

Alliance™ LT & SL

Indirect Water Heaters

Two long-life, corrosion resistant tanks, featuring **NEW** thermoplastic (LT) or traditional hydrastone (SL) lining

- Impervious to water quality variations
- Minimal maintenance required
- No anode rod required
- Advanced TPI thermostat control
- 10-year residential warranty, *optional lifetime warranty available!*

Easy, low cost installation

- Top connections, flexible alignment
- Bolted topside coil access – no tank draining
- Alliance LT offers lower weight, ease of transport



Alliance SL
Four residential sizes:
27, 35, 50, & 70 gal.
plus **NEW** 70 gal. commercial



NEW Alliance LT
Three residential sizes:
30, 55, & 80 gal.
plus 80 & 119 gal. commercial

Alliance™ Indirect Water Heaters



A Lifetime of Abundant Domestic Hot Water

There can be extensive demands for domestic (potable) hot water in both residential and commercial applications. Alliance LT and SL indirect-fired water heaters meet the need for domestic hot water with unique designs and uncompromising reliability.

Indirect Water Heaters vs. Conventional Direct-Fired Water Heaters

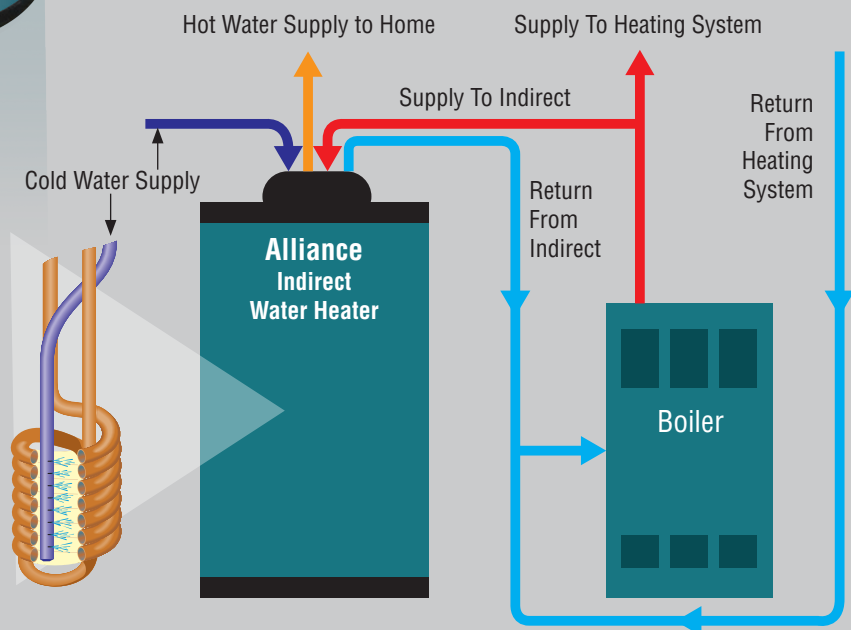
All “tank” water heaters store hot water to be used for household needs. A conventional direct-fired tank uses a 34,000 BTU heat source. By comparison, a similar indirect tank uses over 100,000 BTUs of boiler power! With its vastly greater heating capacity, an indirect water heater can actually create hot water faster than it leaves the tank. Your supply of hot water is **virtually limitless!**

How it Works

Cold domestic water entering the tank is heated as it is diffused across the surface of a uniquely designed heating coil. This heating coil contains hot water circulated by the boiler. An external control monitors tank water temperature for comfort and efficiency.

Not Created Equal

Indirect water heaters come with several kinds of tank lining. Alliance is available as Thermoplastic (LT) or Hydrastone Lined (SL). Both have distinct advantages over other types of tank lining:



Alliance LT (thermoplastic) & Alliance SL (hydrastone)

- ✓ Seamless construction
- ✓ No anode rod/replacement needed
- ✓ Minimal maintenance
- ✓ Withstands all water conditions
- ✓ Tolerates high temp & pressure

Glass-Lined Tanks

- Defects in glaze can expose tank to premature failure
- Sacrificial anode rod required
- Regular maintenance required
- Sensitive to high temps

Stainless Steel-Lined Tanks

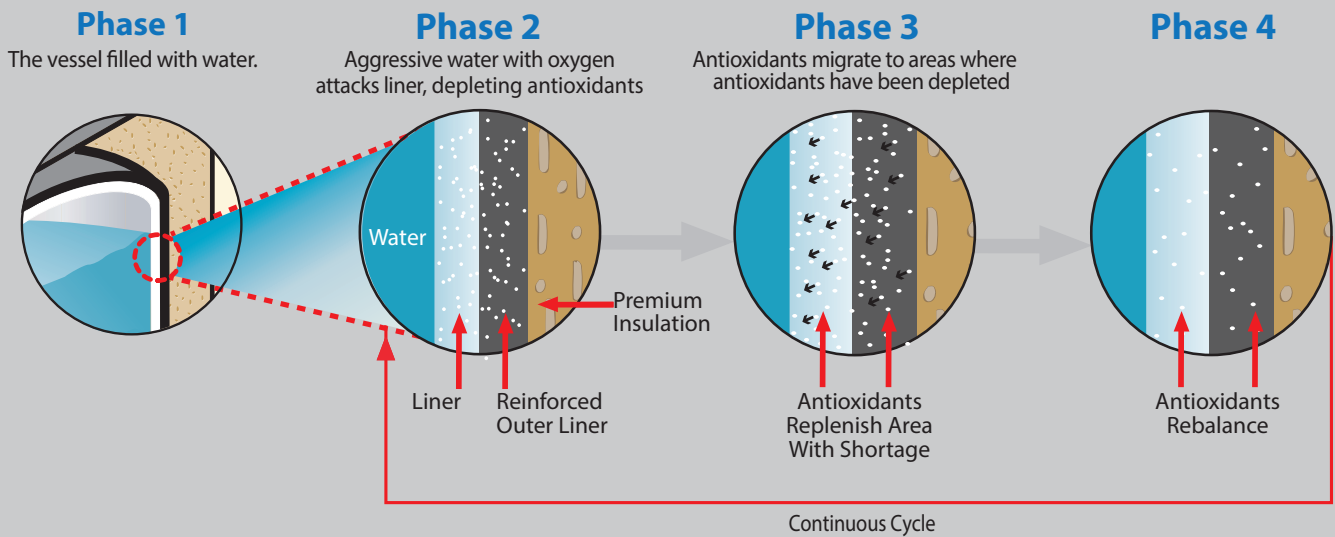
- Sensitivity to chlorides in domestic water can lead to shortened lifespan in some areas
- Construction welds become structural weak points on non-passivated tanks

The Science of Protection

Thermoplastic Lining (Alliance LT)

The greatest enemies of any water heater are corrosion and rust. The best defense against those enemies is to avoid tank materials that can rust or corrode. By utilizing a proprietary double-bonded thermoplastic tank liner, the Alliance LT can handle even the most aggressive water

conditions by continuously replenishing and rebalancing antioxidant levels throughout the storage vessel. This means that the tank won't rust, and the thermoplastic construction will keep the tank performing over its long service life.

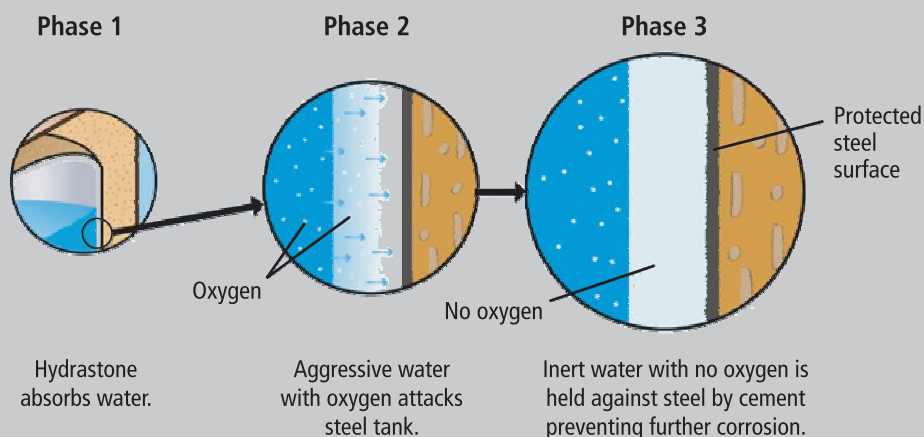


Hydrastone Lining (Alliance SL)

The concept of stone-lined water tanks is not a new one, and has been successful against corrosion for ages. In New England, a region prone to highly acidic water conditions, stone lined tanks are the norm. Actually, it's not uncommon to find one in service for 30+ years.

What makes the Alliance SL unique is the Hydrastone-lining itself. This 1/2" tank liner, comprised of a proprietary

material similar to cement, protects the outer steel of the tank vessel from the corrosive action of water. When water initially enters the tank, it is absorbed into the Hydrastone-lining permanently. This water loses its oxygen and becomes inert, non-corrosive water which then acts as a protective wall between the hot water and steel tank. This unique process and design makes Alliance SL water heaters a great choice for domestic hot water applications.



Alliance Indirects: Technical Information

Alliance LT										
		Performance Specifications					Physical Specifications			
Model	Storage (gallons)	First Hour ¹ (gal./hr.)		Boiler Output ² (6 GPM @ 200°F) BTU/hr.	Boiler Water Continuous Flow		Standby Heat Loss (°F/hr.)	Height (in.)	Diameter (in.)	Shipping Weight (lbs.)
		@115°F	@140°F		Flow Rate (gal./min.)	Head Loss (ft./w.c.)				
AL30LT	30	295	225	150,000	6	7	0.72	40.5	22.75	70
AL55LT	55	325	255	150,000	6	7	0.72	41	28	95
AL80LT	80	350	280	150,000	6	7	0.56	53.5	28	125
AL80CLT*	80	485	395	235,000	14	14	0.45	53.5	28	125
AL119CLT*	119	605	495	295,000	14	20	0.42	74	28	125

* Commercial model

1. First flow ratings are based on 50°F inlet water, 200°F boiler supply to coil.
2. Output may vary depending on boiler size, boiler water supply temperature, flow rate through coil, and circumstances of installation and use.

Alliance LT Standard Features:

- Thermoplastic seamless tank construction
- 1" (nominal) premium insulation
- Fiberglass outer shell
- Unique cold water diffuser
- TPI Thermostat Control module
- 3/4" MNPT cold water inlet connection*
- 3/4" FNPT hot water outlet connection*

- 3/4" MNPT boiler supply/return connections**
- 3/4" FNPT temperature & pressure relief valve
- Removable top mounted access plate with stainless steel flange reinforcements
- 10-year warranty, lifetime warranty optional (residential models only)

* 1-1/2" MNPT for commercial models

** 1" MNPT for commercial models

Alliance SL										
		Performance Specifications					Physical Specifications			
Model	Storage (gallons)	First Hour ¹ (gal./hr.)		Boiler Output ² (6 GPM @ 200°F) BTU/hr.	Boiler Water Continuous Flow		Standby Heat Loss (°F/hr.)	Height (in.)	Diameter (in.)	Shipping Weight (lbs.)
		@115°F	@140°F		Flow Rate (gal./min.)	Head Loss (ft./w.c.)				
AL27SL	27	295	225	150,000	6	7	0.78	39.25	20	172
AL35SL	35	300	230	150,000	6	7	0.72	39.25	22.75	185
AL50SL	50	320	250	150,000	6	7	0.56	40.75	26	238
AL70SL	70	340	270	150,000	6	7	0.45	45.75	28	290
AL70CSL*	70	475	385	235,000	14	14	0.45	45.75	28	290

* Commercial model

1. First flow ratings are based on 50°F inlet water, 200°F boiler supply to coil.
2. Output may vary depending on boiler size, boiler water supply temperature, flow rate through coil, and circumstances of installation and use.

Alliance SL Standard Features:

- Hydrastone seamless tank liner
- Steel tank vessel
- 1" (nominal) premium insulation
- Fiberglass outer shell
- Unique cold water diffuser
- TPI Thermostat Control module

- 3/4" MNPT cold water inlet connection*
- 3/4" FNPT hot water outlet connection*
- 3/4" MNPT boiler supply/return connections**
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