

SCOPE OF WORK

GENERAL CONDITIONS

1. All schedules will be coordinated with staff to inform residents so that onsite management can (give written notice) of work 48 hours in advance.
2. All debris will be put immediately into refuse containers for proper disposal according to code and not temporarily left in parking lot or on grass areas. (provided by contractor)
3. Work to be done in timely fashion and coordinated with the Property Management office Monday thru Friday 8-5 p.m.

EXISTING CONDITIONS

1. Examination of the Site and Existing Facilities: Examine the Site and existing facilities and become familiar with local conditions under which the Work is to be performed and correlate personal observations with the requirements of the Contract Documents. Failure by Contractor to have acquainted himself with available information concerning Site conditions, including factors affecting costs and liabilities, shall not relieve Contractor of his responsibility for performance of Work in accordance with the Contract Documents. If any items are found outside of the scope and description of work, please note in bid or RFI.
2. Protection of Existing Facilities and Services: Unless otherwise required, water, gas, lighting, power and telephone conduits and wires, sewer lines, streets, curbs, driveway approaches, buildings and other surface and subsurface structures and lines and similar items, shall be protected from disturbance, damage and disconnection by Contractor during progress of Work. Should Contractor in performance of Work disturb, disconnect or damage any of the above items, remove, repair, or replace such disconnected or damaged items with materials and construction matching existing undamaged work and restore to a condition as good as or better than existed prior to such disturbance, disconnection or damage at no additional expense to Owner.

QUALITY ASSURANCE

1. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for the proper performance of the work of this Section.
2. Perform this work in accordance with the pertinent regulations, standards and codes of governmental agencies having jurisdiction where such requirements are more stringent than specified herein. Obtain any all permits that are required for performing such work.
3. Supply safety equipment and supervision required to comply with applicable laws. Obtain required inspections. Pay all required licenses, fees, taxes and permits prior to beginning of work. If applicable, provide and pay for the cost of installing permanent electrical meter or meters as required.
4. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance with the requirements of governmental agencies having jurisdiction,

regardless of whether such materials and associated labor are specifically indicated in these Contract Documents.

DESCRIPTION OF WORK

SCOPE:

- * Turn off water to boiler.
- * Disconnect and remove existing PVI water heater.
- * Supply and install new Rheem GHE 100 SU 200 energy efficient condensing water heater or comparable model to attached specs in exhibit A.
- * Re connect new heater to existing piping with code approved fittings.
- * Connect to existing vent pipe.
- * Supply and install new CO2 safety shut off per state code.
- * Bring heater on line and set temperature.
- * Clean-up work area and haul off old equipment and debris.

Exhibit A

BOILER SPECS

(Water heater should be comparable to RHEEM GHE
100SU-200)



The new degree of comfort.

TRITON™ – The Most Intelligent, High-Efficiency Commercial Gas Water Heater in the Market

Ideal for Replacements and New Construction Applications

THE TRITON ADVANTAGE

- Most accurate, all-inclusive leak detection and prevention system in the market
- Eliminate downtime with the ability to detect and prevent water heater problems
- Lasts an average 5 years longer than the industry standard – save up to \$4500+ in replacement costs
- Patented triple pass heat exchanger constructed of ASME grade steel
- Universal retrofit features make it easy to replace any water heater
- Maximum temperature setting 185°F

SS EXCLUSIVE FEATURES

- **LeakGuard™** – All inclusive leak detection and prevention system with auto shut off valve limits water leakage outside the tank to 24 ounces
- **Integrated BMS Connectivity Via BACnet (MS/TP)** – Built-in BACnet port easily connects to building management systems (BMS)
- **Energy & Water Usage Reports** – Track usage trends and manage energy and water consumption through the Rheem EcoNet app
- **Warranty** – 5-Year limited tank*

SS AND SU FEATURES

Built-In Intelligence

- **LeakSense™** – Intelligent leak detection system detect leaks as small as a grain of sand and provides real-time notifications that warn you before catastrophic failure occurs
- **EcoNet® Smart Monitoring Technology with Integrated WiFi**** – Rheem Exclusive! Provides performance updates and alerts via both mobile device and full-color LCD display
- **Systematic Health Checks** – Ongoing self-monitoring of Triton's most vital components and alerts of potential issues
- **Preventive Maintenance Alerts** – Maintenance reminders help to extend life of the tank

Easy Retrofit/Installation

- **Multiple Connection Points** – Multiple water connections at the top, side and bottom of the unit simplify installation for replacement of any model
- **Variety of Flexible Venting Options Including InnoFlue® Flex Venting** – Polypropylene, PVC, CPVC, InnoFlue® Flex Vent and ABS materials; venting 2, 3, 4 and 6 inch diameters
- **Patented Built-In Condensate Neutralizer** – Reduces water acidity for safe drainage

Built to Last

- **Triple Pass Heat Exchanger** – Constructed with premium **ASME-grade steel** to minimize rust and corrosion for extended tank life and maximum thermal efficiency
- **Advanced Power Anodes** – Self-adjusting, non-sacrificial power anodes provide systematic monitoring of anode health and remaining life

Energy Efficient

- **Full Modulation** – Maximizes energy savings by optimizing BTU input for specific water heating demand
- **Scheduling Capability** – Adjust to heat water only during peak operating hours when your business needs it most

Plus

- Altitude certified up to 8,999 feet above sea level
- CSA/ASME rated T&P valve
- **Warranty** – SU Model: 3-Year limited tank; SS Model: 5-Year limited tank*

*See Commercial Warranty Certificate for complete information.

**WiFi broadband internet connection required.



Triton SU

Triton SS

Rheem Triton

80 and 100-Gallon Capacities
130,000-399,900 BTU/h
Sealed Combustion System
Up to 98% Thermal Efficiency
Ultra Low NOx
Natural and LP Gas



With
Optional Kit



Low Lead
Compliant



BASE MODELS: SU = SMART UNIVERSAL	
80-GALLON	100-GALLON
GHE80SU-130(A)	GHE100SU-130(A)
GHE80SU-160(A)	GHE100SU-160(A)
GHE80SU-200(A)	GHE100SU-200(A)
GHE80SU-300(A)	GHE100SU-250(A)
	GHE100SU-300(A)
	GHE100SU-400(A)

PREMIUM MODELS: SS = SMART AUTO SHUTOFF VALVE	
80-GALLON	100-GALLON
GHE80SS-130(A)	GHE100SS-130(A)
GHE80SS-160(A)	GHE100SS-160(A)
GHE80SS-200(A)	GHE100SS-200(A)
GHE80SS-300(A)	GHE100SS-250(A)
	GHE100SS-300(A)
	GHE100SS-400(A)

A= ASME Option

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	40°F (22°C)	50°F (28°C)	60°F (33°C)	70°F (39°C)	80°F (45°C)	90°F / (50°C)	100°F / (56°C)	110°F / (61°C)	120°F / (67°C)	130°F / (75°C)	140°F / (78°C)
GHE80SU/SS-130(A)	130,000	98%	GPH	382	306	255	218	191	170	153	139	127	118	109
			LPH	1448	1160	966	826	724	644	580	527	481	447	413
GHE80SU/SS-160(A)	160,000	97%	GPH	465	372	310	266	233	207	186	169	155	143	133
			LPH	1760	3305	1173	1007	882	784	704	640	587	541	503
GHE80SU/SS-200(A)	199,900	95%	GPH	576	461	384	329	288	256	230	209	192	177	165
			LPH	2180	1745	1454	1245	1090	966	871	791	727	670	625
GHE80SU/SS-300(A)	300,000	95%	GPH	855	684	570	488	427	380	342	311	285	263	244
			LPH	3237	2589	2158	1847	1616	1438	1295	1177	1079	996	924
GHE100SU/SS-130(A)	130,000	97%	GPH	382	306	255	218	191	170	153	139	127	118	109
			LPH	1446	1158	965	825	723	634	579	526	481	447	413
GHE100SU/SS-160(A)	160,000	97%	GPH	470	376	314	269	235	209	188	171	157	145	134
			LPH	1779	1423	1189	1018	890	791	712	647	594	549	507
GHE100SU/SS-200(A)	199,900	97%	GPH	582	465	388	332	291	259	233	212	194	179	166
			LPH	2203	1760	1469	1257	1102	980	882	803	746	678	628
GHE100SU/SS-250(A)	250,000	96%	GPH	727	582	485	416	364	323	291	264	242	224	208
			LPH	2752	2203	1836	1575	1378	1223	1102	999	916	848	787
GHE100SU/SS-300(A)	300,000	96%	GPH	873	698	582	499	436	388	349	317	291	269	249
			LPH	3305	2642	2203	1889	1650	1469	1321	1200	1102	1018	943
GHE100SU/SS-400(A)	399,900	95%	GPH	1139	912	760	651	570	506	456	414	380	351	326
			LPH	4312	3452	2877	2464	2158	1915	1726	1567	1438	1329	1234

MAXIMUM DELIVERY (In U.S. Gallons and Liters - Includes useable storage and recover for indicated times)															
MODEL NUMBER	INPUT (BTU/H) NAT. & LP	GAL.	LITERS	TEMP. RISE	UNITS	5 MIN.	10 MIN.	15 MIN.	20 MIN.	30 MIN.	45 MIN.	60 MIN.	120 MIN.	180 MIN.	MIN TO RECOVER CONTENTS
GHE80SU/SS-130(A)	130,000	80	303	100°F	GPH	69	81	94	107	132	171	209	362	515	31
				56°C	LPH	260	308	357	405	501	646	791	1369	1948	
GHE80SU/SS-160(A)	160,000	80	303	100°F	GPH	72	87	103	118	149	196	242	428	615	28
				56°C	LPH	271	329	388	447	564	741	917	1622	2326	
GHE80SU/SS-200(A)	199,900	80	303	100°F	GPH	75	94	114	133	171	229	286	517	747	21
				56°C	LPH	285	357	430	503	648	866	1084	1956	2827	
GHE80SU/SS-300(A)	300,000	80	303	100°F	GPH	84	113	141	170	227	312	398	740	1081	14
				56°C	LPH	320	428	535	643	859	1182	1506	2800	4094	
GHE100SU/SS-130(A)	130,000	100	379	100°F	GPH	83	95	108	121	146	185	223	376	529	39
				56°C	LPH	313	361	410	458	554	699	844	1422	2007	
GHE100SU/SS-160(A)	160,000	100	379	100°F	GPH	86	101	117	133	184	211	258	446	634	33
				56°C	LPH	324	384	443	502	621	799	977	1689	2407	
GHE100SU/SS-200(A)	199,900	100	379	100°F	GPH	89	109	128	148	186	245	303	535	768	26
				56°C	LPH	338	412	485	559	705	926	1146	2027	2908	
GHE100SU/SS-250(A)	250,000	100	379	100°F	GPH	94	118	143	167	215	288	361	652	943	21
				56°C	LPH	357	449	540	632	816	1091	1366	2467	3569	
GHE100SU/SS-300(A)	300,000	100	379	100°F	GPH	99	128	157	186	245	332	419	768	1117	18
				56°C	LPH	375	485	595	705	926	1256	1586	2908	4229	
GHE100SU/SS-400(A)	399,900	100	379	100°F	GPH	108	146	184	222	298	412	526	982	1437	13
				56°C	LPH	409	553	696	840	1128	1559	1990	3715	5441	

VENTING OPTIONS

POWER DIRECT VENT

MODEL NUMBER	MAX. VENT LENGTH (Eq. Ft.)							
	PIPE DIAMETER							
	2" (5 cm)		3" (8 cm)		4" (10 cm)		6" (15 cm)	
	INLET	OUTLET	INLET	OUTLET	INLET	OUTLET	INLET	OUTLET
GHE80SU/SS-130(A)	20	35	60	75	120	135	X	X
GHE80SU/SS-160(A)	20	35	60	75	120	135	X	X
GHE80SU/SS-200(A)	20	35	60	75	120	135	X	X
GHE80SU/SS-300(A)	X	X	60	75	120	135	120	135
GHE100SU/SS-130(A)	20	35	60	75	120	135	X	X
GHE100SU/SS-160(A)	20	35	60	75	120	135	X	X
GHE100SU/SS-200(A)	20	35	60	75	120	135	X	X
GHE100SU/SS-250(A)	X	X	60	75	120	135	X	X
GHE100SU/SS-300(A)	X	X	60	75	120	135	120	135
GHE100SU/SS-400(A)	X	X	50	65	70	85	120	135

POWER VENT

MODEL NUMBER	MAX. VENT LENGTH (Eq. Ft.)							
	PIPE DIAMETER							
	2" (5 cm)		3" (8 cm)		4" (10 cm)		6" (15 cm)	
	INLET	OUTLET	INLET	OUTLET	INLET	OUTLET	INLET	OUTLET
GHE80SU/SS-130(A)	-	35	-	135	-	185	-	X
GHE80SU/SS-160(A)	-	35	-	135	-	185	-	X
GHE80SU/SS-200(A)	-	35	-	135	-	185	-	X
GHE80SU/SS-300(A)	-	X	-	135	-	145	-	120
GHE100SU/SS-130(A)	-	35	-	135	-	185	-	X
GHE100SU/SS-160(A)	-	35	-	135	-	185	-	X
GHE100SU/SS-200(A)	-	35	-	135	-	185	-	X
GHE100SU/SS-250(A)	-	X	-	135	-	185	-	120
GHE100SU/SS-300(A)	-	X	-	135	-	185	120	120
GHE100SU/SS-400(A)	-	X	-	65	-	100	120	135

For each 90° elbow, reduce pipe length by five (5) feet.

For each 45° elbow, reduce pipe length by two and a half (2.5) feet.

Note: Vent pipe size should not be mixed for venting these units.

Use same diameter pipe for all venting of the unit.

3" Concentric = 60 ft. in, 75 ft. out

4" Concentric = 120 ft. in, 135 ft. out

See use and care manual for venting details.

Venting configurations are the same for SS Models. Vents with Polypropylene, ABS, CPVC or PVC.

NOTE: For Canadian installations, please use Polypropylene, ULC S636 PVC or CPVC.

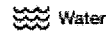
Efficiency | All models tested according to ANSI test procedures, and meet or exceed the thermal efficiency and standby loss requirements of ASHRAE standard (EPA). Also exceeds energy efficiency codes of all states including California Energy Commission (CEC).

Safety and Construction | Design certified by CSA: For operation at 185 degrees; meets all safety and construction requirement of ANSI Z21.10.3; as an automatic storage or instantaneous water heater; as an automatic circulating tank water heater; and for operation on combustible floors and in alcove installations. **Certified for 150 PSI maximum working pressure (160 PSI for ASME models).**

Optional Construction | ASME construction is available on designated models. UL Sanitation (NSF5) compliant models are available when equipped with optional seal kit (Part No. AS42690).



The new degree of comfort.



Commercial Gas
Triton Water Heaters

DIMENSIONAL INFORMATIONS (Shown in English and Metric)

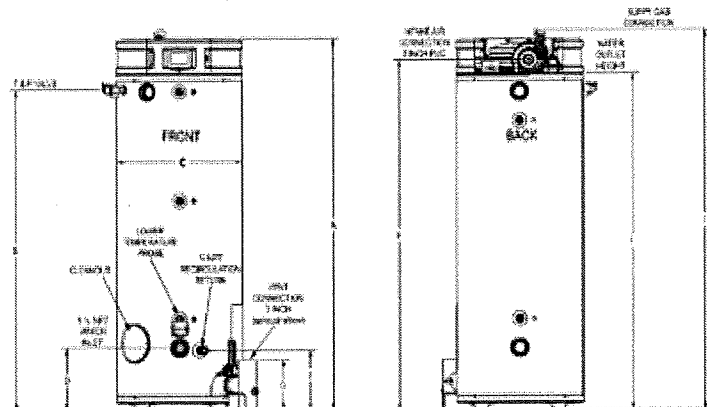
MODEL NUMBER	UNITS	A	B	C	D	E	F	G	H	I	VENT	SIDE WATER CONNECTION		TOP OUTLET	APPROX. SHIP. WT. (LB)*
												INLET	OUTLET		
GHE80SU/SS-130(A)	Inches	67-7/8	57.43	26-3/8	13	12-1/2	60-1/2	10-5/8	63-5/8	70-1/16	2", 3", 4" **	2"	2" NPT	1.5" NPT	600
	MM	1724	1459	668	331	318	1537	270	1617	1780					
GHE80SU/SS-160(A)	Inches	67-7/8	57.43	26-3/8	13	12-1/2	60-1/2	10-5/8	63-5/8	70-1/16	2", 3", 4" **	2"	2" NPT	1.5" NPT	600
	MM	1724	1459	668	331	318	1537	270	1617	1780					
GHE80SU/SS-200(A)	Inches	67-7/8	57.43	26-3/8	13	12-1/2	60-1/2	10-5/8	63-5/8	70-1/16	2", 3", 4" **	2"	2" NPT	1.5" NPT	650
	MM	1724	1459	668	331	318	1537	270	1617	1780					
GHE80SU/SS-300(A)	Inches	67-7/8	57.43	26-3/8	13	12-1/2	60-1/2	10-5/8	63-5/8	70-1/16	3", 4", 6" **	2"	2" NPT	1.5" NPT	650
	MM	1724	1459	668	331	318	1537	270	1617	1780					
GHE100SU/SS-130(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	2", 3", 4" **	2"	2" NPT	1.5" NPT	725
	MM	1956	1696	668	331	318	1773	270	1847	1969					
GHE100SU/SS-160(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	2", 3", 4" **	2"	2" NPT	1.5" NPT	725
	MM	1956	1696	668	331	318	1773	270	1847	1969					
GHE100SU/SS-200(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	2", 3", 4" **	2"	2" NPT	1.5" NPT	775
	MM	1956	1696	668	331	318	1773	270	1847	1969					
GHE100SU/SS-250(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	3", 4" **	2"	2" NPT	1.5" NPT	775
	MM	1956	1696	668	331	318	1773	270	1847	1969					
GHE100SU/SS-300(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	3", 4", 6" **	2"	2" NPT	1.5" NPT	775
	MM	1956	1696	668	331	318	1773	270	1847	1969					
GHE100SU/SS-400(A)	Inches	77	66-3/4	26-3/8	13	12-1/2	69.80	10-5/8	72-3/4	77-1/2	3", 4", 6" **	2"	2" NPT	1.5" NPT	775
	MM	1956	1696	668	331	318	1773	270	1847	1969					

*Weights listed are for non-ASME. Add 35 lbs. for ASME models.
** 2", 3", 4", 6" (InnoFlue Flex vent)

0" CLEARANCE TO ALL COMBUSTIBLE SURFACES ON SIDES; 6" TOP CLEARANCE FOR 130 TO 300 MODELS; 8" FOR 350 TO 400 MODELS
(FOR CANADIAN INSTALLATIONS, PLEASE USE POLYPROPYLENE, ULC 5636 PVC OR CPVC.)

MODEL NUMBER	FLEX VENT LENGTHS POWER VENT ONLY	
	PIPE DIAMETER	
	3"	4"
GHE80SU/SS-130(A)	45	45
GHE80SU/SS-160(A)	45	45
GHE80SU/SS-200(A)	45	45
GHE80SU/SS-300(A)	45	45
GHE100SU/SS-130(A)	45	45
GHE100SU/SS-160(A)	45	45
GHE100SU/SS-200(A)	45	45
GHE100SU/SS-250(A)	45	45
GHE100SU/SS-300(A)	45	45
GHE100SU/SS-400(A)	45	45

NOTE: 16 Feet of CPVC, Polypropylene, PVC is allowed to connect to flex venting from heater.



Recommended Specifications (for trade reference only)

Water heater(s) shall be Triton Model _____ # or equal, manufactured by Rheem, having a gas input of _____ BTU/h and recovery rate of _____ GPH at a 100°F temperature rise and tested and certified at a Min. of .95 thermal efficiency, with a maximum hydrostatic working pressure of 150 psi. Water heater(s) shall 1.) Modulating gas burner that automatically adjusts the input based on demand. 2.) Power anodes that are non-sacrificial and maintenance free. 3.) Have the CSA seal of certification and supplied with a factory installed CSA/ASME rated temperature and pressure relief valve, and meet SCAQMD rule 1146.2. 4.) Shall have a wet-base design and furnished with US Patent heat exchange system with two sided coating high temperature porcelain enamel. 5.) Have 2" NPT front and rear, 1 1/2" Top water connections. 6.) Have a 3 year (SU) or 5-year (SS) standard warranty.

The control shall be an integrated 4.3" Color touch screen the ability to perform 1.) Health alerts on tank and combustion system, giving user predictive notice of any issues. 2.) Integrated Leak sense™ leak detection system giving users advanced notice of catastrophic failure. 3.) Integrated Leak Guard™ Auto Shut-Off Valve giving the system the ability to automatically turn off water in the event of a failure (SS model only). 4.) The system shall have the ability to report water & energy usage reports via app or control. (SS model only) 5.) The control shall have integrated WiFi allowing the user to connect to a cloud, and control & remote monitor the system via EcoNet® app. 6.) The control shall have an integrated BacNet MS/TP connection allowing the user to connect to a Building management system without the need of any accessories.

For Standard power vent, water heater shall be suited 2", 3", 4" or 6" _____ pipe for a total maximum venting of 185 ft. For Power Direct Vent water heater shall be suited for 2", 3", 4" or 6" _____ pipe for a total maximum vent length, intake 120 ft, exhaust 135 ft. Water heater (s) shall be able to vent with the following materials: Polypropylene, PVC, CPVC, ABS, & InnoFlue® flex venting.

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

Rheem Water Heating • 1115 Northmeadow Parkway, Suite 100
Roswell, Georgia 30076 • www.rheem.com

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