPH	Nat. Imp. GPH										
U1-30S6FRN	30	25	30,000	31	26	48 <sup>3</sup> / <sub>8</sub>	18	3x4	38 <sup>3</sup> / <sub>4</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	46 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>4</sub>	110
U1-30T6FRN•	30	25	32,000	33	28	59 <sup>1</sup> / <sub>8</sub>	16	3x4	49 <sup>3</sup> / <sub>4</sub> / 56 <sup>3</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	57 <sup>1</sup> / <sub>2</sub>	20 <sup>1</sup> / <sub>4</sub>	113
U1-40S6FRN•	40	33	40,000	42	34	50	20	3x4	41 / 47 <sup>1</sup> / <sub>4</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	48 <sup>1</sup> / <sub>2</sub>	24 <sup>1</sup> / <sub>4</sub>	137
U1-40T6FRN•	40	33	40,000	42	34	59 <sup>3</sup> / <sub>8</sub>	18	3x4	50 / 56 <sup>5</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	57 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>4</sub>	130
U1-404T6FRN•	40	33	50,000	53	44	60 <sup>3</sup> / <sub>4</sub>	18	4	51 <sup>1</sup> / <sub>2</sub> / 58	11 <sup>5</sup> / <sub>8</sub>	-	-	58 <sup>1</sup> / <sub>2</sub>	22 <sup>1</sup> / <sub>4</sub>	137
U1-50S6FRN•	50	42	40,000	42	34	59 <sup>3</sup> / <sub>8</sub>	20	3x4	50 / 56 <sup>3</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	58	24 <sup>1</sup> / <sub>4</sub>	154
U1-50L6FRN	48	40	40,000	42	34	49 <sup>3</sup> / <sub>4</sub>	22	3x4	40 <sup>1</sup> / <sub>2</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	48 <sup>1</sup> / <sub>4</sub>	26 <sup>1</sup> / <sub>4</sub>	163
U1-504S6FRN•	50	42	50,000	53	44	58 <sup>1</sup> / <sub>2</sub>	20	4	50 / 55 <sup>3</sup> / <sub>4</sub>	11 <sup>5</sup> / <sub>8</sub>	-	-	57	24 <sup>1</sup> / <sub>4</sub>	160
U1-XR-403S6FRN	40	33	40,000	43	36	50	20	3x4	41	13	13 <sup>1</sup> / <sub>2</sub>	41	48 <sup>1</sup> / <sub>2</sub>	24 <sup>1</sup> / <sub>4</sub>	137

Model Number	Capacity		Recovery at 50°C Rise*	A Floor to Flue Conn. mm.	B Jacket Dia. mm.	C Vent Size mm.	D Floor to T&P Conn. mm.	E Floor to Gas Conn. mm.	F Floor to Space Heating Return mm.	G Floor to Space Heating Outlet mm.	H Floor to Water Conn. mm.	K Depth mm.	Approx. Shipping Weight kg.
	Liters	kW Input											
U1-30S6FRN	114	8.8	117	1229	457	76x102	984	295	-	-	1187	565	50
U1-30T6FRN•	114	9.4	125	1502	406	76x102	1264 / 1432	295	-	-	1461	514	51
U1-40S6FRN•	151	11.7	155	1207	508	76x102	1041 / 1200	295	-	-	1232	615	62
U1-40T6FRN•	151	11.7	155	1508	457	76x102	1270 / 1438	295	-	-	1467	565	59
U1-404T6FRN•	151	14.7	201	1543	457	102	1308 / 1473	295	-	-	1486	565	62
U1-50S6FRN•	189	11.7	155	1514	508	76x102	1270 / 1453	295	-	-	1473	615	70
U1-50L6FRN	182	11.7	155	1264	559	76x102	1029	295	-	-	1226	666	74
U1-504S6FRN•	189	14.7	201	1486	508	102	1270 / 1416	295	-	-	1448	615	73
U1-XR-403S6FRN	151	11.7	163	1270	508	76x102	1041	330	343	1041	1232	615	62

Available in Natural Gas only.

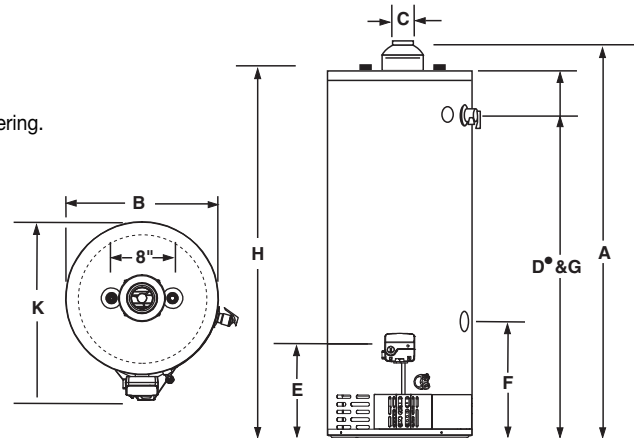
For 10 year models, change suffix from "6" to "10".

\*Based on manufacturers rated recovery efficiency.

Note: U1-30S, U1-50L and U1-XR-403S do not have top T&P option.

•Models feature optional top T&P location and must be specified when ordering.

All models meet SCAQMD rule 1121 requirement of 10ng/J, or less, NOx emissions.



• Optional T&P Location Dimension "D" dimension listed as side/top.

### 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 water connections are 3/4" NPT (19mm) on 8" (203mm) centers. All Gas Connections are 1/2" (13mm).

All models design certified by CSA International (formerly AGA/CGA), to meet ANSI standard 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.

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



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

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**Built to be the Best™**

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