## How to calculate gallons of rainwater that can be collected from a roof

In order to figure out the size of the tank you will need to store the rainfall collected in your rainwater harvesting system, it is important to know how large the roof is. Most rain events are 1 inch or less.

## **Method**

1.Measure the length and the width of the roof but check where the downspouts are to find what part of the roof drains to each downspout when there is more than one downspout. For example, if the roof is pitched in 2 directions and you are only able to use the downspout on one side then just measure the part of the roof that drains to the downspout you will use.

2. Every square foot of roof space collects .6 gallons of water in a 1 inch rainfall.

3.To account for losses and inefficiency, you can expect to collect about 75% of the actual rainfall so your calculation should be multiplied by .75

## Formula

Length of roof	feet
X width of roof	feet
X.6gallons per square ft	
X .75	
Xinches of rainfall	
<u>=</u>	_gallons of rainfall collected

A roof that is 50 feet long by 20 feet wide in a 2 inch rainfall

Length of roof \_\_\_\_\_ feet

X width of roof \_\_\_\_\_\_ feet

X.6gallons per square ft

X .75

X \_\_\_\_\_\_inches of rainfall

gallons of rainfall collected

## How to calculate gallons of rainwater that can be collected from a roof

Calculate for:

A 30 foot long by 20 foot wide roof in a 1 inch rainfall but you can only collect from half of the roof

Length of roof feet	
X width of roof feet	
X.6gallons per square ft	
X .75	
Xinches of rainfall	
=gallons of rainfall collected	
Calculate for:	
A roof that is 50 feet long by 20 feet wide for 34 inches of rainfall in a season	
Length of roof feet	
X width of roof feet	
X.6gallons per square ft	
X .75	
Xinches of rainfall	
=gallons of rainfall collected	
Calculate for your roof for a 2 inch rainfall:	
Length of roof feet	
X width of roof feet	
X.6gallons per square ft	
X .75	
Xinches of rainfall	
= gallons of rainfall collected	