

Whole Home and Light Commercial Water Filtration Systems for 1.5" and 2" incoming line size

MODEL NUMBERS:

Whole Home and Light Commercial Water Filtration & Conditioning Systems:

EWS-1354-1.5, EWS-1665-2

Whole Home and Light Commercial Water Filtration Systems:

CWL-1354-1.5, CWL-1665-2





ENVIRONMENTAL WATER SYSTEMS®

Quality Water Filtration Crafted in the USA Since 1987.

WWW.EWSWATER.COM



ENVIRONMENTAL WATER SYSTEMS Quality Water Filtration Crafted in the USA Since 1987.

SPECTRUM -Whole Home Water Filtration

The most versatile and best-selling whole home filtration appliance in the USA.

- · Filter all the water in your home with one system.
- World-class EWS quality and performance.
- · Trusted by hospitals, health care centers, military, and hundreds of thousands of private homes worldwide.
- Inhibits hard water build-up in pipes and on surfaces.
- No salts, no chlorides, and no metal resins.
- Hassle-free and low maintenance.
- · Quick and easy install, just like a water heater.
- Made in the USA, meets or exceeds all compliances.
- Protects you and your family from chlorine, THMs, VOCs, pesticides, and more in tap water.1



Chlorine (a common disinfectant used in USA tap water) and its byproducts are known carcinogens. Drinking or inhaling and absorbing them while showering or bathing is not recommended. The New York State Dept. of Health and President's Cancer Panel recommend water filtration to reduce or eliminate exposure.



ENJOY BETTER HEALTH.

The SPECTRUM prevents you and your family from absorbing and inhaling carcinogenic chlorine while showering and bathing. Enjoy better skin, hair, and overall health.



100% HASSLE-FREE.

The SPECTRUM is a self-cleaning, USA-made appliance of the highest quality. The only maintenance is a simple filtration media replacement once up to every 10 years.*



ULTIMATE PROTECTION.

The SPECTRUM uses our proprietary high-grade, biodegradable filtration media that effectively removes and reduces chlorine, chloramine, dyes, fuels, pharmaceutical residues, and much more.



HELP FOR HARD WATER.

The SPECTRUM (EWS Series) inhibits scale build-up in pipes and water heaters, makes it easier to wipe off water spots, and enables you to use less soap - all without salts, chemicals, or brine discharge.



"AMERICA'S WATER IS NOT SAFE. EVERY HOME SHOULD FILTER THEIR WATER FOR DRINKING AND BATHING."

1 HEALTHY HOME & LIFESTYLE

EWS provides clean, quality filtered water throughout your entire home for all uses. EWS protects you and your family from consuming, absorbing, and inhaling carcinogenic (cancercausing) pollutants while bathing, showering, and drinking. Enjoy healthy water for cooking, making coffee or tea, soaking in the tub, or taking a shower.

An increasing number of familes are purchasing EWS appliances to remove chlorine and chloramine, which can exacerbate respiratory problems, and asthma and allergy symptoms.

Taking showers is a health risk.

Showers and baths lead to a greater exposure to toxic chemicals contained in water supplies than does drinking water. The chemicals are absorbed and evaporate out of the water and are inhaled. They can also spread through the house and be inhaled by others.

- New Scientist Magazine

2 ENVIRONMENTALLY-FRIENDLY, USA-MADE APPLIANCE

Enjoy the hassle-free convenience of filtered water at every sink and shower in your home. No more frequent filter replacements. No more buying plastic bottles of water. No more showering in carcinogenic chlorinated water.

EWS filtration replaces expensive, wasteful bottled water and the need for most other filtration. You will be able to simply fill up your reusable bottle at any sink in your home and go.

EWS appliances are made in the USA, self-cleaning, and require no chemicals or salts. The only maintenance is a simple filter replacement once up to every 10 years. Furthermore, EWS proprietary filtration media is biodegradable and disposable in your garden.

PROTECT YOUR PLUMBING, APPLIANCES & FIXTURES

EWS filtration will prevent damage to your home's plumbing, appliances, surfaces, and fixtures caused by corrosive chlorine and chloramine.

If you have hard water, EWS Series conditioning inhibits scale formation in water heaters and pipes, solving problems associated with the naturally found calcium and magnesium (hardness) minerals without the use of any chemicals, harmful salts, or a "slippery feeling" while showering or bathing.

Enjoy the savings and convenience of not having to buy bottled water

Enjoy delicious, healthy water from every tap



Experience shiny hair, smooth skin, and a healthier body

¹Replacement timeframe based on local water conditions and usage.

EWS WHOLE HOME WATER FILTRATION IS THE STANDARD IN EVERY HOME.

LIKE CENTRAL HEAT AND AIR, HOMEOWNERS WANT THE CONVENIENCE OF CENTRAL WATER.

Since 1987, EWS has pioneered central water filtration and is the leader in whole home filtration appliances, trusted by hospitals, health care centers, military, high-end hotels, and private homes worldwide.

Like central heat/AC and air filters that improve your air quality, EWS central water filtration improves your water quality by removing contaminants from your tap water or well water.

The President's Cancer Panel annual report, Reducing Environmental Cancer Risks: What We Can Do Naw, states: "Individuals and families have many opportunities to reduce or eliminate chemical exposures...filtering home tap water or well water can decrease exposure to numerous known or suspected carcinogens or endocrine-disrupting chemicals."

TOP 8 BENEFITS OF EWS CENTRAL WATER FILTRATION

- 1. Chlorine-free, filtered water to every sink and shower.
- Protects you and your family from drinking, absorbing, and inhaling carcinogenic (cancer-causing) water pollutants.
- Hassle-free, self-cleaning, user-friendly appliance that only requires a filtration media change-out up to every 10 years.
- Alleviate symptoms of asthma and allergies by providing chlorine-free filtered water for showering and humidifiers.
- Eliminates the need for most sink filtration systems and the gimmicks of small showerhead and faucet filters, refrigerator filters, and carafe or pitcher filters.
- Stops the destructive effects of chlorine dry skin, brittle hair, skin irritations, and red itchy eyes.
- Eliminates the need for expensive plastic bottles of water, which helps your budget and the planet.
- Unparalled customer service, satisfaction, and expertise at EWS, top-performing USA-made filtration is all we do.

Chlorine is used to disinfect water.

Exposure through inhalation, ingestion and contact will cause eye, skin and airway irritation, sore throat, cough and corrosive tissue damage of the gastrointestinal tract. Children are at increased risk due to greater lung surface to body weight ratios.

- New York State Department of Health





Find The Right Product For You

Whether your water is hard or soft, treated with chlorine or chloramine**, Environmental Water Systems has the right appliance to protect you, your family, and your home. Just a few simple questions will help you determine which appliance is best for you. If you need any help at all, please call EWS Customer Service at 702.256.8182 Monday-Friday 8.00 am - 4.30 pm Pacific Time.

DO YOU HAVE HARD WATER?

YES

Some of us have harder water than others, and EWS generally considers 6 grains (102 ppm or mg/l) of hardness to be on the lower end of hard water. Select **YES** if you have hard water issues such as excessive spotting or mineral build-up in pipes, faucets and water heaters.

NO

DOES YOUR CITY USE CHLORINE OR CHLORAMINE**?

.....



DOES YOUR CITY USE CHLORINE OR CHLORAMINE**?

CWL SERIES Whole Home Water Filtration Only for Water Without Hardness Issues.

EWS SERIES Whole Home Water Filtration and Conditioning for Hardness Minerals.

CHLORINE 1

EWS SPECTRUM

Model #: EWS-SPECTRUM
Our most popular
EWS system
and #1 seller.

Adjustable for 3/4" - 1 1/2" main water line. Up to 37 gpm.

1 If your city water is treated by chloramine this system can still be very effective for 4 or less people with 4 or less bathrooms.

The only difference may be how long the filtration media may last.

- With Chlorine up to 10 yearsWith Chloramine 7 years
- Either way you cannot go wrong.

So the choice between the EWS SPECTRUM and the EWS-CC-1465 can be a customer choice based on price point or longevity of filter media.

CHLORAMINE*

EWS CC 1465

Model #: EWS-CC-1465 For up to 10 years before filter replacement.

Select this system (or the EWS-SPECTRUM as an alternate choice1) if you have all of the following:

- 4 (or less) bathrooms
- 4 (or less) people
- 1-2 water heaters

EWS CC 1865

Model #: EWS-CC-1865
For up to 10 years before filter replacement.

Select this system if you have ANY of the following:

- 5 (or more) bathrooms
- 5 (or more) people
- 2+ water heaters

CHLORAMINE**

CWL CC 1465

Model #: CWL-CC-1465
For up to 10 years before filter replacement.

Select this system (or the CWL-SPECTRUM as an alternate choice¹) if you have all of the following:

- 4 (or less) bathrooms
- 4 (or less) people
- 1-2 water heaters

CWL CC 1865

Model #: CWL-CC-1865
For up to 10 years before filter replacement.

Select this system if you have ANY of the following:

- 5 (or more) bathrooms
- 5 (or more) people
- 2+ water heaters

CHLORINE 1

CWL SPECTRUM

Model #: CWL-SPECTRUM Our most popular CWL system

Adjustable for 3/4" - 1 1/2" main water line. Up to 37 gpm.

1 If your city water is treated by chloramine this system can still be very effective for 4 or less people with 4 or less bathrooms.

The only difference may be how long the filtration media may last.

- With Chlorine up to 10 years
- With Chloramine 7 years

Either way you cannot go wrong.

So the choice between the CWL SPECTRUM and the CWL-CC-1465 can be a customer choice based on price point or longevity of filter media.

Need Help? Call Us for Friendly & Helpful Assistance.

EWS Customer Service at 702.256.8182 or email us at customerservice@ewswater.com

All systems can be installed at any main water line using our adaptive digital valve that accommodates 3/4" - 1 1/2" water lines up to 37 gpm. All systems self clean and are specified to last up to 10 years before any filter media replacement based on usage and water conditions.

**About 22% of people have tap water treated with chloramine (a corrosive combination of chlorine and ammonia). Chloramine requires more contact time (vs. chlorine) through a specialized filtration media to effectively filter it out of the water. EWS has designed systems specifically for handling chloramine (and does everything else the chlorine systems will do). See the chart above to determine the right system for you, your family and your home.



Are You On Well Water?

If you are on private or community well water, you need information to determine any water issues and their solutions. Well water requires complete and independent testing. Call EWS Customer Service at 702.256.8182 or visit **EWSWATER.COM** (see the Well Water Tab) for more information.

OPTIONAL ADD-ONS

EWS PROVIDES ADDITIONAL SAFEGUARDS TO HELP MEET YOUR NEEDS, CONCERNS AND LIFESTYLE.

DRINKING WATER OPTIONS

Our sink filtration offers additional safeguards based on need or preference, such as autoimmune disease, weak immune systems, concern about old pipes, taste, or concerns about specific chemicals.

The following systems filter the water at the point of use, such as the sink, for use in cooking and drinking. Choosing the right system is simple and based on local water conditions and your needs and preferences.

OPTION 1 — ESSENTIAL DRINKING WATER

Used with an EWS Whole Home System, ESSENTIAL reduces lead and cysts. Model #: DWS

OPTION 2 — ESSENTIAL DRINKING WATER WITH ULTRAVIOLET

Our most popular upgrade provides the same great benefits of the ESSENTIAL along with our patented 99.99% effective UV safeguard. Kills bacteria, viruses, E.coli and other microorganisms. Model #: DWS-UV



WATER SOFTENING OPTIONS

In addition to EWS Central Water Filtration, the option of salt softening can be installed to the hot-side only to restrict the harmful use of salt softened water and reduces the environmental impact due to the brine discharge.

SALT (SODIUM OR POTASSIUM CHLORIDE) SOFTENING

If you prefer the "slippery feeling" of softened water, EWS Central Water with a Softener option is best for you. Softeners strictly soften the water and are not filtration systems. The softening process (ion exchange) substitutes naturally found calcium and magnesium minerals for sodium or potassium chloride.

Restrictions may apply to softener usage and brine discharge. Softeners may effect or void warranties on fixtures and finishes, pools, spas, appliances, and certain household and commercial devices.

All our softeners have digital metered valves and even though we generally advise against their use, we produce some of the highest quality and most efficient softeners in the industry.

OPTION 3 — ESSENTIAL REVERSE OSMOSIS

Select if you prefer a more stripped down or flatter taste to your water, or are allergic to the fluoride in city tap water. Model #s: RO3 and RO4

UV disinfection option available (Model #s: RO3-UV and RO4-UV). Four and five-stage options (not shown) available for well water.



Pictured at right: Twin Tank Salt Softene Model #: TT1054



OPTION 4 — ESSENTIAL MAX FLOW

Installs directly to any faucet - no separate dispenser or hole needed in the sink or counter. Use with an EWS Whole Home System for an additional safeguard. Model #s: SS-2.5



MY OPTIONS

These are options only, in order to meet your specific needs and preferences.

SINK FILTRATION OPTIONS

DWS Drinking Water Filtration for Any Sink.

DWS UV Drinking

Water Filtration with UV Upgrade.

RO3 & **RO4**

Reverse Osmosis Systems. MAX FLOW

Direct Faucet Install.

SOFTENING OPTIONS

RT1035 CABINET

Hot Side Inlet. 3/4-1" for Homes with One Water Heater.

TT1054 TWIN TANK

Hot Side Inlet, 3/4-1" for Homes with Multiple Water Heaters.

EWS WATER FILTRATION

EWS FILTRATION PROVIDES CLEAN, HEALTHY, CHLORINE-FREE WATER TO EVERY FAUCET & SHOWER -- EVERY DAY.

EWS FILTRATION

- Imagine the convenience and enjoyment of clean, filtered water for your entire home.
- Like central heat/AC and air filters that improve your air quality, EWS central water filtration improves your entire home's water quality.
- Better tasting, chlorine-free water to every faucet and tap — fill up your reusable bottle and go!
- No more absorbing and inhaling chlorine and other toxic substances during your showers and baths.
- Reduce or eliminate your exposure to 80,000+ chemicals that are unstudied and largely unregulated in our tap water.
- Chlorine dries out the skin and hair and damages soft tissues and mucuous membranes — EWS filtration removes the chlorine for healthier skin and hair.
- The best there is our proprietary media is the highest quality available for optimum filtration and longevity (dedusted Granular Activated Carbon with a minimum iodine rating of 1200).

OUR STANDARDS

All EWS product has been independently tested by an accredited third-party laboratory to meet and/or exceed all relevant FDA, California State regulations, and NSF standards for all claims made regarding NSF/ASNI standards. All EWS product is No-Lead Compliant to California AB1953.

¹Replacement timeframe based on local water conditions and usage.

EWS SERIES FILTRATION & CONDITIONING

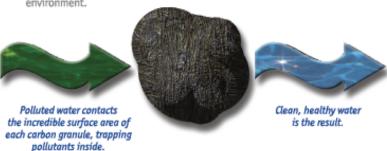
Environmental Water Systems' flagship products are the EWS Series whole home filtration appliances. Meticulously engineered with the highest quality materials and filtration media, the EWS Series filters and conditions all the water to your home for healthy, chlorine-free water that protects your family and protects your home's pipes, fixtures, and appliances.

EWS keeps the naturally found, essential minerals in your water for a pure, fresh taste while helping to solve the problems associated with hard water (without the disadvantages of salt-softening and environmentally damaging brine discharge).

Our EWS Series has repeatedly been recognized and showcased as the top whole home filtration appliance by the National Association of Home Builders (NAHB), Decorative Plumbing & Hardware Association (DPHA), International Builder's Show and New American Showcase Home, HGTV, Builder Magazine, Building Products Magazine, and many more.

CWL SERIES FILTRATION (NO CONDITIONING)

Equipped with the same top-performing materials and filtration media, our CWL Series is designed for those with no perceived water hardness issues. The CWL Series filters all the water to your home for a healthy, chlorine-free water environment.



CHLORAMINE SERIES

Some water districts use chloramine (a corrosive, toxic combination of chlorine and ammonia) instead of (or in addition to) chlorine to disinfect the water supply. In this instance, select the EWS or CWL Chloramine Series. To find out if your water district uses chloramine, call your water district or contact EWS customer service.

EWS FILTRATION QUALITY & PERFORMANCE

EWS uses a unique, high-grade Granular Activated Carbon (GAC) to filter your water. EWS Granular Activated Carbon has long been recognized as the most effective and reliable media for the removal of contaminants from drinking water. The raw material used for our GAC is high-carbon-content organic material and is biodegradable and compostable. Carbon's highly porous nature provides a large surface area for contaminants (absorbates) to collect.

GAC is more than 99% effective against trihalomethanes (THMs), chlorine, and more, and is the filtration of choice in hospitals, health care centers, military, private homes, and more.

EWS SERIES CONDITIONING

EWS CONDITIONING IS THE ALTERNATIVE TO WATER SOFTENING WITHOUT THE HARSH EFFECTS OF SALTS (SODIUM CHLORIDE OR POTASSIUM CHLORIDE).

BENEFITS OF EWS CONDITIONING

- Inhibits scale formation in pipes and water heaters.
- Provides an easier wipe off and clean up of water spotting versus untreated water.
- Use less soaps and detergents than with untreated water.
- EWS is the environmentally safe alternative to softeners – no brine discharge.
- Nice clean feeling on your skin while bathing and showering without the "slick" feeling from salt-softened water.

WHAT IS WATER HARDNESS?

Nature intended for us to have high-quality, fresh water. Water from oceans, rivers, lakes, streams, and wetlands evaporates and falls to the ground as rain or snow, and is filtered through the Earth's surface and bedrock, picking up natural calcium and magnesium minerals along the way. Depending on the location, the water will have varying levels of minerals (hardness).

IS HARD WATER HARMFUL?

Hard (mineral) water is beneficial to humans, plants, and animals. It can be harmful to plumbing and appliances because excessive hardness minerals can cause scale build-up, eventually blocking pipes and affecting the performance of appliances like dishwashers and water heaters. The EWS Series is designed to offer all of us the best of both worlds — keeping the healthy natural minerals in our water while preventing them from causing problems with our homes.



Hardness minerals in dendritic patterns easily adhere to surfaces. Molecules form concentric patterns which no longer adhere to surfaces.

BENEFITS OF ALL EWS SYSTEMS

- User-friendly and hassle-free.
 Replace the biodegradable filtration media and conditioning module up to every 10 years.¹
- Automatic backwash using Proprietary Digital Valve Technology self-cleans the appliance and provides years of trouble-free operation, all using the power consumption of a doorbell.
- Installed at the main water service line to your home, providing high flow rates to accommodate almost any application.
- Installation by your contractor or plumbing professional is as easy as installing a water heater.

WHAT DOES THE EWS SERIES DO ABOUT HARD WATER?

In use worldwide, our scientifically supported catalytic process is called Increased Calcite Nucleation (ICN). The ICN breaks the bonds between water molecules and calcium and magnesium minerals that easily adhere to surfaces and skin. Once in suspension, the minerals become attracted to each other and form concentric patterns which no longer adhere to surfaces, actively inhibiting scale formation. This process has been used in soaps and detergents for decades to allow them to work in hard water conditions.

HOW DOES EWS COMPARE TO SOFTENERS?

EWS Conditioning should not be confused with water softening. Softening is the exchange of naturally found minerals for salt (sodium or potassium chloride). Salt softeners are not filtration devices. Softening has many disadvantages, and is not safe for the environment or people with diabetes, high blood pressure, or heart and kidney issues. EWS appliances filter the water and use an environmentally-friendly approach to hardness issues.

WHAT ABOUT WATER SPOTTING?

Even though conditioning and softening both inhibit scale formation, water will spot when left on a surface to dry. EWS leaves the minerals in while preventing the hard scale build-up and difficult spotting that would occur with untreated water. Water spots are like dust particles in the air — they cannot be totally eliminated. EWS makes life a bit easier by making spots a breeze to wipe off.

Please Note: The CWL Series has the same high-grade filtration and performance benefits of the EWS Series, but does not condition the water like the EWS Series does. If you do not have issues with water hardness (e.g. spotting, build-up, clogged pipes and heaters, etc.), a unit from the CWL Series is the correct unit for you.

If you don't read this service guide at least read these 7 simple steps

SIMPLE STEPS FOR A CORRECT INSTALLATION AND A HAPPY CUSTOMER

1.

Set up system and install it on the main water supply coming into the home

Page 6-7

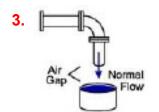
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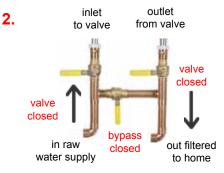
Set up a bypass (see illustration ——) and use corrugated flexible stainless or some other flexible piping to make the plumbing connections

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3.

Install a proper drain line with an air gap
Page 10



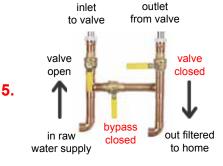


4.

Plug in the system into a standard outlet and set the time of day Page 11

5.

Open valve on the incoming line slowly to fill the tank and begin the start up procedure. Keep bypass and outgoing valve closed Page 12

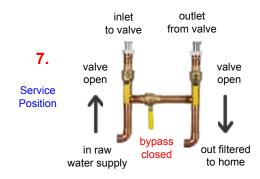


6.

Allow system to start itself up and self clean the filtration media Page 13

7.

Open valve on the outgoing line (keep bypass closed) and put system in service position and flush water throughout the house, flush toilets, run tubs, replace ice and drain water heater if needed.



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For Illustration Purposes Only:

Tank, valve and all contents (as pictured below) for these systems are delivered fully assembled. Plumber installed bypass is required.

> Pictured: EWS-1354-1.5 CWL-1354-1.5

depth: minimum 22" needed for proper installation

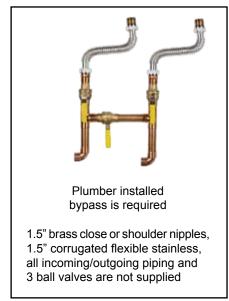


Valve (front view) Not pictured: Electric Transformer, Bypass Valve and Adaptors to the rear of the Valve.

For Illustration Purposes Only:

This is an example of 3 valve bypass using corrugated flexible stainless to make the final connections with the valve.

Configuration may vary



*Not Supplied:

Due to variations in installations, length and sizing needed for pipe connections to and from the system (see flexible requirement) and drain line are not supplied

Flexible Connections Required:

approximates

and system heights may have

variances up to 1".

Stainless steel corrugated water connectors, PEX or PVC Sch 40 have a flexible capability that may assist with issues where the rough and finish measurements are slightly off or where pressure surges/spikes or back pressure occur. This flexible connection may prevent tank and valve issues where rigid or hard pipe create problems over time. This is a requirement of the tank manufacturer and is stated on the label affixed to every tank. Perform all plumbing according to state or local codes.

Drain Line Air Gap Required and Spring Check Highly Recommended:

Please see information for proper drain line installation in the Product and Installation Guide

For Illustration Purposes Only: Corrugated flexible stainless not supplied

parts breakdown - all ews/cwl-1354-1.5 whole home filtration systems

(for illustration only)



Valve - Inlet Side



Brass Drain Adaptor (DLFC) 3/4" FTNP (Pictured installed on the valve inlet side)

Drain Flow Rates: 1354-1.5 - 7gpm

Front View; Fully Ported 1.5" Valve

4" valve base

Below represents a fully assembled system from a front view.



Electric:

24 volt plug & play transformer with 16' cord Note: Valve consumes the power equal to a doorbell



Tank:

13" x 54" (pictured, most common used in all Spectrum systems) Food & beverage grade, non-corrosive, one-piece, blow-molded polyethelyene interior with structured fiberglass outer laminate.

4" opening



Top 1/3 of tank is empty for proper backwash and lift of filtration media for the automatic self cleaning of the system



iltration:

EWS proprietary, high grade, 1200 iodine rated, granular activated carbon (GAC). No binders, fillers or metal resins

1354-1.5 systems: 2.5 cu.ft.



self leveling base



Underbed:

Specific pea gravel materials for proper water and backwash flow and distribution

30 lbs. for 1354-1.5 systems



Riser:: (CWL-1354-1.5) Food & beverage rated pvc water distribution riser with lower screen



eco-cover for tank with contact information and information important for the proper application of the system.



ICN Riser & Manifold: (EWS-1354-1.5)

Food & beverage rated pvc water distribution riser with lower screen and ICN Manifold for Conditioning.

EWS-1354-1.5 system - 2 ICN's

Not Shown: optional stainless steel cover & plastic dome for 1354 sized tanks only.

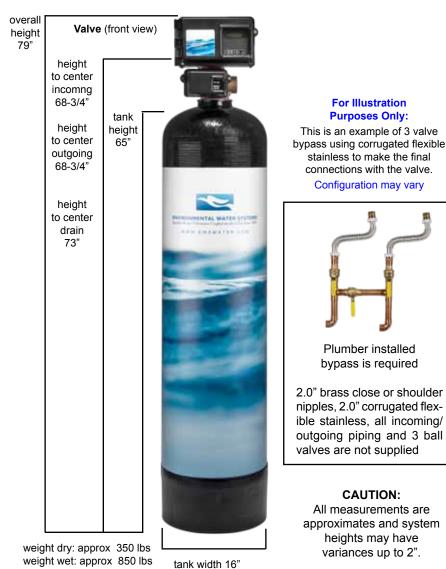
For Illustration Purposes Only:

On-Site Assembly Required

Due to shipping weight for all larger systems, tank, all tank contents and valve must be assembled on site. Please review the simple steps for proper assembly.

Pictured: EWS-1665-2, CWL-1665-2

depth: minimum 24" needed for proper installation



*Not Supplied:

Due to variations in installations, length and sizing needed for pipe connections to and from the system (see flexible requirement) and drain line are not supplied

Flexible Connections Required:

Stainless steel corrugated water connectors, PEX or PVC Sch 40 have a flexible capability that may assist with issues where the rough and finish measurements are slightly off or where pressure surges/spikes or back pressure occur. This flexible connection may prevent tank and valve issues where rigid or hard pipe create problems over time. This is a requirement of the tank manufacturer and is stated on the label affixed to every tank. Perform all plumbing according to state or local codes.

Drain Line Air Gap Required and Spring Check Highly Recommended:

Please see information for proper drain line installation in the Product and Installation Guide



For Illustration Purposes Only: Corrugated flexible stainless not supplied

parts breakdown - ews/cwl-1665-2 filtration systems





Features & Benefits of All EWS Proprietary Carbon Media

All granular activated carbon media for all EWS and CWL Whole Home Filtration Systems

Versatility of Process

Filters allow the bonding of single or multiple types of extremely small sized particles onto a single support structure. For example, fine powdered lead sorbents bonded onto larger carbon support structures. This unique feature enables EWS to produce complex composite filtration media that can meet the requirements of complicated water contamination problems.

Increased Surface Area

The ability to bond extremely fine powdered media onto larger support particles results in increased surface area and improved kinetic efficiency. Instead of having one large particle available for filtration purposes, EWS technology makes possible the bonding of thousands of fine particles onto the surface of the larger support particles which greatly increases the surface area of the composite media.

Enhanced Kinetics

The process of increasing the surface area of a media enhances the adsorption kinetics and catalytic effects of that media. Consequently, in all EWS sink filtration product, EWS technology allows us to use less media and still achieve similar or superior filtration results. As a result, with this technology, we are now able to design smaller, more aesthetically appealing filtration devices with excellent performance characteristics. In all EWS whole home water filtration systems, this EWS technology allows us to create greater filtration capacities and with more longevity.

Improved Performance

EWS carbon media for cartridges, blocks or loose media has improved catalytic and adsorption characteristics because of the increase in surface area and kinetic activity. Test results have proven that EWS composite adsorption products exceed the performance characteristics of simple, one component, granular based products.

Standard 42 Aesthetic Effects

| Parameter | US EPA MCL | Influent Challenge | Effluent Average | Effluent Maximum | Percent Reduction Average | Percent Reduction Minimum | |
|--|---------------|-----------------------|---------------------|---------------------|---------------------------------|---------------------------------|--|
| Chlorine | - | 2.0 mg/L | 0.03 mg/L | 0.06 mg/L | 98.5 | 97 | |
| Note regarding NSF compliant testing: The challenge level of chlorine is much higher than found in treated tap water | | | | | | | |



Top Claims - The Myth and The Reality

Claim: Multi-media tanks or tanks with multiple types of filtration media filter for chlorine, chloramine*, bacterial removal, pH balancing, water polishing and other claims. Reality:

First, effective bacterial removal is only achieved through ultraviolet, ozone or chemical disinfectant. Bacterialstatic filters using silver nitrate or other metal resins only protect poor filtration media from internal bacteria growth and not the consumer against bacteria in the water.

Second, when more than one media is incorporated into one tank, there is not enough of any one media to effectively remove the contaminants as Second, when more than one media is incorporated into one tank, there is not enough or any one media to enectively remove the contaminants as claimed. Each media has a specific amount of material needed per tank size and flow rate according to their Material Safety Data Sheets (MSDS) in order to actually be effective. For example, while marketing all the buzzwords to the consumer where 3 or up to 5 different media is used, the tank would have to be up to 20 feet tall to accomodate all the media properly installed. Result, the system does nothing but fool the consumer for taste over a brief period. *EWS uses the highest grade of specialty blended proprietary carbon media available.*

Claim: We are green and water conservative because our systems do not need to backwash.

Remember the Material Safety Data Sheets mentioned above for each filtration media? Oddly enough they all have requirements for backwashing filtration media to effectively filter, maintain proper filtration surface area and to prevent any packing, channeling and bacteria growth. Not backwashing media results in poor results and costly and premature replacement. Any claims are bold faced lies dressed up nicely as marketing - the only loser is the consumer. EWS effectively backwashes to maintain effective filtration and longevity. Backwash water usage is adjustable using our advanced valving and the water (which is not a brine) is usable for landscaping, pools and other needs.

Claim: Sure our units also remove chloramine*.

Making this claim is dangerous. Cloramine requires a different and very specific carbon media and the proper amount for proper contact time. Most filters may remove the chloramine for a short time (taste only) until they become incapable of removing the entire compound. multi-media filters, refrigerator filters, pitcher, carafe and faucet filters simply reduce the chlorine and allow the ammonia portion of the chloramine compound to shear off and render the filter useless as a foul or bad taste becomes evident and are limited by their filtration capacities. Therefore, similar to bottled water, taste becomes the actual consumer standard and not the health of the water or actual contaminants removed. EWS has developed an advanced media and systems to effectively remove chloramine (which also work greatr on chlorine and VOCs)

*Chloramine is a compound comprised of chlorine and ammonia. For the removal of this compound to be effective, carbon must be able to have catalytic and kinetic capabilities of drawing the chlorine and attached ammonia onto the surface area of the carbon and drawing it into the interior surface area of the carbon granule. Greater surface area and contact time is necessary for adequate removal over the life of the filter cartridge.

Claim: Small tanks or cartridges in larger housings are whole home filtration.

At bare minimum, a typical home requires 10 gallons per minute (gpm) of available water to supply enough flow to the home. Small tanks that appear to be less money have flow rates of less than 10 gpm will need more than one unit to be effective for a homes' use. The other issue as stated above, there is not enough filtration media or contact time to effectively do anything but fool the consumer that taste equates to health. EWS wants you to be informed not sold. EWS wants to provide you a healthy water environment and not one that may simply taste good.





Carbon Removal Chart for All Whole Home Filtration Systems

All EWS advanced carbon filtration media meets or complies with NSF Standard 42 for reduction of Chlorine and other Volatile Organic Compounds. The media utilizes a high performance advanced kinetic and catalytic granular activated carbon which provides exceptional filtration capacity and effectively reduces by an average of 98.5% chlorine, voc's, bad taste and odor in drinking water.

About Municipally-Treated Water

Municipal water is heavily regulated, monitored, tested, filtered and treated. Most taste, quality and health issues are directly related to the treatment or disinfection of the water and their by-products, as well as man-made pollutants common to most water (see reference #'s below generally between 3 to 5). Issues with heavy metals and primary contaminants (see reference #'s below generally between 0 to 2) are highly regulated and effectively treated by water utilities. These contaminants are rarely an issue with water quality.

How to Use the (GAC) Carbon Filtration Reference Chart

Below is a simple reference chart to give some perspective as to GAC's capabilities with various substances. Some items are heavy metals and inorganics, while others are VOC's (volatile organic compounds), some of which are man-made pollutants. Still other items, such as hardness, are not even considered contaminants. In general, GAC is very economical and a great compliment to municipally-treated water without the disadvantages of more aggressive filtration. GAC is used in all filtration due to its removal capacities. Know your water to select the correct product for you, your family and your home.

| | | | | | | | $\neg \neg$ |
|----------------------|---|---------------------|---|------------------------|-----|-----------------------|-------------|
| Acetaldehyde | 4 | Emulsions | 2 | Lead | 3 | Precipitated Sulfur | 2 |
| Acetic Acid | 3 | Ethyl Acetate | 5 | Lime | 0 | Propioic Acid | 4 |
| Acetone | 4 | Ethyl Acrylate | 5 | Mercaptans | 4 | Propionaldehyde | 3 |
| Alcohols | 4 | Ethyl Alcohol | 4 | Metal Salts | 1 | Propyl Acetate | 4 |
| Alkalinity | 1 | Ethyl Amine | 4 | Methyl Acetate | 4 | Propyl Alcohol | 4 |
| Amines | 3 | Ethyl Chloride | 4 | Methyl Alcohol | 4 | Propyl Chloride | 4 |
| Ammonia | 3 | Ethyl Ether | 4 | Methyl Bromide | 5 | Radon | 4 |
| Amyl Acetate | 5 | Fertilizers | 1 | Methyl Chloride | 4 | Rubber Hose Taste | 5 |
| Amyl Alcohol | 5 | Fluorides | 2 | Methyl Ethyl Ketone | 5 | Seawater | 1 |
| Antifreeze | 4 | Formaldehyde | 2 | Naphtha | 5 | Sediment | 2 |
| Arsenic | 1 | Gasoline | 5 | Nitrates | 0 | Soap | 3 |
| Benzene | 5 | Glycols | 5 | Nitric Acid | 3 | Sodium Hypochlorite | 5 |
| Bleach | 5 | Hardness | 0 | Nitrobenzene | 5 | Soluble Iron | 2 |
| Boron | 1 | Heavy Metals | 3 | Nitrotoluene | 5 | Solvents | 4 |
| Bytly Alcohol | 5 | Herbicides | 5 | Odors (General) | 5 | Sulfuric Acid | 1 |
| Butly Acetate | 5 | Hydrogen Bromide | 2 | Oil - Dissolved | 5 | Sulphonated Oils | 4 |
| Calcium Hypochlorite | 5 | Hydrogen Chloride | 1 | Oil - Suspended | 2 | Suspended Matter | 2 |
| Carbon Dioxide | 0 | Hydrogen Fluoride | 1 | Organic Acids | 4 | Tannins | 4 |
| Chloral | 5 | Hydrogen Iodide | 2 | Organic Esters | 5 | Tar Emulsion | 4 |
| Chloramine | 4 | Hydrogen Peroxide | 5 | Organic Salts | 4 | Tartaric Acid | 4 |
| Chloroform | 5 | Hydrogen Selenide | 3 | Oxalic Acid | 5 | Taste (DI Water) | 4 |
| Chlorine | 5 | Hydrogen Sulfide | 3 | Oxygen | 5 | Taste (From Organics) | 4 |
| Clorobenzene | 5 | Hydroclorous Acid | 5 | Ozone | 4 | THM's | 5 |
| Chlorophenol | 5 | Inorganic Acids | 1 | PCB's | 5 | Toluene | 5 |
| Chlorophyll | 4 | Inorganic Chemicals | 1 | Pesticides | 5 | Toluidine | 5 |
| Citric Acid | 4 | Insecticides | 5 | Phenol | 5 | Trichlorethylene | 5 |
| Cresol | 5 | lodine | 5 | Phosphates | 0 | Turpentine | 5 |
| Defoliants | 5 | Isopropyl Acetate | 5 | Plastic Taste | 5 | Urine | 2 |
| Detergents | 3 | Isopropyl Alcohol | 5 | Plating Wastes | 3 | Vinegar | 3 |
| Diesel Fuel | 5 | Ketones | 5 | Potassium Permanganate | e 4 | Xanthophyll | 4 |
| Dyes | 5 | Lactic Acid | 4 | Precipitated Iron | 2 | Xylene | 5 |

KEY TO THE ABOVE LIST FOR CARBON FILTRATION:

- **5 EXCELLENT:** Proven Application **4 VERY GOOD:** Proven Application
- 3 GOOD: Very Acceptable Result
- 2 FAIR: limited application 1 POOR: not a recommended application (See RO) 0 Not applicable (See RO)
- Carbon Block technology has additional filtration capabilities and is the last stage in all EWS Essential Drinking Water Systems. See additional information on EWS Essential Drinking Water Systems (model #'s DWS or RO3).
- UV Disinfection for greater safeguards (DWS-UV, optional with Reverse Osmosis). See additional information.
- To prevent the absorption and inhalation of chlorine, chloramine, VOCs, by-products and pollutants. See CWL or EWS Whole Home Systems for GAC filtration to the entire home for bathing, showering and all uses.





FDA*, EPA and NSF** Compliances

Please be advised that all the materials and components utilized in producing all POU (Point of Use) drinking water filtration and reverse osmosis systems, and all POE (Point of Entry) filtration, conditioning and softening equipment, by EWS, Inc., comply with, but are not limited to, one or more of the following regulating standards:

| NSF STANDARD 14 | FDA 21 CFR 177.1520 | FDA 21CFR 177.1640 | FDA 21 CFR 177.1350 |
|---------------------|---------------------|---------------------|---------------------|
| FDA 21 CFR 175.105 | CAS # 7440-44-0 | ANSI 304 | CDA C360000 |
| NSF STANDARD 60 | NSF STANDARD 61 | NSF STANDARD 58 | ANSI 302 |
| ANSI 316 | FDA 21 CFR 177.2600 | FDA 21 CFR 175.300 | FDA 21 CFR 177.2550 |
| NSF STANDARD 52 | NSF STANDARD 42 | NSF STANDARD 18 | FDA 21 CFR 177.2550 |
| FDA 21 CFR 177.1655 | FDA 21 CFR 177.1630 | FDA 21 CFR 177.2800 | FDA 21 CFR 175.300 |
| FDA 21 CFR 177.2260 | FDA 21 CFR 181.32 | FDA 21 CFR 177.2660 | FDA 21 CFR 177.1950 |
| FDA 21 CFR 177.2910 | FDA 21 CFR 177.2250 | FDA 21 CFR 177.1680 | NSF STANDARD 53 |
| NSF STANDARD 55 | CA AB1953 | | |
| | | | |

- *The standards listed above relate to the Code of Federal Regulations of the United States of America, Title 21, Charter 1, Subchapter B set forth by the U.S. Food and Drug Administration.
- **The NSF (National Sanitation Foundation) standards correlate to materials and potable water. The National Sanitation Foundation is not a government agency.

Furthermore, and without, exception every component included in all POU and POE systems by EWS, Inc. are compliant for food and beverage contact and/or meet or comply with the most current, appropriate, and applicable standards without exception.

All EWS product has been independently tested to NSF standards by an accredited third-party laboratory for all claims made regarding NSF/ANSI standards.

Please take note of this helpful and enlightening information on this confusing subject:

Contrary to common belief and less than truthful marketing, drinking water treatments units are NOT required to be "NSF Certified" (as tested by NSF itself), but they must be independently tested to applicable NSF standards by an accredited, independent laboratory. Though the test standards bear the NSF/ANSI name, NSF is just one of many accredited institutions.

All EWS Product is No-Lead Compliant to California AB1953 and the No-Lead Standards which will take effect throughout the USA as of 2014.

Factory Preparation:

All systems are factory prepared and thoroughly checked to assure proper function and if applicable, quality tests of product water produced to assure that minimum standards of rejection have been met, and/or tests of specific components to assure correct function and flow rate measurements to assure efficiency specifications are met.

Product Performance:

- For all product capabilities, compliances and/or warranties to remain valid, all systems are dependent upon proper application, specification, and installation of any specific unit and/or combination of units.
- Please know your local or individual water condition(s), and plumbing application(s). Please review system(s) capabilities, applications, setup, installation, startup, maintenance, and related warranties.
- Detailed information is published in EWS Product Manuals and specific Product Service Guides (included with each specific unit) and made available upon request throughout US distribution and/or EWS corporate offices. All current information is available online @ www.ewswater.com





Summary of Performance Guidelines, Factory Preparation, Product Performance, and Compliances

Product performance may vary based on local water conditions, proper product specification and application, proper plumbing application, setup, installation, startup, maintenance and/or usage. To ensure proper operation, follow all setup, installation, start-up and maintenance procedures as detailed in all service guides. In addition, follow all applicable local plumbing codes.

The feed water must comply with the following conditions for all systems capabilities, compliances, and warranties to remain valid. All commercial POU and POE systems: Performance guidelines and feed water compliance dependent on specification and application, please consult with EWS, Inc. upon specification.

Water Temperature Range: minimum 40°F, maximum 80°F

Water Pressure: Point of Use (POU): minimum 40 psi, maximum 75 psi;

Point of Entry (POE): minimum 40 psi, maximum 75 psi

Water Flow Rates:

Point of Use (POU): water supplied to residential sink product: at a minimum of 1 gpm water supplied to tanks up to 1054: at a minimum of 8 gpm water supplied to 1354 tanks: at a minimum of 12 gpm

All product must be connected to main or cold water supplies. Product not intended to be connected to hot water supplies or allow heated water to flow through systems. Contact EWS, Inc. for product available for this purpose.

All product contain water. Do not allow any product to freeze.

Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit(s).

Reverse Osmosis Systems Only: Never allow reject water to be hindered or stopped, without the reject water flow or improper drain connection, impurities may build up on membrane.

Point of Entry (POE) Units: Do not prevent backwash or brine lines to be stopped or restricted. Create and allow air gap to prevent any cross contamination.

Compliances:

Please be advised that all the materials and components utilized in producing all POU (Point of Use) drinking water filtration and reverse osmosis systems, and all POE (Point of Entry) filtration, conditioning and softening equipment, by EWS, Inc., comply with, but are not limited to, any one or more of the appropriate regulating standards. Furthermore, and without exception, every component included in all POU and POE systems by EWS, Inc. are compliant for food and beverage contact and/or meet or comply with the most current, appropriate, and applicable standards without exception.

Factory Preparation:

All systems are factory prepared and thoroughly checked to assure proper function and if applicable, quality tests of product water produced to assure that minimum standards of rejection have been met, and/or tests of specific components to assure correct function and flow rate measurements to assure efficiency specifications are met.

Product Performance:

- For all product capabilities, compliances and/or warranties to remain valid, all systems are dependent upon proper application, specification, and installation of any specific unit and/or combination of units.
- Please know your local or individual water condition(s), and plumbing application(s). Please review system(s) capabilities, applications, setup, installation, startup, maintenance, and related warranties.
- ♦ Detailed information is published in EWS Product Manuals and specific Product Service Guides (included with each specific unit) and made available upon request throughout US distribution and/or EWS corporate offices. All current information is available online @ www.ewswater.com



Warranty Notification - As Published and Available Online

Notification:

This warranty is referenced by EWS, Inc. in all literature, addressed in General Terms and Standard Conditions of Sale, and is published in its entirety in all EWS, Inc. product manuals, websites, and in all service guides supplied with all product.

Limited Warranty

EWS, Inc., a Nevada corporation, hereby warrants all products to the original consumer purchaser to be free from defects in material and workmanship as stated in the following paragraphs:

- All residential point of use: countertop filtration, in-line filtration, undercounter drinking water filtration, shower filtration, residential reverse osmosis, and canister and filter cartridge point of entry pre-sediment and/or filtration units or systems for one year from date of purchase.
- All residential point of entry: pH decreasing and softener (resin and ion-exchange) systems, Environmental (EWS) Water Systems, Iron Removal units, CWL whole-home (filtration media) systems, pH increasing reagent (sacrificial media) units for 10 years on the tank and riser, 10 years on the ICN conditioner(s) (if applicable) and 5 years on the valve body and electronics from date of purchase.
- · All commercial systems: Dependent on specification and application, please consult with EWS, Inc. upon specification.
- All filtration medias, resins, cartridges, uv lamps, and/or membranes are not covered by any warranty. Filter media, resin, cartridge, uv lamp, and/or membrane replacement or maintenance schedule will vary and must be replaced, as necessary, as determined by usage and local water conditions.
- Any wear and tear parts or any parts damaged in shipping, installation or application are not covered under warranty.

Product performance may vary based on local water conditions, proper product specification and application, proper plumbing application, setup, installation, startup, maintenance and/or usage. To ensure proper operation, follow all setup, installation, start-up and maintenance procedures as detailed in all service guides.

Not intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after unit(s). The contaminants or other substances removed or reduced by these and any other water filtration or treatment devices are not necessarily in your water. To confirm the presence of any primary and secondary contaminants, have your water supply completely analyzed by an independent and approved facility or if applicable, contact your local water utility for information.

Aesthetic, non-health related, or constituents without set federal standards may be part of water testing but are insufficient to determine proper application of any water filtration or treatment device.

EWS, Inc. will replace, free of charge, during the warranty period, any part which proves defective in material and/or workmanship under proper product and plumbing specification and application, normal and proper installation, use, service and proper care as published in detail in all service guides included with product. Wear and tear parts such as pistons, spacers & seals are not covered under warranty. Labor charges are excluded from any warranty service or repair and are not the responsibility of EWS, Inc. Shipping charges may apply to delivered replacement parts or materials. Charges may also apply for the cost of any replacement media, resin, cartridges, uv lamp and/or membrane from any warranty service or repair. Information can be obtained at any time through a local dealer, distributor, representative or direct from EWS, Inc. and/or on-line at; www.ewswater. com. Replacement parts can be obtained from your local dealer, distributor, online or contractor.

This warranty is the exclusive warranty granted by EWS, Inc. and is in lieu of all other warranties of merchantability and fitness for a particular purpose and is further limited to defective parts replacement only. Labor charges and/or damage incurred in setup, installation, and startup, or repair, or replacement, as well as, incidental and consequential damages connected there with, are excluded, and are not the responsibility of, and will not be paid by EWS, Inc.

This warranty is void for any damages due to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc., or any replacement parts other than genuine parts or replacements supplied by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be subject to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be personal and of subjective opinion and that does not relate to the performance of any system.

Warranty Information and the Purchaser's Responsibility

Keep a record of the purchase receipt and/or installation receipt. Purchaser is required fill out warranty registration form(s) on applicable product(s) and register all product by either online @ www.ewswater.com, telephone, postal delivery, fax, e-mail (either register@ewswater.com or information provided to customerservice@ewswater.com). Failure to do so voids the warranty unless restricted by state regulations.

Privacy: EWS, Inc. does not sell, show or make available any information on any consumer in our database. This database is to ensure, if needed, proper warranty service, and good customer service for years to come. Please see our privacy policy published in our website at www.ewswater.com.

Know Your Water:

- If on a municipal system, large or small, it is your right as a consumer to have access to the most recent test results and to expect adherence to federal guidelines, as well as any state or local requirements. Any problems should be reported to the appropriate agencies. Please acquire those municipal test results to become an informed consumer.
- If on an individual well, have your water completely and independently tested. Local code may require a simple test for coliform bacteria to approve a well, however you may be unaware of potential problems for you and/or your home. A local water salesman is looking to close a sale and is going to test for hardness minerals and a few simple and obvious issues, which may or may not be contamination problems. Their solution is almost always the same and yet may provide no resolution to any true problems. Obtain our "Guide for the Private Well Owner" on our website; www.ewswater.com. Review our section on well water testing and applications in our complete catalog with your local distributor, dealer, or our representative or visit our website.

• WARNING:

Some restrictions apply to the use of softeners. Contact your local municipal water district or Gov't Agency. Brine discharge is already restricted on, or may be a problem for, septic applications and waste water treatment facilities. Since some states have already restricted softeners to metered valves to prevent excessive brine discharge, EWS, Inc. only provides metered valving in its line of softeners.

Restrictions or an outright ban may also apply to hot-side only, salt-exchange tanks or services. Local water dealers and other organizations do not inform consumers of these issues and believe these rules are unenforcable. The consumer is ultimately responsible.

Softeners may also provide warranty issues with pools and spas, certain other products and finishes. Softened water should not be used for drinking, cooking, pets or plants and is usually bypassed or "looped away" from the cold side of the kitchen sink. Reverse osmosis, which also has its drawbacks and issues with other products and materials, may be used to remove the salt from the water that the softener put in at the kitchen sink, yet may be misapplied for the actual local water conditions.

Any problems of water quality, or the fitness of any EWS, Inc. product that is associated with any mechanical, construction, application, installation, and/or environmental issue(s) (ie: flow rates, line pressure, piping materials, broken supply lines, changing water conditions; well or municipal water quality, et. al.), known or unknown, of the home or facility will not be considered by EWS, Inc. until such issue(s) have been resolved.

Responsibility for the proper product and/or plumbing specification, application and/or installation of any device manufactured by EWS, Inc. lies with the consumer, their builder contractor, plumbing sub-contractor and any other installer of choice. Items do not specify and/or install themselves. EWS, Inc. has provided many sources to acquire information on the proper application of systems and their installation prior to any purchase. EWS, Inc. manufactures a complete product line of point of use water filtration systems and point of entry filtration, softening and/or conditioning systems and/or appliances.

EWS, Inc. and the distributors of EWS, Inc. will stand behind the warranties of materials and workmanship. However, EWS, Inc. and the distributors of EWS, Inc. and the Environmental Water Systems Product Line do not bear any responsibility for improper applications of product and/or improper installation. It is for this reason that EWS, Inc. provides complete information on all product for your understanding, specification, application and selection, and proper plumbing application and installation.

To obtain warranty service support, contact your local dealer or contractor from whom you obtained the product or contact EWS, Inc., Customer Service, via phone, fax, or email.

