


iQ751, Gen II Submittal Data

Date:	<input type="text"/>	Bid Date:	<input type="text"/>
Project Name:	<input type="text"/>	Fuel Type:	<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane
Project #:	<input type="text"/>	Factory Option:	<input type="checkbox"/> iNTouch-BMS
City State Zip:	<input type="text"/> <input type="text"/> <input type="text"/>	Factory Option:	<input type="checkbox"/> Propane Setup
Engineer:	<input type="text"/>		
Contractor:	<input type="text"/>		

	Temperature Rise (ΔT) °F						
	40	50	60	70	80	90	100
Flow (GPM)	35.4	28.4	23.6	20.3	17.7	15.8	14.2



KEY FEATURES

- Multiple Stainless (316L) Heat Exchangers
- Flexible-Floating Design, stress-relieving and thermal shock resistant
- Built-in Redundancy - Multiple heat engines with individual controls
- Multi-Unit - Masterless cascading with common venting
- Gas Pressures - Operates on gas pressure range of 2.5"-14" WC
- ASME-HLW Compliant
- Designed and Built in the U.S.
- 7" Color Touch Screen - access to usage data, troubleshooting, and parts wear
- Wi-Fi Connectivity

PERFORMANCE

- Turndown Ratio of 25:1 per unit
- Cascade up to 4 units with common venting for a total of over 3000MBH and a 100:1 total turndown ratio



Recommended Accessories iQ751:

Condensate Neutralizer Kit - **CN1001**

This condensate is acidic, with a pH level between 3 and 4. Local building codes may require an in-line neutralizer to be installed (not included) to treat this water.

Outdoor Installation Kit - **SPR0112**

iBMS BacNET- **SPR0068**

Intellihot's iNTouch BMS has three unique features that are not available in any other BMS in the industry.

- External Pump – Powers building recirculation pumps based on learned water usage of the building.
- Remote Setpoint – Allows the temperature to be set remotely via a 0-10 VDC or 4-20mA signal.
- Alarm – Buzzes if it detects anything wrong with any of the components it is connected to, and communicates the appropriate error codes so that the user knows which component needs attention.
- Run-time Status
- Louver Interlock
- Louver Power
- Remote On/Off
- Tank Temperature Sensor if present
- Outdoor Temperature Monitor
- BACNET – Interface with BMS/BAS
- Conveys flame status, error status, temperature, firing rate, blower speed, and performance history.
- Supports remote interlock.

Intellihot Exclusive Service:

telliCare™

Zero Downtime. Zero Worries. Zero Problems

24/7/365 monitoring – With telliCare your units will be monitored 24/7/365 by factory personnel, and should any problems arise, they can take appropriate action.

Monitor the boiler room from your phone:

- Notifications- telliCare monitors various parameters and sends appropriate notifications alerting of potential issues. These notifications can be delegated to the appropriate maintenance person or contracting company.
- Prognostics and Predictive Analytics – our advanced predictive analytics make these reports available on your mobile device

Available on Google play and the Apple app store.

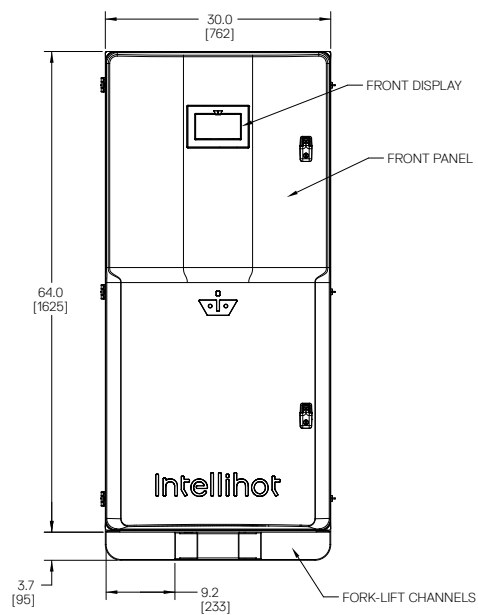
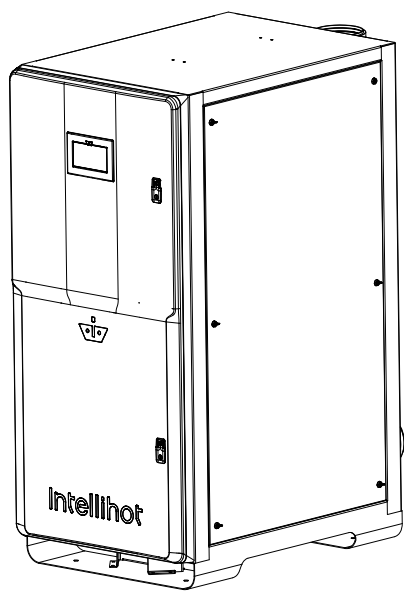


iQ751, Gen II Specifications

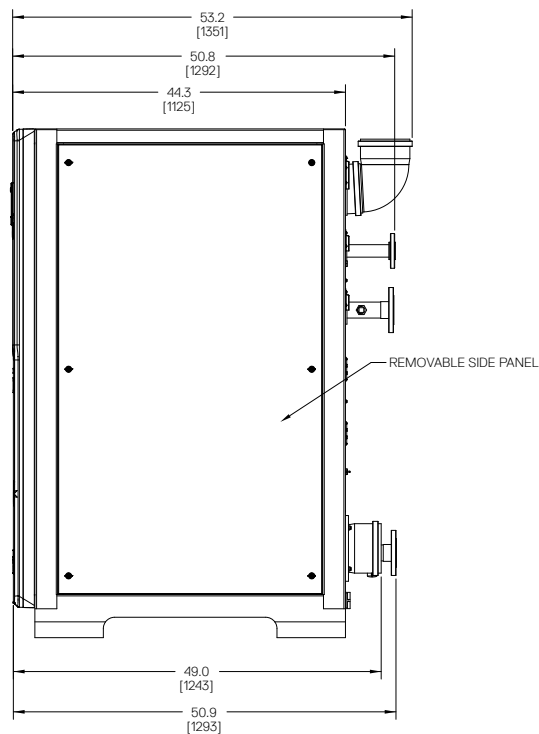
PARAMETERS	MODELS
	iQ751, Gen II
Type	Indoor/Outdoor, Floor Mounted, Condensing, Fully Modulating, On-Demand Water Heater
Fuel	Preset for NG / LP convertible
Minimum Input (BTU/hr)	30,000
Maximum Input (BTU/hr)	751,000
Maximum Output (BTU/hr)	705,940
Thermal Efficiency	94%
Turn Down Ratio (TDR)	25:1
Water Inlet / Outlet Connections	2" Headers with 6" OD Flange
Gas Inlet Connection	1-1/4" Gas Inlet With 4-5/8" OD Flange
Condensate Drain Connection	3/4" Flex PVC
Maximum Condensate Flow Rate (GPH)	5.4
Unit Dimensions H X W X D (Inches)	67.7 X 30 X 44.3 (48 CU. FT)
Service Clearances	Recommend 24" on all sides, 32" in the front
Unit Weight (LBS)	730 LBS
Shipping Crate Dimensions H X W X D / Weight	87 X 47 X 67 (Inches) / 972 (LBS)
Venting Type	Direct Vent (2 pipe - intake & exhaust), Power Vent (1 pipe - exhaust only)
Venting Materials (USA)	Sch. 40 PVC, Sch. 80 CPVC, Polypropylene, Stainless Steel (AL29-4C)
Venting Materials (Canada)	Type BH Gas Vent Classes: II A (PVC), II B (CPVC), II C (Polypropylene), I (AL 29-4C SS)
Vent Size (Diameter)	6" Ø
Max Vent Length - Single Pipe / Power Vent*	220 ft (6")
Max Vent Length - Two Pipe / Direct Vent*	110 ft (6")
* Venting Note: From the maximum lengths above, deduct 5 ft. per 90° elbow and 2 ft. per 45° elbow	
Ignition	Electronic Spark Ignition
Temperature Range	100°F – 190°F
Temperature Stability	+/- 4°F
Installation Location Ambient Temperature	40°F – 130°F
Safety	Flame Rod, Thermal Fuse, Overheat Prevention Device, Fan Speed Monitor, Flue Temperature Monitor, Blocked Vent Detector, Dual Flame Sensing
Water Pressure Min / Max (PSIG)	30 / 160
Pressure Relief Valve (Select BTU/hr Input Rating to Match Model Max Input)	3/4"
NG/LP - Min. Dynamic Gas Pressure (Full Fire)	NG = 2.5" WC; LP = 8" WC (set Gas regulator to 8" WC for NG 11" WC for LP)
NG/LP - Maximum Static Gas Pressure	14" WC (set Gas regulator to 8" WC for NG 11" WC for LP)
Gas Regulator Pressure Set To	8" WC for Natural Gas, 11" WC for Propane
Electrical	120V AC, 60 Hz
Power Consumption	Max 16 Amps, 24W (Standby)
Internal Water Volume (gallons)	4
Features	iQ751, Gen II
High Turn Down	25:1
Built-In Redundancy	Multiple Heat Engines w/ Individual Control
Cascading	Masterless, 4 units, Automatic Rotation
Common Venting	Yes - up to 4 units
Heat Exchanger	Expandable, Stainless 316L
Listing	ETL (Z21.10.3 / CSA 4.3), ASME HLW, AHRI
Performance GPM	iQ751, Gen II
Hot Water Capacity, 45F Rise (GPM)	31.4
Hot Water Capacity, 70F Rise (GPM)	20.2
Hot Water Capacity, 90F Rise (GPM)	15.7
Hot Water Capacity, 100F Rise (GPM)	14.1
Hot Water Capacity, 140F Rise (GPM)	10.1
Warranty (with recirculation, and unlimited thermal cycles)	Heat Exchanger Coil – 10 years, All Other Parts – 2 years



iQ751, Gen II Dimensional Specifications

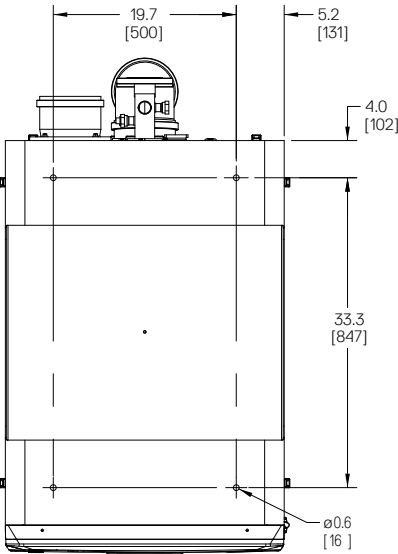
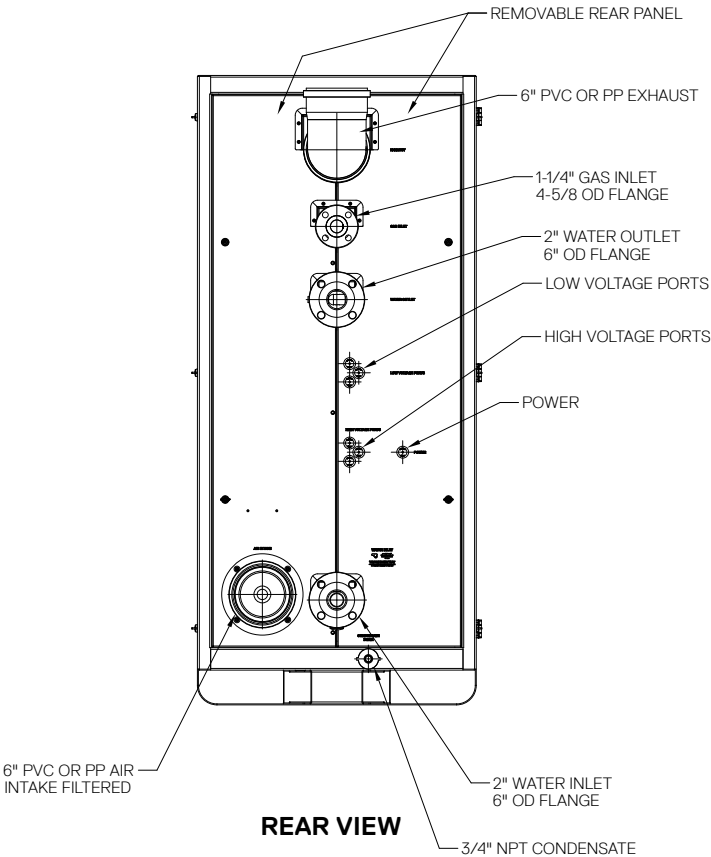


FRONT VIEW



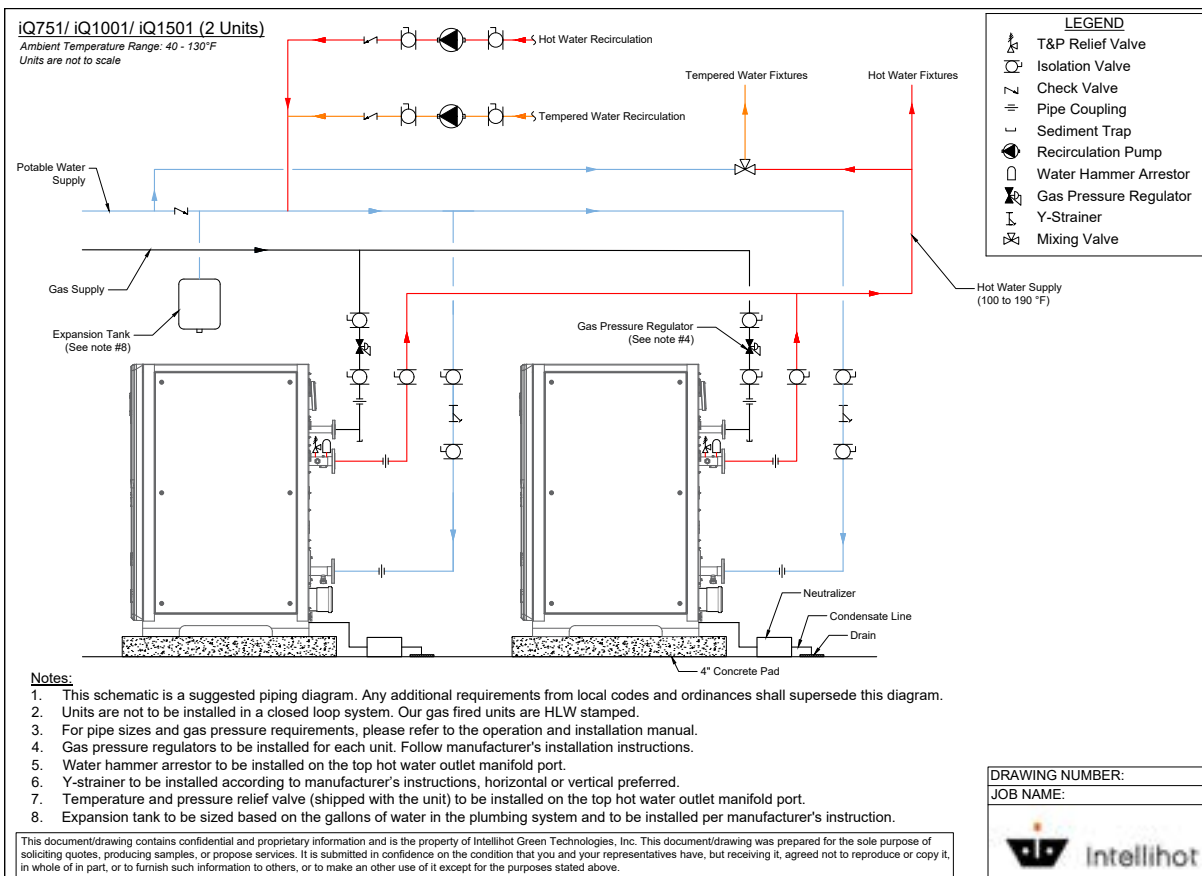
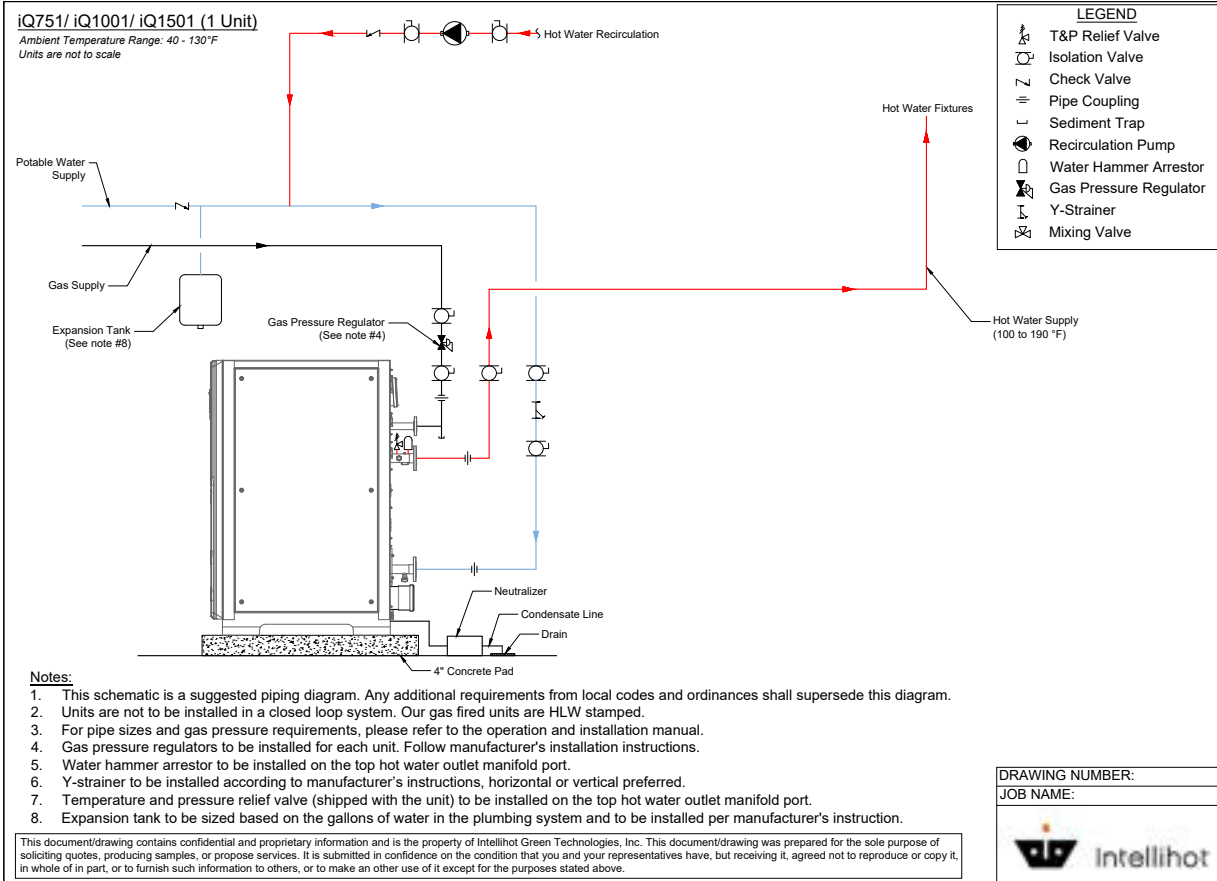
SIDE VIEW

iQ751, Gen II Dimensional Specifications

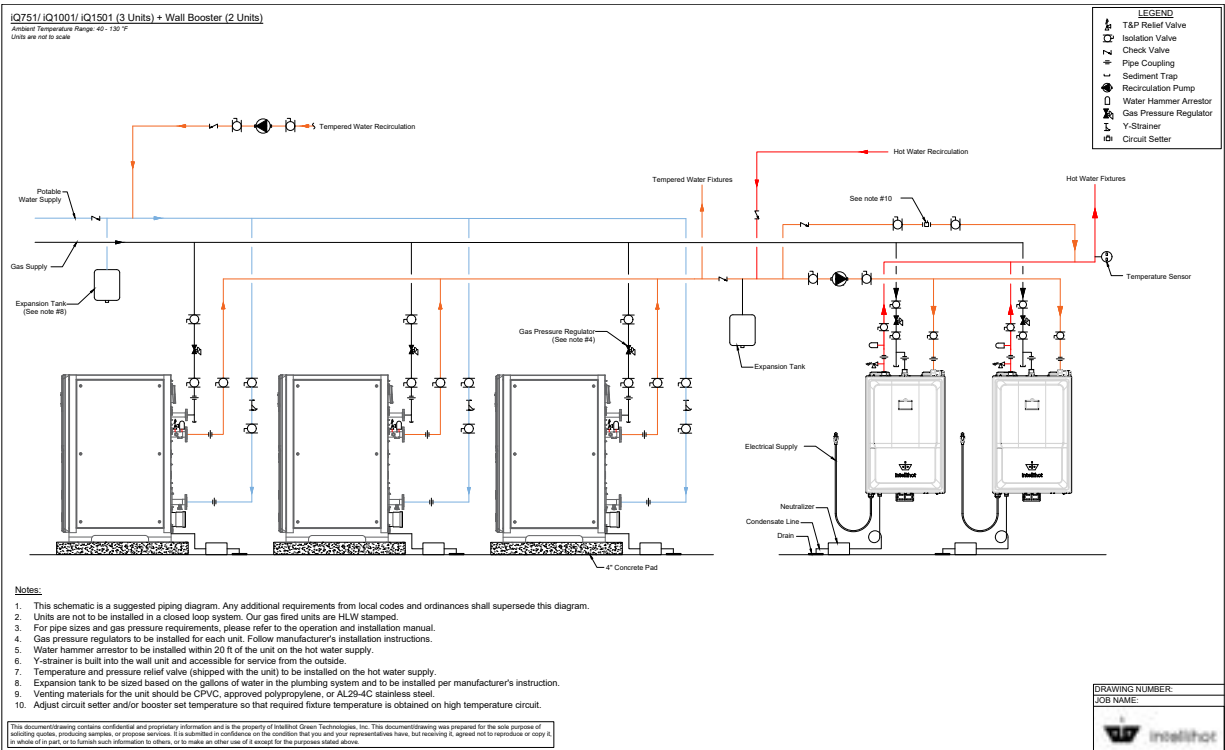
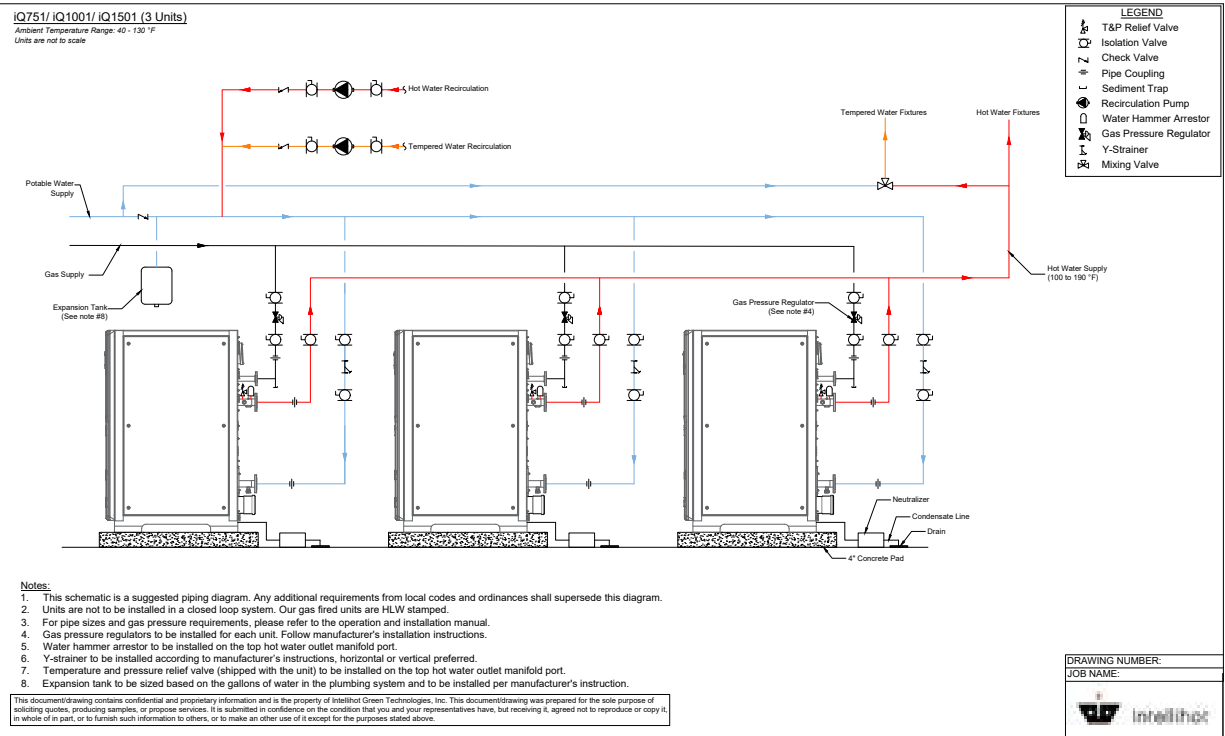


BOTTOM VIEW

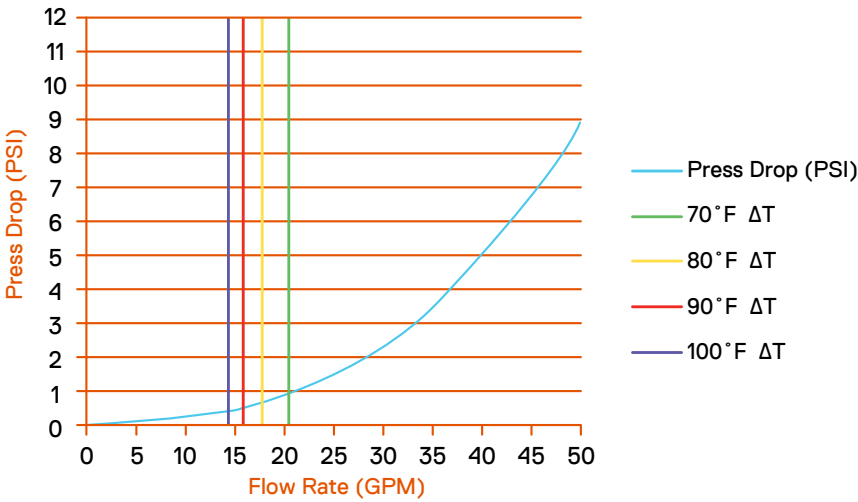
iQ751, Gen II Configuration Options



iQ751, Gen II Configuration Options



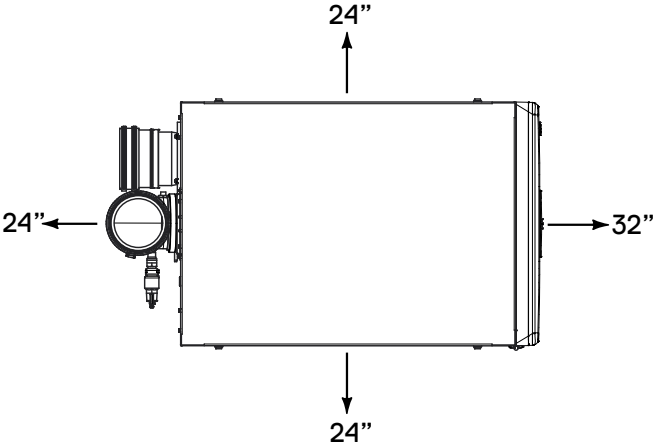
iQ751, Gen II Pressure Drop, Drop, Cascading Support & Clearance Requirements



iQ751/iQ1001/iQ1501 Cascading Support			
Model (Max Number of Cascaded Units)	iQ751	iQ1001	iQ1501
iQ751	Yes (Max 4 units)	Yes (Max 4 units)	Yes (Max 4 units)
iQ1001	Yes (Max 4 units)	Yes (Max 4 units)	Yes (Max 4 units)
iQ1501	Yes (Max 4 units)	Yes (Max 4 units)	Yes (Max 4 units)
All other models (i200, i250, iQ251, iQ251D, iN401, iN501, iQ2001 and iQ3001)	Not Supported		

Location	Required		Recommended Service Clearance ¹
	From Combustibles	From Non- Combustibles	
Top	6" (152 mm)	2" (50.8 mm)	18" (457 mm)
Back	5/8" (15.8 mm)	5/8" (15.8 mm)	24" (610 mm)
Sides	1" (25.4 mm)	1/2" (12.7 mm)	24" (610 mm)
Front	2" (51 mm)	2" (50.8 mm)	32" (813 mm)
Bottom	0" (0 mm)	0" (0 mm)	0" (0 mm)

¹ Service clearances are recommended dimensions to allow for normal service of the unit.



iQ751, Gen II Venting

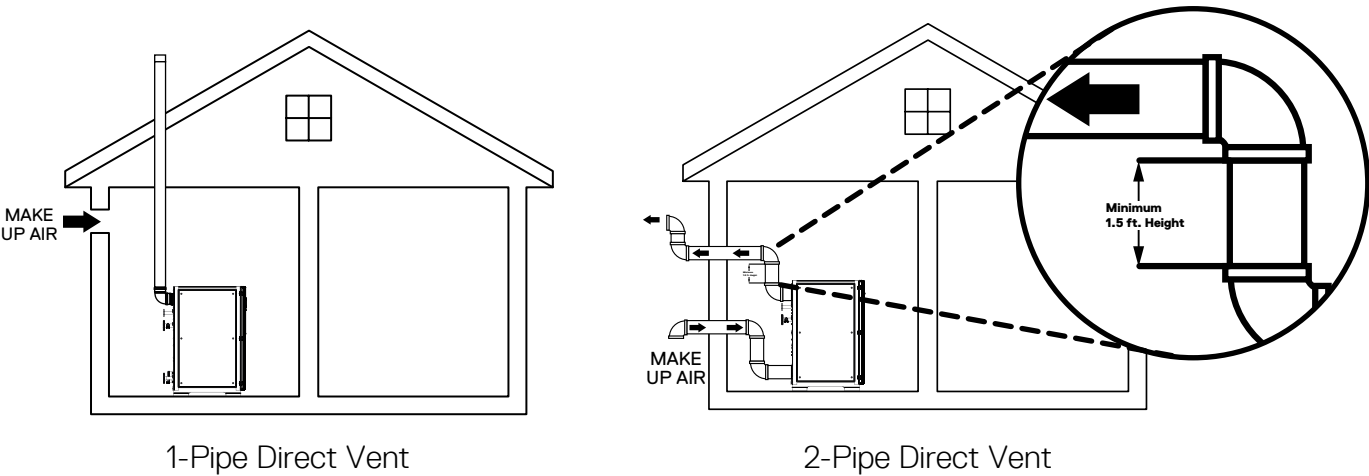
Maximum Pipe Length in Feet						
Number of Units	Venting Type	6" Diameter	8" Diameter	10" Diameter	12" Diameter	14" Diameter
		iQ751	iQ751	iQ751	iQ751	iQ751
1	1 Pipe	220	500	500	500	500
	2 Pipe	110	250	250	250	250
2	1 Pipe	60	252	500	500	500
	2 Pipe	30	127	250	250	250
3	1 Pipe	-	120	360	500	500
	2 Pipe	-	60	180	250	250
4	1 Pipe	-	70	212	500	500
	2 Pipe	-	35	106	250	250

1 Pipe - Only exhaust out pipe is connected and the combustion air intake is from within the room. For example, one iQ751 with a 6" diameter, the maximum exhaust pipe length for 1 pipe is 220 feet.

2 Pipe - Both the Com ion air intake and the exhaust pipe are connected. In this case, the table specifies the maximum length per pipe. For example, one iQ751 with 6" diameter, 110 feet maximum is allowed for combustion air intake pipe and exhaust out pipe. The 110 feet maximum is per pipe.

Note:

1. Reduce the maximum equivalent length above by 5 feet per 90° elbow used and by 2 feet per 45° elbow used. Do not exceed the above set limits.
2. If multiple units are common vented, then the units must be cascaded. Please refer to the combustion section for how to do combustion with common vented units.
3. **SAFETY INSTRUCTIONS: Do not connect any other appliance vents to the water heater inlet or outlet pipes.**



iQ751, Gen II Electrical Data

Electrical power required for the water heater is 120V AC, 60 Hz. The circuit breaker shall be sized for a power consumption of 16A (FLA). Larger breakers can be used for multiple units. Please ensure correct polarity of wiring before powering up unit.