



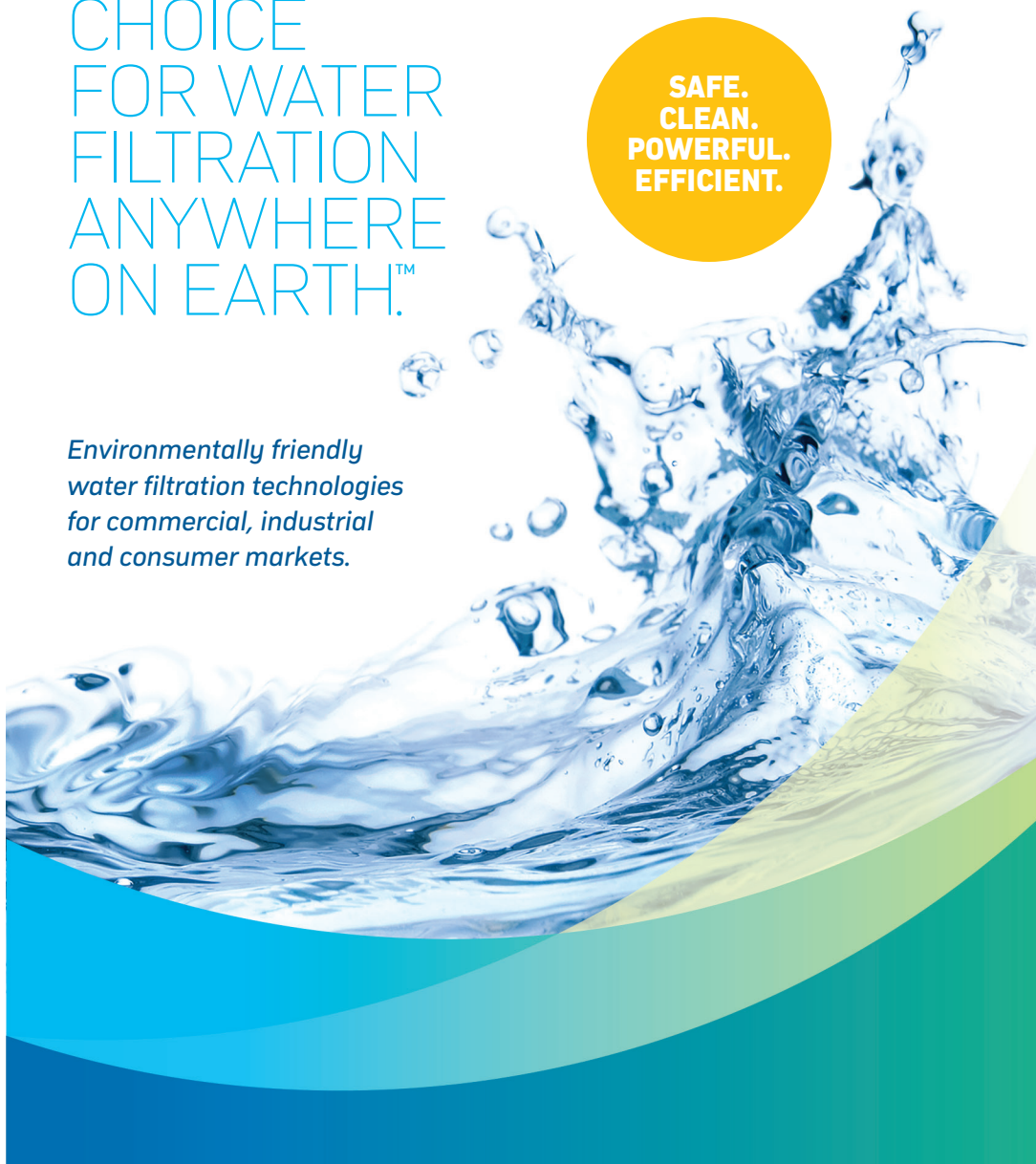
# Triple Clear

WATER SOLUTIONS

THE CLEAR  
CHOICE  
FOR WATER  
FILTRATION  
ANYWHERE  
ON EARTH.™

**SAFE.  
CLEAN.  
POWERFUL.  
EFFICIENT.**

*Environmentally friendly  
water filtration technologies  
for commercial, industrial  
and consumer markets.*



# What is Force Field™ Technology?

## CHANGING THE WORLD OF FILTRATION



### Patented Technology Creates the Ultimate Filter for Water Purification & Filtration

Using electroadsorptive technology, our filters remove a wide range of submicron particulates, pathogens, trace pharmaceuticals, cellular debris, and heavy metals. A naturally occurring positive charge field that essentially puts a “force field” over the pores that will attract and capture negatively charged contaminants in water (and most contaminants are negatively charged).

It is like a magnet that attracts, captures, and kills the pollutants in water. Unlike other submicron filters, Force Field™ Filters have very little pressure drop making them the perfect choice for most plumbing applications.

#### Water Remediation Technologies — Residential, Commercial, Industrial, Municipal, Desal

Contaminants	Force Field™ Pac Technology	RO	NF	UF	MF	Particulate Cartridges	Carbon Block	Ultra Violet
Dissolved Salts		■						
Endotoxin	■	■	■	■	■	■		
Virus	■	■	■					■
Bacteria	■	■	■	■	■	■	■	■
Cysts	■	■	■	■	■	■	■	■
Polysaccharides (TEP)	■	■	■	■	■			
Colloids	■	■	■	■				
Particulates	■	■	■	■	■	■	■	
Chemical Reduction	■	■					■	■
Trace Pharmaceuticals	■	■					■	■

Membrane definition: Reverse Osmosis=RO; Nanofiltration=NF; Ultrafiltration=UF; Microfiltration=MF.

## GLOBAL APPLICATIONS

### HOW POWERFUL IS IT?

Force Field™ Filters provide water quality on par only with Reverse Osmosis at a fraction of the cost and with none of the drawbacks.

Independent laboratory tests have proven its ability to provide 4 and 6 log reduction of bacteria, virus, and cysts!

It can also remove better than 99% of heavy metals like lead and chromium VI. Force Field™ Filters are the ultimate choice for providing safe water to your customers.

- Post stagnation of water
  - Any time water is stored in a tank
- Cooling Towers
- Rain Water Harvesting
- Potable water disaster protection
- Potable water polishing
- Legionella prevention
- When Biofouling is an issue
  - RO pre-filtering
  - Cooling towers
  - Storage tanks
- Maintenance reduction for mechanical systems
  - Reducing metals, particulates, chemicals

### CERTIFIED PERFORMANCE BY THIRD PARTY TESTING

#### Microbiological Threats

Testing by BCS Labs (1/2/14), #1401002

Challenge Species: Triple Clear 2.5* Force Field™ Gravity Camp Filters	Filter Influent Average Concentration	Percent removal of the challenge species by the filter initially and following the passage of the indicated volume (liters) of laboratory grade reagent water			
		1.0 liter	10.0 liter	25.0 liter	50.0 liter
Bacteria: <i>Raoultella terrigena</i>	$3.45 \times 10^5$ cfu/ml	>99.9999%*	>99.9999%*	>99.9999%*	>99.9999%*
Virus: MS-2 Bacteriophage	$3.45 \times 10^5$ pfu/ml	>99.9999%*	>99.9999%*	>99.9999%*	>99.9999%*
e: 3.0 micron microspheres	$1.8 \times 10^5$ spheres/ml	>99.998%*	>99.998%*	>99.998%*	>99.998%*

\* No species were detected in the filter effluent for the duplicate samples analyzed. Filter effluent samples were analyzed in duplicates at the minimum following collection.

#### Heavy Metals

Metal Species	Influent Concentration (ppm)	Filter #1 Effluent following passage of 100 gallons water; BCS 1407065		Filter #2 Effluent following passage of 100 gallons water; BCS 1407066		Cumulative % Reduction
		Concentration (ppm)	% Reduction	Concentration (ppm)	% Reduction	
Arsenic (As)	.011	0.0052	95.3%	<0.0040**	>96.4%**	95.9%
Barium (Ba)	.011	0.01	90.9%	0.0054	95.1%	93.0%
Cadmium (Cd)	.010	<0.0010**	>99.0%**	<0.0010**	>99.0%**	>99.0%**
Chromium (Cr)	.015	<0.0020**	>98.7%**	<0.0020**	>98.7%**	>98.7%**
Lead (Pb)	0.084	<0.0022**	97.4%**	0.0027	96.8%	97.1%
Mercury (Hg)	0.140	0.069	50.7%	0.056	40.0%	45.4%
Selenium (Se)	.011	<0.0050**	>95.5%**	<0.0050**	>95.5%**	>95.5%**
Silver (Ag)	0.064	0.0049	92.3%	<0.0010**	>98.4%**	95.4%

\*\* The species was not detected in the effluent.

#### Other Contaminants

- PCB's Remove to 99+%
- Antibiotics Remove to 99+%
- Bisphenol A (BPA) remove to 99+%
- TEP remove to 99+%
- Chlorophyll remove to 99+%
- Trace Hydrocarbons remove to 99+%

#### Specifications

- Max Operating Temp: 160F
- Max Flow Rates: 2gpm to 45gpm (per filter)
- Nominal Dimensions: 5", 10", 20", 30", 40" Length, 2"-7" diameter
- Micron: Effective micron rate .001
- Endcaps: 222, 226, DOE

## Point of Entry Purification

Bottled water quality from every tap.  
More efficient mechanical systems.  
Happy tenants and guests.

Reverse the effects of leaks, debris, lead, biofilm, rust and other contaminants that can degrade water quality. Even in the best municipal system aging distribution systems are letting serious contamination into water systems.

Using no chemicals, almost no power, and 99% less water than RO systems, Triple Clear solutions removes system clogging grit, potentially dangerous micro biologicals, heavy metals like lead, and cellular debris that causes efficiency-sapping biofilms.

Triple Clear is like a firewall protecting your building from contaminants.



15gpm, 3-stage  
POE System

## Point of Use Filtration

When a POU filter is necessary, our Quick-Change systems are the perfect solution.



Our Quick-Change Force Field™ Filters come packaged in a self-sealing and self locking, commercial grade disposable sump.

Just a few simple turns of the mounting bracket is all it takes to easily swap in a new filter with no mess, and no tool in less than a minute.

10" under-sink mounted  
cartridge filter



# Legionella & Biofilm Cooling Tower Filters

Force Field™ Filters are designed to reduce Legionella in water by 99.99%!

Cooling towers are public enemy #1 when it comes to risk from Legionella.

Triple Clear filters can be easily added via a side flow from any point in the water circulation system. Most commonly they are added in the mechanical room off the pumps or on the roof off of the basin.



50gpm, 3-stage side stream system



## Significant Benefits:

- Removes cellular remains of dead contaminants (endotoxins & cellular debris), which create breeding for bacteria with biofilm and biofouling.
- Remove sediment from the water extending the life of expensive HVAC systems and reducing maintenance costs.
- Are completely GREEN! and require no chemicals or electricity to clean your water.
- Don't require backwashing, saving thousands in wasted water costs annually.

# Hot Water Storage

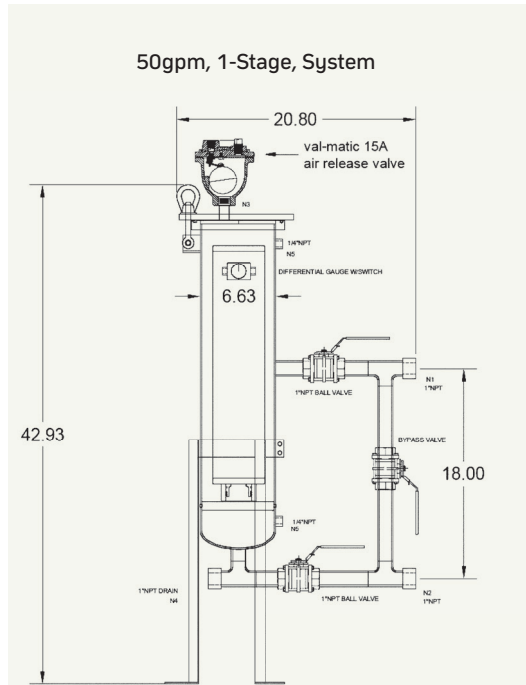
Storing hot water at 140° wastes money. Control Legionella with Triple Clear. Save money. Save water. Decrease risk.

Today, most hot water is stored at 140° to inhibit Legionella growth. Then, immediately upon exiting the tank it has to be mixed with cold water to avoid scalding and meet code.

That means you waste money and energy to heat and store water at 20° higher than needed just to cool it immediately on exit. To make matters worse, 140° does not kill

Legionella, it merely inhibits its growth. It starts growing again as soon as it is mixed with cold water. A Triple Clear System will remove 99.999% of Legionella from water using no chemicals and no electricity.

Furthermore we remove system-clogging grit and other potentially dangerous microbiologicals, heavy metals like lead, and the cellular debris that cause efficiency-sapping biofilms.



- Mounts directly to the effluent of a water storage tank
- Removes > 99.999% of Legionella Bacteria
- Approx 2 PSID at install





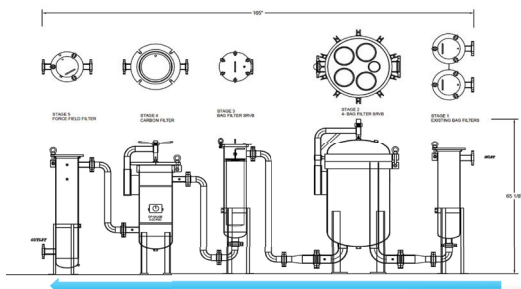
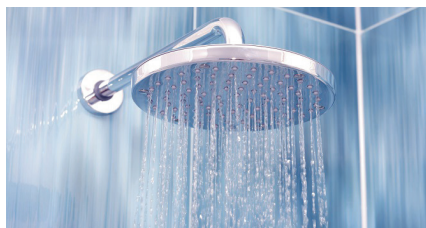
## Rainwater/Greywater

Triple Clear's Systems Solve the Challenge of Water Reuse.

Rainwater reuse and Greywater systems are becoming a standard element in water system design around the world.

However, current technologies struggle to be reliable, consistent, and cost effective. The bottom line is that these applications are challenging and most of the technologies for this type of water purification are not commercially reasonable on a small scale.

Now, Triple Clear has developed a water treatment systems that deal with these type of water treatment challenges with no chemicals, no electricity, and no moving parts. The results we get can be up to potable quality if needed



From  
Dangerous to  
Undetectable

BEFORE		AFTER	
<b>Client:</b> Triple Clear <b>Project Name:</b> Total Coliform/E. coli (DEXT) <b>Analysis:</b> N/A <b>Client Sample ID:</b> Raw <b>BCS Sample ID:</b> 1611164 <b>Date Received:</b> November 15, 2016 11:52 <b>Amount Analyzed:</b> 6.1 mL <b>Analysis Start:</b> November 15, 2016 15:15 <b>Analyst:</b> Wei-Yee Hsu, M.S. <b>Primary Value:</b> 261,300 Total Coliform MPN/100 mL <b>Secondary Value:</b> 2,900 E. coli MPN/100 mL <b>Analysis Notes:</b> Sampling date and time not provided.	<b>Sample Date/Time:</b> <b>Sample Description:</b> Water <b>Amount Submitted:</b> 250 mL <b>Receipt Temperature:</b> 23.1 deg C <b>Analysis Stop Date:</b> November 16, 2016 10:40 <b>Qualifier:</b> None	<b>Client:</b> Triple Clear <b>Project Name:</b> Total Coliform/E. coli (DEXT) <b>Analysis:</b> N/A <b>Client Sample ID:</b> Sample 2 <b>BCS Sample ID:</b> 1611165 <b>Date Received:</b> November 15, 2016 11:52 <b>Amount Analyzed:</b> 100 mL <b>Analysis Start:</b> November 15, 2016 15:15 <b>Analyst:</b> Wei-Yee Hsu, M.S. <b>Primary Value:</b> 5.0 E. coli MPN/100 mL <b>Secondary Value:</b> 5.0 E. coli MPN/100 mL <b>Analysis Notes:</b> Undetected: Analyte was not detected in the sample analyzed. Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units. Sampling date and time not provided.	<b>Sample Date/Time:</b> <b>Sample Description:</b> Water <b>Amount Submitted:</b> 250 mL <b>Receipt Temperature:</b> 23.1 deg C <b>Analysis Stop Date:</b> November 16, 2016 10:40 <b>Qualifier:</b> U
<b>Client:</b> Triple Clear <b>Project Name:</b> Heterotrophic Plate Count <b>Analysis:</b> N/A <b>Client Sample ID:</b> Raw <b>BCS Sample ID:</b> 1611164 <b>Date Received:</b> November 15, 2016 11:52 <b>Amount Analyzed:</b> 2 mL <b>Analysis Start:</b> November 15, 2016 15:15 <b>Analyst:</b> Wei-Yee Hsu, M.S. <b>Primary Value:</b> 2,430,000 Microorganisms CFU/mL sample <b>Secondary Value:</b> 2,430,000 Microorganisms CFU/mL sample <b>Analysis Notes:</b> sampling date and time not provided.	<b>Sample Date/Time:</b> <b>Sample Description:</b> Water <b>Amount Submitted:</b> 250 mL <b>Receipt Temperature:</b> 23.1 deg C <b>Analysis Stop Date:</b> November 21, 2016 9:04 <b>Qualifier:</b> None	<b>Client:</b> Triple Clear <b>Project Name:</b> Heterotrophic Plate Count <b>Analysis:</b> N/A <b>Client Sample ID:</b> Sample 2 <b>BCS Sample ID:</b> 1611165 <b>Date Received:</b> November 15, 2016 11:52 <b>Amount Analyzed:</b> 2 mL <b>Analysis Start:</b> November 15, 2016 15:15 <b>Analyst:</b> Wei-Yee Hsu, M.S. <b>Primary Value:</b> 61.0 Microorganisms CFU/mL sample <b>Secondary Value:</b> 61.0 Microorganisms CFU/mL sample <b>Analysis Notes:</b> Undetected: Analyte was not detected in the sample analyzed. Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units. Sampling date and time not provided.	<b>Sample Date/Time:</b> <b>Sample Description:</b> Water <b>Amount Submitted:</b> 250 mL <b>Receipt Temperature:</b> 23.1 deg C <b>Analysis Stop Date:</b> November 21, 2016 9:04 <b>Qualifier:</b> U



PATENTED  
TECHNOLOGY  
THAT CREATES THE  
ULTIMATE FILTER  
FOR WATER  
PURIFICATION  
& FILTRATION

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