

SBB Indirectly Fired Water Heater Tanks

Features

- » Heavy gauge steel with porcelain enamel coating
- » Superb quality with long service life
- » Fitted with one or two large heat exchangers
- » Sacrificial anode rod
- » Up to 3" R-21 urethane foam insulation for low standby heat loss
- » Large clean out port for ease of maintenance
- » Limited lifetime warranty

Left to right:
SBB 300
SBB 400
SBB 600 Plus



Models & Specifications

| | SBB 300 Plus | SBB 400 Plus | SBB 600 Plus |
|--------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Item Number | 187873 | 187874 | 187875 |
| Contents | | | |
| Storage Capacity | 80.6 gal / 305 l | 108.6 gal / 411 l | 162.9 gal / 617 l |
| Volume of heat exchanger, top | 1.9 gal / 7.3 l | 2.2 gal / 8.2 l | 2.5 gal / 9.6 l |
| Volume of heat exchanger, bottom | 2.7 gal / 10.1 l | 2.9 gal / 11.3 l | 3.5 gal / 13.2 l |
| Pressure | | | |
| Working pressure | 150 PSI / 10 bar | 150 PSI / 10 bar | 150 PSI / 10 bar |
| Tested to pressure | 217 PSI / 15 bar | 217 PSI / 15 bar | 217 PSI / 15 bar |
| Max. pressure of upper loop | 150 PSI / 10 bar | 150 PSI / 10 bar | 150 PSI / 10 bar |
| Temperature | | | |
| Max. temperature of lower loop | 266 °F / 130 °C | 266 °F / 130 °C | 266 °F / 130 °C |
| Max temperature of upper loop | 266 °F / 130 °C | 266 °F / 130 °C | 266 °F / 130 °C |
| Heat exchanger | | | |
| Surface area heat exchanger top | 1,705 sq. in / 1.1 m ² | 2,015 sq. in / 1.3 m ² | 2,945 sq. in / 1.9 m ² |
| Surface area heat exchanger bottom | 2,325 sq. in / 1.5 m ² | 2,635 sq. in / 1.7 m ² | 3,875 sq. in / 2.5 m ² |
| Output rating heat exchanger top | 111,000 Btu/hr / 32 kW | 128,000 Btu/hr / 37 kW | 182,000 Btu/hr / 53 kW |
| Output rating heat exchanger bottom | 150,000 Btu/hr / 44 kW | 164,000 Btu/hr / 48 kW | 242,000 Btu/hr / 71 kW |
| Recovery rate (maximum input) | 180 gal/hr / 681 l/hr | 186 gal/hr / 704 l/hr | 224 gal/hr / 848 l/hr |
| Weights | | | |
| Tank weight empty | 339 lb / 154 kg | 412 lb / 187 kg | 544 lb / 247 kg |
| Tank weight full | 1051 lb / 477 kg | 1362 lb / 618 kg | 1955 lb / 887 kg |
| Other | | | |
| Standby losses in 24 hours | 6500 Btu / 1.9 kWh | 7500 Btu / 2.2 kWh | 10000 Btu / 2.9 kWh |
| Cold/hot water connection | | | |
| Dimensions | | | |
| Height with insulation | 66 3/32 in / 1,679 mm | 72 11/16 in / 1,848 mm | 68 5/16 in / 1,735 mm |
| Width with insulation | 27 9/16 in / 700 mm | 29 1/2 in / 750 mm | 36 1/4 in / 920 mm * |
| Width of insulation | 3 in / 75 mm | 3 in / 75 mm | 3 11/32 in / 85 mm * |

* Insulation is partially removable to reduce width to 31.5" for clearance purposes

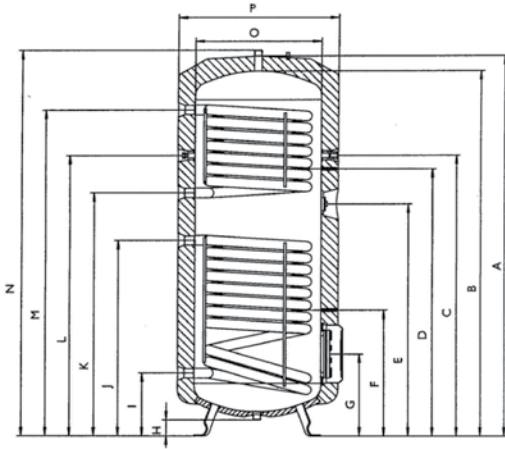


SBB tanks are ETL certified in US and Canada to IAS U.S. Requirements for Indirect Fired Water Heaters For Use With External Heat Source. No 1-91, Dated June 6, 1992



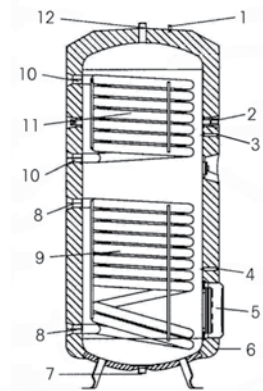
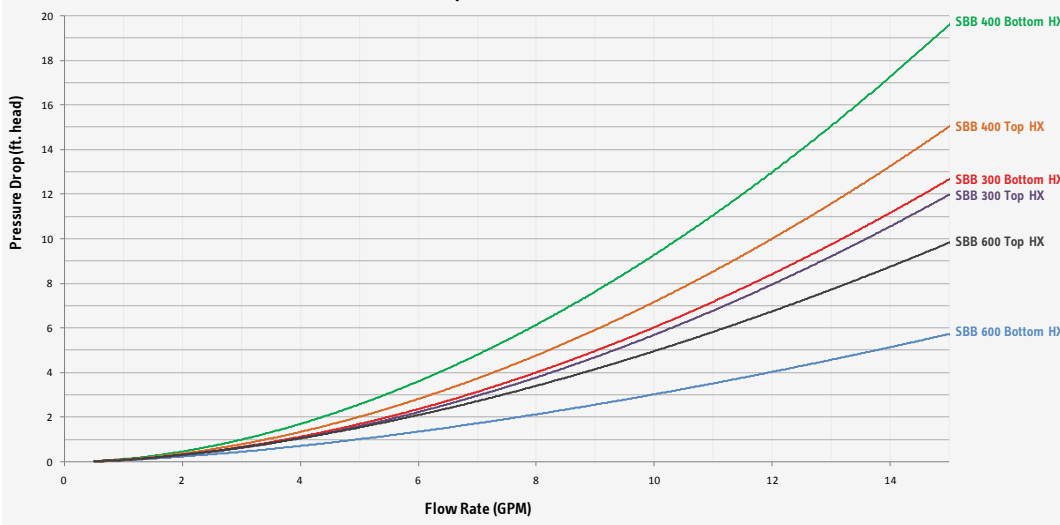
Tested and Certified by Water Quality Association against NSF/ANSI 372 for lead free compliance.

Dimensions



| Type | | SBB 300 Plus | SBB 400 Plus | SBB 600 Plus |
|------|-----------------------------------|--------------|--------------|--------------|
| A | Height of unit w/insulation | 66.1/1679 | 72.7/1848 | 68.3/1735 |
| B | Height of unit without insulation | 63.3/1609 | 70.1/1781 | 65.7/1670 |
| C | Height of well for temp. sensor | 46.4/1179 | 48.7/1238 | 46.9/1192 |
| D | Height thermometer | 41.1/1045 | 43.0/1093 | 41.5/1055 |
| E | Height spare port | 40.3/1025 | 42.4/1078 | 40.9/1040 |
| F | Height of well for temp. sensor | 21.9/557 | 22.0/560 | 23.4/595 |
| G | Height inspection flange | 14.4/365 | 14.4/367 | 15.9/405 |
| H | Height cold water feed | 2.9/73 | 2.6/65 | 2.0/50 |
| I | Height solar cold feed | 11.0/280 | 11.1/282 | 10.9/277 |
| J | Height solar hot return | 34.0/865 | 34.1/867 | 33.9/862 |
| K | Height heater hot boiler return | 38.4/975 | 44.5/1130 | 42.9/1089 |
| L | Height circulation port | 52.7/1339 | 63.0/1600 | 57.2/1453 |
| M | Height cold boiler feed | 52.7/1339 | 63.0/1600 | 57.2/1453 |
| N | Overall height | 67.08/1704 | 73.74/1873 | 69.29/1760 |
| O | Width without thermal insulation | 21.65/550 | 23.62/600 | 29.52/750 |
| P | Width with thermal insulation | 27.55/700 | 29.52/750 | 36.22/920 |

Pressure Drop Curve for SBB Tanks



- 1 Sacrificial anode indicator
- 2 Thermometer
- 3 Well for temperature sensor (boiler)
- 4 Well for temperature sensor (solar)
- 5 Clean-out port
- 6 Foam insulation
- 7 Cold water inlet
- 8 Heat exchanger ports lower loop (solar)
- 9 Lower exchanger coil (solar)
- 10 Heat exchanger ports upper loop (boiler)
- 11 Upper exchanger coil (boiler)
- 12 Hot water outlet

Specification

Tank shall be constructed of steel with porcelain enamel coating on all surfaces in contact with DHW. Tank shall be insulated with urethane foam insulation 2.95 in. (70 mm.) thick to R-21 with an ABS outer casing cover. Standby heat loss shall be between 1.9 and 2.9 kWh (6,500-10,000 Btu) per 24 hours. Tank shall be delivered wrapped in plastic on a one-way pallet. Tank shall have been pressure tested to 217 PSA/15 bar and the maximum operating pressure shall be 150 PSI/10 bar. Tank shall be ETL certified in USA and Canada to IAS U.S. Requirements for Indirect Fired Water Heaters For Use With External Heat Source. No 1-91, Dated June 6, 1992. Tank shall be equipped with welded steel plain-ended pipe heat exchangers, hot water corrosion protection via special enamel coating and magnesium sacrificial anode, three immersion sleeves for housing of temperature probe and thermometer, circulation socket, inspection/cleaning port with cover.

Engineer/Architect _____ Date _____

Job Name/Customer _____ Location _____

Contractor _____ Representative _____

Qty _____ Volume _____

SBB model _____

rev. 7.2023 Due to our continuous process of engineering and technological advancement, specifications may change without notice.