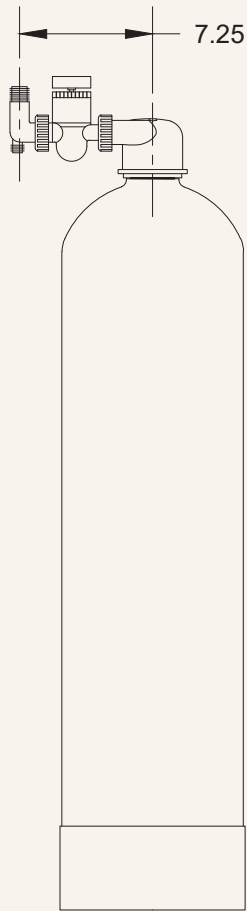




# LANCASTER WATER TREATMENT

## UP-FLOW SERIES UFTT CITYGUARD PLUS FILTER & ANTI-SCALE SYSTEM

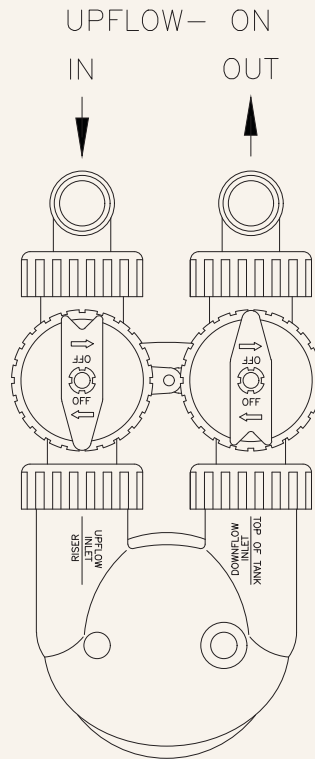
INLET SIDE VIEW  
SHOWN WITH BYPASS  
AND  
1.0 MNPT ELBOW ASSEMBLY



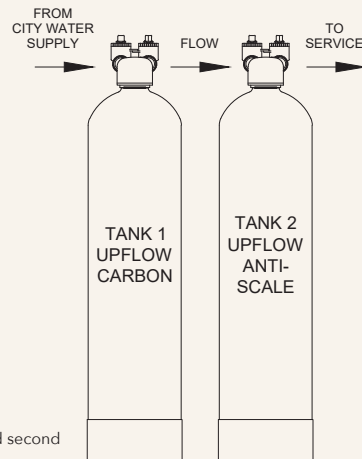
FRONT VIEW



ENLARGED TOP VIEW  
OF IN/OUT HEAD, BYPASS  
AND  
1.0 MNPT ELBOW ASSEMBLY



INSTALLATION SEQUENCE



\*CityGuard Plus System includes two tanks to be installed. First tank to be filled with included Carbon media and second tank to be filled with included EcoSense (Filtersorb SP3) anti-scale media.

# UP-FLOW SERIES UFTT CITYGUARD PLUS FILTER & ANTI-SCALE SYSTEM

UFTT SPECIFICATIONS			CITYGUARD PLUS UF SYSTEM		
Model Number			7-UFTT-CTAS -IB		
Inlet/Outlet Fitting Options (Inches) <sup>1</sup>			0.75 - 1.0 <sup>1</sup> - 1.25 - 1.5		
In / Out Head I191 (Part Number)			DI400		
Bypass Included			Yes		
Water Pressure Range (PSI)			20 - 100		
Water Operating Temperature Range (°F)			35 - 100		
Tank			Tank 1 (Carbon)	Tank 2 (EcoSense)	
Amount of Carbon (Cubic Feet) <sup>2</sup>			1	N/A	
Amount of EcoSense Media (Filtersorb SP3) (Cubic Feet) <sup>3</sup>			N/A	0.11	
EcoSense Media (Filtersorb SP3) Weight (LBS)			N/A	5.0	
Service Flow Rates (GPM) <sup>4</sup>	Recommended	Organics	1	N/A	
		Chlorine	RO Feed	2	N/A
			Commercial	3	N/A
	Typical	Continuous	2.7	N/A	
		Intermittent (Peak)	5.5	N/A	
Maximum Service Flow Rates (GPM)			See <sup>4</sup>	10	
Overall Height (Inches)			49.3	49.2	
Mineral Tank Size: Diameter x Height (Inches)			10 x 44	8 x 44	
Bottom Distributor Type			Stack - II Segment	Plate	
Top Basket Distributor			No	Yes	
Underbed Layer			Yes	No	

<sup>1</sup>1.0 MNPT Elbow Standard - Options Available

<sup>2</sup>Mineral used: Coconut Shell-High Activated Carbon (CS-HAC). Used for removal of chlorine, color, taste, odor and low levels of sulfur, etc. One of the most common applications for Carbon is the reduction of the undesirable tastes and odors present in many chlorinated water supplies. Upon installation allow bed to soak overnight before putting filter into service. Carbon has an extremely high capacity but must be replaced when the filter bed loses the capacity for reduction of taste and odor.

<sup>3</sup>Mineral used: Filtersorb SP3 is a scale prevention media, developed and produced in Germany by CWG (Chopra Water Group) / Watch Water Germany, and is distributed in the USA by Watch Water USA. Filtersorb SP3 is NOT an ion exchange resin therefore should NOT be considered a water softening media. Filtersorb SP3 is a "GREEN" alternative to ion exchange softeners.

<sup>4</sup>Basis for Carbon Filter Service Flow Rates:

Continuous - 5 GPM/SQ. FT.

Intermittent (Peak) - 10 GPM/SQ. FT.

Chlorine:

RO Feed - 2 GPM/CU. FT.

Commercial - 3 GPM/CU. FT.

Organics: 1 GPM/CU. FT.

Higher flow rates are possible, however lower flow rates produce higher quality water.

**EcoSense (Filtersorb SP3) Primary Benefits:**

Filtersorb SP3 media prevents the formation of scale on heating elements and on the pipes and hardware of plumbing systems. Water is directed UPFLOW through a fluidized layer of media which acts as a catalyst, pulling the hardness minerals of calcium and magnesium out of solution. The media (ceramic coated modified acrylic polymer beads) transforms the calcium and magnesium cations into neutral inactive crystal particles. The crystal particles attach to the media for a short time until they cluster to nano-sized particles and break off, freely flowing through the system and not able to attach to any surfaces. The process is called NUCLEATION ASSISTED CRYSTALLIZATION or NAC.

The media also effectively descales existing scale buildup within the plumbing system. During the NAC process, dissolved carbon dioxide (CO<sub>2</sub>) is released as near-visible micro-bubbles, which gradually reduce previous formed scale over a period of time determined by water usage.

**Additional Benefits:**

Maintenance Free

Chemical Free

Salt Free

No Wasted Water (i.e. no regeneration or backwashing)

No Electricity Required

WQA Gold Seal ANSI/NSF 61 (Health Effects)

**Operating Parameters:**

pH 6.5 - 9.5 (6.8 - 7.5 optimum pH range for calcium carbonate, 7.0 - 8.0 optimum range for magnesium hydroxide).

Ferrous Iron (Soluble) < (less than) 0.3 mg/L (or ppm).

Manganese (Soluble) < (less than) 0.05 mg/L (or ppm).

Chlorine - up to 3 ppm (treat Filtersorb SP3 same as softener resin regarding chlorine).

No Hydrogen Sulfide, Oil, Grease or Polyphosphates.

Hardness 25 gpg (grains per gallon) max. for models shown above (up to 75 gpg possible but unit size must be re-evaluated).

Copper 1.3 mg/L (or ppm) max.

Install CITYGUARD LTE in new facilities with copper pipe after six weeks of water use.

Do not exceed recommended flow rates.

Designed for intermittent flows; for continuous flows, consult factory.

The effective average lifespan of Filtersorb SP3 is 5 to 7 years, depending on the feed water conditions.