



# Infiniti® GR Tankless Gas Condensing Water Heater With Recirculation







#### This model features:

- ENERGY STAR® Qualified.
- Certified Green Product™ by the Green Restaurant Association.
- Residential and Commercial Application.
- Indoor and Outdoor Installation (requires outdoor installation kit).
- Stainless Steel Heat Exchanger.
- Bottom Water Connections.
- Built-in Recirculation Pump and Dedicated Recirculation Connection.
- Temperature Setting 95°F (35°C) to 185°F (85°C).
- AHRI Certified.
- 0.95 UEF.
- Ultra Low NOx System—Complies with SCAQMD Rule 1146.2 for natural gas Low NOx Emissions of 14 ng/J or 20 ppm.
- Low Lead Compliant with NSF/ANSI 372.
- Easy Installation Options:
  - Compatible with 1/2" (12.7mm) Gas Pipe up to 24 ft. (7.32m).
  - Compatible with 2" (50.8mm) PVC Vent up to 60 ft. (18.3m) or 3" (76.2mm) up to 150 ft. (45.7m).
  - Vent with PVC, CPVC, Stainless Steel or Polypropylene.
  - Supports Direct Vent, Unbalanced Vent or Outdoor Vent Cap.
- Commercial Application Features:
  - Cascade up to 2 Infiniti® GR units or mix up with up to 14 additional Infiniti® GS units.
  - Free Standing Rack System.
  - Common venting with PVC, CPVC, or Polypropylene up to 8 units.
  - Easy plumbing manifold kits.
- Service Friendly Features:
  - Air Filter and Inlet Water Filter—Mounted outside of cabinet for easy access and servicing.
  - Gasket Kit Included.

#### **Sample Specification**

Condensing gas tankless wall-mounted water heater(s) shall be Infiniti® GR Series model \_\_\_\_\_\_\_\_, which are certified by ETL to the latest edition of ANSI standard Z21.10.3/CSA 4.3. This water heater shall have a built-in digital control for temperature adjustment. This water heater shall have a built-in recirculation pump and dedicated recirculation connection. Water heater(s) shall be designed to burn natural gas or propane. Water heater(s) with rated input of \_\_\_\_\_\_\_\_\_ BTU/Hr. (kW) shall have a nominal flow rate capacity of \_\_\_\_\_\_\_\_\_ GPM/GPH (LPM/LPH) at \_\_\_\_\_\_\_\_ °F (°C) rise. Water heater(s) shall have a 11:1 Turndown ratio. Water heater(s) is rated for 150 PSI (1034 kPa) working pressure and 300 PSI (2068 kPa) test pressure. Natural gas supply pressure shall be 3.5" (89mm) to 10.5" (267mm) WC and propane gas supply pressure shall be 8.0" (203mm) to 14.0" (356mm) WC. The minimum input for natural gas and propane shall be 18,000 BTU/Hr. (5.3kW). Water heater(s) shall have a dual heat exchanger with stainless steel primary and secondary. Water heater(s) shall have ¾" (19mm) inlet gas connection with flexibility of utilizing a ½" (12.7mm), ¾" (19mm) or 1" (25.4mm) gas line. Water heater shall have a filtered ¾" (19mm) inlet and ¾" (19mm) outlet water connections. Indoor installation model shall have the water connection on the bottom of the heater. Outdoor installation should be available with the outdoor installation kit. Water heater(s) shall be vented with 2" (50.8mm) PVC/CPVC/polypropylene vent pipe at a distance not to exceed 60 ft. (18.3m) (or equivalent) with each elbow equal to 8 ft. (2.4m) of pipe length or 3" (76.2mm) PVC/CPVC/ polypropylene vent pipe at a distance 150 ft. (45.7m) (or equivalent) with each elbow equal to 5 ft. (1.5m) of pipe length. Water heater(s) shall have 15-year limited Heat Exchanger warranty and 5-year limited Parts warranty (8-year Heat Exchanger and 5-year Parts for commercial use) per Bradford White Limited Warranty.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.







15-Year Residential Heat Exchanger Warranty.\* 5-Year Parts Warranty.\*

For more information on warranty, please visit www.bradfordwhite.com For products installed in USA, Canada, and Puerto Rico.
\*See complete copy of the warranty included with the heater for limitations.

# Infiniti® GR Tankless Gas Condensing Water Heater Models -



#### **SIZING DATA**

| Model     | Configuration | Gas Type    | Max. | Input | Min. | Input | Turndown | Uniform          |  |
|-----------|---------------|-------------|------|-------|------|-------|----------|------------------|--|
|           |               |             | MBH  | kW    | MBH  | kW    | Ratio    | Energy<br>Factor |  |
| RTGR199N1 | Recirculation | Natural Gas | 199  | 58.3  | 18   | 5.3   | 11:1     | 0.95             |  |
| RTGR199X1 | Recirculation | Propane     | 199  | 58.3  | 18   | 5.3   | 11:1     | 0.95             |  |

| Model     | Water Connection | Gas Connection | Product | Shipping Weight |      |     |  |  |
|-----------|------------------|----------------|---------|-----------------|------|-----|--|--|
|           | Size             | Size           | lbs.    | kg.             | lbs. | kg. |  |  |
| RTGR199N1 | 3/4" NPT         | 3/4" NPT       | 85      | 39              | 96   | 44  |  |  |
| RTGR199X1 | 3/4" NPT         | 3/4" NPT       | 85      | 39              | 96   | 44  |  |  |

#### DOMESTIC HOT WATER CAPACITY

| Flow Rate at Degree Rise |      |     |      |     |      |     |      |     |      |     | Minir      | num |      |     |      |     |      |     |      |     |      |       |      |
|--------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
| 40                       | D°F  | 50  | )°F  | 60  | )°F  | 70  | )°F  | 80  | )°F  | 90  | ° <b>F</b> | 10  | 0°F  | 110 | 0°F  | 120 | )°F  | 130 | )°F  | 140 | )°F  | Water | Flow |
| GPM                      | LPM  | GPM | LPM  | GPM | LPM  | GPM | LPM  | GPM | LPM  | GPM | LPM        | GPM | LPM  | GPM | LPM  | GPM | LPM  | GPM | LPM  | GPM | LPM  | GPM   | LPM  |
| 9.7                      | 36.7 | 7.8 | 29.5 | 6.5 | 24.6 | 5.6 | 21.2 | 4.9 | 18.5 | 4.3 | 16.3       | 3.9 | 14.8 | 3.5 | 13.2 | 3.2 | 12.1 | 3.0 | 11.4 | 2.8 | 10.6 | 0.5   | 1.9  |

#### **CLEARANCES**

| Location | Non-Combustible | ation From<br>and Combustible<br>aces | Suggested Service Clearances |     |  |  |  |
|----------|-----------------|---------------------------------------|------------------------------|-----|--|--|--|
|          | in.             | cm.                                   | in.                          | cm. |  |  |  |
| Тор      | 10              | 25                                    | 18                           | 46  |  |  |  |
| Back     | 1               | 2.5                                   | 1                            | 2.5 |  |  |  |
| Front    | 4               | 10                                    | 40                           | 101 |  |  |  |
| Side     | 4               | 10                                    | 8                            | 20  |  |  |  |
| Bottom   | 10              | 25                                    | 24                           | 61  |  |  |  |

#### **ELECTRICAL DATA**

| Model     | Power       | Supply       | Power Consumption |           |             |  |  |  |  |  |
|-----------|-------------|--------------|-------------------|-----------|-------------|--|--|--|--|--|
|           | Main Supply | Max Current  | Standby           | Operation | Anti Freeze |  |  |  |  |  |
| RTGR199N1 | 120V 60Hz   | Less than 2A | 2.7W              | 188W      | 117W        |  |  |  |  |  |
| RTGR199X1 | 120V 60Hz   | Less than 2A | 2.7W              | 188W      | 117W        |  |  |  |  |  |

### **VENTING SYSTEM**

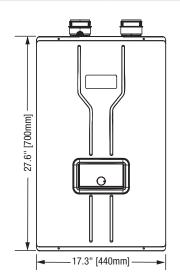
| 2" (50.8r      | nm) Combus         | tion Air / Vent Pipe        | 3" (76.2mm) Combustion Air / Vent Pipe |    |                             |  |  |  |
|----------------|--------------------|-----------------------------|--|----|-----------------------------|--|--|--|
| Maximum<br>Len | Equivalent<br>gth* | Maximum Number<br>of Elbows | Maximum Equivalent<br>Length*          |    | Maximum Number<br>of Elbows |  |  |  |
| ft.            | m.                 | 5                           | ft.                                    | m. | 0                           |  |  |  |
| 60             | 18                 | J                           | 150                                    | 45 | 0                           |  |  |  |

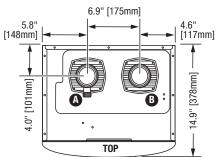
\* For each elbow, reduce maximum allowable length:

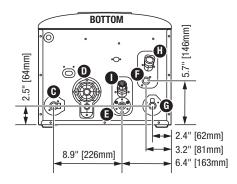
5 ft (1.5m) for each 3" 90° elbow 8 ft (2.4m) for each 2" 90° elbow 3 ft (0.9m) for each 3" 45° elbow 4 ft (1.2m) for each 2" 45° elbow

## DIMENSIONAL DATA

| Recirculation Model RTGR199N1 and RTGR199X1 |                                 |          |  |  |  |  |  |
|---|---------------------------------|----------|--|--|--|--|--|
| Location                                    | Description                     | Size     |  |  |  |  |  |
| Α   | Exhaust                         | 2" PVC   |  |  |  |  |  |
| В   | Air Intake                      | 2" PVC   |  |  |  |  |  |
| C   | Hot Water Connection            | 3/4" NPT |  |  |  |  |  |
| D   | Condensate                      | 1/2" NPT |  |  |  |  |  |
| E   | Recirculation Return Connection | 3/4" NPT |  |  |  |  |  |
| F   | Cold Water Connection           | 3/4" NPT |  |  |  |  |  |
| G   | Gas                             | 3/4" NPT |  |  |  |  |  |
| Н   | Cold Water Filter               | _        |  |  |  |  |  |
|   | Recirculation Return Filter     | _        |  |  |  |  |  |











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Products made by Bradford White are manufactured in the United States using the finest raw materials and components from around the world.