

# Architectural Series

by Sundance Spas



## Inground Shell Installation Instructions

**Sundance Spas**

## Please Read This Entire Manual Thoroughly Before Attempting Spa Installation!



**IMPORTANT:** Your new Sundance Architectural Series Inground Spa is designed to provide years of trouble-free use when properly installed. Read and follow all installation instructions in this manual to ensure satisfactory performance. Failure to follow these guidelines may void the warranty on this product.

Before installing, check with local building department officials to determine what requirements must be met in order to conform to local building codes. Refer to section 16 (page 13-14) for shell information and specifications.



**CAUTION:** Remove all jet face bearings before installing spa shell and store in clean plastic bag! DO NOT reinstall jet face bearings until spa plumbing has been flushed and verified! This practice will prevent dirt from damaging jet face bearings upon initial start-up!



**CAUTION:** Optional external air “turndown” vents, when used, MUST be installed above grade and the waterline in a location where an occasional minor water release will not cause damage. Recommended locations include planters or areas with shrubbery that can absorb a minor water release without harm. Such areas work well to hide “unsightly” venting lines and to prevent them from becoming tripping hazards in the customer’s backyard.

Checkvalves (purchased separately) can be installed on each external air vent line to prevent any water release. When used, always install checkvalve towards spa in a location that is accessible for cleaning or replacement. See section 6 (page 4-5) for additional information regarding the use of an external air venting system.

# Table of Contents

<b>1.</b>	<b>Planning the Installation</b> .....	<b>1</b>
<b>2.</b>	<b>Spa Excavation and Foundation</b> .....	<b>1</b>
<b>3.</b>	<b>Spa Backfilling</b> .....	<b>2</b>
<b>4.</b>	<b>Pipe Trenching</b> .....	<b>2</b>
<b>5.</b>	<b>Connecting Pipes Between Spa and Equipment Pack</b> .....	<b>3</b>
5.1	Shell Plumbing .....	3
5.2	Water Features.....	4
<b>6.</b>	<b>Jet Air Supply</b> .....	<b>4</b>
<b>7.</b>	<b>Equipment Sizing</b> .....	<b>6</b>
7.1	Heater Selection.....	6
7.2	Pumps .....	6
7.3	Main and Auxiliary Pumps.....	6
7.4	Main Pump .....	6
7.5	Filter .....	6
<b>8.</b>	<b>Controllers</b> .....	<b>7</b>
8.1	Optional Controller Features .....	7
8.2	Remote Controls .....	7
<b>9.</b>	<b>Spa Light</b> .....	<b>7</b>
<b>10.</b>	<b>Ozone</b> .....	<b>9</b>
<b>11.</b>	<b>Drain Valve</b> .....	<b>9</b>
<b>12.</b>	<b>Tiling</b> .....	<b>9</b>
<b>13.</b>	<b>System Testing</b> .....	<b>12</b>
<b>14.</b>	<b>Decking and Concrete</b> .....	<b>12</b>
<b>15.</b>	<b>Spa Cover</b> .....	<b>12</b>
<b>16.</b>	<b>Specifications</b> .....	<b>13</b>



# 1. Planning the Installation

When locating the equipment pack, it is most efficient to position it as close to 7 feet of the water's edge as possible and to install all plumbing connections under the shell steps. However, never place the equipment pack closer than 7 feet for electrical safety reasons. Also, never place the equipment pack farther than 65 feet to prevent inadequate pump performance caused by longer pipe runs.

Use only schedule 40 PVC pipe and approved primer and glue(s) for all plumbing connections. Insulate piping when required and follow local codes for trenching depth to prevent freeze damage. The equipment pack should be placed or covered to minimize exposure to direct sunlight in Sun belt states and/or to protect it from snow and foul weather conditions where applicable. A 4" thick concrete slab is recommended for the equipment base; poured above grade to eliminate the collection of casual water. Always follow the manufacturer's instructions for proper equipment installation and plan access to all sides for servicing.

Architectural Series Spas require 100% backfill support for proper installation. Yard location, shell elevation, grade, and drainage should be carefully planned to avoid the collection of casual, ground, or spilled water on or near the spa shell and equipment pack.

All information contained in this guide are product requirements. However, check with the local building department to ensure your installation plans meet code requirements for residential pool and spa installations. Barrier codes and limited access requirements for uncovered pools and spas in your area are not included in this guide. A UL approved safety cover is available for these spas. However, proper cover and lock installations must be permitted, inspected, and approved by local authorities prior to filling the spa.



**CAUTION:** To prevent sun exposure damage to the acrylic shell, you must keep the spa's interior surface covered at all times from direct sunlight prior to and during the installation process. Failure to do so can result in acrylic delamination, warped jet wall fittings, or other serious conditions voiding the surface and plumbing warranty of the spa. Instruct the owner to never leave the spa empty longer than the time it takes to drain, clean, and refill it.

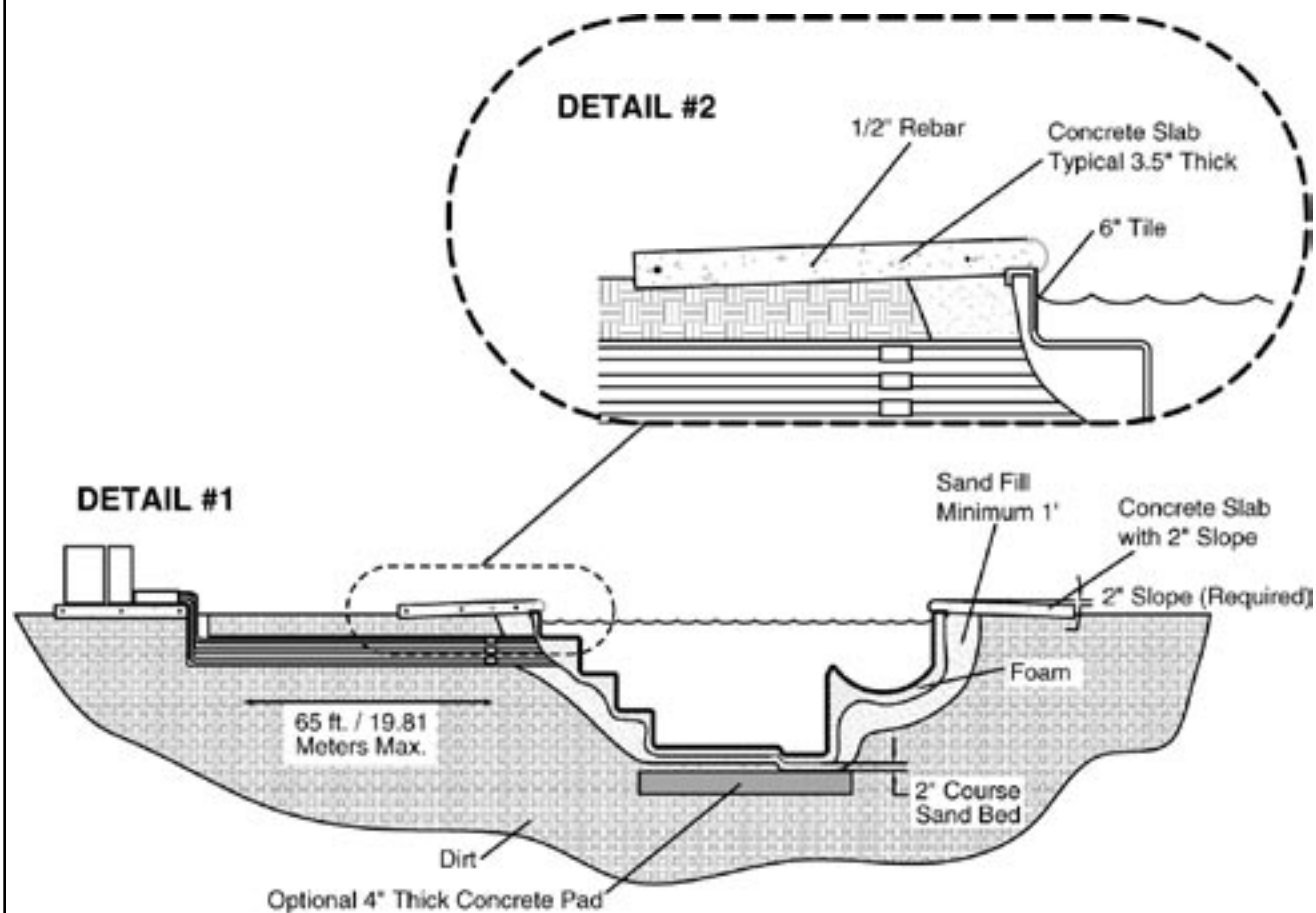
# 2. Spa Excavation and Foundation

The hole should be closely sculpted to the spa's shape, allowing a minimum of 1 foot of sand to be backfilled between the shell and hole on all sides. Grade the hole 2" deeper than the expected spa elevation and place 2" of coarse sand, washed, tamped and smoothed as level as possible for the foundation. Your site plan must incorporate a spa elevation and decking scheme that moves spilled or rain water away from the spa using slopes and drain(s) as needed. Soil conditions can vary. However, for the entire time the spa is in place, the spa must rest on a flat, compacted sand surface capable of uniformly supporting the weight of the spa, water, and users without shifting. Refer to Figure 1 (page 2) to calculate approximate hole size. Carefully plan the hole depth so that no more than 3" of sand can be placed beneath the spa shell. This will prevent potential sinking problems causing the spa shell to pull away from the concrete coping. An optional 4" thick concrete pad can also be poured under the spa shell but is not required.



**CAUTION:** In northern states, it may be necessary to consult professionals to calculate additional backfill and/or foundation requirements to prevent soil expansion during freezing weather. Installations in extreme cold weather areas are at risk of spa shell implosion, distortion, or ejection from the ground during freezing conditions. Spa foundation plans and connected plumbing should be designed to accommodate for this potential condition.

**Figure 1**  
**Excavation Detail**



### 3. Spa Backfilling

Temporary supports may be used to hold the spa in position while backfilling. A combination of coarse sand and limited water must be washed and tamped between the shell until the hole is completely filled to grade. Take precaution not to damage the plumbing protected by the foam on the outside of the shell. Refer to Figure 1 above.

Backfilling large spas can take up to 2 days depending on soil conditions. Because of the foam insulation, this spa may become buoyant during backfilling. Therefore, counterweight the shell by slowly adding water into the spa's footwell during the backfill process. Never fill the spa completely for test until proper backfill support has been achieved or shell damage/shifting may result. When finished, sand fill should reach within 1 inch of the spa's top lip and include a small slope groomed away from the shell on all sides to direct rain or casual water from the spa.

### 4. Pipe Trenching

The piping should extend away from the stair area in the most direct route to the equipment pack as possible and must accommodate up to 5 large pipes and conduit. The trench should be deep and wide enough to allow all pipes to be buried below the frost line and/or meet all other local code requirements for underground pool plumbing. Do not cover or refill the piping trench until at least 48 hours of system running time has been completed for proper testing of connections (see Figure 2).

## 5. Connecting Pipes Between Spa and Equipment Pack



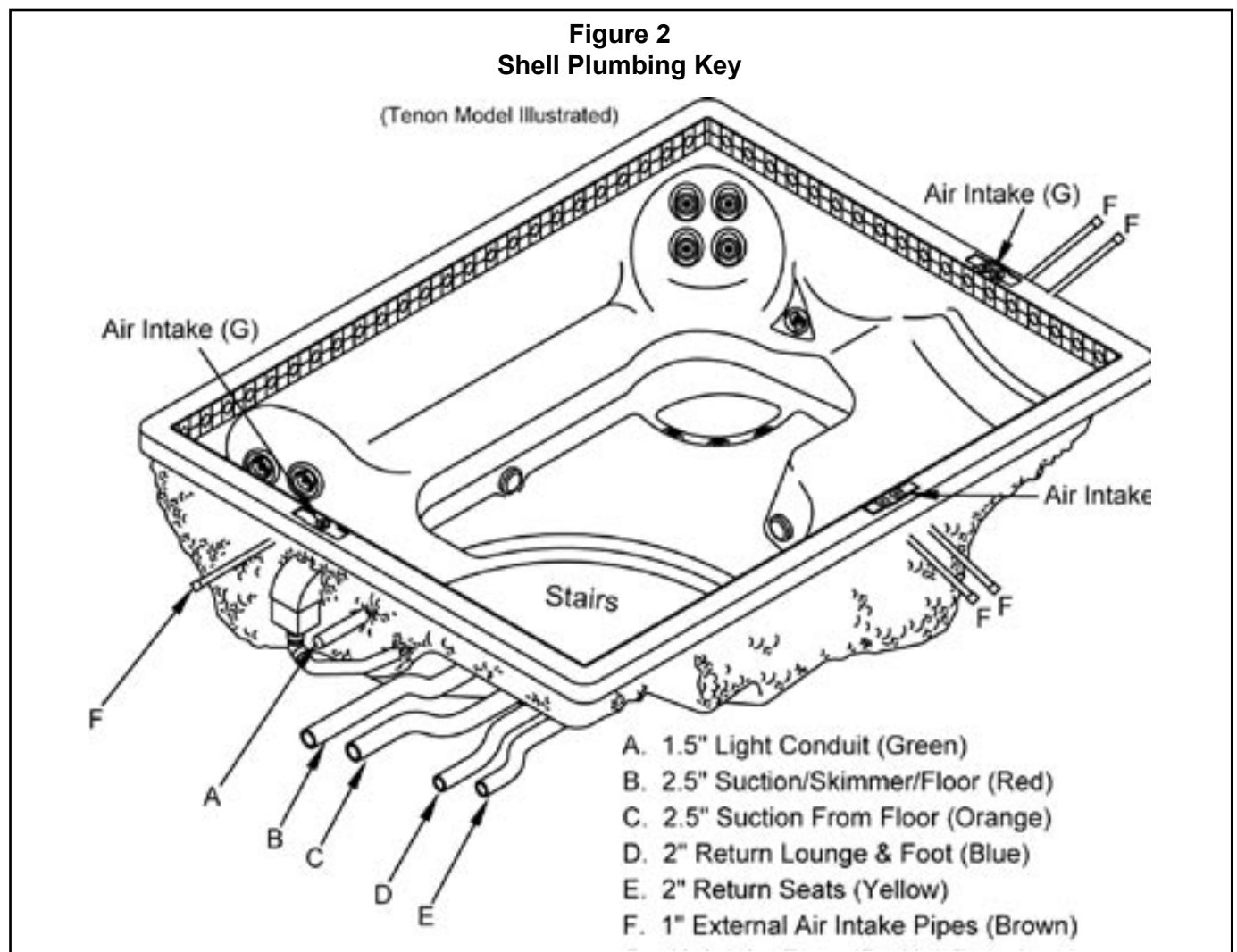
**CAUTION:** Take extreme care to keep debris that could clog jets from entering the pipes during installation. Remove all jet face bearings before installing spa shell and store in clean plastic bag! Do not reinstall until all plumbing lines are flushed and verified! Use only SCH40 PVC pipe and fittings with appropriate primer and glue following the glue manufacturer's recommended solvent welding procedures. To minimize flow restrictions, avoid the use of 90° elbow fittings whenever possible by using two 45° elbows, sweep fitting, or flex pipe.

### 5.1 Shell Plumbing

The spa shell comes with four external plumbing pipes, three external capped air inlet pipes, and one light conduit. Pipe identification is simple. The 2.5" gray flex pipes are for the main and auxiliary therapy pump suction lines which connect directly to the floor suction. Both pipes should be connected directly to the each pumps priming pot in the shortest possible run. The **red** marked suction line is connected to the skimmer and floor drain. The **orange** marked suction line is connected only to floor suction.

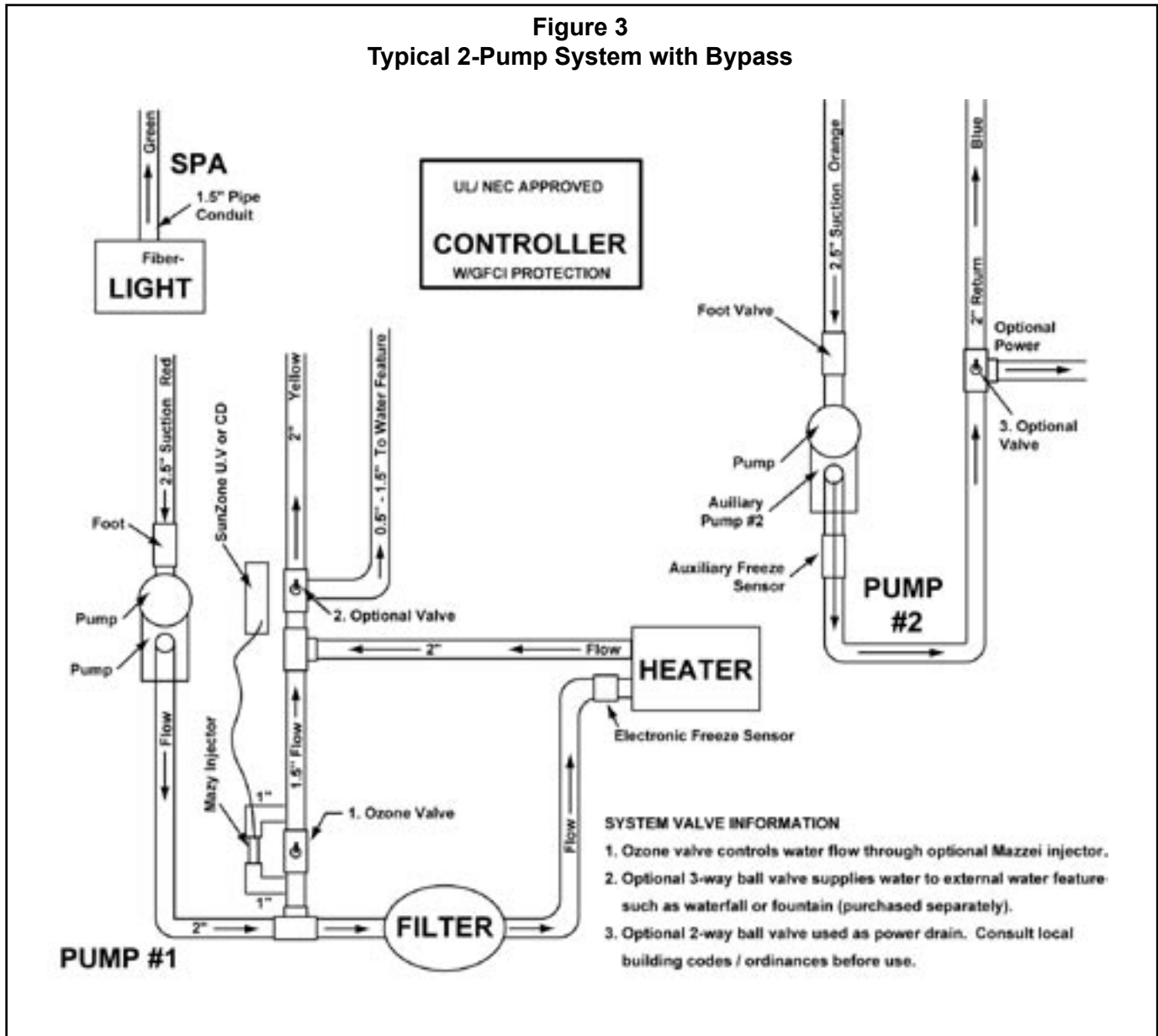
The 2" white flex pipes are the main and auxiliary pump returns (discharge lines) and are plumbed directly to the spa's jet system. The **blue** marked line is for water returning to the foot jets and lounges, while the **yellow** marked line is for the primary therapy jets. The installer or homeowner may choose which lines to use as the main filter/heater water return since either jet system is suitable for this purpose

The 1" capped white flex lines are for optional external air port venting "turndowns." Each line is marked with **brown** tape for easy identification.



## 5.2 Water Features

A secondary return line can be added to either pump discharge to power a low flow water accessory such as a fountain or waterfall. Refer to the Figure 3 below for a typical plumbing system using a 3-way valve to power this type of accessory.



## 6. Jet Air Supply

The Sundance Architectural Series Spa design allows full air venturi action to the jets without the aid of an air blower assist. Located at the top of the shell are 4-5 intake fittings acting as portways for air induction to the jetting system (Figure 4). Although this unique design provides for better antifreeze and stagnant water protection, attention must be taken to not clog or cover these ports during backfilling or concrete decking installation. Use masking tape or duct tape to protect holes from sand and debris until you are ready to pour the concrete deck. A second air induction method using external air intake "turn-downs" can also be used as an alternative. Refer to both air intake installation options outlined on the following page to determine the best method of installation for your customer.



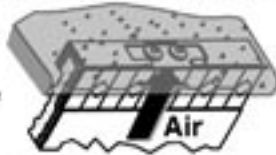
**CAUTION:** This operation is critical to jet performance and correct system operation.



Figure 4  
Air Intake Installation Options

**OPTION 1**  
Air Intake Pathways under Concrete Decking

All ports located on spa lip are air inputs only. They are not compatible with knobs or valve assemblies of any kind.



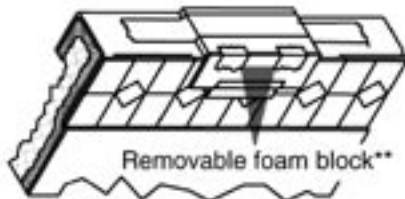
All air ports are protected from debris intrusion by the installation of common swimming pool "cantilevered" style decking using Steigmeyer® forms.

A small wood block covers each air port and remains in place after decking is poured. A removable foam block is then extracted after decking is dry to open hidden air intake passage. Refer installation diagrams and cutaway diagram below for details:

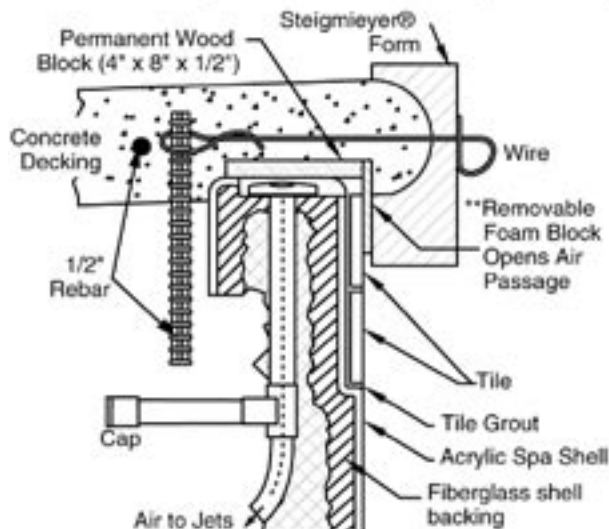
1. Protect air ports by taping permanent wood block over each location using duct tape.



2. Cover air port air gap by taping a removable foam block over each location using masking tape.

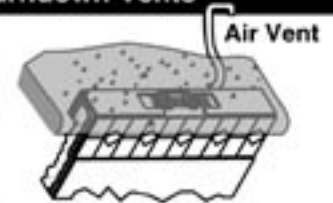


**Under Decking Air Intake Diagram (Side View)**



**OPTION 2**  
Remote Air Intake Turndown Vents

All ports located on spa lip are air inputs only. They are not compatible with knobs or valve assemblies of any kind.



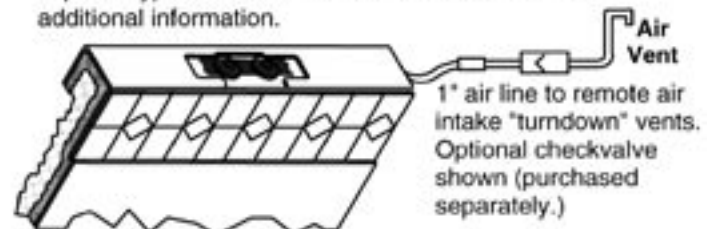
Capped air line(s) marked with brown tape protrude from the spa foam next to each air port. These lines and are designed for external air intake turndown vents.

A piece of duct tape covers each air port and remains in place after concrete decking is poured. It seals each air port to prevent debris entrapment while pouring concrete. Refer to installation and cutaway diagrams below for details:

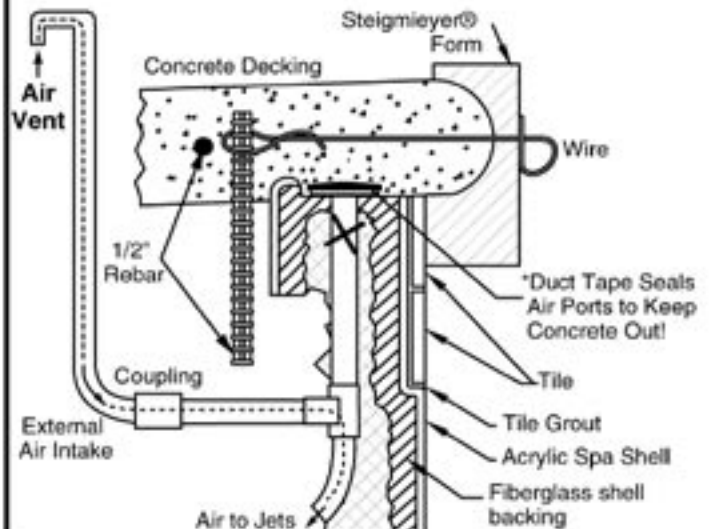
1. Place duct tape\* over ALL spa air ports to seal them from concrete entrapment.



2. Remove caps from each 1" white flex lines marked with brown tape. Lengthen each line using 1" rigid/flex pipe and couplings (purchased separately). **Always install air intake turndown vents ABOVE spa waterline to prevent siphoning.** Checkvalves can also be installed as shown to prevent an occasional minor water release (purchased separately). See inner cover caution statement for additional information.



**External Air Intake Decking Diagram (Side View)**



## 7. Equipment Sizing

All operating equipment must be strictly installed to the manufacturer's recommendations. Selected pumps, filters, and heaters should be properly sized and rated to operate within the water flow guidelines of your designed plumbing system. Refer to figure 3 (page 4) for a typical system layout.

### 7.1 Heater Selection

Gas heaters are strongly recommended for Architectural Series Spas fast recovery time and economical operation. Because of the large water capacity, we recommend gas burners sized between 100,000 and 350,000 BTU. When gas is unavailable, a minimum 11 kilowatt (≈36,000 BTU) electric heater may be used.

*Note: A typical 50 foot installation will hold 40 and 65 gallons of water in the piping and equipment. This additional water should be factored into calculations for total system volume, heat recovery time, and operational cost.*



**CAUTION:** Do not under rate your heater for water flow! Refer to figure 3 (page 4) for filter and heater bypass plumbing if needed.

### 7.2 Pumps

The Architectural Series Spa shells are preplumbed for a two pump operating system. Refer to Figure 3, page 4. *Note: the system can support a 2-speed main pump if it meets the heater manufacturer's minimum and maximum flow rate requirements when running in either low or high speed. Some heaters and filters may require a bypass to reduce excessive flow.*

### 7.3 Main and Auxiliary Pumps

Two high head/high flow swimming pool pumps with integral priming pots are necessary to supply the needed water to drive both independently plumbed hydrotherapy jet systems. Each pump should be sized to deliver between 120-130 GPM at 50-60 feet of head (based on a typical 50' installation).



**CAUTION:** Under or oversized pumps may result in poor performance or excessive noise and heat. Recommendations for main and auxiliary pumps are as follows: 2.0 hp or 2.5 hp, 240 VAC, 13.0 amp Jacuzzi® (Magnum Force) swimming pool pump or equivalent with integral pot, capable of accepting a minimum 2.5" suction and 2" discharge plumbing connection for quiet operation.

### 7.4 Main Pump

Check or foot valves are recommended in all pump suction lines for fast priming capabilities and air leak prevention. Refer to Figure 3, page 4 (Foot Valves).

### 7.5 Filter

A cartridge style filter with a minimum capacity of 150 ft<sup>2</sup> is recommended for this "high flow" application. Because of the size and delivery of the bigger pumps, a diatomaceous earth (DE) and/or sand filter may not accommodate the 145+ GPM flow rate necessary to operate this spa reliably and efficiently. An improperly sized filter can be restrictive and greatly reduce flow to the hydrotherapy jet system. Additionally, limiting the pump's full water flow capacity **will** cause motor overheating, cavitation, excessive noise, filter blockage, and pressures in excess of the filter's maximum rating.

Always consult the filter and pumps operational specification to determine proper filter size. Refer to Figure 3 (page 4) for hookup and typical bypass plumbing details.

## 8. Controllers

A system control must be selected that is UL/ETL listed, NEC approved, and constructed to meet or exceed all local electrical codes for outdoor pool/spa residential applications. Ideal operation allows for all pumps and the heater to be monitored for freeze protection in inclement weather. When possible, controls should be programmed to operate all pumps for a short period each day to reduce stagnant water conditions. *Note: When designing a 2-speed system, the logic must support the high and low speed operation of the main pump.*

At minimum, the operating system controls for all Architectural Series Spas **must** meet the following requirements:

- Ground fault circuit interrupter (GFCI) protection
- Two therapy pumps (240 VAC @ 13 A each)
- 100,000 - 300,000 BTU gas heater or minimum 11 kilowatt electric heater supply (240 VAC @ 45 A)
- Fiber-optic light source, and independent color wheel operation (240 VAC @ 6 A)
- Electronic freeze/ overheat protection
- Programmable filter cycles

### 8.1 Optional Controller Features

- Ozonator (240 VAC @ 1 A)
- Low voltage valve actuator for water feature (24 VDC @ 1 A)
- Phone modem hookup
- 2-speed main pump capable of meeting the gas heater's minimum/maximum flow rate requirement while running in either low or high speed
- Complete system purge once a day

### 8.2 Remote Controls



**CAUTION!** Damages of any kind resulting from the installation of optional remote controls **will not** be covered under the manufacturer's warranty.

Use only UL/ETL listed remote and wireless remote systems approved for pool/spa operation. Spa side touchpads should be installed according to the manufacturer's specifications for location and serviceability. Care must be taken when drilling touchpad access into the tile line area as to not damage acrylic spa surface or plumbing hidden beneath the shell surface. Never locate touchpads in walk areas, below grade, or near/below the waterline. Remote control wiring should always be installed in a minimum 1" watertight PVC conduit when placed underground for protection and servicing.

Ideal spa side operation should include the operation of both therapy pumps, light, color wheel, and temperature control adjustment.

## 9. Spa Light

Sundance Architectural Series Spas include a light wall fitting (niche) and lens cap designed for an optional underwater light. The light niche is designed to accept a Fiberstar™ brand compression fitting and fiber-optic cable (purchased separately). This brand of spa light was chosen for its low profile design, durability, unique options, and safety advantages over incandescent fixtures. The niche is completely protected by foam insulation. Its 1.5" conduit is stubbed out and must be located (see Figure 2, page 3).

The typical installation requires a minimum of 150 strands of fiber to adequately illuminate the spa interior up to 65 feet from the light source. Fiberstar systems offer a color wheel and accommodate up to 450 optic strands, providing additional accent lighting for pools, planters, steps, and walkways. However, you must separately order the fiber-optic cable size and lengths needed to customize your installation. Detailed wiring diagrams, optic cable cutting procedures, and wall fitting connection diagrams are provided with the generator assembly. Recommended tools are the Ultratorch® hot cutting knife and the lens

service tool (purchased separately). Refer to Figure 5 below and the Fiberstar™ website at: <http://www.fiberstars.com> for specific product features and specifications.

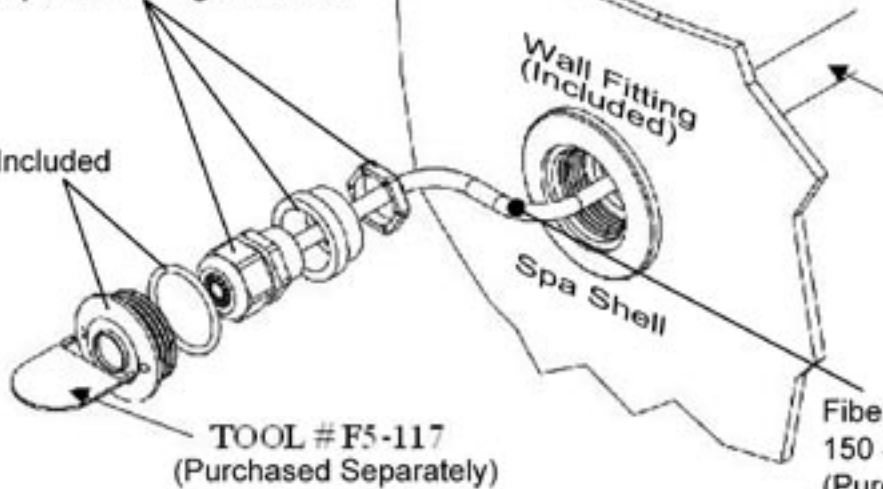
*Note: all underground fiber-optic cables should be housed in watertight PVC conduit utilizing “sweeps” in lieu of 90° elbows for ease of cable installation and service.*

**Figure 5**  
**Fiberstar LNS-A Evenglo Assembly Diagram for Fiber-optic Light & Cable**



Fiber-optic compression fitting  
purchased separately from  
fiber-optic cable / light vendor.

Included



USE SCHED 40  
PVC PIPE & SWEEPS

Fiber-optic Cable,  
150 Strands Minimum  
(Purchased separately from  
fiber-optic cable / light vendor)

## 10. Ozone

The SunZone U.V. or CD (Ultraviolet or Corona Discharge) ozone generators (240 VAC, 3A) or equivalent are ideal for this water volume and application. Controller programming should be set to turn on the ozonator only when the delivery pump is operating, and at no other time. The preferred ozone delivery method is by Mazzei™ injection at the equipment pack. Please refer to the Mazzei™ bypass plumbing diagram in this guide (Figure 3, page 4) for correct placement and hookup of the injector.

*Note: Sundance SunZone ozone generators are not approved for exposed use and must be covered.*

The Mazzei™ PVDF 978 (red) in combination with #24 orifice restrictor is specifically designed for this plumbing flow application and is available through most local distribution channels. Follow all ozone generator and Mazzei™ installation procedures exactly for proper mounting, electrical, and plumbing hookup. Note that the injection system must be plumbed in conjunction with an adjustable valve for proper operation (see Figure 3, page 4).

## 11. Drain Valve

The simplest way for the home owner to drain the spa is to use a portable submersible pump connected to a garden hose. However, when permissible, a 3-way valve may be installed on pump 2's discharge line to provide a means of high flow draining (see Figure 3, page 4). Consult local codes for discharge regulations of pool and spa water.



**IMPORTANT!** Provide specific instructions to the home owner regarding proper draining procedures to prevent unlawful water discharge and/or causing spa to float out of the ground.

## 12. Tiling

Because of direct sun exposure, tile is required to be installed on all Architectural Series Spas. A continuous recess molded into the shell provides stability and alignment of typical 6" pool tile for a flush installation to the shell wall. Care should be taken to select a smoothed edge glazed tile that is approved for pool installations. Silicone adhesive and silicone grouting are recommended for permanent but flexible attachment to acrylic surface. *Note: Read all instructions prior to start of installation. For best results, pre-tiling spas in a controlled environment is preferred.*

### Required Tools

1. Tile cutter
2. Silicone cartridge dispenser/gun
3. Tile file (for filing rough and/or sharp edges)
4. Safety glasses/ goggles (when cutting/working on tile)
5. Clean bucket

### Required Materials

1. Masking tape (non-residue adhesive type)
2. Isopropyl Alcohol
3. Scrubber (use NovaGard™ brand 'Grout Scrubbers' Product #ACC100) or terry cloths
4. Dishwashing liquid soap
5. Gloves
6. Tile adhesive (use Novagard™ Quick Fix Tile Adhesive #RTV700-150 (clear); -160 (gray); or -163 (white).
7. Tile grout (use Novagard Quick Fix Tile Grout #RTV700-164 (white); -165 (gray); or -166 (tan).

(continued)



**CAUTION!** Make sure tile edges are not sharp prior to installation. Sharp edges may result in injuries (cuts) to the tile installer and the spa user.

### General Instructions

1. Make sure the spa tile recess surface is clean (free of debris, oil, grease etc.) and dry. Sanding is optional.
2. Scrubbers and cloths should be periodically discarded if they have extensive silicone grout buildup.
3. We recommend using the same color adhesive and grout.
4. Do Not apply tile in the rain, direct sunlight, or in temperatures below 50 °F.
5. Allow 48 hours for tile to set prior to filling spa.
6. Use only glazed tiles approved for use in pools and spas.
7. Quantity of grout cartridges required depends on the type of tile (number of grout lines and space widths). Typical quantity is 4-6 cartridges per spa when 3" x 3" tiles are used.
8. Typical quantity of adhesive cartridges required is 3-4 cartridges per @ 3/16" bead width; or 7-8 cartridges per spa @ 1/4" bead width.
9. Perimeter length of the Tenon model is approximately 37 feet. Perimeter length of the Luna model is approximately 32 feet.

### A. Silicone Bonding Procedure



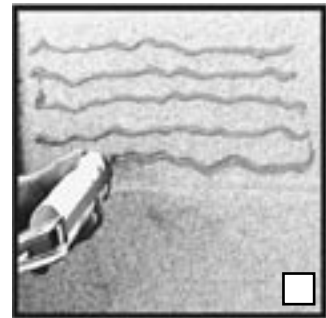
1. Wipe shell tile recess with a clean rag to remove residue. Use Isopropyl Alcohol if necessary (sanding is optional).



2. Cut tile net backing to fit spa. Maximum tile height is 6".



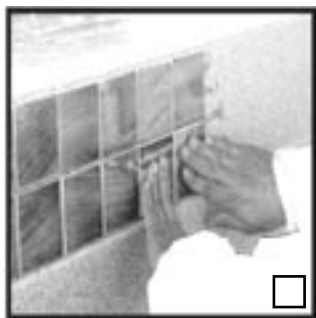
3. Calk area for tile mounting (Do not make a circular pattern). Apply 1/4" wide bead, 3 feet long.



4. Apply additional lines of adhesive for typical coverage as shown.



5. Immediately apply tile to the shell surface using the shell's tile ledge as a guide.



6. Press tile against shell firmly, making sure tiles have not slid downward.



7. Verify spacing at top and between tiles is uniform. Use spacers if desired.



8. Repeat steps 2-7 and continue around shell. Cut tile to fit corners, as required.

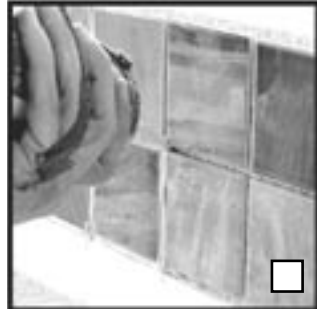


9. Allow silicone to set for a minimum of 3-4 hours before performing the silicone grouting procedure outlined below.

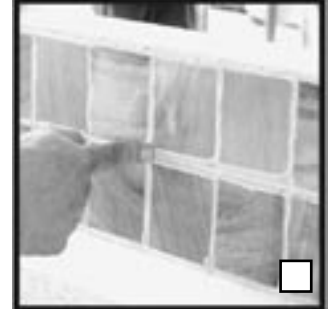
### B. Silicone Grouting Procedure



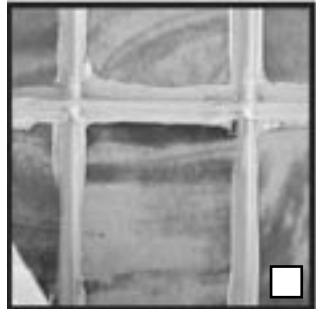
1. Cover shell tile ledge with masking tape for easy cleanup.



2. Cut grout nozzle to fit between tiles. Fill space between tiles and at the top and bottom tile edge in a 3 foot section (apply to an area small enough to allow working time). **DO NOT** let the silicone grout skin over.



3. Smooth silicone grout by pressing/pushing it completely into the grout spaces with your finger.



4. Make sure spaces between tiles are completely filled with grout with no gaps or edges showing.



5. Immediately mix a cap full liquid dish soap with a gallon of clean water. Then saturate a scrubber or clean rag.



6. Wipe off excess silicone from tile surface being careful not to remove grouting between tiles.



7. Clean along tile ledge tape line.



8. Remove masking tape from shell ledge.

9. Congratulations! You have successively completed the tile installation procedure. **Allow silicone adhesive and grout to set undisturbed for a minimum of 48 hours prior to exposing to water.**

## 13. System Testing

This spa has been pretested at the factory for leaks. **However, we strongly recommend filling the spa and operating it for a minimum of 48 hours before filling in trenches.** This provides an opportunity to discover and repair any problems before they are hidden and difficult to access. Proper testing should involve operation of all pumps, filter, heater, ozone, etc. for up to 24 hours with visual inspection of plumbing pipe connections, jet operation, jet air draw, light seal and conduit, water feature operation (if applicable), pump priming, etc.

**Once pressure testing is completed, mark the water level and allow the spa to set undisturbed for a second 24-hour period to statically test the suction and venturi lines.** If the water level has not changed after this second 24-hour period, you are ready to complete the installation.

## 14. Decking and Concrete

Once plumbing has been thoroughly inspected and tested the access trench can be filled and lightly compacted. Each day during the test period the sand backfill area should be watered, compacted, and prepared to accommodate a minimum of 4" concrete deck. Be sure to follow all local building codes for rebar/mesh installation, poolside electrical grounding, concrete pressure ratings, slope, and terrain requirements.

Sundance Architectural Series spas require a cantilever style pool coping be formed and poured over their acrylic shell lip for beauty, stability, and protection from direct sunlight. For best look and fit the concrete decking should extend over the shell lip and cover the top 3/8" of the tile line when finished. (see Figure 1, detail #2, page 2). We suggest using Steigmieyer® attachable foam forms that can be cut and shaped for a continuous cantilevered bullnose edge inside the spa perimeter.

*Note: The spa's acrylic shell will not adhere to the poured concrete decking. This allows for seasonal expansion and contraction of the deck top, without affecting the spa's shape or integrity.*



**ATTENTION!** Please follow instructions and review the Jet Air Supply Intake protection diagram prior to pouring the concrete deck. Refer to Figure 4, page 5.

## 15. Spa Cover

An optional fitted cover is available for weatherization, safety, or reducing heat loss. Covers include a 2-piece design with integral handles and anchoring straps. They are skirtless and can be placed directly on top of the concrete decking. Sundance Architectural Series spas are designed to be coverless, however, all codes and regulations for residential pool installation must be strictly followed regarding barrier, entry access, exposure rules as they apply to fences, walls, gates, doors, widows, etc. **It is the responsibility of the homeowner to maintain the water level mid-tile year round to prevent acrylic surface damage caused from excessive sun exposure.**

Inground spa covers, unless permitted and approved by the city or county, are not suitable or an acceptable substitute for safety requirements. Be sure to follow all cover manufacturer recommendations for strap and lock emplacement as well as local code requirements.

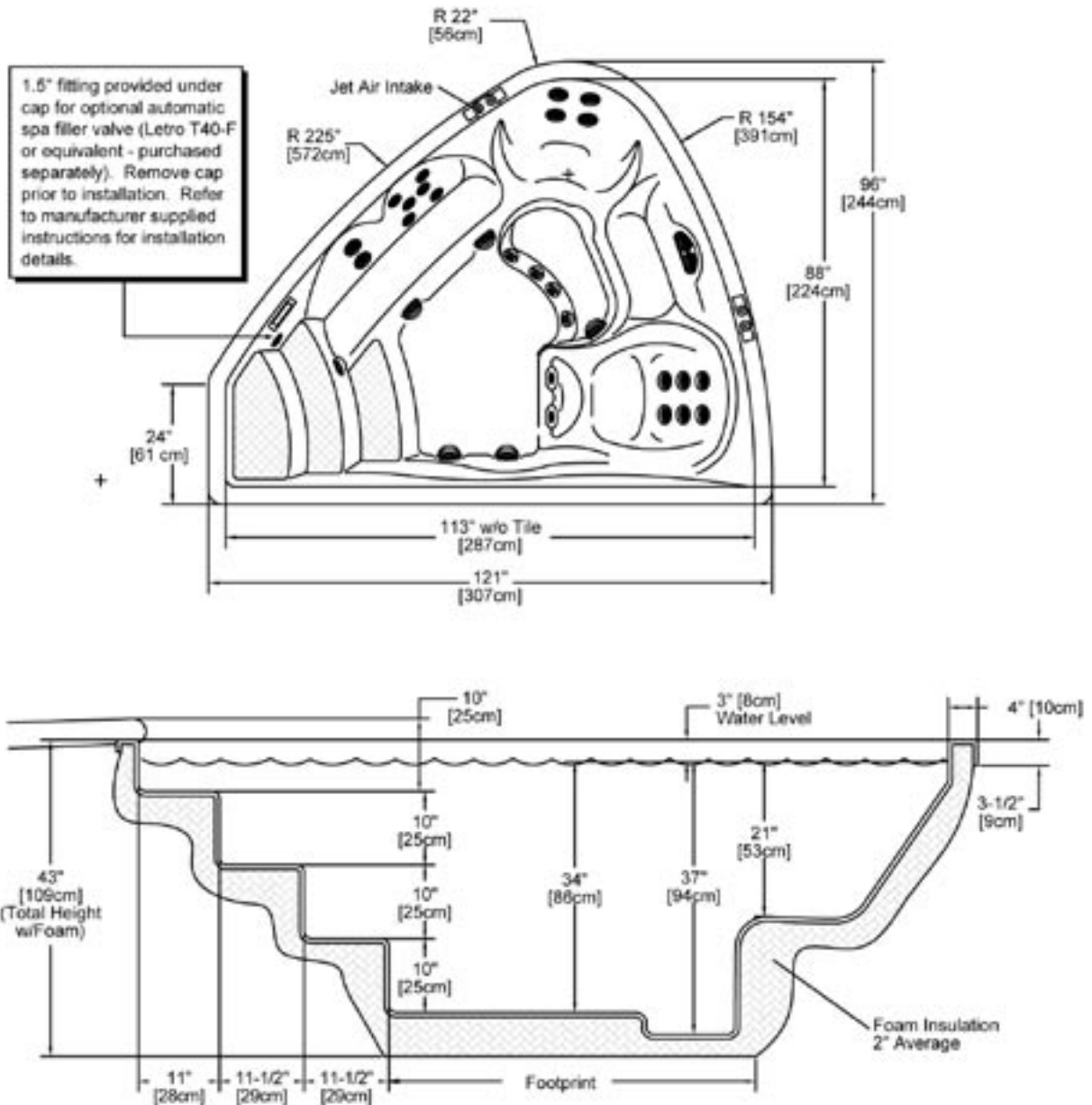
An owner's manual is provided with the spa shell (#6530-181) for the homeowner. This manual containing basic operation, sanitation, and maintenance instructions for spas.





# 16. Specifications

## Luna Specifications (IAPMO# SP-3511)



### General Specifications

- Total Gallons: 600 US / 2271 Liters
- Overall Dimensions: 121" x 96" x 43" / 307 cm x 224 cm x 109 cm
- Max. Water Depth: 40" / 102 cm
- Typical Water Depth: 37" / 94 cm
- Shell Dry Weight: 600 lbs / 273 kg
- Total Shipping Weight: 720 lbs / 327 kg
- Occupant Capacity: Up to 7 adults

### Main Shell Specifications

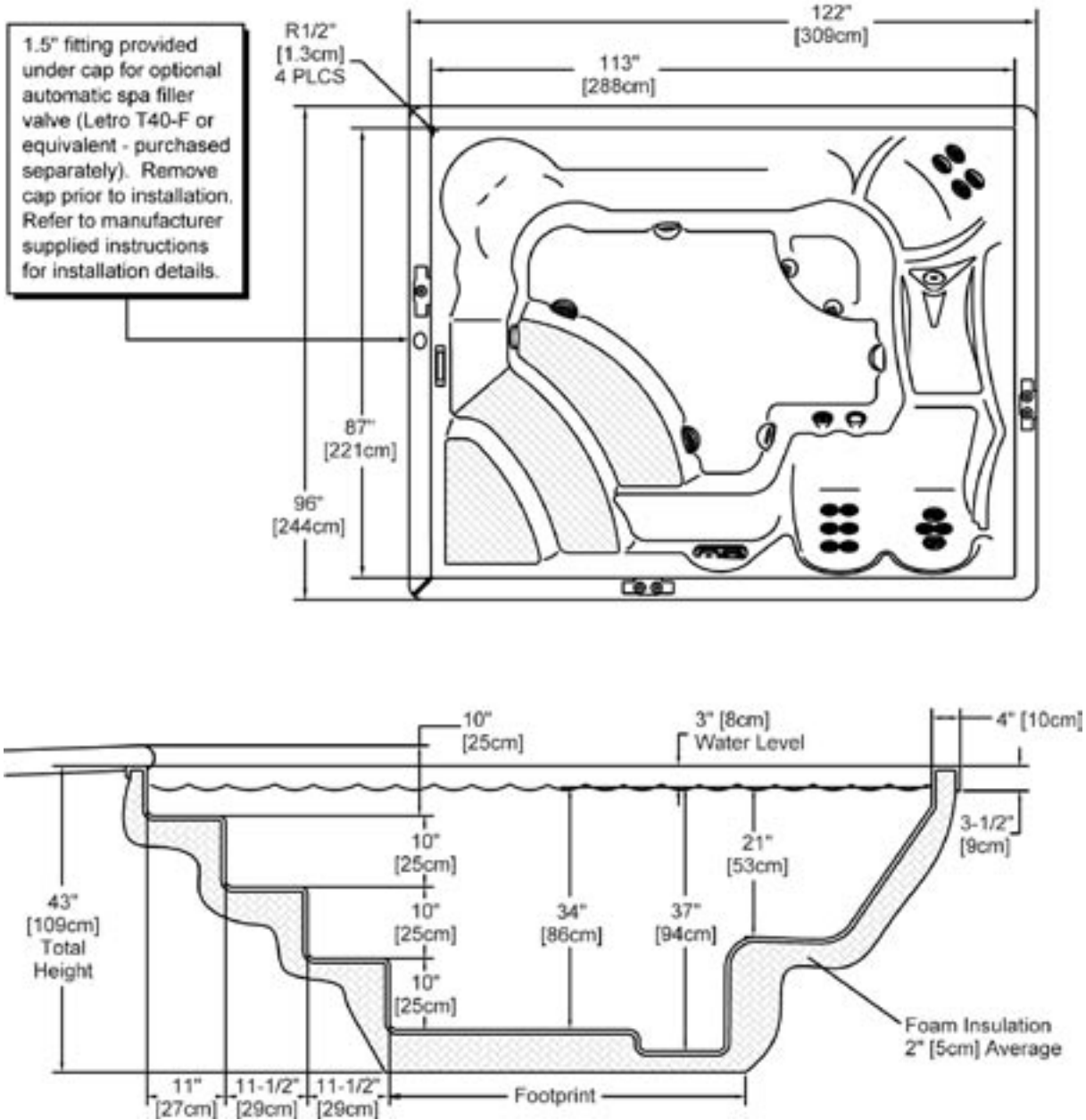
- Cast Acrylic Surface Sheet
- Laminated Fiberglass Reinforced
- Urethane Foam Insulation (Non-structural)
- Total Footprint Area: ≈15 ft<sup>2</sup> / 4.57 m<sup>2</sup>
- Total Linear Feet of 6" Tile: 32
- Textured Anti-Skip Step Area: min. 253 in<sup>2</sup> / 64 cm<sup>2</sup>
- Water Surface Area: 50 ft<sup>2</sup> / 13 m<sup>2</sup>

### Main Plumbing Specifications

- Floor Suction Rating: 208 GPM (each)
- Jet Pressure Rating: 30 psi / 2 bar max.
- Pipe/Fitting Materials: SCH40 PVC
- Safety lighting: fiber-optic
- Filtration: 8" x 8" Jacuzzi skimmer w/basket, 40 gpm max.
- Plumbing Pressure: factory tested to 30 psi / 2.1 bar.

Note: Spa not rated to free stand and must be backfilled. Hard cover optional. All dimensions ±1/2" [±1.3 cm]

## Tenon Specifications (IAPMO# SP-3511)



### General Specifications

- Total Gallons: 800 US / 3028 Liters
- Overall Dimensions: 121.75" x 96" x 43" / 309 cm x 244 cm x 109 cm
- Max. Water Depth: 40" / 102 cm
- Typical Water Depth: 37" / 94 cm
- Shell Dry Weight: 660 lbs / 301 kg
- Total Shipping Weight: 790 lbs / 360 kg
- Occupant Capacity: Up to 7 adults

### Main Shell Specifications

- Cast Acrylic Surface Sheet
- Laminated Fiberglass Reinforced
- Urethane Foam Insulation (Non-structural)
- Total Footprint Area:  $\approx 15 \text{ ft}^2 / 4.57 \text{ m}^2$
- Total Linear Feet of 6" Tile: 38
- Textured Anti-Skip Step Area: min.  $420 \text{ in}^2 / 107 \text{ cm}^2$
- Water Surface Area:  $68 \text{ ft}^2 / 21 \text{ m}^2$

### Main Plumbing Specifications

- Floor Suction Rating: 208 GPM (each)
- Jet Pressure Rating: 30 psi / 2 bar max.
- Pipe/Fitting Materials: SCH40 PVC
- Safety lighting: fiber-optic
- Filtration: 8" x 8" Jacuzzi skimmer w/basket, 40 gpm max.
- Plumbing Pressure: factory tested to 30 psi / 2.1 bar.

Note: Spa not rated to free stand and must be backfilled. Hard cover optional. All dimensions  $\pm 1/2"$  [ $\pm 1.3 \text{ cm}$ ]



**Installing Contractor:**

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**Sundance Spas, Inc.**

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