



CoverTalk

All about Hot Spring® Brand Covers

Jon Watkins was a pioneer, with a vision.

Jon Watkins was a pioneer . . . not just in hot tubs. He also innovated the first rigid, vinyl cover. Jon had a vision. He perceived the need for a cover that would promote energy savings and heat conservation; thus, he could deliver a hot tub that was even more energy efficient. Watkins was the first manufacturer to ship every hot tub with a cover. Jon Watkins' vision eventually drove the entire industry to a higher standard of energy efficiency.

Assure your customers of a great fitting, energy efficient cover that delivers the highest quality and good looks. Order your customers a Hot Spring® brand replacement cover. Not only will your customers save money every day . . . their backyard will look refreshed and new again.

Read [Cover Talk](#) for all the important features of a Hot Spring® brand cover. You can use our Cover Cut-A-Way to follow along.

[Tapered Foam Cores with Improved Vapor Lock Seal](#)

The foam core interior is the heart of the spa cover. Foam cores provide strength, rigidity and insulation for the cover. Adding a taper to the cover allows for efficient water run off. This is especially helpful in wet climates. Our 3.5" to 2.5" taper provides a strong cover, especially at the corners where lesser taper can weaken long-term stability of the foam. Watkins foam cores are made of EPS foam, which is an excellent insulator and is environmentally sound. EPS is lightweight, yet strong, which makes it easier to lift the cover, whether it is assisted by a cover lifter or by hand.

- 2# Tapered Foam Density covers are now standard on all Grandee®, Vanguard®, Highlife®,

Accolade™, Sovereign®, and Caspian® models. This change, effective July of 2003, was provided at no up charge. The higher density cover on our larger spas assures a stronger cover to support the full expanse of the tub, and to stand up against harsh winter weather.

- 1.5# Tapered Foam Density covers continue to be standard on smaller spa models, and provide excellent insulation and strength for these models.

Improved Vapor Lock Seal – In June of 2003, we implemented two important improvements to our Hot Spring brand covers, both designed to reduce vapor transmission; and therefore, reduce the possibility of covers becoming heavy.

- A new colored poly-bag was introduced. The 4-mil poly-bag that encapsulates each foam core now comes in a dark color, instead of in a clear bag. The contrast between this dark colored bag and the white foam core underneath allows for better visual inspection at the time of assembly.
- A new seam sealing process was also introduced. The new poly-bags no longer are shrink wrapped, and therefore no longer require any vacuum holes. The edges of the new poly-bags are seam sealed, all around the perimeter of the core. The excess material is trimmed off and taped, allowing for easy placement into the vinyl encasement. Our manufacturing equipment and technique provide a seam seal all the way around. By applying just the right pressure and amount of heat, this equipment properly seals a seam around the entire perimeter of each foam core.

These two improvements provide an effective vapor lock seal around the foam cores, to increase their life.



Aluminum Reinforcing Channel – I6 Gauge

Support is critical at the midpoint (hinge) of the cover. Watkins gives you added strength along the spine of the foam cores. All Hot Spring brand covers feature a I6 gauge non-corrosive, aluminum reinforcing channel for strong support across the center of the cover, thus ensuring long life even through repeated use.

System-Ready Brackets

Every Hot Spring cover is outfitted with our exclusive aluminum brackets on the rear half of the cover. Each rear half foam core has a 0.050" thick aluminum bracket attached to the core at four critical points – two in the back and one on each side – providing proper support of any one of Watkins' approved retractable cover systems.

These system-ready brackets are designed and built to factory specifications to assure strong support and easy installation.

Tough 'N Hefty Hinge

Watkins knows the cover hinge takes a big brunt of the wear and tear on a cover. That's why we build Hot Spring brand covers with a four-layer hinge, distributing the stress over multiple layers and seams. Our hinge spans two pieces of vinyl, which are double-stitched to each half of the cover. You get four layers of vinyl, instead of two.

Exclusive Press-style Cover Locks

In the year 2000, our design team developed an easier-to-use, sleeker, modern-style locking hardware. Modeled after automobile seatbelt hardware, our child-resistant safety locks are a quick and easy press style design. Our innovative locking hardware not only looks great on the spa, it delivers superior performance for customers, and differentiates a Hot Spring brand cover from other brands. Our new generation locking hardware conforms with the Underwriters Laboratories specifications for safety covers in accordance with the ASTM Spa Cover Safety Standard. All Watkins hardware locks with a

key to help keep unsupervised children out, delivering peace of mind.

Adjustable Tie-down Straps

In 1995 we introduced our exclusive adjustable tie-down straps, to offer easy field alteration to the strap length. Since vinyl may shrink over time, an adjustable strap accommodates the minor shrinkage as the cover ages. Snug fitting tie-down straps are important for a good fitting cover, assuring a tight seal, and a secure, safe spa when not in use. Watkins' adjustable tie-down straps are secured to the tub with our locking, exclusive, press-style, safety cover locks.

Drain Grommets

Hot Spring brand covers are uniquely designed with multiple drain holes on the underside of the cover. The drain holes are strategically placed to prevent water from accumulating between the foam core and the vinyl. Unlike other brands, our covers feature four drain holes on each half of the underside of the cover, assuring successful water egress. Continuing the Watkins drive for first-rate quality and a fine finished look, each hole is comprised of a low profile, "non-abrasive" grommet, made of industrial grade nylon that matches the bottom vinyl color of the cover. These grommets won't scratch the lip of the spa when the cover is moved on and off.

Heavy Duty Zipper and Zipper Protection Flap

While the zipper may not see a lot of use, it is critical to have a strong, commercial grade zipper that can do the job when it's in use, without breaking. Watkins' zippers are a true #8 YKK. Sewn in with fine attention to detail, the zipper is completely protected with a finished vinyl flap. The zipper on a Hot Spring brand cover is completely sewn, even as it enters the corners of the cover, so all stress points are finished and reinforced, providing long-lasting use.

Heat Seal (shoe)

Watkins' revolutionary, insulating Heat Seal Shoe prevents precious heat loss at the hinge, where the two halves of the cover come together. The hinge heat



seal is one of the most critical points of the cover, when it comes to preserving energy efficiency of the spa. Without a seal at the outer end of each side of the cover hinge, heat would escape. Each shoe, sewn into both sides of the cover hinge, is made of EPS high density, 2# foam, which has an excellent insulating quality. It is encapsulated with our 28-ounce marine grade top vinyl, delivering a beautiful finished look.

A spa cover's insulation depends on two items: The R-value of the insulating foam, and how well the cover is sealed at the hinge. Even with a high R-value of the foam, if the hinge area is not properly sealed, the heat will escape. Think of it as a house that has great R-value, but no roof to enclose the house; without the roof, heat still escapes. **Watkins Heat Seal Shoe contributes to the cover's overall R-value of 13.**

[Highest Marine-Grade Vinyl](#)

A spa cover receives all the force of nature's elements. The top vinyl is exposed to sun, rain, snow, ice, dirt, chemicals and more. All of these elements can affect the top vinyl. It's the top vinyl your customers see most often; therefore, it is what they want to keep looking its best.

Watkins uses only the highest quality top vinyl available for spa covers. At 25 ounces, the Hot Spring covers are dressed with the most durable marine grade vinyl, which is treated to resist the impact of UV rays and extreme temperatures. Our top vinyl passes the accelerated UV test for 1500 hours of UV resistance, and is treated for mildew resistance, chlorine resistance, and a -40 degree cold crack.

When our top vinyl is properly maintained, it will keep its beautiful appearance and deliver years of maximum performance. This is why Watkins urges a schedule of regular cleaning and conditioning, and advises use of our Hot Spring branded recommended product, the FreshWater® Cover Shield.

[Double-Ply Poly Laminate Bottom Vinyl](#)

The bottom of the spa cover is exposed on a daily basis to the stress of chemical and sanitizer exposure, and the environment. Watkins uses a bottom vinyl material formulated to withstand normal exposure to these harsh environments. Treated with mildew and UV inhibitors, and passing a -40 degree cold crack, our 16.5 ounce, scuff resistant double-ply poly laminate vinyl has a cross hatch weave, also called weft, which is a much stronger vinyl than other formulations. This weft creates an interlocking of fibers and thus provides a bottom vinyl that effectively protects the foam core and its critical plastic seal. This, coupled with our multiple drain grommets on each underside of the cover, solves any concerns about water accumulation between the core and the bottom vinyl. While our bottom vinyl is tough, its texture will not scratch the spa surface, unlike other formulations.

A tip about bottom vinyl, and chemical sanitizers:

With proper use of chemicals and sanitizers, it is normal to see some discoloration and fading of the bottom vinyl. All of our covers are finished with a light gray bottom vinyl, which shows less fading than other brands that use dark brown or black.

If there is improper or severe use of chemicals, this, combined with the heat of the spa water, can cause damage to the bottom vinyl. If severe, it actually 'burns' the material, causing the vinyl to sag – becoming extremely discolored and weak. Read our Cover Corner Q&A about water chemistry and troubleshooting problems with vinyl.

[UL Classified, ASTM Safety Cover](#)

Watkins is an industry leader, committed to delivering safe products for consumer use. All Hot Spring brand covers are UL Classified for safety, in accordance with the ASTM F1346-91 Standard for Safety Covers. Our classification # is E-173712. Watkins covers meet the requirements for the ASTM Standard static load bearing, both our 1.5# and 2.0# density covers.



Many communities are governed by pool and spa barrier code requirements. ASTM compliance carries weight with building officials, and in most cases, allows easy completion of the sale and quick approvals from inspectors.

To meet the Standard, performance requirements state:

- **Static Load:** In the case of a pool (spa) with a width or diameter greater than 8 ft (2.4 m) from the periphery, the cover shall be able to hold a weight of 485 lb (220.0 kg) (2 adults and 1 child) to permit a rescue operation. In the case of a pool (spa) with a width or diameter not greater than 8ft (2.4 m) the cover shall withstand the weight of 275 lb (125 kg) (weight of a child and an adult).
- **Perimeter Deflection:** The cover shall be designed in such a way that, when it is tested . . . deflection of the cover does not allow the test object to pass between the cover and the side of the pool (spa) or to gain access to the water.
- Other requirements are related to labeling, fastening (locking) down, surface drainage and conformance on literature and notifications.

Extra Strong, Padded Vinyl Handles

Thanks to our approved cover removal systems, the spa cover is usually not moved daily by hand. However, when it is, a super strength handle on each side of the cover is critical to ease its transport.

Our handles are made from the same high quality, 28-ounce, marine grade vinyl we use on the top, skirts, and heat seal shoes of the cover. They are designed for durability and strength, and are padded for ease of use and long lasting performance. Like the rest of our cover, our handles are constructed with multiple layers of internal reinforcement. Each handle is attached with a box –X stitch, very carefully sewn through multiple layers, providing an extra strong handle.

Internal Reinforcement

Our cover is custom crafted to intense manufacturing specifications. If you unzip the vinyl encasement and remove the foam cores, you will find that a Hot Spring brand cover is reinforced throughout, protecting every internal stress point. Our vinyl handles and hinge are discussed above; other stress points that we protect are the “grab spot” on the skirt, and adjustable tie down straps. We use our double-ply poly laminate bottom vinyl to reinforce, because it is so tough. In total, we reinforce 24 different areas throughout the inside of our covers.

Prior to the introduction of cover lifters, consumers often grabbed the part of the skirt (flap) closest to the hinge, to assist them in moving the cover off the tub. Some continue to use this spot like a handle. When you discuss the cover with your customer, encouraging use of the handles, and the Watkins’ approved retractable cover systems, may assure a longer life of the cover.

Perimeter Skirt

The perimeter skirt, also called the flap, acts as an additional seal to conserve heat, and keep dirt out. It also protects the bar top. Hot Spring brand covers are designed with a split skirt, allowing for a graceful fit all the way around, even at the radius, and on rounded sides. The skirt is completely finished, and the skirt (flap) grab spot, by the hinge, too often used as a substitute handle, has extra reinforcing, using the bottom vinyl inside, where it meets the cover.

Sewing, Thread and Finish

A Hot Spring brand cover is truly a thing of beauty. The pride our sewing professionals take in craftsmanship is apparent throughout each finished cover. This special commitment to fine craftsmanship reflects Watkins’ adherence to working with only the finest raw materials, including the thread used throughout the cover. Ours is a polyester thread, which is treated with UV and mildew inhibitors. This polyester thread has both strength and durability, and withstands years of harsh weather, chemicals and intense sunlight.



The strength and integrity of a spa cover is very much dependent on consistent stitching and clean tie offs. Watkins' sewing professionals are experts at clean and consistent stitching. No sloppy backstitch, no unraveled stitching. We use a locking carriage stitch to reinforce the stitches.

For extra strength and beauty, our Top Stitch provides an attractive finish, and a fine fit to the cover, such as what you see on many expensive leather goods. We use the same strong polyester thread, treated with UV and mildew inhibitors for long life.

Full 2 Year Limited Warranty

Watkins' non-prorated limited warranty protects the Hot Spring, Tiger River® and Hot Spot® covers for a full 2 years from the cover purchase date. Our warranty assures the covers will be free from defects in materials and workmanship, both on the vinyl encasement, and the foam core. This warranty specifically protects the original consumer purchaser from excessive damage to, or the failure of, the vinyl encasement, including the handles and straps, determined to have been caused by normal usage, and damage to the foam caused by water saturation and warping. The cover locks are not included in this warranty, but are warranted to be free from defects in materials or workmanship at the time of delivery to the original consumer purchaser. Fading of the vinyl and thread is not considered a defect, and will occur naturally due to normal chemical maintenance required for spa water.

Watkins maintains an extensive service network throughout the United States, Canada and the world. We take great pride in the professional, efficient and courteous manner in which our limited warranty is administered.
