

Crystal Quest® Whole House Filter Double 20 Specifications

CQE-WH-01108



The diagram shows a cross-section of the filter housing with two vertical chambers. The left chamber contains several layers of filtration media, labeled 2 through 7 from top to bottom. The right chamber contains a single large white mesh filter pad labeled 1. The top of the housing is white with a blue circular opening in the center.

- Water flows through a 20" solid carbon cartridge for removing volatile organic carbon compounds (VOC's, insecticides, pesticides and industrial solvents.*
- Water passes through pre and post one - micron filter pads (1 micron equals 1/25,000th of an inch), which remove suspended particles such as silt, sediment, cyst (Giardia, Cryptosporidium), sand, rust, dirt, and other undissolved matter.
- Granulated activated carbon reduces chlorine, bad tastes and odors, reduces pesticides (lindane, atrazine and 2,4-D) and chemicals that are linked to cancer risk (benzene, TTHMs and toxaphene).
- Ceramic ball effectively removes harmful bacteria such as E. Coli, Fecal coli form, Salmonella, Streptococcus, and cysts (Cryptosporidium, Giardia) and sediment .
- KDF 55 and KDF 85 reduce iron, mercury, copper, nickel, chromium, cadmium, aluminum, lead, other dissolved metals and hydrogen sulfide, and inhibits bacterial growth, algae, fungi, scale, and other microorganisms.

This product is manufactured using GAC which meets standard ANSI 42 NSF Certified, KDF which meets standard ANSI61/42 Certified, and pre and post one-micron filter pads which are from ISO 9001 approved manufacturers.

* If found in your drinking water

Specifications

Model number: CQE-WH-01108

Dual 20"x5" Big Blue housings.

First filter: 5 micron carbon block 20x4.5" cartridge.

Second filter: Multi-stage 20"x4.5" cartridge

Flow rate: 6-8 gpm

Available in 0.75" , 1" and 1.25" NPT input/output (water line diameter).

Built-in bracket

Pressure relive valve on both housings.

First stage, water flows through a 20" solid carbon cartridge for removing volatile organic carbon compounds (VOC's), insecticides, pesticides and industrial solvents.*

In stage 2, water flows through one - micron filter pads (1 micron equals 1/25,000th of an inch), which remove suspended particles such as silt, sediment, cyst (Giardia, Cryptosporidium), sand, rust, dirt, and other un-dissolved matter.*

In stage 3, water flows through granulated activated carbon (GAC). GAC is universally recognized and widely used as an effective adsorbent for a wide variety of organic contaminants, such as chlorine (99.9%), chemicals linked to cancer (THM's, benzene) pesticides, herbicides, insecticides, volatile organic compounds (VOC's), PCB's, MTBE's and hundreds of other chemical contaminants that may be present in water that create bad taste and odors.*

Carbon is extremely porous and provides a large surface area for contaminants to collect. Carbon-only filters must also use their capacity for chlorine removal, resulting in a shortened life. They also may use a bituminous coal carbon, which is good at removing chlorine, but not as effective at removing chemicals. We use a high-grade coconut shell carbon that is most effective at removing chemicals. Coconut shell carbon provides a significantly higher volume of micro-pores than either coal, wood or lignite based carbon. As a result, it is more effective than other carbon types in removing trihalomethanes (THM's) and other chemicals from municipally supplied water. Since our REDOX media removes the chlorine before it reaches the carbon, the carbon capacity is not wasted on chlorine and is free to concentrate more effectively on organic contaminants.

In stage 4, Water flows through ceramic balls, removes harmful bacteria such as E. Coli, Fecal coli form, Salmonella, Streptococcus, and cysts (Cryptosporidium, Giardia) and sediment.

In stages 5 and 6, water flows through a bed of media made of a special high-purity alloy blend of two dissimilar metals - copper and zinc KDF-55D ®, and KDF-85D ® . KDF is a major advancement in water treatment technology that works on the electro-chemical and spontaneous-oxidation-reduction (REDOX) principles. Chlorine is instantaneously and almost inexhaustibly oxidized.

Tests on KDF/GAC cartridge have shown 99+% chlorine removal past 20,000 gallons of water. In comparison, carbon cartridges of comparable volumes drop below 90% effectiveness after only 4,000 gallons.

Iron and hydrogen sulfide are oxidized into insoluble matter and attach to the surface of the media. Heavy metals such as lead, mercury, copper, nickel, chromium, cadmium, aluminum, and other dissolved metals are removed from the water by the electrochemical process. They are attracted to the surface of the media, much like a magnet. The media inhibits bacterial growth throughout the entire unit In fact, it has been shown to be reduced up to 90%, eliminating the need for silver, which is commonly used in carbon-only filters (silver is considered a pesticide by the EPA and, as such, must be registered with them).

Is copper or zinc added to the water in any significant amount? On 2.3 ppm chlorinated water, <0.05 mg/l copper and only 0.46 mg/l zinc were measured. The EPA aesthetic levels are 1.0 mg/l for copper and 5.0 mg/l for zinc. Both zinc and copper are essential minerals for good health - the FDA recommends a daily intake of 15 mg of zinc and 2 mg of copper.

In stage 7, water flows through another one-micron filtration pad for further reduction of undesirable particles. The end result is a great reduction or the total elimination of a wide variety of contaminants.

* If present in your water.

Replacement Cartridges

#1 Carbon block filter , CQE-RC-04036 (CQ-R5-20x5)

Materials of Construction

- Filter Media: Coconut Based Carbon
- End Caps: Polypropylene #5
- Inner/Outer Wraps: Polyolefin
- Netting: Food Grade High-density Polyethylene
- Gaskets: Buna-N
- Temperature Rating: 40°F to 180°F (4.4°C to 82.2°C)

#2 Multi-stage filter , CQE-RC-04030 (CQ-RC-PL-20x5)

Maximum temperature:	160,000 Gallons
Minimum temperature:	100°F (38°C)
Maximum pressure:	40°F (5°C)
Minimum pressure:	125 PSI (8.6 bar)
	20 PSI (1.4 bar)

Materials of Construction

- End Caps: Polypropylene #5
- Inner/Outer Wraps: Polyolefin
- Netting: Food Grade High-density Polyethylene
- Gaskets: Buna-N

For more information, visit the following links:

* System

<http://www.filterwater.com/pc-128-21-high-flow-whole-house-filter-double-20.aspx>

* Replacement filters

<http://www.filterwater.com/p-118-20x5-carbon-block-cartridge.aspx>

<http://www.filterwater.com/p-114-high-flow-replacement-cartridge-20.aspx>