

## PERFORMANCE DATA

PERFORMANCE CLAIMS FOR 385 SERIES						
Models	Replacement Elements	Operating Pressure Range	Operating Temperature Range	Recovery Rating	Efficiency Rating	Daily Production Rate (DPR)
ERO-385, ERO-385E, HERO-385Plus	7278913, 7382746, 7382762	40 - 100 PSI (275 - 689 kPa)	40 - 100 °F (5 - 38 °C)	41.8%	26.2%	15.75 gal./day (59.6 liters/day)
NSF/ANSI Standard 42		Minimum Reduction		Overall % Reduction		Results
Chlorine Taste & Odor		<0.5 mg/L		97.5%		Pass
NSF/ANSI Standard 473		Influent Challenge Concentration	Maximum Permissible Concentration	Overall % Reduction	Results	
Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)		1.5 µg/L ±10%	0.07 µg/L	97.7%	Pass	
NSF/ANSI Standard 53		Influent Challenge Concentration	Maximum Permissible Concentration	Overall % Reduction	Results	
VOC Surrogate Test		300 µg/L	15 µg/L	99.4%	Pass	
MTBE		15 µg/L	5 µg/L	99.4%	Pass	
NSF/ANSI Standard 58		Influent Challenge Concentration	Maximum Permissible Concentration	Overall % Reduction	Results	
Arsenic (pentavalent)		0.30 mg/L ±10%	0.010 mg/L	98.2%	Pass	
Barium		10 mg/L ±10%	2.0 mg/L	97.8%	Pass	
Cadmium		0.03 mg/L ±10%	0.005 mg/L	98.1%	Pass	
Chromium (VI)		0.3 mg/L ±10%	0.1 mg/L	97.0%	Pass	
Chromium (III)		0.3 mg/L ±10%	0.1 mg/L	98.3%	Pass	
Copper		3.0 mg/L ±10%	1.3 mg/L	98.8%	Pass	
Cysts		≥50,000 particles/mL	99.95%	99.99%	Pass	
Lead		0.15 mg/L ±10%	0.010 mg/L	99.1%	Pass	
Fluoride		8.0 mg/L ±10%	1.5 mg/L	96.5%	Pass	
Nitrate plus Nitrite (as N)		30 mg/L ±10%	10.0 mg/L	75.9%	Pass	
Nitrate (as N)		27.0 mg/L ±10%	10.0 mg/L	75.7%	Pass	
Nitrite (as N)		3.0 mg/L ±10%	1.0 mg/L	75.8%	Pass	
Radium 226/228		25 pCi/L ±10%	5 pCi/L	80%	Pass	
Selenium		0.10 mg/L ±10%	0.05 mg/L	98.0%	Pass	
Turbidity		11 ±1 NTU	0.5 NTU	99.0%	Pass	
TDS		750 mg/L ±40	187 mg/L	90.6%	Pass	
Ammonium <sup>1</sup>		1.2 mg/L ±10%	–	90%	Pass	
Bicarbonate <sup>1</sup>		300 mg/L ±10%	–	96%	Pass	
Bromide <sup>1</sup>		1.5 mg/L ±10%	–	89%	Pass	
Chloride <sup>1</sup>		800 mg/L ±10%	–	92%	Pass	
Magnesium <sup>1</sup>		30 mg/L ±10%	–	97%	Pass	
Sodium <sup>1</sup>		350 mg/L ±10%	–	98%	Pass	
Sulfate <sup>1</sup>		800 mg/L ±10%	–	98%	Pass	
Tannin <sup>1</sup>		3.0 mg/L ±10%	–	97%	Pass	
Zinc <sup>1</sup>		15 mg/L ±10%	–	98%	Pass	
NSF/ANSI Standard 401		Influent Challenge Concentration	Maximum Permissible Concentration	Overall % Reduction	Results	
Atenolol		200 ng/L ±20%	60 ng/L	99.5%	Pass	
Bisphenol A		2,000 ng/L ±20%	300 ng/L	98.2%	Pass	
Carbamazepine		1,400 ng/L ±20%	200 ng/L	97.1%	Pass	
DEET		1,400 ng/L ±20%	200 ng/L	99.2%	Pass	
Estrone		140 ng/L ±20%	20 ng/L	98.9%	Pass	
Ibuprofen		400 ng/L ±20%	60 ng/L	94.5%	Pass	
Linuron		140 ng/L ±20%	20 ng/L	96.6%	Pass	
Meprobamate		400 ng/L ±20%	60 ng/L	99.0%	Pass	
Metolachlor		1,400 ng/L ±20%	200 ng/L	97.5%	Pass	
Naproxen		140 ng/L ±20%	20 ng/L	98.7%	Pass	
Nonyl phenol		1,400 ng/L ±20%	200 ng/L	98.4%	Pass	
Phenytoin		200 ng/L ±20%	30 ng/L	99.5%	Pass	
TCEP		5,000 ng/L ±20%	700 ng/L	97.0%	Pass	
TCCP		5,000 ng/L ±20%	700 ng/L	96.5%	Pass	
Trimethoprim		140 ng/L ±20%	20 ng/L	98.9%	Pass	

<sup>1</sup> Tested by Spectrum Labs, a qualified independent laboratory, against accepted industry protocol.

## PERFORMANCE DATA

VOCs (by surrogate testing using chloroform)	Maximum Permissible Concentration	Effluent/ Unfiltered	Effluent/ Filtered	% Reduction
Alachlor	2.0 µg/L	50 µg/L	1.0 µg/L	>98%
Atrazine	3.0 µg/L	100 µg/L	3.0 µg/L	>97%
Benzene	5.0 µg/L	81 µg/L	1.0 µg/L	99%
Carbofuran	40 µg/L	190 µg/L	1.0 µg/L	>99%
Carbon Tetrachloride	5.0 µg/L	78 µg/L	1.8 µg/L	98%
Chlorobenzene	100 µg/L	77 µg/L	1.0 µg/L	99%
Chloropicrin	NA	15 µg/L	0.2 µg/L	99%
2,4-D	70 µg/L	110 µg/L	1.7 µg/L	98%
Dibromochloropropane (DBCP)	0.2 µg/L	52 µg/L	0.02 µg/L	>99%
o-Dichlorobenzene	600 µg/L	80 µg/L	1.0 µg/L	99%
p-Dichlorobenzene	75 µg/L	40 µg/L	1.0 µg/L	98%
1,2-Dichloroethane	5.0 µg/L	88 µg/L	4.8 µg/L	95%
1,1-Dichloroethylene	7.0 µg/L	83 µg/L	1.0 µg/L	99%
cis-1,2-Dichloroethylene	70 µg/L	170 µg/L	0.5 µg/L	>99%
trans-1,2-Dichloroethylene	100 µg/L	86 µg/L	1.0 µg/L	99%
1,2-Dichloropropane	5.0 µg/L	80 µg/L	1.0 µg/L	99%
cis-1,3-Dichloropropylene	NA	79 µg/L	1.0 µg/L	99%
Dinoseb	7.0 µg/L	170 µg/L	0.2 µg/L	99%
Endrin	2.0 µg/L	53 µg/L	0.59 µg/L	99%
Ethylbenzene	700 µg/L	88 µg/L	1.0 µg/L	99%
Ethyl Dibromide (EDB)	0.05 µg/L	44 µg/L	0.02 µg/L	>99%
Haloacetonitriles (HAN)				
Bromochloroacetonitrile	NA	22 µg/L	0.5 µg/L	98%
Dibromoacetonitrile	NA	24 µg/L	0.6 µg/L	98%
Dichloroacetonitrile	NA	9.6 µg/L	0.2 µg/L	98%
Trichloroacetonitrile	NA	15 µg/L	0.3 µg/L	98%
Haloketones (HK)				
1,1-dichloro-2-propanone	NA	7.2 µg/L	0.1 µg/L	99%
1,1,1-trichloro-2-propanone	NA	8.2 µg/L	0.3 µg/L	96%
Heptachlor	0.4 µg/L	25 µg/L	0.01 µg/L	>99%
Heptachlor Epoxide	0.2 µg/L	10.7 µg/L	0.2 µg/L	98%
Hexachlorobutadiene	NA	44 µg/L	1.0 µg/L	98%
Hexachlorocyclopentadiene	50 µg/L	60 µg/L	0.002 µg/L	>99%
Lindane	0.2 µg/L	55 µg/L	0.01 µg/L	>99%
Methoxychlor	40 µg/L	50 µg/L	0.1 µg/L	>99%
Pentachlorophenol	1.0 µg/L	96 µg/L	1.0 µg/L	99%
Simazine	4.0 µg/L	120 µg/L	4.0 µg/L	97%
Styrene	100 µg/L	150 µg/L	0.5 µg/L	>99%
1,1,2,2-Tetrachloroethane	NA	81 µg/L	1.0 µg/L	99%
Tetrachloroethylene	5.0 µg/L	81 µg/L	1.0 µg/L	99%
Toluene	1,000 µg/L	78 µg/L	1.0 µg/L	99%
2,4,5-TP (silvex)	50 µg/L	270 µg/L	1.6 µg/L	99%
Tribromoacetic acid	NA	42 µg/L	1.0 µg/L	98%
1,2,4-Trichlorobenzene	70 µg/L	160 µg/L	0.5 µg/L	>99%
1,1,1-Trichloroethane	200 µg/L	84 µg/L	4.6 µg/L	95%
1,1,2-Trichloroethane	5.0 µg/L	150 µg/L	0.5 µg/L	>99%
Trichloroethylene	5.0 µg/L	180 µg/L	1.0 µg/L	>99%
Chloroform (THM)				
Bromoform (THM)				
Bromodichloromethane (THM)	80 µg/L	300 µg/L	15 µg/L	95%
Chlorodibromomethane (THM)				
Xylenes (total)	10,000 µg/L	70 µg/L	1.0 µg/L	99%

FILTER PERFORMANCE DATA FOR 385 SERIES	
<b>Flow Rate</b>	0.9 gallons per minute (3.4 liters per minute)
<b>Capacity</b>	310 gallons (1,173 liters)

## PERFORMANCE DATA

This system has been tested according to NSF/ANSI standards for the reduction of substances listed above. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI Standards 42, 53, 58, 401 and 473.

Testing was performed under standard laboratory conditions. Actual performance may vary.

Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.

Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system. This system is certified for cyst reduction, and may be used on disinfected water that may contain filterable cysts.

This system has been tested for the treatment of water containing pentavalent arsenic [also known as As (V), As (+5), or arsenate] at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not reduce other forms of arsenic. This system shall be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section below for further information.

The compounds certified under NSF/ANSI 401 have been deemed as “incidental contaminants/emerging compounds”. Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels. While occurring at only trace levels, these compounds can affect the public acceptance/perception of drinking water quality.

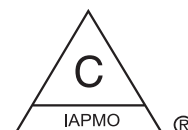
This system has been tested according to NSF/ANSI 58 for reduction of the substances listed above. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF Protocol P473.

This system is acceptable for treatment of influent concentrations of no more than 27 mg/L nitrate and 3 mg/L nitrite in combination, measured as N, and is certified for nitrate/nitrite reduction only for water supplies with a pressure of 280 kPa (40 psig) or greater. This system is supplied with a nitrate/nitrite test kit. Product water should be monitored periodically according to the instructions provided with the test kit.

Systems tested and certified by NSF International against NSF/ANSI Standards 58 and 42 for the reduction of claims as specified in the performance data on page 26.



Systems tested and certified by IAPMO R&T against NSF/ANSI Standards 42, 53, 58, 401 and 473 for the reduction of claims as specified in the performance data on pages 26-29.



# PERFORMANCE DATA

## ARSENIC FACTS

### Background

Arsenic (abbreviated As) can occur naturally in well water. There are two forms of arsenic: pentavalent arsenic [also called As (V), As (+5), and arsenate] and trivalent arsenic [also called As (III), As (+3), and arsenite]. Although both forms are potentially harmful to human health, trivalent arsenic is considered more harmful than pentavalent arsenic. In well water, arsenic may be pentavalent, trivalent, or a combination of both. Additional information about arsenic in water can be found on the Internet at the U.S. Environmental Protection Agency (USEPA) website: [www.epa.gov/safewater/arsenic.html](http://www.epa.gov/safewater/arsenic.html).

### Testing Your Water

Arsenic in water has no color, taste or odor. It must be measured by a lab test. Public water utilities must have their water tested for arsenic. You can get the results from your water utility. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified labs. The cost is typically \$15 to \$30.

### Pentavalent vs. Trivalent Arsenic Removal

These systems are very effective at reducing pentavalent arsenic from drinking water. These models were tested in a lab and proven to reduce 300 parts per billion (ppb) pentavalent arsenic to below 10 ppb, the USEPA standard for safe drinking water.

RO systems are not as effective at reducing trivalent arsenic from water. These models will not convert trivalent arsenic to pentavalent arsenic. If you have free chlorine residual in contact with your water supply for at least one minute any trivalent arsenic will be converted to pentavalent arsenic and reduced by this RO. Other water treatment chemicals such as ozone, and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

### Maintenance

It is strongly recommended that you follow the maintenance instructions and have your water tested periodically to make sure the system is performing properly. See replacement element information above for recommendations on maintaining your Reverse Osmosis water filtration system.



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Buyer/Renter \_\_\_\_\_ Date \_\_\_\_\_

Seller \_\_\_\_\_ Date \_\_\_\_\_

Seller's Address \_\_\_\_\_

Seller's Phone No. \_\_\_\_\_

**Product: EcoWater Systems 385 Series Reverse Osmosis Filter Systems**