



# Envirosense SF<sup>®</sup>

## HIGH-EFFICIENCY RESIDENTIAL GAS WATER HEATERS

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

Commercial-grade hot water delivery is now more attainable than ever. The Vertex<sup>®</sup> 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<sup>®</sup> 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 Envirosense SF<sup>®</sup> 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 placement

#### GLASS COATING

- Provides superior corrosion resistance compared to industry standard 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 NRCAN and provincial thermal efficiency and standby loss requirements.

#### 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.

#### WARRANTY

- 8-year limited tank and parts warranty



MODEL SHOWN ENV-50N



\*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 installed per the manufacturer’s instructions.



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## HIGH-EFFICIENCY 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)
	USG (L)	USG (L)	USG (L)			GPH (LPH)	BTU/h	LB (KG)
ENV-40N	40 (151)	39 (147)	86 (325)	0,90	93%	62 (234)	50,000	216 (98,2)
ENV-50N	50 (189)	48 (181)	118 (446)	0,90	93%	81 (306)	65,000	246 (111,8)

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 (cm)	
		40 GAL	50 GAL
A	Diameter	22 (56)	22 (56)
B	Height to T&P	38-3/8 (97)	47-3/8 (120)
C	Height to top	44-7/8 (114)	54-1/4 (138)
D	Height to gas connection	16-1/2 (42)	17-1/2 (44)
E	Height to Upper Side Connect	36-3/8 (92)	45-3/8 (115)
F	Height to Lower Side Connect	8-5/8 (22)	7-7/8 (20)
G	Height to Drain Valve	3-7/8 (10)	3 (8)
H	Height to Air Intake	22-1/8 (56)	24-1/4 (62)
I	Height to Exhaust	5-3/8 (14)	4-7/8 (12)
J	Height to Condensate Connection	5-1/2 (14)	4 (10)
K	Overall Depth	28-1/2 (72)	28-1/2 (72)
L	Water Connections	8 (20)	8 (20)

