



COMMERCIAL-GRADE  
RESIDENTIAL GAS WATER HEATERS

## VERTEX® HV

Flexible, Powerful & Highly Efficient Gas Water Heater for the Everyday Home.

Commercial-grade hot water delivery is now more attainable than ever. The Vertex® HV provides flexible, powerful and highly efficient performance to the everyday home. The fully condensing Vertex design is so advanced, it can deliver "continuous hot water for shower after shower" at a constant flow of over 2.5 gallons per minute.\*

### ENERGY STAR® QUALIFIED

### ADVANCED ELECTRONIC CONTROL

- Precise temperature control
- Built-in diagnostics and operational information

### CONDENSING DESIGN

- High efficiency operation with up to 0.90 Uniform Energy Factor to save money on operating costs

### HELICAL INTERNAL HEAT EXCHANGER

- Spiral heat exchanger keeps hot combustion gases in the tank longer to lengthen the heat transfer cycle
- Positioned in the center of the tank for more even heat distribution
- Spiral design reduces lime scale formation on the heat exchanger to maintain high efficiency operation over time

### POWER VENT AND POWER DIRECT VENT WITH A SINGLE DESIGN

- Combined vertical and horizontal runs terminating through an outside wall. Vents using PVC, CPVC, or polypropylene pipe.
- 2" pipe, vents up to 60 equivalent feet
- 3" pipe, vents up to 150 equivalent feet

### SIDE-MOUNTED HOT AND COLD RECIRCULATING TAPS

- Allows Vertex HV to be installed as part of combination space heating/water heating applications

### AVAILABLE IN NATURAL GAS AND PROPANE

### SIDE FIRED GAS BURNER

- Unique side fire design allows for optimal burner efficiency

### BLUE DIAMOND® GLASS COATING

- Provides superior corrosion resistance compared to industry standard glass lining.

### LEAK PROTECTION TECHNOLOGY

- Comes standard with dual sacrificial anodes to protect the tank
- Optional Powered Anode available for enhanced tank protection in all water conditions
- Includes Leak Detection smart sensor that alerts audibly and visually if a leak occurs

### CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

### MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

### CODE COMPLIANCE

- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1.

### DESIGN-CERTIFIED BY CSA

- Certified at 300 psi test pressure and 150 psi working pressure. Listed according to ANSI Z21.10.1 - CSA 4.1 standards governing storage tank-type water heaters.

### 8-YEAR LIMITED TANK AND PARTS WARRANTY

- For complete information, consult written warranty or go to hotwater.com

\*Continuous hot water based on 65,000 BTU unit, 2.8 GPM continuous flow with a 65°F inlet water temperature, 110°F outlet temperature, and a unit installed per the manufacturer's instructions.



MODEL SHOWN HPCT-40L



AHRI CERTIFIED®  
[www.ahridirectory.org](http://www.ahridirectory.org)



# COMMERCIAL-GRADE RESIDENTIAL GAS WATER HEATERS

Model Number	Nominal Capacity	Rated Storage Volume	First Hour Rating (Gallons)	UEF	Thermal Efficiency	Recovery @ 90° Rise Gallon Per Hour	BTU Input Per Hour	Approx. Shipping Weight (lbs)
HPCT-40L	40	39	86	0.90	93%	62	50,000	216
HPCX-50L	50	48	118	0.90	93%	81	65,000	246

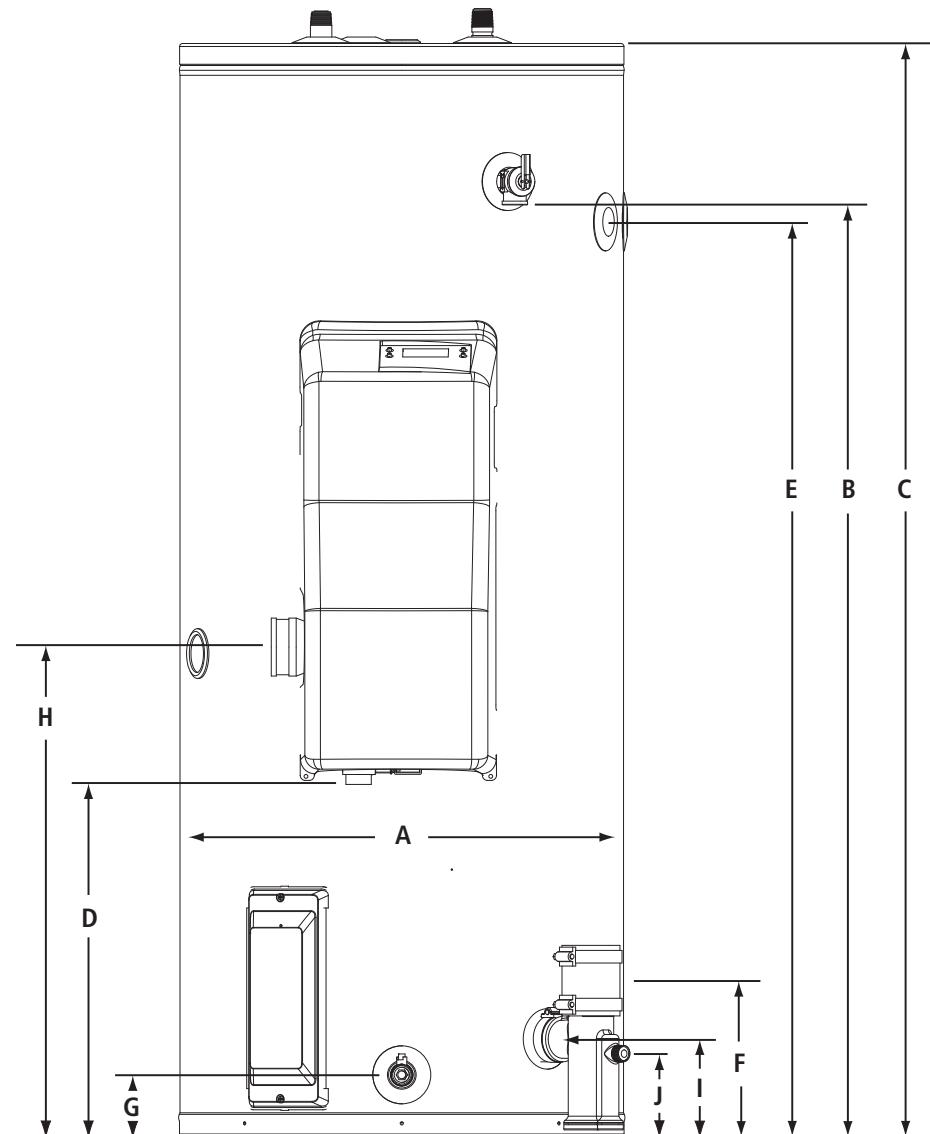
Top Inlet and outlet connections: 3/4" male NPT

Circulation loop connections: 3/4" female NPT

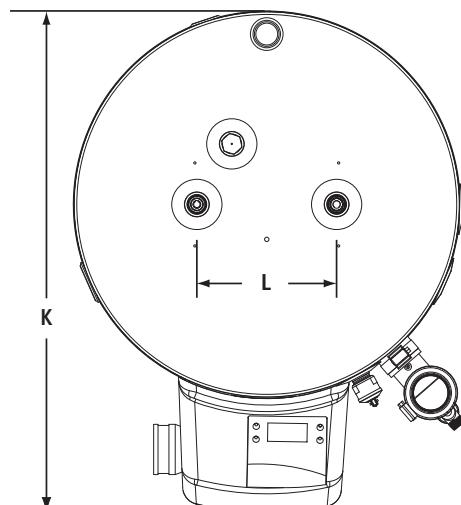
Models certified for sea level to 10,100 ft. elevation.

Optional Condensate Neutralizer Kit available (Part Number 100112380).

Optional Powered Anode Kit available (Part Number 100305721).



	Description:	Dimensions in inches	
		40 GAL	50 GAL
A	Diameter	22	22
B	Height to T&P	38-3/8	47-3/8
C	Height to TOP	44-7/8	54-1/4
D	Height to Gas Connection	16-1/2	17-1/2
E	Height to Upper Side Connect	36-3/8	45-3/8
F	Height to Lower Side Connect	8-5/8	7-7/8
G	Height to Drain Valve	3-7/8	3
H	Height to Air Intake	22-1/8	24-1/4
I	Height to Exhaust	5-3/8	4-7/8
J	Height to Condensate Connection	5-1/2	4
K	Overall Depth	28-1/2	28-1/2
L	Water Connections	8	8



For Technical Information call 800-527-1953. A.O.Smith Corporation reserves the right to make product changes or improvements without prior notice.