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
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.

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).

Unique10/2/1 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.
**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.
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.

### Alliance SL Ratings

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Maximum First Hour Rating at 135°F (gal./hr.)</th>
<th>Continuous Draw Rating at 135°F (gal./hr.)</th>
<th>Standby Loss (°F/hr.)</th>
<th>Minimum Boiler Output (MBtu/hr.)</th>
<th>Boiler Water Flow Rate (gal./min.)</th>
<th>Pressure Drop through Coil (ft. w.c.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL27SL</td>
<td>192</td>
<td>162</td>
<td>0.97</td>
<td>99</td>
<td>6</td>
<td>9.0</td>
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<tr>
<td>AL35SL</td>
<td>200</td>
<td>162</td>
<td>0.72</td>
<td>99</td>
<td>6</td>
<td>9.0</td>
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<td>AL50SL</td>
<td>225</td>
<td>171</td>
<td>0.56</td>
<td>110</td>
<td>6</td>
<td>9.5</td>
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<td>AL70SL</td>
<td>294</td>
<td>217</td>
<td>0.45</td>
<td>120</td>
<td>6</td>
<td>10.0</td>
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<tr>
<td>AL119SL*</td>
<td>339</td>
<td>235</td>
<td>0.39</td>
<td>149</td>
<td>14</td>
<td>17.0</td>
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</tbody>
</table>

### Dimensions & Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Storage Capacity (gal.)</th>
<th>Height Dim. ‘A’ (in.)</th>
<th>Diameter Dim. ‘C’ (in.)</th>
<th>Maximum Allowable Working Pressure</th>
<th>Approximate Shipping Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL27SL</td>
<td>27</td>
<td>39-1/4</td>
<td>20</td>
<td>150 PSI</td>
<td>170</td>
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<tr>
<td>AL35SL</td>
<td>35</td>
<td>39-1/4</td>
<td>22-3/4</td>
<td>150 PSI</td>
<td>198</td>
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<tr>
<td>AL50SL</td>
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<td>40-3/4</td>
<td>26</td>
<td>150 PSI</td>
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<tr>
<td>AL70SL</td>
<td>70</td>
<td>45-3/4</td>
<td>28</td>
<td>150 PSI</td>
<td>300</td>
</tr>
<tr>
<td>AL119SL*</td>
<td>119</td>
<td>67-3/4</td>
<td>28</td>
<td>150 PSI</td>
<td>480</td>
</tr>
</tbody>
</table>

The AL119SL uses 1.0”M coil connections for input/output to boiler and 3/4”M for hot water inlet/outlet on side of tank.