



Please take the time to read this booklet carefully, as it will provide you with the information you will need to ensure the safe, secure, and timely installation of your new spa. The following sections are guidelines on how to prepare for delivery and set-up of your new spa. Specifically covered are site selection, delivery access, ground preparation, and electrical requirements.

Remember to carefully read the Owner's Manual that accompanies your spa and to complete the warranty card within ten days of delivery. These items, along with other valuable information, included in the Owner's Package which can be located in the equipment compartment of your spa. You will also find your serial number, in the equipment compartment.

Watkins Manufacturing Corporation reserves the right to change features, specifications and design without notification and without incurring any obligation.

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In most cities and counties, permits will be required for the installation of electrical circuits or the construction of exterior surfaces (decks and spa enclosures). In addition, some communities have adopted residential barrier codes which may require fencing and/or self-closing gates on the property to prevent unsupervised access to a pool (or spa) by children under 5 years of age. Your Caldera® spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers and as a result, is usually exempt from most barrier requirements. As a general practice, your local Building Department will inform you of any applicable barrier requirements at the time a permit is obtained for the installation of an electrical circuit. Your Caldera dealer can provide information on which permits may be required.

#### SITE SELECTION AND PREPARATION

**IMPORTANT:** Site selection and preparation are your responsibility. Carefully read these instructions and consult your authorized Caldera® dealer if you have any questions.

You probably have a spot picked out for your new spa, whether it's indoors or outdoors, on a patio or on a deck. Just make sure you check the following:

- Always put your spa on a structurally sound, level surface. A filled spa can weigh a great deal. Make certain that
  the location you choose can support the weight of your filled spa.
- Locate your equipment compartment, which houses all of the electrical components, in a place where water will
  drain away from it. Allowing water into the equipment compartment can damage the electronics, or may result in
  tripping your house's circuit breaker.
- Leave yourself easy access to the circuit breakers in the subpanel.
- Never let water get into the subpanel. Your 230 volt spa's subpanel is raintight when installed correctly with the
  door closed.
- Leave access to the entire front of the spa (the removable panel provides access to the spa's equipment) for periodic spa care and maintenance.
- Note that on the Utopia and Aquatic Melodies® Series spas, the SpaGlo® exterior lighting fixtures are located on
  only three sides, the side opposite the main control panel has no lighting.

#### INDOOR/BASEMENT INSTALLATION

Be aware of some special requirements if you place your spa indoors. Water will accumulate around the spa, so flooring materials must provide a good grip when wet. Proper drainage is essential to prevent a build-up of water around the spa. When building a new room for the spa, it is recommended that a floor drain be installed. The humidity will naturally increase with the spa installed. Water may get into woodwork and produce dry rot, mildew, or other problems. Check for airborne moisture's effects on exposed wood, paper, etc. in the room. To minimize these effects, it is best to provide plenty of ventilation to the spa area. An architect can help to determine if more ventilation must be installed.

Your Caldera dealer can help you with local information such as zoning regulations and building codes.

#### DECK INSTALLATION

To be certain your deck can support your spa, you must know the deck's maximum load capacity. **Consult a qualified building contractor or structural engineer before you place the spa on an elevated deck or indoors.** To find the weight of your spa, its contents and occupants, refer to the Spa Specification chart (on back cover). This weight per square foot must not exceed the structure's rated capacity, or serious structural damage could result.

#### **OUTDOOR AND PATIO INSTALLATION**

No matter where you install your new spa, it's important that you have a solid foundation to support it. Structural damage to the spa resulting from incorrect installation or placement on an inadequate foundation is not covered under the spa's limited warranty. (See next page for specifics)



# GROUND AND SPA LEVELING PREPARATION

Your Caldera spa has been engineered to perform on several types of common yard surfaces. While a concrete slab is best for long-term use\*, other foundations are acceptable so long as a level base is prepared prior to delivery. Three foundation base pictures, shown at right, represent examples of alternatives to a concrete slab for spas installed without gazebos or other accessories.

\*NOTE: A reinforced concrete pad at least four inches thick or structurally sound deck able to support the "dead weight" found in the spa specification chart is required for the Geneva™, Niagara®, Elation® and Moorea™ spas, and recommended for the Aspire®, Tahitian®, Hawaiian, Martinique® and Kauai® spas. The reinforcing rod or mesh in the pad should be attached to a bond wire.

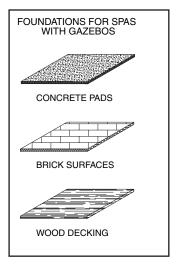
#### **INSTALLATION NOTES:**

- Concrete sloped at 1/2 inch per 10 feet is preferred so that rain water and water spillover will run off and not puddle underneath the spa (water under the spa for long periods of time may cause the wood to deteriorate).
- If stepping stones or railroad ties are selected for the spa foundation, they should be placed and leveled below the entire spa to maintain even distribution of the spa weight.
- It is important to note that soft surfaces, even when stepping stones are used to distribute the weight of the spa as evenly as possible, will still have a tendency to settle unevenly, resulting in an unlevel spa.
- Remember, placing the spa on grass or dirt may increase the amount of debris which is inadvertently brought into the spa water on the user's feet.

If you are purchasing a deck package or a spa enclosure with your spa, a solid foundation becomes mandatory. Placing them on any surface other than a single level pad could create problems with their installation. Pictured at right are a few of the recommended surfaces.

As a homeowner, it is your responsibility to provide a suitable, level foundation for your spa. Keep in mind that most delivery crews are not equipped to level and prepare spa sites.

PE-CAST STEPPING STONES



If you are interested in having a concrete slab, brick surface, or wood deck installed, your Caldera dealer should be able to suggest a qualified, licensed contractor.

#### Delivery Access

First, locate the dimensions of your spa on the chart that is found on the next page. The dimensions shown are the measurements of the spa in the vertical position, laid on its side.

Next, contact your dealer to find the height and width added by the delivery cart which the dealer will use to deliver your new spa. Use the height of the cart plus the dimension shown as H to determine the vertical clearance required to pass the spa and cart. Use the width of the cart, or dimension W, whichever is greater, to determine the maximum width of clearance necessary.

**NOTE:** It may be necessary to allow for additional over-head clearance if the spa will be rolled up or down an incline or moved up or down a short flight of stairs.

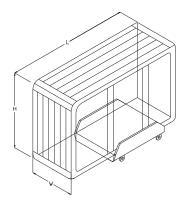
Use the information in the picture below to determine the requirements for access to your desired location. It may be

necessary to remove a gate, part of a fence, or other movable obstructions in order to roll the spa to its installation site. About ten percent of the time, a crane is the only way to install the spa by lifting it to its final destination.

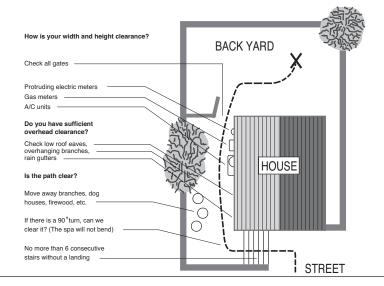
If the spa has to be taken off of the cart to go over a wall (either because the entry area is too narrow, the eaves are too low, the corner is too tight, or the stairway is too steep), a crane will be required. Don't be alarmed!

The crane has a truck-mounted boom which can fit right in your driveway. It is run by a licensed and insured operator. For a charge, the crane operator will lift your spa over walls, buildings, or any other obstruction and place it as close to the installation site as possible. The Caldera® spa delivery personnel will supervise the crane delivery and complete the spa installation. Crane delivery typically takes an average of 30 minutes to complete.

**NOTE:** If your spa delivery requires the use of a crane, you may be required to pay for its services at the completion of the delivery.



Model	Width W	Length L	Height H
Geneva™	38"	7' 5"	7' 5"
Niagara <sup>®</sup>	38"	7' 5"	7' 5"
Tahitian <sup>®</sup>	36"	7' 0"	7' 0"
Elation <sup>®</sup>	38"	7' 7"	7' 7"
Aspire <sup>®</sup>	36"	7' 0"	7' 0"
Moorea™	36"	7' 7"	7' 0"
Hawaiian	36"	7' 0"	7' 0"
Martinique <sup>®</sup>	34"	7' 5"	6' 4"
Kauai <sup>®</sup>	29"	7' 0"	5' 5"

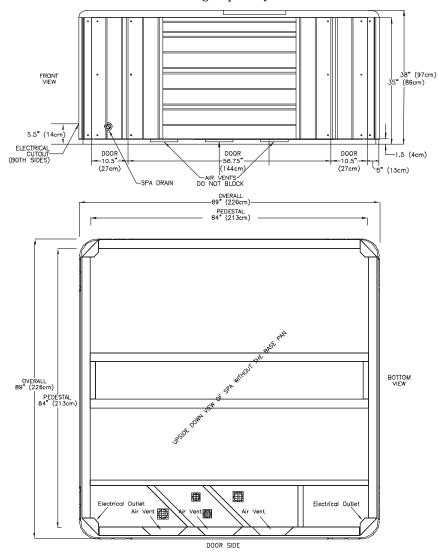




# Geneva™ and Niagara®

#### **Dimensions**

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.

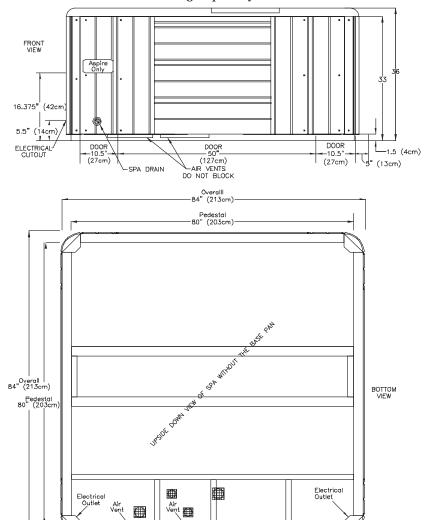


**NOTE:** Watkins Manufacturing Corporation requires that the Geneva and Niagara be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

WARNING: The Geneva and Niagara must not be shimmed in any manner.

# Tahitian<sup>®</sup>, Aspire<sup>®</sup> and Hawaiian (Aspire is an Aquatic Melodies<sup>®</sup> model only) Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.



NOTE: Watkins Manufacturing Corporation recommends that the Tahitian, Aspire, and Hawaiian be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

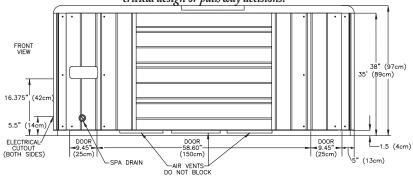
DOOR SIDE

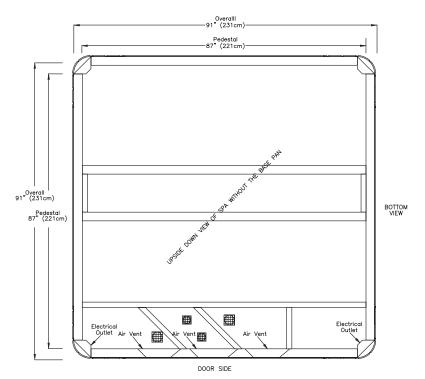
WARNING: The Tahitian, Aspire and Hawaiian must not be shimmed in any manner.

### **Elation**®

#### (Aquatic Melodies' model only) Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.





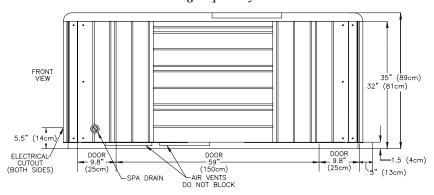
**NOTE:** Watkins Manufacturing Corporation requires that the Elation be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

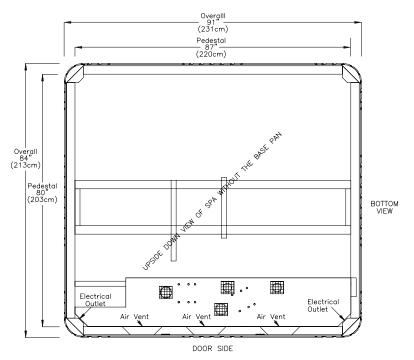
WARNING: The Elation must not be shimmed in any manner.

#### $Moorea^{TM}$

#### (Paradise model only) Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.





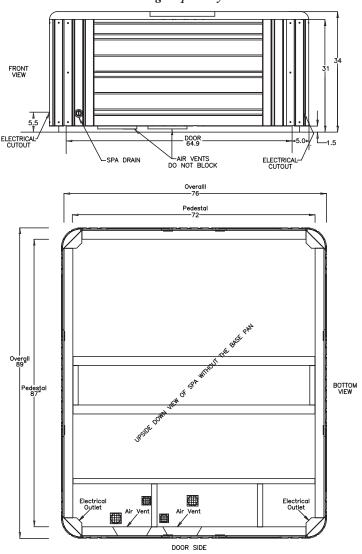
**NOTE:** Watkins Manufacturing Corporation requires that the Moorea be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

WARNING: The Moorea must not be shimmed in any manner.

# Martinique®

#### (Paradise model only) Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.



**NOTE:** Watkins Manufacturing Corporation recommends that the Martinique be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

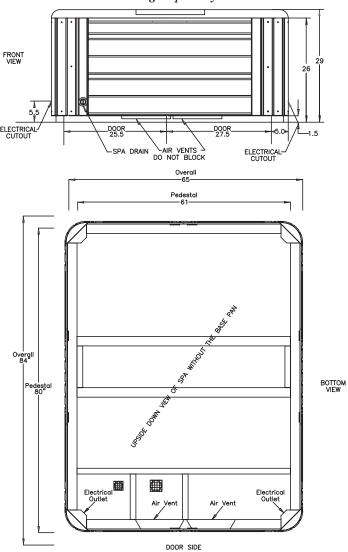
WARNING: The Martinique must not be shimmed in any manner.



Kauai<sup>®</sup>

#### (Paradise model only) Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.

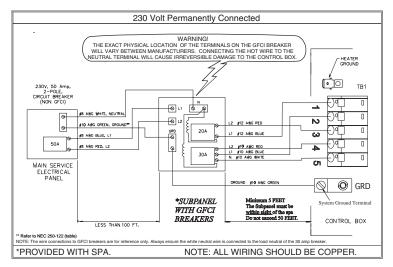


**NOTE:** Watkins Manufacturing Corporation recommends that the Kauai be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

WARNING: The Kauai must not be shimmed in any manner.

### ELECTRICAL REQUIREMENTS

To ensure you will have an opportunity to use your spa soon after delivery, it is very important that the required electrical service has been installed. Unless otherwise stipulated by your dealer, **THIS ISYOUR RESPONSIBILITY**. **IMPORTANT**: All electrical circuits must be installed by a qualified, licensed electrician.



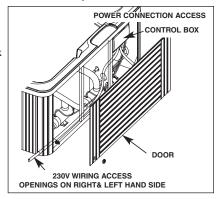
### 230 VOLT INSTALLATION

Your spa contains a control box designed to operate at 230V, 60Hz. Installation of a 50 amp. dedicated circuit is

recommended. The control box must be hard wired directly to a subpanel protected by a Ground Fault Circuit Interrupter (GFCI). The subpanel containing GFCI breakers is included with the spa.

**IMPORTANT NOTE:** All electrical connections to the control box must be accomplished by a qualified electrician in accordance with the National Electrical Code and in accordance with any local electrical codes in effect at the time and place of installation.

All electrical connections must be made in accordance with the wiring information contained in this manual and on the back of the field wiring access panel of the control box. A licensed electrician should install a four-wire electrical service (two line voltages, one neutral, one ground) from the main electrical service panel to the subpanel. The equipment pack requires a MINIMUM of 112 volts per line under load.



The grounding conductor must be at least #10 AWG. Your electrician should mount the subpanel in the vicinity of the spa but it should not be closer than five (5) feet from the spa water edge (NEC 680-38 to 41-A-3).

**INSTALLATION NOTE:** After the spa has been installed, your electrician can connect the conduit from the subpanel to the spa's control box and then complete the wiring connections in the control box.

**NOTE:** Complete step-by-step Installation and Wiring Instructions for all models are included in the Owner's Manual and with each sub-panel, which can be obtained from your dealer.

**WARNING:** Removing or bypassing the GFCI breakers in the subpanel at any time will result in an unsafe spa and will void the warranty.



#### POWER CONNECTION

To connect power to the spa, refer to "230 VOLT WIRING SCHEMATIC DIAGRAM" and "POWER CONNECTION ACCESS" illustrations on page 11 , then proceed with the following steps:

When supplying power, remove the screws securing the equipment door (for Utopia and Aquatic Melodies® spas, always remove the SpaGlo® exterior light fixtures and lift the fiber optic cable out of the fixture base before removing the doors). Lower the panel one inch and remove the panel to allow access to the input power wiring.

NOTE: The 230V wiring diagram is located on the inside of the Control Box Cover.

**IMPORTANT:** The following must be followed to properly install the equipment compartment door.

- Place top of door or panel directly below bartop against the frame of the spa. For Utopia and Aquatic Melodies spas, first lift the fiber optic cable out of the way.
- Push bottom of door or panel against the spa frame.
- Slide door or panel upward (pushing in on center of door to ensure door clips catch) until screw holes line up, making sure that the exterior fiber optic light cable will fit into the fixture.

SERVICES AVAILABLE FROM YOUR CALDERA® SPA DEALER

- Slightly pull on door or panel, if door remains against the spa then replace the screws.
- If the door does not lock into position, repeat the previous steps.

Inspect the spa cover, place on spa, and install cover locks

#### Pre-Delivery site inspection Deliver spa to installation site Unwrap spa and haul away packaging material Set up spa Fill the spa with water Explain and test the spa's operation Lighting • Sound system (Aquatic Melodies® spas only) Set temperature control • Control panel functions • Auxiliary panel functions (Utopia and Aquatic Melodies® spas only) Explain the safety features • GFCI • Heater high limit General spa operation & maintenance orientation Water quality and maintenance orientation Adjust the water's pH, Total Alkalinity and Calcium Hardness

Follow-up call

Sanitize the water

Review winterizing instructions

In-store spa water analysis TOTAL COST

Review Owner's Manual & Warranty Card

Service Cost

### ADDITIONAL PRODUCTS AVAILABLE FROM YOU CALDERA® **DEALER**

- Monarch® CD Ozone Generator
- Monarch Silver Ion Purifier Cartridge
- Monarch MPS non-chlorine oxidizer
- Monarch MPS test strips
- Retractable cover system with clearance requirements

   ProLift® 14" Clearance Required

   ProLift II 24" Clearance Required
- Vinyl covers
- Spa upgrade jet kits
- Replacement Filter Cartridges
- Pillows

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### UTOPIA / AQUATIC MELODIES® / PARADISE SPECIFICATIONS

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Geneva™	7'5"x 7'5" (226cm x 226cm)	38" (97cm)	100 sq ft (10 sq m)	4,300	475 gallons (1,798 l)	920 lbs. (417 kg)	5,915 lbs. (2,683 kg)	115 lbs/sq ft (560 kg/m²)	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Niagara®	7'5"x 7'5" (226cm x 226cm)	38" (97cm)	100 sq ft (10 sq m)	4,300	500 gallons (1,893 l)	920 lbs. (417kg)	6,300 lbs. (2,858 kg	115 lbs/sq ft (560 kg/m <sup>2</sup> )	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Tahitian®	7'0"x 7'0" (213cm x 213cm	36" (91cm)	Uto - 100 sq ft (10 sq m)	4,300	360 gallons (1,363 I)	790 lbs. (358 kg)	4,825 lbs (2,189	105 lbs/ sq ft (515	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Elation®	7'7"x 7'7" (231cmx 231cm)	38" (97cm)	100 sq ft (10 sq m)	4,300	500 gallons (1,893 l)	930 lbs. (422 kg)	6,135 lbs. (2,783 kg)	115 lbs/sq ft (560 kg/m <sup>2</sup> )	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Aspire™	7'0"x 7'0" (213cm x 213cm	36" (91cm)	100 sq ft (10 sq m)	4,300	380 gallons (1,438 l)	800 lbs. (363 kg)	5,180 lbs. (2,350 kg)	105 lbs./sq ft (540 kg/m²)	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Moorea <sup>™</sup>	7'0"x 7'7" (213cmx 231cm)	36" (91cm)	75 sq ft (7 sq m)	4,300	420 Gallons (1590 I)	870 Lbs. (395 kg)	5,490 Lbs. (2490 kg)	115 lbs/sq ft 591 kg/m²)	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Hawaiian	7'0"x 7'0" (213cm x 213 cm	36" (91cm)	75 sq ft (7 sq m)	4,300	380 gallons (1,438 l)	800 lbs. (363 kg)	5,180 lbs. (2,350 kg)	105 lbs./sqft (540 kg/m <sup>2</sup> )	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Martinique®	7'5"x 6'4" (226cm x193cm)	34" (86cm)	50 sq ft (5 sq m)	4,300	320 gallons (1,211 l)	710 lbs. (322 kg)	4,420 lbs. (2,005 kg)	100 lbs./sq ft (490 kg/m²)	230 volt, 30 or 50 amp Single phase GFCI protected circuit
Kauai®	7'0"x 5'5" (213 cm x 165cm)	29" (74 cm)	50 sq ft (5 sq m)	4,300	200 gallons (757 l)	610 lbs. (277 kg)	2,795 lbs. (1,268 kg)	95 lbs./sq ft (465 kg/m²)	230 volt, 30 or 50 amp Single phase GFCI protected circuit

**CAUTION:** Watkins Manufacturing Corporation suggests a structural engineer or contractor be consulted before the spa is placed on an elevated deck.

\* NOTE: The "Filled weight" and "Dead weight" of the spa includes the weight of the occupants (assuming an average occupant weight of 175 lbs).



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