

## How to Make a Water Purifier

It is a great way to save money by making your own Berkey water filter system (<https://www.foodstorageguys.com/water-filters-storage/water-purification>) or Berkey bucket using food grade plastic 5 gallon buckets and black Berkey replacement filters (<https://www.foodstorageguys.com/berkey-blackberry-filter-elements>). Although Berkey filter systems are well made using stainless steel and convenient to use, they are not as cheap as low budget preppers might want. It is also fun to make your own things and save some money in the process. Pure water is probably the second most important consideration when surviving a major disaster or emergency situation or other crisis. Building this water filter system will allow you to clean water to 99.99999% purity.

The standard black Berkey replacement filters (<https://www.foodstorageguys.com/berkey-blackberry-filter-elements>) come in a packet of two which will filter up to 6,000 gallons of water before becoming too slow to use. If you add two more filters, you will be able to filter up to 12,000 gallons before replacement is needed. The water you run through the filter will also do so twice as fast with the two extra filters. Your DIY filter system will also need a spigot (<https://www.foodstorageguys.com/berkey-replacement-spigot-stainless>) to easily get the water out that is clean. Berkey makes replacement spigots (<https://www.foodstorageguys.com/water-filters-storage/water-purification/berkey-replacement-spigot-stainless>) that will work well for this project which we recommend.

The best kind of buckets to use are white food grade HDPE plastic buckets that are 4 or 5 gal. They need to be tall enough to fit the tall berkey elements in the top bucket. The two buckets also should be the same size so when you fill up the top bucket the bottom one will not overflow. You could have a larger bottom bucket if you like, just not a smaller bottom bucket. That is the bucket that the clean water will flow into as it goes through the filters.

You will need two buckets, two lids, a spigot (<https://www.foodstorageguys.com/berkey-replacement-spigot-stainless>), and Berkey filters (<https://www.foodstorageguys.com/berkey-blackberry-filter-elements>). The bottom bucket will need to have holes drilled in the lower side for the spigot and also in the lid for the water to come in from the upper bucket. See the photos to know where to put the holes.

The upper bucket, where you will pour in the water to be filtered, will need holes drilled in the bottom for the filters to be mounted through. These holes should be 5/8 in diameter. The top lid only needs to be set on top so it is easy to remove and refill the top bucket. The two buckets will be stacked on top of one another. Insert the two Berkey filters into the two holes in the top bucket and use the washers and nuts to secure them. Make sure not to over or under tighten the nuts. Just hand tighten them firmly with just a little compression of the washers. Align the top bucket so the bottoms of the filters go through the two larger holes in the lid of the bottom bucket.

Fill the top bucket with water and let it filter through. It might take a day before the water is all filtered through. Discard that water and refill the top bucket. You want to clean out any particles that the water will flush through the filters. Be sure to prime the filters before install them using your sink and the instructions that come with your Berkey filter set.

Enjoy your low cost Berkey bucket water filter system.