

# Tank Sizing

## Factors to consider

Things you need to consider when determining the size of your tank or storage vessel include:

1. **Rainfall** - how much rainfall you get in your area,
2. **Roof area** - how large the catchment surface is,
3. **Water usage** - what you intend to use rainwater for, and how much you expect to use,
4. **Site characteristics** - how much space you have, and the location you intend to install the tank or storage vessel.

## Calculating the appropriate size

Use the following formula:

**Roof Area X Annual Rainfall = Maximum Available for Capture**

Then determine:

**Most Days without Rain X Average Daily Water Use = Storage Volume Required on Day One of a Dry Spell**

If for example, the most days without rain was 40 days, and the average daily usage was 400L, the volume on hand on Day One of 40 days would have to be 16,000L.

It is very difficult to predict the required volume, because often a dry period will start when the tank is not full. However, this method provides a guideline, and you can add a safety factor on top of this requirement.

When calculating how big the storage capacity should be, plan the tank area so that extra storage can be added later if required.

## Location for the tank

It is important to consider the **space** you have available, whether the vessel is to be installed **above or below ground**, below the **roof-line** or above it (eg. on a sloping site), whether you will have **one or more tanks** - connected or installed as separate systems, and what ground **surface preparation** is required.