

# H-1100C Commercial Hot Tub Specs

Section Includes:

1. Hot Tub Materials
  - A. Shell
  - B. Plumbing
  - C. Suction/Return Fittings
  
2. Hot Tub Mechanical System
  - A. Plumbing
  - B. Mechanical
  - C. Equipment Layout
  - D. Optional Equipment
  
3. Warranty

## 1.1 – Hot Tub Materials

### A. Shell

1. The Hot Tub shell shall be vacuum formed with 0.187” acrylic.
2. The acrylic shell shall be reinforced with two coats of fibreglass resin. The first coat shall be a waterproof high adhesion vinyl ester. The second coat shall be a conventional composite mix.
3. The shell shall be insulated using 2lb closed cell polyurethane foam.
4. Delineating markings shall be applied to the stair and bench edges with gel coat.

### B. Plumbing

1. Piping connected to and around the sump under the Hot Tub shall consist of PVC (Poly-Vinyl Chloride) with Schedule 40 (ASTM D1785, CSA B137.3).
2. Piping connecting the white goods shall be PVC flex pipe (NSF 50).
3. Pipe fittings shall be PVC with Schedule 40 (ASTM D1784, ASTM D2466).

### C. Suction/Return Fittings

1. There shall be seven (7) large hydrotherapy jets.
2. There shall be four (4) medium hydrotherapy jets.
3. There shall be two (2) VGB compliant floor drain.
4. There shall be one (1) Poolmiser water level controller.
5. There shall be one (1) wide mouthed skimmer (NSF listed).
6. There shall be three (3) filter returns located in the foot well.

7. There shall be two (2) air controls.

## **1.2 – Hot Tub Mechanical**

### **A. Plumbing**

1. Piping connecting the pump, filter and heater shall consist of 2" Schedule 40 rigid PVC (ASTM D1785, CSA B137.3).
2. Pipe fittings shall be PVC with Schedule 40 (ASTM D1784, ASTM D2466) except when connecting directly to the heater CPVC Schedule 80 (ASTM D1784, F441) shall be used.
3. One (1) Schedule 40 2" x 3/4" reducing bushing to allow for a fresh water connection.
4. Four (4) Schedule 40 PVC true union ball valve with EPDM seats.

### **B. Equipment**

The basic mechanical package shall consist of:

1. One (1) 240V single phase 3/4hp filter pump with strainer (NSF listed, UL listed)
2. One (1) 240V single phase 3hp jet pump with strainer (NSF listed, UL listed).
3. One (1) 150 sq.ft Cartridge Filter (NSF listed).
4. One (1) 240V single phase 15kW Electric Heater (UL listed).
5. One (1) 2" Blue White flowmeter.
6. Two (2) Inline thermometers.

Please note that some dealers may purchase only a pre-plumbed hot tub shell and supply their own equipment.

### **C. Packaged Equipment Layout**

1. All equipment shall be organized, mounted and plumbed to stub outs per the equipment layout on the hot tub drawing.
2. All equipment shall be mounted on two (2) waterproof, plastic pads.
3. Thermometers and gauges shall be provided, but not installed.

Not included: Following, but not limited to:

4. Connection piping between pre-plumbed shell and packaged mechanical equipment.
5. Control and power wiring and electrical components.

## **D. Optional Equipment**

The following equipment does not come standard with the hot tub mechanical package and may be purchased/upgraded at additional cost.

1. Pumps and heater may be upgraded to 208V or 575V 3 Phase equipment.
2. Chemical control system.
  - A. One (1) Pool Link 103 chemical controller (ETL listed).
  - B. One (1) probe chamber.
  - C. One (1) pH probe.
  - D. One (1) ORP probe.
  - E. One (1) piston style flow switch.
  - F. One (1) Fixed Rate Peristaltic Feed Pump for acid feed (UL listed).
  - G. One (1) Acid holding tank with lid.
  - H. One (1) Erosion Feeder (NSF listed).
  - I. One (1) ½" 120V/60Hz N/C brass solenoid valve with Viton seals.
3. Add second Fixed Rate Peristaltic Feed Pump and a chemical holding tank for liquid sanitizer.
  - A. Removes Erosion Feeder
  - B. Removes solenoid valve.
4. Emergency push/pull switch.
  - A. One (1) N/O contact block.
  - B. One (1) N/C contact block.
  - C. One (1) push/pull button.
5. AV Alarm (flashing beacon with horn).
6. Low voltage spa light with install.
  - A. 12V Spa light (UL listed).
  - B. 300-watt safety transformer, 120V input to 12V output (CSA certified for Canada and US).
7. United Electric Company B54-103 external high limit temperature switch (UL, CSA, CE listed).
  - A. Adjustable from 0 to 225 F.
  - B. Includes stainless steel thermal well.
8. Top Mount 24" Sand Filter.
  - A. Includes sand.

- B. 2" Variflow valve
  - C. Replaces 150 sq.ft Cartridge Filter.
9. 15-minute Countdown Timer.
10. Two (2) VA-2000S Vac-Alert SVRS units (ASME/ANSI 112.19.17 compliant).
11. Grab rail with deck flange, 33 inch.
- A. One (1) 33" safety access "P" shaped grab rail.
  - B. Two (2) deck flanges.
  - C. One (1) hardware set.
12. Grab rail with anchors, 33 inch.
- A. One (1) 33" safety access "P" shaped grab rail.
  - B. Two (2) brass rail anchors.
  - C. Two (2) escutcheons.
13. Hot tub hardcover.
- A. 4" – 3" taper
  - B. Grey or brown.
14. UV Disinfection System
- A. 82GPM UV Sanitizer
15. Substitute Natural Gas or Propane Heater
- A. 175,000 BTU Natural Gas or Propane Heater
  - B. Replaces 15KW 240V Heater
16. Rigid Plumbing
17. Additional R12 Insulation

### **1.3 – Hot Tub Warranty**

- 1. Five (5) year limited warranty – shell
- 2. Two (2) year limited warranty – mechanical package
- 3. One (1) year limited warranty – labour

See full warranty for details and limitations.