

# Elite Fire Tube Wall Mounted Combined Appliance Submittal Sheet

- JOB NAME:
- LOCATION:
- ARCH. / ENGR.:

# WHOLESALER:

MECH. CONTRACTOR:

## MODEL NUMBER:

# BTU/HR INPUT LOW - HIGH FIRE:

## **TYPE OF GAS:**

# NOTES:

#### Heat Exchanger

- All 316L Stainless Steel ASME "H" Stamped Construction
- National Board listed
- Low pressure drop, gasketless, vertical tube combustion heat exchanger design provides maintenance-free operation on internal buildup of material inside the combustion chamber
- High fin aluminum inner insert provides superior heat transfer to transmit energy more efficiently
- 30 PSI Relief Valve
- Internal indirect storage tank constructed with 316L stainless steel

#### Combustion System

- 140W Model have modulating burner turn down 5 to 1 199W Model have modulating burner turn down up to 10 to 1
- Models with installed optional large external pump
- Up to 95% AFUE
- High Grade Ceramic Fiber Burner Design
- Spark Ignition
- Models Available for Natural or LP Gas
- Optical Flame monitoring

#### **Integrated Control System**

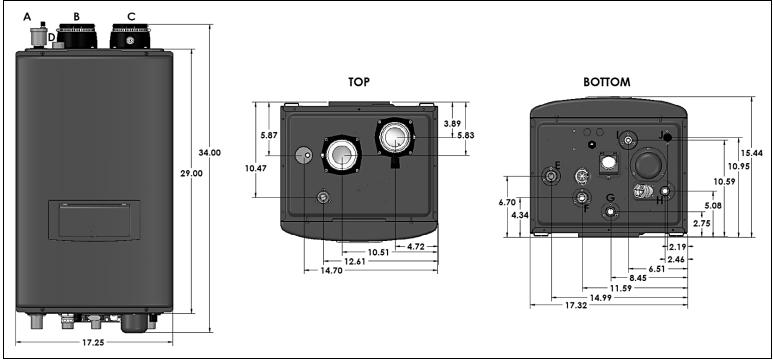
- Digital operating control and display to program and monitor boiler operation
- Programmable settings: Outdoor Reset Curve DHW Supply Set Point – Step Sequence for delayed response for smart zones – Boost Response – Internal Storage Tank Setpoint Temperature
- Field Connection Board Line voltage terminal strip with 120 VAC / 60 Hertz power / low voltage terminal strip with multiple contacts
- 0-10 VDC input
- Boiler output regulation (Adjustment of boiler output down to 50 percent of rated capacity)
- Low water protection device
- Freeze protection

#### Additional Features

- Superior condensate collection system with overflow protection switch
- Additional flow restrictor to increase flow rate on domestic hot water circuit
- Vents in Plastic PVC CPVC Stainless Steel ULC S636 flexible polypropylene vent liner (chimney lining only)
- Vents up to 100 combined equivalent feet 3 inch venting, and 50 combined equivalent feet 2 inch venting
- 10 Year Limited Warranty
- Manual reset high temperature limit
- Included wall mount bracket
- Built-in low water cutoff
- Low NOx emissions SCAQMD Certified
- Lead Free Compliant, as required by the Safe Drinking Water Act, Section 1417

#### **Optional Components**

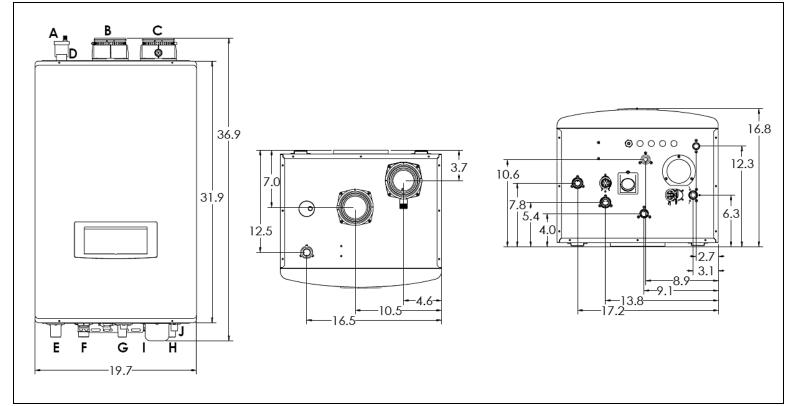
- **3**" Polypro Flex Vent Kit (8400P-001)
- **3**" (80mm) PP Concentric Vent Kit (KGAVT0601CVT)
- **3**" Stainless Steel Termination Vent Kit (V1000)
- 4" Stainless Steel Termination Vent Kit (V2000)
- Condensate Neutralizer (7450P-212)
- 3/4" Tankless DHW Isolation Valves (7850P-090)



**Figure 1 – 140W Specifications and Dimensions** 

|   | DESCRIPTION             | DIAMETER (ALL NPTM)  |
|---|-------------------------|--|
| Α | Automatic Air Vent      | -  |
| В | Intake Pipe Connection  | 3″   |
| С | Exhaust Vent Connection | 3″   |
| D | Relief Valve Adapter    | 3⁄4″ NPT   |
| E | CH Supply Adapter       | 1" NPT   |
| F | CH Return Adapter       | 1" NPT   |
| G | DHW Outlet Adapter      | ¾″ NPT   |
| н | DHW Inlet Adapter       | ¾″ NPT   |
| I | Gas Connection Adapter  | 1/2" NPT (1/2" X 3/4" Bell Coupling Provided to Upsize Gas Line) |
| J | Condensate Adapter      | -  |

 Table 1 – 140W Adapter Specifications



# Figure 2 - 199W Specifications and Dimensions

|   | DESCRIPTION             | DIAMETER (ALL NPTM)  |
|---|-------------------------|--|
| Α | Automatic Air Vent      | -  |
| В | Intake Pipe Connection  | 3″   |
| С | Exhaust Vent Connection | 3″   |
| D | Relief Valve Adapter    | ¾″ NPT   |
| E | CH Supply Adapter       | 1" NPT   |
| F | CH Return Adapter       | 1" NPT   |
| G | DHW Outlet Adapter      | ¾″ NPT   |
| н | DHW Inlet Adapter       | ¾″ NPT   |
| I | Gas Connection Adapter  | ½" NPT (1/2" X ¾" Bell Coupling Provided to Upsize Gas Line) |
| J | Condensate Adapter      | -  |

 Table 2 - 199W Adapter Specifications

| MODEL                     |                                     | 140W  | 199W                         |  |
|---------------------------|-------------------------------------|---|------------------------------|--|
| Installation              |                                     | Indoor, Wall Mount, Fully Condensing  |                              |  |
| Minimum /                 | Central Heating (CH)                |   | 19,900 / 140,000*            |  |
| Maximum Input<br>(Btu/Hr) | Domestic Hot Water<br>(DHW)         | 28,000 / 140,000  | 19,900 / 199,000*            |  |
| AFUE                      |                                     | 95%   |                              |  |
|                           | 35°F Rise                           | 7.1 Gal   | 9.9 GPM                      |  |
| Hot Water<br>Capacity     | 45°F Rise                           | 5.5 Gal   | 7.7 GPM                      |  |
| capacity                  | 77°F Rise                           | 3.2 Gal   | 4.8 GPM                      |  |
| Flue System               |                                     | Sealed Combustion Direct Vent, Power Vent   |                              |  |
| Combined Vent Length      |                                     | 2" (50 feet), 3" (100 feet)   |                              |  |
| Shipping \                | Veight (lbs est.)                   | 110   | 120                          |  |
| Orifice Size              | NG                                  | 0.255" (6.5 mm)   | 0.327" (8.3mm)               |  |
| Office Size               | LP                                  | 0.19" (4.85 mm)   | 0.244" (6.2mm)               |  |
| Gas Supply                | NG                                  | 3.5" to 14" WC  |                              |  |
| Pressure                  |                                     |   |                              |  |
| Manifold                  | Min (2" / 3" Vent)                  | NG/LP: 0" WC  | NG/LP: -0.015" WC            |  |
| Pressure                  | Max (2" / 3" Vent)                  | NG/LP: -0.22" WC  | NG/LP: -0.134'WC / -0.173"WC |  |
| Dowor Cumply              | Main Supply<br>Maximum Power        | 120V 60 Hz / 6A   |                              |  |
| Power Supply              | Consumption                         | 160W  |                              |  |
| Ignition System           |                                     | Direct Electronic Ignition / Automatic Flame Sensing  |                              |  |
| Burner System             |                                     | Single Orifice Premixed Fuel Modulation Ceramic Fiber Infrared  |                              |  |
| Gas Valve System          |                                     | Combination Modulating (Current Proportional)   |                              |  |
| Internal Pipe Material    |                                     | Copper  |                              |  |
| Dimensions                |                                     | W 17.25" – H 34" – D 15.5"  | W 19.7" – H 37" – 16.8"      |  |
| Minimum Flow Rate         |                                     | 0.5 GPM   |                              |  |
|                           | e Tank Water Capacity<br>(DHW)      | 1 Gallon  | 1.5 Gallons                  |  |
| Heat Exchanger Capacity   |                                     | 4 Gallons   | 3.5 Gallons                  |  |
|                           | ater Capacity                       |   | 5 Gallons                    |  |
|                           | ller / Control Panel                | NGTX-900C / P-920C_CB-HTP   |                              |  |
|                           | Pressure                            | Min 12 PSI - Max 30 PSI   |                              |  |
| DHV                       | V Pressure<br>DHW Inlet / Hot Water | Max 150 PSI   |                              |  |
|                           | Outlet                              | ¾" NPT  |                              |  |
| <b>Connection Sizes</b>   | CH Supply / Return                  | 1" NPT  |                              |  |
|                           | Gas Inlet                           | ½" NPT (1/2" X ¾" Bell Coupling<br>Provided to Upsize Gas Line)   | ¾″ NPT                       |  |
|                           | Cabinet                             | Cold Rolled Carbon Steel  |                              |  |
| Materials                 | Heat Exchanger                      | Primary Heat Exchanger: Stainless Steel<br>Storage Tank: Stainless Steel  |                              |  |
| Safety Devices            |                                     | Optical Flame Sensor, Burner Plate High Limit (392°F), Water Temperature High Limit Sensor<br>(200°F), Freeze Protection (Three Stage Operation - Activates at 46°F – See Freeze Protection<br>in Installer Menu for Details), Exhaust Temperature High Limit Sensor (190°F), Blocked Flue<br>Switch, Condensate Switch, Built-In Low Water Cut-Off Probe |                              |  |

 Table 3 – Technical Specifications – NOTE: 199W Models Offer a Maximum BTU/Hr Input of 140,000 as Shipped. Maximum BTU/Hr can be increased up to 199,000 BTU/Hr with a Larger External Pump Installed in the Primary Loop

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