H_2OC RAINSMART REBATES PILOT PROGRAM

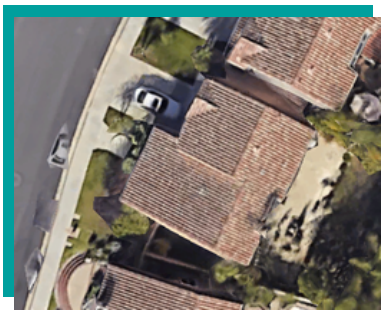
Residential Rainwater Collection Calculation Guide

Thank you for participating in this program and joining your neighbors in an effort to reduce water use and protect water resources. This guide can help you estimate the amount of rainwater you will treat with your project.

HOW DO I MEASURE MY ROOF AREA?

You need to know your roof's area to calculate your minimum rain collection volume, which is used to determine the right size for rainwater collection projects. We recommend using Google Earth to calculate the area. You may also find it helpful to sketch out your house as you take measurements. Additionally, you can use this method to measure other impervious areas on your property that you want to collect rainwater from. Measurements can be an estimate.

1 Go to Google.com/earth.

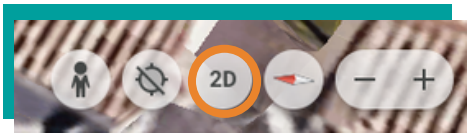


2 Find your property.

Click on the search icon and enter your home address.

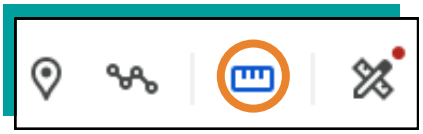
3 See your house from a bird's eye view.

Click the 2D on the bottom right. Zoom to your house so that you can see your house from above.



4 Find the measurement tool.

Click the ruler tool from the menu at the top of your screen and put the units in feet.



5 Measure your roof's area.

For each downspout with a rain saving feature, trace the perimeter of the roof area that drains to it by clicking on the applicable corners. A yellow line will appear and your roof area will be automatically calculated. Be sure to change the unit of measurement from meters to feet. You can adjust the lines if needed by clicking and dragging them into place.

6 Write down your calculations in your application.

WHAT IS A MINIMUM RAIN COLLECTION VOLUME?

Your minimum rain collection volume is the amount of water that runs off your impervious surfaces (roof, driveway, etc.) during a typical Orange County storm. To qualify for the rebate, you must capture this amount in a container or your landscape.

What is my minimum rain collection volume?

You will need to know the area in square feet of your roof or the impervious area you are collecting rainwater from. To measure the impervious area you are capturing rainwater from, use this formula:

Area (sqft) _____ x 0.0625 ft x 7.48 gallon/ft^3 = _____ Gallons

HOW TO SIZE YOUR RAIN GARDEN

Example

If you are capturing rainwater from a 1,000 sqft roof, you will need to collect 468 gallons.

If you have a space that is 95 sqft, you can build a rock garden that is 0.5 ft deep, or a rain garden that is 1 ft deep (add 0.5 ft for ponding).

If you have less space, you can collect the same amount of water if the garden is deeper.

If your roof and available area do not fit in this table, program staff will help you calculate exact measurements.

Rain garden size in square feet

Soil Media Depth in feet	Size of Roof or Other Impervious Area									
	300	500	700	800	1000	1200	1500	1750	2000	2500
0.5	30	50	70	80	100	120	150	175	200	250
1	25	42	58	67	84	100	125	146	167	208
1.5	22	36	50	57	72	86	107	125	143	179
2	19	31	44	50	63	75	94	110	125	156
2.5	17	28	39	45	56	67	84	97	111	139
3	15	25	35	40	50	60	75	88	100	125
	140	234	327	374	468	561	701	818	935	1169
	Number of Gallons Stored in Rain Garden									

Rock garden size in square feet

Rock Depth in feet	Size of Roof or Other Impervious Area									
	300	500	700	800	1000	1200	1500	1750	2000	2500
0.5	29	47	66	75	94	113	141	165	188	235
1	23	38	53	60	75	90	113	132	151	188
1.5	19	32	44	50	63	75	94	110	126	157
2	16	27	38	43	54	65	81	94	108	135
2.5	15	24	33	38	47	57	71	83	94	118
3	13	21	29	34	42	50	63	74	84	105
	140	234	327	374	468	561	701	818	935	1169
	Number of Gallons Stored in Rock Garden									

This program is organized by: H2OC STORMWATER PROGRAM

Learn more at h2oc.org/rainsmart

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