



## Crossover Floor Mounted Water Heater Submittal Sheet

Models: *RGH20-100F*

**JOB NAME:**

**LOCATION:**

**ARCH. / ENGR.:**

**WHOLESALE:**

**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

**Energy Efficiency**

- Up to 0.87 Uniform Energy Factor (UEF)

**Integrated Control System**

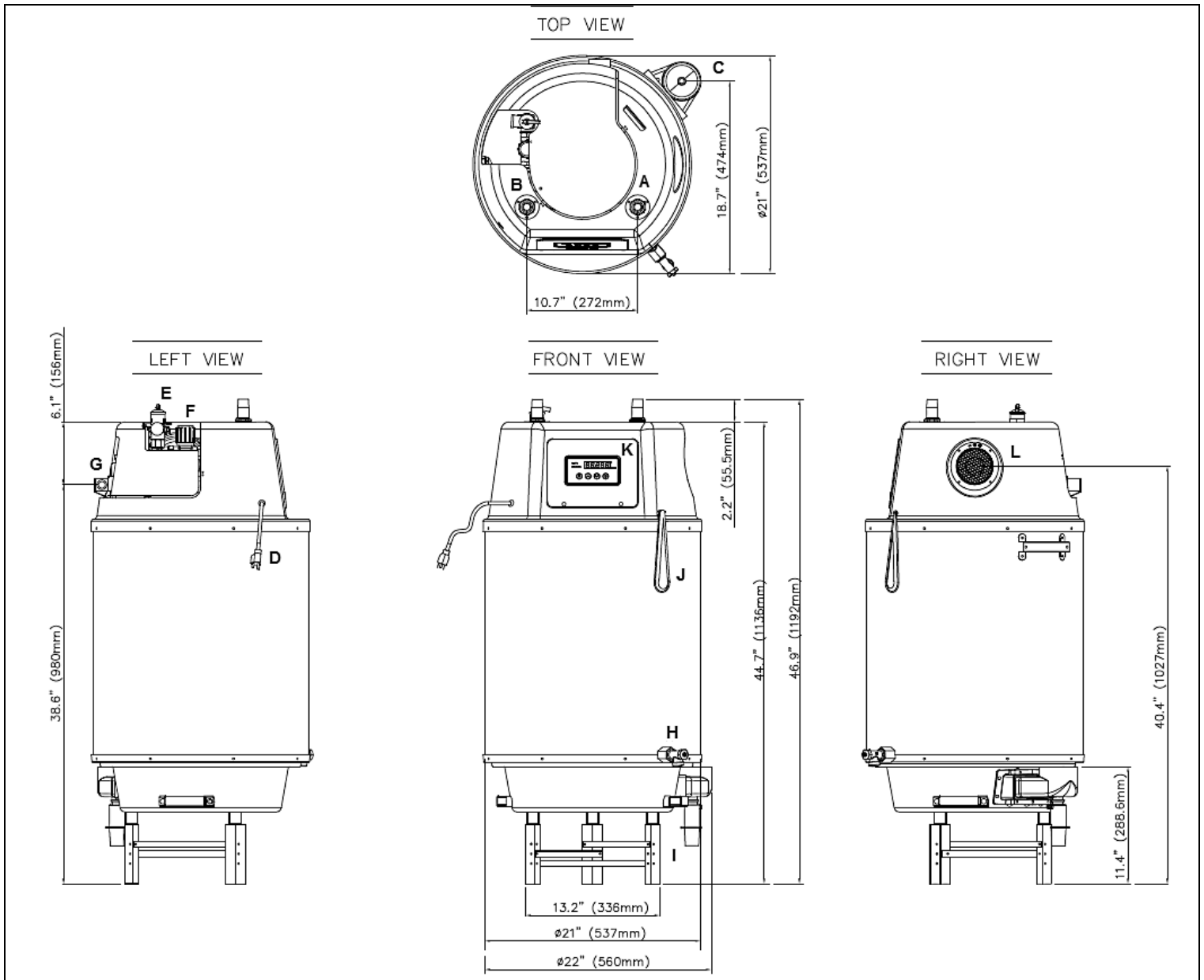
- LCD control display enables user to monitor and control storage tank temperature setting, faults, and system parameters
- Fan speed is adjusted automatically through pulse with signal provided from the control, enabling the unit to modulate its firing based on tank temperature set point
- System safeties 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
- ASSE 1017 rated domestic water thermostatic valve

**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

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