

Burnham® Alliance™ SL

Hydrastone-lined Indirect Water Heater

- Seamless hydrastone-lined tank
- A great option for use with any Burnham brand boiler for abundant domestic hot water
- VERY LOW standby heat loss
- Easy installation and servicing
- Five sizes available – 27, 35, 50, 70, & 119
- Proprietary TPI thermostat control included
- Optional lifetime warranty available

Burnham®
by
U.S. Boiler Company



Alliance™ SL

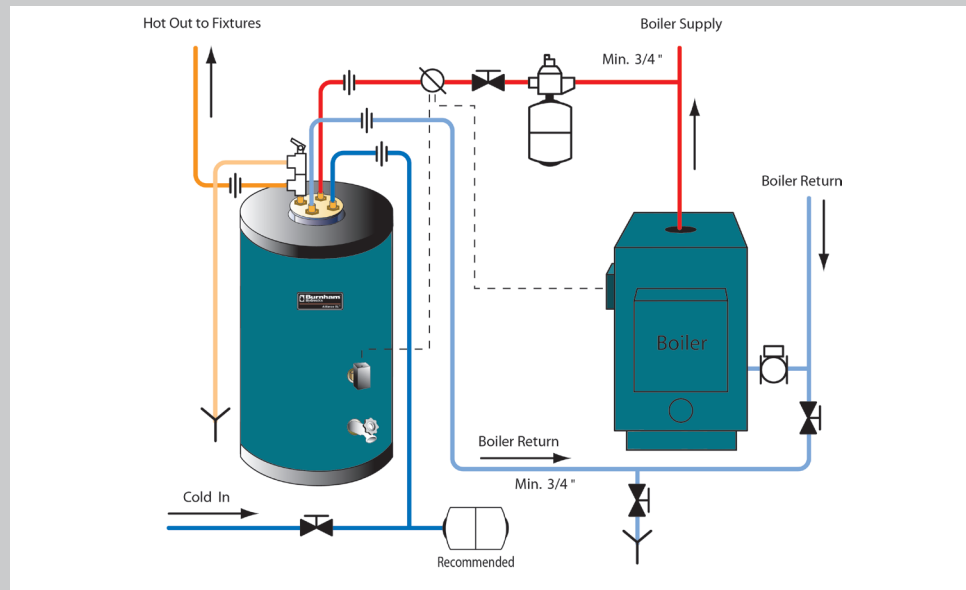


Hydrastone-lined Indirect Water Heater

There can be extensive demands for domestic (potable) hot water in both residential and commercial applications. Hydrastone-lined Alliance SL indirect-fired water heaters meet the needs for domestic hot water with a unique design and uncompromising reliability.

How an Indirect Water Heater Works

Indirect water heaters utilize the power and large heating capacity of a boiler to provide year-round hot water at low operating costs.



Alliance SL water heaters have a higher recovery rate than typical direct fired or electrically operated water heaters because they utilize the large output from the boiler as the heat source.

A Diverse Offering

To meet the needs of virtually any residential or commercial application Alliance SL water heaters are available in five sizes: 27, 35, 50, 70 and 119. Whether it is a three-story house or a 30-story apartment building, there's an Alliance SL for the job.



5 Sizes Available

The hydrastone-lining provides a protective barrier between the domestic hot water and the steel tank. This rugged tank design works well in a wide range of water conditions and operating temperatures.

Benefits of Installing an Alliance SL

Easy Installation

The coil comes installed and can be easily turned to line up with the boiler and domestic water piping on replacement installations. (The AL119SL coil is shipped separately).

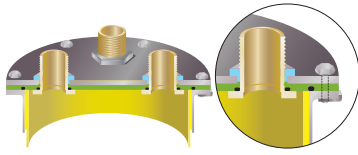
Easy Service

All connections are located on the top of the tank and all of the controls are located on the front of the tank for easy service and installation. The heat exchanger can be removed without having to drain the tank. (The AL119SL utilizes a side mounted coil).

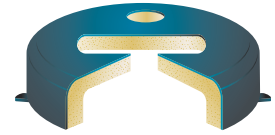
Unique 10/2/1 Warranty

A 10-year full tank replacement, two-year labor and one year on parts, which include the coil, come with every Alliance SL. An optional lifetime warranty is also available.

Top mount removable heat exchanger with double o-ring design for easy installation and service and eliminates the need for welds between the piping and the tank.

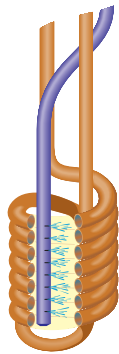


Two to three inches of polyurethane foam insulation combined with the stone lining resulting in extremely low standby heat loss.



Hydrastone-lining protects effectively against corrosion.

Larger coil diameter and spacing designed and positioned for maximum heating output and minimizes build-up.

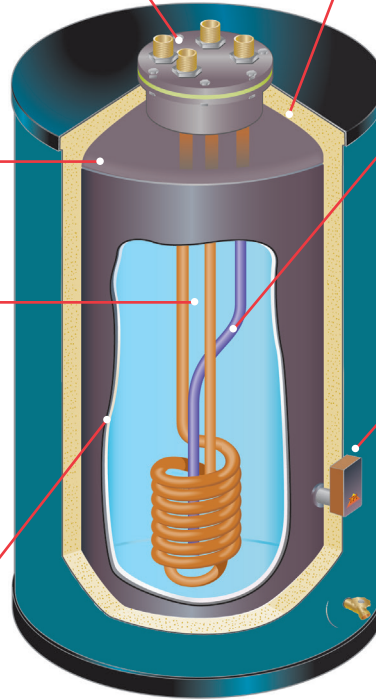


Unique cold water diffuser to increase output by 20 percent.

Proprietary TPI control accurately controls the output water temperature and helps eliminate tank "overload."



Heavy gauge steel helps increase integrity of the tanks



Note: No anode rod required

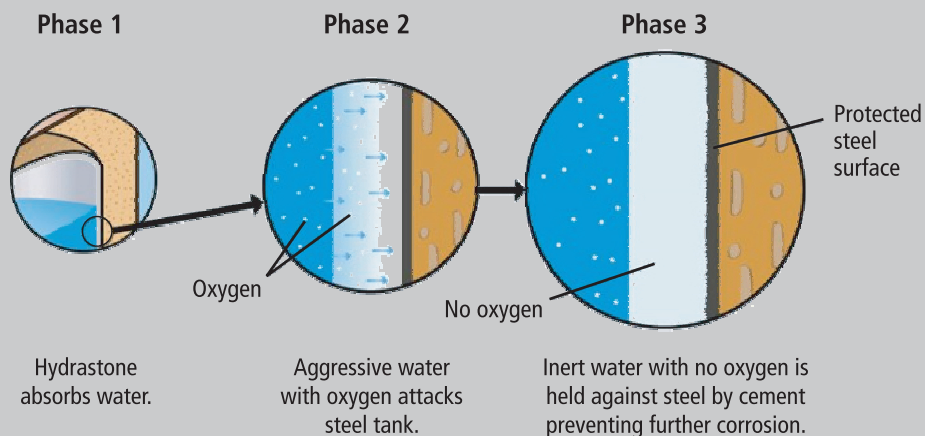
The Alliance model AL119SL utilizes a side mounted coil that is supplied separately.

Hydrastone Lining

The concept of stone-lined water tanks is not a new one, and has been proving successful against corrosion for ages.

Many of the stone-lined tanks are installed are 25-30 years old. In fact, the New England area has been using stone-lined tanks for years due to their water supply being very acidic and has been devastating to glass lined tanks.

What makes the Alliance SL unique is the Hydrastone-lining. This one half inch lining protects the steel tank from the corrosive action of water. When the water first 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 SL Ratings						
Model Number	Maximum First Hour Rating at 135°F (gal./hr.)	Continuous Draw Rating at 135°F (gal./hr.)	Standby Loss (°F/hr.)	Minimum Boiler Output (MBtu/hr.)	Boiler Water Flow Rate (gal./min.)	Pressure Drop through Coil (ft. w.c.)
AL27SL	192	162	0.97	99	6	9.0
AL35SL	200	162	0.72	99	6	9.0
AL50SL	225	171	0.56	110	6	9.5
AL70SL	294	217	0.45	120	6	10.0
AL119SL*	339	235	0.39	149	14	17.0

1. First flow ratings are based on 58°F inlet water, 135°F hot water and 180°F boiler supply water.
2. The above ratings were obtained at the boiler outputs (in MBtu/hr.) shown in column (4) at the boiler water flow rates (in GPM) shown in column (5). Other results will be obtained under different conditions.

* Note: The AL119SL utilizes a side mounted coil that is shipped separately.

Dimensions & Specifications					
Model Number	Storage Capacity (gal.)	Height Dim. 'A' (in.)	Diameter Dim. 'C' (in.)	Maximum Allowable Working Pressure	Approximate Shipping Weight (lbs.)
AL27SL	27	39-1/4	20	150 PSI	170
AL35SL	35	39-1/4	22-3/4	150 PSI	198
AL50SL	50	40-3/4	26	150 PSI	248
AL70SL	70	45-3/4	28	150 PSI	300
AL119SL	119	67-3/4	28	150 PSI	480

