

## Residential Direct Vent Gas Water Heater



Photo is of  
RG2DV50H6N

### FEATURING:



### The Direct Vent FVIR Defender Safety System® Models Feature:

- **Bradford White ICON System®**—Intelligent gas control with proven millivolt powered technology and built-in piezo igniter. A standard, off the shelf thermopile converts heat energy from the pilot flame into electrical energy to operate the gas valve and microprocessor. No need for external electricity.
  - **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.
- **Closed Combustion**—All air for combustion is taken directly from the outside. The co-axial vent pipe (pipe inside a pipe) draws combustion air in through the outer pipe, and exhausts the products of combustion through the inner pipe. The co-axial vent pipe at the top of the unit can be rotated for venting flexibility.
- **Reinforced Seals**—Seals surround the closed combustion chamber and the FVIR inner door, preventing the ignition of flammable vapors outside of the water heater.
- **Maintenance-Free**—The vent piping and the closed combustion chamber with reinforced seals does not require regular cleaning under normal operating conditions.
- **Sight Window**—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **Factory-Installed Hydrojet® Total Performance System**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank.
- **Vitraglas® Lining**—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **Cast Aluminum Air Intake Boot**—A cast molded air intake boot provides exceptional installation durability.
- **Telescoping Solid Vent Kits**—Multiple kits (see reverse side) allow up to 8ft. vertical and 8ft. horizontal vent lengths (horizontal termination only).
- **Flexible Vent Kit**—The maximum vent length (horizontal and vertical) can be flexed to 100" (2540mm) (horizontal termination only).
- **Side Connections**—3/4" (19mm) NPT tappings allow easy connections for space heating applications (Potable water only) (RG2DV50H6N only).
- **Insulation System**—2" (51mm) Non-CFC foam insulation covers surrounds the tank surface, saving energy by reducing the amount of heat loss.
- **Pedestal Base.**
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings.
- **Factory-Installed Heat Traps.**
- **Protective Magnesium Anode Rod.**
- **T&P Relief Valve**—Installed.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **NOx Emissions**—Less than 40 ng/J.

### 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: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. Defender Safety System®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

# Residential Direct Vent Water Heater

## Direct Vent Models

NATURAL GAS AND LIQUID PROPANE GAS

Recovery efficiency ranging up to 78%

Model Number	Nominal Gal. Capacity		BTU/Hr. Input		First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 90°F Rise*				Model Number	Nominal Liter Capacity	kW Input		First Hour Rating (Liters)	Uniform Energy Factor	Recovery at 50°C Rise*	
	U.S. Gal.	Imp. Gal.	BTU/Hr. Input	LP BTU/Hr. Input			U.S. GPH	Imp. GPH	U.S. GPH	LP Imp. GPH			kW Input	LP kW Input			Liters/Hour	LP Liters/Hour
RG2DV40S6N	40	33	38,000	36,000	62	0.60	41	34	39	32	RG2DV40S6N	151	11.1	10.5	235	0.60	155	148
RG2DV50S6N	50	42	42,000	40,000	77	0.64	45	35	43	36	RG2DV50S6N	189	12.3	11.7	291	0.64	170	163
RG2DV50H6N	48	40	50,000	48,000	96	0.64	54	45	50	42	RG2DV50H6N	182	14.6	14.1	363	0.64	204	189

Model Number	A Floor to C/L of Vent in.	B Jacket Dia. in.	C Vent Size in. I.D. / O.D.	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.	K Floor to Space Heating Inlet in.	L Floor to Space Heating Outlet in.	M Water Conn. NPT in.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
RG2DV40S6N	63 1/2 min.	22	3 5	43 1/2	13	50 9/16	51 1/8	31	8	N/A	N/A	3/4	N/A	1/2	189
RG2DV50S6N	72 1/2 min.	22	3 5	52 1/4	13	59 3/16	60 1/8	31	8	N/A	N/A	3/4	N/A	1/2	212
RG2DV50H6N	75 7/8 min.	22	4 6	52 1/4	13	59 9/16	60 1/8	31	11	15 3/4	52 1/4	3/4	3/4	1/2	234

Model Number	A Floor to C/L of Vent mm.	B Jacket Dia. mm.	C Vent Size mm. I.D. / O.D.	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.	K Floor to Space Heating Inlet mm.	L Floor to Space Heating Outlet mm.	M Water Conn. NPT mm.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
RG2DV40S6N	1613 min.	559	76 127	1105	330	1275	1299	787	203	N/A	N/A	19	N/A	13	86
RG2DV50S6N	1842 min.	559	76 127	1327	330	1503	1527	787	203	N/A	N/A	19	N/A	13	96
RG2DV50H6N	1927 min.	559	102 152	1327	330	1503	1527	787	279	400	1327	19	19	13	106

All Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

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.

**RG2DV40S6N / RG2DV50S6N Solid Vent Kit:** Part No. 239-51283-00. **RG2DV40S6N / RG2DV50S6N Flexible Vent Kit:** Part No. 239-51284-00.

**RG2DV50H6N Solid Vent Kit:** Part No. 239-51286-00. **RG2DV50H6N Flexible Vent Kit:** Part No. 239-51287-00.

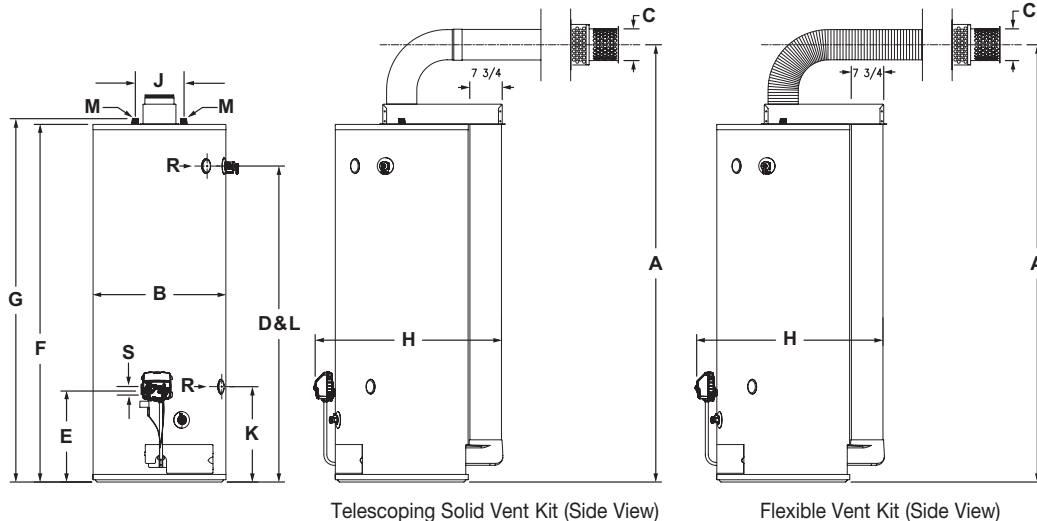
Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

### RG2DV40S6N / RG2DV50S6N Optional Telescoping Solid Vent Kits:

<b>Kit "A"</b>	Telescopes from 4 3/4" to 5 1/8" (121 to 144 mm)	Part No. 239-41260-00
<b>Kit "B"</b>	Telescopes from 6 1/2" to 9 5/8" (165 to 233 mm)	Part No. 239-41331-00
<b>Kit "C"</b>	Telescopes from 13 3/4" to 23 1/8" (349 to 602 mm)	Part No. 239-41029-00
<b>Kit "D"</b>	Telescopes from 49 1/8" to 95 1/8" (1265 to 2434 mm)	Part No. 239-41424-00

### RG2DV50H6N Optional Telescoping Solid Vent Kits:

<b>Kit "F"</b>	Telescopes from 4 3/4" to 5 1/8" (121 to 144 mm)	Part No. 239-42516-00
<b>Kit "G"</b>	Telescopes from 6 1/2" to 9 5/8" (165 to 233 mm)	Part No. 239-42517-00
<b>Kit "H"</b>	Telescopes from 13 3/4" to 23 1/8" (349 to 602 mm)	Part No. 239-42514-00
<b>Kit "I"</b>	Telescopes from 49 1/8" to 95 1/8" (1265 to 2434 mm)	Part No. 239-42512-00



**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). All gas connections 1/2" (13mm). All models design-certified by CSA International (formerly AGA/CGA), ANSI 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.



For field service, contact your professional installer or local Bradford White sales representative.

Sales / Technical Support 1-866-690-0961 / 905-203-0600

[www.bradfordwhite.com](http://www.bradfordwhite.com)

**Built to be the Best**