



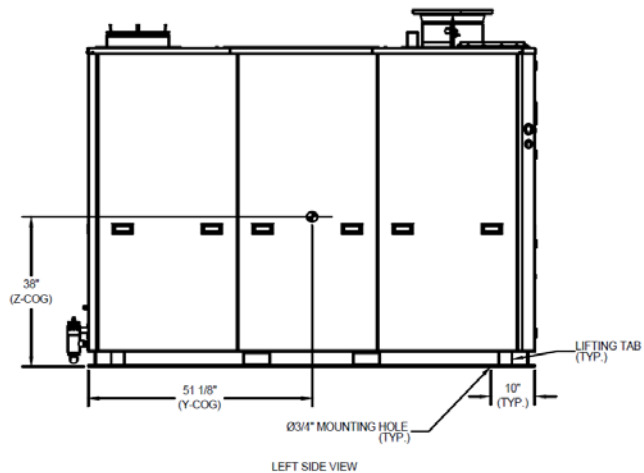
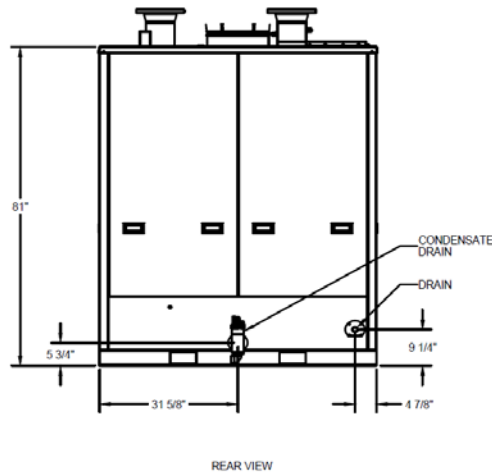
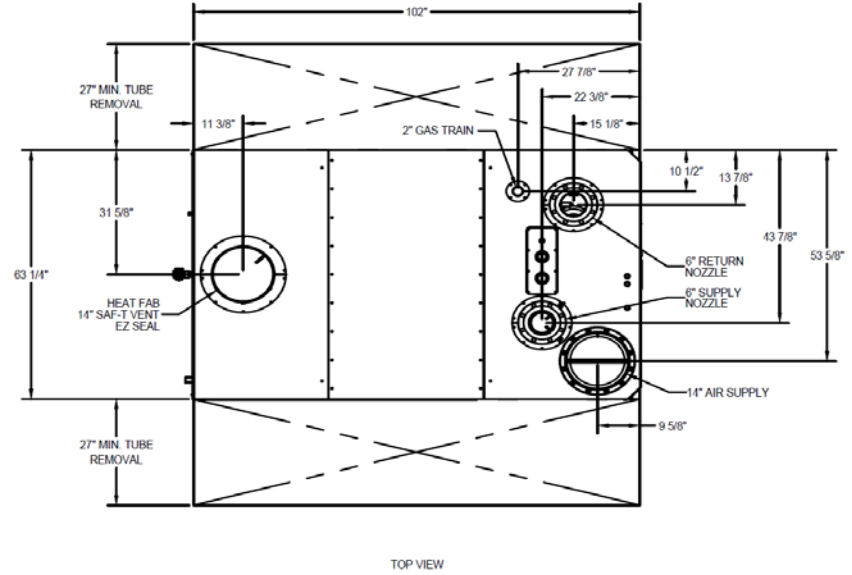
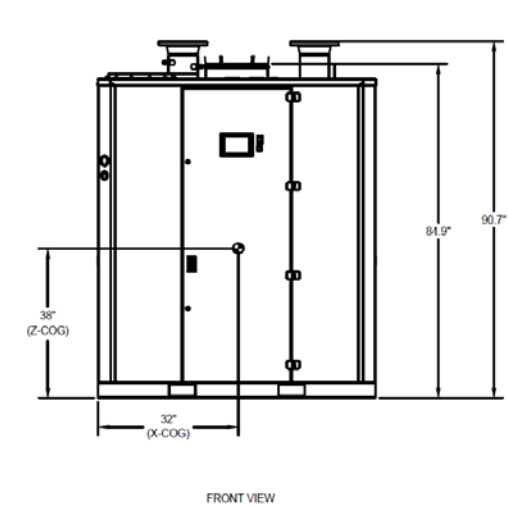
FREE FLEX CONDENSING BOILERS - SUBMITTAL DATA SHEET

RATINGS AND CAPACITIES		
Input - High Fire	4,500,000	BTU/HR
Output - High Fire	4,275,000	BTU/HR
Boiler Horsepower	127.7	BHP
Thermal Efficiency	95.0%	
Fuel	Natural Gas	
Firing Rate	Full Modulation	
Burner Turndown	Up to 20:1	
Low NOx Emissions	Capable, Consult Factory	
Inlet Gas Pressure (NG)	7"wc	Min.
	14"wc	Max.
Shipping Weight, Approximate	5,400	lbs

ASME Section IV (Max 160 PSIG / 210°F)	
ETL Certified to UL 795 and CAN 3.1.1	

DIMENSIONS / CONNECTIONS	
- Height	81"
- Width	63-1/4"
- Length	102"
- Supply / Return Connections	6" Flange
- Vent / Air Intake Connections	14"
- Condensate / Boiler Drain Conn.	1"
- Gas Connection	2"

STANDARD EQUIPMENT	
- ASME Stainless Steel Heat Exchanger	
- Stainless Steel Mesh Pre-Mix Burner	
- Variable Speed Combustion Blower	
- Siemens LMV3 Burner Management and Parallel Positioning	
- Fuel-to-Air Ratio System with (9) Programmable Points	
- High Limit Temperature Control, Manual Reset	
- Water Flow Switch	
- Low Water Cutoff, Manual Reset	
- Condensate Trap	
- Blocked Condensate Switch	
- Combustion Air Proving Switch	
- Blocked Vent Air Switch	
- Pressure Relief Valve	
- Pressure & Temperature Gauges	
- Flue Gas Temperature Sensor	
- (2) Motorized Gas Valves with Proof of Closure	
- Supervised Pilot / UV Scanner	
- High/Low Gas Pressure Switches, Manual Reset	
- 480/3/60 Line Voltage (14.3 Amps)	
- Category IV Individual Venting	
- Category II Common Venting with Engineered Vent System	
- Polypropylene & Stainless Steel Acceptable *Material	
- Ducted or Room Combustion Air Intake	



* Flue system material shall be capable of continuous operation at 230°F or higher, have the same corrosion resistance to flue gas condensation as AL29-4C and shall be certified to UL 1738 – venting system for gas-burning appliances cat II, III and IV.

NOTES: 1. Dimensions shown are for reference only and subject to change without written notice.
2. See O&M for required installation clearances

FLOWS AND PRESSURE DROPS					
Delta T	Flow (GPM)	Δ P (Ft. Hd)	Delta T	Flow (GPM)	Δ P (Ft. Hd)
20°F Δ T (Max)	428	25.17	50°F Δ T	171	2.92
25°F Δ T	342	16.08	60°F Δ T	143	0.92
30°F Δ T	285	11.17	70°F Δ T	122	0.67
35°F Δ T	244	8.17	80°F Δ T	107	0.58
40°F Δ T	214	6.25	90°F Δ T	95	0.50
45°F Δ T	190	4.17	100°F Δ T (Min)	86	0.42

<h2>FF-4500</h2>
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