

Effective Circulation & Filtration

The Circulatory System Of A Basic Pool

At least 80% of swimming pool problems are due to poor circulation and / or inefficient filtration! The most important thing in swimming pool water management is NOT chemicals - but good circulation and filtration

This Involves:

- Maintaining water balance through use of • appropriate chemicals
- Enhancing the quality and appearance of the water
- Protection of the structure and machinery of the pool
- Using effective and continuous sanitation
- Oxidising (shocking) regularly to eliminate bather waste
- Maintaining water balance though effective filtration and circulation
- Inhibiting the growth of algae

Circulation

The purpose of circulation is to pass all the pool water through a filter in an acceptably short period of time and provide thorough sanitation. Good circulation should evenly distribute the pool chemicals and temperature. It should eliminate "dead spots" in the pool where bacteria, algae, debris and other foreign material can collect (not 100% possible). One helpful image of the circulation system is the human body's circulation system, where the heart keeps blood moving through blood vessels. In a pool, the pump keeps the water constantly in motion. Water is pumped through pipes and other equipment like heaters where it is filtered and heated prior to being recirculated into the pool. In the summer the pump should run at least 8-12 hours a day while in the winter or in colder climates, this can drop down to 2-4 hours a day. The pool also needs at least a once weekly sweep, vacuum and skimmer basket check.....more if used frequently. Other variables that can influence how long the pump needs to run are the power of the pump, the position of the return inlets (these should be facing 45 degrees down), number of people using the pool, the shape of the pool and the weather (particularly if there is no cover).

Filtration

The filter is one of your most important pieces of equipment. It removes both visible debris and most microscopic material. You may have either a sand/glass media filter, a diatomaceous earth filter (DE - rare now) or cartridge filter(s). Filter debris can be categorised into two main groups:

- Plant material, oils and greases (i.e. suntan lotions, body fats and oils, cosmetics, pollutants, etc.) - these clog or coat the filter making it incapable of filtering effectively
- Scale and other mineral deposits and scum (i.e. calcification, rust, hair, lint, etc.) these can harden and reduce the effectiveness of the filter.

Every week, or after clarifier products have been added, check the pressure gauge on the filter and ensure that it is within the manufacturer's recommendations.





Filter - Backwash/Rinse - Recirculate - Waste

As the filter ages, it accumulates debris which is not easily or effectively removed through normal cleaning procedures. This culminates in a loss of filter efficiency, eventually to the point where the only solution is replacement of the filter media or cartridges(s).

Cleaning Filters

Sand or glass media filters should be backwashed and rinsed at least once a week

in the summer and monthly in the winter. Glass media is much longer lasting and more efficient than sand so backwashing need only be for 1 minute compared to 3 minutes for sand. Rinsing is done for about 15 seconds or until the water is running clear in the sight glass. Cartridge filters should be hosed down (NOT water blasted) every month. ALL filters benefit from a regular soak in Bioguard Filter Brite every 4 months.

How To Use Bioguard Filter Brite

Sand Or Glass Filters:

- Backwash and rinse filter
- Turn pump off and return filter dial valve to normal filter position and remove the strainer lid on the pump
- Dissolve one sachet of Filter Brite in 1 2 litres of clean water
- Add Filter Brite solution through the strainer basket and turn pump on. When the strainer is empty, turn the pump off and top up the strainer basket with water (to avoid an air lock) and replace lid. Leave pump off
- Wait 6 hours and then thoroughly backwash the filter

Cartridge Filters:

- Remove cartridge(s) and remove excess debris with garden hose
- Immerse cartridge(s) completely in a plastic bucket of warm clean water containing one bag of Filter Brite
- Light brushing may be required for heavy oil accumulation
- Allow to soak at least 6 hours and preferably overnight
- Rinse the filter elements thoroughly with maximum garden hose pressure and reassemble
- If scale, crust or discolouration remains, use rubber gloves and briefly brush or soak filter elements in a diluted acid solution. To make acid solution, dilute 750 gms Wright Pools & Spas Balancing 2 in 10 - 15 litres of water
- Thoroughly flush the acid solution from filter elements with a garden hose
- Reassemble filter and resume normal operation

Replacing Filter Sand Or Glass Media

Sand media in filters may last 5-10 years depending on factors such as bather load, level of sanitation, chemical water balance, pool construction, other equipment and the environment. We routinely replace sand with glass media as it is more efficient and much longer lasting. We can do a media change for you, please ask us to quote this for you and we will check the rest of your equipment at the same time.

Replacing Filter Cartridges

With appropriate care, filter cartridges generally last about 2 years. Since there are so many types of filter size on the market, when replacing, please bring your old filter(s) into us so we can ensure we replace with the correct size.

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