

# Residential Double-Wall Indirect Water Heater



Photo is of NDW-2-50-L



## The Double-Wall Indirect Models feature:

- Heat Exchanger—Double wall 1½" (38mm) O.D. glass coated (Ultonium® glass lining with Microban®) steel coil. The positive leak path between the two walls of the coil ensures the potable water will stay separate from the hydronic fluid.
- Low Heat Exchanger Head Loss—Up to 10 GPM (38L) flow, with less than 5 ft. (1.5m) of head loss. Greatly reduces the required pump size for heat exchange.
- Factory Installed Sparge Tube System—Sediment reducing device that also increases first hour delivery of hot water while minimizing temperature build-up in tank.
- Ultonium® Glass Lining with Microban®—An exclusively engineered enamel formula that is applied to the interior surface of the steel for superior protection against corrosion. Microban® antimicrobial technology helps 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.
- 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.
- Potable Water Connections 3/4" (19mm) NPT factory installed true dielectric fittings extend water heater life and eases installation.
- Two Protective Anode 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.









# 5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For more information on warranty, please visit www.bradfordwhite.com
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.

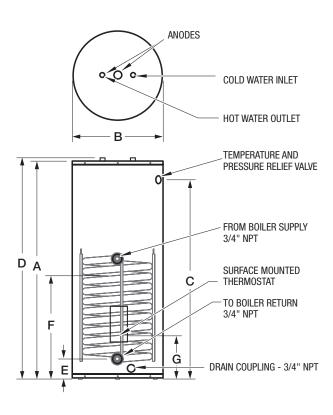
Microban® antimicrobial product protection helps prevent the growth of bacteria, mold and mildew that may affect the product. The built-in antimicrobial properties do not protect users or others from disease-causing organisms. Microban® is a registered trademark of Microban Products Company.

# Residential Double-Wall Indirect Water Heater

# **Double Wall Indirect Models**

Meet or exceed ASHRAE 90.1 (latest edition)

Model Number	Capa U.S.	city Imp.	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
	Gal.	Gal.	in.	in.	in.	in.	in.	in.	in.	lbs.
NDW-2-40-L	37	31	41	22	34%	41%	5%	27½	11½	195
NDW-2-50-L	43	36	46¼	22	40%	47¼	5%	27½	11½	205
NDW-2-65-L	57	47	59	22	53%	60	5%	27½	11½	235
NDW-2-80-L	71	59	59	24	52%	59¾	5%	27½	11½	255
			1	1						
Model Number	Сара	city	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
	Capa Lite		Floor to Heater	Jacket	Floor to T&P	Floor to Water	Floor to Exchanger	Exchanger	Floor to	Shipping
		ers	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Water Conn.	Floor to Exchanger Outlet	Exchanger Inlet	Floor to Thermostat	Shipping Weight
Number	Lite	e <b>rs</b> 0	Floor to Heater Top mm.	Jacket Dia. mm.	Floor to T&P Conn. mm.	Floor to Water Conn. mm.	Floor to Exchanger Outlet mm.	Exchanger Inlet mm.	Floor to Thermostat mm.	Shipping Weight kg.
Number	Lite	e <b>rs</b> 0 3	Floor to Heater Top mm. 1045	Jacket Dia. mm.	Floor to T&P Conn. mm.	Floor to Water Conn. mm.	Floor to Exchanger Outlet mm.	Exchanger Inlet mm. 699	Floor to Thermostat mm.	Shipping Weight kg. 89



#### **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.)
NDW-2-40-L	110	85	1.1	58,000	8.0
NDW-2-50-L	120	85	0.9	58,000	8.0
NDW-2-65-L	135	85	0.7	58,000	8.0
NDW-2-80-L	145	85	0.6	58,000	8.0
					1

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.)
NDW-2-40-L	416	322	0.61	17.0	30.3
NDW-2-50-L	454	322	0.50	17.0	30.3
NDW-2-65-L	511	322	0.39	17.0	30.3
NDW-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.) @ 140°F 115°F		Continuous Draw Rating (Gal./Min.) @ 140°F 115°F		Approximate Boiler Output Needed For Ratings (BTU/Hr.)	
NDW-2-40-L	116	164	1.5	2.3	80.000	
NDW-2-50-L	123	171	1.5	2.3	80.000	
NDW-2-65-L	132	180	1.5	2.3	80,000	
NDW-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.

Niles Steel Tank = 1701 Terminal Road = PO Box 728 = Niles, MI 49120
Phone: 269-683-1910 = FAX: 269-683-1953 = www.nilesst.com