

DEFENDER SAFETY SYSTEM®

# Residential PDX1 Power Direct Vent Energy Saver Gas Water Heater



Photo is of **PDX1**-40S6FBN

### The PDX1 FVIR Defender Safety System® Models Feature:

- ENERGY STAR<sup>®</sup> Qualified—These models qualify for the January 1st, 2009 minimum ENERGY STAR<sup>®</sup> EF requirement, as well as most utility rebate programs.
- Closed Combustion Venting System—Power Direct Vent models are ideal for installations which lack sufficient are for combustion, such as new construction homes or additions which are tightly insulated. These models use a twin pipe system where combustion air is drawn from outside the building in one pipe, and combustion products are expelled to the outside in another pipe.
- Cast Aluminum Air Intake Boot—A cast molded air intake boot design provides exceptional durability during installation and operation.
- Flammable Vapor Sensor—Electronic sensor prevents burner operation if flammable vapors are detected. The sensor will also prevent burner operation if there is an ongoing flammable vapor burn inside the combustion chamber.
- 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.
- Electronic Gas Control—Integrated, immersion control offers precise temperature control for higher First Hour Delivery ratings, easy temperature adjustment and removal of gas valve without draining the tank. Also, an LED display provides real time status indication for diagnostic codes and start-up procedure.
- Spark to Pilot Ignition System—Eliminates the constant burning pilot used on other water heaters.
- Powerful Blower Motor—Our significantly quiet design has greater resistance to outside winds and the power to vent in many difficult venting situations.
- Optional Concentric Vent Kit Termination—2" termination fitting provides for only one exit opening through a wall or roof. (Subtract 10ft. for intake pipe and 10ft. for exhaust pipe when calculating total vent length.)
- Horizontal and Vertical Venting—With 2" or 3" PVC, ABS, or CPVC. The equivalent feet of intake venting cannot be greater than the equivalent feet of exhaust venting.
- 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 makes installation easier.
- 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.
- T&P Relief Valve—Included.
- Brass Drain Valve—Tamper proof design.
- 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 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; (81)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,608,366; 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>, Viiraglas<sup>®</sup> and Hydrojet<sup>®</sup> are registered trademarks of Bradford White<sup>®</sup> Corporation.

### Residential Power Direct Vent Gas Water Heater

PDX1-40S

PDX1 50S

35 ft.

35 ft.

7 ft.

30 ft

25 ft.

20 ft PDX1-40S

> 85 ft. 85 ft

> > 7 ft.

80 ft. 75 ft.

70 ft.

3

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

80% Recovery Efficiency

## **PDX1 Energy Saver Models**

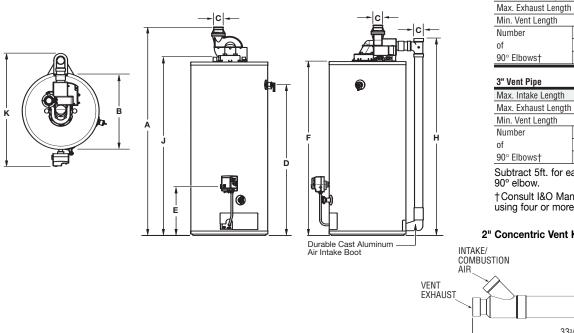
NATURAL GAS AND LIOUID PROPANE GAS

| Model<br>Number | Capacity     |     | Nat. LP             |                   | Recovery at<br>90°F Rise*<br>Nat. Nat. LP LP |             |                            | A<br>Floor to<br>Exhaust<br>Outlet | B<br>Jacket<br>Dia. | C<br>Vent<br>Size    | D<br>Floor to<br>T&P<br>Conn. | E<br>Floor<br>to<br>Gas | F<br>Floor<br>to Top<br>of Heater | H<br>Floor to<br>Air<br>Intake | J<br>Floor<br>to<br>Water | K<br>Depth                    | Approx.<br>Shipping<br>Weight         |      |
|-----------------|--------------|-----|---------------------|-------------------|--|-------------|----------------------------|------------------------------------|---------------------|----------------------|-------------------------------|-------------------------|-----------------------------------|--------------------------------|---------------------------|-------------------------------|---------------------------------------|------|
|                 | U.S.<br>Gal. |     | BTU/Hr.<br>Input    | BTU/Hr.<br>Input  | U.S.<br>GPH                                  | lmp.<br>GPH | U.S.<br>GPH                | lmp.<br>GPH                        | in.                 | in.                  | in.                           | in.                     | Conn.<br>in.                      | in.                            | in.                       | Conn.<br>in.                  | in.                                   | lbs. |
| PDX1-40S6FBN    | 40           | 33  | 40,000              | 38,000            | 43   | 36          | 41                         | 34                                 | 58 <sup>3</sup> /4  | 20                   | 2                             | 423/4                   | 14                                | 483/4                          | 55 <sup>3</sup> /8        | 50 <sup>1</sup> /8            | <b>30</b> <sup>1</sup> / <sub>2</sub> | 146  |
| PDX1-50S6FBN    | 50           | 42  | 40,000              | 38,000            | 43   | 36          | 41                         | 34                                 | 595/8               | 22                   | 2                             | 431/8                   | 14                                | 495/8                          | 56 <sup>3/8</sup>         | 51                            | 323/8                                 | 171  |
| Model<br>Number | Capacity     |     |                     |                   | Recovery at<br>50°C Rise*                    |             | A<br>Floor to J<br>Exhaust | B<br>Jacket<br>Dia.                | C<br>Vent<br>Size   | D<br>Floor to<br>T&P | E<br>Floor<br>to              | F<br>Floor<br>to Top    | H<br>Floor to<br>Air              | J<br>Floor<br>to               | K<br>Depth                | Approx.<br>Shipping<br>Weight |                                       |      |
|                 | Lit          | ers | Nat.<br>kW<br>Input | LP<br>kW<br>Input | Na<br>Lite<br>Ho                             | ers/        | LI<br>Lite<br>Ho           | rs/                                | Outlet mm.          | mm.                  | mm.                           | Conn.<br>mm.            | Gas<br>Conn.<br>mm.               | of Heater<br>mm.               | Intake<br>mm.             | Water<br>Conn.<br>mm.         | mm.                                   | kg.  |
| PDX1-40S6FBN    | 15           | 51  | 11.7                | 11.0              | 16   | 63          | 15                         | 5                                  | 1473                | 508                  | 50                            | 1067                    | 346                               | 1219                           | 1397                      | 1270                          | 762                                   | 66   |
|                 |              |     |                     |                   |  |             |                            |                                    |                     |                      |                               |                         |                                   |                                |                           |                               |                                       |      |

Propane models feature a Titanium Stabilized Stainless Steel propane burner. For Propane (LP) models change suffix "BN" to "SX". For 10 year model, change suffix "6" to "10".

\*Based on manufacturers rated recovery efficiency.

110 V.A.C Required for Power Venting / 110 V.A.C., 60HZ, 3.1 Amperes.

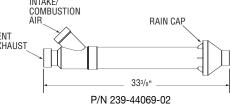


#### PDX1 50S Max. Intake Length Max. Exhaust Length Min. Vent Length Number 2 90° Elbows† Subtract 5ft. for each additional 90° elbow. +Consult I&O Manual when using four or more elbows.

2" Vent Pipe

Max. Intake Length

#### 2" Concentric Vent Kit Termination



#### **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

BRADFORD WHITE-CANADA\* INC. Sales / Technical Support 866-690-0961 / 905-238-0100 • Fax 905-238-0105 / www.bradfordwhite.com

# Built to be the Best<sup>™</sup>

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