

## Residential Damper Ultra Low NOx Gas Water Heater



Photo is of  
URG2D50S6N

**FEATURING:**



**The FVIR Eco-Defender Safety System<sup>®</sup> Models Feature:**

- **ENERGY STAR<sup>®</sup> Qualified**—Meets or exceeds requirements for ENERGY STAR<sup>®</sup> per the latest ENERGY STAR<sup>®</sup> criteria revision, as well as most utility rebate programs.
- **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 standby periods (120 VAC).
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Rating and tighter temperature differential.
  - **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 ten different diagnostic codes to assist in troubleshooting.
  - **Pilot On Indication**—Flashing green LED provides positive indication that pilot is on.
  - **Separate Immersed Thermowell**—High-strength advanced polymer composite thermowell provides isolation between electric temperature sensor and surrounding water. No need to drain the tank when removing gas valve.
- **Automatic Flue Damper**—Reduces standby heat loss, resulting in less gas consumption, higher energy factor ratings, and improved overall efficiency.
  - Ten Foot Power Cord—Included (120 VAC).
- **Defender Combustion Chamber**—Incorporates the Advanced ScreenLok<sup>®</sup> 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 when needed.
- **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**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank.
- **Vitraglas<sup>™</sup> Lining**—An exclusively engineered enamel formula that provides superior tank 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).
- **Insulation System**—Non-CFC foam insulation covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies, and jacket rigidity.
- **Pedestal Base**—Rugged and durable base allows easy transport and positioning while providing corrosion-resistant contact with floor.
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **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-term, trouble-free service.
- **3x4 "Snap Lock" Draft Diverter**—Allows either 3" (76mm) or 4" (102mm) vent connections.
- **T&P Relief Valve**—Installed.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **Design Certified by CSA International (formerly AGA/CGA).**
- **Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).**

**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.

# Residential Damper Ultra Low NOx Gas Water Heater

## Ultra Low NOx Damper Models

NATURAL GAS

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

Model Number	Nominal Gal. Capacity		DOE Rated Storage Volume (Gal.)	BTU/Hr. Input	First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 90°F Rise*		Model Number	Nominal Liter Capacity	DOE Rated Storage Volume (Liters)	kW Input	First Hour Rating (Liters)	Uniform Energy Factor	Recovery at 50°C Rise*	
	U.S. Gal.	Imp. Gal.					U.S. GPH	Imp. GPH							Liters/Hour	
★ URG2D40S6N	40	33	38	38,000	67	0.64	40	33	★ URG2D40S6N	151	144	11.1	254	0.64	151	
★ URG2D50S6N	50	42	47	40,000	81	0.68	42	35	★ URG2D50S6N	189	178	11.7	307	0.68	158	

Model Number	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 Top of Heater in.	G Floor to Water Conn. in.	H Depth in.	J C/L of Water Conn. in.	M Water Conn. NPT in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
★ URG2D40S6N	57 <sup>5</sup> / <sub>16</sub>	22	3 or 4	41	11 <sup>1</sup> / <sub>2</sub>	48 <sup>3</sup> / <sub>16</sub>	49 <sup>9</sup> / <sub>16</sub>	26 <sup>1</sup> / <sub>8</sub>	11	3/4	1/2	159
★ URG2D50S6N	65 <sup>7</sup> / <sub>8</sub>	22	3 or 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>4</sub>	58 <sup>11</sup> / <sub>16</sub>	26	11	3/4	1/2	172

Model Number	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 Top of Heater mm.	G Floor to Water Conn. mm.	H Depth mm.	J C/L of Water Conn. mm.	M Water Conn. NPT mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
★ URG2D40S6N	1456	559	76 or 102	1041	292	1224	1259	664	279	19	13	72
★ URG2D50S6N	1673	559	76 or 102	1267	292	1441	1491	660	279	19	13	78

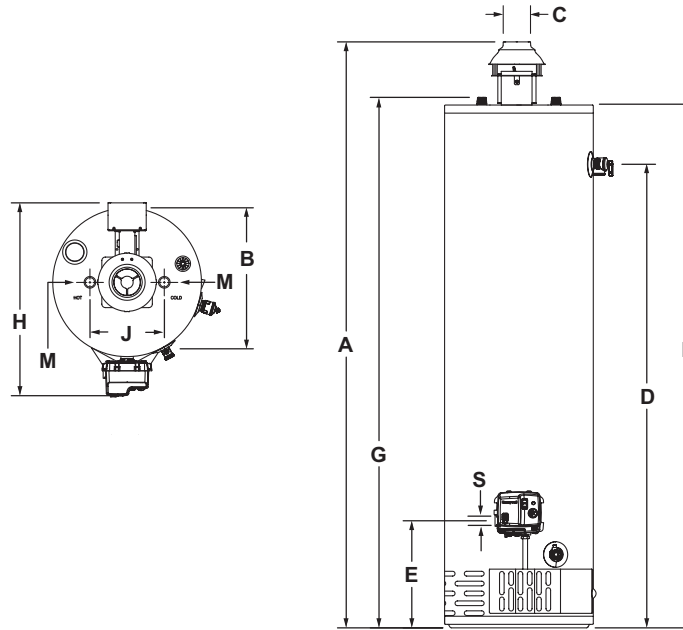
Available in Natural Gas only.

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

\* Based on manufacturer's rated recovery efficiency.

Uniform Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified. 



### General:

#### Meets NAECA Requirements.

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 Z21.10.1 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.

— BRADFORD WHITE IS —

**AMERICAN STRONG**

Sales: 800-523-2931 ■ Fax 215-641-1612

24/7 Technical Support: 800-334-3393 ■ Email [techserv@bradfordwhite.com](mailto:techserv@bradfordwhite.com)

**Built to be the Best®**