



## Crossover Floor Mounted Water Heater Submittal Sheet

Models: RGH20-75F / 76F / 100F

**JOB NAME:**

**LOCATION:**

**ARCH. / ENGR.:**

**WHOLESALER:**

**MECH. CONTRACTOR:**

**MODEL NUMBER:**

**BTU/HR INPUT LOW - HIGH FIRE:**

**TYPE OF GAS:**

**NOTES:**

### High Efficiency Fire Tube Heat Exchanger

- Corrosion resistant 316L stainless steel construction for superior service life
- Gasketless heat exchanger design
- Fire tube design enhances condensate drainage and minimizes build-up inside the secondary portion of the heat exchanger to enhance the long term efficiency of the unit

### Stainless Steel Storage Tank

- High quality stainless steel tank construction
- All plumbing connections are stainless steel

### Combustion System

- Modulating burner with up to 2 to 1 turndown for better temperature control
- Low NOx operation exceeds the most stringent standards (SCAQMD Approved)
- High Grade Inconel mesh premix burner
- Reliable direct spark ignition
- Models ship ready to fire on Natural Gas
- Field convertible to LP Gas operation (Kit included with water heater)
- Flame monitoring through flame rod
- RGH-75F Model is FVIR compliant

### Energy Efficiency

- 75F Model has up to 0.88 Uniform Energy Factor (UEF)
- 76F Model has up to 0.89 UEF
- 100F Model has up to 0.87 UEF

### Integrated Control System

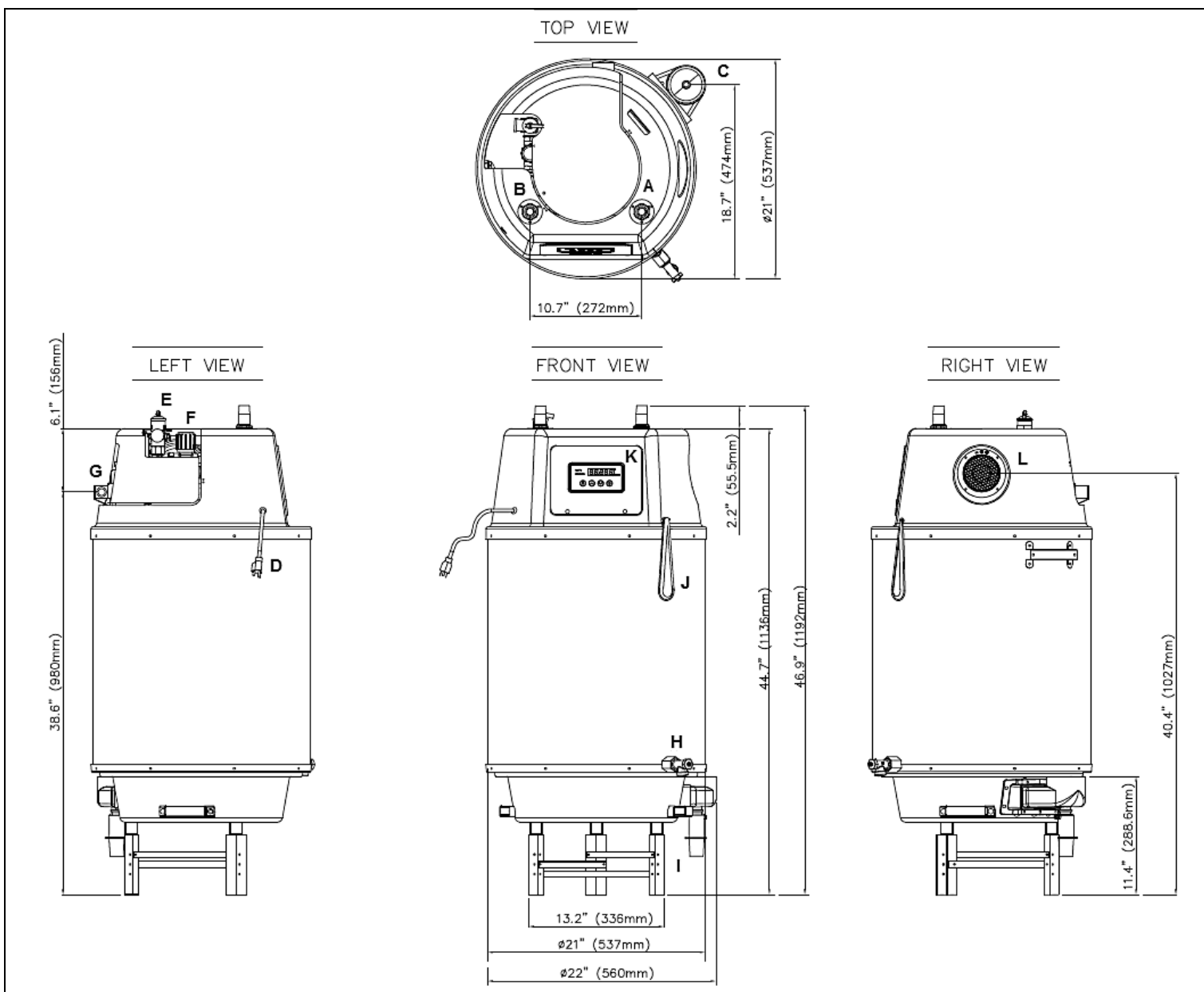
- LCD control display enables user to monitor and control storage tank temperature setting, faults, and system parameters
- Fan speed is adjusted automatically through pulse with signal provided from the control, enabling the unit to modulate its firing based on tank temperature set point
- System safeties are constantly monitored through the control to ensure the unit is operating within designed parameters
- Safeties include: Flue Pressure, ECO Water Temperature Limiting Sensor, Burner Temperature Sensor, Flame Rectification Current Monitoring
- High altitude fan adjustment switch

### Additional Features

- Vents in 3" (100 feet combined equivalent length) in PVC, CPVC, Stainless Steel, or Polypropylene Pipe
- Exhaust support bracket supports exhaust pipe on the water heater (Additional supports are required. See installation manual for further details)
- Lead Free Compliant as required by the Safe Drinking Water Act, Section 1417
- Six (6) Year Limited Residential Tank Warranty
- Three (3) Year Limited Commercial Tank Warranty
- High altitude compliant models certified up to 10,000 feet above sea level
- Water heater extension legs keep water heater bottom from corroding for longer service life
- Water inlet and outlet connections are on the top of the water heater for easy replacement of existing water heaters
- All major components can be easily serviced from the top of the water heater

### Optional

- 3" Power Vent Exhaust Termination (Part # 8100P-029)
- 3" Exhaust Extension Adapter w/ Combustion Test Port (8100P-030)
- 3" Polypro Flex Vent Kit (8400P-001)
- 3" PVC Concentric Vent Kit (KGAVT0601CVT)
- 3" Stainless Steel Termination Vent Kit (V1000)
- Condensate Neutralizer (7450P-212)
- Heating Application Kit (8100P-049)



DESCRIPTION	DESCRIPTION
A – Cold Water Inlet 3/4" Male NPT	G – Gas Connection 1/2" or 3/4" Female NPT
B – Hot Water Outlet 3/4" Male NPT	H – Drain Valve
C – 3" Exhaust	I – Condensate System 1/2" Male NPT
D – Electric Cord	J – Tank Sensor
E – T & P Valve	K – Display Control
F – Thermostatic Mixing Valve	L – 3" Air Intake

MODEL		RGH-75F	RGH-76F	RGH-100F
Uniform Energy Factor (UEF) (*)		0.88	0.89	0.87
Installation		Indoor, Floor Mount, Fully Condensing		
Minimum to Maximum Input (Btu/Hr)		37,500 to 75,000	37,500 to 76,000	50,000 to 100,000
Condensate pH Level		4 pH		
Flue System		Sealed Combustion Direct Vent, Power Vent		
3" Vent Run		100 feet, 6 elbows max, 5 ft deduction per 90° elbow Schedule 40 PVC, CPVC, PP		
Weight (lbs)		110		
Gas Type		Pre-set for NG / LP Conversion Kit Included		
Orifice Size	NG	3.9 mm (0.154")		5.3 mm (0.208")
	LP	2.8 mm (0.11")		3.5 mm (0.137")
Gas Supply Pressure	NG	3.5" to 14" WC		
	LP			
Manifold Pressure	Min (3")	NG: -0.15" / LP: -0.10" WC		
	Max (3")	NG: -0.15" / LP: -0.10" WC		
Power Supply	Main Supply	Dedicated 120VAC 60 Hz with 3 Pronged Power Cord		
	Maximum Power Consumption	45W		53W
Ignition System		Direct Electronic Spark Ignition with Automatic Flame Sensing		
Burner System		Single Orifice Premixed Fuel Injection Metal Fiber Premix Burner		
Gas Valve System		Dual Stage Air Ratio Negative Pressure		
Minimum Flow Rate		Zero activation with 20 gallons capacity tank		
Internal Pipe Material		Copper		
Dimensions		21" Diameter – 47" Height		
Reserve Tank		20 Gallons		
First Hour Rating at 90°F Rise		107 Gallons		130 Gallons
Water Pressure		Min 12 – Max 150 PSI		
DHW Setpoint Temperature Range		Mechanical Tempering Valve from 70°F – 145°F (21°C – 63°C) Factory Preset to 120°F (48.9°C)		
Activation Sensing		Tank Temperature		
Temperature Control		Thermistor Starts with Heating Cycle		
Connection Sizes	Cold Water Inlet / Hot Water Outlet	¾" Male NPT		
	Gas Inlet	½", ¾" Female NPT		
Materials	Cabinet	Cold Rolled Carbon Steel		
	Heat Exchanger	Stainless Steel		
Safety Devices		T&P Valve, Flame Rod, Remaining Flame Detection, Fan RPM Check, Vent Blockage Detection, ECO Burner Plate (305°F), ECO Hot Water Cutoff (194°F), 1 x 5A Fuse, Intake Blockage Detection		

**Table 1 – Technical Specifications**

\*Maximum manifold pressure is indicated on the rating label on right side of the unit.

\*Independent DOE tested.

\*AHRI Certified.

**NOTE:** HTP reserves the right to make product changes or updates without notice and will not be held liable for typographical errors in literature.