



## Safety Cover Owner's Guide

**Safety Covers**



**Vinyl Liners**



**Spa Covers**



**Safety Fence**



**Merlin Industries, Inc., proud manufacturers of  
the world's finest pool and spa products.**

[www.merlinindustries.com](http://www.merlinindustries.com)

# SAFETY COVER OWNER'S GUIDE

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Thank you for purchasing a Merlin Industries, Inc swimming pool safety cover. Swimming pools are a fantastic form of recreation. They give you access to a terrific form of physical activity while also bringing your family and friends together for years of fun and enjoyment. Please use your swimming pool with the utmost care. The unique nature of pools requires an extra level of awareness to the dangers they can present. Remember: Nothing replaces proper supervision.

Merlin Industries, Inc. manufactures swimming pool safety covers in both mesh and solid materials. Our covers are designed and constructed to help increase the safety level of your swimming pool and help ease the general maintenance and care of your pool. Merlin Industries, Inc. is the original innovator of the Solid Safety Cover. No one has made more or has more experience. Thank you for trusting your safety cover with #1.

Most installations of Merlin Industries, Inc. swimming pool safety covers meet or exceed the standards for safety covers as established by the American Society for Testing Materials (ASTM). (Please see -exceptions on last page.)

Please review the contents of this homeowner's guide. Following these guidelines will help you and your family to safely enjoy your pool and swimming pool safety cover for years.

Enclosed with this guide is the National Spa & Pool Institute (NSPI) pamphlet, "Layers of Protection". We urge you to review the suggested safety options and review your own pool safety methods. Merlin Industries, Inc. manufactures safety covers that help prevent entry into the pool, as well as safety fencing which can be used when children or pets are present. The combination of the safety cover and safety fencing can provide you with two layers of protection for added peace of mind. Brochures on these and other Merlin Industries, Inc. quality swimming pool products are included in this packet.

\*Note: Merlin Industries, Inc. manufactures safety covers to be as maintenance free as possible. However there is some needed maintenance. It is up to you to follow the recommendations outlined in this owner's guide. For example, the swimming pool water level must be maintained between 6 inches & 18 inches from the cover or the cover warranty will be voided. Serious structural damage to the cover and/or the hardware may result. Safety hazards are also a possibility if the water level is not maintained within this range. If you have any questions contact your dealer or visit us at [www.merlinindustries.com](http://www.merlinindustries.com).

## I. YOUR COVER

### Construction:

All Merlin Industries, Inc. safety covers are designed to formfit to the shape of the pool for which they are made. Rectangular safety covers should not be used on anything but rectangular pools and a safety cover must be used on the pool for which it was designed. Failure to follow these rules will void the warranty. The overlap on a rectangle swimming pool can vary from 10 inches to 18 inches. For free-form pools this overlap can vary from 12 inches to 24 inches. In the case of an obstruction, rock walls or waterfalls for example, the cover can be cut flush at these areas. It is the grid of webbing that allows the safety cover to be stretched taut across the pool and provides the cover with its strength.

### SmartMesh Covers:

SmartMesh Safety Covers utilize a high tech weave that allows water to pass through the material and still provides 100% shade to reduce the chance of algae growth. If water should accumulate on the cover, it is necessary to remove it and clean the cover using the techniques described in the "Using you Cover" section of this guide.

Merlin's patent number for SmartMesh is US 6,886,187 B2.

The SmartMesh safety cover meets or exceeds all standards for safety covers as established by the American Society for Testing Materials (ASTM)\*. The SmartMesh safety cover comes with a limited pro-rated 15-year warranty, which warranties against manufacturer's defects. Refer to your warranty card.

#### Dura-Mesh Safety Covers:

The weave of the mesh safety cover is designed to allow water to drain through the cover and to prevent large debris and particles from passing through the safety cover and entering into the pool. The cover allows some fine silt and/or dust to enter the pool. Some sunlight is also allowed into the pool.

The standard mesh safety cover meets or exceeds all standards for safety covers as established by the American Society for Testing Materials (ASTM)\*. The Dura-Mesh safety cover comes with a limited pro-rated 15-year warranty, which warranties against manufacturer's defects. Refer to your warranty card.

#### Advanced Grade Mesh Safety Covers:

The weave of the advanced grade mesh safety cover is designed to allow water to drain through the cover and prevent large debris and particles from passing through the cover and entering the pool. The weave of the advanced grade mesh safety cover is approximately 50% tighter and thicker than the weave of the standard mesh safety cover. This cover allows a reduced amount of fine silt and/or dust to enter the pool. A reduced amount of sunlight is also allowed into the pool.

The Advanced Grade Mesh safety cover meets or exceeds all standards for safety covers as established by the American Society for Testing Materials (ASTM)\*. The advanced grade mesh safety cover comes with a limited pro-rated 20-year warranty, which warranties against manufacturer's defects. Refer to your warranty card.

#### Solid Safety Covers:

The solid cover with an automatic pump does not allow any debris, fine silt and/or dust, or sunlight to enter the pool through the cover. The solid cover with a window mesh drain panel may allow a very small amount of particulate matter to enter the pool through the 2 layers of micro-mesh filter. The solid safety cover must have a properly working automatic pump or a properly working window mesh drain panel on the cover at all times to meet ASTM\* standards.

The solid safety cover meets or exceeds all standards for safety covers as established by the American Society for Testing Materials (ASTM)\*. The solid safety cover comes with a limited pro-rated 10-year warranty, which warranties against manufacturer's defects. Refer to your warranty card.

\* When safety cover is properly installed

## II. SAFETY COVER ACCESSORIES

#### Window Mesh Drain Panel for Solid Safety Covers:

Solid safety covers can come with a "Window Mesh Drain Panel" to remove water from the top of the cover in lieu of an automatic cover pump. The window mesh drain panel is a removable square piece of 250-micromesh material attached to a square piece of standard mesh material. The panel is applied to the top of the cover with Velcro for easy removal.

The drain panel is placed where the water on the cover will drain the quickest. During installation the cover needs to be adjusted so the water will be "directed" toward the panel for drainage purposes. The adjustment will require tightening and loosening of some straps to achieve maximum effectiveness.

#### Automatic Cover Pump for Solid Safety Covers:

Solid safety covers can come with an automatic cover pump to remove water from the top of the cover in lieu of a window mesh drain panel. The pool pump should be placed at the lowest point of the cover or where the water accumulates. The pool pump is required to stay on the cover, and be plugged in, whenever the cover is in place. It is designed to withstand snow and/or freezing conditions.

The pump is equipped with a pressure activated pneumatic float switch, which will automatically turn the pump on at the 2 inch to 3-inch water level. Once activated the pump will pump until the water level is at the lowest pump level. When attaching the garden hose to the pump make sure that you have a long enough run of hose so the water does not end up back on the cover or the pool deck. Place the end of the hose far enough away from the pool so the water does not saturate the ground around the pool. In the event that the pump does not perform refer to pump owners manual found in the pump box or contact your local service dealer.

#### Padding:

On many pools, step sections and swim out sections create "reverse corners" or "sharp edges" inside the pool. These sharp edges need to be padded to prevent wearing of the cover in these locations. This padding is attached directly to the underside of the cover and is sewn on with the same webbing used to put the cover together. When the cover is installed the padded sections of the cover should fall directly over any reverse corners inside the pool. Some very sharp corners and rough coping may require additional padding. Please consult with your dealer for further information

#### Step Riser Kits: (optional)

Step riser kits are designed to close or fill the triangular gaps created when a safety cover is installed to go up and over a raised wall area. Step riser kits are installed at the job site during the initial installation. They are designed to prevent small children, pets, or leaves and debris from entering the pool. Failure to install a step riser kit when one is required will result in a safety hazard and will VOID ASTM safety approval.

#### Raised Wall Kit: (optional)

Raised wall kits are designed to secure a safety cover to a pool with a raised wall or beam. The kit is applied directly to the raised wall or beam using a stainless steel cable assembly and eyebolts that are installed during initial installation. Failure to install a Raised wall kit when one is required will result in a safety hazard and will VOID ASTM safety approval.

#### Center Harness Strap Kit: (optional)

Center harness strap kits, or "Y" straps, are designed to be installed on a cover with an obstruction that does not come in contact with the cover, but has a strap that runs into it. This strap kit creates a Y-strap to go on either side of the obstruction. An example of an obstruction may be a dive stand.

#### Coping Clips: (optional)

Coping Clips fit underneath the cover and act as a buffer between the cover wear bars and the coping to prevent wear and/or discoloration to the coping. Coping Clips slip onto the coping and are tied to the brass anchor or strap behind the wear bar.

#### Brass Flanges: (optional)

Brass Flanges or beauty rings, fit over your brass anchors, are flush with the deck and are used to give a more finished look or to hide any chipping that may occur during initial installation

### III. USING YOUR COVER

Merlin Industries, Inc. strongly suggests that a qualified pool professional complete the initial installation of the cover. Improper installation of the cover can result in the warranty being voided.

Upon installation the cover should be taut across the pool. The springs on a mesh safety cover should be compressed approximately 50% and between 60% to 75% for solid safety covers and should not be removed without the aid of the installation tool. Should the cover not be taut, the straps can be adjusted and tightened. (See Below).

Although the cover will support an adult's weight, we do not recommend walking on the cover except when cleaning the window mesh drain panel or clearing debris from around the automatic pump. Do not walk on the edge of the cover to avoid excessive cover wear.

**Clogged Window Mesh Drain Panel for Solid Covers:**

Remove the window mesh drain panel from the cover by grasping one corner and pulling the velcroed panel off the cover. With a garden hose spray the underside of the mesh panel to remove all debris and spray the cover's filter panel. Reattach panel.

**Pump not pumping:**

Check the electrical source for the pump. Check for excess debris around the base of the pump. Refer to the pump owner's manual.

**Checking water level for mesh and solid:**

In order to ensure that the water level of the pool does not rise above 6 inches or fall below 18 inches from the cover, remove a spring at a convenient corner of the pool and pull cover back to view the water. Should the water level be more than 18 inches from the cover, add water with a garden hose to the appropriate level. Should the water level be less than 6 inches from the cover, place a water pump on the first step of your stair section and pump the water down to the correct level.

\*Note: The swimming pool water level must be maintained between 6 inches & 18 inches from the cover or the cover warranty will be voided. Serious structural damage to the cover and/or the hardware may result. Safety hazards are also a possibility if proper water levels are not maintained.

**Tightening straps:**

In the event the springs are not compressed 50% for mesh covers and between 60% to 75% for solid covers, or the straps become loose, the straps should be tightened. Loose straps can cause premature cover wear. Remove the spring from the anchor with the installation tool. Using the strap and buckle, adjust the length of the strap by 2 inch increments and reinstall the spring on the anchor using the installation tool until the spring is compressed 50% for mesh covers and 60% to 75% for solid covers and the straps are snug.

**Leaves collecting on cover:**

Leaves collecting on the cover are a normal circumstance. Simply allow them to dry and blow off. Should you find that the leaves tend to collect on the cover ensure that the straps are taut across the pool to allow the leaves to blow away.

Water not collecting near panel of solid cover:

In the event that water seems to collect in an area of the cover that does not have a window mesh drain panel, the straps of the cover can be adjusted to direct the water towards the drain panel for proper drainage.

Step 1: Loosen the four straps that border the window mesh panel.

Step 2: Tighten the straps that are outside or surrounding the accumulation of water.

Step 3: The water might need assistance to begin moving towards the panel. Try to temporarily depress the cover near the panel to help the flow of water towards it. In some situations you may need to add some weight to that area of the cover.

Step 4: Wait 2 to 3 days to allow the cover to "tighten" then flood the cover with a garden hose to check that the cover drains properly on its own.

Step 5: Repeat above steps as needed.

Water Coming Through Seams (Solid Safety Covers):

You may notice that water will pass through the seams of a solid cover. This is due to our normal manufacturing process, and is inherent in all Solid Safety Covers. Taut Solid Safety Covers are held together and given their strength by the webbing which is sewn in place. Water may pass through the needle holes formed by this process. THIS IS NOT A DEFECT IN THE COVER. Over time, these needle holes will become "clogged" by the expansion of the thread when it becomes wet, and by small debris particles that become lodged in the holes.

SmartMesh Cover Collecting Water:

In areas where large amounts of pollen, dirt, leaves or other debris clog the openings of a SmartMesh cover, it will be necessary to clean the cover. While on the pool use a nylon bristle pool brush to dislodge the debris and allow water to pass through. If the cover is dry, a leaf blower may be used to blow the debris off the cover or spray through the backside of the cover with a garden hose or LOW power pressure washer. NOTE: HIGH PRESSURE POWER WASHING MAY DAMAGE YOUR COVER. DO NOT USE HIGH PRESSURE POWER WASHERS OR HIGH PRESSURE POWER WASHER TIPS.

Cover Chafe or Coping Wear:

Cover Chafe or coping wear is NOT a manufacturing defect and is NOT covered under the warranty. It can be caused by many things, including, but not limited to the following...

PROBLEM	SOLUTION
Loose cover	Adjust straps to tighten cover.
Rough coping	Smooth coping by removing any burrs or small pebbles. Pad coping with carpeting or some other non-abrasive substance. Padding is also available through your dealer from Merlin Industries, Inc.
Windy area	Adjust straps to tighten cover. Padding may also be needed (Available as an option, and can be added).

Spreading of Mesh Material:

Like the strings of a tennis racket, the strands of the mesh material can be moved back into position by rubbing the material with your fingers. Rub the cover between your fingers gently. Remember to avoid pulling on the mesh material when moving the cover. When moving the cover always use the straps to pull the cover.

#### IV. CLOSING YOUR POOL IN THE FALL

The cover should be checked for any damage that may have occurred during storage. Never raise the deck anchors prior to reinstallation, as damage may occur by dragging the cover over raised anchors. Keep anchors flush until the cover is positioned correctly over the pool. When moving or handling the cover, never grab the paneled material; always move the cover by using the reinforced webbing and straps. Water level in the pool must be between 6 inches and 18 inches below the cover at all times or the warranty will be voided.

##### Mesh Cover:

Check with your pool dealer for water treatment prior to putting the cover on the pool. Once the cover is on the pool, do not add chemicals through the cover always lift one corner and add chemicals accordingly. If chemicals do get on your cover, rinse immediately with large volumes of water. To help assure you open your pool to clear water, it may be necessary to add chlorine and/or algaecide (40% to 60% "quat" algaecide) 2-3 times in the spring, prior to opening your pool. Consult with your pool dealer for appropriate dosages.

##### SmartMesh Cover:

To help ensure a clean and algae free pool at opening, a SmartMesh covered pool MUST be clean, algae free with the water balanced and proper winterizing chemicals added. SmartMesh provides 100% shade but is only one part of having a clean and algae free pool. Failure to properly follow the above instructions may lead to an algae and or debris problem when the pool is opened.

Failure to remove debris and leaves from the top of your SmartMesh cover can also lead to an unpleasant opening in the spring. Debris and leaves usually blow off the cover with normal winds. If this does not happen you can remove leaves and debris with your pool brush or a leaf blower. When leaves and debris are left on the cover, they can begin to decay and can "steep" when water drains through the cover. This "steeping" will effect the pool water similar to how a tea bag effects water when brewing tea.

##### Solid Cover:

Check with your pool dealer for water treatment prior to putting the cover on the pool. Once the cover is on the pool, do not add chemicals through the cover always lift one corner and add chemicals accordingly. If chemicals do get on your cover, rinse immediately with large volumes of water. Weeping or dripping of water through the stitching of a solid safety cover is normal and should diminish over time.

Note: Observation of your cover pump is necessary to prevent accidental draining of your pool. Also, heavy rain or snow load may displace some water in your pool. It may be necessary to add water to the pool over the course of the winter. Keep your water level between 6" and 18" below the cover.

##### How to use the Installation Tool to install cover:

Using the allen wrench, raise the threaded portion of the brass anchor approximately 1/4". Slip the installation tool through the round end of the stainless steel spring. Stand facing the pool and place the installation tool over the brass anchor with the notched end facing the pool. Using your body for leverage, pull the top of the installation tool away from the pool seating the spring on the brass anchor. You may want to gently step on the spring as it slides down the installation tool. Twist the installation tool to cause the notched area to line up with the back of the spring.



## V. OPENING YOUR POOL

The cover should be checked for any damage that may have occurred during the winter season. If any problems have occurred, contact your Merlin Dealer for repair procedures. General repairs are not made by Merlin Industries between July 1st and December 15th. Never leave the deck anchors raised when removing the cover as damage may occur by dragging the cover over raised anchors. When moving or handling the cover, never grab the paneled material; always move the cover by using the reinforced webbing and straps.

### Mesh Cover:

A fine silt or sediment may be visible on the bottom of the pool. Vacuum to waste and allow your filter to run. Add opening chemicals according to your pool dealer's recommendations. If chemicals get on your cover rinse immediately with large volumes of water.

### Solid Cover:

A fine silt or sediment may be visible on the bottom of the pool for pools with a window mesh drain panel. Vacuum to waste and allow your filter to run. Add opening chemicals according to your pool dealer's recommendations. If chemicals get on your cover rinse immediately with large volumes of water.

### How to use the Installation Tool to remove cover:

Stand outside of the anchor, away from the pool, facing the cover. Place the installation tool into the round end of the spring with the notch facing away from the pool. Position the tool between the anchor and the spring, lean it forward towards the pool. This will unseat the spring.

## VI. STORING YOUR COVER

Before storing your Merlin cover, remove all leaves and debris from the cover's surface. Simply spray with hose and gently brush to loosen dirt. Check the cover prior to storage for excessive wear or damage that may have occurred during the winter. Covers do not need to be dried prior to storage. Fold cover and store in mesh bag included with your cover order. Merlin recommends hanging the cover far enough off the ground to avoid damage by mice and other rodents. Never place the cover near chemicals or a heat source as excessive heat can melt the cover. Removal of the springs vs. leaving them on is an option that is up to you.

### SmartMesh Covers

When cleaning your cover prior to storage, spray the cover with a garden hose or LOW power pressure washer from its underside to dislodge any pollen or fine debris caught in the mesh material.

**NOTE: HIGH PRESSURE POWER WASHING MAY DAMAGE YOUR COVER. DO NOT USE HIGH PRESSURE POWER WASHERS OR HIGH PRESSURE POWER WASHER TIPS.**

## VII. A.S.T.M. EXCEPTIONS\*

More than 25% of the safety cover requires lawn stakes or aluminum tubes.

No step riser kit installed when required.

No gap filler installed when required.

No cable assembly installed when required.

A solid cover that does not have a pool pump or window mesh drain panel in proper working order, or does not have either water removal system present.

VII. A.S.T.M. EXCEPTIONS\* CON'T.

Covers being installed on pools they were not designed for.

Damaged cover.

Improper installation.

VIII. NON - WARRANTY SITUATIONS\*

Coping wear. - When the pool's edge wears through the cover or cover pads.

(Additional padding can be purchased to help avoid this)

Acts of God.

Improper installation.

Water levels not maintained between 6" and 18" below cover.

Wear due to a cover being installed on a pool for which it was not designed.

\*The above situations are some, but not all, of the situations that are not covered under the warranty and that will cause a cover to not meet A.S.T.M. standards. If you have any questions about your cover contact your dealer or visit us at...[www.merlinindustries.com](http://www.merlinindustries.com)

ALL INQUIRIES REGARDING YOUR COVER SHOULD BE MADE TO YOUR DEALER OR INSTALLER.

IF YOU ARE UNABLE TO CONTACT YOUR DEALER FOR ANY REASON, MERLIN INDUSTRIES CAN BE CONTACTED VIA EMAIL OR MAIL.

MAIL TO : MERLIN INDUSTRIES, INC.  
2904 EAST STATE STREET EXT.  
HAMILTON, NJ 08619

EMAIL TO: [emailus@merlinind.com](mailto:emailus@merlinind.com)

ALL INQUIRIES SHOULD INCLUDE:

DATE OF PURCHASE

SERIAL NUMBER

DEALER OR INSTALLER NAME AND LOCATION

PICTURES OF ISSUE

CUSTOMERS CALLING MERLIN INDUSTRIES, INC. DIRECTLY WILL BE DIRECTED TO CONTACT US VIA ONE OF THE TWO METHODS ABOVE.

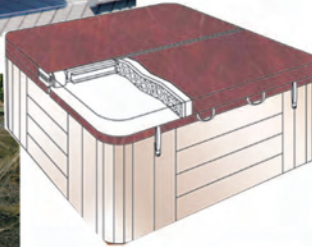
Retain for your records:

Purchase Date  \_\_\_\_\_

Dealer   \_\_\_\_\_

Serial Number  \_\_\_\_\_

Merlin Industries, Inc. also manufactures these professional pool and spa products...



Our **Custom Spa Cover** division offers four cover grades including fiberglass reinforced covers and a floating cover for freeform spas where conventional foam covers are not an option. **Custom Spa Covers** are available in a variety of Marine Grade Vinyl colors to match your outdoor decor.

Although nothing can provide the safety of adult supervision, Merlin's **Safe 'n Secure** removable safety fence can add a layer of protection between your pets, family and your swimming pool. **Safe 'n Secure** fencing is 4' high and features aluminum quad-core poles for added strength.



Contact your Merlin Authorized Dealer for more information on these products or visit our web-site.

**Merlin Vinyl Liners!**

**Merlin Vinyl Liners** are unmatched when it comes to fit, finish and pattern choice. Our knowledgeable design team sends the design files for your liner directly to our fully automated computer aided cutting machines for precise fit and super fast lead times.

At Merlin Industries, Inc. we look forward to new challenges every day. Custom liner components such as tanning ledges, vanishing edges, custom covered steps and in pool bar stools are our specialty. Let us work with your Merlin Authorized Dealer to make your dream pool a reality!

[www.merlinindustries.com](http://www.merlinindustries.com)

**The World's finest pool and spa products.**

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