

ULTIMATE[®]

INDIRECT WATER HEATER

For Unlimited Hot Water on Demand... Choose the Unsurpassed Heating Effectiveness of Ultimate Indirect

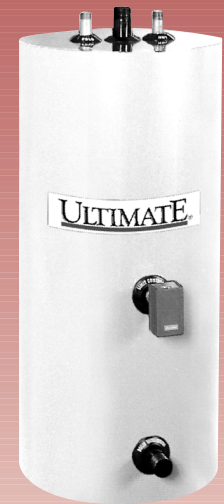
The innovation, quality and value that goes into every Ultimate product has now been applied to high-performance instantaneous indirect water heating - the most effective method of providing hot water for the home or business.

The Ultimate's tank contains circulating boiler water which heats domestic water flowing through three copper coils. This process provides unlimited hot water at consistently high temperatures and virtually eliminates corrosive failure of the tank because no fresh water is introduced.

By substantially lowering water heating costs, the Ultimate Indirect Water Heater will immediately begin paying returns on the home or business owner's initial investment. In addition, the Ultimate can enhance boiler operating efficiency for even greater savings.*

ULTIMATE'S BENEFITS:

- Supplies unlimited hot water for as long as needed due to the large heat transfer surface provided by the coils and the efficient transfer of heat from boiler water.
- Corrosion and scaling inside the Ultimate's tank are **virtually eliminated** because it is filled with boiler water and not fresh water containing oxygen and corrosive mineral salts. This extends the life of the water heater and eliminates the most common failures of conventional indirect water heaters.
- Because of accelerated domestic water flow through the heating coils, **scaling and corrosion on the heat transfer surface is also minimized.**
- The Ultimate continuously produces hot water at 140°. It can also supply hotter water for commercial use.
- Counterflow Heat Exchange configuration makes **water heating exceptionally effective and minimizes the head loss** typical in conventional indirect water heaters.
- Because boiler water circulates through Ultimate's tank instead of the coils, a large circulating pump is not required.



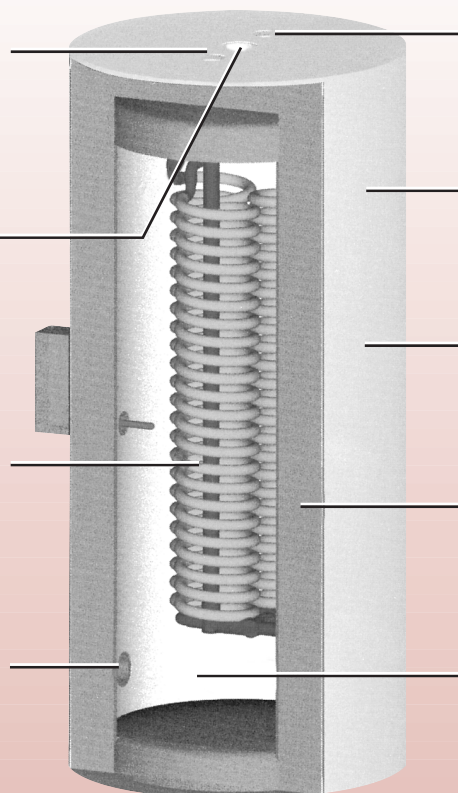
HOW THE ULTIMATE INDIRECT WATER HEATER WORKS

Domestic water enters at the top of the tank, travels downward to the base of the heat exchange unit from which it circulates upward to achieve maximum heating effectiveness.

Hot boiler water enters the Ultimate tank in a unique counter flow configuration for superior heating effectiveness. 220 GPH or 340 GPH model sizes provide water heating capacity for all applications.

Three tightly wound copper coils provide an exceptionally large heat transfer surface to provide consistently higher domestic hot water temperatures.

**Cooled water is returned to the boiler supply system, which, in turn, lowers the flue temperature and improves boiler efficiency by 0.5 - 1%.*



Hot water of 140°F or greater is continuously supplied to home or business.

The Ultimate's tank is made of durable, carbon steel for longer and more effective operation.

An enamel coated jacket inhibits rust and gives the unit an attractive appearance.

Foam insulation maintains high internal tank temperatures and limits stand by loss to 1/2° F per hour.

Because there is minimal pressure drop as water passes through the tank, small circulators can be used to maintain favorable heat transfer capacities.

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ULTIMATE SPECIFICATIONS

BOILER OUTPUT MBH	FLOW RATING GAL/HR AT 140°F		FLOW RATING GAL/HR AT 110°F		MIN. BOILER WATER FLOW Gal/min
	First Hour	Continuous	First Hour	Continuous	
MODEL U220					
50	78	72	117	108	2.7 (Taco 007)
70	102	95	153	142	2.7 (Taco 007)
90	129	120	193	180	2.7 (Taco 007)
110	156	147	233	220	3.4 (Taco 007)
140	195	187	292	280	5.4 (Taco 007)
160	220	213	330	320	6.5 (Taco 007)
MODEL U340					
160	226	213	339	320	4.1 (Taco 007)
190	265	253	398	380	5.7 (Taco 007)
220	305	294	456	440	6.7 (Taco 0012)
250	343	333	516	500	9.0 (Taco 0012)
300	369	360	557	540	10.0 (Taco 0012)
350	428	420	648	630	12.5 (Taco 0012)
400	487	480	739	720	15.0 (Taco 0012)

Test Conditions: 50°F domestic water in, 90° rise and 180°F boiler water in.

Pressure Ratings: Maximum Allowable Tank Working Pressure – 150 psi.
Heat exchangers are tested @ 300 psi.

Ultimate offers a limited lifetime warranty on residential applications on the Models to further promote our commitment to exceptional product performance. Commercial applications have 7 year warranty.



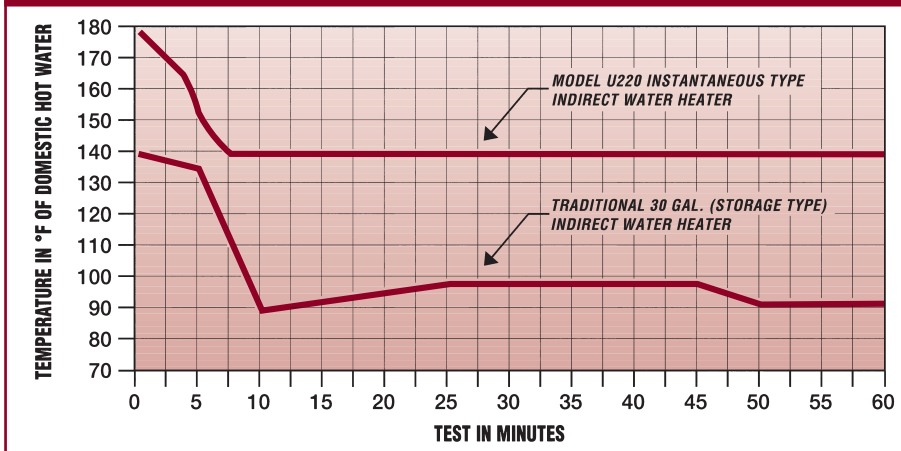
INDIRECT WATER HEATER INCLUDES:

- Copper Coil Heat Exchanger
- Carbon Steel Tank
- 2" High Density Foam
- Honeywell L4080B Control
- 3/4" Copper Sweat
- 1-1/4" NPT Boiler Supply/Return
- Recyclable Cardboard Shipping Container

OPTIONAL EQUIPMENT:

- Thermostatic mixing valve

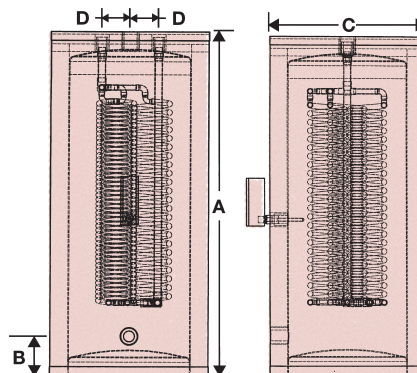
THERMAL PERFORMANCE DURING ONE HOUR CONTINUOUS DRAW



Test Conditions: Boiler Output: 120,000 BTU./HR. (Both Units)
Boiler Water Supply Temperature: U220 - 180°F • Traditional Indirect - 180°F
Domestic Water Flow Rate: 2.6 GPM (Both Units)
Boiler Water Flow Rate: 3.4 GPM (Both Units)

PHYSICAL SPECIFICATIONS:

Dimensions (inches)	A	B	C	D
Model U220	39.4	4.5	18.06	3.25
Model U340	46.4	4.5	18.06	3.25
Coil Surface (square feet)				
Model U220	17 sq. ft. (100 linear feet)			
Model U340	20 sq. ft. (119 linear feet)			
Weight (pounds)				
	Net	Full		
Model U220	117	269		
Model U340	141	357		



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