

## 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 controls burner operation for consistent and accurate water temperature levels up to 160°F (71°C).
  - **Intelligent Diagnostics**—Exclusive multicolor LED light indicates operation status/service required.
- **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 tapings 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.

\*May vary by region



### 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 Direct Vent Water Heater

## Direct Vent Models

NATURAL GAS AND LIQUID PROPANE GAS

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

| 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. |                                 | BTU/Hr. Input | LP BTU/Hr. Input |                          |                       | U.S. GPH               | Imp. GPH | LP U.S. GPH | LP Imp. GPH |              |                        |                                   | kW Input | LP kW Input | First Hour Rating (Liters) | Uniform Energy Factor |                       | Liters/Hour            | LP Liters/Hour |
| RG2DV40S6N   | 40                    | 33        | 38                              | 38,000        | 36,000           | 62                       | 0.60                  | 41                     | 34       | 39          | 32          | RG2DV40S6N   | 151                    | 144                               | 11.1     | 10.5        | 235                        | 0.60                  | 155                   | 148                    |                |
| RG2DV50S6N   | 50                    | 42        | 47                              | 42,000        | 40,000           | 77                       | 0.64                  | 45                     | 35       | 43          | 36          | RG2DV50S6N   | 189                    | 178                               | 12.3     | 11.7        | 292                        | 0.64                  | 170                   | 163                    |                |
| RG2DV50H6N   | 48                    | 40        | 46                              | 50,000        | 48,000           | 96                       | 0.64                  | 54                     | 45       | 50          | 42          | RG2DV50H6N   | 182                    | 174                               | 14.7     | 14.0        | 364                        | 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 9/16                      | 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.

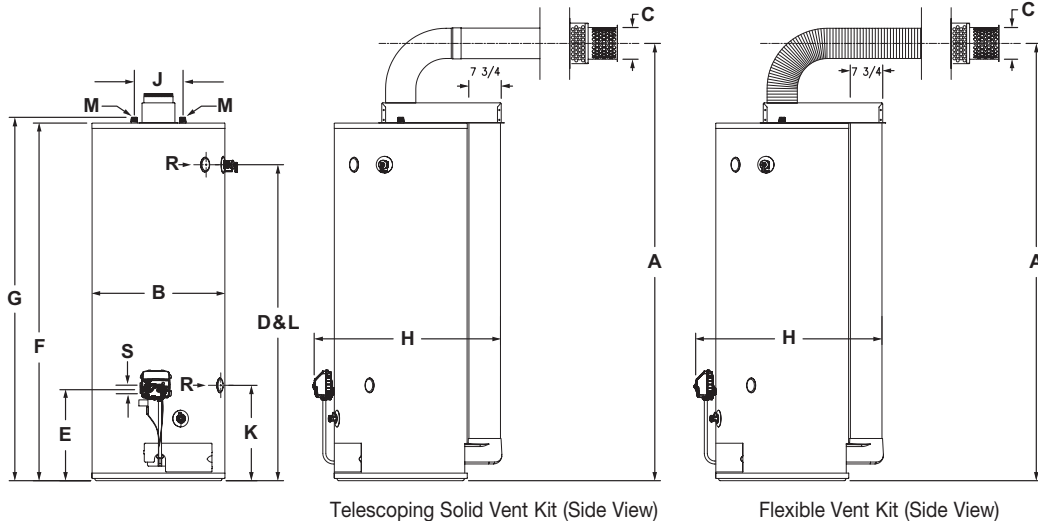
Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

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

- Kit "A" Telescopes from 4 3/4" to 5 1/8" (121mm to 145mm) Part No. 239-41260-00
- Kit "B" Telescopes from 6 1/2" to 9 5/16" (165mm to 233mm) Part No. 239-41331-00
- Kit "C" Telescopes from 13 3/4" to 23 1/16" (349mm to 602mm) Part No. 239-41029-00
- Kit "D" Telescopes from 49 3/16" to 95 3/16" (1265mm to 2434mm) Part No. 239-41424-00

### RG2DV50H6N Optional Telescoping Solid Vent Kits:

- Kit "F" Telescopes from 4 3/4" to 5 1/8" (121mm to 145mm) Part No. 239-42516-00
- Kit "G" Telescopes from 6 1/2" to 9 5/16" (165mm to 233mm) Part No. 239-42517-00
- Kit "H" Telescopes from 13 3/4" to 23 1/16" (349mm to 602mm) Part No. 239-42514-00
- Kit "I" Telescopes from 49 3/16" to 95 3/16" (1265mm to 2434mm) Part No. 239-42512-00



**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 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.

— BRADFORD WHITE IS —



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Built to be the Best