



Heating Systems Company

A subsidiary of **BRADFORD WHITE** Corporation

Laars-Stor2™ Residential Energy Saver Double-Wall Indirect Water Heater



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

The Laars-Stor2™ Series® Features:

- **Heat Exchanger**—Double wall 1½" 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. 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.
- **2" Non-CFC Foam Insulation**—Covers the sides and top of tank to save energy by retarding loss of heat. Also increases jacket rigidity.
- **Water Connections**—¾" NPT factory installed true dielectric fittings. Extends water heater life and eases installation.
- **Fully Automatic Controls**—Fast acting surface-mount thermostat for automatic temperature control.
- **Glass Lined Tank**—LAARS Heating System water heater tanks are protected from the corrosive effects of hot water by an exclusive ceramic porcelain-like coating.
- **Two Protective Aluminum Rods**—Provides added protection against corrosion for long trouble-free service.
- **Supply and Return Connections**—The ¾" NPT female connections are located on the front for both the boiler supply and boiler return.
- **Stand-by Heat Loss**—Less than ½°F per hour (ASHRAE 90.1b current standard).
- **Brass Drain Valve.**
- **T&P Relief Valve Included**—All models feature opening on side of tank.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded to assure a continuous seam for glass lining.
- **I-B-R Certified.**



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 and provinces do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,063,133 B2; 5,954,492; 5,761,379; 5,943,984; 5,081,696; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,669,448; 4,829,983; 4,808,356; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105.

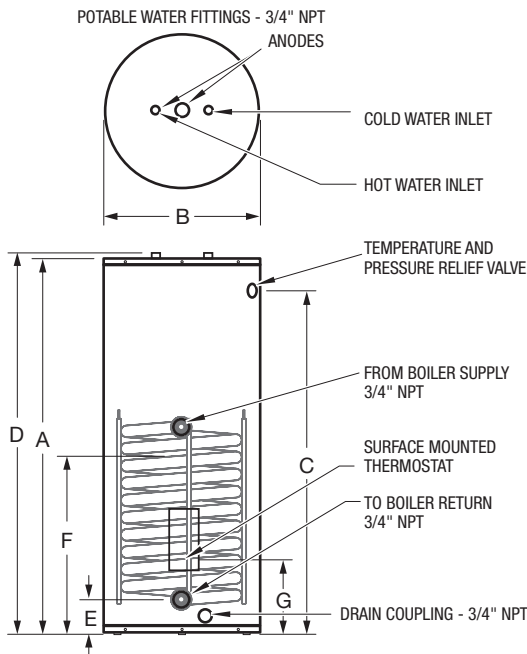
Laars-Stor2™ Residential Double Wall Indirect Water Heater

Deluxe Energy Saver Models

Meet or exceed ASHRAE 90.1b (current standard)

Model Number	Capacity		A	B	C	D	E	F	G	Approx. Shipping Weight
	U.S. Gal.	Imp. Gal.	Floor to Heater Top in.	Jacket Dia. in.	Floor to T&P Conn. in.	Floor to Water Conn. in.	Floor to Boiler Outlet in.	Floor to Boiler Inlet in.	Floor to Thermostat in.	
LS-DW-2-40-L	38	32	41	22	34%	41%	5%	27½	11½	170
LS-DW-2-50-L	48	40	46½	22	40%	47%	5%	27½	11½	180
LS-DW-2-65-L	64	54	59	22	53%	60	5%	27½	11½	196
LS-DW-2-80-L	75	63	59	24	52%	59%	5%	27½	11½	224

Model Number	Capacity		A	B	C	D	E	F	G	Approx. Shipping Weight
	Liters	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	
LS-DW-2-40-L	144	1045	559	873	1083	137	699	292	76	
LS-DW-2-50-L	182	1175	559	1019	1200	137	699	292	89	
LS-DW-2-65-L	242	1505	559	1349	1527	137	699	292	89	
LS-DW-2-80-L	284	1505	610	1343	1518	137	699	292	102	



I-B-R Water Heater Ratings					
Model	First Hour Rating @ 135°F (Gal./Hr.)	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	123	98	1.1	65,000	8.0
LS-DW-2-50-L	133	98	0.9	65,000	8.0
LS-DW-2-65-L	148	98	0.7	65,000	8.0
LS-DW-2-80-L	158	98	0.6	65,000	8.0

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

DOE Water Heater Performance					
Model	Maximum First Hour Rating (Gal./Hr.) @ 140°F	Continuous Draw Rating (Gal./Min.) @ 115°F	Approximate Boiler Output Needed For Ratings (BTU/Hr.)		
LS-DW-2-40-L	80	122	0.9	1.6	55,000
LS-DW-2-50-L	87	129	0.9	1.6	55,000
LS-DW-2-65-L	96	138	0.9	1.6	55,000
LS-DW-2-80-L	106	148	0.9	1.6	55,000

NOTES: Based on 200° F boiler water temperature and 50° F potable water inlet temperature.

Heat Exchanger Head Loss					
GPM	2	5	8	10	12
Ft. of Hd. Loss	trace	0.4	2.3	4.6	6.9

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 and heat exchanger 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.