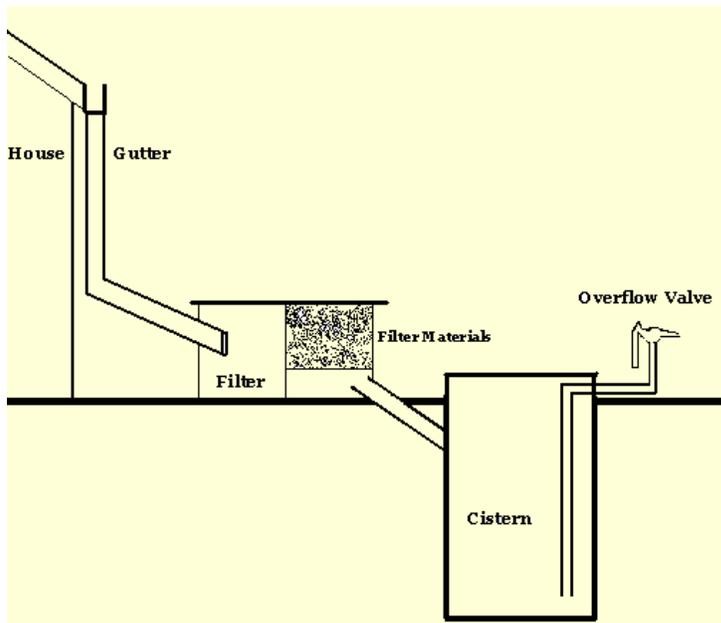


Cistern Basics

What is a Cistern?

A cistern is a storage device in a rainwater catchment system designed to collect rainwater mainly from your home's roof or gutters and storing it until it is needed. The water in a cistern is not suitable for drinking water or bathing.



Tips

- You can add chlorine or chemical disinfectants if you would like to clean the water further.
- A cistern can cost as little as \$100 if you are willing to do most of the work and construction yourself.
- Gutter guards and roof washers will improve the quality of the water collected.

Design and Installation

- The first step for installing a cistern is finding the roof, gutter or downspout that will serve as your **water collection area** and feed directly into the cistern. This area should be washed from time to time to clear any pollutants that have accumulated.
- The collected water should run through a **filter** before entering the cistern to rid it of contaminants. Most filters are two levels; one level is empty and clears large particles such as dirt and leaves from the water, while the other level is filled with a filtering material such as gravel or sand to remove smaller contaminants. A screen is placed between the filter and the storage vessel to ensure impurities do not get into the cistern.
- The cistern should be constructed of a **strong material** such as concrete, stone, galvanized steel or plastic (metal is not suggested). The cistern should be sealed and should have an overflow opening, one that does not allow contaminants to enter. Be sure it has a door that fits securely on top to allow access to the inside for cleaning. Do not place the cistern in the path of runoff from crop or livestock fields or near sewage lines.
- Everything in the cistern should be **airtight**, with every inlet or outlet containing a valve or screen to ensure animals cannot enter the cistern and so the water flow is controlled.

Will a Cistern work in your yard?

- You should live in an area where regular rainfall occurs.
- You should have a roof or large surface where the water will be collected and transported to the cistern.
- You need an area either above or below ground large enough to hold a cistern.
- Cisterns are often constructed below ground because it keeps the water cool decreasing evaporation and prevents the liquid from freezing.

For more information

<http://edis.ifas.ufl.edu/AE029>
<http://motherearthnews.com>

A step-by-step guide to constructing a concrete cistern:
<http://www.dancingrabbit.org/building/cistern.php>