

Water Filtration Systems

Find out which system is perfect for your needs.

Different types of water filtration systems are used to fix different kinds of problems. In this guide, our goal is to explain the differences between these systems so that you can easily find out which system you need and which system can help you.

There are 4 main types of water filtration systems:

- Water Softeners
- Reverse Osmosis Systems
- Iron Filters
- Other Water Filtration Systems

In this guide, we will explain what each system is used for and how they compare against each other.



Water Softeners

Water Softeners are one of the most popular water filtration systems and for a good reason.

If you've been dealing with stains on your water appliances or mineral crust on your showerheads, you have probably already figured out that you have a problem with hard water.

Hard water is a term that's used for water that has high amounts of calcium and magnesium. Although these elements are healthy in small amounts, they can cause a lot of problems if there is a lot of them in your drinking water.

A water softener is designed to convert the hard water in your home to soft and clean water. This filtration system does this by removing high concentrations of calcium and magnesium in your water.

Hard water is a big nuisance for a modern home. It causes the scale buildup in your water pipes which clogs your pipes and makes your water pressure weak. Scale also damages your water-based appliances, such as dishwashers, coffee makers, etc. It's especially bad for hot water appliances.

Hard water also can also cause stains on your laundry and your dishes, making them look dirty. Bathing in it makes your skin itchy and dry as well. By removing a high concentration of these minerals from the water in your home, water softener fixes all these issues and more.

Water softeners use a process called ion exchange which removes the calcium and magnesium from your drinking water.



Water Conditioner

Water conditioners are often confused with water softeners, but they have some major differences between them.

A water softener solves one particular problem – hard water. A water conditioner might solve one or more problems, including hard water.

Water softeners and water conditioners are also configured differently.

Both of these systems are frequently installed at the point of your home where water comes in so that the conditioned/softened water is available throughout your entire house.

Water softeners also use salt while most water conditioners are actually salt-free systems. Water conditioners are used to remove unwanted substances that affect the taste or the smell of your water, such as:

- Chlorine,
- Volatile Organic Compounds(VOCs),
- Organic Gasses, etc.

Some water conditioners can also be used to remove the lead from the water.

Water softeners focus on removing the hard minerals (calcium and magnesium) in order to make your water soft while water conditioners also remove some other contaminants from your water.



Iron Filters

Iron is one of the most abundant minerals on Earth and it's especially common in Minnesota, especially around the Iron Range area. This is why this mineral frequently ends up in the drinking water sources as well.

Iron in small concentrations cannot really harm anyone but if there is a lot of iron in your water, it can cause a lot of problems. It can leave red, yellow, and brown stains on your clothes and dishes. It can clog wells, pumps, and pipes, creating additional plumbing issues.

The most common problem with having iron in your water is that it makes your water taste like metal.

A lot of water softeners can actually treat iron, but if you have a large amount of iron in your water, then you might need a dedicated iron filtration system.

Water softeners can already remove the iron through the same process that they remove calcium and magnesium (ion exchange). But, getting iron out of the softener bed during the regeneration cycle can be a problem because it tends to adhere to the beads or particles in the softener bed.

Because of this, iron can gradually accumulate in the bed, causing longevity issues to your water softener as well as starting to end up in your water once again.



Reverse Osmosis Systems

Unfortunately, public water sources are not always free from harmful contaminants. There are many bacteria, parasites, and contaminants that could be in your drinking water without your knowledge.

Some of these contaminants can make your water smell like rotten eggs or metal and some contaminants can be extremely harmful to your health over a long period of time.

Reverse osmosis systems are the most powerful water filtration systems that remove 99.99% of contaminants from your water. The system works by pushing the unfiltered water through a submersible membrane which removes all contaminants from the drinking water, making it crystal clear.

Reverse osmosis water is even better than the bottled water, due to the effectiveness of this system.

This system can help remove all contaminants that are commonly found in tap water, such as:

- Sodium,
- Calcium,
- Sulfate,
- Lead,
- Mercury,
- Arsenic,
- Fluoride,
- Chloride, etc.

