Elite XL Commercial VWH (Volume Water Heater) Submittal
(ELX-400FVWHN / 500 / 650 / 800 / 1000 / 1500 / 2000)

JOB NAME:

LOCATION:

ARCH./ENGR.:

WHOLESALER:

MECH. CONTRACTOR:

MODEL NUMBER: **TYPE OF GAS:**   **BTU/HR INPUT LOW – HIGH FIRE:**

NOTES:

Heat Exchanger
- All Stainless Steel 160 PSI ASME stamped construction. National Board listed
- Gasketless heat exchanger design
- ASME 150 PSI relief valve
- Front service access to combustion chamber and burner

Combustion System
- Modulating burner with up to 10 to 1 turndown
- Up to 98% thermal efficiency
- High-Grade stainless-steel burner design
- Spark ignition with high capacity transformer for reliable ignition
- 400 – 1000 Models - Natural or LP Gas Operation; 1500 - 2000 Models – Natural Gas Operation Only
- Flame monitoring (Flame probe)
- Pneumatic Gas Valve System
- Gas Valve pressure range 3 ½" minimum to 14" maximum Water Column - 400 – 1000 models; 3 ½" minimum to 10.5" maximum WC – 1500 - 2000 models
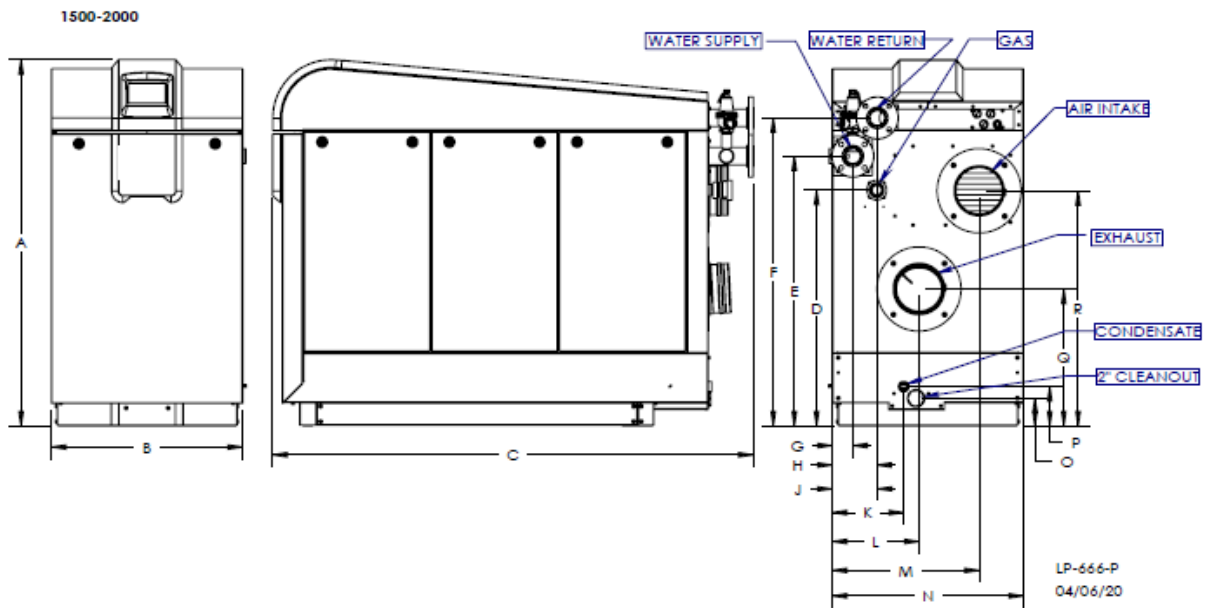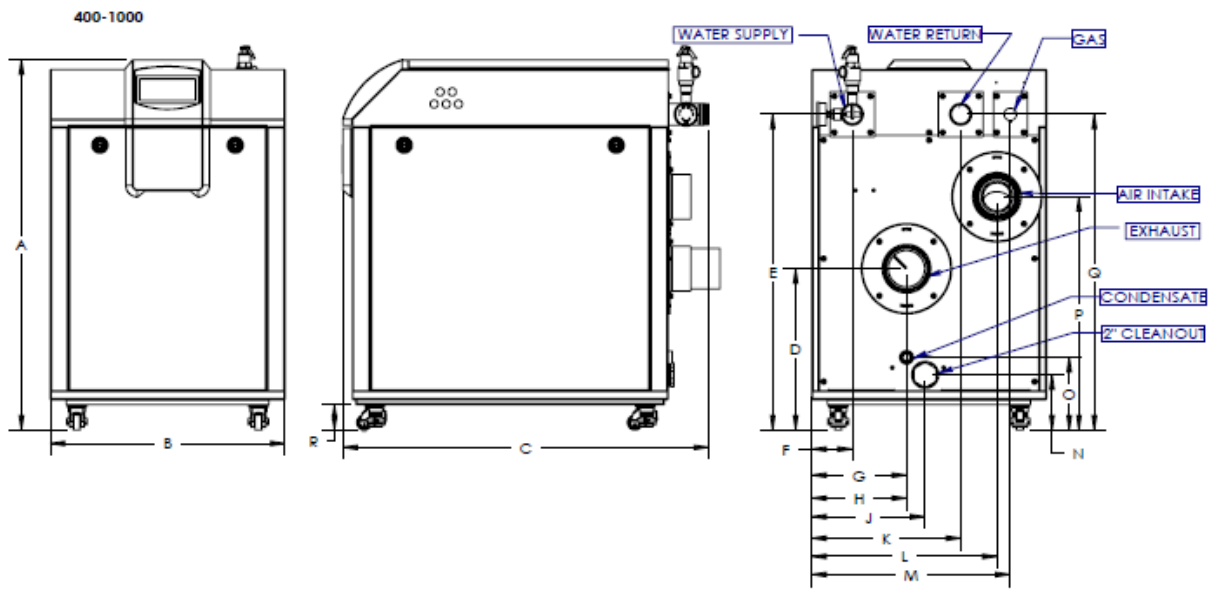
Integrated Control System
- 928 Digital operating control with color touchscreen display
- Embedded Wi-Fi control standard on all models
- Fault indicators for DHW Pump – System Fault – System Operation – Freeze Protection – Flame On – Fault Indication
- On/Off Switch
- Password protected
- Multiple 120-volt pump outputs – DHW pump
- 0-10 VDC input from a building management system
- 0-10V output A allows offers variable speed pump support, which controls pump speed via an analog VDC signal
- 0-10V output B relates to one of the following values: VWH or cascade power, fan speed, alarm status, temperature based on outdoor reset curve, or flame
- VWH output regulation (adjustment of VWH output down to 10% of rated capacity)
- Field wiring connection board / Cascade wiring CAT 3 or 5
- Dry contact for alarm output
- Cascade up to eight (8) VWHs
- Return temperature sensor

Additional Features
- Superior condensate collection system with float switch and 2" clean out
- Five (5) year limited warranty
- High resolution flow switch to ensure minimum flow rates through the heat exchanger (All Models)
- Vents in PVC - CPVC - stainless steel – polypropylene
- Integrated UL 353 certified CSD-1 compliant low water cut-off with manual reset
- Dual Water Supply Temperature Sensor / High Limit (210ºF)
- Caster wheel with adjustable leveling pads (400 – 1000 Models)
- Flue High temperature limit with Manual reset
- Blocked vent pressure switch
- Pressure and temperature gauge
- Low NOx emissions – SCAQMD Certified

Optional Equipment

☐ Indirect Tank Sensor (Part # 7250P-325)

☐ System Sensor (7250P-324)

☐ 4" Stainless Steel Outside Termination Vent Kit (V2000)

☐ 6" Stainless Steel Outside Termination Vent Kit (V3000)

☐ 8" Stainless Steel Elbow (7550P-067)

☐ 8" Stainless Steel to PVC / CPVC Vent Pipe Adapter (7550P-064)

☐ High and Low Gas Pressure Switch Kit with Manual Reset
  500 Model (7550P-999); 650 – 2000 Model (7550P-988)

☐ Alarm System to monitor any failure (7350P-602)

☐ Condensate Neutralizer (7350P-611)

☐ Modbus / BACnet (7350P-636)

☐ Mechanical Manual Reset High Temperature Limit (6300P-998)

☐ 928 PC Connection Kit (7450P-330)

☐ Stack Rack Kit
  400 – 500 Models (7550P-983); 650 – 1000 Models (7550P-984)

☐ Outdoor Installation Kit
  400 – 1000 Models (7550P-987); 1500 – 2000 Models (7550P-982)

☐ Flush Kit (7550P-606)

400-1000

WATER SUPPLY WATER RETURN GAS

AIR INTAKE
EXHAUST
CONDENSATE
2" CLEANOUT

1500-2000

WATER SUPPLY WATER RETURN GAS

AIR INTAKE
EXHAUST
CONDENSATE
2" CLEANOUT

LP-666-P
04/06/20

400 - 2000 Model Dimensions

MODEL #	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
ELX-400-500	41.0	26.0	40.7	17.9	35.0	4.1	10.1	10.5	12.6	16.1	20.5	22.0	6.1	8.1	25.8	35.0	2.8*
ELX-650-1000	41.0	26.0	56.5	17.9	35.0	4.1	10.1	10.5	12.6	16.1	20.5	22.0	6.1	8.1	25.8	35.0	2.8*
ELX-1500	60.8	31.8	67.5	39.2	44.8	51.2	3.4	7.4	7.5	11.9	14.4	24.4	31.8	4.6	6.5	22.7	39.1
ELX-2000	60.8	31.8	80.0	39.2	44.8	51.2	3.4	7.4	7.5	11.9	14.4	24.4	31.8	4.6	6.5	22.7	39.1

MODEL	SUPPLY / RETURN CONNECTION	VENT SIZE	AIR INTAKE	GAS CONNECTION	CONDENSATE
400	2" NPT	4"	4"	1"	3/4" PVC
500	2" NPT	4"	4"	1"	3/4" PVC
650	2" NPT	6"	6"	1-1/4"	3/4" PVC
800	2" NPT	6"	6"	1-1/4"	3/4" PVC
1000	2" NPT	6"	6"	1-1/4"	3/4" PVC
1500	2 ½" Flange	8"	8"	1-1/2"	1" PVC
2000	2 ½" Flange	8"	8"	2"	1" PVC

400 – 2000 Model Dimensions and Specifications - *NOTE: All dimensions are approximate - *FOR REFERENCE ONLY

MODEL	400	500	650	800	1000	1500	2000
Installation	Indoor (with Optional Kit), Floor Standing, Fully Condensing						
Minimum / Maximum Input (Btu/Hr)	39,900 / 399,000	50,000 / 500,000	65,000 / 650,000	80,000 / 800,000	100,000 / 1,000,000	150,000 / 1,500,000	200,000 / 2000,000
Heating Capacity	391	490	637	784	980	1,470	1,960
Flue System	Category IV, Sealed Combustion Direct Vent, Power Vent						
Min Combined Vent Run	10 feet					15 feet	
Max Combined Vent Run	4" (125 feet)		6" (125 feet)			8" (150 feet)	
Approved Exhaust Vent Materials	PVC, CPVC, PP, Stainless Steel						
Packaging Dimensions (in Inches) — W	32.25					43.25	
Packaging Dimensions (in Inches) — H	49.625					64.25	
Packaging Dimensions (in Inches) — D	48		64			76	86
Shipping Weight (lbs)	538	545	680	700	745	1400	1750
Gas Supply Pressure	3.5" to 14" WC (NG or LP)					3.5" to 10.5" WC (NG ONLY)	
Manifold Pressure — Min/Max	-0.08" WC (NG or LP)					-0.07" WC (NG ONLY)	
Power Supply	120V 60Hz, 20A					208/3PH WYE, 60HZ, 15A/Leg	
Customer Connection Board Fuse Amperage Ratings	2 Amps					5 Amps	
General Operating Conditions	Minimum Ambient Temperature: Greater than 32ºF (0ºC) Product Approvals and Requirements: ANSI Z21.13 / CSA 4.9, CSD-1 ASME Code						
Ignition System	Direct Electronic Spark Ignition/Flame Rectification						
Burner System	Premixed Fuel Modulation/Stainless Steel Burner						
Gas Valve System	Pneumatic Gas Valve						
Dimensions (in Inches) — W	26					31.8	
Dimensions (in Inches) — H	41					60.8	
Dimensions (in Inches) — D	40.7		56.5			66.5	79
VWH Water Content (Gallons)	3.8	4.3	5.6	6.6	8.1	12.9	16.25
Minimum Flow Rate @ 20^{0}F ΔT at Low Fire (GPM)	4	5	6.5	8	10	15	20
Flow Switch Activation (GPM)	4					9	
DHW Setpoint Temperature Range	70-185ºF						
Water Pressure (PSI) — Heat Exchanger MAWP	160						
Water Pressure (PSI) — Relief Valve	Temperature: 210F / Pressure: 150						
Control Panel	7" Full Color Touch Screen						
Main Controller	928 SIT Control						
Connection Sizes — Supply / Return	2" NPT					2 ½" Flange	
Connection Sizes — Gas Inlet	1" NPT		1 ¼" NPT			1 ½" NPT	2" NPT
Materials — Cabinet	Powder Coated Galvanneal Steel						
Materials — Heat Exchanger	316L Stainless Steel Water Tube						
Safety Devices	Flame Rectifier Probe, Dual Water Supply Temperature Sensor / High Limit (210ºF), Freeze Protection, Condensate Trap with Float, Dual Flue Sensor (210ºF), Blocked Vent Pressure Switch, Internal UL 353 Approved Low Water Cut-Off (LWCO), High Resolution Flow Switch						

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