

Pool Winterization Guide



Winter is Coming!

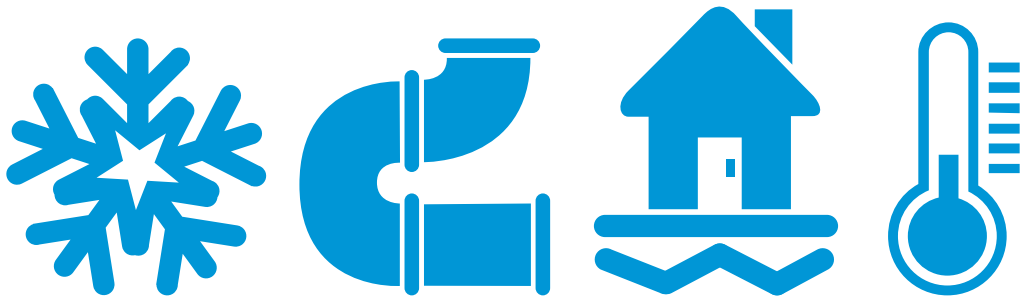
A good pool closing means a good pool opening — plain and simple. It can also mean saving money on your pool, which is good news.

The top three goals in closing a pool for the winter are to preserve water quality, secure equipment and protect pool surfaces. A proper closing helps you avoid costly issues such as freeze-damaged tile, broken pool equipment and green algae stains. Badly closed pools can lead to a costly and frustrating opening (Boo).

Whether your pool is closing completely or just on reduced maintenance, you'll be happy you reviewed the information in this packet. Turn the page to get the inside scoop on why we do what we do, and more.

Enjoy!

American Pool
americanpool.com



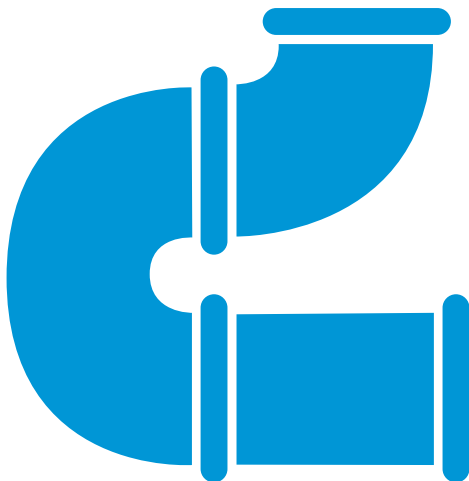
The Power of Freeze

Ice | Check the Pipes | Prevent Expansion



Ice

Water freezes once the temperature reaches 32° Fahrenheit and microscopic ice crystals start forming at 30° Fahrenheit. When water freezes, it increases in volume by about 9% and during this expansion it creates pressure up to 114,000 psi. This level of pressure can easily burst pipes, disrupt concrete and crack tile. So ice must be monitored in all areas of your facility.



Check the Pipes

Freezing temperatures can damage your pipes. Draining the water from unused pipes can help protect them during the off season. For in-ground pipes, you need to measure the temperature of the pipes. If accessible, be sure to place your thermometer under the pipe's insulation in order to get an accurate reading. The temperature may vary depending on ground insulation and weather cycles in your region.



Prevent Expansion

To help prevent expansion, your pool area should be sealed to prevent water from collecting underground. Depending on how/when you pool was built, the ground below your pool may contain air pockets. These air pockets can fill with water, which will freeze in cold weather. In turn, this freezing will cause expansion and put pressure on the ground or gravel that supports your pool. When this happens channeling or shifting of the deck and coping may occur. To help prevent water from entering these areas, ensure there are no surface cracks, gaps around fittings and that all joints on the deck and pool perimeter are properly caulked to prevent expansion.

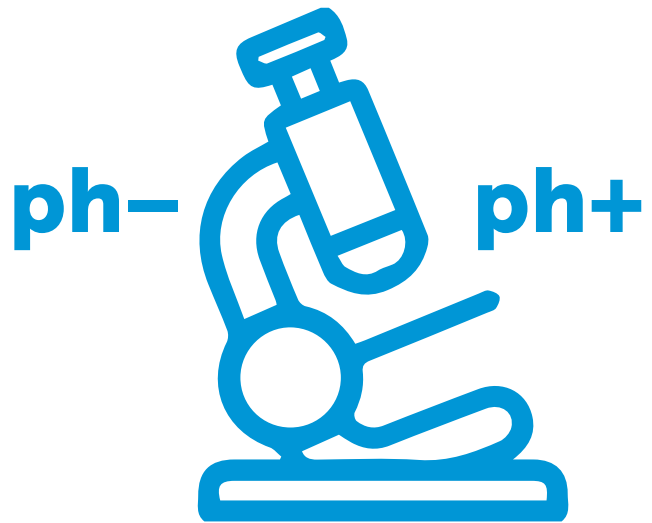


Water Quality

Balance the Water | Take Care of Water Issues Now | Prevent Stains | Prevent Algae | Clean the Pool

Balance the Water

On a chemical level, unbalanced water is greedy. It takes what it wants from whatever it touches. When your water is not balanced there are two primary issues that may arise: you get build up (like calcium crystals or globs of algae) or you get aggressive corrosion (which may cause faded plaster pigment or strong staining). This is especially true when the filtration system is off. Things like the age of your plaster can also play a part. For example, if your pool has newer plaster, you will have a natural lift in pH. In the end, properly balanced water will provide better protection for your pool during the off-season.



Take Care of Water Issues Now

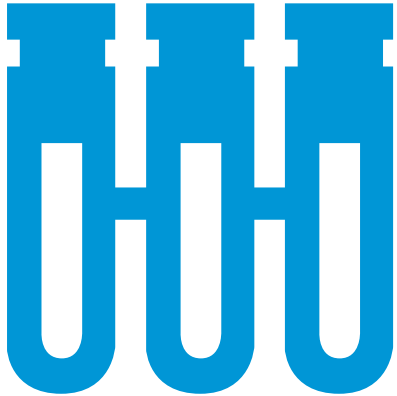
Any water-quality problems should be addressed before the pool is closed. Water issues left at closing will still exist upon opening. In fact, many of these problems can become worse over the course of the winter, which may make opening your pool a real challenge. The goal here is to prevent algae growth, which is common when your pool water is stagnant. Algae growth can continue until the temperature drops to freezing. Chemical treatments after closing can ensure algae is kept at bay and surface staining is avoided.



Prevent Stains

In the winter, dissolved metals are not being filtered. A sequestering agent (metal/scale treatment) applied to the water will help prevent any dissolved metals from staining your pool's surface. Sequestering agents help hold the metals in the water and prevent them from attaching to your surface.

If a pool stains during the winter, it can be several months before it is treated. This will make the stain much more difficult to remove. Sequestering agents can also help prevent the formation of calcium scale, particularly in hard-water areas. Stain and scale build-up on pool surfaces or equipment can lead to a costly removal. For every acid wash removal process, you can subtract one year from your plaster's life span. So you end up paying twice: once with your budget and once with the life span of your pool's surface. Preventing stains ends up being the more cost-efficient option for your pool.



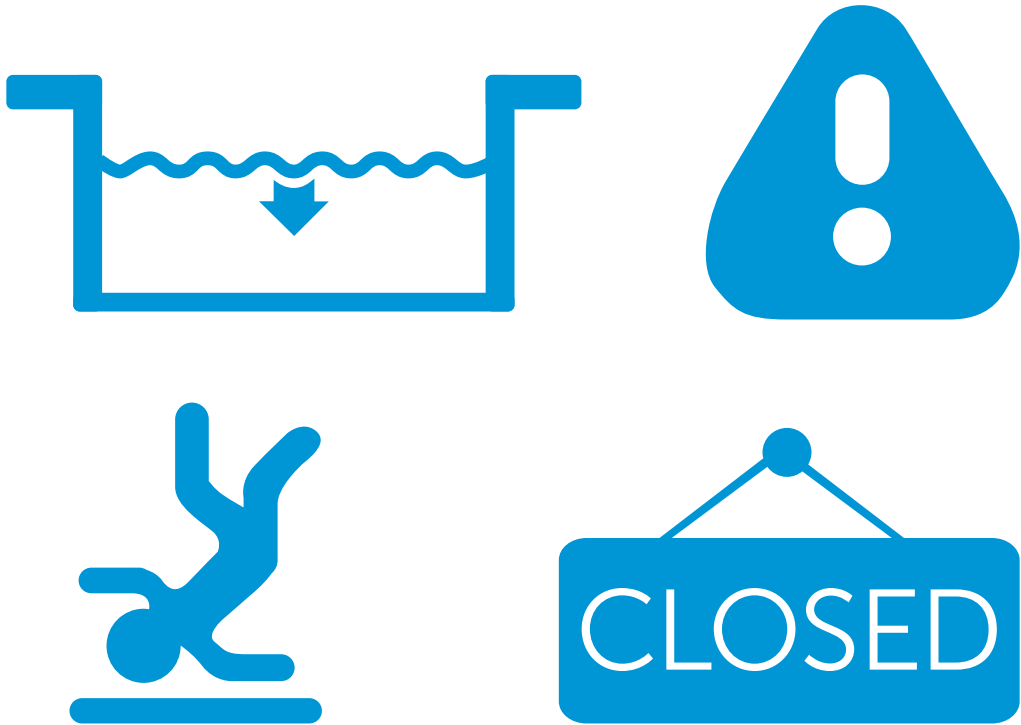
Prevent Algae

To help prevent algae growth over the winter months, a winter algaecide may be used. Algae is one of the #1 causes of surface staining in the off season. Be sure that the pool has been circulated adequately before shutting down so that the algaecide is properly dispersed. In warmer climates, a mid-winter application may be necessary if the temperature does not drop below freezing.



Clean the Pool

Remove any dirt and debris from the water before closing. Leaves, dirt and other unwanted debris can cause unsightly markings if left on pool surfaces for long periods of time. These stains set into the surface and will be tough to remove at opening.



Water Level

Lower the Water Level | Close Access to the Pool

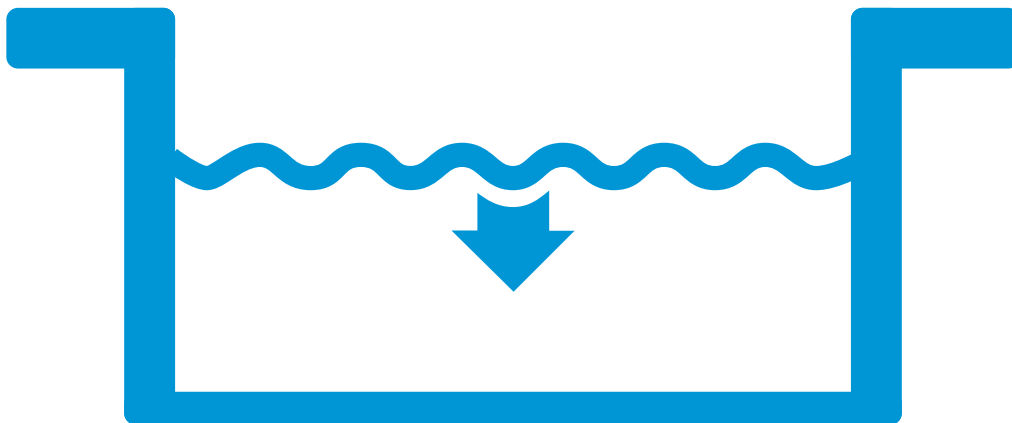
Lower the Water Level

When preparing for the winter, make sure to lower the water level and drain the lines and equipment. Remove enough water from the pool so that the water level is below the skimmer. Water expands as it freezes, so be sure that water is removed from the lines or that antifreeze is added. Use a non-toxic antifreeze that is appropriate for pools. A shop-vac may be used to blow the water from the lines. Once drained, the lines may be plugged to ensure that pipes do not crack over the winter.

Pumps and other equipment should be completely drained by removing the drain plugs. All water should be removed from the filter to prevent damage to the filter's housing. Be certain that there are no open valves that can leak water into the filter.

It is not recommended to completely drain in-ground pools due to hydrostatic pressure from ground water. This means that water underground can put pressure on your pool's structure and crack the shell or even push the pool out of the ground. Vinyl-lined pools will wrinkle if completely drained and can be costly to repair.

Finally, be on the lookout for heavy rain or snow fall. Your water may rise to a level that is not recommended for your cover, equipment or tile line.





Close Access to the Pool

Swimming pools are a source a fun, recreation and healthy activity, but they can be a safety issue if not secured properly. This is especially true in the winter months. When public or commercial pools are closed, they should be secured against all public access. Make sure to check that all perimeter fencing, latches and gates are up to code. Self-latching gates are required on all wading pools. Your front gate should be locked at all times, even during on-site maintenance. Any entryway to the pool should be examined. This security check will put your mind at ease and should be repeated throughout the off season.



Pool Cover

Cover the Pool | Advantages | Prevent Accidents



Cover the Pool

Covering the pool can reduce the amount of leaves, dirt and other debris that enter the pool. In turn, keeping your water covered will make your spring opening easier and reduce the potential for algae staining and high chlorine demand.

If you have a solid cover, a siphon should be used to remove water and other debris that may accumulate on top of the cover throughout the winter. Mesh safety covers will let rainwater through and provide additional filtration when in use. Covers also help to prevent algae growth by blocking out the sun's rays.

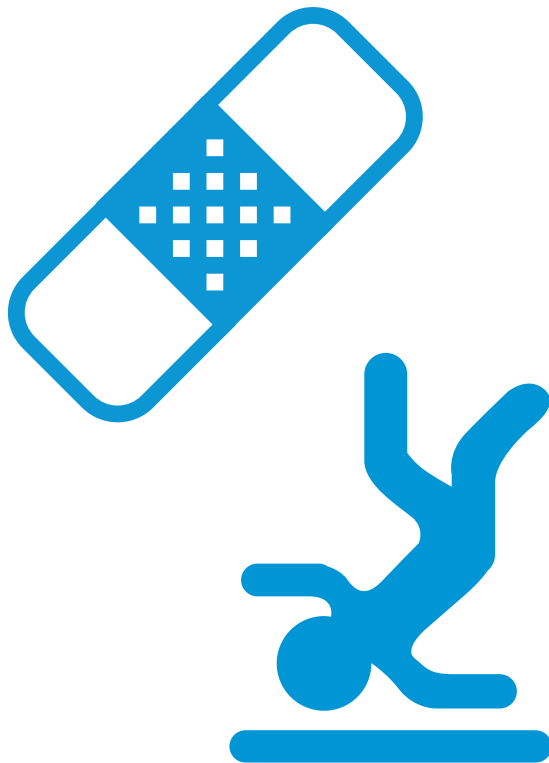
Be sure that all of your springs and anchors, which hold your cover in place, are in tact and functioning properly. Continue to check on the pool over the course of the winter. Rain or snow can raise the water level or cause the cover to sink. If this happens, then take action to correct the situation.

Learn more about Merlin Smart Mesh safety covers at [merlinindustries.com](https://www.merlinindustries.com).



Advantages

By using a cover, you will save on water draining and refilling costs, chemicals, electricity and more. Pool covers that fit securely will help minimize unwanted debris and look great to prospective patrons. A good pool cover will extend the life of your pool's surface and delay big ticket items like a full pool re-plaster.



Prevent Accidents

A partially-drained, uncovered pool is a significant fall hazard and will leave your property vulnerable to accidents. Protect yourself against unexpected scenarios: Like a pet digging under the fence or a child climbing into the pool area to retrieve a ball. An old pool cover that is not properly maintained can be just as dangerous as an uncovered pool.



Site Evaluation

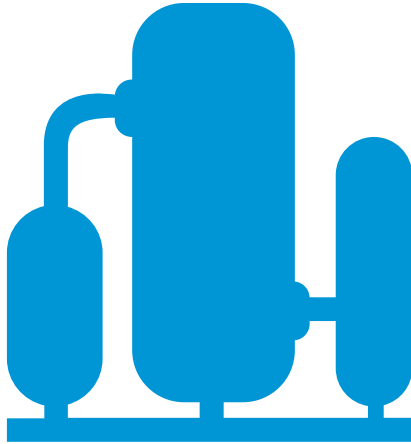
Store Chemicals Properly | Equipment



Store Chemicals Properly

Most bulk chemicals used during the season should be properly discarded in the off season. If you have bottled chemicals with unbroken seals, check with your pool professional to see if these can be kept in storage. Pool products should be stored in a cool, dry, well-ventilated area separate from other products such as fertilizers, motor oil, grease, paint and other household and garden chemicals. Mixing these common items with pool products can lead to unwanted and potentially dangerous chemical reactions. Keep pool-care products tightly sealed in the original container to prevent contamination. Always store pool products where they are inaccessible to children and pets.

It is best to discard test kit reagents and/or test strips at the end of the pool season. Testing materials have a shelf life, which declines rapidly once opened. Because accurate testing is so important to proper pool maintenance, it is best to start with new test reagents and/or test strips at the beginning of each season.



Equipment

Remove and store any equipment that may be damaged due to extreme weather conditions.

If you are not removing and storing, make sure all equipment is off, including timers. Pumps can be damaged by running without proper water flow, so make sure that the timers are disabled so that the pump does not start.



Pool lights should also remain off – even if they are energy-efficient LED lights. Pool lights are cooled by water, so if they are exposed to the air they may become too hot and burst. New contact with cold water can also cause them to crack. To be safe, the water level should cover the pool light in case the lights are accidentally turned on.

Now You Know!

Now that you have absorbed all of this information, it's time to put it to good use! How does it feel to be informed and empowered?

Like we said before, a good closing will lead to a much better spring opening. And keeping an eye on everything in the off season will only benefit your operation. Take a moment to chat with your pool professional about off-season care.

Of course, American Pool welcomes any questions or conversations. :)

Stay safe and enjoy!

American Pool
americanpool.com