WATER

Did you know a person would need over 700 gallons a year to drink and for sanitation? (365 x 2 gal/day = 730 gallons). Did you know it is not difficult or overly expensive to meet that need, and that you do not need to fill your house with giant water canisters to do so?

Quantities Needed

A person drinks 182 gallons a year, so 910 gallons for 5 people (just drinking), probably another 400-500 per person if possible for cooking, cleaning, washing.

A shower every other day using 2 gal would require 365 gallons/person, every third day would require 243 gallons.

A reasonable sum total per person might be 182 gallons (drinking) + 364 (cleaning/cooking) + 243 gallons (washing) = 789 gallons, about 3,900 gallons/year for five adults.

The Church recommends a minimum of 2 gallons / person / day which would be 730 gallons / yr, 3,650 / 5. The Church recommends storing enough water for at least a two-week supply. A two-week supply for one person would be about 28 gallons, 56 gallons for a one-month supply.



WATER NIGHT Recording

Water Storage Calculator - 1 Year Supply										
Family Size	Gallons	Gallons	Gallons	Gallons						
	per Person	per Person	per Person	per Person						
	Per Day	Per Day	Per Day	Per Day						
	1	2	3	4						
1	365	730	1,095	1,460						
2	730	1,460	2,190	2,920						
3	1,095	2,190	3,285	4,380						
4	1,460	2,920	4,380	5,840						
5	1,825	3,650	5,475	7,300						
6	2,190	4,380	6,570	8,760						
7	2,555	5,110	7,665	10,220						
8	2,920	5,840	8,760	11,680						
9	3,285	6,570	9,855	13,140						
10	3,650	7,300	10,950	14,600						

Water Capture												
Water Capture - Gallons Captured												
Tarps					Roof / Raingutter downspout							
Rain Storm	Tarp Size			Rain Storm	Roof Size							
	10' x 10'	12' x 16'	45' x 14'		Ham Storm	Noor Size						
Inches of Rain	Square Feet			Inches of Rain	Square Feet							
inches of Kain	100	192	630		inches of Rain	400	750	1,200				
0.5	31	60	195		0.5	124	233	372				
1.0	62	119	391		1.0	248	465	744				
1.5	93	179	586		1.5	372	698	1,116				
2.0	124	238	781		2.0	496	930	1,488				
2.5	155	298	977		2.5	620	1,163	1,860				
3.0	186	357	1,172		3.0	744	1,395	2,232				
3.5	217	417	1,367		3.5	868	1,628	2,604				
4.0	248	476	1,562		4.0	992	1,860	2,976				
0.62 Gallons per square foot in 1" rainstorm for every 1,000 SqFt												

Water can be captured by rain barrels (downspouts), tarps, and snow gathering. A 10' x 10' square-foot area tarp would capture 31 gallons of water in a half inch rain storm, 62 gallons in a 1 inch rain storm.

Five 10' x 10' tarps capturing that would gather 155 gallons of water in a standard $\frac{1}{2}$ " rain storm, or 310 gallons in a good 1" storm. Or one 45' x 14' tarp would capture 195 gallons in a .5" rain event, 391 gallons in a 1" event.

Total average precipitation by month is Jan 0.91", Feb 0.90", Mar 1.04", Apr 1.17", May 1.10", Jun 0.72", Jul 0.66", Aug 0.91", Sep 0.84", Oct. 1.08", Nov. 1.0", Dec. 0.85". Annual 11.18".

Five 10' x10' tarps could capture 3,466 gallons / year. One 45x14' tarp could capture 4,673 gallons / year.

Capacity to store captured water becomes the biggest limiting factor! Barrels good for storage but even garbage cans (our city cans about 100 gallons) would work for storage. Lids would be important to reduce evaporation.

Aim for 200 gallons (per adult) of water storage capacity (empty trash cans, barrels or something similar) so you don't waste precious rain water. Barrels do not need to be BPA-free because a filter will remove all BPAs.



Product Info Link