

# Residential PowerStor Series® Single-Wall Indirect Water Heater



Photo is of SW-2-65-L

### The PowerStor Series® Single-Wall Models feature:

- Heat Exchanger—Single-Wall 1½" (38mm) O.D. glass coated (Vitraglas®) carbon steel coil. The coil has a heat transfer area of 14.2 sq. ft. and a stored water volume of 2.7 Gal. (10.2L) Maximum supply temperature from the boiler must not exceed 240°F (116°C).
- Factory Installed Hydrojet® Total Performance System—Sediment reducing device that also increases first hour delivery of hot water while minimizing temperature build-up in tank.
- Vitraglas® Lining—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- Immersed Adjustable Honeywell Aquastat—Fast acting immersion aquastat for automatic temperature control (adjustable from 80°F to 160°F), (27°C to 71°C).
- Supply and Return Connections—1" (25mm) NPT female connections are located on the front for both the boiler collector supply and return.
- Insulation System—2" (51mm) Non-CFC foam insulation covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- Potable Water Connections—3/4"(19mm) NPT (1" (25mm) NPT for 120 gallon (454L) model) factory installed true dielectric fittings extend water heater life and eases installation.
- Three Protective Aluminum Anode Rods—Provide added protection against corrosion for long-term, trouble-free service.
- Steel Tank—Heavy gauge steel automatically formed, rolled and welded to assure a continuous seam for glass lining.
- T&P Relief Valve—Included.
- Low Restriction Brass Drain Valve—Durable tamper proof design.
- AHRI Certified—These water heaters are rated by the Air-Conditioning, Heating, and Refrigeration Institute to provide accurate performance data within the standards of the certification. This certification provides a recognized standard for proper comparison of hydronic appliances.









Limited Lifetime Tank and Heat Exchanger Warranties / 6-Year Limited Warranty on Component Parts.

For more information on warranty, please visit www.bradfordwhite.com

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

# Residential PowerStor Series® Single-Wall Indirect Water Heater I

# **Single Wall Models**

Meet or exceed ASHRAE 90.1b (current standard)

Model Number	Capa U.S.	lmp.	A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Aquastat	Approx. Shipping Weight
	Gal.	Gal.	in.	in.	in.	in.	in.	in.	in.	lbs.
SW-2-30-L	29	24	335/8	22	281/4	343/8	53/8	271/2	111/2	164
SW-2-40R-L	37	31	411/8	22	343/8	417/8	53/8	271/2	111/2	185
SW-2-50R-L	43	36	461/4	22	401/8	47	53/8	271/2	111/2	195
SW-2-65-L	57	47	59 <sup>1</sup> / <sub>4</sub>	22	531/8	60	53/8	271/2	111/2	225
SW-2-80-L	71	59	59	24	527/8	593/4	53/8	271/2	111/2	250
SW-2-120-L	110	92	621/2	281/4	55 <sup>3</sup> / <sub>4</sub>	631/4	63/8	281/2	111/2	370

Model Number	Capacity	A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Aquastat	Approx. Shipping Weight
	Liters	mm.	mm.	mm.	mm.	mm.	mm.	mm.	kg.
SW-2-30-L	110	854	559	718	873	137	699	292	74
SW-2-40R-L	140	1045	559	873	1064	137	699	292	85
SW-2-50R-L	163	1175	559	1019	1194	137	699	292	89
SW-2-65-L	216	1505	559	1349	1524	137	699	292	102
SW-2-80-L	269	1499	610	1343	1518	137	699	292	114
SW-2-120-L	416	1588	718	1416	1607	162	720	292	167

**AHRI Certified Water Heater Ratings** 

Model Number	First Hour Delivery @ 135°F (Gal.)		Standby Heat Loss Rating (°F/Hr.)	Minimum Output Rate of Heat Source (BTU/Hr.)	Minimum Heat Source Flow Rate (Gal./Min.)	Model Number	First Hour Delivery @ 57°C (Liters)	Continuous Draw Rating @ 57°C (Liters/Hr.)	Standby Heat Loss Rating (°C/Hr.)	Minimum Output Rate of Heat Source (kW/Hr.)	Minimum Heat Source Flow Rate (Liters/Min.)
SW-2-30-L	255	235	1.2	157,000	13.7	SW-2-30-L	965	890	0.67	46.0	51.8
SW-2-40R-L	260	235	1.1	157,000	13.7	SW-2-40R-L	984	890	0.61	46.0	51.8
SW-2-50R-L	265	235	0.9	157,000	13.7	SW-2-50R-L	1003	890	0.50	46.0	51.8
SW-2-65-L	275	235	0.7	157,000	13.7	SW-2-65-L	1041	890	0.39	46.0	51.8
SW-2-80-L	295	235	0.6	157,000	13.7	SW-2-80-L	1117	890	0.33	46.0	51.8
SW-2-120-L	325	235	0.4	157,000	13.7	SW-2-120-L	1230	890	0.22	46.0	51.8

These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180°F (82°C) boiler water supply temperature. Other results will be obtained under different conditions.

DOF	Water	Heater	Performance

DOL Water freater i entrinance									
Model Number	Maximum First Hour Rating (Gal.) @ 140°F 115°F		Draw	nuous Rating Vin.) @ 115°F	Approximate Boiler Output Needed for Ratings (BTU/Hr.)				
SW-2-30-L	279	429	4.2	6.7	220,000				
SW-2-40R-L	288	438	4.2	6.7	220,000				
SW-2-50R-L	297	447	4.2	6.7	220,000				
SW-2-65-L	306	456	4.2	6.7	220,000				
SW-2-80-L	321	470	4.2	6.7	220,000				
SW-2-120-L	357	507	4.2	6.7	220,000				

Based on 200°F boiler water temperature and 50°F potable water inlet.

Heat Exchanger Head Loss									
GPM	2	5	8	10	12				
Ft. of Hd. Loss	0.01	0.09	0.22	0.80	0.50				

# ANODE ROD CONFIGURATIONS SW-2-30-L SW-2-50R-L SW-2-65-L

### General:

All units are certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. Potable water connections are 3/4" (19mm) NPT on 8" (203mm) centers. The 120 gallon model has 1" (25mm) NPT potable water connections on 8" (203 mm) centers.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement. Suitable for Water (Potable) Heating and Space Heating.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into the potable side of this system. The potable side may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance. The heat exchanger side of the unit may be used in space heating applications.







For field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 = Fax 215-641-1612

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