

# Essential<sup>®</sup>

Essential Power Vent gas water heaters offer up to 150 foot vent runs, energy efficiency and the flammable vapor detection system

## EFFICIENCY

- .65 - .69 UEF

## PERFORMANCE

- FHR: up to 78 gallons for 50-gallon models and up to 86 gallons for 40-gallon models
- Recovery: 32.4 to 42.4 GPH at a 90° F rise, depending on model

## SELF-DIAGNOSTIC SYSTEM

- Electronic gas control for improved monitoring and service

## LOW EMISSIONS

- Eco-friendly burner, low NOx design

## FEATURES

- Uses indoor air for combustion; blower exhausts the flue gases
- Standard 120 VAC electrical connection
- Whisper quiet blower

## FLAMMABLE VAPOR DETECTION SYSTEM

- Exclusive air/fuel shut-off device for double protection
- Maintenance free – no filter to clean
- Disables the heater in the presence of flammable vapor accumulation

## FLEXIBLE VENTING OPTIONS

- Long venting lengths up to 100 equivalent feet
- 2" or 3" PVC, ABS, or CPVC vent pipe options
- Vertical or horizontal termination

## HIGH ALTITUDE COMPLIANT

- All models certified for applications up to 7,800 ft. above sea level

## PLUS...

- Side water connections for space heating applications **available on select models**
- Quality anode rod helps protect against tank corrosion
- Temperature and pressure relief valve included
- Low lead compliant
- Durable Silicon Nitride Ignitor (HSI)
- EverKleen<sup>®</sup> patented system fights sediment build-up
- Models can operate at high ambient temperatures above 100° F and up to 175° F with special venting requirements (see Use & Care manual for more information)
- High Ambient Temperature Service Kit available for installations from 100-175° F. See chart on page 2 for more information
- Standard replacement parts

## WARRANTY

- 6-Year limited tank and parts warranty\*

\*See Residential Warranty Certificate for complete information

Units meet or exceed ANSI requirements and have been tested according to D.O.E. procedures. Units meet or exceed the energy efficiency requirements of NAECA, ASHRAE standard 90, ICC Code and all state energy efficiency performance criteria.



*Essential  
Power Vent*  
40 and 50-Gallon Capacities  
Up to 42,000 BTU/h  
Natural and LP Gas



LEED Point = 1

See specifications chart on back.

# Essential®

## Power Vent Specifications

DESCRIPTION				FEATURES						ROUGHING IN DIMENSIONS (SHOWN IN INCHES)							ENERGY INFO.	
TYPE	NOMINAL GALLON CAPACITY	RATED GALLON CAPACITY	MODEL NUMBER	GAS INPUT IN THOUS. BTU/H		RECOVERY IN G.P.H. 90° F RISE		FIRST HR. RATING (GALLONS)		HT. TO TOP OF ASSEMBLY A	TANK HEIGHT B	DIAM. C	HT. TO GAS CONN. D	WATER CONN. CENTER E	HT. TO SIDE T&P VALVE F	WATER CONN. SIZE G	SHIP WEIGHT (LBS)	UNIFORM ENERGY FACTOR (UEF)
				NAT.	LP	NAT.	LP	NAT.	LP									
Tall	40	38	6GR40PVE2-40	40	-	40.4	-	86	-	66-1/4	59	19-3/4	14	8	53-1/2	3/4	137	0.70
Tall	40	38	6GR40PVE2-36P	-	36	-	36.4	-	71	66-1/4	59	19-3/4	14	8	53-1/2	3/4	137	0.68
Tall	50	48	6GR50PVE2-42	42	-	42.4	-	78	-	65-1/2	58	21-3/4	14	8	52-1/2	3/4	170	0.68
Tall	50	48	6GR50PVE2-42P	-	42	-	42.4	-	78	65-1/2	58	21-3/4	14	8	52-1/2	3/4	170	0.68
Short	40	39	6GR40SPVE2-36	36	-	36.4	-	66	-	58-1/4	51-1/4	21-3/4	14	8	44-1/4	3/4	161	0.65
Short	40	39	6GR40SPVE2-32P	-	32	-	32.4	-	66	58-1/4	51-1/4	21-3/4	14	8	44-1/4	3/4	161	0.65
Short	50	48	6GR50SPVE2-36	36	-	36.4	-	78	-	58-1/4	51-1/4	23-3/4	14	8	44	3/4	185	0.70
Short	50	48	6GR50SPVE2-32P	-	32	-	32.4	-	78	58-1/4	51-1/4	23-3/4	14	8	44	3/4	185	0.65
<b>Models with Installed Side Water Connections</b>																		
Tall	50	48	6GRX50PVE2-42	42	-	42.4	-	78	-	65-1/2	58	21-3/4	14	8	52-1/2	3/4	167	0.68
Tall	50	48	6GRX50PVE2-42P	-	42	-	42.4	-	78	65-1/2	58	21-3/4	14	8	52-1/2	3/4	167	0.68

Uniform Energy Factor and rated gallon capacity based on Department of Energy (DOE) requirements.

Maximum and Minimum Vent Lengths for 2 - 3" Vents up to 2,000 Ft. (609 m) Above Sea Level								
Model	Gas	Heater input	Vent System Diameter	Min. Allowed Equivalent Vent Length		Max Allowed Equivalent Vent Length		Vent System Termination
		Btu/hr.		Inches	Feet	Meters	Feet	
All	Natural & Propane	42,000, 40,000, 36,000, 32,000	2	7	2.1	55	16.7	45° Elbow
			3	7	2.1	150	45.7	45° Elbow

Maximum and Minimum Vent Lengths for 2 - 3" Vents From 2,000 Ft. (609 m) through 7,800 Ft. (2,377 m) Above Sea Level								
Model	Gas	Heater Input	Vent System Diameter	Min. Allowed Equivalent Vent Length		Max Allowed Equivalent Vent Length		Vent System Termination
		Btu/hr.		Inches	Feet	Meters	Feet	
40 Gallon	Natural	40,000	2	7	2.1	25	7.6	45° Elbow
			3	7	2.1	150	45.7	45° Elbow
40 Gallon	Propane	36,000	2	7	2.1	35	10.6	45° Elbow
			3	7	2.1	150	45.7	45° Elbow
40 Gallon	Natural & Propane	36,000, 32,000	2	7	2.1	40	12.2	45° Elbow
			3	7	2.1	150	45.7	45° Elbow
50 Gallon	Natural & Propane	42,000, 36,000, 32,000	2	7	2.1	35	10.6	45° Elbow
			3	7	2.1	150	45.7	45° Elbow

For the 2" and 3" vent, one 90° elbow is approximately equal to 5 feet of pipe. One 45° elbow is approximately equal to 2.5 feet of pipe.

High Ambient Installations				
Part	Temperature Rating	Vent Length	Venting Material Required	Fitting Material Required
SP21171-High Ambient Temperature Kit	100-175° F	First 10 equivalent feet of vent pipe and/or fittings be of CPVC or ABS	CPVC (Schedule 40, ASTM F441)	CPVC (Schedule 40, ASTM F438)
			ABS (Schedule 40, ASTM D2661)	ABS (Schedule 40 DWV, ASTM D2661)

See Use and Care Manual for additional information and instructions.

