

RHEEM SOLAR WATER HEATING SYSTEMS

# SOLAR SOLUTIONS

*High Efficiency, Low Energy Costs  
from Rheem*



**Solar** water heaters  
from Rheem



*relax*  
It's Rheem®



# SOLPAK™ ACTIVE SOLAR WATER HEATING PACKAGE SYSTEM



Available in 80 and 119 Gallon Capacities

- ▶ 6-Year Limited Tank Warranty\* ▶ 10-Year Limited Collector Warranty\*\*
- ▶ 2-Year Limited Pump and Control Warranty\*\*

### The System

- Closed loop glycol design
- Single and double collector systems
- Included: Solaraide™ HE tank, collectors, controller, adjustable pump, mixing valve, glycol solution, thermal expansion tank (for glycol loop)
- Sold separately: 18 AGW sensor wire, tilt mount kits(consult factory for mounting options)
- OG-300 Certification by SRCC (Pending on RS80-40BP model)

### The Heat Exchanger Tank

- All models have at least 40 gallons of hot water storage at all times
- Double wall heat exchanger – copper tubing wrap-around design
- Single element backup heating source
- 3/4" Water and collector loop connections

### The Collectors

- Flat plate design
- Black paint absorber coating
- OG-100 certified by SRCC

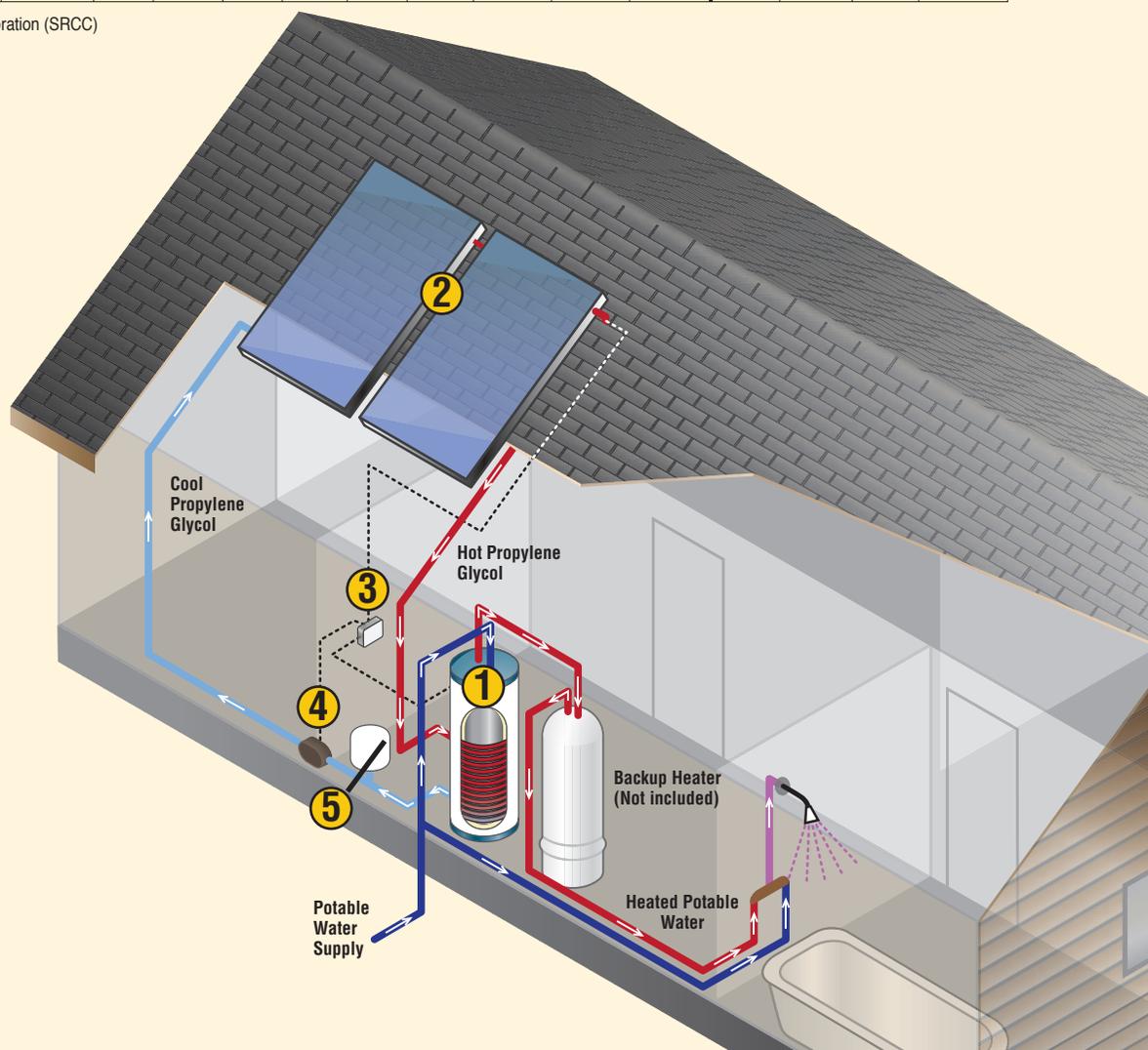
\*See Residential Warranty Certificate for complete information.  
 \*\*See SolPak Warranty Certificate for complete system information.



SYSTEM INFORMATION			COLLECTOR INFORMATION											WATER HEATER INFORMATION			
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR*	NUMBER OF COLLECTOR PANELS	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT. (GROSS)	DRY WEIGHT (LBS)	FLUID CAPACITY (US GAL)	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX. OPERATING PRESSURE	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX. WEIGHT (LBS)	ELEMENT WATTAGE
80	RS80-40BP	2.4	1	Black Paint	48-1/8	122-1/4	3-1/4	40.81	141	1.2	1.04	12	160	58-3/4	24-1/2	222	4500 W
80	RS80-48BP	2.6	2	Black Paint	36-1/8	98-1/4	3-1/4	24.61	80	.78	0.62	12	160	58-3/4	24-1/2	222	4500 W
119	RS120-64BP	3.2	2	Black Paint	48-1/8	98-1/4	3-1/4	32.79	106	1.0	0.83	12	160	62	28-1/4	380	4500 W

\*As rated by the Solar Rating & Certification Corporation (SRCC)

- ① Heat Exchanger Tank
- ② Collectors
- ③ Controller
- ④ Multi-Speed Pump
- ⑤ Thermal Expansion Tank



# SOLPAK™ ACTIVE SOLAR WATER HEATING SYSTEMS FEATURING A GAS ASSIST HEAT EXCHANGE TANK



## Available in 75 Gallon Capacity

- ▶ 6-Year Limited Tank Warranty\* ▶ 10-Year Limited Collector Warranty\*\*
- ▶ 2-Year Limited Pump and Control Warranty\*\*

### The System – a Single Tank Solar Solution!

- Takes up less space
- Drop in replacement for current gas water heating system
- Fast recovery for high demand situations
- Closed loop glycol design
- Included: HE tank, collectors, controller, multi-speed pump, mixing valve, glycol solution, thermal expansion tank (for glycol loop)
- Sold separately: 18 AGW sensor wire, tilt mount kits (consult factory for mounting options)
- OG-300 Certification by SRCC (Pending)

### The Heat Exchanger Tank

- FVIR compliant
- 75 Gallon capacity
- 75.1 BTU input per hour (natural gas)
- Double wall heat exchanger – copper tubing wrap-around design
- Gas backup heating source
- 3/4" Water and collector loop connections

### The Collectors

- 3' x 8' and 4' x 10'
- Flat plate design
- Black paint absorber coating
- OG-100 certified by SRCC

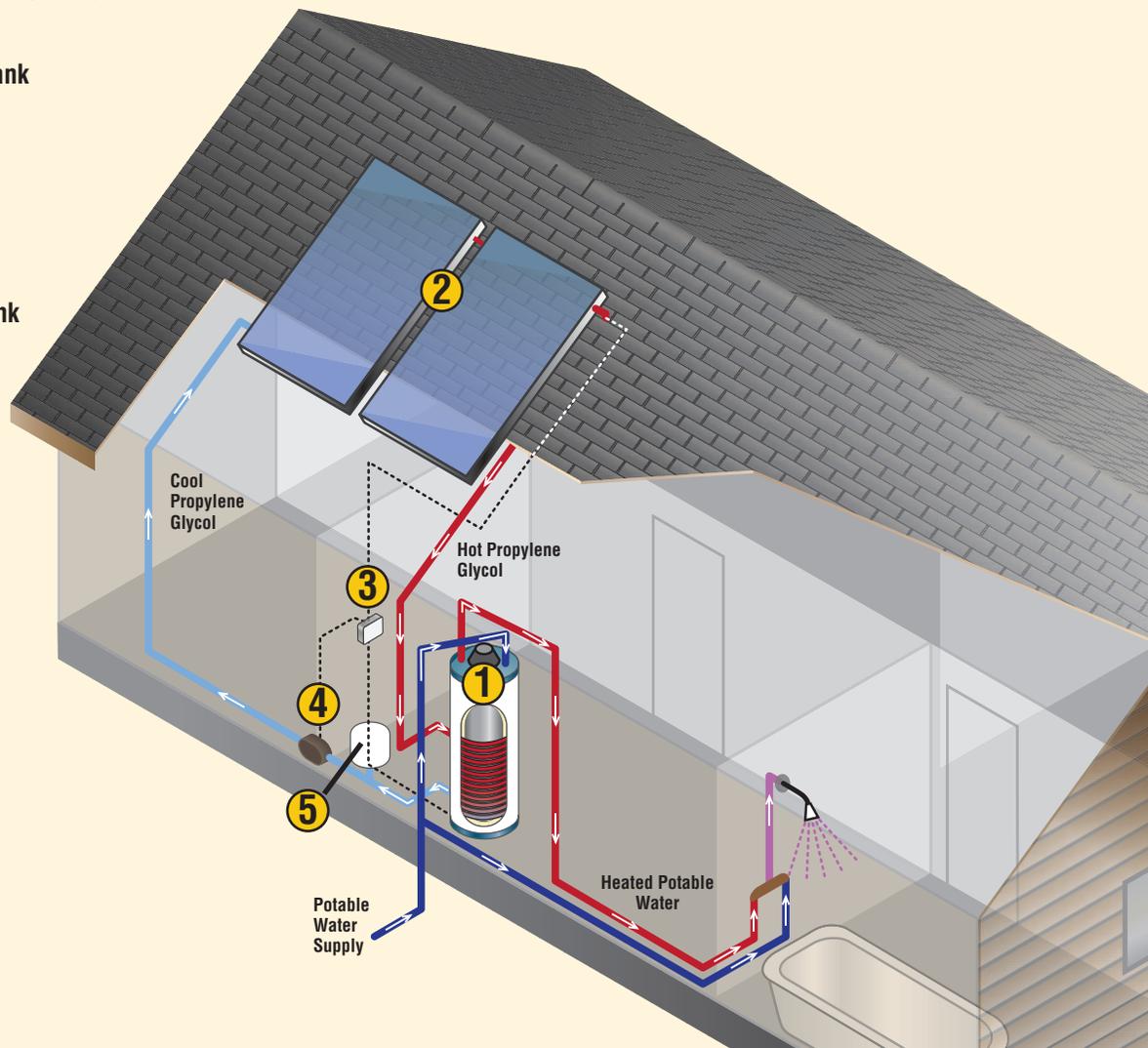
\*See Residential Warranty Certificate for complete information.  
 \*\*See SolPak Warranty Certificate for complete system information.



SYSTEM INFORMATION			COLLECTOR INFORMATION										WATER HEATER INFORMATION				
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR*	NUMBER OF COLLECTOR PANELS	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT. (GROSS)	DRY WEIGHT (LBS)	FLUID CAPACITY (US GAL)	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX. OPERATING PRESSURE	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX. WEIGHT (LBS)	BTU INPUT
75	RSG75-48BP	–	2	Black Paint	36-1/8	98-1/4	3-1/4	24.61	80	.78	0.62	12	150	60	26-1/4	340	75.1
75	RSG75-40BP	–	1	Black Paint	40-1/8	122-1/4	3-1/4	40.81	141	1.20	1.04	12	160	60	26-1/4	340	75.1

\*As rated by the Solar Rating & Certification Corporation (SRCC)

- 1 Gas Heat Exchanger Tank
- 2 Collectors
- 3 Controller
- 4 Multi-Speed Pump
- 5 Thermal Expansion Tank



# SOLPAK™ OPEN LOOP ACTIVE SOLAR WATER HEATING PACKAGE SYSTEM



Available in 80 and 119 Gallon Capacities

- ▶ 6-Year Limited Tank Warranty\* ▶ 10-Year Limited Collector Warranty\*\*
- ▶ 2-Year Limited Pump and Control Warranty\*\*

### The System

- Open loop design
- Not suitable for freezing climates
- Single and double collector systems
- Included: Solaraide™ storage tank, collectors, controller, multi-speed pump, mixing valve, freeze protection valve, air release valve, check valve
- Sold separately: 18 AGW sensor wire, tilt mount kits (consult factory for mounting options)
- OG-300 Certification by SRCC (Pending)

### The Universal Tank

- Flexibility to install in either a side or top connection application
- Single element back-up heating source
- 3/4" water and collector loop connections

### The Collectors

- Two sizes: 4' x 8' and 4' x 10'
- Flat plate design
- Black paint absorber coating
- OG-100 certified by SRCC

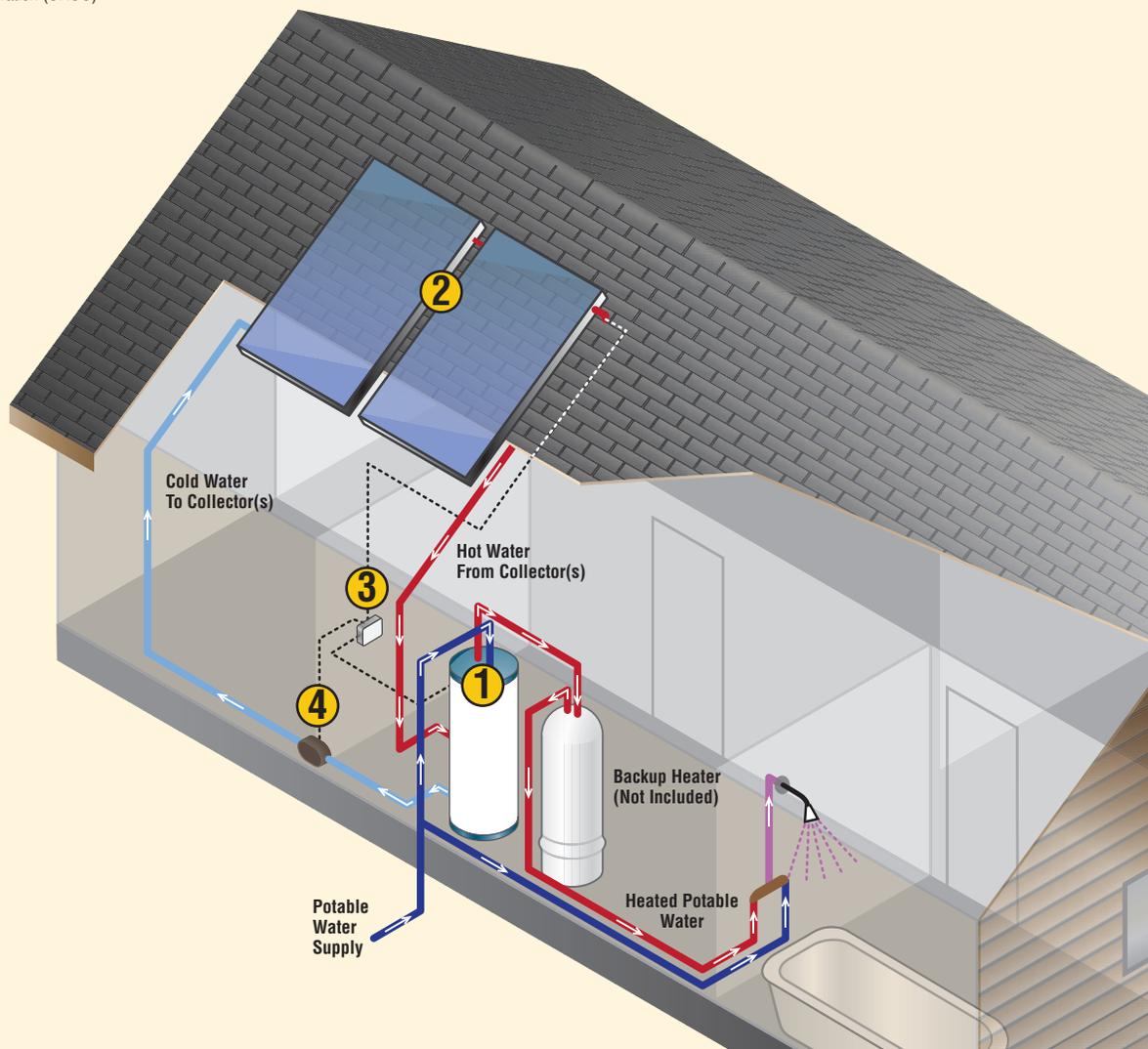
\*See Residential Warranty Certificate for complete information.  
 \*\*See SolPak Warranty Certificate for complete system information.



SYSTEM INFORMATION			COLLECTOR INFORMATION											WATER HEATER INFORMATION			
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR*	NUMBER OF COLLECTOR PANELS	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT. (GROSS)	DRY WEIGHT (LBS)	FLUID CAPACITY (US GAL)	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX. OPERATING PRESSURE	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX. WEIGHT (LBS)	ELEMENT WATTAGE
80	RSO80-40BP	2.3	1	Black Paint	48-1/8	98-1/4	3-1/4	40.81	150	1.2	1.04	25	160	58-3/4	24-1/2	192	4500 W
119	RSO120-64BP	1.8	2	Black Paint	122-1/4	98-1/4	3-1/4	32.79	106	1.0	0.83	12	150	62	28-1/4	336	4500 W

\*As rated by the Solar Rating & Certification Corporation (SRCC)

- 1 Solar Storage Tank
- 2 Collectors
- 3 Controller
- 4 Multi-Speed Pump



# SOLPAK™ ACTIVE SOLAR WATER HEATING SYSTEM FEATURING MARATHON® TANKS



## Available in 85 and 105 Gallon Capacities

- ▶ Lifetime Limited Tank Warranty\* ▶ 10-Year Limited Collector Warranty\*\*
- ▶ 5-Year Limited Tank Parts Warranty\* ▶ 2-Year Pump Controller Warranty\*\*

### The System

- Closed loop glycol system
- Double collector systems
- Included: Marathon tank, collectors, pump controller, mixing valve, glycol solution (3 gallons), thermal expansion tank (for glycol loop) and more
- Sold separately: 18 AGW sensor wire, tilt mounting kits (consult factory for mounting options)

### The Tank

- Strong, polybutene material built to last as long as the solar system
- Unique, corrosion resistant design will never rust
- Lightweight and easy to install
- Electrical element backup heating source

### The Pump Controller

- Combines a variable speed solar temperature control, collector circulator, storage tank circulator and heat exchanger in a single unit
- Digital display with energy monitoring
- Flexible, programmable inputs/outputs



### The Collectors

- Two sizes: 3'x8' and 4'x8'
- Flat plate design
- Black paint absorber coating
- OG-100 certified by SRCC

\*See Residential Warranty Certificate for complete information.  
 \*\*See Solar Marathon Warranty Certificate for complete details.

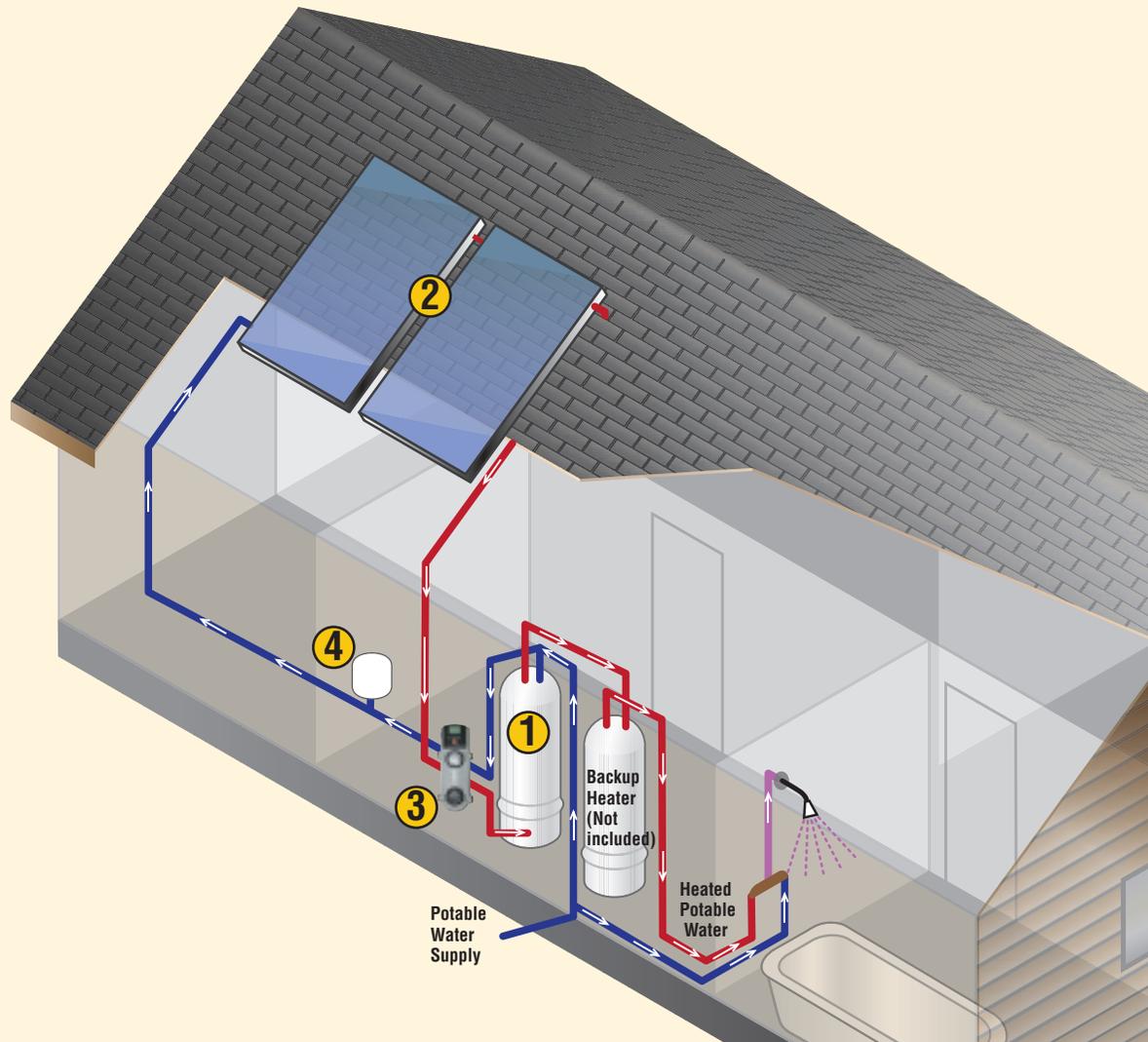


SYSTEM INFORMATION			COLLECTOR INFORMATION											WATER HEATER INFORMATION**			
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR	NUMBER OF COLLECTOR PANELS	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT. (GROSS)	DRY WEIGHT (LBS)	FLUID CAPACITY (US GAL)	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX. OPERATING PRESSURE	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX. WEIGHT (LBS)	ELEMENT WATTAGE
85	RHSME85-48P	*	2	Black Paint	36-1/8	98-1/4	3-1/4	24.61	80	.78	0.62	12	150	66-1/4	28-1/4	134	4500 W
105	RHSME105-64P	*	2	Black Paint	48-1/8	98-1/4	3-1/4	32.79	106	1.0	0.83	12	150	66-3/4	30-1/4	152	4500 W

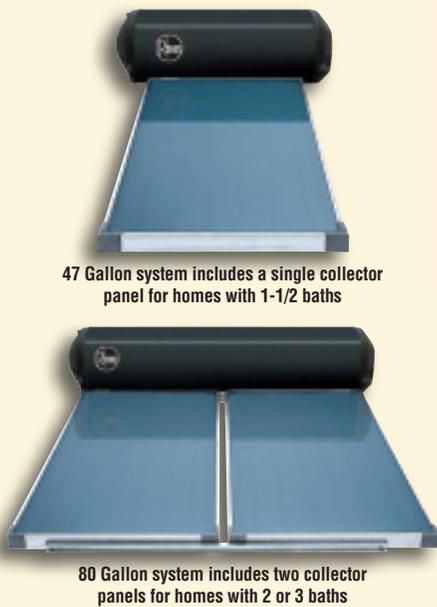
\*As rated by the Solar Rating & Certification Corporation (SRCC)

\*\*240V AC

- 1 Storage Tank
- 2 Collectors
- 3 Solar Control System
- 4 Thermal Expansion Tank



# SOLARAIDE™ PASSIVE WATER HEATING SYSTEM



## Available in 47 and 80 Gallon Storage Capacities

### ► 5-Year Limited Tank, Collector and Parts Warranty\*

#### The System

- Passive design, requires no pumps or controllers
- Available in two system configurations: RS47-21BP, 47 gallon storage capacity and RS80-42BP, 80 gallon storage capacity
- Complete system includes tank, collector(s), installation kit, and heat transfer fluid
- Closed loop, indirect heat exchange
- OG-300 Certification by SRCC

- Rugged steel tank with vitreous enamel tank lining
- Immersion, copper sheath backup element

#### The Collector

- Black polyester powdercoat collector absorber coating
- 35 multi-flow risers for faster heat transfer
- OG-100 certified by SRCC
- Flat plate design

#### The Tank

- Single wall external heat exchanger completely surrounds storage tank

\*See Residential Warranty Certificate for complete information.

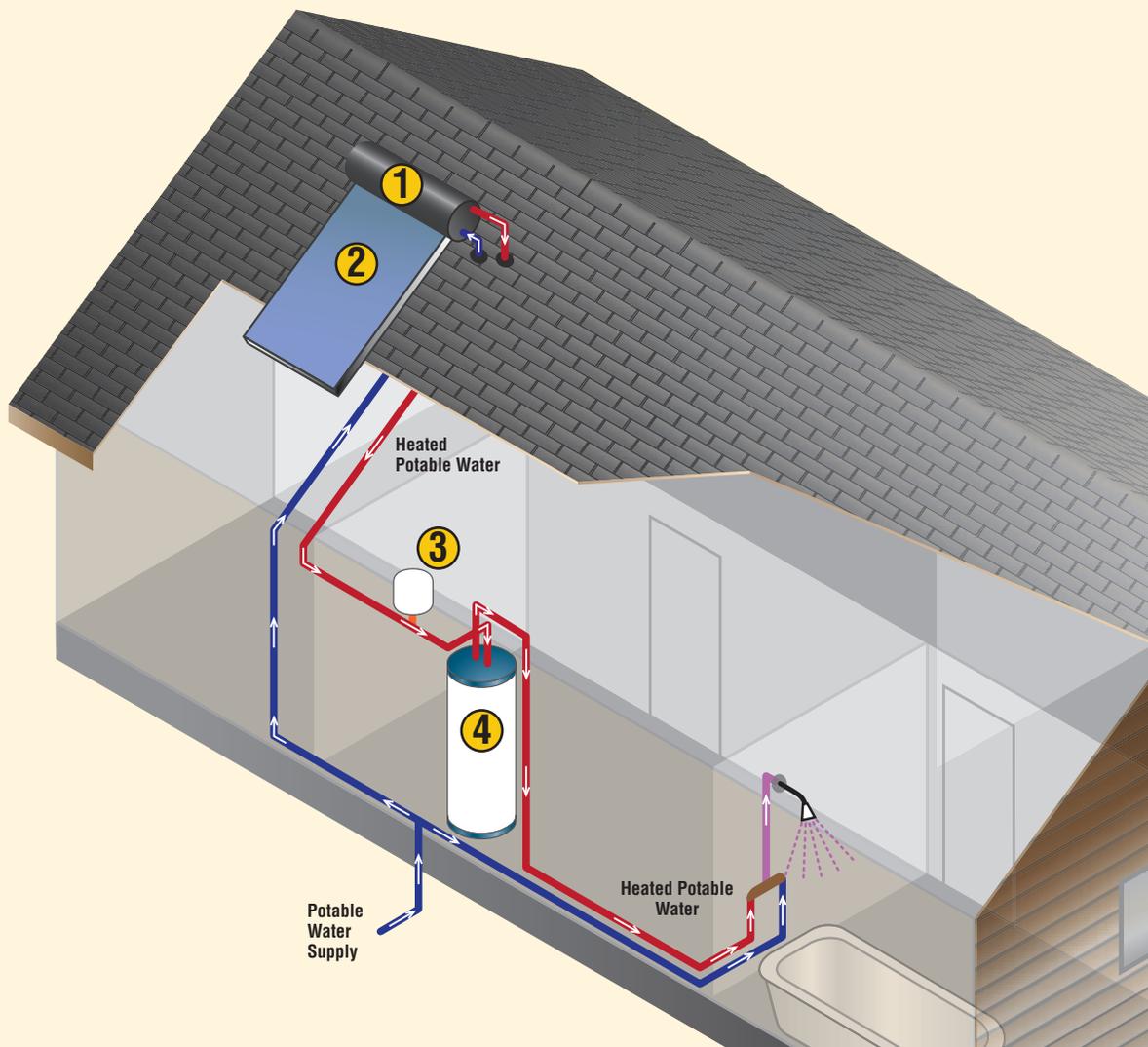


OG-300  
Certified  
by SRCC

DESCRIPTION							ROUGHING IN DIMENSIONS					
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR*	NUMBER OF COLLECTOR PANELS	WORKING PRESSURE (TANK)	DELIVERY CAPACITY (SOLAR)	BACKUP ELEMENT SPECIFICATIONS	SYSTEM (IN INCHES)		TANK (IN INCHES)	COLLECTOR (IN INCHES)	APPROX. SYSTEM WEIGHT	
							LENGTH	WIDTH			EMPTY	FULL
47	RS47-21BP	1.3	1	145 PSI	42.3 GAL.	2.4kw, 240V	97-1/2	58-1/2	58.5 x 20.1 x 20.1	76.3 x 40.3 x 3.04	236 LBS.	641 LBS.
80	RS80-42BP	1.5	2	145 PSI	68 GAL.	2.4kw, 240V	97-1/2	91	90.9 x 20.1 x 20.1	76.3 x 40.3 x 3.04	402 LBS.	1,079 LBS.

\*As rated by the Solar Rating & Certification Corporation (SRCC)

- 1 Thermosiphon Heat Exchanger Tank
- 2 Collector
- 3 Thermal Expansion Tank
- 4 Existing or Backup Water Heater (Not Included)



# SOLAR COLLECTORS



## Available in 3 Sizes

### ▶ 10-Year Limited Collector Warranty\*

- OG-100 certified by SRCC
- Durable low iron tempered glass
- Integral mounting channel for easy installation
- Stainless steel fasteners
- Suitable for open and closed loop systems
- Copper absorber plate
- Can be mounted horizontally or vertically

\* See Warranty Certificate for complete information.



MODEL NUMBER	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT.	DRY WEIGHT (LBS.)	FLUID CAPACITY	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX OPERATING PRESSURE
RS24-BP	Black Paint	36-1/8	98-1/4	3-1/4	24.61	80	0.78	0.62	12	160
RS32-BP	Black Paint	48-1/8	98-1/4	3-1/4	32.79	106	1	0.83	12	160
RS40-BP	Black Paint	48-1/8	122-1/4	3-1/4	40.81	141	1.2	1.04	12	160
RS24-BC	Black Chrome	36-1/8	98-1/4	3-1/4	24.61	80	0.78	0.62	12	160
RS32-BC	Black Chrome	48-1/8	98-1/4	3-1/4	32.79	106	1	0.83	12	160
RS40-BC	Black Chrome	48-1/8	122-1/4	3-1/4	40.81	141	1.2	1.04	12	160

### THERMAL PERFORMANCE RATINGS\* BP SERIES

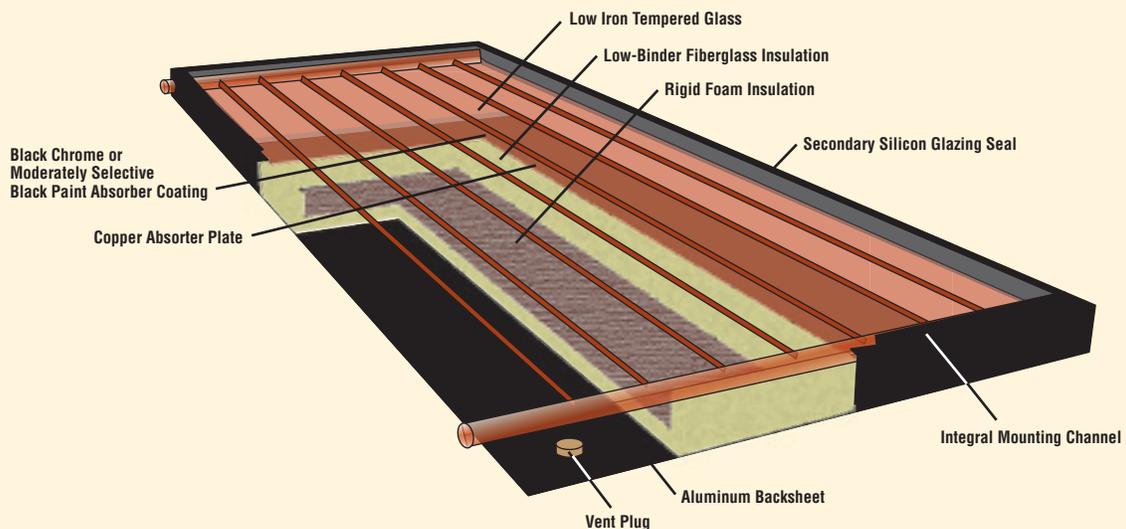
Category (Ti-Ta) Ti = inlet fluid temp. Ta = ambient air temp.	Btu / ft <sup>2</sup> / Day		
	CLEAR DAY 2000 Btu / ft <sup>2</sup> / Day	MILDLY CLOUDY DAY 1500 Btu / ft <sup>2</sup> / Day	CLOUDY DAY 1000 Btu / ft <sup>2</sup> / Day
A(-9°F)	1,284	971	659
B(9°F)	1,169	854	542
C(36°F)	984	677	372
D(90°F)	619	343	89
E(144°F)	280	62	-

### THERMAL PERFORMANCE RATINGS\* BC SERIES

Category (Ti-Ta) Ti = inlet fluid temp. Ta = ambient air temp.	Btu / ft <sup>2</sup> / Day		
	CLEAR DAY 2000 Btu / ft <sup>2</sup> / Day	MILDLY CLOUDY DAY 1500 Btu / ft <sup>2</sup> / Day	CLOUDY DAY 1000 Btu / ft <sup>2</sup> / Day
A(-9°F)	1,332	1,005	680
B(9°F)	1,218	890	565
C(36°F)	1,040	720	402
D(90°F)	699	405	127
E(144°F)	390	137	-

Thermal performance is obtained by multiplying the collector output for the appropriate application and insolation level by the total gross collector area.

\*Collector ratings are derived from the Solar Rating & Certification Corp (SRCC) Document RM-1 and Standard OG-100.



# MORE RHEEM SOLAR WATER HEATING SOLUTIONS!

## Storage Tanks



**Solaraide™**  
A Universal Storage Tank and Electric Storage Water Heaters for Solar Applications



**Solaraide™ HE**  
Solar Heat Exchanger, Solar Tank, or Electric Storage Water Heater



**Solar Indirect**  
Solar Storage Tank with Single Wall Internal Heat Exchanger and Back-up Heating Element



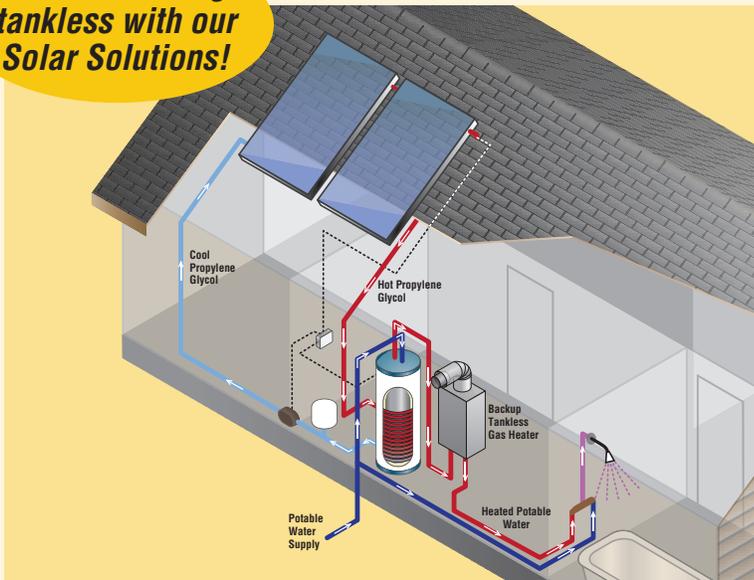
**Marathon® Thermal Storage Tanks**  
Specifically Designed for Solar Applications



**Solaraide™ HE Tank with Gas Assist**  
For Use in Residential Closed Loop Solar Water Heating Applications



**Ask about using tankless with our Solar Solutions!**



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**Email: solar@rheem.com**  
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