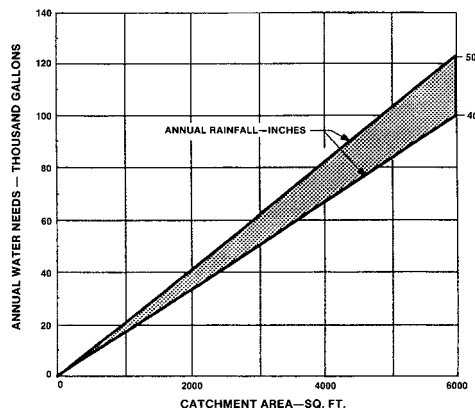


# Parts of a Cistern Water System

## Roof Area

- The right size depends on where you live and how much water you use.
- A family of 4 in Kentucky needs 200 gallons of water per day. There are 365 days in a year. Therefore, a family of 4 would need 73,000 gallons of water per year. Using the chart below, the family needs a catchment area of 3,500 square feet if it rains 50 inches per year.



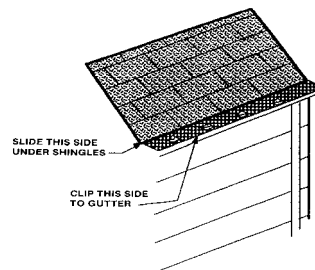
- You may need to use a barn roof plus the house roof or haul water in dry times. Few houses have 3,500 square feet of roof.

## Cistern

- Can be made of poured concrete, concrete block, fiberglass, or metal.

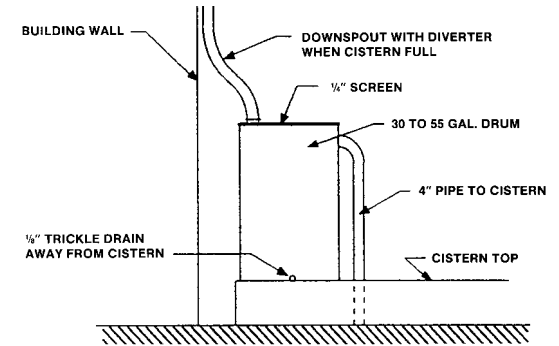
## Roof Gutters

- Must be the right size and in the right place to catch the most rainfall.
- Must be fastened tightly to the roof.
- Must be cleaned often – more often in the fall when leaves may clog them.
- Use 1/4-inch wire mesh guards to keep out leaves and trash.



## Drainspouts

- Must have a valve and waste pipe to drain the roof water when the cistern is full.



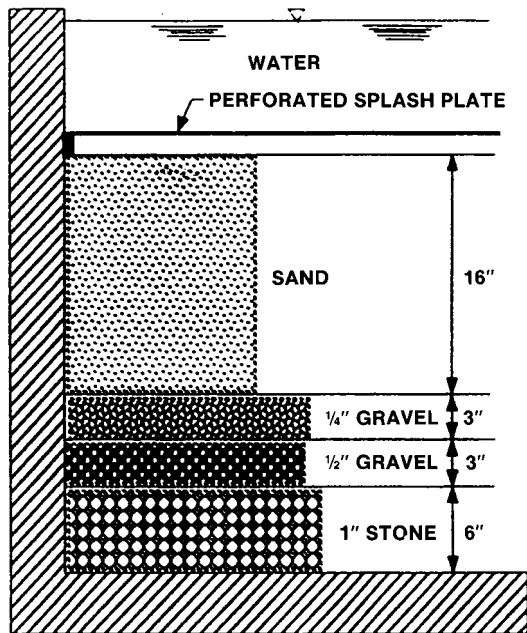
## Roof Washer

- Uses the first rainwater of the season to wash the roof.
- Cleans the roof before rain water goes into the cistern.
- Washes off discharge from power plants, factories, cars and trucks.
- Reduces smoke taste from wood fires.
- Gets rid of bird droppings.

## Optional Parts

### Sand Filter

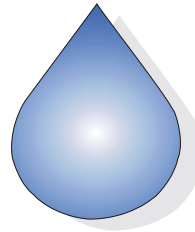
- Made of sand and gravel which will remove unwanted materials and reduce the acidity of the rain water.
- Must be backwashed so it won't clog.
- Top 1-2 inches of sand must be replaced regularly.



Having trouble with bacteria in your water? Have it tested by the local health department. You may need to install the following:

### Chlorine pump

- Puts chlorine into the water to treat bacteria.
- The chlorine must be in contact with the water for 5 minutes to kill the bacteria.
- A long pipe or storage tank is needed between the point where the chlorine goes into the water and the point where the water is used.



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This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under special project number EWQI-10395.

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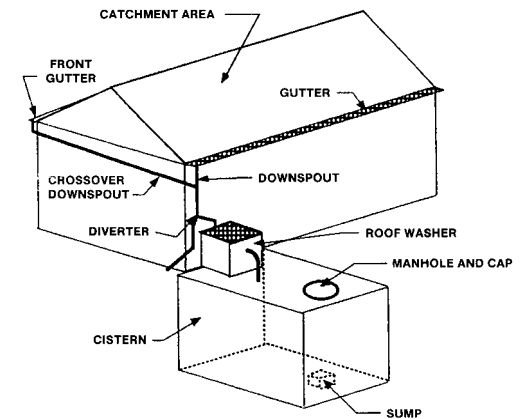
Original April 1999; Revised November 2005;

## Basic Needs for a Cistern Water System

Living in a part of the county where there's no city water?

Having trouble getting a good well drilled?

Maybe it's time to look at a cistern water system!



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