UFT Fire Tube Boiler Submittal Sheet
Models: UFT-80 / 100 / 120 / 140 / 175 / 199 – Floor ("F") or Wall ("W") Mount Models

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 –with internal aluminum fins inserted into the individual fire tube circuits to increase heat transfer capabilities**
- **Fire tube design provides maintenance-free operation on internal buildup of material inside the combustion chamber**
- **30 PSI Relief Valve for All UFT models**

Combustion System
- **Modulating burner with up to 10 to 1 turndown (175kBTU models shall have a turndown of 8.79 to 1)**
- **Up to 96% AFUE**
- **High Grade Ceramic Metal Fiber Burner Design**
- **Spark Ignition**
- **Models Available for Natural or LP Gas**
- **Optical Flame monitoring**

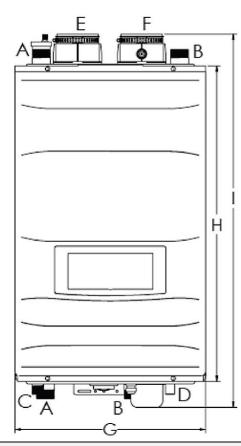## Integrated Control System
- **Digital operating control with LCD display to program and monitor boiler operation**
- **Pump outputs for Boiler Pump – System Pump – DHW Pump with Domestic Hot Water priority with timing**
- **Programmable settings: Outdoor Reset Curve – DHW Supply Set Point – Step Sequence for delayed response for small zones – Boost Function - Cascade up to 20 boilers - Field Program Service reminders with date or runtime activation**
- **Connection Board – Line voltage terminal strip with 120 VAC / 60 Hertz power / low voltage terminal strip with multiple contacts - Cascade wiring**
- **0-10 VDC input Building Management System**
- **Boiler output regulation (Adjustment of boiler output from 100 to 50 percent)**
- **Built in Low water cut off**
- **Fault History logging – Last 10 fault codes**
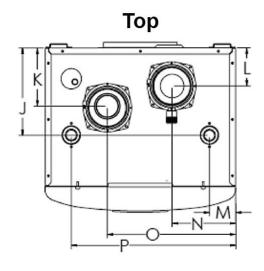- **Customized freeze protection parameters**

Additional Features
- **Superior condensate collection system with overflow protection switch**
- **Vents in Plastic PVC - CPVC - Stainless Steel – ULC S636 flexible polypropylene vent liner (chimney lining only)**
- **Vents up to 100 combined equivalent feet in 3 inch pipe or 50 feet in 2 inch pipe**
- **10 Year Limited Residential Warranty**
- **5 Year Limited Commercial Warranty**
- **Manual reset high temperature limit**
- **Included wall mount bracket (Wall Models Only)**
- **Corrugated condensation hose with built in vent**
- **Automatic Air vent installed on boiler**
- **Additional Fittings for Relief Valve installation**
- **Two included 3 inch vent screens**
- **Low NOx emissions – SCAQMD Certified**
- **Floor or Wall Mount models available**
- **Piping adapters can be moved from the left to the right side of floor mount models to ease installation**
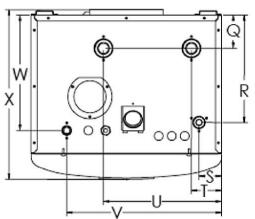
Optional

- [ ] **System / Pipe Sensor (Part # 7250P-324)**

- [ ] **Indirect Water Heater Sensor (7250P-325)**

- [ ] **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)**

- [ ] **U.L. 353 Compliant Low Water Cut-Off Interface Kit w/ Manual Reset for UFT Boiler (7855P-315)**
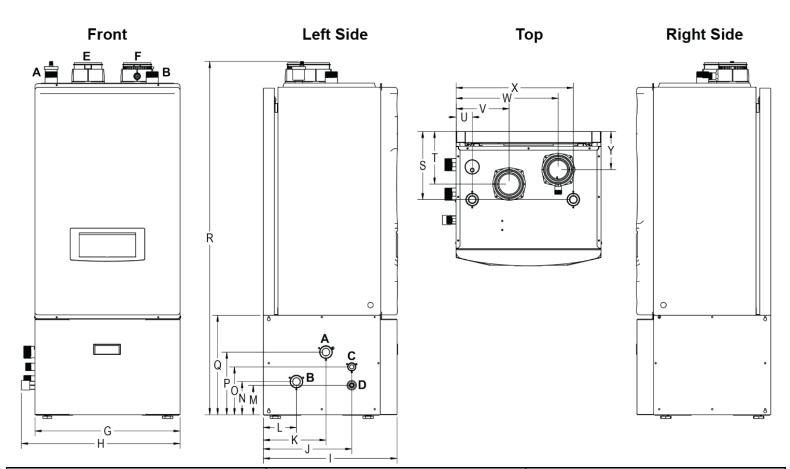
- [ ] **Cascade Communication Cable (7850P-093)**

	Description	Diameter
A	CH Supply Adapter	1 1/4" NPT
B	CH Return Adapter	1 1/4" NPT
C	Gas Inlet Adapter	3/4" NPT
D	Condensate Adapter	1/2" NPT
E	Air Intake Adapter	3"
F	Exhaust Vent Adapter	3"

Model	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
80 / 100 120 / 140	17.5	28.75	34	7.9	5.3	3.5	2.4	5.8	11.7	14.9	3.0	9.8	2.1	2.7	10.7	14.1	10.5	15.4
175 / 199	19.7	31.9	37	7.2	5.1	3.2	3.75	5.8	12.5	17.5	4	11.1	2.1	2.2	11.7	15.8	11.8	16.8

Table 1- Wall Model Specifications and Dimensions

Front **Left Side** **Top** **Right Side**

		Description	Diameter
A		CH Supply Adapter	1 1/4" NPT
B		CH Return Adapter	
C		Gas Inlet Adapter	3/4" NPT
D		Condensate Adapter	3/4" PVC Socket
E		Air Intake Adapter	3"
F		Exhaust Vent Adapter	

Model	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
80 / 100 120 / 140	17.3	19.1	16.8	12.0	8.5	4.5	4.0	4.5	6.5	8.5	13.5	45.0	10.0	7.4	2.3	5.7	11.5	14.9	5.5
175 / 199	19.7	21.5	18.1									48.0	9.2	7.1	2.2	7.2	14.0	16.0	5.2

Table 2- Floor Model Specifications and Dimensions

Model	80	100	120	140	175	199
Installation	Indoor, Wall Mounted Model or Floor Model, Fully Condensing					
Minimum / Maximum Input (Btu/Hr)	8,000 / 80,000	10,000 / 100,000	12,000 / 120,000	14,000 / 140,000	19,900 / 175,000	19,900 / 199,000
Flue System	Sealed Combustion Direct Vent, Power Vent					
Vent Run	2" (50 feet), 3" (100 feet), Schedule 40 PVC, CPVC, PP					
Weight (lbs) Wall Mount Model	90		100		110	
Weight (lbs) Floor Model	120		130		140	
Gas Supply Pressure — NG	3.5" to 14" WC					
Gas Supply Pressure — LP						
Power Supply — Main Supply	120V 60 Hz, 6A					
Power Supply — Maximum Power Consumption	160W					
General Operating Conditions	Ambient Temperature Range: 33 – 104^{0}F (0.6 – 40^{0}C) Operating Relative Humidity: Up to 90% at 140^{0}F (40^{0}C) Shipping and Storage Temperature Range: -4 – 176^{0}F (-20 – 80^{0}C) Power Supply and Communication (CN4): 14V DC Product Approvals and Requirements EMC: 89/336/EEC LVD: 73/23/EEC					
Ignition System	Direct Electronic Ignition / Automatic Flame Sensing					
Burner System	Premixed Fuel Modulation / Ceramic Fiber Infrared					
Gas Valve System	Combination Modulating (Current Proportional)					
Internal Pipe Material	Copper					
Wall Mount Model Dimensions	W 17.5" - H 34" - D 15.4"				W 19.7" - H 37" - D 16.8"	
Floor Model Dimensions	W 19" - H 45" - D 17"				W 22" - H 48" - D 18"	
Heat Exchanger Water Capacity	3 Gallons					
Control Panel / Main Controller	P-950EH / NGTB-900C					
Water Pressure	Min 12 - Max 30 PSI					
Connection Sizes — Space Heating Supply / Return	1 1/4" NPT					
Connection Sizes — Gas Inlet	3/4" NPT					
Materials — Cabinet (Wall Mount Model)	Painted Cold Rolled Carbon Steel					
Materials — Cabinet (Floor Model)	Galvaneal					
Materials — Heat Exchanger	316L Stainless Steel					
Safety Devices	Optical Flame Sensor, Burner Plate High Limit (392°F), Water Temperature High Limit Sensor (200°F), Freeze Protection (Three Stage Operation - Activates at 46°F – See Freeze Protection in Installer Menu for Details), Exhaust Temperature High Limit Sensor (190°F), Blocked Flue Switch, Condensate Switch, Built-In Low Water Cut-Off Probe					

Table 3 – 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.