

DEFINITIONS

PROS PICK – Products the experts use commonly and prefer for best results. VERY HELPFUL FOR AVERAGE CONSUMERS.

GROUND WATER/WELL WATER – Water that collects or flows beneath the Earth's surface, filling the porous spaces in soil, sediment, and rocks. Groundwater originates from rain and from melting snow and ice and is the source of water for aquifers, springs, and wells. The upper surface of groundwater is the water table. Most wells (other than some community wells) are unmonitored for water quality and testing, etc., thus, monitoring must be done by the owner.

MUNICIPAL/CITY WATER – Water provided by a town, city or some similar body to occupants in that locality. Municipal water is “treated to provide water that is colorless, odorless, and healthy for its occupants.” Regular testing is mandated. Although chlorine commonly used for disinfection by municipalities, it may result in taste and odor that may be undesirable to some occupants.

POE – Point of Entry; Referred to when choosing a filter that will provide high flow rates to facilitate typical household use & flow rates.

POU – Point of Use; Referred to when choosing a filter that will provide lower flow rates to facilitate typical drinking water systems & flow rates that enable filters to remove at the highest levels (typically ¼”, ½” or 3/8” feed lines).

GPM - Gallons Per Minute - Also known as "flow rate", GPM is a measure of how many gallons of water flow out of your filter, fixture or pipe each minute.

FLOW RATE - Water flow capacity through a pipe, filter or drain typically measured in GPM.

MICRON – A unit of measurement; One millionth of a meter; A human blood cell is 4-5 microns in size.

PARTICULATE IRON – Iron or rust often found on well systems or older lines on municipal (city water) feed lines and is readily visible; Is removable by simple filtration.

DISSOLVED IRON – Iron that is dissolved within the water molecule and not readily visible in a glass of water (may be seen in a glass with standing water once it precipitates out of its dissolved state because air has oxidized it out of solution or in a toilet bowl) and is a constituent that can be precipitated out of solution by means of oxidation (by air or chemical reaction, such as with chlorine); Is not removable by simple filtration.

TURBIDITY – Cloudiness or haziness of a fluid caused by large numbers of individual particles that are generally invisible to the naked eye, and typically suspended in the sample. Turbidity is not always filterable with a typical sediment filter.

SEDIMENT – Can be comprised of iron, some turbidity, plain debris, well gravel particles, etc. and is readily visible and thus, typically filterable. The size of the particles determines which micron size and type of filter to use.

VOC'S – Volatile Organic Chemicals commonly found in municipal water supplies and contaminated wells. Includes Chlorine and chloramine, and trihalomethanes sometimes created by the chlorination process. They are carbon-containing compounds that evaporate or volatize easily from water into the air. In some cases, VOC's (regulated by the EPA) may be carcinogenic.

EPA – Environmental Protection Agency - An agency of the federal government of the United States which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress. The EPA has compliance standards for water quality.

EPA PRIMARY DRINKING STANDARD – Standard set forth by EPA depicting a potential health concern if over prescribed limit.

EPA SECONDARY STANDARD - Standard set forth by EPA typically depicting non-health related items that can interfere with daily household use with regards to plumbing, fixtures, and appliances. May pose undesirable taste and odor, and/or staining and build up.

MCL – Maximum Contaminant Level set forth by EPA to quantify certain constituents and their potential health concerns.

MCLG – Maximum Contaminant Level Goal set forth by EPA and is defined as limits “where no known health effects occur”, e.g., lead MCLG for drinking water is 0, although the MCL is set at 15 ppb (as of 2018). MCLG limits are not always attainable on certain water supplies without water treatment.

CHLORINATION - A process using a form of disinfectant, most commonly calcium hypochlorite, to ensure a bacteria free environment. Can be used to kill sulfate reducing bacteria which can create an undesirable “rotten egg” smell also known as hydrogen sulfide.

CALCIUM HYPOCHLORITE – A chemical used for disinfection purposes that may also be found in different forms and strengths, such as pellets or powder. Clorox and other liquid bleaches are sodium hypochlorite and have similar properties.

HOUSING – A device that holds or “houses” a filter cartridge.

SUMP – Synonymous with housing

I/O – Inlet and outlet size, typically for residential products being $\frac{1}{4}$ ”, $\frac{3}{4}$ ”, 1” and 1 $\frac{1}{2}$ ”.

STANDARD HOUSING – A filter housing that typically houses a 2.5” W x 10” L filter cartridge. Used mainly in drinking water applications at the point of use or kitchen sink. Also comes in a 20” variety for more life or volume and sometimes installed in the basement area to feed the kitchen sink.

BB HOUSING - A filter housing that typically houses a 4.5” W X 10” L filter cartridge. Used mainly for whole house applications and installed where the water enters the house or building to filter all plumbing tributaries. Also comes in a 20” variety for more life or volume.

NOTE: ALL FILTER HOUSINGS CAN CONTAIN FILTER CARTRIDGES THAT ARE INTERCHANGEABLE FOR DIFFERENT APPLICATIONS REGARDLESS OF THE SYSTEM OR HOUSING MANUFACTURER.

GRADIENT DENSITY DEPTH FILTER/MELT BLOWN – A filter cartridge typically used for sediment removal, that is made of compacted polypropylene with a self-supporting inner core which can have varying degrees of layers and densities to trap varying size particles as they enter in to the filter. Chemical resistant and not prone to bacterial intrusion.

GRADIENT DENSITY W/GROOVED FILTER- A filter cartridge typically used for sediment removal, that is made of compacted polypropylene substance which can have varying degrees of layers to trap varying size particles that in theory provides slightly more surface area than a non-grooved filter.

PLEATED FILTER - A filter cartridge typically used for sediment removal, consisting of polyester media made of durable non-woven polyester reusable fabric, pleated to maximize dirt holding capacity.

SPUN/STRING WOUND FILTER- A filter cartridge typically used for sediment removal made of spun polypropylene cord substance and wrapped around a rigid polypropylene core with a consistent filtration capability. The PROS prefer this filter over the other types listed above for best performance in removing sand, silt, scale particles (not hardness in the dissolved state), sludge and rust particles.

CARBON BLOCK FILTER – A filter cartridge used for the removal of chlorine, taste and odor, and if rated to 1 micron, will also remove waterborne cysts, without carbon fine release. Typically used for municipal/city water systems.

NOTE: CARBON TYPE FILTERS CAN PROMOTE BACTERIAL GROWTH OF PATHOGENIC AND NON-PATHOGENIC BACTERIA. BEST WHEN USED ON DISINFECTED WATER SUPPLIES SUCH AS CITY/MUNICIPAL WATER AND SHOULD BE FLUSHED BEFORE USE FOR 15 – 30 SECONDS PRIOR TO USE.

RADIAL FLOW FILTER– Water enters filter through the sides resulting in a greater degree of contact with the filter media than a longitudinal flow type filters.

NOTE:

MOST FILTERS (filter cartridges) ARE INTERCHANGEABLE FOR DIFFERENT APPLICATIONS AND ARE AVAILABLE IN DIFFERENT MICRON RATINGS FOR REMOVAL OF SPECIFIC TYPES AND SIZES OF CONSTITUENTS/SEDIMENT REGARDLESS OF THE SYSTEM OR HOUSING MANUFACTURER

QUICK CONNECT FITTING – Connection fitting that is secured via a mechanism that allows the user to simply push the tube inside the connector and completely seal. There are different manufacturers of this type of connection including, but not limited to, well known “John Guest”.

SPANNER WRENCH – Tool used to unscrew a filter housing in order to remove the filter cartridge.

BRACKET – Support bracket from which to securely hang a filter housing.

PR (VALVE) – Pressure Relief valve which allows you to release the air inside a filter housing in order to unscrew and remove the filter cartridge inside the housing.

INFLUENT LOAD – Incoming water quality before filtrations.

REFILL – Term used for backwashing and non-backwashing systems using media(s) in mineral tanks where the media used is of a dissolving nature, as in acid neutralizing systems used to cure low pH water conditions.

ULTRAVIOLET (UV) - A very effective method to address bacterial concerns as well as other microorganisms, such as some cysts, by utilizing a short wave length light (ultraviolet) to kill or inactivate microorganisms by destroying their nucleic acids and disrupting their DNA, resulting in their ability to reproduce vital cellular functions and becoming non-pathogenic. Unlike other means of disinfection, UV does not add any chemicals to the water.

It is most important to note that specific procedures must be followed for UV systems to perform properly, including removal of dirt/debris, hardness, iron, sediment. In most cases, ultraviolet is used in conjunction with other water treatment

CHEMICAL FEED SYSTEM – System used to treat certain constituents by way of injecting a liquid solution from a solution tank utilizing a feed pump. Sometimes used in combination with a “mixer”. This is popular for treating hydrogen sulfide and/or low pH conditions (does not add hardness to the water.)

FAUCET AERATORS – A screw in mechanism typically found on many faucets, that includes a screen which prevents large sediment from dispelling into usable water. These screens may get clogged with debris and should be cleaned regularly when sediment is an issue, or a decreased flow is noticed.



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— filters —
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