

Residential Combination Heater



Heat and Hot Water in One Footprint





The **Delta Elite** Combination Heater delivers heat and hot water in a single, compact foot print.

Unlike other water heaters that try to perform the function of space heating with domestic hot water, the Elite utilizes two separate water circuits, one dedicated to space heating (outer steel tank) and the other dedicated to the production of domestic hot water (inner stainless steel tank).

The unique closed heating loop "water barrier" eliminates direct contact between the source of heat and the stored domestic hot water, increasing the life expectancy of the product. At the same time tempered 120° F domestic water is distributed in the house, 180° F water in the outer tank is circulated through the heating loop, providing comfortable, efficient space heating at the desired temperature.



Limited Lifetime Warranty

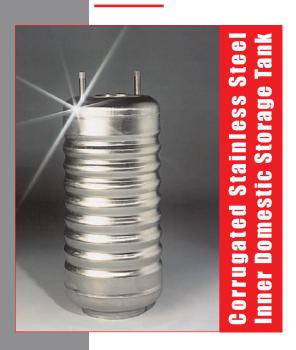
Zero clerance to combustibles



5 and 10 year parts and labor plans available



Features



- Available in:
 - Oil fired & Oil fired direct vent
- Uniquely designed corrugated stainless steel inner tank ensures maximum heat transfer and rapid recovery
- Wet based combustion chamber improves overall efficiency
- Two separate built-in control systems for domestic hot water and space heating
- No anode rods required
- Easy to clean flue tubes and combustion chamber
- Vertical firetubes with turbulators produce combustion efficiency in excess of 86%
- Exclusive "Tank-in-Tank" technology
- CFC free 2" foam insulation reduces standby losses
- Low stack temperatures increase efficiency without increasing the risk of condensation
 - Unit comes completely piped and wired from the factory



Product Specifications

Model	Input Btu/hr	Dimensions (inches)		Approx. weight	Connections Domestic		Heat Surface	Internal Tank	Flue Connection	AFUE	
		Height	Width	Depth	lbs	Hot Water	Primary	(Sq. Ft.)	Cap. gal.	Diameter	%
F 25	100,000	59	21	22	345	3/4"	1"	17	20	5"	85.5
F 30	120,000	59	21	22	345	3/4"	1"	17	20	5"	84.1
F 35	140,000	59	21	22	345	3/4"	1"	17	20	5"	82.8
F 40	165,000	67	21	22	485	3/4"	1"	26 ¹ / ₂	22	7"	86.7
F 45	199,000	67	21	22	485	3/4"	1"	26 ¹ / ₂	22	7"	86.0

Zero clearance to any combustible surface; can be installed in almost any closet

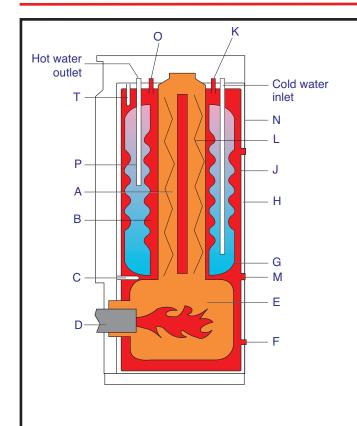
Product Performance

Model	10 Min. Peak Flow (gallons)	1st Hour Rating (gallons)	Continuous Flow @ 80°F Rise (gph)
F 25	56	163	128
F 30	61	188	153
F 35	65	214	179
F 40	74	249	210
F 45	81	292	254

Delta Elite Model

- First hour and continuous flow:
 - Performance based on factory installed mixing valve set @ 120°F outlet temperature with 180°F storage temperature. Cold water inlet temperature at 40°F.
- · Ten minute peak flow:
 - Performance based on average water temperature of 108°F at mixing valve outlet.

Anatomy of the Delta Elite Combination Heater



- A. Flueway fitted with stainless steel turbulators
- B. Primary water
- C. Primary Circuit thermostat (up to 180°F) sensing bulb
- D Rurner
- E. Water cooled immersed combustion chamber
- F. Primary circuit drain connection
- G. Corrugated stainless steel heat exchanger
- H. 1 1/2" of rigid (CFC-Free) polyurethane insulation
- J. Steel body containing primary water
- K. Primary Heating Supply Connection
- L. Baffles (turbulators)
- M. Primary Heating Return Connection
- N. Baked enamel steel jacket
- O. Expansion Tank Connection
- P. Secondary Circuit (domestic water) thermostat sensing bulb
- T. Safety limit thermostat (200°F) (manual reset)
- L.W.C.O.: Low water cut-off device (not shown)

Factory Piped and Wired

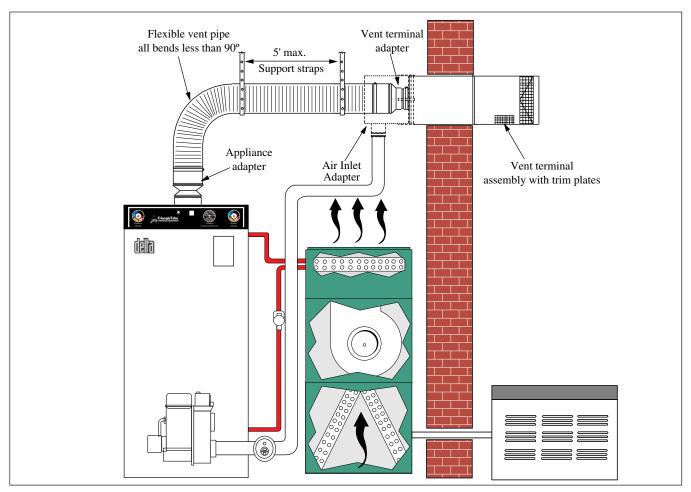
The **Delta Elite** Combination Heater is factory wired for domestic hot water priority to ensure the maximum supply of hot water.



Standard Components

- Circulator (prewired)
- Primary 30 psi relief valve
- M Automatic air vent
- Built-in low water cut-off
- Secondary 150 psi temperature & pressure relief valve
- Drain valve
- Domestic thermostatic mixing valve
- Prewired control panel
- Prewired & preset automatic and manual high limit reset controls

Sample installation (Direct vent Hydro-Air System)



Direct Vent Kits (F-25 through F-35 only) are available from Triangle Tube

Triangle Tube reserves the right to make product changes or improvements at any time without notice.





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