# STATE SUPER HIGH EFFICIENCY GAS WATER HEATERS 96% Thermal Efficiency

**RESIDENTIAL PREMIER® POWER DIRECT VENT • COMMERCIAL FORCE 90+™** 





# The ideal choice for high-demand homes

With the Premier® Power Direct Vent, you have a water heater with 96% thermal efficiency for high-demand residential applications. Homeowners can say goodbye to cold showers because this advanced alternative to larger water heaters or on-demand units can go "nonstop." Continuous\* flow ensures a supply that's always ready for one more hot shower.

#### Designed for today's lifestyles,

the Premier® Power Direct Vent is wellsuited for larger homes with multiple bathrooms and whirlpool tubs and for families with teenagers, who typically take longer and more frequent showers.

### Unlike standard 50 & 75-gallon

units, this water heater has a substantially higher first-hour delivery and recovery, providing homeowners with a nonstop flow of hot water.\* And with 96% thermal efficiency, it heats more water for significantly less, which equates to welcome energy savings.

#### Compared to on-demand water

heaters, the Premier® Power Direct Vent manages changes in demand more effectively and delivers a nonstop\* supply of hot water. And unlike on-demand units, there won't be any surprises during installation because size and placement of gas and water lines are identical to a conventional tank-type gas water heater.



# FORCE 90+™ COMMERCIAL GAS WATER HEATER

# A force for high efficiency at 96%

State offers a truly comprehensive line of commercial gas and electric water heaters, plus commercial storage tanks up to 10,000 gallons. And when a light commercial application calls for the very best, look to State's line of high-efficiency Force 90+™ units to deliver superior performance from the inside out!

With a design for light commercial applications, the Force 90+™ puts 100,000 BTU input into the tank to deliver more hot water than any "conventional" unit. Force 90+™ is the ideal choice to give smaller businesses and institutions more hot water in the same space or less than conventional units, with significant savings on their energy bills.

**Get maximum service life** with a quality commercial grade glass lining, protected by two anode rods, to meet the demands of commercial applications. The interior of the heat exchanger is also glass lined to protect against flue gas condensate.

Helical coil heat exchanger provides maximum heating power because unlike conventional light-commercial heaters with a "flue tube" that vents hot combustion gases straight up and out, the Force 90+" achieves 96% thermal efficiency by circulating them around and around. This design provides much more heat transfer surface, keeps heat in the heat exchanger longer, and allows the Force 90+" to handle 100,000 BTU input for extraordinary water heating power.







# Durability and performance for a constant\* supply of hot water!

- Premium-Grade Glass Lining provides superior protection against leaks.
- 2 Dual Anode Rods provide the highest quality defense against leaks.
- 3 Top-Fired Ultra-Low NOx
  Gas Burner Enhanced Ultra-low
  NOx burner complies with SCAQMD Rule
  1121 and other Air Quality Management
  Districts with similar requirements for
  NOx emissions of less than 10 ng/J.
- 4 Side-Mounted Hot and Cold Recirculating Taps Allows Force 90+ to be installed as part of combination space heating/water heating applications or any system requiring a recirculating hot water loop.
- 5 PEXAN" Dip Tube for Long Life made from a rugged cross-link polymer for superior resistance to thermal oxidation, with "diffuser" design to help reduce sediment build-up.
- Advanced Electronic Control
   provides precise temperature control due
   to its state-of-the-art design. Mounted
   at eye level, the easy-to-read LCD panel
   gives both current operating modes as
   well as performance history maintenance
   and quick trouble shooting.
- iCOMM™ Compatible and can be monitored from remote locations. Call 1.888.WATER02 for more information.

- 6 Helical Internal Heat
  Exchanger Spiral heat exchanger
  keeps hot combustion gases in the
  tank longer which lengthens the heat
  transfer cycle.
- 7 On/Off Control helps simplify service and allows total shutdown during vacation by cutting all power to the water heater with the flick of a switch.
- Versatile Power Direct Vent Design uses inexpensive 2" or 3" PVC, CPVC, ABS or polypropylene pipe for intake and exhaust. Can be venter vertically thru-the-roof or horizontally thru-the-wall.
- Easy Removal of Flue Gas Condensate created by 96% efficiency, using condensate elbow and outlet supplied with water heater.



# **RESIDENTIAL** Premier® Power Direct Vent

Easy to install • Connects to 1/2" gas line • Vents using inexpensive PVC, CPVC, ABS or polypropylene • Small footprint-22"

#### Vent length in feet

2" pipe, vents up to 45 equivalent feet • 3" pipe, vents up to 128 equivalent feet • 4" PVC 120 feet • Vertical or horizontal

#### **SPECIFICATIONS**

| MODEL        | GALLON<br>CAPACITY | FIRST HOUR<br>DELIVERY | RECOVERY-<br>GALLONS PER<br>HOUR AT 90°F | BTU INPUT | HEIGHT<br>IN INCHES | DIAMETER<br>IN INCHES |
|--------------|--------------------|------------------------|--|-----------|---------------------|-----------------------|
| GP6 50 YTPDT | 50                 | 164                    | 129                                      | 100,000   | 66-3/4"             | 22"                   |
| GP6 75 YTPDT | 75                 | 182                    | 129                                      | 100,000   | 64-3/4"             | 27-3/4"               |

Available in Natural Gas or Propane.



#### PERFORMANCE COMPARISON

| MODEL   | THERMAL EFFICIENCY | FIRST HOUR DELIVERY |  |
|---|--------------------|---------------------|--|
| Premier® Power Direct Vent 50-Gallon<br>100,000 BTU | 96%                | 182 GALLONS         |  |
| Standard 40-Gallon/40,000 BTU                       | 78%                | 71 GALLONS          |  |
| Standard 50-Gallon/40,000 BTU                       | 78%                | 91 GALLONS          |  |
| Premier® Power-Vent 50-Gallon/76,000 BTU            | 90%                | 127 GALLONS         |  |

# **COMMERCIAL** Force 90+™

 $Easy\ to\ install\ \bullet\ Connects\ to\ 1/2''\ gas\ line\ \bullet\ Vents\ using\ inexpensive\ PVC,\ CPVC,\ ABS\ or\ polypropylene\ \bullet\ Small\ footprint-22''$ 

# Vent length in feet

2" pipe, vents up to 45 equivalent feet • 3" pipe, vents up to 128 equivalent feet • 4" PVC 120 feet • Vertical or horizontal



# **SPECIFICATIONS**

| MODEL       | GALLON<br>CAPACITY | BTU INPUT | RECOVERY<br>100°F RISE | HEIGHT<br>IN INCHES | DIAMETER<br>IN INCHES |
|-------------|--------------------|-----------|------------------------|---------------------|-----------------------|
| SHE50 100NE | 50                 | 100,000   | 116                    | 66-3/4"             | 22"                   |
| SHE75 100NE | 75                 | 100,000   | 116                    | 64-3/4"             | 27-3/4"               |

Available in Natural Gas or Propane.

## **PERFORMANCE COMPARISON**

| MODEL   | THERMAL EFFICIENCY | RECOVERY GALLON AT 100°F |  |
|---|--------------------|--------------------------|--|
| Force 90+™/SHE50 100NE                                | 96%                | 116 GALLONS              |  |
| Typical 70-Gallon/120,000 BTU<br>Commercial Gas Model | 80%                | 115 GALLONS              |  |

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