



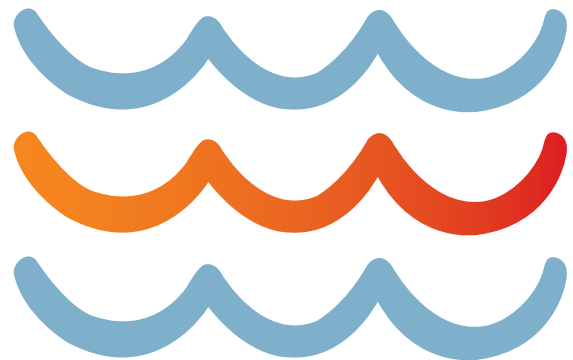
The new degree of comfort.™

# MAXIMUM PERF<sup>o</sup>RMANCE



**SPIDER<sup>fire</sup>:** Delivers high efficiency and real savings for today's businesses

- Up to 97% thermal efficiency
- 80 and 100-gallon capacity models
- Patented heat exchanger system eliminates hot spots
- Ultra low NO<sub>x</sub> burner
- Eye-level LCD diagnostics



# SPIDERfire takes a bite out of fuel costs

The SPIDERfire® family of 80 and 100-gallon condensing commercial water heaters offers a wide range of Btu/h inputs and ultra-high thermal efficiencies. The result is fuel savings and a higher hot water recovery rate – especially during periods of peak demand.

## How SPIDERfire Works

The heart of the SPIDERfire is its patented multi-leg, heat-exchange system. Our proprietary design provides a remarkably efficient heat transfer system.



1. Top burner blows combustion gases down the main flue.
2. Hot gases traverse nearly the full length of the elongated tubes two more times, extracting the heat.
3. By the end of the cycle, the temperature of the flue gases drops to between 110°F and 140°F and is cool enough for condensation to begin.

## Exclusive SPIDERfire Features

### Durable, Energy-efficient “Wet-base” Design

Rheem engineered a “wet base” for the lower portion of its flue system, suspending the first two legs of the porcelain coated flue network in water. Hot spots are eliminated and the design boosts efficiency.

### Advanced Burner Operation

Latest 80 and 100-gallon models have increased burner surface area for ultra smooth ignition and quiet operation.

### LCD Diagnostic System

Positioned at eye level, it monitors key functions and includes a scrollable, operational history that details usage.

### Slim Profile

SPIDERfire’s narrow diameters and modest height will fit in tight spaces.

### Brass Drain Valve

Factory installed, full-port, full-flow brass drain valve for faster draining and servicing.

### Third-party Tested

The SPIDERfire unit has been extensively tested by Rheem and a third-party agency for water conditions, temperature, corrosive environments, dust and lint, increased cycling, and venting configurations.

### Made in America

Manufactured in Montgomery, AL.

## SPIDERfire Fits Many Commercial Applications

With its sleek modern design, SPIDERfire models are engineered to quickly deliver substantial amounts of low-cost hot water that meets the needs of larger commercial applications.



Athletic Clubs

Restaurants

Laundromats

## Additional SPIDERfire Features

### PVC or CPVC Venting

SPIDERfire's cooler flue gases permit venting through low-cost tubing, which means it can be installed virtually anywhere.

### Power Vent and Power Direct Vent Installation

All models can be installed as a PV or PDV. The PDV is a good choice where negative air pressure or indoor air quality is a concern.

### Multiple Water Connections

Hot and cold connections on front and rear for more installation options.

### Natural and LP Gas

All SPIDERfire models are available in either natural or LP gas.

### Reduced Emissions

Ultra low NOx burner design reduces greenhouse emissions. SCAQMD Rule 1146.2 compliant: 14ng/J NOx emissions.

### Direct Spark-to-pilot Ignition System

Energy saving design ignites the pilot only when there is a call for heat.

### ASME Certification

All inputs are available with ASME certification.

### Warranty

Standard three-year limited warranty can be upgraded to five years.

*Please refer to Commercial Warranty Certificate.*



80 and 100-gallon models

## Customer Benefits

### Specifying Engineers

SPIDERfire offers ultra-high efficiency and energy savings. With maximum delivery of up to 516 gallons of hot water for one hour at a 100 degree rise, its performance meets the needs of most businesses. Indoor air quality issues can be addressed by drawing combustion air from outside the building with a power direct vent installation. The small footprint reduces space requirements and long vent runs can be achieved through the use of low-cost PVC venting.

### Contractors

SPIDERfire's narrow diameter fits more easily down stairs and in tight places. Hot and cold water connections on both sides of the jacket provide installation flexibility, especially during retrofits. The eye level status and diagnostic display is scrollable and reduces guess work. Low-cost plastic venting can be used for power or power direct vent applications.

### Facilities Managers

SPIDERfire's energy savings is an attractive solution to escalating costs. Because businesses often have heavy periods of hot water demand daily, the ability to deliver up to 516 gallons for one hour helps keep you in business. Easy-to-read status and diagnostic display provides key information for faster installation and service. Standard three-year warranty can be increased to five years.



## SPIDERfire in Action: Hazeltine National Golf Club

Steeped deep in tradition and natural beauty, Hazeltine National Golf Club has hosted more United States Golf Association (USGA) events than any other golf club in the country.

"Without a reliable supply of hot water, our club simply cannot function," explained Matt Murphy, who has managed club operations since 2007. "From our kitchen and culinary staff, to guest services and locker rooms, down to our onsite laundry facility – dependable hot water is critical." He added that the club hosts more than 150 events and draws upwards of 60,000 members and guests each year.



Three 100-gallon SPIDERfire models installed

"We are very pleased with the outcome of this extensive course and facilities renovation and especially our new clubhouse," said Murphy. "We're experiencing a 20-30 percent reduction in energy costs for the new clubhouse, despite increasing our square footage by 25 percent. Based on the enormous amount of hot water used by our kitchen, laundry and guest services, I would attribute a sizable portion of these energy savings to our high-efficiency water heating system."



The new degree of comfort™



Commercial Gas  
SPIDERfire Water Heaters

### SPIDERfire Specifications

RECOVERY CAPACITIES					
Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises					
MODEL NUMBER	INPUT (BTU/H) NAT. & LP	THERMAL EFFICIENCY	UNITS	100°F (56°C)	140°F (78°C)
GHE80-130(A)	130,000	97%	GPH	153	109
			LPH	580	413
GHE80-150(A)	150,000	94%	GPH	171	122
			LPH	648	462
GHE80-200(A)	199,900	94%	GPH	228	163
			LPH	864	618
GHE80-250(A)	250,000	92%	GPH	279	199
			LPH	1057	754
GHE80-300(A)	300,000	92%	GPH	335	239
			LPH	1270	906
GHE100-130(A)	130,000	95%	GPH	150	107
			LPH	567	405
GHE100-160(A)	160,000	95%	GPH	184	132
			LPH	698	499
GHE100-200(A)	199,000	95%	GPH	229	164
			LPH	868	620
GHE100-250(A)	250,000	93%	GPH	282	201
			LPH	1068	763
GHE100-300(A)	300,000	93%	GPH	338	242
			LPH	1282	916
GHE100-350(A)	350,000	92%	GPH	390	279
			LPH	1479	1057
GHE100-400(A)	399,900	92%	GPH	446	319
			LPH	1688	1209

MAXIMUM DELIVERY								
In U.S. Gallons and Liters (Includes useable storage and recovery for indicated times)								
MODEL NUMBER	GAL.	LITERS	INPUT (BTU/H) NAT. & LP	TEMP. RISE	UNITS	5 MIN.	1 HR.	MIN. TO RECOVER CONTENTS
GHE80-130(A)	80	303	130,000	100 F	GAL.	69	209	31
				56°C	LTR.	262	792	
GHE80-150(A)	80	303	150,000	100°F	GAL.	70	227	28
				56°C	LTR.	265	860	
GHE80-200(A)	80	303	199,900	100°F	GAL.	75	284	21
				56°C	LTR.	284	1076	
GHE80-250(A)	80	303	250,000	100°F	GAL.	79	335	17
				56°C	LTR.	299	1270	
GHE80-300(A)	80	303	300,000	100°F	GAL.	84	391	14
				56°C	LTR.	318	1482	
GHE100-130(A)	100	379	130,000	100°F	GAL.	83	220	39
				56°C	LTR.	313	833	
GHE100-160(A)	100	379	160,000	100°F	GAL.	85	254	33
				56°C	LTR.	323	964	
GHE100-200(A)	100	379	199,000	100°F	GAL.	89	299	26
				56°C	LTR.	338	1134	
GHE100-250(A)	100	379	250,000	100°F	GAL.	94	352	21
				56°C	LTR.	354	1333	
GHE100-300(A)	100	379	300,000	100°F	GAL.	98	408	18
				56°C	LTR.	372	1547	
GHE100-350(A)	100	379	350,000	100°F	GAL.	103	460	15
				56°C	LTR.	389	1745	
GHE100-400(A)	100	379	399,900	100°F	GAL.	107	516	14
				56°C	LTR.	406	1956	

All models have a maximum setpoint of 185°F.

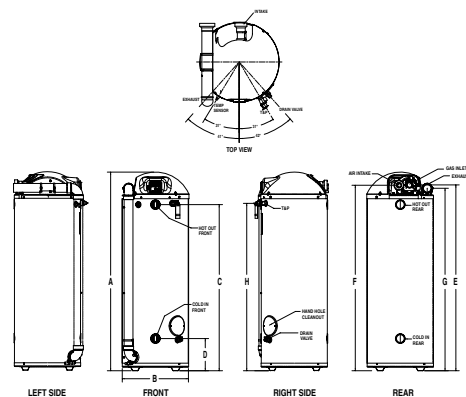
DIMENSIONAL INFORMATION													
All dimensions shown in English and Metric													
MODEL NUMBER	UNITS	A	B	C	D	E	F	G	H	VENT	WATER CONN.		APPROX. SHIP. WT. (LB)*
											INLET	OUTLET	
GHE80-130(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2", 3", 4"	2" NPT	2" NPT	725
	mm	1768	667	1680	324	1641	1646	1595	1692				
GHE80-150(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2", 3", 4"	2" NPT	2" NPT	725
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE80-200(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2", 3", 4"	2" NPT	2" NPT	745
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE80-250(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	3", 4"	2" NPT	2" NPT	745
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE80-300(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	3", 4"	2" NPT	2" NPT	745
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE100-130(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-160(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-200(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-250(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	795
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-300(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	795
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-350(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	800
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-400(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	800
	mm	2001	667	1674	324	1873	1869	1829	1687				

\*Weights listed are for non-ASME. Add 35 lbs. for ASME models.  
 130,000 - 199,000 Btu/h models are certified to be installed with 2" venting.  
 All models require a 120V power source.  
 Input rates 130-199: 1/2" gas inlet. Input rates 250-400: 3/4" gas inlet.  
 See use and care manual for venting details.  
 †Overall width is 27-5/16" due to exhaust cover.

Zero inch clearance to all combustible surfaces on sides; 6" top clearance for 130 to 300 models; 8" for 350 to 400 models.

Models with inputs of 130,000 Btu/h thru 199,000 Btu/h are certified to vent with 2" schedule 40 PVC, CPVC or ABS pipe.

(For Canadian installations, please use ULC-S636 PVC or CPVC pipe.)



In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Water Heating • 101 Bell Road  
Montgomery, Alabama 36117-4305 • 1.800.621.5622

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1  
Brampton, Ontario L6Y 0P5 • 1.800.268.6966



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