

# CL FREE

watersystems



pool  
sanitation  
system



salt-free  
chlorine-free  
**chemical-free**  
water  
sanitation



whole house  
point-of-entry  
system



enjoy the water.





## CL Free Water Systems Overview

### See Next Chart For Hardness Levels Over 25

#### ALL SYSTEMS:

Provide Great Tasting/Smelling Water  
 Remove Chlorine, Chemicals, Organics  
 Salt Free, Use No Chemicals  
 Leave the Healthy Minerals In  
 No Reverse Osmosis (RO) System Required  
 98+% Efficient (water softeners/70%, RO/20%)  
 Significantly Reduce or Eliminate Scaling (see model)

#### Single Tank System, Flow Chamber and Controller

**Active Sanitization, Latent Bacterial Protection, Significantly Reduces Scaling**

Flow Rate		5 gpm	10 gpm	15 gpm
		Model	Model	Model
Hardness	<25	POE-111-G-0	POE-211-G-0	POE-321-G-0

#### Dual Tank System

**Virtually Eliminates Scaling**

Flow Rate		5 gpm	10 gpm	15 gpm	20 gpm	25 gpm	30 gpm
		Model	Model	Model	Model	Model	Model
Hardness	<25	POE-102-C-04	POE-202-C-06	POE-302-C-09	POE-402-C-12	POE-503-C-18	POE-603-C-18

#### Dual Tank System, Flow Chamber and Controller

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		Model	Model	Model	Model	Model	Model
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16844 E. Ave. of the Fountains, Oasis Plaza Suite 101, Fountain Hills AZ.. 85268 [www.clfree.com](http://www.clfree.com)  
 Arizona 480.422.5710 Ohio 937.787.3288 Nationwide 1.866.NOCHLORINE

# CL Free Water Systems

## Point-of-Entry Sizing Tool

### GAC only, Flow Cell and Controller

	5 gpm	10 gpm	15 gpm	20 gpm	25 gpm		
Hardness <10	POE-111-G-0	POE-211-G-0	POE-311-G-0	POE-411-G-0	POE-521-G-0		Hardness <10
<15				POE-421-G-0			<15
<20			POE-321-G-0				<20
<25		POE-221-G-0					<25

### GAC and Hardness Media, NO Flow Cell. NO Controller

CWC and Hardness Media, No Flow Control, No Control								
		5 gpm	10 gpm	15 gpm	20 gpm	25 gpm	30 gpm	
Hardness	<25	POE-102-C-04	POE-202-C-06	POE-302-C-09	POE-402-C-12	POE-503-C-18	POE-603-C-18	<25
	<30	POE-102-C-06	POE-202-C-09	POE-303-C-18	POE-403-C-18		POE-603-C-24	<30
	<35					POE-503-C-24	POE-604-C-27	<35
	<40				POE-504-C-27		POE-604-C-33	<40
	<45		POE-203-C-12		POE-404-C-24	POE-504-C-33		<45
	<50							<50

### GAC and Hardness Media, Flow Cell and Controller

CVC and Hardness Analysis, Flow Gpm and Solids								
Hardness		5 gpm	10 gpm	15 gpm	20 gpm	25 gpm	30 gpm	
	<25	POE-112-C-04	POE-212-C-06	POE-312-C-09	POE-412-C-12	POE-513-C-18	POE-613-C-18	<25
	<30	POE-112-C-06	POE-212-C-09	POE-313-C-18	POE-413-C-18		POE-613-C-24	<30
	<35					POE-513-C-24	POE-614-C-27	<35
	<40				POE-414-C-24		POE-514-C-27	POE-614-C-33
	<45		POE-213-C-12			POE-514-C-33	<45	
	<50							<50



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environmentally responsible  
water treatment

**CL FREE**  
watersystems

enjoy the water.



advantages of **CL Free** water treatment



- *Give the benefits of soft water without adding salt or removing essential minerals.*
- *Prevent hard scale buildup in and on water equipment and fixtures.*
- *Soften the existing hard scale around taps, basins, and toilets.*
- *Reduce soap scum and improve the lather of soap.*
- *Make the water feel silkier.*
- *Reduce the harsh effects of hard water on skin and clothes.*
- *Reduce water spotting on fixtures and surfaces in contact with the water.*
- *Provide a much more environmentally responsible solution to hard water; no salts or chemicals are introduced into the waste stream*
- *Eliminate the need for Reverse-osmosis system use, saving thousands of gallons of water annually for the average family.*
- *Remove chlorine, radon, solvents, pesticides, MTBE's, volatile organic compounds and many other contaminants that may be present in your water supply.*

chemical-free • chlorine-free • salt-free



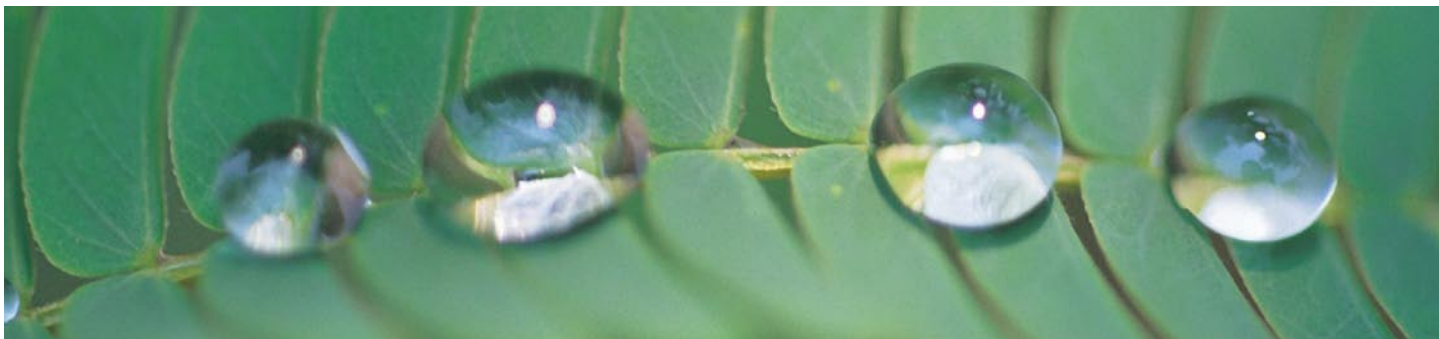
enjoy the water.



## water systems comparison

advantages	CL Free Water Systems	H <sub>2</sub> O Concepts	EWS	Point-of-Use Filtration	Reverse Osmosis System	Water Softener (Kinetic)
removes chlorine & other chemicals	✓	✓	✓	✓	✓	
reduces scale & calcium build-up	✓	✓	✓			✓
sanitizes water	✓	✓				
kills or disables bacteria	✓	✓				
environment-friendly	✓	✓	✓	✓		
provides latent bacterial protection	✓					
changes minerals to digestible bicarbonate	✓	✓				
drinkable back-wash water	✓	✓	✓	not applicable		
whole house system	✓	✓	✓	not applicable	not applicable	✓

disadvantages	CL Free Water Systems	H <sub>2</sub> O Concepts	EWS	Point-of-Use Filtration	Reverse Osmosis System	Water Softener (Kinetic)
removes healthy calcium & magnesium					✗	✗
requires salt or potassium						✗
add salt to water						✗
brine or other heavy discharge					✗	✗
excessive waste of water					✗	✗
potential bacteria in tank			✗	✗	✗	✗
aggressive low pH					✗	



environmentally responsible **water treatment**



Americans are being threatened by the increasing contamination of our most precious and necessary resource — WATER.

Powerful pesticides, industrial cleaners, hydrocarbons, prescription drugs, PCBs and MTBEs (toxic gasoline additives) have all found their way into our water supplies.

The tremendous task of acquiring, processing and distributing water safely to our homes and businesses is becoming more and more of a technical and financial burden on our cities and towns.

The Environmental Protection Agency reports that virtually every source of surface water (lakes and rivers) and some groundwater sources are contaminated with organics, and disinfecting these waters with chlorine is producing a host of toxins (chlorides, chloroform, other chlorine by-products) that municipal water treatment companies are helpless to remove without tremendous investment into the water treatment infrastructure.

It is also known that use of traditional residential water treatment (water softeners and reverse-osmosis units) is a major contributing factor to the contamination of our ground and surface waters by adding significant amounts of chlorides and other toxins to the water cycle.

CL Free residential water systems improve water quality by applying **environmentally responsible technologies** to filter out contaminants and sanitize all the water in your home without adding chemicals or salts to the water cycle.

chemical-free • chlorine-free • salt-free



enjoy the **water.**



water softener or **CL Free Water Sanitation System?**

**water softener**



❶ Does NOT sanitize water	❶ Will sanitize water, oxidizing bacteria, algae and other microscopic contaminants
❷ Does NOT remove chlorine from water	❷ Will remove chlorine and harmful chlorine by-products
❸ Produces “undrinkable” water	❸ Provides fresh, great tasting water everywhere in your home
❹ Removes calcium and other minerals from the water and replaces them with sodium (salt)	❹ Transforms calcium and other beneficial minerals into their bi-carbonate” forms, allowing easy absorption into the body, and removing the ability of minerals to stick to surfaces
❺ Gives a “slimy” feel while bathing or showering	❺ Produces luxurious feeling water when you bathe or shower; your hair will be “squeaky clean”
❻ Will dry out your skin	❻ Will NOT dry your skin
❼ Requires that salt be purchased and replaced at regular intervals	❼ Will remove calcium build-up in pipes and water appliances
❽ Contribute to negative environmental conditions and are banned in many communities	❽ Provides an environment-friendly solution to hard water by adding no salts or chemicals
❾ Requires ongoing maintenance	❾ Does not require constant maintenance
❿ Produces water unhealthy for plants and pets	❿ Produces water that will stimulate plant growth and is great for pets

### *Copper*

- ❶ Already in your daily multi-vitamin, 2 milligrams equal 100% recommended minimum daily value amount of copper
- ❷ Provides latent bacterial protection (remains in the water to prevent bacteria and algae growth)
- ❸ Essential micro-nutrient for:  
Nervous system  
Cardiovascular system  
Skin  
Bone  
Immune system  
Reproductive system
- ❹ Copper deficiency is linked to increased risk of coronary heart disease and certain types of cancer
- ❺ 0.15 – 0.20 ppm of ionized copper is added to the water, well below the EPA's Maximum Contaminant Level Goals (MCLG) of 1.3 ppm. At this level, 2.5 gallons of water per day are required to meet your meet your daily value amount requirement of copper

### *Titanium Oxidation*

- ❶ Kills/disables bacteria
- ❷ Reduces scaling/hard water deposits (by converting minerals from their carbonate form to their bicarbonate form)
- ❸ Oxidizes (burns up) other microscopic contaminants
- ❹ Provides a softer feeling water (as opposed to the “slimy feel” of salt-softened water)

### *Activated Carbon*

- ❶ We use only Highly Activated Coconut Shell Granulated Activated Carbon. This type of GAC has 25% more surface area than other types of GAC. It does not affect the water's pH. It is significantly better at absorbing MTBEs than non-treated and other types o GAC. It is the highest quality activated carbon available for drinking water treatment
- ❷ Removes chlorine, chemicals & chlorination by-products
- ❸ Freshens water
- ❹ Improves taste
- ❺ Backwash drinkable
- ❻ The Filter is digital and regenerates based on usage and/or elapsed time, which addresses the needs of our snowbirds and/or frequent travelers

### *Reverse Osmosis (RO) System*

- ❶ Wastes 3 – 4 gallons of water for every gallon it produces
- ❷ Removes minerals essential to health from water (calcium and magnesium)
- ❸ Produces highly acidic water (also unhealthy)

### *Water Softener*

- 1 Requires bags of sodium or potassium chloride
- 2 Removes minerals essential to health from water (calcium and magnesium)
- 3 Adds sodium to water, bad for hypertension
- 4 Bad taste
- 5 Water not fit for drinking or cooking
- 6 Backwash is brine, bad for environment, banned in many communities with many more bans threatening

### *Chlorine*

- 1 Linked to many health issues including heart disease and cancer
- 2 Absorbed through skin as well as through ingestion
- 3 Dries out skin and hair
- 4 Odor
- 5 Produces by-products that are known carcinogens
- 6 Releases the chemical *chloroform* in the shower or hot tub (not water), which is inhaled and not healthy
- 7 Does not kill *Cryptosporidium* at U.S. EPA standards level

### *Why CL FREE?*

- 1 **Non-chemical approach to water sanitation and microbiological control while producing water with all the healthy benefits of soft water without removing beneficial minerals or adding salts**
- 2 Microprocessor controlled Whole house system
- 3 Eliminates need for...  
Water softener  
RO (reverse osmosis) system
- 4 Enjoy water that is...  
Odor free  
Chlorine free  
Salt free (none added)
- 5 Fresh, treated water to every tap in the house
- 6 Reduces scale build-up
- 7 Extends the life of all water-using appliances and fixtures
- 8 Eliminates...  
Salt  
Expensive bottled water  
Filter changes  
Reverse osmosis maintenance

enjoy the water.





immerse yourself in  
a completely new  
[swimming experience.](#)





feel clean, refreshed and rejuvenated when you leave your pool.

With the CL Free pool sanitation system your pool water quality can be similar to mountain spring water. Fit to drink. Fresh, clean, free of unwanted chemicals like chlorine and salts. You will notice a softer “feel” to your pool water, a swimming experience you have never had in a chlorinated or salt water pool. You may never want to get out of your pool, but when you do you will feel clean, refreshed and rejuvenated.

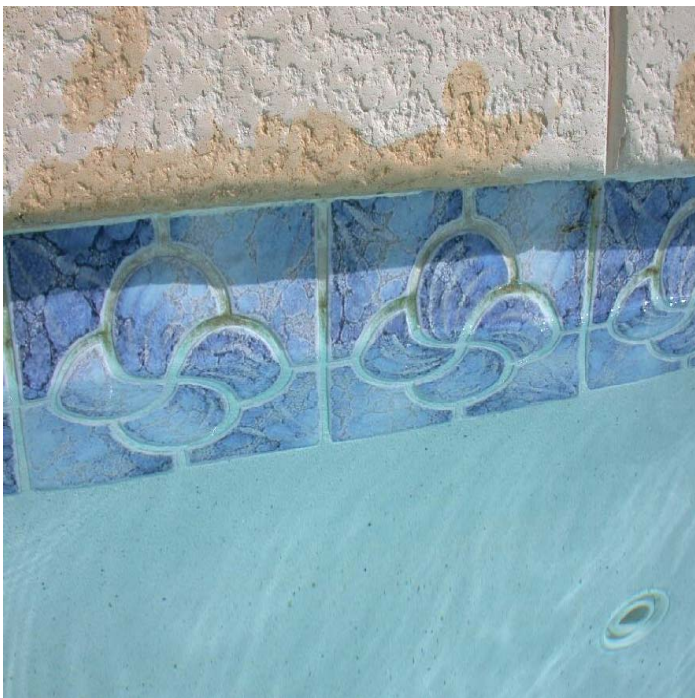
### pool sanitation system comparison

advantages	CL FREE watersystems	Salt Water Pool	Chlorine Pool
pool water fit to drink	✓		
chlorine-free & salt-free	✓		
reduces scale and calcium buildup	✓	✓	
automatic pH control	✓		
provides non-chemical bacterial protection	✓		
clean, residue-free feeling after swimming	✓		
backwash water is environmentally safe	✓		

disadvantages	CL FREE watersystems	Salt Water Pool	Chlorine Pool
dries skin		✗	✗
fades bathing suits		✗	✗
unhealthy exposure to chlorine and chlorine by-products		✗	✗
corrosive to pool equipment and decks		✗	
backwash water is harmful to plants & pets		✗	✗



Conventional sanitization and filtration.



CL Free sanitation installed at construction.

The two photo show decking and tile of two pools on the same water supply that have received similar maintenance. Both pools were built in 1999. These photo were taken on the same day in 2004.

## CL Free systems sanitize your pool water without the need for chlorine.

The purpose of chlorine in pool water is to kill bacteria and prevent algae growth. **CL Free systems eliminate the need for chlorine in your pool water!** During your pool's filter cycle water is passed through the CL Free flow cell where it is **electronically sanitized** through a process known as **oxidation**. During the oxidation process, microscopic contaminants that your filter may not catch are oxidized (burned up) along with bacteria and algae components.

## protection from bacteria and algae.

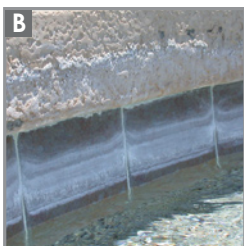
CL Free pool sanitation systems protect your pool from bacteria and algae growth by introducing copper ions into the pool water through the CL Free flow cell. Copper is deadly to bacteria and is a well-known algaecide (check out the active ingredients in most popular pool algaecide products). Copper levels are controlled by the CL Free microprocessor and can be precisely adjusted to maintain the correct copper levels in your pool.

## reduce scale and calcium build-up.

During the oxidation process, minerals like calcium and magnesium are transformed from their carbonate to their bicarbonate form. Minerals in their bicarbonate form will not permanently adhere to surfaces (like pool tile). No more hours with the pumice stone cleaning your pool tile. The CL Free pool sanitation water system eliminates most build-up.



**Pool A** was equipped with a **CL Free pool sanitation system** at construction. **Pool B** has been maintained with conventional chemicals and filtration.



The two photos show close-ups of the decking and tile of two pools on the same water supply that have received similar maintenance. Both pools were built in 1999, and these photos were taken on the same day in 2004.

enjoy the water.

Most residential water treatment systems rely on **half-century-old technologies**.

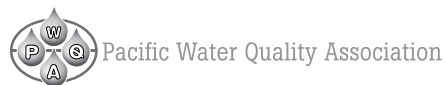
Here's what we've learned about our health, our water, and our environment in the last 50-plus years...

- 1 Long term exposure to chlorine and chlorine by-products is considered to be a contributing factor to serious disease.
- 2 Traditional water treatment methods produce unhealthy water, process water inefficiently and are causing dramatic increases in chloride (salt) levels in our water supplies and soil.
- 3 MTBE's, PCB's and other solvents and chemical contaminants are finding their way into our water supplies.

Recognizing these issues and addressing them with **environmentally responsible technology**, CL Free water systems provide safe, healthy, and enjoyable water for you and your family.



www.clfree.com



ARIZONA: 480-422-5710 | TOLL FREE: 866-NOCHLORINE (662-4567)

**WARRANTY:** CL Free Water Systems, LLC warrants to the original owner, at the original installation site, that the Whole House Point of Entry System (POE) shall be free of defects in material and workmanship for a period of five (5) years. Warranty is transferable, please contact CL Free Water Systems for instructions. See our full warranty and disclosure form online at <http://www.clfree.com/disclosure.pdf>.

### Both Whole House Point of Entry (POE) and Pool/Spa Systems

1. Sanitize water passing through flow cell by oxidizing the organic material. This kills/disables bacteria & burns up organic matter.
2. Place copper ions into the water which provide a latent bacteria protection in both and algae protection in Pools/Spas.
3. Change calcium and magnesium to a soft form which significantly reduces hard water spotting, deposits and scale build up.
4. Are not water softeners, they DO NOT remove calcium and other healthy minerals, they do not eliminate water spotting.

### Whole House Point of Entry (POE) System

1. Filters water with Highly Activated Coconut Shell Carbon; removes chlorine/other chemicals; provides fresh, great tasting water.
2. Descales existing build-up inside pipes. Homes with older plumbing may see cloudy water for the first several weeks.  
**NOTE: DO NOT INSTALL THE STANDARD SYSTEM ON GALVANIZED PLUMBING AS LEAKS MAY OCCUR.**
3. Granulated Activated Carbon (GAC) requires surface area and contact time with water to be effective. Accordingly, Flow Rate is how POE systems are sized. As water can create channels or tunnels in the GAC, the system performs a backwash at preset times based on usage and/or elapsed time. The backwash function is performed solely to "fluff" the GAC, eliminating any channeling. No chemicals are released in a backwash. The backwash water is treated and safe to drink.

### Pool/Spa System

1. There is no such thing as a "maintenance-free pool." Weekly brushing, adequate filtering (at least 2 water exchanges per filtering cycle) and good circulation are key.

### What is Expected of the Owner

1. Owner is responsible for checking copper levels in the Home and Pool/Spa water. After the initial startup period, the pool/spa water should be checked weekly, house water every other month. Adjust power settings as required.
2. Pool/Spa systems, check pH levels weekly. Adjust sensor settings as required. Total Alkalinity as needed. Stabilizer is not used. Hardness, TSD and Total Alkalinity are kept at the same levels as a chlorine pool.
3. Home owner should check flow cell monthly for calcium buildup. Typical flow cell service is 1-2 times per year.

### Warranty

CFWS (CL Free Water Systems, LLC) warrants to the original owner, at the original installation site, that the Whole House Point of Entry System (POE) and/or Pool/Spa System shall be free of defects in material and workmanship for a period of five (5) years. Warranty is transferable, please contact CFWS for instructions.

Warranty subject to the following conditions:

1. Installation is made according to manufacturer's recommendations (see installation manual) and local codes.
2. pH Sensors are covered for two years (void if sensor allowed to dry out or not installed in a "wet" location).
3. Copper plates are a consumable item and are not covered.
4. POE: water pressure does not exceed 80 psi; water temperature does not exceed 100 degrees F.

CFWS is not responsible for warranty service should the label, logo, seal or serial number be removed, or should the product fail to be properly maintained or fail to function properly as a result of: misuse, abuse, improper installation, neglect, improper shipping, damage caused by disaster such as fire, flood, lightning, improper electrical current, or interaction with a non CFWS product or service other than by a CFWS dealer or authorized service provider.

**Should you have questions or your system fail during the warranty period, contact your dealer for service/support.**

If purchased company direct, call CFWS 1-866-NOCHLORINE for warranty repair instructions and/or return authorization. A CFWS service technician will provide telephone diagnostic services to determine whether or not the system requires service or repair. If service is needed, CFWS, at its option, will exchange or repair the system without charge for parts or in-shop labor. Repaired or replaced parts assume the original warranty period. If a claimed defect cannot be identified or reproduced, customer will be held responsible for costs incurred.

This warranty does not cover service and or labor charges related to regular maintenance or service of the system.

Customer is responsible for the removal, return and re-installation of equipment. CFWS will return covered items, freight prepaid.

No other warranties are assumed or intended.

SIGNATURE: _____	PRINT NAME: _____	DATE: _____
ADDRESS: _____	CITY: _____	STATE: _____ ZIP: _____

