

Laars-Stor®2 Residential Energy Saver Double-Wall Indirect Water Heater



Photo is of
LS-DW-2-50-L

The Laars-Stor®2 Series Features:

- **Heat Exchanger**—Double wall 1½" (38mm) O.D. glass coated steel coil. Because the double wall coil has a positive leak path, the hydronic fluid will stay separate from the potable water.
- **Low Heat Exchanger Head Loss**—Up to 10 GPM flow, with less than 5 ft. (1.5m) of head loss. Greatly reduces the required pump size for heat exchange.
- **Factory Installed Sediment Reduction System**—Cold water inlet sediment reducing device. Helps to minimize sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up at top of tank.
- **Insulation System**—2" (51mm) Non-CFC foam insulation covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Enamel Glass with Microban®**—An exclusively engineered enamel formula that provides superior tank protection from the corrosive effects of water; and with Microban® antimicrobial product protection to help prevent the growth of bacteria, mold and mildew on the surface of the tank lining.
- **Fully Automatic Thermostat Controls**—Fast acting surface-mount thermostat for automatic temperature control.
- **Supply and Return Connections**—The 3/4" (19mm) NPT female connections are located on the front for both the boiler supply and boiler return.
- **Potable Water Connections**—3/4" (19mm) NPT factory installed true dielectric fittings extend water heater life and eases installation.
- **Two Protective Aluminum Rods**—Provide added protection against corrosion for long trouble-free service.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded to assure a continuous seam for glass lining.
- **T&P Relief Valve**—Included.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.
- **AHRI Certified**—These water heaters are rated by the Air-Conditioning, Heating, and Refrigeration Institute to provide accurate performance data within the standards of the certification. This certification provides a recognized standard for proper comparison of hydronic appliances.

FEATURING: _____

MICROBAN®



Limited Lifetime Tank and Heat Exchanger Warranties / 6-Year Limited Warranty on Component Parts.

For products installed in USA, Canada, and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

Microban® antimicrobial product protection helps prevent the growth of bacteria, mold and mildew that may affect the product. The built-in antimicrobial properties do not protect users or others from disease-causing organisms. Microban® is a registered trademark of Microban Products Company.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 6,442,178; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. Microban® is a registered trademark of Microban Products Company.

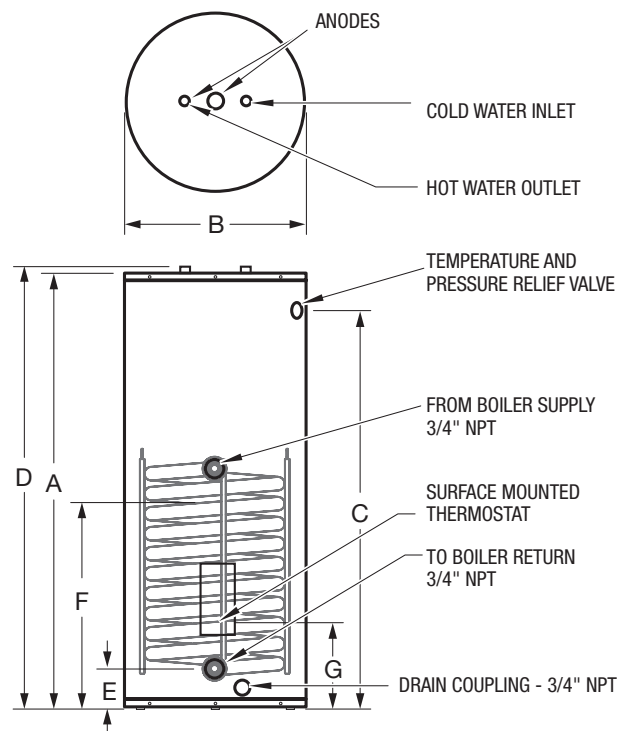
Laars-Stor® 2 Residential Double Wall Indirect Water Heater

Double Wall Indirect Models

Meet or exceed ASHRAE 90.1 (latest edition)

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Thermostat	Approx. Shipping Weight
	U.S. Gal.	Imp. Gal.	in.	in.	in.	in.	in.	in.	in.	lbs.
LS-DW-2-40-L	37	31	41	22	34 ³ / ₈	41 ⁷ / ₈	5 ³ / ₈	27 ¹ / ₂	11 ¹ / ₂	195
LS-DW-2-50-L	43	36	46 ¹ / ₄	22	40 ¹ / ₈	47 ¹ / ₄	5 ³ / ₈	27 ¹ / ₂	11 ¹ / ₂	205
LS-DW-2-80-L	71	59	59	24	52 ⁷ / ₈	59 ³ / ₄	5 ³ / ₈	27 ¹ / ₂	11 ¹ / ₂	255

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Thermostat	Approx. Shipping Weight
	Liters		mm.	mm.	mm.	mm.	mm.	mm.	mm.	kg.
LS-DW-2-40-L	140		1045	559	873	1083	137	669	292	89
LS-DW-2-50-L	163		1175	559	1019	1200	137	669	292	93
LS-DW-2-80-L	269		1505	610	1343	1518	137	669	292	116



AHRI Certified Water Heater Ratings

Model	First Hour Rating @ 135°F (Gal.)	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Minimum Heat Req. Rate (BTU/Hr.)	Minimum Heat Source Flow Rate (Gal./Min.)
LS-DW-2-40-L	110	85	1.1	58,000	8.0
LS-DW-2-50-L	120	85	0.9	58,000	8.0
LS-DW-2-80-L	145	85	0.6	58,000	8.0

Model	First Hour Rating @ 57°C (Liters)	Continuous Draw Rating @ 57°C (Liters/Hr.)	Standby Heat Loss Rating (°C/Hr.)	Minimum Heat Req. Rate (kW/Hr.)	Minimum Heat Source Flow Rate (Liters/Min.)
LS-DW-2-40-L	416	322	0.61	17.0	30.3
LS-DW-2-50-L	454	322	0.50	17.0	30.3
LS-DW-2-80-L	549	322	0.33	17.0	30.3

NOTES: These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180°F (82°C) boiler water supply temperature. Other results will be obtained under different conditions.

DOE Water Heater Performance

Model	Maximum First Hour Rating (Gal.) @		Continuous Draw Rating (Gal./Min.) @		Approximate Boiler Output Needed For Ratings (BTU/Hr.)
	140°F	115°F	140°F	115°F	
LS-DW-2-40-L	116	164	1.5	2.3	80,000
LS-DW-2-50-L	123	171	1.5	2.3	80,000
LS-DW-2-80-L	142	190	1.5	2.3	80,000

NOTES: Based on 200°F (93°C) boiler water temperature and 50°F (10°C) potable water inlet temperature.

Heat Exchanger Head Loss

GPM	2	5	8	10	12
Ft. of Hd. Loss	0.20	0.90	2.40	3.80	5.40

Meets NAECA Requirements

General

All units are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All potable water connections are 3/4" NPT (19mm) on 8" (203mm) centers.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement. Suitable for Water (Potable) Heating and Space Heating.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into the potable water side. The potable side of this unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance. The heat exchanger side of the unit may be used in space heating applications.



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